



**LOUVER & ARCHITECTURAL SOLUTIONS
PRODUCTS
CATALOG**

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Architectural Louvers

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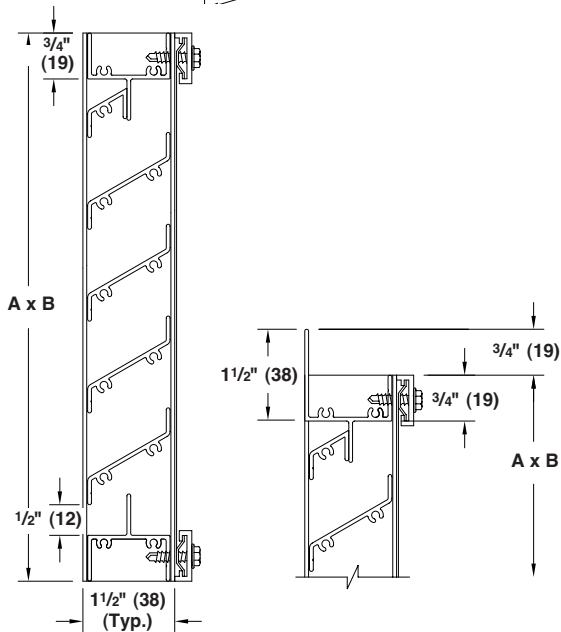
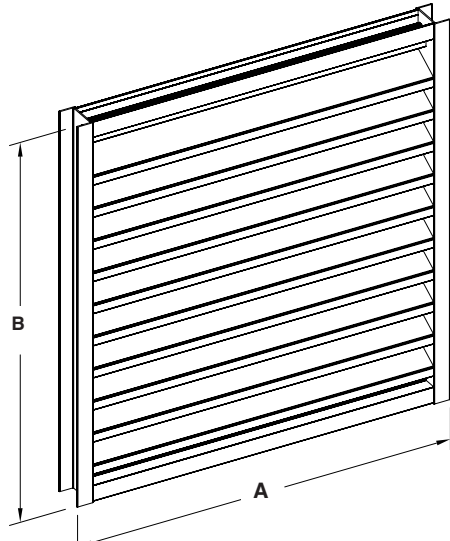
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15030Z



STANDARD CONSTRUCTION

FRAME

1.5" (38) deep .062" (1.5) thick extruded aluminum frame, 6063-T5 alloy.

BLADES

.062" (1.5) thick aluminum drainable blades positioned at 30° angle and spaced approximately 1 1/2" (38) center to center.

SCREEN

.625 x .040" (16 X 1) flattened aluminum bird screen in removable frame (WBS-1).

MINIMUM SIZE

6"w x 6"h (152 x 152).

MAXIMUM SIZE

Single section - 120" x 90"h (3048 x 2286).

Note: Louvers larger than the maximum single section size will require field assembly of smaller sections.

FEATURES

The 15030Z offers:

- 51% Free Area based on 48" x 48" (1219 x 1219) unit.
- All aluminum construction for high resistance to corrosion.

VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens (reference screen submittal).
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		WIDTH (A)	HEIGHT (B)		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		



15030Z

FREE AREA GUIDE

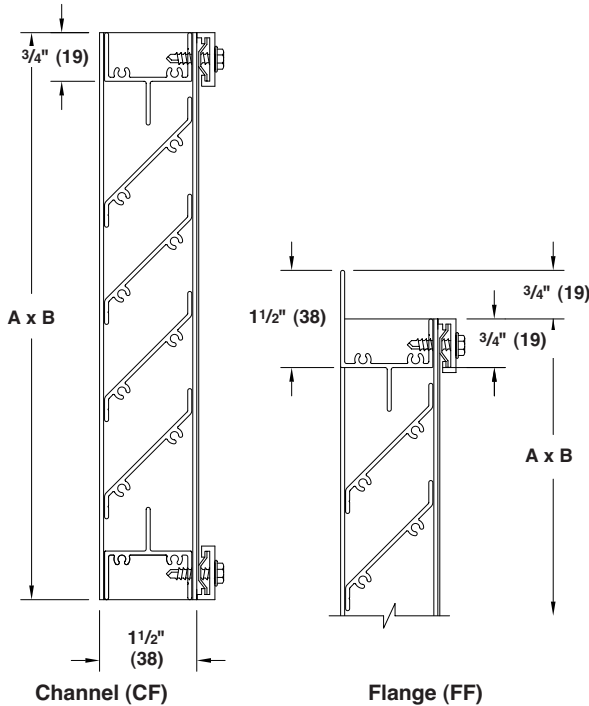
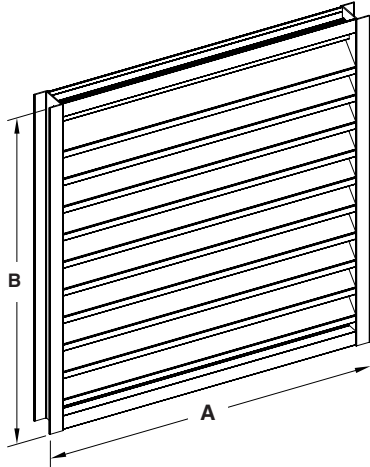
Free Area Guide shows free area in ft² and m² for various sizes of 15030Z.
Width – Inches and Meters

Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.30	0.47	0.64	0.79	0.96	1.14	1.31	1.45	1.63	1.80	1.97	2.12	2.29	2.47	2.64	2.79	2.96	3.13	3.31
0.30	0.03	0.04	0.06	0.07	0.09	0.11	0.12	0.14	0.15	0.17	0.18	0.20	0.21	0.23	0.25	0.26	0.28	0.29	0.31
18	0.50	0.79	1.08	1.32	1.61	1.90	2.20	2.44	2.73	3.02	3.31	3.55	3.85	4.14	4.43	4.67	4.96	5.25	5.54
0.46	0.05	0.07	0.10	0.12	0.15	0.18	0.20	0.23	0.25	0.28	0.31	0.33	0.36	0.38	0.41	0.43	0.46	0.49	0.52
24	0.70	1.11	1.52	1.86	2.26	2.67	3.08	3.42	3.83	4.24	4.65	4.99	5.40	5.81	6.21	6.56	6.96	7.37	7.78
0.61	0.06	0.10	0.14	0.17	0.21	0.25	0.29	0.32	0.36	0.39	0.43	0.46	0.50	0.54	0.58	0.61	0.65	0.69	0.72
30	0.90	1.42	1.95	2.39	2.92	3.44	3.97	4.41	4.93	5.46	5.98	6.42	6.95	7.48	8.00	8.44	8.97	9.49	10.02
0.76	0.08	0.13	0.18	0.22	0.27	0.32	0.37	0.41	0.46	0.51	0.56	0.60	0.65	0.70	0.74	0.78	0.83	0.88	0.93
36	1.10	1.74	2.39	2.92	3.57	4.21	4.85	5.39	6.03	6.68	7.32	7.86	8.50	9.14	9.79	10.32	10.97	11.61	12.26
0.91	0.10	0.16	0.22	0.27	0.33	0.39	0.45	0.50	0.56	0.62	0.68	0.73	0.79	0.85	0.91	0.96	1.02	1.08	1.14
42	1.30	2.06	2.82	3.46	4.22	4.98	5.74	6.37	7.14	7.90	8.66	9.29	10.05	10.81	11.58	12.21	12.97	13.73	14.49
1.07	0.12	0.19	0.26	0.32	0.39	0.46	0.53	0.59	0.66	0.73	0.81	0.86	0.93	1.01	1.08	1.14	1.21	1.28	1.35
48	1.50	2.38	3.26	3.99	4.87	5.75	6.63	7.36	8.24	9.12	9.99	10.73	11.61	12.48	13.36	14.09	14.97	15.85	16.73
1.22	0.14	0.22	0.30	0.37	0.45	0.53	0.62	0.68	0.77	0.85	0.93	1.00	1.08	1.16	1.24	1.31	1.39	1.47	1.56
54	1.70	2.70	3.69	4.52	5.52	6.52	7.51	8.34	9.34	10.33	11.33	12.16	13.16	14.15	15.15	15.98	16.98	17.97	18.97
1.37	0.16	0.25	0.34	0.42	0.51	0.61	0.70	0.78	0.87	0.96	1.05	1.13	1.22	1.32	1.41	1.49	1.58	1.67	1.76
60	1.90	3.02	4.13	5.06	6.17	7.28	8.40	9.33	10.44	11.55	12.67	13.60	14.71	15.82	16.94	17.86	18.98	20.09	21.21
1.52	0.18	0.28	0.38	0.47	0.57	0.68	0.78	0.87	0.97	1.07	1.18	1.26	1.37	1.47	1.58	1.66	1.76	1.87	1.97
66	2.10	3.33	4.57	5.59	6.82	8.05	9.28	10.31	11.54	12.77	14.00	15.03	16.26	17.49	18.72	19.75	20.98	22.21	23.44
1.68	0.20	0.31	0.42	0.52	0.63	0.75	0.86	0.96	1.07	1.19	1.30	1.40	1.51	1.63	1.74	1.84	1.95	2.07	2.18
72	2.30	3.65	5.00	6.13	7.47	8.82	10.17	11.29	12.64	13.99	15.34	16.46	17.81	19.16	20.51	21.63	22.98	24.33	25.68
1.83	0.21	0.34	0.47	0.57	0.70	0.82	0.95	1.05	1.18	1.30	1.43	1.53	1.66	1.78	1.91	2.01	2.14	2.26	2.39
78	2.50	3.97	5.44	6.66	8.12	9.59	11.06	12.28	13.74	15.21	16.68	17.90	19.37	20.83	22.30	23.52	24.99	26.45	27.92
1.98	0.23	0.37	0.51	0.62	0.76	0.89	1.03	1.14	1.28	1.41	1.55	1.66	1.80	1.94	2.07	2.19	2.32	2.46	2.60
84	2.71	4.29	5.87	7.19	8.78	10.36	11.94	13.26	14.85	16.43	18.01	19.33	20.92	22.50	24.08	25.40	26.99	28.57	30.15
2.13	0.25	0.40	0.55	0.67	0.82	0.96	1.11	1.23	1.38	1.53	1.68	1.80	1.95	2.09	2.24	2.36	2.51	2.66	2.80
90	2.91	4.61	6.31	7.73	9.43	11.13	12.83	14.25	15.95	17.65	19.35	20.77	22.47	24.17	25.87	27.29	28.99	30.69	32.39
2.29	0.27	0.43	0.59	0.72	0.88	1.03	1.19	1.32	1.48	1.64	1.80	1.93	2.09	2.25	2.41	2.54	2.70	2.85	3.01



15045Z



STANDARD CONSTRUCTION

FRAME

1.5" (38) deep .062" (1.5) thick extruded aluminum frame, 6063-T5 alloy.

BLADES

.062" (1.5) thick aluminum drainable blades positioned at 45° angle and spaced approximately 1 1/2" (38) center to center.

SCREEN

.625 x .040" (16 X 1) flattened aluminum bird screen in removable frame (WBS-1).

MINIMUM SIZE

6"w x 6"h (152 x 152).

MAXIMUM SIZE

Single section - 120" x 90"h (3048 x 2286).

Note: Louvers larger than the maximum single section size will require field assembly of smaller sections.

FEATURES

The 15045Z offers:

- 42% Free Area based on 48" x 48" (1219 x 1219) unit.
- All aluminum construction for high resistance to corrosion.

VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Extended sill.
- Flange frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- Higher wind load with additional blade bracing.
- A variety of bird and insect screens (reference screen submittal).
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

Dimensions in inches, parenthesis () indicate millimeters.

TAG	QTY.	ACTUAL SIZE		FRAME	VARIATIONS
		WIDTH (A)	HEIGHT (B)		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		



15045Z

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 15045Z.
Width – Inches and Meters

Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.30	0.47	0.64	0.79	0.96	1.14	1.31	1.45	1.63	1.80	1.97	2.12	2.29	2.47	2.64	2.79	2.96	3.13	3.31
0.30	0.03	0.04	0.06	0.07	0.09	0.11	0.12	0.14	0.15	0.17	0.18	0.20	0.21	0.23	0.25	0.26	0.28	0.29	0.31
18	0.50	0.79	1.08	1.32	1.61	1.90	2.20	2.44	2.73	3.02	3.31	3.55	3.85	4.14	4.43	4.67	4.96	5.25	5.54
0.46	0.05	0.07	0.10	0.12	0.15	0.18	0.20	0.23	0.25	0.28	0.31	0.33	0.36	0.38	0.41	0.43	0.46	0.49	0.52
24	0.70	1.11	1.52	1.86	2.26	2.67	3.08	3.42	3.83	4.24	4.65	4.99	5.40	5.81	6.21	6.56	6.96	7.37	7.78
0.61	0.06	0.10	0.14	0.17	0.21	0.25	0.29	0.32	0.36	0.39	0.43	0.46	0.50	0.54	0.58	0.61	0.65	0.69	0.72
30	0.90	1.42	1.95	2.39	2.92	3.44	3.97	4.41	4.93	5.46	5.98	6.42	6.95	7.48	8.00	8.44	8.97	9.49	10.02
0.76	0.08	0.13	0.18	0.22	0.27	0.32	0.37	0.41	0.46	0.51	0.56	0.60	0.65	0.70	0.74	0.78	0.83	0.88	0.93
36	1.10	1.74	2.39	2.92	3.57	4.21	4.85	5.39	6.03	6.68	7.32	7.86	8.50	9.14	9.79	10.32	10.97	11.61	12.26
0.91	0.10	0.16	0.22	0.27	0.33	0.39	0.45	0.50	0.56	0.62	0.68	0.73	0.79	0.85	0.91	0.96	1.02	1.08	1.14
42	1.30	2.06	2.82	3.46	4.22	4.98	5.74	6.37	7.14	7.90	8.66	9.29	10.05	10.81	11.58	12.21	12.97	13.73	14.49
1.07	0.12	0.19	0.26	0.32	0.39	0.46	0.53	0.59	0.66	0.73	0.81	0.86	0.93	1.01	1.08	1.14	1.21	1.28	1.35
48	1.50	2.38	3.26	3.99	4.87	5.75	6.63	7.36	8.24	9.12	9.99	10.73	11.61	12.48	13.36	14.09	14.97	15.85	16.73
1.22	0.14	0.22	0.30	0.37	0.45	0.53	0.62	0.68	0.77	0.85	0.93	1.00	1.08	1.16	1.24	1.31	1.39	1.47	1.56
54	1.70	2.70	3.69	4.52	5.52	6.52	7.51	8.34	9.34	10.33	11.33	12.16	13.16	14.15	15.15	15.98	16.98	17.97	18.97
1.37	0.16	0.25	0.34	0.42	0.51	0.61	0.70	0.78	0.87	0.96	1.05	1.13	1.22	1.32	1.41	1.49	1.58	1.67	1.76
60	1.90	3.02	4.13	5.06	6.17	7.28	8.40	9.33	10.44	11.55	12.67	13.60	14.71	15.82	16.94	17.86	18.98	20.09	21.21
1.52	0.18	0.28	0.38	0.47	0.57	0.68	0.78	0.87	0.97	1.07	1.18	1.26	1.37	1.47	1.58	1.66	1.76	1.87	1.97
66	2.10	3.33	4.57	5.59	6.82	8.05	9.28	10.31	11.54	12.77	14.00	15.03	16.26	17.49	18.72	19.75	20.98	22.21	23.44
1.68	0.20	0.31	0.42	0.52	0.63	0.75	0.86	0.96	1.07	1.19	1.30	1.40	1.51	1.63	1.74	1.84	1.95	2.07	2.18
72	2.30	3.65	5.00	6.13	7.47	8.82	10.17	11.29	12.64	13.99	15.34	16.46	17.81	19.16	20.51	21.63	22.98	24.33	25.68
1.83	0.21	0.34	0.47	0.57	0.70	0.82	0.95	1.05	1.18	1.30	1.43	1.53	1.66	1.78	1.91	2.01	2.14	2.26	2.39
78	2.50	3.97	5.44	6.66	8.12	9.59	11.06	12.28	13.74	15.21	16.68	17.90	19.37	20.83	22.30	23.52	24.99	26.45	27.92
1.98	0.23	0.37	0.51	0.62	0.76	0.89	1.03	1.14	1.28	1.41	1.55	1.66	1.80	1.94	2.07	2.19	2.32	2.46	2.60
84	2.71	4.29	5.87	7.19	8.78	10.36	11.94	13.26	14.85	16.43	18.01	19.33	20.92	22.50	24.08	25.40	26.99	28.57	30.15
2.13	0.25	0.40	0.55	0.67	0.82	0.96	1.11	1.23	1.38	1.53	1.68	1.80	1.95	2.09	2.24	2.36	2.51	2.66	2.80
90	2.91	4.61	6.31	7.73	9.43	11.13	12.83	14.25	15.95	17.65	19.35	20.77	22.47	24.17	25.87	27.29	28.99	30.69	32.39
2.29	0.27	0.43	0.59	0.72	0.88	1.03	1.19	1.32	1.48	1.64	1.80	1.93	2.09	2.25	2.41	2.54	2.70	2.85	3.01



15045RZ THIN LINE STATIONARY LOUVER

EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

FRAME
 1 1/2" (38) deep, 6063T5 extruded aluminum with .063" (1.6) nominal wall thickness. Caulking surfaces provided.

BLADES
 6063T5 extruded aluminum with .063" (1.6) nominal wall thickness. Blades are positioned at 45° angle and spaced approximately 1 7/8" (48) center to center.

SCREEN
 5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
 Mill.

MINIMUM SIZE
 6"w x 6"h (152 x 152).

APPROXIMATE SHIPPING WEIGHT
 2.5 lb. per sq. ft. (12.2 kg/m²).

MAXIMUM FACTORY ASSEMBLY SIZE
 Shall be 60 sq. ft. (5.6m²) per section, not to exceed 120"w x 72"h (3048 x 1829) or 72"w x 120"h (1829 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
 Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for other special requirements.

FEATURES

- The 15045RZ offers:
- 50% Free Area.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Aluminum construction for low maintenance and high resistance to corrosion.

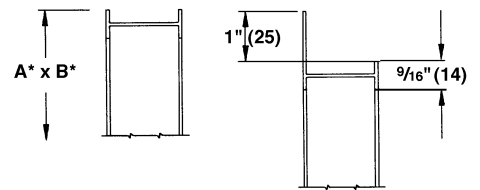
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

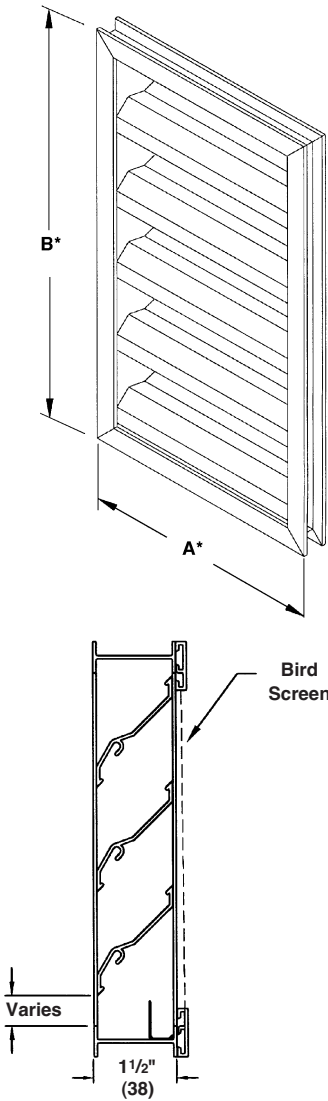
- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



STANDARD INTEGRAL FLANGE



Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT			LOCATION		
ARCH./ENGR.			CONTRACTOR		
REPRESENTATIVE			DATE		

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type. Louvers shall have a minimum of 50% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary blades shall be contained within a 1 1/2" (38) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph [145 KPH] wind - specifier may substitute any loading required).

Louvers shall be Reliable Model 15045RZ extruded 6063T5 aluminum alloy construction as follows:

Frame: 1 1/2" (38) deep .063" (1.6) wall thickness.

Blades: .063" (1.6) nominal wall thickness. Blades are positioned at 45° angle and spaced at approximately 1 7/8" (48) center to center.

Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.

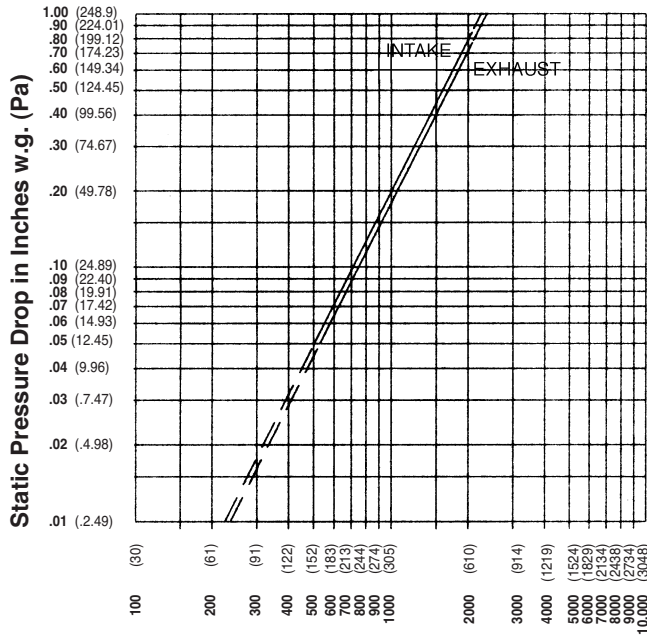
Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data derived from testing in accordance with AMCA 500 for Air Performance must be submitted for approval prior to fabrication and must demonstrate pressure drop equal to or less than the Reliable model specified.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 15045RZ

PRESSURE DROP

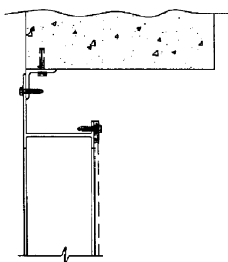


	12	18	24	30	36	42	48	54	60
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52
12	0.37	0.58	0.79	1.01	1.22	1.43	1.64	1.85	2.06
0.30	0.03	0.05	0.07	0.09	0.11	0.13	0.15	0.17	0.19
18	0.62	0.98	1.33	1.69	2.04	2.39	2.75	3.10	3.46
0.46	0.06	0.09	0.12	0.16	0.19	0.22	0.26	0.29	0.32
24	0.87	1.37	1.87	2.37	2.86	3.36	3.86	4.36	4.85
0.61	0.08	0.13	0.17	0.22	0.27	0.31	0.36	0.41	0.45
30	1.06	1.66	2.27	2.88	3.48	4.09	4.69	5.30	5.90
0.76	0.10	0.15	0.21	0.27	0.32	0.38	0.44	0.49	0.55
36	1.31	2.06	2.81	3.56	4.30	5.05	5.80	6.55	7.30
0.91	0.12	0.19	0.26	0.33	0.40	0.47	0.54	0.61	0.68
42	1.56	2.45	3.34	4.24	5.13	6.02	6.91	7.80	8.69
1.07	0.06	0.10	0.13	0.17	0.20	0.24	0.27	0.31	0.34
48	1.81	2.85	3.88	4.92	5.95	6.98	8.02	9.05	10.09
1.22	0.17	0.26	0.36	0.46	0.55	0.65	0.75	0.84	0.94
54	2.06	3.24	4.42	5.60	6.77	7.95	9.13	10.31	11.48
1.37	0.19	0.30	0.41	0.52	0.63	0.74	0.85	0.96	1.07
60	2.25	3.53	4.82	6.11	7.39	8.68	9.96	11.25	12.53
1.52	0.21	0.33	0.45	0.57	0.69	0.81	0.93	1.05	1.17

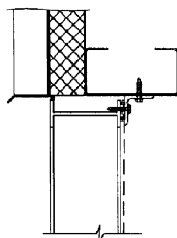
Free area velocity at point of .01 oz./ft.² (3g/m²) of free area water penetration: 390 fpm (119 m/min).

TYPICAL INSTALLATION DETAILS

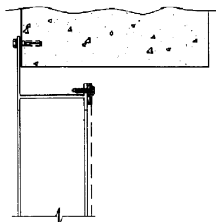
Angle Subframe



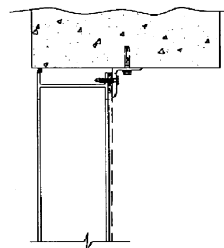
Metal Panel Wall



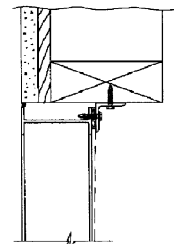
Flange Mount



Masonry Wall



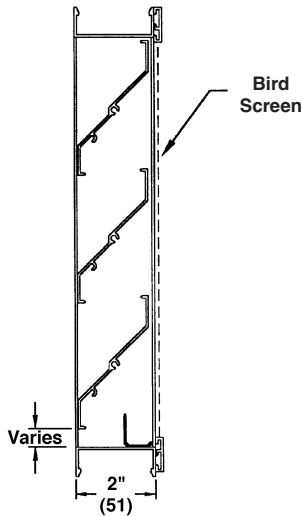
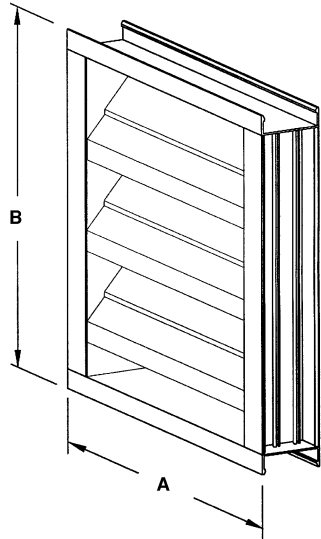
Wood Installation





245RB THIN LINE STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
2" (51) deep 6063T5 extruded aluminum with .060" (1.5) nominal wall thickness. Caulking surfaces provided.

BLADES
6063T5 extruded aluminum with .060" (1.5) nominal wall thickness. Blades are positioned at 45° angle and spaced approximately 3³/₁₆" (81) center to center.

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
6"w x 10"h (152 x 254).

APPROXIMATE SHIPPING WEIGHT
2 lbs. per sq. ft. (9.8 kg/m²).

MAXIMUM SIZE
Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

- The 245RB offers:
- 42% Free Area.
 - Published performance ratings based on testing in accordance with AMCA Standard 500.
 - Aluminum construction for low maintenance and high resistance to corrosion.

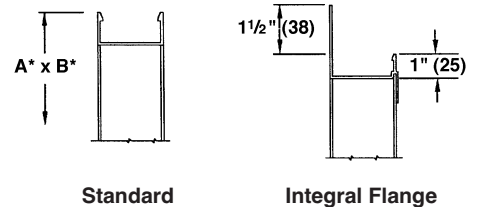
VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



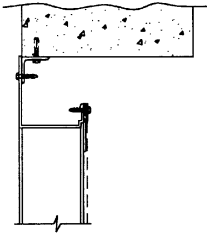
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

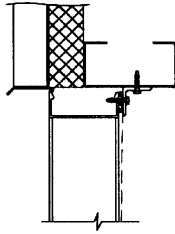
TAG	QTY.	SIZE		FRAME	VARIATIONS
		WIDTH (A)	HEIGHT (B)		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

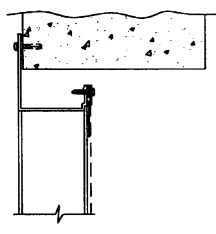
Angle Subframe



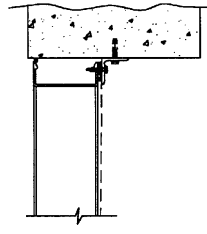
Metal Panel Wall



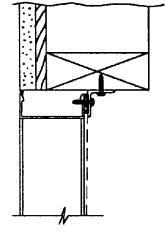
Flange Mount



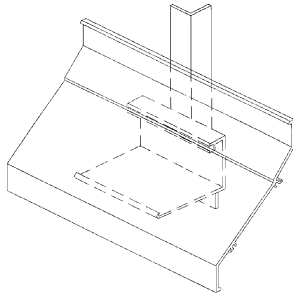
Masonry Wall



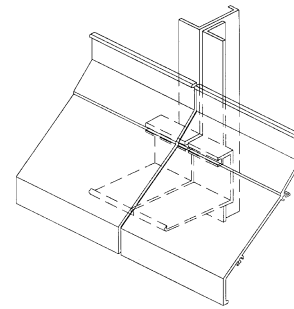
Wood Installation



STANDARD CONSTRUCTION DETAILS



Hidden Vertical Blade Support (HVBS)

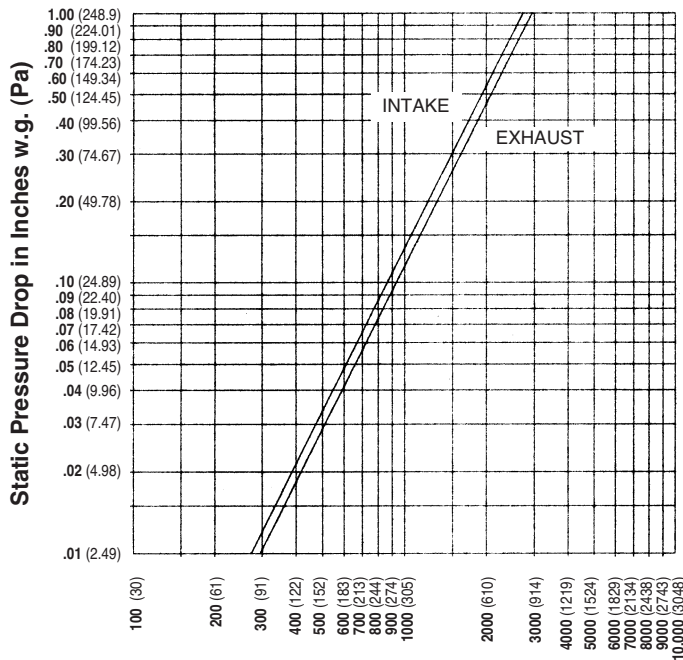


Continuous Blade Appearance at Multiple Section Junctions

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 245RB
Width – Inches and Meters

PRESSURE DROP



Free Area Velocity in feet (meters) per minute through free area.

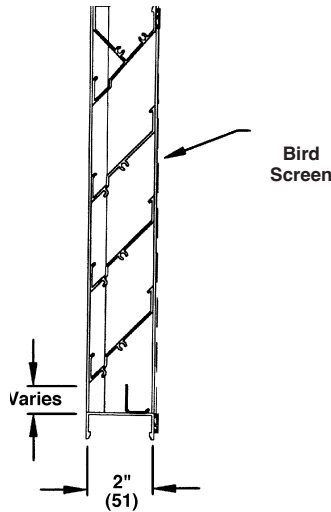
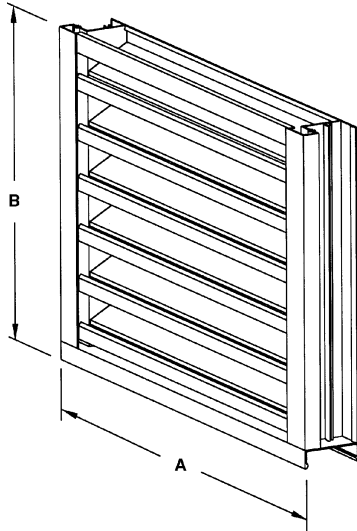
	12	18	24	30	36	42	48	54	60
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52
12	0.26	0.41	0.56	0.71	0.86	1.01	1.16	1.31	1.46
0.30	0.02	0.04	0.05	0.07	0.08	0.09	0.11	0.12	0.14
18	0.45	0.71	0.96	1.22	1.48	1.73	1.99	2.25	2.50
0.46	0.04	0.07	0.09	0.11	0.14	0.16	0.19	0.21	0.23
24	0.76	1.20	1.63	2.07	2.50	2.94	3.37	3.81	4.24
0.61	0.07	0.11	0.15	0.19	0.23	0.27	0.31	0.35	0.39
30	0.95	1.49	2.03	2.57	3.12	3.66	4.20	4.74	5.29
0.76	0.09	0.14	0.19	0.24	0.29	0.34	0.39	0.44	0.49
36	1.14	1.78	2.43	3.08	3.73	4.38	5.03	5.68	6.33
0.91	0.11	0.17	0.23	0.29	0.35	0.41	0.47	0.53	0.59
42	1.32	2.08	2.83	3.59	4.35	5.10	5.86	6.61	7.37
1.07	0.05	0.08	0.11	0.14	0.17	0.20	0.23	0.26	0.29
48	1.51	2.37	3.23	4.10	4.96	5.82	6.69	7.55	8.41
1.22	0.14	0.22	0.30	0.38	0.46	0.54	0.62	0.70	0.78
54	1.70	2.67	3.64	4.60	5.57	6.54	7.51	8.48	9.45
1.37	0.16	0.25	0.34	0.43	0.52	0.61	0.70	0.79	0.88
60	1.88	2.96	4.04	5.11	6.19	7.26	8.34	9.42	10.49
1.52	0.18	0.28	0.38	0.48	0.58	0.68	0.78	0.88	0.98
66	2.20	3.45	4.71	5.96	7.21	8.47	9.72	10.98	12.23
1.68	0.20	0.32	0.44	0.55	0.67	0.79	0.90	1.02	1.14
72	2.38	3.74	5.11	6.47	7.83	9.19	10.55	11.91	13.27
1.83	0.22	0.35	0.47	0.60	0.73	0.85	0.98	1.11	1.23

Height – Inches and Meters



245D DRAINABLE THIN LINE STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION	FEATURES
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FRAME
2" (51) deep 6063T5 extruded aluminum, .060" (1.5) nominal wall thickness. Downspouts and caulking surfaces provided.

BLADES
6063T5 extruded aluminum, .060" (1.5) nominal wall thickness. Drainable blades are positioned at 45° angle and spaced approximately 3³/₁₆" (81) center to center.

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
6"w x 10"h (152 x 254).

- The 245D offers:
- 38% Free Area.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
 - Drain gutter in each blade minimizes water cascade between blades.
 - Architecturally styled, hidden mullions allowing continuous blade appearance up to 120" (3048).
 - All aluminum construction for low maintenance and high resistance to corrosion.

APPROXIMATE SHIPPING WEIGHT
2 lbs. per sq. ft. (9.8 kg/m²).

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

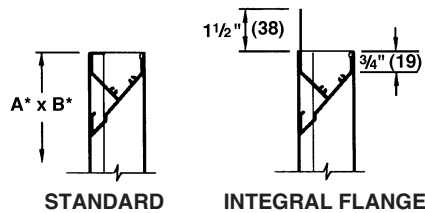
SUPPORTS
Louvers may be provided with rear mounted Hidden Vertical Blade Supports that increase overall louver depth depending on louver size, assembly configuration or wind-load.

Consult Reliable for additional information.

VARIATIONS

- Variations to the basic design of the louver are available at additional cost. They include:
- Extended sill.
 - Hinged frame.
 - Front or rear security bars.
 - Filter racks.
 - Installation angles.
 - A variety of bird and insect screens.
 - Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)
- Consult Reliable for other special requirements.

FRAME CONSTRUCTION

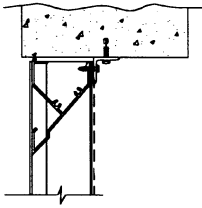


Dimensions in inches, parenthesis () indicate millimeters. *Units furnished 1/4" (6) smaller than given opening dimensions.

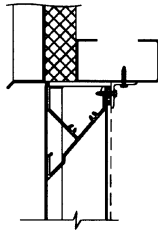
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

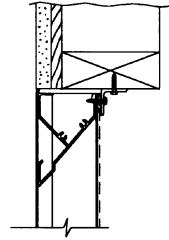
Masonry Wall



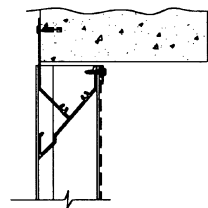
Metal Panel Wall



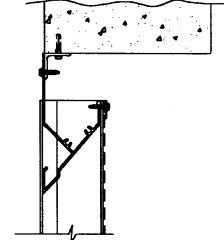
Wood Installation



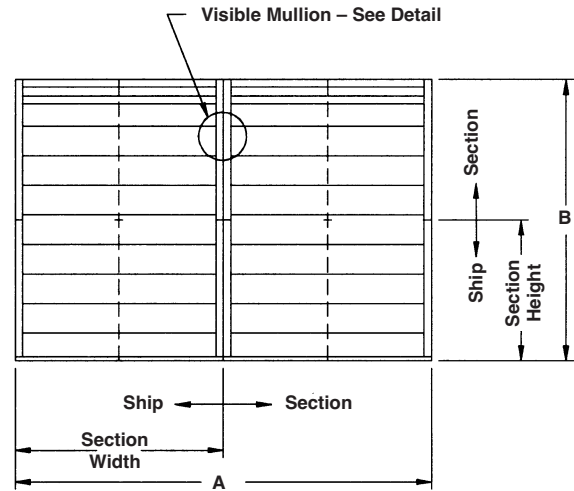
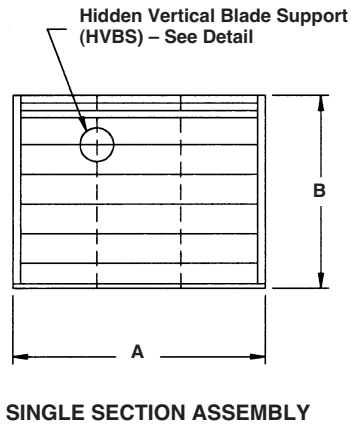
Flange Mount



Angle Subframe

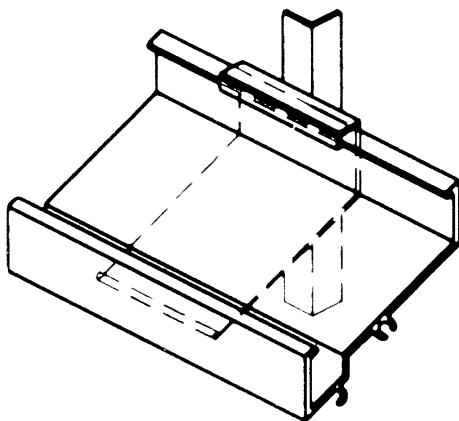


STANDARD CONSTRUCTION DETAILS

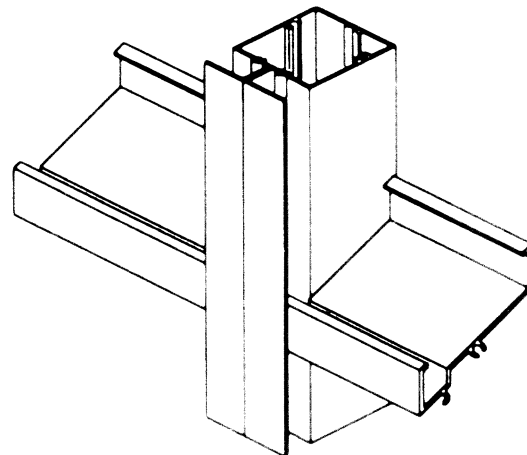


NOTES:

1. Max. section size is 120" wide x 90" high or 90" wide x 120" high. Louvers larger than these sizes will be provided in multiple sections for field assembly.
2. Hidden Vertical Blade Support (HVBS) depth and c-c spacing varies depending on louver size, assembly configuration or windload.

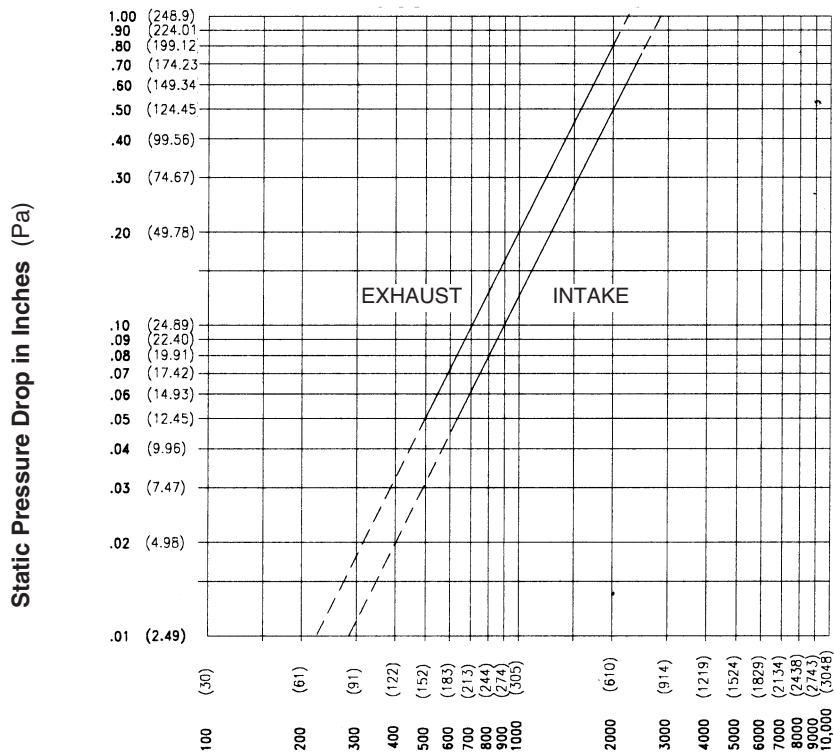


Hidden Vertical Blade Support (HVBS)



Visible Mullions on Multiple Section Junctions

PRESSURE DROP

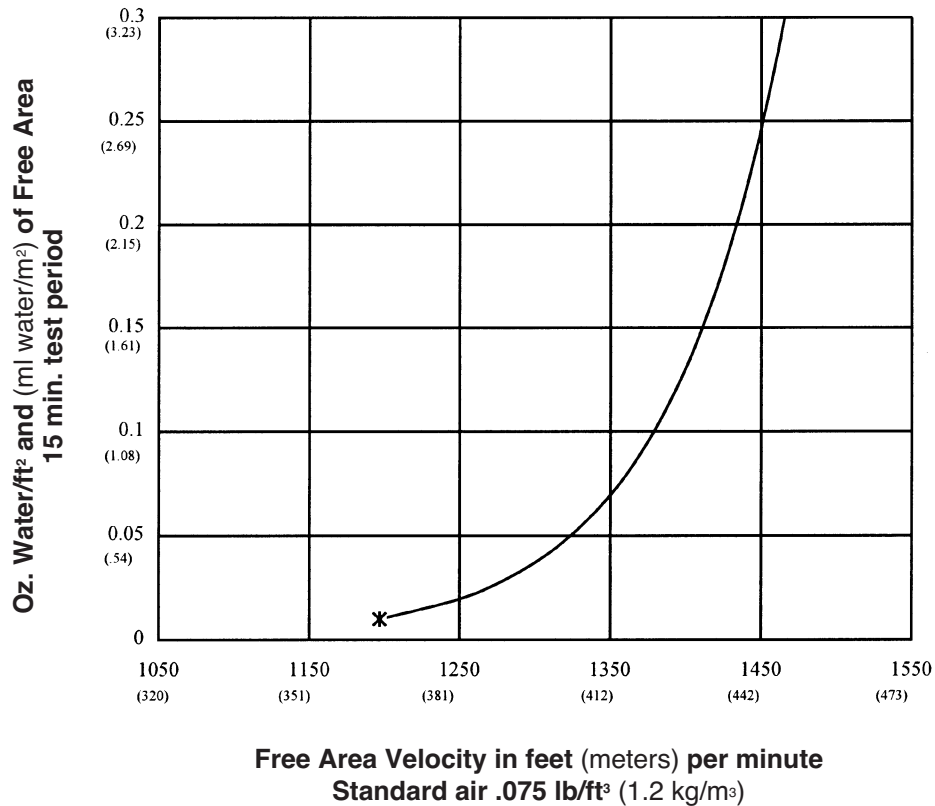


Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1197 fpm (365 m/min).





245D

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type. Louvers shall have a minimum of 38% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary blades shall be contained within a 2" (51) frame. Louver components (heads, jambs, sills, blades, and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 245D extruded 6063T5 aluminum alloy construction as follows:

Frame: 2" (51) deep .060" (1.5) wall thickness.

Blades: .060" (1.5) nominal wall thickness. Blades are positioned at 45° angle and spaced approximately 3³/₁₆" (81) center to center.

Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.

Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

Published louver performance data derived from testing in accordance with AMCA 500 for Air Performance must be submitted for approval prior to fabrication and must demonstrate pressure drop equal to or less than the Reliable model specified.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 245D. Width – Inches and Meters

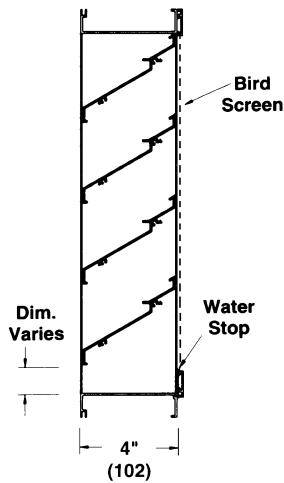
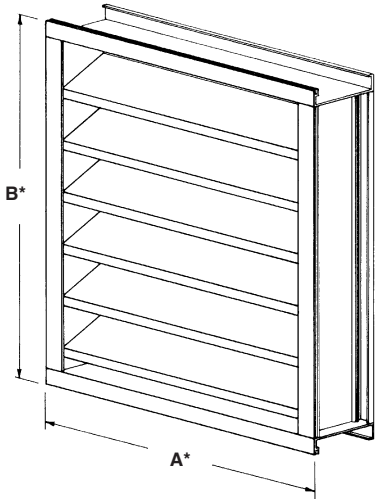
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.30	0.47	0.65	0.82	0.99	1.16	1.33	1.51	1.68	1.85	2.02	2.19	2.37	2.54	2.71	2.88	3.05	3.23	3.40
0.30	0.03	0.04	0.06	0.08	0.09	0.11	0.12	0.14	0.16	0.17	0.19	0.20	0.22	0.24	0.25	0.27	0.28	0.30	0.32
18	0.53	0.84	1.14	1.45	1.75	2.05	2.36	2.66	2.97	3.27	3.58	3.88	4.18	4.49	4.79	5.10	5.40	5.71	6.01
0.46	0.05	0.08	0.11	0.13	0.16	0.19	0.22	0.25	0.28	0.30	0.33	0.36	0.39	0.42	0.45	0.47	0.50	0.53	0.56
24	0.66	1.04	1.42	1.79	2.17	2.55	2.93	3.31	3.68	4.06	4.44	4.82	5.19	5.57	5.95	6.33	6.71	7.08	7.46
0.61	0.06	0.10	0.13	0.17	0.20	0.24	0.27	0.31	0.34	0.38	0.41	0.45	0.48	0.52	0.55	0.59	0.62	0.66	0.69
30	0.89	1.40	1.91	2.42	2.93	3.44	3.95	4.46	4.97	5.48	5.99	6.50	7.01	7.52	8.03	8.54	9.05	9.56	10.07
0.76	0.08	0.13	0.18	0.23	0.27	0.32	0.37	0.42	0.46	0.51	0.56	0.60	0.65	0.70	0.75	0.79	0.84	0.89	0.94
36	1.02	1.60	2.19	2.77	3.36	3.94	4.52	5.11	5.69	6.27	6.86	7.44	8.02	8.61	9.19	9.77	10.36	10.94	11.52
0.91	0.09	0.15	0.20	0.26	0.31	0.37	0.42	0.47	0.53	0.58	0.64	0.69	0.75	0.80	0.85	0.91	0.96	1.02	1.07
42	1.25	1.97	2.68	3.40	4.12	4.83	5.55	6.26	6.98	7.70	8.41	9.13	9.84	10.56	11.27	11.99	12.71	13.42	14.14
1.07	0.12	0.18	0.25	0.32	0.38	0.45	0.52	0.58	0.65	0.72	0.78	0.85	0.92	0.98	1.05	1.12	1.18	1.25	1.31
48	1.38	2.17	2.96	3.75	4.54	5.33	6.12	6.91	7.70	8.48	9.27	10.06	10.85	11.64	12.43	13.22	14.01	14.80	15.59
1.22	0.13	0.20	0.28	0.35	0.42	0.50	0.57	0.64	0.72	0.79	0.86	0.94	1.01	1.08	1.16	1.23	1.30	1.38	1.45
54	1.61	2.53	3.46	4.38	5.30	6.22	7.14	8.06	8.99	9.91	10.83	11.75	12.67	13.59	14.51	15.44	16.36	17.28	18.20
1.37	0.15	0.24	0.32	0.41	0.49	0.58	0.66	0.75	0.84	0.92	1.01	1.09	1.18	1.26	1.35	1.44	1.52	1.61	1.69
60	1.74	2.74	3.73	4.73	5.72	6.72	7.71	8.71	9.70	10.70	11.69	12.69	13.68	14.68	15.67	16.67	17.66	18.66	19.65
1.52	0.16	0.25	0.35	0.44	0.53	0.62	0.72	0.81	0.90	0.99	1.09	1.18	1.27	1.36	1.46	1.55	1.64	1.74	1.83
66	1.97	3.10	4.23	5.35	6.48	7.61	8.74	9.86	10.99	12.12	13.25	14.37	15.50	16.63	17.76	18.88	20.01	21.14	22.26
1.68	0.18	0.29	0.39	0.50	0.60	0.71	0.81	0.92	1.02	1.13	1.23	1.34	1.44	1.55	1.65	1.76	1.86	1.97	2.07
72	2.20	3.46	4.72	5.98	7.24	8.50	9.76	11.02	12.28	13.54	14.80	16.06	17.32	18.58	19.84	21.10	22.36	23.62	24.88
1.83	0.21	0.32	0.44	0.56	0.67	0.79	0.91	1.03	1.14	1.26	1.38	1.49	1.61	1.73	1.85	1.96	2.08	2.20	2.31
78	2.33	3.67	5.00	6.33	7.67	9.00	10.33	11.66	13.00	14.33	15.66	17.00	18.33	19.66	21.00	22.33	23.66	25.00	26.33
1.98	0.22	0.34	0.46	0.59	0.71	0.84	0.96	1.08	1.21	1.33	1.46	1.58	1.70	1.83	1.95	2.08	2.20	2.32	2.45
84	2.56	4.03	5.50	6.96	8.43	9.89	11.36	12.82	14.29	15.75	17.22	18.68	20.15	21.61	23.08	24.55	26.01	27.48	28.94
2.13	0.24	0.37	0.51	0.65	0.78	0.92	1.06	1.19	1.33	1.47	1.60	1.74	1.87	2.01	2.15	2.28	2.42	2.56	2.69
90	2.69	4.23	5.77	7.31	8.85	10.39	11.93	13.46	15.00	16.54	18.08	19.62	21.16	22.70	24.24	25.78	27.31	28.85	30.39
2.29	0.25	0.39	0.54	0.68	0.82	0.97	1.11	1.25	1.40	1.54	1.68	1.82	1.97	2.11	2.25	2.40	2.54	2.68	2.83

Height – Inches and Meters



430RB-430RBS STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
4" (102) deep, 6063T5 extruded aluminum. 430RB - .080" (2) wall thickness. 430RBS - .125" (3.2) wall thickness. Caulking slots provided.

BLADES
6063T5 extruded aluminum. 430RB - .080" (2) nominal wall thickness. 430RBS - .080" (2) nominal wall thickness. K-style blades (formerly "stormproof") are positioned at 30° angle and spaced approximately 3 1/4" (83) center to center.

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
6"w x 8"h (152 x 203).

APPROXIMATE SHIPPING WEIGHT
4 lbs. per sq. ft. (20 kg per m²).

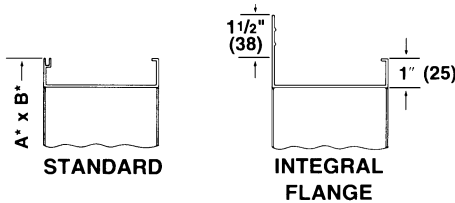
MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 75 (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FRAME CONSTRUCTION



FEATURES

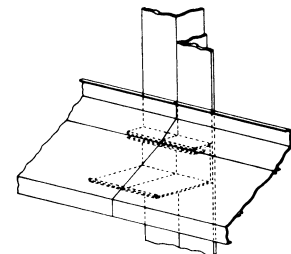
- The 430RB-430RBS offers:
- Architecturally styled, hidden mullions for attractive appearance.
 - All aluminum construction for high resistance to corrosion.
 - Outstanding durability and low maintenance.
 - Low pressure drop with high free area.

VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill
- Hinged frame
- Front or rear security bars
- Filter racks
- Installation angles.
- A variety of bird and insect screens
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Pearledize, prime coat, clear and color anodize. (Some variation in anodize color consistency is possible).

Consult Reliable for other special requirements.



Architectural Style Hidden Mullion

Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

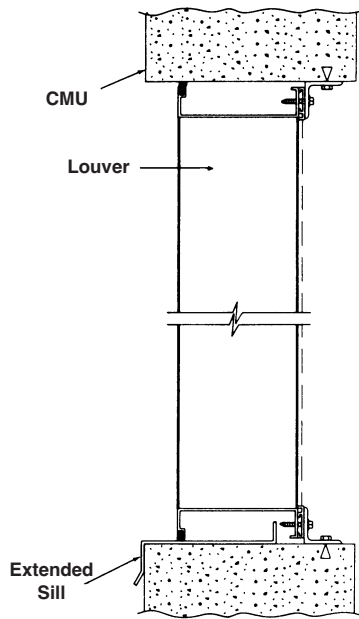
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE	



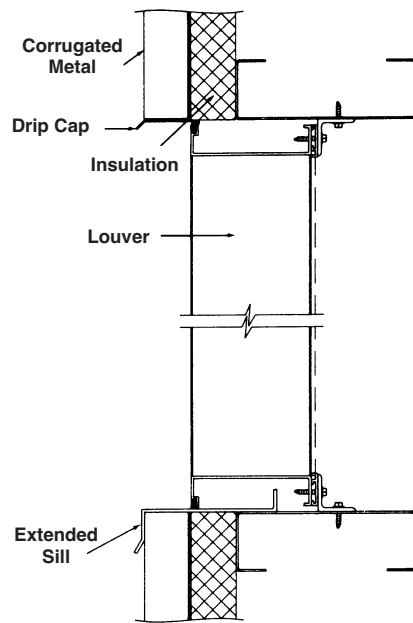
430RB
430RBS

TYPICAL INSTALLATION DETAILS

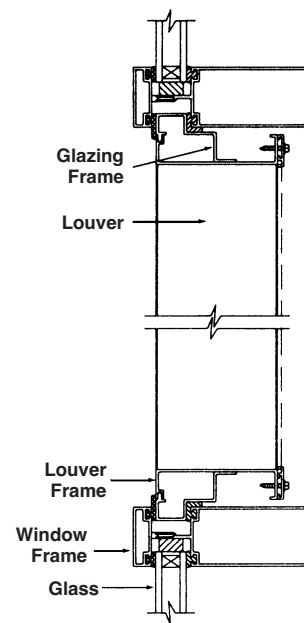
Masonry Wall



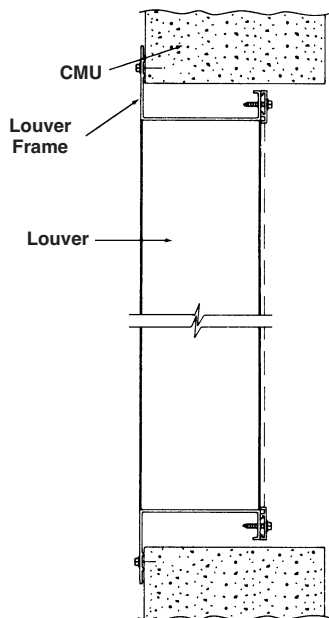
Metal Panel Wall



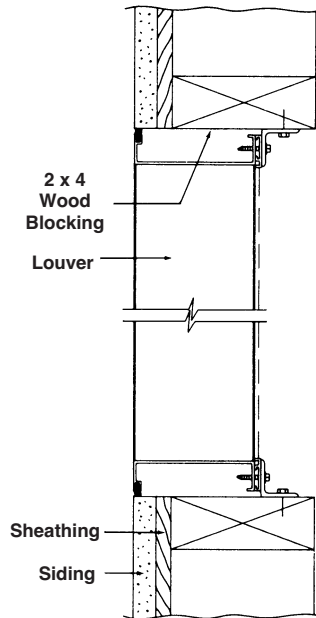
Glazing Frame



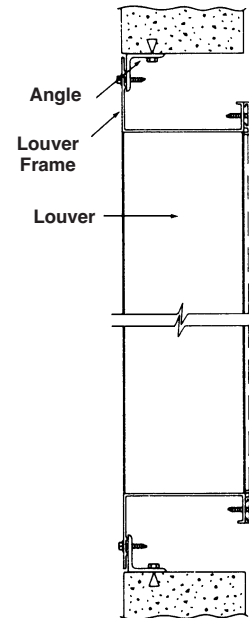
Flange Mount



Wood Installation

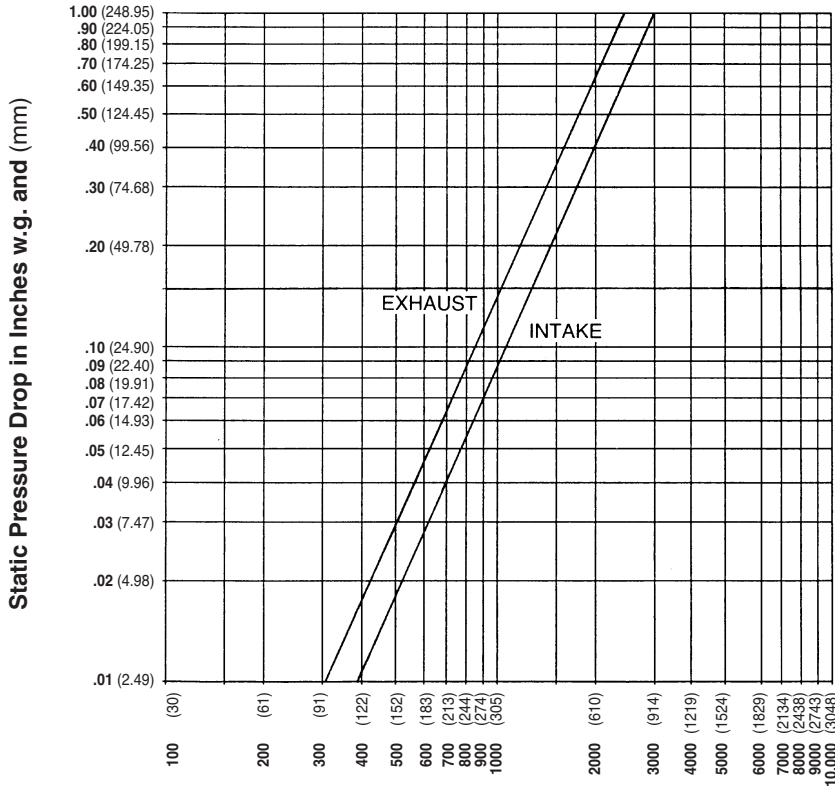


Angle Subframe



Accessories at additional cost.

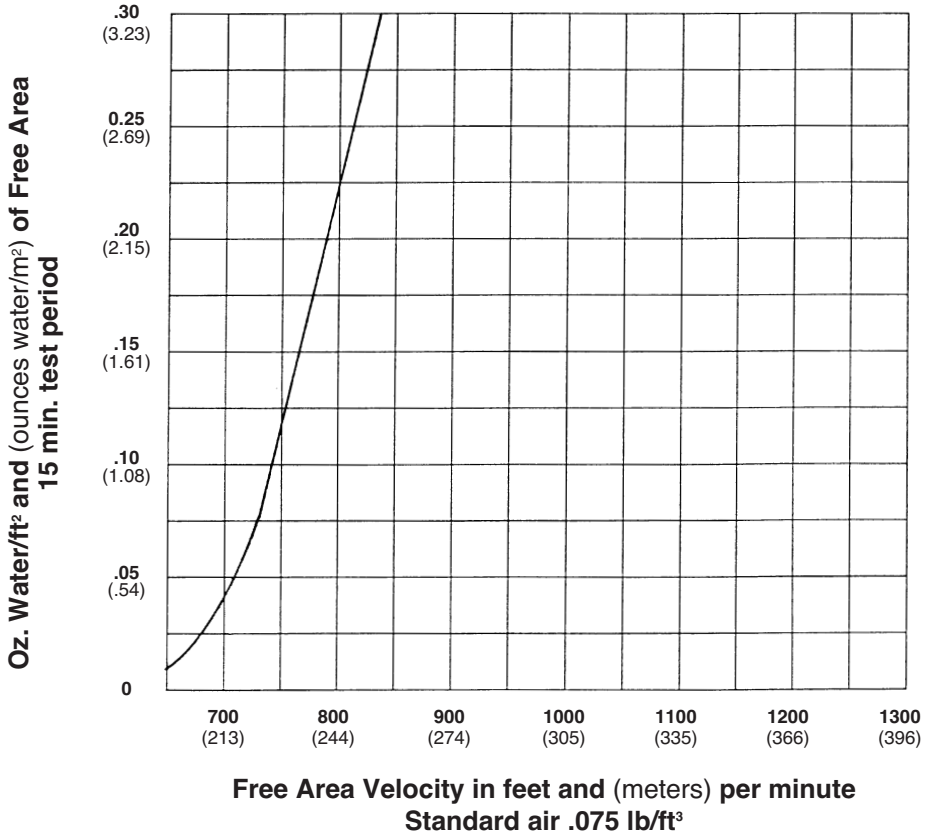
PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 644 fpm (196 m/min).





430RB
430RBS

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type entirely contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades, & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] – specifier may substitute any loading required).

Louvers shall be architectural style with continuous appearing stationary blades – intermediate support mullions shall not interrupt blade appearance when viewed from outside of louver.

Louvers shall be Reliable Model 430RB - 430RBS 6063T5 extruded aluminum alloy construction as follows:

- Frame: .080" (2) wall thickness.
- Blades: .080" (2) wall thickness positioned at 30° angle and spaced approximately 3 1/4" (83) center to center.
- Screen: 3/4" x .051" (19 x 1) expanded, flattened aluminum in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 430RB & 430RBS.

Width – Inches and Meters

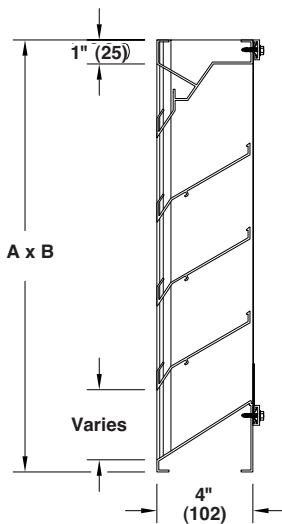
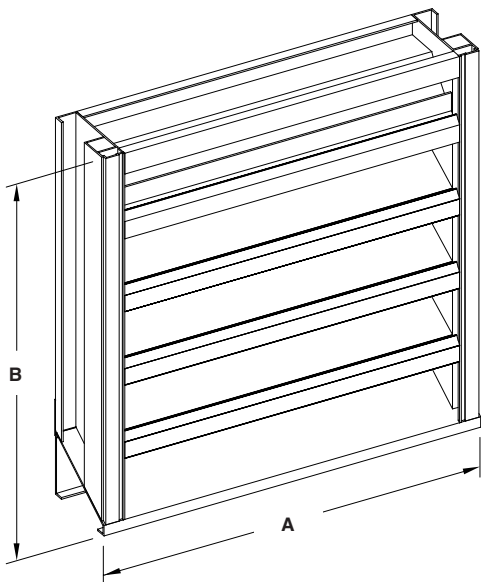
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	.30	.46	.61	.76	.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44
12	.26	.41	.56	.72	.87	1.03	1.18	1.33	1.49	1.64	1.80	1.95	2.10	2.26	2.41
30	.02	.04	.05	.07	.08	.10	.11	.12	.14	.15	.17	.18	.20	.21	.22
18	.53	.85	1.16	1.48	1.80	2.12	2.43	2.75	3.07	3.39	3.71	4.02	4.34	4.66	4.98
46	.05	.08	.11	.14	.17	.20	.23	.26	.29	.31	.34	.37	.40	.43	.46
24	.81	1.29	1.78	2.26	2.74	3.23	3.71	4.20	4.68	5.16	5.65	6.13	6.62	7.10	7.58
61	.08	.12	.17	.21	.25	.30	.34	.39	.43	.48	.52	.57	.61	.66	.70
30	1.04	1.67	2.30	2.93	3.55	4.18	4.81	5.43	6.06	6.69	7.31	7.94	8.57	9.20	9.82
76	.10	.16	.21	.27	.33	.39	.45	.50	.56	.62	.68	.74	.80	.85	.91
36	1.30	2.07	2.85	3.63	4.41	5.19	5.96	6.74	7.52	8.30	9.08	9.85	10.63	11.41	12.19
91	.12	.19	.26	.34	.41	.48	.55	.63	.70	.77	.84	.92	.99	1.06	1.13
42	1.60	2.56	3.52	4.48	5.44	6.39	7.35	8.31	9.27	10.23	11.19	12.15	13.11	14.07	15.03
107	.15	.24	.33	.42	.51	.59	.68	.77	.86	.95	1.04	1.13	1.22	1.31	1.40
48	1.83	2.93	4.03	5.13	6.23	7.33	8.43	9.53	10.63	11.73	12.83	13.93	15.03	16.13	17.23
122	.17	.27	.37	.48	.58	.68	.78	.89	.99	1.09	1.19	1.29	1.40	1.50	1.60
54	2.08	3.32	4.57	5.82	7.06	8.31	9.55	10.80	12.05	13.29	14.54	15.78	17.03	18.28	19.52
137	.19	.31	.42	.54	.66	.77	.89	1.00	1.12	1.23	1.35	1.47	1.58	1.70	1.81
60	2.37	3.79	5.22	6.64	8.06	9.48	10.91	12.33	13.75	15.17	16.60	18.02	19.44	20.86	22.90
152	.22	.35	.48	.62	.75	.88	1.01	1.15	1.28	1.41	1.54	1.67	1.81	1.94	2.07
66	2.62	4.20	5.77	7.35	8.92	10.49	12.07	13.64	15.22	16.79	18.36	19.94	21.51	23.09	24.66
168	.24	.39	.54	.68	.83	.97	1.12	1.27	1.41	1.56	1.71	1.85	2.00	2.15	2.29
72	2.87	4.58	6.30	8.02	9.74	11.46	13.18	14.90	16.62	18.34	20.06	21.77	23.49	25.21	26.93
183	.27	.43	.59	.75	.90	1.06	1.22	1.38	1.54	1.70	1.86	2.02	2.18	2.34	2.50
78	3.14	5.02	6.90	8.79	10.67	12.55	14.44	16.32	18.20	20.09	21.97	23.85	25.73	27.62	29.50
198	.29	.47	.64	.82	.99	1.17	1.34	1.52	1.69	1.87	2.04	2.22	2.39	2.57	2.74
84	3.42	5.46	7.51	9.56	11.61	13.66	15.71	17.76	19.81	21.86	23.91	25.96	28.00	30.05	32.10
213	.32	.51	.70	.89	1.08	1.27	1.46	1.65	1.84	2.03	2.22	2.41	2.60	2.79	2.98
90	3.65	5.85	8.04	10.23	12.42	14.61	16.81	19.00	21.19	23.38	25.57	27.77	29.96	32.15	34.34
229	.34	.54	.75	.95	1.15	1.36	1.56	1.77	1.97	2.17	2.38	2.58	2.78	2.99	3.19
96	3.91	6.25	8.59	10.94	13.28	15.62	17.97	20.31	22.65	25.00	27.34	29.68	32.03	34.37	36.71
244	.36	.58	.80	1.02	1.23	1.45	1.67	1.89	2.10	2.32	2.54	2.76	2.98	3.19	3.41

Height – Inches and Meters

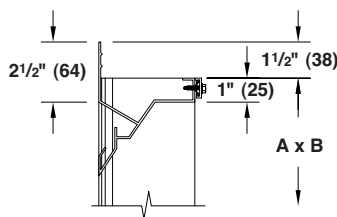


1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

430RD/430RDS



Channel (CF)



Flange (FF)

STANDARD CONSTRUCTION

FRAME

430RDS - .081 (2.1) blade .125 plenum. 4" (102) deep .081" (2.1) thick extruded aluminum frame, 6063-T5 alloy.

BLADES

.081" (2.1) thick aluminum drainable blades positioned at 30° angle and spaced approximately 3 1/2" (89) center to center.

SCREEN

.625 x .040" (16 X 1) flattened aluminum bird screen in removable frame (WBS-1).

MINIMUM SIZE

12"w x 12"h (305 x 305).

MAXIMUM SIZE

Single section - 120" x 90"h (3048 x 2286).

Note: Louvers larger than the maximum single section size will require field assembly of smaller sections.

FEATURES

The 430RD and 430RDS offer:

- 56% Free Area based on 48" x 48" (1219 x 1219) unit.
- Architecturally styled, hidden mullions allowing continuous blade appearance.
- All aluminum construction for high resistance to corrosion.
- Outstanding durability and low maintenance.

VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Extended sill.
- Higher wind load with additional blade bracing.
- A variety of bird and insect screens (reference screen submittal).
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		WIDTH (A)	HEIGHT (B)		

PROJECT
ARCH/ENGR.
REPRESENTATIVE

LOCATION
CONTRACTOR
DATE



430RD

430RDS

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 430RD/430RDS.
Width – Inches and Meters

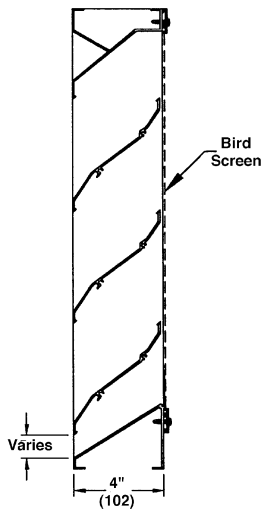
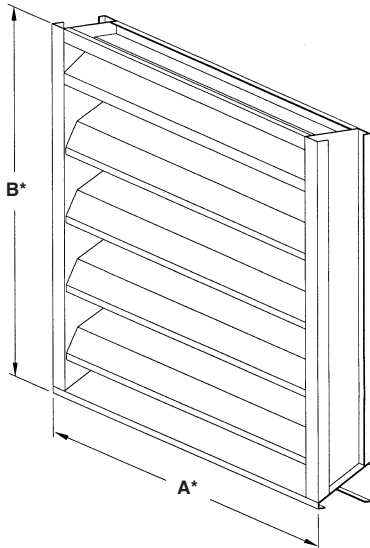
Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.32	0.51	0.70	0.90	1.09	1.29	1.48	1.67	1.87	2.06	2.26	2.45	2.65	2.84	3.03	3.23	3.42	3.62	3.81
0.30	0.03	0.05	0.07	0.08	0.10	0.12	0.14	0.16	0.17	0.19	0.21	0.23	0.25	0.26	0.28	0.30	0.32	0.34	0.35
18	0.57	0.93	1.28	1.64	1.99	2.34	2.70	3.05	3.40	3.76	4.11	4.47	4.82	5.17	5.53	5.88	6.23	6.59	6.94
0.46	0.05	0.09	0.12	0.15	0.19	0.22	0.25	0.28	0.32	0.35	0.38	0.42	0.45	0.48	0.51	0.55	0.58	0.61	0.65
24	0.83	1.35	1.86	2.38	2.89	3.40	3.92	4.43	4.94	5.46	5.97	6.48	7.00	7.51	8.02	8.54	9.05	9.57	10.08
0.61	0.08	0.13	0.17	0.22	0.27	0.32	0.36	0.41	0.46	0.51	0.56	0.60	0.65	0.70	0.75	0.79	0.84	0.89	0.94
30	1.12	1.81	2.50	3.19	3.88	4.57	5.26	5.95	6.64	7.33	8.02	8.71	9.40	10.09	10.78	11.47	12.16	12.85	13.54
0.76	0.10	0.17	0.23	0.30	0.36	0.42	0.49	0.55	0.62	0.68	0.75	0.81	0.87	0.94	1.00	1.07	1.13	1.19	1.26
36	1.40	2.26	3.12	3.98	4.84	5.70	6.56	7.43	8.29	9.15	10.01	10.87	11.73	12.59	13.45	14.31	15.17	16.04	16.90
0.91	0.13	0.21	0.29	0.37	0.45	0.53	0.61	0.69	0.77	0.85	0.93	1.01	1.09	1.17	1.25	1.33	1.41	1.49	1.57
42	1.66	2.68	3.70	4.72	5.74	6.76	7.78	8.81	9.83	10.85	11.87	12.89	13.91	14.93	15.95	16.97	17.99	19.01	20.03
1.07	0.15	0.25	0.34	0.44	0.53	0.63	0.72	0.82	0.91	1.01	1.10	1.20	1.29	1.39	1.48	1.58	1.67	1.77	1.86
48	1.92	3.10	4.27	5.45	6.63	7.81	8.99	10.17	11.35	12.53	13.71	14.89	16.07	17.24	18.42	19.60	20.78	21.96	23.14
1.22	0.18	0.29	0.40	0.51	0.62	0.73	0.84	0.95	1.06	1.17	1.27	1.38	1.49	1.60	1.71	1.82	1.93	2.04	2.15
54	2.22	3.59	4.96	6.33	7.70	9.07	10.44	11.80	13.17	14.54	15.91	17.28	18.65	20.02	21.39	22.75	24.12	25.49	26.86
1.37	0.21	0.33	0.46	0.59	0.72	0.84	0.97	1.10	1.23	1.35	1.48	1.61	1.73	1.86	1.99	2.12	2.24	2.37	2.50
60	2.48	4.01	5.54	7.07	8.60	10.12	11.65	13.18	14.71	16.24	17.76	19.29	20.82	22.35	23.88	25.41	26.93	28.46	29.99
1.52	0.23	0.37	0.52	0.66	0.80	0.94	1.08	1.23	1.37	1.51	1.65	1.79	1.94	2.08	2.22	2.36	2.50	2.65	2.79
66	2.74	4.43	6.12	7.81	9.49	11.18	12.87	14.56	16.24	17.93	19.62	21.31	22.99	24.68	26.37	28.06	29.75	31.43	33.12
1.68	0.26	0.41	0.57	0.73	0.88	1.04	1.20	1.35	1.51	1.67	1.82	1.98	2.14	2.30	2.45	2.61	2.77	2.92	3.08
72	3.05	4.92	6.80	8.68	10.55	12.43	14.30	16.18	18.06	19.93	21.81	23.68	25.56	27.44	29.31	31.19	33.06	34.94	36.82
1.83	0.28	0.46	0.63	0.81	0.98	1.16	1.33	1.50	1.68	1.85	2.03	2.20	2.38	2.55	2.73	2.90	3.07	3.25	3.42
78	3.31	5.35	7.39	9.43	11.47	13.51	15.55	17.59	19.63	21.67	23.71	25.75	27.78	29.82	31.86	33.90	35.94	37.98	40.02
1.98	0.31	0.50	0.69	0.88	1.07	1.26	1.45	1.64	1.83	2.01	2.20	2.39	2.58	2.77	2.96	3.15	3.34	3.53	3.72
84	3.57	5.76	7.96	10.15	12.35	14.54	16.74	18.93	21.13	23.32	25.52	27.71	29.91	32.10	34.30	36.49	38.69	40.88	43.08
2.13	0.33	0.54	0.74	0.94	1.15	1.35	1.56	1.76	1.96	2.17	2.37	2.58	2.78	2.99	3.19	3.39	3.60	3.80	4.01
90	3.82	6.18	8.53	10.89	13.24	15.59	17.95	20.30	22.65	25.01	27.36	29.71	32.07	34.42	36.78	39.13	41.48	43.84	46.19
2.29	0.36	0.57	0.79	1.01	1.23	1.45	1.67	1.89	2.11	2.33	2.54	2.76	2.98	3.20	3.42	3.64	3.86	4.08	4.30



4375B STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
4" (102) deep, 6063T5 extruded aluminum, .081" (2.1) nominal wall thickness. Caulking surfaces provided.

BLADES
6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Blades are positioned at 37¹/₂° angle and spaced approximately 4³/₄" (127) center to center.

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
4 lbs. per sq. ft. (19.5 kg/m²)

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90" w x 120" h (2286 x 3048). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

- The 4375B offers:
- 52% Free Area.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Architecturally styled hidden mullions allowing continuous line appearance.
 - Aluminum construction for low maintenance and high resistance to corrosion.
 - Low pressure drop and low water penetration.

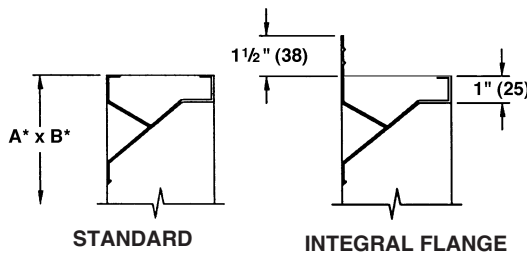
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variations in anodize color consistency is possible.)

Consult Reliable for other special requirements.

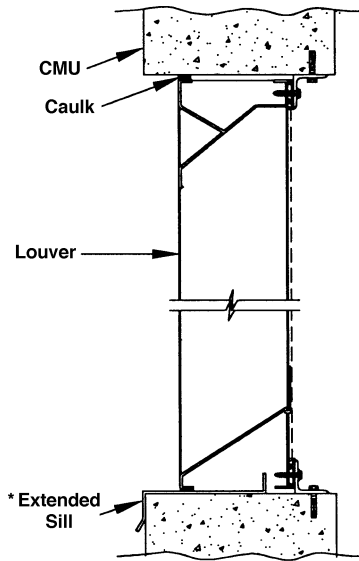
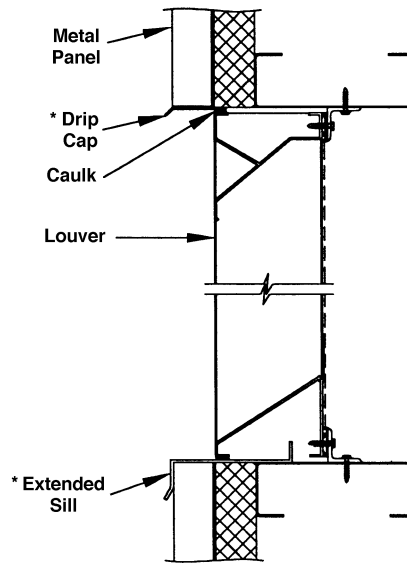
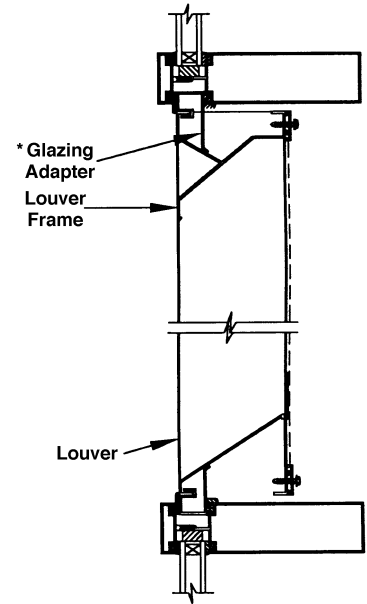
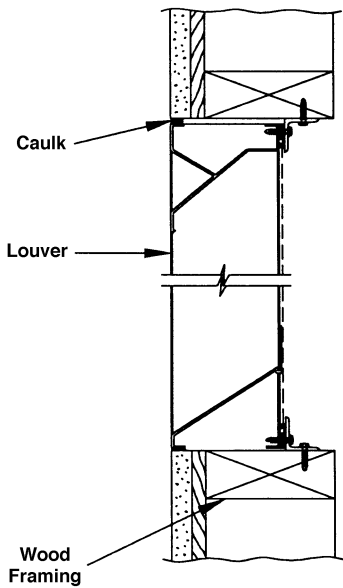
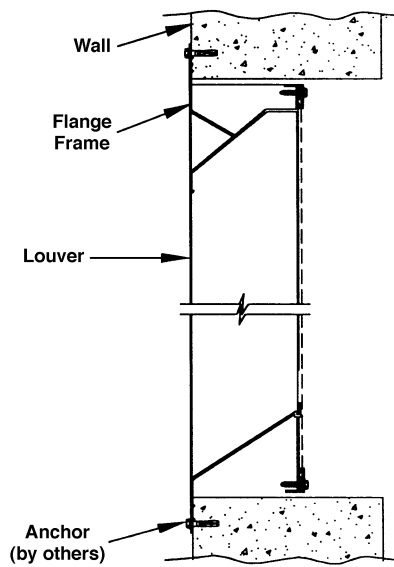
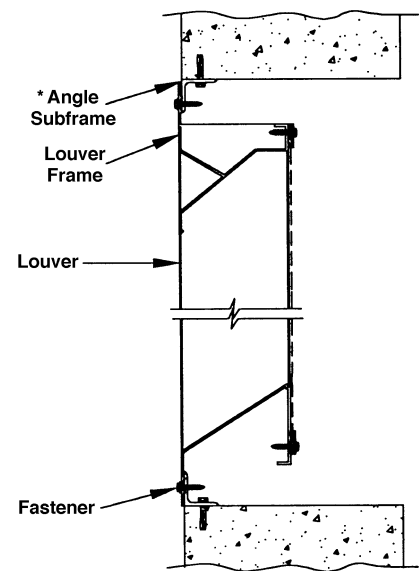
FRAME CONSTRUCTION



Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

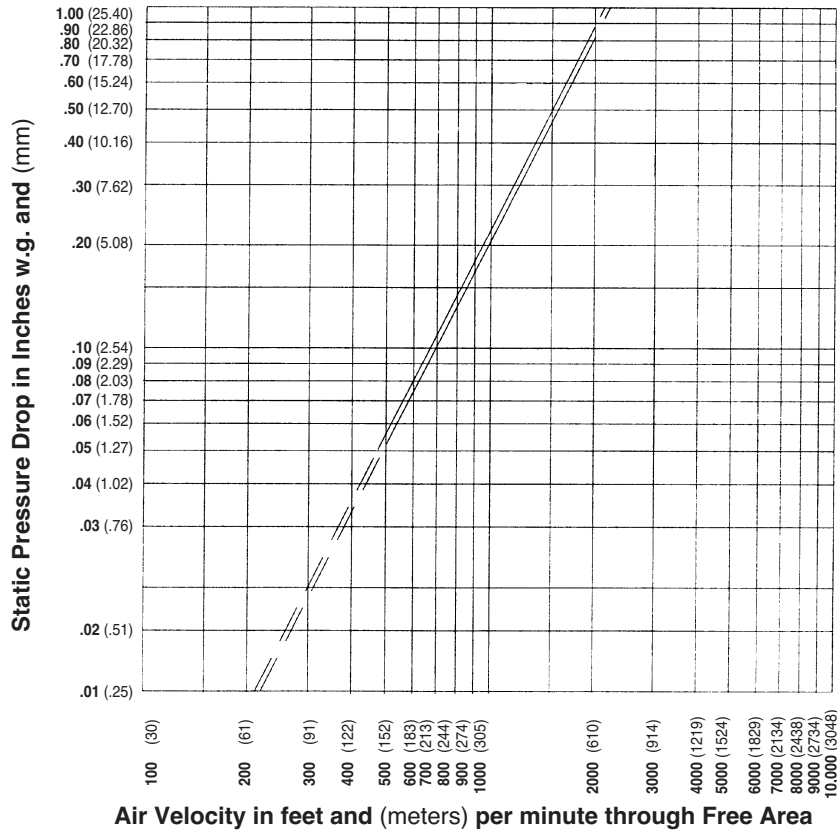
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE	

TYPICAL INSTALLATION DETAILS**Masonry Wall****Metal Panel Wall****Glazing Frame****Wood Installation****Flange Mount****Angle Subframe**

Caulk and anchors are not provided by Reliable.

*Accessories at additional cost.

PRESSURE DROP

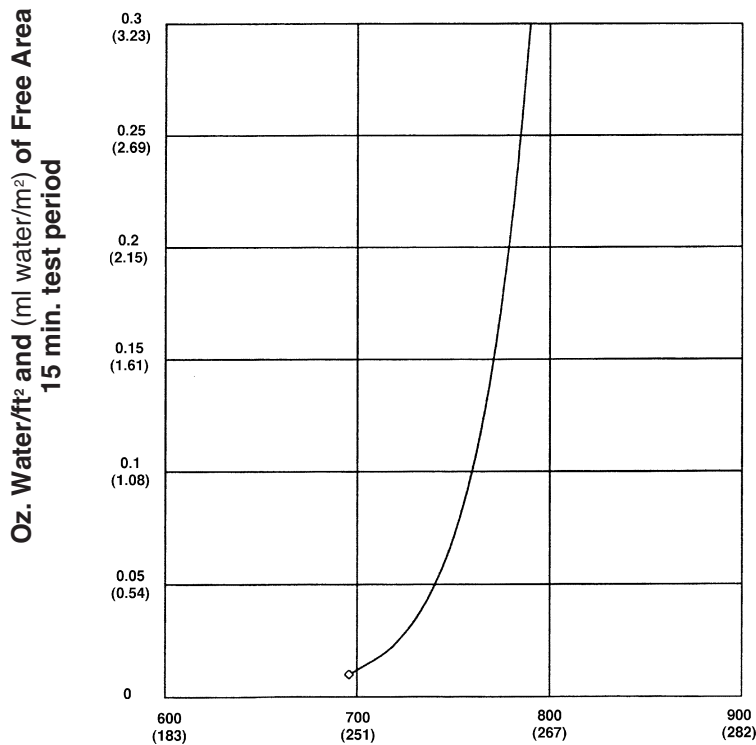


Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 696 fpm (212 m/min).



Reliable Products certifies that the louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

Free Area Velocity in feet and (meters) per minute Standard air .075 lb/ft³ (1.2 kg/m³)



4375B

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type with downspouts in jambs and mullions. Louvers shall have a minimum of 52% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary blades shall be contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 10 feet (3) and shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 4375B extruded 6063T5 aluminum alloy construction as follows:

- Frame: 4" (102) deep, .081" (2.1) wall thickness.
- Blades: .081" (2.1) nominal wall thickness. Blades are positioned at 37¹/₂° angle and spaced approximately 4³/₄" (121) center to center.
- Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 4375B. Width – Inches and Meters

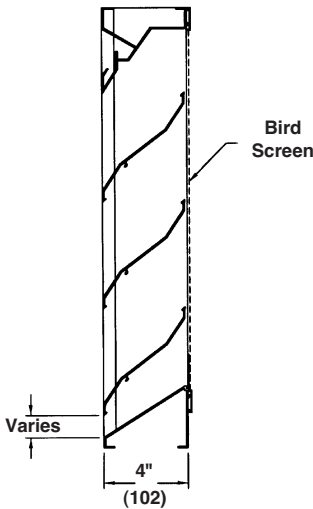
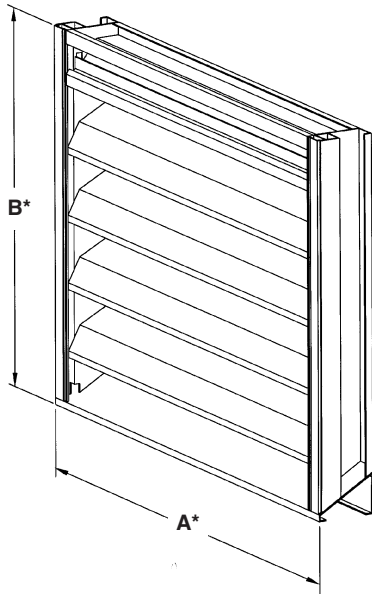
Height – Inches and Meters		12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	12	0.34	0.54	0.74	0.95	1.15	1.35	1.56	1.76	1.96	2.16	2.37	2.57	2.77	2.98	3.18	3.38	3.58	3.79	3.99
	18	0.61	0.97	1.34	1.70	2.06	2.43	2.79	3.16	3.52	3.89	4.25	4.62	4.98	5.34	5.71	6.07	6.44	6.80	7.17
	24	0.79	1.27	1.75	2.22	2.70	3.18	3.65	4.13	4.61	5.08	5.56	6.04	6.51	6.99	7.47	7.94	8.42	8.90	9.37
	30	1.06	1.70	2.34	2.98	3.62	4.25	4.89	5.53	6.17	6.81	7.44	8.08	8.72	9.36	10.00	10.63	11.27	11.91	12.55
	36	1.33	2.13	2.93	3.73	4.53	5.33	6.13	6.93	7.73	8.53	9.33	10.13	10.93	11.73	12.53	13.33	14.12	14.92	15.72
	42	1.60	2.56	3.52	4.48	5.45	6.41	7.37	8.33	9.29	10.25	11.21	12.17	13.13	14.09	15.06	16.02	16.98	17.94	18.90
	48	1.79	2.86	3.93	5.01	6.08	7.15	8.23	9.30	10.37	11.45	12.52	13.59	14.67	15.74	16.81	17.89	18.96	20.03	21.11
	54	2.06	3.29	4.53	5.76	7.00	8.23	9.47	10.70	11.94	13.17	14.40	15.64	16.87	18.11	19.34	20.58	21.81	23.05	24.28
	60	2.33	3.72	5.12	6.52	7.91	9.31	10.70	12.10	13.50	14.89	16.29	17.68	19.08	20.48	21.87	23.27	24.67	26.06	27.46
	66	2.60	4.15	5.71	7.27	8.83	10.38	11.94	13.50	15.06	16.61	18.17	19.73	21.29	22.85	24.40	25.96	27.52	29.08	30.63
	72	2.78	4.45	6.12	7.79	9.46	11.13	12.80	14.47	16.14	17.81	19.48	21.15	22.82	24.49	26.16	27.83	29.50	31.17	32.84
	78	3.05	4.88	6.71	8.55	10.38	12.21	14.04	15.87	17.70	19.53	21.37	23.20	25.03	26.86	28.69	30.52	32.35	34.18	36.02
	84	3.32	5.31	7.31	9.30	11.29	13.29	15.28	17.27	19.26	21.26	23.25	25.24	27.23	29.23	31.22	33.21	35.21	37.20	39.19
	90	3.59	5.74	7.90	10.05	12.21	14.36	16.52	18.67	20.82	22.98	25.13	27.29	29.44	31.60	33.75	35.90	38.06	40.21	42.37
		0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

4375Z, 4375ZS, 4375Z125 STATIONARY LOUVERS

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
 4" (102) deep, 6063T5 extruded aluminum.
 4375Z - .081" (2.1) nominal wall thickness.
 4375ZS - 125" (3.2) nominal wall thickness.
 4375Z125 - .125" (3.2) nominal wall thickness.
 Downspouts and caulking surfaces provided.

BLADES
 6063T5 extruded aluminum.
 4375Z - .081" (2.1) nominal wall thickness.
 4375ZS - .081" (2.1) nominal wall thickness.
 4375Z125 - .125" (3.2) nominal wall thickness.
 Blades are positioned at 37 1/2° angle and spaced approximately 5 3/32" (129) center to center.

SCREEN
 3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
 Mill.

MINIMUM SIZE
 12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
 4375Z - 4 lbs./ft.² (19.5 kg/m²).
 4375ZS - 5 lbs./ft.² (24.4 kg/m²).
 4375Z125 - 6 lbs./ft.² (29.3 kg/m²).

MAXIMUM FACTORY ASSEMBLY SIZE
 Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).
 Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
 Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

- The 4375Z and 4375Z125 offers:
- 54% Free Area.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
 - Architecturally styled, hidden mullions allowing continuous line appearance up to 120" (3048).
 - Aluminum construction for low maintenance and high resistance to corrosion.
 - All welded construction.

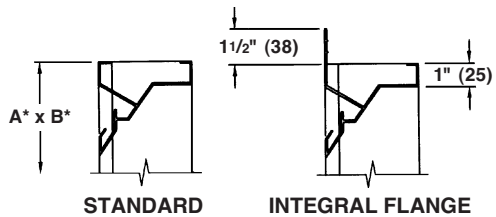
VARIATIONS

Variations to the basic design of these louvers are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

FRAME CONSTRUCTION

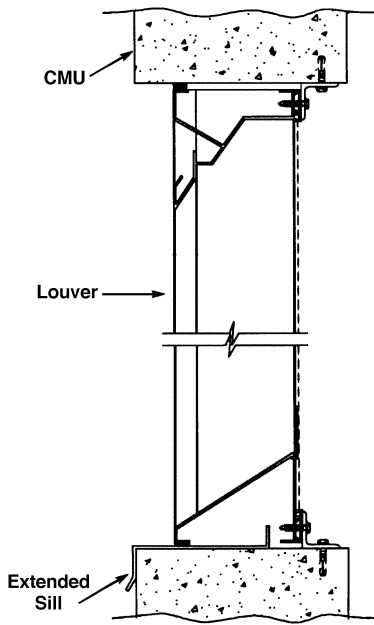


Dimensions in inches, parenthesis () indicate millimeters. *Units furnished 1/4" (6) smaller than given opening dimensions.

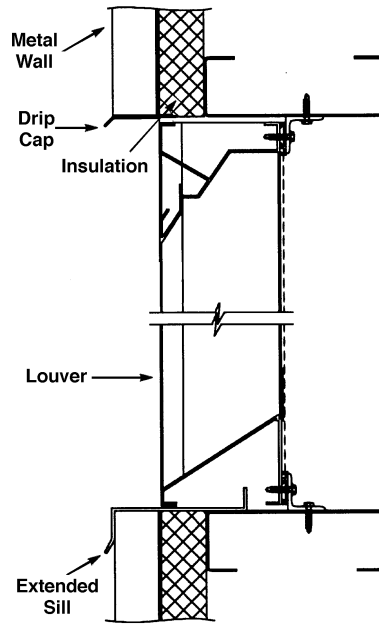
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

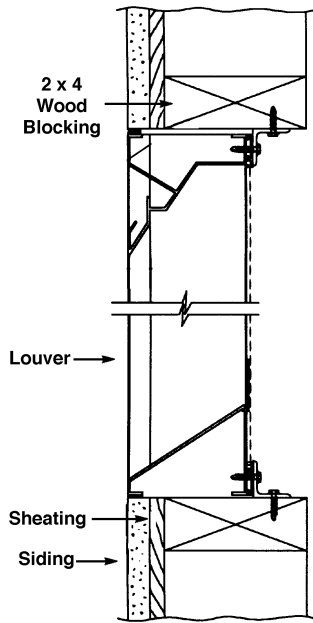
Masonry Wall



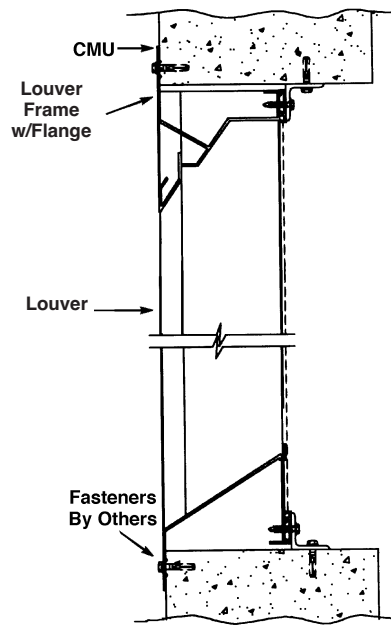
Metal Panel Wall



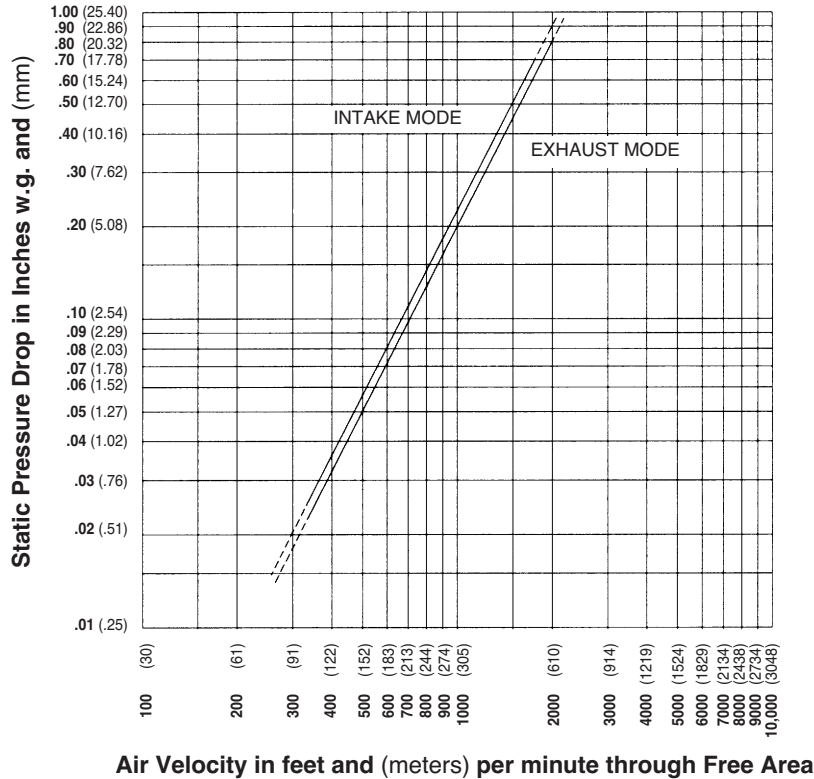
Wood Installation



Flange Mount

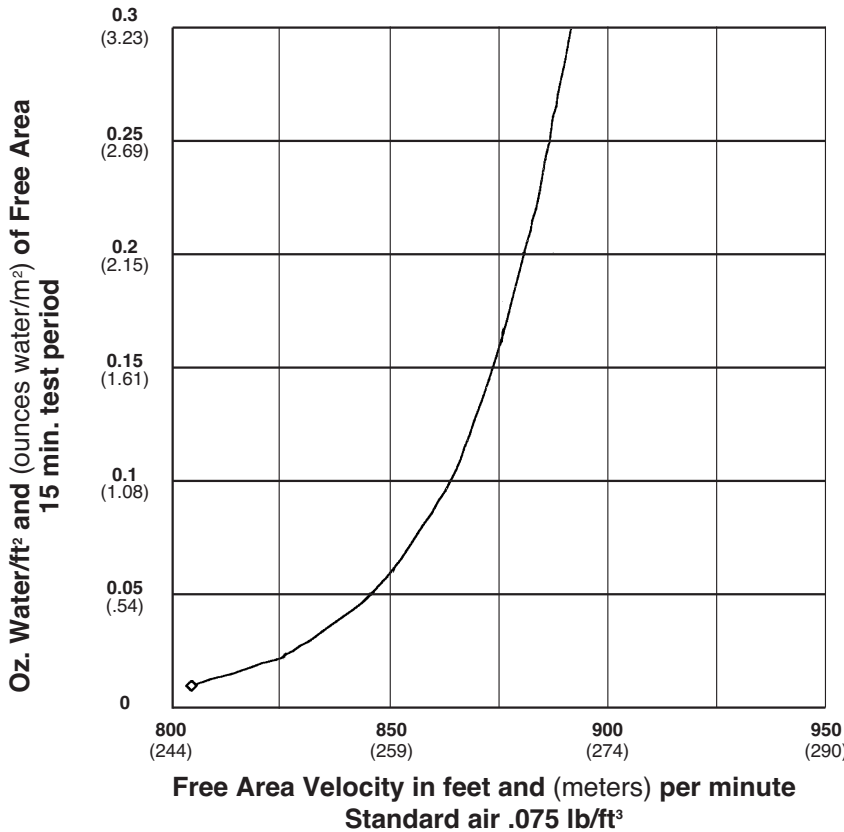


PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)
Beginning point of water penetration at .01 oz./sq. ft. is 803 fpm (245 m/min).



Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 4375Z and 4375Z125 Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.



4375Z
4375ZS
4375Z125

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type with downspouts in jambs and mullions. Louvers shall have a minimum of 54% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary blades shall be contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades, & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 10 feet (3) and shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph [145 KPH] wind – specifier may substitute any loading required).

Louvers shall be Reliable Model 4375Z or 4375Z125 extruded 6063T5 aluminum alloy construction as follows:

- Frame: 4" (102) deep, 4375Z - .081" (2.1) wall thickness.
4375Z125 - .125" (3.2) wall thickness
- Blades: 4375Z - .081" (2.1) wall thickness.
4375Z125 - .125" (3.2) wall thickness at 37¹/₂° angle and spaced approximately 5³/₃₂" (129) center to center.
- Screen: 3/4" x .051 (19 x 1.3) expanded, flattened aluminum in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 4375Z and 4375Z125.
 Width – Inches and Meters

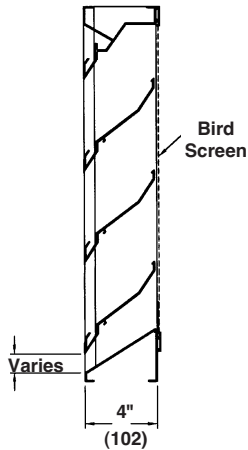
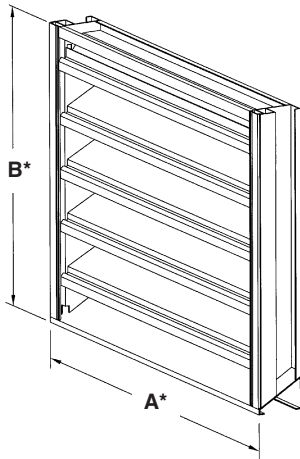
Height – Inches and Meters	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12 0.30	0.26 0.02	0.41 0.04	0.56 0.05	0.71 0.07	0.87 0.08	1.02 0.09	1.17 0.11	1.33 0.12	1.48 0.14	1.63 0.15	1.79 0.17	1.94 0.18	2.09 0.19	2.24 0.21	2.40 0.22	2.55 0.24	2.70 0.25	2.86 0.27	3.01 0.28
18 0.46	0.61 0.06	0.97 0.09	1.33 0.12	1.70 0.16	2.06 0.19	2.43 0.23	2.79 0.26	3.15 0.29	3.52 0.33	3.88 0.36	4.25 0.39	4.61 0.43	4.97 0.46	5.34 0.50	5.70 0.53	6.06 0.56	6.43 0.60	6.79 0.63	7.16 0.67
24 0.61	0.87 0.08	1.40 0.13	1.92 0.18	2.45 0.23	2.97 0.28	3.50 0.33	4.02 0.37	4.55 0.42	5.07 0.47	5.60 0.52	6.12 0.57	6.65 0.62	7.17 0.67	7.70 0.72	8.22 0.76	8.75 0.81	9.27 0.86	9.80 0.91	10.32 0.96
30 0.76	1.14 0.11	1.83 0.17	2.51 0.23	3.20 0.30	3.89 0.36	4.57 0.42	5.26 0.49	5.94 0.55	6.63 0.62	7.32 0.68	8.00 0.74	8.69 0.81	9.37 0.87	10.06 0.93	10.74 1.00	11.43 1.06	12.12 1.13	12.80 1.19	13.49 1.25
36 0.91	1.33 0.12	2.13 0.20	2.92 0.27	3.72 0.35	4.52 0.42	5.31 0.49	6.11 0.57	6.91 0.64	7.70 0.72	8.50 0.79	9.30 0.86	10.09 0.94	10.89 1.01	11.69 1.09	12.49 1.16	13.28 1.23	14.08 1.31	14.88 1.38	15.67 1.46
42 1.07	1.60 0.15	2.55 0.24	3.51 0.33	4.47 0.42	5.43 0.50	6.39 0.59	7.34 0.68	8.30 0.77	9.26 0.86	10.22 0.95	11.18 1.04	12.13 1.13	13.09 1.22	14.05 1.31	15.01 1.39	15.96 1.48	16.92 1.57	17.88 1.66	18.84 1.75
48 1.22	1.86 0.17	2.98 0.28	4.10 0.38	5.22 0.49	6.34 0.59	7.46 0.69	8.58 0.80	9.70 0.90	10.82 1.01	11.93 1.11	13.05 1.21	14.17 1.32	15.29 1.42	16.41 1.52	17.53 1.63	18.65 1.73	19.77 1.84	20.89 1.94	22.00 2.04
54 1.37	2.13 0.20	3.41 0.32	4.69 0.44	5.97 0.55	7.25 0.67	8.53 0.79	9.81 0.91	11.09 1.03	12.37 1.15	13.65 1.27	14.93 1.39	16.21 1.51	17.49 1.63	18.77 1.74	20.05 1.86	21.33 1.98	22.61 2.10	23.89 2.22	25.17 2.34
60 1.52	2.40 0.22	3.84 0.36	5.28 0.49	6.72 0.62	8.16 0.76	9.61 0.89	11.05 1.03	12.49 1.16	13.93 1.29	15.37 1.43	16.81 1.56	18.25 1.70	19.69 1.83	21.13 1.96	22.57 2.10	24.01 2.23	25.45 2.37	26.90 2.50	28.34 2.63
66 1.68	2.59 0.24	4.14 0.38	5.69 0.53	7.24 0.67	8.79 0.82	10.35 0.96	11.90 1.11	13.45 1.25	15.00 1.39	16.55 1.54	18.11 1.68	19.66 1.83	21.21 1.97	22.76 2.12	24.31 2.26	25.86 2.40	27.42 2.55	28.97 2.69	30.52 2.84
72 1.83	2.85 0.26	4.57 0.42	6.28 0.58	7.99 0.74	9.71 0.90	11.42 1.06	13.13 1.22	14.84 1.38	16.56 1.54	18.27 1.70	19.98 1.86	21.70 2.02	23.41 2.18	25.12 2.33	26.83 2.49	28.55 2.65	30.26 2.81	31.97 2.97	33.69 3.13
78 1.98	3.12 0.29	5.00 0.46	6.87 0.64	8.74 0.81	10.62 0.99	12.49 1.16	14.37 1.34	16.24 1.51	18.11 1.68	19.99 1.86	21.86 2.03	23.74 2.21	25.61 2.38	27.48 2.55	29.36 2.73	31.23 2.90	33.10 3.08	34.98 3.25	36.85 3.42
84 2.13	3.39 0.32	5.43 0.50	7.46 0.69	9.50 0.88	11.53 1.07	13.57 1.26	15.60 1.44	17.63 1.64	19.67 1.83	21.70 2.02	23.74 2.21	25.77 2.39	27.81 2.58	29.84 2.77	31.88 2.96	33.91 3.15	35.95 3.34	37.98 3.53	40.02 3.72
90 2.29	3.66 0.34	5.86 0.54	8.05 0.75	10.25 0.95	12.44 1.16	14.64 1.36	16.83 1.56	19.03 1.77	21.23 1.97	23.42 2.18	25.62 2.38	27.81 2.58	30.01 2.79	32.20 2.99	34.40 3.20	36.60 3.40	38.79 3.60	40.99 3.81	43.18 4.01



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

4375D, 4375DS, 4375D125 DRAINABLE STATIONARY LOUVERS

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME

4" (102) deep, 6063T5 extruded aluminum. 4375D - .081" (2.1) nominal wall thickness. 4375DS - 125" (3.2) nominal wall thickness. 4375D125 - .125" (3.2) nominal wall thickness. Downspouts and caulking surfaces provided.

BLADES

6063T5 extruded aluminum. 4375D - .081" (2.1) nominal wall thickness. 4375DS - .081" (2.1) nominal wall thickness. 4375D125 - .125" (3.2) nominal wall thickness. Blades are positioned at 37¹/₂° angle and spaced approximately 5³/₃₂" (129) center to center.

SCREEN

5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

4375D - 4 lbs./ft.² (19.5 kg/m²).
 4375DS - 5 lbs./ft.² (24.4 kg/m²).
 4375D125 - 6 lbs./ft.² (29.3 kg/m²).

MAXIMUM FACTORY ASSEMBLY SIZE

Single sections shall not exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048). Louvers larger than the maximum single section size will require field assembly of smaller sections.

BLADE SUPPORTS

Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

The 4375D, 4375DS and 4375D125 offers:

- 54% Free Area.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
- Drain gutter in each blade minimizes water cascade between blades.
- Architecturally styled, hidden mullions allowing continuous line appearance up to 120" (3048).
- Aluminum construction for low maintenance and high resistance to corrosion.
- All welded construction.

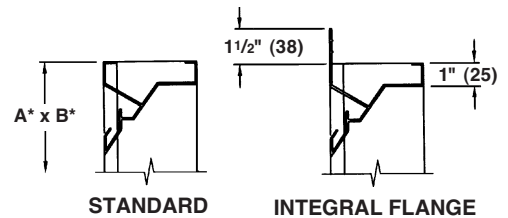
VARIATIONS

Variations to the basic design of these louvers are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



LEED Material Information

VOC Content (g/L) - 0	Recycled Content (MR 4.1 & 4.2)
Manufacturing Locations (MR 5.1)	10% Post Consumer
Geneva, AL 36340	30% Pre-Consumer

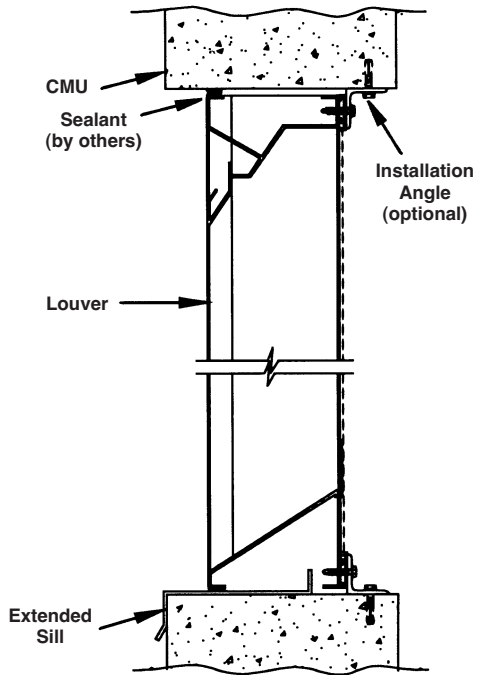
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

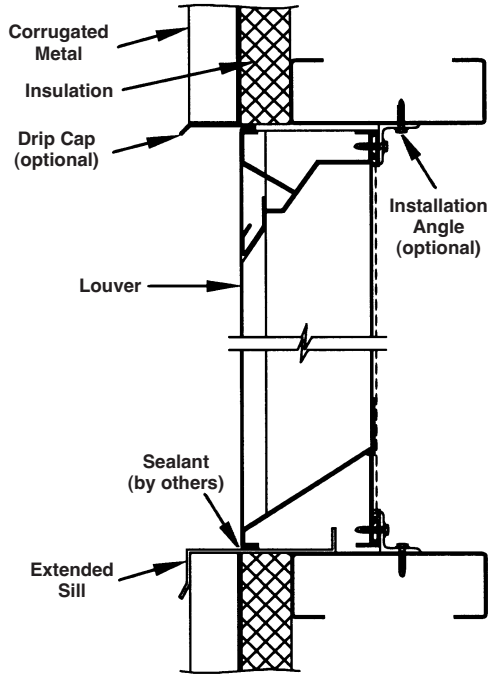
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

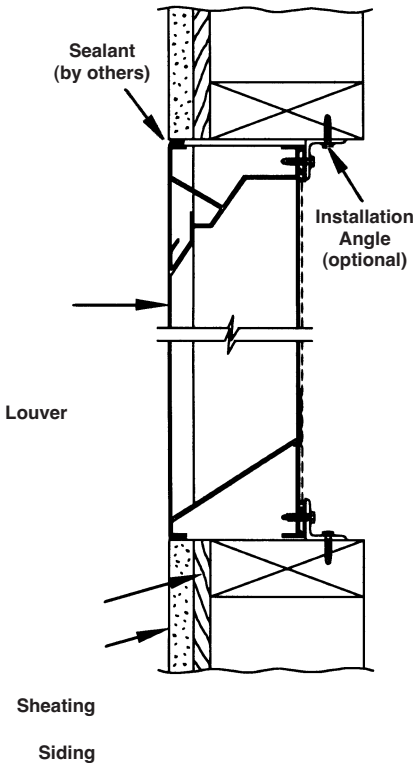
Masonry Wall



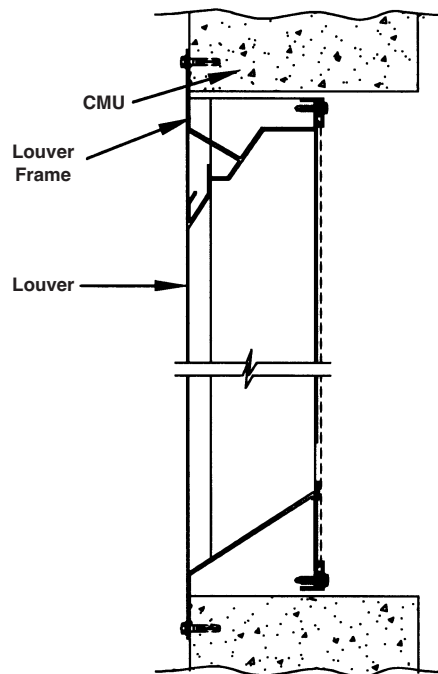
Metal Panel Wall



Wood Installation

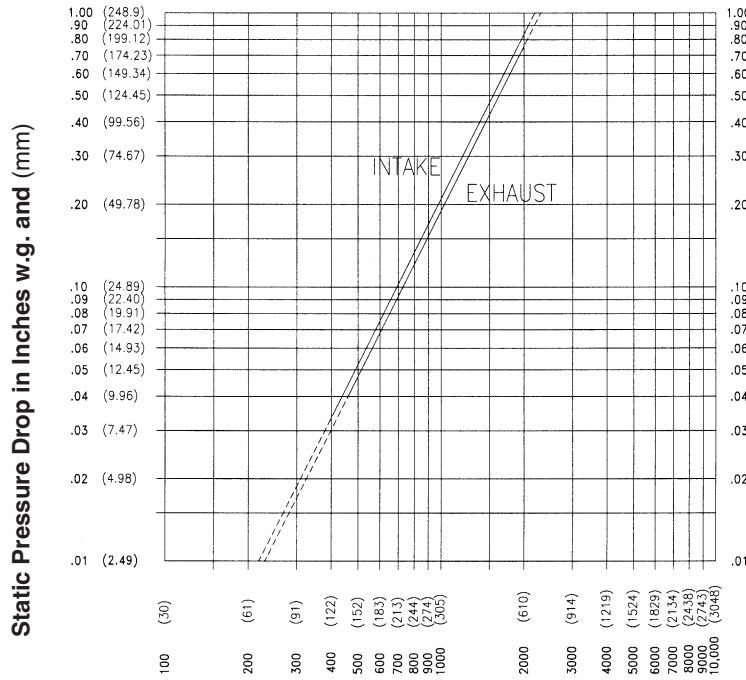


Flange Mount



Options are available at additional cost.
Fasteners into substrate are not provided by Reliable.

PRESSURE DROP

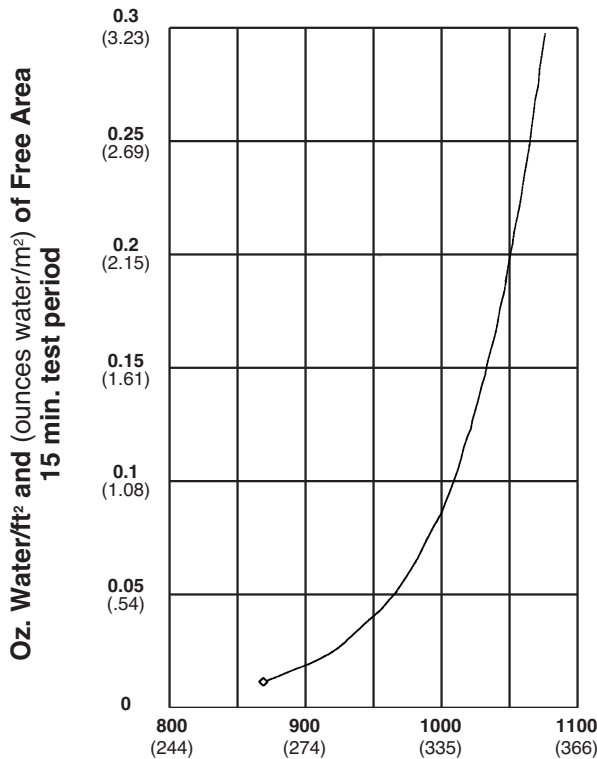


Air Velocity in feet and (meters) per minute through Free Area

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 873 fpm (266 m/min).



**Free Area Velocity in feet and (meters) per minute
Standard air .075 lb/ft³**

Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 4375D, 4375DS and 4375D125 Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.



4375D
4375DS
4375D125

SUGGESTED SPECIFICATION

GENERAL

Furnish and install at locations shown on the plans or as described in schedules drainable louvers. Stationary louvers shall be manufactured in an ISO 9001 certified factory.

Stationary louvers shall be furnished with bird and/or insect screens, supports and finishes as specified and as required for a complete installation. Stationary louvers shall incorporate drainable stationary blade. All blades and frames shall be constructed of 6063-T5 aluminum alloy.

MATERIAL

Stationary louvers shall be 4" (102) deep. Louver blade and frame nominal wall thickness shall be .081" (2.1) for 4375DS, or .125" (3.2) for 4375D125. Integral gutters shall be incorporated into blades, louver head and jamb frames.

PERFORMANCE

The louver shall be AMCA certified for Water Penetration and Air Performance conforming to the following minimum requirements: Free Area: 8.58 Square Feet (0.80 m²).

Maximum pressure drop at 1000 fpm (305 m/min): 0.20" w.g. (0.05 kPA).

Free Area Velocity at Beginning Point of Water Penetration: 873 fpm (+266 m/min).

STRUCTURAL DESIGN

Integral structural supports shall be designed and furnished by the louver manufacturer to carry a wind load of not less than 20 psf (.96 kPA).

FINISH

Stationary louvers shall be finished as specified by the architect. Painted finishes shall include the following minimum requirements. All Kynar finishes shall be applied at 1.2 mil total dry film thickness and meet the following AAMA standards. 70% Kynar finishes shall meet AAMA 2605-05 for organic coatings and exterior aluminum finishes requiring 10 years of South Florida exposure. 50% Kynar finishes shall meet AAMA 2604-05 for organic coatings and exterior aluminum finishes requiring 5 years of South Florida exposure.

Louver manufacturer shall provide 20 year limited warranty for fluo-ropolymer-based finishes. 10-year warranties shall not be acceptable. Finish coating shall not peel, blister, chip, crack or check. Chalking and fading of finish shall not exceed the maximum limits identified in the manufacturers finish warranty.

This warranty shall begin on the date of material shipment.

Stationary Louver shall be Reliable model 4375D, 4375DS or 4375D125.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 4375D and 4375D125 .
 Width – Inches and Meters

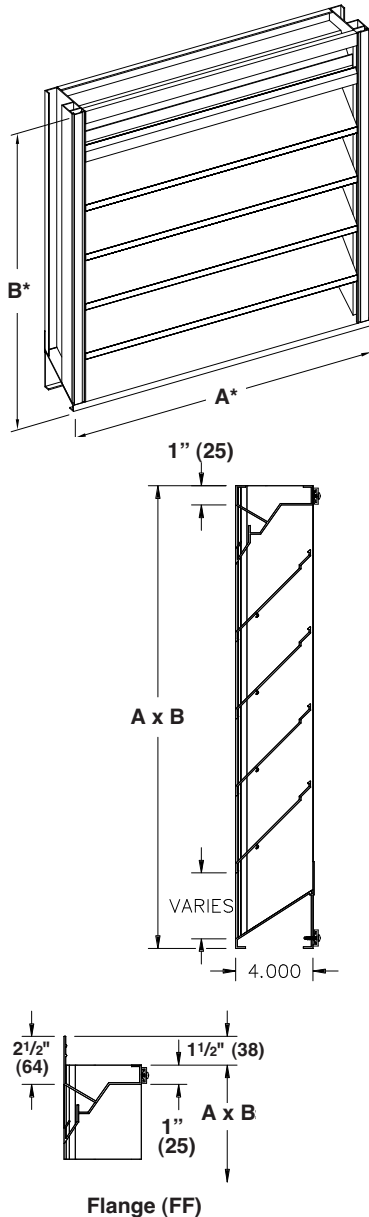
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.26	0.41	0.56	0.71	0.87	1.02	1.17	1.33	1.48	1.63	1.79	1.94	2.09	2.24	2.40	2.55	2.70	2.86	3.01
0.30	0.02	0.04	0.05	0.07	0.08	0.09	0.11	0.12	0.14	0.15	0.17	0.18	0.19	0.21	0.22	0.24	0.25	0.27	0.28
18	0.61	0.97	1.33	1.70	2.06	2.43	2.79	3.15	3.52	3.88	4.25	4.61	4.97	5.34	5.70	6.06	6.43	6.79	7.16
0.46	0.06	0.09	0.12	0.16	0.19	0.23	0.26	0.29	0.33	0.36	0.39	0.43	0.46	0.50	0.53	0.56	0.60	0.63	0.67
24	0.87	1.40	1.92	2.45	2.97	3.50	4.02	4.55	5.07	5.60	6.12	6.65	7.17	7.70	8.22	8.75	9.27	9.80	10.32
0.61	0.08	0.13	0.18	0.23	0.28	0.33	0.37	0.42	0.47	0.52	0.57	0.62	0.67	0.72	0.76	0.81	0.86	0.91	0.96
30	1.14	1.83	2.51	3.20	3.89	4.57	5.26	5.94	6.63	7.32	8.00	8.69	9.37	10.06	10.74	11.43	12.12	12.80	13.49
0.76	0.11	0.17	0.23	0.30	0.36	0.42	0.49	0.55	0.62	0.68	0.74	0.81	0.87	0.93	1.00	1.06	1.13	1.19	1.25
36	1.33	2.13	2.92	3.72	4.52	5.31	6.11	6.91	7.70	8.50	9.30	10.09	10.89	11.69	12.49	13.28	14.08	14.88	15.67
0.91	0.12	0.20	0.27	0.35	0.42	0.49	0.57	0.64	0.72	0.79	0.86	0.94	1.01	1.09	1.16	1.23	1.31	1.38	1.46
42	1.60	2.55	3.51	4.47	5.43	6.39	7.34	8.30	9.26	10.22	11.18	12.13	13.09	14.05	15.01	15.96	16.92	17.88	18.84
1.07	0.15	0.24	0.33	0.42	0.50	0.59	0.68	0.77	0.86	0.95	1.04	1.13	1.22	1.31	1.39	1.48	1.57	1.66	1.75
48	1.86	2.98	4.10	5.22	6.34	7.46	8.58	9.70	10.82	11.93	13.05	14.17	15.29	16.41	17.53	18.65	19.77	20.89	22.00
1.22	0.17	0.28	0.38	0.49	0.59	0.69	0.80	0.90	1.01	1.11	1.21	1.32	1.42	1.52	1.63	1.73	1.84	1.94	2.04
54	2.13	3.41	4.69	5.97	7.25	8.53	9.81	11.09	12.37	13.65	14.93	16.21	17.49	18.77	20.05	21.33	22.61	23.89	25.17
1.37	0.20	0.32	0.44	0.55	0.67	0.79	0.91	1.03	1.15	1.27	1.39	1.51	1.63	1.74	1.86	1.98	2.10	2.22	2.34
60	2.40	3.84	5.28	6.72	8.16	9.61	11.05	12.49	13.93	15.37	16.81	18.25	19.69	21.13	22.57	24.01	25.45	26.90	28.34
1.52	0.22	0.36	0.49	0.62	0.76	0.89	1.03	1.16	1.29	1.43	1.56	1.70	1.83	1.96	2.10	2.23	2.37	2.50	2.63
66	2.59	4.14	5.69	7.24	8.79	10.35	11.90	13.45	15.00	16.55	18.11	19.66	21.21	22.76	24.31	25.86	27.42	28.97	30.52
1.68	0.24	0.38	0.53	0.67	0.82	0.96	1.11	1.25	1.39	1.54	1.68	1.83	1.97	2.12	2.26	2.40	2.55	2.69	2.84
72	2.85	4.57	6.28	7.99	9.71	11.42	13.13	14.84	16.56	18.27	19.98	21.70	23.41	25.12	26.83	28.55	30.26	31.97	33.69
1.83	0.26	0.42	0.58	0.74	0.90	1.06	1.22	1.38	1.54	1.70	1.86	2.02	2.18	2.33	2.49	2.65	2.81	2.97	3.13
78	3.12	5.00	6.87	8.74	10.62	12.49	14.37	16.24	18.11	19.99	21.86	23.74	25.61	27.48	29.36	31.23	33.10	34.98	36.85
1.98	0.29	0.46	0.64	0.81	0.99	1.16	1.34	1.51	1.68	1.86	2.03	2.21	2.38	2.55	2.73	2.90	3.08	3.25	3.42
84	3.39	5.43	7.46	9.50	11.53	13.57	15.60	17.63	19.67	21.70	23.74	25.77	27.81	29.84	31.88	33.91	35.95	37.98	40.02
2.13	0.32	0.50	0.69	0.88	1.07	1.26	1.45	1.64	1.83	2.02	2.21	2.39	2.58	2.77	2.96	3.15	3.34	3.53	3.72
90	3.66	5.86	8.05	10.25	12.44	14.64	16.83	19.03	21.23	23.42	25.62	27.81	30.01	32.20	34.40	36.60	38.79	40.99	43.18
2.29	0.34	0.54	0.75	0.95	1.16	1.36	1.56	1.77	1.97	2.18	2.38	2.58	2.79	2.99	3.20	3.40	3.60	3.81	4.01

Height – Inches and Meters



445RB, 445RBS AND 445RB125 STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME

4" (102) deep, 6063T5 extruded aluminum. 445RB - .081" (2.1) nominal wall thickness. 4445RBS - .125" (3.2) nominal wall thickness. 445RB125 - .125" (3.2) nominal wall thickness. Downspouts and caulking surfaces provided.

BLADES

6063T5 extruded aluminum. 445RB - .081" (2.1) nominal wall thickness. 445RBS - .081" (2.1) nominal wall thickness. 445RB125 - .125" (3.2) nominal wall thickness. Blades are positioned at 45° angle and spaced approximately 4" (102) center to center.

SCREEN

3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

445RBS - 4 lbs./ft.² (19.5 kg /m²)
445RB125 - 6 lbs./ft.² (29.3 kg /m²)

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS

Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

The 445RB, 445RBS and 445RB125 offer:

- 52% Free Area based on 48" x 48" (1219 x 1219) unit.
- Architecturally styled, hidden mullions allowing continuous blade appearance.
- All aluminum construction for high resistance to corrosion.
- Outstanding durability and low maintenance.

VARIATIONS

Variations to the basic design of these louvers are available at additional cost. They include:

- Extended sill.
- .125 thick frames and blades.
- Higher wind load with additional blade bracing.
- A variety of bird and insect screens (reference screen submittal).
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.



Reliable Products certifies that the 445RB and 445RB125 Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

Consult Reliable for additional information.

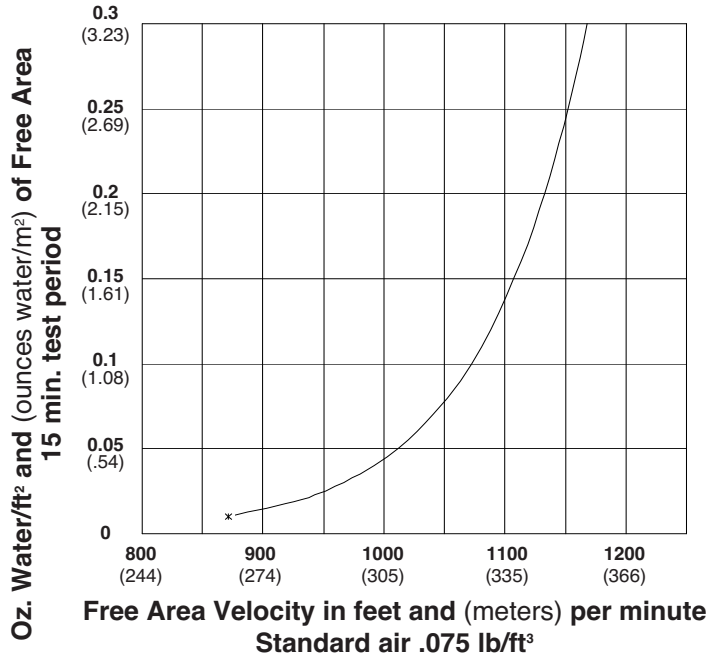
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

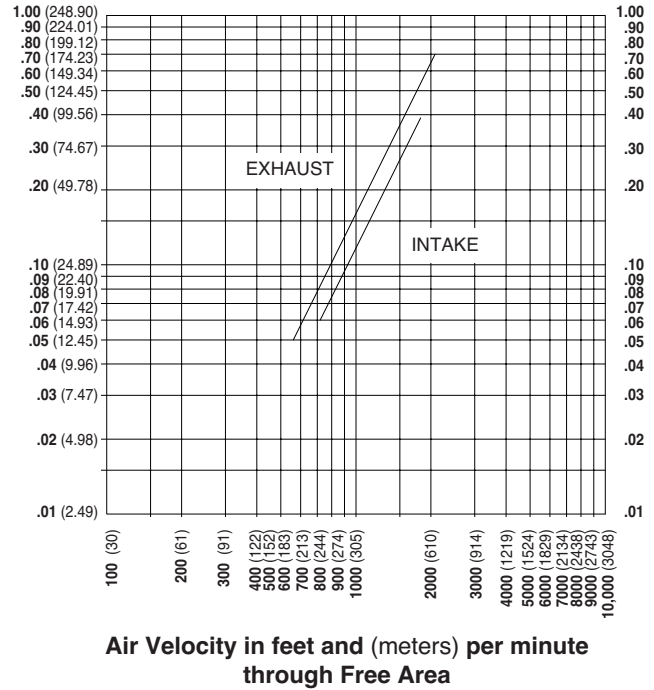
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A-WIDE	B-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

WATER PENETRATION GRAPH

Beginning point of water penetration
at .01 oz./sq. ft. is 871 fpm (265 m/min).



PRESSURE DROP 445RB 445RBS 445RB125



FREE AREA GUIDE

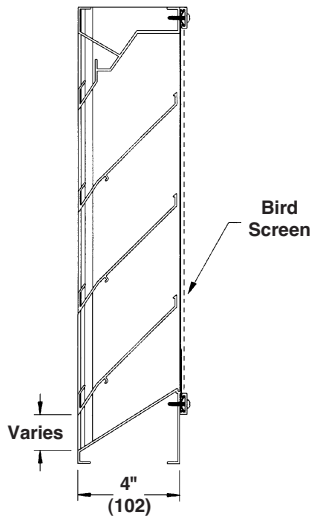
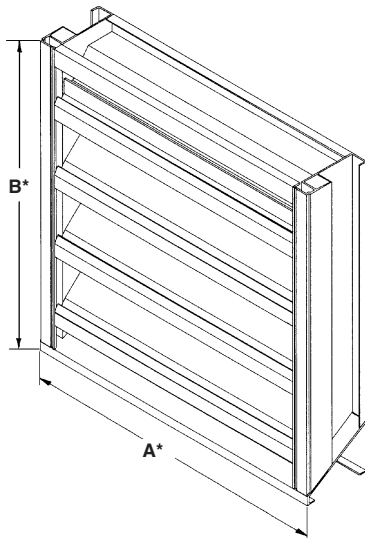
Free Area Guide shows free area in ft² and m² for various sizes of 445RB, 445RBS, 445RB125.
Width – Inches and Meters

Height – Inches and Meters	12		18		24		30		36		42		48		54		60		66		72		78		84		90		96		102		108		114		120			
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.05	3.20	3.36	3.51	3.67	3.82	3.97	4.13	4.28	4.43	4.59	4.74	4.89	5.05	5.20	5.36	5.51	5.67	5.82	5.98		
12	0.33	0.53	0.73	0.93	1.13	1.34	1.54	1.74	1.94	2.07	2.28	2.48	2.68	2.88	3.08	3.28	3.49	3.69	3.89																					
0.30	0.03	0.05	0.07	0.09	0.11	0.12	0.14	0.16	0.18	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.32	0.34	0.36																					
18	0.55	0.89	1.22	1.56	1.90	2.23	2.57	2.91	3.25	3.47	3.81	4.25	4.48	4.82	5.16	5.49	5.83	6.17	6.51																					
0.46	0.05	0.08	0.11	0.15	0.18	0.21	0.24	0.27	0.30	0.32	0.35	0.40	0.42	0.45	0.48	0.51	0.54	0.57	0.61																					
24	0.82	1.32	1.82	2.32	2.82	3.32	3.82	4.32	4.83	5.16	5.66	6.16	6.66	7.16	7.67	8.17	8.67	9.17	9.67																					
0.61	0.08	0.12	0.17	0.22	0.26	0.31	0.36	0.40	0.45	0.48	0.53	0.57	0.62	0.67	0.71	0.76	0.81	0.85	0.90																					
30	1.04	1.67	2.31	2.95	3.58	4.22	4.86	5.49	6.13	6.56	7.19	7.83	8.47	9.10	9.74	10.38	11.01	11.65	12.29																					
0.76	0.10	0.16	0.21	0.27	0.33	0.39	0.45	0.51	0.57	0.61	0.67	0.73	0.79	0.85	0.91	0.97	1.02	1.08	1.14																					
36	1.30	2.10	2.90	3.71	4.51	5.31	6.11	6.91	7.71	8.24	9.05	9.85	10.65	11.45	12.25	13.05	13.85	14.65	15.45																					
0.91	0.12	0.20	0.27	0.35	0.42	0.49	0.57	0.64	0.72	0.77	0.84	0.92	0.99	1.06	1.14	1.21	1.29	1.36	1.44																					
42	1.52	2.46	3.40	4.33	5.27	6.21	7.14	8.08	9.02	9.64	10.58	11.51	12.45	13.39	14.32	15.26	16.20	17.13	18.07																					
1.07	0.14	0.23	0.32	0.40	0.49	0.58	0.66	0.75	0.84	0.90	0.98	1.07	1.16	1.25	1.33	1.42	1.51	1.59	1.68																					
48	1.79	2.89	3.99	5.09	6.19	7.29	8.39	9.49	10.60	11.33	12.43	13.53	14.63	15.73	16.83	17.93	19.04	20.14	21.24																					
1.22	0.17	0.27	0.37	0.47	0.58	0.68	0.78	0.88	0.99	1.05	1.16	1.26	1.36	1.46	1.57	1.67	1.77	1.87	1.98																					
54	2.01	3.25	4.48	5.72	6.96	8.19	9.43	10.66	11.90	12.73	13.96	15.20	16.43	17.67	18.91	20.14	21.38	22.62	23.85																					
1.37	0.19	0.30	0.42	0.53	0.65	0.76	0.88	0.99	1.11	1.18	1.30	1.41	1.53	1.64	1.76	1.87	1.99	2.10	2.22																					
60	2.28	3.68	5.08	6.48	7.88	9.28	10.68	12.08	13.48	14.41	15.81	17.22	18.62	20.02	21.42	22.82	24.22	25.62	27.02																					
1.52	0.21	0.34	0.47	0.60	0.73	0.86	0.99	1.12	1.25	1.34	1.47	1.60	1.73	1.86	1.99	2.12	2.25	2.38	2.51																					
66	2.50	4.03	5.57	7.10	8.64	10.18	11.71	13.25	14.79	15.81	17.35	18.88	20.42	21.95	23.49	25.03	26.56	28.10	29.64																					
1.68	0.23	0.37	0.52	0.66	0.80	0.95	1.09	1.23	1.38	1.47	1.61	1.76	1.90	2.04	2.18	2.33	2.47	2.61	2.76																					
72	2.76	4.46	6.16	7.86	9.56	11.26	12.97	14.67	16.37	17.50	19.20	20.90	22.60	24.30	26.00	27.70	29.40	31.10	32.80																					
1.83	0.26	0.41	0.57	0.73	0.89	1.05	1.21	1.36	1.52	1.63	1.81	1.94	2.10	2.26	2.42	2.58	2.73	2.89	3.05																					
78	2.98	4.82	6.66	8.49	10.33	12.16	14.00	15.84	17.67	18.90	20.73	22.57	24.40	26.24	28.07	29.91	31.75	33.58	35.42																					
1.98	0.28	0.45	0.62	0.79	0.96	1.13	1.30	1.47	1.64	1.76	1.93	2.10	2.27	2.44	2.61	2.78	2.95	3.12	3.29																					
84	3.25	5.25	7.25	9.25	11.25	13.25	15.25	17.25	19.25	20.58	22.58	24.48	26.58	28.58	30.58	32.58	34.58	36.58	38.58																					
2.13	0.30	0.49	0.67	0.86	1.05	1.23	1.42	1.60	1.79	1.91	2.10	2.28	2.47	2.66	2.84	3.03	3.22	3.41	3.59																					
90	3.47	5.61	7.74	9.88	12.01	14.15	16.28	18.42	20.56	21.98	24.12	26.25	28.39	30.52	32.66	34.79	36.93	39.07	41.20																					
2.29	0.32	0.52	0.72	0.92	1.12	1.32	1.51	1.71	1.91	2.04	2.24	2.44	2.64	2.84	3.04	3.23	3.43	3.63	3.83																					



445RD, 445RDS AND 445RD125 DRAINABLE STATIONARY LOUVERS

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME

4" (102) deep, 6063T5 extruded aluminum. 445RD - .081" (2.1) nominal wall thickness. 4445RDS - .125" (3.2) nominal wall thickness. 445RD125 - .125" (3.2) nominal wall thickness. Downspouts and caulking surfaces provided.

BLADES

6063T5 extruded aluminum. 445RD - .081" (2.1) nominal wall thickness. 4445RDS - .081" (2.1) nominal wall thickness. 445RD125 - .125" (3.2) nominal wall thickness. Drainable blades are positioned at at 45° angle and spaced approximately 4" (102) center to center.

SCREEN

3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

445RDS - 4 lbs./ft.² (19.5 kg /m²)
445RD125 - 6 lbs./ft.² (29.3 kg /m²)

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS

Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

The 445RD, 445RDS and 445RD125 offers:

- 52% Free Area.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
- Drain gutter in each blade minimizes water cascade between blades.
- Architecturally styled, hidden mullions allowing continuous line appearance up to 120" (3048).
- All aluminum construction for low maintenance and high resistance to corrosion.
- All welded construction.

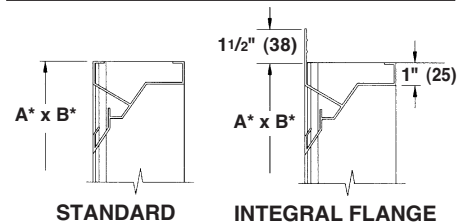
VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize 50 & 70, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



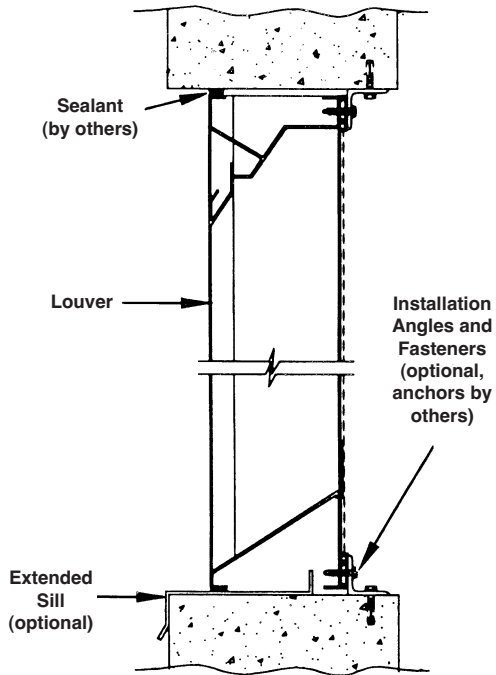
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

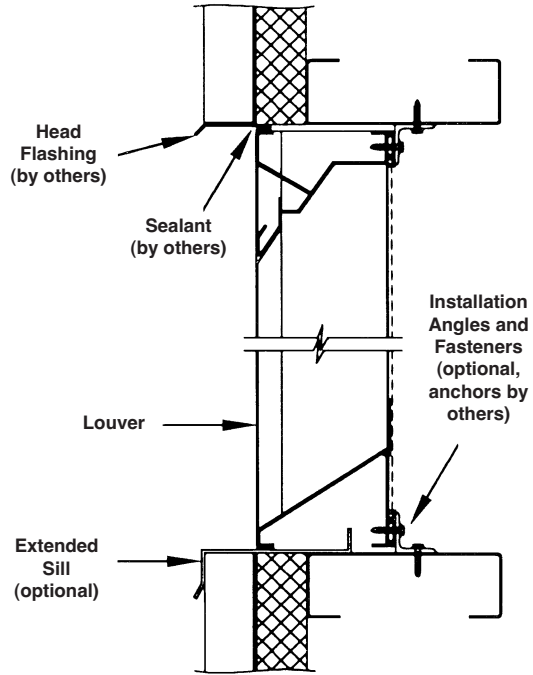
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

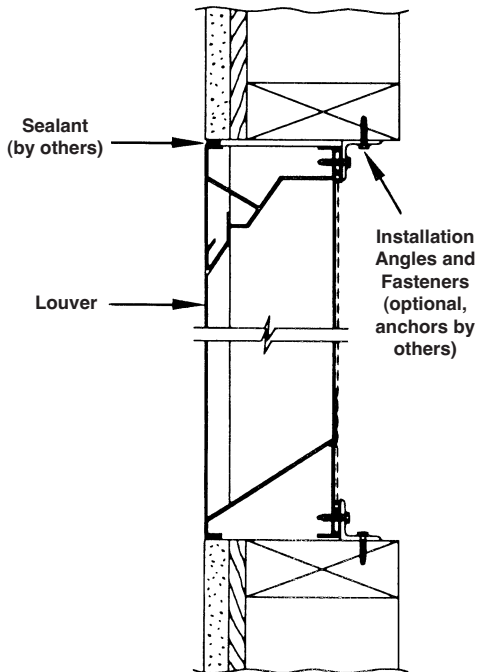
Masonry Wall



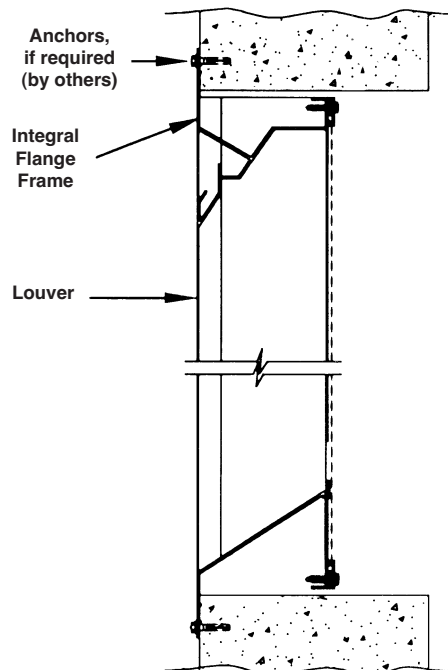
Metal Panel Wall



Wood Installation

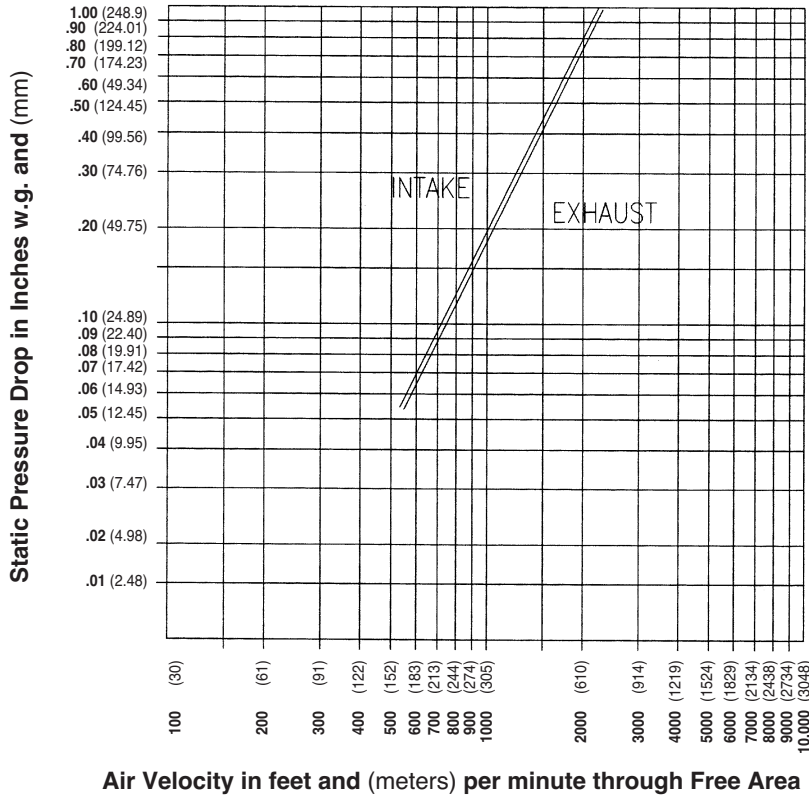


Flange Mount



Optional items are available at additional cost. Anchors or other fasteners securing installation angles to substrate are by others.

PRESSURE DROP

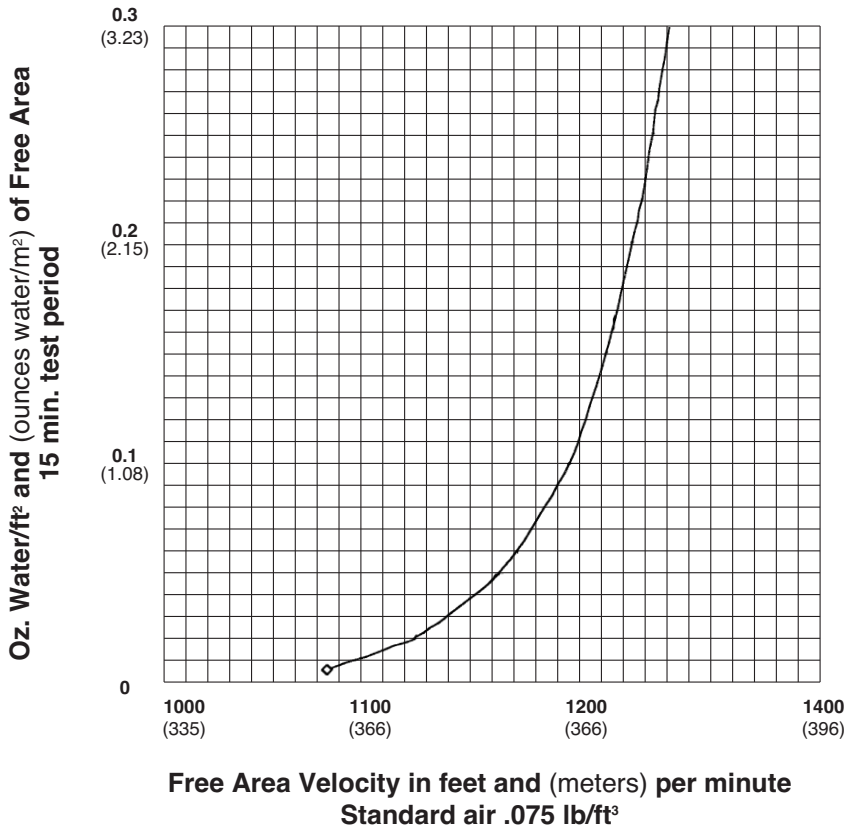


Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" x 48" (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1075 fpm (328 m/min).



Reliable Products certifies that the 445RD, 445RDS and 445RD125 Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.



445RD
445RDS
445RD125

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary drainable type with drain gutters in each blade and downspouts in jambs and mullions. Louvers shall have a minimum of 52% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary drainable blades shall be contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades, & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 10 feet (3) and shall incorporate structural supports required to withstand a wind-load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph [145 KPH] wind – specifier may substitute any loading required).

Louvers shall be Reliable Model 445RD, 445RDS or 445RD125 extruded 6063T5 aluminum construction as follows:

Frame: 445RD – .081" (2.1) nominal wall thickness.
 445RDS – .125" (3.2) nominal wall thickness
 445RD125 – .125" (3.2) nominal wall thickness.

Blades: 445RD - .081" (2.1) wall thickness. 445RD125 - .125" (3.2) wall thickness. Drainable blades are positioned at 45° angle and spaced approximately 4" (102) center to center.

Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.

Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

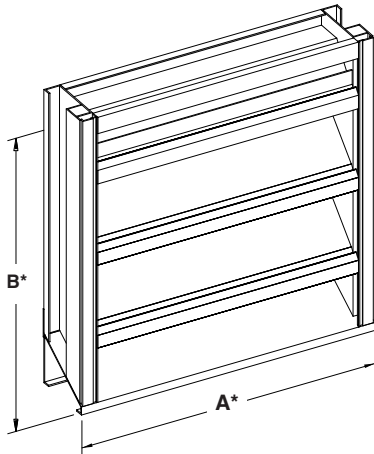
FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 445RD, 445RDS and 445RD125 .
 Width – Inches and Meters

Height – Inches and Meters	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.33	0.63	0.73	0.93	1.14	1.34	1.64	1.74	1.94	2.08	2.28	2.48	2.68	2.88	3.09	3.29	3.49	3.69	3.89
0.30	0.03	0.05	0.07	0.09	0.11	0.12	0.14	0.16	0.18	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.32	0.34	0.36
18	0.66	0.88	1.22	1.66	1.89	2.23	2.66	2.90	3.23	3.46	3.79	4.13	4.47	4.80	5.14	5.47	5.81	6.15	6.48
0.46	0.05	0.08	0.11	0.14	0.18	0.21	0.24	0.27	0.30	0.32	0.35	0.38	0.42	0.45	0.48	0.51	0.54	0.57	0.60
24	0.81	1.31	1.81	2.31	2.81	3.30	3.80	4.30	4.80	5.13	5.63	6.13	6.63	7.13	7.63	8.12	8.62	9.12	9.62
0.61	0.08	0.12	0.17	0.21	0.26	0.31	0.35	0.40	0.45	0.48	0.52	0.57	0.62	0.66	0.71	0.76	0.80	0.85	0.89
30	1.03	1.66	2.29	2.93	3.56	4.19	4.83	5.46	6.09	6.51	7.15	7.78	8.41	9.04	9.68	10.31	10.94	11.58	12.21
0.76	0.10	0.15	0.21	0.27	0.33	0.39	0.45	0.51	0.57	0.61	0.66	0.72	0.78	0.84	0.90	0.96	1.02	1.08	1.14
36	1.29	2.09	2.88	3.68	4.47	5.27	6.07	6.86	7.66	8.19	8.98	9.78	10.57	11.37	12.17	12.96	13.76	14.55	15.35
0.91	0.12	0.19	0.27	0.34	0.42	0.49	0.56	0.64	0.71	0.76	0.84	0.91	0.98	1.06	1.13	1.21	1.28	1.35	1.43
42	1.51	2.44	3.37	4.30	5.23	6.16	7.09	8.02	8.96	9.57	10.50	11.43	12.36	13.29	14.22	15.15	16.08	17.01	17.94
1.07	0.14	0.23	0.31	0.40	0.49	0.57	0.66	0.75	0.83	0.89	0.98	1.06	1.15	1.24	1.32	1.41	1.50	1.58	1.67
48	1.78	2.87	3.96	5.05	6.14	7.24	8.34	9.42	10.51	11.24	12.34	13.43	14.52	15.61	16.70	17.80	18.89	19.98	21.07
1.22	0.17	0.27	0.37	0.47	0.57	0.67	0.78	0.88	0.98	1.05	1.15	1.25	1.35	1.45	1.55	1.66	1.76	1.86	1.96
54	1.99	3.22	4.45	5.67	6.90	8.13	9.35	10.58	11.81	12.62	13.85	15.08	16.30	17.53	18.76	19.98	21.21	22.44	23.66
1.37	0.19	0.30	0.41	0.53	0.64	0.76	0.87	0.98	1.10	1.17	1.29	1.40	1.52	1.63	1.74	1.86	1.97	2.09	2.20
60	2.26	3.65	5.04	6.43	7.81	9.20	10.59	11.98	13.37	14.30	15.69	17.08	18.47	19.86	21.24	22.63	24.02	25.41	26.80
1.52	0.21	0.34	0.47	0.60	0.73	0.86	0.99	1.11	1.24	1.33	1.46	1.59	1.72	1.85	1.98	2.10	2.23	2.36	2.49
66	2.48	4.00	5.52	7.05	8.57	10.09	11.62	13.14	14.66	15.68	17.20	18.73	20.25	21.77	23.30	24.82	26.34	27.87	29.39
1.68	0.23	0.37	0.51	0.66	0.80	0.94	1.08	1.22	1.36	1.46	1.60	1.74	1.88	2.02	2.17	2.31	2.45	2.59	2.73
72	2.74	4.43	6.11	7.80	9.48	11.17	12.86	14.54	16.23	17.35	19.04	20.73	22.41	24.10	25.78	27.47	29.16	30.84	32.53
1.83	0.25	0.41	0.57	0.73	0.88	1.04	1.20	1.35	1.51	1.61	1.77	1.93	2.08	2.24	2.40	2.55	2.71	2.87	3.03
78	2.96	4.78	6.60	8.42	10.24	12.06	13.88	15.70	17.52	18.73	20.55	22.37	24.20	26.02	27.84	29.66	31.48	33.30	35.12
1.98	0.28	0.44	0.61	0.78	0.95	1.12	1.29	1.46	1.63	1.74	1.91	2.08	2.25	2.42	2.59	2.76	2.93	3.10	3.27
84	3.22	5.21	7.19	9.17	11.16	13.14	15.12	17.10	19.09	20.41	22.39	24.37	26.36	28.34	30.32	32.31	34.29	36.27	38.26
2.13	0.30	0.48	0.67	0.85	1.04	1.22	1.41	1.59	1.78	1.90	2.08	2.27	2.45	2.64	2.82	3.00	3.19	3.37	3.56
90	3.44	5.56	7.67	9.79	11.91	14.03	16.14	18.26	20.38	21.79	23.91	26.02	28.14	30.26	32.38	34.49	36.61	38.73	40.84
2.29	0.32	0.52	0.71	0.91	1.11	1.30	1.50	1.70	1.90	2.03	2.22	2.42	2.62	2.81	3.01	3.21	3.40	3.60	3.80



445RD5, 445RD5S AND 445RD5125



STANDARD CONSTRUCTION

FRAME
445RD5S - .081 (2.1) blade .125 plenum. 4" (102) deep .125" (3.2) thick extruded aluminum frame, 6063-T5 alloy.

BLADES
.081" (2.1) thick aluminum drainable blades positioned at 45° angle and spaced approximately 5.094" (127) center to center.

SCREEN
.625 x .040" flattened aluminum bird screen in removable frame (WBS-1).

MINIMUM SIZE
12"w x 12"h (305 x 305).

MAXIMUM SIZE
Single section - 120" x 90"h (3048 x 2286).

Note: Louvers larger than the maximum single section size will require field assembly of smaller sections.

FEATURES

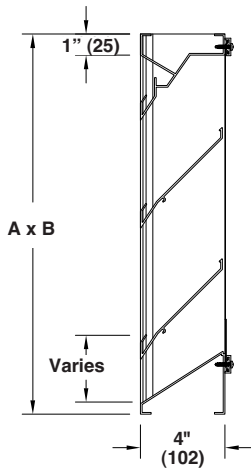
- The 445RD5, 445RD5S and 445RD5125 offer:
- 55% Free Area based on 48" x 48" (1219 x 1219) unit.
 - Architecturally styled, hidden mullions allowing continuous blade appearance.
 - All aluminum construction for high resistance to corrosion.
 - Outstanding durability and low maintenance.
 - Published performance ratings based on testing in accordance with AMCA

VARIATIONS

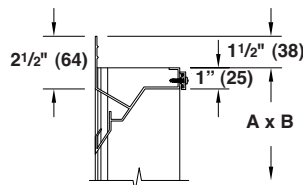
Variations to the basic design of the louver are available at additional cost. They include:

- Extended sill.
- .125 thick frames and blades.
- Higher wind load with additional blade bracing.
- A variety of bird and insect screens (reference screen submittal).
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.



Channel (CF)



Flange (FF)

INTEGRAL FLANGE

Dimensions in inches, parenthesis () indicate millimeters.

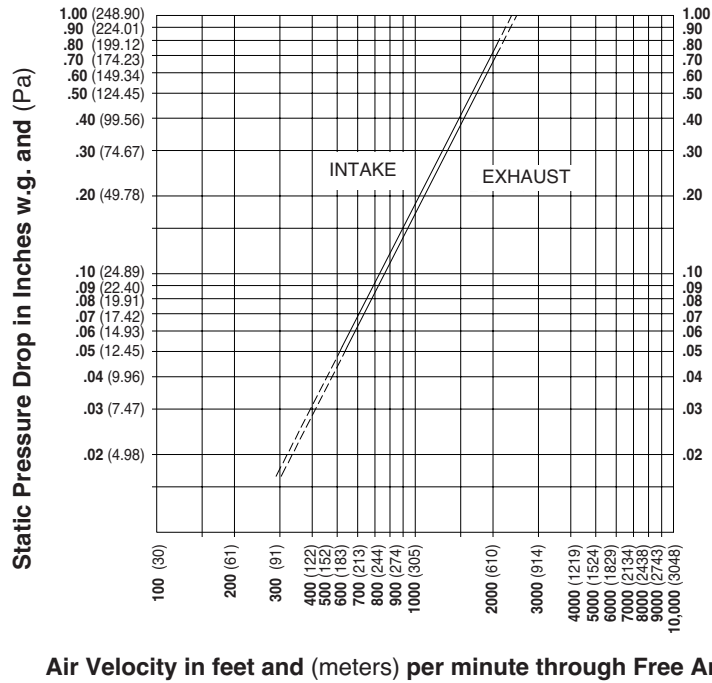
*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE	



445RD5
445RD5S
445RD5125

PRESSURE DROP



Air Velocity in feet and (meters) per minute through Free Area

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 445RD5.
 Width – Inches and Meters

Height – Inches and Meters

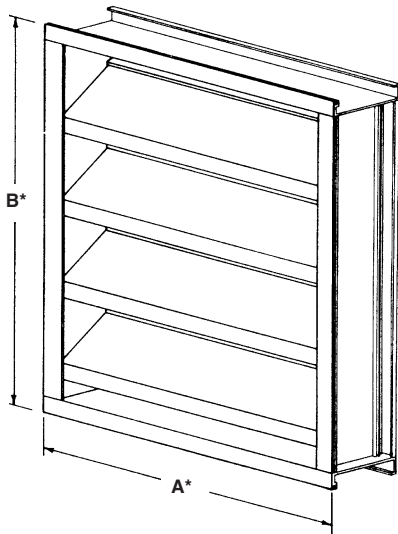
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.33	0.54	0.74	0.95	1.15	1.36	1.56	1.76	1.97	2.17	2.38	2.58	2.79	2.99	3.20	3.40	3.61	3.81	4.01
0.30	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10
18	0.59	0.96	1.33	1.69	2.06	2.42	2.79	3.16	3.52	3.89	4.25	4.62	4.98	5.35	5.72	6.08	6.45	6.81	7.18
0.46	0.02	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.15	0.16	0.17	0.18
24	0.86	1.38	1.91	2.44	2.96	3.49	4.02	4.55	5.07	5.60	6.13	6.65	7.18	7.71	8.24	8.76	9.29	9.82	10.34
0.61	0.02	0.04	0.05	0.06	0.08	0.09	0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.20	0.21	0.22	0.24	0.25	0.26
30	1.11	1.79	2.48	3.16	3.84	4.52	5.21	5.89	6.57	7.26	7.94	8.62	9.30	9.99	10.67	11.35	12.04	12.72	13.40
0.76	0.03	0.05	0.06	0.08	0.10	0.11	0.13	0.15	0.17	0.18	0.20	0.22	0.24	0.25	0.27	0.29	0.31	0.32	0.34
36	1.34	2.17	3.00	3.82	4.65	5.47	6.30	7.13	7.95	8.78	9.61	10.43	11.26	12.08	12.91	13.74	14.56	15.39	16.22
0.91	0.03	0.06	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.22	0.24	0.26	0.29	0.31	0.33	0.35	0.37	0.39	0.41
42	1.61	2.61	3.60	4.59	5.58	6.58	7.57	8.56	9.55	10.55	11.54	12.53	13.52	14.52	15.51	16.50	17.49	18.49	19.48
1.07	0.04	0.07	0.09	0.12	0.14	0.17	0.19	0.22	0.24	0.27	0.29	0.32	0.34	0.37	0.39	0.42	0.44	0.47	0.49
48	1.88	3.04	4.19	5.35	6.51	7.66	8.82	9.98	11.13	12.29	13.45	14.60	15.76	16.92	18.07	19.23	20.39	21.54	22.70
1.22	0.05	0.08	0.11	0.14	0.17	0.19	0.22	0.25	0.28	0.31	0.34	0.37	0.40	0.43	0.46	0.49	0.52	0.55	0.58
54	2.14	3.46	4.78	6.10	7.41	8.73	10.05	11.37	12.69	14.01	15.32	16.64	17.96	19.28	20.60	21.91	23.23	24.55	25.87
1.37	0.05	0.09	0.12	0.15	0.19	0.22	0.26	0.29	0.32	0.36	0.39	0.42	0.46	0.49	0.52	0.56	0.59	0.62	0.66
60	2.40	3.88	5.35	6.83	8.31	9.78	11.26	12.74	14.21	15.69	17.17	18.64	20.12	21.60	23.07	24.55	26.03	27.50	28.98
1.52	0.06	0.10	0.14	0.17	0.21	0.25	0.29	0.32	0.36	0.40	0.44	0.47	0.51	0.55	0.59	0.62	0.66	0.70	0.74
66	2.65	4.29	5.92	7.55	9.18	10.82	12.45	14.08	15.71	17.35	18.98	20.61	22.24	23.88	25.51	27.14	28.77	30.41	32.04
1.68	0.07	0.11	0.15	0.19	0.23	0.27	0.32	0.36	0.40	0.44	0.48	0.52	0.56	0.61	0.65	0.69	0.73	0.77	0.81
72	2.89	4.67	6.45	8.23	10.01	11.80	13.58	15.36	17.14	18.92	20.70	22.48	24.26	26.04	27.82	29.60	31.38	33.16	34.94
1.83	0.07	0.12	0.16	0.21	0.25	0.30	0.34	0.39	0.44	0.48	0.53	0.57	0.62	0.66	0.71	0.75	0.80	0.84	0.89
78	3.16	5.11	7.06	9.00	10.95	12.90	14.84	16.79	18.74	20.68	22.63	24.58	26.52	28.47	30.42	32.36	34.31	36.26	38.20
1.98	0.08	0.13	0.18	0.23	0.28	0.33	0.38	0.43	0.48	0.53	0.57	0.62	0.67	0.72	0.77	0.82	0.87	0.92	0.97
84	3.43	5.54	7.65	9.75	11.86	13.97	16.08	18.19	20.30	22.41	24.52	26.63	28.74	30.85	32.95	35.06	37.17	39.28	41.39
2.13	0.09	0.14	0.19	0.25	0.30	0.35	0.41	0.46	0.52	0.57	0.62	0.68	0.73	0.78	0.84	0.89	0.94	1.00	1.05
90	3.70	5.98	8.25	10.53	12.80	15.08	17.36	19.63	21.91	24.19	26.46	28.74	31.01	33.29	35.57	37.84	40.12	42.40	44.67
2.29	0.09	0.15	0.21	0.27	0.33	0.38	0.44	0.50	0.56	0.61	0.67	0.73	0.79	0.85	0.90	0.96	1.02	1.08	1.13



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445RGZ5 STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
4" (102) deep, 6063T5 extruded aluminum with .080" (2) nominal wall thickness. Box or integral flange frames are available. Caulking slots provided on box frame.

BLADES
6063T5 extruded aluminum with .063" (1.6) nominal wall thickness. J-style blades (formerly "weatherproof") are positioned at 45° angle and spaced approximately 5" (127) center to center.

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

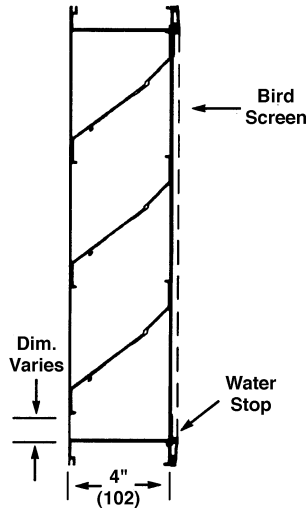
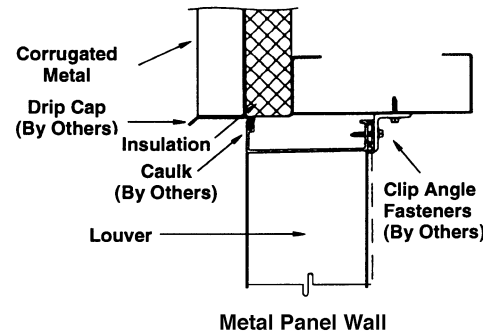
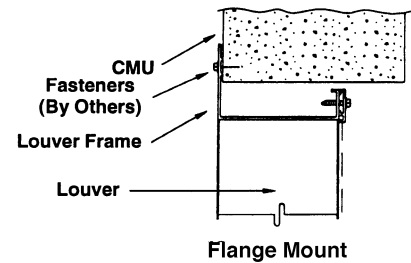
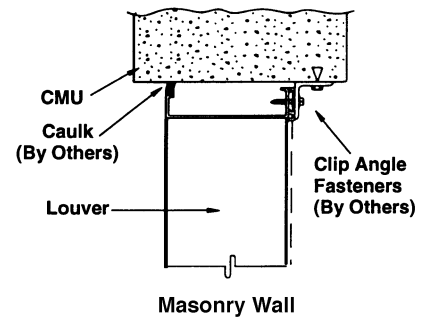
FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

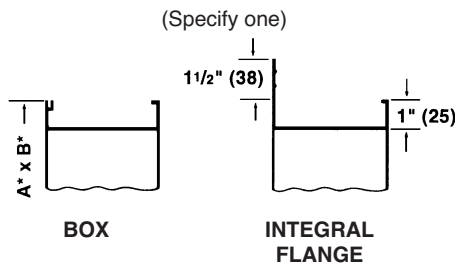
MAXIMUM SIZE
60"w x 60"h (1524 x 1524).

Consult Reliable for additional information.

SUGGESTED INSTALLATION DETAILS



FRAME CONSTRUCTION

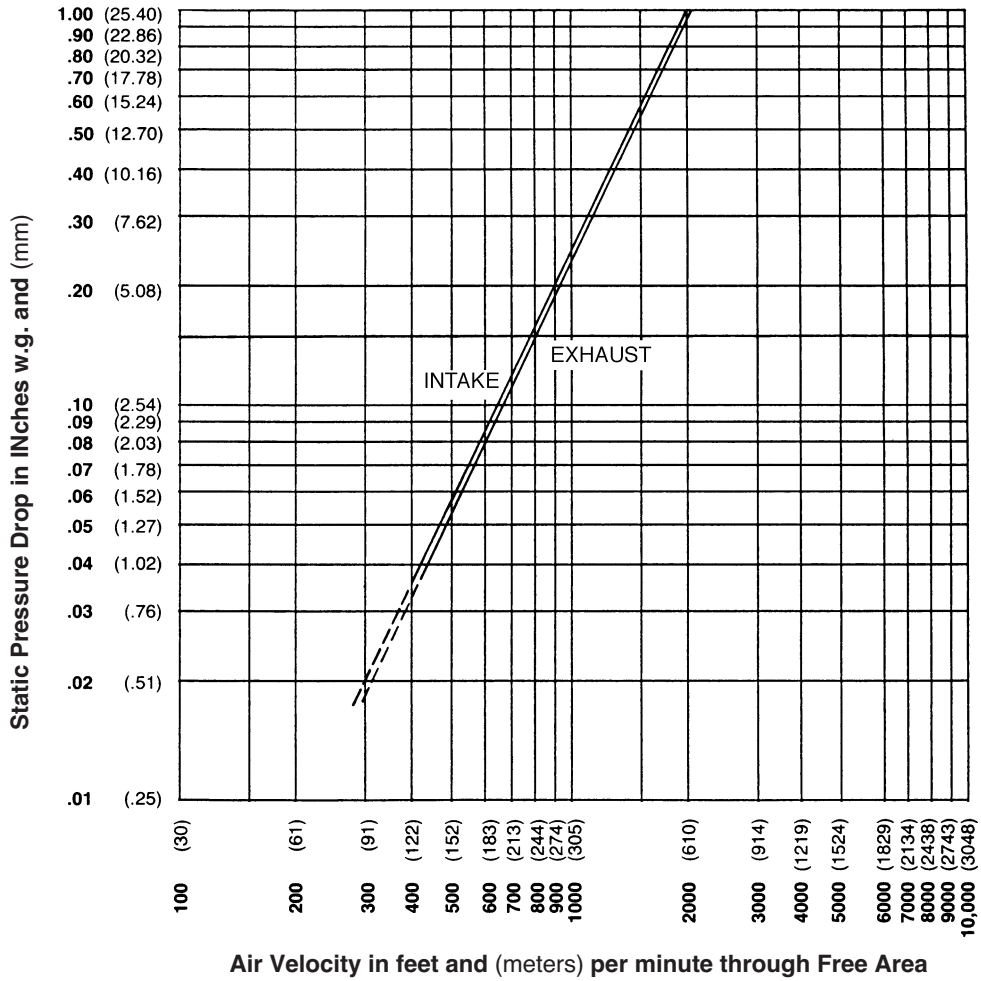


Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT			LOCATION		
ARCH./ENGR.			CONTRACTOR		
REPRESENTATIVE			DATE		

PRESSURE DROP



Ratings do not include the effect of a bird screen.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 445RGZ5.

	12 0.30	18 0.46	24 0.61	30 0.76	36 0.91	42 1.07	48 1.22	54 1.37	60 1.52
12 0.30	.17 .02	.27 .03	.37 .03	.47 .04	.57 .05	.67 .06	.77 .07	.87 .08	.98 .09
18 0.46	.42 .04	.67 .06	.93 .09	1.18 .11	1.44 .13	1.69 .16	1.95 .18	2.20 .20	2.46 .23
24 0.61	.67 06	1.08 .10	1.49 .14	1.90 .18	2.31 .21	2.72 .25	3.13 .29	3.54 .33	3.95 .37
30 0.76	.91 .08	1.47 .14	2.03 .19	2.59 .24	3.15 .29	3.71 .34	4.27 .40	4.83 .45	5.38 .50
36 0.91	1.12 .10	1.80 .17	2.49 .23	3.17 .29	3.85 .36	4.54 .42	5.22 .48	5.90 .55	6.59 .61
42 1.07	1.28 .12	2.06 .19	2.84 .26	3.62 .34	4.40 .41	5.18 .48	5.96 .55	6.74 .63	7.52 .70
48 1.22	1.53 .14	2.46 .23	3.40 .32	4.33 .40	5.27 .49	6.20 .58	7.10 .66	8.07 .75	9.00 .84
54 1.37	1.78 .17	2.87 .27	3.96 .37	5.05 .47	6.14 .57	7.23 .67	8.32 .77	9.41 .87	10.50 .98
60 1.52	2.03 .19	3.26 .30	4.50 .42	5.74 .53	6.98 .65	8.21 .76	9.45 .88	10.69 .99	11.93 1.11

Width – Inches and Meters



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445RGD5 STATIONARY LOUVER

EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

FRAME

4" (102) deep, 6063T5 extruded aluminum with .080" (2) nominal wall thickness. Box or integral flange frames are available with integral downslopes. Caulking surfaces provided on box frame.

BLADES

6063T5 extruded aluminum with .063" (1.6) nominal wall thickness. Drainable blades are positioned at 45° angle and spaced approximately 5" (127) center to center.

SCREEN

3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Aluminum 1/2" x .063" mesh bird or 18-16 mesh insect screens are also available. Screen adds approximately 1/2" (13) to louver depth.

FINISH

Mill.

INSTALLATION ANGLES

1 1/2" x 1 1/2" x 1/8" thick x 2" long aluminum clip angles with holes and two #10 self drilling screws (clip to louver) provided loose (clip to wall fasteners not included). Install clips 6" max. from ends and at 24" max. between for 20 psf windload.

MINIMUM SIZE

12"w x 12"h (305 x 305).

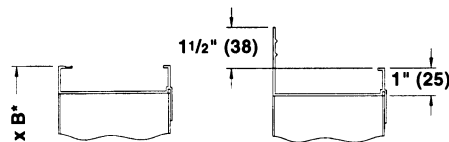
MAXIMUM SIZE

60"w x 60"h (1524 x 1524).

Consult Reliable for additional information.

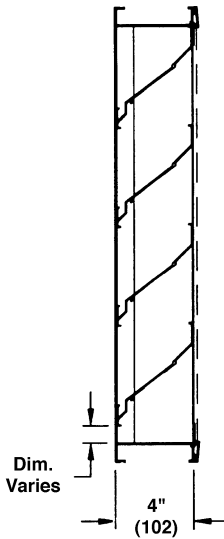
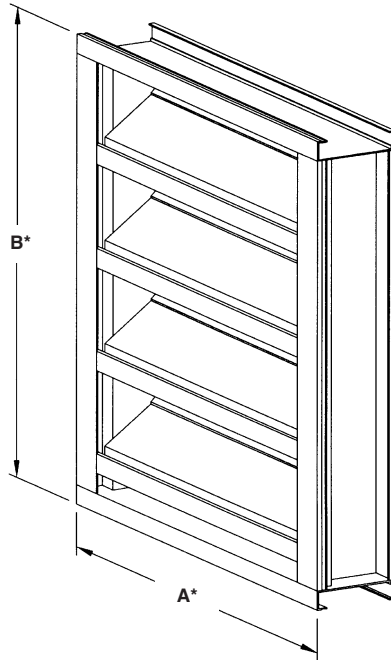
FRAME CONSTRUCTION

(Specify one)

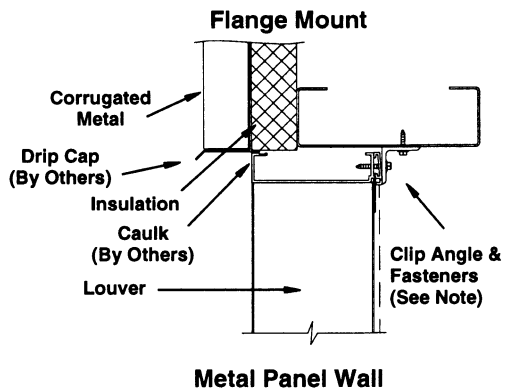
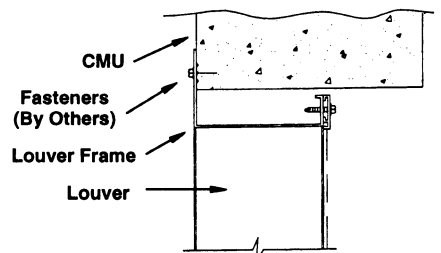
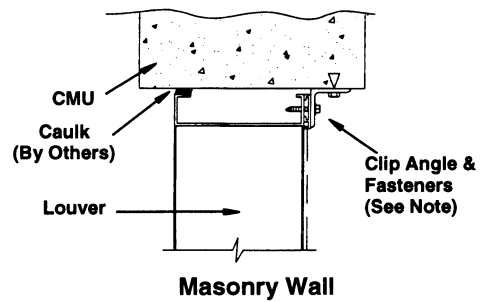


STANDARD (BOX)

INTEGRAL FLANGE



SUGGESTED INSTALLATION DETAILS

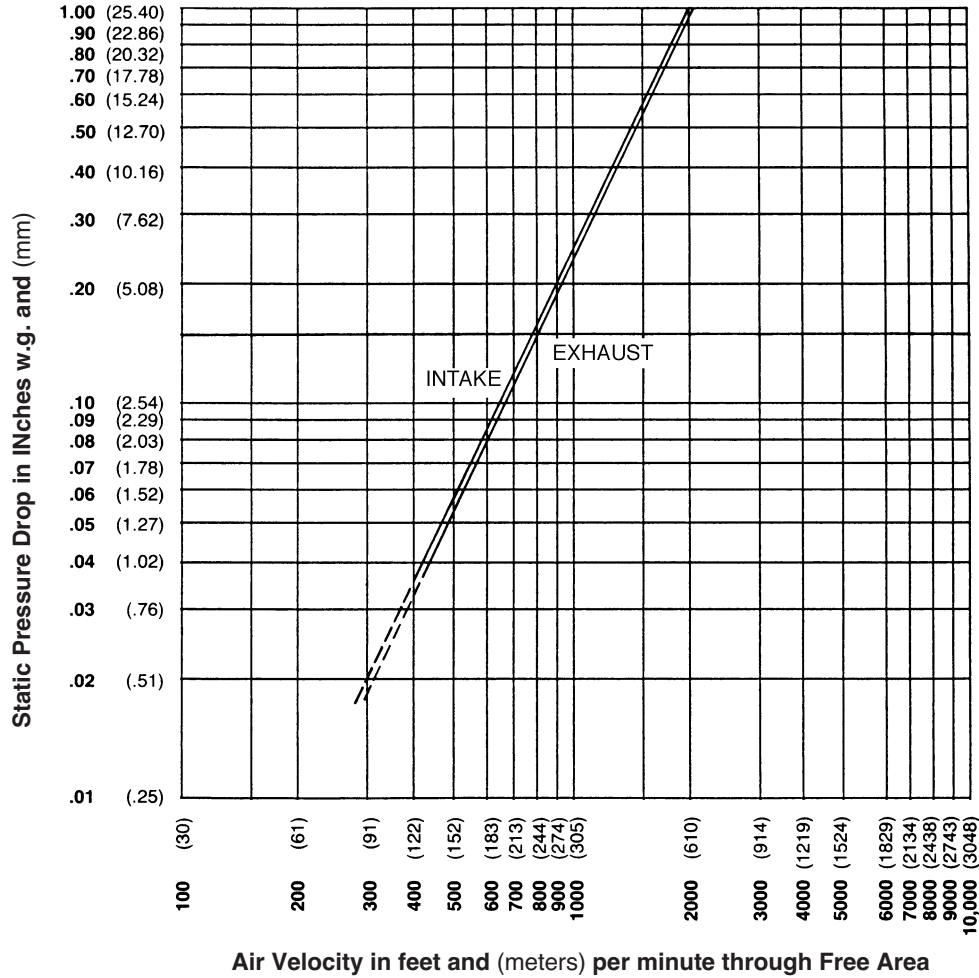


Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

PRESSURE DROP



Ratings do not include the effect of a bird screen.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 445RGD5.

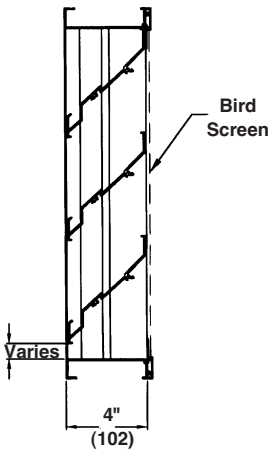
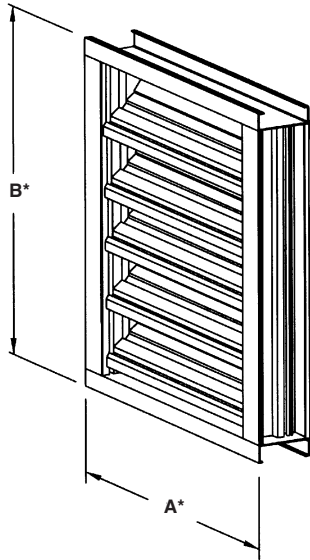
	12	18	24	30	36	42	48	54	60
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52
12	.17	.27	.38	.48	.58	.69	.79	.90	1.00
0.30	.02	.03	.04	.04	.05	.06	.07	.08	.09
18	.43	.69	.95	1.20	1.46	1.72	1.98	2.24	2.49
0.46	.04	.06	.09	.11	.14	0.16	.18	.21	.23
24	.69	1.11	1.52	1.93	2.35	2.76	3.18	3.59	4.01
0.61	.06	.10	.14	.18	.22	0.26	.30	.33	.37
30	.95	1.52	2.09	2.66	3.23	3.81	4.38	4.95	5.52
0.76	.09	.14	.19	.25	.30	0.35	.41	.46	.51
36	1.21	1.94	2.67	3.39	4.12	4.85	5.58	6.30	7.03
0.91	.11	.18	.25	.32	.38	0.45	.52	.59	.65
42	1.25	2.04	2.83	3.62	4.41	5.20	5.99	6.78	7.57
1.07	.12	.19	.26	.34	.41	0.48	.56	.63	.70
48	1.58	2.52	3.47	4.42	5.36	6.31	7.26	8.20	9.15
1.22	.15	.23	.32	.41	.50	0.59	.67	.76	.85
54	1.84	2.94	4.04	5.15	6.25	7.35	8.46	9.56	10.66
1.37	.17	.27	.38	.48	.58	0.68	.79	.89	.99
60	2.10	3.36	4.62	5.88	7.14	8.40	9.66	10.91	12.17
1.52	.20	.31	.43	.55	.66	0.78	.90	1.01	1.13

Width – Inches and Meters





445DD STATIONARY LOUVER DOUBLE DRAINABLE BLADE EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
4" (102) deep, 6063T5 extruded aluminum with .090" (2.3) nominal wall thickness. Downspouts and caulking surfaces provided.

BLADES
6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Double drainable blades are positioned at 45° angle and spaced approximately 5^{3/32}" (129) center to center.

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
4 lbs. per sq. ft. (20 kg per m²).

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

- The 445DD offers:
- Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Double drain gutters in each blade and downspouts in jambs and mullions to drain water from louver for minimum water cascade from blade to blade.
 - Architecturally styled hidden mullions allowing continuous line appearance up to 120" (3048).
 - All aluminum construction for low maintenance and high resistance to corrosion.
 - Low pressure drop and low water penetration.
 - 44% free area based on 48" x 48" (1219 x 1219) unit

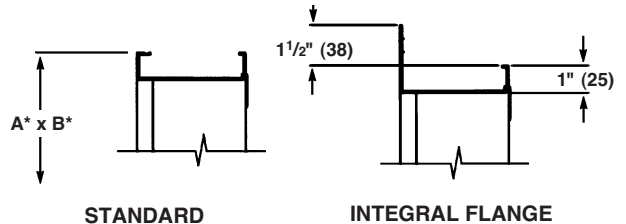
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

FRAME CONSTRUCTION

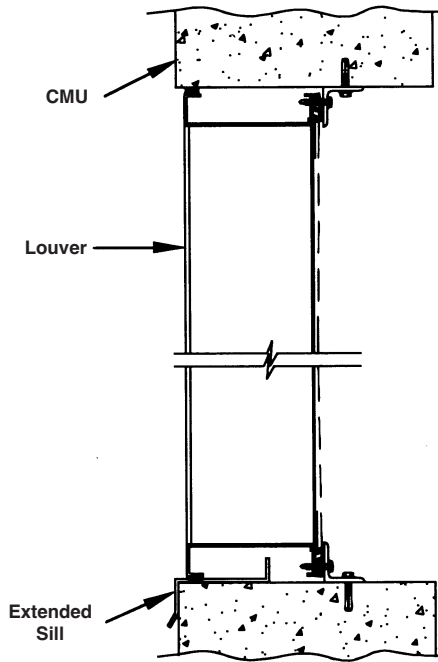


Dimensions in inches, parenthesis () indicate millimeters.
*Units furnished 1/4" (6) smaller than given opening dimensions.

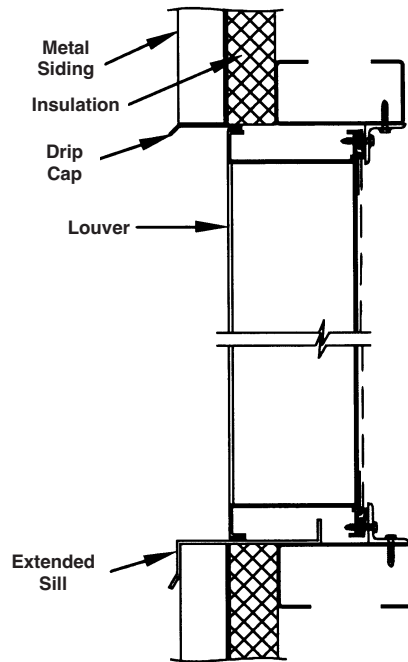
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE	

TYPICAL INSTALLATION DETAILS

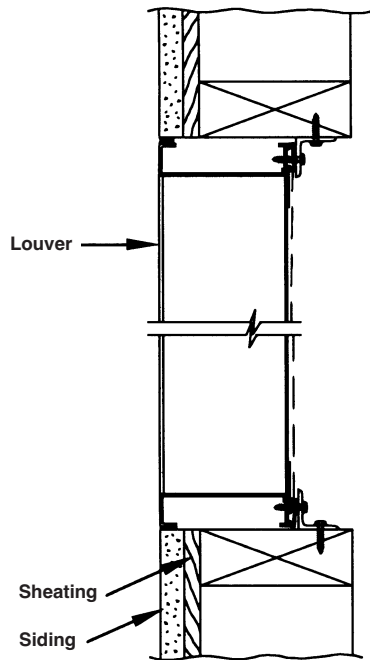
Masonry Wall



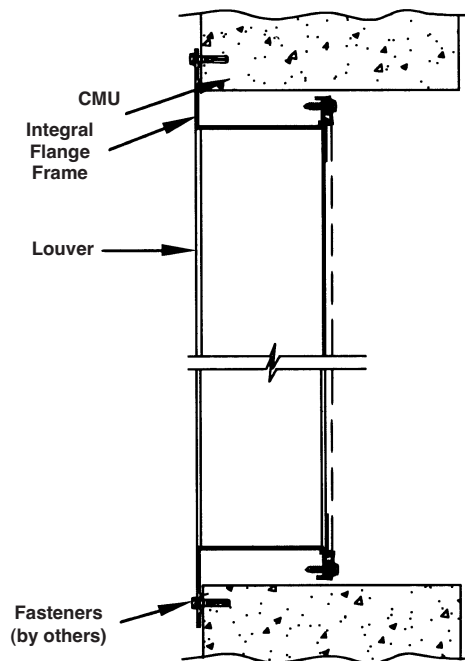
Metal Panel Wall



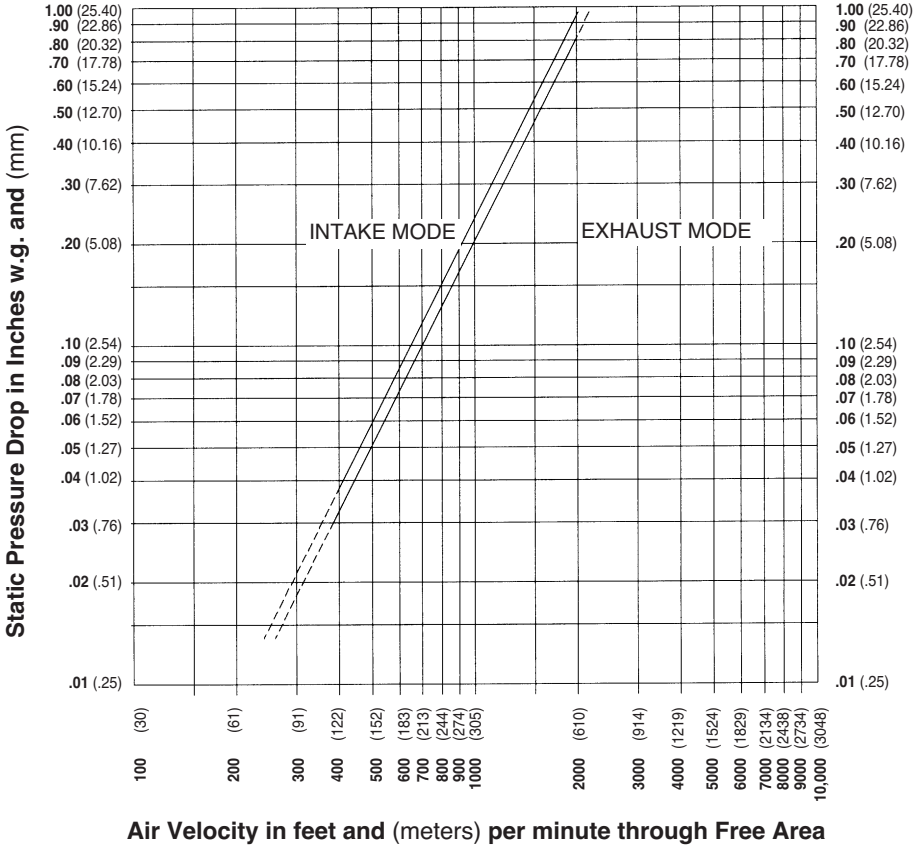
Wood Installation



Flange Mount



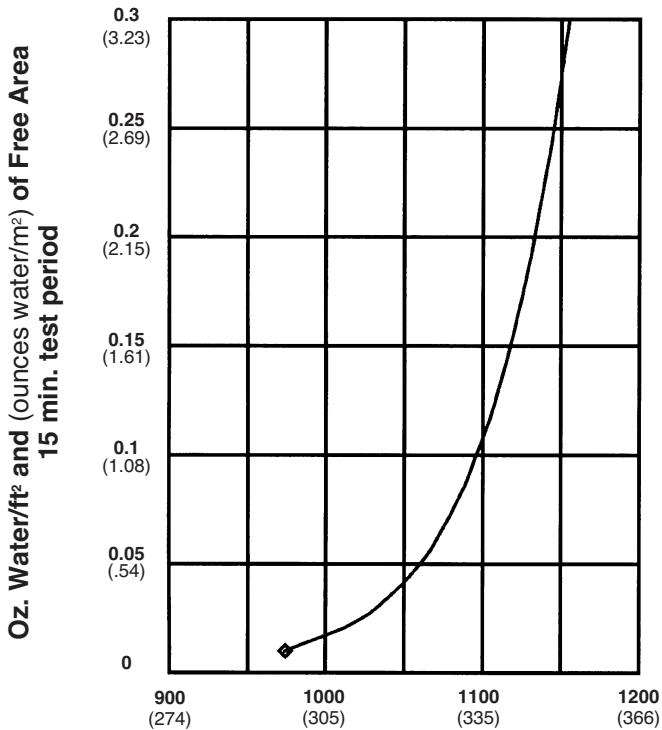
PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 974 fpm (297 m/min).



Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 445DD Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary double drainable with drain gutters in each blade and downspouts in jambs and mullions. Stationary drainable blades shall be contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 10 ft. (3) and shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 445DD extruded 6063T5 aluminum alloy construction as follows:

- Frame: .090" (2.3) wall thickness.
- Blades: .081" (2.1) wall thickness at 45° angle on approximately 5³/₃₂" (129) centers.
- Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500-L is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz. of water penetration.

FREE AREA GUIDE

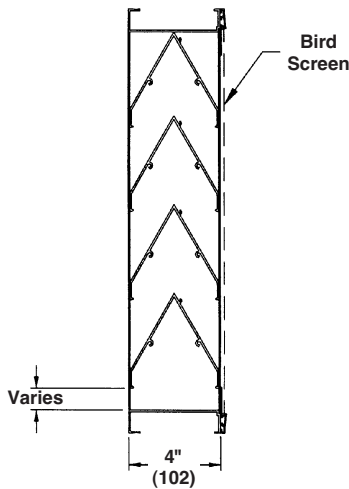
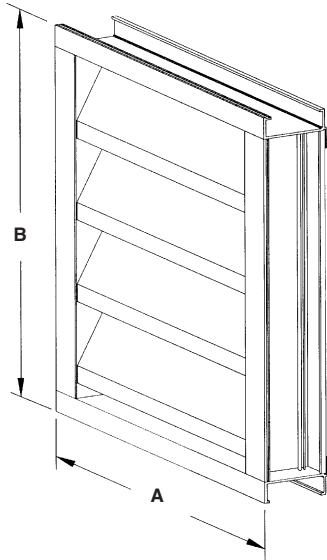
Free Area Guide shows free area in ft² and m² for various sizes of 445DD.
Width – Inches and Meters

Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.17	0.27	0.38	0.48	0.59	0.69	0.80	0.90	1.01	1.11	1.21	1.32	1.42	1.53	1.63	1.74	1.84	1.94	2.05
0.30	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19
18	0.41	0.66	0.91	1.16	1.41	1.65	1.90	2.15	2.40	2.65	2.90	3.15	3.40	3.65	3.90	4.15	4.40	4.65	4.90
0.46	0.04	0.06	0.08	0.11	0.13	0.15	0.18	0.20	0.22	0.25	0.27	0.29	0.32	0.34	0.36	0.39	0.41	0.43	0.46
24	0.65	1.06	1.46	1.86	2.27	2.67	3.07	3.47	3.88	4.28	4.68	5.08	5.49	5.89	6.29	6.70	7.10	7.50	7.90
0.61	0.06	0.10	0.14	0.17	0.21	0.25	0.29	0.32	0.36	0.40	0.43	0.47	0.51	0.55	0.58	0.62	0.66	0.70	0.73
30	0.90	1.46	2.01	2.57	3.13	3.68	4.24	4.79	5.35	5.90	6.46	7.01	7.57	8.13	8.68	9.24	9.79	10.35	10.90
0.76	0.08	0.14	0.19	0.24	0.29	0.34	0.39	0.45	0.50	0.55	0.60	0.65	0.70	0.76	0.81	0.86	0.91	0.96	1.01
36	1.15	1.86	2.57	3.28	3.99	4.69	5.40	6.11	6.82	7.53	8.24	8.95	9.65	10.36	11.07	11.78	12.49	13.20	13.91
0.91	0.11	0.17	0.24	0.30	0.37	0.44	0.50	0.57	0.63	0.70	0.77	0.83	0.90	0.96	1.03	1.09	1.16	1.23	1.29
42	1.26	2.04	2.82	3.60	4.38	5.16	5.93	6.71	7.49	8.27	9.05	9.82	10.60	11.38	12.16	12.94	13.72	14.49	15.27
1.07	0.12	0.19	0.26	0.33	0.41	0.48	0.55	0.62	0.70	0.77	0.84	0.91	0.99	1.06	1.13	1.20	1.28	1.35	1.42
48	1.50	2.42	3.34	4.26	5.18	6.10	7.02	7.95	8.87	9.79	10.71	11.63	12.55	13.47	14.39	15.31	16.24	17.16	18.08
1.22	0.14	0.22	0.31	0.40	0.48	0.57	0.65	0.74	0.82	0.91	1.00	1.08	1.17	1.25	1.34	1.42	1.51	1.59	1.68
54	1.74	2.81	3.88	4.95	6.02	7.09	8.16	9.23	10.30	11.37	12.44	13.51	14.58	15.65	16.72	17.79	18.86	19.93	21.00
1.37	0.16	0.26	0.36	0.46	0.56	0.66	0.76	0.86	0.96	1.06	1.16	1.26	1.35	1.45	1.55	1.65	1.75	1.85	1.95
60	1.99	3.21	4.43	5.66	6.88	8.10	9.33	10.55	11.77	13.00	14.22	15.44	16.67	17.89	19.11	20.33	21.56	22.78	24.00
1.52	0.18	0.30	0.41	0.53	0.64	0.75	0.87	0.98	1.09	1.21	1.32	1.43	1.55	1.66	1.78	1.89	2.00	2.12	2.23
66	2.24	3.61	4.99	6.36	7.74	9.12	10.49	11.87	13.24	14.62	16.00	17.37	18.75	20.12	21.50	22.88	24.25	25.63	27.00
1.68	0.21	0.34	0.46	0.59	0.72	0.85	0.97	1.10	1.23	1.36	1.49	1.61	1.74	1.87	2.00	2.13	2.25	2.38	2.51
72	2.48	4.01	5.54	7.07	8.60	10.13	11.66	13.19	14.72	16.25	17.77	19.30	20.83	22.36	23.89	25.42	26.95	28.48	30.01
1.83	0.23	0.37	0.51	0.66	0.80	0.94	1.08	1.23	1.37	1.51	1.65	1.79	1.94	2.08	2.22	2.36	2.50	2.65	2.79
78	2.59	4.19	5.78	7.38	8.97	10.57	12.16	13.76	15.35	16.95	18.54	20.14	21.73	23.33	24.92	26.52	28.11	29.71	31.30
1.98	0.24	0.39	0.54	0.69	0.83	0.98	1.13	1.28	1.43	1.58	1.72	1.87	2.02	2.17	2.32	2.46	2.61	2.76	2.91
84	2.82	4.56	6.30	8.04	9.77	11.51	13.25	14.99	16.73	18.46	20.20	21.94	23.68	25.41	27.15	28.89	30.63	32.36	34.10
2.13	0.26	0.42	0.59	0.75	0.91	1.07	1.23	1.39	1.55	1.72	1.88	2.04	2.20	2.36	2.52	2.68	2.85	3.01	3.17
90	3.07	4.96	6.85	8.74	10.63	12.53	14.42	16.31	18.20	20.09	21.98	23.87	25.76	27.65	29.54	31.43	33.32	35.21	37.10
2.29	0.29	0.46	0.64	0.81	0.99	1.16	1.34	1.52	1.69	1.87	2.04	2.22	2.39	2.57	2.75	2.92	3.10	3.27	3.45



4RCH (HORIZONTAL) AND 4RCV (VERTICAL) STATIONARY SIGHTPROOF LOUVER EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
4" (102) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Caulking surfaces provided.

BLADES
6063T5 extruded aluminum .081" (2.1) nominal wall thickness. Chevron blades feature 60° surfaces and are spaced approximately 4" (102) center to center.

SCREEN
5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
4 lbs. per sq. ft. (19.5 kg/m²).

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 and 2286) or 90"w x 120"h (2286 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for other special requirements.

FEATURES

- The 4RCH/4RCV offers:
- 35% Free Area.
 - Sightproof chevron blades provide privacy, conceal equipment, prevent vandalism and act as a safety barrier to dangerous areas.
 - Architecturally styled hidden mullions allowing continuous line appearance.
 - Aluminum construction for low maintenance and high resistance to corrosion.

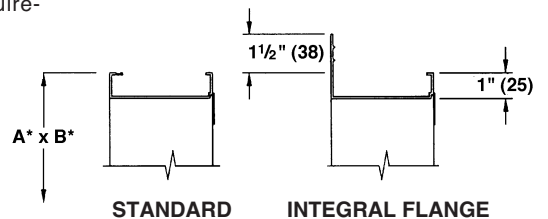
VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible).

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		



4RCH
4RCV

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type with downspouts in jambs and mullions. Louvers shall have a minimum of 35% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary blades shall be contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louvers shall be architectural style with continuous appearing stationary blades. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph [145 KPH] wind - specifier may substitute any loading required).

Louvers shall be Reliable Model 4RCH/4RCV extruded 6063T5 aluminum alloy construction as follows:

Frame: 4" (102) deep, .081" (2.1) wall thickness.

Blades: .081" (2.1) nominal wall thickness. Chevron blades feature 60° surfaces and are spaced at approximately 4" (102) center to center.

Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.

Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

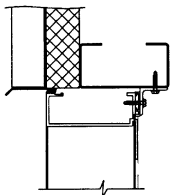
FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 4RCH/4RCV
Width – Inches and Meters

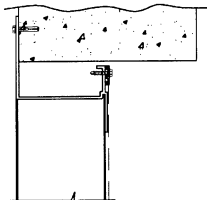
Height – Inches and Meters	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12 0.30	0.24 0.02	0.38 0.04	0.52 0.05	0.66 0.06	0.81 0.08	0.95 0.09	1.09 0.10	1.24 0.11	1.38 0.13	1.52 0.14	1.66 0.15	1.81 0.17	1.95 0.18	2.09 0.19	2.24 0.21	2.38 0.22	2.52 0.23	2.66 0.25	2.81 0.26
18 0.46	0.31 0.03	0.50 0.05	0.69 0.06	0.88 0.08	1.07 0.10	1.26 0.12	1.45 0.13	1.64 0.15	1.82 0.17	2.01 0.19	2.20 0.20	2.39 0.22	2.58 0.24	2.77 0.26	2.96 0.28	3.15 0.29	3.34 0.31	3.53 0.33	3.72 0.35
24 0.61	0.56 0.05	0.89 0.08	1.23 0.11	1.57 0.15	1.90 0.18	2.24 0.21	2.58 0.24	2.92 0.27	3.25 0.30	3.59 0.33	3.93 0.37	4.27 0.40	4.60 0.43	4.94 0.46	5.28 0.49	5.61 0.52	5.95 0.55	6.29 0.58	6.63 0.62
30 0.76	0.63 0.06	1.01 0.09	1.40 0.13	1.78 0.17	2.17 0.20	2.55 0.24	2.93 0.27	3.32 0.31	3.70 0.34	4.08 0.38	4.47 0.42	4.85 0.45	5.23 0.49	5.62 0.52	6.00 0.56	6.38 0.59	6.77 0.63	7.15 0.67	7.53 0.70
36 0.91	0.88 0.08	1.41 0.13	1.94 0.18	2.47 0.23	3.00 0.28	3.53 0.33	4.07 0.38	4.60 0.43	5.13 0.48	5.66 0.53	6.19 0.58	6.72 0.63	7.26 0.67	7.79 0.72	8.32 0.77	8.85 0.82	9.38 0.87	9.91 0.92	10.45 0.97
42 1.07	0.95 0.04	1.53 0.06	2.11 0.08	2.68 0.11	3.26 0.13	3.84 0.15	4.42 0.17	5.00 0.20	5.57 0.22	6.15 0.24	6.73 0.26	7.31 0.29	7.89 0.31	8.46 0.33	9.04 0.36	9.62 0.38	10.20 0.40	10.78 0.42	11.35 0.45
48 1.22	1.19 0.11	1.92 0.18	2.65 0.25	3.37 0.31	4.10 0.38	4.83 0.45	5.55 0.52	6.28 0.58	7.00 0.65	7.73 0.72	8.46 0.79	9.18 0.85	9.91 0.92	10.63 0.99	11.36 1.06	12.09 1.12	12.81 1.19	13.54 1.26	14.26 1.33
54 1.37	1.27 0.12	2.04 0.19	2.82 0.26	3.59 0.33	4.36 0.41	5.13 0.48	5.90 0.55	6.68 0.62	7.45 0.69	8.22 0.76	8.99 0.84	9.77 0.91	10.54 0.98	11.31 1.05	12.08 1.12	12.86 1.20	13.63 1.27	14.40 1.34	15.17 1.41
60 1.52	1.51 0.14	2.44 0.23	3.36 0.31	4.28 0.40	5.20 0.48	6.12 0.57	7.04 0.65	7.96 0.74	8.88 0.83	9.80 0.91	10.72 1.00	11.64 1.08	12.56 1.17	13.48 1.25	14.40 1.34	15.32 1.42	16.24 1.51	17.16 1.60	18.08 1.68
66 1.68	1.59 0.15	2.56 0.24	3.52 0.33	4.49 0.42	5.46 0.51	6.42 0.60	7.39 0.69	8.36 0.78	9.32 0.87	10.29 0.96	11.26 1.05	12.22 1.14	13.19 1.23	14.16 1.32	15.12 1.41	16.09 1.50	17.06 1.59	18.02 1.68	18.99 1.77
72 1.83	1.67 0.16	2.68 0.25	3.69 0.34	4.71 0.44	5.72 0.53	6.73 0.63	7.74 0.72	8.76 0.81	9.77 0.91	10.78 1.00	11.80 1.10	12.81 1.19	13.82 1.29	14.84 1.38	15.85 1.47	16.86 1.57	17.87 1.66	18.89 1.76	19.90 1.85
78 1.98	1.91 0.18	3.07 0.29	4.23 0.39	5.39 0.50	6.56 0.61	7.72 0.72	8.88 0.83	10.04 0.93	11.20 1.04	12.36 1.15	13.52 1.26	14.68 1.37	15.84 1.47	17.00 1.58	18.17 1.69	19.33 1.80	20.49 1.91	21.65 2.01	22.81 2.12
84 2.13	1.99 0.18	3.19 0.30	4.40 0.41	5.61 0.52	6.82 0.63	8.02 0.75	9.23 0.86	10.44 0.97	11.65 1.08	12.85 1.20	14.06 1.31	15.27 1.42	16.47 1.53	17.68 1.64	18.89 1.76	20.10 1.87	21.30 1.98	22.51 2.09	23.72 2.21
90 2.29	2.23 0.21	3.59 0.33	4.94 0.46	6.30 0.59	7.65 0.71	9.01 0.84	10.36 0.96	11.72 1.09	13.07 1.22	14.43 1.34	15.78 1.47	17.14 1.59	18.50 1.72	19.85 1.85	21.21 1.97	22.56 2.10	23.92 2.22	25.27 2.35	26.63 2.48

TYPICAL INSTALLATION DETAILS

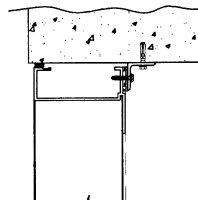
Metal Panel Wall



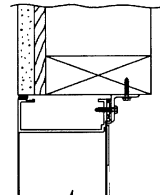
Flange Mount



Masonry Wall

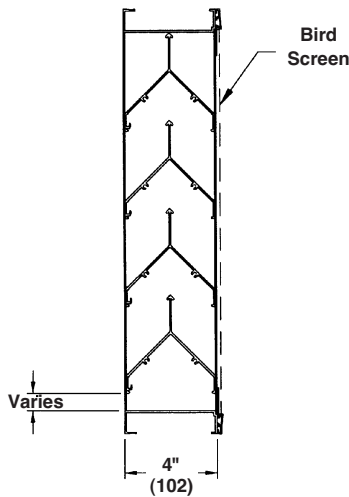
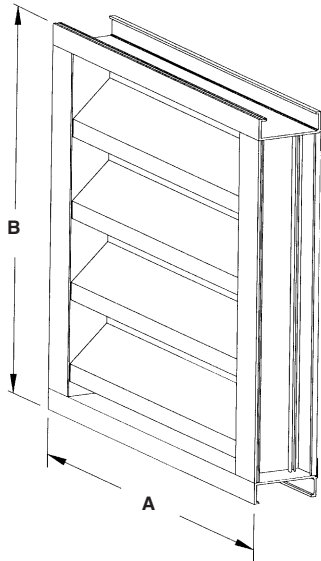


Wood Installation





4RYH (HORIZONTAL) AND 4RYV (VERTICAL) STATIONARY SIGHTPROOF LOUVER EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
4" (102) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Caulking surfaces provided.

BLADES
6063T5 extruded aluminum .081" (2.1) nominal wall thickness. Inverted "Y" blades feature 45° surfaces and are spaced approximately 4" (102) center to center.

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
4 lbs. per sq. ft. (19.5 kg/m²).

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).
Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for other special requirements.

FEATURES

- The 4RYH/4RYV offers:
- 33% Free Area.
 - Sightproof inverted "Y" blades provide privacy, conceal equipment, prevent vandalism and act as a safety barrier to dangerous areas.
 - Architecturally styled hidden mullions allowing continuous line appearance.
 - Aluminum construction for low maintenance and high resistance to corrosion.

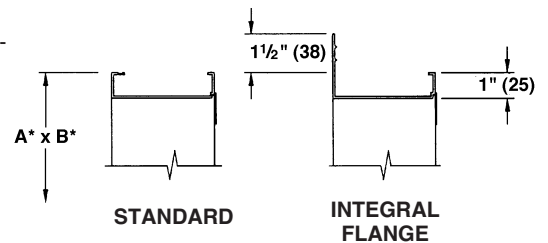
VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible).

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type with downspouts in jambs and mullions. Louvers shall have a minimum of 33% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary blades shall be contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louvers shall be architectural style with continuous appearing stationary blades. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph [145 KPH] wind - specifier may substitute any loading required).

- Louvers shall be Reliable Model 4RYH/4RYV extruded 6063T5 aluminum alloy construction as follows:
- Frame: 4" (102) deep, .081" (2.1) wall thickness.
- Blades: .081" (2.1) nominal wall thickness. Inverted "Y" blades feature 45° surfaces and are spaced at approximately 4" (102) center to center.
- Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.
- Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

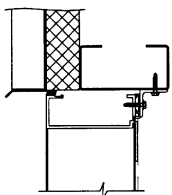
FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 4RYH/4RYV
Width – Inches and Meters

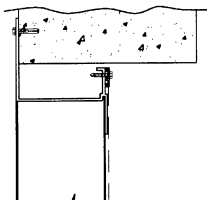
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120		
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05		
Height – Inches and Meters	12	0.22	0.35	0.49	0.62	0.76	0.89	1.02	1.16	1.29	1.43	1.56	1.69	1.83	1.96	2.09	2.23	2.36	2.50	2.63	
	0.30	0.02	0.03	0.05	0.06	0.07	0.08	0.10	0.11	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.21	0.22	0.23	0.24	
	18	0.46	0.46	0.74	1.01	1.29	1.57	1.85	2.13	2.40	2.68	2.96	3.24	3.52	3.80	4.07	4.35	4.63	4.91	5.19	5.46
	0.46	0.04	0.07	0.09	0.12	0.15	0.17	0.20	0.22	0.25	0.28	0.30	0.33	0.35	0.38	0.40	0.43	0.46	0.48	0.51	
	24	0.52	0.84	1.15	1.47	1.79	2.11	2.42	2.74	3.06	3.37	3.69	4.01	4.32	4.64	4.96	5.27	5.59	5.91	6.22	6.54
	0.61	0.05	0.08	0.11	0.14	0.17	0.20	0.23	0.25	0.28	0.31	0.34	0.37	0.40	0.43	0.46	0.49	0.52	0.55	0.58	
	30	0.76	0.76	1.22	1.68	2.14	2.60	3.06	3.53	3.99	4.45	4.91	5.37	5.83	6.29	6.75	7.21	7.67	8.14	8.60	9.06
	0.76	0.07	0.11	0.16	0.20	0.24	0.28	0.33	0.37	0.41	0.46	0.50	0.54	0.59	0.63	0.67	0.71	0.76	0.80	0.84	
	36	0.82	1.32	1.82	2.32	2.82	3.32	3.82	4.32	4.82	5.32	5.82	6.32	6.82	7.32	7.82	8.32	8.82	9.32	9.82	10.32
	0.91	0.08	0.12	0.17	0.22	0.26	0.31	0.36	0.40	0.45	0.49	0.54	0.59	0.63	0.68	0.73	0.77	0.82	0.87	0.91	
	42	1.06	1.70	2.35	2.99	3.64	4.28	4.92	5.57	6.21	6.86	7.50	8.14	8.79	9.43	10.07	10.72	11.36	12.01	12.65	13.30
	1.07	0.07	0.07	0.09	0.12	0.14	0.17	0.19	0.22	0.24	0.27	0.30	0.32	0.35	0.37	0.40	0.42	0.45	0.47	0.50	
	48	1.12	1.81	2.49	3.17	3.85	4.54	5.22	5.90	6.58	7.27	7.95	8.63	9.31	10.00	10.68	11.36	12.04	12.73	13.41	14.10
	1.22	0.10	0.17	0.23	0.29	0.36	0.42	0.49	0.55	0.61	0.68	0.74	0.80	0.87	0.93	0.99	1.06	1.12	1.18	1.25	
	54	1.36	2.19	3.01	3.84	4.67	5.49	6.32	7.15	7.98	8.80	9.63	10.46	11.28	12.11	12.94	13.76	14.59	15.42	16.24	17.07
	1.37	0.13	0.20	0.28	0.36	0.43	0.51	0.59	0.66	0.74	0.82	0.90	0.97	1.05	1.13	1.20	1.28	1.36	1.43	1.51	
	60	1.42	2.29	3.16	4.02	4.89	5.75	6.62	7.48	8.35	9.21	10.08	10.94	11.81	12.67	13.54	14.40	15.27	16.14	17.00	17.87
	1.52	0.13	0.21	0.29	0.37	0.45	0.53	0.62	0.70	0.78	0.86	0.94	1.02	1.10	1.18	1.26	1.34	1.42	1.50	1.58	
	66	1.66	2.67	3.68	4.69	5.70	6.71	7.72	8.73	9.74	10.75	11.76	12.77	13.78	14.79	15.80	16.81	17.82	18.83	19.84	20.85
	1.68	0.15	0.25	0.34	0.44	0.53	0.62	0.72	0.81	0.91	1.00	1.09	1.19	1.28	1.38	1.47	1.56	1.66	1.75	1.84	
72	1.73	2.77	3.82	4.87	5.92	6.97	8.01	9.06	10.11	11.16	12.21	13.26	14.30	15.35	16.40	17.45	18.50	19.55	20.59	21.64	
1.83	0.16	0.26	0.36	0.45	0.55	0.65	0.75	0.84	0.94	1.04	1.14	1.23	1.33	1.43	1.53	1.62	1.72	1.82	1.92		
78	1.96	3.16	4.35	5.54	6.73	7.93	9.12	10.31	11.50	12.70	13.89	15.08	16.27	17.47	18.66	19.85	21.04	22.24	23.43	24.62	
1.98	0.18	0.29	0.40	0.52	0.63	0.74	0.85	0.96	1.07	1.18	1.29	1.40	1.51	1.62	1.74	1.85	1.96	2.07	2.18		
84	2.03	3.26	4.49	5.72	6.95	8.18	9.41	10.64	11.88	13.11	14.34	15.57	16.80	18.03	19.26	20.49	21.72	22.96	24.19	25.42	
2.13	0.19	0.30	0.42	0.53	0.65	0.76	0.88	0.99	1.10	1.22	1.33	1.45	1.56	1.68	1.79	1.91	2.02	2.13	2.25		
90	2.26	3.64	5.01	6.39	7.77	9.14	10.52	11.89	13.27	14.64	16.02	17.39	18.77	20.14	21.52	22.89	24.27	25.65	27.02	28.40	
2.29	0.21	0.34	0.47	0.59	0.72	0.85	0.98	1.11	1.23	1.36	1.49	1.62	1.75	1.87	2.00	2.13	2.26	2.39	2.51		

TYPICAL INSTALLATION DETAILS

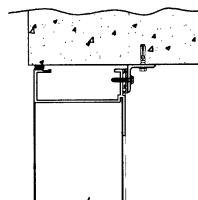
Metal Panel Wall



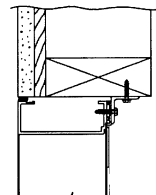
Flange Mount



Masonry Wall



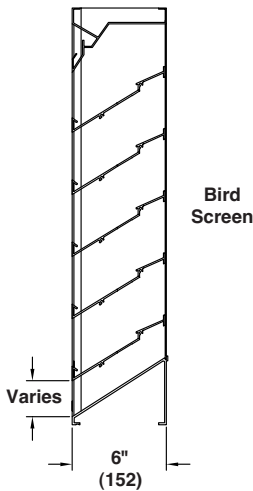
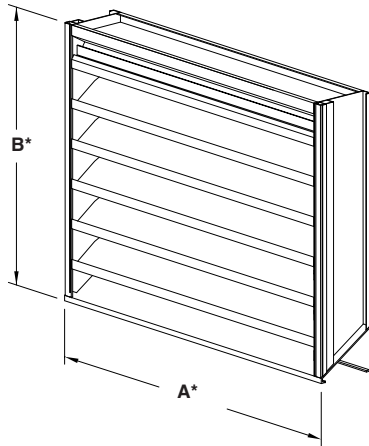
Wood Installation





6350DS DRAINABLE STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
6" (152) deep, 6063T6 extruded aluminum with .125" (3.2) nominal wall thickness. Downsputs and caulking surfaces provided.

BLADES
6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Drainable blades are positioned at 35° angle and spaced approximately 4" (102) center to center.

SCREEN
5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
6 lbs. per sq. ft. (29.3 kg per m²).

MAXIMUM FACTORY ASSEMBLY SIZE
Single sections shall not exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

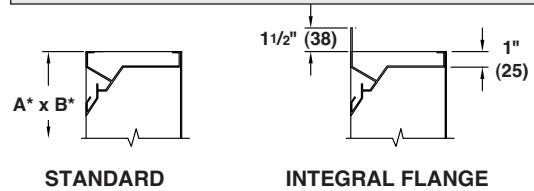
FEATURES

- The 6350DS offers:
- 61.8% Free Area.
 - Beginning point of water penetration above 1,250 fpm free area velocity.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
 - Drain gutter in each blade minimizes water cascade between blades.
 - Continuous blades up to 120" (3048).
 - All aluminum construction for low maintenance and high resistance to corrosion.

VARIATIONS

- Variations to the basic design of this louver are available at additional cost. They include:
- Extended sill
 - Hinged frame
 - Front or rear security bars
 - Filter racks
 - A variety of bird and insect screens
 - Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize 50 & 70, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible).
- Consult Reliable for other special requirements.

FRAME CONSTRUCTION



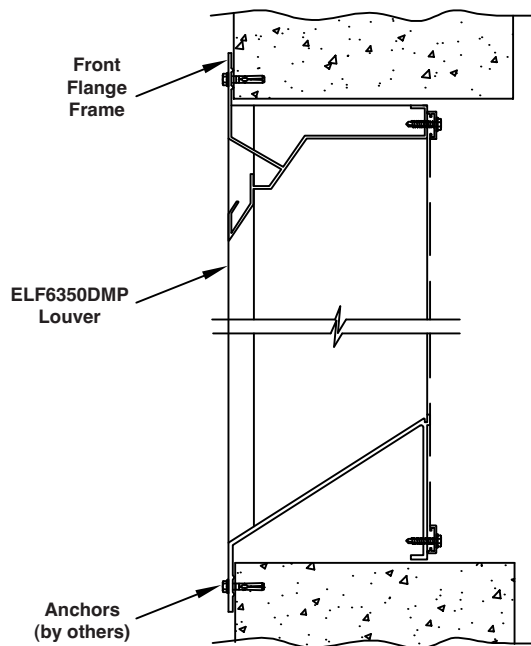
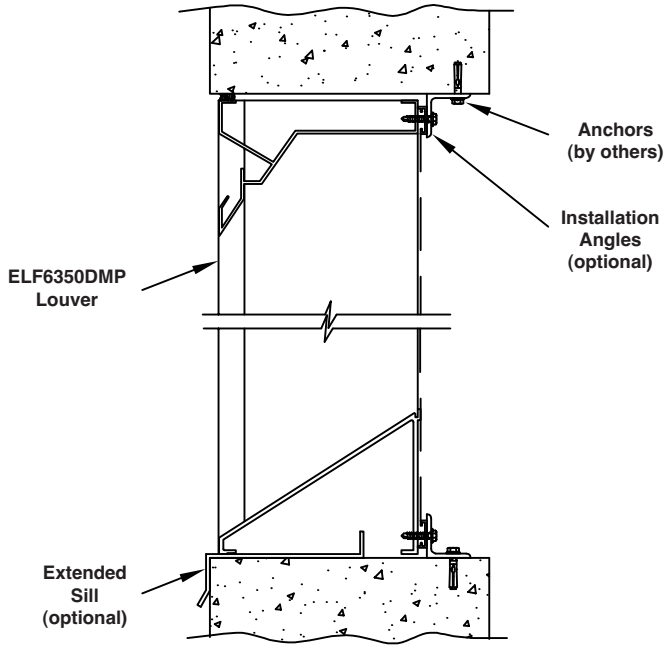
- NOTES:**
1. Dimensions in inches, parenthesis () indicate millimeters.
 2. Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

FRAME CONSTRUCTION

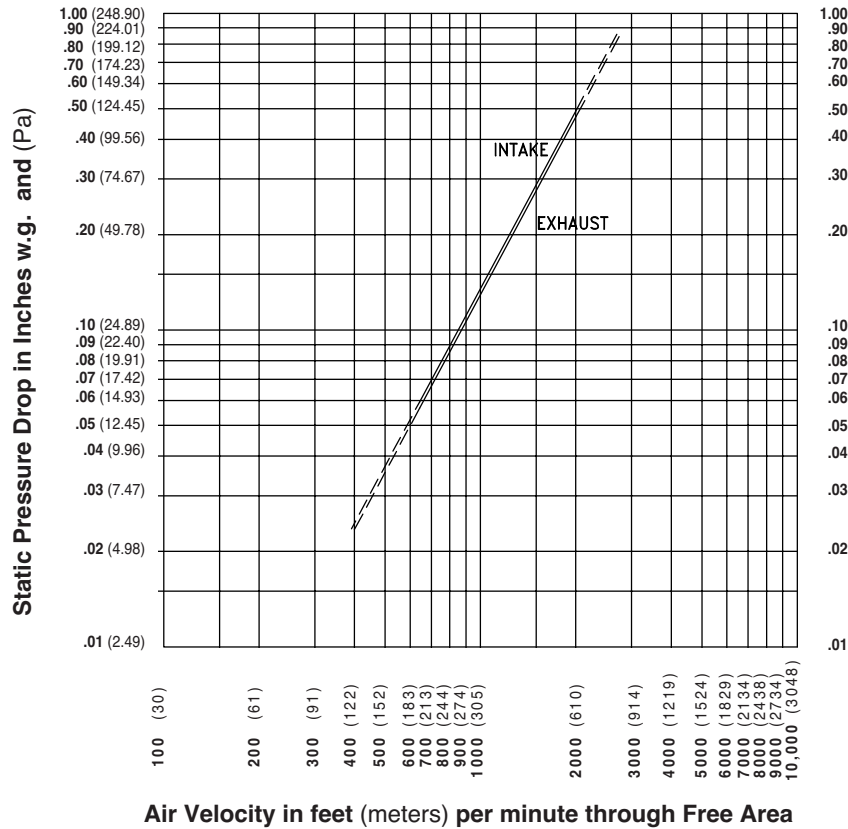
**Standard
Frame**

**Flange
Frame**



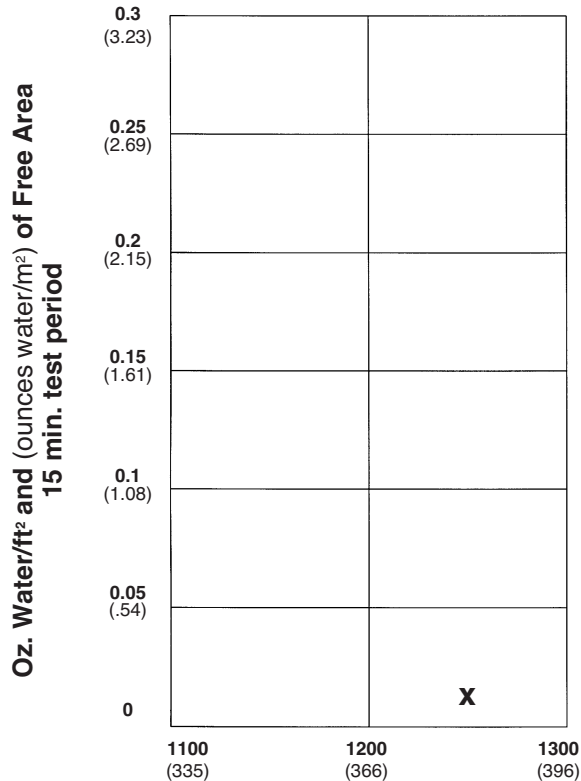
Optional items are available at additional cost. Anchors or other fasteners securing installation angles to substrate are by others.

PRESSURE DROP
Test size 48" x 48" (1219 x 1219)



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219) Beginning point of water penetration at .01 oz./sq. ft. is 1250 fpm (381 m/min).



Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 6350DS louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

Free Area Velocity in feet (meters) per minute through Free Area

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary drainable type with drain gutters in each blade and downspouts in jambs and mullions. Louvers shall have a minimum of 58% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary drainable blades shall be contained within a 6" (152) frame. Louver components (heads, jambs, sills, blades, & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 10 feet (3) and shall incorporate structural supports required to withstand a windload of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] – specifier may substitute any loading required).

Louvers shall be Reliable Model 6350DS extruded 6063T6 aluminum alloy construction as follows:

- Frame: 6" (152) deep,
6350DS - .125" (3.2) wall thickness.
- Blades: 6350DS .081" (2.1) wall thickness. Drainable blades positioned at 37½° angle and spaced approximately 4" (102) center to center.
- Screen: 5/8" x .040" (16 x 1) expanded, flattened aluminum in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 6350DS.

Width – Inches and Meters

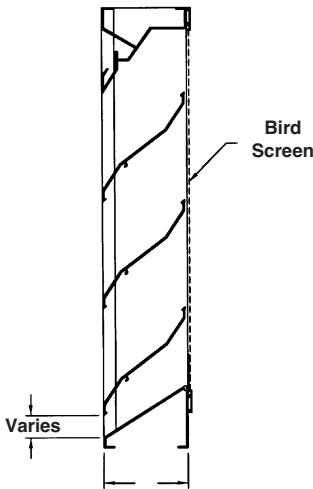
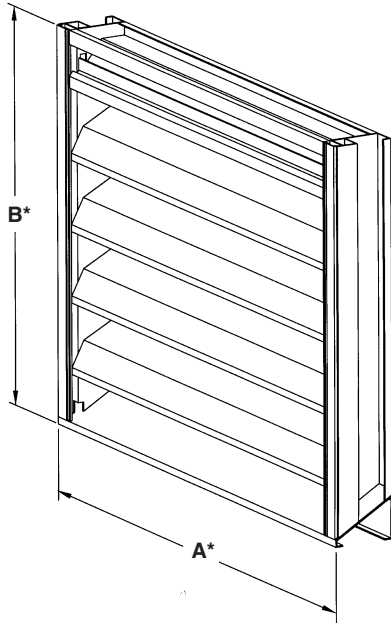
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.23	0.40	0.74	0.91	1.26	1.43	1.77	1.94	2.29	2.46	2.80	2.97	3.32	3.49	3.83	4.01	4.35	4.52	4.86
0.30	0.02	0.04	0.07	0.08	0.12	0.13	0.16	0.18	0.21	0.23	0.26	0.28	0.31	0.32	0.36	0.37	0.40	0.42	0.45
18	0.39	0.68	1.26	1.56	2.14	2.44	3.02	3.32	3.90	4.20	4.78	5.07	5.66	5.95	6.54	6.83	7.42	7.71	8.30
0.46	0.04	0.06	0.12	0.14	0.20	0.23	0.28	0.31	0.36	0.39	0.44	0.47	0.53	0.55	0.61	0.64	0.69	0.72	0.77
24	0.55	0.96	1.79	2.20	3.03	3.45	4.27	4.69	5.52	5.93	6.76	7.17	8.00	8.42	9.25	9.66	10.49	10.90	11.73
0.61	0.05	0.09	0.17	0.20	0.28	0.32	0.40	0.44	0.51	0.55	0.63	0.67	0.74	0.78	0.86	0.90	0.98	1.01	1.09
30	0.71	1.24	2.31	2.85	3.92	4.45	5.52	6.06	7.13	7.67	8.74	9.27	10.34	10.88	11.95	12.49	13.56	14.09	15.16
0.76	0.07	0.12	0.21	0.26	0.36	0.41	0.51	0.56	0.66	0.71	0.81	0.86	0.96	1.01	1.11	1.16	1.26	1.31	1.41
36	0.86	1.52	2.83	3.49	4.81	5.46	6.78	7.43	8.75	9.40	10.72	11.37	12.69	13.34	14.66	15.31	16.63	17.28	18.60
0.91	0.08	0.14	0.26	0.32	0.45	0.51	0.63	0.69	0.81	0.87	1.00	1.06	1.18	1.24	1.36	1.42	1.55	1.61	1.73
42	1.02	1.80	3.36	4.14	5.69	6.47	8.03	8.80	10.36	11.14	12.69	13.47	15.03	15.81	17.36	18.14	19.70	20.47	22.03
1.07	0.10	0.17	0.31	0.38	0.53	0.60	0.75	0.82	0.96	1.04	1.18	1.25	1.40	1.47	1.61	1.69	1.83	1.90	2.05
48	1.18	2.08	3.88	4.78	6.58	7.48	9.28	10.18	11.98	12.87	14.67	15.57	17.37	18.27	20.07	20.97	22.77	23.67	25.46
1.22	0.11	0.19	0.36	0.44	0.61	0.70	0.86	0.95	1.11	1.20	1.36	1.45	1.62	1.70	1.87	1.95	2.12	2.20	2.37
54	1.34	2.36	4.41	5.43	7.47	8.49	10.53	11.55	13.59	14.61	16.65	17.67	19.71	20.73	22.77	23.79	25.84	26.86	28.90
1.37	0.12	0.22	0.41	0.50	0.69	0.79	0.98	1.07	1.26	1.36	1.55	1.64	1.83	1.93	2.12	2.21	2.40	2.50	2.69
60	1.50	2.64	4.93	6.07	8.35	9.50	11.78	12.92	15.20	16.35	18.63	19.77	22.06	23.20	25.48	26.62	28.91	30.05	32.33
1.52	0.14	0.25	0.46	0.56	0.78	0.88	1.10	1.20	1.41	1.52	1.73	1.84	2.05	2.16	2.37	2.48	2.69	2.79	3.01
66	1.66	2.93	5.45	6.71	9.24	10.50	13.03	14.29	16.82	18.08	20.61	21.87	24.40	25.66	28.19	29.45	31.98	33.24	35.76
1.68	0.15	0.27	0.51	0.62	0.86	0.98	1.21	1.33	1.56	1.68	1.92	2.03	2.27	2.39	2.62	2.74	2.97	3.09	3.33
72	1.82	3.21	5.98	7.36	10.13	11.51	14.28	15.67	18.43	19.82	22.59	23.97	26.74	28.12	30.89	32.28	35.04	36.43	39.20
1.83	0.17	0.30	0.56	0.68	0.94	1.07	1.33	1.46	1.71	1.84	2.10	2.23	2.49	2.62	2.87	3.00	3.26	3.39	3.65
78	1.98	3.49	6.50	8.00	11.02	12.52	15.53	17.04	20.05	21.55	24.56	26.07	29.08	30.59	33.60	35.10	38.11	39.62	42.63
1.98	0.18	0.32	0.60	0.74	1.02	1.16	1.44	1.58	1.86	2.00	2.28	2.42	2.70	2.84	3.12	3.26	3.54	3.68	3.96
84	2.14	3.77	7.02	8.65	11.90	13.53	16.78	18.41	21.66	23.29	26.54	28.17	31.42	33.05	36.30	37.93	41.18	42.81	46.06
2.13	0.20	0.35	0.65	0.80	1.11	1.26	1.56	1.71	2.01	2.17	2.47	2.62	2.92	3.07	3.38	3.53	3.83	3.98	4.28
90	2.30	4.05	7.55	9.29	12.79	14.54	18.03	19.78	23.28	25.03	28.52	30.27	33.77	35.51	39.01	40.76	44.25	46.00	49.50
2.29	0.21	0.38	0.70	0.86	1.19	1.35	1.68	1.84	2.16	2.33	2.65	2.82	3.14	3.30	3.63	3.79	4.12	4.28	4.60
96	2.46	4.33	8.07	9.94	13.68	15.55	19.28	21.15	24.89	26.76	30.50	32.37	36.11	37.98	41.72	43.58	47.32	49.19	52.93
2.44	0.229	0.403	0.75	0.92	1.27	1.45	1.79	1.97	2.31	2.49	2.84	3.01	3.36	3.53	3.88	4.05	4.40	4.57	4.92





6375Z, 6375ZS, 6375Z125 STATIONARY LOUVERS

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
 6" (152) deep, 6063T5 extruded aluminum.
 6375Z – .081" (2.1) nominal wall thickness.
 6375ZS – .125" (3.2) nominal wall thickness.
 6375Z125 – .125" (3.2) nominal wall thickness.
 Downspouts and caulking surfaces provided.

BLADES
 6063T5 extruded aluminum.
 6375Z – .081" (2.1) nominal wall thickness.
 6375ZS – .125" (3.2) nominal wall thickness.
 6375Z125 – .125" (3.2) nominal wall thickness.
 Blades are positioned at 37¹/₂° angle and spaced approximately 5²⁹/₃₂" (150) center to center.

SCREEN
 3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
 Mill.

MINIMUM SIZE
 12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
 ELF375X - 4 lbs./ft.² (19.5 kg/m²).
 ELF375XH - 6 lbs./ft.² (29.3 kg/m²).

MAXIMUM FACTORY ASSEMBLY SIZE
 Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).
 Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
 Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

- The 6375Z, 6375ZS and 6375Z125 offers:
- 55% Free Area.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
 - Architecturally styled, hidden mullions allowing continuous line appearance up to 120" (3048).
 - Aluminum construction for low maintenance and high resistance to corrosion.
 - All welded construction.

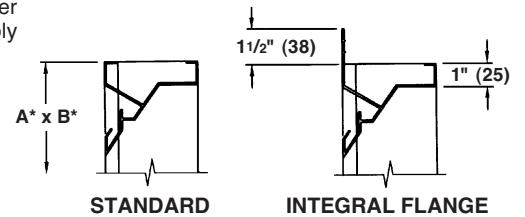
VARIATIONS

Variations to the basic design of these louvers are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



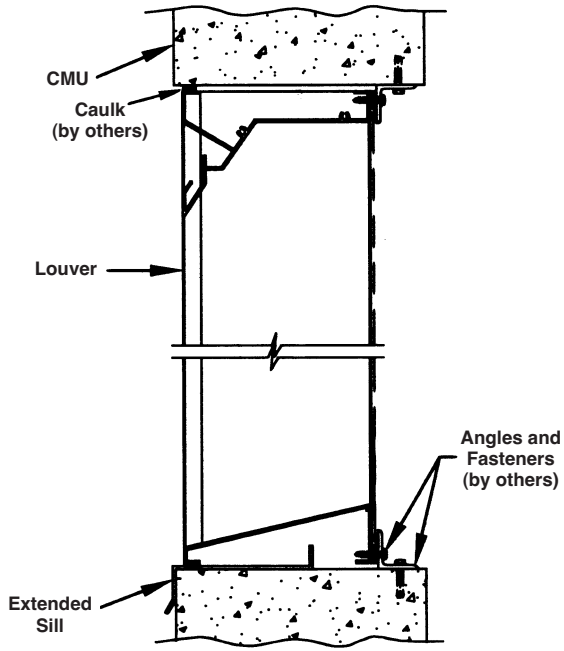
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

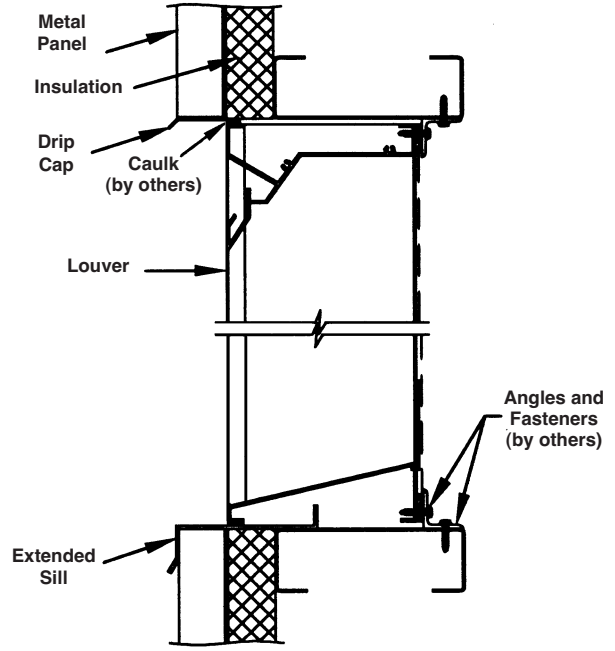
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

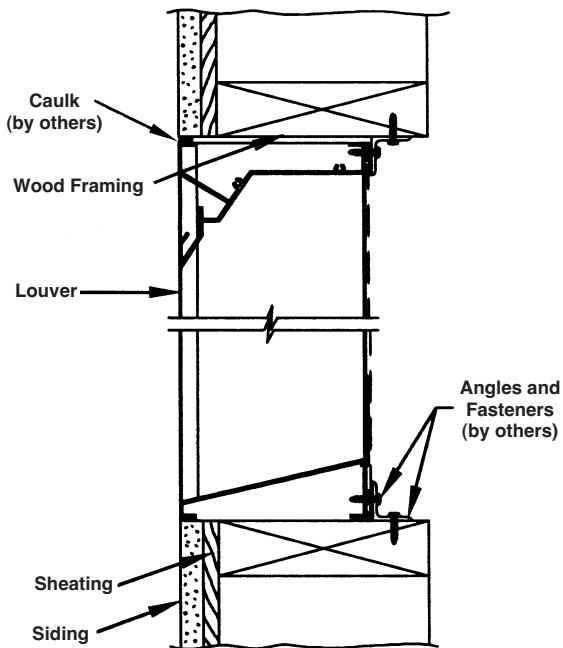
Masonry Wall



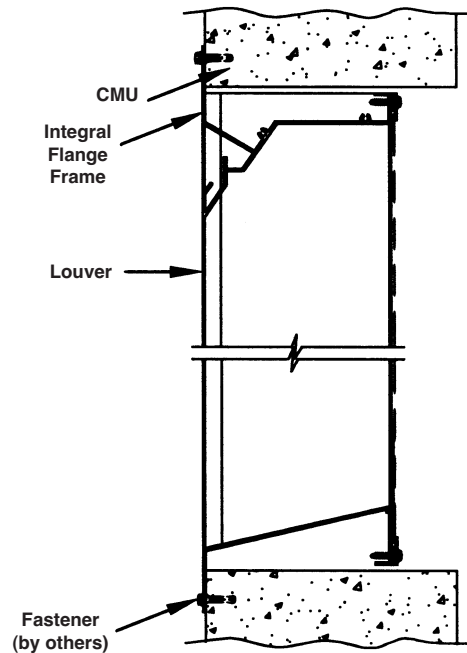
Metal Panel Wall



Wood Installation

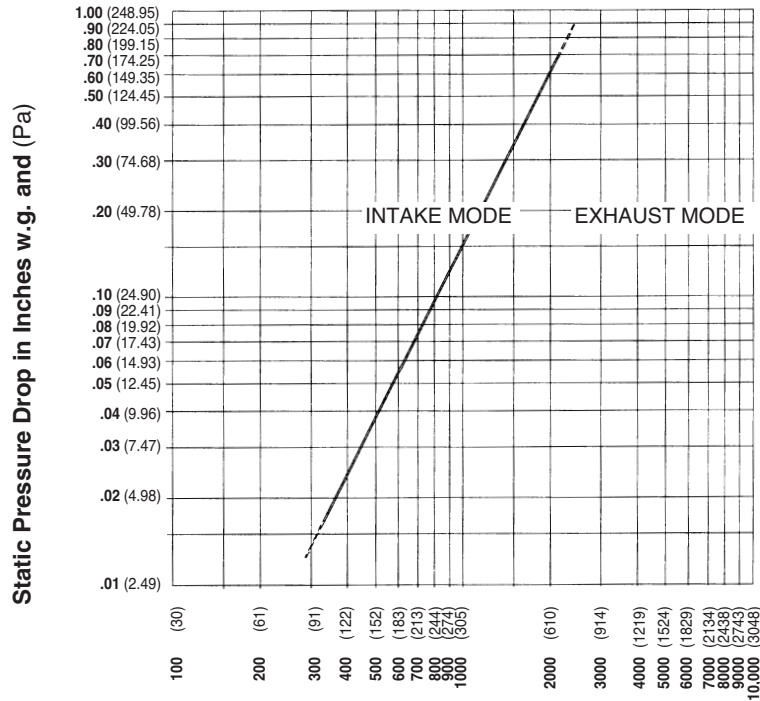


Flange Mount



*Accessories at additional cost.

PRESSURE DROP

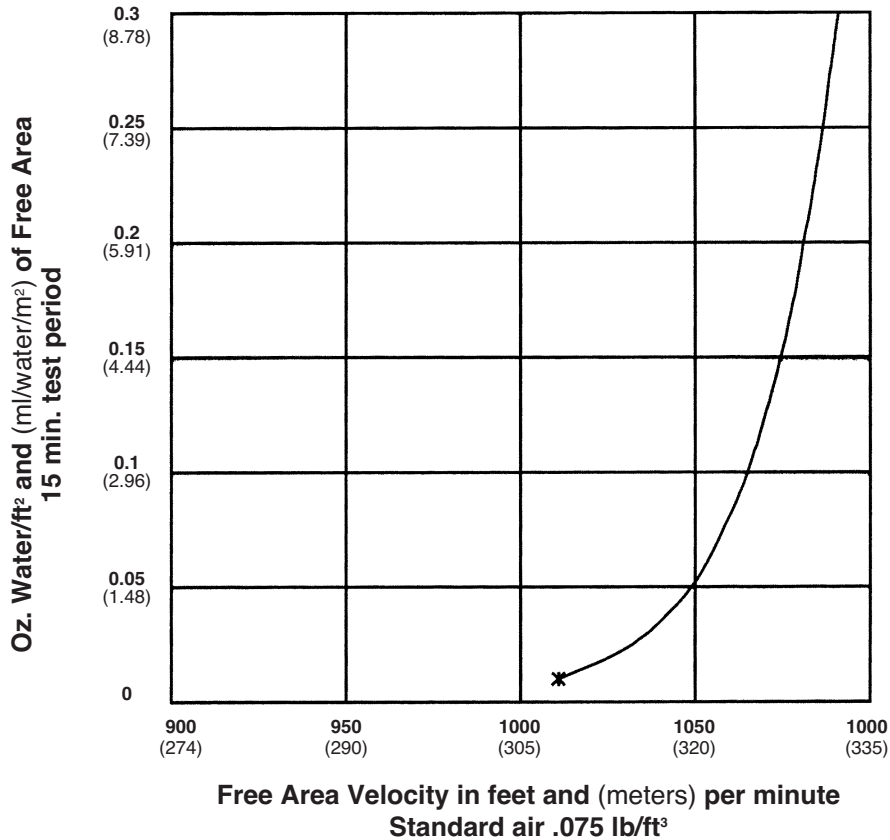


Air Velocity in feet and (meters) per minute through Free Area

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 803 fpm (245 m/min).



Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 6375Z and 6375Z125 Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.



6375Z
6375ZS
6375Z125

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type with downspouts in jambs and mullions. Louvers shall have a minimum of 54% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary blades shall be contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades, & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 10 feet (3) and shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph [145 KPH] wind – specifier may substitute any loading required).

Louvers shall be Reliable Model 6375Z, 6375ZS or 6375Z125 extruded 6063T5 aluminum alloy construction as follows:

Frame: 6" (152) deep, 6063T5 extruded aluminum. 6375Z – .081" (2.1) nominal wall thickness. 6375ZS – .125" (3.2) nominal wall thickness. 6375Z125 – .125" (3.2) nominal wall thickness.

Blades: 6375Z – .081" (2.1) nominal wall thickness. 6375ZS – .125" (3.2) nominal wall thickness. 6375Z125 – .125" (3.2) nominal wall thickness. Blades positioned at 37¹/₂° angle and spaced approximately 5²⁹/₃₂" (150) center to center.

Screen: 3/4" x .051 (19 x 1.3) expanded, flattened aluminum in removable frame.

Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 6375Z and 6375Z125.
 Width – Inches and Meters

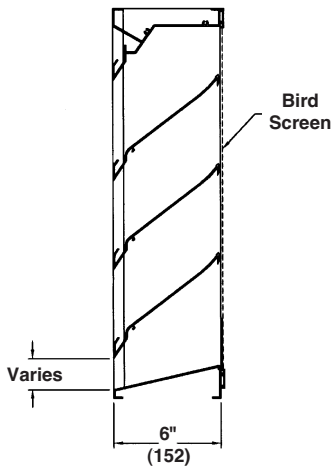
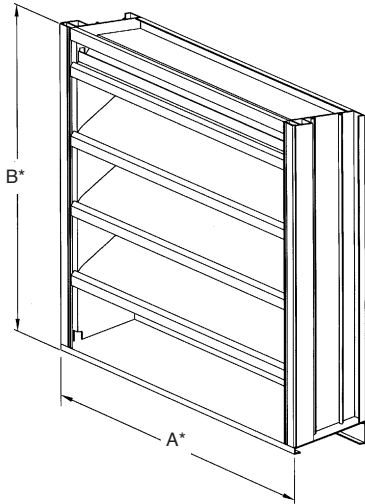
Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.31	0.50	0.69	0.88	1.07	1.26	1.45	1.63	1.81	2.01	2.20	2.39	2.58	2.77	2.96	3.15	3.34	3.49	3.71
0.30	0.03	0.05	0.06	0.08	0.10	0.12	0.13	0.15	0.17	0.19	0.20	0.22	0.24	0.26	0.28	0.29	0.31	0.32	0.34
18	0.58	0.94	1.28	1.63	1.98	2.32	2.68	3.03	3.38	3.73	4.08	4.43	4.78	5.13	5.48	5.83	6.18	6.53	6.88
0.46	0.05	0.09	0.12	0.15	0.18	0.22	0.25	0.28	0.31	0.35	0.38	0.41	0.44	0.48	.051	0.54	0.57	0.61	0.64
24	0.85	1.36	1.87	2.38	2.89	3.40	3.91	4.42	4.93	5.43	5.94	6.45	6.96	7.47	7.98	8.49	9.00	9.51	10.02
0.61	0.08	0.13	0.17	0.22	0.27	0.32	0.36	0.41	0.46	0.50	0.55	0.60	0.65	0.69	0.74	0.79	0.84	0.88	0.93
30	1.12	1.79	2.46	3.13	3.80	4.47	5.14	5.81	6.48	7.15	7.82	8.49	9.16	9.84	10.51	11.18	11.85	12.52	13.19
0.76	0.10	0.17	0.23	0.29	0.35	0.42	0.48	0.54	0.60	0.66	0.72	0.79	0.85	0.91	0.98	1.04	1.10	1.16	1.23
36	1.39	2.22	3.05	3.88	4.71	5.54	6.38	7.21	8.04	8.87	9.70	10.53	11.37	12.20	13.03	13.86	14.69	15.52	16.36
0.91	0.13	0.21	0.28	0.36	0.44	0.51	0.59	0.67	0.75	0.82	0.90	0.98	1.06	1.13	1.21	1.29	1.37	1.44	1.52
42	1.65	2.65	3.64	4.63	5.63	6.62	7.61	8.60	9.60	10.59	11.58	12.57	13.57	14.56	15.55	16.54	17.54	18.53	19.52
1.07	0.15	0.25	0.34	0.43	0.52	0.62	0.71	0.80	0.89	0.98	1.08	1.17	1.26	1.35	1.45	1.54	1.63	1.72	1.81
48	1.92	3.08	4.23	5.38	6.54	7.69	8.85	10.00	11.15	12.31	13.46	14.61	15.77	16.92	18.08	19.23	20.38	21.54	22.69
1.22	0.18	0.29	0.39	0.50	0.61	0.71	0.82	0.93	1.04	1.14	1.25	1.36	1.47	1.57	1.68	1.79	1.89	2.00	2.11
54	2.19	3.51	4.82	6.14	7.45	8.77	10.08	11.40	12.71	14.02	15.34	16.65	17.97	19.28	20.60	21.91	23.23	24.54	25.86
1.37	0.20	0.33	0.45	0.57	0.69	0.81	0.94	1.06	1.18	1.30	1.43	1.55	1.67	1.79	1.91	2.04	2.16	2.28	2.40
60	2.46	3.94	5.41	6.89	8.36	9.84	11.32	12.79	14.27	15.74	17.22	18.69	20.17	21.65	23.12	24.60	26.07	27.55	29.03
1.52	0.23	0.37	0.50	0.64	0.78	0.91	1.05	1.19	1.33	1.46	1.60	1.74	1.87	2.01	2.15	2.29	2.42	2.56	2.70
66	2.73	4.37	6.00	7.64	9.28	10.91	12.55	14.19	15.82	17.46	19.10	20.73	22.37	24.01	25.65	27.28	28.92	30.56	32.19
1.68	0.25	0.41	0.56	0.71	0.86	1.01	1.17	1.32	1.47	1.62	1.77	1.93	2.08	2.23	2.38	2.54	2.69	2.84	2.99
72	3.00	4.79	6.59	8.39	10.19	11.99	13.78	15.58	17.38	19.18	20.98	22.77	24.57	26.37	28.17	29.97	31.76	33.56	35.36
1.83	0.28	0.45	0.61	0.78	0.95	1.11	1.28	1.45	1.62	1.78	1.95	2.12	2.28	2.45	2.62	2.79	2.95	3.12	3.29
78	3.27	5.22	7.18	9.14	11.10	13.06	15.02	16.98	18.94	20.90	22.86	24.81	26.77	28.73	30.69	32.65	34.61	36.57	38.53
1.98	0.30	0.49	0.67	0.85	1.03	1.21	1.40	1.58	1.76	1.94	2.12	2.31	2.49	2.67	2.85	3.03	3.22	3.40	3.58
84	3.53	5.65	7.77	9.89	12.01	14.13	16.25	18.37	20.49	22.61	24.73	26.85	28.98	31.10	33.22	35.34	37.46	39.58	41.70
2.13	0.33	0.53	0.72	0.92	1.12	1.31	1.50	1.71	1.90	2.10	2.30	2.50	2.69	2.89	3.09	3.28	3.48	3.68	3.88
90	3.80	6.08	8.36	10.65	12.93	15.21	17.49	19.77	22.05	24.33	26.61	28.90	31.18	33.46	35.74	38.02	40.30	42.58	44.86
2.29	0.35	0.57	0.78	0.99	1.20	1.41	1.63	1.84	2.05	2.26	2.47	2.69	2.90	3.11	3.32	3.53	3.75	3.96	4.17



6375D, 6375DS, 6375D125 DRAINABLE STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME

6" (152) deep, 6063T5 extruded aluminum.
 6375D – .081" (2.1) nominal wall thickness.
 6375DS – .125" (3.2) nominal wall thickness.
 6375D125 – .125" (3.2) nominal wall thickness.
 Downspouts and caulking surfaces provided.

BLADES

6063T5 extruded aluminum.
 6375D – .081" (2.1) nominal wall thickness.
 6375DS – .081" (2.1) nominal wall thickness.
 6375D125 – .125" (3.2) nominal wall thickness.
 Drainable blades are positioned at at 37 1/2° angle and spaced approximately 5 29/32" (150) center to center.

SCREEN

3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

6375D - 4 lbs./ft.² (19.5 kg /m²)
 6375D125 - 6 lbs./ft.² (29.3kg /m²)

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS

Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

The 6375D and 6375D125 offers:

- 57% Free Area.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
- Drain gutter in each blade minimizes water cascade between blades.
- Architecturally styled, hidden mullions allowing continuous line appearance up to 120" (3048).
- Aluminum construction for low maintenance and high resistance to corrosion.
- All welded construction.

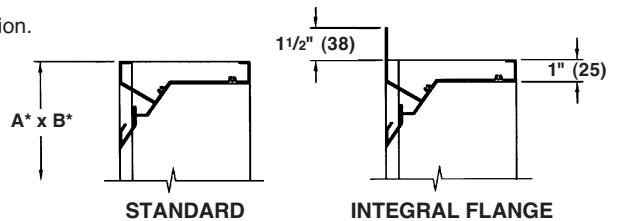
VARIATIONS

Variations to the basic design of these louvers are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency)

Consult Reliable for other special require-

FRAME CONSTRUCTION



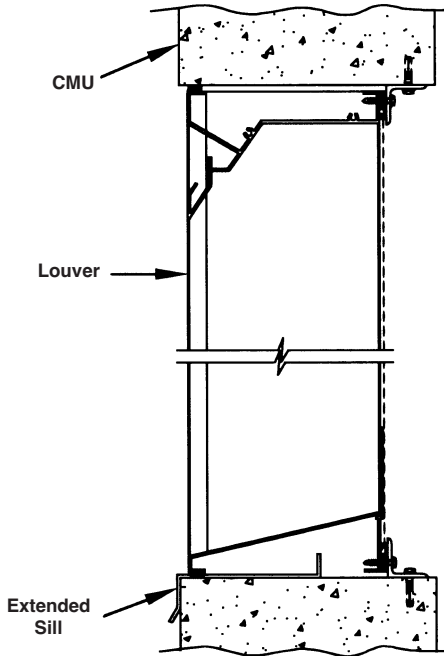
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

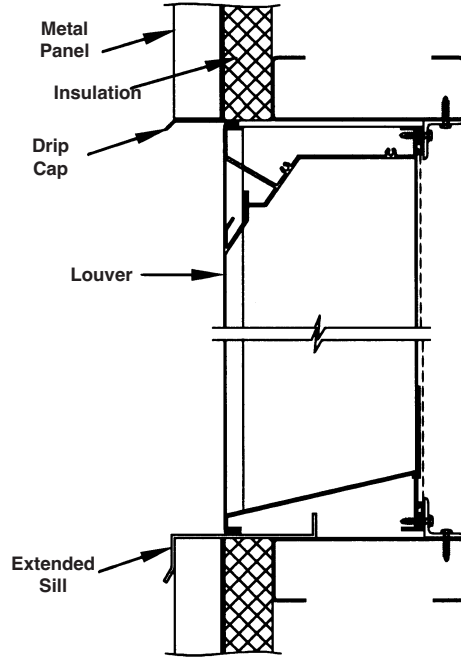
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT			LOCATION		
ARCH./ENGR.			CONTRACTOR		
REPRESENTATIVE			DATE		

TYPICAL INSTALLATION DETAILS

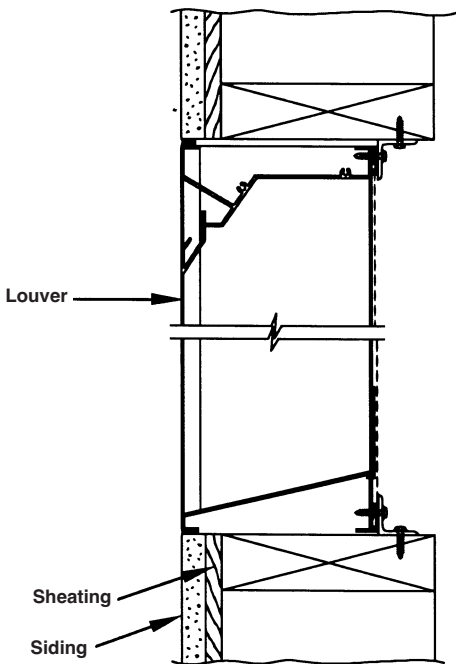
Masonry Wall



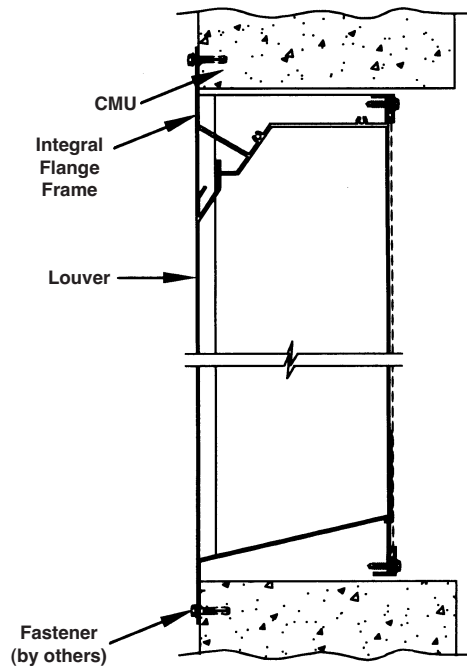
Metal Panel Wall



Wood Installation



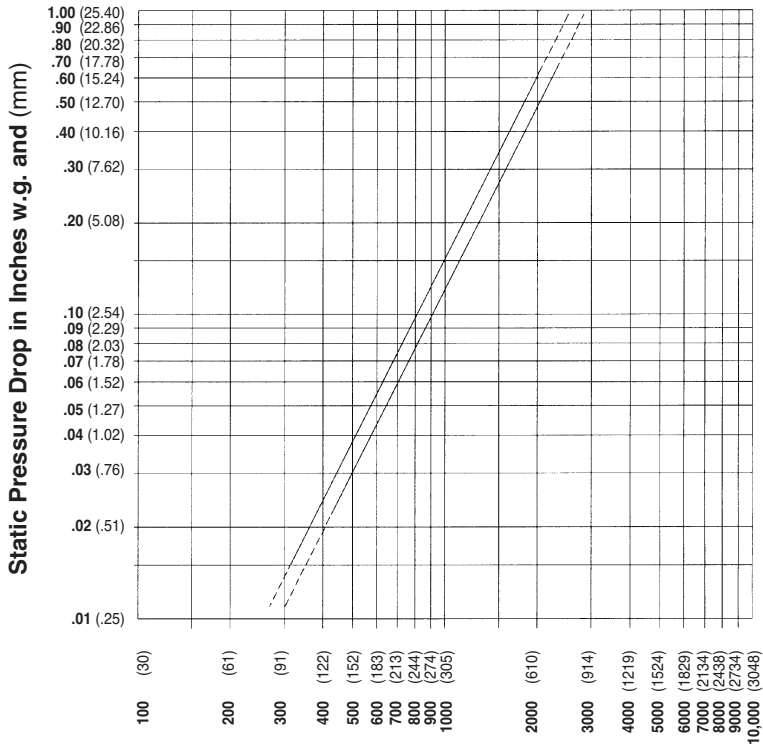
Flange Mount





6375D
6375DS
6375D125

PRESSURE DROP

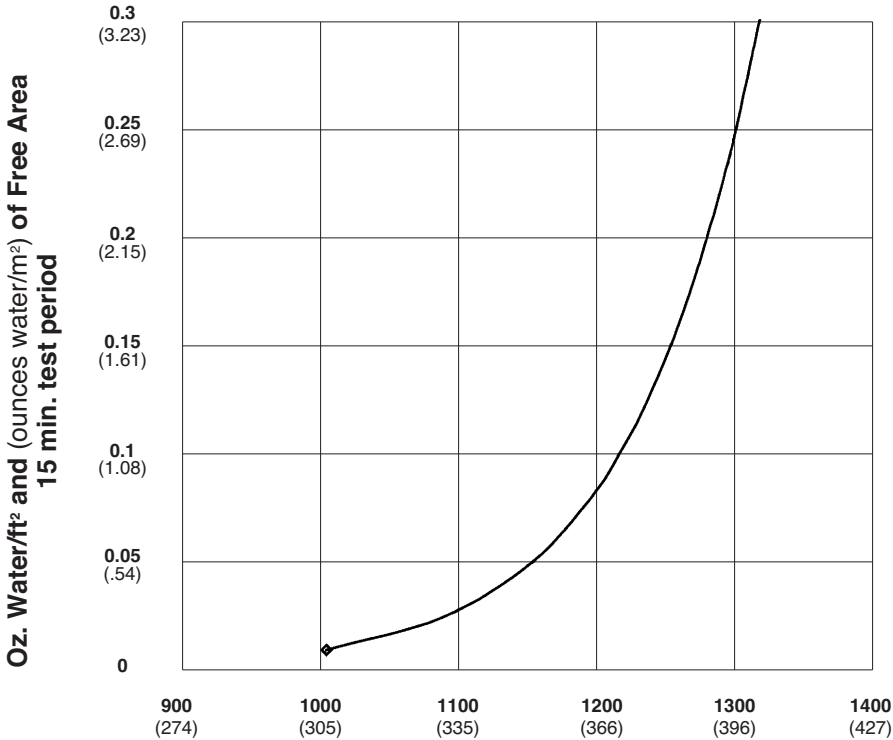


Air Velocity in feet and (meters) per minute through Free Area

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1023 fpm (312 m/min).



Free Area Velocity in feet and (meters) per minute
 Standard air .075 lb/ft³

Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 6375D, 6375DS and 6375D125 Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.



6375D
6375DS
6375D125

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary drainable type with drain gutters in each blade and downspouts in jambs and mullions. Louvers shall have a minimum of 57% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary drainable blades shall be contained within a 6" (152) frame. Louver components (heads, jambs, sills, blades, & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 10 feet (3) and shall incorporate structural supports required to withstand a wind-load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] wind – specifier may substitute any loading required).

Louvers shall be Reliable Model 6375D or 6375D125 extruded 6063T5 aluminum construction as follows:

- Frame: 6" (152) deep, 6063T5 extruded aluminum. 6375D – .081" (2.1) nominal wall thickness. 6375D125 – .125" (3.2) nominal wall thickness.
- Blades: 6375D – .081" (2.1) nominal wall thickness. 6375DS – 125" (3.2) nominal wall thickness. 6375D125 – .125" (3.2) nominal wall thickness. Blades positioned at 37¹/₂° angle and spaced approximately 5²⁹/₃₂" (150) center to center.
- Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Ruskin model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 6375D, 6375DS and 6375D125.
 Width – Inches and Meters

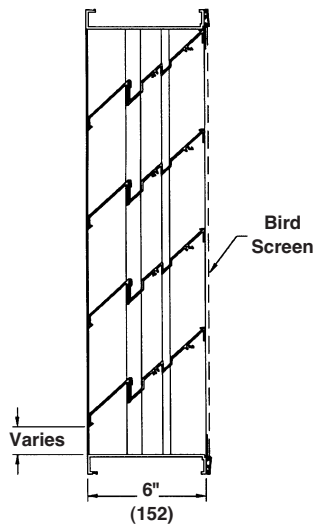
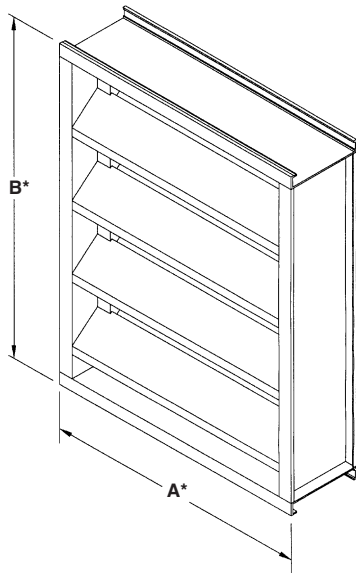
Height – Inches and Meters	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.31 0.30	0.49 0.05	0.67 0.06	0.86 0.08	1.04 0.10	1.22 0.11	1.41 0.13	1.59 0.15	1.77 0.16	1.96 0.18	2.14 0.20	2.32 0.22	2.51 0.23	2.69 0.25	2.88 0.27	3.06 0.28	3.25 0.30	3.43 0.32	3.61 0.34
18	0.58 0.46	0.93 0.09	1.28 0.12	1.63 0.15	1.98 0.18	2.32 0.22	2.68 0.25	3.03 0.28	3.37 0.31	3.73 0.35	4.08 0.38	4.42 0.41	4.77 0.44	5.13 0.48	5.48 0.51	5.82 0.54	6.18 0.57	6.52 0.61	6.87 0.64
24	0.86 0.61	1.38 0.13	1.89 0.18	2.40 0.22	2.92 0.27	3.43 0.32	3.96 0.37	4.47 0.42	4.98 0.46	5.50 0.51	6.02 0.56	6.53 0.61	7.05 0.66	7.57 0.70	8.09 0.75	8.60 0.80	9.12 0.85	9.63 0.89	10.15 0.94
30	1.14 0.76	1.82 0.11	2.50 0.23	3.18 0.30	3.87 0.36	4.54 0.42	5.24 0.49	5.92 0.55	6.59 0.61	7.28 0.68	7.97 0.74	8.64 0.80	9.33 0.87	10.01 0.93	10.70 0.99	11.37 1.06	12.06 1.12	12.74 1.18	13.42 1.25
36	1.41 0.91	2.26 0.13	3.11 0.29	3.95 0.37	4.80 0.45	5.64 0.52	6.52 0.61	7.35 0.68	8.18 0.76	9.04 0.84	9.89 0.92	10.73 1.00	11.58 1.08	12.44 1.16	13.29 1.24	14.13 1.31	14.98 1.39	15.82 1.47	16.67 1.55
42	1.69 1.07	2.70 0.16	3.72 0.25	4.72 0.35	5.75 0.44	6.74 0.53	7.79 0.63	8.79 0.72	9.79 0.81	10.81 0.91	11.83 1.00	12.83 1.09	13.86 1.19	14.88 1.29	15.89 1.38	16.90 1.48	17.92 1.57	18.92 1.67	19.94 1.85
48	1.97 1.22	3.15 0.18	4.33 0.29	5.50 0.40	6.69 0.51	7.86 0.62	9.08 0.73	10.24 0.84	11.40 0.95	12.59 1.06	13.78 1.17	14.95 1.28	16.14 1.39	17.33 1.50	18.51 1.61	19.68 1.72	20.87 1.83	22.04 1.94	23.23 2.16
54	2.24 1.37	3.59 0.21	4.94 0.33	6.27 0.46	7.63 0.58	8.96 0.71	10.35 0.83	11.67 0.96	13.00 1.08	14.35 1.21	15.71 1.33	17.04 1.46	18.40 1.58	19.75 1.71	21.10 1.84	22.44 1.96	23.79 2.09	25.12 2.21	26.48 2.46
60	2.52 1.52	4.03 0.23	5.55 0.37	7.05 0.52	8.57 0.66	10.06 0.80	11.62 0.93	13.12 1.08	14.60 1.22	16.13 1.36	17.65 1.50	19.14 1.64	20.67 1.78	22.19 1.92	23.71 2.06	25.21 2.20	26.73 2.34	28.22 2.48	29.75 2.76
66	2.80 1.68	4.47 0.26	6.16 0.42	7.82 0.57	9.51 0.73	11.17 0.88	12.90 1.04	14.56 1.20	16.20 1.35	17.90 1.51	19.59 1.66	21.24 1.82	22.94 1.97	24.63 2.13	26.31 2.29	27.98 2.44	29.67 2.60	31.32 2.76	33.01 3.07
72	3.08 1.83	4.92 0.29	6.76 0.46	8.59 0.63	10.45 0.80	12.27 1.14	14.18 1.32	16.00 1.49	17.81 1.66	19.67 1.83	21.53 2.00	23.35 2.17	25.21 2.34	27.07 2.52	28.91 2.69	30.74 2.86	32.60 3.03	34.42 3.20	36.28 3.37
78	3.35 1.98	5.36 0.31	7.37 0.50	9.37 0.68	11.40 0.87	13.38 1.24	15.45 1.44	17.44 1.61	19.41 1.80	21.44 1.99	23.47 2.18	25.45 2.37	27.48 2.55	29.51 2.74	31.52 2.93	33.51 3.11	35.54 3.30	37.52 3.49	39.55 3.68
84	3.63 2.13	5.80 0.34	7.98 0.54	10.14 0.74	12.34 1.15	14.48 1.35	16.73 1.54	18.88 1.75	21.02 1.95	23.21 2.16	25.41 2.36	27.55 2.56	29.75 2.76	31.94 2.97	34.12 3.17	36.28 3.37	38.48 3.58	40.62 3.77	42.82 3.98
90	3.91 2.29	6.25 0.36	8.59 0.58	10.92 1.01	13.28 1.23	15.59 1.45	18.01 1.67	20.32 1.89	22.62 2.10	24.98 2.32	27.35 2.54	29.65 2.76	32.02 2.98	34.38 3.19	36.73 3.41	39.05 3.63	41.41 3.85	43.72 4.06	46.09 4.28



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

6425DD CONTINUOUS DRAINABLE STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
6" (125) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Downspouts and caulking surfaces provided.

BLADES
6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Double drainable blades positioned at 42¹/₂° angle and spaced at approximately 5" (127) center to center.

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
8 lbs. per sq. ft. (39.1 per m²).

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 60 sq. ft. (6m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

- The 6425DD offers:
- Drainable louver performance with continuous blade construction.
 - Recessed vertical drain mullions that do not interrupt exterior blade appearance.
 - Drainable blades with recessed gutters for collection and removal of rain and a smooth exterior surface providing a clean, architectural look.
 - 51% free area, beginning water penetration at 852 fpm free area velocity with .09" (2.29) pressure drop.
 - AMCA licensed performance.
 - Extruded aluminum construction for low maintenance and high resistance to corrosion.

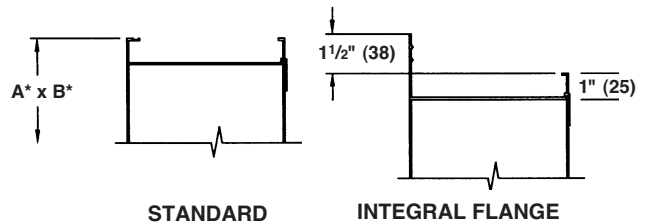
VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



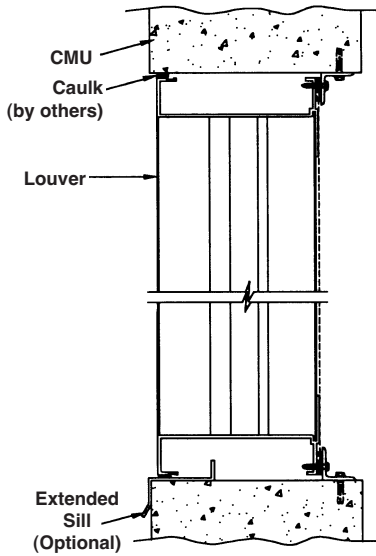
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

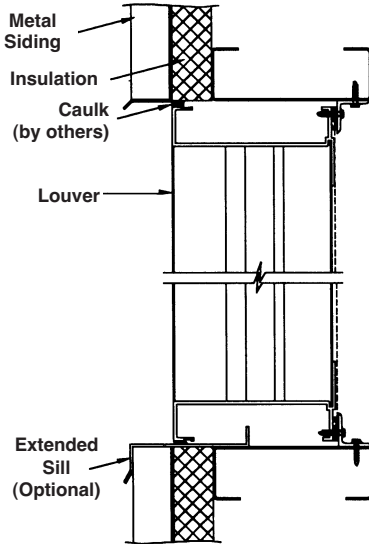
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

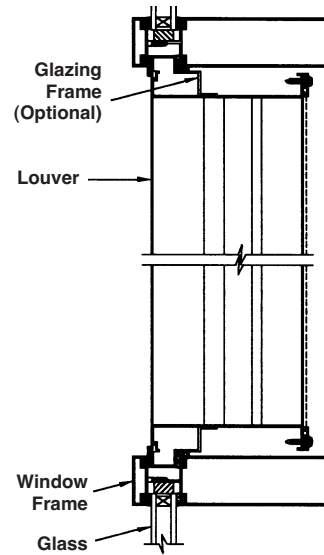
Masonry Wall



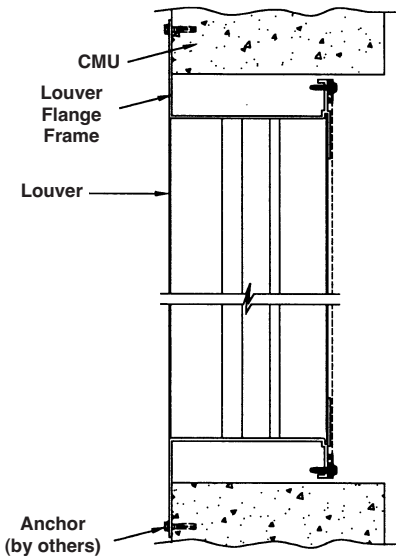
Metal Panel Wall



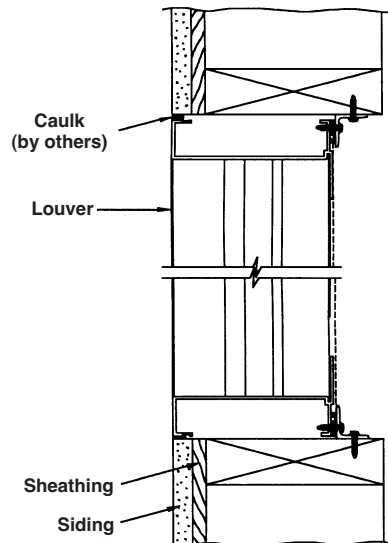
Glazing Frame



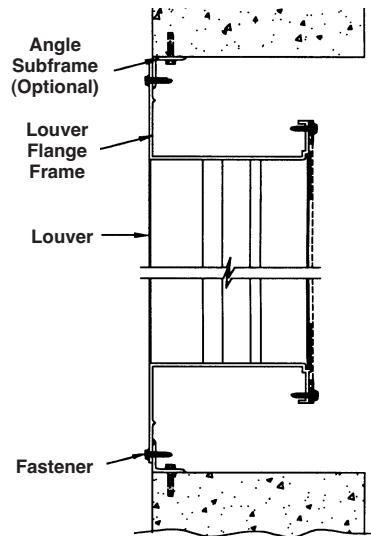
Flange Mount



Wood Installation

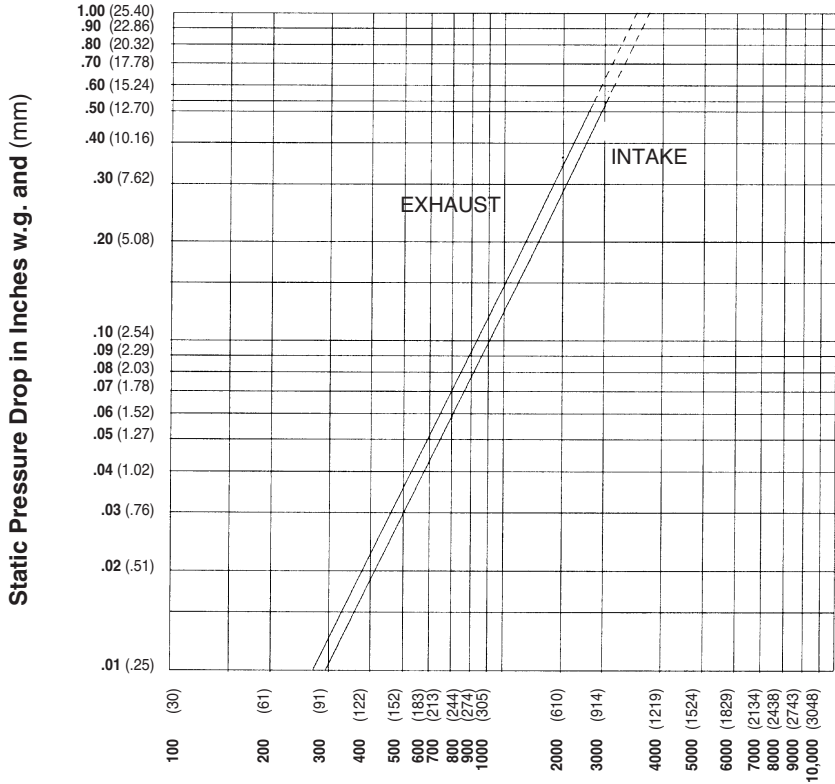


Angle Subframe



Options at additional cost.

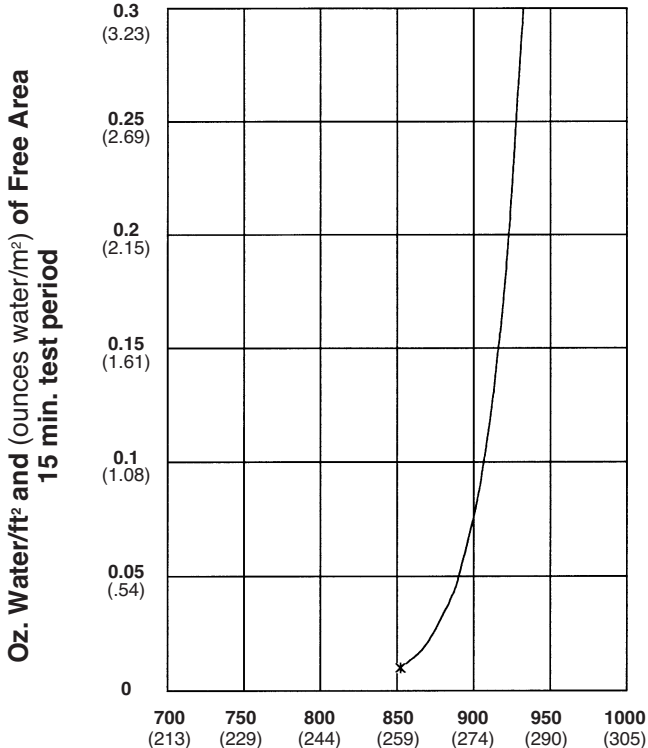
PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 852 fpm (260 m/min).



Free Area Velocity in feet and (meters) per minute
Standard air .075 lb/ft³

Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 6425DD Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type with downspouts in jambs and mullions. Louvers shall have a minimum of 50% free area based on a 48"w x 48"h (1219 x 1219) size. Stationary blades shall be contained within a 6" (152) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 6425DD.

Frame: 6" (152) deep, .081" (2.1) wall thickness.

Blades: .081" (2.1) wall thickness at 42¹/₂° angle and spaced approximately 5" (127) centers.

Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.

Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

FREE AREA GUIDE

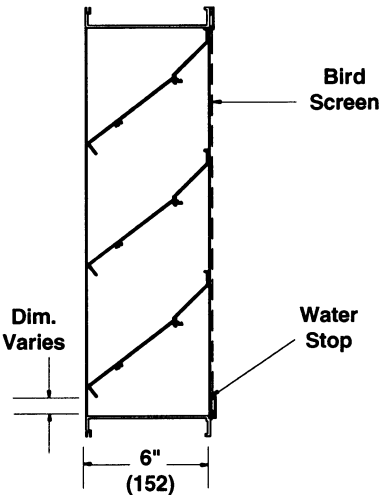
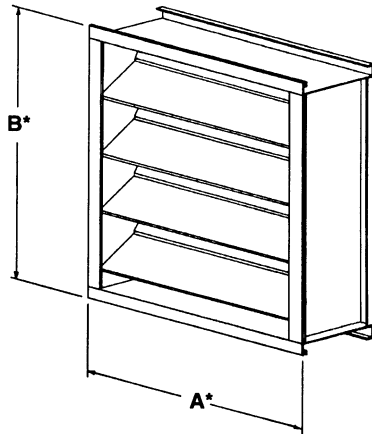
Free Area Guide shows free area in ft² and m² for various sizes of 6425DD.
Width – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.26	0.46	0.67	0.87	1.07	1.27	1.47	1.68	1.88	2.08	2.28	2.48	2.69	2.89	3.09	3.29	3.49	3.70	3.90
0.30	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.17	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.32	0.34	0.36
18	0.40	0.71	1.01	1.32	1.63	1.94	2.24	2.55	2.86	3.17	3.48	3.78	4.09	4.40	4.71	5.02	5.32	5.63	5.94
0.46	0.04	0.07	0.09	0.12	0.15	0.18	0.21	0.24	0.27	0.29	0.32	0.35	0.38	0.41	0.44	0.47	0.50	0.52	0.55
24	0.63	1.11	1.60	2.08	2.57	3.06	3.54	4.03	4.51	5.00	5.49	5.97	6.46	6.94	7.43	7.91	8.40	8.89	9.37
0.61	0.06	0.10	0.15	0.19	0.24	0.28	0.33	0.37	0.42	0.46	0.51	0.56	0.60	0.65	0.69	0.74	0.78	0.83	0.87
30	0.86	1.52	2.18	2.85	3.51	4.18	4.84	5.50	6.17	6.83	7.49	8.16	8.82	9.49	10.15	10.81	11.48	12.14	12.80
0.76	0.08	0.14	0.20	0.24	0.33	0.39	0.45	0.51	0.57	0.64	0.70	0.76	0.82	0.88	0.94	1.01	1.07	1.13	1.19
36	1.09	1.93	2.77	3.61	4.45	5.30	6.14	6.98	7.82	8.66	9.50	10.34	11.19	12.03	12.87	13.71	14.55	15.39	16.24
0.91	0.10	0.18	0.26	0.34	0.31	0.49	0.57	0.65	0.73	0.81	0.88	0.96	1.04	1.12	1.20	1.28	1.35	1.43	1.51
42	1.32	2.34	3.36	4.38	5.40	6.41	7.43	8.45	9.47	10.49	11.51	12.53	13.55	14.57	15.59	16.61	17.63	18.65	19.67
1.07	0.05	0.09	0.13	0.17	0.21	0.25	0.29	0.33	0.37	0.41	0.45	0.49	0.53	0.57	0.61	0.65	0.69	0.73	0.77
48	1.45	2.58	3.70	4.83	5.96	7.08	8.21	9.33	10.46	11.58	12.71	13.83	14.96	16.08	17.21	18.33	19.46	20.58	21.71
1.22	0.14	0.24	0.34	0.45	0.55	0.66	0.76	0.87	0.97	1.08	1.18	1.29	1.39	1.50	1.60	1.71	1.81	1.91	2.02
54	1.68	2.99	4.29	5.59	6.90	8.20	9.50	10.81	12.11	13.41	14.72	16.02	17.32	18.63	19.93	21.23	22.54	23.84	25.14
1.37	0.16	0.28	0.40	0.52	0.64	0.76	0.88	1.01	1.13	1.25	1.37	1.49	1.61	1.73	1.85	1.97	2.10	2.22	2.34
60	1.91	3.39	4.88	6.36	7.84	9.32	10.80	12.28	13.76	15.24	16.73	18.21	19.69	21.19	22.65	24.13	25.61	27.09	28.57
1.52	0.18	0.32	0.45	0.59	0.73	0.87	1.00	1.14	1.28	1.42	1.56	1.69	1.83	1.97	2.11	2.24	2.38	2.52	2.66
66	2.14	3.80	5.46	7.12	8.78	10.44	12.10	13.76	15.42	17.08	18.73	20.39	22.05	23.71	25.37	27.03	28.69	30.35	32.01
1.68	0.20	0.35	0.51	0.66	0.82	0.97	1.13	1.28	1.43	1.59	1.74	1.90	2.05	2.21	2.36	2.51	2.67	2.82	2.98
72	2.37	4.21	6.05	7.88	9.72	11.56	13.40	15.23	17.07	18.91	20.74	22.58	24.42	26.25	28.09	29.93	31.77	33.60	35.44
1.83	0.22	0.39	0.56	0.73	0.90	1.07	1.25	1.42	1.59	1.76	1.93	2.10	2.27	2.44	2.61	2.78	2.95	3.13	3.30
78	2.51	4.45	6.40	8.34	10.28	12.22	14.17	16.11	18.05	20.00	21.94	23.88	25.82	27.77	29.71	31.65	33.60	35.54	37.48
1.98	0.23	0.41	0.59	0.78	0.96	1.14	1.32	1.50	1.68	1.86	2.04	2.22	2.40	2.58	2.76	2.94	3.12	3.31	3.49
84	2.74	4.86	6.98	9.10	11.22	13.34	15.46	17.58	19.71	21.83	23.95	26.07	28.19	30.31	32.43	34.55	36.67	38.79	40.91
2.13	0.25	0.45	0.65	0.85	1.04	1.24	1.44	1.64	1.83	2.03	2.23	2.42	2.62	2.82	3.02	3.21	3.41	3.61	3.80
90	2.97	5.27	7.57	9.87	12.16	14.46	16.76	19.06	21.36	23.66	25.96	28.25	30.55	32.85	35.15	37.45	39.75	42.05	44.35
2.29	0.28	0.49	0.70	0.92	1.13	1.35	1.56	1.77	1.99	2.20	2.41	2.63	2.84	3.06	3.27	3.48	3.70	3.91	4.12



645RB STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME

6" (152) deep, 6063T5 extruded aluminum with .125" (3.2) nominal wall thickness. Caulking surfaces provided.

BLADES

6063T5 extruded aluminum with .090" (2.3) nominal wall thickness. J-style blades (formerly "weatherproof") are positioned at 45° angle and spaced approximately 6" (152) center to center.

SCREEN

3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH

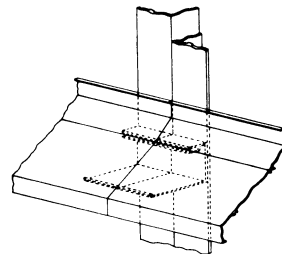
Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 64 sq. ft. (6m²) per section, not to exceed 120" wide and 90" high (3048 and 2286) or 90" wide and 120" high (2286 and 3048). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.



Hidden Mullion Detail

FEATURES

The 645RB offers:

- Hidden mullions for attractive appearance.
- All aluminum construction for low maintenance and high resistance to corrosion.
- Low pressure drop with high free area.

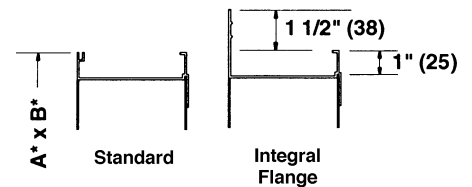
VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Anodize, prime coat, integral color and clear anodize, (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

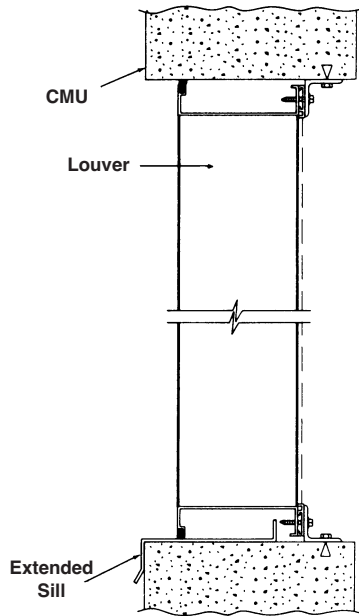
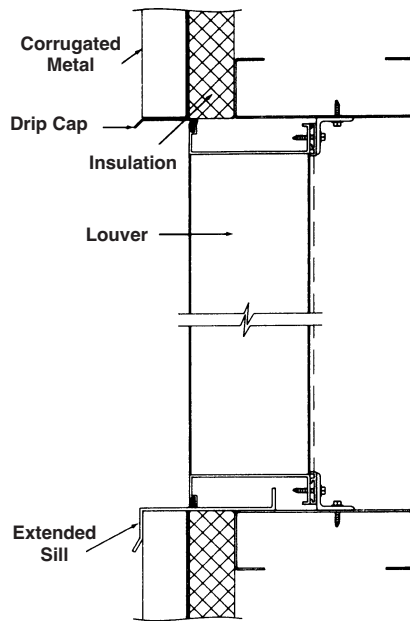
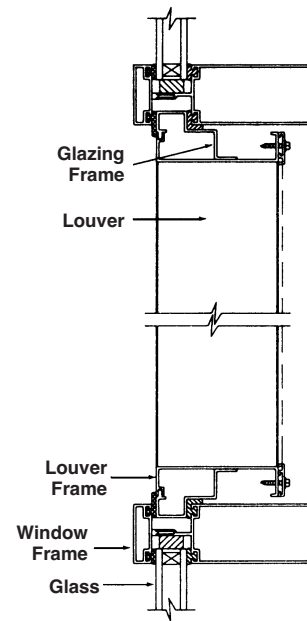
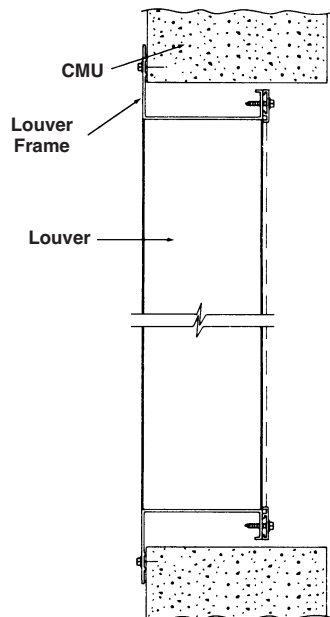
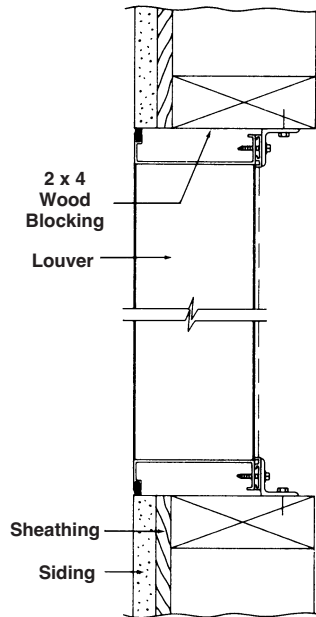
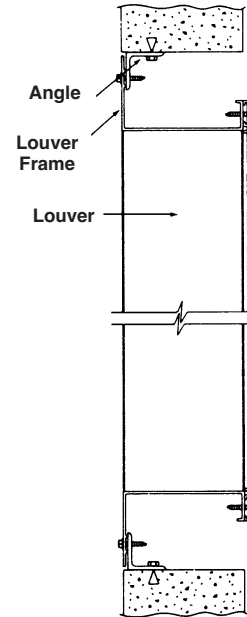
FRAME CONSTRUCTION



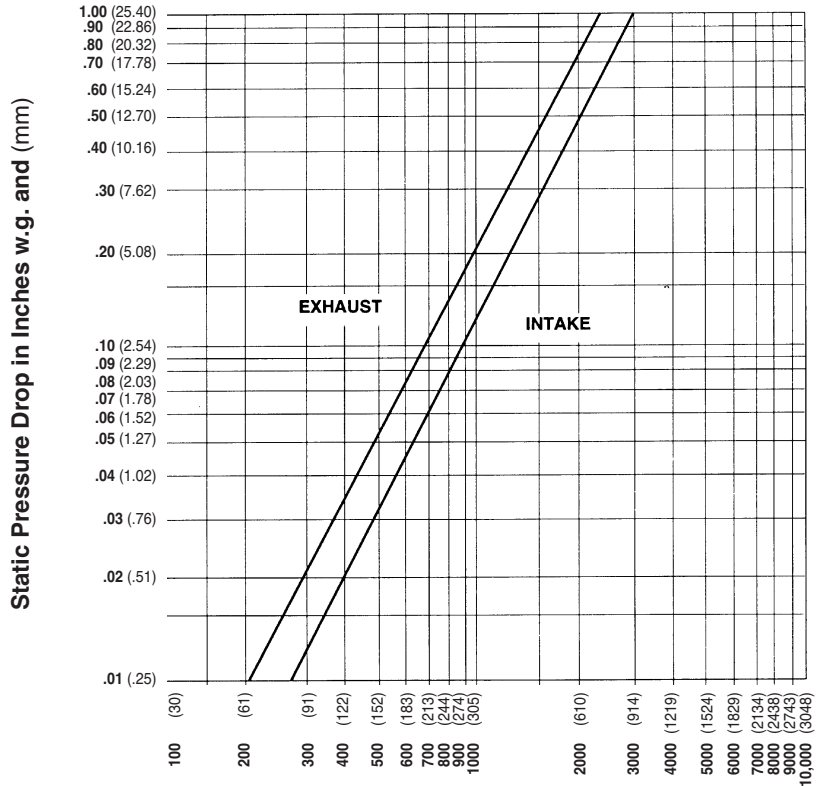
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE	

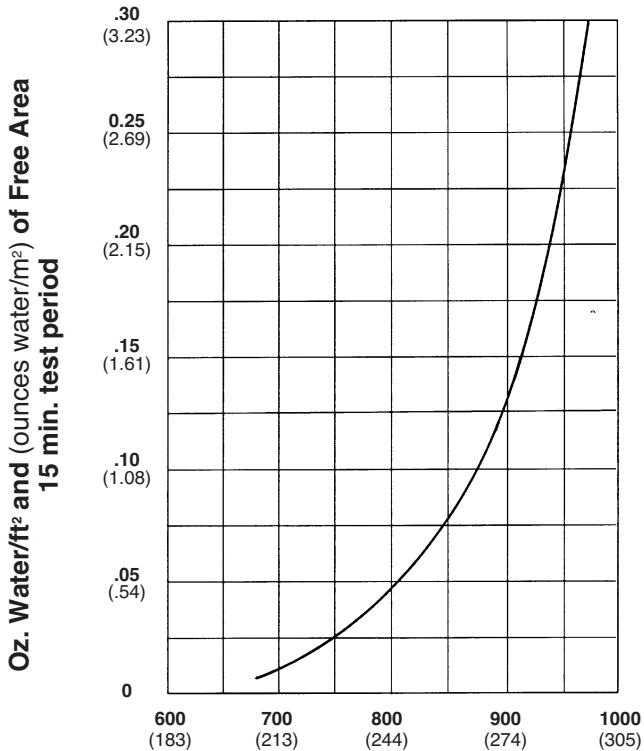
TYPICAL INSTALLATION DETAILS**Masonry Wall****Metal Panel Wall****Glazing Frame****Flange Mount****Wood Installation****Angle Subframe**

Accessories at additional cost.

PRESSURE DROP**WATER PENETRATION GRAPH**

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 680fpm (207 m/min).



Free Area Velocity in feet and (meters) per minute
Standard air .075 lb/ft³

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type entirely contained within a 6" (152) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be continuous appearing stationary blades – intermediate support mullions shall not interrupt blade appearance when viewed from outside of louver.

Louvers shall be Reliable Model 645RB extruded 6063T5 aluminum alloy construction as follows:

- Frame: .125" (3.2) wall thickness.
- Blades: .090 (2.3) wall thickness at 45° angle on approximately 6" (152) centers.
- Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 645RB.
Width – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	.30	.46	.61	.76	.91	1.07	1.22	1.37	1.52	1.68	1.83	1.96	2.13	2.29	2.44
12	.13	.21	.29	.37	.45	.53	.61	.69	.76	.84	.92	1.00	1.08	1.16	1.24
	.30	.01	.02	.03	.03	.04	.05	.06	.07	.08	.08	.09	.10	.11	.12
18	.39	.63	.86	1.10	1.33	1.57	1.80	2.04	2.27	2.51	2.74	2.98	3.22	3.45	3.69
	.46	.04	.06	.08	.10	.12	.14	.17	.19	.21	.23	.25	.27	.30	.34
24	.65	1.04	1.44	1.83	2.22	2.61	3.00	3.39	3.78	4.18	4.57	4.96	5.35	5.74	6.13
	.61	.06	.10	.13	.17	.21	.24	.28	.31	.35	.39	.42	.46	.50	.53
30	.91	1.46	2.01	2.56	3.10	3.65	4.20	4.75	5.29	5.84	6.39	6.94	7.48	8.03	8.58
	.76	.08	.13	.19	.24	.29	.34	.39	.44	.49	.54	.59	.64	.69	.74
36	1.17	1.88	2.58	3.28	3.99	4.69	5.40	6.10	6.80	7.51	8.21	8.91	9.62	10.32	11.03
	.91	.11	.17	.24	.30	.37	.43	.50	.57	.63	.70	.76	.83	.89	.96
42	1.43	2.29	3.15	4.01	4.87	5.73	6.59	7.45	8.31	9.17	10.03	10.89	11.75	12.61	13.47
	1.07	.13	.21	.29	.37	.45	.53	.61	.69	.77	.85	.93	1.01	1.09	1.17
48	1.69	2.71	3.73	4.74	5.76	6.77	7.79	8.81	9.82	10.84	11.85	12.87	13.89	14.90	15.92
	1.22	.16	.25	.35	.44	.53	.63	.72	.82	.91	1.01	1.10	1.19	1.29	1.38
54	1.95	3.13	4.30	5.47	6.64	7.82	8.99	10.16	11.33	12.50	13.68	14.85	16.02	17.19	18.37
	1.37	.18	.29	.40	.51	.62	.73	.83	.94	1.05	1.16	1.27	1.38	1.49	1.60
60	2.21	3.54	4.87	6.20	7.53	8.86	10.18	11.51	12.84	14.17	15.50	16.83	18.16	19.48	20.81
	1.52	.20	.33	.45	.57	.70	.82	.94	1.07	1.19	1.32	1.44	1.56	1.69	1.81
66	2.47	3.96	5.44	6.93	8.41	9.90	11.38	12.87	14.35	15.84	17.32	18.80	20.29	21.77	23.26
	1.68	.23	.37	.50	.64	.78	.92	1.06	1.19	1.33	1.47	1.61	1.75	1.88	2.02
72	2.73	4.38	6.02	7.66	9.30	10.94	12.58	14.22	15.86	17.50	19.14	20.78	22.42	24.06	25.71
	1.83	.25	.41	.56	.71	.86	1.02	1.17	1.32	1.47	1.62	1.78	1.93	2.08	2.23
78	2.99	4.79	6.59	8.39	10.18	11.98	13.78	15.57	17.37	19.17	20.96	22.76	24.56	26.35	28.15
	1.96	.28	.44	.61	.78	.94	1.11	1.28	1.45	1.61	1.78	1.95	2.11	2.28	2.45
84	3.26	5.21	7.16	9.11	11.07	13.02	14.97	16.93	18.88	20.83	22.79	24.74	26.69	28.65	30.60
	2.13	.30	.48	.66	.85	1.03	1.21	1.39	1.57	1.75	1.93	2.12	2.30	2.48	2.66
90	3.52	5.62	7.73	9.84	11.95	14.06	16.17	18.28	20.39	22.50	24.61	26.72	28.83	30.94	33.04
	2.29	.33	.52	.72	.91	1.11	1.31	1.50	1.70	1.89	2.09	2.29	2.48	2.68	2.87
96	3.78	6.04	8.31	10.57	12.84	15.10	17.37	19.63	21.90	24.16	26.43	28.70	30.96	33.23	35.49
	2.44	.35	.56	.77	.98	1.19	1.40	1.61	1.82	2.03	2.24	2.45	2.67	2.88	3.09



645DD STATIONARY LOUVER DOUBLE DRAINABLE BLADE EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

FRAME
6" (152) deep, 6063T5 extruded aluminum with .120" (3) nominal wall thickness. Downspouts and caulking slots provided.

BLADES
6063T5 extruded aluminum with .100" (2.5) nominal wall thickness. Double drainable blades are positioned at 45° angle and spaced approximately 6" (152) center to center.

SCREEN
5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
5 lbs. per sq. ft.

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 64 sq. ft. (6m²) per section, not to exceed 120" wide and 90" high (3048 and 2286) or 90" wide and 120" high (2286 and 3048). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

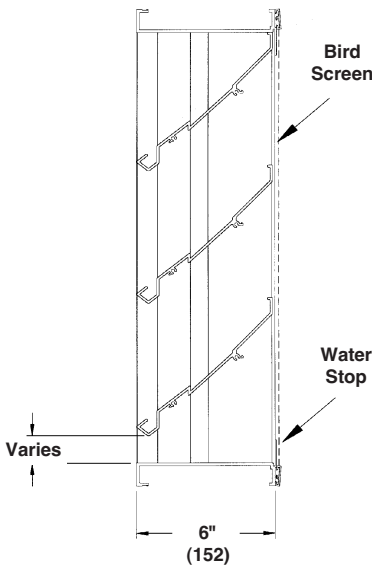
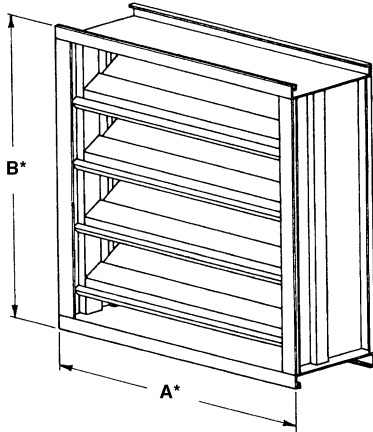
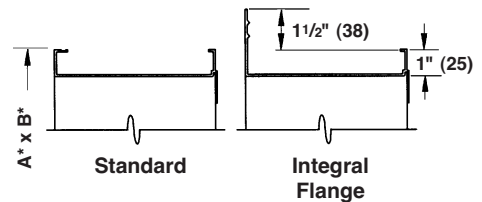
FEATURES

- The 645DD offers:
- Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Double drain gutters in each blade, and downspouts in jambs and mullions to drain water from louver for minimum water cascade from blade to blade.
 - Hidden mullions allowing continuous line appearance up to 120" (3048).
 - All aluminum construction for low maintenance and high resistance to corrosion.
 - Low pressure drop and low water penetration.

VARIATIONS

- Variations to the basic design of the louver are available at additional cost. They include:
- Installation angles.
 - Extended sill.
 - Hinged frame.
 - Front or rear security bars.
 - Filter racks.
 - A variety of bird and insect screens.
 - Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Pearledize 50 & 70, prime coat, integral color and clear anodize, (Some variation in anodize color consistency is possible.)
- Consult Reliable for other special requirements.

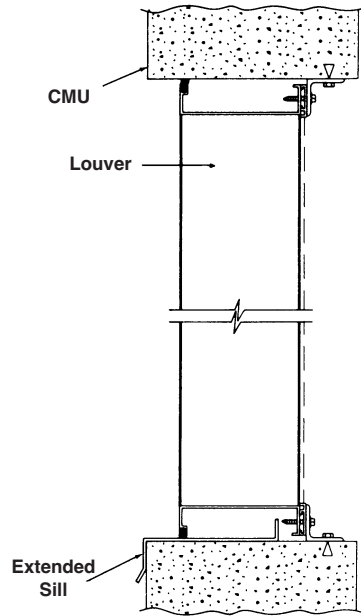
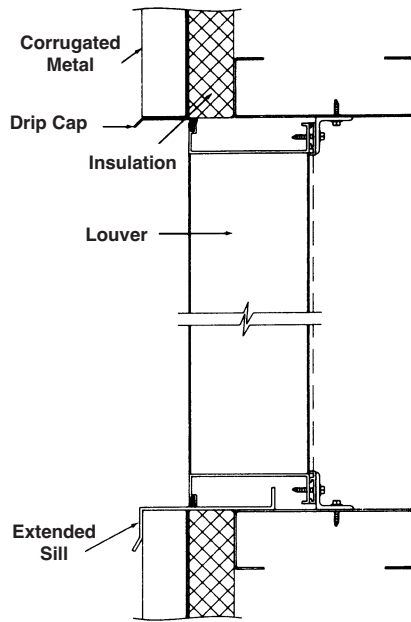
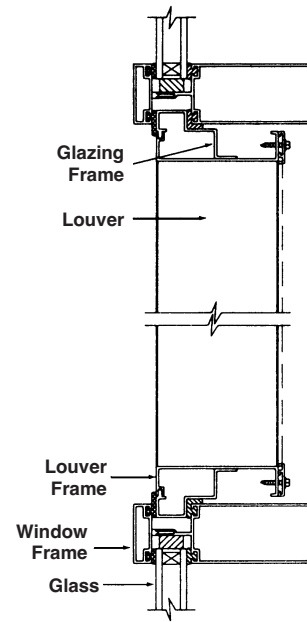
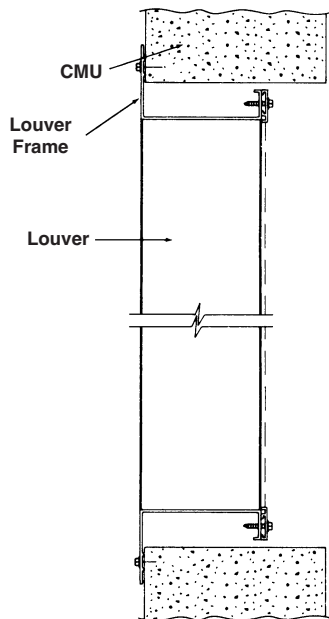
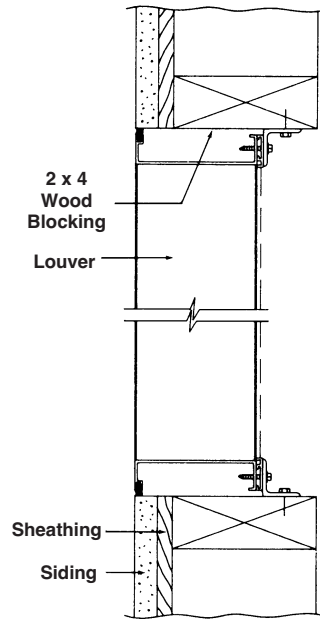
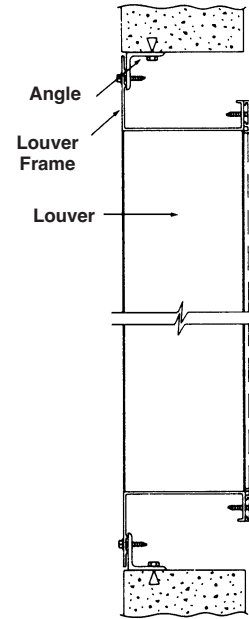
FRAME CONSTRUCTION



Dimensions in inches, parenthesis () indicate millimeters.

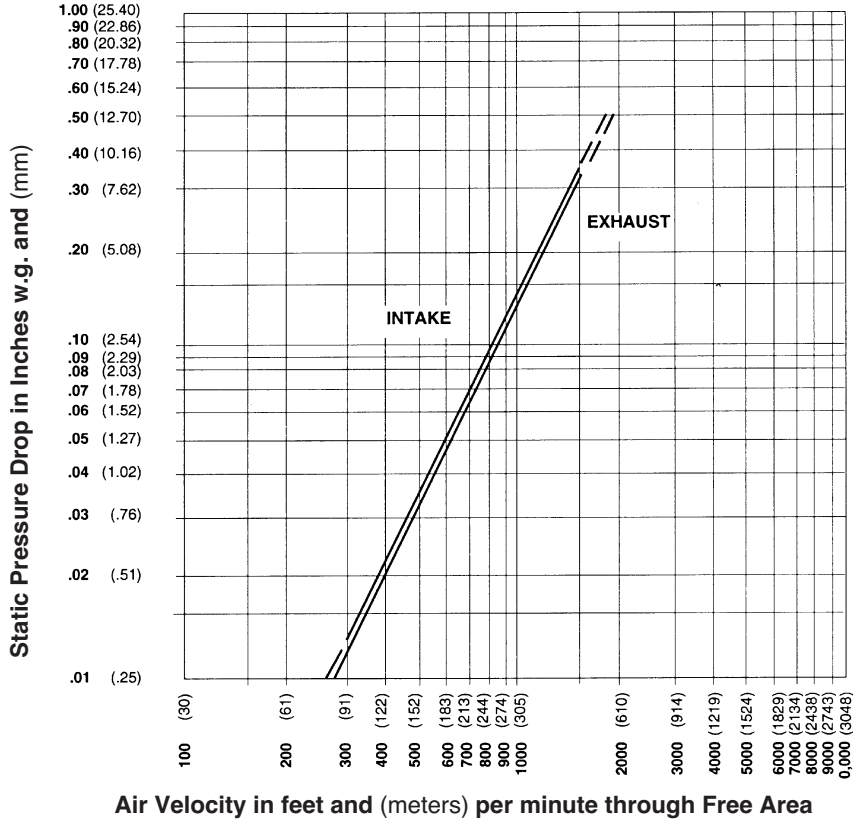
*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS**Masonry Wall****Metal Panel Wall****Glazing Frame****Flange Mount****Wood Installation****Angle Subframe**

Options at additional cost.

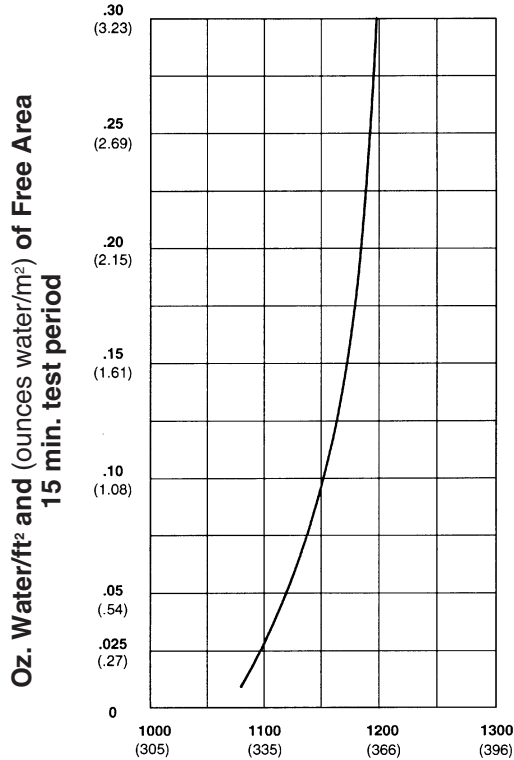
PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1080 fpm (329 m/min).



Reliable Products certifies that the 645DD Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary double drainable type entirely contained within a 6" (152) frame. Louver shall include a drain gutter in each blade and downspouts in jambs and mullions. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 10 feet (3048) and shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 645DD extruded 6063T5 aluminum construction as follows:

- Frame: .120" (3) wall thickness.
- Blades: .100" (2.5) wall thickness at 45° angle and spaced approximately 6" (152) center to center.
- Screen: 5/8" x .040" (16 x 1) expanded, flattened aluminum in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 645DD.
Width – Inches and Meters

Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	.30	.46	.61	.76	.91	1.07	1.22	1.37	1.52	1.68	1.83	1.96	2.13	2.29	2.44
12	.12	.18	.25	.32	.39	.46	.53	.60	.67	.74	.81	.88	.95	1.01	1.08
.30	.01	.02	.02	.03	.04	.04	.05	.06	.06	.07	.08	.08	.09	.09	.10
18	.35	.56	.78	.99	1.20	1.41	1.62	1.83	2.04	2.26	2.47	2.68	2.89	3.10	3.31
.46	.03	.05	.07	.09	.11	.13	.15	.17	.19	.21	.23	.25	.27	.29	.31
24	.59	.94	1.30	1.65	2.00	2.36	2.71	3.07	3.42	3.77	4.13	4.48	4.84	5.19	5.54
.61	.05	.09	.12	.15	.19	.22	.25	.29	.32	.35	.38	.42	.45	.48	.51
30	.83	1.32	1.82	2.32	2.81	3.31	3.80	4.30	4.80	5.29	5.79	6.28	6.78	7.28	7.77
.76	.08	.12	.17	.22	.26	.31	.35	.40	.45	.49	.54	.58	.63	.68	.72
36	1.06	1.70	2.34	2.98	3.62	4.26	4.89	5.53	6.17	6.81	7.45	8.09	8.73	9.36	10.00
.91	.10	.16	.22	.28	.34	.40	.45	.51	.57	.63	.69	.75	.81	.87	.93
42	1.30	2.08	2.86	3.64	4.42	5.21	5.99	6.77	7.55	8.33	9.11	9.89	10.67	11.45	12.23
1.07	.12	.19	.27	.34	.41	.48	.56	.63	.70	.77	.85	.92	.99	1.06	1.14
48	1.54	2.46	3.38	4.31	5.23	6.15	7.08	8.00	8.92	9.85	10.77	11.69	12.62	13.54	14.46
1.22	.14	.23	.31	.40	.49	.57	.66	.74	.83	.92	1.00	1.09	1.17	1.26	1.34
54	1.78	2.84	3.91	4.97	6.04	7.10	8.17	9.23	10.30	11.36	12.43	13.50	14.56	15.63	16.69
1.37	.17	.26	.36	.46	.56	.66	.76	.86	.96	1.06	1.15	1.25	1.35	1.45	1.55
60	2.01	3.22	4.43	5.64	6.84	8.05	9.26	10.47	11.68	12.88	14.09	15.30	16.51	17.71	18.92
1.52	.19	.30	.41	.52	.64	.75	.86	.97	1.09	1.20	1.31	1.42	1.53	1.65	1.76
66	2.25	3.60	4.95	6.30	7.65	9.00	10.35	11.70	13.05	14.40	15.75	17.10	18.46	19.81	21.16
1.68	.21	.33	.46	.59	.71	.84	.96	1.09	1.21	1.34	1.46	1.59	1.71	1.84	1.97
72	2.49	3.98	5.48	6.97	8.47	9.96	11.45	12.95	14.44	15.94	17.43	18.92	20.42	21.91	23.40
1.83	.23	.37	.51	.65	.79	.93	1.06	1.20	1.34	1.48	1.62	1.76	1.90	2.04	2.17
78	2.73	4.37	6.00	7.64	9.28	10.92	12.55	14.19	15.83	17.47	19.10	20.74	22.38	24.02	25.65
1.96	.25	.41	.56	.71	.86	1.01	1.17	1.32	1.47	1.62	1.77	1.93	2.08	2.23	2.38
84	2.96	4.74	6.52	8.30	10.08	11.86	13.64	15.42	17.19	18.97	20.75	22.53	24.31	26.09	27.87
2.13	.27	.44	.61	.77	.94	1.10	1.27	1.43	1.60	1.76	1.93	2.09	2.26	2.42	2.59
90	3.19	5.10	7.02	8.93	10.84	12.76	14.67	16.58	18.50	20.41	22.32	24.24	26.15	28.07	29.98
2.29	.30	.47	.65	.83	1.01	1.19	1.36	1.54	1.72	1.90	2.07	2.25	2.43	2.61	2.79
96	3.41	5.46	7.51	9.56	11.61	13.66	15.70	17.75	19.80	21.85	23.90	25.95	27.99	30.04	32.09
2.44	.32	.51	.70	.89	1.08	1.27	1.46	1.65	1.84	2.03	2.22	2.41	2.60	2.79	2.98



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

RCS STATIONARY LOUVERS ROUND AND SEMIROUND SHAPES EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

FRAME

6063T5 extruded aluminum. RCS louvers are constructed with the standard or flange frames shown on this page. Drainable head and jamb frames are not utilized.

BLADES

6063T5 extruded aluminum.

SCREEN

³/₄" x .051" (19 x 1.3) expanded, flattened aluminum bird screen. Screen adds approximately ¹/₂" (13) to louver depth.

FINISH

Mill.

MINIMUM SIZE

RCS245D – 18" (457) diameter.
All others – 24" (610) diameter. Consult Reliable if smaller sizes are required.

MAXIMUM SIZE.

Typically shall be 75 ft² (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048). Consult Reliable for section information on specific size louvers.

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS

Louvers may be provided with rear mounted hidden vertical blade supports (HVBS) that increase louver depth (see detail). Support depth varies depending on louver size, assembly configuration or windload.

PERFORMANCE

The drainable styles offered in RCS louvers are only performance tested in a square louver configuration. RCS louver performance may differ from comparably sized RCS models. RCS models are not licensed to bear the AMCA Seal for performance.

***See individual louver model spec sheet for more detailed construction information.**

FEATURES

The RCS offers:

- Architecturally styled, hidden mullions for attractive appearance.
- Corrosion resistant, all aluminum construction.
- Outstanding durability and low maintenance.

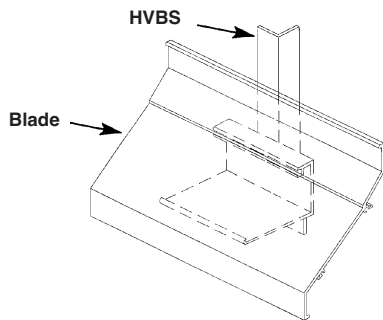
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Flange frame.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), Pearledize 50 & 70, Kynar, clear and color anodize (some variation in anodize color consistency is possible).

Consult Reliable for other special requirements.

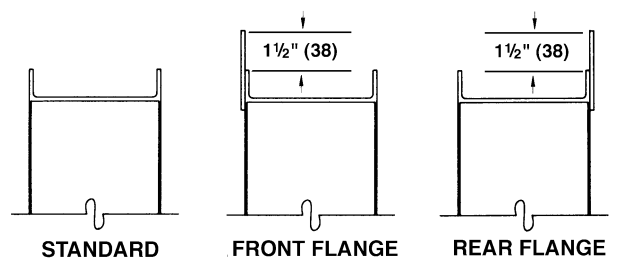
SUPPORT DETAIL



BLADE STYLE OPTIONS

230RB	645RB
245RB	6375Z
245D	6375Z125
4375Z	445RB
4375D	2DDWRG
445RD	4DDWRG
445RD125	5DDWRG
4RCH-V	3RRGH
445DD	4RRV
4375B	6RRSV
6350DS	

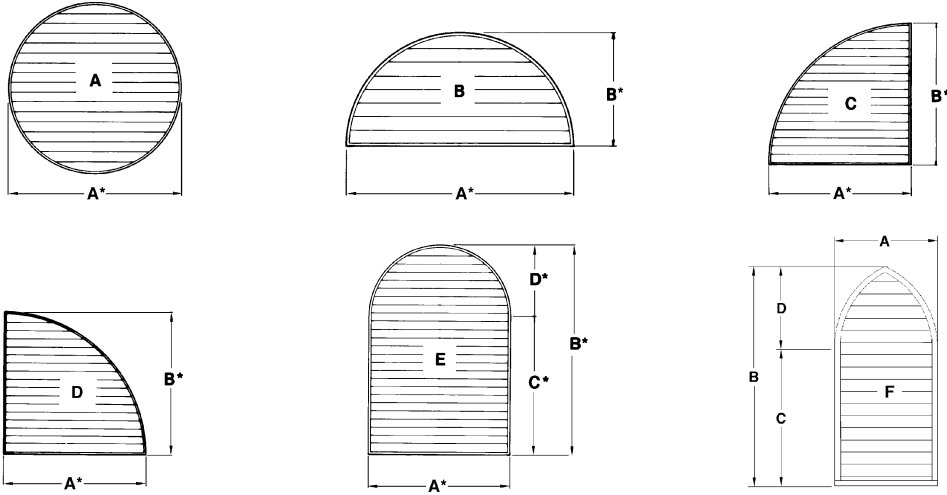
FRAME CONSTRUCTION



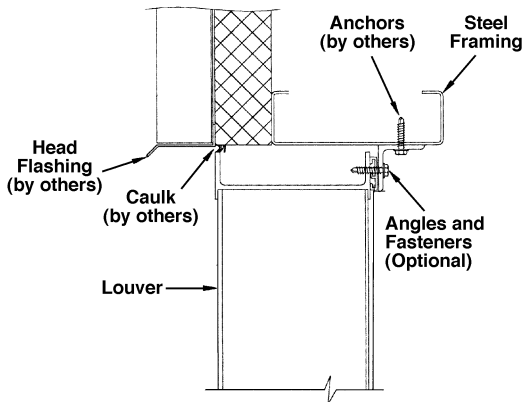
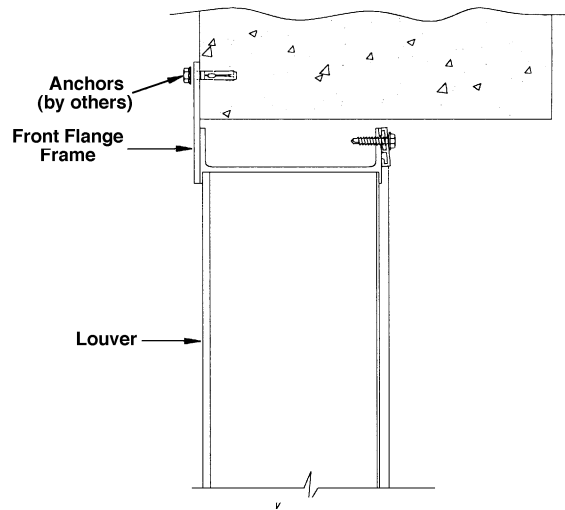
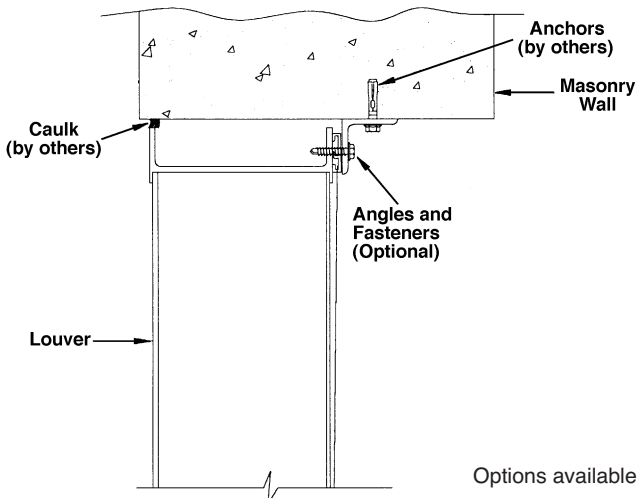
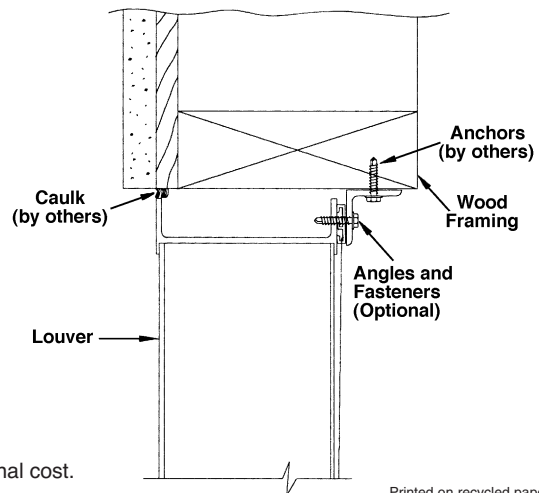
Dimensions in parenthesis () indicate millimeters.

*Unit is furnished ¹/₄" (6) smaller than given opening dimensions.

QTY.	BLADE STYLE	SHAPE					SIZE				FRAME	VARIATIONS
		A	B	C	D	E	A*	B*	C*	D*		
JOB						LOCATION						
CONTRACTOR												

STANDARD SHAPES FRONT VIEWS

*Units furnished 1/4" (6) smaller than given opening dimensions.

TYPICAL INSTALLATION DETAILS**Metal Panel Wall****Flange Mount****Masonry Wall****Wood Installation**

Options available at additional cost.



RTS STATIONARY LOUVERS TRIANGULAR AND TRAPEZOIDAL SHAPES EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

FRAME

6063T6 extruded aluminum. RTS louvers are constructed with standard or flange frames. Drainable head and jambs are not utilized so water penetration may vary from tested performance. When sloped sill frames are standard construction they may be utilized in Shape C, D, F, J and K configuration RTS shapes only.

BLADES

6063T6 extruded aluminum.

SCREEN

5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH

Mill.

MINIMUM SIZE

20"w x 16"h (508 x 406)

MAXIMUM SIZE

Typically shall be 75 ft² (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS

Louvers may be provided with rear mounted hidden vertical blade supports (HVBS) that increase louver depth. Support depth varies depending on louver size, assembly configuration or windload.

PERFORMANCE

Blade styles offered in RTS louvers are only performance tested in square louver configuration. RTS louver performance may differ from comparably sized louver in standard configuration. RTS models are not licensed to bear the AMCA Seal for performance.

***See individual louver model spec sheet for more detailed construction information.**

***Drainable RTS louvers are fabricated with non-drainable head and jambs. Water performance may differ from test.**

FEATURES

RTS models offer:

- Architecturally styled hidden mullions for attractive appearance.
- All aluminum construction for low maintenance and high resistance to corrosion.

VARIATIONS

Variations to the basic louver design are available at additional cost. They include:

- Extended sill
- Glazing frames
- Flanged frame
- Hinged frame
- Filter racks
- Front or rear security bars
- A variety of bird and insect screens.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Acrodize, prime coat, clear and color anodize. (Some variation in anodize color consistency is possible.)

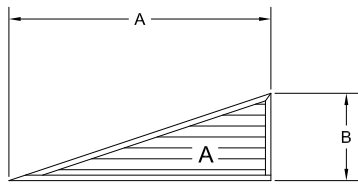
Dimensions in parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

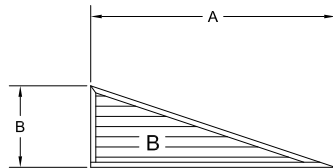
QTY.	BLADE STYLE	SHAPE											SIZE			VARIATIONS	
		A	B	C	D	E	F	G	H	J	K	L	A	B	C		

PROJECT:
ARCH/ENGR:
REPRESENTATIVE:

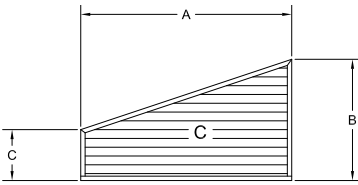
LOCATION:
CONTRACTOR:
DATE:



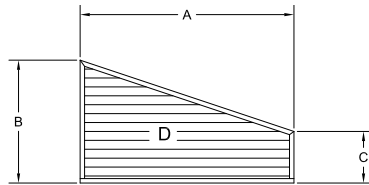
Left Half Triangle (A)



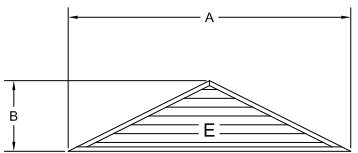
Right Half Triangle (B)



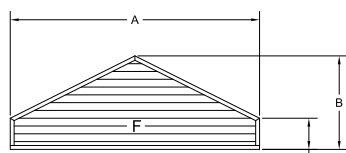
Left Triangle Top (C)



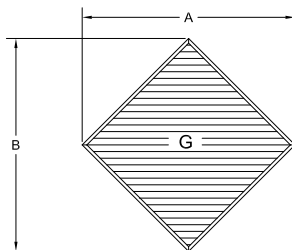
Right Triangle Top (D)



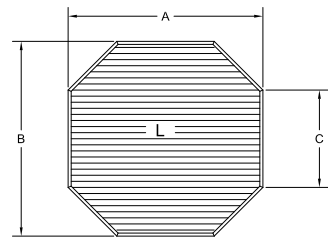
Pyramid (E)



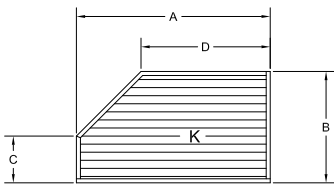
House (F)



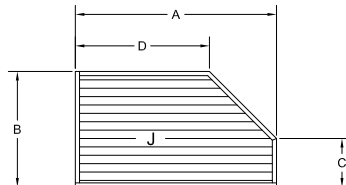
Diamond (G)



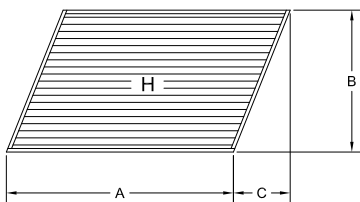
Octagon (L)



Left Corner (K)



Right Corner (J)



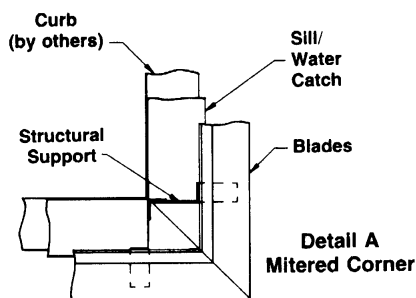
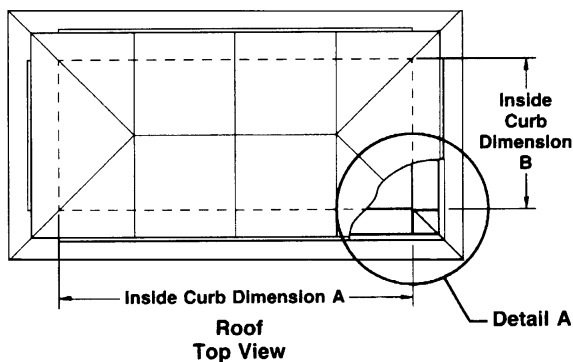
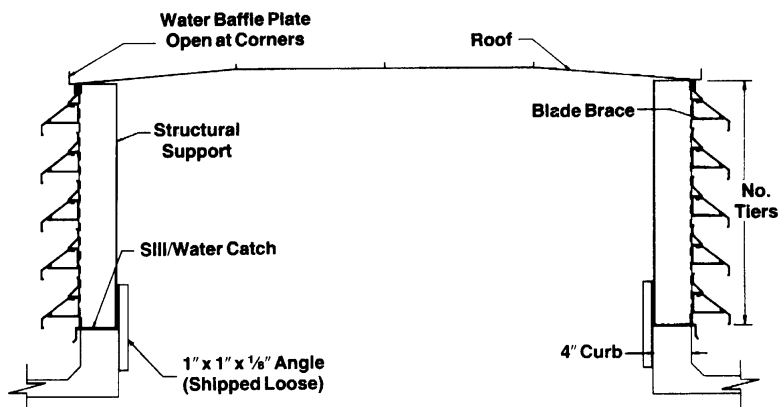
Parallelogram (H)

LOUVER MODEL	FRAME DEPTH
245RB	2" (51)
245D	2" (51)
4375Z	4" (102)
4375D	4" (102)
445RD	4" (102)
4RCV-H	4" (102)
445DD	4" (102)
4375B	4" (102)
6350DS	6" (152)
6375Z	6" (152)
6375Z125	6" (152)
645RB	6" (152)
645RB125	6" (152)
645DD	6" (152)
2DDWRG	2" (51)
4DDWRG	4" (102)
5DDWRG	5" (127)
3RRGH	3" (76)
4RRV	4" (102)
6RRSV	6" (152)



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

MODEL RPH MITERED CORNER PENTHOUSES



STANDARD CONSTRUCTION

LOUVERS

Available with most louver models. Not available with adjustable and drainable models. See appropriate louver specification sheet for louver construction details.

ROOF

18 gage (1.2) galvanized steel with steel louver models. .063" (1.6) aluminum with aluminum louver models.

STRUCTURAL SUPPORT

20 gage (1.1) galvanized formed steel or 1 1/2" x 4" x 1 1/2" (38 x 102 x 38) 6063T5 extruded aluminum.

CORNERS

Mitered.

SCREEN

1/2" mesh 19 gage (13 x 1.1) galvanized steel with steel louver models. 3/4" x .051" (19 x 1) expanded flattened aluminum bird screen with aluminum louver models.

FINISH

Mill.

VARIATIONS

(At additional cost)

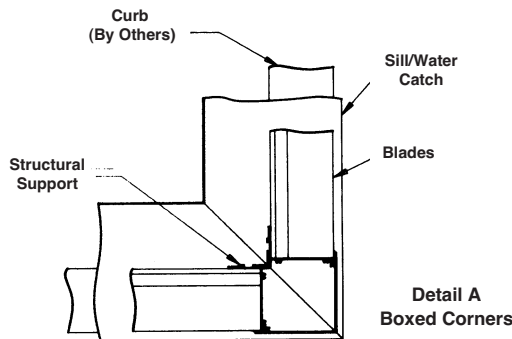
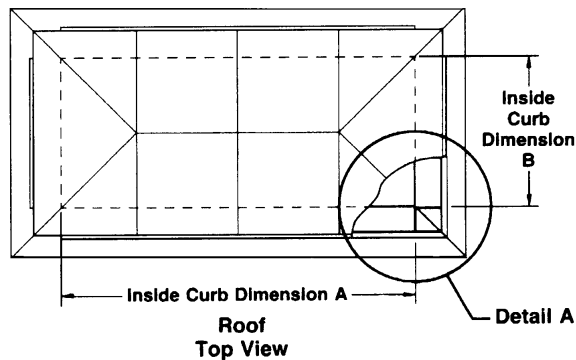
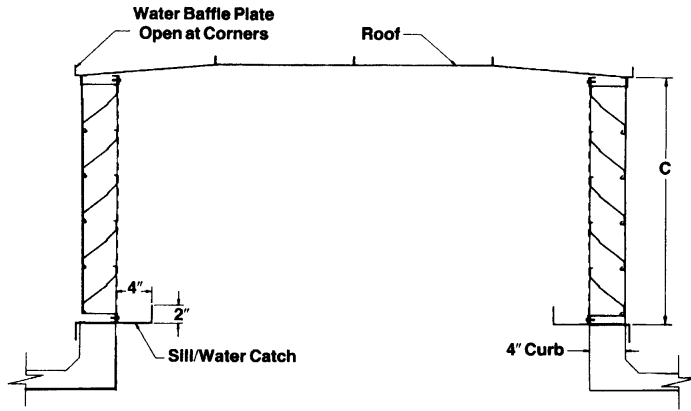
- Bitumastic roof undercoating.
- 1" (25) fiberglass roof insulation.
- A variety of finishes (baked enamel [modified fluoropolymer], Kynar, anodize, epoxy, flurodize)
- A selection of bird and insect screens.

Dimensions in inches, parenthesis () indicate millimeters.

QTY.	DIMENSIONS			BLADE STYLE (MODEL)	VARIATIONS
	A	B	C		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		



MODEL RPH BOXED CORNER PENTHOUSES



STANDARD CONSTRUCTION

LOUVERS

Most louver models. See appropriate louver specification sheet for louver construction details..

ROOF

18 gage (1.2) galvanized steel with steel louver models. .063" (1.6) aluminum with aluminum louver models.

STRUCTURAL SUPPORT

20 gage (1.1) galvanized formed steel or 1 1/2" x 4" x 1 1/2" (38 x 102 x 38) 6063T5 extruded aluminum.

CORNERS

Boxed.

SCREEN

1/2" mesh 19 gage (13 x 1.1) galvanized steel with steel louver models. 3/4" x .051" (19 x 1) expanded flattened aluminum bird screen with aluminum louver models.

FINISH

Mill.

VARIATIONS

(At additional cost)

- Bitumastic roof undercoating.
- 1" (25) fiberglass roof insulation.
- A variety of finishes (baked enamel [modified fluoropolymer], Kynar, anodize, epoxy, flurodize)
- A selection of bird and insect screens.

Dimensions in inches, parenthesis () indicate millimeters.

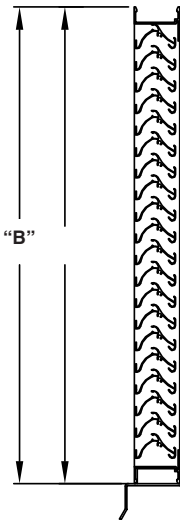
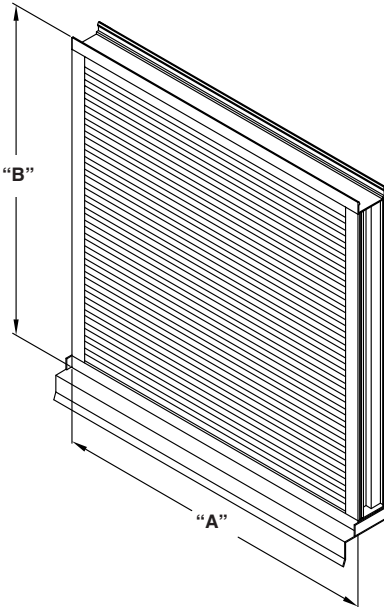
QTY.	DIMENSIONS			BLADE STYLE (MODEL)	VARIATIONS
	A	B	C		

**PROJECT
ARCH./ENGR.
REPRESENTATIVE**

**LOCATION
CONTRACTOR
DATE**



2DDWRG WIND-DRIVEN RAIN RESISTANT STATIONARY LOUVER
EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
 2" (51) deep, 6063T6 extruded aluminum with .060" (1.5) nominal wall thickness.

BLADES
 6063T6 extruded aluminum .045" (1.1) nominal wall thickness. Double drainable blades are sightproof.

SCREEN
 5/8" x .040" (16 x 1) expanded flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
 Mill.

MINIMUM SIZE
 6"w x 6"h (152 x 152).

APPROXIMATE SHIPPING WEIGHT
 4 lbs. per sq. ft. (19.4 kg/m²)

MAXIMUM FACTORY ASSEMBLY SIZE
 Single sections shall not exceed 120" x 90" (3048 x 2286) or 90" w x 120" h (2286 x 3048).

Louvers larger than the maximum single section size will require field assembly of smaller sections.

SUPPORTS
 Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

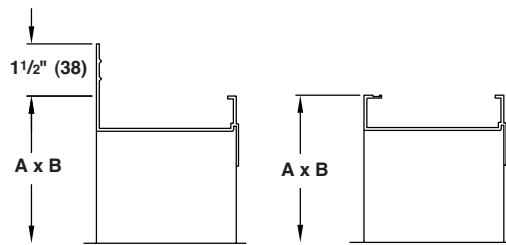
FEATURES

- Closely spaced horizontal blades minimize the penetration of wind-driven rain, reducing damage and additional operating expenses.
- Tested in the AMCA 500-L Wind-Driven Rain Penetration Test.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- 43% Free Area.
- Excellent pressure drop performance.
- Aluminum construction for low maintenance and high resistance to corrosion.

VARIATIONS

- Extended sill.
 - Hinged frame.
 - Front or rear security bars.
 - Filter racks.
 - Installation angles.
 - A variety of bird and insect screens.
- Finishes:
- Prime coat.
 - Baked enamel (modified fluoropolymer).
 - Epoxy
 - Pearledize 50 & 70.
 - Kynar.
 - Clear and color anodize.
 - Triangular and round shapes available.
- Consult Reliable for other special requirements.

FRAME CONSTRUCTION



INTEGRAL FLANGE

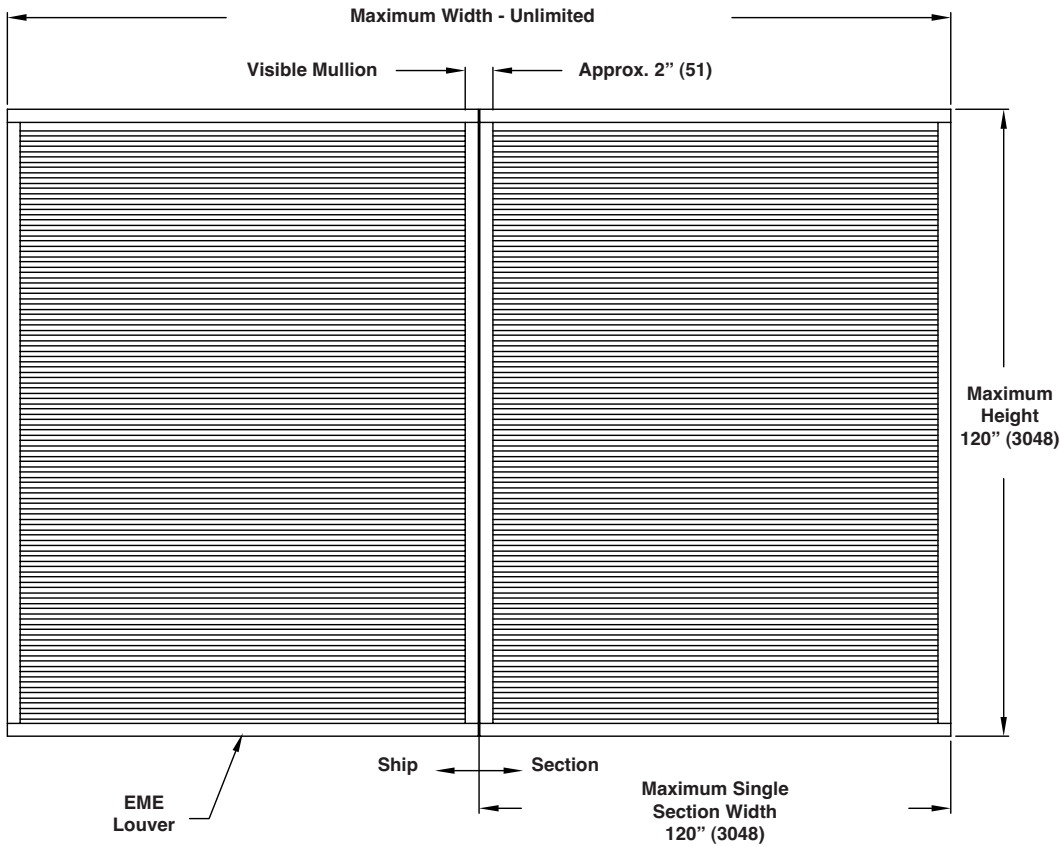
STANDARD

NOTES:

1. Dimensions in inches, parenthesis () indicate millimeters.
2. Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT				LOCATION	
ARCH./ENGR.				CONTRACTOR	
REPRESENTATIVE				DATE	

TYPICAL INSTALLATION DETAILS



1. Reference separate Installation Instruction sheets for installation details. It is the responsibility of the installing contractor to properly install the louvers per the appropriate detail.
2. Louvers wider than the maximum single section width will be shipped in multiple sections and will require field assembly. Field assembly is not by Reliable.

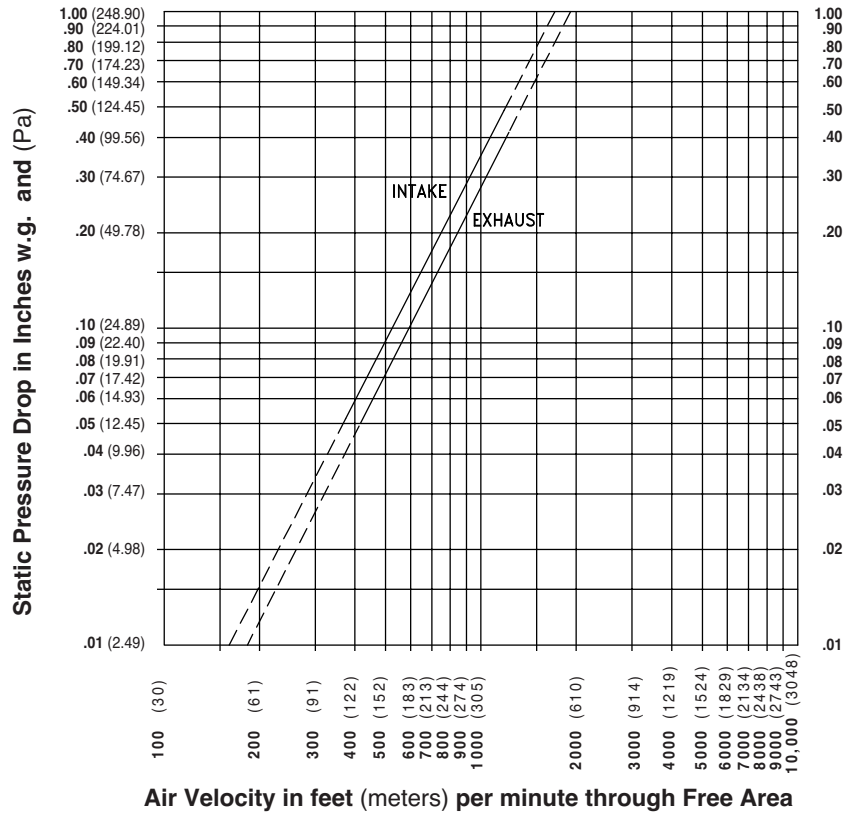
FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 2DDWRG.
Width – Inches and Meters

Height – Inches and Meters	6		12		18		24		30		36		42		48		54		60		66		72		78		84		90		96		102		108		114		120	
	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m		
6	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
12	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
18	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
24	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
30	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
36	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
42	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
48	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
54	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
60	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
66	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
72	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
78	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
84	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
90	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
96	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
102	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
108	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
114	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	
120	0.15	0.04	0.30	0.11	0.46	0.18	0.61	0.25	0.76	0.32	0.39	0.91	1.07	1.22	0.53	0.60	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.89	3.04	3.19	3.34	3.49	3.64	3.79	3.94	4.09	4.24	4.39	4.54	4.69	

PRESSURE DROP

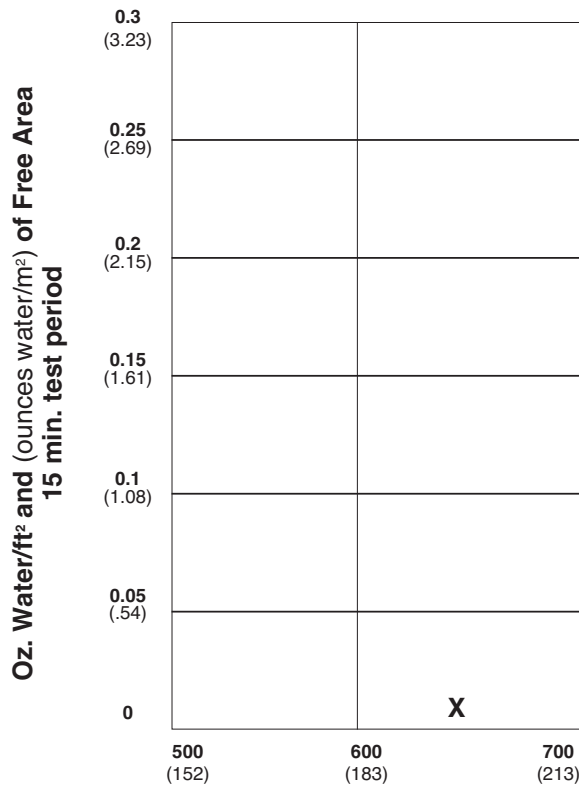
Pressure Drop testing performed on 48" x 48" (1219 x 1219) unit.



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is above 680 fpm (208 m/min).



Reliable Products certifies that the louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings, water penetration ratings and wind driven rain ratings only.

Free Area Velocity in feet (meters) per minute through Free Area

WIND-DRIVEN RAIN PERFORMANCE

Test size is 1m x 1m (39" x 39") core area, 1.04m x 1.12m (41" x 44") nominal. Free Area of test louver is 4.20 ft² (.39m²).

29 mph (75 mm/h) wind & 3" (76) per hour rain conditions

Core Velocity ₁ fpm (m/s)	Airflow cfm (m ³ /min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class
0	0	0	100	A
132 (.7)	1421	383	100	A
197 (1.0)	2120	505	100	A
285 (1.4)	3068	730	100	A
374 (1.9)	4031	960	99.9	A
472 (2.4)	5077	1209	99.3	A
583 (3.0)	6277	1495	97.1	B
685 (3.5)	7373	1755	96.1	B

NOTES

- Core area is the open area of the louver face (face area less louver frames). Core Velocity is the airflow velocity through the Core Area of the louver (1m x 1m).
- Free Area of test size is calculated per AMCA standard 500-L.
- Wind Driven Rain Penetration Classes:

Class	Effectiveness
A	1 to .99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.8

- Intake Discharge Loss Class 2

Discharge Loss Coefficient is calculated by dividing a louvers' actual airflow rate vs. a theoretical airflow for the opening. It provides an indication of the louvers' airflow characteristics.

50 mph (202 mm/h) wind & 8" (203) per hour rain conditions

Core Velocity ₁ fpm (m/s)	Airflow cfm (m ³ /min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class
0	0	0	100	A
114 (.6)	1228	292	99.8	A
186 (.9)	2001	476	99.4	A
294 (1.5)	3181	757	99.3	A
398 (2.0)	4285	1020	97.8	B
494 (2.5)	5315	1265	96.2	B
568 (2.9)	6114	1456	95.4	B
691 (3.5)	7442	1772	90.9	C

Discharge Loss Classes:

Class Discharge Loss Coefficient

1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and below

(The higher the coefficient, the less resistance to airflow.)

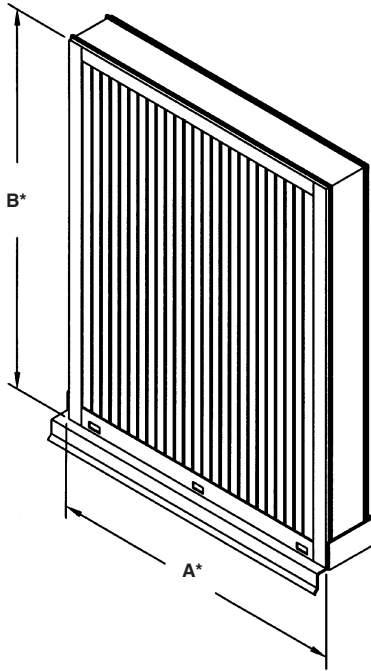
- The AMCA Wind Driven Rain Test is performed in a laboratory environment and incorporates controlled wind, water and system airflow effects. In actual field installations, storms may create conditions not considered by the AMCA test. Penthouse and similar applications where wind can pass through multiple louvers in an enclosure is another condition that is not simulated by AMCA tests. These applications can create elevated water penetration rates through any louver. Because of these uncontrolled situations, it is recommended that provisions to manage water penetration through louvers be included in the building design.





3RRGV WIND-DRIVEN RAIN RESISTANT STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
3" (76) deep, 6063T5 extruded aluminum with .062" (1.6) nominal wall thickness.

BLADES
6063T5 extruded aluminum .040" (1) nominal wall thickness. Blades are mounted vertically and spaced approximately 3/4" (19) center to center.

SCREEN
1/2" x .063" (13 x 1.6) square mesh aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

EXTENDED SILL
.081" (2.1) formed aluminum with end dams.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
5 lbs. per sq. ft. (24 kg/m²)

MAXIMUM SINGLE SECTION SIZE
Shall be 48" x 96" (1219 x 2438). Lifting lugs provided on louvers 48" x 72" (1219 x 1829) and larger.

Louvers larger than the maximum factory assembly size will require field assembly of

FEATURES

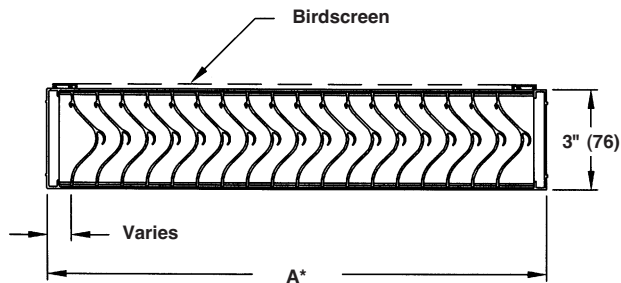
- 45% Free Area.
- Closely spaced vertical blades prevent the penetration of wind-driven rain, reducing damage and additional operating expenses.
- Published performance ratings based on testing in accordance with AMCA Publication 500L.
- Excellent pressure drop performance.
- Aluminum construction for low maintenance and high resistance to corrosion.
- All welded construction.
- Visible mullion construction. Hidden mullions and continuous blade construction are not available.

VARIATIONS

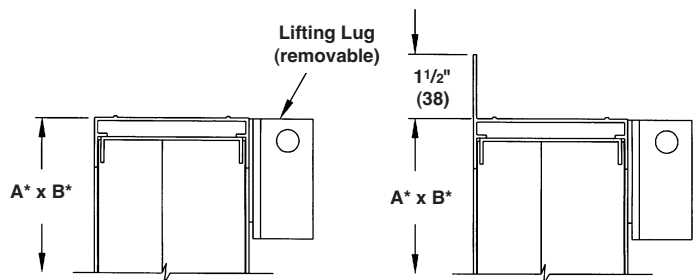
Variations to the basic design of these louvers are available at additional cost. They include:

- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Pearledize 50 & 70, prime coat, clear and color anodize. (Some variation in anodize color consistency is possible).

All variations are available at additional cost. Consult Reliable for other special require-



FRAME CONSTRUCTION



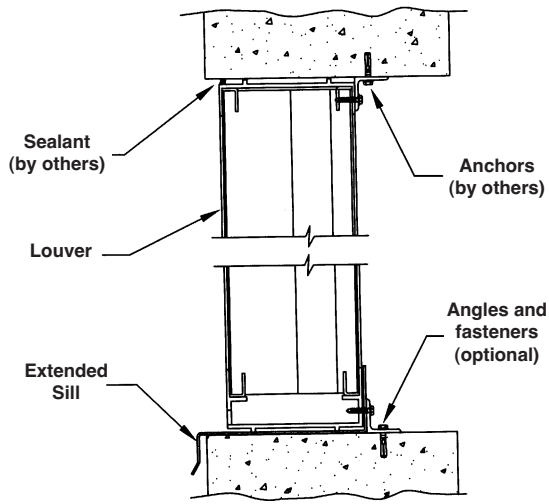
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

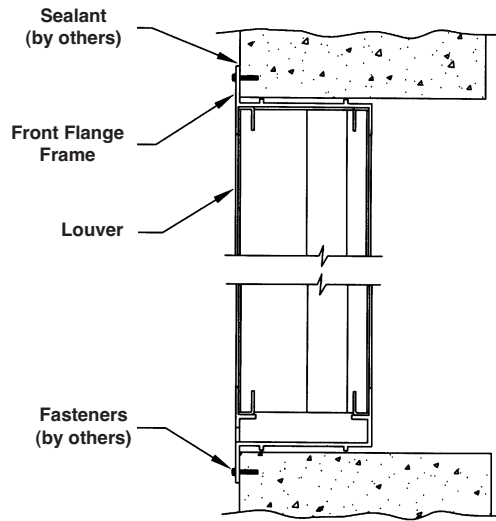
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

Standard Frame

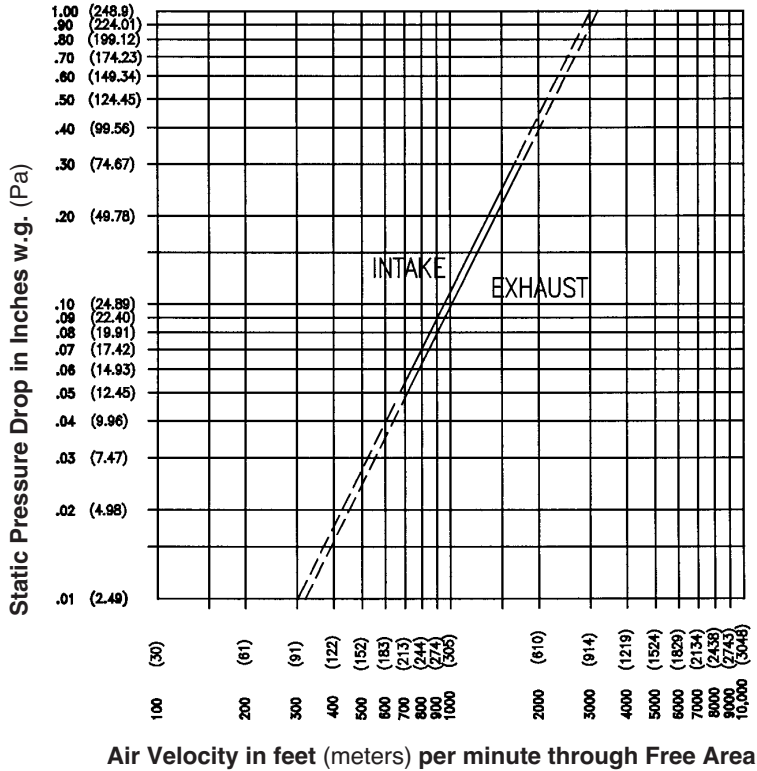


Flange Mount



Options available at additional cost.

PRESSURE DROP



FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 3RRGV.
Width – Inches and Meters

	12	18	24	30	36	42	48
	0.30	0.46	0.61	0.76	0.91	1.07	1.22
12	0.22	0.37	0.52	0.66	0.81	0.96	1.11
0.30	0.02	0.03	0.05	0.06	0.08	0.09	0.10
18	0.43	0.71	1.00	1.28	1.57	1.85	2.14
0.46	0.04	0.07	0.09	0.12	0.15	0.17	0.20
24	0.63	1.06	1.48	1.90	2.32	2.75	3.17
0.61	0.06	0.10	0.14	0.18	0.22	0.26	0.29
30	0.84	1.40	1.96	2.52	3.08	3.64	4.20
0.76	0.08	0.13	0.18	0.23	0.29	0.34	0.39
36	1.05	1.74	2.44	3.14	3.84	4.53	5.23
0.91	0.10	0.16	0.23	0.29	0.36	0.42	0.49
42	1.25	2.09	2.92	3.76	4.59	5.43	6.26
1.07	0.12	0.19	0.27	0.35	0.43	0.50	0.58
48	1.46	2.43	3.40	4.38	5.35	6.32	7.29
1.22	0.14	0.23	0.32	0.41	0.50	0.59	0.68
54	1.66	2.77	3.88	4.99	6.10	7.21	8.32
1.37	0.15	0.26	0.36	0.46	0.57	0.67	0.77
60	1.87	3.12	4.37	5.61	6.86	8.11	9.35
1.52	0.17	0.29	0.41	0.52	0.64	0.75	0.87
66	2.08	3.46	4.85	6.23	7.62	9.00	10.39
1.68	0.19	0.32	0.45	0.58	0.71	0.84	0.97
72	2.28	3.81	5.33	6.85	8.37	9.89	11.42
1.83	0.21	0.35	0.50	0.64	0.78	0.92	1.06
78	2.49	4.15	5.81	7.47	9.13	10.79	12.45
1.98	0.23	0.39	0.54	0.69	0.85	1.00	1.16
84	2.70	4.49	6.29	8.09	9.88	11.68	13.48
2.13	0.25	0.42	0.58	0.75	0.92	1.09	1.25
90	2.90	4.84	6.77	8.71	10.64	12.57	14.51
2.29	0.27	0.45	0.63	0.81	0.99	1.17	1.35
96	3.11	5.18	7.25	9.32	11.40	13.47	15.54
2.44	0.289	0.482	0.67	0.87	1.06	1.25	1.45



Reliable Products certifies that the louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and wind driven rain ratings only.



SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall possess stationary vertical blades designed to prevent the penetration of wind-driven rain. Louver blades shall be contained within a 3" (76) frame. Louver components (heads, jambs, sill and blades) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit single section sizes to 48" x 96" (1219 x 2438) and shall withstand a wind load of 20 lbs. per sq. ft. (.96 kPa) (equivalent of a 90 mph wind [145 kph] - specifier may substitute any loading required).

Louvers shall be Reliable Model 3RRVG extruded 6063T5 aluminum alloy construction as follows:

- Frame: .062" (1.6) wall thickness, caulking surfaces provided.
- Blades: .040" (1) wall thickness, installed vertically on approximately .75" (19) centers.
- Screen: .050" x .063" (13 x 1.6) square mesh aluminum bird screen in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

WIND-DRIVEN RAIN PERFORMANCE

Test size is: 39" x 39" (.99 x .99) core area, 41" x 41" (1.04 x 1.04) nominal. Free Area of test louver is 5.18 ft.² (.48m²).

Wind Velocity mph (kph)	Rainfall rate in./hr. (mm/hr.)	Core Velocity FPM (m/s) ¹	Airflow cfm (m ³ /min)	Free area velocity ₂ fpm (m/s)	Effectiveness Ratio	Class _{3,4}	Discharge Loss Class ₅ Intake
29 (46.4)	3 (76)	967 (5)	10,412 (294)	2,010 (10.0)	100%	A	1
50 (80.5)	8 (203)	974 (5)	10,484 (296)	2,024 (10.1)	100%	A	1

NOTES

1. Core area is the open area of the louver face (face area less louver frames). Core Velocity is the airflow velocity through the Core Area of the louver. 5 m/s is the maximum core velocity utilized in this test.
2. Free Area of test size is calculated per AMCA standard 500-L.
3. Wind-Driven Rain Penetration Classes:

Class	Effectiveness
A	1 to .99
B	0.989 to .095
C	0.949 to 0.80
D	Below 0.8

4. The 3RRGV provides class A performance at all velocities up to and including 5 m/s core velocity.
5. Discharge Loss Coefficient is calculated by dividing a louvers' actual airflow rate vs. a theoretical airflow for the opening. It provides an indication of the louvers' airflow characteristics.

Discharge Loss Classes:

Class	Discharge Loss Coefficient
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and below

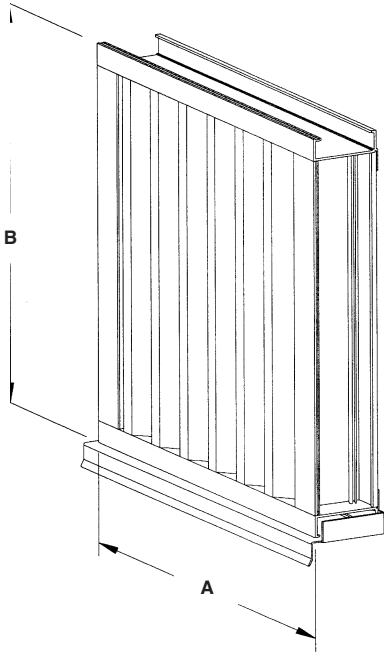
(The higher the coefficient, the less resistance to airflow.)





4RRV WIND-DRIVEN RAIN RESISTANT STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
4" (102) deep, 6063T5 extruded aluminum with .080" (2) nominal wall thickness.

BLADES
6063T5 extruded aluminum .080" (2) nominal wall thickness. Blades are mounted vertically and spaced approximately 1³/₄" (44) center to center.

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

EXTENDED SILL
.081" (2.1) formed aluminum with end dams.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
8 lbs. per sq. ft. (39 kg/m²)

MAXIMUM SINGLE SECTION SIZE
Shall be 48" x 96" (1219 x 2438). Lifting lugs provided on louvers 48" x 72" (1219 x 1829) and larger.

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

FEATURES

- 41% Free Area.
- Closely spaced vertical blades prevent the penetration of wind-driven rain, reducing damage and additional operating expenses.
- Published performance ratings based on testing in accordance with AMCA Publication 500L.
- Excellent pressure drop performance.
- Aluminum construction for low maintenance and high resistance to corrosion.
- All welded construction.
- Visible mullion construction. Hidden mullions and continuous blade construction are not available.

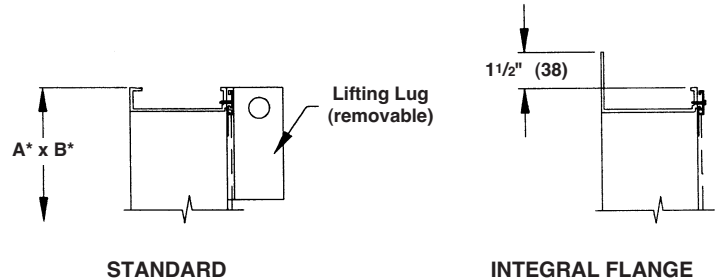
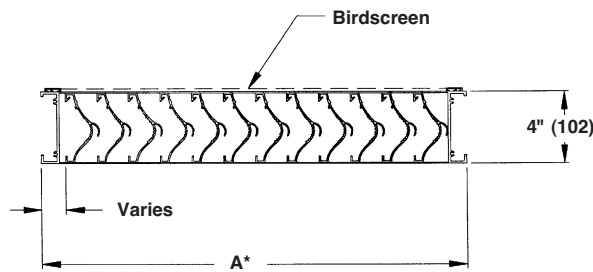
VARIATIONS

Variations to the basic design of these louvers are available at additional cost. They include:

- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Pearledize 50 & 70, prime coat, clear and color anodize. (Some variation in anodize color consistency is possible).

All variations are available at additional cost. Consult Reliable for other special requirements.

FRAME CONSTRUCTION



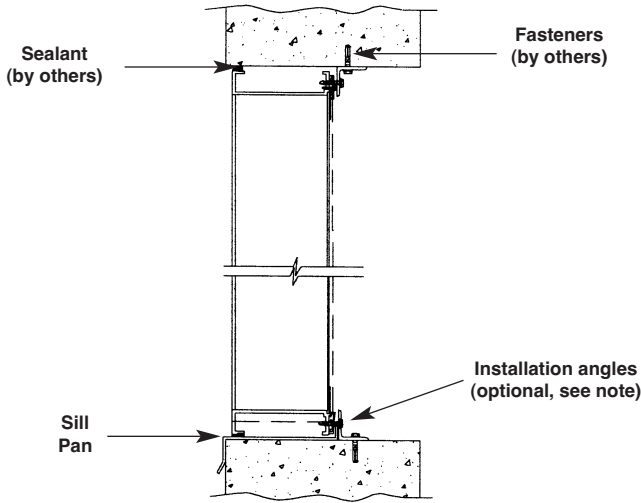
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

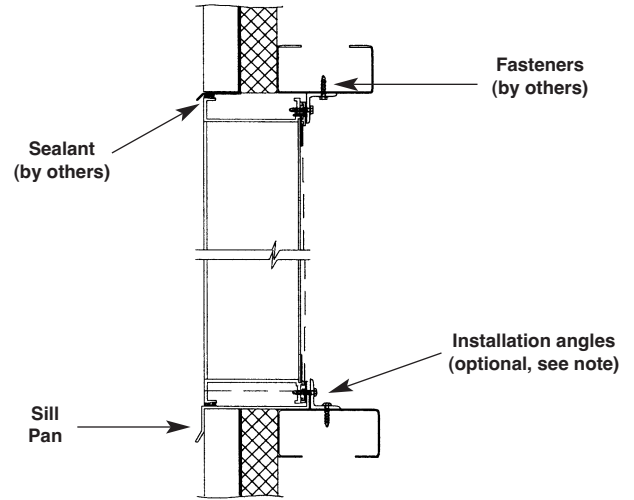
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A-WIDE	B-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

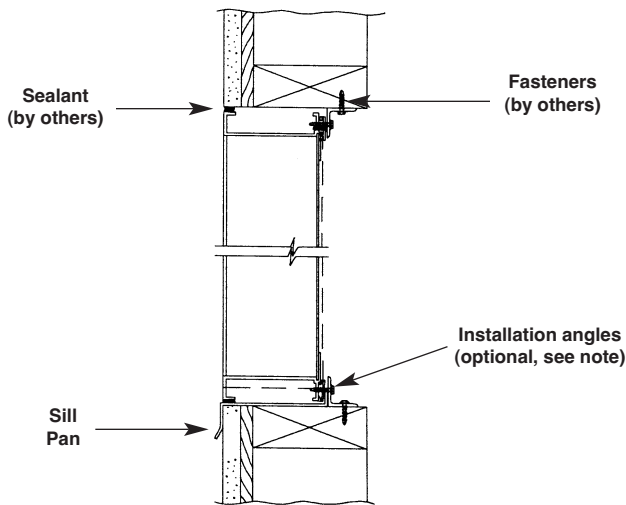
Masonry Wall



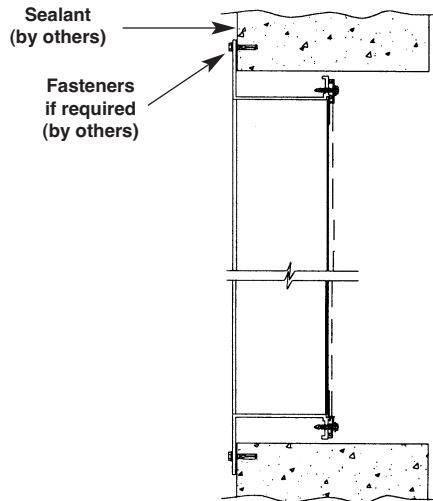
Metal Panel Wall



Wood Installation

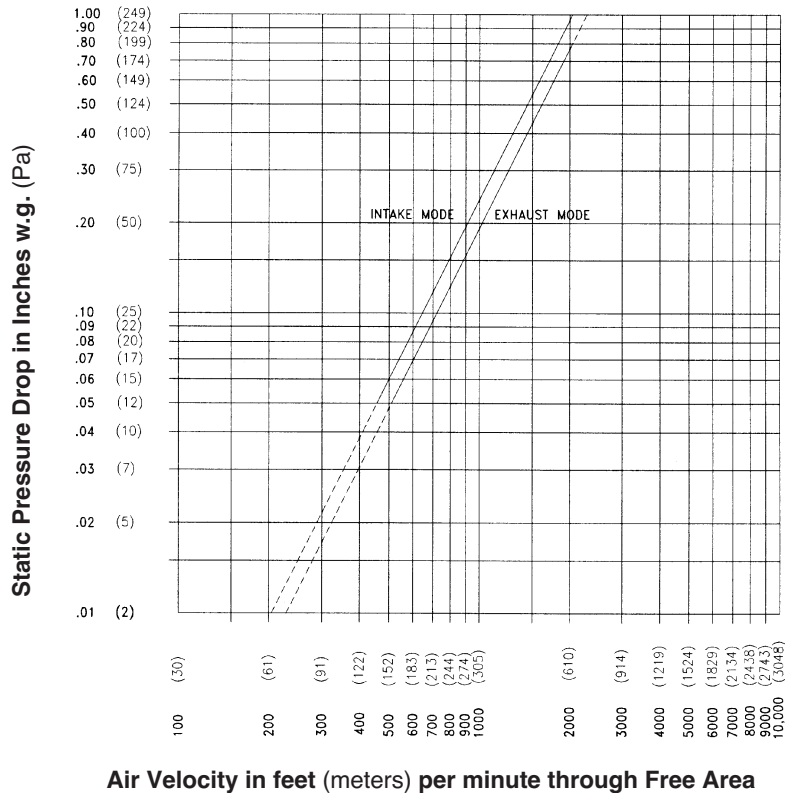


Flange Mount



INSTALLATION ANGLE NOTE: Installation clip or continuous angles are available from Reliable at additional cost. Optional clip angles are 2" long and should be installed around the perimeter no more than 6" from corners and at 24" maximum c-c between. Two screws per clip are provided for angle-to-louver connection. Optional continuous angles are provided without holes for the perimeter in full lengths when possible or in the same length as the louver sections when necessary. Screws are provided for angle-to-louver connection for installation at 6" from corners and 24" maximum c-c for continuous angles. Angles are 1 1/2" x 1 1/2" x 1/8" thick aluminum and fasteners are #10 x 1" long self-drilling plated steel screws. Fasteners to connect angles to the surrounding structure are not provided. **Installation using these angles, fasteners and spacing is adequate for windloads up to 40 psf (1.91kPa) assuming adequate connection to structure is provided (standard louver windload design is 20 psf [.96kPa], higher windload capability available, consult Reliable).** Other angle sizes and types are available at additional cost.

PRESSURE DROP



FREE AREA GUIDE
Free Area Guide shows free area in ft² and m² for various sizes of 4RRV.
Width – Inches and Meters

Height – Inches and Meters	12	18	24	30	36	42	48
	0.30	0.46	0.61	0.76	0.91	1.07	1.22
12 0.30	0.11 0.01	0.22 0.02	0.30 0.03	0.38 0.04	0.48 0.05	0.56 0.05	0.67 0.06
18 0.46	0.27 0.03	0.54 0.05	0.74 0.07	0.94 0.09	1.21 0.11	1.41 0.13	1.68 0.16
24 0.61	0.43 0.04	0.86 0.08	1.18 0.11	1.51 0.14	1.94 0.18	2.26 0.21	2.69 0.25
30 0.76	0.59 0.06	1.18 0.11	1.63 0.15	2.07 0.19	2.66 0.25	3.11 0.29	3.70 0.34
36 0.91	0.75 0.07	1.51 0.14	2.07 0.19	2.64 0.25	3.39 0.32	3.95 0.37	4.71 0.44
42 1.07	0.91 0.09	1.83 0.17	2.51 0.23	3.20 0.30	4.11 0.38	4.80 0.45	5.71 0.53
48 1.22	1.08 0.10	2.15 0.20	2.96 0.28	3.76 0.35	4.84 0.45	5.65 0.53	6.51 0.61
54 1.37	1.24 0.12	2.47 0.23	3.40 0.32	4.33 0.40	5.57 0.52	6.49 0.60	7.73 0.72
60 1.52	1.40 0.13	2.80 0.26	3.85 0.36	4.89 0.46	6.29 0.59	7.34 0.68	8.74 0.81
66 1.68	1.56 0.15	3.12 0.29	4.29 0.40	5.46 0.51	7.02 0.65	8.19 0.76	9.75 0.91
72 1.83	1.72 0.16	3.44 0.32	4.73 0.44	6.02 0.56	7.74 0.72	9.04 0.84	10.76 1.00
78 1.98	1.88 0.18	3.76 0.35	5.18 0.48	6.59 0.61	8.47 0.79	9.88 0.92	11.77 1.09
84 2.13	2.04 0.19	4.09 0.38	5.62 0.52	7.15 0.67	9.20 0.86	10.73 1.00	12.77 1.19
90 2.29	2.21 0.21	4.41 0.41	6.06 0.56	7.72 0.72	9.92 0.92	11.58 1.08	13.78 1.28
96 2.44	2.37 0.22	4.73 0.44	6.51 0.61	8.28 0.77	10.65 0.99	12.42 1.16	14.79 1.38

Ratings do not include the effect of a bird screen.



Reliable Products certifies that the louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Pro gram. The AMCA Certified Ratings Seal applies to air performance ratings and wind driven rain ratings only.



SUGGESTED SPECIFICATION

Furnish and install as specified hereinafter where shown on plans or as described in schedules. Louvers shall possess stationary vertical blades designed to prevent the penetration of wind-driven rain. Louver blades shall be contained within a 4" (102) frame. Louver components (heads, jambs, sill and blades) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit single section sizes to 48" x 96" (1219 x 2438) and shall withstand a wind load of 20 lbs. per sq. ft. (.96 kPa) (equivalent of a 90 mph wind [145 kph] - specifier may substitute any loading required).

Louvers shall be Reliable Model 4RRV extruded 6063T5 aluminum alloy construction as follows:

- Frame: .080" (2) wall thickness, caulking surfaces provided.
- Blades: .080" (2) wall thickness, installed vertically on approximately 1.75" (44) centers.
- Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame.
- Extended Sill: .081" (2.1) formed aluminum with end dams.
- Finish: Select finish specification from Reliable Finishes Brochure.

WIND-DRIVEN RAIN PERFORMANCE

Test size is: 46" x 46" (1.17 x 1.17) core area, 48" x 48" (1.22 x 1.22) nominal. Free Area of test louver is 6.51 ft.² (.61m²).

Wind Velocity mph (kph)	Rainfall rate in./hr. (mm/hr.)	Core Velocity FPM (m/s) ¹	Airflow cfm (m ³ /min)	Free area velocity ₂ fpm (m/s)	Effectiveness Ratio	Class ₃	Discharge Loss Class ₄ Intake
29 (46.4)	3 (76)	687 (3.5)	10,095 (286)	1,551 (7.9)	100%	A	3
50 (80.5)	8 (203)	581 (3.0)	8,537 (242)	1,311 (6.7)	99.4%	A	3
50 (80.5)	8 (203)	686 (3.5)	10,080 (285)	1,548 (7.9)	98.9%	B	3

NOTES

1. Core area is the open area of the louver face (face area less louver frames). Core Velocity is the airflow velocity through the Core Area of the louver. 3.5 m/s is the maximum core velocity utilized in this test.
2. Free Area of test size is calculated per AMCA standard 500-L.
3. Wind-Driven Rain Penetration Classes:

Class	Effectiveness
A	1 to 99
B	0.989 to .095
C	0.949 to 0.80
D	Below 0.8

4. Discharge Loss Coefficient is calculated by dividing a louvers' actual airflow rate vs. a theoretical airflow for the opening. It provides an indication of the louvers' airflow characteristics.

Discharge Loss Classes:

Class	Discharge Loss Coefficient
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1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and below

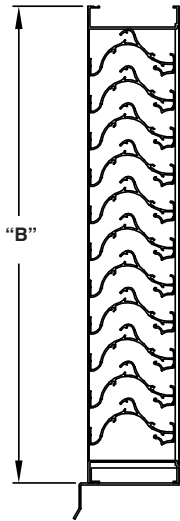
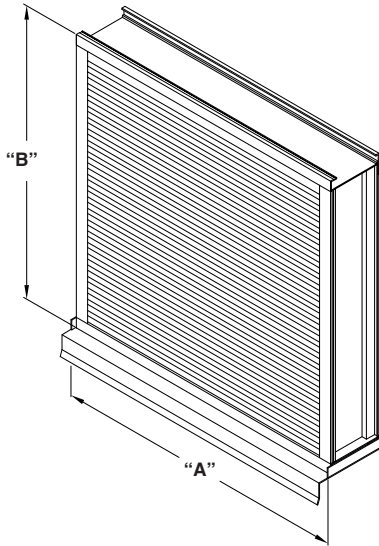
(The higher the coefficient, the less resistance to airflow.)





4DDWRG WIND-DRIVEN RAIN STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
4" (102) deep, 6063T6 extruded aluminum with .081" (2.1) nominal wall thickness.

BLADES
6063T6 extruded aluminum .063" (1.6) nominal wall thickness. Double drainable blades are sightproof.

SCREEN
5/8" x .040" (16 x 1) expanded flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 6"h (305 x 153).

APPROXIMATE SHIPPING WEIGHT
7 lbs. per sq. ft. (34.2 kg/m²)

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 75 sq. ft. (7m²) per section. Single sections shall not exceed 120" x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048). Louvers larger than the maximum single section size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

- Horizontal architectural blades minimize the penetration of wind-driven rain, reducing damage and additional operating expenses.
- AMCA certified wind-driven rain results.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- 40% Free Area.
- Aluminum construction for low maintenance and high resistance to corrosion.

VARIATIONS

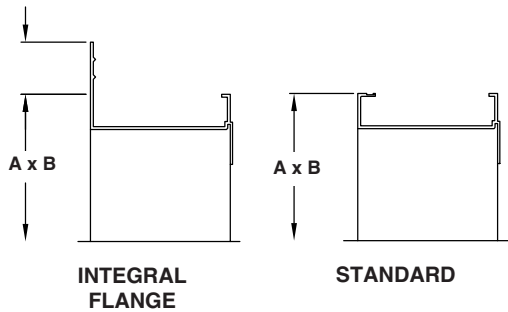
- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.

Finishes:

- Prime coat.
- Baked enamel (modified fluoropolymer).
- Epoxy
- Pearledize 50 & 70.
- Kynar.
- Clear and color anodize.

Consult Reliable for other special requirements.

FRAME CONSTRUCTION

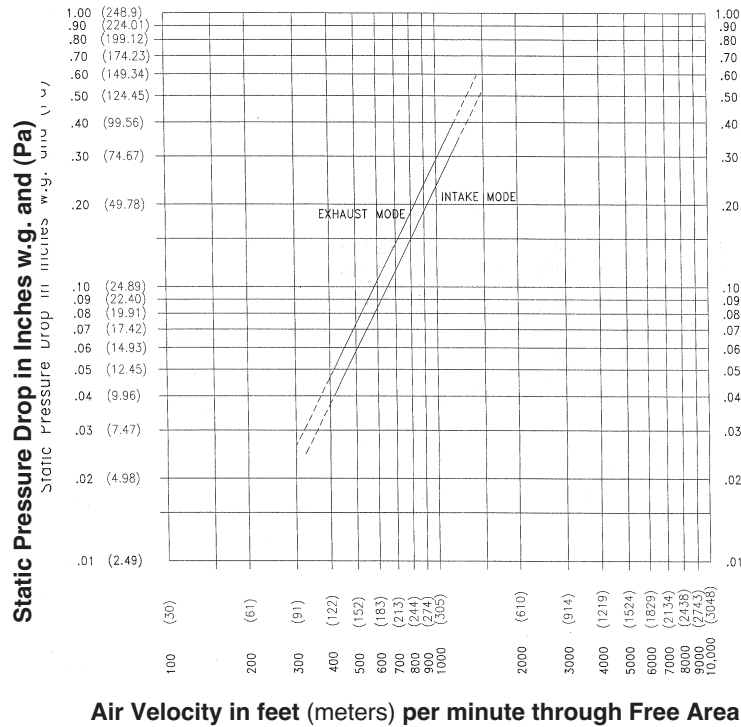


Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

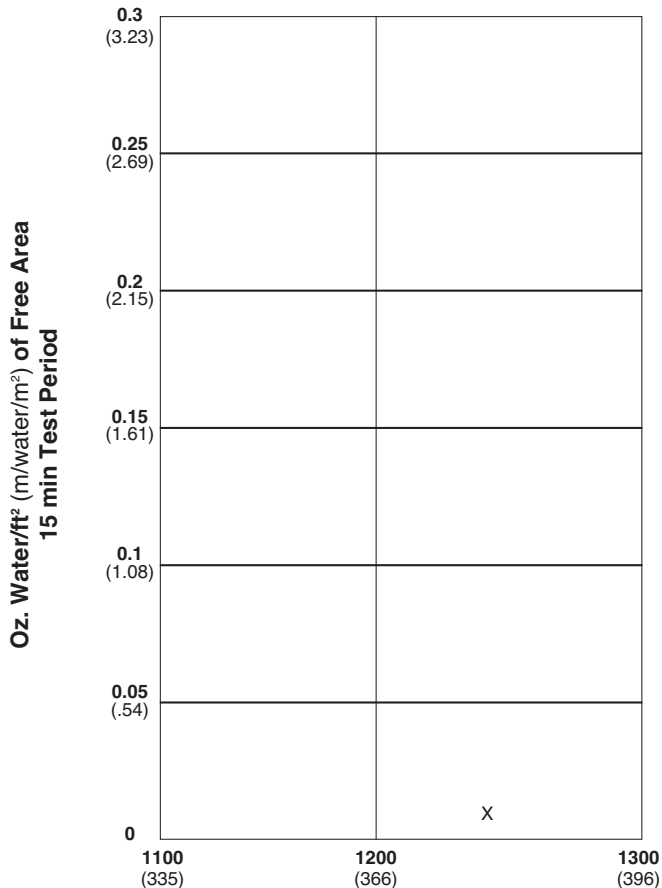
PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" x 48" (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is above 1250 fpm (381 m/min.)



Ratings do not include the effect of a bird screen.



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FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 4DDWRG.
Width – Inches and Meters

Height	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
0.30	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.30	0.49	0.67	0.86	1.04	1.23	1.42	1.60	1.79	1.97	2.16	2.34	2.53	2.71	2.90	3.08	3.27	3.45	3.64
0.30	0.03	0.05	0.06	0.08	0.10	0.11	0.13	0.15	0.17	0.18	0.20	0.22	0.23	0.25	0.27	0.29	0.30	0.32	0.34
18	0.42	0.71	1.00	1.29	1.58	1.87	2.16	2.45	2.74	3.03	3.32	3.61	3.90	4.19	4.48	4.77	5.06	5.35	5.64
0.46	0.04	0.07	0.09	0.12	0.15	0.17	0.20	0.23	0.25	0.28	0.31	0.34	0.36	0.39	0.42	0.44	0.47	0.50	0.52
24	0.58	0.97	1.36	1.76	2.15	2.55	2.94	3.34	3.73	4.12	4.52	4.91	5.31	5.70	6.10	6.49	6.89	7.28	7.67
0.61	0.05	0.09	0.13	0.16	0.20	0.24	0.27	0.31	0.35	0.38	0.42	0.46	0.49	0.53	0.57	0.60	0.64	0.68	0.71
30	0.78	1.32	1.85	2.39	2.92	3.46	3.99	4.53	5.06	5.60	6.13	6.67	7.21	7.74	8.28	8.81	9.35	9.88	10.42
0.76	0.07	0.12	0.17	0.22	0.27	0.32	0.37	0.42	0.47	0.52	0.57	0.62	0.67	0.72	0.77	0.82	0.87	0.92	0.97
36	0.93	1.57	2.21	2.85	3.49	4.13	4.77	5.41	6.05	6.69	7.33	7.97	8.61	9.25	9.89	10.53	11.17	11.81	12.45
0.91	0.09	0.15	0.21	0.27	0.32	0.38	0.44	0.50	0.56	0.62	0.68	0.74	0.80	0.86	0.92	0.98	1.04	1.10	1.16
42	1.09	1.83	2.58	3.32	4.06	4.81	5.55	6.30	7.04	7.79	8.53	9.28	10.02	10.77	11.51	12.26	13.00	13.75	14.49
1.07	0.04	0.07	0.10	0.13	0.16	0.19	0.22	0.25	0.28	0.31	0.34	0.37	0.39	0.42	0.45	0.48	0.51	0.54	0.57
48	1.24	2.09	2.94	3.79	4.64	5.49	6.33	7.18	8.03	8.88	9.73	10.58	11.43	12.28	13.13	13.98	14.83	15.68	16.53
1.22	0.12	0.19	0.27	0.35	0.43	0.51	0.59	0.67	0.75	0.83	0.91	0.98	1.06	1.14	1.22	1.30	1.38	1.46	1.54
54	1.44	2.43	3.42	4.42	5.41	6.40	7.39	8.38	9.37	10.36	11.35	12.34	13.33	14.32	15.31	16.30	17.29	18.28	19.27
1.37	0.13	0.23	0.32	0.41	0.50	0.59	0.69	0.78	0.87	0.96	1.06	1.15	1.24	1.33	1.42	1.52	1.61	1.70	1.79
60	1.60	2.69	3.79	4.88	5.98	7.07	8.17	9.26	10.36	11.45	12.55	13.64	14.74	15.83	16.93	18.02	19.12	20.21	21.31
1.52	0.15	0.25	0.35	0.45	0.56	0.66	0.76	0.86	0.96	1.06	1.17	1.27	1.37	1.47	1.57	1.68	1.78	1.88	1.99
66	1.75	2.95	4.15	5.35	6.55	7.75	8.95	10.15	11.35	12.55	13.75	14.95	16.14	17.34	18.54	19.74	20.94	22.14	23.34
1.68	0.16	0.27	0.39	0.50	0.61	0.72	0.83	0.94	1.06	1.17	1.28	1.39	1.50	1.61	1.72	1.84	1.95	2.06	2.17
72	1.96	3.30	4.64	5.98	7.32	8.66	10.00	11.34	12.68	14.02	15.36	16.70	18.04	19.38	20.72	22.06	23.40	24.75	26.09
1.83	0.18	0.31	0.43	0.56	0.68	0.81	0.93	1.05	1.18	1.30	1.43	1.55	1.68	1.80	1.93	2.05	2.18	2.30	2.43
78	2.11	3.55	5.00	6.44	7.89	9.33	10.78	12.22	13.67	15.11	16.56	18.01	19.45	20.90	22.34	23.79	25.23	26.68	28.12
1.98	0.20	0.33	0.46	0.60	0.73	0.87	1.00	1.14	1.27	1.41	1.54	1.67	1.81	1.94	2.08	2.21	2.35	2.48	2.62
84	2.26	3.81	5.36	6.91	8.46	10.01	11.56	13.11	14.66	16.21	17.76	19.31	20.86	22.41	23.96	25.51	27.06	28.61	30.16
2.13	0.21	0.35	0.50	0.64	0.79	0.93	1.08	1.22	1.36	1.51	1.65	1.80	1.94	2.08	2.23	2.37	2.52	2.66	2.80
90	2.47	4.16	5.85	7.54	9.23	10.92	12.61	14.30	15.99	17.68	19.37	21.07	22.76	24.45	26.14	27.83	29.52	31.21	32.90
2.29	0.23	0.39	0.54	0.70	0.86	1.02	1.17	1.33	1.49	1.64	1.80	1.96	2.12	2.27	2.43	2.59	2.75	2.90	3.06
96	2.62	4.41	6.21	8.01	9.80	11.60	13.39	15.19	16.98	18.78	20.57	22.37	24.16	25.96	27.76	29.55	31.35	33.14	34.94
2.44	0.24	0.41	0.58	0.74	0.91	1.08	1.25	1.41	1.58	1.75	1.91	2.08	2.25	2.41	2.58	2.75	2.92	3.08	3.25
102	2.77	4.67	6.57	8.47	10.37	12.27	14.17	16.07	17.97	19.87	21.77	23.67	25.57	27.47	29.37	31.27	33.17	35.07	36.97
2.69	0.26	0.43	0.61	0.79	0.96	1.14	1.32	1.49	1.67	1.85	2.02	2.20	2.38	2.56	2.73	2.91	3.09	3.26	3.44
108	2.98	5.02	7.06	9.10	11.14	13.18	15.22	17.26	19.31	21.35	23.39	25.43	27.47	29.51	31.55	33.59	35.64	37.68	39.72
2.74	0.29	0.47	0.66	0.85	1.04	1.23	1.42	1.61	1.80	1.99	2.18	2.36	2.55	2.74	2.93	3.12	3.31	3.50	3.69
114	3.13	5.28	7.42	9.57	11.71	13.86	16.00	18.15	20.30	22.44	24.59	26.73	28.88	31.03	33.17	35.32	37.46	39.61	41.75
2.90	0.29	0.49	0.69	0.89	1.09	1.29	1.49	1.69	1.89	2.09	2.29	2.49	2.69	2.89	3.08	3.28	3.48	3.68	3.88
120	3.28	5.53	7.78	10.03	12.28	14.53	16.78	19.04	21.29	23.54	25.79	28.04	30.29	32.54	34.79	37.04	39.29	41.54	43.79
3.05	0.31	0.51	0.72	0.93	1.14	1.35	1.56	1.77	1.98	2.19	2.40	2.61	2.82	3.03	3.24	3.44	3.65	3.86	4.07

WIND-DRIVEN RAIN PERFORMANCE

Test size is 1m x 1m (39" x 39") core area, 1.04m x 1.12m (41" x 44") nominal. Free Area of test louver is 5.45 ft² (.51m²).

29 mph (13 m/s) wind & 3" (76) per hour rain conditions

50 mph (22 m/s) wind & 8" (203) per hour rain conditions

Core Velocity ₁ fpm (m/s)	Airflow cfm (m ³ /min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class ₃
0 (0)	0 (0)	0 (0)	99.9%	A
0 (0)	0 (0)	0 (0)	99.9%	A
0 (0)	0 (0)	0 (0)	99.9%	A
283 (1.4)	3052 (86.4)	726 (221.3)	99.9%	A
376 (1.9)	4049 (114.7)	964 (293.8)	99.9%	A
464 (2.4)	4992 (141.4)	1190 (362.7)	99.1%	A
578 (2.9)	6224 (176.3)	1482 (451.9)	96.5%	B
681 (3.5)	7334 (207.7)	1746 (532.2)	93.2%	C

Core Velocity ₁ fpm (m/s)	Airflow cfm (m ³ /min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class ₃
0 (0)	0 (0)	0 (0)	99.9%	A
101 (.5)	1084 (30.7)	259 (78.9)	99.8%	A
175 (.9)	1889 (53.5)	349 (136.9)	99.7%	A
296 (1.5)	3189 (90.3)	759 (231.3)	99.3%	A
390 (2.0)	4199 (118.9)	1000 (304.8)	98.3%	B
491 (2.5)	5289 (149.8)	1259 (383.7)	97.2%	B
567 (2.9)	6104 (172.9)	1454 (443.2)	96.0%	B
687 (3.5)	7392 (209.3)	1762 (537.1)	91.6%	C

NOTES

- Core area is the open area of the louver face (face area less louver frames). Core Velocity is the airflow velocity through the Core Area of the louver (1m x 1m).
- Free Area of test size is calculated per AMCA standard 500-L.
- Wind Driven Rain Penetration Classes:

Class	Effectiveness
A	1 to .99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.8

- Intake Discharge Loss Class 3

Discharge Loss Coefficient is calculated by dividing a louver's actual airflow rate vs. a theoretical airflow for the opening. It provides an indication of the louvers' airflow characteristics.

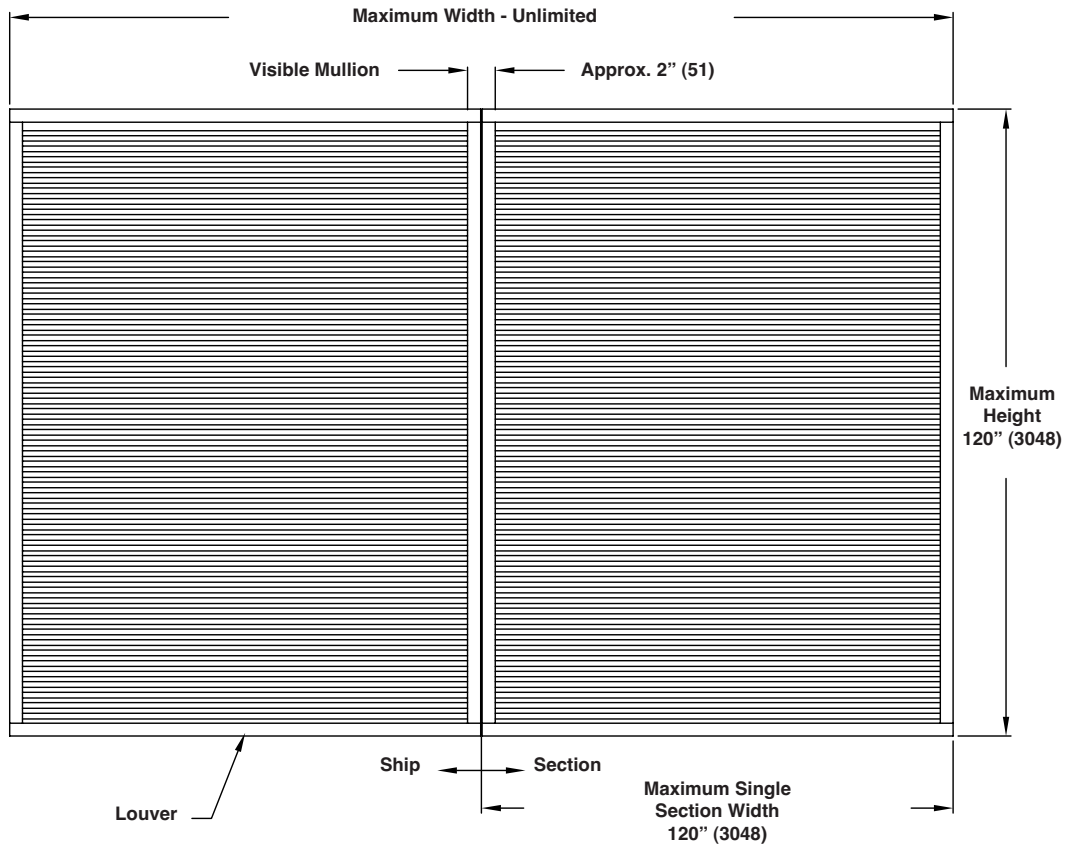
Discharge Loss Classes:

Class	Discharge Loss Coefficient
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and below

(The higher the coefficient, the less resistance to airflow.)

5. The AMCA Wind Driven Rain Test is performed in a laboratory environment and incorporates controlled wind, water and system airflow effects. In actual field installations, storms may create conditions not considered by the AMCA test. Penthouse and similar applications where wind can pass through multiple louvers in an enclosure is another condition that is not simulated by AMCA tests. These applications can create elevated water penetration rates through any louver. Because of these uncontrolled situations, it is recommended that provisions to manage water penetration through louvers be included in the building design.

TYPICAL INSTALLATION DETAILS



1. Reference separate Installation Instruction sheets for installation details. It is the responsibility of the installing contractor to properly install the louvers per the appropriate detail.

2. Louvers wider than the maximum single section width will be shipped in multiple sections and will require field assembly. Field assembly is not by Reliable.

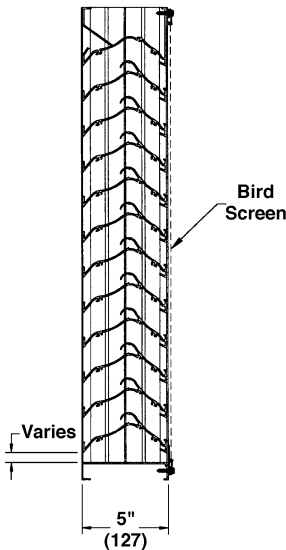
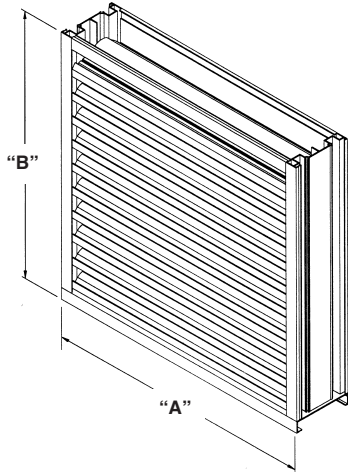




1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

5DDWRG AND 5DDWR WIND-DRIVEN RAIN RESISTANT STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
5" (127) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness.

BLADES
5DDWRG - .062 (1.6) blades
5DDWR - .081 (2.1) blades
6063T5 extruded aluminum .063" (1.6) nominal wall thickness. Double drainable blades are sightproof and spaced approximately 2" (51) center to center.

SCREEN
5/8" x .040" (16 x 1) expanded flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

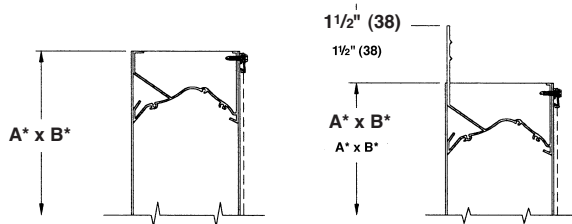
APPROXIMATE SHIPPING WEIGHT
7 lbs. per sq. ft. (34.2 kg/m²)

MAXIMUM FACTORY ASSEMBLY SIZE
Single sections shall not exceed 120" x 90" (3048 x 2286) or 90" w x 120" h (2286 x 3048). Louvers larger than the maximum single section size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FRAME CONSTRUCTION



FEATURES

- Closely spaced horizontal blades minimize the penetration of wind-driven rain, reducing damage and additional operating expenses.
- Tested in the AMCA 5DD-L Wind-Driven Rain Penetration Test.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- 44% Free Area.
- Excellent pressure drop performance.
- Aluminum construction for low maintenance and high resistance to corrosion.

VARIATIONS

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize 50 & 70, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible).

Consult Reliable for other special requirements.

LEED Material Information

VOC Content (g/l) - 0

Manufacturing Locations (MR 5.1)
Geneva, AL 36340

Recycled Content (MR 4.1 & 4.2)
10% Post Consumer
30% Pre-Consumer

Dimensions in inches, parenthesis () indicate millimeters.

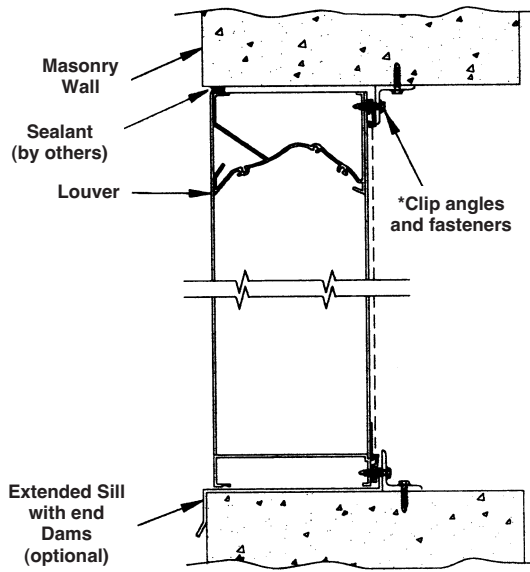
*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

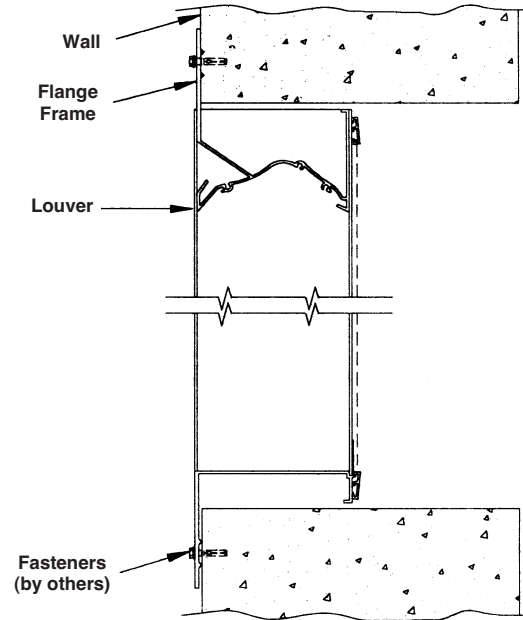
TYPICAL INSTALLATION DETAILS

5DDWRG
5DDWR

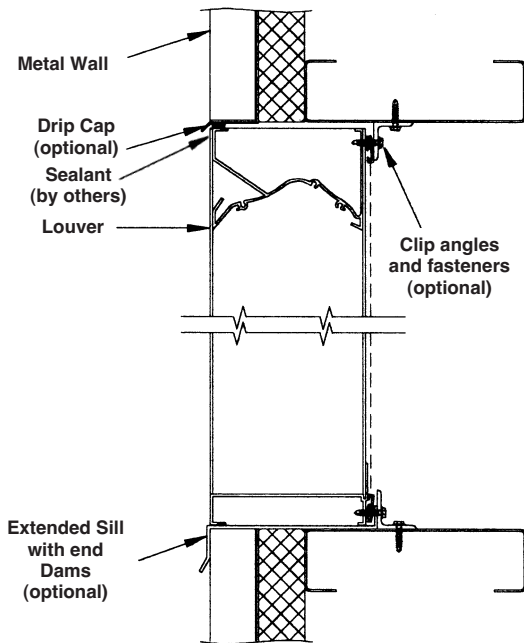
Masonry Wall



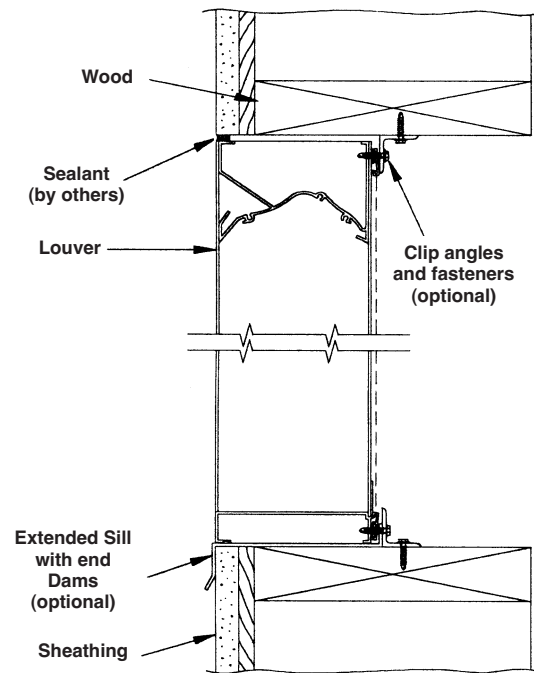
Flange Mount



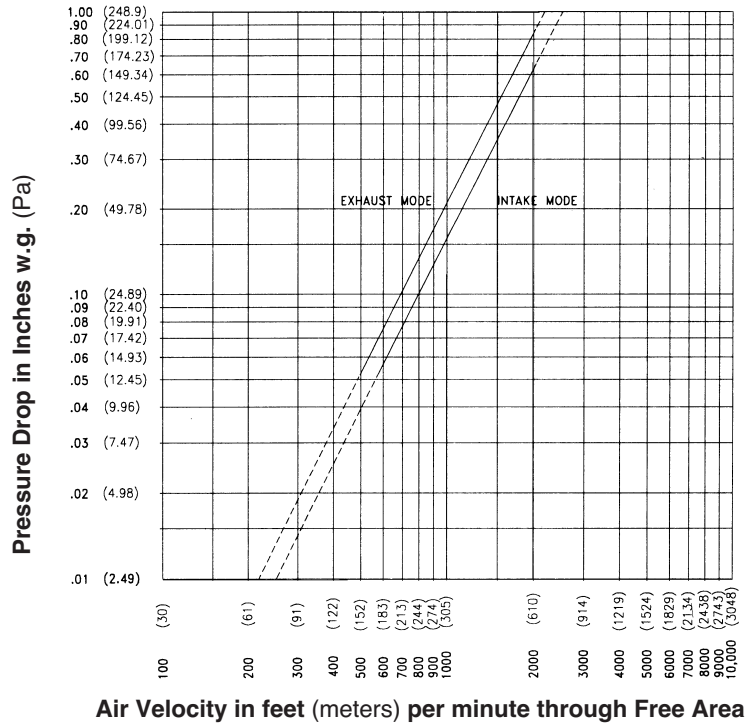
Metal Panel Wall



Wood Installation



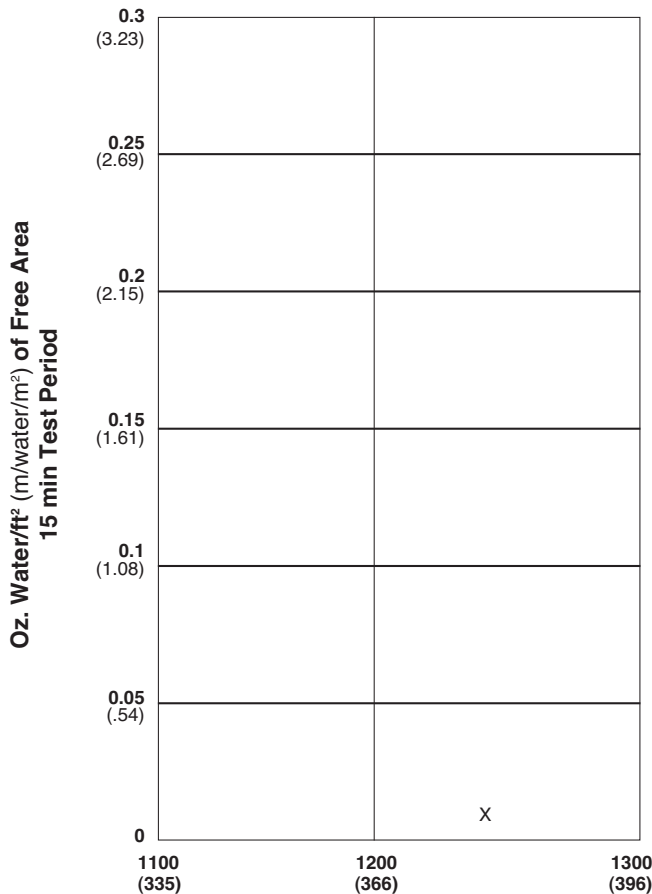
PRESSURE DROP
Test size 48" wide x 48" high (1219 x 1219).



Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" x 48" (1219 x 1219)
Beginning point of water penetration at .01 oz./sq. ft. is above 1250 fpm (381 m/min.)



Reliable Products certifies that the louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings, water penetration ratings and wind driven rain ratings only.

**5DDWRG
5DDWR**

WIND-DRIVEN RAIN PERFORMANCE

Test size is 1m x 1m (39" x 39") core area, 1.04m x 1.12m (41" x 44") nominal. Free Area of test louver is 5.45 ft² (.51m²).

29 mph (47 kph) wind & 3" (76) per hour rain conditions

Core Velocity ₁ fpm (m/s)	Airflow cfm (m ³ /min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class ₃
0 (0)	0 (0)	0 (0)	99.9%	A
98 (.5)	1060 (30)	226 (1.1)	99.9%	A
197 (1.0)	2119 (60)	389 (2.0)	99.9%	A
287 (1.5)	3179 (90)	583 (3.0)	99.9%	A
381 (1.9)	4239 (120)	778 (4.0)	99.9%	A
476 (2.4)	5299 (150)	972 (4.9)	99.9%	A
586 (3.0)	6358 (180)	1167 (5.9)	99.8%	A
673 (3.4)	7418 (210)	1361 (6.9)	99.7%	A
763 (3.9)	8478 (240)	1556 (7.9)	98.9%	B
882 (4.5)	9537 (270)	1750 (8.9)	97.3%	B
987 (5.0)				B

50 mph (80 kph) wind & 8" (203) per hour rain conditions

Core Velocity ₁ fpm (m/s)	Airflow cfm (m ³ /min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class ₃
0 (0)	0 (0)	0 (0)	99.4%	A
106 (.5)	1060 (30)	226 (1.1)	99.3%	A
184 (.9)	2119 (60)	389 (2.0)	99.2%	A
282 (1.4)	3179 (90)	583 (3.0)	99.0%	A
408 (1.9)	4239 (120)	778 (4.0)	99.0%	A
495 (2.5)	5299 (150)	972 (4.9)	98.9%	B
567 (2.9)	6358 (180)	1167 (5.9)	98.9%	B
680 (3.5)	7418 (210)	1361 (6.9)	98.3%	B
791 (4.0)	8478 (240)	1556 (7.9)	97.2%	B
882 (4.5)	9537 (270)	1750 (8.9)	95.1%	B
982 (5.0)				D

NOTES

- Core area is the open area of the louver face (face area less louver frames). Core Velocity is the airflow velocity through the Core Area of the louver (1m x 1m).
- Free Area of test size is calculated per AMCA standard 5DD-L.
- Wind Driven Rain Penetration Classes:

Class	Effectiveness
A	1 to .99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.8

- Intake Discharge Loss Class 2

Discharge Loss Coefficient is calculated by dividing a louvers' actual airflow rate vs. a theoretical airflow for the opening. It provides an indication of the louvers' airflow characteristics. Discharge Loss Classes:

Class Discharge Loss Coefficient

- 0.4 and above
- 0.3 to 0.399
- 0.2 to 0.299
- 0.199 and below

(The higher the coefficient, the less resistance to airflow.)

- The AMCA Wind Driven Rain Test is performed in a laboratory environment and incorporates controlled wind, water and system airflow effects. In actual field installations, storms may create conditions not considered by the AMCA test. Penthouse and similar applications where wind can pass through multiple louvers in an enclosure is another condition that is not simulated by AMCA tests. These applications can create elevated water penetration rates through any louver. Because of these uncontrolled situations, it is recommended that provisions to manage water penetration through louvers be included in the building design.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 5DDWRG - 5DDWR. Width – Inches and Meters

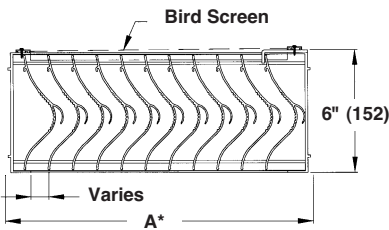
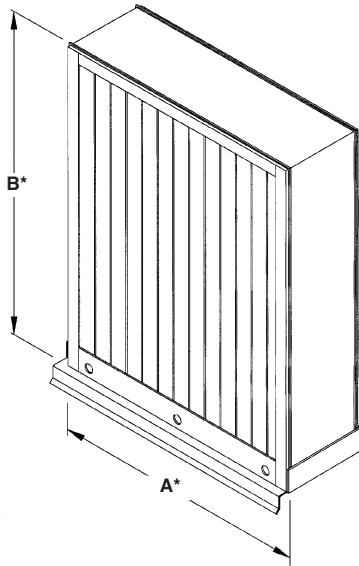
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.24	0.39	0.55	0.70	0.85	1.00	1.15	1.31	1.46	1.61	1.76	1.92	2.07	2.22	2.37	2.52	2.68	2.83	2.98
0.30	0.02	0.04	0.05	0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.16	0.18	0.19	0.21	0.22	0.23	0.25	0.26	0.28
18	0.44	0.72	1.00	1.29	1.57	1.85	2.13	2.41	2.69	2.97	3.25	3.53	3.81	4.09	4.37	4.65	4.93	5.21	5.49
0.46	0.04	0.07	0.09	0.12	0.15	0.17	0.20	0.22	0.25	0.28	0.30	0.33	0.35	0.38	0.41	0.43	0.46	0.48	0.51
24	0.65	1.06	1.46	1.87	2.28	2.69	3.10	3.51	3.92	4.33	4.73	5.14	5.55	5.96	6.37	6.78	7.19	7.60	8.00
0.61	0.06	0.10	0.14	0.17	0.21	0.25	0.29	0.33	0.36	0.40	0.44	0.48	0.52	0.55	0.59	0.63	0.67	0.71	0.74
30	0.85	1.39	1.92	2.46	3.00	3.53	4.07	4.61	5.15	5.68	6.22	6.76	7.29	7.83	8.37	8.90	9.44	9.98	10.52
0.76	0.08	0.13	0.18	0.23	0.28	0.33	0.38	0.43	0.48	0.53	0.58	0.63	0.68	0.73	0.78	0.83	0.88	0.93	0.98
36	1.05	1.72	2.38	3.05	3.71	4.38	5.04	5.71	6.37	7.04	7.70	8.37	9.04	9.70	10.37	11.03	11.70	12.36	13.03
0.91	0.10	0.16	0.22	0.28	0.35	0.41	0.47	0.53	0.59	0.65	0.72	0.78	0.84	0.90	0.96	1.03	1.09	1.15	1.21
42	1.26	2.05	2.84	3.64	4.43	5.22	6.02	6.81	7.60	8.40	9.19	9.98	10.78	11.57	12.36	13.16	13.95	14.74	15.54
1.07	0.12	0.19	0.26	0.34	0.41	0.49	0.56	0.63	0.71	0.78	0.85	0.93	1.00	1.08	1.15	1.22	1.30	1.37	1.45
48	1.46	2.38	3.30	4.22	5.15	6.07	6.99	7.91	8.83	9.75	10.68	11.60	12.52	13.44	14.36	15.28	16.21	17.13	18.05
1.22	0.14	0.22	0.31	0.39	0.48	0.56	0.65	0.74	0.82	0.91	0.99	1.08	1.16	1.25	1.34	1.42	1.51	1.59	1.68
54	1.66	2.71	3.76	4.81	5.86	6.91	7.96	9.01	10.06	11.11	12.16	13.21	14.26	15.31	16.36	17.41	18.46	19.51	20.56
1.37	0.15	0.25	0.35	0.45	0.55	0.64	0.74	0.84	0.94	1.03	1.13	1.23	1.33	1.42	1.52	1.62	1.72	1.81	1.91
60	1.87	3.04	4.22	5.40	6.58	7.76	8.93	10.11	11.29	12.47	13.65	14.82	16.00	17.18	18.36	19.54	20.72	21.89	23.07
1.52	0.17	0.28	0.39	0.50	0.61	0.72	0.83	0.94	1.05	1.16	1.27	1.38	1.49	1.60	1.71	1.82	1.93	2.04	2.15
66	2.07	3.37	4.68	5.99	7.29	8.60	9.91	11.21	12.52	13.83	15.13	16.44	17.74	19.05	20.36	21.66	22.97	24.28	25.58
1.68	0.19	0.31	0.44	0.56	0.68	0.80	0.92	1.04	1.16	1.29	1.41	1.53	1.65	1.77	1.89	2.01	2.14	2.26	2.38
72	2.27	3.71	5.14	6.58	8.01	9.44	10.88	12.31	13.75	15.18	16.62	18.05	19.49	20.92	22.36	23.79	25.23	26.66	28.09
1.83	0.21	0.34	0.48	0.61	0.74	0.88	1.01	1.15	1.28	1.41	1.55	1.68	1.81	1.95	2.08	2.21	2.35	2.48	2.61
78	2.47	4.04	5.60	7.16	8.73	10.29	11.85	13.41	14.98	16.54	18.10	19.67	21.23	22.79	24.35	25.92	27.48	29.04	30.61
1.98	0.23	0.38	0.52	0.67	0.81	0.96	1.10	1.25	1.39	1.54	1.68	1.83	1.97	2.12	2.26	2.41	2.56	2.70	2.85
84	2.68	4.37	6.06	7.75	9.44	11.13	12.82	14.52	16.21	17.90	19.59	21.28	22.97	24.66	26.35	28.04	29.73	31.43	33.12
2.13	0.25	0.41	0.56	0.72	0.88	1.04	1.19	1.35	1.51	1.66	1.82	1.98	2.14	2.29	2.45	2.61	2.77	2.92	3.08
90	2.88	4.70	6.52	8.34	10.16	11.98	13.80	15.62	17.44	19.25	21.07	22.89	24.71	26.53	28.35	30.17	31.99	33.81	35.63
2.29	0.27	0.44	0.61	0.78	0.94	1.11	1.28	1.45	1.62	1.79	1.96	2.13	2.30	2.47	2.64	2.81	2.98	3.14	3.31





6RRSV WIND-DRIVEN RAIN RESISTANT STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
6" (152) deep, 6063T5 extruded aluminum with .095" (2.4) nominal wall thickness.

BLADES
6063T5 extruded aluminum .063" (1.6) nominal wall thickness. Blades are mounted vertically and spaced approximately 1 1/2" (38) center to center.

SCREEN
1/2" x .063" (13 x 1.6) square mesh aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

EXTENDED SILL
.081" (2.1) formed aluminum.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
10 lbs. per sq. ft. (49 kg/m²)

MAXIMUM SINGLE SECTION SIZE
Shall be 48" x 96" (1219 x 2438). Lifting lugs provided on louvers 48" x 48" (1219 x 1219) and larger.
Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

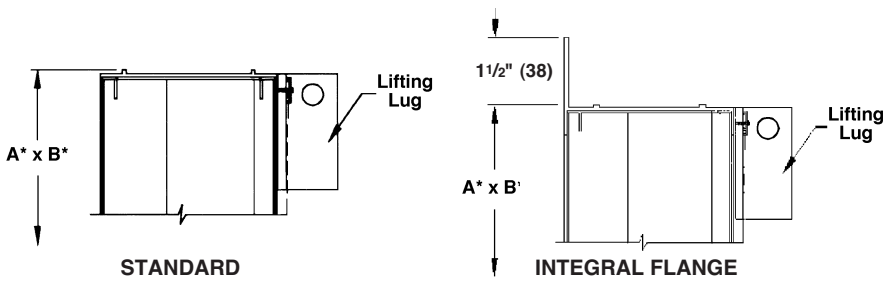
FEATURES

- The 6RRSV offers:
- 42% free area.
 - Closely spaced vertical blades prevent the penetration of wind-driven rain, reducing damage and additional operating expenses.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Excellent pressure drop performance.
 - Withstands 30 psf (1.4 kPa) windload.
 - Aluminum construction for low maintenance and high resistance to corrosion.
 - All welded construction.
 - Visible mullion construction. Hidden mullions and continuous blade construction are not available.

VARIATIONS

- Variations to the basic design of this louver are available at additional cost. They include:
- Filter racks.
 - A variety of bird and insect screens.
 - Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Pearl-dize 50 & 70, prime coat, integral color and clear anodize. (Some variation in anodize color consistency is possible).
- Consult Reliable for other special requirements.

FRAME CONSTRUCTION



LEED Material Information

VOC Content (g/l) - 0

Manufacturing Locations (MR 5.1)
Geneva, AL 36340

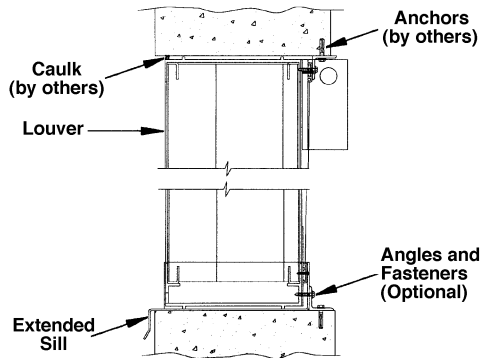
Recycled Content (MR 4.1 & 4.2)
10% Post Consumer
30% Pre-Consumer

Dimensions in inches, parenthesis () indicate millimeters. *Units furnished 1/4" (6) smaller than given opening dimensions.

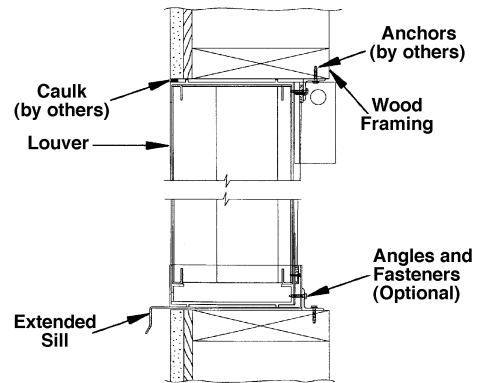
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

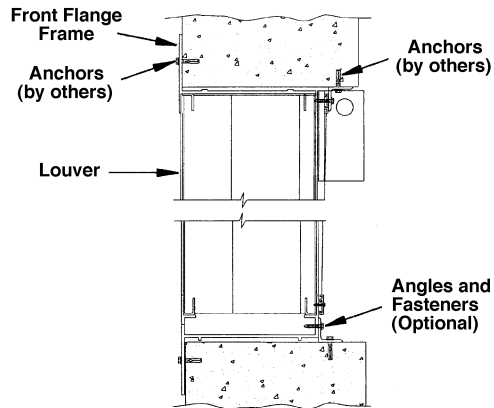
Masonry Wall



Wood Installation

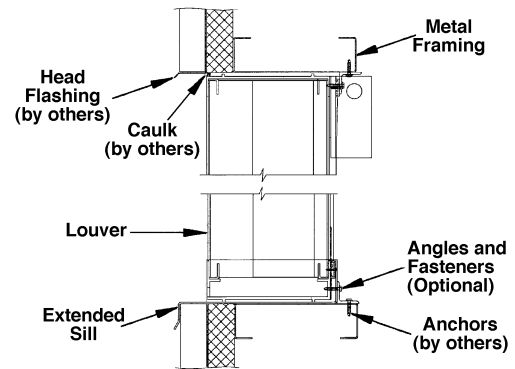


Flange Mount



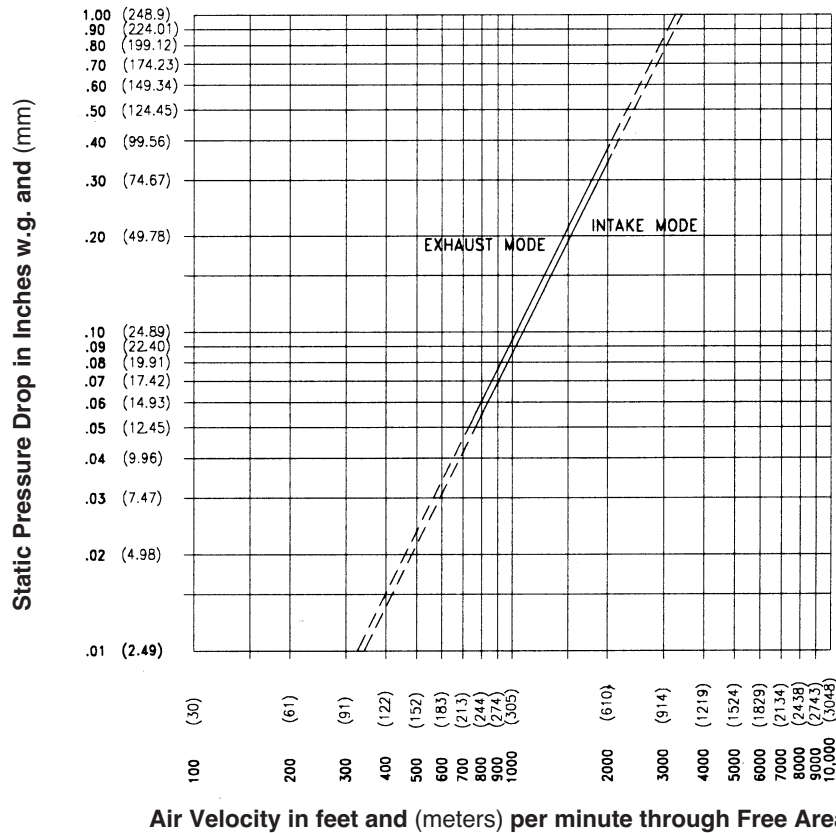
(No Extended Sill provided with Flange Frame)

Metal Panel Wall



Options available at additional cost.

PRESSURE DROP



Ratings do not include the effect of a bird screen.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 6RRSV.
Width – Inches and Meters

Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.11	0.18	0.25	0.32	0.39	0.45	0.52	0.59	0.66	0.73	0.80	0.87	0.94	1.01	1.07	1.14	1.21	1.28	1.35
0.30	0.01	0.02	0.02	0.03	0.04	0.04	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.10	0.11	0.11	0.12	0.13
18	0.33	0.54	0.74	0.95	1.16	1.36	1.57	1.78	1.98	2.19	2.40	2.60	2.81	3.02	3.22	3.43	3.64	3.84	4.05
0.46	0.03	0.05	0.07	0.09	0.11	0.13	0.15	0.17	0.18	0.20	0.22	0.24	0.26	0.28	0.30	0.32	0.34	0.36	0.38
24	0.55	0.89	1.24	1.58	1.93	2.27	2.62	2.96	3.31	3.65	4.00	4.34	4.68	5.03	5.37	5.72	6.06	6.41	6.75
0.61	0.05	0.08	0.12	0.15	0.18	0.21	0.24	0.28	0.31	0.34	0.37	0.40	0.44	0.47	0.50	0.53	0.56	0.60	0.63
30	0.77	1.25	1.73	2.22	2.70	3.18	3.66	4.15	4.63	5.11	5.59	6.08	6.56	7.04	7.52	8.01	8.49	8.97	9.45
0.76	0.07	0.12	0.16	0.21	0.25	0.30	0.34	0.39	0.43	0.48	0.52	0.57	0.61	0.65	0.70	0.74	0.79	0.83	0.88
36	0.99	1.61	2.23	2.85	3.47	4.09	4.71	5.33	5.95	6.57	7.19	7.81	8.43	9.05	9.67	10.29	10.91	11.53	12.15
0.91	0.09	0.15	0.21	0.27	0.32	0.38	0.44	0.50	0.55	0.61	0.67	0.73	0.78	0.84	0.90	0.96	1.01	1.07	1.13
42	1.21	1.97	2.73	3.48	4.24	5.00	5.76	6.52	7.27	8.03	8.79	9.55	10.31	11.06	11.82	12.58	13.34	14.10	14.85
1.07	0.11	0.18	0.25	0.32	0.39	0.46	0.54	0.61	0.68	0.75	0.82	0.89	0.96	1.03	1.10	1.17	1.24	1.31	1.38
48	1.43	2.32	3.22	4.12	5.01	5.91	6.80	7.70	8.60	9.49	10.39	11.28	12.18	13.08	13.97	14.87	15.76	16.66	17.56
1.22	0.13	0.22	0.30	0.38	0.47	0.55	0.63	0.72	0.80	0.88	0.97	1.05	1.13	1.22	1.30	1.38	1.47	1.55	1.63
54	1.65	2.68	3.72	4.75	5.78	6.82	7.85	8.88	9.92	10.95	11.99	13.02	14.05	15.09	16.12	17.15	18.19	19.22	20.26
1.37	0.15	0.25	0.35	0.44	0.54	0.63	0.73	0.83	0.92	1.02	1.11	1.21	1.31	1.40	1.50	1.60	1.69	1.79	1.88
60	1.87	3.04	4.21	5.38	6.55	7.73	8.90	10.07	11.24	12.41	13.58	14.76	15.93	17.10	18.27	19.44	20.61	21.79	22.96
1.52	0.17	0.28	0.39	0.50	0.61	0.72	0.83	0.94	1.05	1.15	1.26	1.37	1.48	1.59	1.70	1.81	1.92	2.03	2.13
66	2.09	3.40	4.71	6.02	7.33	8.64	9.94	11.25	12.56	13.87	15.18	16.49	17.80	19.11	20.42	21.73	23.04	24.35	25.66
1.68	0.19	0.32	0.44	0.56	0.68	0.80	0.92	1.05	1.17	1.29	1.41	1.53	1.66	1.78	1.90	2.02	2.14	2.26	2.39
72	2.31	3.76	5.20	6.65	8.10	9.54	10.99	12.44	13.89	15.33	16.78	18.23	19.67	21.12	22.57	24.02	25.46	26.91	28.36
1.83	0.21	0.35	0.48	0.62	0.75	0.89	1.02	1.16	1.29	1.43	1.56	1.70	1.83	1.96	2.10	2.23	2.37	2.50	2.64
78	2.53	4.11	5.70	7.28	8.87	10.45	12.04	13.62	15.21	16.79	18.38	19.96	21.55	23.13	24.72	26.30	27.89	29.47	31.06
1.98	0.24	0.38	0.53	0.68	0.82	0.97	1.12	1.27	1.41	1.56	1.71	1.86	2.00	2.15	2.30	2.45	2.59	2.74	2.89
84	2.75	4.47	6.19	7.92	9.64	11.36	13.08	14.81	16.53	18.25	19.98	21.70	23.42	25.15	26.87	28.59	30.31	32.04	33.76
2.13	0.26	0.42	0.58	0.74	0.90	1.06	1.22	1.38	1.54	1.70	1.86	2.02	2.18	2.34	2.50	2.66	2.82	2.98	3.14
90	2.97	4.83	6.69	8.55	10.41	12.27	14.13	15.99	17.85	19.71	21.57	23.44	25.30	27.16	29.02	30.88	32.74	34.60	36.46
2.29	0.28	0.45	0.62	0.80	0.97	1.14	1.31	1.49	1.66	1.83	2.01	2.18	2.35	2.53	2.70	2.87	3.04	3.22	3.39

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall possess stationary vertical blades designed to prevent the penetration of wind driven rain. Louver blades shall be contained within a 6" (152) frame. Extended sill shall be provided to capture and drain water to exterior of building. Louver components (heads, jams, sill and blades) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate visible mullions on units larger than 48" x 96" (1219 x 2438). Louvers shall withstand a wind load of 30 lbs. per sq. ft. (1.4kPa) (specifier may substitute any loading required).

Louvers shall be Reliable Model 6RRSV extruded 6063T5 aluminum alloy construction as follows:

- Frame: .045" (2.4) wall thickness, caulking surfaces provided.
- Blades: .063" (1.6) wall thickness, installed vertically on approximately 1 1/2" (38) centers.
- Extended Sill: .081" (2.1) wall thickness, with upturned side panels to prevent water leakage.
- Screen: 1/2" x .063" (13 x 1.6) square mesh aluminum bird screen in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

**WIND-DRIVEN RAIN PERFORMANCE
AMCA 500-L WIND-DRIVEN RAIN TEST**

Test size is 1m x 1m (39" x 39") core area, 1.05m x 1.08m (41 1/4" x 42 5/16") nominal. Free Area of test louver is 4.86 ft² (.45m²).

Wind Velocity mph (kph)	Rain Fall Rate In./hr. (mm/hr.)	Core Velocity ₁ fpm (m/s)	Airflow cfm (m ³ /min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class _{3,4}	Discharge Loss Class ₅ Intake
29 (46.4)	3 (76)	970 (5)	10,444 (295)	2,149 (10.9)	99.9%	A	2
50 (80.5)	8 (203)	982 (5)	10,570 (298)	2,175 (11.0)	99.8%	A	2

NOTES

1. Core area is the open area of the louver face (face area less louver frames).
Core Velocity is the airflow velocity through the Core Area of the louver (1m x 1m). 5 m/s is the maximum core velocity utilized in this test.
2. Free Area of test size is calculated per AMCA standard 500-L.
3. Wind Driven Rain Penetration Classes:

Class	Effectiveness
A	1 to .99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.8
4. The 6RRSV provides class A performance at all velocities up to and including 5 m/s core velocity.
5. Discharge Loss Coefficient is calculated by dividing a louvers' actual airflow rate vs. a theoretical airflow for the opening. It provides an indication of the louvers' airflow characteristics.

Class	Discharge Loss Coefficient
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and below

(The higher the coefficient, the less resistance to airflow.)

6. The AMCA Wind Driven Rain Test is performed in a laboratory environment and incorporates controlled wind, water and system airflow effects. In actual field installations, storms may create conditions not considered by the AMCA test. Penthouse and similar applications where wind can pass through multiple louvers in an enclosure is another condition that is not simulated by AMCA tests. These applications can create elevated water penetration rates through any louver. Because of these uncontrolled situations it is recommended that provisions to manage water penetration through louvers be included in the building design.

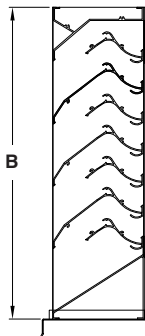
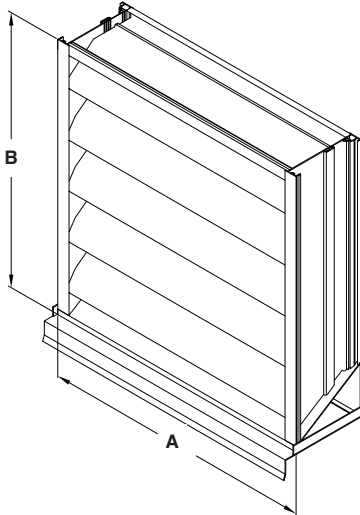


Reliable Products certifies that the Louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and wind driven rain ratings only.



7375WR WIND-DRIVEN RAIN RESISTANT STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME

Single frame design produced from 6063T6 extruded aluminum with .080" (2.1) nominal wall thickness. Frame depth is 7" (178).

BLADES

Sight-proof double blade design produced from 6063T6 extruded aluminum with .080" (2.1) nominal wall thickness. Blades are 7" (178) deep, positioned at 37 1/2" angle and spaced at approximately 4 3/4" (121) center to center. Interior blades are 3" (76) deep and positioned at approximately 2 3/8" (60) center to center alternating with full depth blades.

SCREEN

5/8" x .040" (16 x 1) expanded flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

EXTENDED SILL

.081" (2.1) formed aluminum with end dams. Not provided with front flange frame.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

8 lbs. per sq. ft. (39 kg/m²)

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 60 sq. ft. (3.5m²) per section, not to exceed 120" x 72"h (3048 x 1829) or 72"w x 120"h (1829 x 3048).

Louvers larger than the maximum single factory assembly size will require field assembly of smaller sections.

SUPPORTS

Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

- Two-piece horizontal alternating blade design. Provides protection from wind-driven rain penetration, reducing damage and additional operating expenses.
- 7" (102) deep exterior blades are continuous style without visible mullions.
- May be ordered without interior blades and frames at areas that are inactive or do not need wind-driven rain protection.
- Tested in the AMCA 500-L Wind-Driven Rain Penetration Test.
- Published performance ratings based on testing in accordance with AMCA Publication 500L.
- 45% Free Area.
- Aluminum construction for low maintenance and high resistance to corrosion.

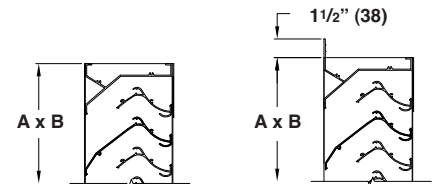
VARIATIONS

- Insulated or sheet blank-off panels
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.

Finishes:

- Prime coat.
- Baked enamel (modified fluoropolymer).
- Epoxy
- Pearledize 50 & 70.
- Kynar.
- Clear and color anodize.

Consult Reliable for other special requirements.



STANDARD

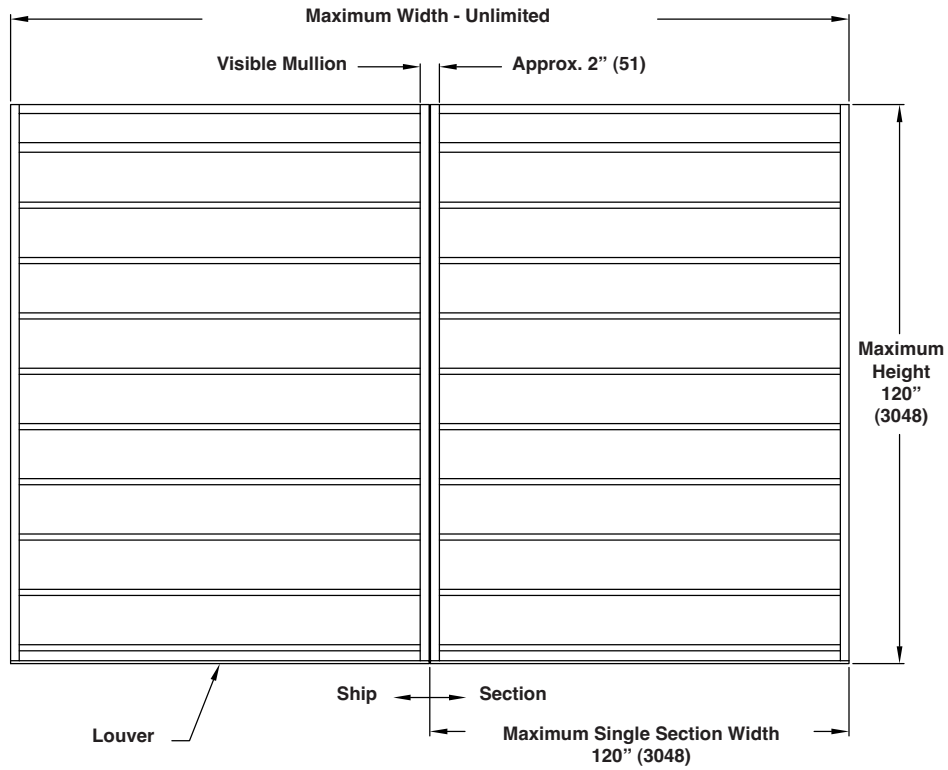
INTEGRAL FLANGE

Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

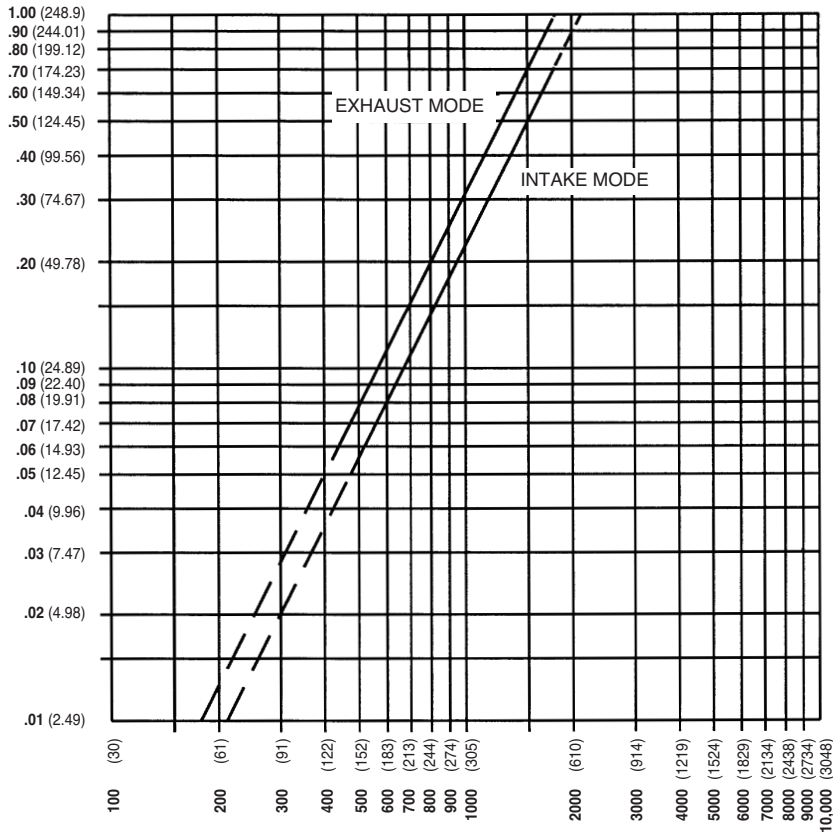
TYPICAL INSTALLATION DETAILS



1. Reference separate installation instruction sheets for installation details. It is the responsibility of the installing contractor to properly install the louvers per the appropriate detail.

2. Louvers wider than the maximum single section width will be shipped in multiple sections and will require field assembly. Field assembly is not by Reliable.

PRESSURE DROP

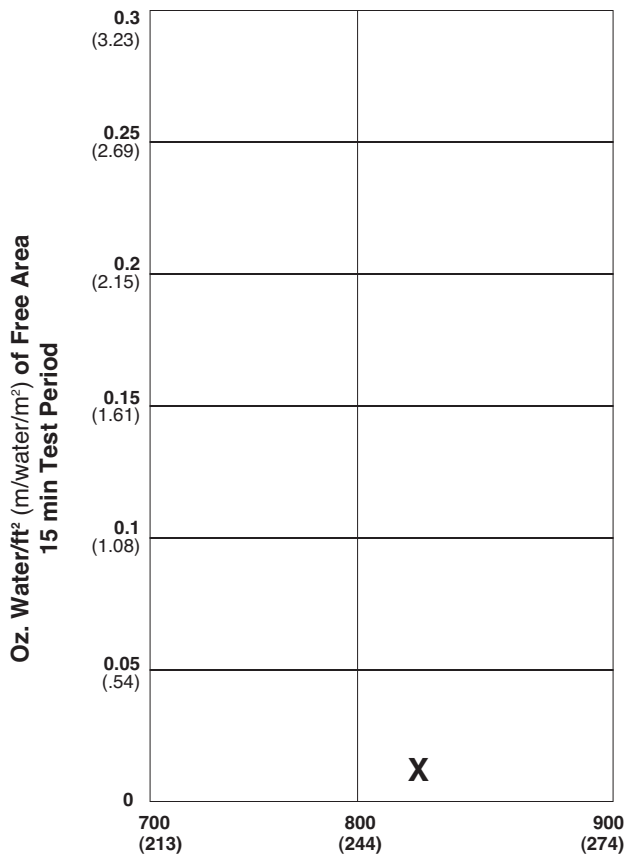


Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" x 48" (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 815 fpm (248 m/min.)



Reliable Products certifies that the louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and wind driven rain ratings only.

WIND-DRIVEN RAIN PERFORMANCE

Test size is 1m x 1m (39" x 39") core area, 1.04m x 1.12m (41" x 44") nominal. Free Area of test louver is 5.35 ft² (.50m²).

29 mph (47 kph) wind & 3" (76) per hour rain conditions

Core Velocity ₁ fpm (m/s)	Airflow cfm (m ³ /min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class ₃
0 (0)	0 (0)	0 (0)	99.9%	A
0 (0)	0 (0)	0 (0)	99.9%	A
198 (1.0)	2129 (603)	398 (2.0)	99.8%	A
284 (1.4)	3060 (86.7)	572 (2.9)	99.7%	A
370 (1.9)	3988 (113.0)	745 (3.8)	99.3%	A
468 (2.4)	5042 (142.8)	942 (4.8)	97.5%	B
605 (3.1)	6513 (184.4)	1217 (6.2)	79.2%	D
681 (3.5)	7335 (207.7)	1371 (7.0)	45.4%	D

50 mph (80 kph) wind & 8" (203) per hour rain conditions

Core Velocity ₁ fpm (m/s)	Airflow cfm (m ³ /min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class ₃
0 (0)	0 (0)	0 (0)	95.7%	B
99	1066	199	94.2%	C
191	2051	383	92.3%	C
279	3001	561	90.1%	C
400	4309	805	86.5%	C
505	5435	1016	82.3%	C
561	6041	1129	78.0%	D
672	7239	1353	65.0%	D

NOTES

- Core area is the open area of the louver face (face area less louver frames). Core Velocity is the airflow velocity through the Core Area of the louver (1m x 1m).
- Free Area of test size is calculated per AMCA standard 500-L.
- Wind Driven Rain Penetration Classes:

Class	Effectiveness
A	1 to .99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.8

- Intake Discharge Loss Class 3

Discharge Loss Coefficient is calculated by dividing a louvers' actual airflow rate vs. a theoretical airflow for the opening. It provides an indication of the louvers' airflow characteristics.

Discharge Loss Classes:

Class Discharge Loss Coefficient

- | | |
|---|-----------------|
| 1 | 0.4 and above |
| 2 | 0.3 to 0.399 |
| 3 | 0.2 to 0.299 |
| 4 | 0.199 and below |

(The higher the coefficient, the less resistance to airflow.)

- The AMCA Wind Driven Rain Test is performed in a laboratory environment and incorporates controlled wind, water and system airflow effects. In actual field installations, storms may create conditions not considered by the AMCA test. Penthouse and similar applications where wind can pass through multiple louvers in an enclosure is another condition that is not simulated by AMCA tests. These applications can create elevated water penetration rates through any louver. Because of these uncontrolled situations, it is recommended that provisions to manage water penetration through louvers be included in the building design.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 7375WR.
Width – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.14	0.23	0.32	0.41	0.50	0.59	0.67	0.76	0.85	0.94	1.03	1.12	1.21	1.29	1.38	1.47	1.56	1.65	1.74
0.30	0.01	0.02	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.15	0.15	0.16
18	0.46	0.75	1.04	1.32	1.61	1.90	2.19	2.47	2.76	3.05	3.34	3.62	3.91	4.20	4.48	4.77	5.06	5.35	5.63
0.46	0.04	0.07	0.10	0.12	0.15	0.18	0.20	0.23	0.26	0.28	0.31	0.34	0.36	0.39	0.42	0.44	0.47	0.50	0.52
24	0.60	0.97	1.35	1.72	2.09	2.47	2.84	3.22	3.59	3.96	4.34	4.71	5.08	5.46	5.83	6.20	6.58	6.95	7.33
0.61	0.06	0.09	0.13	0.16	0.19	0.23	0.26	0.30	0.33	0.37	0.40	0.44	0.47	0.51	0.54	0.58	0.61	0.65	0.68
30	0.92	1.49	2.06	2.64	3.21	3.78	4.35	4.93	5.50	6.07	6.64	7.22	7.79	8.36	8.93	9.50	10.08	10.65	11.22
0.76	0.09	0.14	0.19	0.25	0.30	0.35	0.40	0.46	0.51	0.56	0.62	0.67	0.72	0.78	0.83	0.88	0.94	0.99	1.04
36	1.06	1.72	2.37	3.03	3.69	4.35	5.01	5.67	6.33	6.98	7.64	8.30	8.96	9.62	10.28	10.94	11.60	12.25	12.91
0.91	0.10	0.16	0.22	0.28	0.34	0.40	0.47	0.53	0.59	0.65	0.71	0.77	0.83	0.89	0.96	1.02	1.08	1.14	1.20
42	1.38	2.23	3.09	3.95	4.81	5.66	6.52	7.38	8.24	9.09	9.95	10.81	11.66	12.52	13.38	14.24	15.09	15.95	16.81
1.07	0.13	0.21	0.29	0.37	0.45	0.53	0.61	0.69	0.77	0.85	0.93	1.01	1.08	1.16	1.24	1.32	1.40	1.48	1.56
48	1.51	2.46	3.40	4.34	5.29	6.23	7.18	8.12	9.06	10.01	10.95	11.89	12.84	13.78	14.73	15.67	16.61	17.56	18.50
1.22	0.14	0.23	0.32	0.40	0.49	0.58	0.67	0.76	0.84	0.93	1.02	1.11	1.19	1.28	1.37	1.46	1.55	1.63	1.72
54	1.65	2.68	3.71	4.74	5.77	6.80	7.83	8.86	9.89	10.92	11.95	12.98	14.01	15.04	16.07	17.10	18.13	19.16	20.19
1.37	0.15	0.25	0.35	0.44	0.54	0.63	0.73	0.82	0.92	1.02	1.11	1.21	1.30	1.40	1.49	1.59	1.69	1.78	1.88
60	1.97	3.20	4.43	5.66	6.89	8.11	9.34	10.57	11.80	13.03	14.26	15.49	16.72	17.94	19.17	20.40	21.63	22.86	24.09
1.52	0.18	0.30	0.41	0.53	0.64	0.75	0.87	0.98	1.10	1.21	1.33	1.44	1.55	1.67	1.78	1.90	2.01	2.13	2.24
66	2.11	3.42	4.74	6.05	7.37	8.68	10.00	11.31	12.63	13.94	15.26	16.57	17.89	19.20	20.52	21.83	23.15	24.46	25.78
1.68	0.20	0.32	0.44	0.56	0.69	0.81	0.93	1.05	1.17	1.30	1.42	1.54	1.66	1.79	1.91	2.03	2.15	2.28	2.40
72	2.43	3.94	5.46	6.97	8.48	10.00	11.51	13.02	14.54	16.05	17.57	19.08	20.59	22.11	23.62	25.13	26.65	28.16	29.68
1.83	0.23	0.37	0.51	0.65	0.79	0.93	1.07	1.21	1.35	1.49	1.63	1.77	1.92	2.06	2.20	2.34	2.48	2.62	2.76
78	2.57	4.17	5.77	7.37	8.97	10.57	12.17	13.77	15.37	16.97	18.57	20.17	21.77	23.37	24.97	26.57	28.17	29.77	31.37
1.98	0.24	0.39	0.54	0.69	0.83	0.98	1.13	1.28	1.43	1.58	1.73	1.88	2.02	2.17	2.32	2.47	2.62	2.77	2.92
84	2.89	4.68	6.48	8.28	10.08	11.88	13.68	15.48	17.28	19.07	20.87	22.67	24.47	26.27	28.07	29.87	31.67	33.46	35.26
2.13	0.27	0.44	0.60	0.77	0.94	1.10	1.27	1.44	1.61	1.77	1.94	2.11	2.28	2.44	2.61	2.78	2.94	3.11	3.28
90	3.02	4.91	6.79	8.68	10.56	12.45	14.33	16.22	18.10	19.99	21.87	23.76	25.64	27.53	29.41	31.30	33.18	35.07	36.95
2.29	0.28	0.46	0.63	0.81	0.98	1.16	1.33	1.51	1.68	1.86	2.03	2.21	2.38	2.56	2.74	2.91	3.09	3.26	3.44



745WR WIND-DRIVEN RAIN RESISTANT STATIONARY LOUVER

EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

FRAME
Double frame design produced from 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Exterior frame depth is 4" (102) and interior frame depth is 3" (76). Overall combined frame depth is 7" (178) nominal.

BLADES
Sight-proof double blade design produced from 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Exterior blades are 4" (102) deep, positioned at 37 1/2° angle and spaced at approximately 4 3/4" (121) center to center. Interior blades are 3" deep (76) and positioned at approximately 2 3/8" (60) center to center.

SCREEN
5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

EXTENDED SILL
.081" (2.1) formed aluminum with end dams. Not provided with front flange frame.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
8 lbs. per sq. ft. (39 kg/m²)

MAXIMUM FACTORY ASSEMBLY SIZE
Standard 745WR – Shall be 37 1/2 sq. ft. (3.5m²) per section, not to exceed 90"w x 60"h (2286 x 1524) or 60"w x 90"h (1524 x 2286). Exterior 4" Deep Frame & Blade Only – shall be 75 sq. ft. (7m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

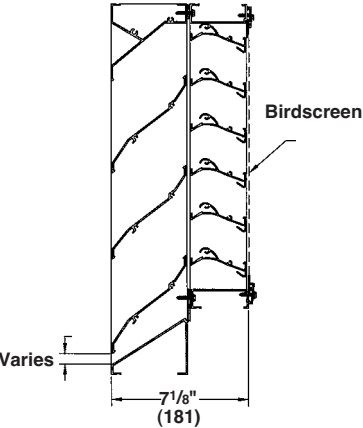
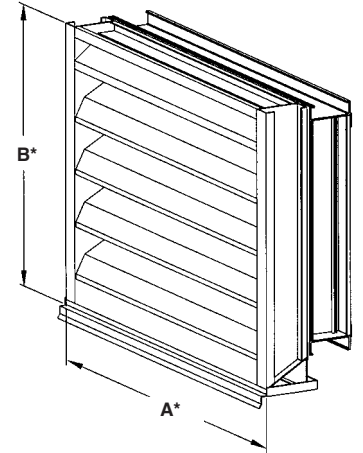
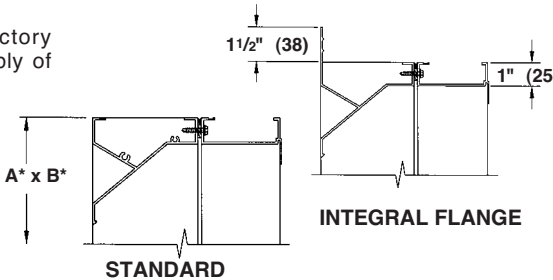
- Two-piece horizontal blade design provides protection from wind-driven rain penetration, reducing damage and additional operating expenses.
- 4" (102) deep exterior blades are continuous style without visible mullions.
- May be ordered without interior blades and frames at areas that are inactive or do not need wind-driven rain protection.
- Tested in the AMCA 500-L Wind-Driven Rain Penetration Test.
- Published performance ratings based on testing in accordance with AMCA Publication 500L.
- 49% Free Area.
- Aluminum construction for low maintenance and high resistance to corrosion.

VARIATIONS

- Insulated or sheet blank-off panels.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize 50 & 70, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible).

Consult Reliable for other special requirements.

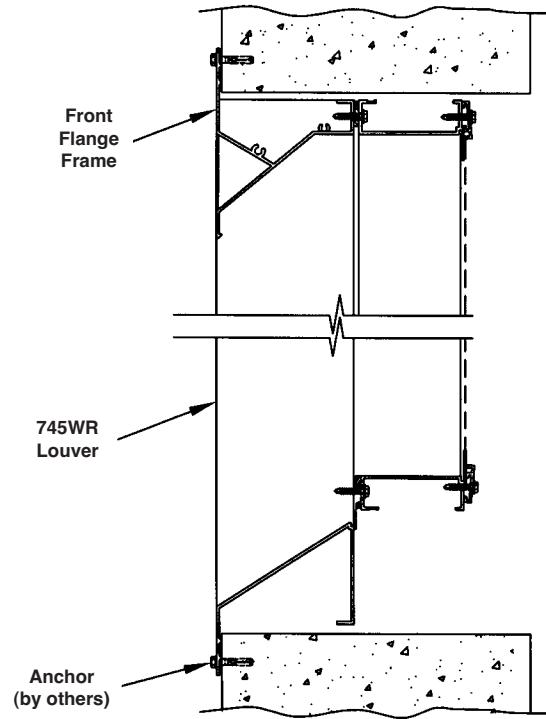
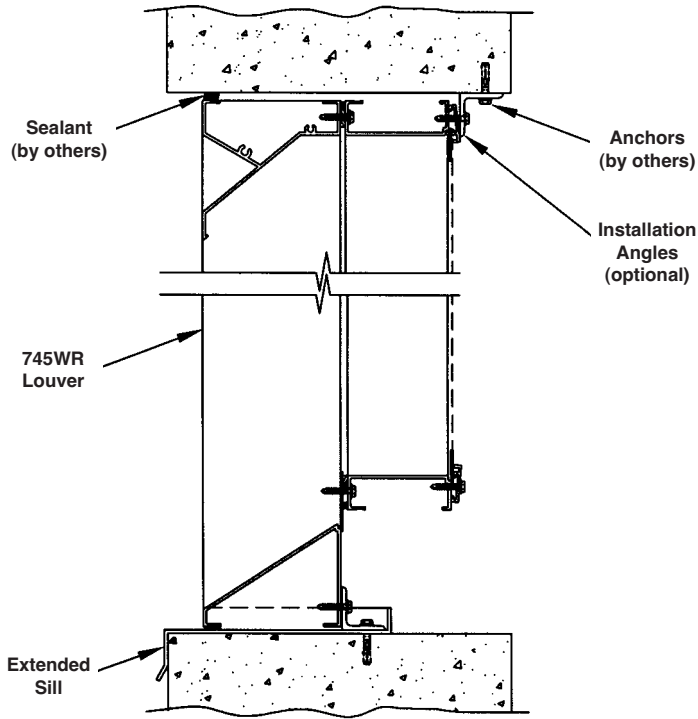
FRAME CONSTRUCTION



Dimensions in inches, parenthesis () indicate millimeters. *Units furnished 1/4" (6) smaller than given opening dimensions.

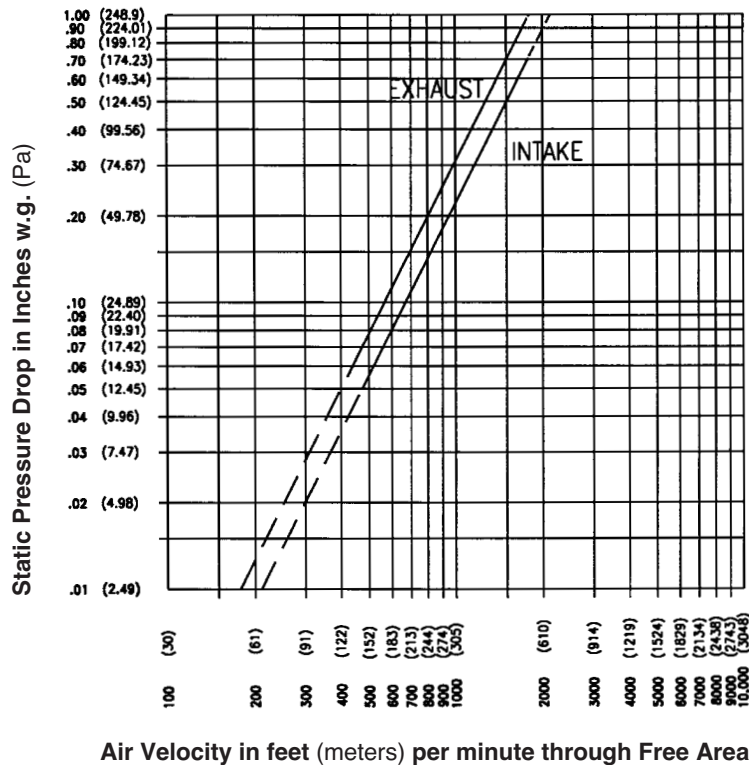
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		

PROJECT ARCH./ENGR. REPRESENTATIVE	LOCATION CONTRACTOR DATE
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TYPICAL INSTALLATION DETAILS**Masonry Wall****Flange Mount**

Optional items are available at additional cost. Anchors or other fasteners securing installation angles to substrate are by others.

PRESSURE DROP



Ratings do not include the effect of a bird screen.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 745WR.
Width – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.27	0.47	0.68	0.88	1.08	1.28	1.49	1.69	1.89	2.10	2.30	2.50	2.71	2.91	3.11	3.31	3.52	3.72	3.92
0.30	0.03	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.33	0.35	0.36
18	0.49	0.85	1.21	1.58	1.94	2.31	2.67	3.04	3.40	3.77	4.13	4.49	4.86	5.22	5.59	5.95	6.32	6.68	7.04
0.46	0.05	0.08	0.11	0.15	0.18	0.21	0.25	0.28	0.32	0.35	0.38	0.42	0.45	0.49	0.52	0.55	0.59	0.62	0.66
24	0.64	1.11	1.59	2.06	2.54	3.02	3.49	3.97	4.45	4.92	5.40	5.88	6.35	6.83	7.31	7.78	8.26	8.74	9.21
0.61	0.06	0.10	0.15	0.19	0.24	0.28	0.32	0.37	0.41	0.46	0.50	0.55	0.59	0.64	0.68	0.72	0.77	0.81	0.86
30	0.85	1.49	2.13	2.76	3.40	4.04	4.68	5.32	5.95	6.59	7.23	7.87	8.51	9.15	9.78	10.42	11.06	11.70	12.34
0.76	0.08	0.14	0.20	0.26	0.32	0.38	0.44	0.49	0.55	0.61	0.67	0.73	0.79	0.85	0.91	0.97	1.03	1.09	1.15
36	1.07	1.87	2.67	3.46	4.26	5.06	5.86	6.66	7.46	8.26	9.06	9.86	10.66	11.46	12.26	13.06	13.86	14.66	15.46
0.91	0.10	0.17	0.25	0.32	0.40	0.47	0.55	0.62	0.69	0.77	0.84	0.92	0.99	1.07	1.14	1.21	1.29	1.36	1.44
42	1.28	2.24	3.20	4.16	5.13	6.09	7.05	8.01	8.97	9.93	10.89	11.85	12.81	13.77	14.74	15.70	16.66	17.62	18.58
1.07	0.12	0.21	0.30	0.39	0.48	0.57	0.66	0.74	0.83	0.92	1.01	1.10	1.19	1.28	1.37	1.46	1.55	1.64	1.73
48	1.43	2.50	3.58	4.65	5.72	6.80	7.87	8.94	10.02	11.09	12.16	13.24	14.31	15.38	16.46	17.53	18.60	19.67	20.75
1.22	0.13	0.23	0.33	0.43	0.53	0.63	0.73	0.83	0.93	1.03	1.13	1.23	1.33	1.43	1.53	1.63	1.73	1.83	1.93
54	1.65	2.88	4.12	5.35	6.58	7.82	9.05	10.29	11.52	12.76	13.99	15.23	16.46	17.70	18.93	20.17	21.40	22.64	23.87
1.37	0.15	0.27	0.38	0.50	0.61	0.73	0.84	0.96	1.07	1.19	1.30	1.42	1.53	1.65	1.76	1.88	1.99	2.11	2.22
60	1.86	3.26	4.65	6.05	7.45	8.84	10.24	11.63	13.03	14.43	15.82	17.22	18.62	20.01	21.41	22.80	24.20	25.60	26.99
1.52	0.17	0.30	0.43	0.56	0.69	0.82	0.95	1.08	1.21	1.34	1.47	1.60	1.73	1.86	1.99	2.12	2.25	2.38	2.51
66	2.08	3.63	5.19	6.75	8.31	9.87	11.42	12.98	14.54	16.10	17.65	19.21	20.77	22.33	23.88	25.44	27.00	28.56	30.11
1.68	0.19	0.34	0.48	0.63	0.77	0.92	1.06	1.21	1.35	1.50	1.64	1.79	1.93	2.08	2.22	2.37	2.51	2.66	2.80
72	2.23	3.90	5.57	7.24	8.91	10.58	12.25	13.92	15.58	17.25	18.92	20.59	22.26	23.93	25.60	27.27	28.94	30.61	32.28
1.83	0.21	0.36	0.52	0.67	0.83	0.98	1.14	1.29	1.45	1.60	1.76	1.92	2.07	2.23	2.38	2.54	2.69	2.85	3.00
78	2.44	4.27	6.10	7.94	9.77	11.60	13.43	15.26	17.09	18.92	20.75	22.59	24.42	26.25	28.08	29.91	31.74	33.57	35.41
1.98	0.23	0.40	0.57	0.74	0.91	1.08	1.25	1.42	1.59	1.76	1.93	2.10	2.27	2.44	2.61	2.78	2.95	3.12	3.29
84	2.66	4.65	6.64	8.64	10.63	12.62	14.61	16.61	18.60	20.59	22.59	24.58	26.57	28.56	30.56	32.55	34.54	36.53	38.53
2.13	0.25	0.43	0.62	0.80	0.99	1.17	1.36	1.54	1.73	1.92	2.10	2.29	2.47	2.66	2.84	3.03	3.21	3.40	3.58
90	2.87	5.03	7.18	9.34	11.49	13.64	15.80	17.95	20.11	22.26	24.42	26.57	28.72	30.88	33.03	35.19	37.34	39.50	41.65
2.29	0.27	0.47	0.67	0.87	1.07	1.27	1.47	1.67	1.87	2.07	2.27	2.47	2.67	2.87	3.07	3.27	3.47	3.67	3.87

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall possess stationary horizontal blades designed to prevent the penetration of wind-driven rain. Louver blades shall be contained within a 7" (178) frame. Extended sill shall be provided to capture and drain water to exterior of building. Louver components (heads, jams, sill and blades) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall have continuous blades without visible mullions and shall withstand a wind load of 20 lbs. per sq. ft. (.96 kPa) (equivalent of a 90 mph wind [145 kph] - specifier may substitute any loading required).

Louvers shall be Reliable Model 745WR extruded 6063T5 aluminum alloy construction as follows:

- Frame: .081" (2.1) wall thickness, caulking surfaces provided.
- Blades: .081" (2.1) wall thickness, exterior 4" deep blades positioned at 37¹/₂" and spaced at approximately 4³/₄" (121) c-c. Interior blades are 3" deep (76) and positioned at approximately 2³/₈" (60) centers.
- Extended Sill: .081" (2.1) wall thickness, with upturned side panels to prevent water leakage.
- Screen: 5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

**WIND-DRIVEN RAIN PERFORMANCE
AMCA 500-L WIND-DRIVEN RAIN TEST**

Test size is: 457/8" x 431/4" (1.16m x 1.10m) core area, 48" x 48" (1.22 x 1.22) nominal. Free Area of test louver is 7.87 ft.² (.73m²).

Wind Velocity mph (kph)	Rainfall Rate in./hr. (mm/hr.)	Core Velocity fpm (m/sec)	Airflow cfm (m ³ /min)	Free Area Velocity ₂ fpm (m/sec)	Effectiveness Ratio	Class ₃	Discharge Loss Class ₄ Intake
29 (46.4)	3 (76)	0	0	0	99.4%	A	2
29 (46.4)	3 (76)	102 (.5)	1406 (40)	179 (.9)	99.3%	A	2
29 (46.4)	3 (76)	205 (1)	2825 (80)	360 (1.8)	98.5%	B	2
29 (46.4)	3 (76)	294 (1.5)	4051 (115)	517 (2.6)	98.2%	B	2
29 (46.4)	3 (76)	394 (2)	5429 (154)	693 (3.5)	98.0%	B	2
29 (46.4)	3 (76)	497 (2.5)	6849 (194)	874 (4.4)	96.2%	B	2
29 (46.4)	3 (76)	593 (3)	8172 (231)	1042 (5.3)	86.3%	C	2
29 (46.4)	3 (76)	665 (3.5)	9164 (260)	1169 (5.9)	74.3%	D	2

NOTES

1. Core area is the open area of the louver face (face area less louver frames). Core Velocity is the airflow velocity through the Core Area of the louver (1m x 1m).
2. Free Area of test size is calculated per AMCA standard 500-L.
3. Wind-Driven Rain Penetration Classes:

Class	Effectiveness
A	1 to .99
B	0.989 to .095
C	0.949 to 0.80
D	Below 0.8

4. Discharge Loss Coefficient is calculated by dividing a louver's actual airflow rate vs. a theoretical airflow for the opening. It provides an indication of the louvers' airflow characteristics.

Discharge Loss Classes:

Class	Discharge Loss Coefficient
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and below

(The higher the coefficient, the less resistance to airflow.)



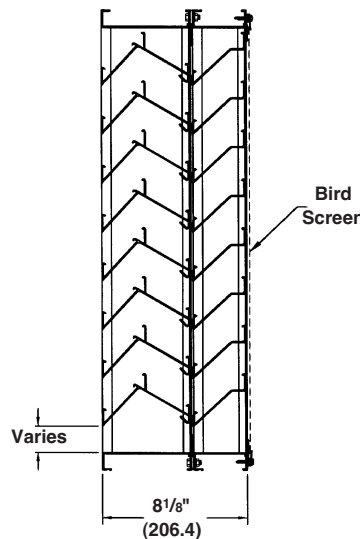
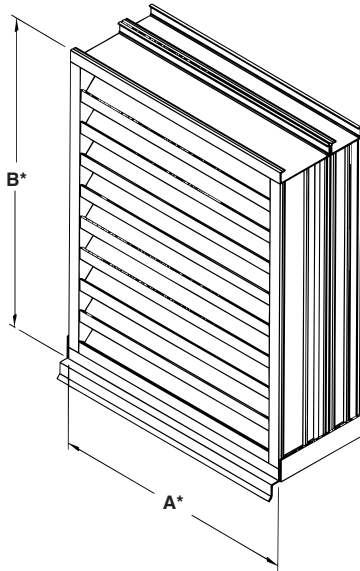
Reliable Products certifies that the louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and wind-driven rain ratings only.





8DDWRG WIND-DRIVEN RAIN STATIONARY LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
8" (203) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Downspouts and caulking surfaces provided.

BLADES
6063T5 extruded aluminum, .060" (1.5) nominal wall thickness. Drainable blades are spaced approximately 2³/₄" (70) center to center.

SCREEN
5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

EXTENDED SILL
.081" (2.1) formed aluminum with end dams.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
8 lbs. per sq. ft.

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 60 sq. ft. (6m²) per section, not to exceed 120"w x 72"h (3048 x 1829) or 72"w x 120"h (1829 x 3048).
Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

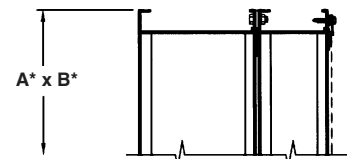
FEATURES

- The 8DDWRG offers:
- 46% Free Area.
 - Special blade profile prevents wind driven rain penetration.
 - Rain penetration test performed under the European (HEVAC) Simulated Rain Testing Method.
 - Drain gutter in each blade; downspouts in jambs and mullions to drain water from louver for minimum water cascade from blade to blade.
 - Aluminum extended finished to match louver is provided.
 - All aluminum construction for low maintenance and high resistance to corrosion.

VARIATIONS

- Variations to the basic design of the louver are available at additional cost. They include:
- Front or rear security bars.
 - Filter racks.
 - A variety of bird and insect screens.
 - Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)
- Consult Reliable for other special requirements.

FRAME CONSTRUCTION



STANDARD

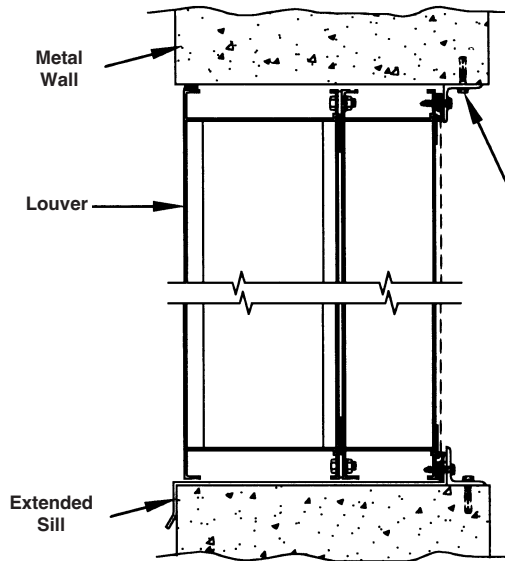
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

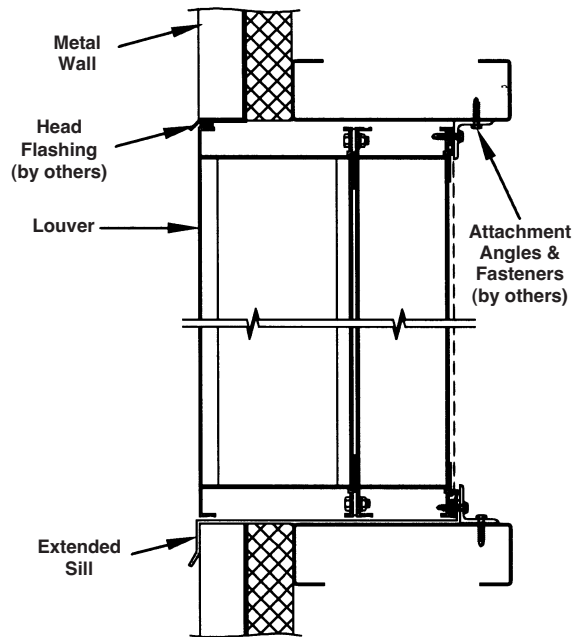
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

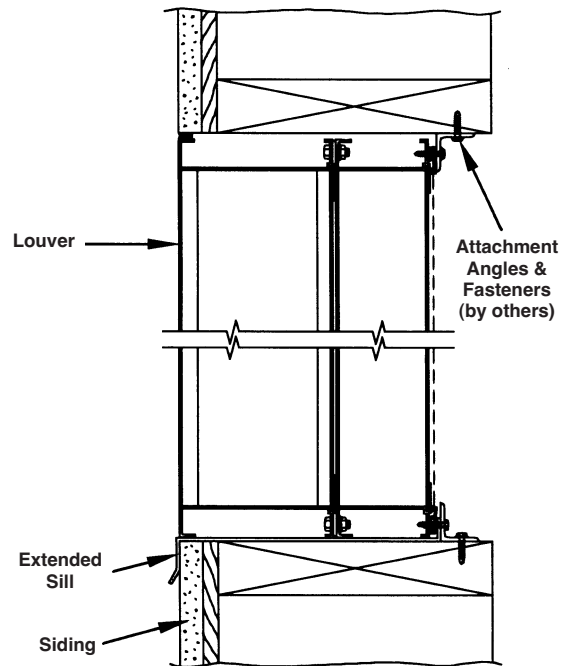
Masonry Wall



Metal Panel Wall

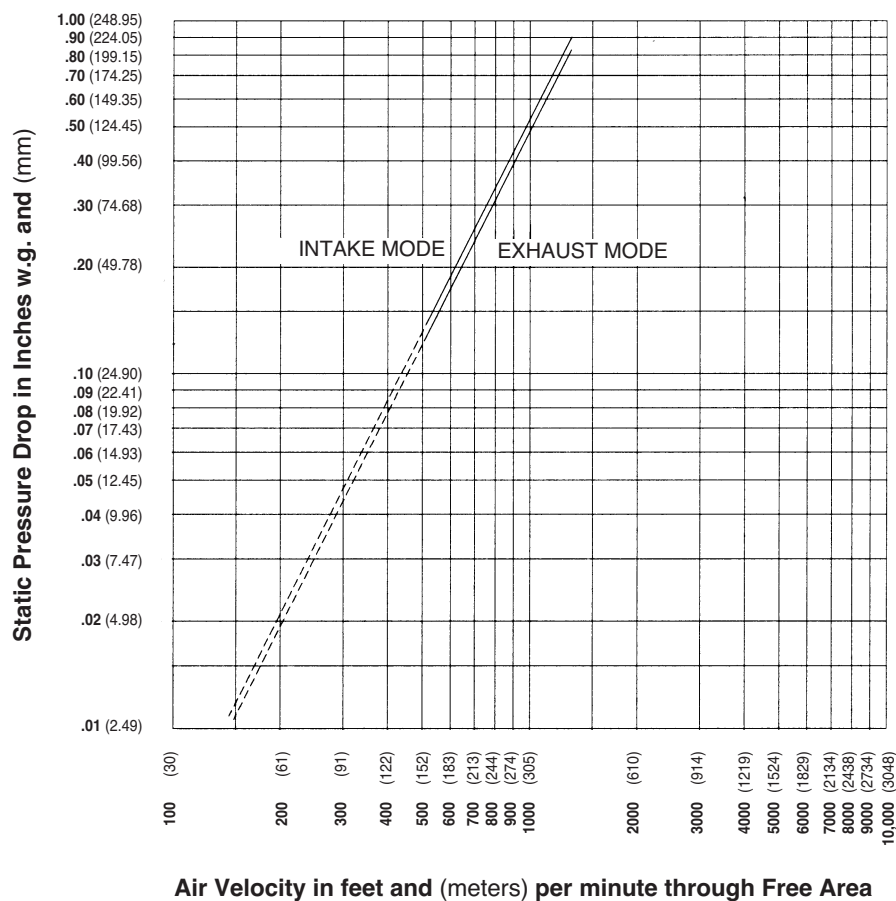


Wood Installation



Accessories at additional cost.

PRESSURE DROP



FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 8DDWRG.
Width – Inches and Meters

Height – Inches and Meters	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.23	0.37	0.50	0.64	0.78	0.91	1.05	1.19	1.32	1.42	1.60	1.74	1.88	2.01	2.15	2.29	2.43	2.56	2.70
18	0.44	0.70	0.97	1.23	1.50	1.76	2.03	2.29	2.55	2.73	3.08	3.34	3.61	3.87	4.14	4.40	4.67	4.93	5.19
24	0.65	1.04	1.43	1.82	2.22	2.60	3.00	3.39	3.77	4.04	4.56	4.95	5.34	5.74	6.13	6.52	6.91	7.29	7.69
30	0.86	1.38	1.90	2.41	2.93	3.44	3.98	4.49	5.00	5.35	6.04	6.55	7.07	7.60	8.12	8.63	9.15	9.66	10.18
36	1.07	1.72	2.36	3.00	3.65	4.29	4.95	5.59	6.22	6.66	7.52	8.16	8.81	9.46	10.10	10.74	11.39	12.03	12.68
42	1.39	2.23	3.06	3.89	4.73	5.55	6.42	7.24	8.06	8.63	9.74	10.57	11.41	12.25	13.09	13.91	14.76	15.58	16.42
48	1.60	2.56	3.53	4.48	5.45	6.40	7.39	8.34	9.28	9.94	11.22	12.17	13.14	14.11	15.07	16.03	17.00	17.94	18.91
54	1.82	2.90	3.99	5.07	6.17	7.24	8.37	9.44	10.51	11.25	12.70	13.78	14.87	15.97	17.06	18.14	19.24	20.31	21.41
60	2.03	3.24	4.46	5.66	6.89	8.08	9.34	10.54	11.73	12.57	14.18	15.38	16.61	17.83	19.05	20.26	21.48	22.68	23.90
66	2.34	3.75	5.15	6.55	7.97	9.35	10.80	12.19	13.57	14.53	16.41	17.79	19.21	20.62	22.03	23.43	24.84	26.23	27.65
72	2.56	4.09	5.62	7.14	8.69	10.19	11.78	13.29	14.79	15.84	17.89	19.39	20.94	22.49	24.02	25.54	27.09	28.60	30.14

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall possess stationary horizontal blades designed to prevent the penetration of wind driven rain. Louver blades shall be contained within a 8" (203) frame. Extended sill shall be provided to capture and drain water to exterior of building. Louver components (heads, jambs, sills, blades) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 10 ft. (3) and shall withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 8DDWRG extruded 6063T5 aluminum alloy construction as follows:

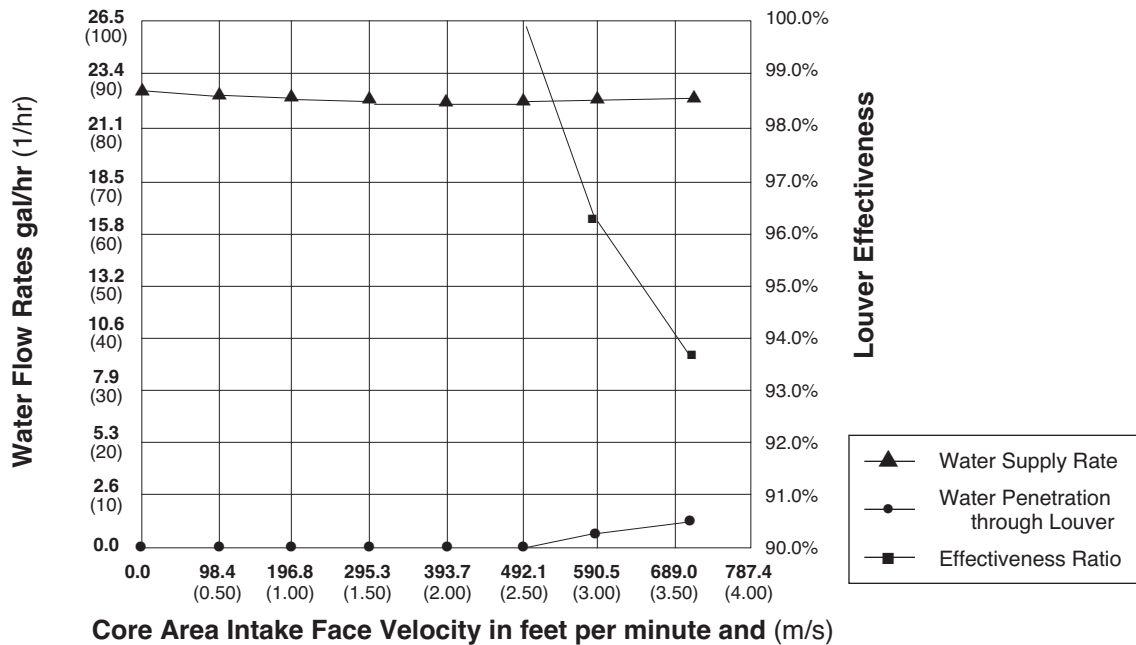
- Frame: .081" (2.1) wall thickness, caulking surfaces provided.
- Blades: .060" (1.5) wall thickness. Drainable blades positioned at 54° angle and spaced approximately 2³/₄" (170) center to center.
- Extended Sill: .081" (2.1) wall thickness, with upturned side panels to prevent water leakage.
- Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

RAIN PENETRATION PERFORMANCE

HEVAC Simulated Rain Test (See Test Description Below)
Test size 39³/₈" wide x 39³/₈" high (1m x 1m)

Wind mph (m/s)	Rainfall In/Hr (mm/hr)	Intake Air			Effectiveness Ratio
		Volume CFM (m/s)	Free Area Velocity FPM (m/s)	Core Area Face Velocity* FPM (m/s)	
29.1 (13)	2.95 (75)	3560 (1.68)	834 (4.24)	394 (2.00)	99.91%
29.1 (13)	2.95 (75)	4450 (2.10)	1041 (5.29)	492 (2.50)	99.95%
29.1 (13)	2.95 (75)	4662 (2.20)	1091 (5.54)	516 (2.62)	99%

*Intake air velocity measured at the front face (exterior) of the louver across the core area (louver face area less frames and waterstops).



TEST DESCRIPTION

Performance data shown are test results from the HEVAC "Laboratory Testing and Rating of Weather Louvres When Subjected to Simulated Rain, 4th Edition" procedure conducted by BSRIA, Berkshire, England. The test subjects the exterior face of a 39.4" x 39.4" (1 x 1) louver to 29.1 mph wind and 2.95" (75) per hour simulated rainfall while intake air is pulled through the unit. Individual tests of at least 30 minutes in duration are conducted at

decreasing intake airflow rates. Testing is discontinued when the difference in water penetration through the louver during consecutive iterations becomes insignificant. Tests are also conducted with a test plate which has an opening equivalent in size to the louver core area. The Effectiveness Ratio is the percentage of water rejected by the louver that would penetrate the test plate under the same conditions.

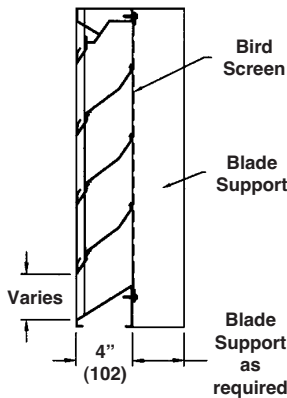
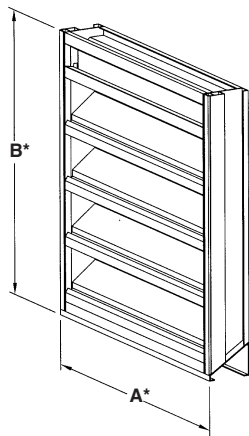


4375DFL DRAINABLE STATIONARY LOUVER

EXTRUDED ALUMINUM

UL LISTED FOR 50 PSF WINDLOAD

Florida Product Approval #FL12900



STANDARD CONSTRUCTION

FRAME

4" (102) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Downspouts and caulking slots provided.

BLADES

6063T5 extruded aluminum, .081" (2.1) nominal wall thickness. Drainable blades are positioned at 37 1/2° angle and spaced approximately 5 3/32" (129) center to center.

SCREEN

5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH

Mill.

APPROXIMATE SHIPPING WEIGHT

6 lbs./ft.² (29.3 kg/m²).

MINIMUM SIZE

12"w x 12"h (305 x 305).

MAXIMUM SIZE

Maximum single ship section size 90"w x 120"h (2286 x 3048) or 120"w x 90"h (3048 x 2286). Maximum field assembled size of ship sections is 180"w x 120"h (4572 x 3048) or 240"w x 90"h (6096 x 2286). A maximum of two sections may be joined side by side. Single section heights only: **sections cannot be stacked in height.** Openings taller than the maximum louver height will need to be divided into multiple openings with suitable structural members. Structural members are not designed or provided by Reliable.

INSTALLATION

The 4375DFL must be installed per the appropriate installation detail. Reference the appropriate separate installation instruction sheets.

BLADE SUPPORTS

Factory installed on louvers over 30" (762) wide. Depth varies from 2" (51) to 6" (152) depending on louver size (consult Reliable for more information).



UL CLASSIFIED as a Wind Resistive Building Component in accordance with ASTM E330-02 for ±50 psf (2.39 kPA) windload. UL File No. R22052.

FEATURES

The 4375DFL offers:

- Meets 2007 Florida Building Code TAS202-94 requirements ±50 psf windload.
- 54% Free Area (48"w x 48"h [1219 x 1219]).
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
- Drain gutter in each blade minimizes water cascade between blades.
- Architecturally styled hidden mullions allowing continuous line appearance up to 120" (3048).
- All aluminum construction for low maintenance and high resistance to corrosion.
- All welded construction.

VARIATIONS

Variations to the basic design of these louvers are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize 50 & 70, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

LEED Material Information

VOC Content (g/l) - 0

Manufacturing Locations (MR 5.1)

Geneva, AL 36340

Recycled Content (MR 4.1 & 4.2)

10% Post Consumer

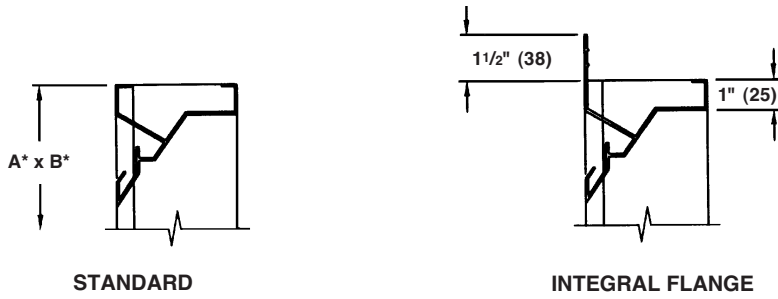
30% Pre-Consumer

Dimensions in inches, parenthesis () indicate millimeters.

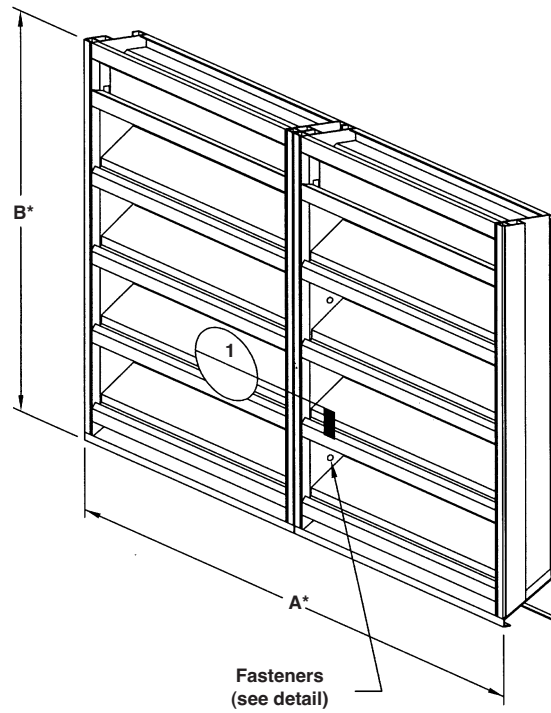
*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

FRAME CONSTRUCTION

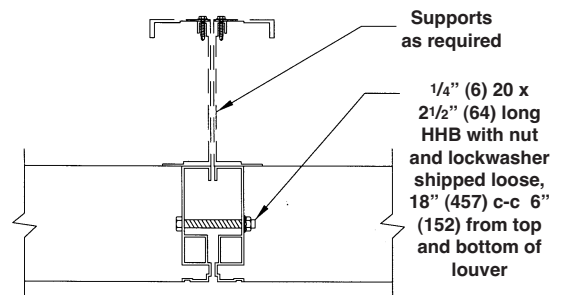


MULTI SECTION FIELD SPLICE DETAIL



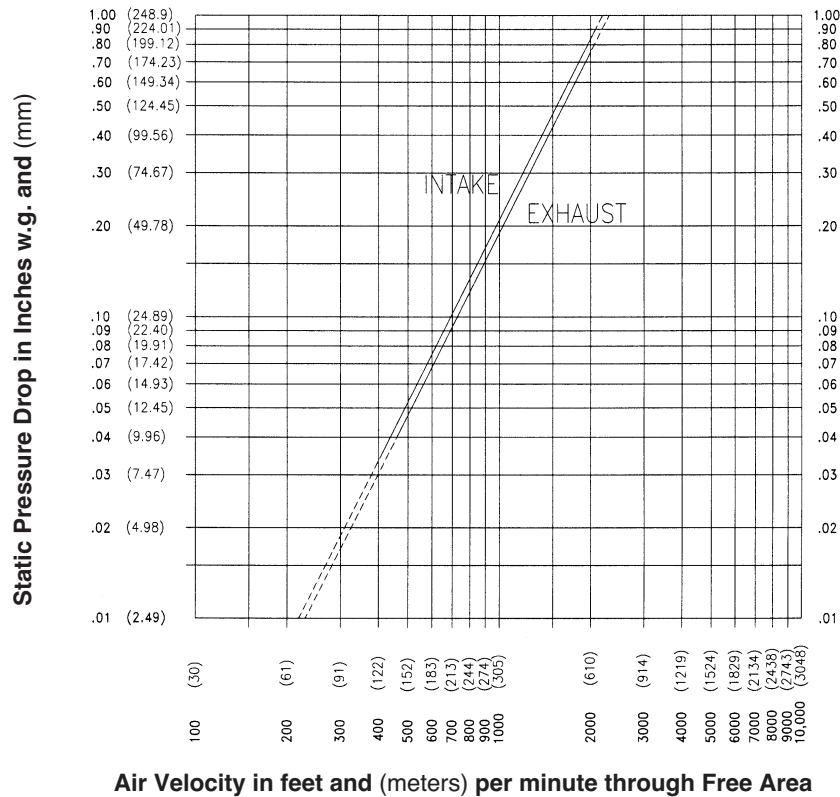
GENERAL NOTES:

1. Reference separate Installation Instruction sheets for installation details.
2. On special orders, Reliable may provide submittal and/or shop drawings. Reference these drawings for additional installation information.
3. Louvers may be provided with hidden vertical blade supports (HVBS) that increase overall installation depth by several inches. Consult Reliable Louver Engineering for exact HVBS depth.
4. Louvers wider than the maximum single section width will be shipped in multiple sections and will require field assembly.



1. SPLICE DETAIL PLAN

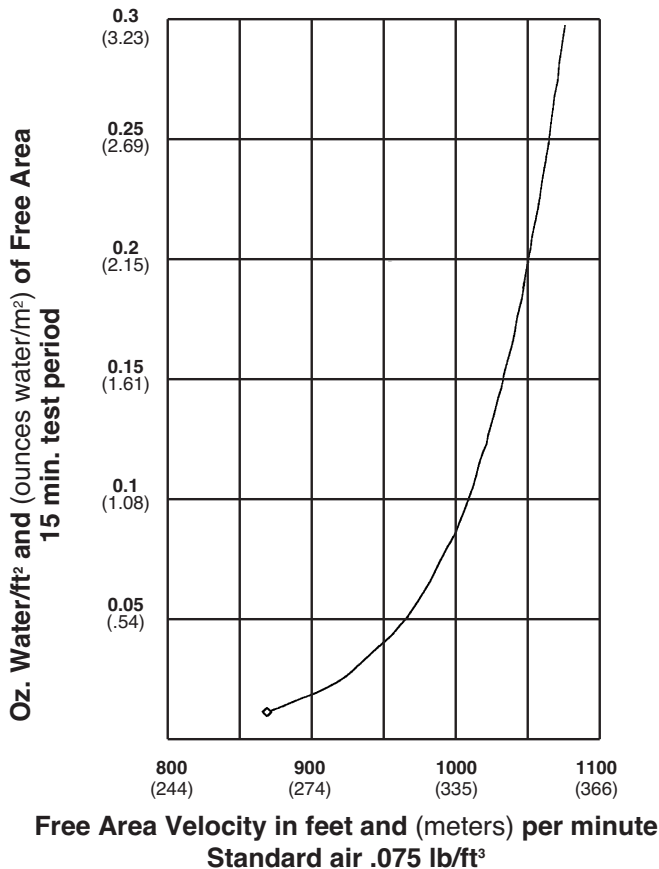
PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 873 fpm (266 m/min).



Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 4375DFL Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

SUGGESTED SPECIFICATION

GENERAL

Furnish and install at locations shown on the plans or as described in schedules drainable stationary louver meeting the performance criteria established by the Florida Building Code. Stationary louvers shall be certified ASTM E330-02 and Florida standard TAS 202 (Uniform Static Air Pressure) tests. Stationary louvers shall be manufactured in an ISO 9001 certified factory.

Stationary louvers shall be furnished with bird and/or insect screens, supports and finishes as specified and as required for a complete installation. Stationary louvers shall incorporate drainable stationary blades. All blades and frames shall be constructed of 6063-T5 aluminum alloy.

MATERIAL

Stationary louvers shall be 4" (102) deep. Louver blades and frames shall be .081" (2.1) nominal wall thickness. Integral gutters shall be incorporated into blades, louver head and jamb frames.

PERFORMANCE

The louver shall be AMCA certified for Water Penetration and Air Performance conforming to the following minimum requirements:

Free Area: 8.58 Square Feet (0.80 m²)

Maximum pressure drop at 1000 fpm (305 m/min): 0.20" w.g. (0.05 kPa)

Free Area Velocity at Beginning Point of Water Penetration: 873 fpm (266 m/min)

STRUCTURAL DESIGN

Integral structural supports shall be designed and furnished by the louver manufacturer to carry a wind load of not less than 50 psf (2.4 kPa).

FINISH

Stationary louvers shall be finished as specified by the architect. Painted finishes shall include the following minimum requirements. All Kynar finishes shall be applied at 1.2 mil total dry film thickness and meet the following AAMA standards. 70% Kynar finishes shall meet AAMA 2605-05 for organic coatings and exterior aluminum finishes requiring 10 years of South Florida exposure. 50% Kynar finishes shall meet AAMA 2604-05 for organic coatings and exterior aluminum finishes requiring 5 years of South Florida exposure.

Louver manufacturer shall provide 20 year limited warranty for fluo-ropolymer-based finishes. 10-year warranties shall not be acceptable. Finish coating shall not peel, blister, chip, crack or check. Chalking and fading of finish shall not exceed the maximum limits identified in the manufacturers finish warranty.

This warranty shall begin on the date of material shipment.

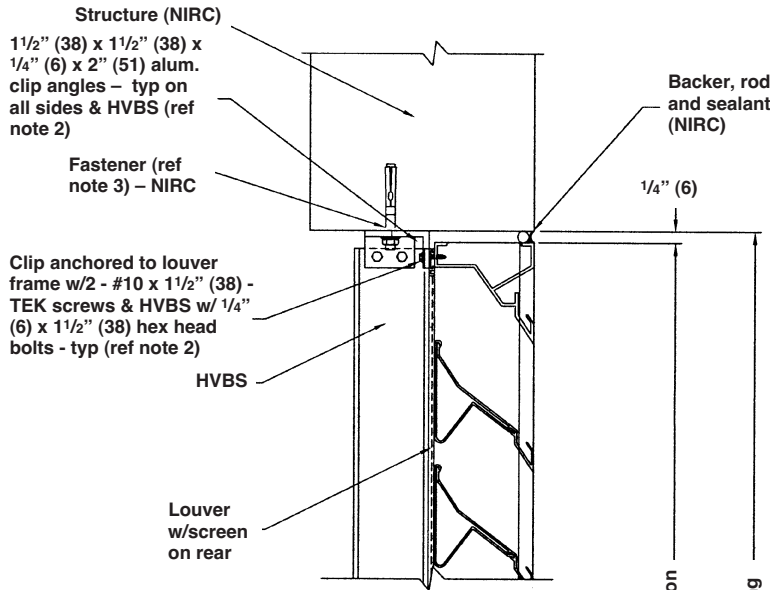
Stationary Louver shall be Reliable model 4375DFL.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 4375DFL.
Width – Inches and Meters

Height – Inches and Meters	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.26	0.41	0.56	0.71	0.87	1.02	1.17	1.33	1.48	1.63	1.79	1.94	2.09	2.24	2.40	2.55	2.70	2.86	3.01
0.30	0.02	0.04	0.05	0.07	0.08	0.09	0.11	0.12	0.14	0.15	0.17	0.18	0.19	0.21	0.22	0.24	0.25	0.27	0.28
18	0.61	0.97	1.33	1.70	2.06	2.43	2.79	3.15	3.52	3.88	4.25	4.61	4.97	5.34	5.70	6.06	6.43	6.79	7.16
0.46	0.06	0.09	0.12	0.16	0.19	0.23	0.26	0.29	0.33	0.36	0.39	0.43	0.46	0.50	0.53	0.56	0.60	0.63	0.67
24	0.87	1.40	1.92	2.45	2.97	3.50	4.02	4.55	5.07	5.60	6.12	6.65	7.17	7.70	8.22	8.75	9.27	9.80	10.32
0.61	0.08	0.13	0.18	0.23	0.28	0.33	0.37	0.42	0.47	0.52	0.57	0.62	0.67	0.72	0.76	0.81	0.86	0.91	0.96
30	1.14	1.83	2.51	3.20	3.89	4.57	5.26	5.94	6.63	7.32	8.00	8.69	9.37	10.06	10.74	11.43	12.12	12.80	13.49
0.76	0.11	0.17	0.23	0.30	0.36	0.42	0.49	0.55	0.62	0.68	0.74	0.81	0.87	0.93	1.00	1.06	1.13	1.19	1.25
36	1.33	2.13	2.92	3.72	4.52	5.31	6.11	6.91	7.70	8.50	9.30	10.09	10.89	11.69	12.49	13.28	14.08	14.88	15.67
0.91	0.12	0.20	0.27	0.35	0.42	0.49	0.57	0.64	0.72	0.79	0.86	0.94	1.01	1.09	1.16	1.23	1.31	1.38	1.46
42	1.60	2.55	3.51	4.47	5.43	6.39	7.34	8.30	9.26	10.22	11.18	12.13	13.09	14.05	15.01	15.96	16.92	17.88	18.84
1.07	0.15	0.24	0.33	0.42	0.50	0.59	0.68	0.77	0.86	0.95	1.04	1.13	1.22	1.31	1.39	1.48	1.57	1.66	1.75
48	1.86	2.98	4.10	5.22	6.34	7.46	8.58	9.70	10.82	11.93	13.05	14.17	15.29	16.41	17.53	18.65	19.77	20.89	22.00
1.22	0.17	0.28	0.38	0.49	0.59	0.69	0.80	0.90	1.01	1.11	1.21	1.32	1.42	1.52	1.63	1.73	1.84	1.94	2.04
54	2.13	3.41	4.69	5.97	7.25	8.53	9.81	11.09	12.37	13.65	14.93	16.21	17.49	18.77	20.05	21.33	22.61	23.89	25.17
1.37	0.20	0.32	0.44	0.55	0.67	0.79	0.91	1.03	1.15	1.27	1.39	1.51	1.63	1.74	1.86	1.98	2.10	2.22	2.34
60	2.40	3.84	5.28	6.72	8.16	9.61	11.05	12.49	13.93	15.37	16.81	18.25	19.69	21.13	22.57	24.01	25.45	26.90	28.34
1.52	0.22	0.36	0.49	0.62	0.76	0.89	1.03	1.16	1.29	1.43	1.56	1.70	1.83	1.96	2.10	2.23	2.37	2.50	2.63
66	2.59	4.14	5.69	7.24	8.79	10.35	11.90	13.45	15.00	16.55	18.11	19.66	21.21	22.76	24.31	25.86	27.42	28.97	30.52
1.68	0.24	0.38	0.53	0.67	0.82	0.96	1.11	1.25	1.39	1.54	1.68	1.83	1.97	2.12	2.26	2.40	2.55	2.69	2.84
72	2.85	4.57	6.28	7.99	9.71	11.42	13.13	14.84	16.56	18.27	19.98	21.70	23.41	25.12	26.83	28.55	30.26	31.97	33.69
1.83	0.26	0.42	0.58	0.74	0.90	1.06	1.22	1.38	1.54	1.70	1.86	2.02	2.18	2.33	2.49	2.65	2.81	2.97	3.13
78	3.12	5.00	6.87	8.74	10.62	12.49	14.37	16.24	18.11	19.99	21.86	23.74	25.61	27.48	29.36	31.23	33.10	34.98	36.85
1.98	0.29	0.46	0.64	0.81	0.99	1.16	1.34	1.51	1.68	1.86	2.03	2.21	2.38	2.55	2.73	2.90	3.08	3.25	3.42
84	3.39	5.43	7.46	9.50	11.53	13.57	15.60	17.63	19.67	21.70	23.74	25.77	27.81	29.84	31.88	33.91	35.95	37.98	40.02
2.13	0.32	0.50	0.69	0.88	1.07	1.26	1.45	1.64	1.83	2.02	2.21	2.39	2.58	2.77	2.96	3.15	3.34	3.53	3.72
90	3.66	5.86	8.05	10.25	12.44	14.64	16.83	19.03	21.23	23.42	25.62	27.81	30.01	32.20	34.40	36.60	38.79	40.99	43.18
2.29	0.34	0.54	0.75	0.95	1.16	1.36	1.56	1.77	1.97	2.18	2.38	2.58	2.79	2.99	3.20	3.40	3.60	3.81	4.01

INSTALLATION DETAILS



CLIP ANGLE LOCATIONS

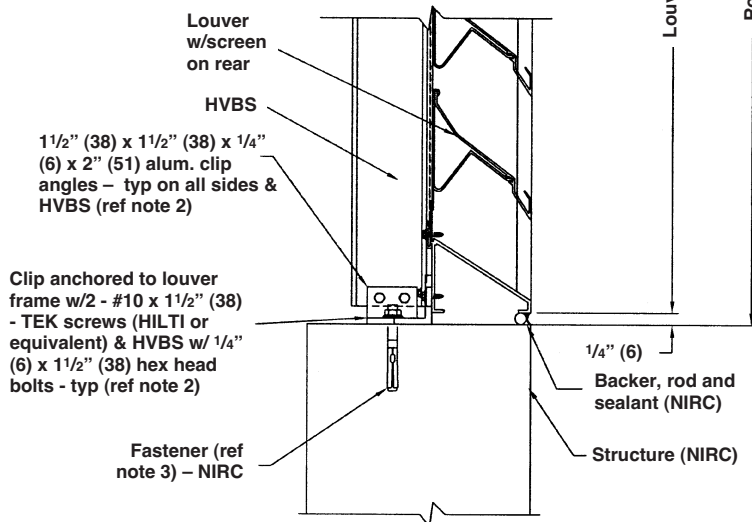
Frame or HVBS	Locations & Spacing
Head & Sill	6" (152) max from corners and ship section joints & 12" (305) max c-c between for timber and steel substrate. 4 1/2" (114) max c-c between for concrete substrate.
Jamb	6" (152) max from corners and 12" (305) max c-c between for timber and steel substrate. 4 1/2" (114) max c-c between for concrete substrate.
HVBS	One clip at top and bottom of HVBS (2 clips total per HVBS).

ANCHOR REQUIREMENTS

(Anchors not provided by Ruskin)

Structural Material	Fastener Specification
Timber	1/2" (13) diameter. 4" (102) long lag screw, 2" (51) min. edge distance.
Steel	5/16" (8) self tapping screw or bolt. Minimum metal thickness is 16 ga. (1.5)
Concrete	5/16" (8) Hilti HLC sleeve anchors. 4 1/2" (114) min edge distance. 2" (51) minimum embedment. 2000 psi min. concrete.
Aluminum	5/16" (8) self tapping screw or bolt. Minimum metal thickness is .125" (3.2)

Dimensions shown in parentheses () indicate millimeters.



4375DFL LOUVER INSTALLATION DETAIL

JAMB SIMILAR

NOTES:

- The installation shown herein must be followed strictly to ensure compliance with UL and Florida listings.
- 1 1/2" (38) x 1 1/2" (38) x 1/4" (6) x 2" (51) long aluminum clip angles with two #10 x 1 1/2" (38) long TEK screws (at frames) or two 1/4" (4) x 1 1/2" (38) hex head bolts and nuts (at HVBS) are provided by Reliable shipped loose. Reference Clip Angle location table for clip locations and spacings.
- One anchor into the substrate is required at every clip angle (both frame and HVBS clips). Reference Anchor Requirements table for anchor information. Anchors are not provided by Reliable.
- Reliable is not responsible for determining the suitability of the structure.
- Shims may be required to achieve consistent clearance between louver and opening on all sides. Shims not provided by Ruskin.
- HVBS = Hidden Vertical Blade Support
- NIRC = Not In Reliable's Contract.

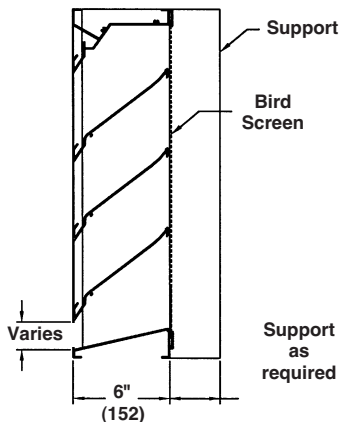
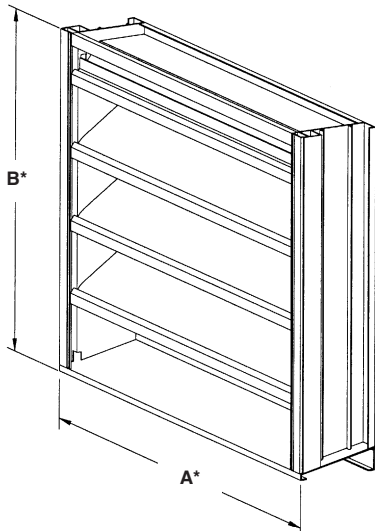


6375DFL DRAINABLE STATIONARY LOUVER

EXTRUDED ALUMINUM

UL LISTED FOR 50 PSF WINDLOAD

Florida Product Approval #11614



STANDARD CONSTRUCTION

FRAME

6" (152) deep, 6063T5 extruded aluminum. .081" (2.1) nominal wall thickness. Downspouts and caulking slots provided.

BLADES

6063T5 extruded aluminum. .081" (2.1) nominal wall thickness. Drainable blades are positioned at 37¹/₂° angle and spaced approximately 5²⁹/₃₂" (150) center to center.

SCREEN

⁵/₈" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH

Mill.

WINDLOAD

±50 psf (2.39 kPA).

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

5 lbs./ft.² (24.4 kg/m²).

MAXIMUM SIZE

Maximum single ship section size 90"w x 120"h (2286 x 3048) or 120"w x 90"h (3048 x 2286). Maximum field assembled size of ship sections is 180"w x 120"h (4572 x 3048) or 240"w x 90"h (6096 x 2286). A maximum of two sections may be joined side by side. Single section heights only: **sections cannot be stacked in height.** Openings taller than the maximum louver height will need to be divided into multiple openings with suitable structural members. Structural members are not designed or provided by Reliable.

INSTALLATION

Must be installed per approved installation method. Refer to the related installation instruction sheet for details.

SUPPORTS

Factory installed on louvers over 60" wide. Depth varies from 3" (76) to 6" (152) depending on louver size (consult Reliable for more information).

Consult Reliable for additional information.

FEATURES

The 6375DFL offers:

- Meets 2004 Florida Building Code TAS202-94 requirements ±50 psf windload.
- 57% Free Area (48"w x 48"h [1219 x 1219]).
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
- Drain gutter in each blade minimizes water cascade between blades.
- Architecturally styled hidden mullions allowing continuous line appearance up to 120" (3048).
- All aluminum construction for low maintenance and high resistance to corrosion.
- All welded construction.

VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize 50 & 70, Kynar, clear & color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.



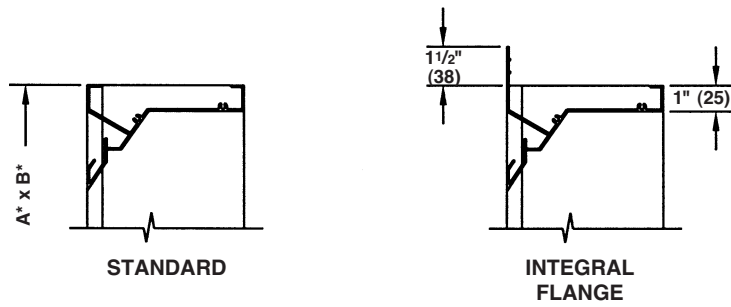
UL CLASSIFIED as a Wind Resistive Building Component in accordance with ASTM E330-02 for ±50 psf (2.39 kPA) windload. UL File No. R22052.

Dimensions in inches, parenthesis () indicate millimeters.

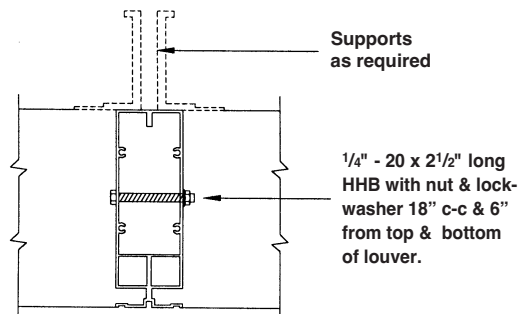
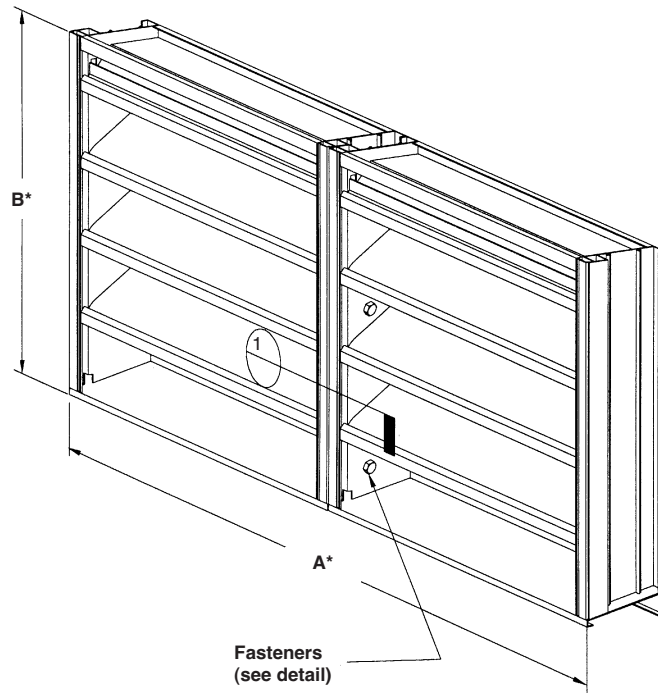
*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

FRAME CONSTRUCTION

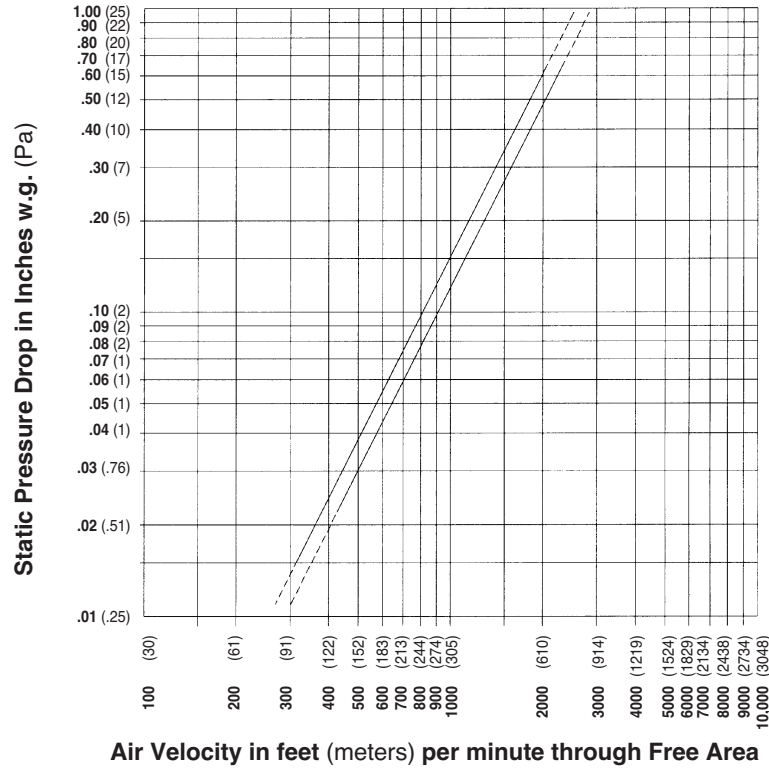


2 X 1 ASSEMBLY FIELD SPLICE DETAIL



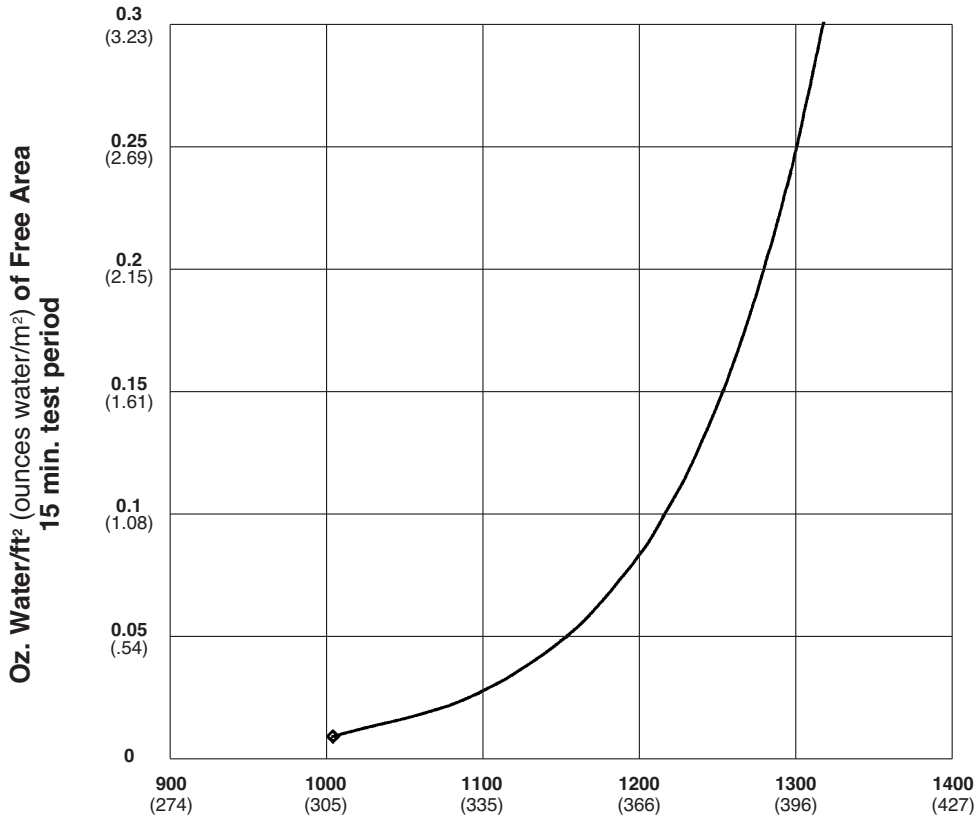
1. SPLICE DETAIL PLAN

PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)
Beginning point of water penetration at .01 oz./sq. ft. is 1023 fpm (312 m/min).



Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 6375DFL Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be UL Classified for wind resistant building components in accordance with ASTM E330-02 for ±50 psf windload. Louvers shall be stationary drainable type with drain gutters in each blade and downspouts in jambs and mullions. Louvers shall have a minimum of 57% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary drainable blades shall be contained within a 6" (152) frame. Louver components (heads, jambs, sills, blades, & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullion to 10 feet (3) and shall incorporate structural supports required to withstand a wind load of 50 lbs. per sq. ft. (.96kPa)

Louvers shall be Reliable Model 6375DFL extruded 6063T5 aluminum alloy construction as follows:

- Frame: 6" (152) deep, .081" (2.1) wall thickness
- Blades: .081" (2.1) wall thickness. Drainable blades are positioned at 37¹/₂° angle and spaced approximately 5²⁹/₃₂" (150) center to center.
- Screen: 5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data bearing: a) AMCA Certified Ratings Seal for Air Performance & Water Penetration and b) UL classification information and file number must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

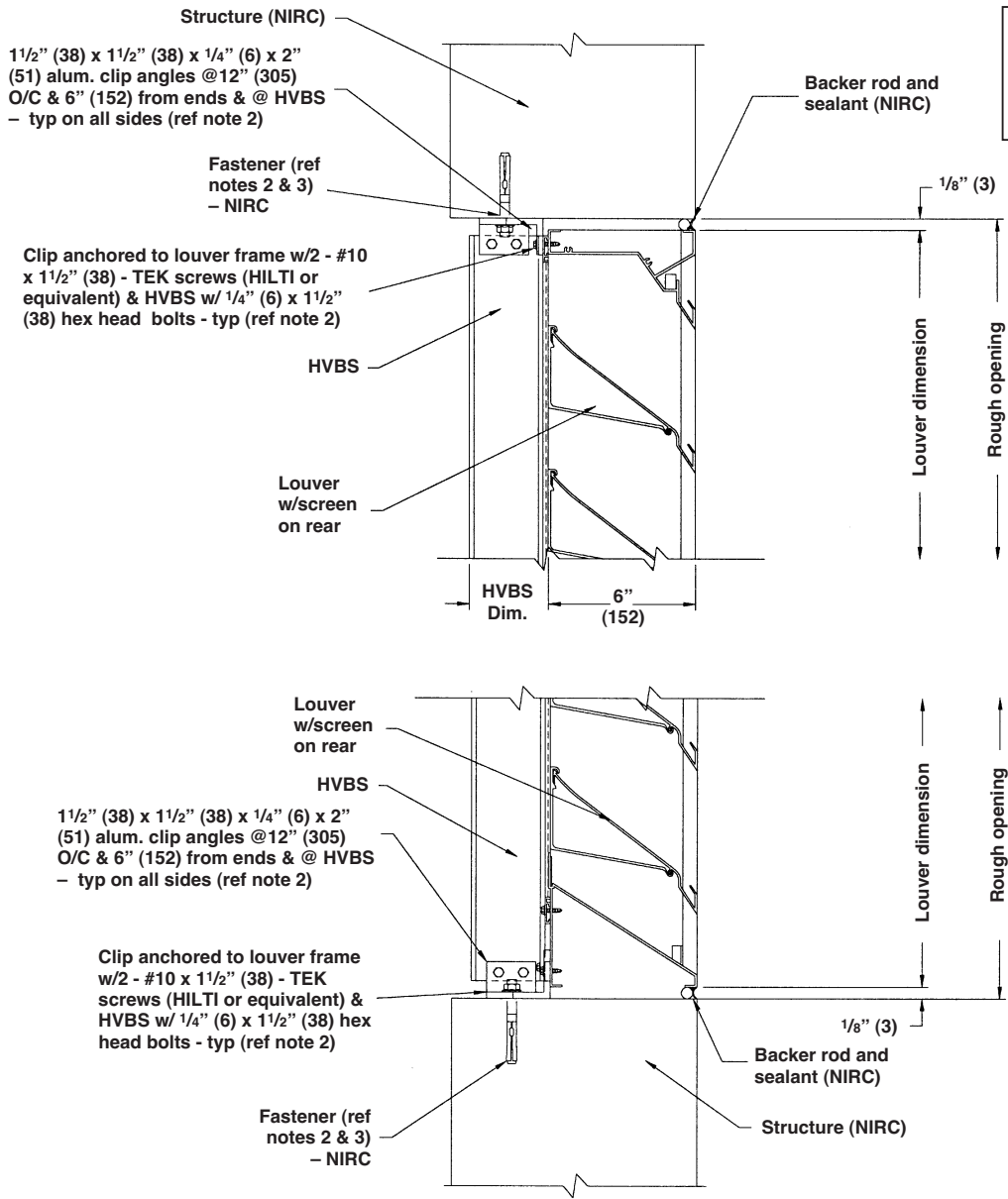
FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 6375DFL.
Width – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.31	0.49	0.67	0.86	1.04	1.22	1.41	1.59	1.77	1.96	2.14	2.32	2.51	2.69	2.88	3.06	3.25	3.43	3.61
0.30	0.03	0.05	0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.20	0.22	0.23	0.25	0.27	0.28	0.30	0.32	0.34
18	0.58	0.93	1.28	1.63	1.98	2.32	2.68	3.03	3.37	3.73	4.08	4.42	4.77	5.13	5.48	5.82	6.18	6.52	6.87
0.46	0.05	0.09	0.12	0.15	0.18	0.22	0.25	0.28	0.31	0.35	0.38	0.41	0.44	0.48	0.51	0.54	0.57	0.61	0.64
24	0.86	1.38	1.89	2.40	2.92	3.43	3.96	4.47	4.98	5.50	6.02	6.53	7.05	7.57	8.09	8.60	9.12	9.63	10.15
0.61	0.08	0.13	0.18	0.22	0.27	0.32	0.37	0.42	0.46	0.51	0.56	0.61	0.66	0.70	0.75	0.80	0.85	0.89	0.94
30	1.14	1.82	2.50	3.18	3.87	4.54	5.24	5.92	6.59	7.28	7.97	8.64	9.33	10.01	10.70	11.37	12.06	12.74	13.42
0.76	0.11	0.17	0.23	0.30	0.36	0.42	0.49	0.55	0.61	0.68	0.74	0.80	0.87	0.93	0.99	1.06	1.12	1.18	1.25
36	1.41	2.26	3.11	3.95	4.80	5.64	6.52	7.35	8.18	9.04	9.89	10.73	11.58	12.44	13.29	14.13	14.98	15.82	16.67
0.91	0.13	0.21	0.29	0.37	0.45	0.52	0.61	0.68	0.76	0.84	0.92	1.00	1.08	1.16	1.24	1.31	1.39	1.47	1.55
42	1.69	2.70	3.72	4.72	5.75	6.74	7.79	8.79	9.79	10.81	11.83	12.83	13.86	14.88	15.89	16.90	17.92	18.92	19.94
1.07	0.16	0.25	0.35	0.44	0.53	0.63	0.72	0.82	0.91	1.00	1.10	1.19	1.29	1.38	1.48	1.57	1.67	1.76	1.85
48	1.97	3.15	4.33	5.50	6.69	7.86	9.08	10.24	11.40	12.59	13.78	14.95	16.14	17.33	18.51	19.68	20.87	22.04	23.23
1.22	0.18	0.29	0.40	0.51	0.62	0.73	0.84	0.95	1.06	1.17	1.28	1.39	1.50	1.61	1.72	1.83	1.94	2.05	2.16
54	2.24	3.59	4.94	6.27	7.63	8.96	10.35	11.67	13.00	14.35	15.71	17.04	18.40	19.75	21.10	22.44	23.79	25.12	26.48
1.37	0.21	0.33	0.46	0.58	0.71	0.83	0.96	1.08	1.21	1.33	1.46	1.58	1.71	1.84	1.96	2.09	2.21	2.33	2.46
60	2.52	4.03	5.55	7.05	8.57	10.06	11.62	13.12	14.60	16.13	17.65	19.14	20.67	22.19	23.71	25.21	26.73	28.22	29.75
1.52	0.23	0.37	0.52	0.66	0.80	0.93	1.08	1.22	1.36	1.50	1.64	1.78	1.92	2.06	2.20	2.34	2.48	2.62	2.76
66	2.80	4.47	6.16	7.82	9.51	11.17	12.90	14.56	16.20	17.90	19.59	21.24	22.94	24.63	26.31	27.98	29.67	31.32	33.01
1.68	0.26	0.42	0.57	0.73	0.88	1.04	1.20	1.35	1.51	1.66	1.82	1.97	2.13	2.29	2.44	2.60	2.76	2.91	3.07
72	3.08	4.92	6.76	8.59	10.45	12.27	14.18	16.00	17.81	19.67	21.53	23.35	25.21	27.07	28.91	30.74	32.60	34.42	36.28
1.83	0.29	0.46	0.63	0.80	0.97	1.14	1.32	1.49	1.66	1.83	2.00	2.17	2.34	2.52	2.69	2.86	3.03	3.20	3.37
78	3.35	5.36	7.37	9.37	11.40	13.38	15.45	17.44	19.41	21.44	23.47	25.45	27.48	29.51	31.52	33.51	35.54	37.52	39.55
1.98	0.31	0.50	0.68	0.87	1.06	1.24	1.44	1.61	1.80	1.99	2.18	2.37	2.55	2.74	2.93	3.11	3.30	3.49	3.68
84	3.63	5.80	7.98	10.14	12.34	14.48	16.73	18.88	21.02	23.21	25.41	27.55	29.75	31.94	34.12	36.28	38.48	40.62	42.82
2.13	0.34	0.54	0.74	0.94	1.15	1.35	1.55	1.75	1.95	2.16	2.36	2.56	2.76	2.97	3.17	3.37	3.58	3.77	3.98
90	3.91	6.25	8.59	10.92	13.28	15.59	18.01	20.32	22.62	24.98	27.35	29.65	32.02	34.38	36.73	39.05	41.41	43.72	46.09
2.29	0.36	0.58	0.80	1.01	1.23	1.45	1.67	1.89	2.10	2.32	2.54	2.76	2.98	3.19	3.41	3.63	3.85	4.06	4.28

Height – Inches and Meters

INSTALLATION DETAILS



Dimensions shown in parentheses () indicate millimeters.

6375DFL LOUVER INSTALLATION DETAIL

JAMB SIMILAR

NOTES:

1. The installation shown herein must be followed strictly to ensure compliance with UL and Florida listings.
2. Aluminum clip angles & #10 TEK screws are available from Reliable at additional cost. Anchors for connection to structure are not provided by Reliable.
3. One anchor into the substrate is required at every clip angle (both frame and HVBS clips). Anchor must be at least 5/16" in diameter.
4. Reliable is not responsible for determining the suitability of the structure.
5. Shims may be required to achieve consistent clearance between louver and opening on all sides. Shims not provided by Reliable.
6. HVBS = Hidden Vertical Blade Support.
7. NIRC = Not in Reliable's Contract.

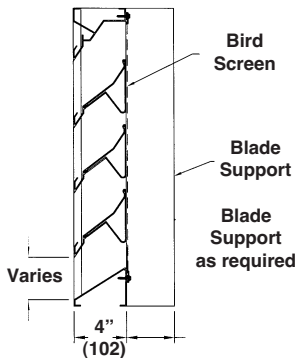
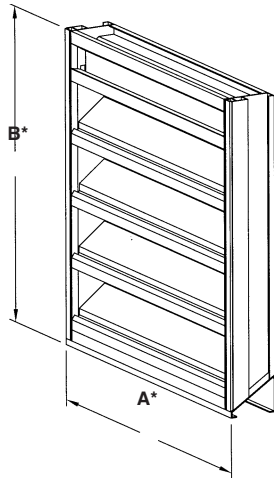


4375DC DRAINABLE STATIONARY LOUVER

MIAMI-DADE APPROVED

MIAMI-DADE COUNTY, FLORIDA NOTICE OF ACCEPTANCE NUMBER: 08-1202.04 (Expires 1/3/13)

Florida Product Approval #FL12900



STANDARD CONSTRUCTION

FRAME

4" (102) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Downspouts and caulking slots provided.

BLADES

6063T5 extruded aluminum, .081" (2.1) nominal wall thickness. Drainable blades are positioned at 37¹/₂° angle and spaced approximately 5³/₃₂" (129) center to center.

SCREEN

5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH

Mill.

APPROXIMATE SHIPPING WEIGHT

6 lbs./ft.² (29.3 kg/m²).

MINIMUM SIZE

12"w x 12"h (305 x 305).

MAXIMUM SIZE

79¹⁵/₁₆"w x 120"h (2031 x 3048) factory assembly, unlimited width x 120"h (3048) field assembly. Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

INSTALLATION

The 4375DC must be installed per the appropriate installation detail. Reference the appropriate separate installation instruction sheets.

BLADE SUPPORTS

Factory installed on louvers over 28" (635) wide. Support depth is 3" (76) on louvers 60" (1524) tall and under. Support depth is 6" (152) on louvers over 60" (1524) tall.

RECYCLED CONTENT

10% Post Consumer.
30% Pre Consumer, Post Industrial.

FEATURES

- Approved for use in open structures with provisions to manage weather infiltration (wet rooms).
- Maximum windload ±130 PSF (6.22 kPa).
- High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
- Drain gutter in each blade minimizes water cascade between blades.
- 49% Free Area in 48" x 48" (1.2 x 1.2) size.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- Aluminum construction for low maintenance and high resistance to corrosion.
- All welded construction.

VARIATIONS

Variations to the basic design of these louvers are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Optional finishes available at additional cost: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

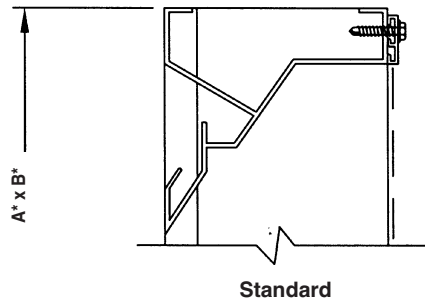
Consult Reliable for other special requirements.

Dimensions in inches, parenthesis () indicate millimeters.

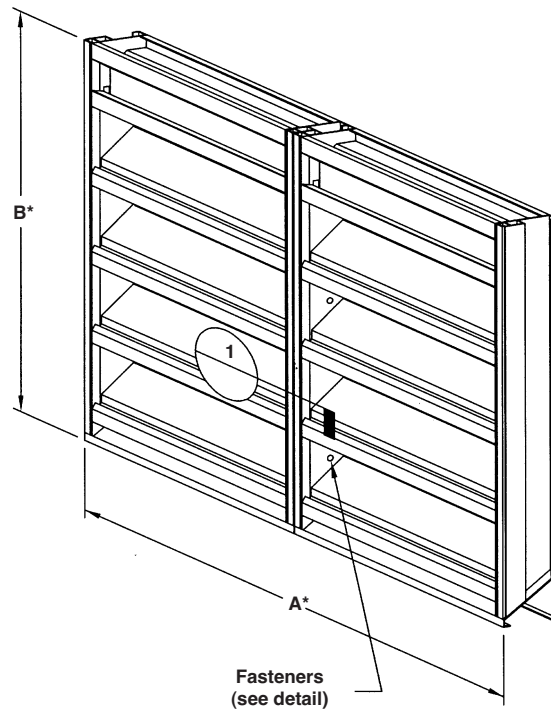
*Units furnished 1/2" (13) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	WALL DEPTH	VARIATIONS
		A*-WIDE	B*-HIGH			
PROJECT				LOCATION		
ARCH./ENGR.				CONTRACTOR		
REPRESENTATIVE				DATE		

FRAME CONSTRUCTION

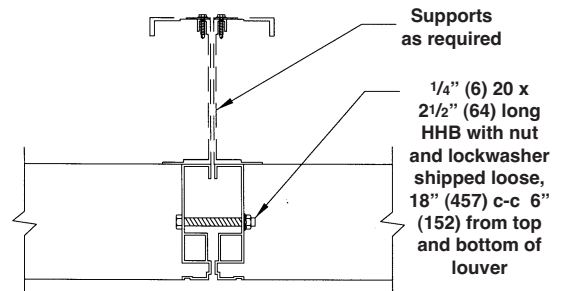


MULTI SECTION FIELD SPLICE DETAIL



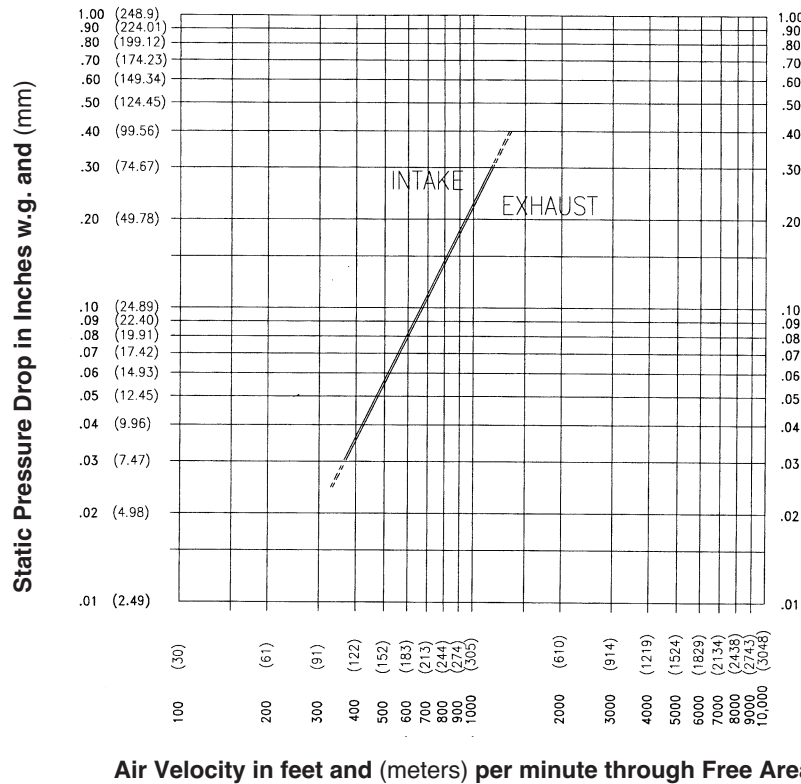
GENERAL NOTES:

1. Reference separate Installation Instruction sheets for installation details. Each frame style has a distinct installation method that must be compiled for Miami-Dade and Florida Approval. It is the responsibility of the installing contractor to properly install the louvers per the appropriate detail.
2. On special orders, Reliable may provide submittal and/or shop drawings. Reference these drawings for additional installation information.
3. Louvers may be provided with hidden vertical blade supports (HVBS) that increase overall installation depth by several inches. Consult Reliable Louver Engineering for exact HVBS depth.
4. Louvers wider than the maximum single section width will be shipped in multiple sections and will require field assembly.



1. SPLICE DETAIL PLAN

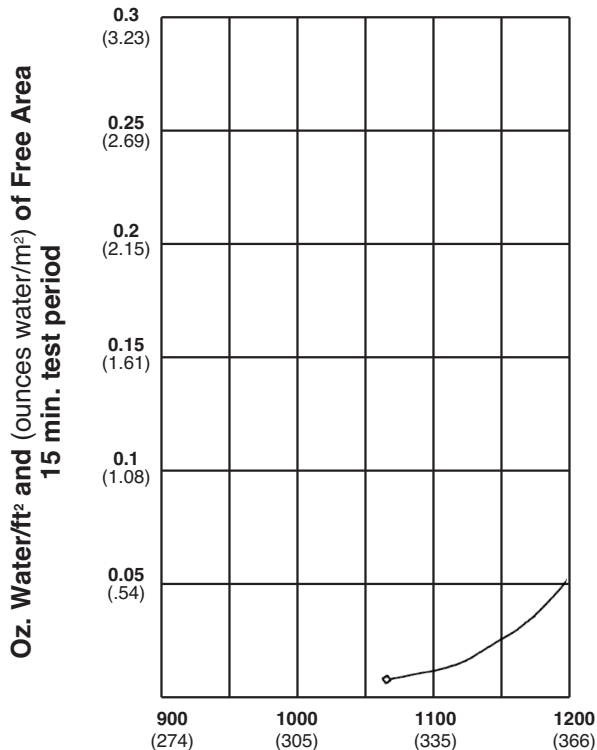
PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1055 fpm (322 m/min).



Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 4375DC Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

Free Area Velocity in feet (meters) per minute
Standard air .075 lb/ft³



MIAMI-DADE COUNTY HURRICANE STRUCTURAL TEST PERFORMANCE

SIZES TESTED: 240¹/₁₆"w x 120" h (6098 x 3048) and 240¹/₁₆"w x 60" h (6098 x 1524)

TAS 201-94 LARGE MISSILE IMPACT TEST

MISSILE TYPE	VELOCITY IN FT/SEC (M/SEC)	IMPACTS
9 lb (4kg) Southern Pine 2" x 4" (51 x 102)	50 (15.24)	7

TAS 202-94 UNIFORM STATIC AIR PRESSURE TEST

LOAD IN PSF (kPa)	LOAD DURATION	LOUVER RECOVERY
+111 (+5.3)	30 seconds	100%
-111 (-5.3)	30 seconds	100%
+148 (+7.1)	30 seconds	100%
-148 (-7.1)	30 seconds	100%
+222 (+10.6)	30 seconds	100%
-222 (-10.6)	30 seconds	100%

TAS 203-94 CYCLIC WIND PRESSURE TEST

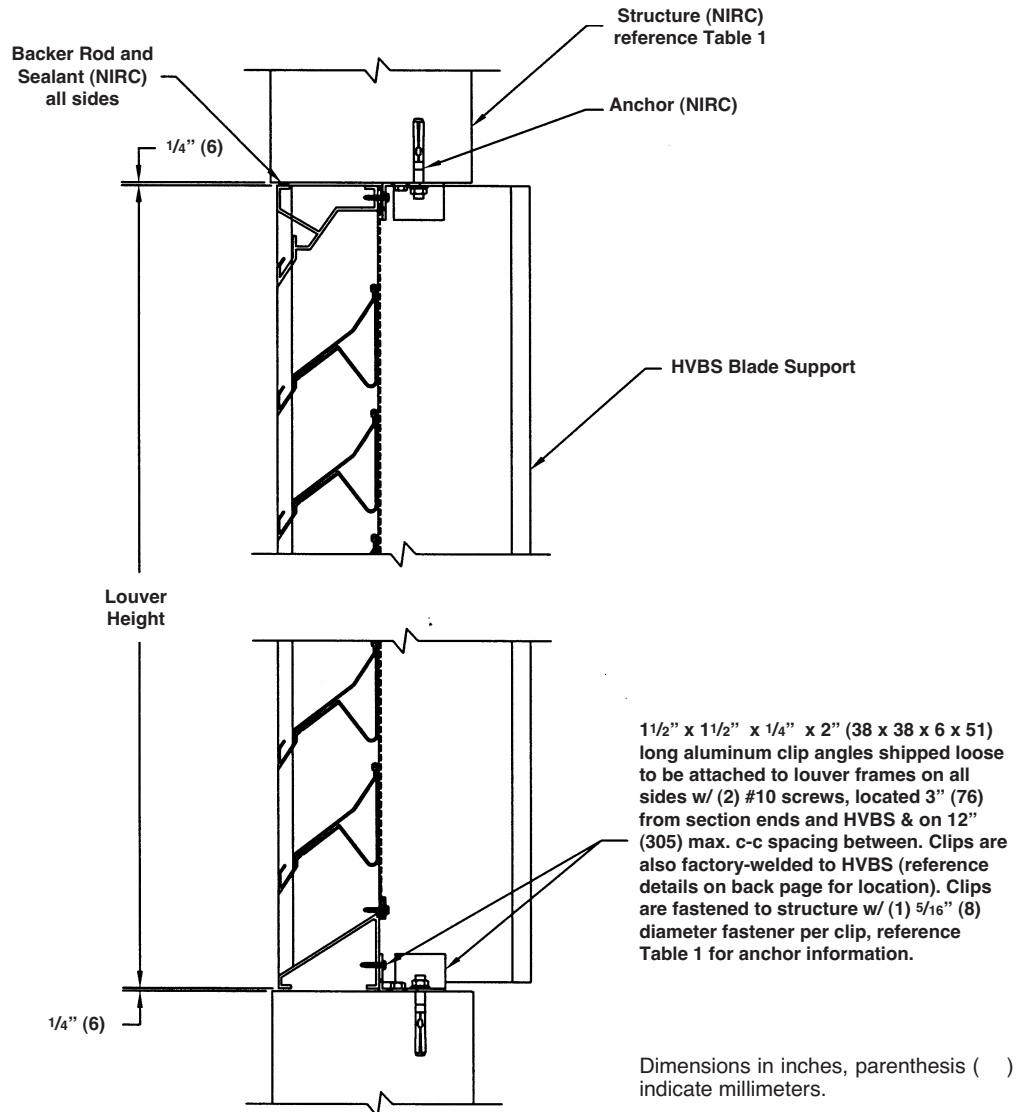
CYCLES	LOAD IN PSF (kPa)	LOAD DURATION CYCLE	LOUVER RECOVERY
600	+74 (+3.54)	1 to 3 seconds	100%
600	-74 (-3.54)	1 to 3 seconds	100%
70	+88.8 (+4.25)	1 to 3 seconds	100%
70	-88.8 (-4.25)	1 to 3 seconds	100%
1	+192.4 (+9.21)	1 to 3 seconds	100%
1	-192.4 (-9.21)	1 to 3 seconds	100%

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 4375DC.
Width – Inches and Meters

	12 0.30	18 0.46	24 0.61	30 0.76	36 0.91	42 1.07	48 1.22	54 1.37	60 1.52	66 1.68	72 1.83	78 1.98	80 2.03
12	0.16	0.36	0.57	0.78	0.99	1.20	1.41	1.62	1.82	2.03	2.24	2.45	2.52
0.30	0.01	0.03	0.05	0.04	0.09	0.11	0.13	0.15	0.17	0.19	0.21	0.23	0.23
18	0.28	0.65	1.02	1.39	1.76	2.13	2.50	2.87	3.24	3.62	3.99	4.36	4.48
0.46	0.03	0.06	0.09	0.13	0.16	0.20	0.23	0.27	0.30	0.34	0.37	0.41	0.42
24	0.40	0.93	1.47	2.00	2.53	3.07	3.60	4.13	4.67	5.20	5.73	5.60	5.78
0.61	0.04	0.09	0.14	0.19	0.24	0.29	0.33	0.38	0.43	0.48	0.53	0.52	0.54
30	0.52	1.22	1.91	2.61	3.30	4.00	4.70	5.39	6.09	6.78	7.48	7.30	7.54
0.76	0.05	0.11	0.18	0.24	0.31	0.37	0.44	0.50	0.57	0.63	0.70	0.68	0.70
36	0.62	1.44	2.27	3.09	3.92	4.74	5.57	6.40	7.22	8.05	8.87	9.70	9.97
0.91	0.06	0.13	0.21	0.29	0.36	0.44	0.52	0.59	0.67	0.75	0.83	0.90	0.93
42	0.74	1.73	2.72	3.70	4.69	5.68	6.67	7.65	8.64	9.63	10.62	11.60	11.93
1.07	0.07	0.16	0.25	0.34	0.44	0.53	0.62	0.71	0.80	0.90	0.99	1.08	1.11
48	0.86	2.01	3.16	4.31	5.46	6.61	7.76	8.91	10.06	11.21	12.36	13.51	13.90
1.22	0.08	0.19	0.29	0.40	0.51	0.61	0.72	0.83	0.94	1.04	1.15	1.26	1.29
54	0.98	2.30	3.61	4.92	6.23	7.55	8.86	10.17	11.48	12.80	14.11	15.42	15.86
1.37	0.09	0.21	0.34	0.46	0.58	0.70	0.82	0.95	1.07	1.19	1.31	1.43	1.47
60	1.11	2.58	4.06	5.53	7.01	8.48	9.96	11.43	12.90	14.38	15.85	17.33	17.82
1.52	0.10	0.24	0.38	0.51	0.65	0.79	0.93	1.06	1.20	1.34	1.47	1.61	1.66
66	1.20	2.81	4.41	6.02	7.62	9.23	10.83	12.43	14.04	15.64	17.25	18.85	19.39
1.68	0.11	0.26	0.41	0.56	0.71	0.86	1.01	1.16	1.31	1.45	1.60	1.75	1.80
72	1.33	3.09	4.86	6.63	8.39	10.16	11.93	13.69	15.46	17.23	18.99	20.76	21.35
1.83	0.12	0.29	0.45	0.62	0.78	0.94	1.11	1.27	1.44	1.60	1.77	1.93	1.99
78	1.45	3.38	5.31	7.23	9.16	11.09	13.02	14.95	16.88	18.81	20.74	22.67	23.31
1.98	0.13	0.31	0.49	0.67	0.85	1.03	1.21	1.39	1.57	1.75	1.93	2.11	2.17
84	1.57	3.66	5.75	7.84	9.94	12.03	14.12	16.21	18.30	20.39	22.49	24.58	25.27
2.13	0.15	0.34	0.53	0.73	0.92	1.12	1.31	1.51	1.70	1.90	2.09	2.29	2.35
90	1.69	3.94	6.20	8.45	10.71	12.96	15.21	17.47	19.72	21.98	24.23	26.49	27.24
2.29	0.16	0.37	0.58	0.79	1.00	1.21	1.41	1.62	1.83	2.04	2.25	2.46	2.53
96	1.81	4.23	6.65	9.06	11.48	13.89	16.31	18.73	21.14	23.56	25.98	28.39	29.20
2.44	0.17	0.39	0.62	0.84	1.07	1.29	1.52	1.74	1.97	2.19	2.42	2.64	2.72
102	1.91	4.46	7.00	9.55	12.0	14.64	17.19	19.73	22.28	24.82	27.37	29.92	30.76
2.59	0.18	0.41	0.65	0.89	1.12	1.36	1.60	1.84	2.07	2.31	2.55	2.78	2.86
108	2.03	4.74	7.45	10.16	12.87	15.57	18.28	20.99	23.70	26.41	29.12	31.82	32.73
2.74	0.19	0.44	0.69	0.94	1.20	1.45	1.70	1.95	2.20	2.46	2.71	2.96	3.04
114	2.15	5.02	7.89	10.77	13.64	16.51	19.38	22.25	25.12	27.99	30.86	33.73	34.69
2.90	0.20	0.47	0.73	1.00	1.27	1.54	1.80	2.07	2.34	2.60	2.87	3.14	3.23
120	2.27	5.31	8.34	11.37	14.41	17.44	20.47	23.51	26.54	29.57	32.61	35.64	36.65
3.05	0.21	0.49	0.78	1.06	1.34	1.62	1.90	2.19	2.47	2.75	3.03	3.31	3.41

INSTALLATION DETAILS

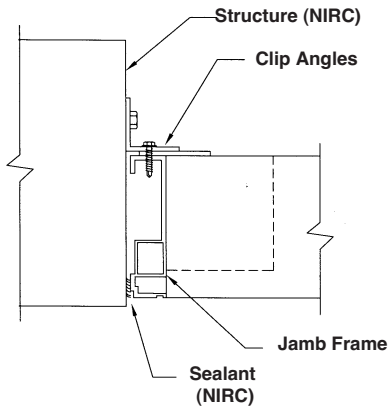


4375DC LOUVER INSTALLATION DETAIL

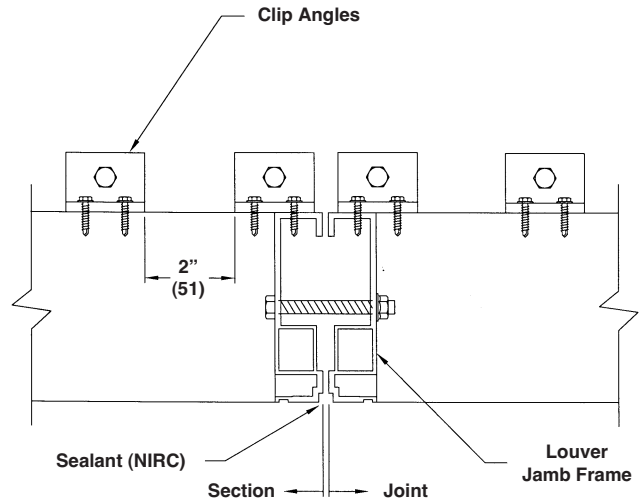
Refer to back page for Table 1 and other details

NOTES:

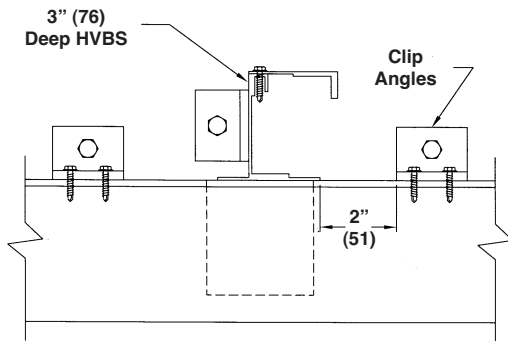
1. The installation shown herein must be followed strictly to ensure compliance with Miami-Dade and Florida Approvals.
2. Aluminum clip angles and #10 screws shown above are provided by Reliable. Anchors for connection to structure are not provided by Reliable.
3. One anchor into the substrate is required at every clip angle. Reference Table 1 for anchor information.
4. Reliable is not responsible for determining the suitability of the structure, or for gaining approval for non-compliant installations.
5. Shims may be required to achieve consistent clearance between louver and opening on all sides. Shims are not provided by Reliable.
6. Backer rod and sealant are not provided by Reliable.
7. HVBS = Hidden Vertical Blade Support.
8. NIRC = Not in Reliable's Contract.



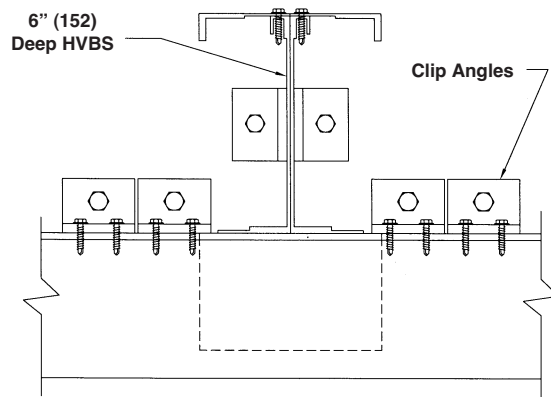
CONNECTION AT JAMB
Plan View, All Heights



CLIP ANGLE LOCATION AT SECTION JOINT
Plan View, 60" (1524) Tall & Under



CLIP ANGLE LOCATION AT 3" (76) HVBS
Plan View, 60" (1524) Tall & Under



CLIP ANGLE LOCATION AT 6" (152) HVBS
Plan View, Over 60" (1524) Tall

STRUCTURE	ANCHOR (By Others)	INSTRUCTIONS
Wood	5/16" (8) Dia. Lag Bolt	3" (76) embed, 4 1/2" (115) min. edge
Concrete 3000 Min. PSI	5/16" (8) Dia. Tapcon (ITW or equal)	2 1/2" (64) embed, 5" (127) min. edge
Concrete 2000 Min. PSI	5/16" (8) Dia. Expansion Anchor (Hilti or equal)	1 3/4" (44) embed, 4" (102) min. edge
Grout Filled Block	5/16" (8) Dia. Tapcon (ITW or equal)	1 3/4" (44) embed, 4" (102) min. edge
Steel Framing (12 Ga. Min.)	5/16" (8) Dia. A307 Bolt or Self-Tapping Screw	1.5 x fastener dia. min. edge

NOTES:

1. All fasteners must be installed per the manufacturer's Miami-Dade/Florida approved installation instructions.
2. Dimensions in inches, parenthesis () indicate millimeters.



6375DC DRAINABLE STATIONARY LOUVER

MIAMI-DADE APPROVED

MIAMI-DADE COUNTY, FLORIDA NOTICE OF ACCEPTANCE NUMBER: 08-1110.12 (Renewal Pending)

Florida Product Approval #FL12900

STANDARD CONSTRUCTION

FRAME

Universal Flange Frame with front flange: 6" (152) deep, .081" (2.1) nominal wall thickness. Downspouts and caulking surfaces provided.

Optional Box Frame: Same material and gauges as above without front flange. For masonry walls only.

Optional Sleeved Box Frame (for louver/ damper combination units only): box frame with factory installed .125" thick aluminum sleeve around perimeter. Sleeve depth: 33" (838). Reference back page for frame details.

BLADES

6063T5 extruded aluminum. 081" (2.1) nominal wall thickness. Drainable blades are positioned at 37 1/2° angle and spaced approximately 5 29/32" (150) center to center.

SCREEN

3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame.

FINISH

Mill.

APPROXIMATE SHIPPING WEIGHT

14 lbs./ft.² (68 kg per m²)

MINIMUM SIZE

12"w x 12"h (305 x 305).

MAXIMUM SIZE

Universal Installation Frame: 84"w x 120"h (1234 x 3048) factory assembly, unlimited width x 120"h (3048) field assembly.

Optional Box Frame (for masonry walls only): 47 1/4"w x 71 1/4"h (1200 x 1810) factory and field assembly.

Optional Sleeved Box Frame (for louver/ damper combination): 78"w x 96"h (1981 x 2438) factory assembly, 156" x 96" (3962 x 2438) field assembly.

INSTALLATION

The 6375DC must be installed per the appropriate Installation Detail. Reference the appropriate separate Installation Instruction Sheets.

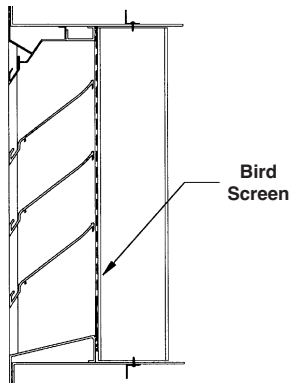
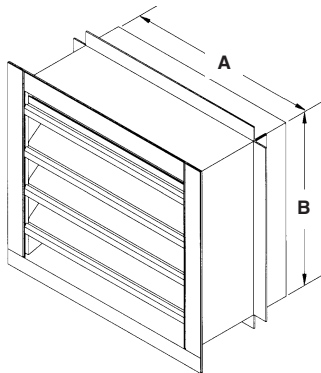
Consult Reliable for additional information.

FEATURES

- Approved for use in open structures with provisions to manage weather infiltration (wet rooms).
- Maximum windload ±148 PSF (7.08 kPa).
- Universal Flange Frame allows installation in walls up to 10" deep (254) and in any wall material. Also available for walls up to 15" (381) deep with UFF15 frame.
- No additional installation angles or fasteners are required with the Universal Installation Frame. Fasteners penetrating the wall are not utilized.
- Approved for use in closed structures with provisions to manage weather infiltration when combined with optional 8RAFBCD7 control damper.
- Optional Box Frame construction available for use in masonry walls only. Maximum windload for Box Frame construction is ±138 psf.
- Optional Sleeved Box Frame construction available for 6375DC/8RAFBCD7 combination units. Optional frame construction available for 6375DC/8RAFBCD7 combination units. Dampers are shipped separately for field installation in sleeves.
- 57% Free Area.
- Published performance ratings based on testing in accordance with AMCA Publication 500-L.
- Optional finishes available at additional cost: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

Louvers ordered as Actual Size will not be undersized. Order acknowledgements for actual size orders or orders with engineering drawings may show actual louver frame dimensions less sleeve thickness.



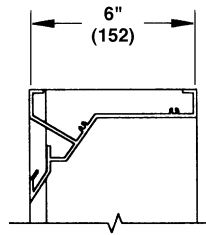
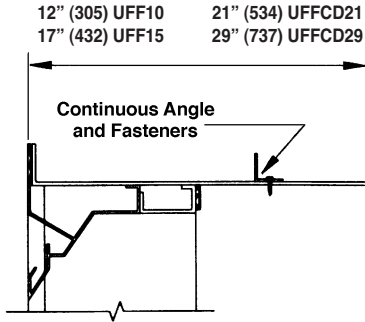
*Please provide Rough Opening Dimensions for A & B dimensions.

Unless ordered as actual size, louvers will be provided smaller than the A & B dimensions provided.

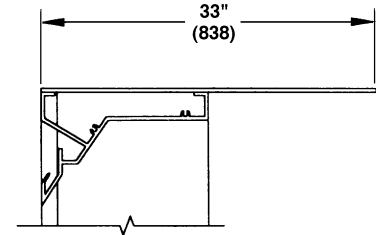
Universal Flange Frame louvers will be undersized 1/2" (12) from the rough opening dimensions provided. Louvers with the optional Box Frame will be undersized 1" (25) from the rough opening dimensions provided. Louvers with the optional Sleeved Box Frame will be undersized 1 3/4" (45) in width and 7/8" (22) in height from the rough opening dimensions provided.

Dimensions in inches, parenthesis () indicate millimeters.

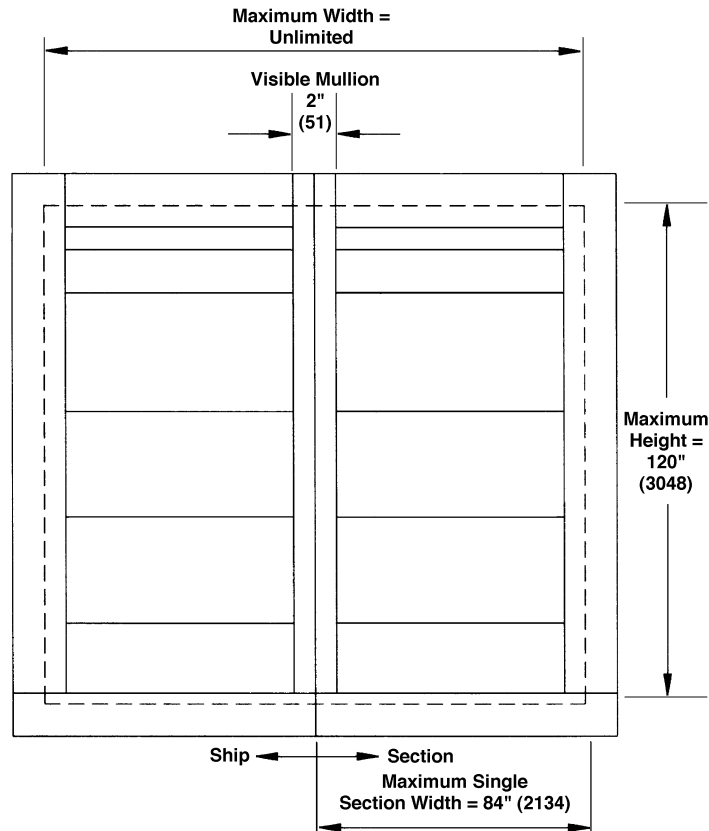
TAG	QTY.	SIZE		FRAME	WALL DEPTH	VARIATIONS
		A*-WIDE	B*-HIGH			
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE		

FRAME CONSTRUCTION

Box Frame (BX)
See general note #4.



Sleeved Box (SB)

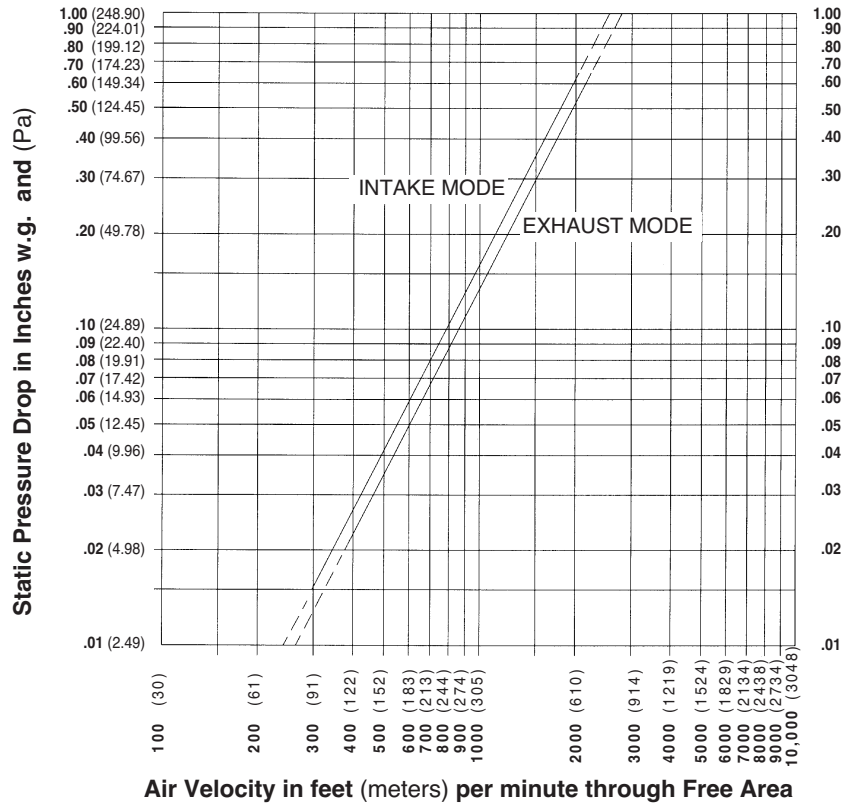
UNIVERSAL FLANGE FRAME CONSTRUCTION

FRONT ELEVATION OF 6375DC LOUVER W/UFF

GENERAL NOTES:

1. Reference separate Installation Instruction sheets for installation details. Each frame style has a distinct installation method that must be compiled with for Miami-Dade Approval. It is the responsibility of the installing contractor to properly install the louvers per the appropriate detail.
2. On special orders, Reliable may provide submittal and/or shop drawings. Reference these drawings for additional installation information.
3. Continuous angles and fasteners supplied with UFF louvers are shipped loose.
4. Louvers may be provided with hidden vertical blade supports (HVBS) that increase overall installation depth by several inches. Consult Reliable Louver Engineering for exact HVBS depth.
5. Louvers wider than the maximum single section width will be shipped in multiple sections and will require field assembly.

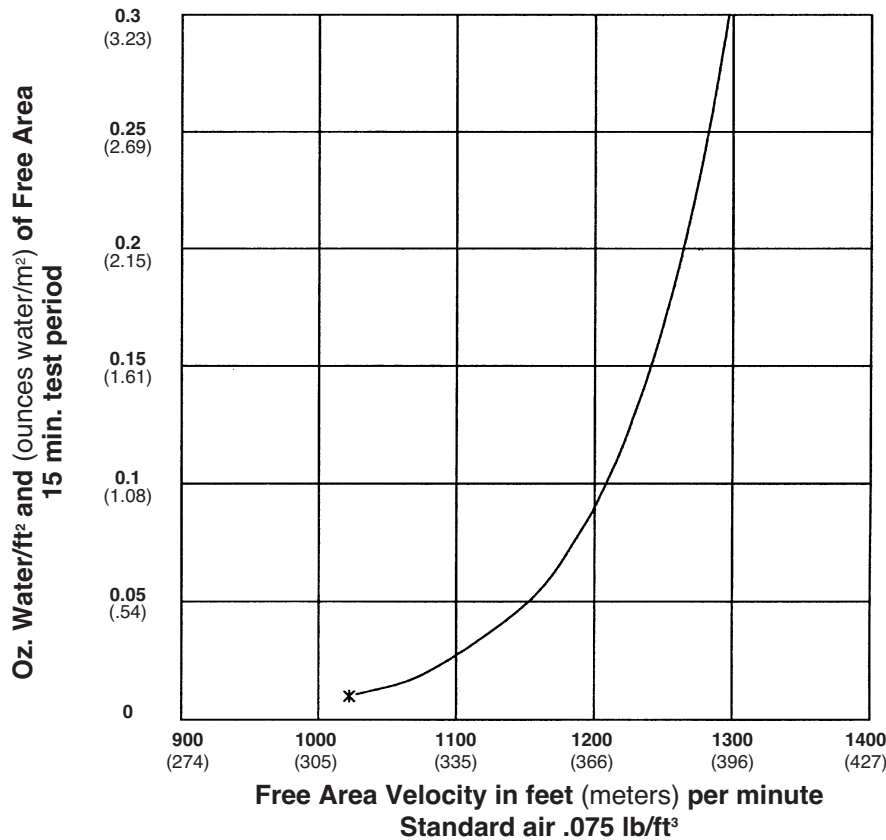
PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1023 fpm (312 m/min).



Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 6375DC Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.



MIAMI-DADE COUNTY HURRICANE STRUCTURAL TEST PERFORMANCE

SIZE TESTED: 251³/₄ W X 119³/₄ H (6394 X 3042)

PA 201-94 LARGE MISSILE IMPACT TEST (LOUVER ONLY):

MISSILE TYPE	VELOCITY IN FT/SEC (M/SEC)	IMPACTS
9 lb (4kg) Southern Pine 2" x 4" (51 x 102)	50 (15.24)	7

PA 202-94 UNIFORM STATIC AIR PRESSURE TEST (LOUVER ONLY)

LOAD IN PSF (kPA)	LOAD DURATION	LOUVER/DAMPER RECOVERY
+111 (+5.3)	30 seconds	100%
-111 (-5.3)	30 seconds	100%
+148 (+7.1)	30 seconds	100%
-148 (-7.1)	30 seconds	100%
+222 (+10.6)	30 seconds	100%
-222 (-10.6)	30 seconds	100%

PA 203-94 CYCLIC WIND PRESSURE TEST (LOUVER ONLY)

CYCLES	LOAD IN PSF (kPA)	LOAD DURATION CYCLE	LOUVER RECOVERY
600	+74 (+3.54)	1 to 3 seconds	100%
600	-74 (-3.54)	1 to 3 seconds	100%
70	+88.8 (+4.25)	1 to 3 seconds	100%
70	-88.8 (-4.25)	1 to 3 seconds	100%
1	+192.4 (+9.21)	1 to 3 seconds	100%
1	-192.4 (-9.21)	1 to 3 seconds	100%

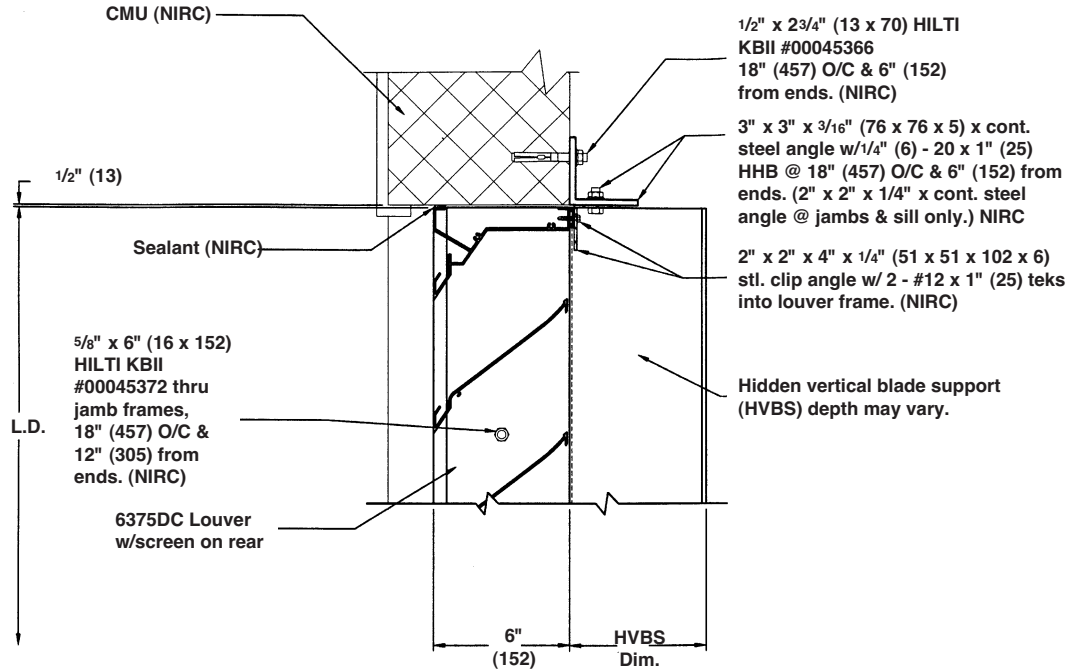
FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 6375DC.
Width – Inches and Meters

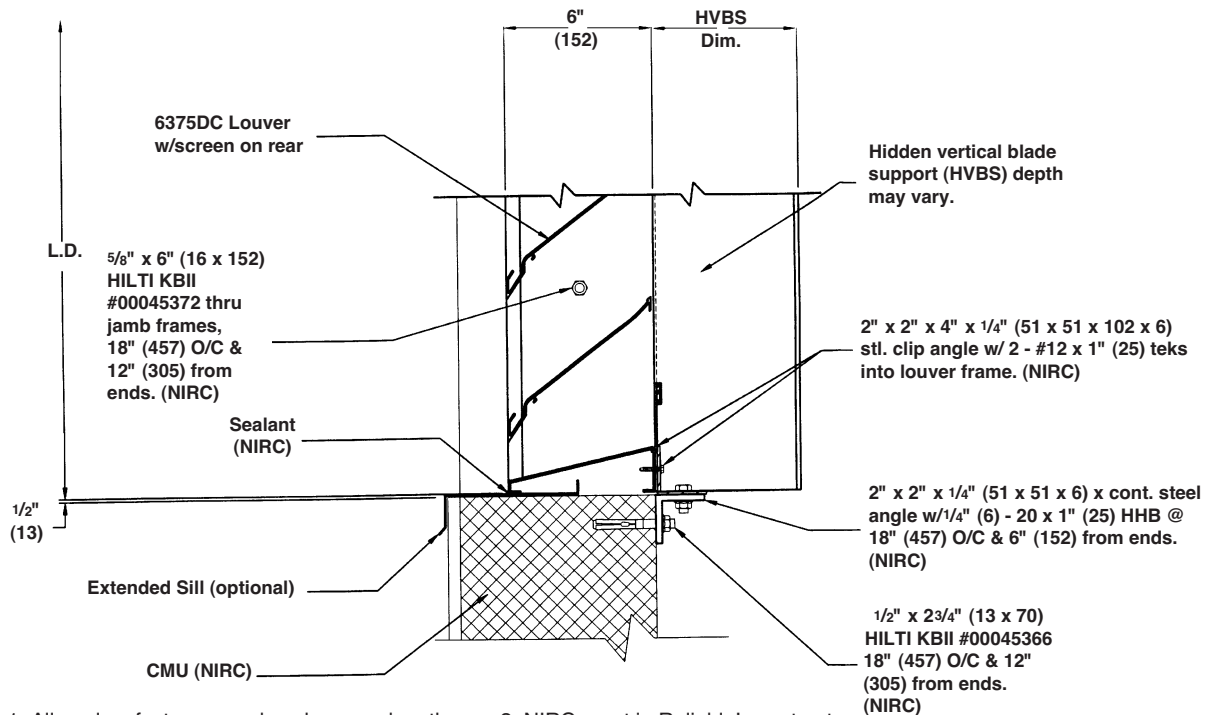
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.31	0.49	0.67	0.86	1.04	1.22	1.41	1.59	1.77	1.96	2.14	2.32	2.51	2.69	2.88	3.06	3.25	3.43	3.61
0.30	0.03	0.05	0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.20	0.22	0.23	0.25	0.27	0.28	0.30	0.32	0.34
18	0.58	0.93	1.28	1.63	1.98	2.32	2.68	3.03	3.37	3.73	4.08	4.42	4.77	5.13	5.48	5.82	6.18	6.52	6.87
0.46	0.05	0.09	0.12	0.15	0.18	0.22	0.25	0.28	0.31	0.35	0.38	0.41	0.44	0.48	0.51	0.54	0.57	0.61	0.64
24	0.86	1.38	1.89	2.40	2.92	3.43	3.96	4.47	4.98	5.50	6.02	6.53	7.05	7.57	8.09	8.60	9.12	9.63	10.15
0.61	0.08	0.13	0.18	0.22	0.27	0.32	0.37	0.42	0.46	0.51	0.56	0.61	0.66	0.70	0.75	0.80	0.85	0.89	0.94
30	1.14	1.82	2.50	3.18	3.87	4.54	5.24	5.92	6.59	7.28	7.97	8.64	9.33	10.01	10.70	11.37	12.06	12.74	13.42
0.76	0.11	0.17	0.23	0.30	0.36	0.42	0.49	0.55	0.61	0.68	0.74	0.80	0.87	0.93	0.99	1.06	1.12	1.18	1.25
36	1.41	2.26	3.11	3.95	4.80	5.64	6.52	7.35	8.18	9.04	9.89	10.73	11.58	12.44	13.29	14.13	14.98	15.82	16.67
0.91	0.13	0.21	0.29	0.37	0.45	0.52	0.61	0.68	0.76	0.84	0.92	1.00	1.08	1.16	1.24	1.31	1.39	1.47	1.55
42	1.69	2.70	3.72	4.72	5.75	6.74	7.79	8.79	9.79	10.81	11.83	12.83	13.86	14.88	15.89	16.90	17.92	18.92	19.94
1.07	0.16	0.25	0.35	0.44	0.53	0.63	0.72	0.82	0.91	1.00	1.10	1.19	1.29	1.38	1.48	1.57	1.67	1.76	1.85
48	1.97	3.15	4.33	5.50	6.69	7.86	9.08	10.24	11.40	12.59	13.78	14.95	16.14	17.33	18.51	19.68	20.87	22.04	23.23
1.22	0.18	0.29	0.40	0.51	0.62	0.73	0.84	0.95	1.06	1.17	1.28	1.39	1.50	1.61	1.72	1.83	1.94	2.05	2.16
54	2.24	3.59	4.94	6.27	7.63	8.96	10.35	11.67	13.00	14.35	15.71	17.04	18.40	19.75	21.10	22.44	23.79	25.12	26.48
1.37	0.21	0.33	0.46	0.58	0.71	0.83	0.96	1.08	1.21	1.33	1.46	1.58	1.71	1.84	1.96	2.09	2.21	2.33	2.46
60	2.52	4.03	5.55	7.05	8.57	10.06	11.62	13.12	14.60	16.13	17.65	19.14	20.67	22.19	23.71	25.21	26.73	28.22	29.75
1.52	0.23	0.37	0.52	0.66	0.80	0.93	1.08	1.22	1.36	1.50	1.64	1.78	1.92	2.06	2.20	2.34	2.48	2.62	2.76
66	2.80	4.47	6.16	7.82	9.51	11.17	12.90	14.56	16.20	17.90	19.59	21.24	22.94	24.63	26.31	27.98	29.67	31.32	33.01
1.68	0.26	0.42	0.57	0.73	0.88	1.04	1.20	1.35	1.51	1.66	1.82	1.97	2.13	2.29	2.44	2.60	2.76	2.91	3.07
72	3.08	4.92	6.76	8.59	10.45	12.27	14.18	16.00	17.81	19.67	21.53	23.35	25.21	27.07	28.91	30.74	32.60	34.42	36.28
1.83	0.29	0.46	0.63	0.80	0.97	1.14	1.32	1.49	1.66	1.83	2.00	2.17	2.34	2.52	2.69	2.86	3.03	3.20	3.37
78	3.35	5.36	7.37	9.37	11.40	13.38	15.45	17.44	19.41	21.44	23.47	25.45	27.48	29.51	31.52	33.51	35.54	37.52	39.55
1.98	0.31	0.50	0.68	0.87	1.06	1.24	1.44	1.61	1.80	1.99	2.18	2.37	2.55	2.74	2.93	3.11	3.30	3.49	3.68
84	3.63	5.80	7.98	10.14	12.34	14.48	16.73	18.88	21.02	23.21	25.41	27.55	29.75	31.94	34.12	36.28	38.48	40.62	42.82
2.13	0.34	0.54	0.74	0.94	1.15	1.35	1.55	1.75	1.95	2.16	2.36	2.56	2.76	2.97	3.17	3.37	3.58	3.77	3.98
90	3.91	6.25	8.59	10.92	13.28	15.59	18.01	20.32	22.62	24.98	27.35	29.65	32.02	34.38	36.73	39.05	41.41	43.72	46.09
2.29	0.36	0.58	0.80	1.01	1.23	1.45	1.67	1.89	2.10	2.32	2.54	2.76	2.98	3.19	3.41	3.63	3.85	4.06	4.28

INSTALLATION DETAILS

HEAD & JAMB DETAIL



SILL DETAIL



NOTES: 1. All angles, fasteners and anchors are by others. 2. NIRC = not in Reliable's contract.



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

445RBABL, 445RBABL125 AND 645RBABL ADJUSTABLE LOUVER EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

STANDARD CONSTRUCTION

FRAME

445RBABL - .081 (2.1) - 4" (102) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. 445RBABL125 - .125 (3.2) - 4" (102) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. 645RBABL - 6" (152) deep, 6063T5 extruded aluminum with .125" (3.2) nominal wall thickness. Caulking surfaces provided.

BLADES

6063T5 extruded aluminum. 445RBABL - .081" (2.1) nominal wall thickness. J-style blades are adjustable to 45° angle. 645RBABL - .081" (2.1) nominal wall thickness. J-style blades are adjustable to 70° angle. 445RBABL125 - .125 (3.2) nominal wall thickness. Blade spacing is approximately 4 3/4" (121) center to center.

SCREEN

3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

BEARINGS

Stainless steel sleeve pressed into frame.

AXLES

1/2" (13) plated steel hex.

FINISH

Mill.

LINKAGE

Concealed in frame.

ACTUATOR

Locking louver quadrant.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

445RBABL - 4 lbs. per sq. ft.

645RBABL - 4.5 lbs. per sq. ft.

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 60" x 96" (1524 x 2438). Louvers with optional blade and jamb seals shall be 48" x 96" (1219 x 2438). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

FEATURES

The 645RBABL and 445RBABL offer:

- Low torque operation and architecturally pleasing appearance with low leakage performance.
- Hexagonal shaped axles assure positive blade alignment and low operating torque.
- Concealed blade linkage is protected from weather exposure and reduces required installation depth.
- Blade and jamb seal options provide tight blade-to-blade and blade-to-frame closure, allowing less than 4 cfm per sq. ft. at 1/2" pressure differential.

VARIATIONS

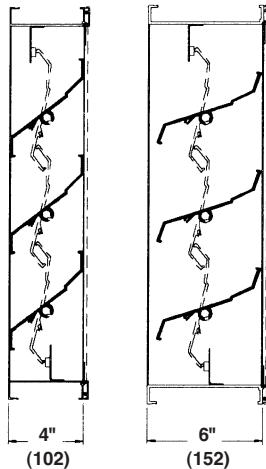
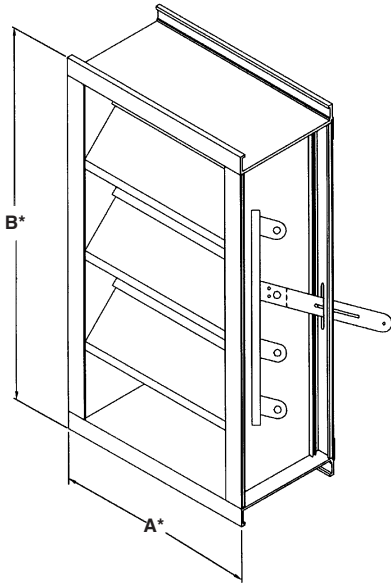
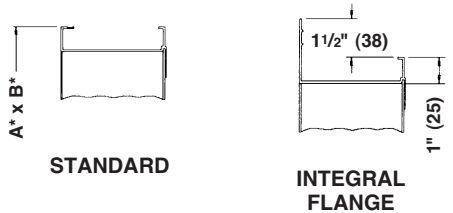
Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill
- Front or rear security bars
- A variety of bird and insect screens
- Filter racks
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize 50 & 70, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)
- Blade edge and jamb seals.
- Manual, electric or pneumatic actuators.

Available with .125" (3.2) construction throughout, refer to as **445RBABL** and **645RBABL**.

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



Dimensions in inches, parenthesis () indicate millimeters.

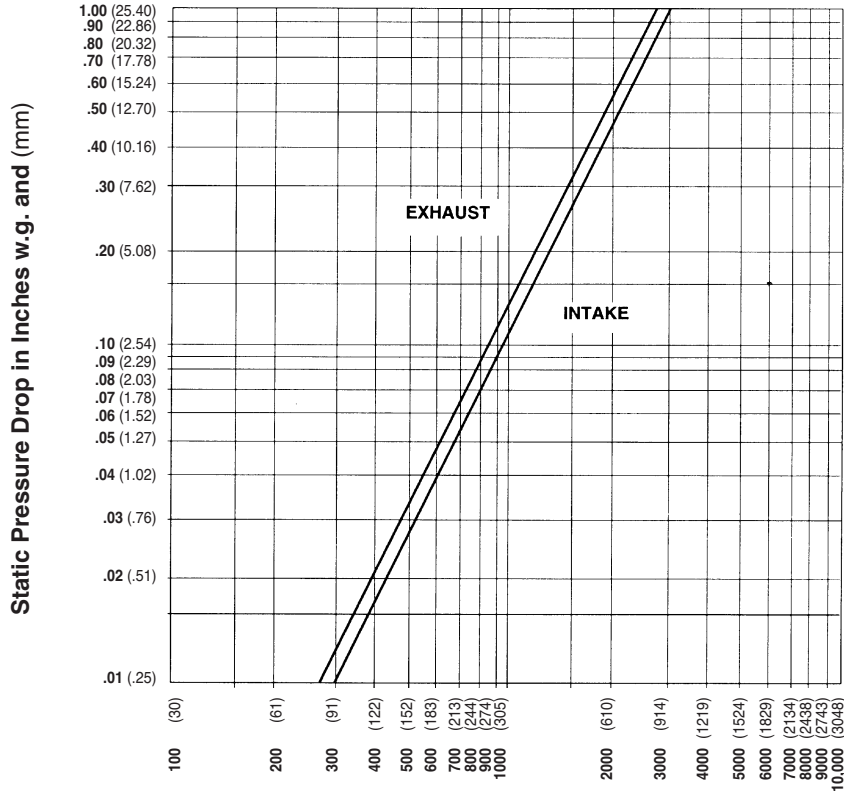
*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		



645RBABL
445RBABL
445RBABL125

445RBABL and 445RBABL125 PRESSURE DROP



Ratings do not include the effect of a bird screen.

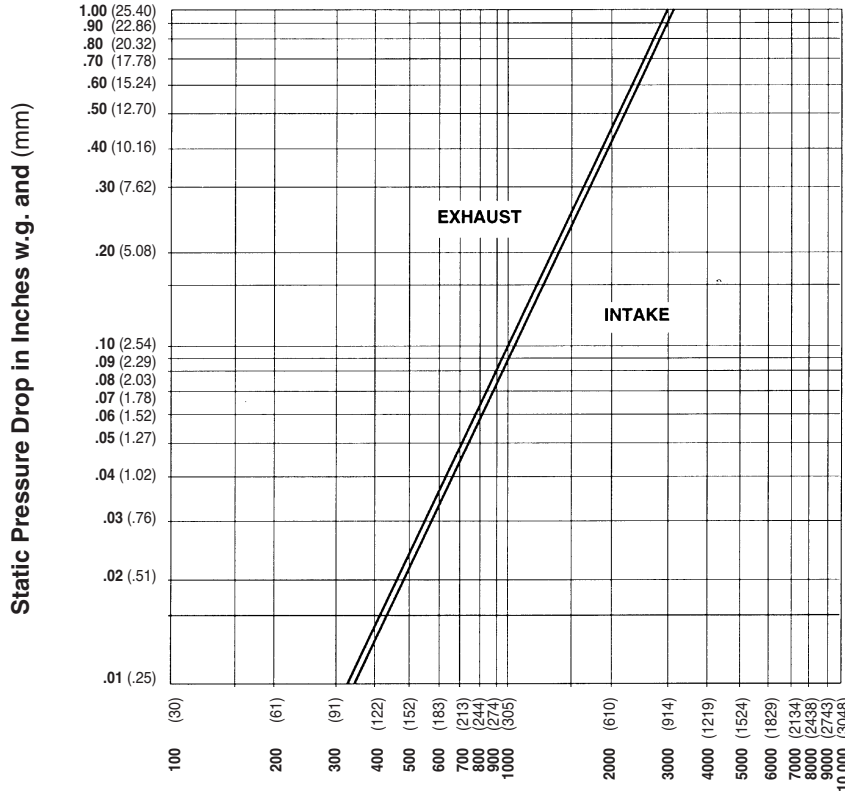
FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 445RBABL and 445RBABL125
 Width – Inches and Meters

Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
12	.30	.46	.61	.76	.91	1.07	1.22	1.37	1.52	1.68	1.83	1.96	2.13	2.29	2.44
18	.42	.68	.93	1.19	1.45	1.71	1.96	2.22	2.48	2.73	2.99	3.25	3.51	3.76	4.02
24	.55	.88	1.22	1.55	1.88	2.22	2.55	2.89	3.22	3.56	3.89	4.23	4.56	4.89	5.23
30	.76	1.23	1.69	2.16	2.62	3.09	3.55	4.02	4.48	4.95	5.41	5.88	6.34	6.81	7.27
36	.93	1.49	2.06	2.62	3.19	3.76	4.32	4.89	5.45	6.02	6.58	7.15	7.72	8.28	8.85
42	1.11	1.79	2.47	3.15	3.83	4.51	5.19	5.87	6.55	7.23	7.91	8.59	9.27	9.95	10.63
48	1.30	2.09	2.88	3.67	4.46	5.26	6.05	6.84	7.63	8.42	9.21	10.01	10.80	11.59	12.38
54	1.42	2.29	3.16	4.03	4.90	5.77	6.64	7.51	8.38	9.25	10.11	10.98	11.85	12.72	13.59
60	1.64	2.64	3.64	4.64	5.64	6.64	7.64	8.64	9.64	10.64	11.64	12.64	13.64	14.64	15.64
66	1.80	2.90	4.00	5.10	6.20	7.30	8.40	9.51	10.61	11.71	12.81	13.91	15.01	16.11	17.21
72	1.99	3.20	4.42	5.63	6.84	8.06	9.27	10.49	11.70	12.92	14.15	15.34	16.56	17.77	18.99
78	2.17	3.50	4.82	6.15	7.48	8.80	10.13	11.46	12.78	14.11	15.44	16.76	18.09	19.42	20.74
84	2.30	3.70	5.11	6.51	7.91	9.32	10.72	12.13	13.53	14.93	16.34	17.74	19.14	20.55	21.95
90	2.51	4.05	5.58	7.12	8.65	10.19	11.72	13.25	14.79	16.32	17.86	19.39	20.93	22.46	24.00
96	2.68	4.31	5.95	7.58	9.22	10.85	12.49	14.12	15.76	17.39	19.03	20.67	22.30	23.94	25.57
2.44	.25	.40	.55	.70	.86	1.01	1.16	1.31	1.46	1.62	1.77	1.92	2.07	2.22	2.38

645RBABL PRESSURE DROP



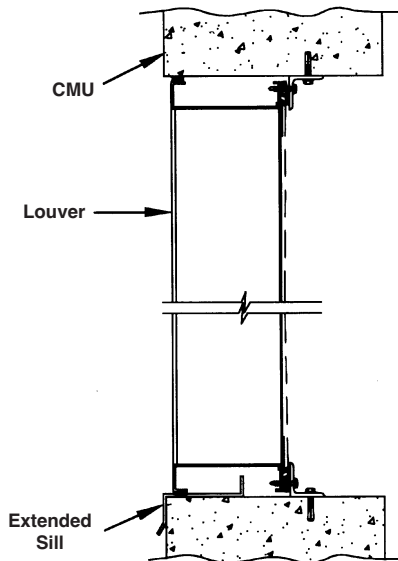
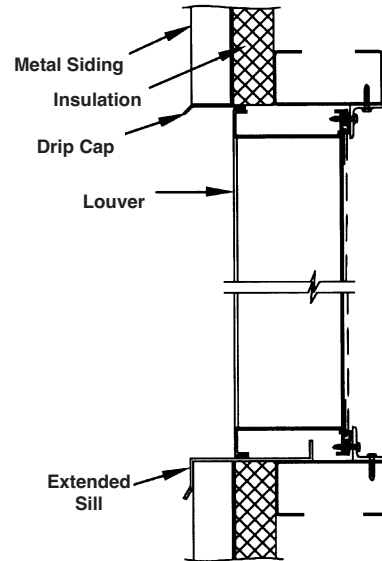
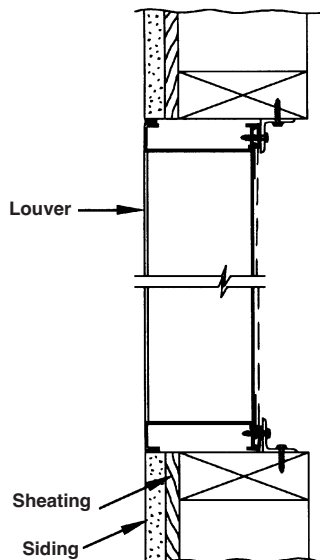
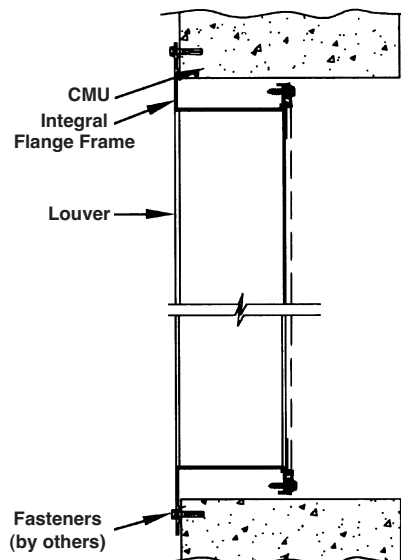
Ratings do not include the effect of a bird screen.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 645RBABL
Width – Inches and Meters

Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	.30	.46	.61	.76	.91	1.07	1.22	1.37	1.52	1.68	1.83	1.96	2.13	2.29	2.44
12	.32	.52	.72	.91	1.11	1.31	1.51	1.70	1.90	2.10	2.30	2.49	2.69	2.89	3.08
.30	.03	.05	.07	.08	.10	.12	.14	.16	.18	.21	.23	.25	.27	.29	.31
18	.59	.95	1.32	1.68	2.04	2.40	2.77	3.14	3.49	3.85	4.21	4.58	4.94	5.30	5.66
.46	.06	.09	.12	.16	.19	.22	.26	.29	.32	.36	.39	.43	.46	.49	.53
24	.81	1.30	1.79	2.28	2.77	3.26	3.76	4.25	4.74	5.23	5.72	6.22	6.71	7.20	7.69
.61	.07	.12	.17	.21	.26	.30	.35	.39	.44	.49	.53	.58	.62	.67	.71
30	1.11	1.78	2.46	3.13	3.81	4.48	5.16	5.83	6.51	7.18	7.86	8.53	9.21	9.88	10.56
.76	.10	.17	.23	.29	.35	.42	.48	.54	.60	.67	.73	.79	.86	.92	.98
36	1.36	2.18	3.01	3.84	4.67	5.50	6.33	7.15	7.98	8.81	9.64	10.47	11.30	12.12	12.95
.91	.13	.20	.28	.36	.43	.51	.59	.66	.74	.82	.90	.97	1.05	1.13	1.20
42	1.71	2.76	3.81	4.85	5.90	6.95	8.00	9.04	10.09	11.14	12.18	13.23	14.28	15.33	16.37
1.07	.16	.26	.35	.45	.55	.65	.74	.84	.94	1.03	1.13	1.23	1.33	1.42	1.52
48	1.98	3.20	4.41	5.62	6.83	8.04	9.25	10.47	11.68	12.89	14.10	15.31	16.53	17.74	18.95
1.22	.18	.30	.41	.52	.63	.75	.86	.97	1.08	1.20	1.31	1.42	1.54	1.65	1.76
54	2.20	3.54	4.88	6.22	7.56	8.90	10.25	11.59	12.93	14.27	15.61	16.95	18.30	19.64	20.98
1.37	.20	.33	.45	.58	.70	.83	.95	1.08	1.20	1.33	1.45	1.58	1.70	1.82	1.95
60	2.50	4.02	5.55	7.07	8.60	10.12	11.65	13.17	14.70	16.22	17.75	19.27	20.80	22.32	23.85
1.52	.23	.37	.52	.66	.80	.94	1.08	1.22	1.37	1.51	1.65	1.79	1.93	2.07	2.22
66	2.75	4.42	6.10	7.78	9.46	11.14	12.81	14.49	16.17	17.85	19.53	21.21	22.88	24.56	26.24
1.68	.26	.41	.57	.72	.88	1.03	1.19	1.35	1.50	1.66	1.81	1.97	2.13	2.28	2.44
72	3.10	5.00	6.90	8.79	10.69	12.59	14.49	16.38	18.28	20.18	22.07	23.97	25.87	27.76	29.66
1.83	.29	.46	.64	.82	.99	1.17	1.35	1.52	1.70	1.87	2.05	2.23	2.40	2.58	2.76
78	3.37	5.44	7.50	9.56	11.62	13.68	15.74	17.81	19.87	21.93	23.99	26.05	28.11	30.17	32.24
1.96	.31	.50	.70	.89	1.08	1.27	1.46	1.65	1.85	2.04	2.23	2.42	2.61	2.80	2.99
84	3.59	5.78	7.97	10.16	12.35	14.54	16.74	18.93	21.12	23.31	25.50	27.69	29.88	32.08	34.27
2.13	.33	.54	.74	.94	1.15	1.35	1.55	1.76	1.96	2.17	2.37	2.57	2.78	2.98	3.18
90	3.89	6.26	8.64	11.01	13.39	15.76	18.13	20.51	22.88	25.26	27.63	30.01	32.38	34.76	37.13
2.29	.36	.58	.80	1.02	1.24	1.46	1.68	1.91	2.13	2.35	2.57	2.79	3.01	3.23	3.45
96	4.14	6.67	9.19	11.72	14.25	16.78	19.30	21.83	24.36	26.89	29.42	31.94	34.47	37.00	39.53
2.44	.38	.62	.85	1.09	1.32	1.56	1.79	2.03	2.26	2.50	2.73	2.97	3.20	3.44	3.67

TYPICAL INSTALLATION DETAILS**Masonry Wall****Metal Panel Wall****Wood Installation****Flange Mount**

Accessories at additional cost.

SUGGESTED SPECIFICATION

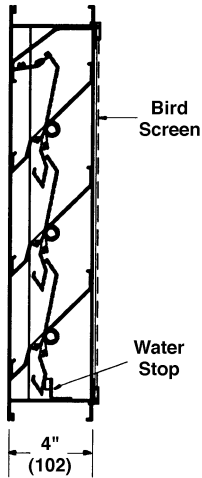
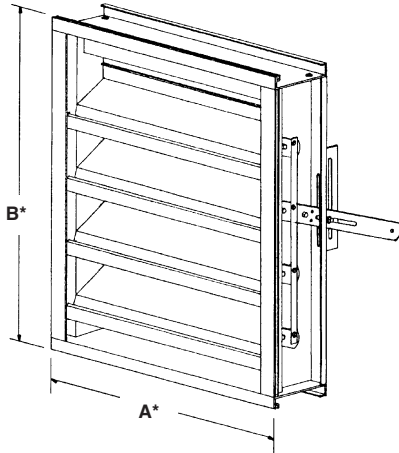
Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be adjustable type entirely contained within a 4" (102) or 6" (152) frame. Louver components (heads, jams, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 5 ft. (1530) and shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa, equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 645RBABL, 445RBABL or 445RBABL125 6063T5 extruded aluminum alloy construction as follows:

- Frame: .081" (2.1) extruded aluminum (445RBABL).
.125" (3.2) extruded aluminum (645RBABL).
- Blades: .081" (2.1) wall thickness on approximately 43/4" (121) centers.
- Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.



445RDABL ADJUSTABLE LOUVER DRAINABLE BLADE EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME

4" (102) deep, 6063T5 extruded aluminum with .080" (2) nominal wall thickness. Downspouts and caulking slots provided.

BLADES

6063T5 extruded aluminum with .080" (2) nominal wall thickness. Drainable blades are positioned at 45° angle and spaced approximately 5" (127) center to center.

SCREEN

3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

LINKAGE

Concealed in frame.

BEARINGS

Stainless steel sleeve pressed into frame.

AXLES

1/2" (13) plated steel hex.

ACTUATOR

Locking louver quadrant.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

6 lbs. per sq. ft.

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 48"w x 90"h (1219 x 2286) or 90" x 48" (2286 x 1219). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

FEATURES

The 445RDABL offers:

- High free area, low water penetration and low pressure drop.
- Ideally suited for air intake and exhaust applications that require tight shutoff.
- Combines architectural styling with performance.
- All aluminum construction for low maintenance and high resistance to corrosion.

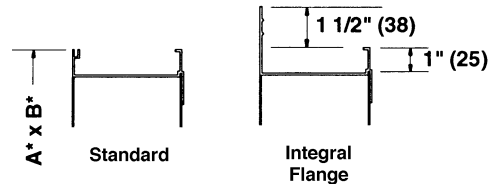
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Blade edge and jamb seals.
- A variety of bird and insect screens.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Acrodize, prime coat, integral color and clear anodize. (Some variation in anodize color consistency is possible.)
- Manual, electric or pneumatic actuators.

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



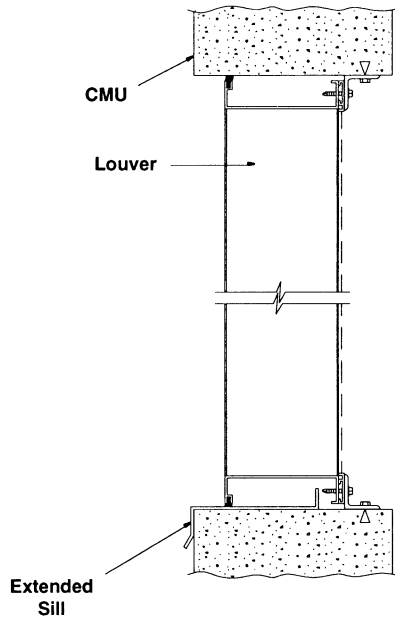
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

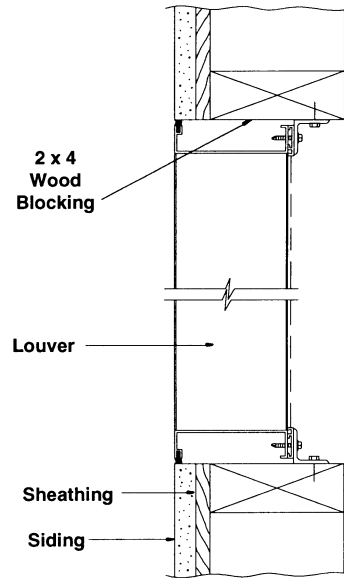
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

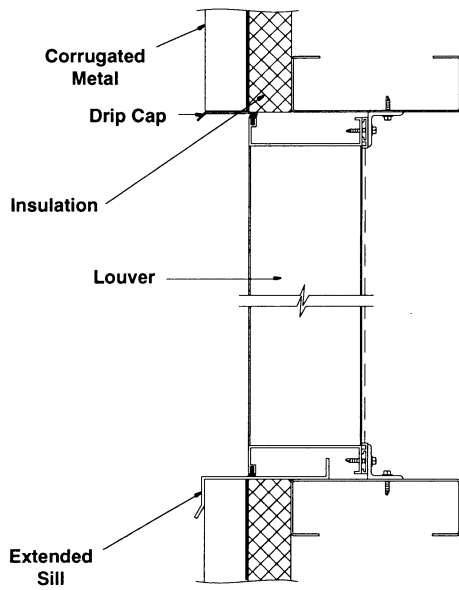
Masonry Wall



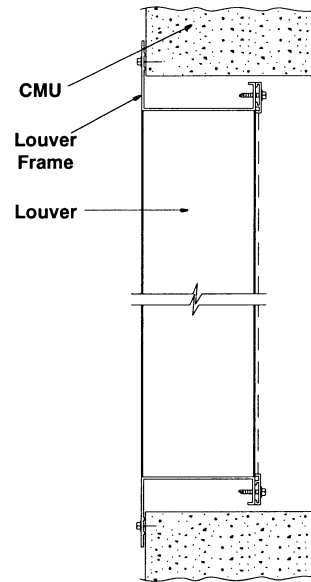
Wood Installation



Metal Panel Wall

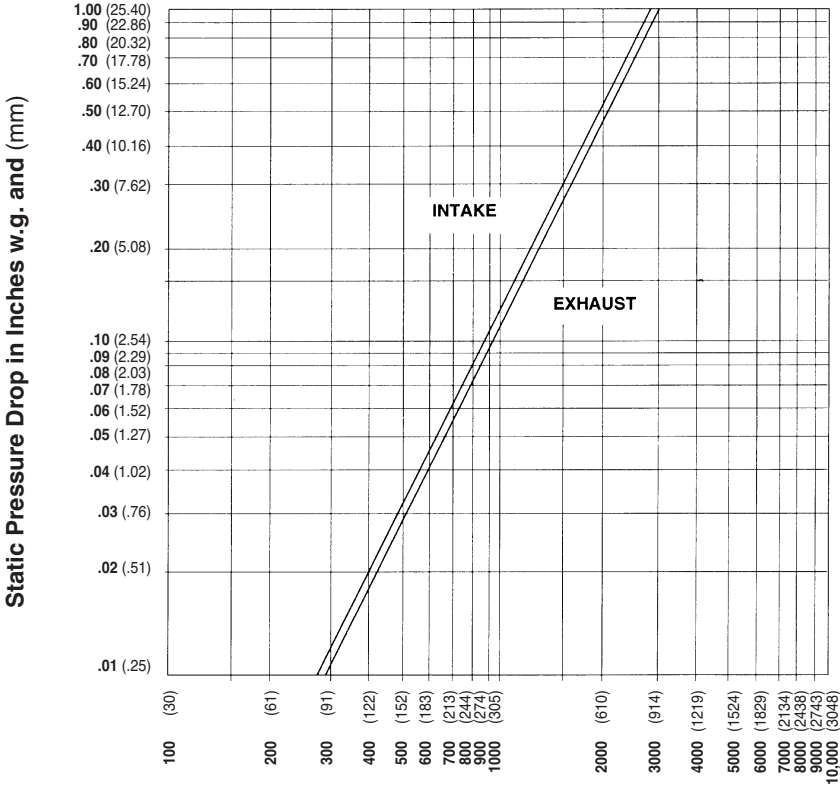


Flange Mount



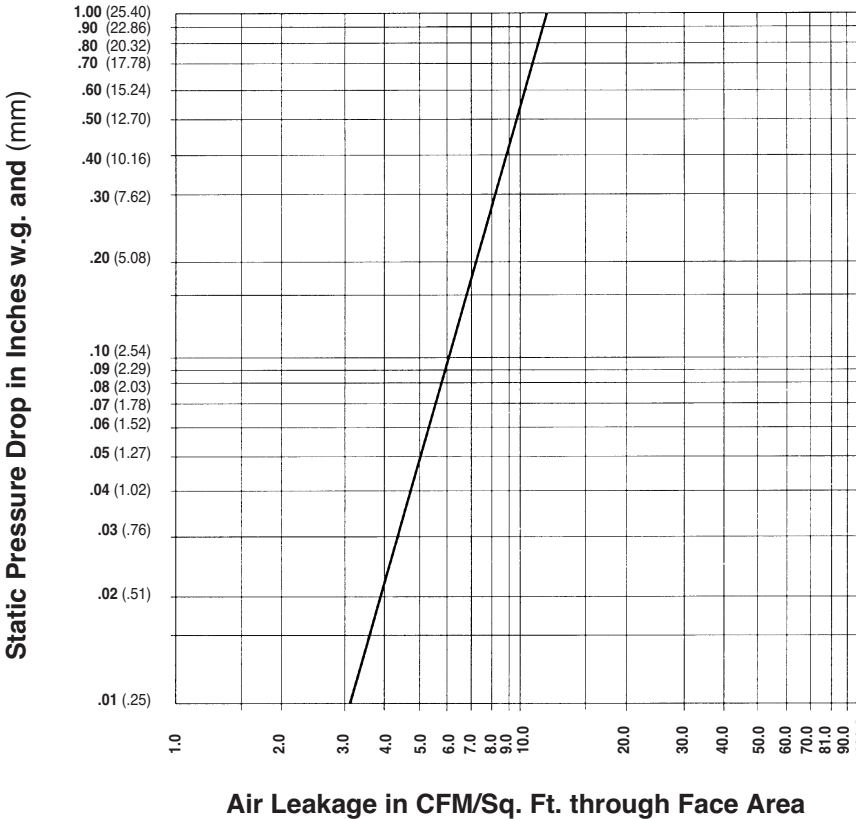
Accessories at additional cost.

PRESSURE DROP



Ratings do not include the effect of a bird screen.

LOUVER LEAKAGE
Test size 48" wide x 48" high (1219 x 1219)



SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be adjustable type entirely contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 445RDABL construction as follows:

Frame: .080" (2) wall thickness.

Blades: .080" (2) wall thickness at 45° angle and spaced approximately 5" (127) center to center.

Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame.

Finish: Select finish specification from Reliable Finishes Brochure.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 445RDABL
Width – Inches and Meters

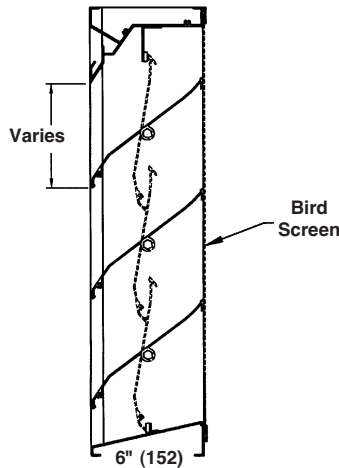
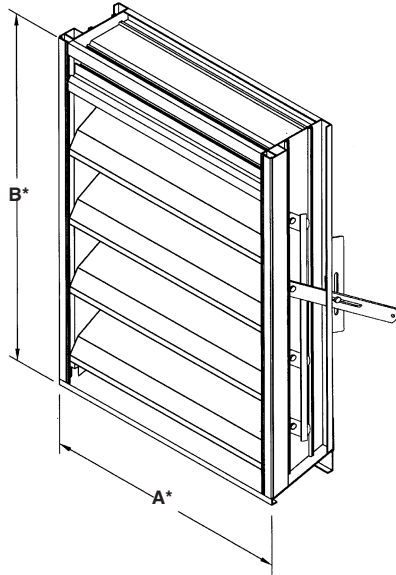
Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	.30	.46	.61	.76	.91	1.07	1.22	1.37	1.52	1.68	1.83	1.96	2.13	2.29	2.44
12	.15	.24	.33	.42	.51	.60	.69	.78	.87	.96	1.05	1.14	1.23	1.32	1.41
.30	.01	.02	.03	.04	.05	.06	.06	.07	.08	.09	.10	.10	.11	.12	.13
18	.37	.59	.81	1.03	1.25	1.48	1.70	1.92	2.14	2.37	2.59	2.81	3.03	3.26	3.48
.46	.03	.05	.08	.10	.11	.14	.16	.18	.20	.22	.24	.26	.28	.30	.32
24	.58	.94	1.29	1.65	2.00	2.35	2.71	3.06	3.42	3.77	4.13	4.48	4.83	5.19	5.54
.61	.05	.09	.12	.15	.19	.22	.25	.28	.32	.35	.38	.42	.45	.48	.51
30	.61	.97	1.34	1.71	2.08	2.45	2.81	3.18	3.55	3.92	4.29	4.66	5.02	5.39	5.76
.76	.06	.09	.12	.16	.19	.23	.26	.30	.33	.36	.40	.43	.47	.50	.54
36	.82	1.32	1.82	2.32	2.82	3.32	3.82	4.32	4.82	5.32	5.82	6.32	6.82	7.32	7.82
.91	.08	.12	.17	.22	.26	.31	.35	.40	.45	.49	.54	.59	.63	.68	.73
42	1.04	1.67	2.30	2.94	3.57	4.20	4.83	5.46	6.10	6.73	7.36	7.99	8.62	9.26	9.89
1.07	.10	.16	.21	.27	.33	.39	.45	.51	.57	.63	.68	.74	.80	.86	.92
48	1.26	2.02	2.79	3.55	4.31	5.08	5.84	6.61	7.37	8.13	8.90	9.66	10.43	11.19	11.95
1.22	.12	.19	.26	.33	.40	.47	.54	.61	.68	.76	.82	.89	.97	1.04	1.11
54	1.47	2.37	3.27	4.16	5.05	5.95	6.85	7.75	8.64	9.54	10.43	11.33	12.23	13.13	14.02
1.37	.14	.22	.30	.37	.47	.55	.64	.72	.80	.89	.97	1.05	1.14	1.22	1.30
60	1.50	2.41	3.32	4.23	5.14	6.05	6.96	7.87	8.78	9.69	10.60	11.51	12.42	13.33	14.24
1.52	.14	.22	.31	.39	.48	.56	.65	.73	.82	.90	.98	1.07	1.15	1.24	1.32
66	1.71	2.76	3.80	4.84	5.88	6.92	7.96	9.01	10.05	11.09	12.13	13.17	14.22	15.26	16.30
1.68	.16	.26	.35	.45	.55	.64	.74	.84	.93	1.03	1.13	1.22	1.32	1.42	1.51
72	1.93	3.11	4.28	5.45	6.63	7.80	8.97	10.15	11.32	12.50	13.67	14.85	16.02	17.19	18.36
1.83	.18	.29	.40	.50	.62	.72	.83	.94	1.05	1.16	1.27	1.38	1.49	1.60	1.71
78	2.15	3.45	4.76	6.07	7.37	8.68	9.98	11.29	12.60	13.90	15.21	16.51	17.82	19.12	20.43
1.96	.20	.32	.44	.56	.68	.81	.93	1.05	1.17	1.29	1.39	1.53	1.65	1.77	1.90
84	2.37	3.80	5.24	6.68	8.12	9.55	10.99	12.43	13.87	15.31	16.74	18.18	19.62	21.06	22.49
2.13	.22	.35	.49	.62	.75	.89	1.02	1.15	1.29	1.42	1.56	1.69	1.82	1.96	2.09
90	2.39	3.84	5.29	6.74	8.20	9.65	11.10	12.55	14.00	15.45	16.91	18.36	19.81	21.26	22.71
2.29	.22	.36	.49	.63	.76	.90	1.03	1.16	1.30	1.44	1.57	1.71	1.84	1.98	2.11
96	2.61	4.19	5.77	7.36	8.94	10.52	12.11	13.69	15.27	16.86	18.44	20.03	21.61	23.19	24.78
2.44	.24	.39	.53	.68	.83	.98	1.12	1.27	1.42	1.57	1.71	1.86	1.98	2.16	2.30



6375RBABL STATIONARY LOUVERS

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

- FRAME**
6" (152) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Caulking surfaces provided.
- BLADES**
6063T5 extruded aluminum. .081" (2.1) nominal wall thickness are adjustable to 37 1/2° angle. Blade spacing is approximately 6" (152) center to center.
- SCREEN**
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.
- SEALS**
Flexible, compressible aluminum jamb seals.
- BEARINGS**
Stainless steel sleeve pressed into frame.
- AXLES**
1/2" (13) plated steel hex.
- FINISH**
Mill.
- LINKAGE**
Concealed in frame.
- ACTUATOR**
Locking louver quadrant.
- MINIMUM SIZE**
12"w x 12"h (305 x 305).
- APPROXIMATE SHIPPING WEIGHT**
3.5 lbs. per sq. ft.
- MAXIMUM FACTORY ASSEMBLY SIZE**
Shall be 60"w x 96"h (1524 x 2438). Louvers with optional blade and jamb seals shall be 48" x 96" (1219 x 2438). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

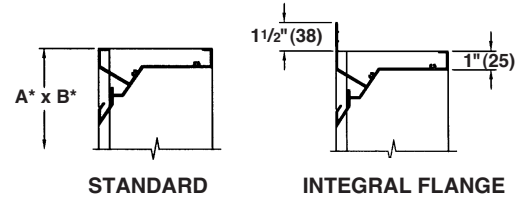
FEATURES

- The 6375RBABL offers:
- Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Low torque operation and architecturally pleasing appearance with low leakage performance.
 - Drain gutter in the head frame; downspouts in jambs and mullions to drain water from louver for minimum water cascade from blade to blade.
 - Concealed blade linkage is protected from weather exposure and reduces required installation depth.
 - Jamb seals provide tight blade-to-frame closure.
- * 54% free area.

VARIATIONS

- Variations to the basic design of this louver are available at additional cost. They include:
- Extended sill.
 - Front or rear security bars.
 - Filter racks.
 - A variety of bird and insect screens.
 - Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)
 - Blade edge and jamb seals.
 - Manual, electric or pneumatic actuators.
- Consult Reliable for other special requirements.

FRAME CONSTRUCTION

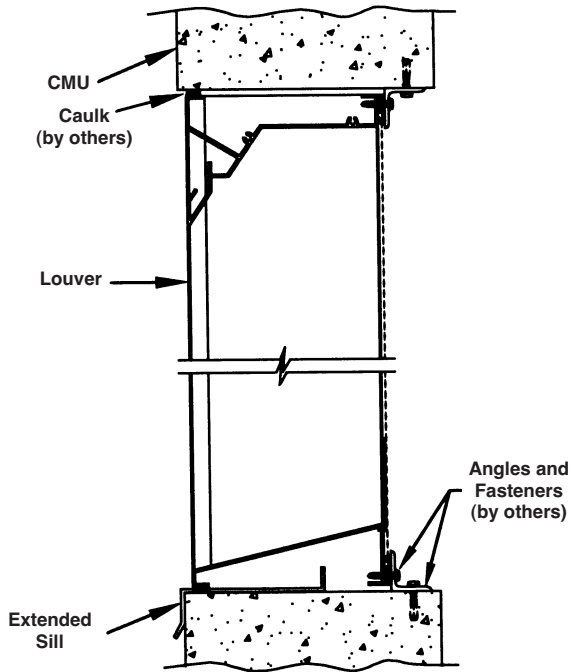


Dimensions in inches, parenthesis () indicate millimeters. *Units furnished 1/4" (6) smaller than given opening dimensions.

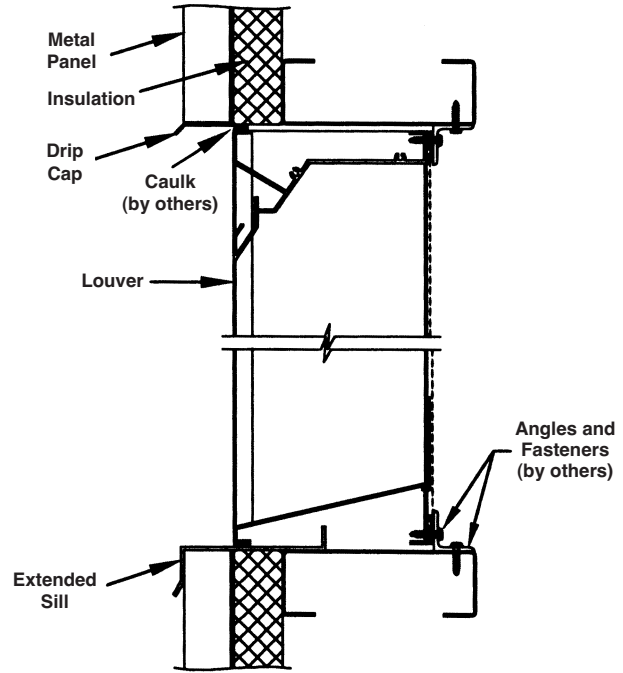
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

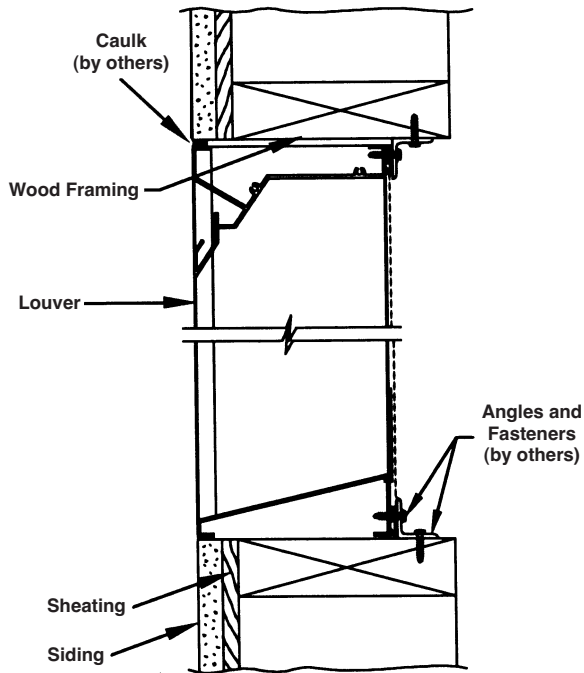
Masonry Wall



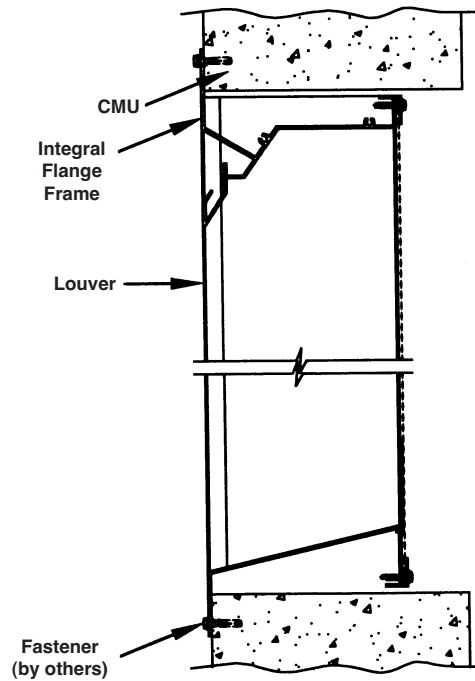
Metal Panel Wall



Wood Installation

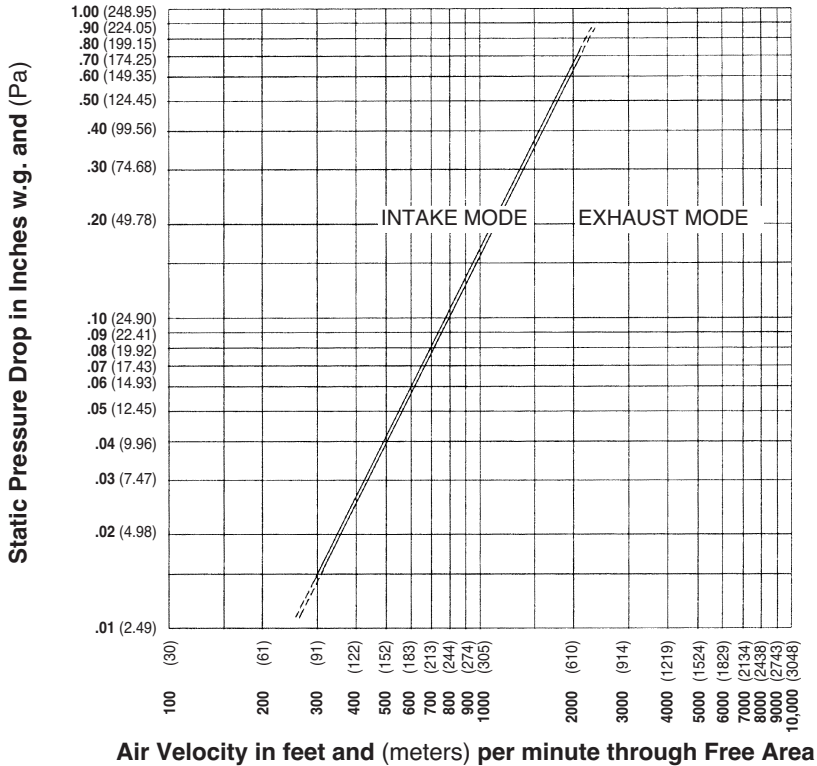


Flange Mount



*Accessories at additional cost.

PRESSURE DROP



Ratings do not include the effect of a bird screen.

Louver tested for water penetration and pressure drop with jamb seals.

PERFORMANCE DATA

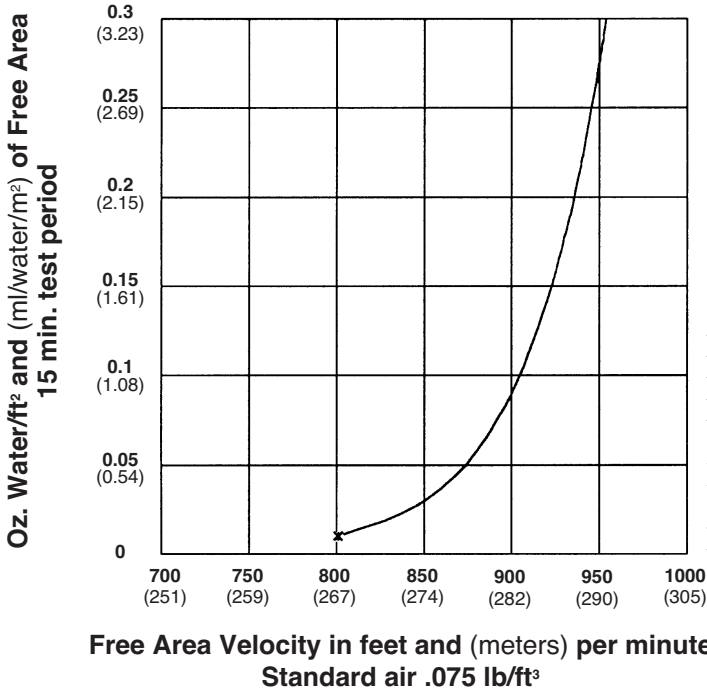
AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 801 fpm (244 m/min).

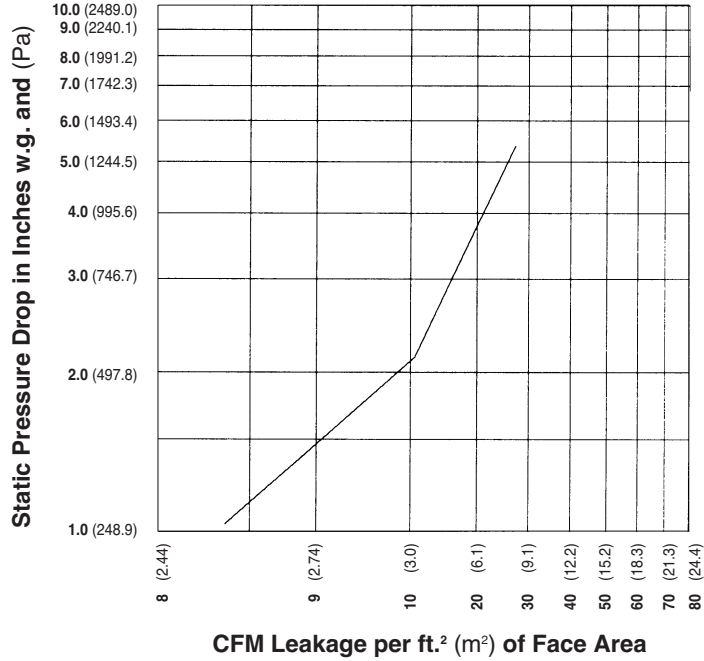


Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 6375RBABL Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

AIR LEAKAGE WITH BLADES CLOSED



Leakage at 1" w.g. (248.9) static pressure drop is 8.3 CFM per ft.² and (m²)

Louver tested for air leakage with jamb seals and optional blade seals.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 6375RBABL.
Width – Inches and Meters

Height – Inches and Meters	12	18	24	30	36	42	48	54	60
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52
12	0.31	0.50	0.68	0.87	1.06	1.24	1.43	1.55	1.74
0.30	0.03	0.05	0.06	0.08	0.10	0.12	0.13	0.14	0.16
18	0.57	0.92	1.26	1.61	1.95	2.30	2.64	2.87	3.22
0.46	0.05	0.09	0.12	0.15	0.18	0.21	0.25	0.27	0.30
24	0.84	1.34	1.84	2.35	2.85	3.35	3.86	4.19	4.69
0.61	0.08	0.12	0.17	0.22	0.26	0.31	0.36	0.39	0.44
30	1.10	1.76	2.43	3.09	3.75	4.41	5.07	5.51	6.17
0.76	0.10	0.16	0.23	0.29	0.35	0.41	0.47	0.51	0.57
36	1.37	2.19	3.01	3.83	4.65	5.47	6.29	6.83	7.65
0.91	0.13	0.20	0.28	0.36	0.43	0.51	0.58	0.63	0.71
42	1.63	2.61	3.59	4.57	5.54	6.52	7.50	8.15	9.13
1.07	0.15	0.24	0.33	0.42	0.51	0.61	0.70	0.76	0.85
48	1.89	3.03	4.17	5.30	6.44	7.58	8.71	9.47	10.61
1.22	0.18	0.28	0.39	0.49	0.60	0.70	0.81	0.88	0.99
54	2.16	3.45	4.75	6.04	7.34	8.63	9.93	10.79	12.09
1.37	0.20	0.32	0.44	0.56	0.68	0.80	0.92	1.00	1.12
60	2.42	3.88	5.33	6.78	8.24	9.69	11.14	12.11	13.57
1.52	0.22	0.36	0.50	0.63	0.77	0.90	1.04	1.13	1.26
66	2.69	4.30	5.91	7.52	9.13	10.75	12.36	13.43	15.04
1.68	0.25	0.40	0.55	0.70	0.85	1.00	1.15	1.25	1.40
72	2.95	4.72	6.49	8.26	10.03	11.80	13.57	14.75	16.52
1.83	0.27	0.44	0.60	0.77	0.93	1.10	1.26	1.37	1.54
78	3.21	5.14	7.07	9.00	10.93	12.86	14.79	16.07	18.00
1.98	0.30	0.48	0.66	0.84	1.02	1.20	1.37	1.49	1.67
84	3.48	5.57	7.65	9.74	11.83	13.91	16.00	17.39	19.48
2.13	0.32	0.52	0.71	0.91	1.10	1.29	1.49	1.62	1.81
90	3.74	5.99	8.23	10.48	12.73	14.97	17.22	18.71	20.96
2.29	0.35	0.56	0.76	0.97	1.18	1.39	1.60	1.74	1.95
96	4.01	6.41	8.81	11.22	13.62	16.03	18.43	20.03	22.44
2.44	0.37	0.60	0.82	1.04	1.27	1.49	1.71	1.86	2.09

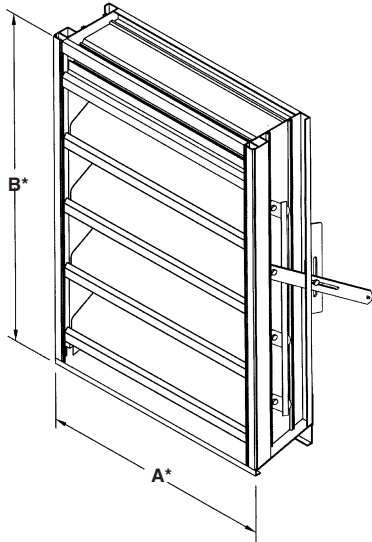


6375RDABL DRAINABLE ADJUSTABLE LOUVER

EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

FEATURES



FRAME
6" (152) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Downspouts and caulking surfaces provided.

BLADES
6063T5 extruded aluminum. .081" (2.1) nominal wall thickness. Drainable blades are adjustable to 37¹/₂° angle. Blade spacing is approximately 6" (152) center to center.

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

SEALS
Flexible, compressible aluminum jamb seals.

BEARINGS
Stainless steel sleeve pressed into frame.

AXLES
1/2" (13) plated steel hex.

FINISH
Mill.

LINKAGE
Concealed in frame.

ACTUATOR
Locking louver quadrant.

MINIMUM SIZE
12"w x 12"h (305 x 305).

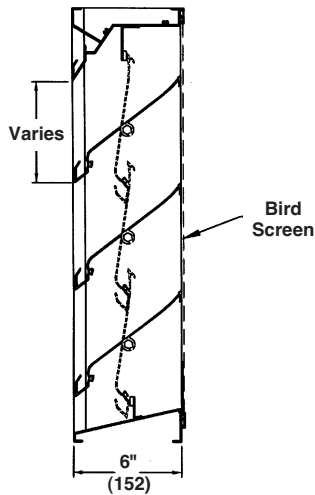
APPROXIMATE SHIPPING WEIGHT
3.5 lbs./ft.² (17.1 kg per m²).

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 60"w x 96"h (1524 x 2438) without seals. Louvers with standard jamb seals and/or optional blade seals shall be 48"w x 96"h (1219 x 2438). Standard construction includes jamb seals. Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

The 6375RDABL offers:

- Published performance ratings based on testing in accordance with AMCA Publication 511.
- Low torque operation and architecturally pleasing appearance with low leakage performance.
- Drain gutter in the head frame and each blade; downspouts in jambs and mullions to drain water from louver for minimum water cascade from blade to blade.
- Concealed blade linkage is protected from weather exposure and reduces required installation depth.
- Jamb seals provide tight blade-to-frame closure.

* 55% free area.



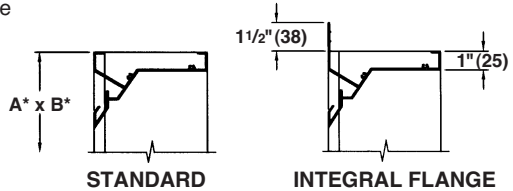
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks.
- Blade edge seals.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)
- Manual, electric or pneumatic actuators.

Consult Reliable for other special requirements.

FRAME CONSTRUCTION

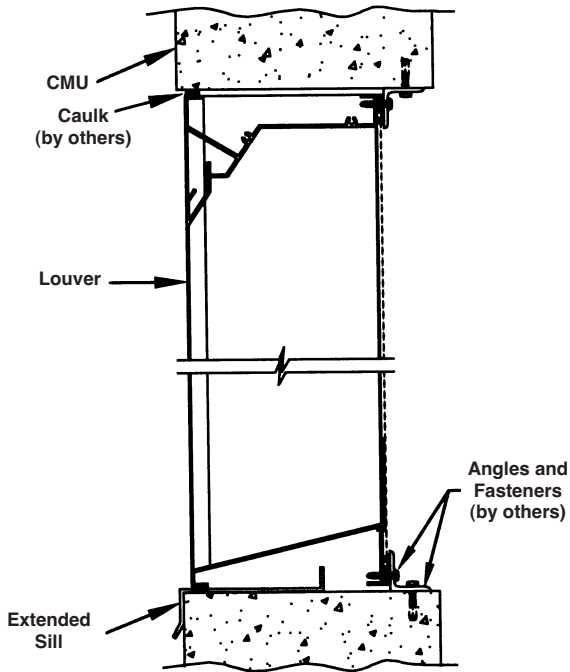


Dimensions in inches, parenthesis () indicate millimeters. *Units furnished 1/4" (6) smaller than given opening dimensions.

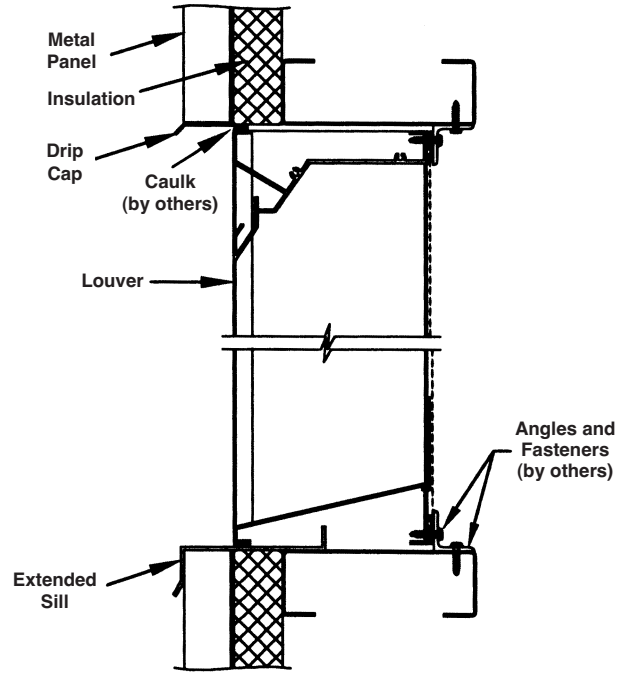
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

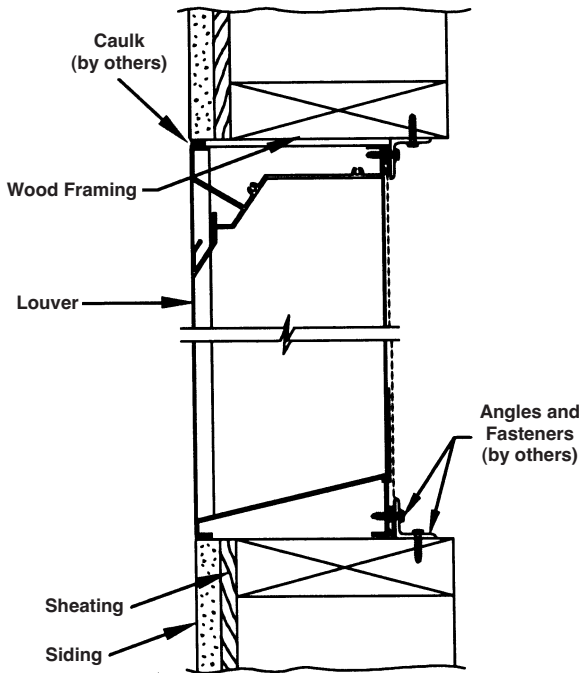
Masonry Wall



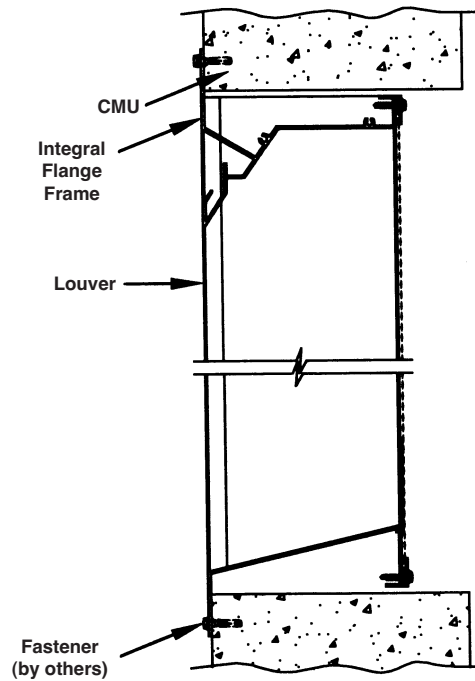
Metal Panel Wall



Wood Installation

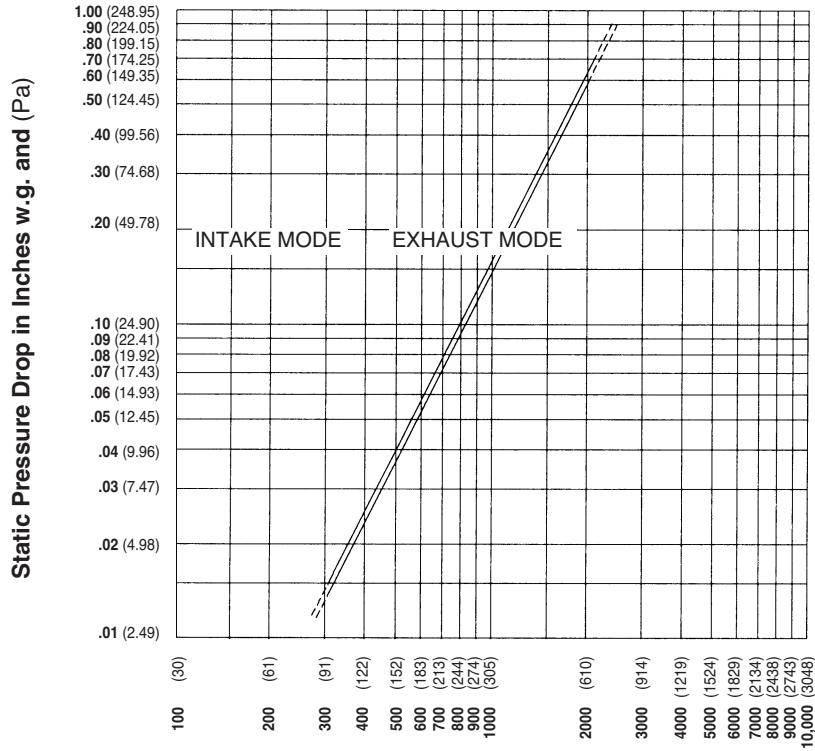


Flange Mount



*Accessories at additional cost.

PRESSURE DROP



Ratings do not include the effect of a bird screen.

Louver tested for water penetration and pressure drop with jamb seals.

Air Velocity in feet and (meters) per minute through Free Area

PERFORMANCE DATA

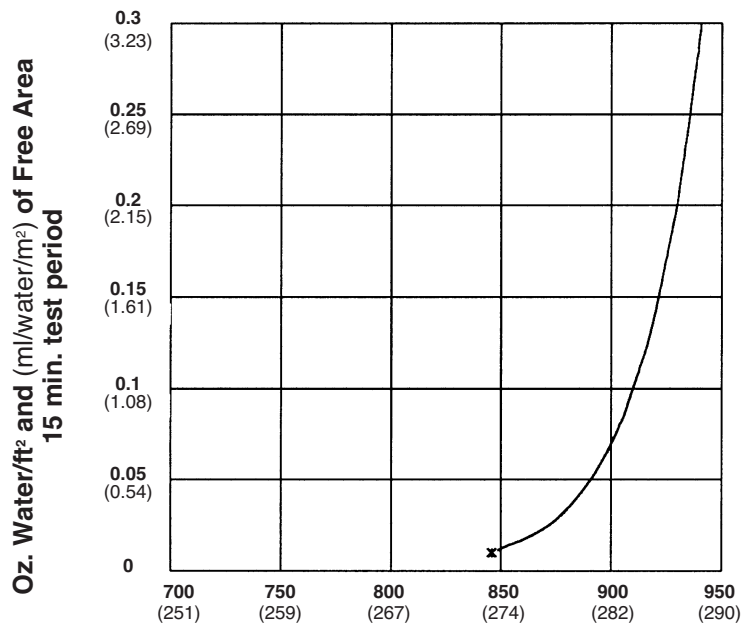
AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 846 fpm (258 m/min).



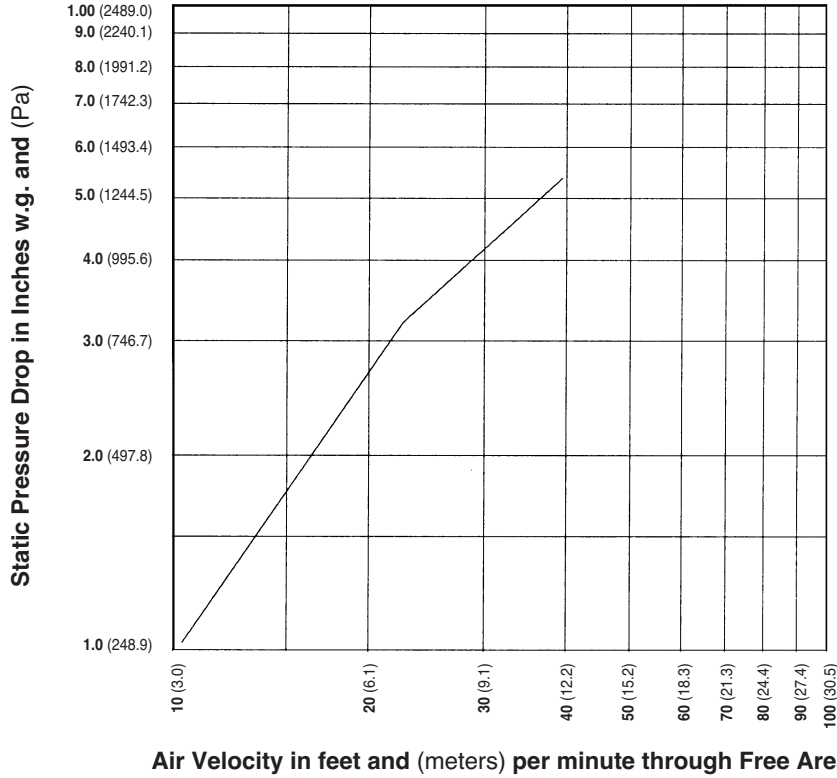
Free Area Velocity in feet and (meters) per minute
Standard air .075 lb/ft³

Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 6375RDABL Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

AIR LEAKAGE WITH BLADES CLOSED



Leakage at 1" w.g. (248.9) static pressure drop is 10.8 CFM per ft.² and (m²).

Louver tested for air leakage with jamb seals and optional blade seals.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 6375RDABL.
Width – Inches and Meters

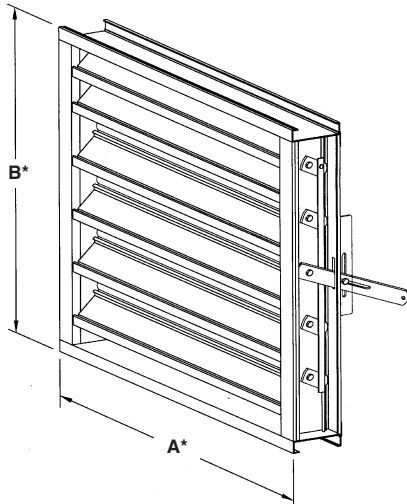
Height – Inches and Meters	Width – Inches and Meters									
	12 0.30	18 0.46	24 0.61	30 0.76	36 0.91	42 1.07	48 1.22	54 1.37	60 1.52	
12 0.30	0.31	0.50	0.68	0.87	1.06	1.24	1.43	1.55	1.74	
18 0.46	0.03	0.05	0.06	0.08	0.10	0.12	0.13	0.14	0.16	
18 0.46	0.57	0.92	1.26	1.61	1.95	2.30	2.64	2.87	3.22	
24 0.61	0.05	0.09	0.12	0.15	0.18	0.21	0.25	0.27	0.30	
24 0.61	0.84	1.34	1.84	2.35	2.85	3.35	3.86	4.19	4.69	
30 0.76	0.08	0.12	0.17	0.22	0.26	0.31	0.36	0.39	0.44	
30 0.76	1.10	1.76	2.43	3.09	3.75	4.41	5.07	5.51	6.17	
36 0.91	0.10	0.16	0.23	0.29	0.35	0.41	0.47	0.51	0.57	
36 0.91	1.37	2.19	3.01	3.83	4.65	5.47	6.29	6.83	7.65	
42 1.07	0.13	0.20	0.28	0.36	0.43	0.51	0.58	0.63	0.71	
42 1.07	1.63	2.61	3.59	4.57	5.54	6.52	7.50	8.15	9.13	
48 1.22	0.15	0.24	0.33	0.42	0.51	0.61	0.70	0.76	0.85	
48 1.22	1.89	3.03	4.17	5.30	6.44	7.58	8.71	9.47	10.61	
54 1.37	0.18	0.28	0.39	0.49	0.60	0.70	0.81	0.88	0.99	
54 1.37	2.16	3.45	4.75	6.04	7.34	8.63	9.93	10.79	12.09	
60 1.52	0.20	0.32	0.44	0.56	0.68	0.80	0.92	1.00	1.12	
60 1.52	2.42	3.88	5.33	6.78	8.24	9.69	11.14	12.11	13.57	
66 1.68	0.22	0.36	0.50	0.63	0.77	0.90	1.04	1.13	1.26	
66 1.68	2.69	4.30	5.91	7.52	9.13	10.75	12.36	13.43	15.04	
72 1.83	0.25	0.40	0.55	0.70	0.85	1.00	1.15	1.25	1.40	
72 1.83	2.95	4.72	6.49	8.26	10.03	11.80	13.57	14.75	16.52	
78 1.98	0.27	0.44	0.60	0.77	0.93	1.10	1.26	1.37	1.54	
78 1.98	3.21	5.14	7.07	9.00	10.93	12.86	14.79	16.07	18.00	
84 2.13	0.30	0.48	0.66	0.84	1.02	1.20	1.37	1.49	1.67	
84 2.13	3.48	5.57	7.65	9.74	11.83	13.91	16.00	17.39	19.48	
90 2.29	0.32	0.52	0.71	0.91	1.10	1.29	1.49	1.62	1.81	
90 2.29	3.74	5.99	8.23	10.48	12.73	14.97	17.22	18.71	20.96	
96 2.44	0.35	0.56	0.76	0.97	1.18	1.39	1.60	1.74	1.95	
96 2.44	4.01	6.41	8.81	11.22	13.62	16.03	18.43	20.03	22.44	
	0.37	0.60	0.82	1.04	1.27	1.49	1.71	1.86	2.09	



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445RDHBD DRAINABLE COMBINATION LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
4" (102) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Downspouts and caulking surfaces provided.

BLADES
Front stationary drainable blades – 6063T5 extruded aluminum with .060" (1.5) nominal wall thickness, positioned at 45° angle and spaced approximately 47/16" (113) center to center.
Rear adjustable blades – 6063T5 extruded aluminum, .125" (3.2) nominal wall thickness for operating section widths through 48" (1219) .

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

SEALS
Extruded vinyl blade edge seals on rear adjustable blades and flexible, compressible aluminum jamb seals.

LINKAGE
Concealed.

BEARINGS
Stainless steel sleeve pressed into frame.

AXLES
1/2" (13) plated steel hex.

ACTUATOR
Locking louver quadrant.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
6 lbs./ft.² (29.3 kg per m²).

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 48"w x 96"h (1219 x 2438).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

FEATURES

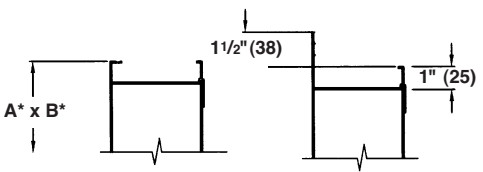
- The 445RDHBD offers:
- Published performance ratings based on testing in accordance with AMCA Publication 511.
 - High free area, low water penetration, and low pressure drop.
 - Concealed blade linkage is protected from weather exposure and reduces required installation depth.
 - Adjustable rear blades provide desired shut off in the same 4" (102) deep frame normally required by a louver alone.
 - Blade and jamb seals provide tight closure.
 - A drain gutter in each front stationary blade and downspouts in jambs and mullions drain water from the louver with minimum water cascade from blade to blade.

VARIATIONS

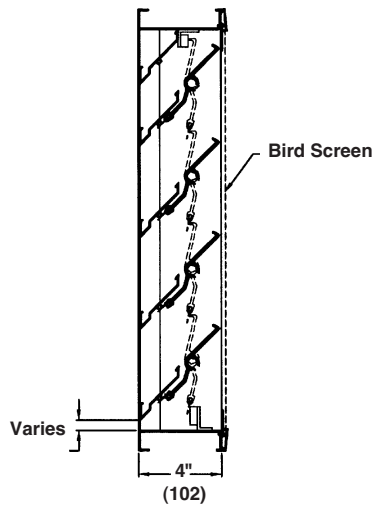
- Variations to the basic design of the louver are available at additional cost. They include:
- Extended sill.
 - Electric or pneumatic actuators.
 - Front or rear security bars.
 - Filter racks.
 - A variety of bird and insect screens.
 - Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible).

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



STANDARD INTEGRAL FLANGE

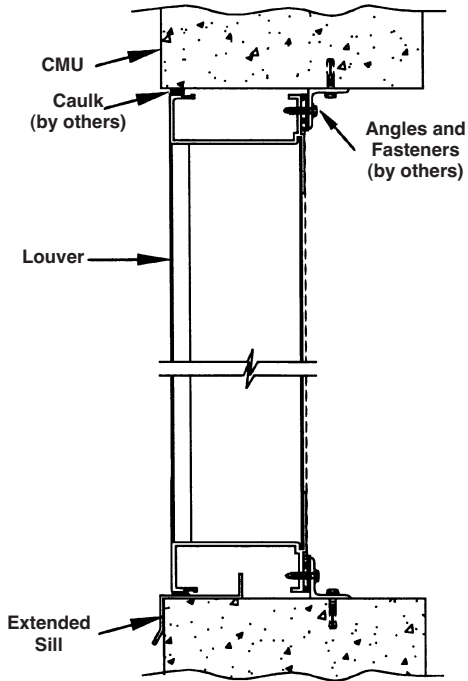


Dimensions in inches, parenthesis () indicate millimeters. *Units furnished 1/4" (6) smaller than given opening dimensions.

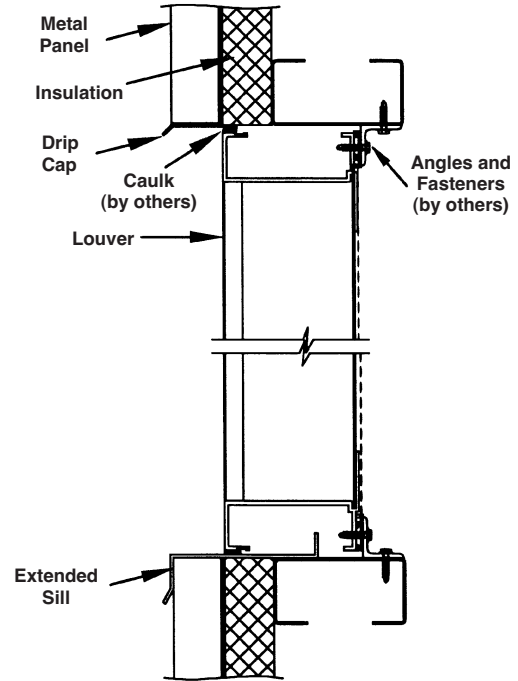
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

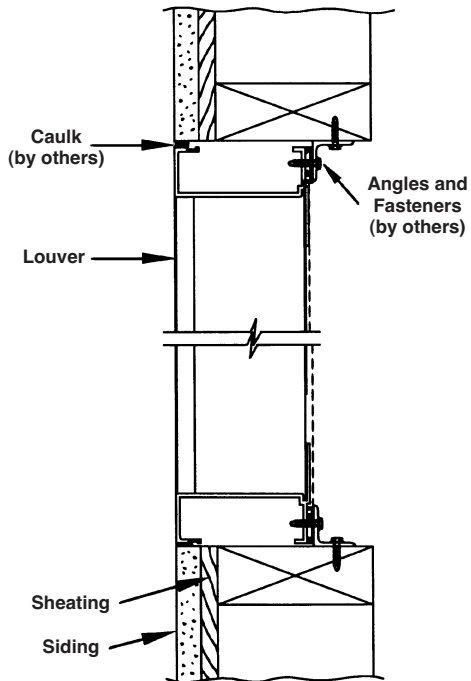
Masonry Wall



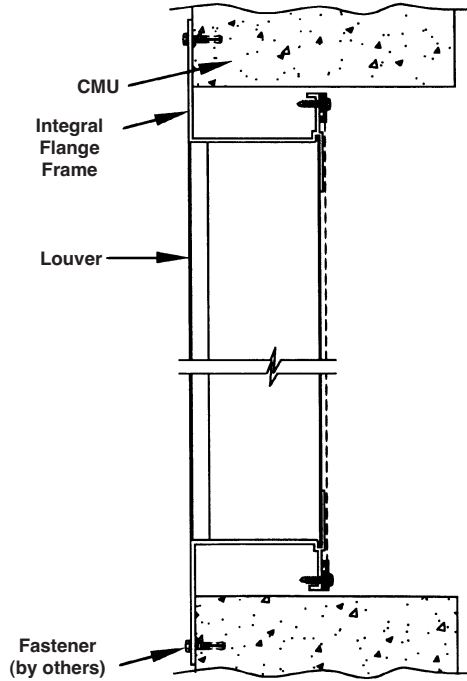
Metal Panel Wall



Wood Installation

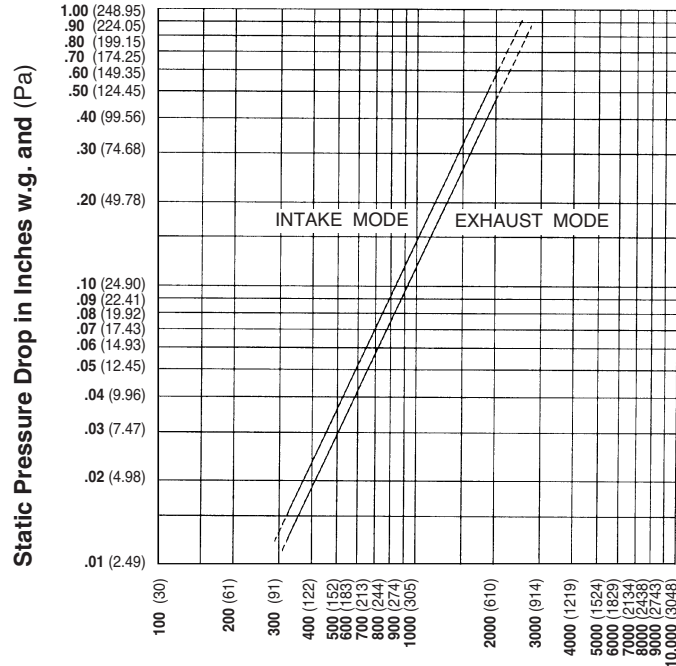


Flange Mount



*Accessories at additional cost.

PRESSURE DROP



Ratings do not include the effect of a bird screen.

Air Velocity in feet and (meters) per minute through Free Area

PERFORMANCE DATA

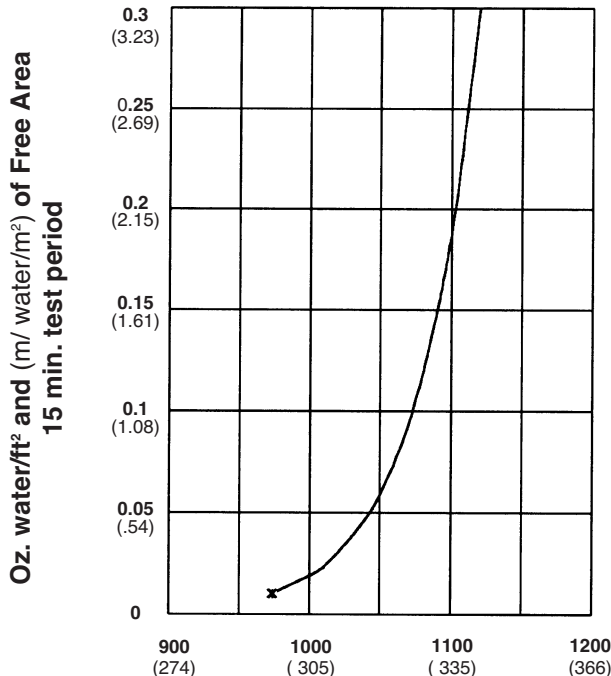
AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

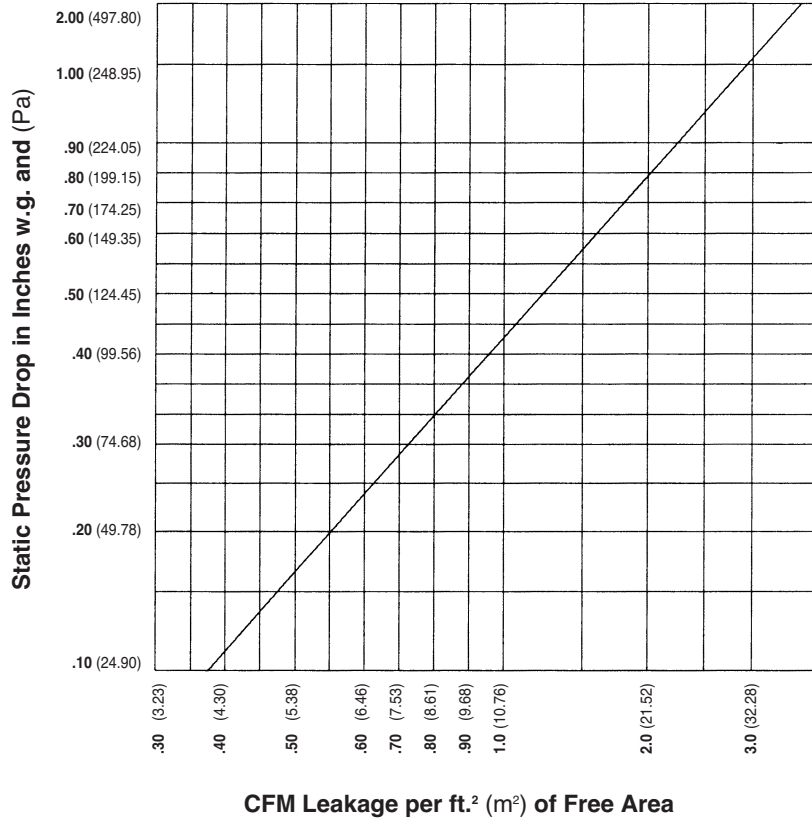
Beginning point of water penetration at .01 oz./sq. ft. is 846 fpm (258 m/min).



Reliable Products certifies that the 445RDHBD Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

Free Area Velocity in feet and (meters) per minute
Standard air .075 lb/ft³

AIR LEAKAGE



FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 445RDHBD.
Width – Inches and Meters

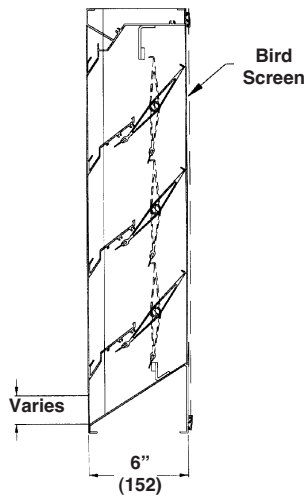
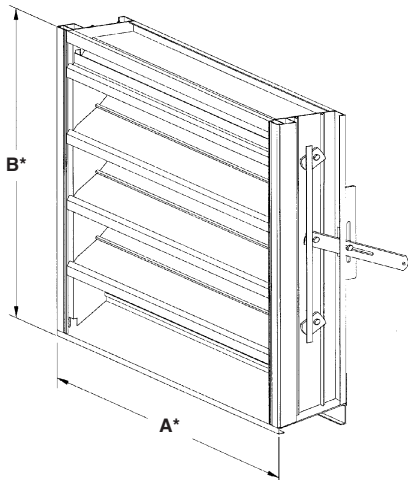
	12	18	24	30	36	42	48
	0.30	0.46	0.61	0.76	0.91	1.07	1.22
12	0.11	0.18	0.24	0.31	0.38	0.45	0.51
0.30	0.01	0.02	0.02	0.03	0.04	0.04	0.05
18	0.40	0.64	0.89	1.13	1.38	1.63	1.87
0.46	0.04	0.06	0.08	0.11	0.13	0.15	0.17
24	0.54	0.87	1.21	1.55	1.88	2.22	2.55
0.61	0.05	0.08	0.11	0.14	0.17	0.21	0.24
30	0.75	1.22	1.69	2.15	2.62	3.09	3.56
0.76	0.07	0.11	0.16	0.20	0.24	0.29	0.33
36	0.97	1.57	2.18	2.78	3.39	3.99	4.59
0.91	0.09	0.15	0.20	0.26	0.32	0.37	0.43
42	1.11	1.81	2.50	3.19	3.89	4.58	5.27
1.07	0.10	0.17	0.23	0.30	0.36	0.43	0.49
48	1.32	2.15	2.98	3.80	4.63	5.45	6.28
1.22	0.12	0.20	0.28	0.35	0.43	0.51	0.58
54	1.54	2.50	3.47	4.43	5.39	6.35	7.31
1.37	0.14	0.23	0.32	0.41	0.50	0.59	0.68
60	1.69	2.74	3.79	4.84	5.89	6.94	7.99
1.52	0.16	0.25	0.35	0.45	0.55	0.64	0.74
66	1.90	3.08	4.26	5.45	6.63	7.81	9.00
1.68	0.18	0.29	0.40	0.51	0.62	0.73	0.84
72	2.12	3.44	4.76	6.07	7.39	8.71	10.03
1.83	0.20	0.32	0.44	0.56	0.69	0.81	0.93
78	2.26	3.67	5.08	6.49	7.90	9.30	10.71
1.98	0.21	0.34	0.47	0.60	0.73	0.86	1.00
84	2.55	4.13	5.72	7.31	8.90	10.48	12.07
2.13	0.24	0.38	0.53	0.68	0.83	0.97	1.12
90	2.69	4.37	6.04	7.72	9.40	11.08	12.75
2.29	0.25	0.41	0.56	0.72	0.87	1.03	1.18
96	2.83	4.60	6.37	8.13	9.90	11.67	13.43
2.44	0.26	0.43	0.59	0.76	0.92	1.08	1.25





6375RDHAX DRAINABLE COMBINATION LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME
6" (152) deep, 6063T5 extruded aluminum with .125" (3.2) nominal wall thickness. Downspouts and caulking surfaces provided.

BLADES
Front stationary drainable blades – 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness, positioned at 37 1/2° angle and spaced approximately 6 1/8" (156) on center. Rear adjustable airfoil blades – 6063T5 extruded aluminum, .140" (3.6) nominal wall thickness.

SCREEN
3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

SEALS
Extruded vinyl blade edge seals on rear adjustable blades and flexible, compressible aluminum jamb seals.

LINKAGE
Concealed in frame.

BEARINGS
Stainless steel sleeve pressed into frame.

AXLES
1/2" (13) plated steel hex.

ACTUATOR
Locking louver quadrant.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
8 lbs. per sq. ft. (39.1 kg per m²).

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 120"w x 96"h (3048 x 2438) with standard frame, 120"w x 93"h (3048 x 2362) with integral flange frame. Maximum operating section width is 60" (1524).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

FEATURES

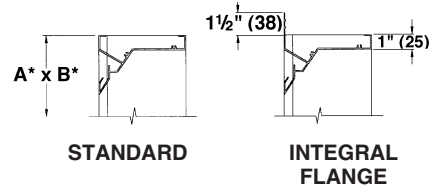
- The 6375RDHAX offers:
- 47% Free Area.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Concealed blade linkage is protected from weather exposure and reduces required installation depth.
 - Adjustable rear blades provide desired shut off in the same 6" (152) deep frame normally required by a louver alone.
 - Blade and jamb seals provide tight closure.
 - High performance frame system with drainable head collects and removes water to provide excellent water penetration performance.
 - A drain gutter in each front stationary blade minimizes water cascade between blades.
 - Architecturally styled hidden mullions allowing continuous line appearance up to 120" (3048).

VARIATIONS

- Variations to the basic design of the louver are available at additional cost. They include:
- Extended sill.
 - Hinged frame.
 - Front or rear security bars.
 - Filter racks.
 - Installation angles.
 - A variety of bird and insect screens.
 - A selection of manual, electric, and pneumatic actuators.
 - Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible).

Consult Reliable for other special requirements.

FRAME CONSTRUCTION

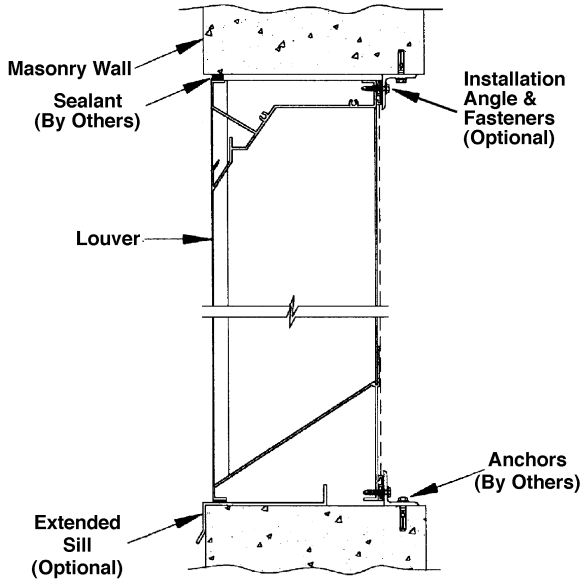


Dimensions in inches, parenthesis () indicate millimeters.
*Units furnished 1/4" (6) smaller than given opening dimensions.

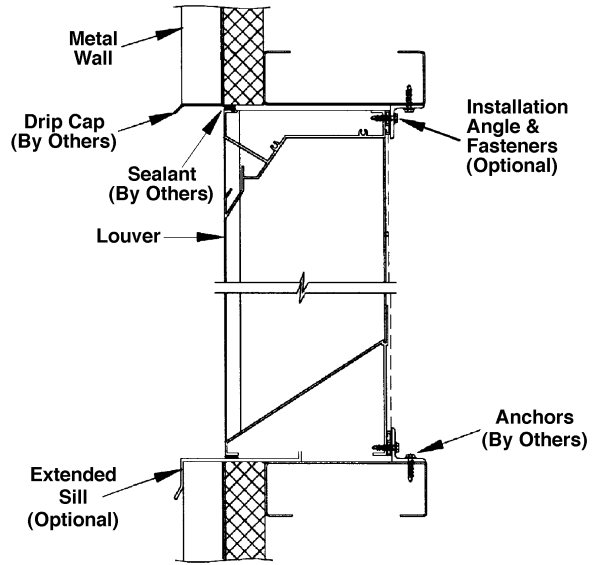
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT			LOCATION		
ARCH./ENGR.			CONTRACTOR		
REPRESENTATIVE			DATE		

TYPICAL INSTALLATION DETAILS

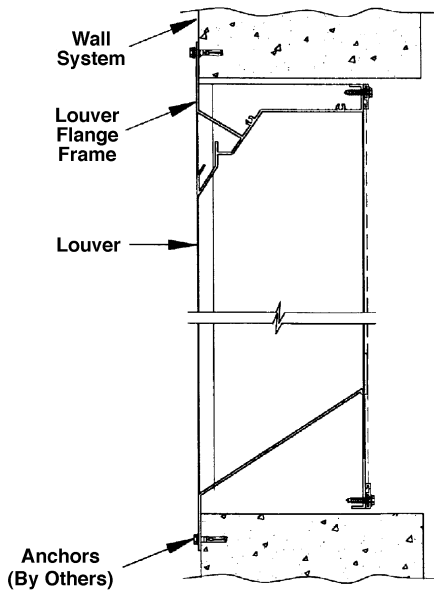
Masonry Wall



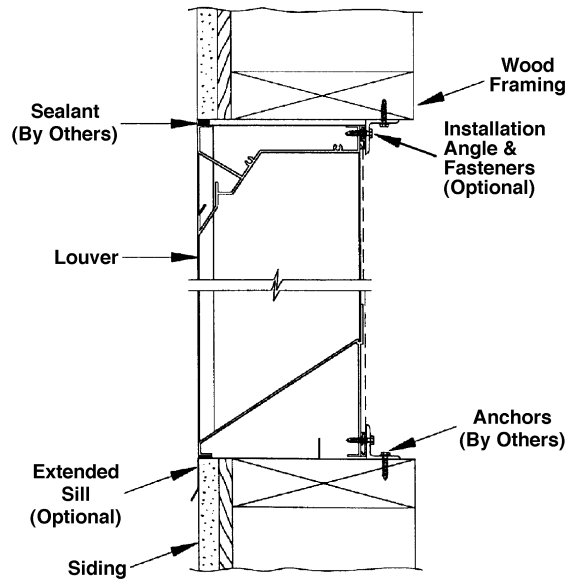
Metal Panel Wall



Wood Installation

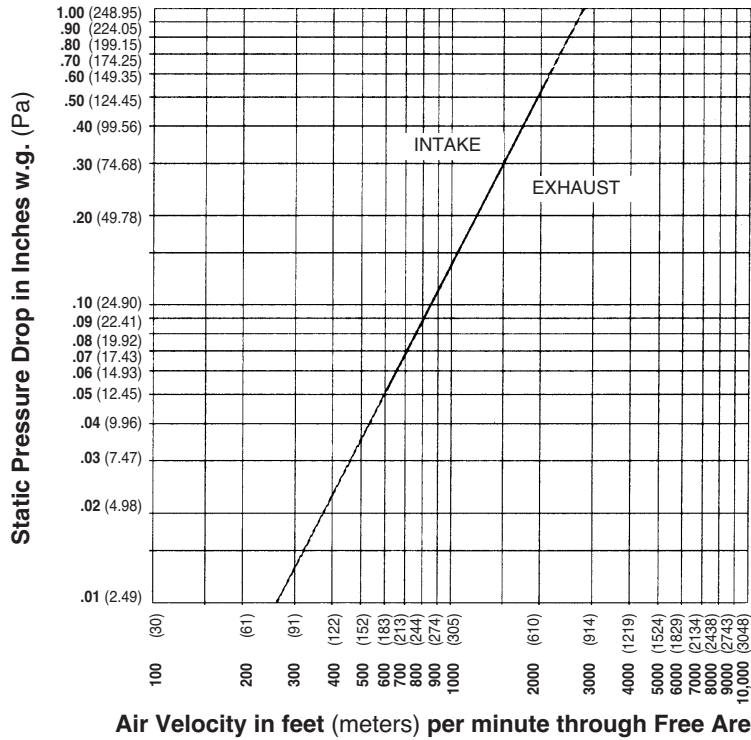


Flange Mount



*Accessories at additional cost.

PRESSURE DROP



Ratings do not include the effect of a bird screen.

PERFORMANCE DATA

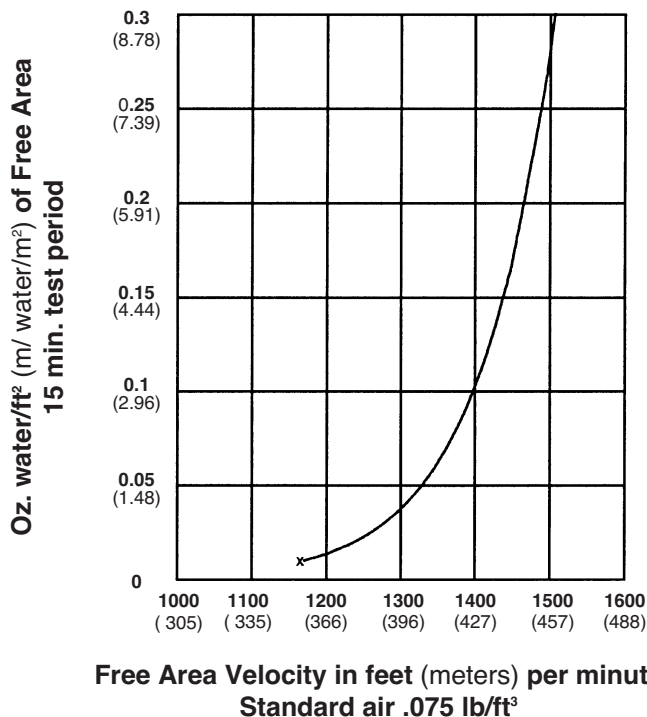
AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1169 fpm (356 m/min).

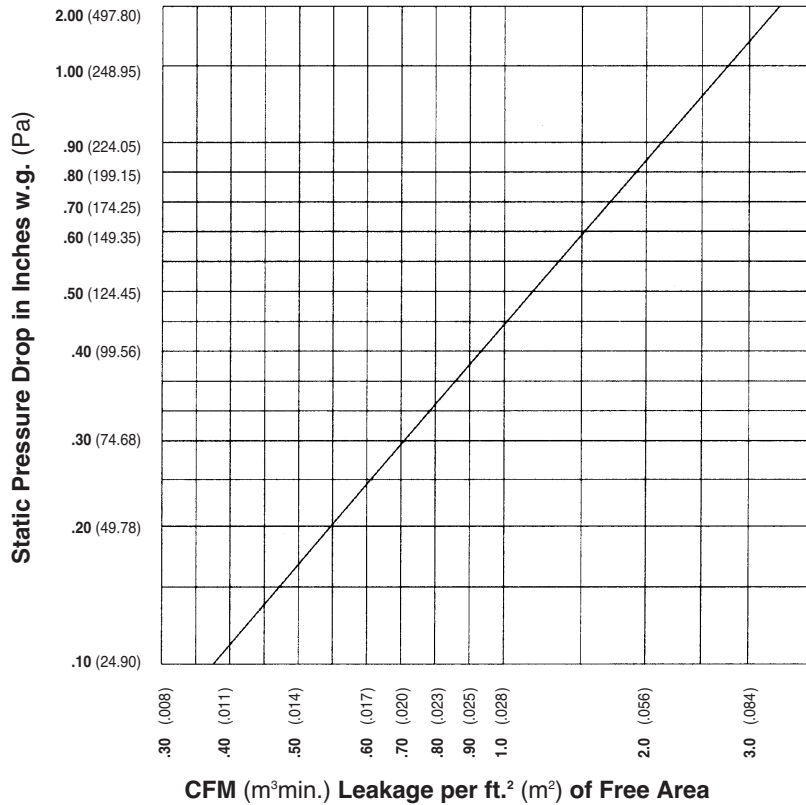


Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 6375RDHAX Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

AIR LEAKAGE



FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 6375RDHAX.
Width – Inches and Meters

Height – Inches (Meters)

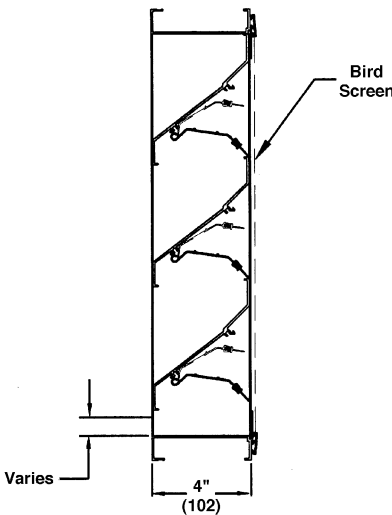
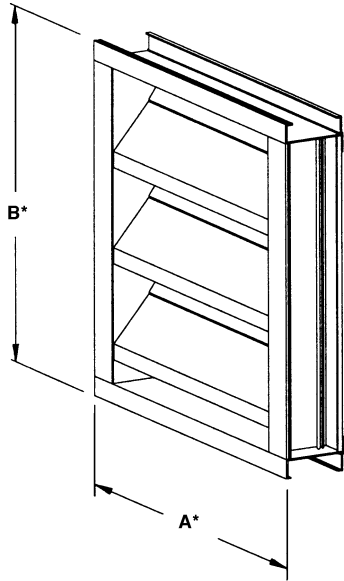
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
18	0.48	0.77	1.06	1.35	1.64	1.93	2.21	2.50	2.79	2.94	3.23	3.51	3.80	4.09	4.38	4.67	4.96	5.25	5.54
0.46	0.04	0.07	0.10	0.13	0.15	0.18	0.21	0.23	0.26	0.27	0.30	0.33	0.35	0.38	0.41	0.43	0.46	0.49	0.51
24	0.69	1.11	1.52	1.94	2.35	2.77	3.18	3.60	4.01	4.22	4.64	5.05	5.47	5.88	6.30	6.71	7.13	7.54	7.96
0.61	0.06	0.10	0.14	0.18	0.22	0.26	0.30	0.33	0.37	0.39	0.43	0.47	0.51	0.55	0.59	0.62	0.66	0.70	0.74
30	0.93	1.48	2.04	2.59	3.15	3.70	4.26	4.81	5.37	5.64	6.20	6.75	7.31	7.86	8.42	8.97	9.53	10.09	10.64
0.76	0.09	0.14	0.19	0.24	0.29	0.34	0.40	0.45	0.50	0.52	0.58	0.63	0.68	0.73	0.78	0.83	0.89	0.94	0.99
36	1.16	1.85	2.55	3.24	3.94	4.63	5.33	6.03	6.72	7.07	7.76	8.46	9.15	9.85	10.54	11.24	11.93	12.63	13.32
0.91	0.11	0.17	0.24	0.30	0.37	0.43	0.50	0.56	0.62	0.66	0.72	0.79	0.85	0.92	0.98	1.05	1.11	1.17	1.24
42	1.39	2.23	3.06	3.90	4.73	5.57	6.40	7.24	8.07	8.49	9.33	10.16	11.00	11.83	12.67	13.50	14.34	15.17	16.01
1.07	0.13	0.21	0.29	0.36	0.44	0.52	0.60	0.68	0.75	0.79	0.87	0.95	1.03	1.10	1.18	1.26	1.34	1.42	1.49
48	1.63	2.60	3.58	4.55	5.53	6.50	7.48	8.45	9.43	9.92	10.89	11.87	12.84	13.82	14.79	15.77	16.74	17.72	18.69
1.22	0.15	0.24	0.33	0.42	0.51	0.60	0.70	0.79	0.88	0.92	1.01	1.10	1.19	1.29	1.38	1.47	1.56	1.65	1.74
54	1.86	2.97	4.09	5.21	6.32	7.44	8.55	9.67	10.78	11.34	12.46	13.57	14.69	15.80	16.92	18.03	19.15	20.26	21.38
1.37	0.17	0.28	0.38	0.48	0.59	0.69	0.80	0.90	1.00	1.05	1.16	1.26	1.37	1.47	1.57	1.68	1.78	1.88	1.99
60	2.09	3.35	4.60	5.86	7.11	8.37	9.63	10.88	12.14	12.76	14.02	15.28	16.53	17.79	19.04	20.30	21.55	22.81	24.06
1.52	0.19	0.31	0.43	0.54	0.66	0.78	0.90	1.01	1.13	1.19	1.30	1.42	1.54	1.65	1.77	1.89	2.00	2.12	2.24
66	2.33	3.72	5.12	6.51	7.91	9.30	10.70	12.09	13.49	14.19	15.58	16.98	18.37	19.77	21.17	22.56	23.96	25.35	26.75
1.68	0.22	0.35	0.48	0.61	0.74	0.87	1.00	1.12	1.25	1.32	1.45	1.58	1.71	1.84	1.97	2.10	2.23	2.36	2.49
72	2.56	4.09	5.63	7.17	8.70	10.24	11.77	13.31	14.84	15.61	17.15	18.68	20.22	21.75	23.29	24.83	26.36	27.90	29.43
1.83	0.24	0.38	0.52	0.67	0.81	0.95	1.09	1.24	1.38	1.45	1.59	1.74	1.88	2.02	2.17	2.31	2.45	2.59	2.74
78	2.79	4.47	6.14	7.82	9.50	11.17	12.85	14.52	16.20	17.04	18.71	20.39	22.06	23.74	25.41	27.09	28.77	30.44	32.12
1.98	0.26	0.42	0.57	0.73	0.88	1.04	1.19	1.35	1.51	1.58	1.74	1.90	2.05	2.21	2.36	2.52	2.68	2.83	2.99
84	3.03	4.84	6.66	8.47	10.29	12.11	13.92	15.74	17.55	18.46	20.28	22.09	23.91	25.72	27.54	29.35	31.17	32.99	34.80
2.13	0.28	0.45	0.62	0.79	0.96	1.13	1.29	1.46	1.63	1.72	1.89	2.05	2.22	2.39	2.56	2.73	2.90	3.07	3.24
90	3.26	5.22	7.17	9.13	11.08	13.04	14.99	16.95	18.91	19.88	21.84	23.80	25.75	27.71	29.66	31.62	33.57	35.53	37.49
2.29	0.30	0.49	0.67	0.85	1.03	1.21	1.39	1.58	1.76	1.85	2.03	2.21	2.39	2.58	2.76	2.94	3.12	3.30	3.49
96	3.49	5.59	7.68	9.78	11.88	13.97	16.07	18.16	20.26	21.31	23.40	25.50	27.60	29.69	31.79	33.88	35.98	38.08	40.17
2.44	0.32	0.52	0.71	0.91	1.10	1.30	1.49	1.69	1.88	1.98	2.18	2.37	2.57	2.76	2.96	3.15	3.35	3.54	3.74



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445RBID AUTOMATIC INTAKE DUAL COMBINATION LOUVER DAMPER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME

445RBID - 4" (102) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Caulking surfaces provided.

BLADES

Louver blades: 6063T5 extruded aluminum, .081" (2.1) nominal wall thickness. J-style blades (formerly "weatherproof") are positioned at 45° angle. Blade spacing is approximately 5" (127) center to center.

Backdraft damper blades: .050" (1.3) extruded aluminum.

SCREEN

3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

SEALS

Extruded vinyl blade edge seals on rear adjustable blades to provide quiet operation.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

6 lbs. per sq. ft. (29.3 kg/m²).

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 48"w x 96"h, 32 sq. ft. (1219 x 2438, 3m²). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

FEATURES

The 445RBID offers:

- All aluminum construction for low maintenance and high resistance to corrosion.
- Approximately 40% free area with backdraft damper blades full open, based on a 48" x 48" (1219 x 1219) size.
- Operable blades start to open at .16" w.g. static pressure and are fully open at .25" w.g. static pressure.

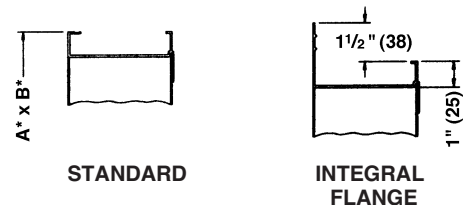
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

SUGGESTED SPECIFICATION

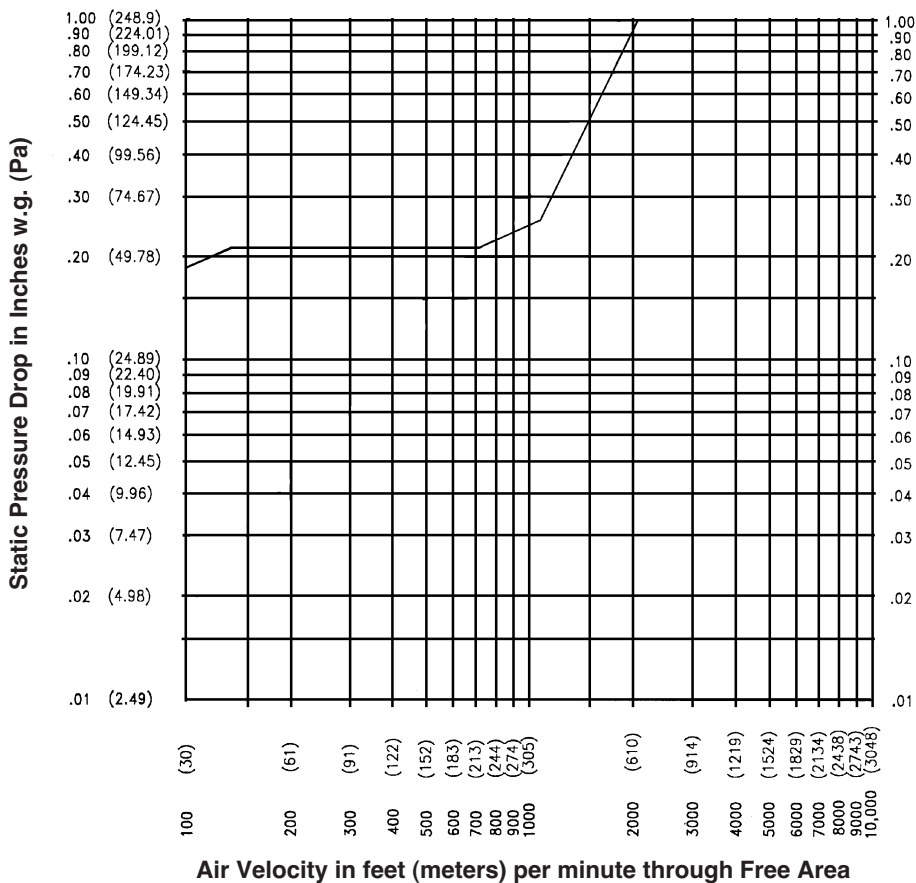
Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be automatic intake dual combination louver damper. Stationary blades with extruded vinyl seals and automatic backdraft blades shall be entirely contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit single section blade span to 48" (1219) and shall incorporate such other structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 445RBID construction as follows:

- Frame: .081" (2.1) extruded aluminum.
- Blades: Stationary blades: .081" (2.1) wall thickness.
Automatic backdraft blades: .050" (1.3) extruded aluminum.
- Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame.
- Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

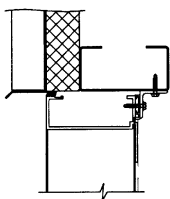
Published louver performance data derived from testing in accordance with AMCA 500 must be submitted for approval prior to fabrication and must demonstrate pressure drop equal to or less than the Reliable model specified.

PRESSURE DROP

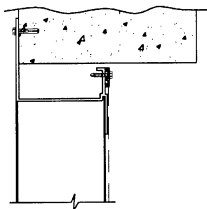


TYPICAL INSTALLATION DETAILS

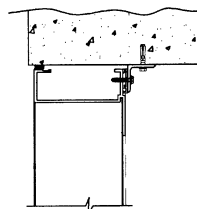
Metal Panel Wall



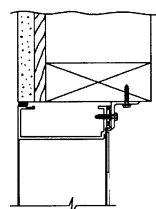
Flange Mount



Masonry Wall



Wood Installation





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445RBED AUTOMATIC EXHAUST DUAL COMBINATION LOUVER DAMPER

EXTRUDED ALUMINUM

STANDARD CONSTRUCTION

FRAME

445RBED - 4" (102) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Caulking surfaces provided.

BLADES

Louver blades: 6063T5 extruded aluminum, .081" (2.1) nominal wall thickness. J-style blades (formerly "weatherproof") are positioned at 45° angle. Blade spacing is approximately 5" (127) center to center.

Backdraft damper blades: .050" (1.3) extruded aluminum.

SCREEN

5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

SEALS

Extruded vinyl blade edge seals on rear adjustable blades to provide quiet operation.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

6 lbs. per sq. ft. (29.3 kg/m²).

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 48"w x 96"h, 32 sq. ft. (1219 x 2438, 3m²). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

FEATURES

The 445RBED offers:

- All aluminum construction for low maintenance and high resistance to corrosion.
- Approximately 40% free area with backdraft damper blades full open, based on a 48" x 48" (1219 x 1219) size.
- Operable blades start to open at .01" w.g. static pressure and are fully open at .25" w.g. static pressure.

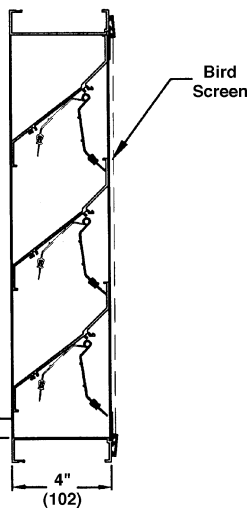
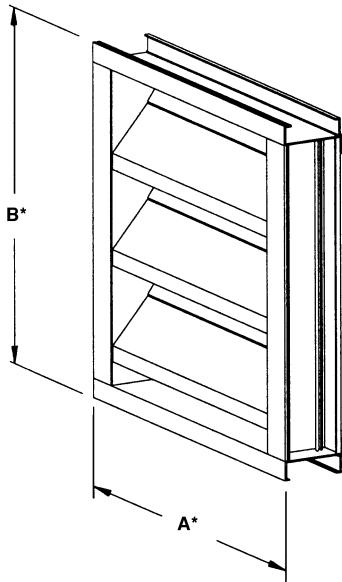
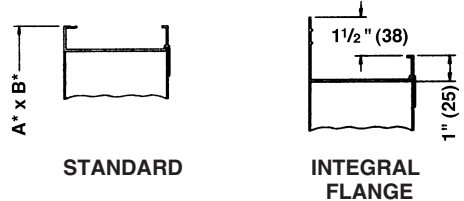
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize 50 & 70, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible.)

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be automatic exhaust dual combination louver damper. Stationary blades with extruded vinyl seals and automatic backdraft blades shall be entirely contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit single section blade span to 48" (1219) and shall incorporate such other structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa).

Louvers shall be Reliable Model 445RBED construction as follows:

Frame: .081" (2.1) extruded aluminum.

Blades: Stationary blades: .081" (2.1) wall thickness.

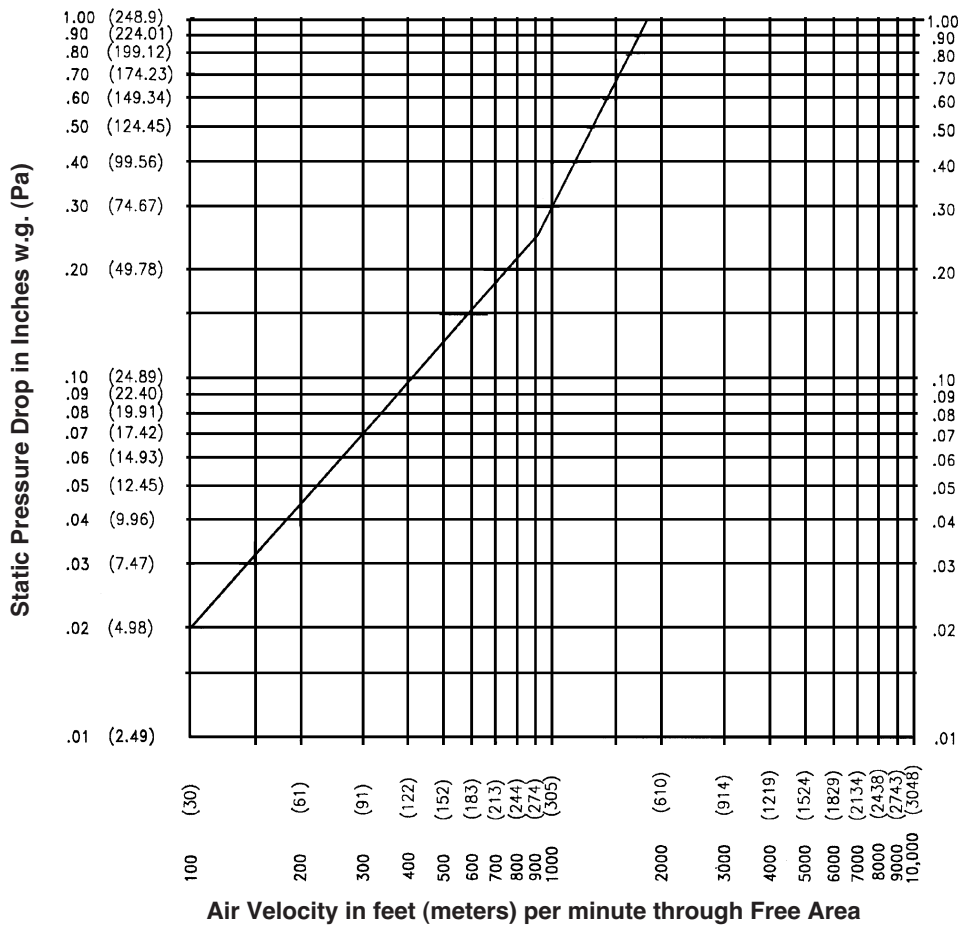
Automatic backdraft blades: .050" (1.3) extruded aluminum.

Screen: 5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame.

Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

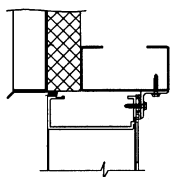
Published louver performance data derived from testing in accordance with AMCA 500 must be submitted for approval prior to fabrication and must demonstrate pressure drop equal to or less than the Reliable model specified.

PRESSURE DROP

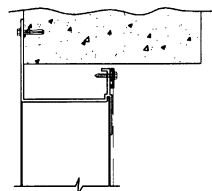


TYPICAL INSTALLATION DETAILS

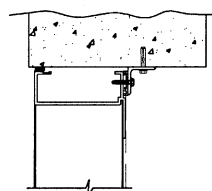
Metal Panel Wall



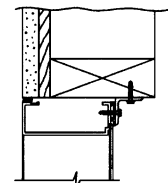
Flange Mount



Masonry Wall



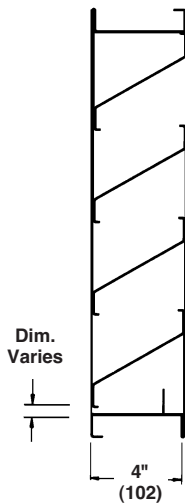
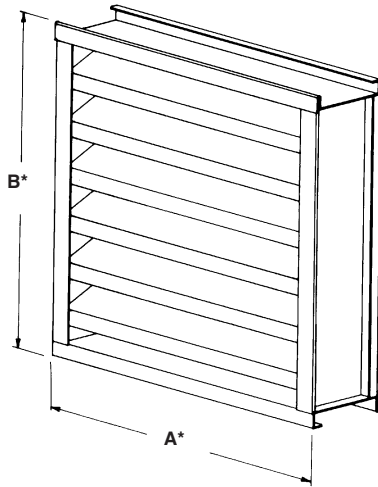
Wood Installation





430FB STATIONARY LOUVER

FORMED STEEL



STANDARD CONSTRUCTION

FRAME
16 (1.6) gage galvanized steel frame depth is 4" (102).

BLADES
18 (1.2) gage galvanized steel, J-style blades (formerly "weatherproof") positioned at 30° angle and spaced approximately 4" (102) center to center.

SCREEN
19 gage galvanized, 1/2" mesh screen in removable frame. Screen adds approximately 1/2" to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

MAXIMUM FACTORY ASSEMBLY SIZE
60 sq. ft. (5.6m²) per section not to exceed 120" x 72" (3048 x 1829) or 72" x 120" (1829 x 3048).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

FEATURES

- The 430FB offers:
- High free area, low pressure drop.
 - Economical galvanized steel construction.

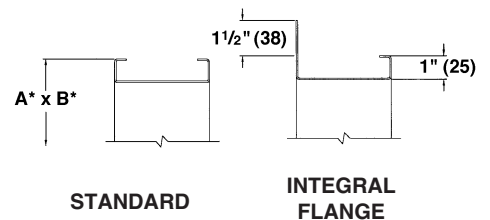
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Pearledize and prime coat.

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



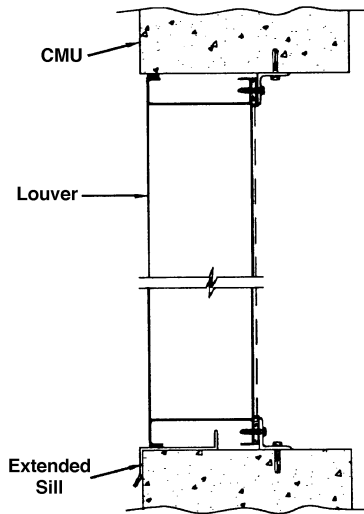
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

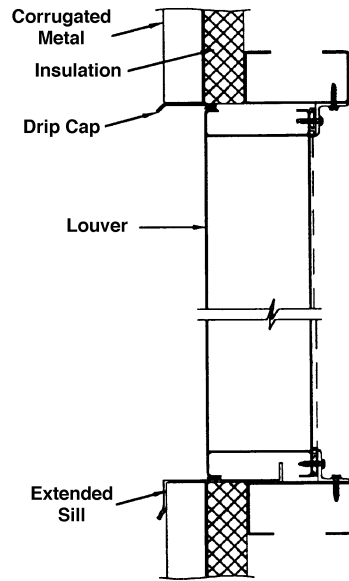
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

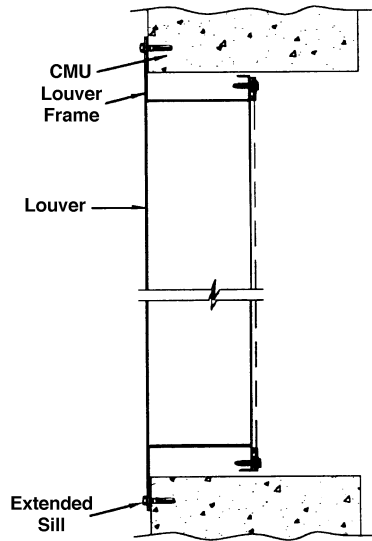
Masonry Wall



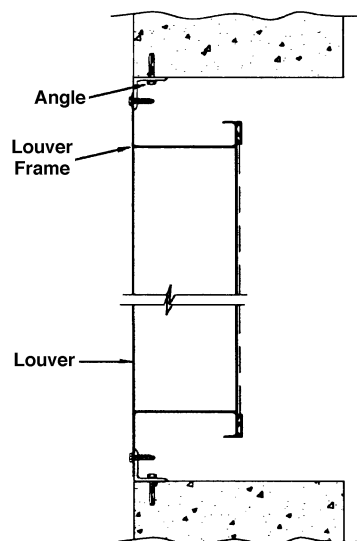
Metal Panel Wall



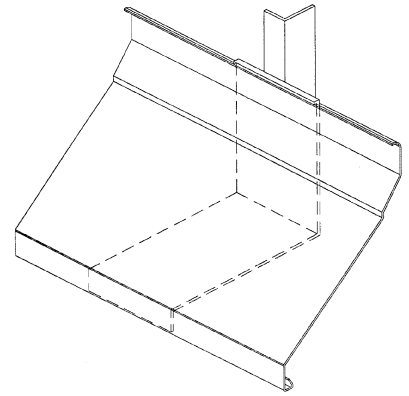
Flange Mount



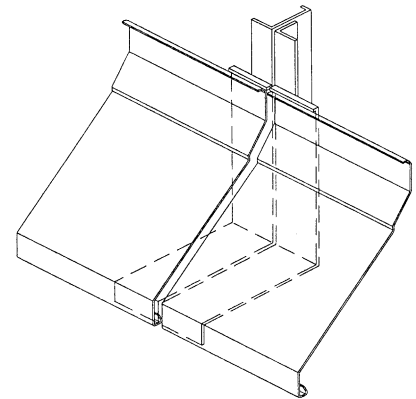
Angle Subframe



STANDARD CONSTRUCTION DETAILS

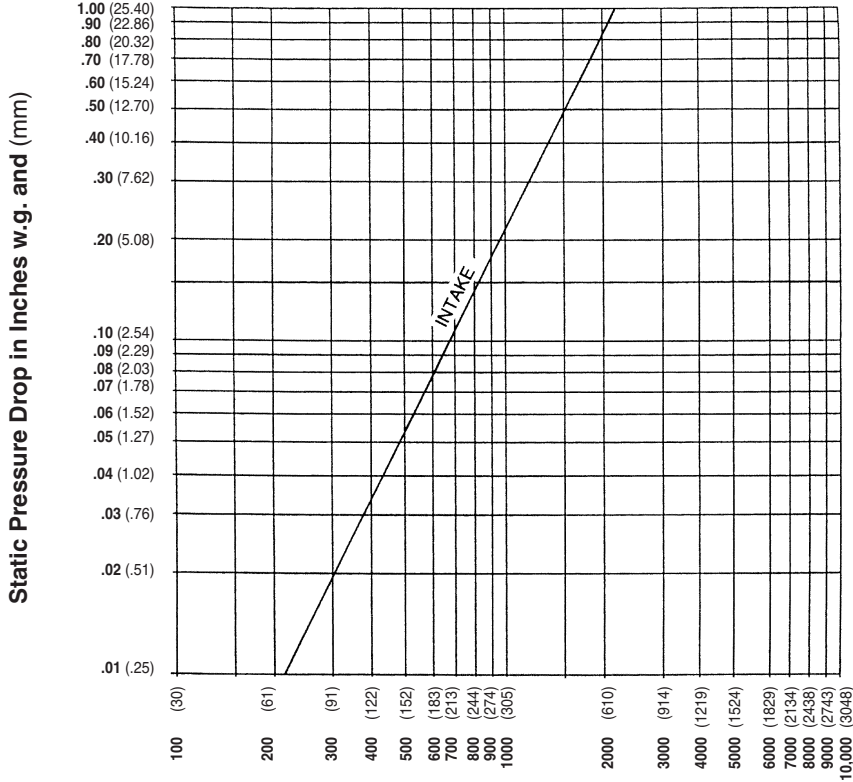


Hidden Vertical Blade Support (HVBS)



Continuous Blade Appearance at Multiple Section Junctions

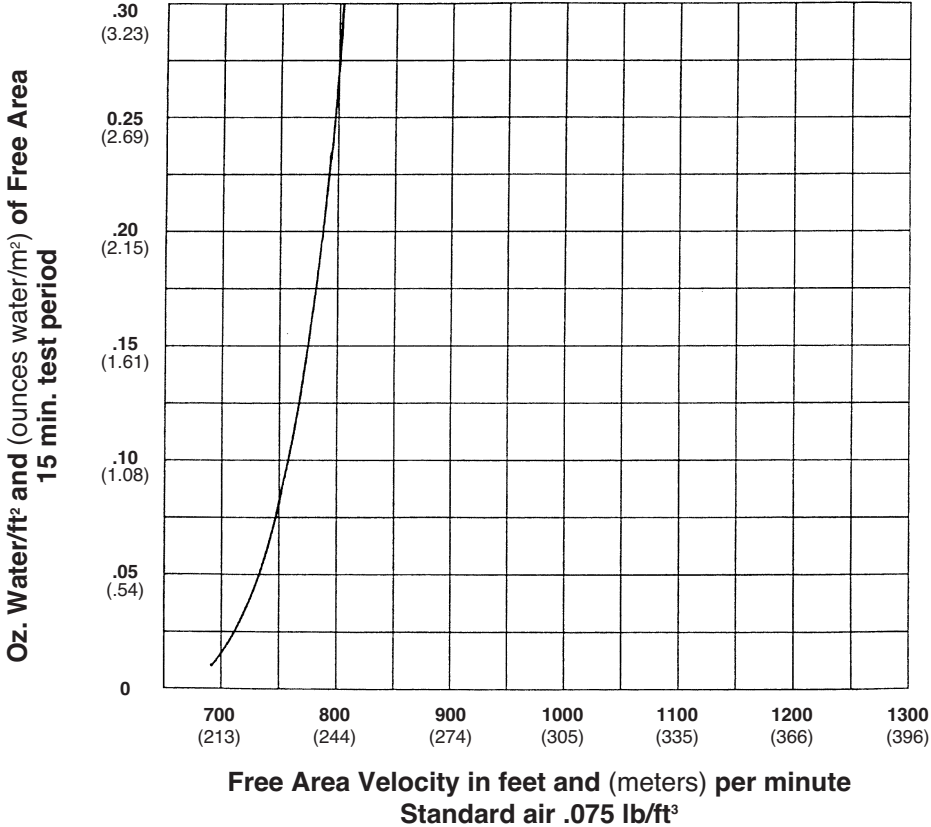
PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 674 fpm (205 m/min).





430FB

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type entirely contained within a 4" frame. Louver components (heads, jambs, sills, blades, & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 6 feet and shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (specifier may substitute any loading required).

Louvers shall be architectural style with continuous appearing stationary blades – intermediate support mullions shall not interrupt blade appearance when viewed from outside of louver.

Louvers shall be Reliable Model 430FB construction as follows:

Frame: 16 gage galvanized steel.

Blades: 18 gage galvanized steel at 30° angle on approximately 4" (102) centers.

Screen: 1/2" mesh x 19 gage galvanized in removable frame.

Louver shall receive Kynar finish color coating applied following a thorough cleaning, pretreatment and prime coating of the galvanized steel. Cleaning shall include complete submersion in an acid cleaner, an alkali cleaner, an acid deoxidation, an amorphous chrome phosphate conversion coating and an acidulated final rinse. Steel shall be dried before application of primer coat. Dry film thickness of the primer coat shall be approximately 0.3 mil after baking at 350°F, for 10 to 15 minutes and cooled at ambient temperature. Kynar top coat shall be applied to provide a final dry film thickness of approximately 1.2 mils when baked at 450°F, for 10 minutes. Color shall be selected from manufacturer's standard color chart.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

Designs should provide a reasonable safety factor for louver performance by selecting at some point below pressure drop or water penetration system requirements.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 430FB.

Width – Inches and Meters

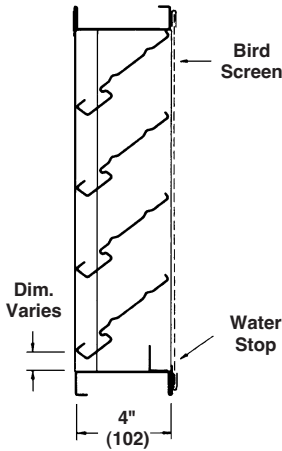
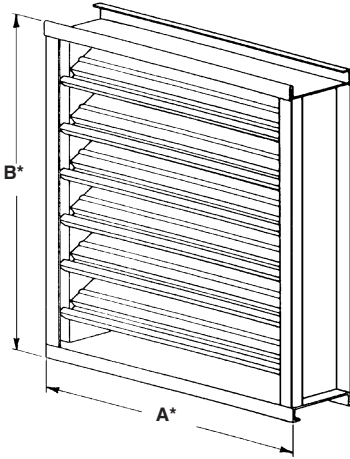
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	.30	.46	.61	.76	.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44
12	.24	.39	.53	.68	.82	.96	1.11	1.25	1.40	1.54	1.69	1.83	1.98	2.12	2.27
.30	.02	.04	.05	.06	.08	.09	.10	.12	.13	.14	.16	.17	.18	.20	.21
18	.54	.86	1.18	1.50	1.83	2.15	2.47	2.79	3.11	3.44	3.76	4.08	4.40	4.73	5.05
.46	.05	.08	.11	.14	.17	.20	.23	.26	.29	.32	.35	.38	.41	.44	.47
24	.78	1.24	1.71	2.18	2.65	3.11	3.58	4.05	4.51	4.98	5.45	5.91	6.38	6.85	7.31
.61	.07	.12	.16	.20	.25	.29	.33	.38	.42	.46	.51	.55	.59	.64	.68
30	1.09	1.74	2.39	3.04	3.70	4.35	5.00	5.65	6.30	6.96	7.61	8.26	8.91	9.57	10.22
.76	.10	.16	.22	.28	.34	.40	.46	.52	.59	.65	.71	.77	.83	.89	.95
36	1.31	2.10	2.89	3.68	4.47	5.26	6.05	6.84	7.63	8.42	9.20	9.99	10.78	11.57	12.36
.91	.12	.20	.27	.34	.42	.49	.56	.64	.71	.78	.85	.93	1.00	1.07	1.15
42	1.64	2.62	3.60	4.58	5.57	6.55	7.53	8.51	9.49	10.48	11.46	12.44	13.42	14.41	15.39
1.07	.15	.24	.33	.43	.52	.61	.70	.79	.89	.97	1.06	1.16	1.25	1.34	1.43
48	1.85	2.96	4.07	5.18	6.30	7.41	8.52	9.63	10.74	11.85	12.96	14.07	15.18	16.30	17.41
1.22	.17	.27	.38	.48	.59	.69	.79	.89	1.00	1.10	1.20	1.31	1.41	1.51	1.62
54	2.19	3.50	4.81	6.12	7.44	8.75	10.06	11.37	12.68	14.00	15.31	16.62	17.93	19.25	20.56
1.37	.20	.33	.45	.57	.69	.81	.93	1.06	1.18	1.30	1.42	1.54	1.67	1.79	1.91
60	2.43	3.88	5.34	6.80	8.25	9.71	11.17	12.62	14.08	15.54	16.99	18.45	19.91	21.36	22.82
1.52	.23	.36	.50	.63	.77	.90	1.04	1.17	1.31	1.44	1.58	1.71	1.85	1.98	2.12
66	2.74	4.38	6.02	7.66	9.31	10.95	12.59	14.23	15.87	17.52	19.16	20.80	22.44	24.09	25.73
1.68	.25	.41	.56	.71	.86	1.02	1.17	1.32	1.47	1.63	1.78	1.93	2.08	2.24	2.39
72	2.98	4.76	6.55	8.33	10.12	11.90	13.69	15.47	17.26	19.04	20.83	22.61	24.40	26.19	27.97
1.83	.28	.44	.61	.77	.94	1.11	1.27	1.44	1.60	1.77	1.94	2.10	2.27	2.43	2.60
78	3.28	5.25	7.22	9.19	11.16	13.13	15.10	17.07	19.04	21.01	22.98	24.95	26.92	28.89	30.86
1.98	.30	.49	.67	.85	1.04	1.22	1.40	1.59	1.77	1.95	2.13	2.32	2.50	2.68	2.87
84	3.52	5.64	7.75	9.87	11.98	14.10	16.21	18.32	20.44	22.55	24.67	26.78	28.90	31.01	33.12
2.13	.33	.52	.72	.92	1.11	1.31	1.51	1.70	1.90	2.09	2.29	2.49	2.68	2.88	3.08
90	3.82	6.11	8.40	10.70	12.99	15.28	17.57	19.87	22.16	24.45	26.74	29.03	31.33	33.62	35.91
2.29	.35	.57	.78	.99	1.21	1.42	1.63	1.85	2.06	2.27	2.48	2.70	2.91	3.12	3.34
96	4.07	6.52	8.96	11.40	13.84	16.29	18.73	21.17	23.62	26.06	28.50	30.95	33.39	35.83	38.28
2.44	.38	.61	.83	1.06	1.29	1.51	1.74	1.97	2.19	2.42	2.65	2.88	3.10	3.33	3.56

Height – Inches and Meters



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

4375FD HIGH PERFORMANCE STATIONARY LOUVER DRAINABLE BLADE ROLL FORMED STEEL



STANDARD CONSTRUCTION

- FRAME**
4" (102) deep, 18 (1.3) gage galvanized steel.
- BLADES**
18 (1.3) gage galvanized steel. Drainable blades are positioned at 37¹/₂° angle and spaced approximately 3¹/₂" (89) center to center.
- SCREEN**
1/2" mesh x 19 (1.1) gage galvanized bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.
- FINISH**
Mill.
- MINIMUM SIZE**
12"w x 12"h (305 x 305).
- APPROXIMATE SHIPPING WEIGHT**
7 lbs. per sq. ft
- MAXIMUM FACTORY ASSEMBLY SIZE**
120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048)

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

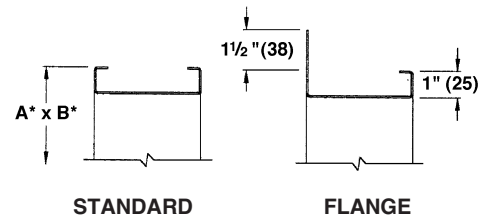
FEATURES

- The 4375FD offers:
- Published performance ratings based on testing in accordance with AMCA Publication 511.
 - High free area, low pressure drop, low water penetration.
 - Drain gutters in each blade and downspouts in jambs and mullions to drain water from louver for minimum water cascade from blade to blade.
 - Architecturally styled hidden mullions allowing continuous line appearance up to 120".
 - Economical galvanized steel construction.

VARIATIONS

- Variations to the basic design of this louver are available at additional cost. They include:
- Extended sill.
 - Hinged frame.
 - Front or rear security bars.
 - Filter racks.
 - A variety of bird and insect screens.
 - Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Acrodize and prime coat.
- Consult Reliable for other special requirements.

FRAME CONSTRUCTION



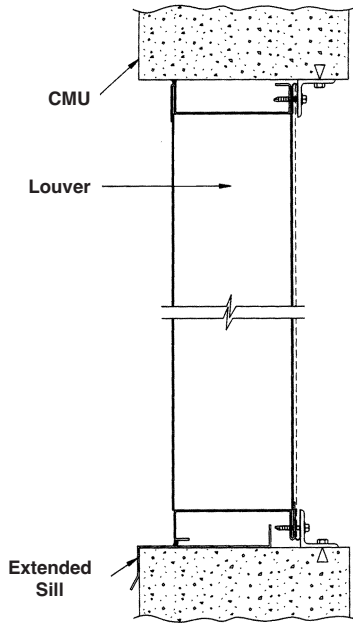
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

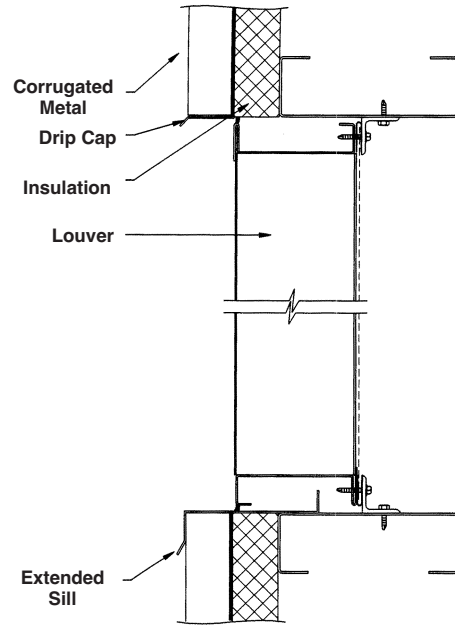
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

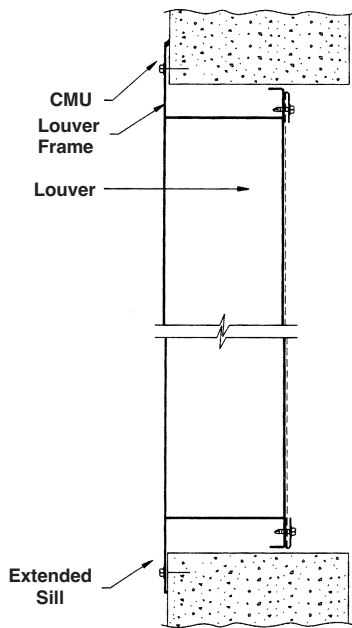
Masonry Wall



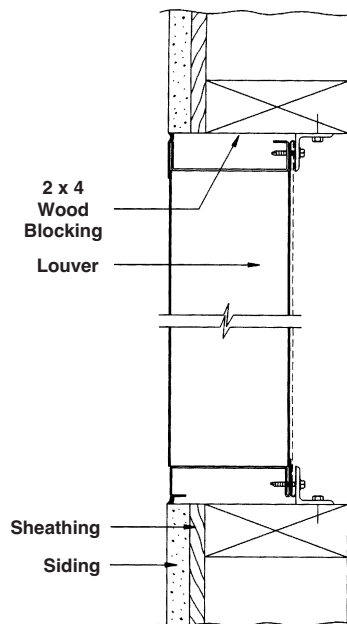
Metal Panel Wall



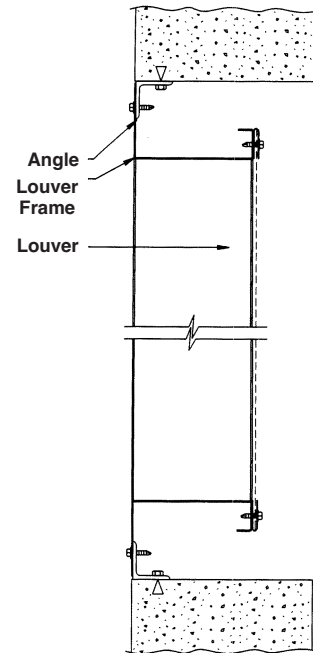
Flange Mount



Wood Installation

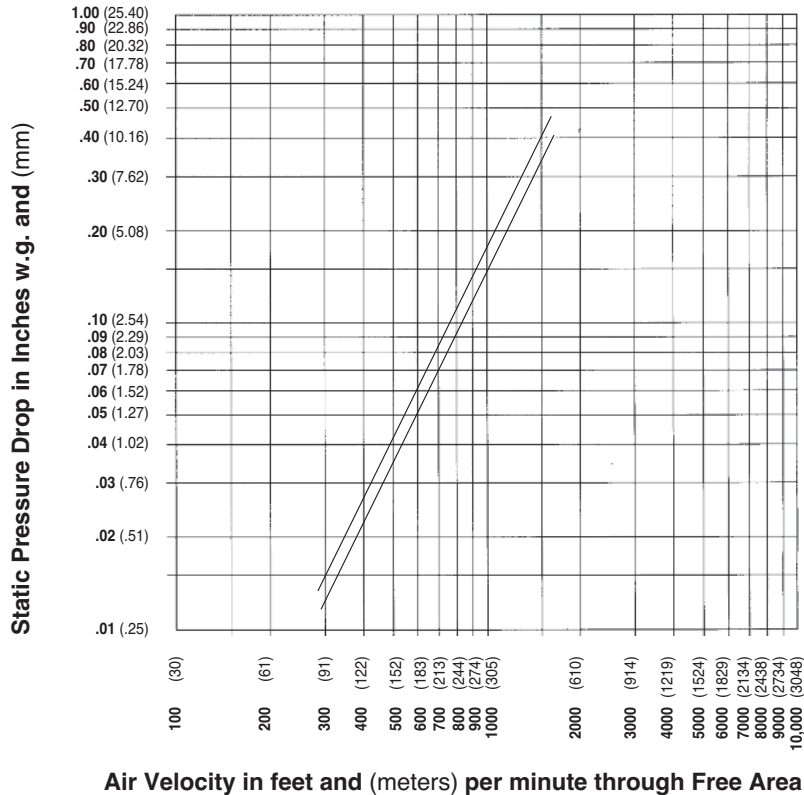


Angle Subframe



*Accessories at additional cost.

PRESSURE DROP

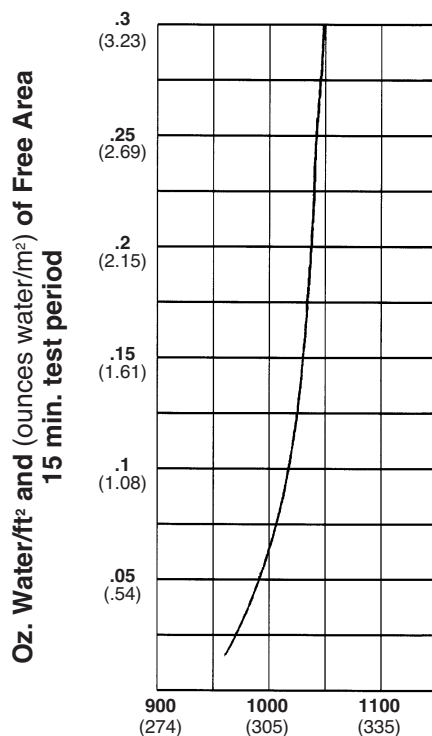


Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" x 48"

Beginning point of water penetration at .01 oz./sq. ft. is 961 fpm (274 m/min).



Reliable Products certifies that the 4375FD Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary drainable type entirely contained within a 4" (102) frame. Louvers shall include a drain gutter in each blade and downspouts in jambs and mullions. Louver components (heads, jambs, sills, blades, and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullion to 10 (3) feet and shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) equivalent of a 90 mph wind - specifier may substitute any loading required).

Louvers shall be Reliable Model 4375FD construction as follows:
 Frame: 18 gage (1.3) galvanized steel.
 Blades: 18 gage (1.3) galvanized steel at 37½° angle on approximate 3½" (89) centers.
 Screen: 19 gage (1.1) galvanized ½" (13) mesh screen.
 Finish: Select finish specification from Ruskin Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 4375FD.
Width – Inches and Meters

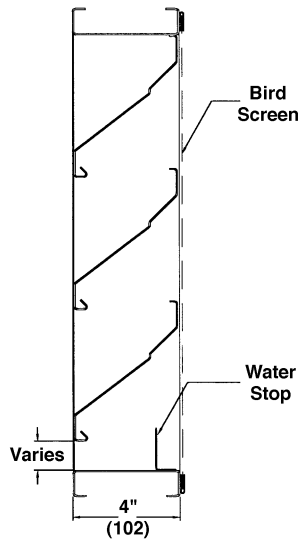
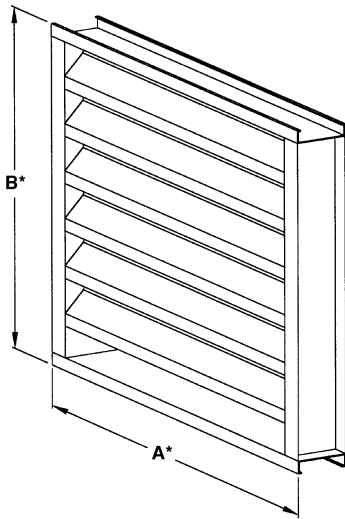
Height – Inches and Meters	12		18		24		30		36		42		48		54		60		66		72		78		84		90		96		102		108		114		120	
	0.30	0.30	0.46	0.46	0.61	0.61	0.76	0.76	0.91	0.91	1.07	1.07	1.22	1.22	1.37	1.37	1.52	1.52	1.68	1.68	1.83	1.83	1.98	1.98	2.13	2.13	2.29	2.29	2.44	2.44	2.59	2.59	2.74	2.74	2.90	2.90	3.05	3.05
12	0.35	0.03	0.56	0.05	0.77	0.07	0.98	0.09	1.19	0.11	1.40	0.13	1.61	0.15	1.82	0.17	2.03	0.19	2.24	0.21	2.45	0.23	2.66	0.25	2.87	0.27	3.08	0.29	3.29	0.31	3.50	0.33	3.71	0.34	3.92	0.36	4.13	0.38
18	0.57	0.05	0.92	0.09	1.26	0.12	1.61	0.15	1.95	0.18	2.30	0.21	2.64	0.25	2.99	0.28	3.33	0.31	3.67	0.35	4.02	0.37	4.36	0.41	4.71	0.44	5.05	0.47	5.40	0.50	5.74	0.53	6.09	0.57	6.43	0.60	6.78	0.63
24	0.80	0.07	1.28	0.12	1.76	0.16	2.23	0.21	2.71	0.25	3.19	0.30	3.67	0.34	4.15	0.39	4.63	0.43	5.11	0.47	5.59	0.52	6.07	0.56	6.54	0.61	7.02	0.65	7.50	0.70	7.98	0.74	8.46	0.79	8.94	0.83	9.42	0.88
30	1.02	0.09	1.64	0.15	2.25	0.21	2.86	0.27	3.47	0.32	4.09	0.38	4.70	0.44	5.31	0.49	5.93	0.55	6.54	0.61	7.15	0.66	7.77	0.72	8.38	0.78	8.99	0.84	9.61	0.89	10.22	0.95	10.83	1.01	11.45	1.06	12.06	1.12
36	1.34	0.12	2.15	0.20	2.95	0.27	3.76	0.35	4.56	0.42	5.37	0.50	6.17	0.57	6.98	0.65	7.78	0.72	8.59	0.80	9.40	0.87	10.20	0.95	11.01	1.02	11.81	1.10	12.62	1.17	13.42	1.25	14.23	1.32	15.03	1.40	15.84	1.47
42	1.57	0.15	2.51	0.23	3.45	0.32	4.39	0.41	5.32	0.49	6.26	0.58	7.20	0.67	8.14	0.76	9.08	0.84	10.02	0.93	10.96	1.02	11.90	1.11	12.84	1.19	13.78	1.28	14.72	1.37	15.66	1.46	16.60	1.54	17.54	1.63	18.48	1.72
48	1.79	0.17	2.86	0.27	3.94	0.37	5.01	0.47	6.09	0.57	7.16	0.67	8.23	0.76	9.31	0.87	10.38	0.96	11.46	1.06	12.53	1.16	13.60	1.26	14.68	1.36	15.75	1.46	16.83	1.56	17.90	1.66	18.97	1.76	20.05	1.86	21.12	1.96
54	2.01	0.19	3.22	0.30	4.43	0.41	5.64	0.52	6.85	0.64	8.06	0.75	9.26	0.86	10.47	0.97	11.68	1.09	12.89	1.20	14.10	1.31	15.31	1.42	16.51	1.53	17.72	1.65	18.93	1.76	20.14	1.87	21.35	1.98	22.56	2.10	23.76	2.21
60	2.24	0.21	3.58	0.33	4.92	0.46	6.27	0.58	7.61	0.71	8.95	0.83	10.29	0.96	11.64	1.08	12.98	1.21	14.32	1.33	15.66	1.46	17.01	1.58	18.35	1.71	19.69	1.83	21.04	1.96	22.38	2.08	23.72	2.20	25.04	2.33	26.41	2.45
66	2.56	0.24	4.09	0.38	5.63	0.52	7.16	0.67	8.70	0.81	10.23	0.95	11.70	1.09	13.30	1.24	14.84	1.38	16.37	1.52	17.91	1.66	19.44	1.81	20.98	1.95	22.51	2.09	24.05	2.23	25.58	2.38	27.12	2.52	28.63	2.66	30.19	2.81
72	2.78	0.26	4.45	0.41	6.12	0.57	7.79	0.72	9.46	0.88	11.13	1.03	12.80	1.19	14.47	1.34	16.14	1.50	17.80	1.65	19.47	1.81	21.14	1.96	22.81	2.12	24.48	2.27	26.15	2.43	27.82	2.59	29.49	2.74	31.16	2.90	32.83	3.05
78	3.01	0.28	4.81	0.45	6.61	0.61	8.42	0.78	10.22	0.95	12.02	1.12	13.83	1.29	15.63	1.45	17.43	1.62	19.24	1.79	21.04	1.96	22.84	2.12	24.65	2.29	26.45	2.46	28.25	2.63	30.06	2.79	31.86	2.96	33.67	3.13	35.47	3.30
84	3.23	0.30	5.17	0.48	7.11	0.66	9.04	0.84	10.98	1.02	12.92	1.20	14.86	1.38	16.79	1.56	18.73	1.74	20.67	1.92	22.61	2.10	24.55	2.28	26.48	2.46	28.42	2.64	30.36	2.82	32.30	3.00	34.24	3.18	36.17	3.36	38.11	3.54
90	3.55	0.33	5.68	0.53	7.81	0.73	9.94	0.92	12.07	1.12	14.20	1.32	16.33	1.52	18.46	1.72	20.59	1.91	22.72	2.11	24.85	2.31	26.98	2.51	29.11	2.71	31.24	2.90	33.37	3.10	35.50	3.30	37.63	3.50	39.46	3.67	41.89	3.89
96	3.77	0.35	6.04	0.56	8.30	0.77	10.57	0.98	12.83	1.19	15.10	1.40	17.36	1.61	19.62	1.82	21.89	2.03	24.15	2.24	26.42	2.46	28.68	2.67	30.95	2.88	33.21	3.09	35.47	3.30	37.74	3.51	40.00	3.72	42.27	3.93	44.53	4.14
102	4.00	0.37	6.40	0.59	8.80	0.82	11.19	1.04	13.59	1.26	15.99	1.49	18.39	1.71	20.79	1.93	23.19	2.16	25.59	2.38	27.98	2.60	30.38	2.82	32.78	3.05	35.18	3.27	37.58	3.49	39.98	3.72	42.38	3.94	44.74	4.16	47.17	4.38
108	4.22	0.39	6.75	0.63	9.29	0.86	11.82	1.10	14.35	1.33	16.89	1.57	19.42	1.80	21.95	2.04	24.49	2.28	27.02	2.51	29.55	2.75	32.08	2.98	34.62	3.22	37.15	3.45	39.68	3.69	42.22	3.92	44.75	4.16	47.24	4.39	49.82	4.63
114	4.54	0.42	7.27	0.68	9.99	0.93	12.72	1.18	15.44	1.43	18.17	1.69	20.89	1.94	23.62	2.20	26.34	2.45	29.07	2.70	31.79	2.95	34.52	3.21	37.24	3.46	39.97	3.71	42.69	3.97	45.42	4.22	48.14	4.47	50.87	4.73	53.59	4.98
120	4.77	0.44	7.63	0.71	10.48	0.97	13.34	1.24	16.20	1.51	19.06	1.77	21.92	2.04	24.78	2.27	27.64	2.57	30.50	2.83	33.36	3.10	36.22	3.37	39.08	3.63	41.94	3.90	44.80	4.16	47.66	4.43	50.52	4.69	53.38	4.96	56.24	5.23

Width – Inches and Meters



445FB STATIONARY LOUVER

ROLL FORMED STEEL



STANDARD CONSTRUCTION

FRAME
4" (102) deep, 18 gage (1.3) galvanized steel.

BLADES
20 gage (1.0) galvanized steel, J-style blades (formerly "weatherproof") are positioned at 45° angle and spaced approximately 5" (127) center to center.

SCREEN
1/2" x 19 gage (13 x 1.1) galvanized bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
6 lbs. per sq. ft. (29.3 per m²).

MAXIMUM FACTORY ASSEMBLY SIZE
64 sq. ft. (6m²) per section, not to exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048).
Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FEATURES

- The 445FB:
- 45% Free Area.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Hidden mullions for attractive appearance.
 - Economical galvanized steel construction.

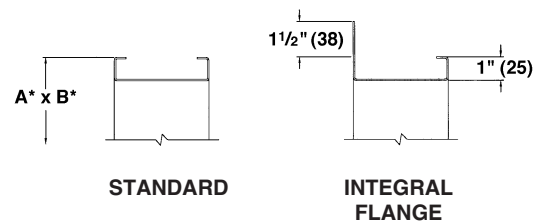
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize and Kynar.

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



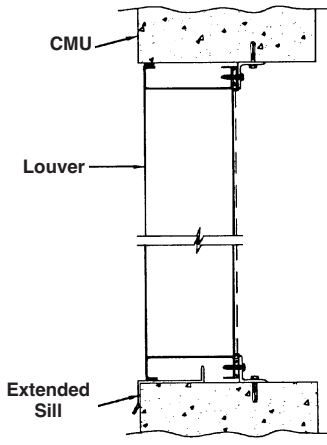
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

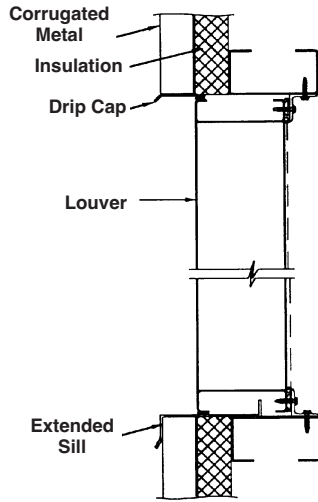
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE	

TYPICAL INSTALLATION DETAILS

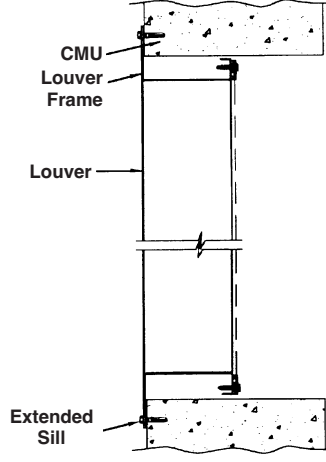
Masonry Wall



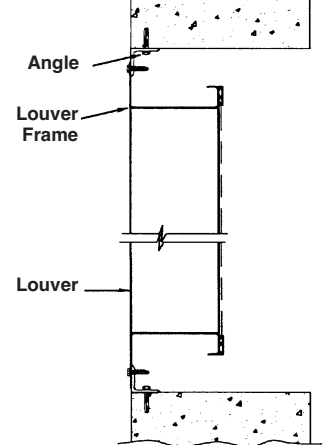
Metal Panel Wall



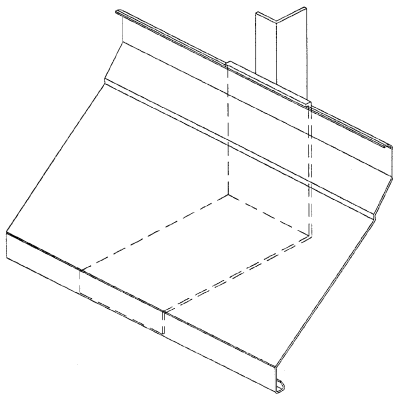
Flange Mount



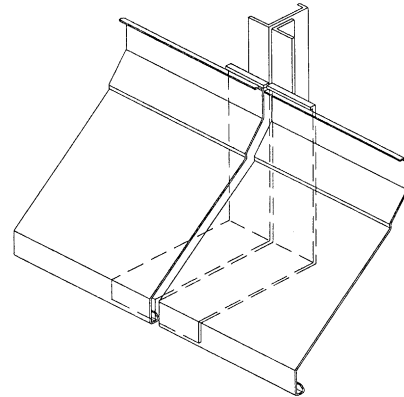
Angle Subframe



STANDARD CONSTRUCTION DETAILS

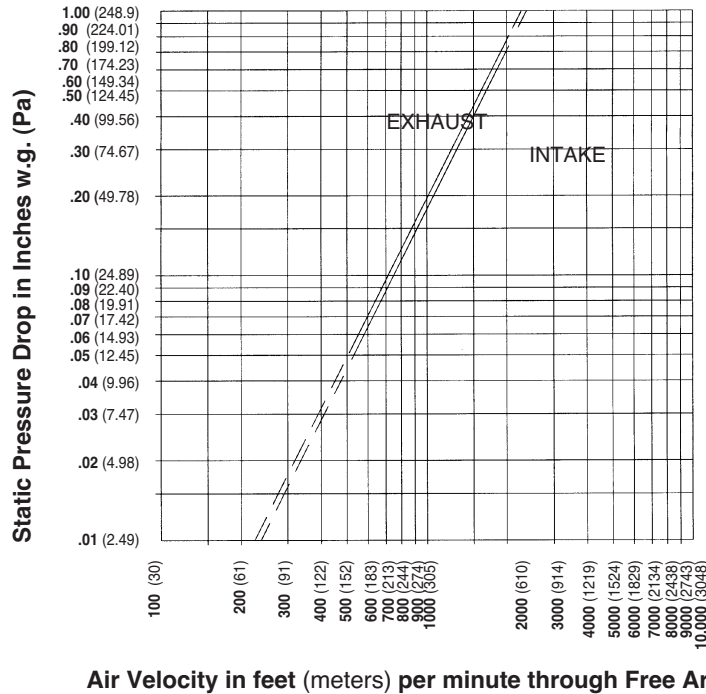


Hidden Vertical Blade Support (HVBS)



Continuous Blade Appearance at Multiple Section Junctions

PRESSURE DROP

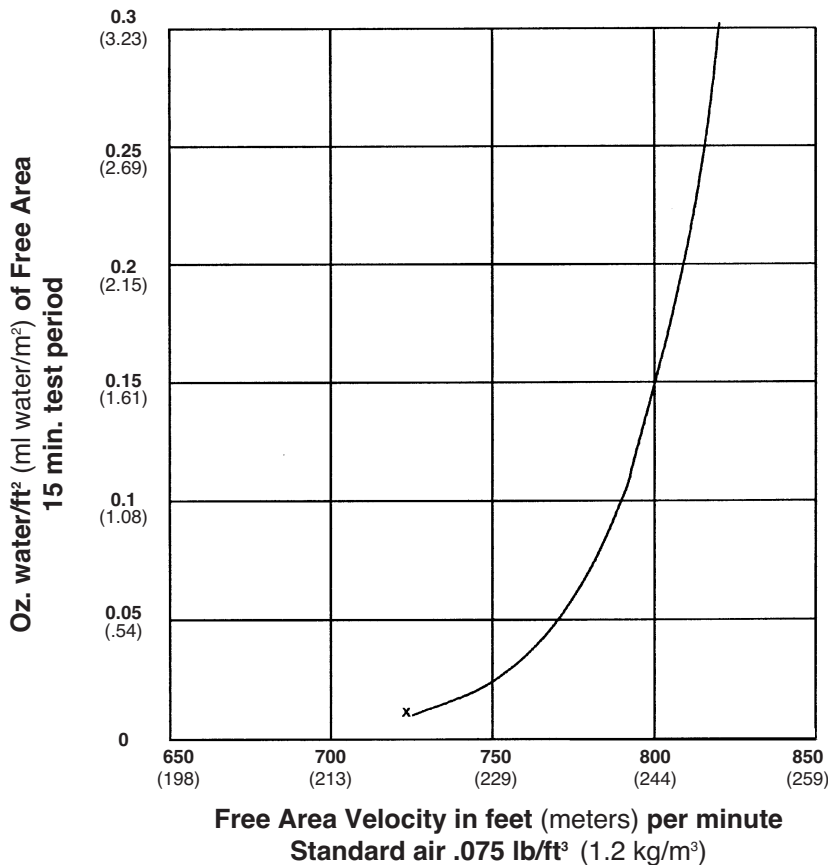


Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 725fpm (221 m/min).



Reliable Products certifies that the 445FB Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type entirely contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades, & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] – specifier may substitute any loading required).

Louvers shall be Reliable Model 445FB construction as follows:

- Frame: 18 gage (1.3) galvanized steel.
- Blades: 20 gage (1.0) galvanized steel at 45° angle on approximately 5" (127) center to center.
- Screen: 1/2" mesh x 19 gage (13 x 1.1) galvanized in removable frame.
- Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

Designs should provide a reasonable safety factor for louver performance by selecting at some point below pressure drop or water penetration system requirements.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 445FB
Width – Inches and Meters

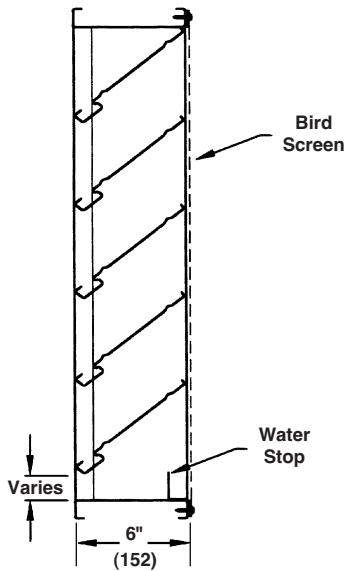
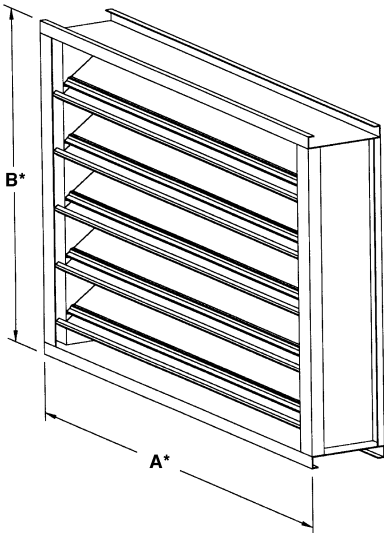
Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29
12	0.32	0.51	0.71	0.90	1.10	1.29	1.48	1.68	1.87	2.07	2.26	2.45	2.65	2.84
0.30	0.03	0.05	0.07	0.08	0.10	0.12	0.14	0.16	0.17	0.19	0.21	0.23	0.25	0.26
18	0.42	0.68	0.93	1.19	1.44	1.70	1.95	2.21	2.46	2.72	2.97	3.23	3.48	3.74
0.46	0.04	0.06	0.09	0.11	0.13	0.16	0.18	0.21	0.23	0.25	0.28	0.30	0.32	0.35
24	0.68	1.09	1.50	1.91	2.32	2.73	3.14	3.55	3.96	4.37	4.79	5.20	5.61	6.02
0.61	0.06	0.10	0.14	0.18	0.22	0.25	0.29	0.33	0.37	0.41	0.45	0.48	0.52	0.56
30	0.93	1.50	2.07	2.63	3.20	3.77	4.33	4.90	5.46	6.03	6.60	7.16	7.73	8.30
0.76	0.09	0.14	0.19	0.24	0.30	0.35	0.40	0.46	0.51	0.56	0.61	0.67	0.72	0.77
36	1.19	1.91	2.63	3.35	4.08	4.80	5.52	6.24	6.97	7.69	8.41	9.13	9.85	10.58
0.91	0.11	0.18	0.24	0.31	0.38	0.45	0.51	0.58	0.65	0.71	0.78	0.85	0.92	0.98
42	1.44	2.32	3.20	4.08	4.96	5.83	6.71	7.59	8.47	9.34	10.22	11.10	11.98	12.86
1.07	0.06	0.09	0.13	0.16	0.20	0.23	0.26	0.30	0.33	0.37	0.40	0.44	0.47	0.51
48	1.55	2.48	3.42	4.36	5.30	6.24	7.18	8.12	9.06	10.00	10.93	11.87	12.81	13.75
1.22	0.14	0.23	0.32	0.41	0.49	0.58	0.67	0.75	0.84	0.93	1.02	1.10	1.19	1.28
54	1.80	2.90	3.99	5.08	6.18	7.27	8.37	9.46	10.56	11.65	12.75	13.84	14.94	16.03
1.37	0.17	0.27	0.37	0.47	0.57	0.68	0.78	0.88	0.98	1.08	1.19	1.29	1.39	1.49
60	2.06	3.31	4.56	5.81	7.06	8.31	9.56	10.81	12.06	13.31	14.56	15.81	17.06	18.31
1.52	0.19	0.31	0.42	0.54	0.66	0.77	0.89	1.01	1.12	1.24	1.35	1.47	1.59	1.70
66	2.31	3.72	5.13	6.53	7.94	9.34	10.75	12.15	13.56	14.97	16.37	17.78	19.18	20.59
1.68	0.22	0.35	0.48	0.61	0.74	0.87	1.00	1.13	1.26	1.39	1.52	1.65	1.78	1.91
72	2.57	4.13	5.69	7.25	8.81	10.38	11.94	13.50	15.06	16.62	18.18	19.74	21.31	22.87
1.83	0.24	0.38	0.53	0.67	0.82	0.96	1.11	1.26	1.40	1.55	1.69	1.84	1.98	2.13
78	2.67	4.29	5.92	7.54	9.16	10.78	12.41	14.03	15.65	17.27	18.90	20.52	22.14	23.76
1.98	0.25	0.40	0.55	0.70	0.85	1.00	1.15	1.30	1.46	1.61	1.76	1.91	2.06	2.21
84	2.93	4.70	6.48	8.26	10.04	11.82	13.60	15.37	17.15	18.93	20.71	22.49	24.26	26.04
2.13	0.27	0.44	0.60	0.77	0.93	1.10	1.26	1.43	1.60	1.76	1.93	2.09	2.26	2.42
90	3.18	5.12	7.05	8.98	10.92	12.85	14.78	16.72	18.65	20.59	22.52	24.45	26.39	28.32
2.29	0.30	0.48	0.66	0.84	1.02	1.20	1.37	1.55	1.73	1.91	2.09	2.27	2.45	2.63
96	3.44	5.53	7.62	9.71	11.80	13.89	15.97	18.06	20.15	22.24	24.33	26.42	28.51	30.60
2.44	0.32	0.51	0.71	0.90	1.10	1.29	1.49	1.68	1.87	2.07	2.26	2.46	2.65	2.85
102	3.69	5.94	8.18	10.43	12.67	14.92	17.16	19.41	21.65	23.90	26.14	28.39	30.63	32.88
2.59	0.34	0.55	0.76	0.97	1.18	1.39	1.60	1.81	2.01	2.22	2.43	2.64	2.85	3.06
108	3.80	6.10	8.41	10.71	13.02	15.33	17.63	19.94	22.24	24.55	26.86	29.16	31.47	33.78
2.74	0.35	0.57	0.78	1.00	1.21	1.43	1.64	1.85	2.07	2.28	2.50	2.71	2.93	3.14
114	4.05	6.51	8.98	11.44	13.90	16.36	18.82	21.28	23.75	26.21	28.67	31.13	33.59	36.05
2.90	0.38	0.61	0.83	1.06	1.29	1.52	1.75	1.98	2.21	2.44	2.67	2.90	3.12	3.35
120	4.31	6.93	9.54	12.16	14.78	17.39	20.01	22.63	25.25	27.86	30.48	33.10	35.72	38.33
3.05	0.40	0.64	0.89	1.13	1.37	1.62	1.86	2.10	2.35	2.59	2.83	3.08	3.32	3.56



6375FD STATIONARY LOUVER

ROLL FORMED STEEL



STANDARD CONSTRUCTION

FRAME
6" (152) deep, 18 gage (1.3) galvanized steel.

BLADES
18 (1.3) gage galvanized steel. Drainable blades are positioned at 37¹/₂° angle and spaced approximately 4³/₄" (121) center to center.

SCREEN
1/2" mesh x 19 gage (13 x 1.1) galvanized bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT
5 lbs. per sq. ft (24.4 kg/m²)

MAXIMUM FACTORY ASSEMBLY SIZE
64 square feet (6m²) per section, not to exceed 60"w x 120"h (1524 x 3048) or 120"w x 60"h (3048 x 1524).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS
Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

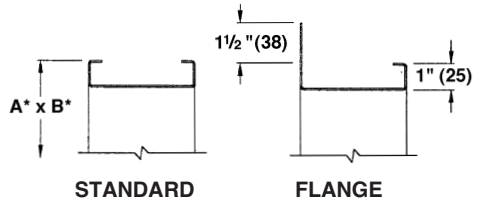
FEATURES

- The 6375FD:
- 54% Free Area.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Drain gutters in each blade and downspouts in jambs and mullions to drain water from louver for minimum water cascade from blade to blade.
 - Low pressure drop and low water penetration.
 - Hidden vertical blade supports allow continuous blade appearance up to 120"w (3048).
 - Economical galvanized steel construction.

VARIATIONS

- Variations to the basic design of this louver are available at additional cost. They include:
- Extended sill.
 - Hinged frame.
 - Front or rear security bars.
 - Filter racks.
 - Installation angles.
 - A variety of bird and insect screens.
 - Heavier, 16 gage (1.6) construction.
 - Formed stainless steel construction with 18 gage (1.3) or 16 gage (1.6) frame and blades.
 - Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize and Kynar.
- Consult Reliable for other special requirements.

FRAME CONSTRUCTION



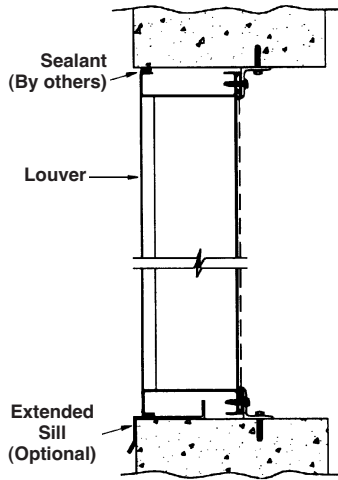
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

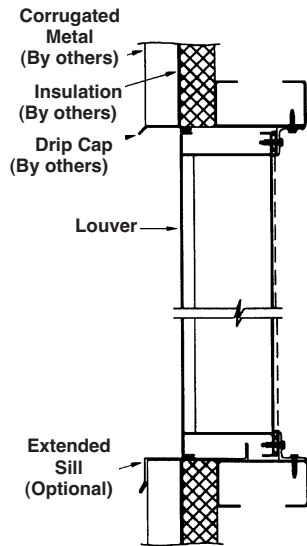
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

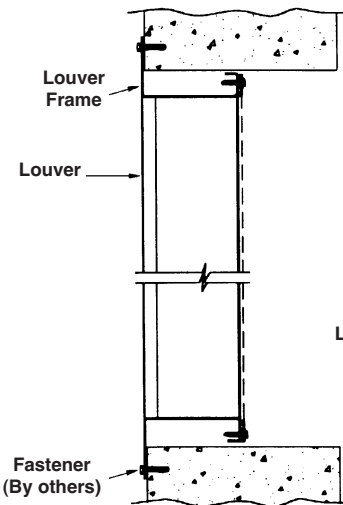
Masonry Wall



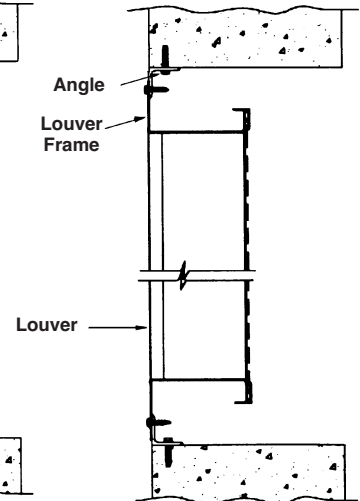
Metal Panel Wall



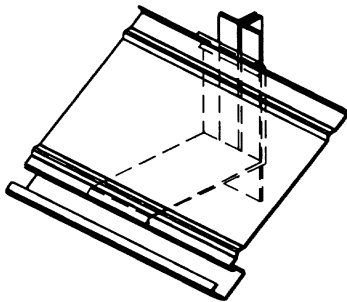
Flange Mount



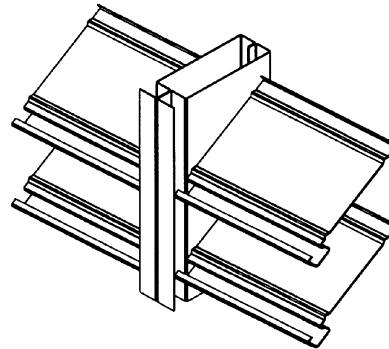
Angle Subframe (Optional)



STANDARD CONSTRUCTION DETAILS

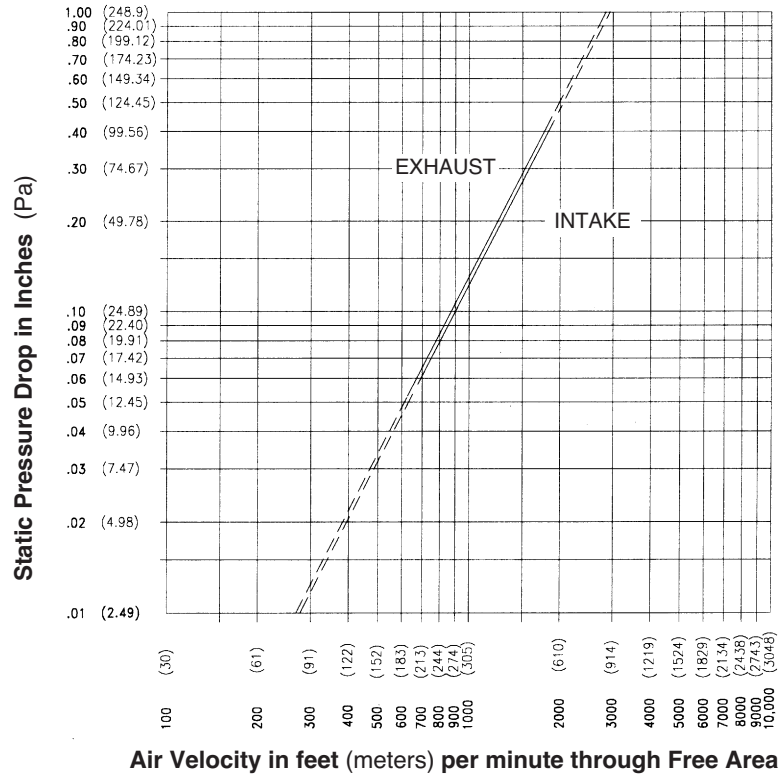


Hidden Vertical Blade Support (HVBS)
Available up to 120" (3048)



Visible Mullion At Section Joints

PRESSURE DROP

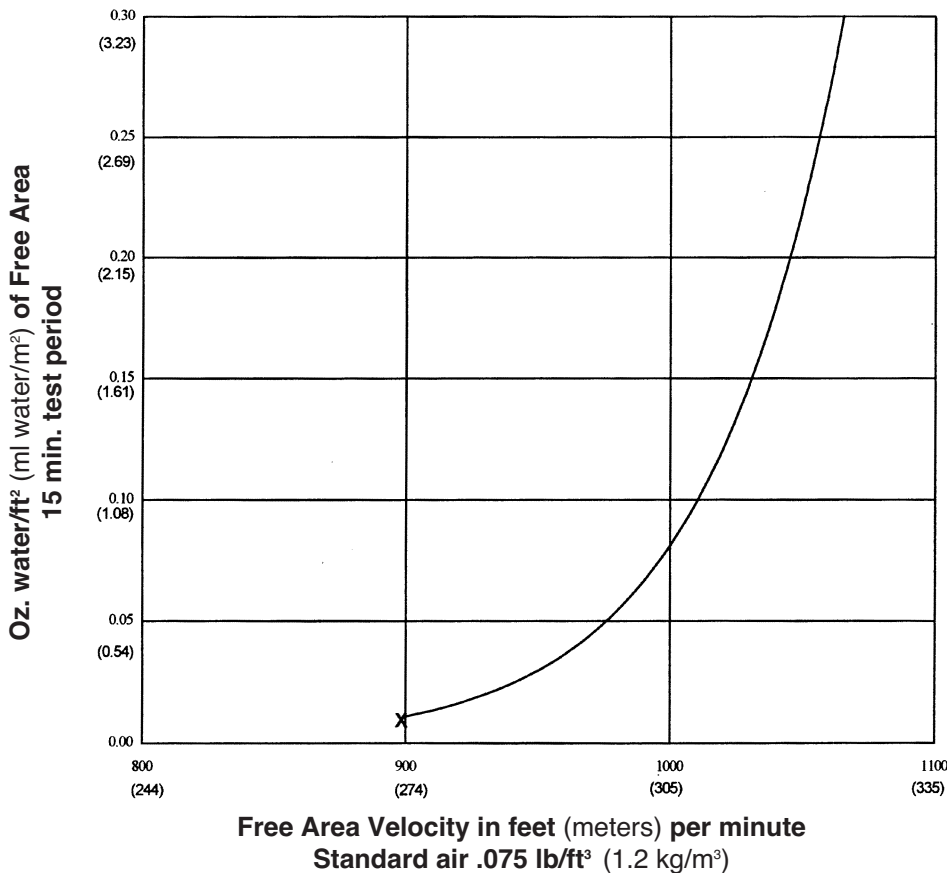


Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 896 fpm (273 m/min).



Reliable Products certifies that the 6375FD Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary drainable type entirely contained within a 6" (152) frame. Louvers shall include a drain gutter in each blade and downspouts in jambs and mullions. Louver components (heads, jambs, sills, blades, and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 6375FD construction as follows:
 Frame: 18 gage (1.3) galvanized steel.
 Blades: 18 gage (1.3) galvanized steel positioned at 37¹/₂° angle and spaced approximately 4³/₄" (121) center to center.
 Screen: 1/2" mesh x 19 gage (13 x 1.1) galvanized steel in removable frame.
 Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

Designs should provide a reasonable safety factor for louver performance by selecting at some point below pressure drop or water penetration system requirements.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 6375FD
 Width – Inches and Meters

Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.21	0.34	0.48	0.61	0.75	0.88	1.01	1.15	1.28	1.41	1.55	1.68	1.81	1.95	2.08	2.21	2.35	2.48	2.61
0.30	0.02	0.03	0.04	0.06	0.07	0.08	0.09	0.11	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.21	0.22	0.23	0.24
18	0.50	0.81	1.12	1.43	1.75	2.06	2.37	2.69	3.00	3.31	3.62	3.94	4.25	4.56	4.87	5.19	5.50	5.81	6.13
0.46	0.05	0.08	0.10	0.13	0.16	0.19	0.22	0.25	0.28	0.31	0.34	0.37	0.40	0.42	0.45	0.48	0.51	0.54	0.57
24	0.78	1.27	1.76	2.26	2.75	3.24	3.73	4.22	4.72	5.21	5.70	6.19	6.69	7.18	7.67	8.16	8.65	9.15	9.64
0.61	0.07	0.12	0.16	0.21	0.26	0.30	0.35	0.39	0.44	0.48	0.53	0.58	0.62	0.67	0.71	0.76	0.80	0.85	0.90
30	1.06	1.73	2.41	3.08	3.75	4.42	5.09	5.76	6.44	7.11	7.78	8.45	9.12	9.79	10.47	11.14	11.81	12.48	13.15
0.76	0.10	0.16	0.22	0.29	0.35	0.41	0.47	0.54	0.60	0.66	0.72	0.79	0.85	0.91	0.97	1.04	1.10	1.16	1.22
36	1.35	2.20	3.05	3.90	4.75	5.60	6.45	7.30	8.16	9.01	9.86	10.71	11.56	12.41	13.26	14.11	14.96	15.81	16.66
0.91	0.13	0.20	0.28	0.36	0.44	0.52	0.60	0.68	0.76	0.84	0.92	1.00	1.07	1.15	1.23	1.31	1.39	1.47	1.55
42	1.52	2.48	3.44	4.40	5.36	6.32	7.28	8.24	9.20	10.16	11.12	12.08	13.04	14.00	14.96	15.92	16.87	17.83	18.79
1.07	0.06	0.10	0.14	0.17	0.21	0.25	0.29	0.32	0.36	0.40	0.44	0.48	0.51	0.55	0.59	0.63	0.66	0.70	0.74
48	1.80	2.94	4.08	5.22	6.36	7.50	8.64	9.78	10.92	12.06	13.19	14.33	15.47	16.61	17.75	18.89	20.03	21.17	22.31
1.22	0.17	0.27	0.38	0.49	0.59	0.70	0.80	0.91	1.02	1.12	1.23	1.33	1.44	1.54	1.65	1.76	1.86	1.97	2.07
54	2.09	3.41	4.72	6.04	7.36	8.68	10.00	11.32	12.64	13.95	15.27	16.59	17.91	19.23	20.55	21.86	23.18	24.50	25.82
1.37	0.19	0.32	0.44	0.56	0.68	0.81	0.93	1.05	1.18	1.30	1.42	1.54	1.67	1.79	1.91	2.03	2.16	2.28	2.40
60	2.37	3.87	5.37	6.87	8.36	9.86	11.36	12.86	14.35	15.85	17.35	18.85	20.35	21.84	23.34	24.84	26.34	27.83	29.33
1.52	0.22	0.36	0.50	0.64	0.78	0.92	1.06	1.20	1.33	1.47	1.61	1.75	1.89	2.03	2.17	2.31	2.45	2.59	2.73
66	2.54	4.15	5.76	7.36	8.97	10.58	12.18	13.79	15.40	17.00	18.61	20.22	21.82	23.43	25.04	26.64	28.25	29.86	31.46
1.68	0.24	0.39	0.54	0.68	0.83	0.98	1.13	1.28	1.43	1.58	1.73	1.88	2.03	2.18	2.33	2.48	2.63	2.78	2.93
72	2.83	4.61	6.40	8.19	9.97	11.76	13.54	15.33	17.12	18.90	20.69	22.47	24.26	26.05	27.83	29.62	31.40	33.19	34.98
1.83	0.26	0.43	0.60	0.76	0.93	1.09	1.26	1.43	1.59	1.76	1.92	2.09	2.26	2.42	2.59	2.75	2.92	3.09	3.25
78	3.11	5.08	7.04	9.01	10.97	12.94	14.90	16.87	18.83	20.80	22.77	24.73	26.70	28.66	30.63	32.59	34.56	36.52	38.49
1.98	0.29	0.47	0.65	0.84	1.02	1.20	1.39	1.57	1.75	1.93	2.12	2.30	2.48	2.67	2.85	3.03	3.21	3.40	3.58
84	3.40	5.54	7.69	9.83	11.97	14.12	16.26	18.41	20.55	22.70	24.84	26.99	29.13	31.28	33.42	35.57	37.71	39.86	42.00
2.13	0.32	0.52	0.71	0.91	1.11	1.31	1.51	1.71	1.91	2.11	2.31	2.51	2.71	2.91	3.11	3.31	3.51	3.71	3.91
90	3.57	5.82	8.07	10.33	12.58	14.84	17.09	19.34	21.60	23.85	26.10	28.36	30.61	33.00	35.26	37.51	39.76	42.02	44.27
2.29	0.33	0.54	0.75	0.96	1.17	1.38	1.59	1.80	2.01	2.22	2.43	2.64	2.85	3.07	3.28	3.49	3.70	3.91	4.12



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

645FB STATIONARY LOUVER

ROLL FORMED STEEL

STANDARD CONSTRUCTION

FRAME
6" (152) deep, 20 (1.4) gage galvanized steel.

BLADES
20 gage (1.4) galvanized steel, J-style blades (formerly "weatherproof") are positioned at 45° angle and spaced approximately 6¹/₁₆" (170) center to center.

SCREEN
1/2" (13) mesh 19 gage (1.1) galvanized screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12" wide x 12" high (305 x 305).

MAXIMUM FACTORY ASSEMBLY SIZE
64 sq. ft. (6m²). Sections must fit into standard enclosed trailer 90" high x 240" deep (2286 x 6096).

FEATURES

- The 645FB offers:
- Architecturally styled hidden mullions for attractive appearance.
 - Economical galvanized steel construction.

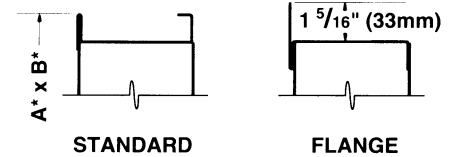
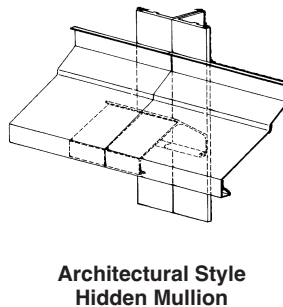
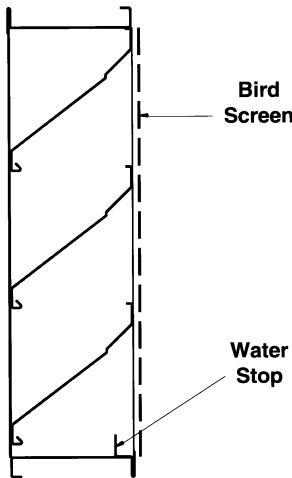
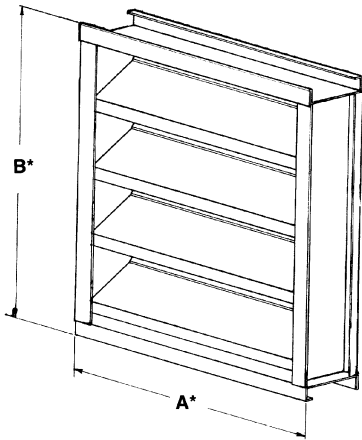
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill
- Hinged frame
- Front or rear security bars
- Filter racks
- A variety of bird and insect screens
- Selection of finishes: baked enamel (modified fluropolymer), epoxy, integral color and clear anodize, Kynar, Fluoridize and prime coat.
- Heavier, 18 gage (1.2) and 16 gage (1.5) construction.

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



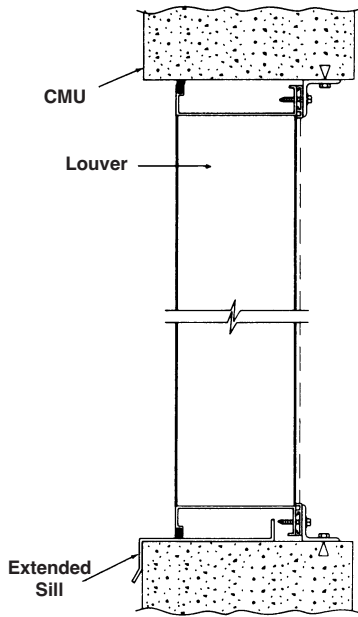
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

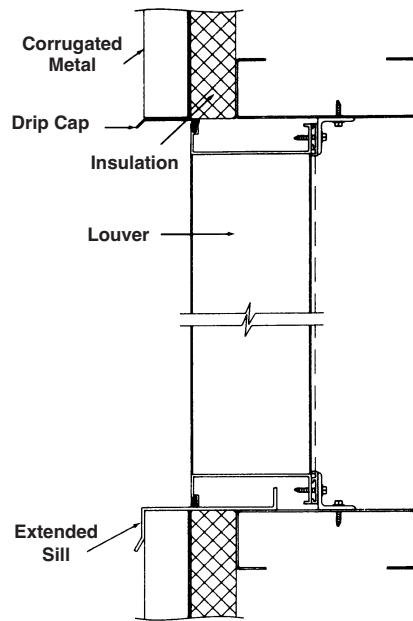
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

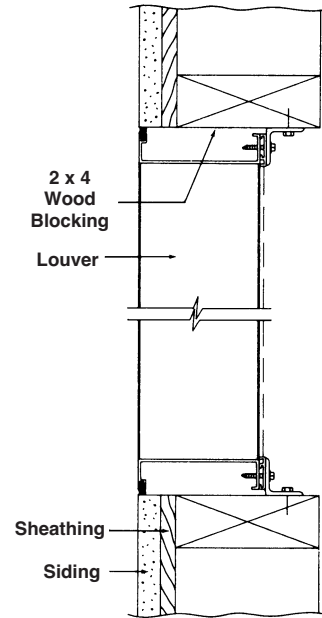
Masonry Wall



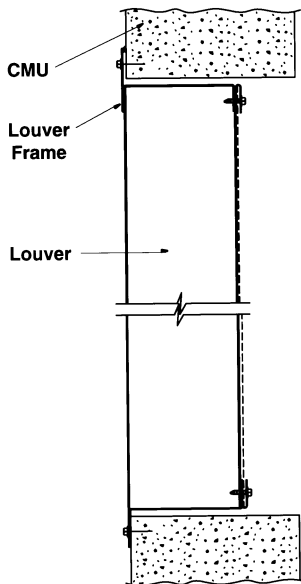
Metal Panel Wall



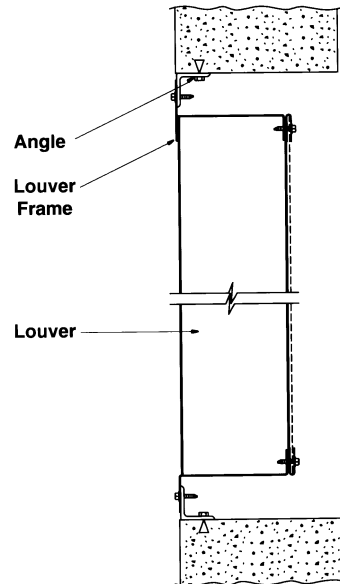
Glazing Frame



Flange Mount

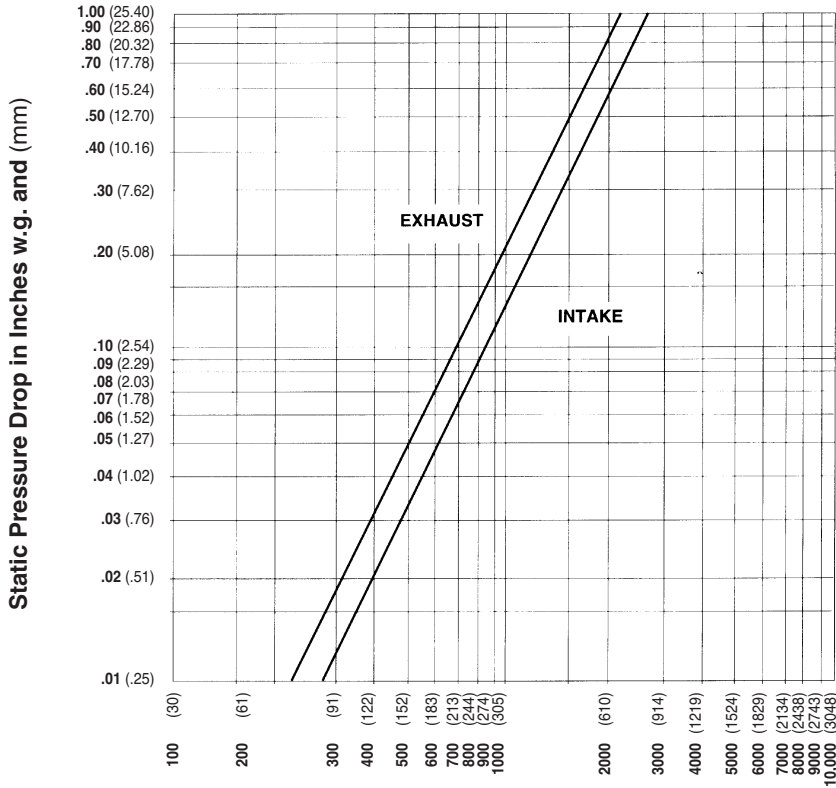


Angle Subframe



Accessories at additional cost.

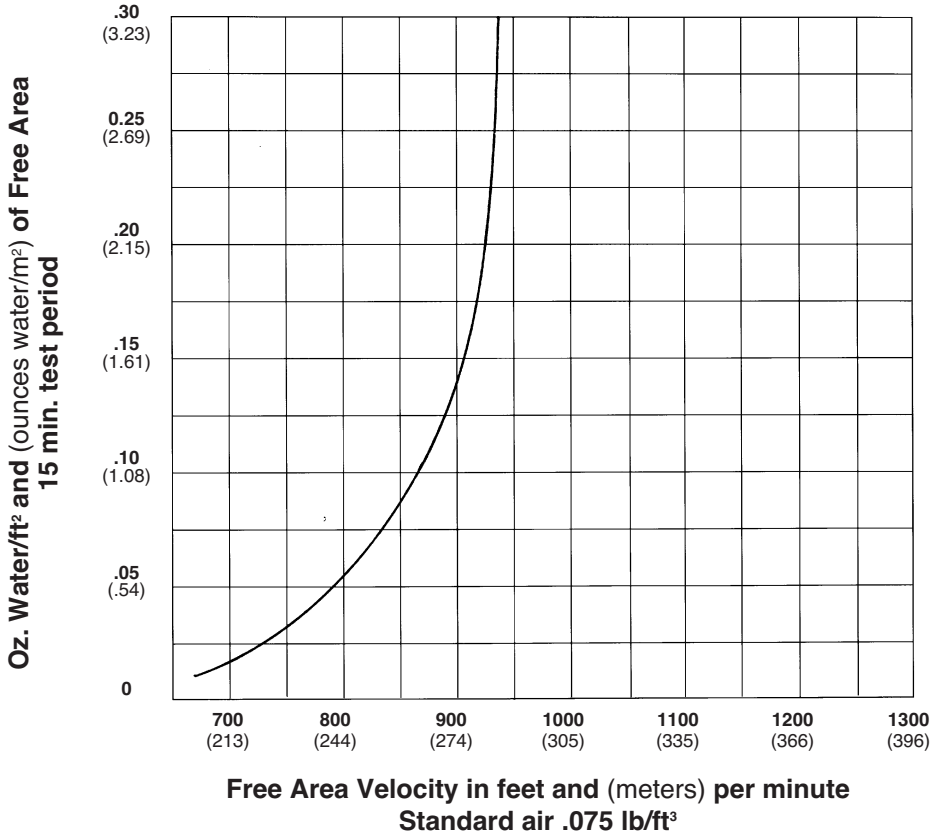
PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 668 fpm (204 m/min).



SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type entirely contained within a 6" (152) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) equivalent of a 90 mph wind - specifier may substitute any loading required).

Louvers shall be Reliable Model 645FB construction as follows:

- Frame: 20 gage (.9) galvanized steel channel
- Blades: 20 gage (.9) galvanized steel at 45° angle on 6¹¹/₁₆" (170) centers.
- Screen: 1/2" mesh x 19 gage (13 x 1.1) galvanized steel in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

Designs should provide a reasonable safety factor for louver performance by selecting at some point below pressure drop or water penetration system requirements.

FREE AREA GUIDE

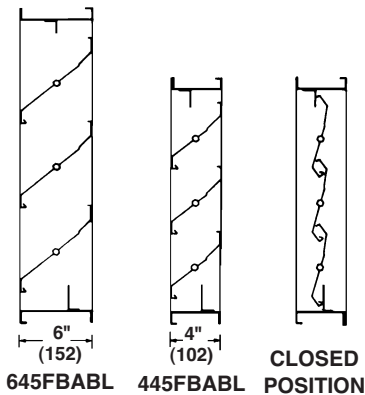
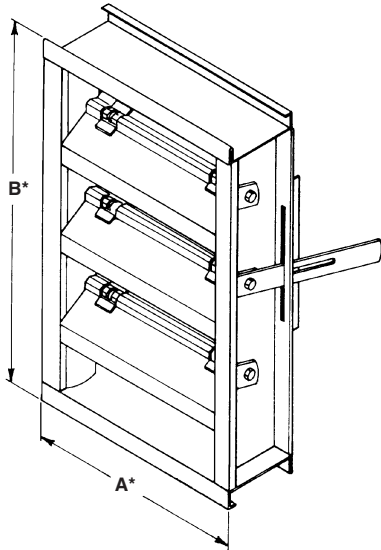
Free Area Guide shows free area in ft² and m² for various sizes of 645FB.
Width – Inches and Meters

Height – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	.30	.46	.61	.76	.91	1.07	1.22	1.37	1.52	1.68	1.83	1.96	2.13	2.29	2.44
12	.15	.27	.40	.53	.66	.79	.91	1.04	1.17	1.30	1.43	1.56	1.68	1.81	1.94
30	.04	.10	.12	.16	.20	.24	.28	.32	.36	.40	.44	.48	.51	.55	.59
18	.30	.57	.83	1.09	1.36	1.62	1.89	2.15	2.42	2.68	2.94	3.21	3.47	3.74	4.00
46	.09	.17	.25	.33	.41	.49	.58	.66	.74	.82	.90	.98	1.06	1.14	1.22
24	.46	.86	1.26	1.66	2.06	2.46	2.86	3.26	3.66	4.06	4.46	4.86	5.26	5.66	6.06
61	.14	.22	.38	.51	.63	.75	.87	.99	1.12	1.24	1.36	1.48	1.60	1.73	1.85
30	.61	1.15	1.69	2.22	2.76	3.30	3.83	4.37	4.90	5.44	5.98	6.51	7.05	7.58	8.12
76	.19	.35	.51	.68	.84	1.00	1.17	1.33	1.49	1.66	1.82	1.98	2.15	2.31	2.48
36	.77	1.44	2.11	2.79	3.46	4.13	4.80	5.48	6.15	6.82	7.49	8.16	8.84	9.51	10.18
91	.23	.44	.64	.85	1.05	1.26	1.46	1.67	1.87	2.08	2.28	2.49	2.69	2.90	3.10
42	.93	1.73	2.54	3.35	4.16	4.97	5.78	6.58	7.39	8.20	9.01	9.82	10.63	11.43	12.24
107	.28	.53	.78	1.02	1.27	1.51	1.76	2.01	2.25	2.50	2.75	2.99	3.24	3.48	3.73
48	1.08	2.03	2.97	3.91	4.86	5.80	6.75	7.69	8.64	9.58	10.52	11.47	12.41	13.36	14.30
122	.33	.62	.91	1.19	1.48	1.77	2.06	2.34	2.63	2.92	3.21	3.50	3.78	4.07	4.36
54	1.24	2.32	3.40	4.48	5.56	6.64	7.72	8.80	9.88	10.96	12.04	13.12	14.20	15.28	16.36
137	.38	.71	1.04	1.37	1.69	2.02	2.35	2.68	3.01	3.34	3.67	4.00	4.33	4.66	4.99
60	1.39	2.61	3.83	5.04	6.26	7.48	8.69	9.91	11.12	12.34	13.56	14.77	15.99	17.21	18.42
152	.42	.80	1.17	1.54	1.91	2.28	2.65	3.02	3.39	3.76	4.13	4.50	4.87	5.24	5.61
66	1.55	2.90	4.25	5.61	6.96	8.31	9.66	11.02	12.37	13.72	15.07	16.43	17.78	19.13	20.48
168	.47	.88	1.30	1.71	2.12	2.53	2.95	3.36	3.77	4.18	4.59	5.01	5.42	5.83	6.24
72	1.84	3.44	5.05	6.64	8.25	9.85	11.45	13.05	14.66	16.26	17.86	19.46	21.06	22.67	24.27
183	.56	1.05	1.54	2.02	2.51	3.00	3.49	3.98	4.47	4.96	5.44	5.93	6.42	6.91	7.40
78	1.99	3.73	5.47	7.21	8.95	10.68	12.42	14.16	15.90	17.64	19.38	21.12	22.85	24.59	26.33
196	.61	1.14	.68	2.20	2.73	3.26	3.79	4.32	4.85	5.38	5.91	6.44	6.96	7.50	8.03
84	2.15	4.02	5.90	7.77	9.65	11.52	13.39	15.27	17.14	19.02	20.89	22.77	24.64	26.52	28.39
213	.66	1.23	1.80	2.37	2.94	3.51	4.08	4.65	5.22	5.80	6.37	6.94	7.51	8.08	8.65
90	2.30	4.31	6.32	8.34	10.35	12.36	14.37	16.38	18.39	20.40	22.41	24.42	26.43	28.44	30.45
229	.70	1.31	1.93	2.54	3.15	3.77	4.38	4.99	5.61	6.22	6.83	7.44	8.06	8.67	9.28
96	2.46	4.61	6.75	8.90	11.05	13.19	15.34	17.39	19.63	21.78	23.93	26.07	28.22	30.37	32.51
244	.75	1.40	2.06	2.71	3.37	4.02	4.68	5.33	5.98	6.64	7.29	7.95	8.60	9.26	9.91



445FBABL AND 645FBABL FORMED ADJUSTABLE LOUVERS



STANDARD CONSTRUCTION

FRAME

445FBABL – 4" (102) deep, 16 gage (1.6) galvanized steel. Caulking surface provided.
L645FBABL – 6" (152) deep, 16 gage (1.6) galvanized steel. Caulking surface provided.

BLADES

445FBABL – 16 gage (1.6) galvanized steel, J-style blades (formerly "weatherproof") are positioned at 45° angle and spaced approximately 4" (102) center to center.
L645FBABL – 16 gage (1.6) galvanized steel, J-style blades (formerly "weatherproof") are positioned at 45° angle and spaced approximately 6" (152) center to center.

SCREEN

1/2" mesh x 19 gage (13 x 1.1) galvanized steel bird screen in removable frame.

LINKAGE

Concealed in frame.

BEARINGS

Stainless steel.

AXLES

Plated steel hex.

ACTUATOR

Louver quadrant.

FINISH

Mill.

MINIMUM SIZE

12" w x 12" h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

445FBABL – 6 lbs. per sq. ft.

L645FBABL – 7 lbs. per sq. ft.

MAXIMUM FACTORY ASSEMBLY SIZE

60" wide x 96" high (1524 x 2438) without jamb seals and 48" wide x 96" high (1219 x 2438) with jamb seals.

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

FEATURES

The 445FBABL and 645FBABL offer:

- Tight shut off for excellent weather protection.
- Rugged galvanized steel construction for long operating life.
- Stainless steel bearing and concealed linkage to reduce operating torque requirements.

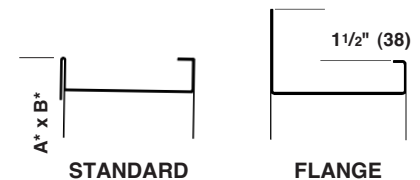
VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Acrodize and prime coat.
- Special materials.
- Manual, electric and pneumatic actuators.

Consult Reliable for other special requirements.

FRAME CONSTRUCTION



Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		VARIATIONS
		A*-WIDE	B*-HIGH	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE		



445FBABL

645FBABL

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be adjustable type entirely centered within a 4" or 6" (102 or 152) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 45FBABL or 65FBABL construction as follows:

Frame: 16 gage (1.6) galvanized steel.

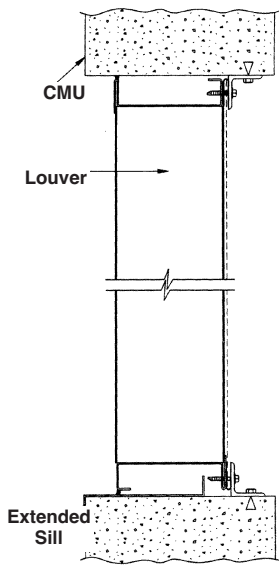
Blades: 16 gage (1.6) galvanized steel positioned at 45° angle and spaced approximately 4" or 6" (102 or 152) center to center.

Screen: 1/2" mesh x 19 gage (13 x 1.1) galvanized steel in removable frame.

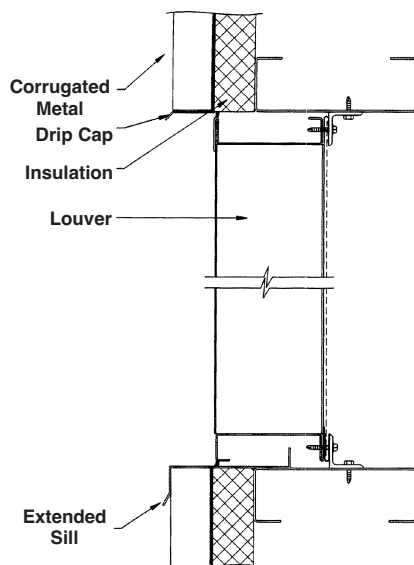
Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

TYPICAL INSTALLATION DETAILS

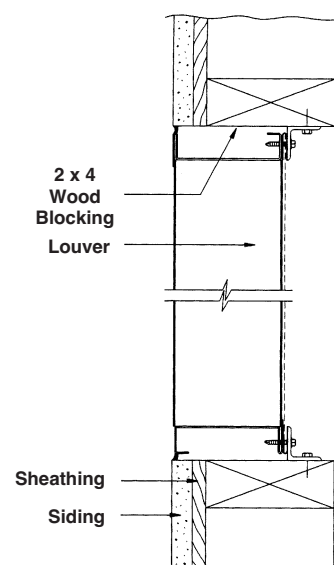
Masonry Wall



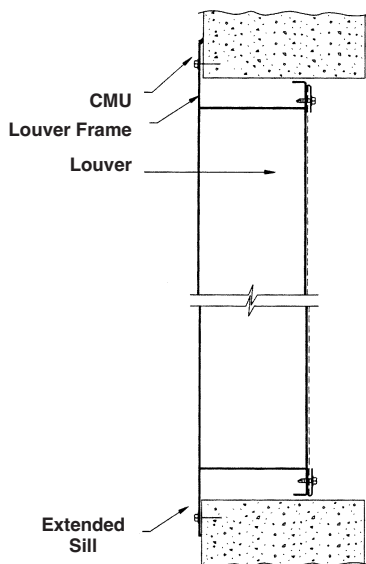
Metal Panel Wall



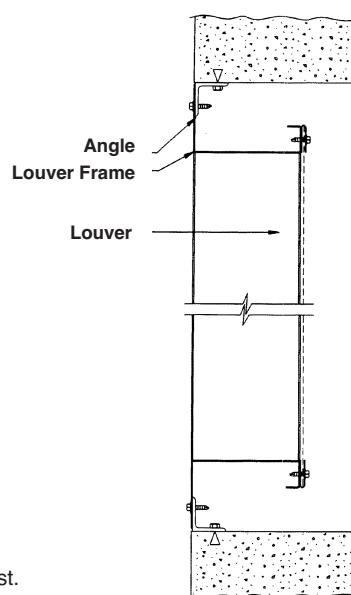
Wood Installation



Flange Mount



Angle Subframe



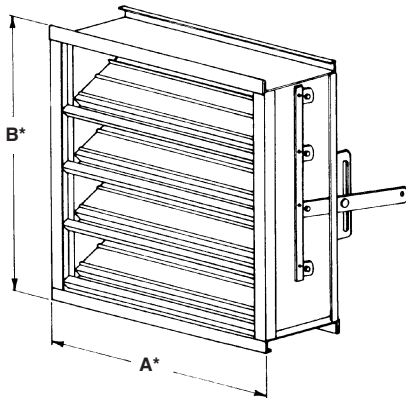
Accessories at additional cost.





1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

6375FDHAX COMBINATION LOUVER DRAINABLE BLADE ROLL FORMED STEEL



STANDARD CONSTRUCTION

- FRAME**
6" (152) deep, 16 gage (1.5) galvanized steel. Downspouts provided.
- BLADES**
Front stationary blades – 18 (1.2) gage galvanized steel. Drainable blades are positioned at 37 1/2° angle and spaced approximately 4 1/2" (114) centers.
Rear adjustable blades – 16 (1.5) gage galvanized steel, positioned at 45° angle.
- SEALS**
Blade edge is PVC impregnated nylon suitable for -50°F to +250°F (46°C to 121°C). Jamb is flexible metal, compression type.
- BEARINGS**
Stainless steel sleeve pressed into frame.
- AXLES**
1/2" (13) plated steel hex.
- LINKAGE**
Concealed.
- OPERATOR**
Locking louver quadrant.
- FINISH**
Mill.
- MINIMUM SIZE**
12"w x 12"h (305 x 305).
- MAXIMUM FACTORY ASSEMBLY SIZE**
64 square feet (6m²). Sections must fit into standard enclosed trailer 90" high x 240" deep (2286 x 6096).

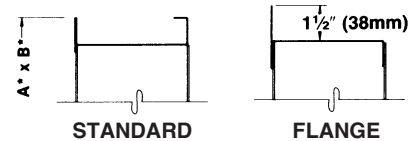
FEATURES

- The 6375FDHAX offers:
- Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Tight shut off in air intake and exhaust applications.
 - Front stationary blades and adjustable rear blades in a 6" (152) frame.
 - Drain gutter in each front stationary blade and downspouts in jambs and mullions for minimum water cascade.
 - Architecturally styled hidden mullions allowing continuous line appearance up to 120".

VARIATIONS

- Variations to the basic design of this louver are available at additional cost. They include:
- A variety of bird and insect screens.
 - Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Fluoridize and prime coat.
 - A selection of manual, electric, and pneumatic actuators.
- Consult Reliable for other special requirements.

FRAME CONSTRUCTION



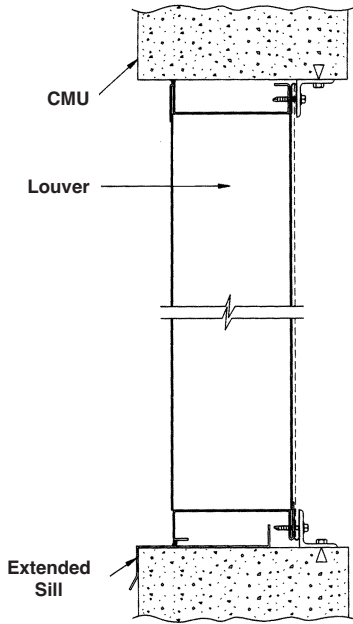
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

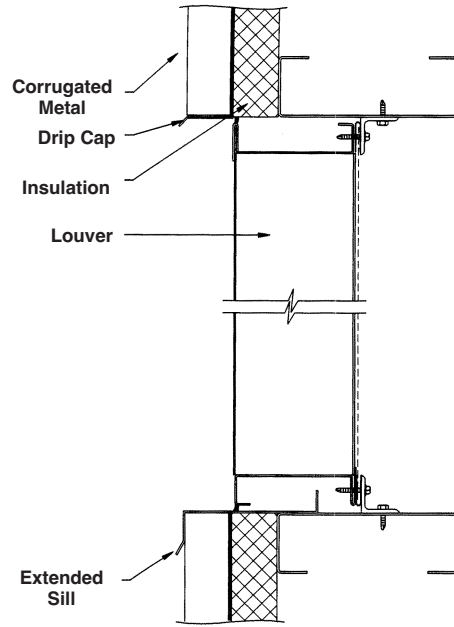
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

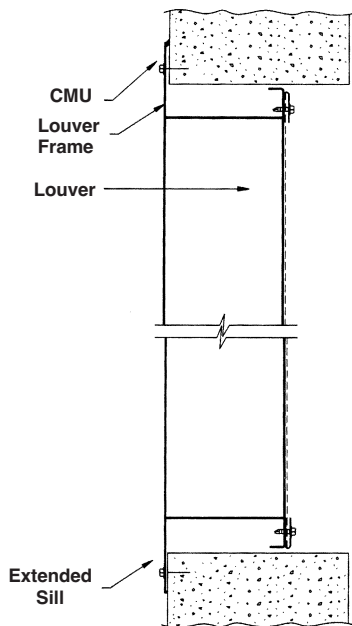
Masonry Wall



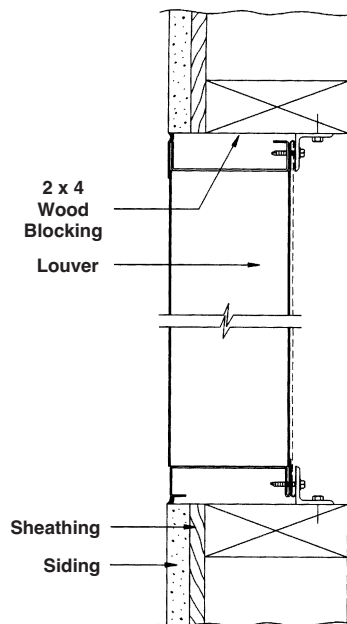
Metal Panel Wall



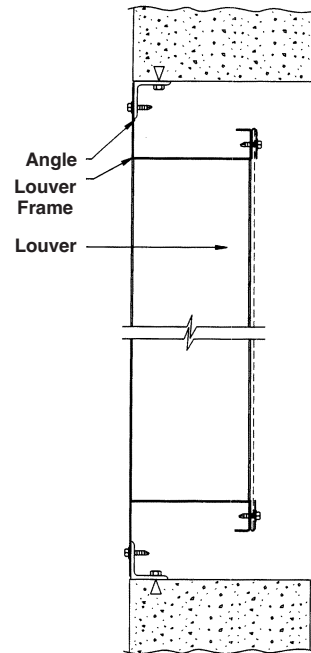
Flange Mount



Wood Installation

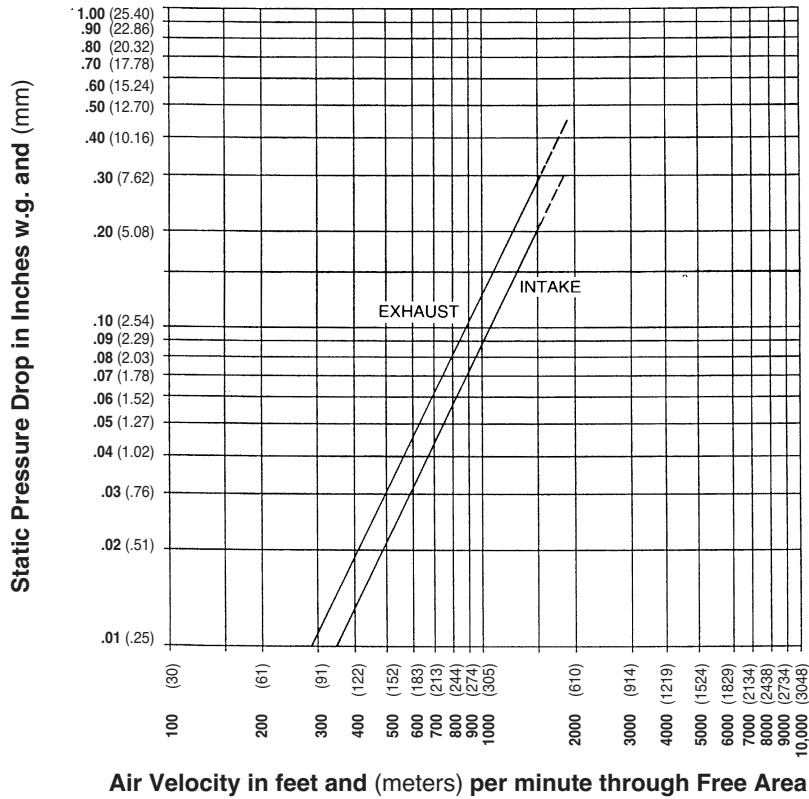


Angle Subframe



*Accessories at additional cost.

PRESSURE DROP

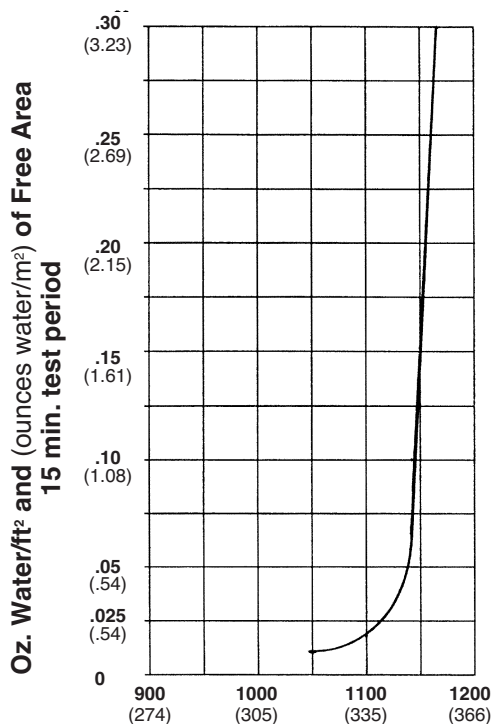


Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1046 fpm (319 m/min).



Reliable Products certifies that the 6375FDHAX Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

Free Area Velocity in feet and (meters) per minute
Standard air .075 lb/ft³

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be combination stationary adjustable drainable type with a drain gutter in each stationary blade and downspouts in jambs and mullions. Stationary blades and adjustable blades shall be contained within a single 6" (152) louver frame. Adjustable sections shall include low leakage blade and jamb seals. Louver components (heads, jambs, sills, blades, and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 6375FDHAX construction as follows:

- Frame: 16 gage (1.6) galvanized steel.
- Blades: Front stationary drainable blades are 18 gage (1.2) galvanized steel. Positioned at 37¹/₂° angle on approximately 4¹/₂" (114) centers.
Rear adjustable blades are 16 gage (1.6) galvanized steel. Positioned at 45° angle when fully open.
Each adjustable louver section shall include manual operating quadrant.
- Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

Designs should provide a reasonable safety factor for louver performance by selecting at some point below pressure drop or water penetration system requirements.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 6375FDHAX.
Width – Inches and Meters

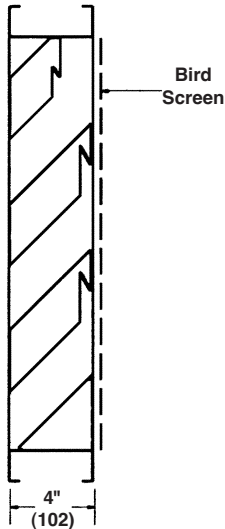
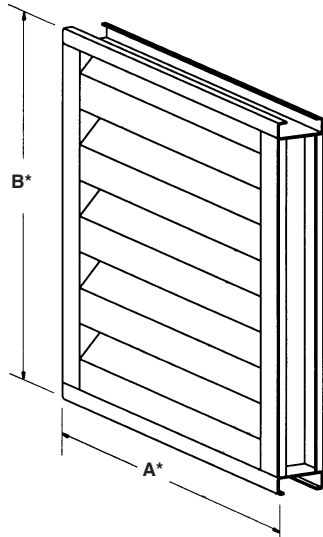
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	.30	.46	.61	.76	.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44
12	0.07	0.11	0.16	0.20	0.24	0.28	0.33	0.37	0.41	0.46	0.50	0.54	0.58	0.63	0.67
.30	.01	.01	.01	.02	.02	.03	.03	.03	.04	.04	.05	.05	.05	.06	.06
18	0.44	0.70	0.97	1.24	1.51	1.78	2.05	2.31	2.58	2.85	3.12	3.39	3.65	3.92	4.19
.46	.04	.07	.09	.12	.14	.17	.19	.21	.24	.26	.29	.31	.34	.36	.39
24	0.62	1.00	1.38	1.76	2.14	2.53	2.91	3.29	3.67	4.05	4.43	4.81	5.19	5.58	5.96
.6180	.06	.09	.13	.16	.20	.23	.27	.31	.34	.38	.41	.45	.48	.52	.55
30	0.80	1.30	1.79	2.29	2.78	3.28	3.77	4.27	4.76	5.26	5.75	6.25	6.74	7.24	7.73
.76	.07	.12	.17	.21	.26	.30	.35	.40	.44	.49	.53	.58	.63	.67	.72
36	1.17	1.89	2.61	3.33	4.05	4.77	5.49	6.21	6.93	7.65	8.37	9.09	9.81	10.53	11.25
.91	.11	.18	.24	.31	.38	.44	.51	.58	.64	.71	.78	.84	.91	.98	1.05
42	1.35	2.19	3.02	3.85	4.69	5.52	6.35	7.19	8.02	8.85	9.69	10.52	11.35	12.19	13.02
1.07	.13	.20	.28	.36	.44	.51	.59	.67	.75	.82	.90	.98	1.05	1.13	1.21
48	1.54	2.49	3.43	4.38	5.33	6.27	7.22	8.17	9.11	10.06	11.01	11.95	12.90	13.85	14.79
1.22	.14	.23	.32	.41	.49	.58	.67	.76	.85	.93	1.02	1.11	1.20	1.29	1.37
54	1.87	3.02	4.17	5.32	6.47	7.61	8.76	9.91	11.06	12.21	13.36	14.51	15.66	16.81	17.96
1.37	.17	.28	.39	.49	.60	.71	.81	.92	1.03	1.13	1.24	1.35	1.45	1.56	1.67
60	2.09	3.37	4.66	5.94	7.23	8.51	9.80	11.08	12.37	13.66	14.94	16.23	17.51	18.80	20.08
1.52	.19	.31	.43	.55	.67	.79	.91	1.03	1.15	1.27	1.39	1.51	1.63	1.75	1.87
66	2.27	3.67	5.07	6.47	7.87	9.27	10.67	12.07	13.46	14.86	16.26	17.66	19.06	20.46	21.86
1.68	.21	.34	.47	.60	.73	.86	.99	1.12	1.25	1.38	1.51	1.64	1.77	1.90	2.03
72	2.60	4.20	5.81	7.41	9.01	10.61	12.21	13.81	15.41	17.02	18.62	20.22	21.82	23.42	25.02
1.83	.24	.39	.54	.69	.84	.99	1.13	1.28	1.43	1.58	1.73	1.88	2.03	2.18	2.32
78	2.82	4.56	6.30	8.03	9.77	11.51	13.25	14.98	16.72	18.46	20.20	21.93	23.67	25.41	27.14
1.98	.26	.42	.59	.75	.91	1.07	1.23	1.39	1.55	1.71	1.88	2.04	2.20	2.36	2.52
84	3.01	4.86	6.71	8.56	10.41	12.26	14.11	15.96	17.81	19.67	21.52	23.37	25.22	27.07	28.92
2.13	.28	.45	.62	.80	.97	1.14	1.31	1.48	1.65	1.83	2.00	2.17	2.34	2.51	2.69
90	3.34	5.39	7.44	9.50	11.55	13.60	15.66	17.71	19.76	21.82	23.87	25.92	27.98	30.03	32.08
2.29	.31	.50	.69	.88	1.07	1.26	1.45	1.65	1.84	2.03	2.22	2.41	2.60	2.79	2.98
96	3.56	5.75	7.94	10.13	12.31	14.50	16.69	18.88	21.07	23.26	25.45	27.64	29.83	32.02	34.21
2.44	.33	.53	.74	.94	1.14	1.35	1.55	1.75	1.96	2.16	2.36	2.57	2.77	2.97	3.18

Height – Inches and Meters



445RAAZ STATIONARY ACOUSTICAL LOUVER

FORMED STEEL



STANDARD CONSTRUCTION

FRAME
4" (102) deep, 16 gage (1.6) galvanized steel channel.

BLADES
18 gage (1.3) galvanized steel exterior surface, with 22 gage (.9) perforated steel interior surface that covers insulation. Blades positioned at 45° angle and spaced approximately 6" (152) center to center.

INSULATION
Ruskatherm blanket.

SCREEN
1/2" mesh x 19 gage (13 x 1.1) galvanized bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 18"h (305 x 457).

APPROXIMATE SHIPPING WEIGHT
5 lbs. per sq. ft.

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 64 sq. ft. (6m²). Maximum single section size shall be 48" x 96" (1219 x 2438). Louvers larger than the maximum single section size will require field assembly of smaller sections.

FEATURES

The 445RAAZ offers insulated blades which provide effective sound attenuation and weather protection with an architecturally pleasing appearance.

VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Acrodize, prime coat, integral color and clear anodize. (Some variation in anodize color consistency is possible.) (Anodize finish available only on aluminum construction.)
- Formed aluminum frame with .100" (2.5) nominal wall thickness and .080" (1.6) blade with .040" (1) perforated aluminum interior surface.

Octave Band Frequency (Hz)	Free Field Noise Reduction (db) Ruskatherm Blanket
1/63	9
2/125	11
3/250	9
4/500	11
5/1000	15
6/2000	17
7/4000	16
8/8000	16

To calculate Transmission Loss (db), subtract 6 db from Free Field Noise Reduction (db).

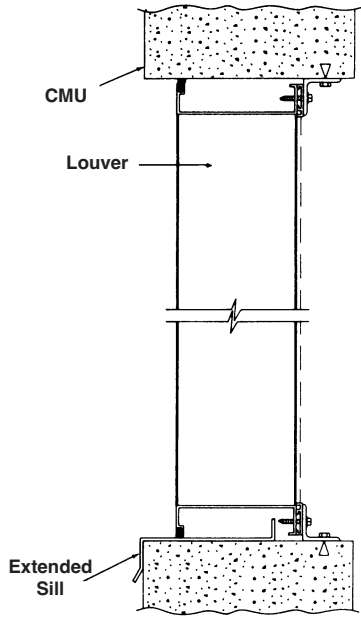
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

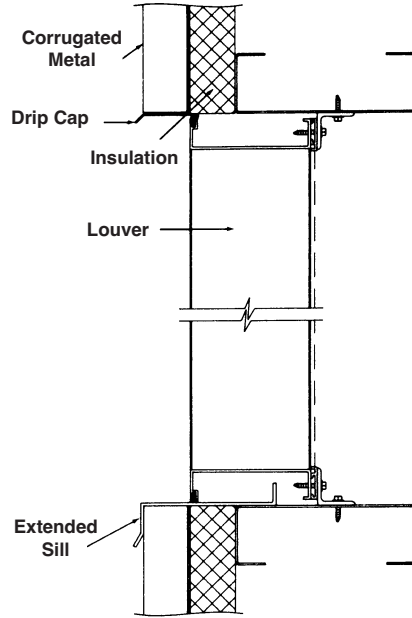
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

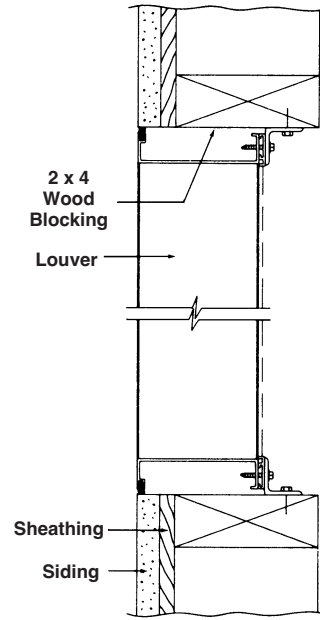
Masonry Wall



Metal Panel Wall

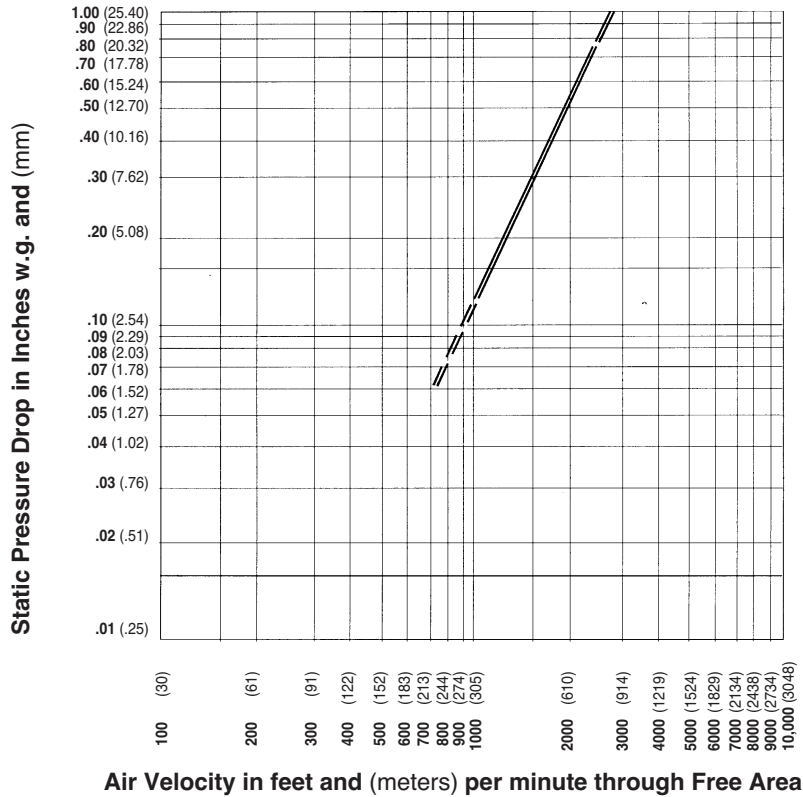


Wood Installation



Accessories at additional cost.

PRESSURE DROP

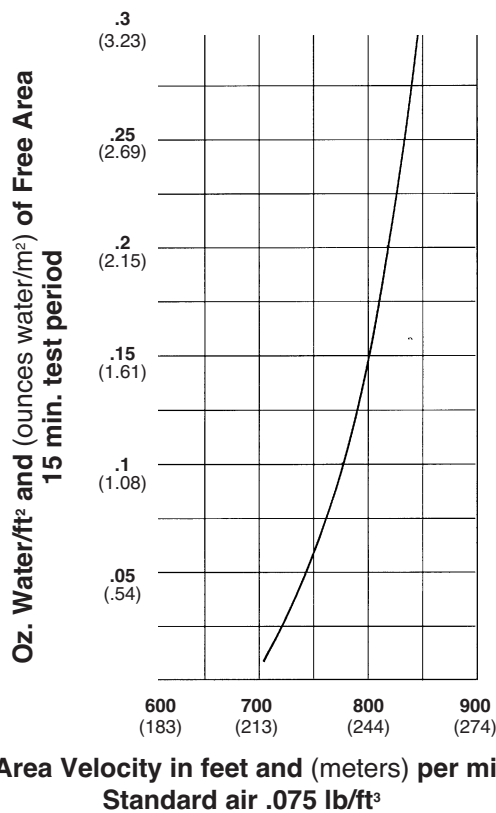


Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 703 fpm (214 m/min).



Reliable Products certifies that the 445RAAZ Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary acoustical type contained within a 4" (102) frame. Louver components (heads, jamps, sills, blades, and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind-load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

- Louvers shall be Reliable Model 445RAAZ construction as follows:
- Frame: 16 gage (1.6) galvanized steel channel.
- Blades: 20 gage (1.0) galvanized steel exterior surface, 22 gage (.9) perforated steel interior surface that covers insulation. Blade angle 45° on 6" (152) centers.
- Screen: 1/2" mesh x 19 gage (13 x 1.1) galvanized steel in removable frame.
- Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance must be submitted for approval prior to fabrication and must demonstrate pressure drop equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 445RAAZ.
Width – Inches and Meters

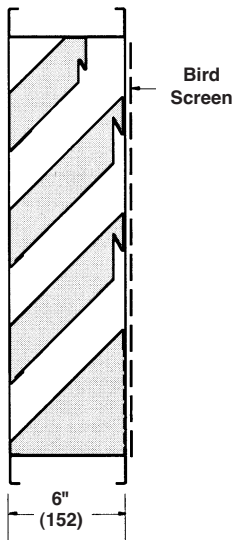
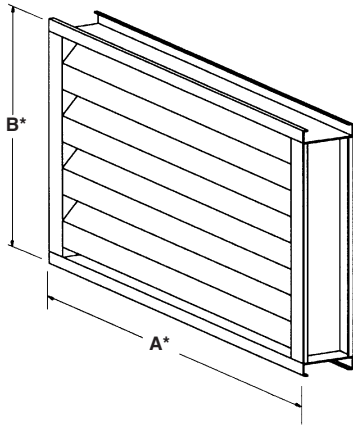
	12 305	18 457	24 610	30 762	36 915	42 1067	48 1219	54 1372	60 1524	66 1676	72 1829	78 1981	84 2134	90 2286	96 2438
18 457	.26 .02	.44 .04	.62 .06	.79 .07	.97 .09	1.15 .11	1.32 .12	1.41 .14	1.59 .14	1.77 .16	1.94 .17	2.12 .20	2.30 .21	2.47 .24	2.65 .25
24 610	.40 .04	.66 .06	.93 .09	1.19 .11	1.46 .14	1.72 .15	1.99 .18	2.12 .20	2.39 .22	2.65 .25	2.92 .27	3.18 .30	3.45 .32	3.71 .34	3.98 .36
30 762	.53 .05	.88 .08	1.24 .11	1.59 .15	1.94 .17	2.30 .21	2.65 .25	2.83 .27	3.18 .30	3.54 .36	3.89 .36	4.24 .39	4.60 .43	4.95 .46	5.30 .49
36 915	.66 .06	1.10 .10	1.55 .14	1.99 .18	2.43 .23	2.87 .27	3.31 .31	3.54 .33	3.98 .36	4.42 .42	4.86 .45	5.30 .50	5.74 .53	6.19 .58	6.63 .61
42 1067	.80 .07	1.33 .12	1.86 .17	2.39 .22	2.92 .27	3.46 .32	3.98 .37	4.24 .39	4.77 .44	5.30 .49	5.83 .54	6.36 .58	6.89 .64	7.42 .69	7.95 .74
48 1219	.93 .09	1.55 .14	2.17 .20	2.78 .26	3.40 .32	4.02 .37	4.75 .43	4.95 .46	5.57 .52	6.19 .58	6.80 .63	7.42 .69	8.08 .76	8.66 .80	9.28 .86
54 1372	1.06 .10	1.77 .16	2.47 .23	3.18 .30	3.89 .36	4.60 .43	5.30 .49	5.66 .53	6.36 .59	7.07 .66	7.78 .72	8.48 .79	9.19 .85	9.90 .91	10.61 .99
60 1524	1.19 .11	1.99 .18	2.78 .26	3.58 .33	4.37 .41	5.17 .48	5.97 .55	6.36 .58	7.16 .67	7.95 .74	8.75 .81	9.54 .89	10.34 .96	11.14 1.03	11.93 1.11
66 1676	.133 .12	2.21 .21	3.09 .29	3.98 .36	4.86 .45	5.74 .53	6.63 .61	7.07 .66	7.95 .74	8.84 .82	9.72 .90	10.61 .99	11.49 1.07	12.37 1.15	13.26 1.23
72 1829	1.46 .14	2.43 .23	3.40 .32	4.37 .41	5.35 .50	6.32 .58	7.29 .68	7.78 .72	8.75 .81	9.72 .90	10.69 .99	11.67 1.08	12.64 1.17	13.61 1.26	14.58 1.35
78 1981	1.59 .15	2.65 .25	3.71 .34	4.77 .44	5.83 .54	6.89 .64	7.95 .74	8.48 .79	9.54 .89	10.61 .99	11.67 1.08	12.73 1.18	13.79 1.28	14.85 1.38	15.91 1.48
84 2134	1.72 .16	2.87 .27	4.02 .37	5.17 .48	6.32 .58	7.47 .69	8.62 .80	9.19 .85	10.34 .96	11.49 1.07	12.64 1.17	13.79 1.28	14.94 1.39	16.08 1.49	17.23 1.60
90 2286	1.86 .17	3.09 .29	4.33 .40	5.57 .52	6.80 .63	8.04 .75	9.28 .86	9.90 .92	11.14 1.03	12.37 1.15	13.61 1.26	14.85 1.38	16.08 1.49	17.32 1.62	18.56 1.72
96 2438	1.99 .18	3.31 .31	4.64 .43	5.97 .55	7.29 .68	8.69 .81	9.94 .92	10.61 .99	11.93 1.11	13.26 1.23	14.58 1.35	15.91 1.48	17.23 1.60	18.56 1.72	19.88 1.85

Height – Inches and Millimeters



645RAAZ STATIONARY ACOUSTICAL LOUVER

FORMED STEEL



STANDARD CONSTRUCTION

FRAME
6" (152) deep, 16 gage (1.6) galvanized steel channel.

BLADES
18 gage (1.3) galvanized steel exterior surface, with 22 gage (.9) perforated steel interior surface that covers insulation. Blades positioned at 45° angle and spaced approximately 6" (152) center to center.

ACOUSTICAL INSULATION
Ruskatherm blanket.

SCREEN
1/2" mesh x 19 gage (13 x 1.1) galvanized steel bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 18"h (305 x 457).

APPROXIMATE SHIPPING WEIGHT
6 lbs. per sq. ft.

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 64 sq. ft. (6m²). Maximum single section size shall be 48" x 96" (1219 x 2438). Louvers larger than the maximum single section size will require field assembly of smaller sections.

FEATURES

The 645RAAZ offers insulated blades which provide effective sound attenuation and weather protection with an architecturally pleasing appearance.

VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Acrodize, prime coat, integral color and clear anodize. (Some variation in anodize color consistency is possible.) (Anodize finish available only on aluminum construction.)
- Formed aluminum frame with .100" (2.5) nominal wall thickness and .080" (1.6) blade with .040" (1) perforated aluminum interior surface.

Octave Band Frequency (Hz)	Free Field Noise Reduction (db) Ruskatherm Blanket
1/63	10
2/125	11
3/250	9
4/500	13
5/1000	19
6/2000	20
7/4000	19
8/8000	18

To calculate Transmission Loss (db), subtract 6 db from Free Field Noise Reduction (db).

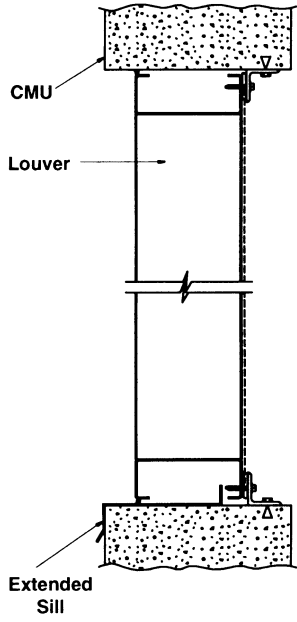
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

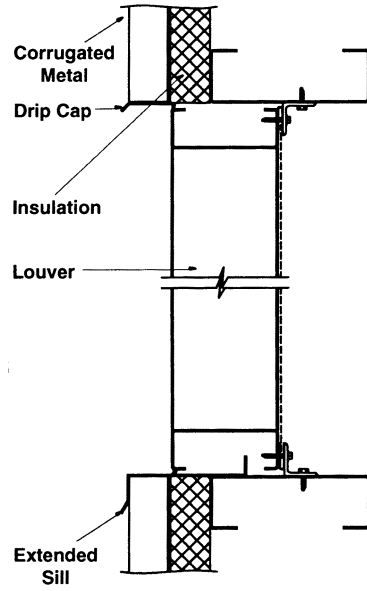
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

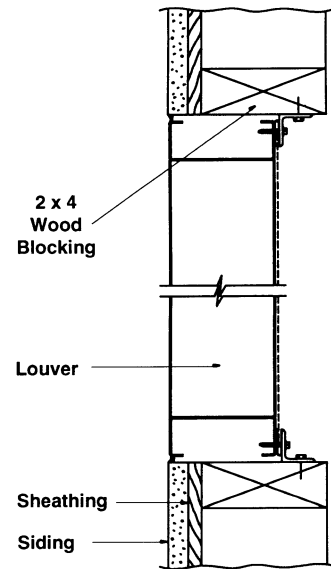
Masonry Wall



Metal Panel Wall

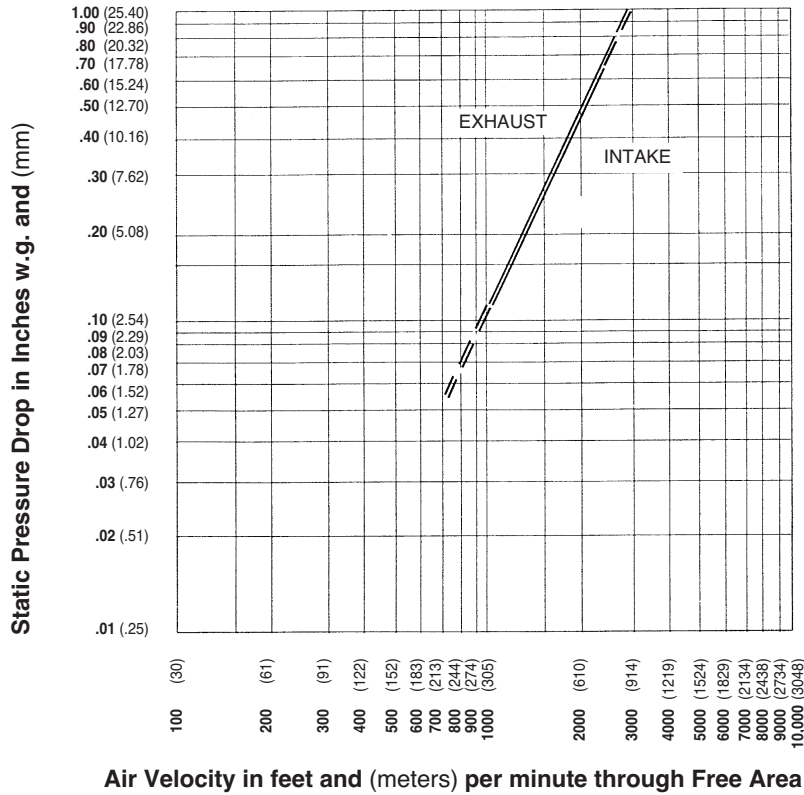


Wood Installation



Accessories at additional cost.

PRESSURE DROP

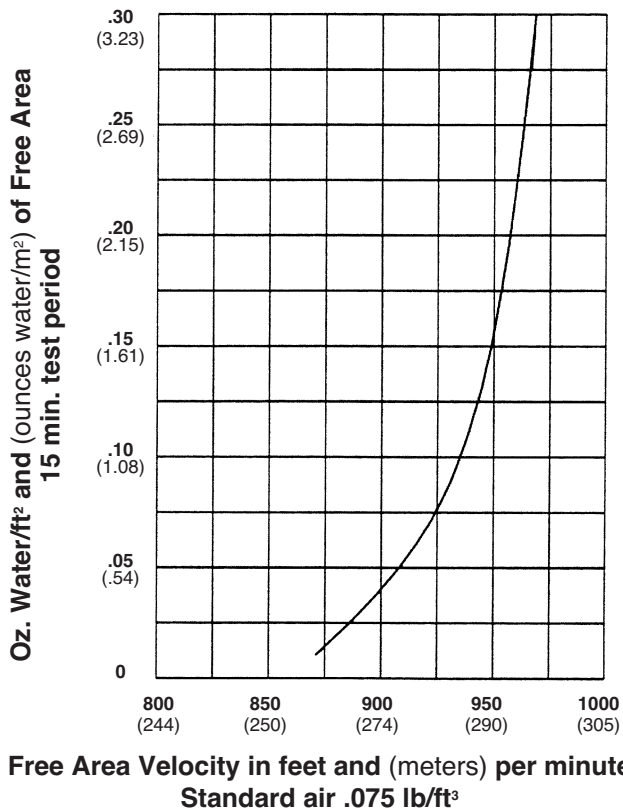


Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 872 fpm (266 m/min).



Reliable Products certifies that the 645RAAZ Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary acoustical type contained within a 6" (152) frame. Louver components (heads, jambs, sills, blades, and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind-load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Reliable Model 6445RAAZ construction as follows:

- Frame: 16 gage (1.6) galvanized steel channel.
- Blades: 20 gage (1.0) galvanized steel exterior surface, 22 gage (.9) perforated steel interior surface that covers insulation. Blade angle 45° on 6" (152) centers.
- Screen: 1/2" mesh x 19 gage (13 x 1.1) galvanized steel in removable frame.
- Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance must be submitted for approval prior to fabrication and must demonstrate pressure drop equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 645RAAZ.
Width – Inches and Meters

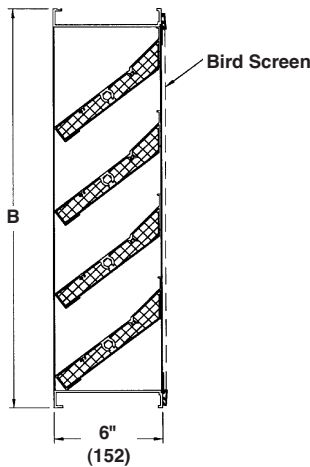
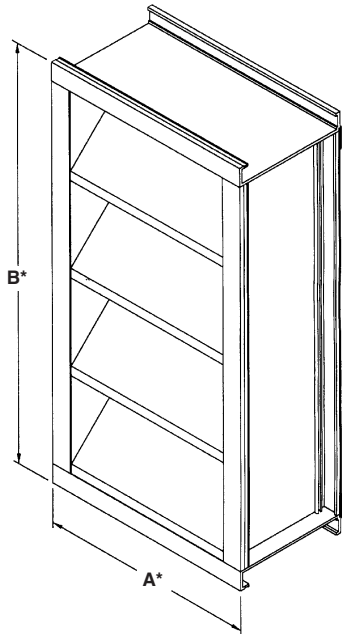
	12 305	18 457	24 610	30 762	36 915	42 1067	48 1219	54 1372	60 1524	66 1676	72 1829	78 1981	84 2134	90 2286	96 2438
18 457	.26 .02	.44 .04	.62 .06	.79 .07	.97 .09	1.15 .11	1.32 .12	1.41 .14	1.59 .14	1.77 .16	1.94 .17	2.12 .20	2.30 .21	2.47 .24	2.65 .25
24 610	.40 .04	.66 .06	.93 .09	1.19 .11	1.46 .14	1.72 .15	1.99 .18	2.12 .20	2.39 .22	2.65 .25	2.92 .27	3.18 .30	3.45 .32	3.71 .34	3.98 .36
30 762	.53 .05	.88 .08	1.24 .11	1.59 .15	1.94 .17	2.30 .21	2.65 .25	2.83 .27	3.18 .30	3.54 .33	3.89 .36	4.24 .39	4.60 .43	4.95 .46	5.30 .49
36 915	.66 .06	1.10 .10	1.55 .14	1.99 .18	2.43 .23	2.87 .27	3.31 .31	3.54 .33	3.98 .36	4.42 .42	4.86 .45	5.30 .50	5.74 .53	6.19 .58	6.63 .61
42 1067	.80 .07	1.33 .12	1.86 .17	2.39 .22	2.92 .27	3.45 .32	3.98 .37	4.24 .39	4.77 .44	5.30 .49	5.83 .54	6.36 .58	6.89 .64	7.42 .69	7.95 .74
48 1219	.93 .09	1.55 .14	2.17 .20	2.78 .26	3.40 .32	4.02 .37	4.64 .43	4.95 .46	5.57 .52	6.19 .58	6.80 .63	7.42 .69	8.08 .76	8.66 .80	9.28 .86
54 1372	1.06 .10	1.77 .16	2.47 .23	3.18 .30	3.89 .36	4.60 .43	5.30 .49	5.66 .53	6.36 .59	7.07 .66	7.78 .72	8.48 .79	9.19 .85	9.90 .91	10.61 .99
60 1524	1.19 .11	1.99 .18	2.78 .26	3.58 .33	4.37 .41	5.17 .48	5.97 .55	6.36 .58	7.16 .67	7.95 .74	8.75 .81	9.54 .89	10.34 .96	11.14 1.03	11.93 1.11
66 1676	1.33 .12	2.21 .21	3.09 .29	3.98 .36	4.86 .45	5.74 .53	6.63 .61	7.07 .66	7.95 .74	8.84 .82	9.72 .90	10.61 .99	11.49 1.07	12.37 1.15	13.26 1.23
72 1829	1.46 .14	2.43 .23	3.40 .32	4.37 .41	5.35 .50	6.32 .58	7.29 .68	7.78 .72	8.75 .81	9.72 .90	10.69 .99	11.67 1.08	12.64 1.17	13.61 1.26	14.58 1.35
78 1981	1.59 .15	2.65 .25	3.71 .34	4.77 .44	5.83 .54	6.89 .64	7.95 .74	8.48 .79	9.54 .89	10.61 .99	11.67 1.08	12.73 1.18	13.79 1.28	14.85 1.38	15.91 1.48
84 2134	1.72 .16	2.87 .27	4.02 .37	5.17 .48	6.32 .58	7.47 .69	8.62 .80	9.19 .85	10.34 .96	11.49 1.07	12.64 1.17	13.79 1.28	14.94 1.39	16.08 1.49	17.23 1.60
90 2286	1.86 .17	3.09 .29	4.33 .40	5.57 .52	6.80 .63	8.04 .75	9.28 .86	9.90 .92	11.14 1.03	12.37 1.15	13.61 1.26	14.85 1.38	16.08 1.49	17.32 1.62	18.56 1.72
96 2438	1.99 .18	3.31 .31	4.64 .43	5.97 .55	7.29 .68	8.69 .81	9.94 .92	10.61 .99	11.93 1.11	13.26 1.23	14.58 1.35	15.91 1.48	17.23 1.60	18.56 1.72	19.88 1.85

Height – Inches and Millimeters



645RAAB STATIONARY ACOUSTICAL LOUVER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME

6" (152) deep, 6063T5 extruded aluminum, .125" (3.2) nominal wall thickness. Caulking surfaces provided.

BLADES

6063T5 extruded aluminum, .081" (2.1) exterior surface nominal wall thickness with .040" (1) perforated aluminum interior surface. Blades are positioned at 45° angle and spaced approximately 4⁵/₈" (118) center to center.

INSULATION

1" (25) fiberglass.

SCREEN

3/4" x .051" (19 X 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH

Mill.

MINIMUM SIZE

12"w x 12" h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

5 lbs./ft.² (24.3 kg per m²).

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 75 sq. ft. (7m²) per section, not to exceed 120"w and 90"h (3048 and 2286) or 90"w and 120"h (2286 x 3048).

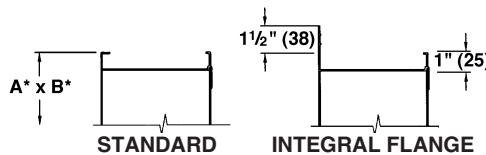
Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

SUPPORTS

Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Reliable for additional information.

FRAME CONSTRUCTION



FEATURES

The 645RAAB offers:

- 30% Free Area.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- Architecturally styled hidden mullions allowing continuous line appearance.
- Aluminum construction for low maintenance and high resistance to corrosion.

VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Extended sill.
- Hinged frame.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Installation angles.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible).

Consult Reliable for other special requirements.

Octave Band Frequency (Hz)	Free Field Noise Reduction (db) 1" (25) Fiberglass Insulation
1/63	9
2/125	7
3/250	8
4/500	9
5/1000	10
6/2000	16
7/4000	16
8/8000	19

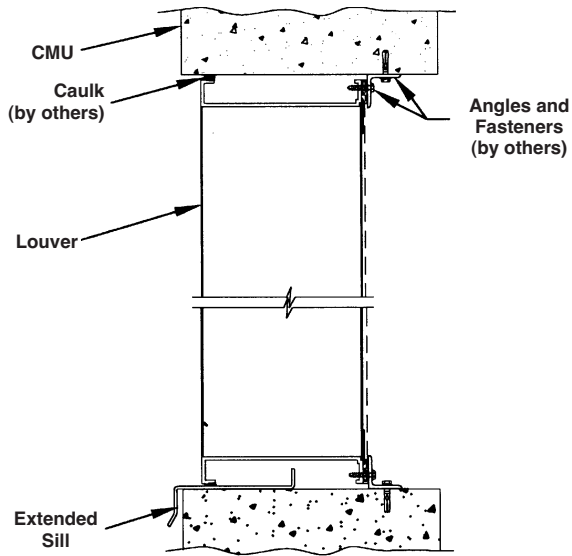
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

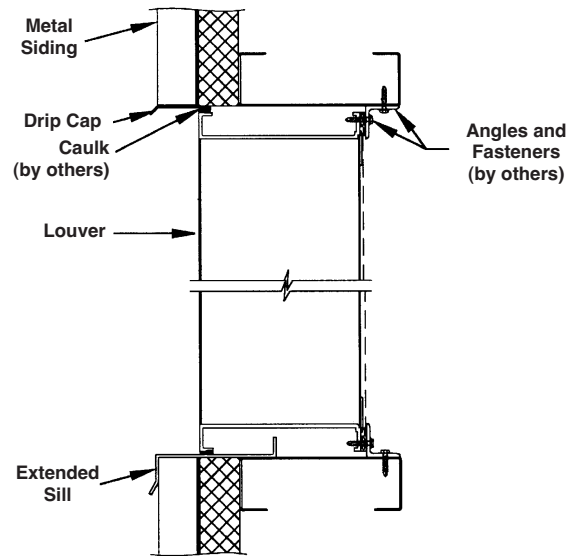
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

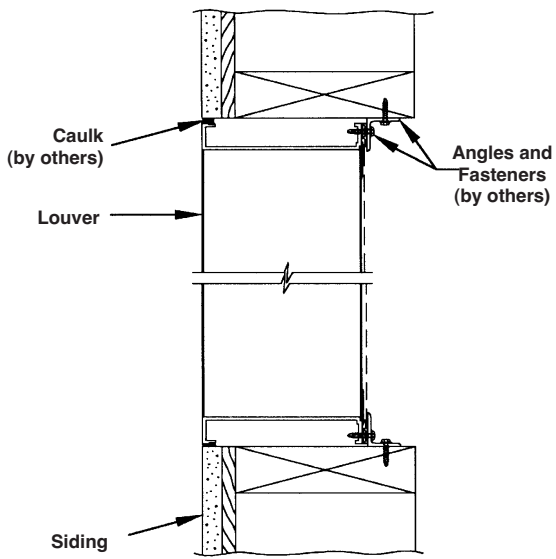
Masonry Wall



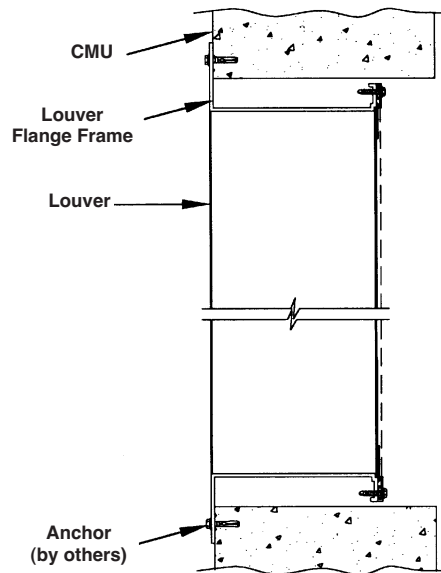
Metal Panel Wall



Wood Installation

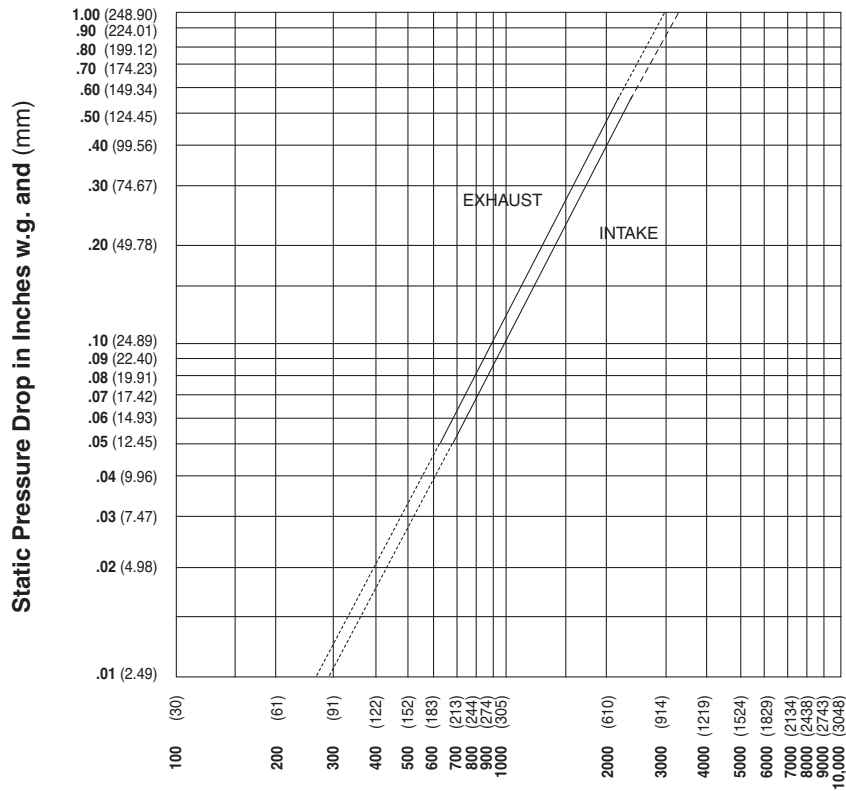


Flange Mount



Accessories at additional cost.

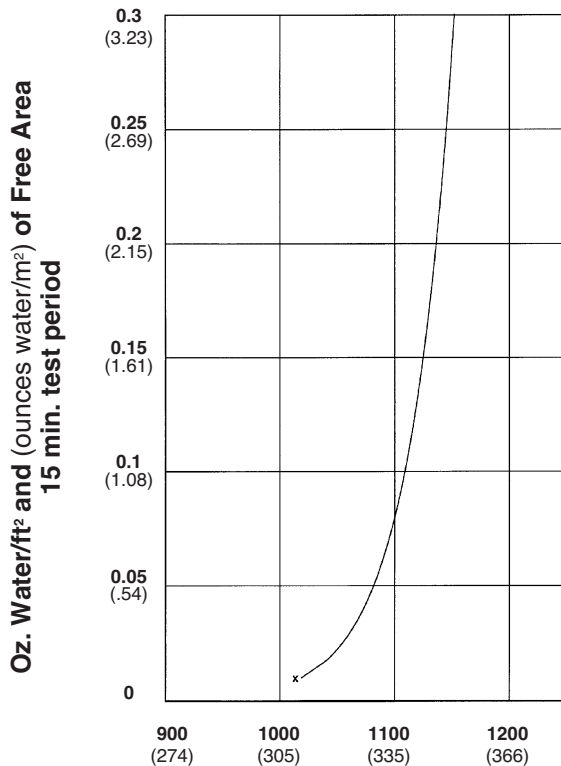
PRESSURE DROP



WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1019 fpm (311 m/min).



Ratings do not include the effect of a bird screen.



Reliable Products certifies that the 645RAAB louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

Free Area Velocity in feet and (meters) per minute
Standard air .075 lb/ft³

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary type. Louvers shall have a minimum of 30% free area based on a 48" wide x 48" high (1219 x 1219) size. Stationary blades shall be contained within a 6" (152) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph [145 KPH] wind - specifier may substitute any loading required).

Louvers shall be Reliable Model 645RAAB extruded 6063T5 aluminum alloy construction as follows:

- Frame: 6" (152) deep, .125" (3.2) wall thickness.
- Blades: .081" (2.1) wall thickness exterior surface with .040" (1) perforated aluminum interior surface, filled with 1" (25) fiberglass insulation. Blades positioned at 45° angle and spaced approximately 4⁵/₈" (118) center to center.
- Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum in removable frame.
- Finish: Select finish specification from Reliable Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz. of water penetration.

FREE AREA GUIDE

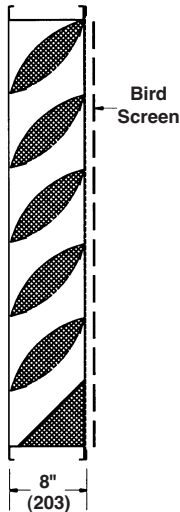
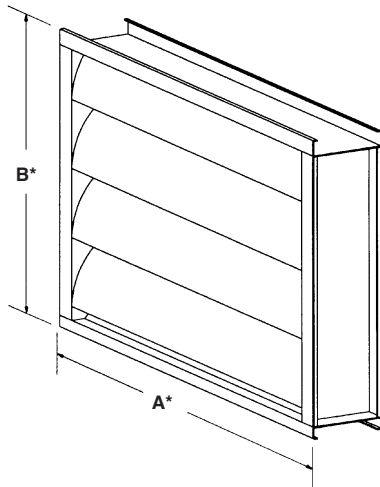
Free Area Guide shows free area in ft² and m² for various sizes of 645RAAB
Width – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
12	0.14	0.22	0.30	0.38	0.47	0.55	0.63	0.71	0.80	0.88	0.96	1.05	1.13	1.21	1.29	1.38	1.46	1.54	1.62
0.30	0.01	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.07	0.08	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.14	0.15
18	0.26	0.42	0.58	0.74	0.90	1.06	1.22	1.37	1.53	1.69	1.85	2.01	2.17	2.33	2.49	2.65	2.81	2.97	3.12
0.46	0.02	0.04	0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	0.19	0.20	0.22	0.23	0.25	0.26	0.28	0.29
24	0.46	0.75	1.03	1.31	1.59	1.87	2.15	2.44	2.72	3.00	3.28	3.56	3.85	4.13	4.41	4.69	4.97	5.25	5.54
0.61	0.04	0.07	0.10	0.12	0.15	0.17	0.20	0.23	0.25	0.28	0.31	0.33	0.36	0.38	0.41	0.44	0.46	0.49	0.51
30	0.59	0.95	1.31	1.66	2.02	2.38	2.74	3.10	3.46	3.81	4.17	4.53	4.89	5.25	5.60	5.96	6.32	6.68	7.04
0.76	0.05	0.09	0.12	0.15	0.19	0.22	0.25	0.29	0.32	0.35	0.39	0.42	0.45	0.49	0.52	0.55	0.59	0.62	0.65
36	0.72	1.15	1.58	2.02	2.45	2.89	3.32	3.76	4.19	4.63	5.06	5.50	5.93	6.37	6.80	7.23	7.67	8.10	8.54
0.91	0.07	0.11	0.15	0.19	0.23	0.27	0.31	0.35	0.39	0.43	0.47	0.51	0.55	0.59	0.63	0.67	0.71	0.75	0.79
42	0.84	1.35	1.86	2.37	2.89	3.40	3.91	4.42	4.93	5.44	5.95	6.46	6.97	7.48	8.00	8.51	9.02	9.53	10.04
1.07	0.08	0.13	0.17	0.22	0.27	0.32	0.36	0.41	0.46	0.51	0.55	0.60	0.65	0.70	0.74	0.79	0.84	0.89	0.93
48	1.04	1.68	2.31	2.94	3.58	4.21	4.85	5.48	6.11	6.75	7.38	8.01	8.65	9.28	9.92	10.55	11.18	11.82	12.45
1.22	0.10	0.16	0.21	0.27	0.33	0.39	0.45	0.51	0.57	0.63	0.69	0.75	0.80	0.86	0.92	0.98	1.04	1.10	1.16
54	1.17	1.88	2.59	3.30	4.01	4.72	5.43	6.14	6.85	7.56	8.27	8.98	9.69	10.40	11.11	11.82	12.53	13.24	13.95
1.37	0.11	0.17	0.24	0.31	0.37	0.44	0.50	0.57	0.64	0.70	0.77	0.84	0.90	0.97	1.03	1.10	1.17	1.23	1.30
60	1.29	2.08	2.87	3.65	4.44	5.23	6.01	6.80	7.59	8.37	9.16	9.95	10.73	11.52	12.31	13.09	13.88	14.67	15.45
1.52	0.12	0.19	0.27	0.34	0.41	0.49	0.56	0.63	0.71	0.78	0.85	0.93	1.00	1.07	1.14	1.22	1.29	1.36	1.44
66	1.50	2.41	3.32	4.22	5.13	6.04	6.95	7.86	8.77	9.68	10.59	11.50	12.41	13.32	14.23	15.14	16.05	16.96	17.87
1.68	0.14	0.22	0.31	0.39	0.48	0.56	0.65	0.73	0.82	0.90	0.98	1.07	1.15	1.24	1.32	1.41	1.49	1.58	1.66
72	1.62	2.61	3.59	4.58	5.57	6.55	7.54	8.52	9.51	10.49	11.48	12.47	13.45	14.44	15.42	16.41	17.39	18.38	19.37
1.83	0.15	0.24	0.33	0.43	0.52	0.61	0.70	0.79	0.88	0.98	1.07	1.16	1.25	1.34	1.43	1.53	1.62	1.71	1.80
78	1.75	2.81	3.87	4.93	6.00	7.06	8.12	9.18	10.25	11.31	12.37	13.43	14.49	15.56	16.62	17.68	18.74	19.81	20.87
1.98	0.16	0.26	0.36	0.46	0.56	0.66	0.76	0.85	0.95	1.05	1.15	1.25	1.35	1.45	1.55	1.64	1.74	1.84	1.94
84	1.87	3.01	4.15	5.29	6.43	7.57	8.71	9.84	10.98	12.12	13.26	14.40	15.54	16.68	17.81	18.95	20.09	21.23	22.37
2.13	0.17	0.28	0.39	0.49	0.60	0.70	0.81	0.92	1.02	1.13	1.23	1.34	1.44	1.55	1.66	1.76	1.87	1.97	2.08
90	2.08	3.34	4.60	5.86	7.12	8.38	9.64	10.91	12.17	13.43	14.69	15.95	17.21	18.47	19.73	21.00	22.26	23.52	24.78
2.29	0.19	0.31	0.43	0.54	0.66	0.78	0.90	1.01	1.13	1.25	1.37	1.48	1.60	1.72	1.84	1.95	2.07	2.19	2.30



845FBAF STATIONARY ACOUSTICAL LOUVER

FORMED STEEL



STANDARD CONSTRUCTION

FRAME
8" (203) deep, 16 gage (1.6) galvanized steel channel.

BLADES
18 gage (1.3) airfoil shaped galvanized steel exterior surface, with 22 gage (.9) perforated steel interior surface that covers insulation. Blades positioned at 45° angle and spaced approximately 8" (203) center to center.

ACOUSTICAL INSULATION
Ruskatherm blanket.

SCREEN
1/2" mesh x 19 gage (13 x 1.1) galvanized bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 18"h (305 x 457).

APPROXIMATE SHIPPING WEIGHT
8 lbs. per sq. ft.

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 64 sq. ft. (6m²). Maximum single section size shall be 48" x 96" (1219 x 2438). Louvers larger than the maximum single section size will require field assembly of smaller sections.

FEATURES

The 845FBAF offers insulated airfoil blades which provide effective sound attenuation and weather protection with an architecturally pleasing appearance.

VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Pearldize, prime coat, integral color and clear anodize. (Some variation in anodize color consistency is possible. Anodize finish available only on aluminum construction.)
- Formed aluminum frame with .100" (2.5) nominal wall thickness and .080" (2) blade with .040" (1) perforated aluminum interior surface.

Octave Band Frequency (Hz)	Free Field Noise Reduction (db) Ruskatherm Blanket
1/63	11
2/125	13
3/250	11
4/500	13
5/1000	18
6/2000	18
7/4000	18
8/8000	20

To calculate Transmission Loss (db), subtract 6 db from Free Field Noise Reduction (db).

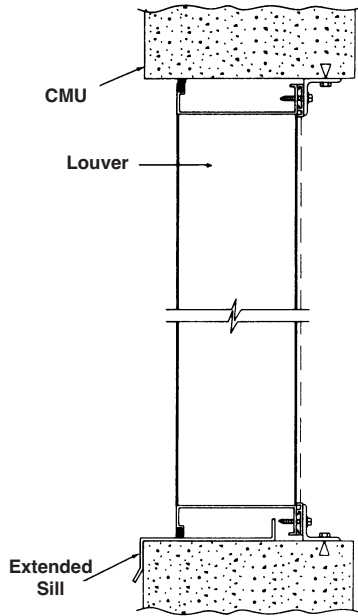
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

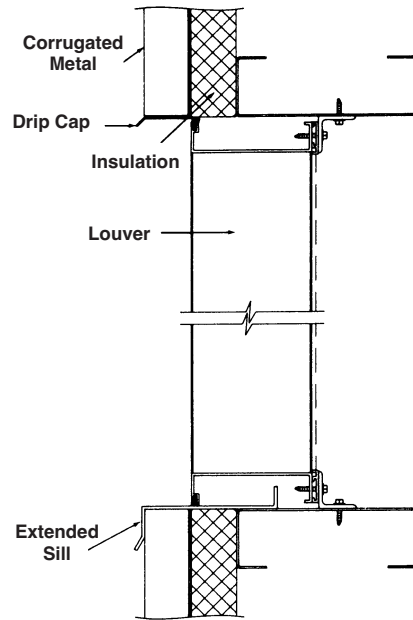
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

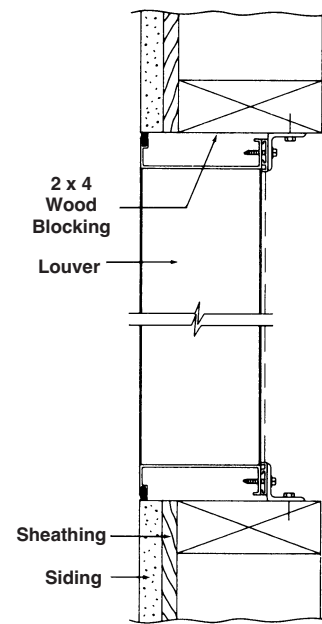
Masonry Wall



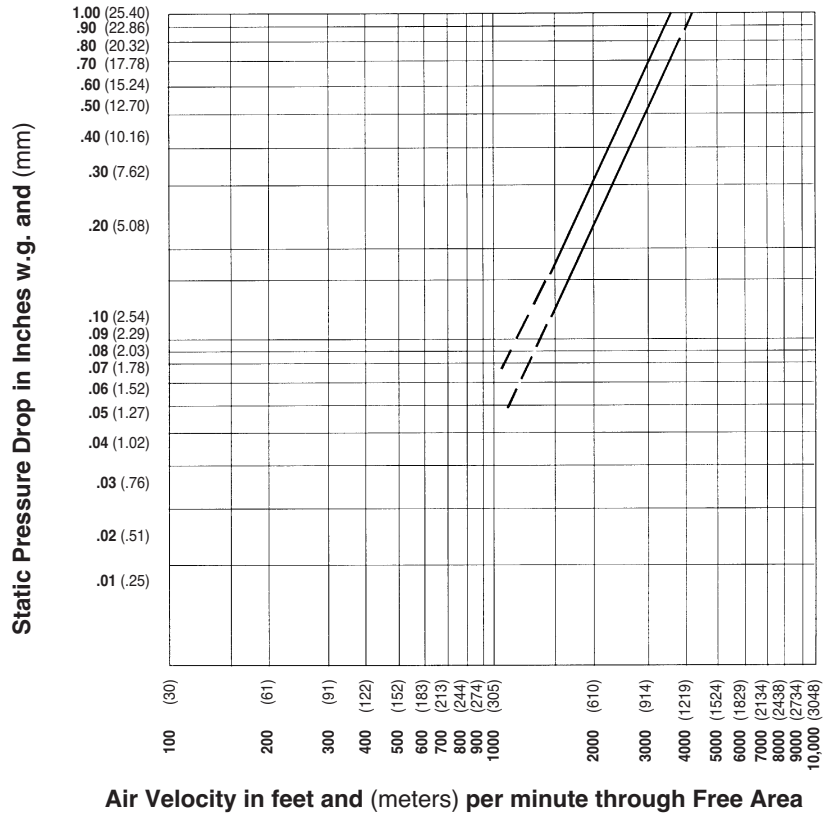
Metal Panel Wall



Wood Installation



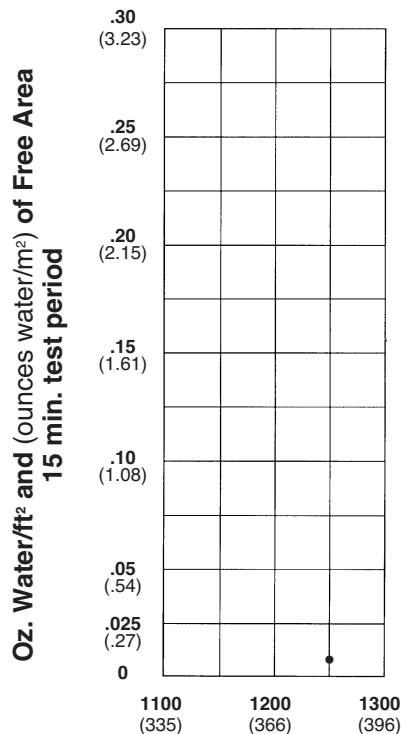
PRESSURE DROP



Ratings do not include the effect of a bird screen.

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219). Beginning point of water penetration at .01 oz./sq. ft. lies above 1250 fpm (381 m/min) through the Free Area of the 845FBAF louver.



Reliable Products certifies that the 845FBAF Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary airfoil acoustical type contained within an 8" (203) frame. Louver components (heads, jambs, sills, blades, and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind-load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

- Louvers shall be Reliable Model 845FBAF construction as follows:
- Frame: 16 gage (1.6) galvanized steel channel.
- Blades: 20 gage (1.0) airfoil shaped galvanized steel exterior surface, 22 gage (.9) perforated steel interior surface that covers insulation. Blade angle 45° on 8" (203) centers.
- Screen: 1/2" mesh x 19 gage (13 x 1.1) galvanized steel in removable frame.
- Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance must be submitted for approval prior to fabrication and must demonstrate pressure drop equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 845FBAF
Width – Inches and Meters

	12 305	18 457	24 610	30 762	36 915	42 1067	48 1219	54 1372	60 1524	66 1676	72 1829	78 1981	84 2134	90 2286	96 2438
18 457	.13 .01	.21 .02	.29 .03	.38 .04	.46 .05	.54 .05	.63 .06	.67 .06	.75 .07	.83 .07	.92 .18	1.00 .09	1.08 .10	1.17 .11	1.25 .12
24 610	.25 .02	.42 .04	.58 .05	.75 .07	.92 .08	1.08 .10	1.25 .12	1.33 .13	1.50 .15	1.67 .16	1.83 .17	2.00 .18	2.17 .20	2.33 .22	2.50 .24
30 762	.38 .04	.63 .06	.88 .08	1.13 .10	1.38 .13	1.63 .15	1.88 .17	2.00 .18	2.25 .21	2.50 .24	2.75 .26	3.00 .27	3.25 .30	3.50 .33	3.75 .35
36 915	.42 .04	.70 .06	.98 .09	1.27 .12	1.55 .15	1.83 .17	2.11 .19	2.25 .20	2.53 .24	2.81 .26	3.09 .29	3.38 .31	3.66 .34	3.94 .36	4.22 .39
42 1067	.50 .05	.83 .07	1.17 .11	1.50 .15	1.83 .16	2.17 .20	2.50 .24	2.67 .25	3.00 .28	3.33 .30	3.67 .34	4.00 .36	4.33 .40	4.67 .43	5.00 .45
48 1219	.63 .06	1.04 .10	1.46 .14	1.88 .17	2.29 .21	2.71 .25	3.13 .29	3.33 .32	3.75 .35	4.17 .38	4.58 .43	5.00 .45	5.42 .50	5.83 .54	6.25 .58
54 1372	.75 .07	1.25 .12	1.75 .16	2.25 .21	2.75 .25	3.25 .31	3.75 .35	4.00 .36	4.50 .42	5.00 .46	5.50 .51	6.00 .55	6.50 .61	7.00 .64	7.50 .70
60 1524	.80 .07	1.33 .13	1.86 .17	2.39 .23	2.92 .27	3.45 .32	3.98 .36	4.25 .39	4.78 .44	5.31 .50	5.84 .54	6.38 .59	6.91 .64	7.44 .69	7.97 .74
66 1676	.88 .08	1.46 .14	2.04 .18	2.63 .24	3.21 .30	3.79 .35	4.38 .41	4.67 .43	5.25 .47	5.83 .54	6.42 .60	7.00 .64	7.58 .71	8.17 .76	8.75 .82
72 1829	1.00 .09	1.67 .16	2.33 .22	3.00 .28	3.67 .34	4.33 .40	4.80 .45	5.33 .48	6.00 .55	6.67 .62	7.33 .68	8.00 .74	8.67 .81	9.33 .87	10.00 .93
78 1981	1.13 .10	1.88 .17	2.63 .24	3.38 .31	4.13 .38	4.88 .45	5.63 .52	6.00 .56	6.75 .63	7.50 .70	8.25 .77	9.00 .84	9.75 .91	10.50 .98	11.25 1.05
84 2134	1.17 .11	1.95 .18	2.73 .25	3.52 .33	4.30 .40	5.08 .47	5.86 .54	6.25 .58	7.03 .65	7.81 .73	8.59 .80	9.38 .87	10.16 .95	10.94 1.02	11.72 1.09
90 2286	1.25 .12	2.08 .19	2.92 .27	3.75 .35	4.58 .43	5.42 .50	6.25 .58	6.67 .62	7.50 .70	8.33 .78	9.17 .85	10.00 .93	10.83 1.01	11.67 1.08	12.50 1.16
96 2438	1.38 .13	2.29 .21	3.21 .30	4.13 .38	5.04 .47	5.96 .55	6.88 .64	7.33 .68	8.25 .77	9.17 .85	10.08 .94	11.00 1.02	11.92 1.11	12.83 1.19	13.75 1.28

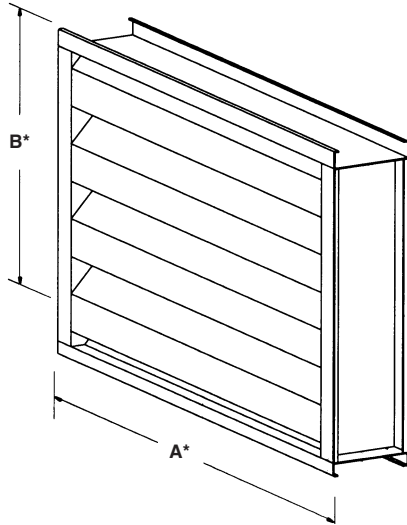
Height – Inches and Millimeters



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

845RAAZ STATIONARY ACOUSTICAL LOUVER

FORMED STEEL



STANDARD CONSTRUCTION

FRAME
8" (203) deep, 16 gage (1.6) galvanized steel channel.

BLADES
18 gage (1.3) galvanized steel exterior surface, with 22 gage (.9) perforated steel interior surface that covers insulation. Blades positioned at 45° angle and spaced approximately 8" (203) center to center.

ACOUSTICAL INSULATION
Ruskatherm blanket.

SCREEN
1/2" mesh x 19 gage (13 x 1.1) galvanized bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 18"h (305 x 457).

APPROXIMATE SHIPPING WEIGHT
9 lbs. per sq. ft. (43.9 kg/m²).

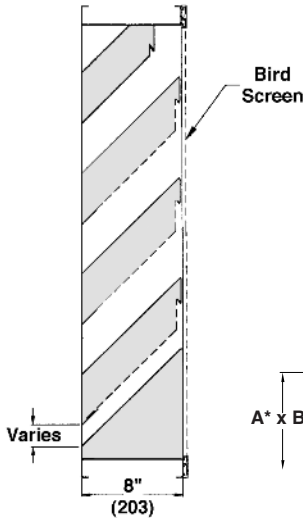
MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 64 sq. ft. (6m²). Maximum single section size shall be 48"w x 96"h (1219 x 2438). Louvers larger than the maximum single section size will require field assembly of smaller sections.

FEATURES

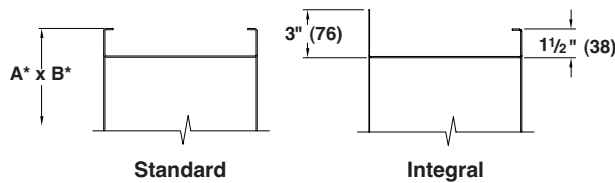
- The 845RAAZ offers:
- Insulated blades which provide effective sound attenuation and weather protection.
 - Published performance ratings based on testing in accordance with AMCA Publication 511.
 - Architecturally pleasing appearance.

VARIATIONS

- Variations to the basic design of this louver are available at additional cost. They include:
- Extended sill.
 - Front or rear security bars.
 - Filter racks.
 - Installation angles.
 - A variety of bird and insect screens.
 - Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Anodize finish available only on aluminum construction. Some variation in anodize color consistency is possible.)
 - Formed aluminum frame with .100" (2.5) nominal wall thickness and .080" (2) blade with .040" (1) perforated aluminum interior surface.



FRAME CONSTRUCTION



Octave Band Frequency (Hz)	Free Field Noise Reduction (db) Ruskatherm Blanket
2/125	17
3/250	12
4/500	16
5/1000	22
6/2000	23
7/4000	21
8/8000	21

To calculate Transmission Loss (db), subtract 6 db from Free Field Noise Reduction (db).

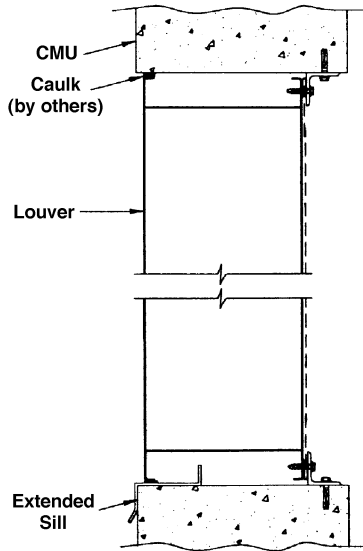
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

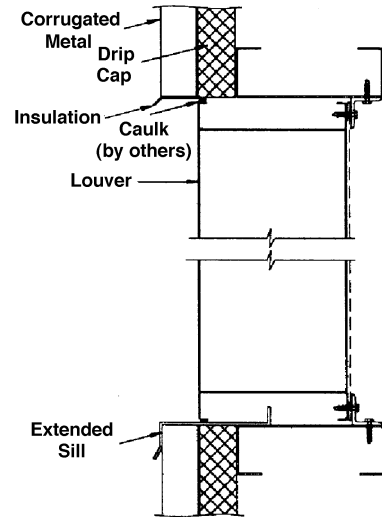
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

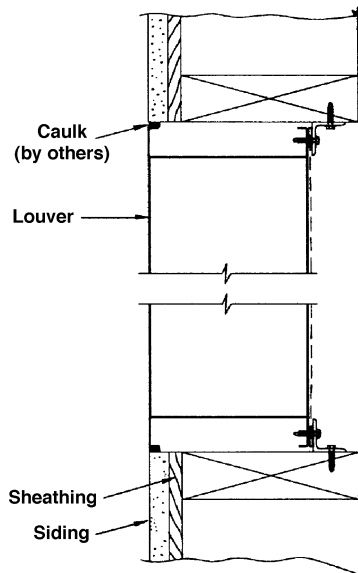
Masonry Wall



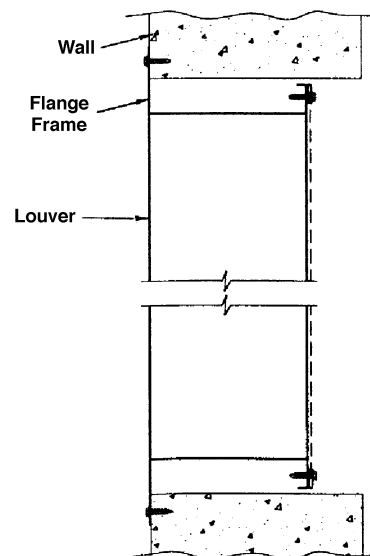
Metal Panel Wall



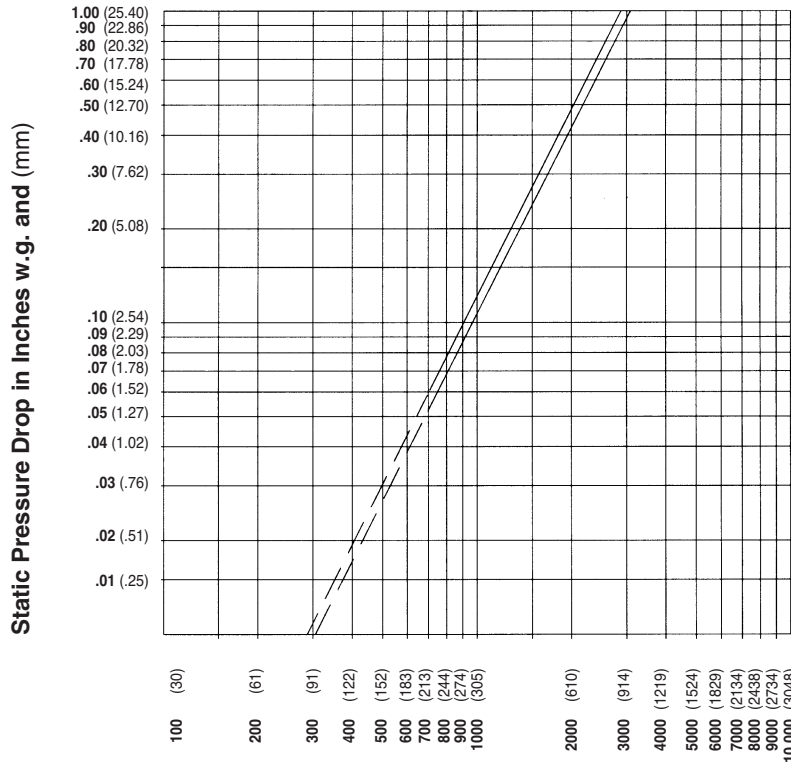
Wood Installation



Flange Mount



PRESSURE DROP



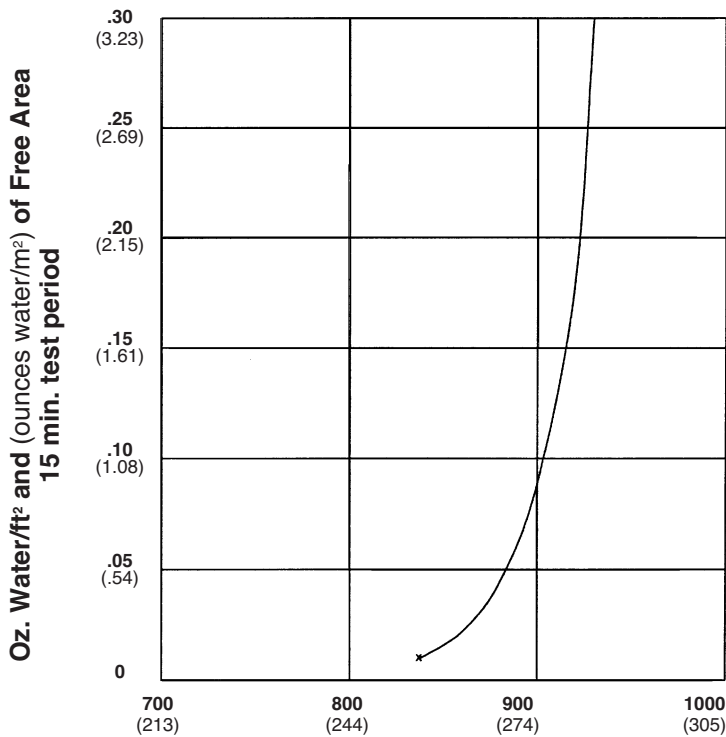
Ratings do not include the effect of a bird screen.

Air Velocity in feet and (meters) per minute through Free Area

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 838 fpm (255 m/min).



Reliable Products certifies that the 845RAAZ Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

Free Area Velocity in feet and (meters) per minute
Standard air .075 lb/ft³

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary acoustical type contained within a 8" (203) frame. Louver components (heads, jambs, sills, blades, and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind-load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

- Louvers shall be Reliable Model 845RAAZ construction as follows:
- Frame: 16 gage (1.6) galvanized steel channel.
- Blades: 18 gage (1.3) galvanized steel exterior surface, 22 gage (.9) perforated steel interior surface that covers insulation. Blades are positioned at 45° angle and spaced approximately 8" (203) center to center.
- Screen: 1/2" mesh x 19 gage (13 x 1.1) galvanized steel in removable frame.
- Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance and Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of ACL845
Width – Inches and Meters

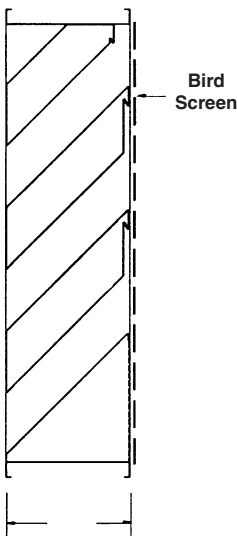
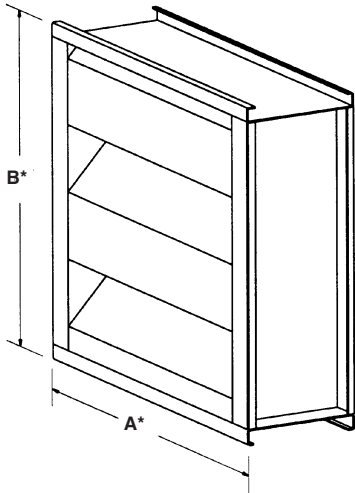
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44
18	0.24	0.40	0.56	0.72	0.88	1.04	1.20	1.36	1.52	1.68	1.84	2.00	2.16	2.32	2.48
0.46	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.06	0.06
24	0.34	0.57	0.80	1.03	1.26	1.49	1.72	1.95	2.18	2.41	2.64	2.87	3.10	3.33	3.56
0.61	0.01	0.01	0.02	0.03	0.03	0.04	0.04	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09
30	0.45	0.75	1.05	1.35	1.65	1.95	2.25	2.55	2.85	3.14	3.44	3.74	4.04	4.34	4.64
0.76	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.10	0.10	0.11	0.12
36	0.55	0.92	1.29	1.66	2.03	2.40	2.77	3.14	3.51	3.88	4.24	4.61	4.98	5.35	5.72
0.91	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15
42	0.76	1.26	1.76	2.27	2.77	3.28	3.78	4.28	4.79	5.29	5.80	6.30	6.80	7.31	7.81
1.07	0.02	0.03	0.04	0.06	0.07	0.08	0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.19	0.20
48	0.86	1.43	2.01	2.58	3.16	3.73	4.30	4.88	5.45	6.02	6.60	7.17	7.74	8.32	8.89
1.22	0.02	0.04	0.05	0.07	0.08	0.09	0.11	0.12	0.14	0.15	0.17	0.18	0.20	0.21	0.23
54	0.96	1.61	2.25	2.89	3.54	4.18	4.82	5.47	6.11	6.75	7.40	8.04	8.68	9.33	9.97
1.37	0.02	0.04	0.06	0.07	0.09	0.11	0.12	0.14	0.16	0.17	0.19	0.20	0.22	0.24	0.25
60	1.07	1.78	2.49	3.21	3.92	4.63	5.35	6.06	6.77	7.48	8.20	8.91	9.62	10.34	11.05
1.52	0.03	0.05	0.06	0.08	0.10	0.12	0.14	0.15	0.17	0.19	0.21	0.23	0.24	0.26	0.28
66	1.27	2.12	2.97	3.82	4.66	5.51	6.36	7.21	8.05	8.90	9.75	10.60	11.45	12.29	13.14
1.68	0.03	0.05	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.23	0.25	0.27	0.29	0.31	0.33
72	1.38	2.29	3.21	4.13	5.05	5.96	6.88	7.80	8.72	9.63	10.55	11.47	12.38	13.30	14.22
1.83	0.03	0.06	0.08	0.10	0.13	0.15	0.17	0.20	0.22	0.24	0.27	0.29	0.31	0.34	0.36
78	1.48	2.47	3.45	4.44	5.43	6.42	7.40	8.39	9.38	10.36	11.35	12.34	13.32	14.31	15.30
1.98	0.04	0.06	0.09	0.11	0.14	0.16	0.19	0.21	0.24	0.26	0.29	0.31	0.34	0.36	0.39
84	1.58	2.64	3.70	4.75	5.81	6.87	7.92	8.98	10.04	11.09	12.15	13.21	14.26	15.32	16.38
2.13	0.04	0.07	0.09	0.12	0.15	0.17	0.20	0.23	0.25	0.28	0.31	0.34	0.36	0.39	0.42
90	1.79	2.98	4.17	5.36	6.55	7.75	8.94	10.13	11.32	12.51	13.70	14.89	16.09	17.28	18.47
2.29	0.05	0.08	0.11	0.14	0.17	0.20	0.23	0.26	0.29	0.32	0.35	0.38	0.41	0.44	0.47
96	1.89	3.15	4.41	5.68	6.94	8.20	9.46	10.72	11.98	13.24	14.50	15.76	17.03	18.29	19.55
2.44	0.05	0.08	0.11	0.14	0.18	0.21	0.24	0.27	0.30	0.34	0.37	0.40	0.43	0.46	0.50

Height – Inches and Meters



1245RAAZ STATIONARY ACOUSTICAL LOUVER

FORMED STEEL



STANDARD CONSTRUCTION

FRAME
8" (203) deep, 16 gage (1.6) galvanized steel channel.

BLADES
18 gage (1.3) galvanized steel exterior surface, with 22 gage (.9) perforated steel interior surface that covers insulation. Blades positioned at 45° angle and spaced approximately 12" (305) center to center.

ACOUSTICAL INSULATION
Ruskatherm blanket.

SCREEN
1/2" mesh x 19 gage (13 x 1.1) galvanized bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

FINISH
Mill.

MINIMUM SIZE
12"w x 24"h (305 x 610).

APPROXIMATE SHIPPING WEIGHT
11 lbs. per sq. ft. (53.7 kg/m²).

MAXIMUM FACTORY ASSEMBLY SIZE
Shall be 64 sq. ft. (6m²). Maximum single section size shall be 48"w x 96"h (1219 x 2438). Louvers larger than the maximum single section size will require field assembly of smaller sections.

FEATURES

The 1245RAAZ offers:

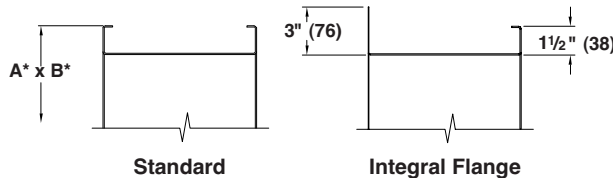
- Insulated blades which provide effective sound attenuation and weather protection.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- Architecturally pleasing appearance.

VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Anodize finish available only on aluminum construction. Some variation in anodize color consistency is possible.)
- Formed aluminum frame with .100" (2.5) nominal wall thickness and .080" (2) blade with .040" (1) perforated aluminum interior surface.

STANDARD CONSTRUCTION



Octave Band Frequency (Hz)	Free Field Noise Reduction (db) Ruskatherm Blanket
2/125	10
3/250	11
4/500	18
5/1000	20
6/2000	19
7/4000	20
8/8000	21

To calculate Transmission Loss (db), subtract 6 db from Free Field Noise Reduction (db).

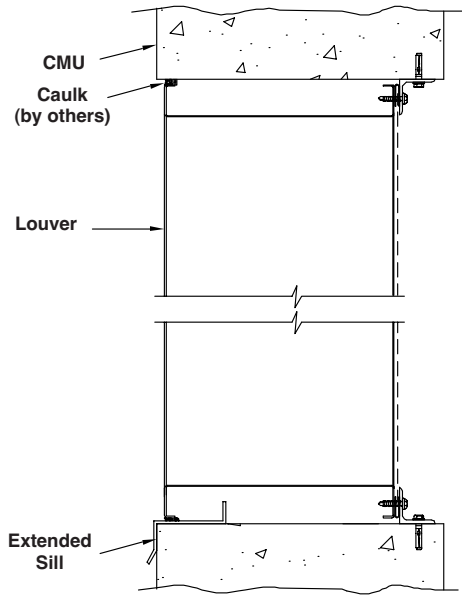
Dimensions in inches, parenthesis () indicate millimeters.

*Units furnished 1/4" (6) smaller than given opening dimensions.

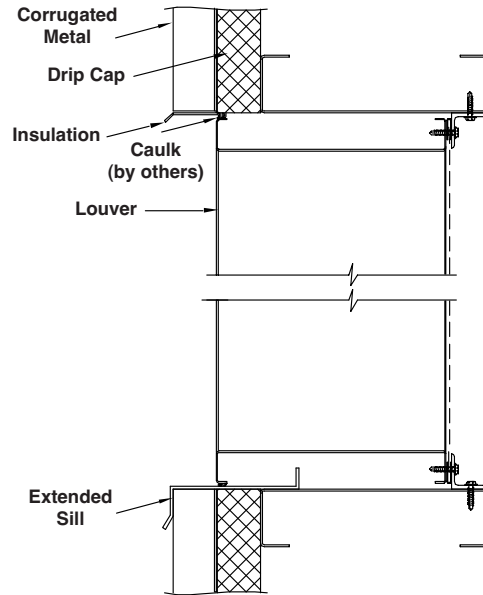
TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

TYPICAL INSTALLATION DETAILS

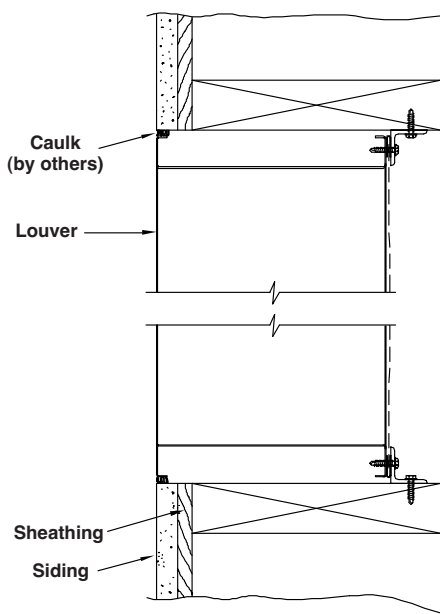
Masonry Wall



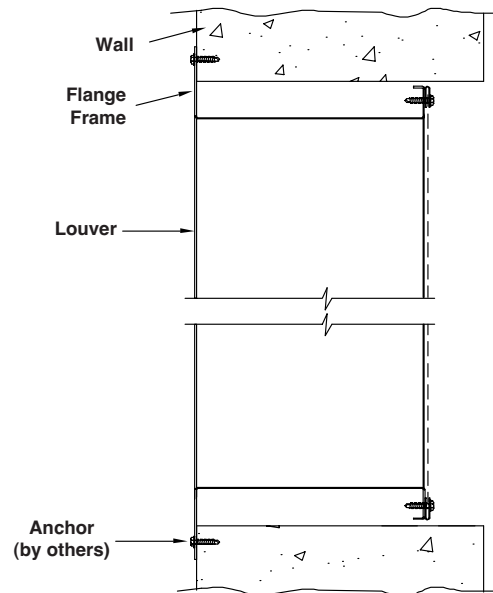
Metal Panel Wall



Wood Installation

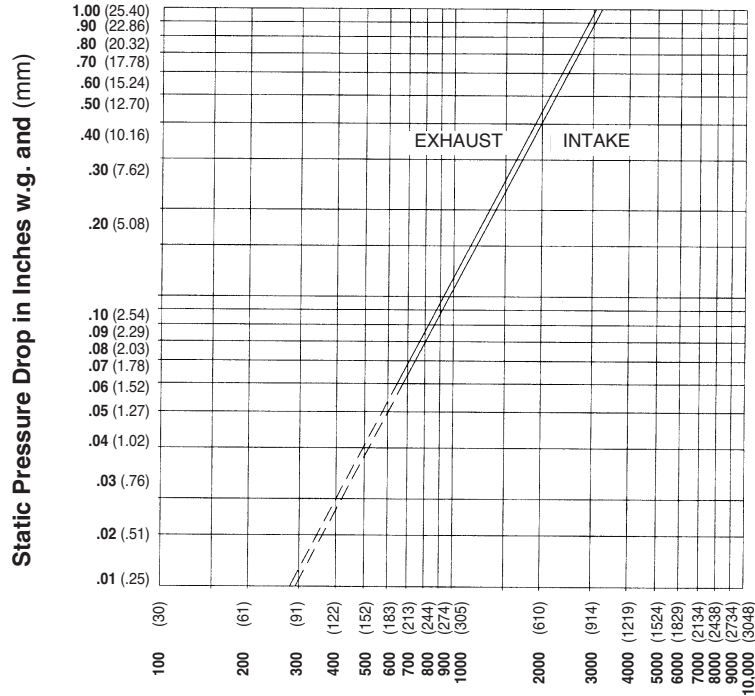


Flange Mount



Accessories at additional cost.

PRESSURE DROP



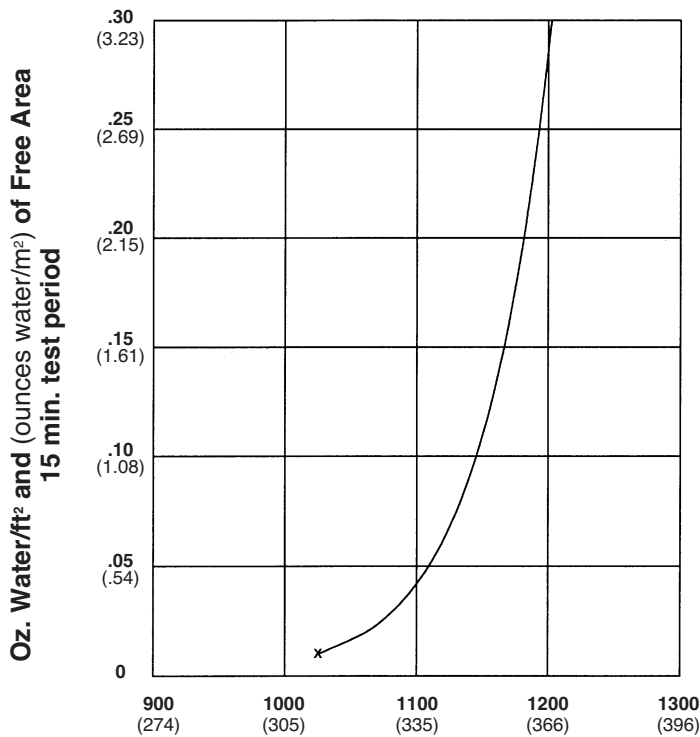
Ratings do not include the effect of a bird screen.

Air Velocity in feet and (meters) per minute through Free Area

WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1025 fpm (312 m/min).



Reliable Products certifies that the 1245RAAZ Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

Free Area Velocity in feet and (meters) per minute
Standard air .075 lb/ft³

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary acoustical type contained within a 12" (305) frame. Louver components (heads, jambs, sills, blades, and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind-load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

- Louvers shall be Reliable Model 1245RAAZ construction as follows:
- Frame: 16 gage (1.6) galvanized steel channel.
- Blades: 20 gage (1.0) galvanized steel exterior surface, 22 gage (.9) perforated steel interior surface that covers insulation. Blades are positioned at 45° angle and spaced approximately 12" (305) center to center.
- Screen: 1/2" mesh x 19 gage (13 x 1.1) galvanized steel in removable frame.
- Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance and Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop equal to or less than the Reliable model specified.

PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

FREE AREA GUIDE

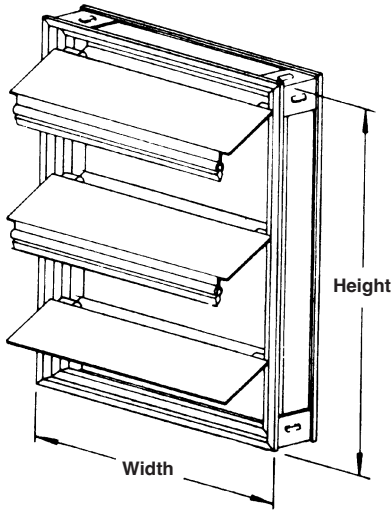
**Free Area Guide shows free area in ft² and m² for various sizes of 1245RAAZ
Width – Inches and Meters**

	12 0.30	18 0.46	24 0.61	30 0.76	36 0.91	42 1.07	48 1.22	54 1.37	60 1.52	66 1.68	72 1.83	78 1.98	84 2.13	90 2.29	96 2.44
18 0.46	0.07 0.00	0.11 0.00	0.15 0.00	0.20 0.00	0.24 0.01	0.28 0.01	0.33 0.01	0.37 0.01	0.41 0.01	0.46 0.01	0.50 0.01	0.55 0.01	0.59 0.01	0.63 0.02	0.68 0.02
24 0.61	0.19 0.00	0.32 0.01	0.45 0.01	0.57 0.01	0.70 0.02	0.83 0.02	0.96 0.02	1.08 0.03	1.21 0.03	1.34 0.03	1.46 0.04	1.59 0.04	1.72 0.04	1.85 0.05	1.97 0.05
30 0.76	0.34 0.01	0.57 0.01	0.80 0.02	1.03 0.03	1.26 0.03	1.48 0.04	1.71 0.04	1.94 0.05	2.17 0.06	2.40 0.06	2.62 0.07	2.85 0.07	3.08 0.08	3.31 0.08	3.54 0.09
36 0.91	0.47 0.01	0.78 0.02	1.09 0.03	1.40 0.04	1.72 0.04	2.03 0.05	2.34 0.06	2.65 0.07	2.96 0.08	3.28 0.08	3.59 0.09	3.90 0.10	4.21 0.11	4.52 0.11	4.84 0.12
42 1.07	0.57 0.01	0.95 0.02	1.34 0.03	1.72 0.04	2.10 0.05	2.48 0.06	2.86 0.07	3.24 0.08	3.62 0.09	4.01 0.10	4.39 0.11	4.77 0.12	5.15 0.13	5.53 0.14	5.91 0.15
48 1.22	0.70 0.02	1.16 0.03	1.63 0.04	2.09 0.05	2.56 0.07	3.02 0.08	3.49 0.09	3.95 0.10	4.42 0.11	4.89 0.12	5.35 0.14	5.82 0.15	6.28 0.16	6.75 0.17	7.21 0.18
54 1.37	0.80 0.02	1.34 0.03	1.87 0.05	2.41 0.06	2.94 0.07	3.48 0.09	4.01 0.10	4.55 0.12	5.08 0.13	5.62 0.14	6.15 0.16	6.69 0.17	7.22 0.18	7.76 0.20	8.29 0.21
60 1.52	0.93 0.02	1.55 0.04	2.17 0.05	2.78 0.07	3.40 0.09	4.02 0.10	4.64 0.12	5.26 0.13	5.88 0.15	6.50 0.16	7.11 0.18	7.73 0.20	8.35 0.21	8.97 0.23	9.59 0.24
66 1.68	1.03 0.03	1.72 0.04	2.41 0.06	3.10 0.08	3.79 0.10	4.47 0.11	5.16 0.13	5.85 0.15	6.54 0.17	7.23 0.18	7.91 0.20	8.60 0.22	9.29 0.24	9.98 0.25	10.67 0.27
72 1.83	1.16 0.03	1.93 0.05	2.70 0.07	3.47 0.09	4.25 0.11	5.02 0.13	5.79 0.15	6.56 0.17	7.33 0.19	8.11 0.21	8.88 0.23	9.65 0.25	10.42 0.26	11.19 0.28	11.97 0.30
78 1.98	1.26 0.03	2.10 0.05	2.95 0.07	3.79 0.10	4.63 0.12	5.47 0.14	6.31 0.16	7.15 0.18	7.99 0.20	8.84 0.22	9.68 0.25	10.52 0.27	11.36 0.29	12.20 0.31	13.04 0.33
84 2.13	1.39 0.04	2.31 0.06	3.24 0.08	4.16 0.11	5.09 0.13	6.01 0.15	6.94 0.18	7.86 0.20	8.79 0.22	9.72 0.25	10.64 0.27	11.57 0.29	12.49 0.32	13.42 0.37	14.34 0.36
90 2.29	1.49 0.04	2.49 0.06	3.48 0.09	4.48 0.11	5.47 0.14	6.47 0.16	7.46 0.19	8.46 0.21	9.45 0.24	10.45 0.27	11.44 0.29	12.44 0.32	13.43 0.34	14.43 0.37	15.42 0.39
96 2.44	1.62 0.04	2.70 0.07	3.78 0.10	4.85 0.12	5.93 0.15	7.01 0.18	8.09 0.21	9.17 0.23	10.25 0.26	11.33 0.29	12.40 0.32	13.48 0.34	14.56 0.37	15.64 0.40	16.72 0.42

Height – Inches and Millimeters



2BDE/2BDHD BACKDRAFT DAMPERS



STANDARD CONSTRUCTION

FRAME

6063T5 extruded aluminum, .090" (2.3) wall thickness, mitered corners.

BLADES

2BDE – .025 (.6) formed aluminum, extruded vinyl edge seals.

2BDHD – 6063T5 extruded aluminum, .050" (1.2) wall thickness, extruded vinyl edge seals.

BEARINGS

Synthetic.

LINKAGE

Concealed in frame.

FINISH

Mill.

TEMPERATURE LIMITS

-40°F to +200°F (-40°C to +93°C).

MAXIMUM SPOT VELOCITY

2BDE – 1500 fpm.

2BDHD – 2500 fpm.

MINIMUM SIZE

6"w x 6"h (152 x 152).

MAXIMUM SIZE

Single section – 40"w x 48"h (1016 x 1219).

Note:

When used in fan discharge applications, damper should be located at a minimum distance equal to half the fan diameter away from the fan discharge.

Dimensions in parentheses () indicate millimeters.

FEATURES

The 2BD dampers offer backdraft protection in light to medium duty applications that demand less than 12 CFM per square foot of leakage at 1/2" w.g. Non-metallic blade-to-blade seal provides quiet operation during the highest spot velocities.

The damper's good looking appearance is maintained by sturdy, corrosion resistant aluminum construction. Contemporary styling features blades that overlap the frame for optimum resistance to weather.

VARIATIONS

The following variations to the 2BD's are available at additional cost:

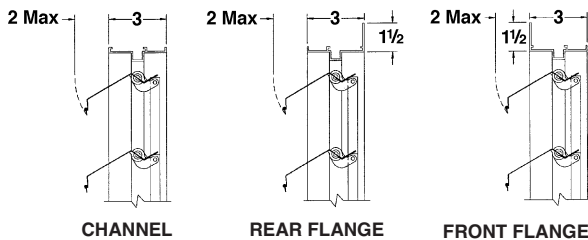
- Rear mounted screen
- Special finishes
- Electric actuators



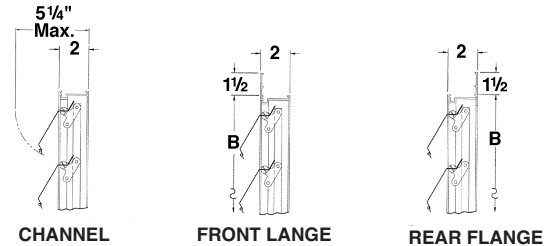
Air Flow

HORIZONTAL MOUNT
(Upward air flow only)

2BDE FRAME CONSTRUCTION



2BDHD FRAME CONSTRUCTION





**2BDE
2BDHD**

SUGGESTED SPECIFICATION

Furnish and install at locations on plans or in accordance with schedules backdraft dampers that meet the following minimum construction standards: Frame shall be .090" (2.3) 6063T5 extruded aluminum wall thickness with mitered corners. Blades shall be (specify) .025" (.6) formed aluminum with extruded vinyl edge seals or .050" (1.3) 6063T5 extruded aluminum with extruded vinyl

edge seals. Blade edge seals shall be mechanically locked into blade edge; adhesive type seals are unacceptable. Bearings shall be corrosion resistant synthetic and linkage shall be concealed in frame for low pressure drop and noise. Damper shall be, in all respects, equivalent to Reliable model (specify) 2BDE or 2BDHD.

PERFORMANCE DATA

2BDE

DAMPER WIDTH	MAXIMUM BACK PRESSURE (EXTERNAL WIND VELOCITY)	MAXIMUM SYSTEM VELOCITY	LEAKAGE*	
			% OF MAX. FLOW	CFM/ SQ. FT.
40" (1016)	55 mph/1.5" w.g.	1000 fpm	1.5	15.0
36" (914)	70 mph/2.5" w.g.	1000 fpm	1.5	15.0
24" (610)	85 mph/3.5" w.g.	1000 fpm	2.0	20.0
12" (305)	95 mph/4.5" w.g.	1000 fpm	4.0	40.0

AMCA Standard 500 provides a reasonable basis for testing and rating dampers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where dampers must operate.

Designs should provide a reasonable safety factor for damper performance by selecting at some point below damper leakage or pressure drop system requirements.

2BDHD

DAMPER WIDTH	MAXIMUM BACK PRESSURE (EXTERNAL WIND VELOCITY)	MAXIMUM SYSTEM VELOCITY	LEAKAGE*	
			% OF MAX. FLOW	CFM/ SQ. FT.
40" (1016)	75 mph/3" w.g.	1500 fpm	1.0	15.0
36" (914)	90 mph/4" w.g.	1500 fpm	1.0	15.0
24" (610)	100 mph/5" w.g.	1500 fpm	1.17	17.5
12" (305)	100 mph/6" w.g.	1500 fpm	2.67	40.0

OPERATIONAL PRESSURES INCHES W.G.		
DAMPER MODEL	BLADES START TO OPEN	BLADES FULLY OPEN
BD2A1	.03	.10
BD2A2	.10	.15

*Leakage information based on pressure differential of 1" w.g.

INSTALLATION INSTRUCTIONS

1. When used in fan discharge applications, damper should be located at least one-half the fan diameter away from the fan.
2. For proper operation, damper must be installed square and free from racking.
3. Bracing of multiple section assemblies: The 2BDE/2BDHD is intended to be self supporting only in the largest single section size. Multiple section damper assemblies may require bracing

to support the weight of the assembly and to hold against system pressure. Reliable recommends appropriate bracing to support the weight of the assembly and to hold against system pressure. Reliable recommends appropriate bracing to support the damper horizontally at least once for every 8 feet of damper width. Vertical assemblies and higher system pressures may require more bracing.





4CBD COUNTERBALANCED BACKDRAFT DAMPER

STANDARD CONSTRUCTION

FRAME

4" x 1" x 6063T5 (102 x 25) extruded aluminum .081" (2.1) nominal wall thickness.

BLADES

6063T5 extruded aluminum .070" (1.8) nominal wall thickness.

AXLES

1/2" (13) diameter synthetic.

BEARINGS

Dustproof, ball bearings pressed into frame.

LINKAGE

1/8" x 1/2" (3 x 13) aluminum tiebars with SS pivot pins.

SEALS

Extruded vinyl locked into blade edge.

MOUNTING

Vertical – Air flow horizontal.
Horizontal – Air flow up or down.

MINIMUM SIZE

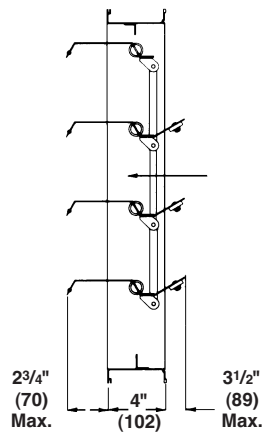
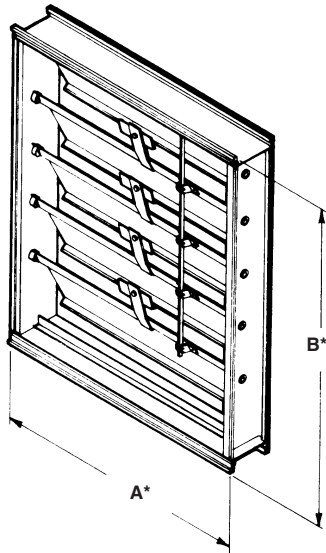
6" w x 11"h (152 x 279)

MAXIMUM SIZE

Single section – 48"w x 52"h (1219 x 1321).

Multiple section assembly – Unlimited size.

Dimensions in parentheses () indicate millimeters.

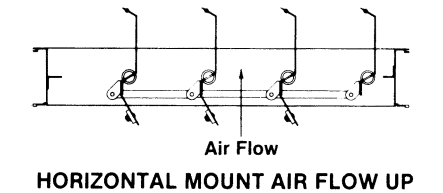
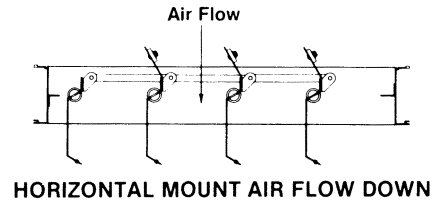
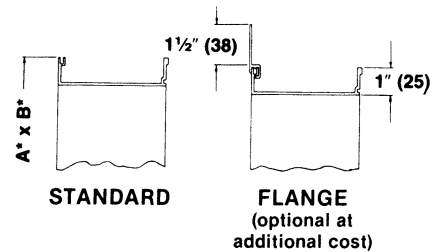


**VERTICAL MOUNT
HORIZONTAL
AIR FLOW**

FEATURES

The 4CBD is designed for gravity relief at relatively low pressure differentials and low velocity airflows. Adjustable counterbalance weights enable the damper to operate in the range of .01 to .05 inches water gage.

FRAME CONSTRUCTION





4CBD

SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans or in accordance with schedules, counterbalance backdraft dampers that meet the following minimum construction standards: frame shall be (specify) .125" (3.2) wall thickness with 12 gage (2.8) galvanized steel structural brace at each corner or 4" x 1" x .081" (102 x 24 x 2.1) 6063-T5 extruded aluminum. Blades shall be .070" (1.8) wall thickness 6063-T5 extruded aluminum with extruded vinyl blade edge seals

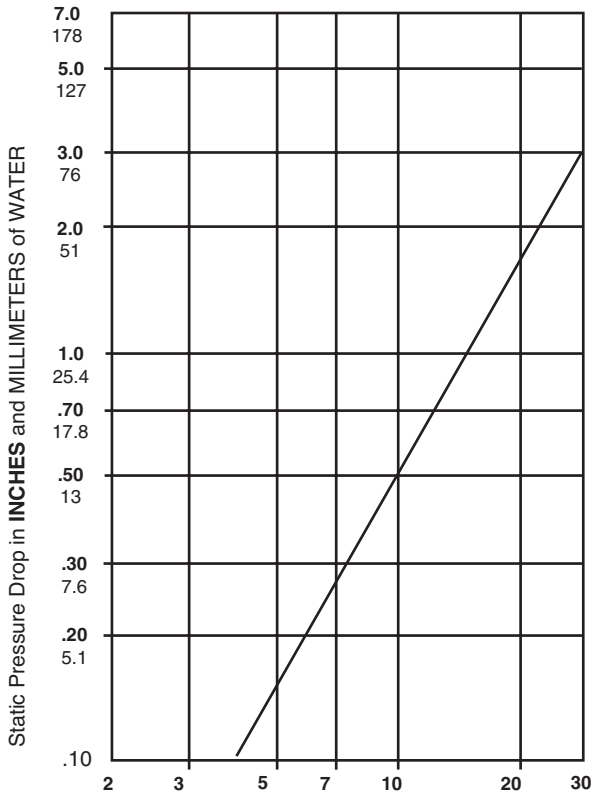
mechanically locked into blade edge. Adhesive or clip-on type seals are unacceptable. Bearings shall be dustproof ball type for quiet low pressure operation. Linkage shall be 1/2" (13) wide tiebar connected to stainless steel pivot pins. Dampers shall be designed for maximum 3500 fpm spot velocities and minimum 4" w.g. back-pressure, depending on damper size. Damper shall be in all respects equivalent to Reliable model 4CBD.

PERFORMANCE DATA

4CBD PERFORMANCE DATA						
DAMPER WIDTH INCHES (MM)	MAXIMUM BACK PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*		BLADES START TO OPEN	BLADES FULLY OPEN
			Percent of Max. Flow	CFM/Sq. Ft.		
48" (1219)	4.0" w.g.	2500 FPM	.7%	17.5	.02" w.g.	.05" w.g.
36" (914)	8.0" w.g.	2500 FPM	.8%	20		
24" (610)	12.0" w.g.	2500 FPM	.9%	23		
12" (305)	16.0" w.g.	2500 FPM	1.6%	40		

AIR LEAKAGE

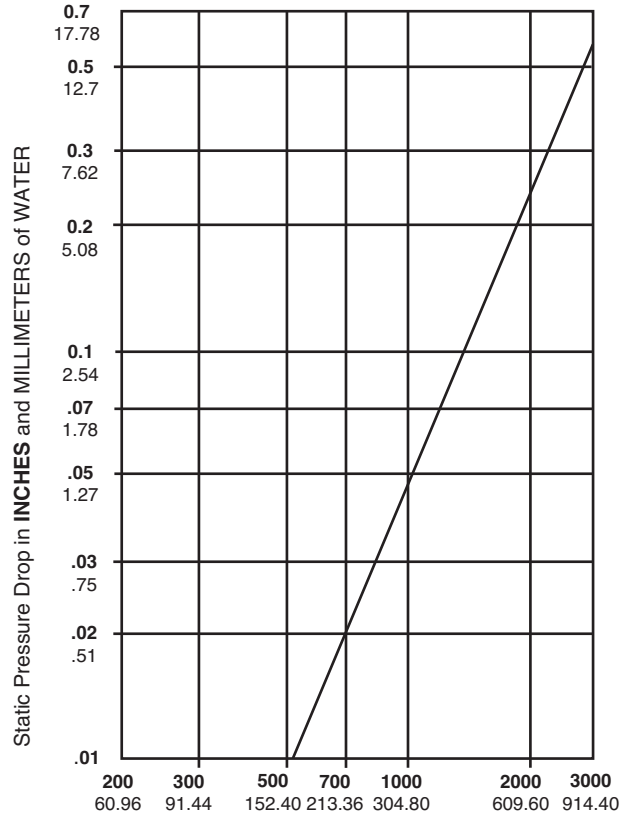
Damper Closed (Max. width)



Air Leakage in **CFM/Sq. Ft.** through FACE AREA. Tested per AMCA Std. 500, Fig. 5.5, plenum mounted.

PRESSURE DROP

Damper Open (24" x 24" [610 x 610] size)



Air Velocity in **FEET** and **METERS** per minute through FACE AREA. Tested per AMCA Std. 500, Fig. 5.3, ductwork upstream and downstream.

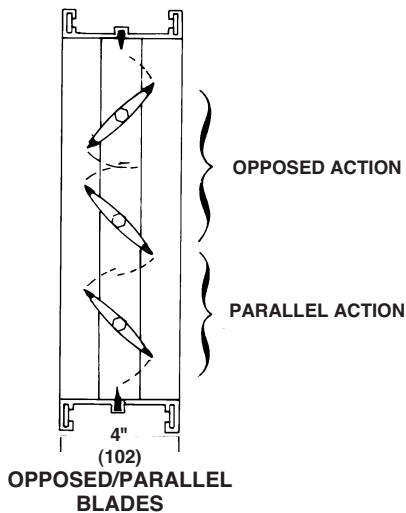
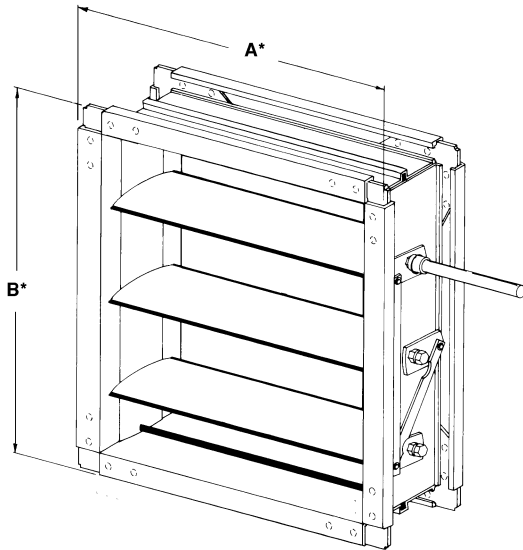




1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

4RAFBCD3 THIN LINE LINEAR CONTROL DAMPER

EXTRUDED ALUMINUM



OPPOSED/PARALLEL BLADES

NOTE: 4RAFBCD3 is not recommended for installation with blades running vertically.

STANDARD CONSTRUCTION

FRAME

4" x 1" (102 x 25) x 6063T5 extruded aluminum hat channel with .081" (2) minimum wall thickness. Mounting flanges on both sides of frame.

BLADES

3" (76) wide, 6063T5 heavy gage extruded aluminum, airfoil shaped blades with integral structural reinforcing tube.

LINKAGE

Concealed in frame.

AXLES

1/2" (13) plated steel hex.

BEARINGS

Molded synthetic.

SEALS

Blade Edge - Extruded Reliableprene (TPR) for -72°F to +275°F (-58°C to +135°C).
Jamb - Flexible metal compression type.

CONTROL SHAFT

6" x 1/2" (152 x 13) diameter. Outboard support bearing supplied with all single section dampers for field mounted actuators. Factory-installed jackshaft supplied with all multiple section dampers.

FINISH

Mill.

MINIMUM SIZE

Three blades – 6"w x 11"h (152 x 279).
Two blades, 100% OB or PB – 6"w x 8 1/2"h (152 x 216).
Single blade, 100% PB – 6"w x 5 1/2"h (152 x 140).

MAXIMUM SIZE

Single section – 48"w x 72"h (1219 x 1829).
Multiple section assembly – Unlimited size.

FEATURES

The Reliable 4RAFBCD3 thin line control damper features a low profile, airfoil blade design and incorporates parallel and opposed action within the same frame. Percentage of opposed action is specifiable. These features enable this damper to provide the linear curve performance ideal for fresh and return air applications.

OPTIONS

Variations to standard design are available at additional cost and include:

- Anodize finishes for corrosive atmospheres
- Special finishes for other requirements
- Factory-installed, pneumatic and electric actuators
- Frame-mounting bracket for simple field installation of most actuators.
- Front or rear flange frame.
- Face and bypass mixing damper assemblies (see page 4).

Dimensions shown in parenthesis () indicate millimeters.

*Unit furnished approximately 1/4" (6) smaller than given opening dimensions.

QTY.	DIMENSIONS				BLADE ACTION			FRAME STYLE			VARIATIONS
	A*	B*	A'	B'	100% PB	100% OB	% OB	STD.	Front Flange FF	Rear Flange RF	

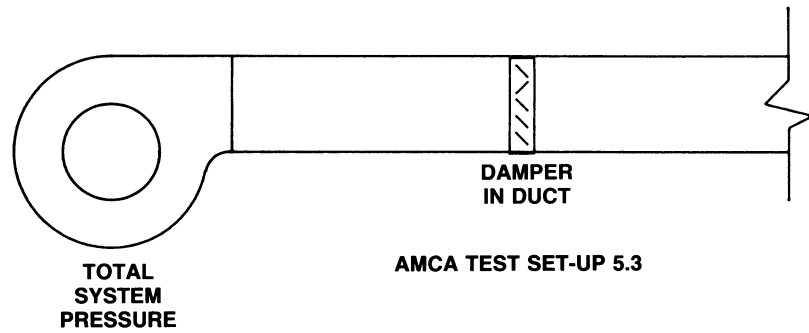
JOB CONTRACTOR

LOCATION

MODEL 4RAFBCD3

Typical control dampers have blades that operate parallel to each other (PB) or that rotate in opposite directions (OB). Parallel and opposed blades also differ from an air flow characteristic standpoint. Parallel blade dampers have an open area of more than 50% between blades when the damper is at mid travel point. Opposed blade dampers have less than 50% open area at mid travel.

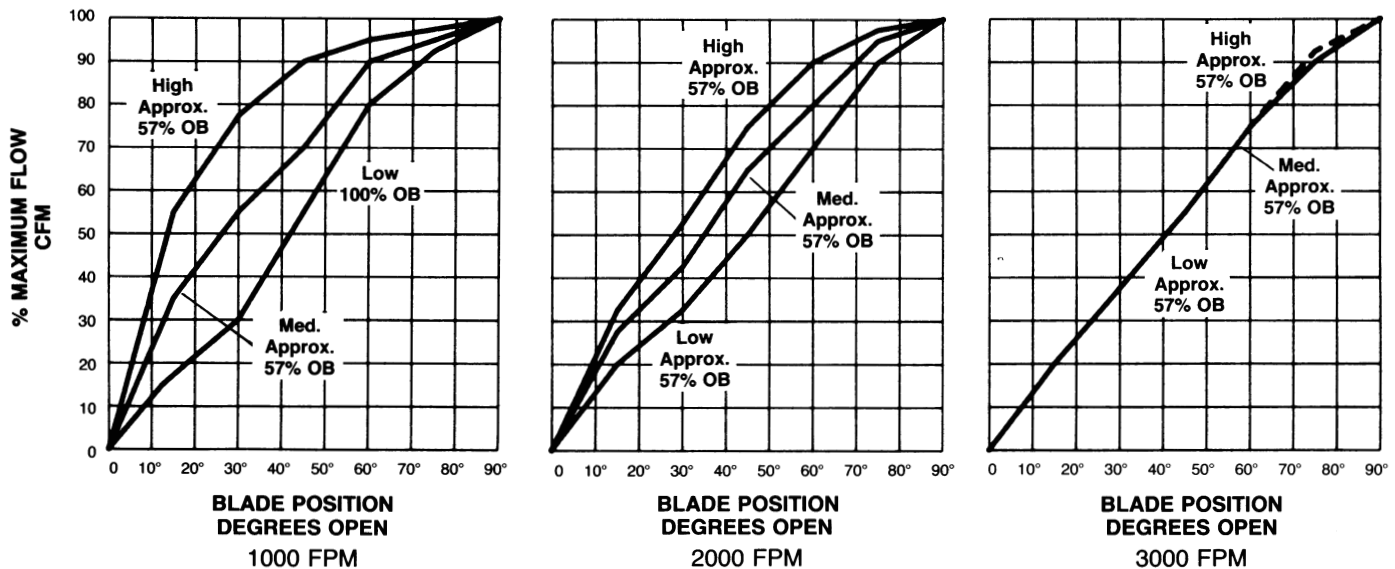
Reliable's Model 4RAFBCD3 damper offers both parallel and opposed blade operation at the same time. This gives more desirable linear air flow performance. The small 3" (76) blade in Model CD403 enables you to closely design the percentage of opposed blades versus parallel blades for the application and to gain air flow performance impossible to achieve with a 6"



DUCTED APPLICATIONS

A typical ducted control damper application for Model 4RAFBCD3 is depicted. The various graphs with high, medium, and low static pressure systems and 1000, 2000, and 3000 fpm face velocities will help you select the correct Model 4RAFBCD3 configuration for ducted applications. Select your duct velocity, refer to the appropriate chart and appropriate static pressure – low (2" w.g.), medium (5" w.g.), or high (10 w.g.). The chart will give the appropriate percentage of opposed blade versus parallel blade you need to achieve linear air flow performance.

The air flow curves shown are selected from wind tunnel air flow testing and represent the optimum selection that can be determined for the velocity and system static pressure involved. Not all curves are shown as linear; other combinations will result in a greater variance than depicted. As shown in the curves below, the most constant blade selection for ducted applications is approximately 57% opposed blade.



EXAMPLES:

- 24" x 36" (610 x 914) (6 sq. ft.) damper with 13,000 cfm and 5" w.g. static pressure fan system.

Divide the cfm by the damper square footage to determine fpm.

$$\frac{13,000}{6} = 2166 \text{ fpm}$$

Use the 2000 fpm chart and the medium pressure (5" w.g.) curve to determine that a 57% (approx.) opposed blade damper provides the most linear performance for the application.

- 24" x 24" (610 x 610) (4 sq. ft.) damper with 4,000 cfm and 2" w.g. static pressure.

Divide the cfm by the damper square footage to determine fpm.

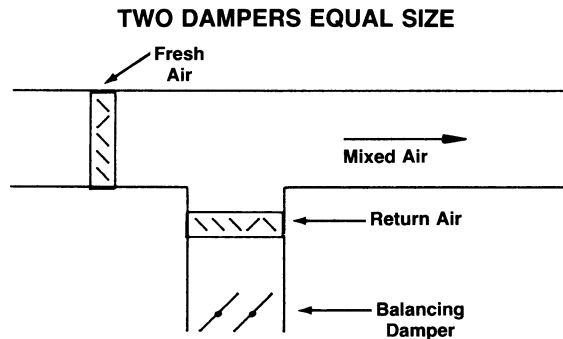
$$\frac{4,000}{4} = 1000 \text{ fpm}$$

Use the 1000 fpm chart and the low pressure curve to determine that 100% opposed blade damper is ideal for a low pressure system.

MIXING BOX SYSTEMS

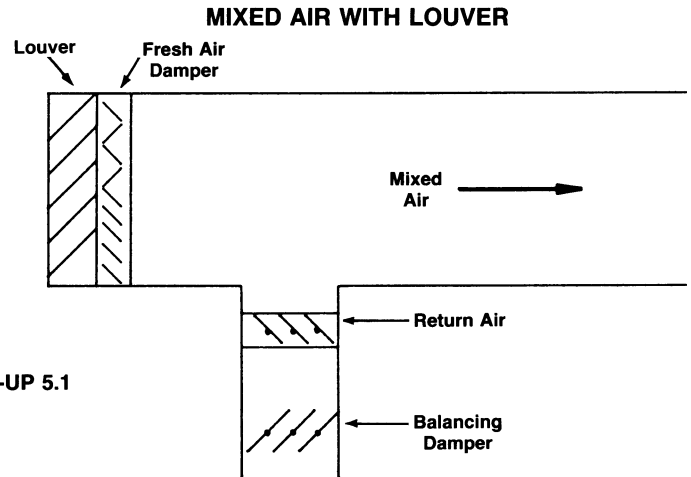
This example depicts a mixing box system with fresh air and return air dampers of equal size. Both are ducted on the inlet side.

Mixing box performance differs from ducted performance. The percentage of opposed blades versus parallel blades selected and shown is based upon air flow testing with equal pressure drop for both outside air and return air. The optimum opposed blade versus parallel blade damper configuration is depicted.



This example depicts a fresh air damper and louver of the same size and a return air damper half the size of the outside air damper.

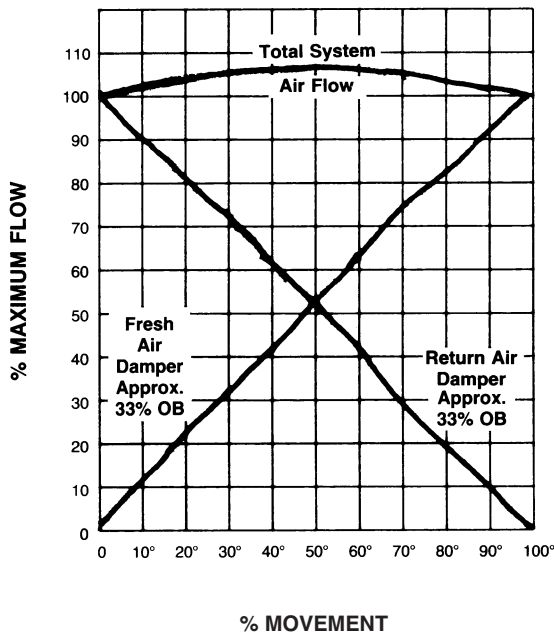
The return air damper is all parallel operation to achieve better mixing. The percentage of opposed blades is varied in the fresh air damper to achieve as close to linear air flow as possible. Optimum damper configuration is depicted.



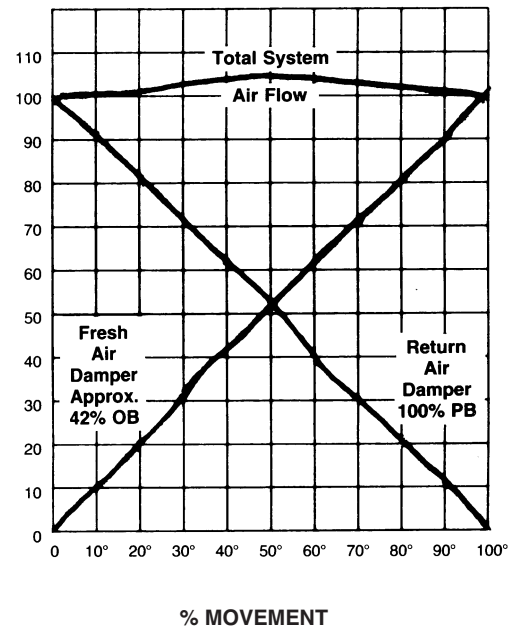
AMCA TEST SET-UP 5.1

FACE AND BYPASS APPLICATION

These curves show the best damper combinations for the two applications.



With equal damper sizes, the return air and fresh air dampers should both be 33% (approx.) opposed blade action.



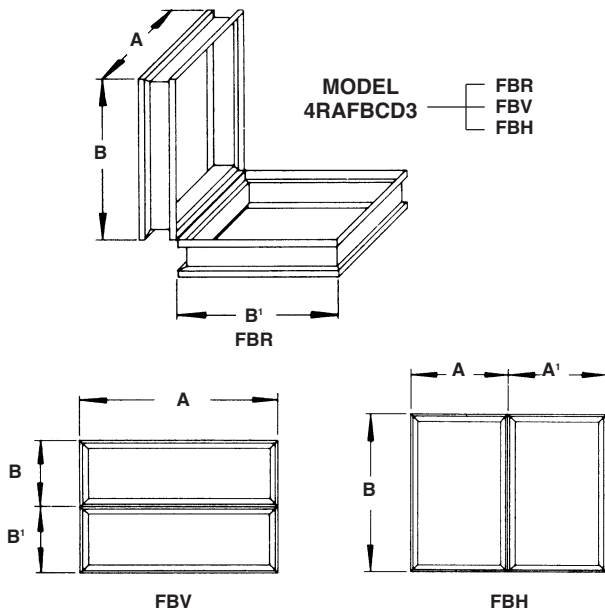
When the damper is mounted next to the louver with approximately 500 fpm face velocity and the return air damper is sized for 1000 fpm face velocity, the best selection would be an all parallel blade return air damper and a 42% (approx.) opposed blade fresh air damper.

SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans, or in accordance with schedules, low leakage airfoil damper with combination opposed blade and parallel blade action linkage in the same damper frame. Frames shall be 4" x 1" x .081" (102 x 25 x 2) extruded aluminum channel. Blades must be 3" (76) maximum width so that the percentage of opposed blades can be closely controlled. Airfoil blade construction shall be extruded aluminum with integral structural reinforcing tube running the full length of each blade. Double edge blade seals shall be extruded vinyl with inflatable pockets which enable air pressure from either direction to

assist in blade-to-blade seal. Blade seals shall be mechanically locked in extruded blade slots. Adhesive or clip-on type blade seals are unacceptable. Bearings shall be non-corrosive molded synthetic. Hexagonal axles shall provide positive locking connection to blade and linkage. Linkage is concealed within the frame. Damper manufacturer's literature shall be submitted for approval prior to installation and shall include performance data on pressure limitations, leakage, and linear flow developed from testing in accordance with AMCA Standard 500. Damper shall be equivalent in all respects to Reliable Model 4RAFBCD3.

FACE and BYPASS MIXING DAMPERS



Dampers larger than maximum single section are an assembly of equal size single section dampers (maximum section size 48"w x 72"h [1219 x 1829]) and may be coupled for operation in a variety of ways. A 1" (25) diameter jackshaft is normally used for multiple section coupling as illustrated above.

Larger multiple section damper assemblies require an analysis of how the damper is to be operated (how many and what type of actuators) before the best method of coupling sections can be determined. Special assembly drawings are normally prepared and forwarded for customer review on larger damper assemblies.

Examples: A 72" x 60" (1829 x 1524) damper would be an assembly consisting of two 36" x 60" (914 x 1524) damper sections.

A 102" x 100" (2591 x 2540) damper would be an assembly consisting of six 34" x 50" (864 x 1270) damper sections.

PERFORMANCE

TOTAL CFM LEAKAGE AT 1" W.G. STATIC PRESSURE DIFFERENTIAL

DAMPER WIDTH (INCHES)	DAMPER HEIGHT (INCHES)										
	12" (305)	18" (457)	24" (610)	30" (762)	36" (914)	42" (1067)	48" (1219)	54" (1372)	60" (1524)	66" (1676)	72" (1829)
12" (305)	3	4	6	7	9	10	12	14	15	16	18
24" (610)	6	9	12	15	18	21	23	26	29	32	35
36" (914)	9	13	18	22	27	31	35	40	44	48	53
48" (1219)	11	16	22	27	33	38	43	49	54	59	65

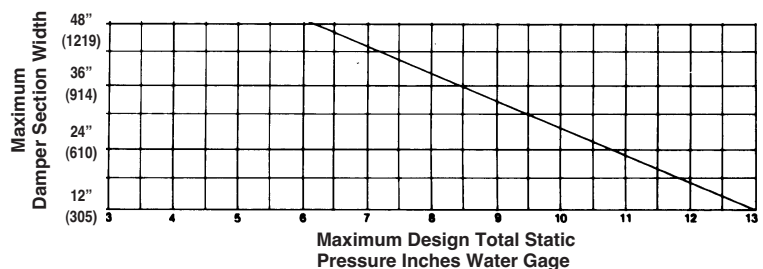
LEAKAGE CORRECTION FACTOR

DAMPER WIDTH (INCHES)	STATIC PRESSURE (Inches Water Gage)												
	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"	13"
12" (305)	1.0	1.5	1.8	2.1	2.4	2.6	2.8	2.8	2.8	2.9	2.9	3.2	3.7
24" (610)	1.0	1.5	1.8	2.1	2.4	2.6	2.8	2.8	2.8	2.9	2.9	3.2	3.7
36" (914)	1.0	1.5	1.8	2.1	2.4	2.6	2.8	2.8	2.8	2.9	2.9	3.2	3.7
48" (1219)	1.0	1.6	2.0	2.3	2.6	3.0	MAX. DESIGN PRESSURE 6.5						

To determine leakage at static pressure differentials higher than one inch water gage, multiply leakage at one inch (from upper table) by correction factor for higher static pressure and appropriate UNIT WIDTH (from lower table). Example: Find leakage for a 36"w x 24"h (914 x 610) damper at 3 inches w.g. 18 CFM x 1.8 = 32.4 CFM leakage at 3 inches w.g.

Leakage ratings are based on AMCA Standard 500 using Test Setup Apparatus Figure 5.5. Torque applied holding damper closed at 5 in. lbs. per sq. ft. of damper with minimum of 20 in. lbs.

4RAFBCD3 PRESSURE LIMITATIONS



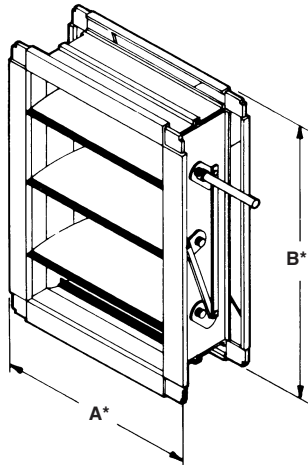
The 4RAFBCD3 dampers may be used in systems with total pressures exceeding 6" w.g. by reducing damper section width as indicated. Example: Maximum design total pressure of 8.5" w.g. would require the 4RAFBCD3 damper with Maximum Section Width of 36" (914).

Pressure Limitations shown on chart above allow maximum blade deflection of 1/360 of span.



4RAFBCD4 THIN LINE CONTROL DAMPER

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

FRAME

4" x 1" (102 x 25) x 6063T5 extruded aluminum hat channel with .081" (2) minimum wall thickness. Mounting flanges on both sides of frame.

BLADES

4" (102) wide, 6063T5 heavy gage extruded aluminum, airfoil shaped blades.

LINKAGE

Concealed.

AXLES

1/2" (13) plated steel hex.

BEARINGS

Molded synthetic.

SEALS

Extruded TPR blade edge seal for -72°F to +275°F (-58°C to +135°C) and flexible metal compression type jamb seals.

CONTROL SHAFT

6" x 1/2" (152 x 13) diameter. Outboard support bearing supplied with all single section dampers for field mounted actuators. Factory-installed jackshaft supplied with all multiple section dampers.

FINISH

Mill.

MINIMUM SIZE

Single blade, parallel action – 6"w x 6"h (152 x 152).

Two blade, parallel or apposed action – 6"w x 9"h (152 x 229).

MAXIMUM SIZE

Single section – 60"w x 72"h (1524 x 1829).

Multiple section assembly – Unlimited size.

NOTES:

- 1) 4RAFBCD4 is not recommended for installation with blades running vertically unless unit is furnished without side seals.
- 2) If damper is to be used in a fan discharge application, consult Ruskin.

Dimensions shown in parenthesis () indicate millimeters.

*Units furnished approximately 1/4" (6) smaller than given opening dimensions.

**Jackshaft used only on multiple section dampers.

FEATURES

The 4RAFBCD4 combines the lowest leakage attainable – 6 cfm/sq. ft. at 4" w.g. – with thin line, 4" (102) overall depth when damper is completely open. Damper easily butts to back side of a louver to tight shut-off capability.

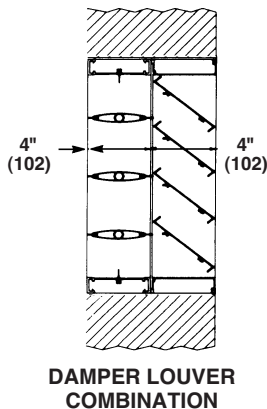
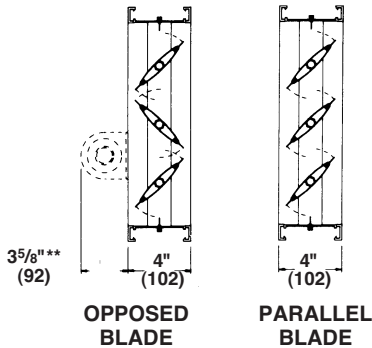
Unique double edge blade seal design features inflatable pocket that enables higher pressure on either side of damper to assist in blade-to-blade seal off. Seals are mechanically locked in extruded blade slots yet can be easily replaced in the field.

Linkage is concealed out of airstream for low maintenance and reduced air turbulence. Hexagonal axles positively lock with blades.

VARIATIONS

Variations to standard design are available at additional cost. They include:

- Anodize finishes.
- Factory-installed, pneumatic and electric actuators (specific information required with order).
- Frame-mounting bracket for simple field installation of most actuators.
- SP100 Switch Package to remotely indicate damper blade position.
- Front or rear flange frame.
- Face and bypass mixing damper assemblies (see page 2).

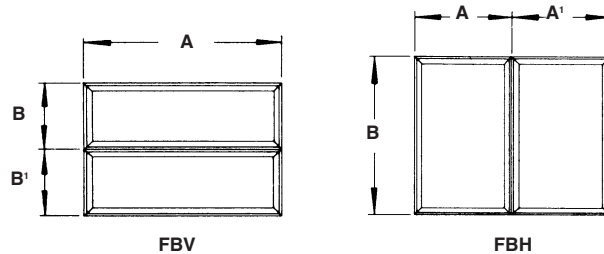
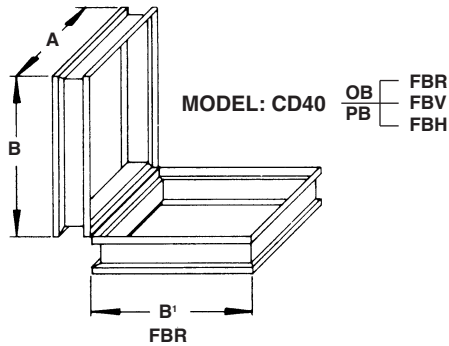


SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans, or in accordance with schedules, low leakage dampers that meet the following minimum construction standards: Frames shall be 4" x 1" x .081" (102 x 25 x 2) (minimum thickness) 6063T5 extruded aluminum hat channel with hat mounting flanges on both sides of the frame. Each corner shall be reinforced with two die formed internal braces and machine staked for maximum rigidity. Blades shall be airfoil type extruded aluminum (maximum 4" [102] depth) with integral structural reinforcing tube running full length of each blade.

Blade edge seals shall be extruded vinyl double edge design with inflatable pocket which enables air pressure from either direction to assist in blade to blade seal off. Blades seals shall be mechanically locked in extruded blade slots, yet shall be easily replaceable in field. Adhesive or clip-on type blade seals are not acceptable. Bearings shall be non-corrosive molded synthetic. Axles shall be hexagonal (round not acceptable) to provide positive locking connection to blades and linkage. Linkage shall be concealed in frame. Dampers shall be in all respects equivalent to Reliable Model 4RAFBCD4.

PERFORMANCE DATA



Dampers larger than maximum single section are an assembly of equal size single section dampers (maximum section size 48" w x 72" h (1219 x 1829) and may be coupled for operation in a variety of ways. A 1" (25) diameter jackshaft is normally used for multiple section coupling.

Larger multiple section damper assemblies require an analysis of how the damper is to be operated (how many and what type of actuators) before the best method of coupling sections can be determined. Special assembly drawings are normally prepared and forwarded for customer review on larger damper assemblies.

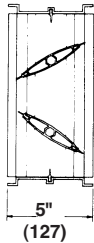
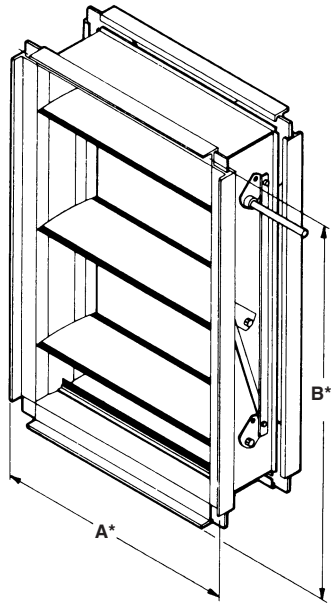
Examples: A 72" x 60" (1829 x 1524) damper would be an assembly consisting of two 36" x 60" (914 x 1524) damper sections.

A 102" x 100" (2591 x 2540) damper would be an assembly consisting of six 34" x 50" (864 x 1270) damper sections.



5RAFBCD4 LOW LEAKAGE CONTROL DAMPER

EXTRUDED ALUMINUM



LOW PROFILE
Standard construction for higher free area on dampers 12" (305) high and less.

STANDARD CONSTRUCTION

FRAME

5" x 1" (127 x 25) x 6063T5 extruded aluminum hat channel with .125" (3.2) minimum wall thickness. Low profile, 5" x 1/2" (127 x 13) top and bottom frames on dampers 12" (305) high and less. Mounting flanges on both sides of frame.

BLADES

4" (102) wide, 6063T5 heavy gage extruded aluminum, airfoil shaped blades.

LINKAGE

Concealed.

AXLES

1/2" (13) plated steel hex.

BEARINGS

Molded synthetic.

SEALS

Extruded TPR blade edge seal for -72°F to +275°F (-58°C to +135°C) and flexible metal compression type jamb seals.

CONTROL SHAFT

6" x 1/2" (152 x 13) diameter. Outboard support bearing supplied with all single section dampers for field mounted actuators. Factory-installed jackshaft supplied with all multiple section dampers.

FINISH

Mill.

MINIMUM SIZE

Single blade, parallel action – 6"w x 6"h (152 x 152).

Two blade, parallel or opposed action – 6"w x 9"h (152 x 229).

MAXIMUM SIZE

Single section – 60"w x 72"h (1524 x 1829).

Multiple section assembly – Unlimited size.

FEATURES

The 5RAFBCD4 offers leakage of 6 cfm/sq. ft. at 4" w.g. – the lowest leakage attainable with a commercially built thin line 4" (102) blade damper. Linkage is concealed in frame and out of air stream for low maintenance and reduced air turbulence. Hexagonal axles positively lock axles to blades. Blade edge seals feature unique double edge, inflatable pocket design that enables higher pressure on either side of damper to assist in tight blade-to-blade seal off. Seals are mechanically locked in extruded blade slots, yet are easily replaced in the field.

VARIATIONS

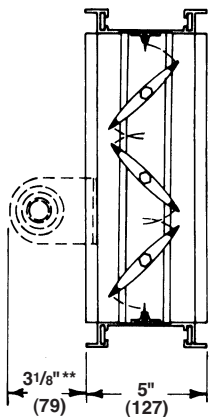
Variations to the 5RAFBCD4 standard design are available at additional cost and include:

- Anodize finishes.
- Factory-installed, pneumatic and electric actuators (specific information required with order).
- Frame-mounting bracket for simple field installation of most actuators.
- SP100 Switch Package to remotely indicate damper blade position.
- Front or rear flange frame.
- Face and bypass mixing damper assemblies.

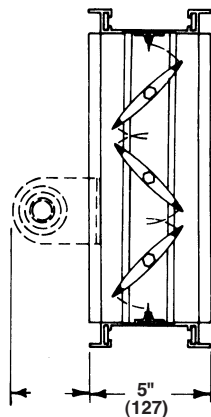
NOTE: Dimensions shown in inches, parenthesis () indicate millimeters.

*Units furnished approximately 1/4" (6) smaller than given opening dimensions.

**Jackshaft used only on multiple section dampers.



OPPOSED BLADE



PARALLEL BLADE



SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans, or in accordance with schedules, low leakage dampers that meet the following minimum construction standards: Frames shall be 5" x 1" x .081" (127 x 25 x 2) (minimum thickness) 6063T5 extruded aluminum hat channel with hat mounting flanges on both sides of the frame. Each corner shall be reinforced with two die formed internal braces and machine staked for maximum rigidity. Blades shall be airfoil type extruded aluminum (maximum 4" [102] depth) with integral structural reinforcing tube running full length of each blade.

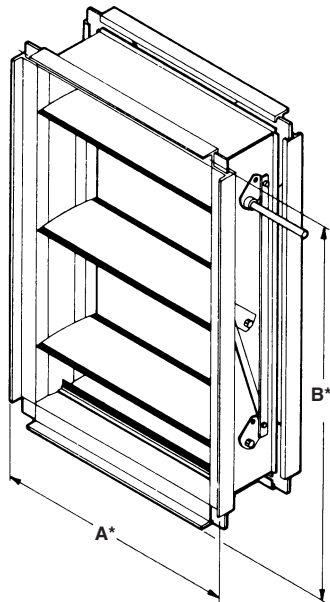
Blade edge seals shall be extruded TPR double edge design with inflatable pocket which enables air pressure from either direction to assist in blade to blade seal off. Blades seals shall be mechanically locked in extruded blade slots, yet shall be easily replaceable in field. Adhesive or clip-on type blade seals are not acceptable. Bearings shall be non-corrosive molded synthetic. Axles shall be hexagonal (round not acceptable) to provide positive locking connection to blades and linkage. Linkage shall be concealed in frame. Dampers shall be in all respects equivalent to Reliable Model 5RAFBCD4.





5RAFBCD6 LOW LEAKAGE CONTROL DAMPER EXTRUDED ALUMINUM

STANDARD CONSTRUCTION



FRAME

5" x 1" (127 x 25) x 6063T5 extruded aluminum hat channel with .125" (3.2) minimum wall thickness. Low profile, 5" x 1/2" (127 x 13) top and bottom frames on dampers 12" (305) high and less. Mounting flanges on both sides of frame.

BLADES

4" (102) wide, 6063T5 heavy gage extruded aluminum, airfoil shaped blades.

LINKAGE

Concealed.

AXLES

1/2" (13) plated steel hex.

BEARINGS

Molded synthetic.

SEALS

Extruded TPR blade edge seal for -72°F to +275°F (-58°C to +135°C) and flexible metal compression type jamb seals.

CONTROL SHAFT

6" x 1/2" (152 x 13) diameter. Outboard support bearing supplied with all single section dampers for field mounted actuators. Factory-installed jackshaft supplied with all multiple section dampers.

FINISH

Mill.

MINIMUM SIZE

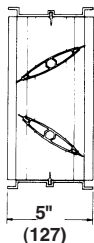
Single blade, parallel action – 6"w x 6"h (152 x 152).

Two blade, parallel or opposed action – 6"w x 9"h (152 x 229).

MAXIMUM SIZE

Single section – 60"w x 72"h (1524 x 1829).

Multiple section assembly – Unlimited size.



LOW PROFILE
Standard construction for higher free area on dampers 12" (305) high and less.

FEATURES

The 5RAFBCD4 offers leakage of 6 cfm/sq. ft. at 4" w.g. – the lowest leakage attainable with a commercially built thin line 4" (102) blade damper. Linkage is concealed in frame and out of air stream for low maintenance and reduced air turbulence. Hexagonal axles positively lock axles to blades. Blade edge seals feature unique double edge, inflatable pocket design that enables higher pressure on either side of damper to assist in tight blade-to-blade seal off. Seals are mechanically locked in extruded blade slots, yet are easily replaced in the field.

VARIATIONS

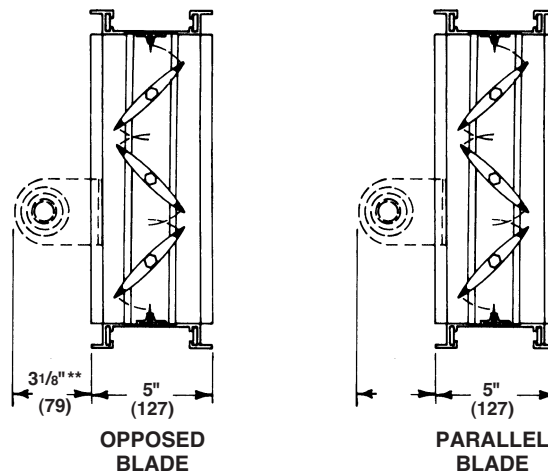
Variations to the 5RAFBCD4 standard design are available at additional cost and include:

- Anodize finishes.
- Factory-installed, pneumatic and electric actuators (specific information required with order).
- Frame-mounting bracket for simple field installation of most actuators.
- SP100 Switch Package to remotely indicate damper blade position.
- Front or rear flange frame.
- Face and bypass mixing damper assemblies.

NOTE: Dimensions shown in inches, parenthesis () indicate millimeters.

*Units furnished approximately 1/4" (6) smaller than given opening dimensions.

**Jackshaft used only on multiple section dampers.





SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans, or in accordance with schedules, low leakage dampers that meet the following minimum construction standards: Frames shall be 5" x 1" x .081" (127 x 25 x 2) (minimum thickness) 6063T5 extruded aluminum hat channel with hat mounting flanges on both sides of the frame. Each corner shall be reinforced with two die formed internal braces and machine staked for maximum rigidity. Blades shall be airfoil type extruded aluminum (maximum 4" [102] depth) with integral structural reinforcing tube running full length of each blade.

Blade edge seals shall be extruded TPR double edge design with inflatable pocket which enables air pressure from either direction to assist in blade to blade seal off. Blades seals shall be mechanically locked in extruded blade slots, yet shall be easily replaceable in field. Adhesive or clip-on type blade seals are not acceptable. Bearings shall be non-corrosive molded synthetic. Axles shall be hexagonal (round not acceptable) to provide positive locking connection to blades and linkage. Linkage shall be concealed in frame. Dampers shall be in all respects equivalent to Reliable Model 5RAFBCD6.

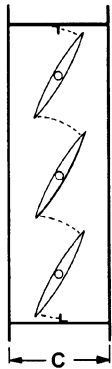
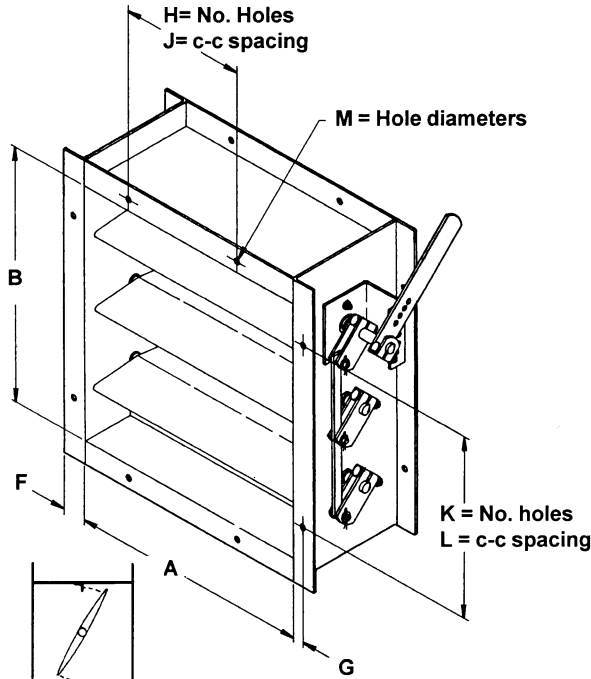




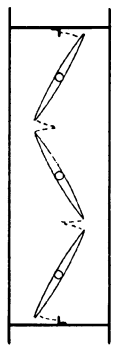
1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

8RAFBCD7 CONTROL DAMPER

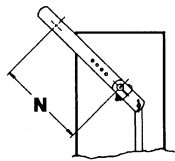
ALUMINUM AIRFOIL BLADES



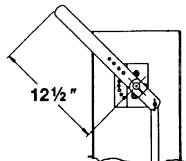
8" (203) Std. PARALLEL (PB)



OPPOSED (OB)



CRANK LEVER (CL)



HAND QUADRANT (HQ)

STANDARD CONSTRUCTION

FRAME

8" x 2" x 12 gage (203 x 51 x 2.8) steel channel.

BLADES

7³/₄" (197) wide, .080 (2.1) thick, 6063T5 extruded aluminum airfoil blade.

AXLES

3/4" (19) diameter plated steel.

BEARINGS

8RAFBCD7 - Stainless steel sleeve pressed into frame.

LINKAGE

Side linkage out of airstream; 10 gage (3.5) galvanized steel clevis-type arms, 3/16" x 3/4" (4.8 x 19) plated steel tie bars and 3/8" diameter (9.5) stainless steel pivot pins with lock-type retainers.

OPERATING LEVER

Hand Quadrant for manual operation. A crank lever for motor operation is available at no extra cost.

FINISH

Mill galvanized frame with mill finish blades.

MAXIMUM TEMPERATURE

300°F (149°C) maximum.

MINIMUM SIZE

Single blade damper – 6"w x 6"h (152 x 152).
Multiple blade damper – 6"w x 14"h (152 x 356).

MAXIMUM SIZE

60"w x 96"h (1524 x 2438).

VARIATIONS

The 8RAFBCD7 can be furnished with a number of variations to meet special requirements. These variations, available at additional cost include:

- 10" (254) deep frame.
- Special finishes.
- Electric and pneumatic actuators.
- Other frame materials.

NOTE: Dimensions in parentheses () indicate millimeters.

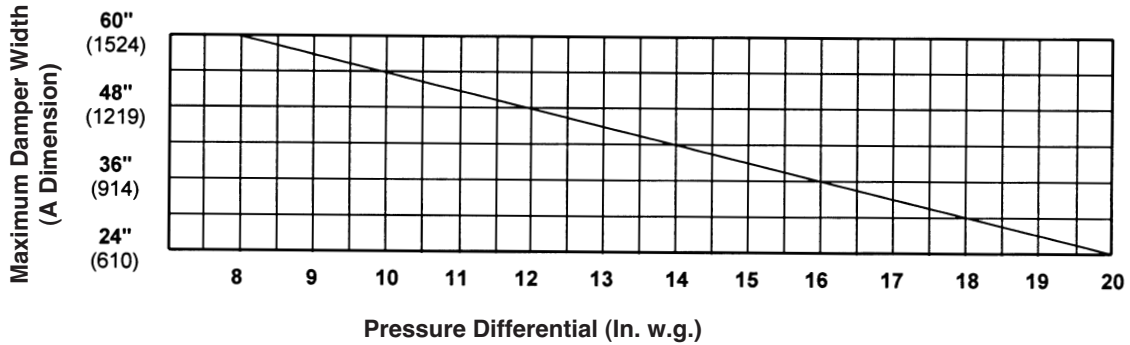
FRAME	BLADES	AXLES	BEARINGS	LINKAGE	SEALS (OPT)	ACCESSORIES
8" x 2" x 12 GA (203 x 51 x 2.8) GALVANIZED STEEL	7 ³ / ₄ " (197) WIDE .080" (2.1) THK 6063T5 EXTRUDED ALUMINUM AIRFOIL	3/4" (19) DIA. 'D' PLATED STEEL	SS SLEEVE PRESSED INTO FRAME (STD ON CD102)	SIDE LINKAGE (CONCEALED)	BLADE SEALS SILICONE 400°F (204°C) MAX	HAND QUADRANT (HQ)
8" x 2" x 10 GA (203 x 51 x 3.5) GALVANIZED STEEL		3/4" (19) DIA. 'D' STAINLESS STEEL (OPT)	SS SLEEVE IN CAST HSG BOLTED TO FRAME (STD ON OD102 OPT ON CD102)		SS JAMB SEALS	CRANK LEVER (CL)
8" x 2" .125 (203 x 51 x 3.2) ALUMINUM		3/4" (19) DIA. 'D' ALUMINUM (OPT)	BOLT ON BRGS W/INTEGRAL SHAFT SEALS (OPT)			BOLT HOLES BOTH FLANGE (OPT)
						PNEUMATIC ACTUATOR (OPT)
						ELECTRIC ACTUATOR (OPT)
						1 ¹ / ₂ " (38) TO 4" (102) FLANGES (OPT)

QTY.	BLADE ACTION		DIMENSIONS										LEVER TYPE		COMMENTS	TAG	
	PB	OB	A	B	C	F	G	H	J	K	L	M	HQ	CL			

JOB ARCH./ENGR. REPRESENTATIVE	LOCATION CONTRACTOR DATE
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8RAFBCD7 PERFORMANCE DATA

PRESSURE LIMITATIONS



The 8RAFBCD7 damper can be mounted in any position for fan discharge. Ideal for medium to heavy duty commercial or industrial applications, the 8RAFBCD7 can be used to control or modulate the volume of air delivered by the fan, to shut off fan air flow and to balance the system.

The graph shows the maximum allowable pressure differentials across a closed 8RAFBCD7 damper. Dampers with a 60" (1524) width (A dimension) can withstand 8 in. w.g. Dampers with smaller widths (A dimension) can withstand higher pressures. For example, a 48" (1219) A dimension damper can withstand a maximum of 12 in. w.g. and a 36" (914) A dimension damper can withstand a maximum of 16" w.g.

Note that 8RAFBCD7 dampers are not recommended for use in abrasive or high temperature atmospheres due to the aluminum blade construction. Consult your Reliable representative for a listing of Reliable models suited to abrasive environments.

**TOTAL CFM LEAKAGE AT ONE INCH
WATER GAGE STATIC PRESSURE DIFFERENTIAL
(For Damper Equipped with Optional Seals)**

DAMPER WIDTH	DAMPER HEIGHT														
	12" (305)	18" (457)	24" (610)	30" (762)	36" (914)	42" (1067)	48" (1219)	54" (1372)	60" (1524)	66" (1676)	72" (1829)	78" (1981)	84" (2134)	90" (2286)	96" (2438)
12" (305)	15	23	30	38	45	53	60	68	75	83	90	98	105	113	120
24" (610)	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160
36" (914)	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
48" (1219)	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256
60" (1524)	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320

LEAKAGE CORRECTION FACTOR

Static Pressure (in.w.g.)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Correction Factor	1.0	1.4	1.7	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.3	3.5	3.6	3.7	3.9	4.0	4.1	4.2	4.4	4.5

DETERMINING LEAKAGE

To determine leakage at static pressure differentials higher than one inch water gage, multiply leakage at one inch (determined from table) by correction factor for higher static pressure (determined from the Leakage Correction Factor Table).

Example:
Find leakage for a 36" wide x 24" high damper at 3 inches water gage: 48 CFM x 1.7 = 81.6 CFM leakage at 3 inches water gage.

Leakage ratings are based on AMCA Standard 500 using Test Setup Apparatus Figure 5.5. Torque applied holding damper closed at 10 in. lbs. per sq. ft. of damper with minimum of 20 in. lbs.

INSTALLATION

For proper operation, damper must be installed square and free from racking. Opposed blade dampers must be operated from a power blade or drive axle.

NOTE:

Dampers are designed for operation with blades running horizontally. Dampers to be installed with vertical blades require thrust collars be added at time of damper manufacture and at additional cost. Some standard features are not available with vertical bladed dampers.

PRESSURE DROP INFORMATION AREA FACTOR TABLE

B Dimension Height in Inches (mm)	A Dimension—Width in Inches (mm)																		
	6" (152)	9" (229)	12" (305)	15" (381)	18" (457)	21" (533)	24" (610)	27" (686)	30" (762)	33" (838)	36" (914)	39" (991)	42" (1067)	45" (1143)	48" (1219)	51" (1295)	54" (1372)	57" (1448)	60" (1524)
6" (152)	6.65	4.43	3.33	2.66	2.22	1.90	1.66	1.48	1.33	1.21	1.11	1.02	.95	.89	.83	.85	.80	.76	.72
9" (229)	3.93	2.62	1.96	1.57	1.31	1.12	.98	.87	.79	.71	.65	.60	.56	.52	.49	.48	.46	.43	.41
12" (305)	2.75	1.84	1.38	1.10	.92	.79	.69	.61	.55	.50	.46	.42	.39	.37	.34	.34	.33	.31	.29
15" (381)	2.05	1.37	1.02	.82	.68	.59	.51	.46	.41	.37	.34	.32	.29	.23	.26	.25	.24	.23	.21
18" (457)	1.74	1.16	.87	.69	.58	.50	.43	.39	.35	.32	.29	.27	.25	.22	.22	.22	.20	.19	.18
24" (610)	1.27	.85	.63	.51	.42	.36	.32	.28	.25	.23	.21	.20	.18	.17	.16	.16	.15	.14	.13
30" (762)	.96	.64	.48	.39	.32	.28	.24	.21	.19	.18	.16	.15	.14	.13	.12	.12	.11	.11	.10
36" (914)	.80	.53	.40	.32	.27	.23	.20	.18	.16	.15	.13	.12	.11	.11	.10	.10	.09	.09	.08
42" (1067)	.68	.46	.34	.27	.23	.20	.17	.15	.14	.12	.11	.11	.10	.09	.09	.08	.08	.08	.07
48" (1219)	.60	.40	.30	.24	.20	.17	.15	.13	.12	.11	.10	.09	.09	.08	.08	.07	.07	.07	.06
54" (1372)	.53	.35	.26	.21	.18	.15	.13	.12	.11	.10	.09	.08	.08	.07	.07	.07	.06	.06	.06
60" (1524)	.47	.31	.23	.19	.16	.13	.12	.10	.09	.08	.08	.07	.07	.06	.06	.06	.05	.05	.05
66" (1676)	.42	.28	.21	.17	.14	.12	.11	.09	.08	.08	.07	.07	.06	.06	.05	.05	.05	.05	.04
72" (1829)	.39	.26	.19	.16	.13	.11	.10	.09	.08	.07	.06	.06	.06	.05	.05	.05	.04	.04	.04
78" (1981)	.36	.24	.18	.14	.12	.10	.09	.08	.07	.07	.06	.06	.05	.05	.04	.04	.04	.04	.04
84" (2134)	.33	.22	.17	.13	.11	.10	.08	.07	.07	.06	.06	.05	.05	.04	.04	.04	.04	.04	.03
90" (2286)	.31	.21	.16	.12	.10	.09	.08	.07	.06	.06	.05	.05	.04	.04	.04	.04	.04	.03	.03
96" (2438)	.29	.19	.14	.12	.10	.08	.07	.06	.06	.05	.05	.04	.04	.04	.04	.04	.03	.03	.03

DETERMINING PRESSURE DROP

Use the Area Factor Table and Pressure Drop Chart to determine pressure drop through Reliable 8RAFBCD7 Dampers.

1. Determine area factor for damper by entering the Area Factor Table through duct width and height.
2. Find the conversion velocity (CV) by multiplying the selected size damper's area factor by the flow rate in CFM:

$$CV = \text{Area Factor} \times \text{CFM}$$

3. Enter the Pressure Drop Chart at the determined area factor and proceed up to appropriate conversion velocity (CV) line. Then, read across to static pressure drop at left side of chart.

Example:

1. Find the pressure drop across an 18" wide x 18" high Model 8RAFBCD7 damper handling 8570 CFM. From the Area Factor Table, area factor is determined to be .58.

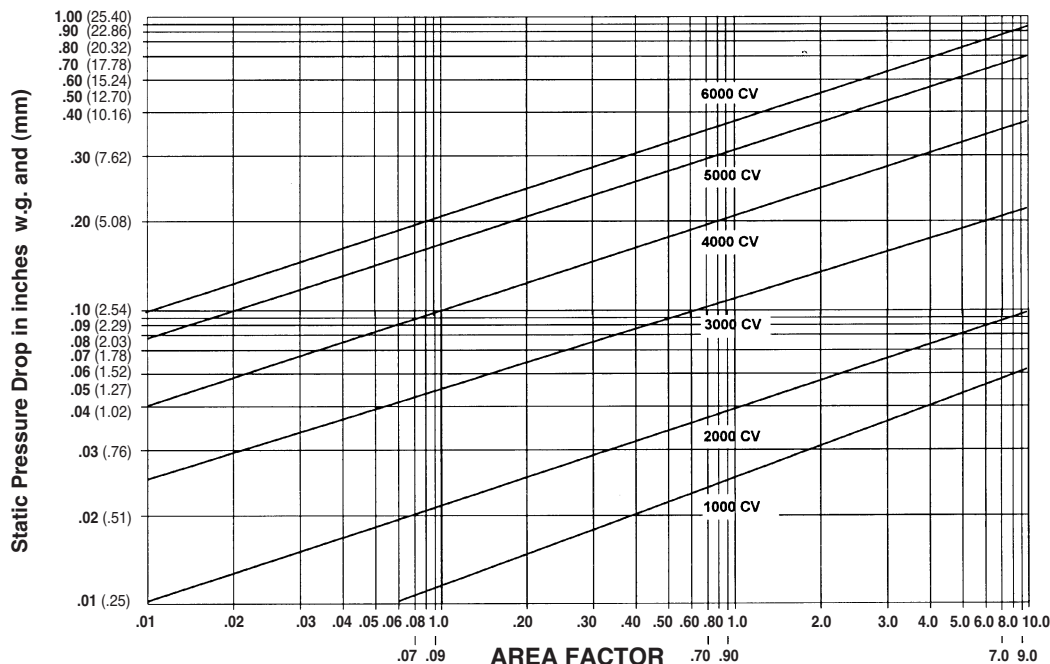
CFM x AREA FACTOR EQUALS CONVERSION VELOCITY

2. Therefore, CV (Conversion Velocity) = 8570 CFM x .58 = 5000. Using the Pressure Drop Chart, pressure drop = .28 inches water gage.

NOTES:

1. Ratings are based on AMCA Standard 500 using Test Setup Apparatus Figure 5.3 (damper is installed with duct upstream and downstream).
2. Static Pressure and Conversion Velocities are corrected to .075 lb./cu. ft. air density.

8RAFBCD7 PRESSURE DROP CHART





8RAFBCD7 SUGGESTED SPECIFICATION

Furnish and install, at locations shown in plans or in accordance with schedules, industrial grade control dampers meeting the following construction standards: Frames shall be minimum 8" deep x 2" flanged 12 gage steel channel (203 x 51 x 2.8). The blades shall be maximum 7^{3/4}" (197) wide, minimum .080" (2) thick, 6063T5 extruded aluminum airfoil shaped with integral structural reinforcing tube running full length of each blade. Axles shall be minimum 3/4" (19) diameter with machined edge to provide positive locking connection to blades and linkage. Full round axles are not acceptable. Bearings shall be stainless steel sleeve pressed into frame. Linkage shall be located in jamb out of airstream and constructed of 10 gage (3.5) galvanized steel clevis type arms, 3/16" x 3/4" (4.7 x 19) plated steel tie bars and 3/8" (9.5) diameter stainless steel pivot pins with lock type retainers.

Submittal must include leakage, pressure drop and maximum pressure data based on AMCA Publication 500 testing. Damper shall be Reliable model 8RAFBCD7 Control Damper.

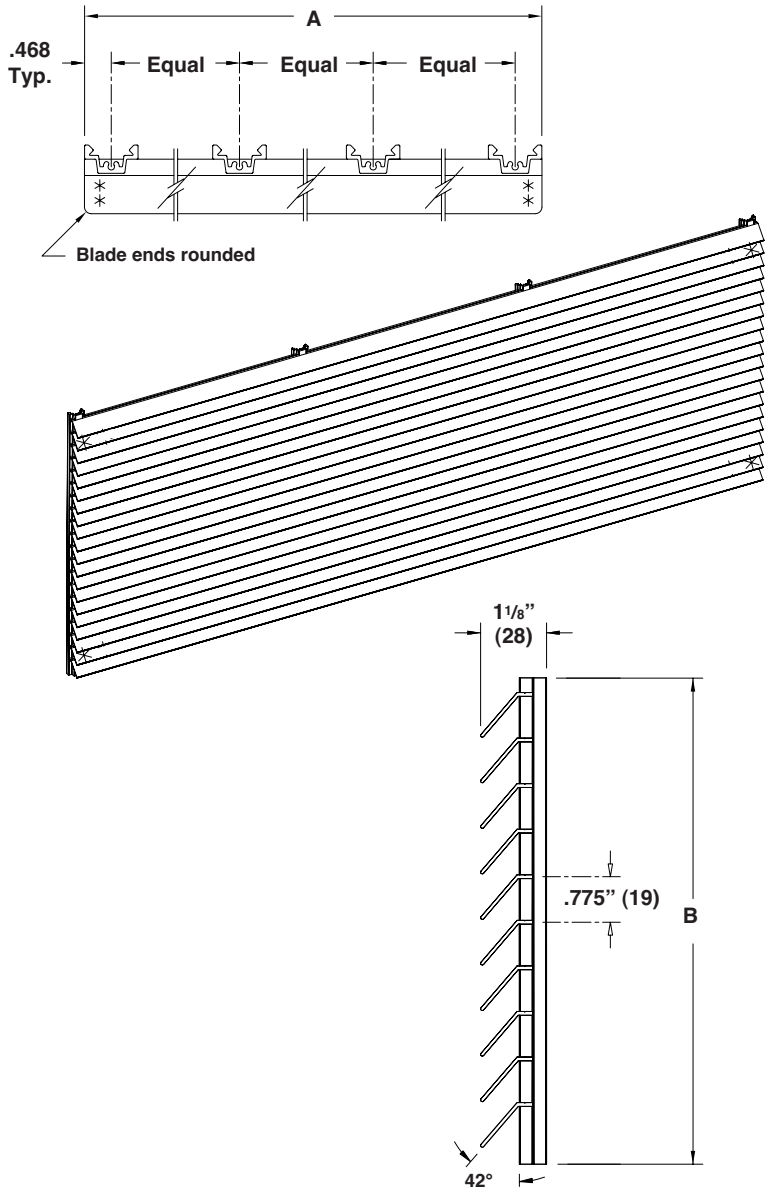
ADD TO SPECIFICATION IF REQUIRED:

Dampers shall be equipped with blade and jamb seals for low leakage application. Blade seals shall be extruded silicone rubber mechanically locked into extruded blade slots. Adhesive type seals are not acceptable. Jamb seals shall be flexible stainless steel located between blade edge and jamb for maximum sealing compression. Wind stop type seals are not acceptable.





AEL - 42



STANDARD CONSTRUCTION

FRAME
 Extruded aluminum; 6063-T5; clear.
 Anodized or _____
 42° architectural decorative louver face and end views for illustration purposes only.
 A = _____
 B = _____
 A as required, not to exceed 180" (4512).
 B as required, not to exceed 84" (2134).
 Brace bar as required, not to exceed 16" (406).

BLADES
 Standard blade thickness .040 with a variety of perimeter frames available. Heavier blades available. Although the AEL-42 is primarily used in PTAC applications, it can also be constructed as a mechanical screen or a variety of aesthetic pleasing thinline applications.

VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Frames of choice, see frame submittal sheet.
- 1" (25) blade spacing.
- Exterior mounting holes as required.

*Consult Reliable for other special requirements.

Dimensions in inches, parenthesis () indicate millimeters.

TAG	QTY.	ACTUAL SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE	



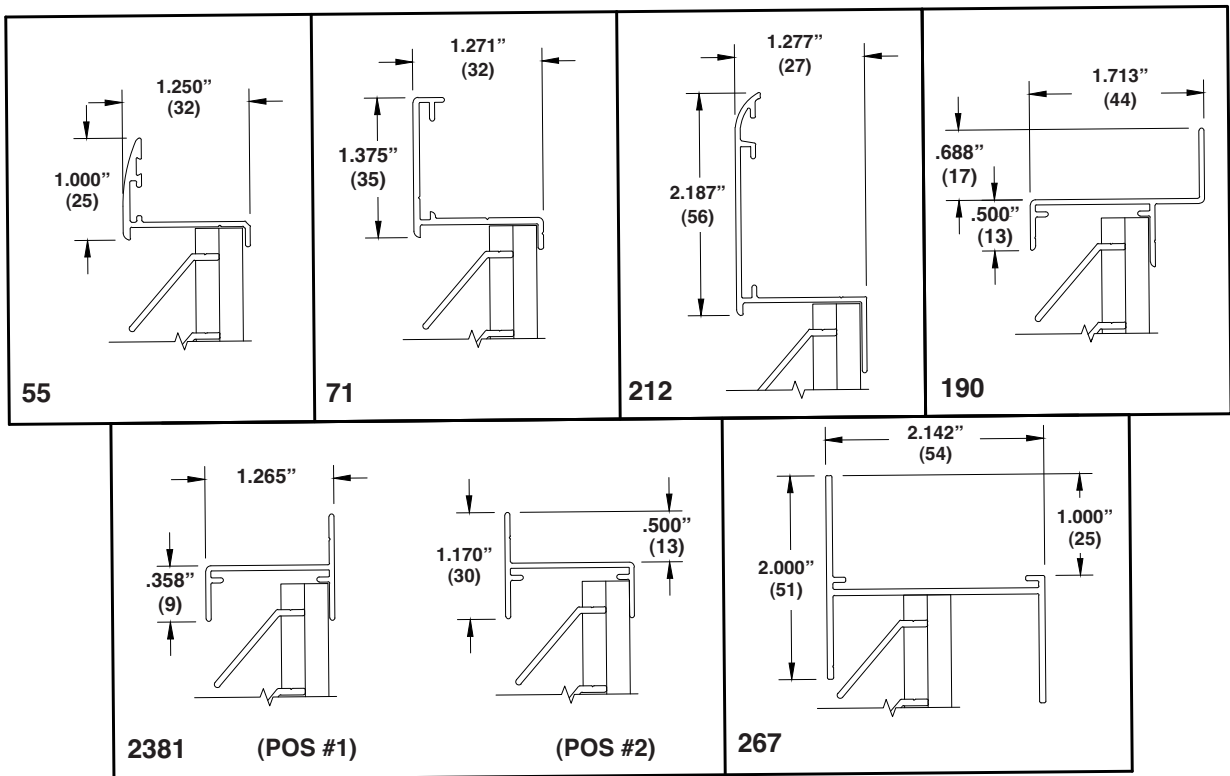
FRAMES

ARCHITECTURAL FRAMES FOR AEL SERIES LOUVERS

OPTIONS

- | | |
|---|---|
| <input type="checkbox"/> Clear or anodized finish | <input type="checkbox"/> Pearledized 50 or 70 |
| <input type="checkbox"/> Prime coat | <input type="checkbox"/> Kynar 70% |
| <input type="checkbox"/> Baked Enamel (Kynar 50%) | |

Flange Type Frames



Note: Dimensions in inches, parenthesis () indicate millimeters

ANY COMBINATION OF AEL LOUVERS AND FRAMES FOR USE WITH WALL AND WINDOW SECTIONS

PROJECT ARCH./ENGR. REPRESENTATIVE	LOCATION CONTRACTOR DATE
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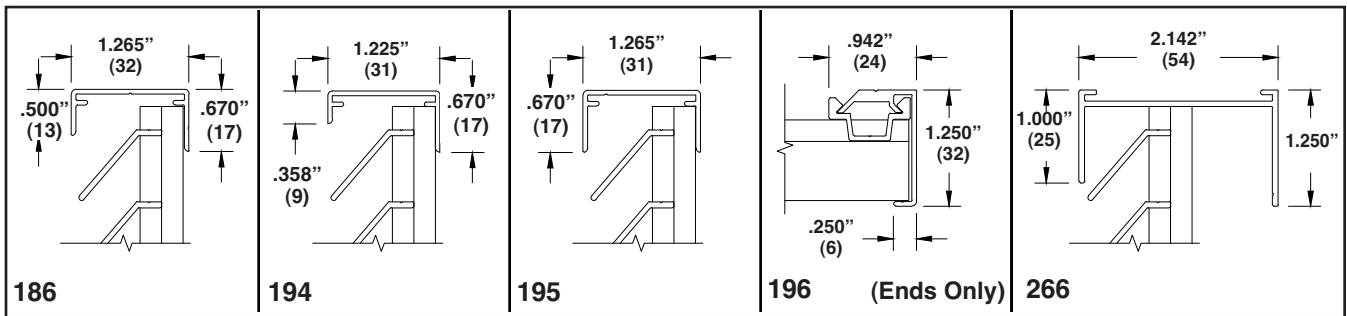
FRAMES

ARCHITECTURAL FRAMES FOR AEL SERIES LOUVERS

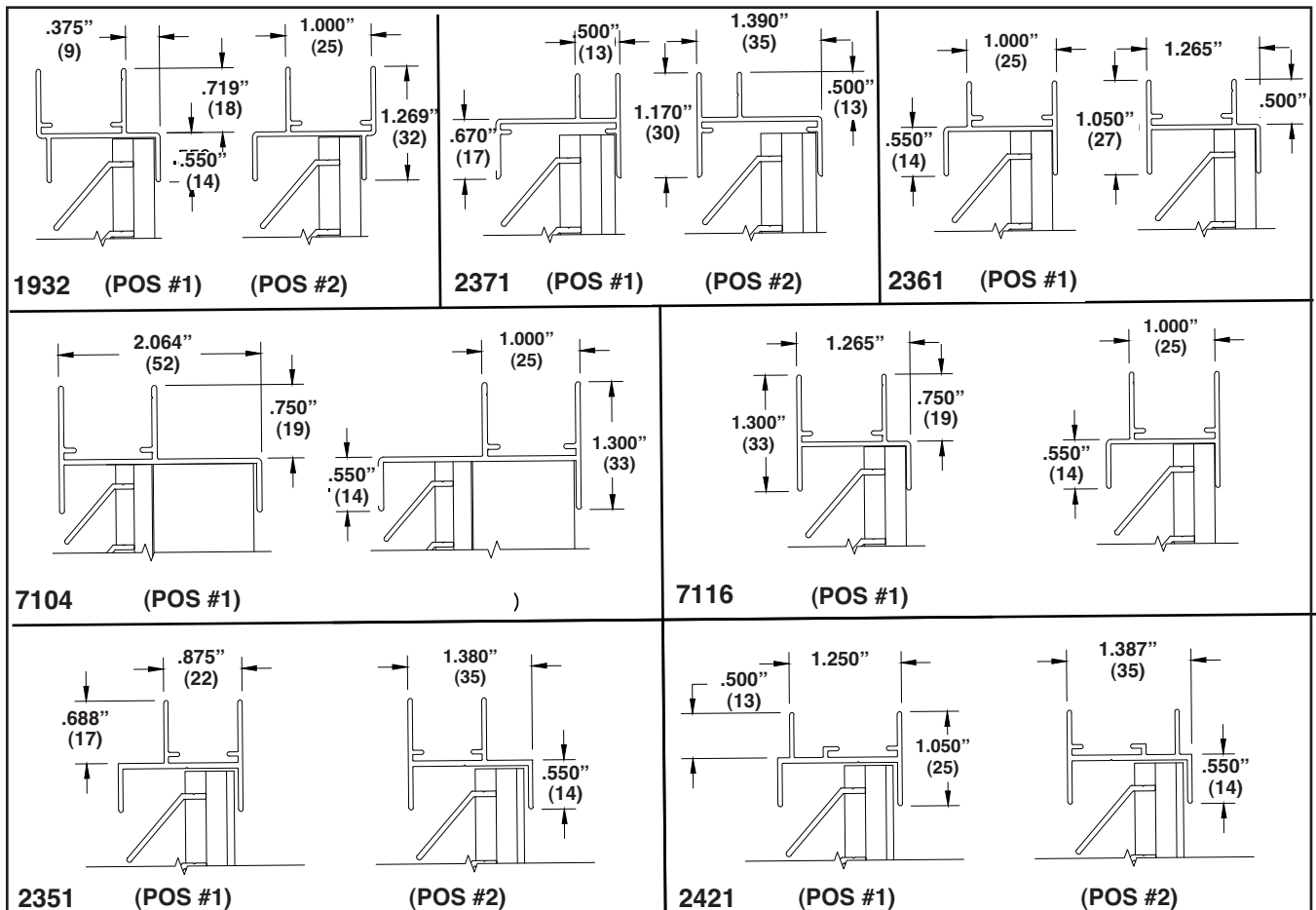
OPTIONS

- Clear or anodized finish
 Prime coat
 Baked Enamel (Kynar 50%)
 Pearledized 50 or 70
 Kynar 70%

Channel Type Frames



Glazing Type Frames

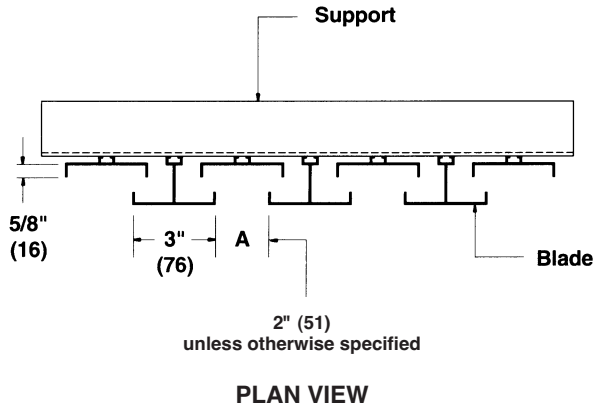


Note: Dimensions in inches, parenthesis () indicate millimeters

ANY COMBINATION OF AEL LOUVERS AND FRAMES FOR USE WITH WALL AND WINDOW SECTIONS



175T VERTICAL SCREEN EXTRUDED ALUMINUM



SUGGESTED SPECIFICATION

Furnish and install vertical screens as hereinafter specified where shown on plans or as described in schedules. Screen components shall be factory assembled by the manufacturer. Sizes too large for shipping shall be built up by the contractor from factory assembled sections to provide overall sizes required. Design shall incorporate structural supports required to withstand a wind load of 20 lbs. per sq. ft. (96 kPa, equivalent of a 90 mph wind [145 KPH] – specifier may substitute any loading required).

Screens shall be Reliable Model 175T 6063T5 extruded aluminum alloy construction as follows:

Blades: .060" (1.5) wall thickness, 3" wide x 5/8" deep (76 x 16), spaced at 2" (51) unless otherwise specified.

Fasteners: Anchorage shall be concealed and not visible on the exterior face of the screen.

Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

STANDARD CONSTRUCTION

BLADES

6063T5 extruded aluminum with .060" (1.5) nominal thickness. Blades are 3" wide and 5/8" deep (76 x 16), spaced at 2" (51) unless otherwise specified. Vertical arrangement is standard.

SUPPORT

As required per wind loading. Consult Reliable.

FINISH

Mill is standard. Special finishes such as Kynar, Acrodize, baked enamel (modified fluoropolymer), epoxy, prime coat, integral color and clear anodize are available at additional cost. (Some variation in anodize color consistency is possible).

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

4 lbs. per sq. ft.

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 64 sq. ft. (6m²) per section, not to exceed 240" wide and 90" high (6096 and 2286) or 90" wide and 240" high (2286 and 6096).

Screens larger than maximum factory assembly size will require field assembly of smaller sections.

FEATURES

The 175T design offers:

- Low profile rear supports for attractive appearance.
- Excellent visual screening with airflow.
- Horizontal blade arrangement option.

NOTES:

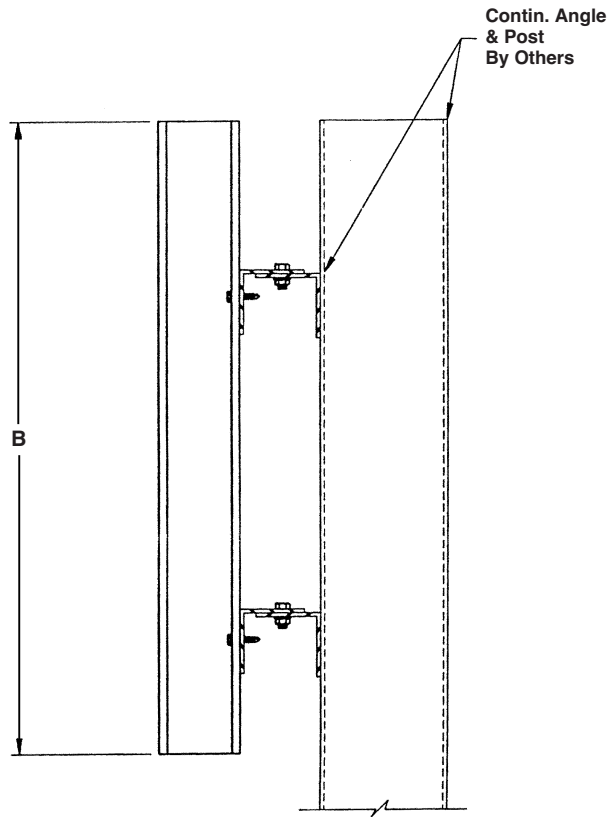
1. Maximum blade support spacing is 48" (1219) center to center.
2. Additional structural framing must be provided by others as required by job specifications and conditions.
3. All options are at additional cost.

Dimensions in parenthesis () indicate millimeters.

Units are furnished actual size.

QTY.	ACTUAL SIZE		A-BLADE SPACING	VARIATIONS
	WIDE	HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE	

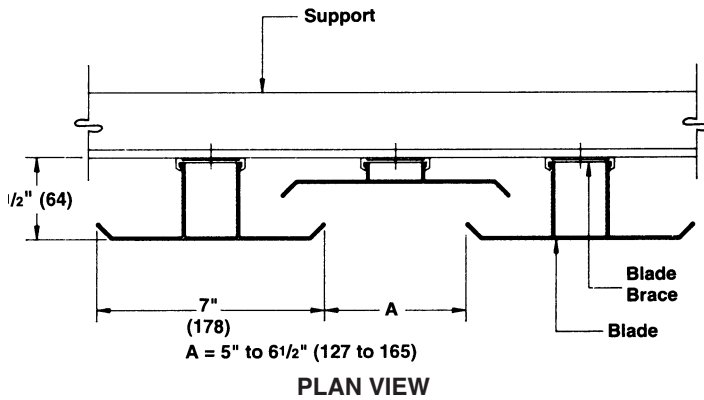
TYPICAL INSTALLATION DETAIL





250T VERTICAL SCREEN

EXTRUDED ALUMINUM
SIGHTPROOF



SUGGESTED SPECIFICATION

Furnish and install sightproof vertical screens as hereinafter specified where shown on plans or as described in schedules. Screen components shall be factory assembled by the manufacturer. Sizes too large for shipping shall be built up by the contractor from factory assembled sections to provide overall sizes required. Design shall incorporate blade supports required to withstand a wind load of 20 lbs. per sq. ft. (96 kPa) (equivalent of a 90 mph wind [145 KPH] – specifier may substitute any loading required) when attached to structural supports supplied by others.

Screens shall be Reliable Model 250T 6063T5 extruded aluminum alloy construction as follows:

Front Blades: .080" (2) nominal thickness, 7" wide x 2 1/2" deep (178 x 64), spaced as specified between 5" and 6 1/2" (127 x 165).

Back Blades: .080" (2) nominal thickness, spaced as specified.

Fasteners: Anchorage shall be concealed and not visible on the exterior face of the screen.

Finish: Select finish specification from Reliable/Valspar Finishes Brochure.

Dimensions in parenthesis () indicate millimeters.

Units are furnished actual size.

STANDARD CONSTRUCTION

BLADES

FRONT – 6063T5 extruded aluminum with .080" (2) nominal thickness. Blades are 7" wide and 2 1/2" deep (178 x 64), spaced as specified between 5" and 6 1/2" (127 and 165).

BACK – 6063T5 extruded aluminum with .080" (2) nominal thickness. Blades are spaced as specified. Front and back blade edges can overlap for complete visual screening. Vertical arrangement is standard.

SUPPORT

As required per wind loading. Consult Reliable.

FINISH

Mill is standard. Special finishes such as Kynar, Acrodize, baked enamel (modified fluoropolymer), epoxy, integral color and clear anodize are available at additional cost. (Some variation in anodize color consistency is possible).

MINIMUM SIZE

24" wide x 12" high (610 x 305).

APPROXIMATE SHIPPING WEIGHT

5 lbs. per sq. ft.

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 64 sq. ft. (6m²) per section, not to exceed 240" wide and 90" high (6096 and 2286) or 90" wide and 240" high (2286 and 6096).

Screens larger than maximum factory assembly size will require field assembly of smaller sections.

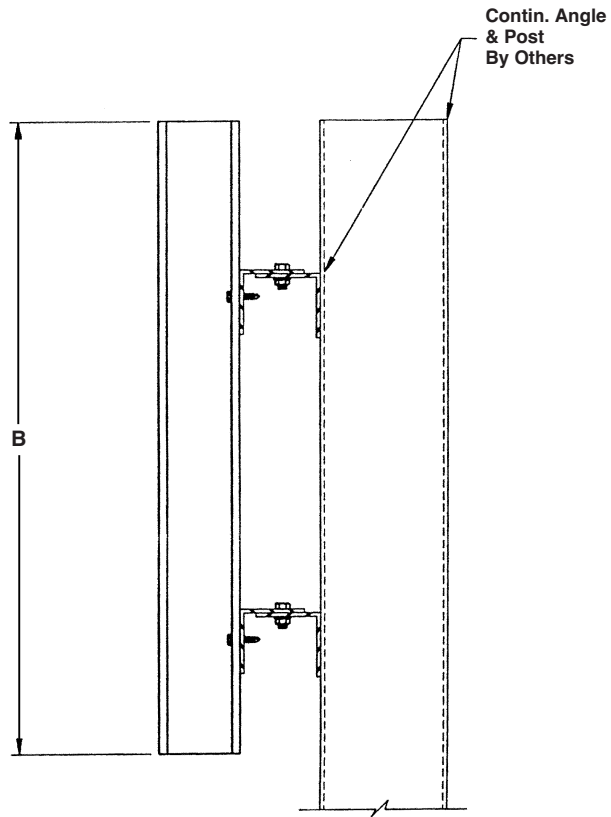
FEATURES

The 250T design offers:

- Variable blade spacing allows for high free area, added economy, or a sight-proof design.
- Architecturally styled, hidden supports for attractive appearance.
- All aluminum construction for lightweight, low maintenance, and high resistance to corrosion.

QTY.	ACTUAL SIZE		A-BLADE SPACING	VARIATIONS
	WIDE	HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE	

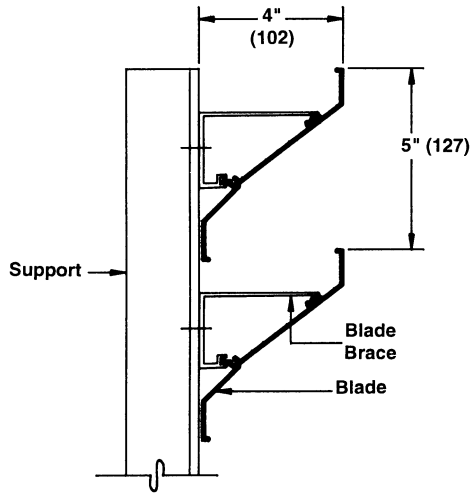
TYPICAL INSTALLATION DETAIL





445RBI HORIZONTAL SCREEN

EXTRUDED ALUMINUM (INVERTED BLADE)



STANDARD CONSTRUCTION

BLADES

6063T5 extruded aluminum with .080" (2) nominal wall thickness, positioned at 45° angle and spaced approximately 5" (127) center to center.

SUPPORT

As required per wind load. Consult Reliable.

FINISH

Mill.

APPROXIMATE SHIPPING WEIGHT

4 lbs. per sq. ft. (20 kg per m²).

MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 64 sq. ft. (6m²) per section, not to exceed 190" wide and 90" high (4826 and 2286) or 90" wide and 190" high (2286 and 4826).

Screens larger than maximum factory assembly size will require field assembly of smaller sections.

FEATURES

The 445RBI design features:

- Architecturally styled, hidden supports for attractive appearance.
- All aluminum construction for low maintenance and high resistance to corrosion.
- Blade spacing allows for high free area, added economy, or a sight proof design.

VARIATIONS

Variations to the basic design of this screen are available at additional cost. They include:

- Mitered or box corners.
- Hinged access sections.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, Kynar, Pearledize, prime coat, clear and color anodize. (Some variation in anodize color consistency is possible).

Consult Reliable for other special requirements.

SUGGESTED SPECIFICATION

Furnish and install screens as described in schedules. Screen components shall be factory assembled by the manufacturer. Sizes too large for shipping shall be built up by the contractor from factory assembled sections to provide overall sizes required. Design shall incorporate blade supports required to withstand a wind load of 20 lbs. per sq. ft. (96KPa) (equivalent of a 90 mph wind [145 KPH] – specifier may substitute any loading required) when attached to structural supports supplied by others.

Screens shall be architectural style with continuous appearing stationary blades – intermediate supports shall not interrupt blade appearance when viewed from outside of screen.

Screens shall be Reliable Model 445RBI extruded 6063T5 aluminum alloy construction as follows:

Blades: .080" (2) wall thickness at 45° angle and spaced approximately 5" (127) center to center.

Fasteners: Anchorage shall be concealed and not visible on the exterior face of the screen.

Finish: Select finish specification from Reliable Finishes Brochure.

Dimensions in parenthesis () indicate millimeters.

Units are furnished actual size.

QTY.	ACTUAL SIZE		VARIATIONS
	A-WIDE	B-HIGH	
PROJECT		LOCATION	
ARCH./ENGR.		CONTRACTOR	
REPRESENTATIVE		DATE	

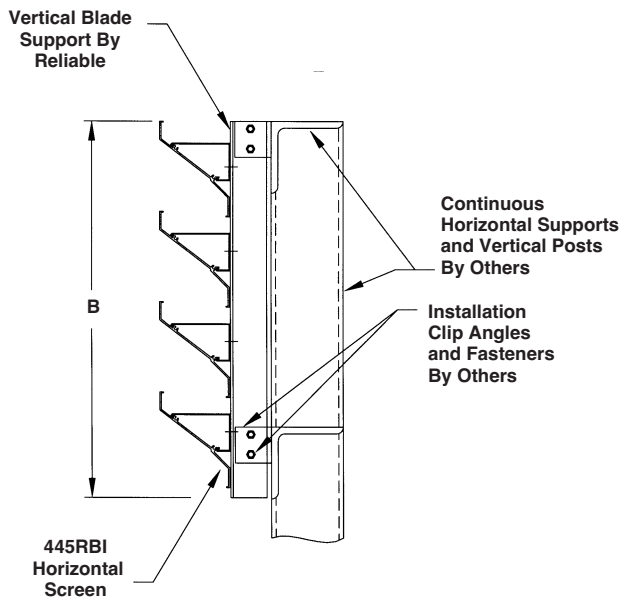
PERFORMANCE DATA
FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of 445RBI.
Width – Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44
12	.17	.27	.37	.47	.57	.67	.77	.87	.98	1.08	1.18	1.28	1.38	1.48	1.58
0.30	.02	.03	.03	.04	.05	.06	.07	.08	.09	.10	.11	.12	.13	.14	.15
18	.42	.67	.93	1.18	1.44	1.69	1.95	2.20	2.46	2.71	2.97	3.22	3.48	3.73	3.99
0.46	.04	.06	.09	.11	.13	.16	.18	.20	.23	.25	.28	.30	.32	.35	.37
24	.67	1.08	1.49	1.90	2.31	2.72	3.13	3.54	3.95	4.36	4.77	5.18	5.59	6.00	6.41
0.61	.06	.10	.14	.18	.21	.25	.29	.33	.37	.41	.44	.48	.52	.56	.60
30	.91	1.47	2.03	2.59	3.15	3.71	4.27	4.83	5.38	5.94	6.50	7.06	7.62	8.18	8.74
0.76	.08	.14	.19	.24	.29	.34	.40	.45	.50	.55	.60	.66	.71	.76	.81
36	1.12	1.80	2.49	3.17	3.85	4.54	5.22	5.90	6.59	7.27	7.96	8.64	9.32	10.01	10.69
0.91	.10	.17	.23	.29	.36	.42	.48	.55	.61	.68	.74	.80	.87	.93	.99
42	1.28	2.06	2.84	3.62	4.40	5.18	5.96	6.74	7.52	8.30	9.08	9.86	10.64	11.42	12.20
1.07	.12	.19	.26	.34	.41	.48	.55	.63	.70	.77	.84	.92	.99	10.6	1.13
48	1.53	2.46	3.40	4.33	5.27	6.20	7.10	8.07	9.00	9.94	10.87	11.81	12.74	13.68	14.61
1.22	.14	.23	.32	.40	.49	.58	.66	.75	.84	.92	1.01	1.10	1.18	1.27	1.36
54	1.78	2.87	3.96	5.05	6.14	7.23	8.32	9.41	10.50	11.59	12.67	13.76	14.85	15.94	17.03
1.37	.17	.27	.37	.47	.57	.67	.77	.87	.98	1.08	1.18	1.28	1.38	1.48	1.58
60	2.03	3.26	4.50	5.74	6.98	8.21	9.45	10.69	11.93	13.17	14.40	15.64	16.88	18.12	19.36
1.52	.19	.30	.42	.53	.65	.76	.88	.99	1.11	1.22	1.34	1.45	1.57	1.68	1.80
66	2.23	3.59	4.95	6.31	7.68	9.04	10.40	11.76	13.12	14.49	15.85	17.21	18.57	19.93	21.30
1.68	.21	.33	.46	.59	.71	.84	.97	1.09	1.22	1.35	1.47	1.60	1.73	1.85	1.98
72	2.39	3.85	5.31	6.77	8.23	9.69	11.15	12.61	14.07	15.53	16.99	18.44	19.90	21.36	22.82
1.83	.22	.36	.49	.63	.76	.90	1.04	1.17	1.31	1.44	1.58	1.71	1.85	1.98	2.12
78	2.64	4.25	5.87	7.48	9.10	10.71	12.32	13.94	15.55	17.16	18.78	20.39	22.00	23.62	25.23
1.98	.25	.39	.55	.69	.85	.99	1.14	1.30	1.44	1.59	1.74	1.89	2.04	2.19	2.34
84	2.89	4.66	6.43	8.20	9.97	11.74	13.51	15.27	17.04	18.81	20.58	22.35	24.12	25.88	27.65
2.13	.27	.43	.60	.76	.93	1.09	1.26	1.42	1.58	1.75	1.91	2.08	2.24	2.40	2.57
90	3.14	5.05	6.97	8.89	10.80	12.72	14.64	16.56	18.47	20.39	22.31	24.22	26.14	28.06	29.97
2.29	.29	.47	.65	.83	1.00	1.18	1.36	1.54	1.72	1.89	2.07	2.25	2.43	2.61	2.78
96	3.26	5.25	7.24	9.23	11.22	13.21	15.20	17.19	19.18	21.16	23.15	25.14	27.13	29.12	31.11
2.44	.30	.49	.67	.86	1.04	1.23	1.41	1.60	1.78	1.97	2.15	2.34	2.52	2.71	2.89

Height in Inches and (Meters)

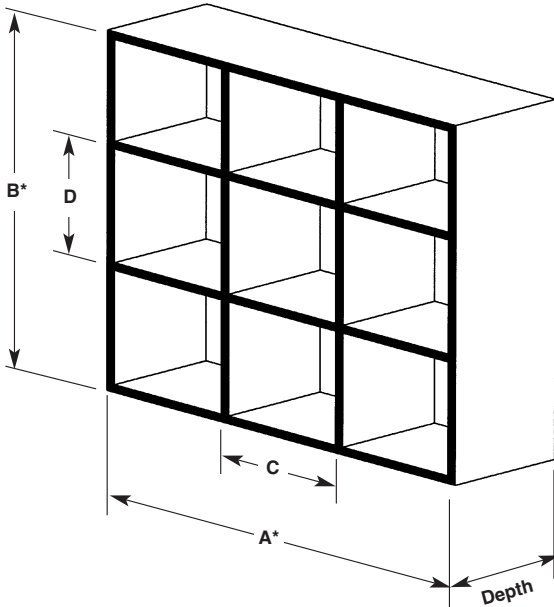
TYPICAL INSTALLATION DETAIL





ECS EGGCRATE GRILLE

EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

BLADES

6063T5 extruded aluminum with .125" (3.2) nominal thickness. Grid can be 2" to 12" (51 to 305) x 2" to 12" (51 to 305). Eggcrate depth can be 2" to 6" (51 to 152). Depth cannot exceed smallest grid dimension.

FRAME

Same material as blades.

FINISH

Mill.

APPROXIMATE SHIPPING WEIGHT

5 lbs. per sq. ft. (24 kg/m²).

MINIMUM SIZE

12" x 12"h (305 x 305).

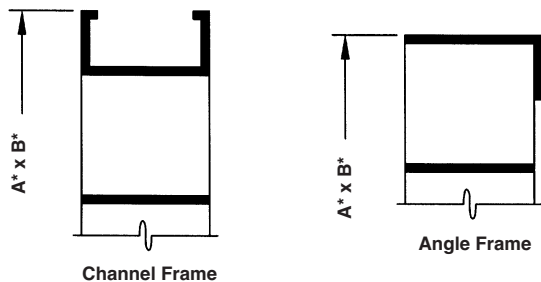
MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 120" x 60" (3048 x 1524). Units larger than the maximum single section size will require field assembly of smaller sections.

FEATURES

- Attractive square or rectangular pattern appearance.
- Wide selection of grid patterns and depths available to fulfill specific aesthetic requirements.
- Aluminum material for low maintenance and high resistance to corrosion.
- Sturdy all welded construction.

OPTIONAL FRAMES



VARIATIONS

- Selection of finishes: Baked Enamel (modified fluropolymer), epoxy, Kynar, Pearledize 50 & 70, prime coat, clear and color anodize (Some variation in anodize color consistency is possible.)
- Channel and angle frames. (Consult Reliable for availability.)
- Angled horizontal blades.
- A variety of bird and insect screens. (Channel or angle frame required.)
- Blank off panels. (Channel or angle frame required.)

All variations are available at additional cost. Consult Reliable for other special requirements.

Dimensions in parenthesis () indicate millimeters.

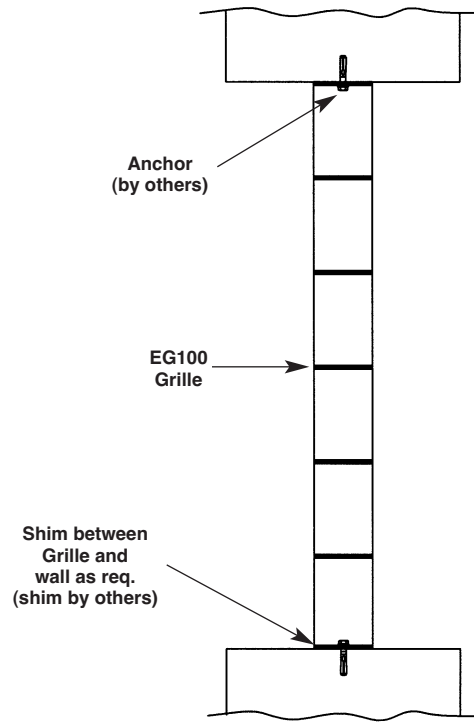
*Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	ACTUAL SIZE		C	D	DEPTH	FRAME	VARIATIONS
		A *WIDE	B *HIGH					

PROJECT
ARCH./ENGR.
REPRESENTATIVE

LOCATION
CONTRACTOR
DATE

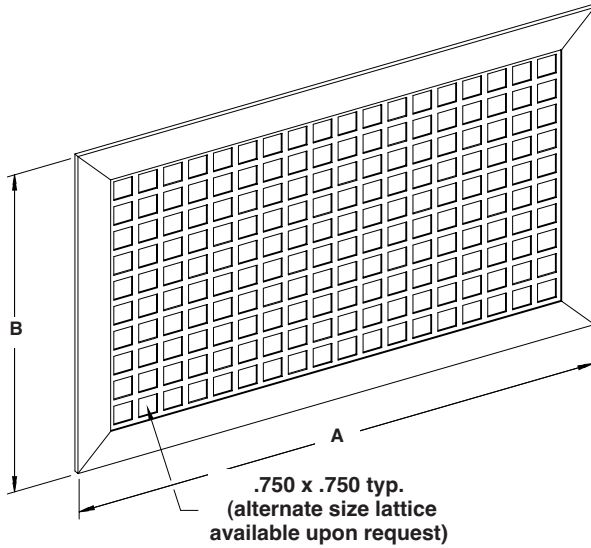
TYPICAL INSTALLATION DETAIL





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LATTICE SCREEN EXTRUDED ALUMINUM



STANDARD CONSTRUCTION

MATERIAL

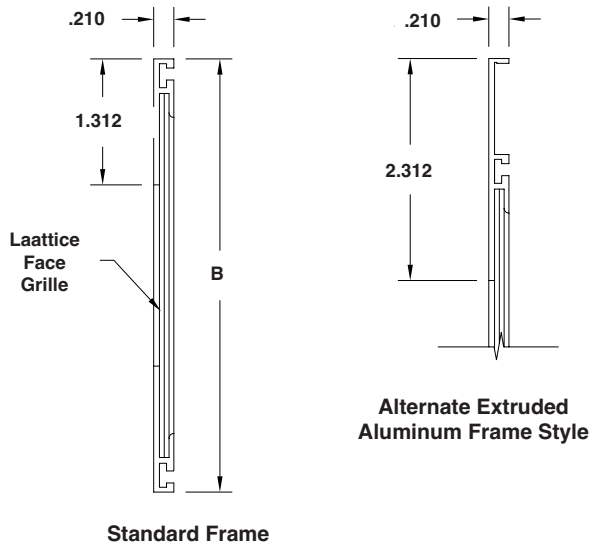
.080" (2) LAT aluminum 4" x 12" x .080 (102 x 305 x 2) grid pattern.

OPTIONS

- Perimeter frame, various grid sizes.
- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

FEATURES

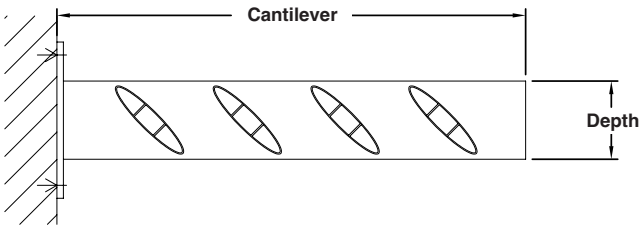
- Aesthetically attractive product that provides protective barrier for louver face or can be used as stand alone product.



TAG	QTY.	ACTUAL SIZE		FRAME	VARIATIONS
		WIDTH (A)	HEIGHT (B)		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		



RELIABLE ARCHITECTURAL SUN CONTROL DESIGN GUIDE



OUTRIGGER ANALYSIS

All analysis is conducted on the basis of a 10 psf vertical dead loading applied vertically over the plan area of the sunshade. Live /wind/snow/seismic load added to the dead load is the Design Vertical Load. Live wind and snow loads are available in the local building codes. Ruskin recommends a minimum of 20 psf live/wind/snow load (see Note #1 below).

Max. Section Width 120" (3048)

Consult Reliable sales representative for section widths that exceed 120" (3048).

**Maximum Sunshade Cantilever
Flat Plate Outrigger
Design Vertical Load (PSF)***

Outrigger Depth	30	40	50	60
4	31	27	24	22
5	39	34	30	28
6	47	41	36	33
7	55	48	42	39
8	63	54	49	44
9	71	61	55	50
10	79	68	61	56
11	87	75	67	61
12	90	82	73	67
13	90	89	79	72
14	90	90	85	78
15	90	90	90	84
16	90	90	90	89

3

**Maximum Sunshade Cantilever
Channel Outrigger
Design Vertical Load (PSF)***

Outrigger Depth	30	40	50	60
4	53	48	44	40
5	58	50	45	41
6	61	53	47	43
7	66	57	51	46
8	71	62	55	50
9	78	67	60	55
10	84	73	65	60
11	90	79	71	64
12	90	85	76	70
13	90	90	82	75
14	90	90	88	80
15	90	90	90	85
16	90	90	90	90

3

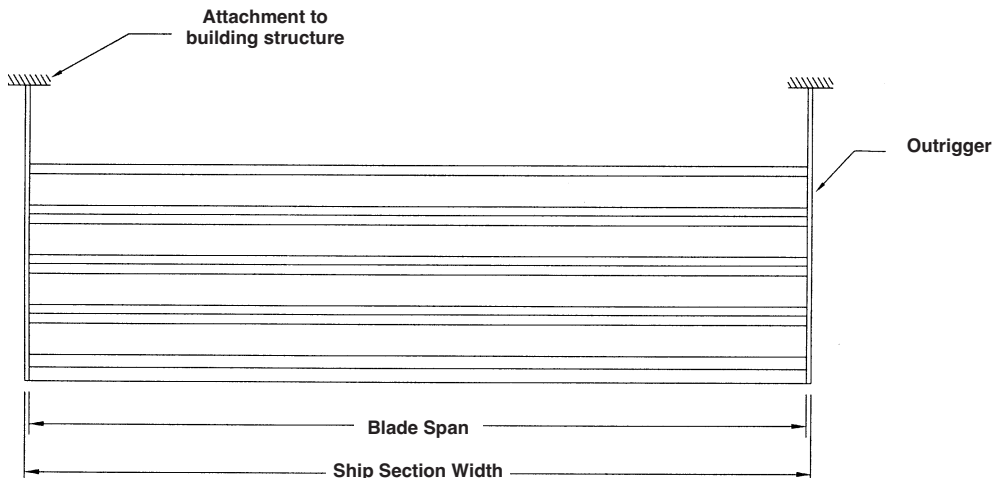
**Maximum Sunshade Cantilever
Tube Outrigger
Design Vertical Load (PSF)***

Outrigger Depth	30	40	50	60
4	57	51	48	44
5	69	62	58	53
6	81	73	67	61
7	90	84	76	70
8	90	90	85	78
9	90	90	90	85
10	90	90	90	90
11	90	90	90	90
12	90	90	90	90
13	90	90	90	90
14	90	90	90	90
15	90	90	90	90
16	90	90	90	90

3

*Design Vertical Load is comprised of dead load, wind load and/or live load and/or snow load and/or seismic.

1. Minimum recommended Design Vertical Load is 30 PSF. Required loading varies by site location and type of installation. Consult the local building authority for the appropriate building code or loading information.
2. Diagonal supports may be added for cantilevers in excess of those shown. Consult Ruskin technical sales for guidance.
3. Consult Ruskin technical sales for cantilevers over 90" (2286).
4. Width is only associated with tube and channel outriggers.



BLADE ANALYSIS

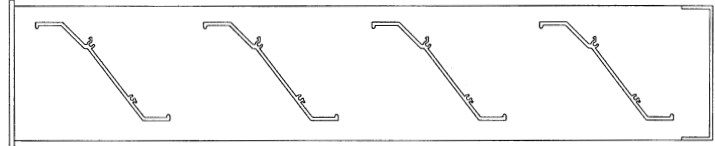
The following tables provide the maximum unsupported span for given blade types. Blade deflection is limited to L/120. When ship sections are equal to or less than blade span only outriggers are

required. See Standard Ship Section (Detail 1). If blade span is less than the section width false outriggers and fascia members are required. See False Outrigger Ship Section (Detail 2).

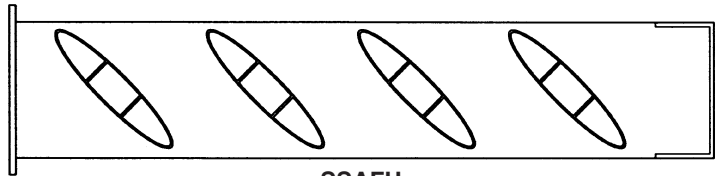
LOUVER BLADE	Design Vertical Load (PSF)*			
	30	40	50	60
4" (102)	66	60	53	49
6" (152)	53	46	41	37

AIRFOIL BLADE	Design Vertical Load (PSF)*			
	30	40	50	60
4" (102)	70	64	60	57
6" (152)	97	88	81	77
8" (203)	120	111	103	97

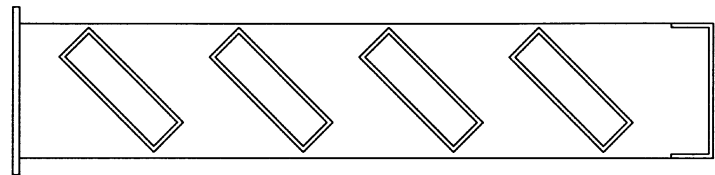
RECTANGULAR TUBE BLADE	Design Vertical Load (PSF)*			
	30	40	50	60
4" (102)	120	120	120	120
6" (152)	120	120 <td 120	120	
8" (203)	120	120	120	120



SSLBH

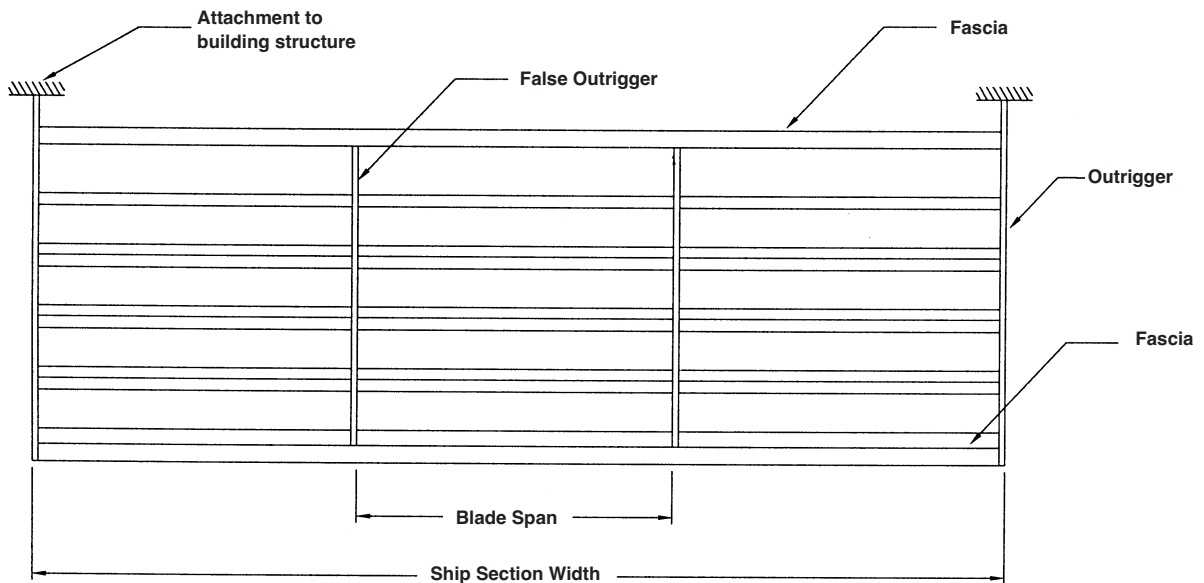


SSAFH



SSRTH

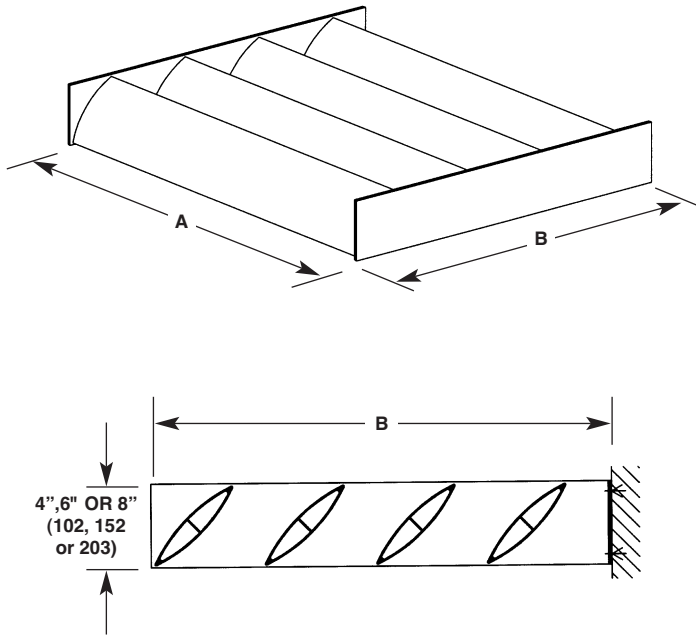
*Design Vertical Load is comprised of wind load and/or live load and/or snow load.





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4AFBSS/6AFBSS/8AFBSS ALUMINUM AIRFOIL BLADE SUNSHADE HORIZONTALLY MOUNTED



STANDARD CONSTRUCTION

BLADES

4" (102), 6" (152) or 8" (203) wide airfoil shape, 6063T5 extruded aluminum, .110" (3) nominal thickness, 6" (152) center-to-center spacing, installed at 45° angle.

OUTRIGGERS

6" wide x .375" thick (152 x 10) flat, non-tapered aluminum bar. Other outrigger designs are available at additional cost.

FASCIA

None.

INSTALLATION

Installation brackets and hardware by others.

CONSTRUCTION

All welded.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

6 lbs. per sq. ft. (29 kg/m²).

MAXIMUM SINGLE SECTION SIZE

Consult factory.

OVERALL

Single sections may be joined together in the field for unlimited overall size. Field assembly and supporting structure are by others.

VARIATIONS

- Alternate blade spacing.
- Alternate blade installation angles.
- Outrigger Options: tapered bar, channel and tube.
- Fascia Options: channel, round and bullnose shapes.
- Installation brackets and hardware are available.
- Selection of finishes: baked enamel (modified fluoropolymer), Kynar, Pearledize 50 & 70, prime coat, clear and color anodize. (Some variation in anodize color consistency is possible.)

All variations are available at additional cost. Consult Reliable for other special requirements.

Dimensions in parenthesis () indicate millimeters.

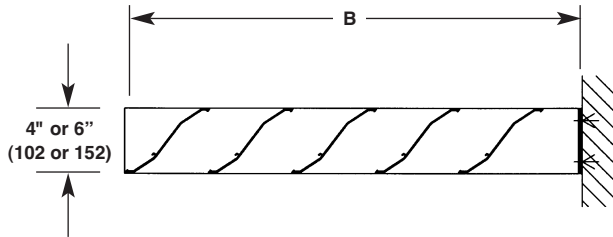
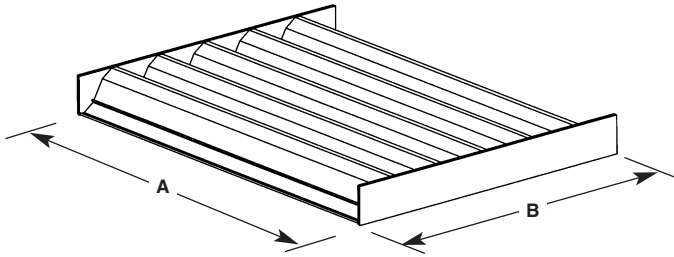
TAG	QTY.	ACTUAL SIZE		VARIATIONS
		A - WIDE	B - HIGH	
PROJECT		LOCATION		
ARCH./ENGR.		CONTRACTOR		
REPRESENTATIVE		DATE		



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4LBSS/6LBSS LOUVER BLADE SUNSHADE HORIZONTALLY MOUNTED

STANDARD CONSTRUCTION



BLADES

4" (102) or 6" (152) wide louver blade, 6063T5 extruded aluminum, .081" (2.1) nominal thickness, approximately 5³/₃₂" (129) center-to-center spacing, installed at 37¹/₂° angle.

OUTRIGGERS

4" wide x .375" thick (102 x 10) flat, non-tapered aluminum bar. Other outrigger designs are available at additional cost.

FASCIA

Available at additional cost.

INSTALLATION

Installation brackets and hardware by others.

CONSTRUCTION

All welded.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

5 lbs. per sq. ft. (24 kg/m²).

MAXIMUM SINGLE SECTION SIZE

Consult factory.

OVERALL

Single sections may be joined together in the field for unlimited overall size. Field assembly and supporting structure are by others.

VARIATIONS

- Alternate blade spacing.
- Alternate blade installation angles.
- Outrigger Options: tapered bar, channel and tube.
- Fascia Options: channel, round and bullnose shapes.
- Installation brackets and hardware are available.
- Selection of finishes: baked enamel (modified fluoropolymer), Kynar, Pearledize 50 & 70, prime coat, clear and color anodize. (Some variation in anodize color consistency is possible.)

All variations are available at additional cost. Consult Reliable for other special requirements.

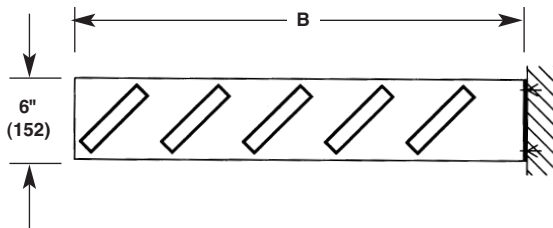
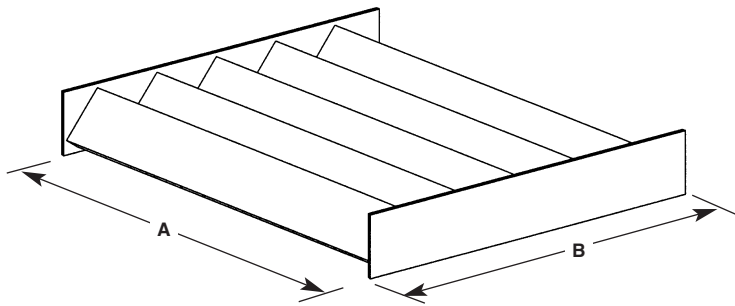
Dimensions in parenthesis () indicate millimeters.

TAG	QTY.	ACTUAL SIZE		VARIATIONS
		A - WIDE	B - HIGH	
PROJECT		LOCATION		
ARCH./ENGR.		CONTRACTOR		
REPRESENTATIVE		DATE		



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4TBSS/6TBSS RECTANGULAR TUBE BLADE SUNSHADE HORIZONTALLY MOUNTED



Dimensions in parenthesis () indicate millimeters.

STANDARD CONSTRUCTION

BLADES

6063T5 extruded aluminum rectangular tubes.
 4TBSS - 1³/₄" x 4" x .125" (44 x 102 x 3.2) installed at 45° angle and 4¹/₂" (114) center-to-center spacing.
 6TBSS - 2" x 6" x .125" (51 x 152 x 3.2) installed at 45° and 6" (152) center-to-center spacing.

OUTRIGGERS

6" wide x .375" thick (152 x 10) flat, non-tapered aluminum rectangle. Other outrigger designs are available at additional cost.

FASCIA

Available at additional cost.

INSTALLATION

Installation brackets and hardware by others.

CONSTRUCTION

All welded.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

6 lbs. per sq. ft. (29 kg/m²).

MAXIMUM SINGLE SECTION SIZE

Consult factory.

OVERALL

Single sections may be joined together in the field for unlimited overall size. Field assembly and supporting structure are by others.

VARIATIONS

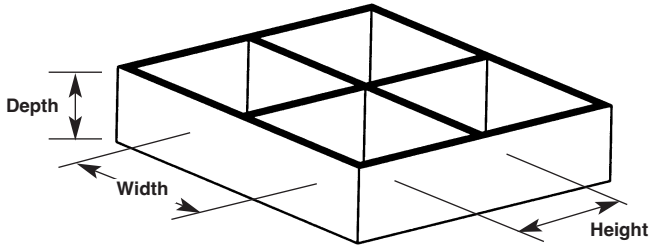
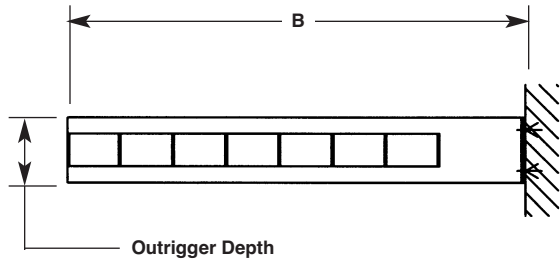
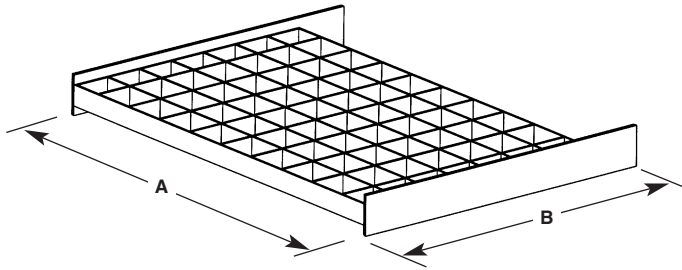
- Alternate blade spacing.
- Alternate blade installation angles.
- Outrigger Options: tapered bar, channel and tube.
- Fascia Options: channel, round and bullnose shapes.
- Installation brackets and hardware are available.
- Selection of finishes: baked enamel (modified fluoropolymer), Kynar, Pearledize 50 & 70, prime coat, clear and color anodize. (Some variation in anodize color consistency is possible.)

All variations are available at additional cost. Consult Reliable for other special requirements.

TAG	QTY.	ACTUAL SIZE		VARIATIONS
		A - WIDE	B - HIGH	
PROJECT		LOCATION		
ARCH./ENGR.		CONTRACTOR		
REPRESENTATIVE		DATE		



ECS EGGCRATE BLADE SUNSHADE HORIZONTALLY MOUNTED



Eggcrate Grid Dimensions

STANDARD CONSTRUCTION

EGGCRATE BLADE INFILL

6063T5 extruded aluminum with .125" (3.2) nominal thickness. Grid can be 2" to 12" (51 to 305) x 2" to 12" (51 x 305) x 1" to 6" (25 to 152) deep as specified.

OUTRIGGERS

Flat, non-tapered aluminum bar. Specify depth. Other outrigger designs are available at additional cost.

FASCIA

Available at additional cost.

INSTALLATION

Installation brackets and hardware by others.

CONSTRUCTION

All welded.

FINISH

Mill.

MINIMUM SIZE

12"w x 12"h (305 x 305).

APPROXIMATE SHIPPING WEIGHT

Varies depending on grid size.

MAXIMUM SINGLE SECTION SIZE

Consult factory.

OVERALL

Single sections may be joined together in the field for unlimited overall size. Field assembly and supporting structure are by others.

VARIATIONS

- Alternate blade spacing.
- Alternate blade installation angles.
- Outrigger Options: tapered bar, channel and tube.
- Fascia Options: channel, round and bullnose shapes.
- Installation brackets and hardware are available.
- Selection of finishes: baked enamel (modified fluoropolymer), Kynar, Pearledize 50 & 70, prime coat, clear and color anodize. (Some variation in anodize color consistency is possible.)

All variations are available at additional cost. Consult Reliable for other special requirements.

Dimensions in inches, parenthesis () indicate millimeters.

TAG	QTY.	ACTUAL SIZE		EGGCRATE GRID			OUTRIGGER DEPTH	VARIATIONS
		A - WIDE	B - HIGH	WIDE	HEIGHT	DEPTH		

PROJECT
ARCH./ENGR.
REPRESENTATIVE

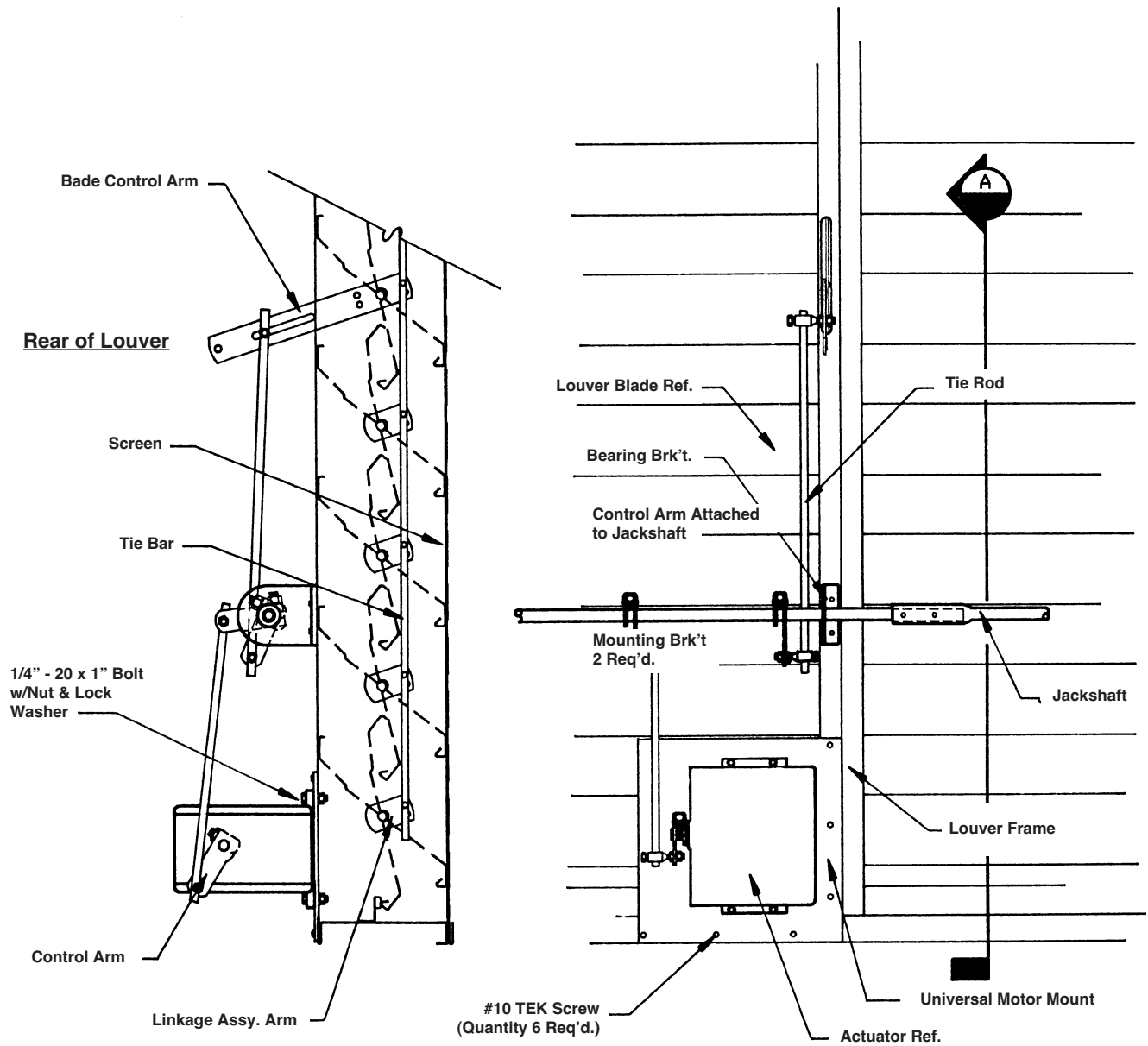
LOCATION
CONTRACTOR
DATE



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MOVABLE LOUVER DETAILS

ELECTRIC OPERATOR (MA418 Actuator shown)



Bade Control Arm

Rear of Louver

Screen

Tie Bar

1/4" - 20 x 1" Bolt w/Nut & Lock Washer

Control Arm

Linkage Assy. Arm

Louver Blade Ref.

Bearing Brk't.

Control Arm Attached to Jackshaft

Mounting Brk't 2 Req'd.

Tie Rod

Jackshaft

Louver Frame

Universal Motor Mount

Actuator Ref.

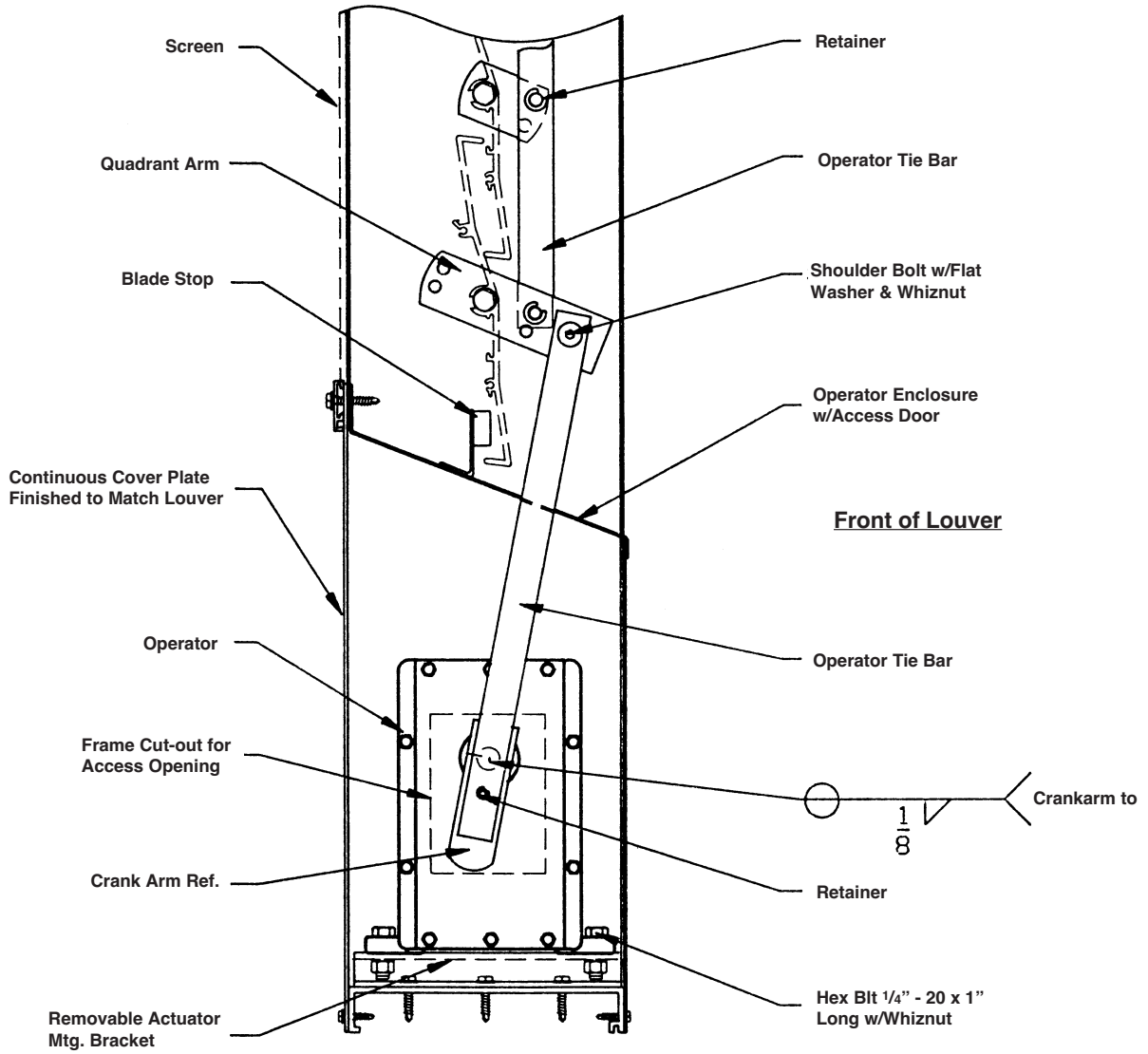
#10 TEK Screw (Quantity 6 Req'd.)

A SECTION THRU
N.T.S. SECTION

PARTIAL REAR ELEVATION
N.T.S. ELEVATION

DWG. NO.
60-020685-00A

**CONCEALED MOTOR
(MA418 Actuator shown)**



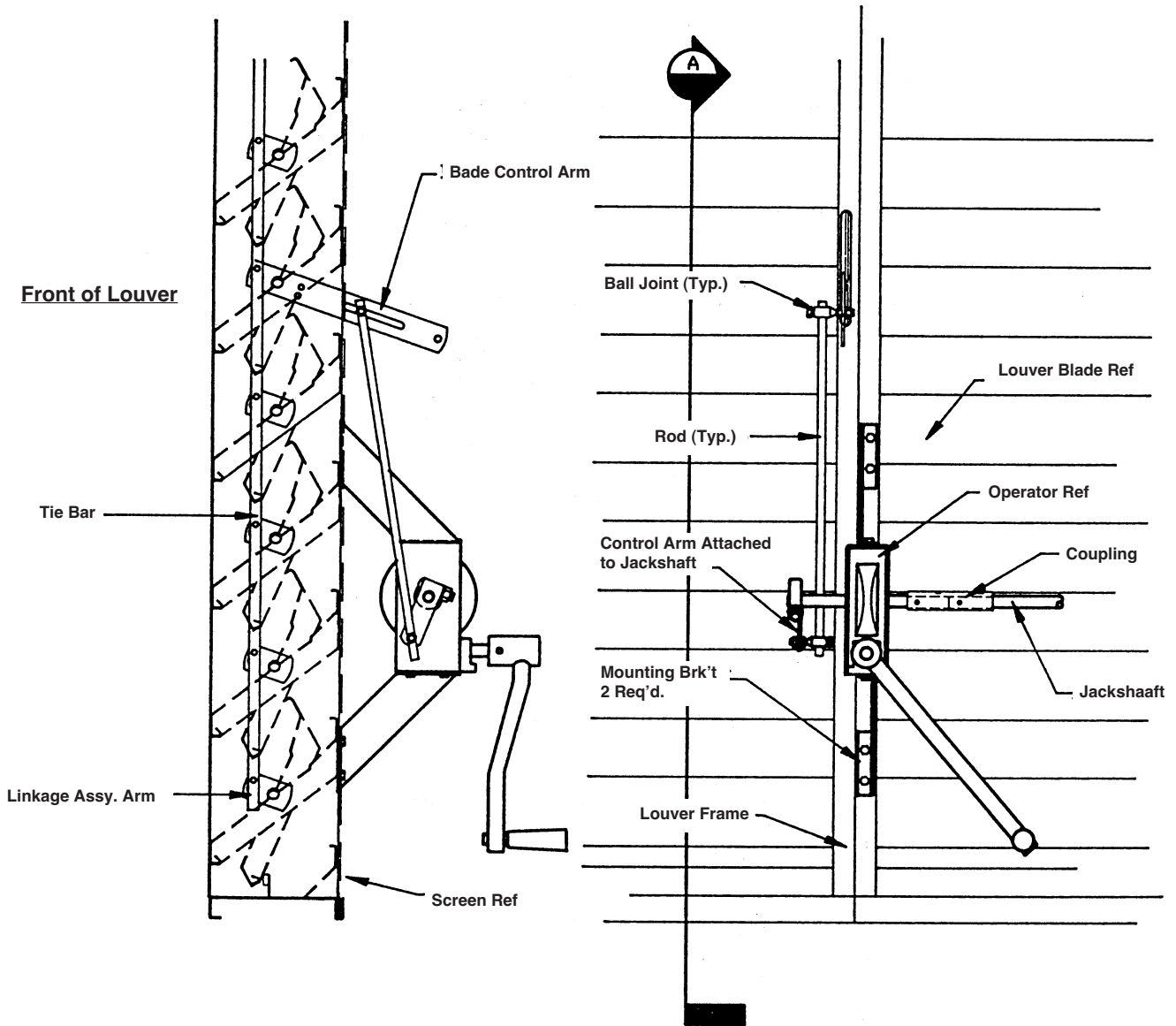
DWG. NO.
60-020686-00A



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MOVABLE LOUVER DETAILS

WORMGEAR OPERATOR

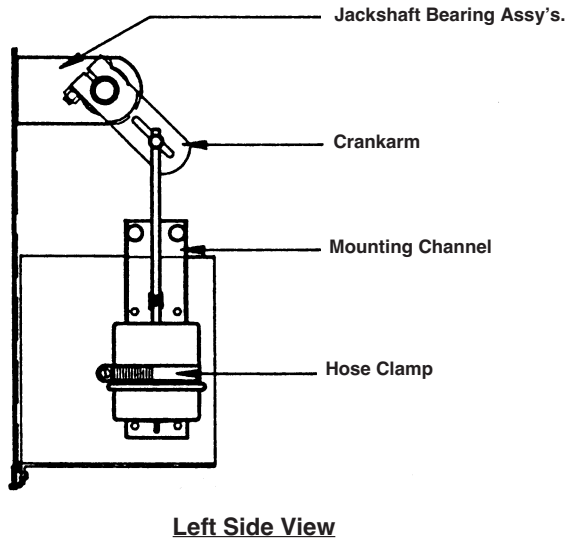
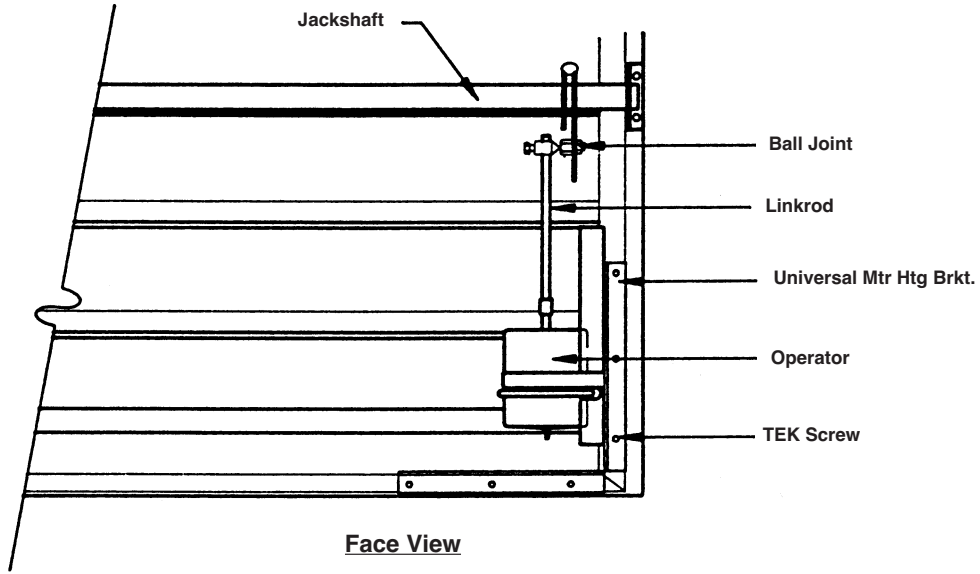


A SECTION THRU
N.T.S. SECTION

PARTIAL REAR ELEVATION
N.T.S. ELEVATION

DWG. NO.
60-020687-00A

PNEUMATIC OPERATOR

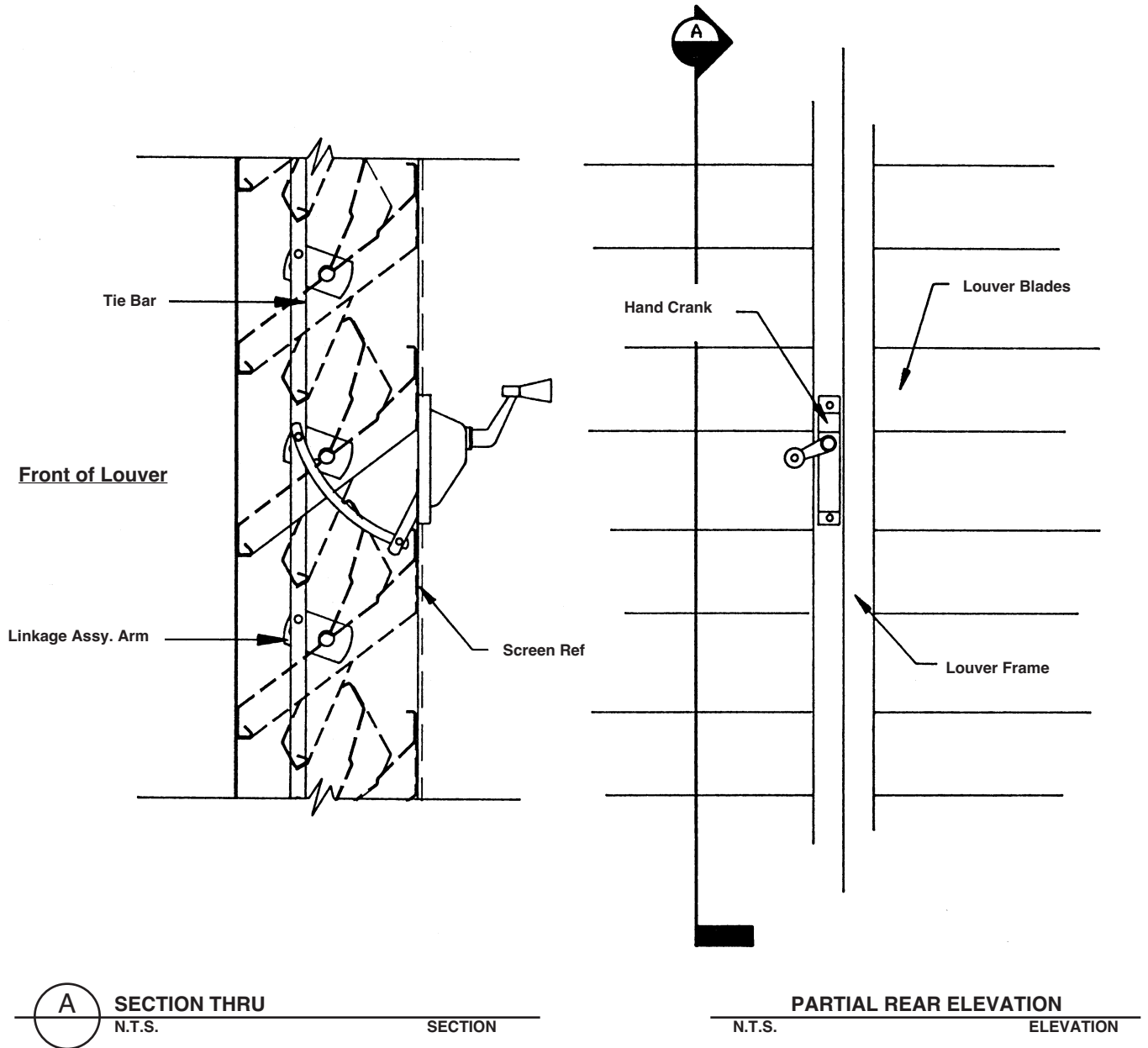


DWG. NO.
60-020688-00A



MOVABLE LOUVER DETAILS

SMALL HAND CRANK OPERATOR

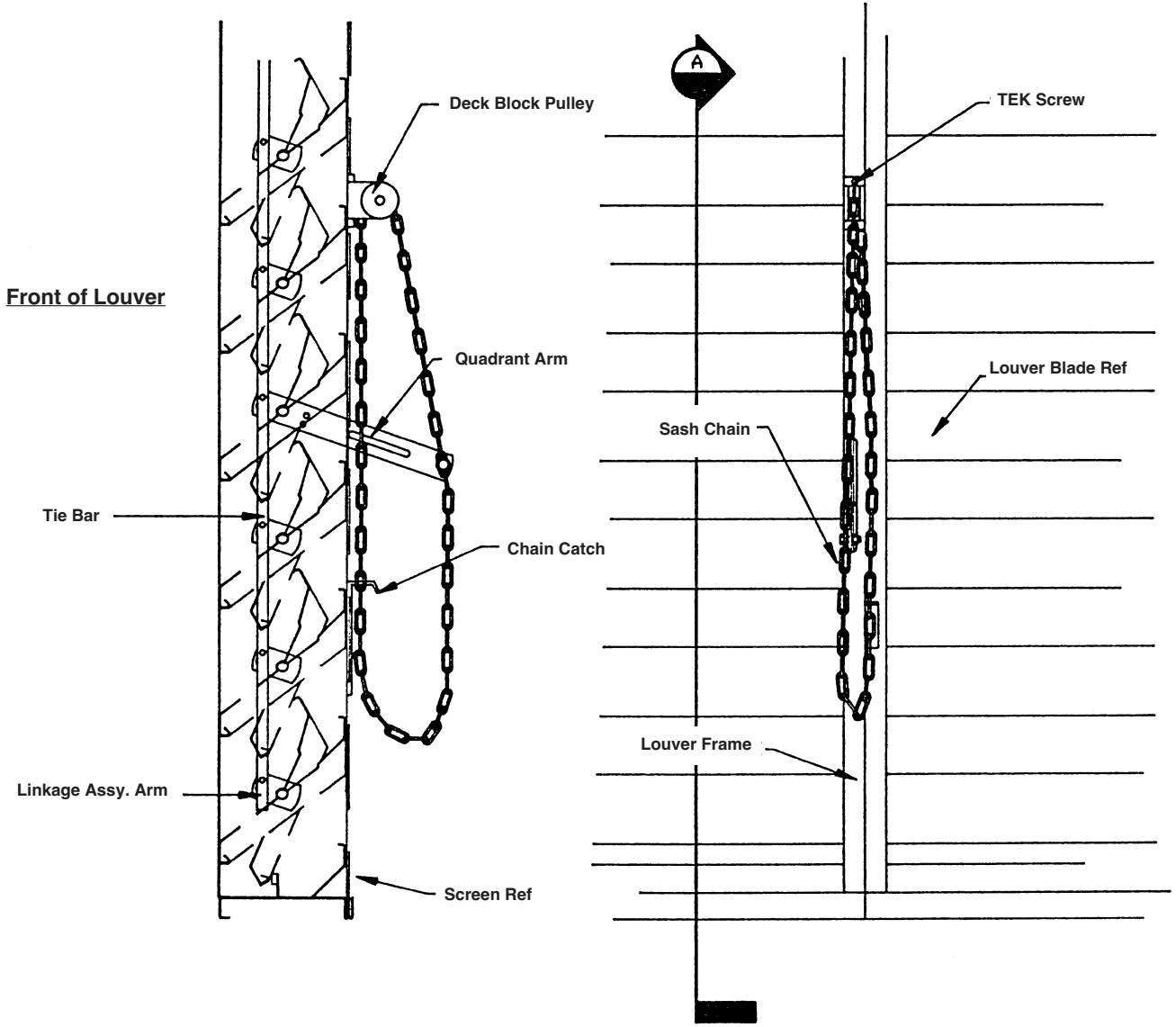


DWG. NO.
60-020689-00A

RELIABLE

**MOVABLE
LOUVER
DETAILS 3**

LOUVER CHAIN OPERATOR



A

SECTION THRU
N.T.S.

SECTION

PARTIAL REAR ELEVATION

N.T.S.

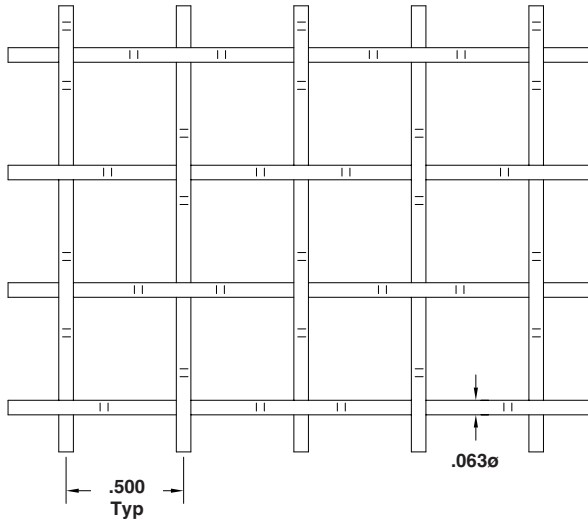
ELEVATION

DWG. NO.
60-020690-00A

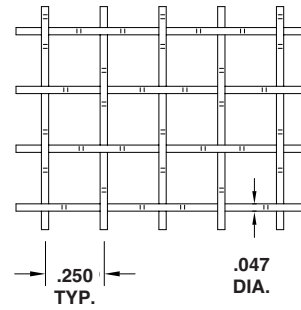




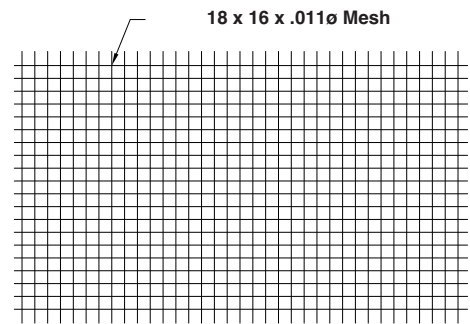
SCREEN DETAILS



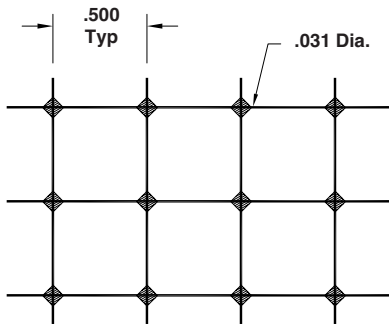
WAMIC2
WOVEN ALUMINUM MESH INTERCRIMPED



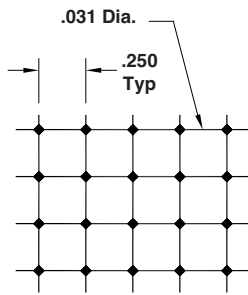
WAMIC4
WOVEN ALUMINUM MESH INTERCRIMPED



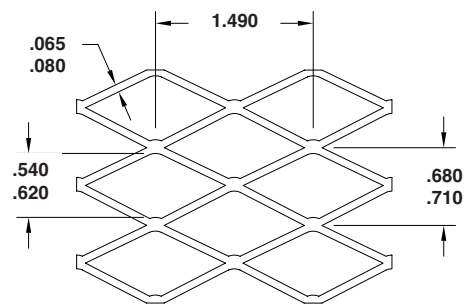
WOVEN INSECT SCREEN
WIS = FIBERGLASS
WAS = ALUMINUM



WGH2
1/2" (13) GALVANIZED
HARDWARE CLOTH



WGH4
1/4" (6) GALVANIZED
HARDWARE CLOTH



WBS-1
ALUMINUM BIRD SCREEN
FINISHED THICKNESS
OF WBS-1 IS .040

EFFECTS OF SCREEN ON PRESSURE DROP

The following information is to be used to determine the effects of screen and filters on pressure drop when installed on any louver. Multiply the pressure drop of any louver at a given velocity times

the number below, based on which type of screen is used. This will give the new pressure drop (total for louver and screen) at that velocity.

For the screens, the following may be used:

1/2" x 1/2" (13 x 13) bird screen (76.4% open area)	1.03 multiplier
Expanded metal bird screen (72% open area)	1.12 multiplier
18-16 mesh insect screen (64.4% open area)	1.16 multiplier

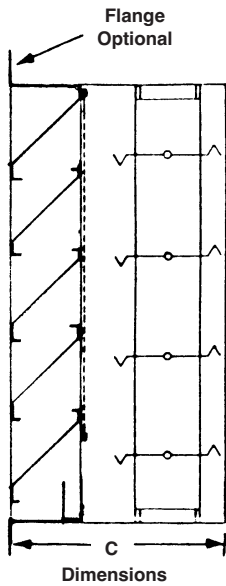
AMCA changed their testing procedure for louvers to be tested without any type of screen so all louver manufacturers will be testing comparable features.



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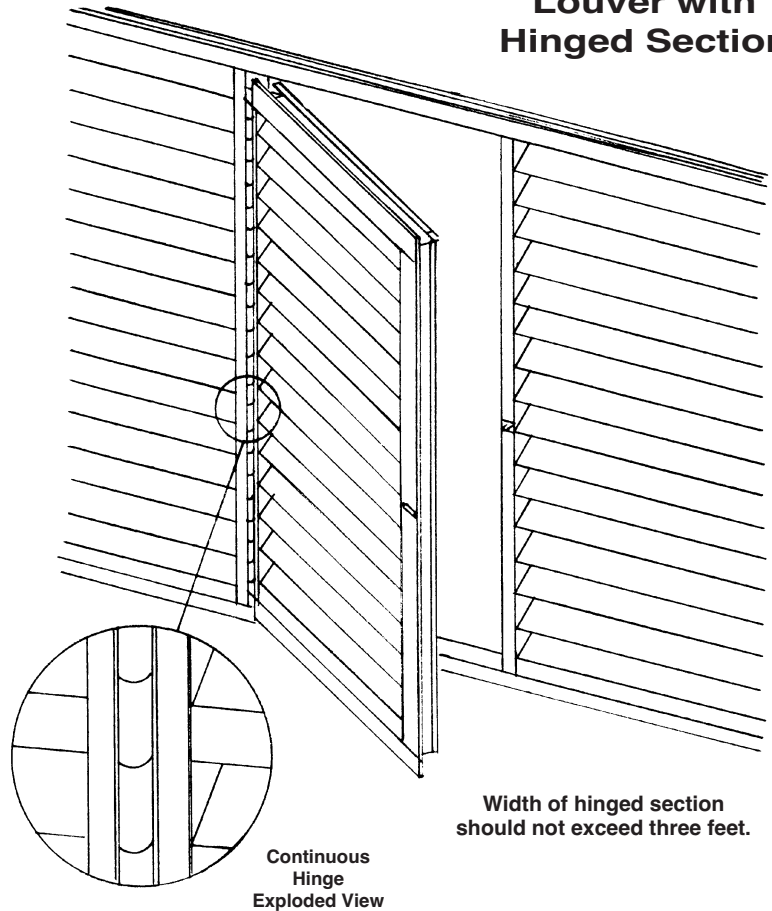
SPECIAL DETAILS – DWG. NO. 3731

Typical Combination Unit

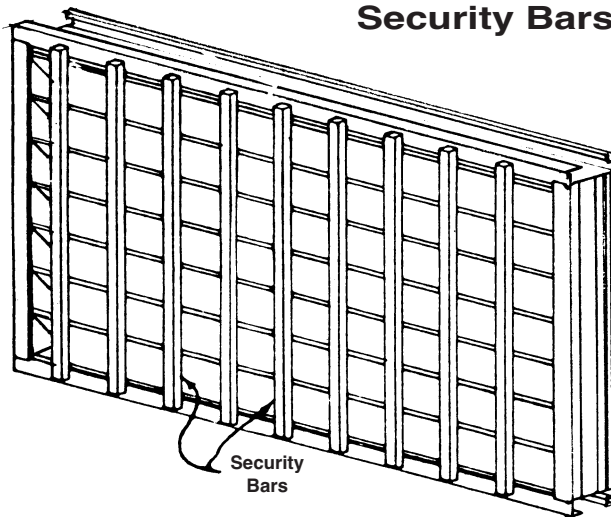


Any two Reliable products may be combined in a common sleeve. Include "Dimension C" with order.

Louver with Hinged Section

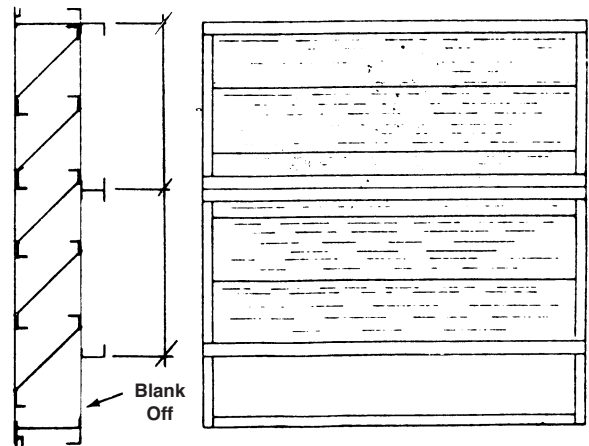


Security Bars



Security Bars are welded to rear of louver. Galvanized steel security bars available in 1/2" x 1/2" and 3/4" x 1/2". Aluminum security bars available in 3/4" x 1/2".

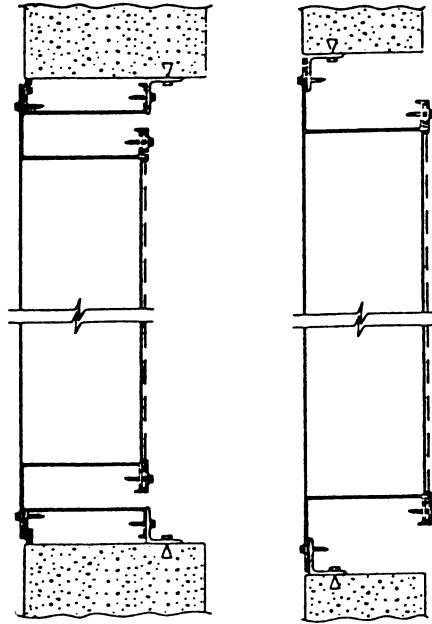
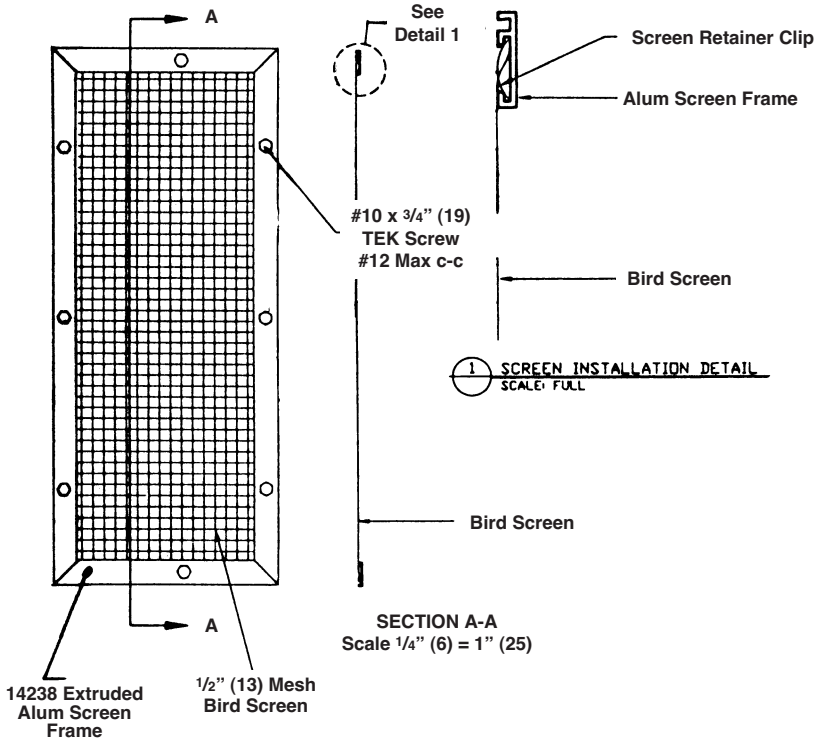
Filter Racks



Filter racks available for 1" or 2" filters. When ordering specify filter depth. Unused bottom portion blanked off with .040 alum. sheet. (Filters furnished by others).

Bird Screen Detail

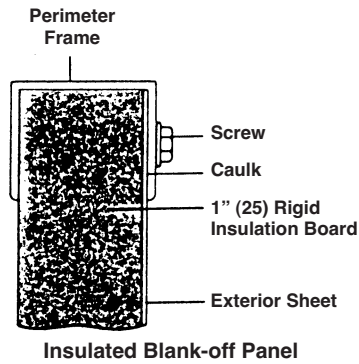
Subframe Installation



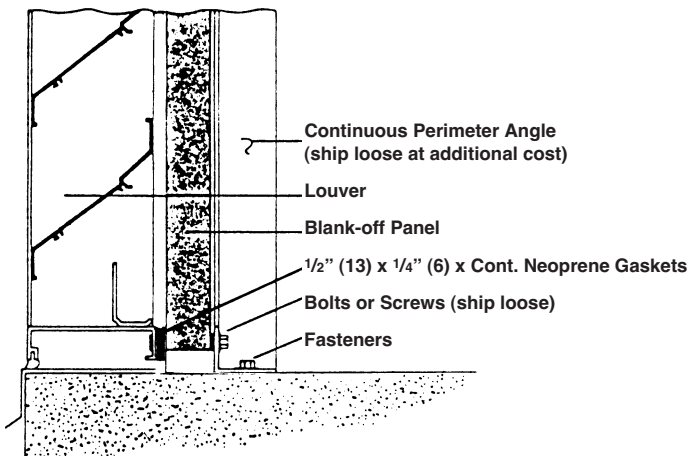
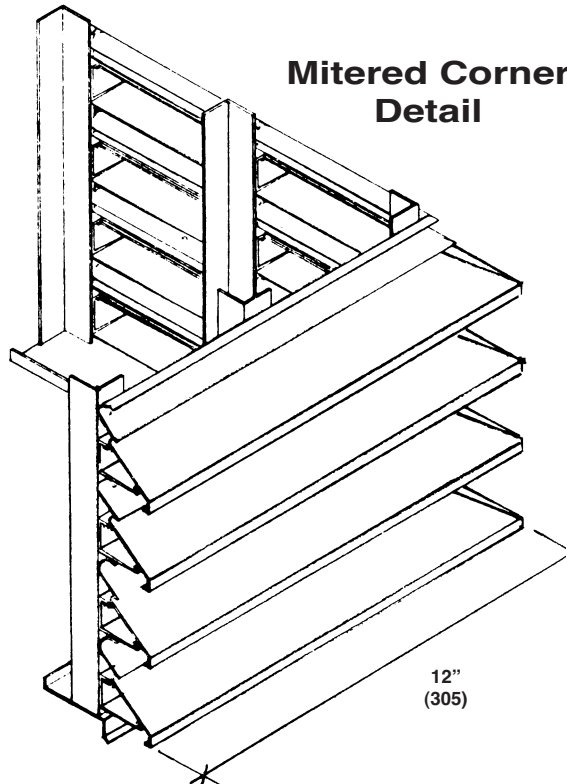
**Channel
Subframe**

**Angle
Subframe**

**Blankoff Panel
Installation**



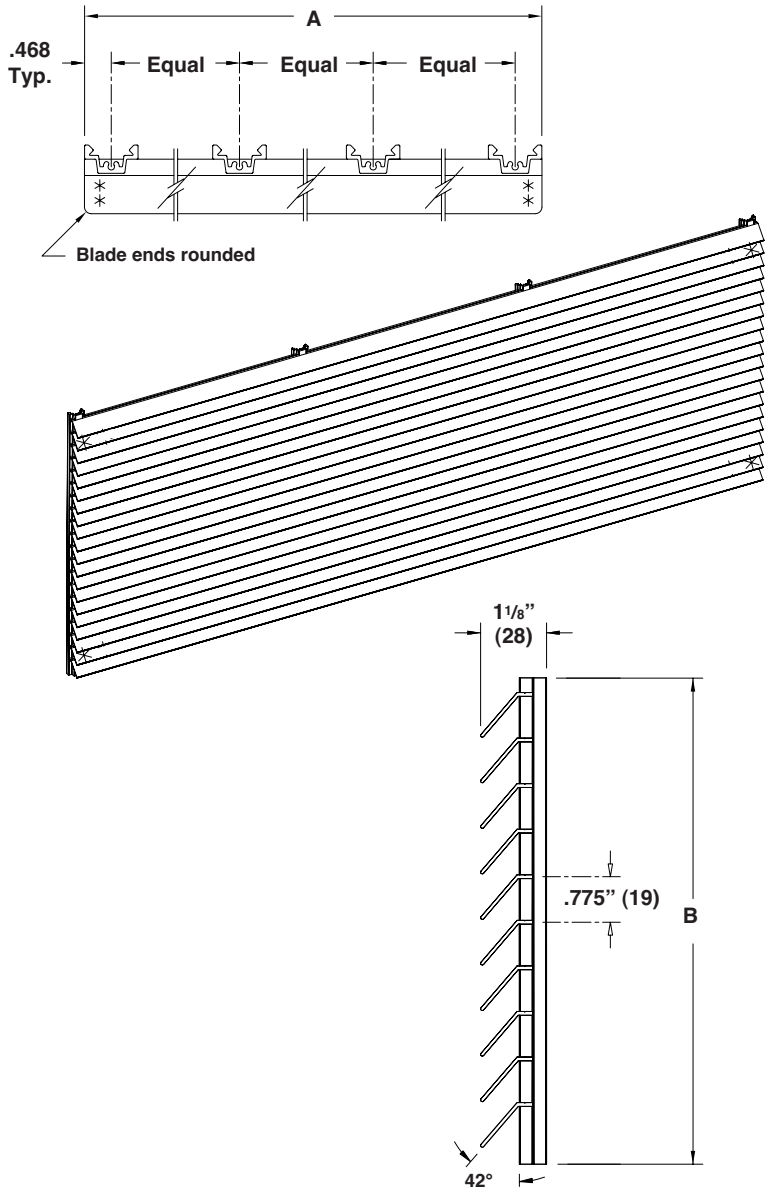
**Mitered Corner
Detail**



Insulated Blank-off Panel Installation



AEL - 42



STANDARD CONSTRUCTION

FRAME
 Extruded aluminum; 6063-T5; clear.
 Anodized or _____
 42° architectural decorative louver face and end views for illustration purposes only.
 A = _____
 B = _____
 A as required, not to exceed 180" (4512).
 B as required, not to exceed 84" (2134).
 Brace bar as required, not to exceed 16" (406).

BLADES
 Standard blade thickness .040 with a variety of perimeter frames available. Heavier blades available. Although the AEL-42 is primarily used in PTAC applications, it can also be constructed as a mechanical screen or a variety of aesthetic pleasing thinline applications.

VARIATIONS

Variations to the basic design of the louver are available at additional cost. They include:

- Frames of choice, see frame submittal sheet.
- 1" (25) blade spacing.
- Exterior mounting holes as required.

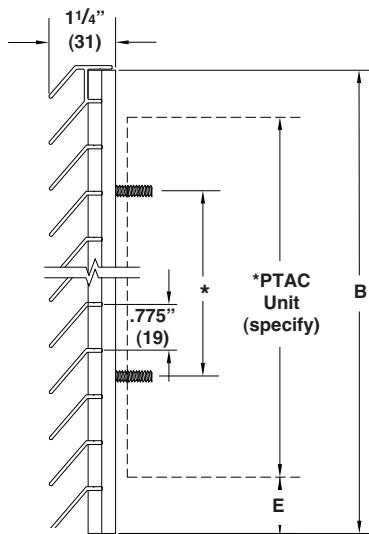
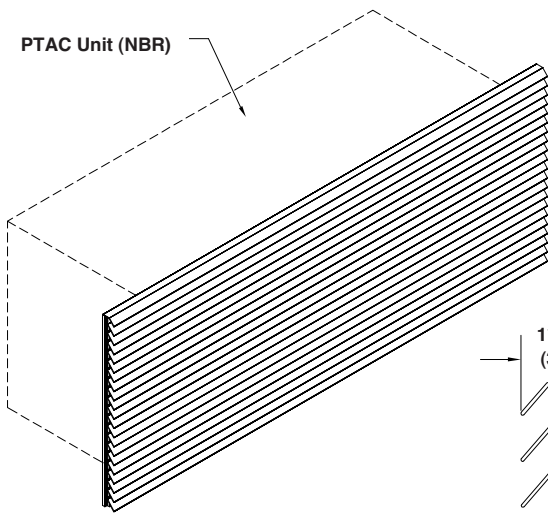
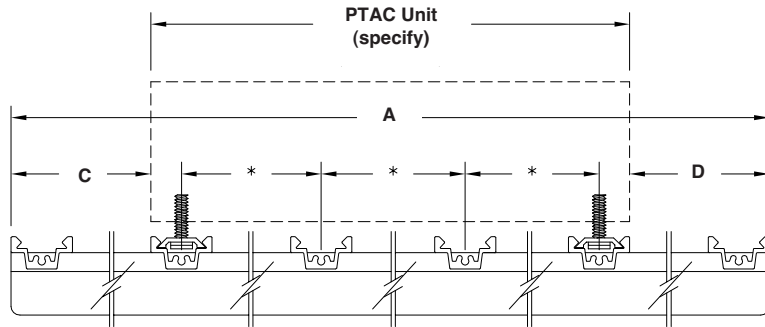
*Consult Reliable for other special requirements.

Dimensions in inches, parenthesis () indicate millimeters.

TAG	QTY.	ACTUAL SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE	



AEL-42 PTAC APPLICATION



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC thru wall application

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
 - Using drain kits
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____

Notes:

1. Face view for illustration purposes only.
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet.
 3. Dimensions in inches, parenthesis () indicate millimeters.
- *Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



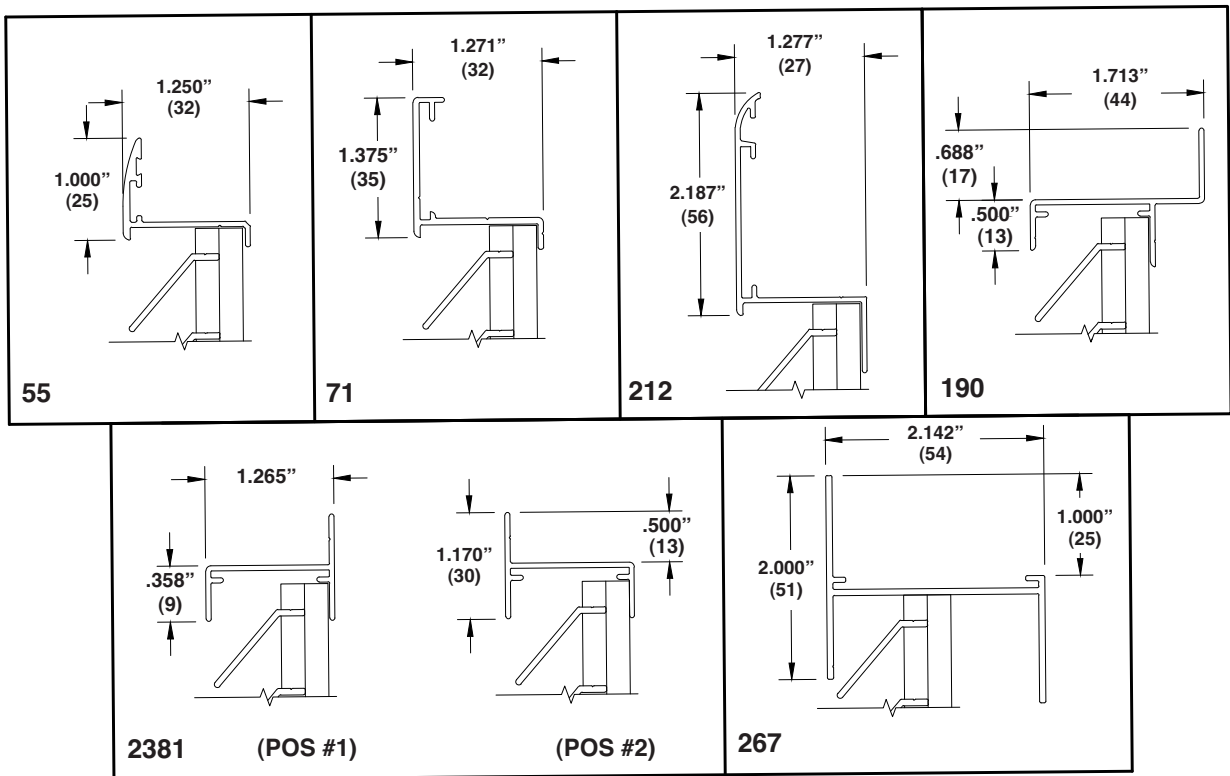
FRAMES

ARCHITECTURAL FRAMES FOR AEL SERIES LOUVERS

OPTIONS

- | | |
|---|---|
| <input type="checkbox"/> Clear or anodized finish | <input type="checkbox"/> Pearledized 50 or 70 |
| <input type="checkbox"/> Prime coat | <input type="checkbox"/> Kynar 70% |
| <input type="checkbox"/> Baked Enamel (Kynar 50%) | |

Flange Type Frames



Note: Dimensions in inches, parenthesis () indicate millimeters

ANY COMBINATION OF AEL LOUVERS AND FRAMES FOR USE WITH WALL AND WINDOW SECTIONS

PROJECT ARCH./ENGR. REPRESENTATIVE	LOCATION CONTRACTOR DATE
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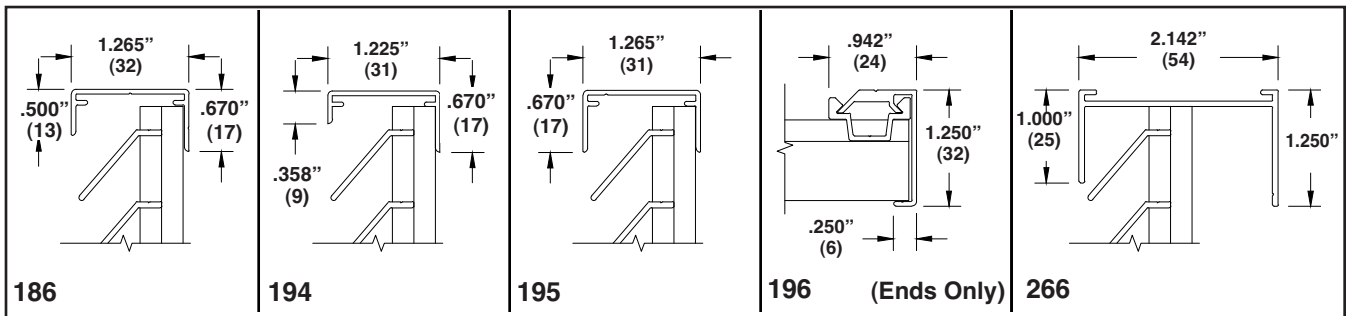
FRAMES

ARCHITECTURAL FRAMES FOR AEL SERIES LOUVERS

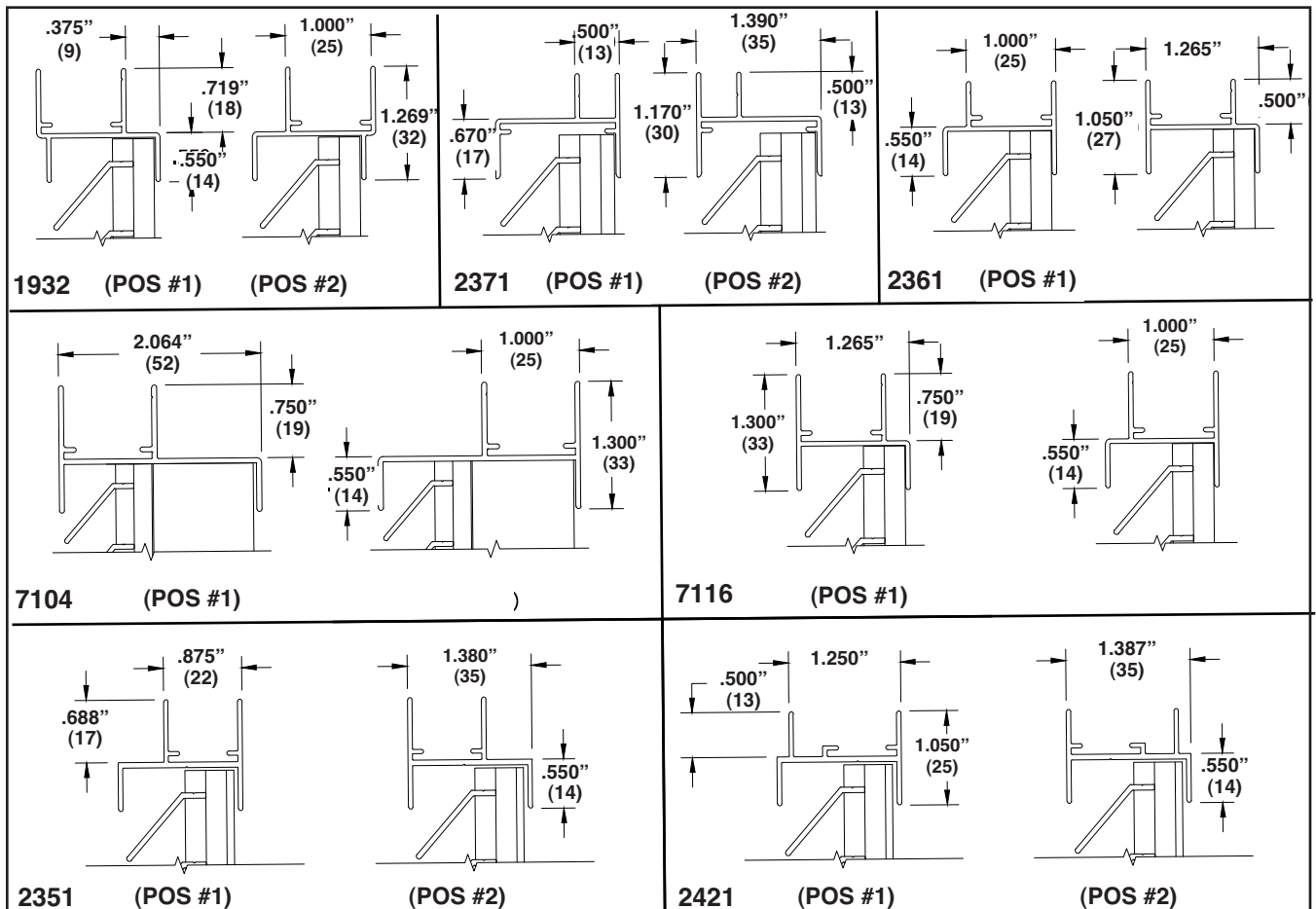
OPTIONS

- Clear or anodized finish
 Prime coat
 Baked Enamel (Kynar 50%)
 Pearledized 50 or 70
 Kynar 70%

Channel Type Frames



Glazing Type Frames

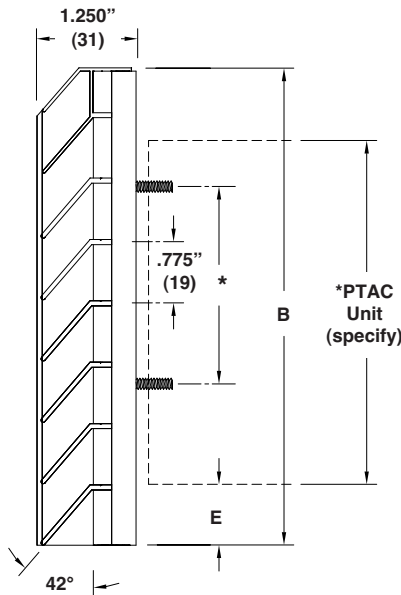
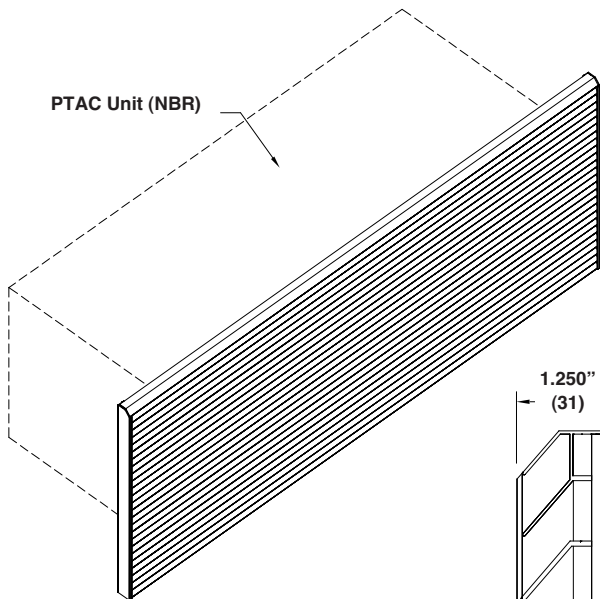
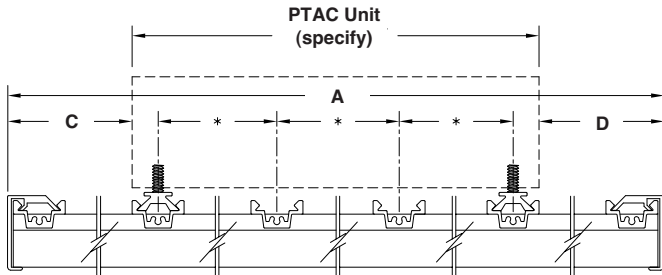


Note: Dimensions in inches, parenthesis () indicate millimeters

ANY COMBINATION OF AEL LOUVERS AND FRAMES FOR USE WITH WALL AND WINDOW SECTIONS



AEL - 42 W/ 196 END FRAMES



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/196 frame

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
- Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

Notes:

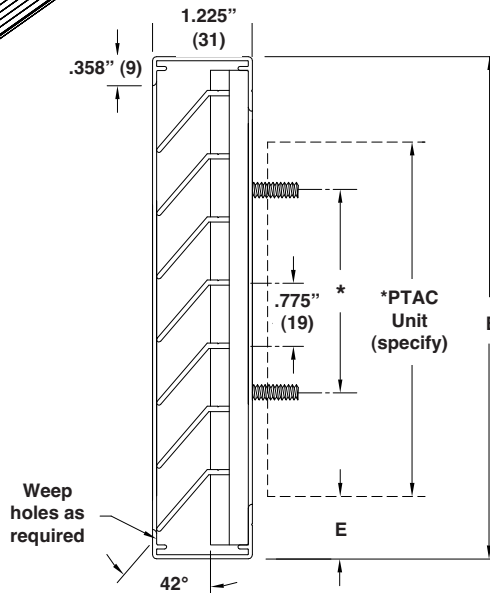
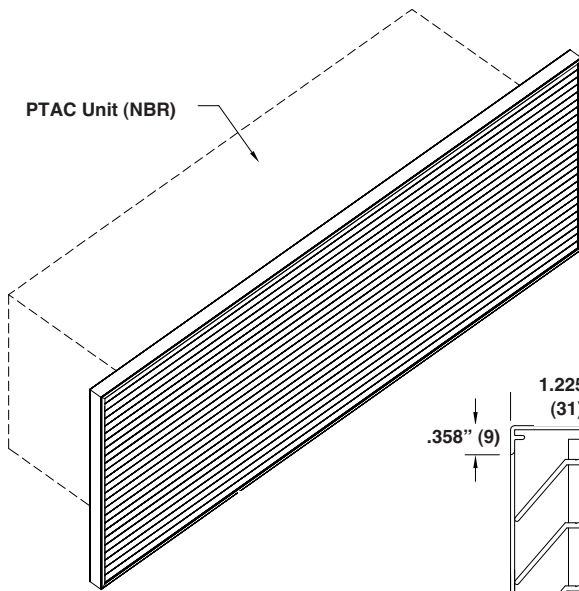
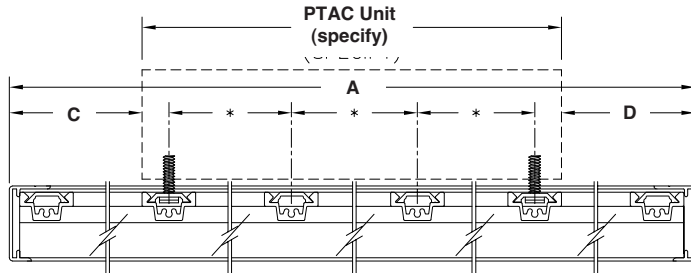
1. Face view for illustration purposes only
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet
 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



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AEL - 42 W/ 194 END FRAMES



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/194 frame

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
 - Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

Notes:

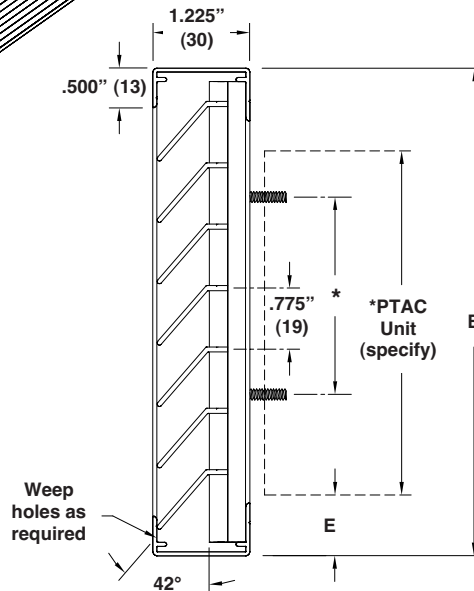
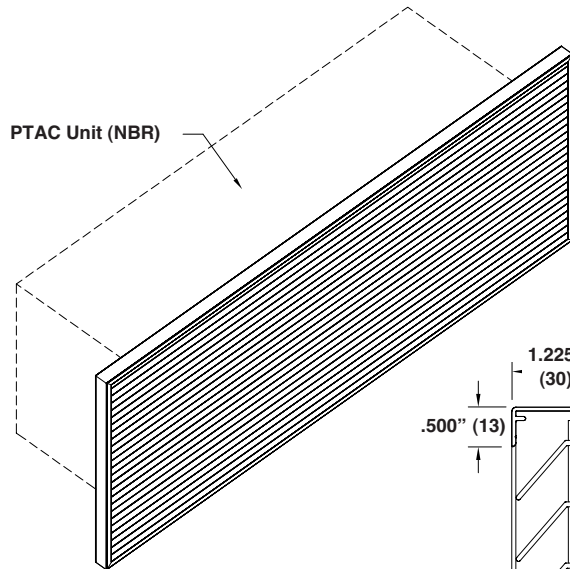
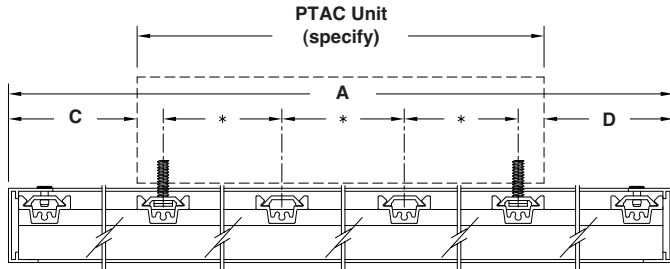
1. Face view for illustration purposes only
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet
 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



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AEL-42 W/ 186 FRAME



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/186 frame

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
- Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

Notes:

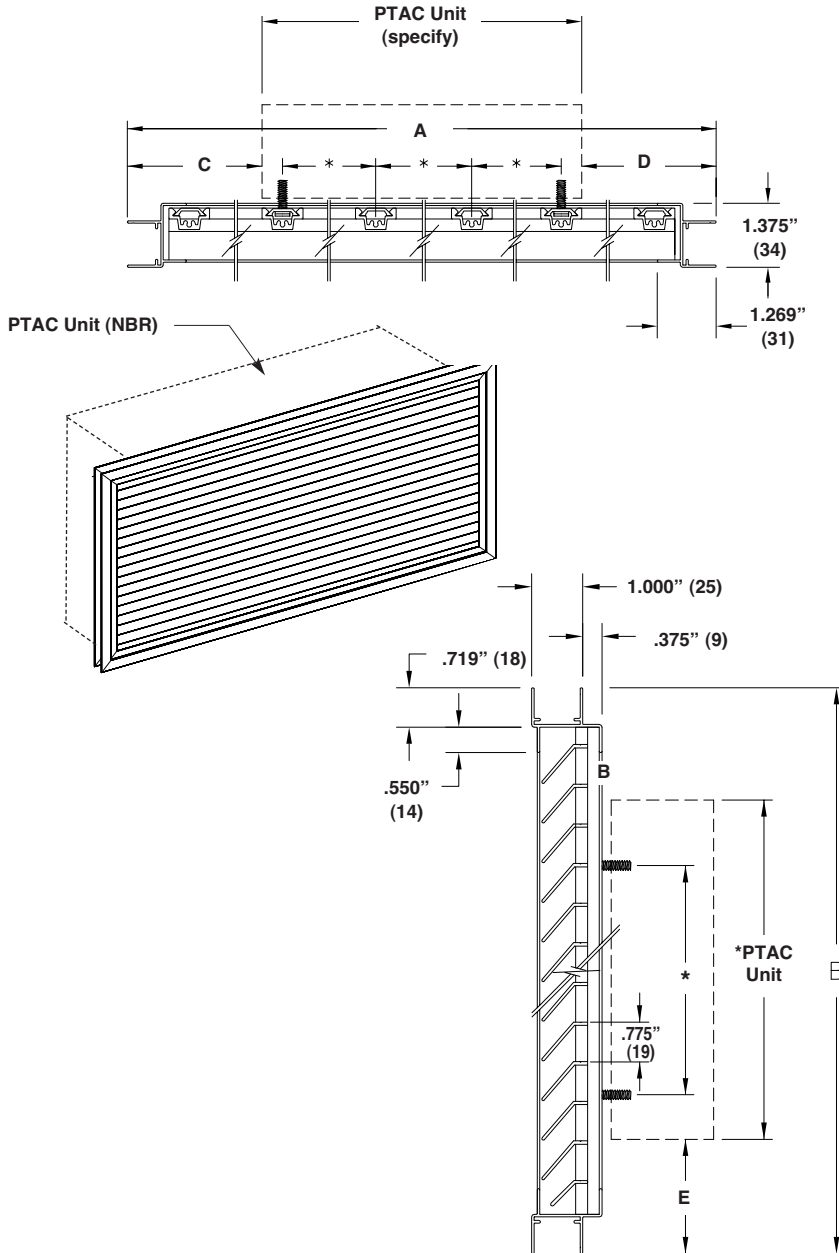
1. Face view for illustration purposes only
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 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



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AEL - 42 W/ 1932 FRAME (POSITION #1)



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/1932 frame post #1

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
- Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

Notes:

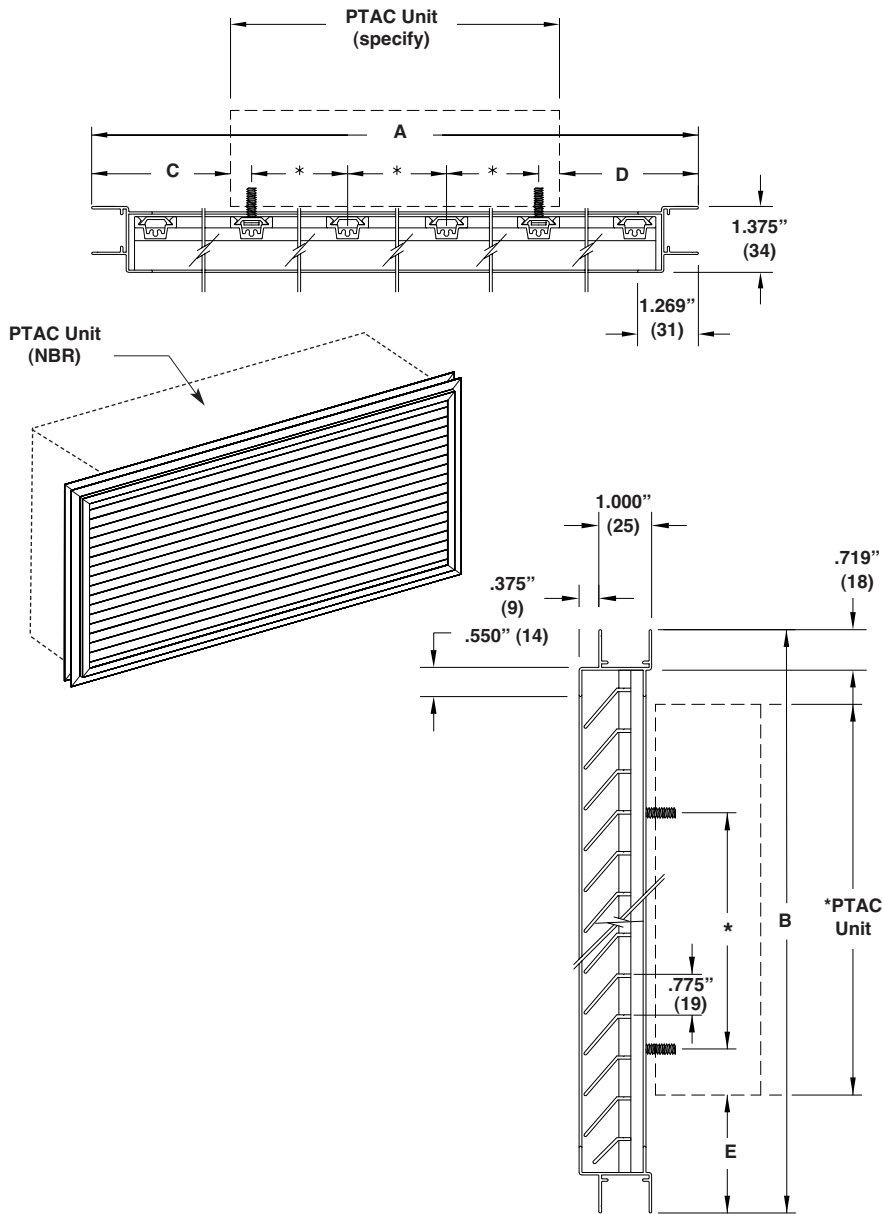
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 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet
 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



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AEL - 42 W/ 1932 FRAME (POSITION #2)



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/1932 frame post #2

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
- Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

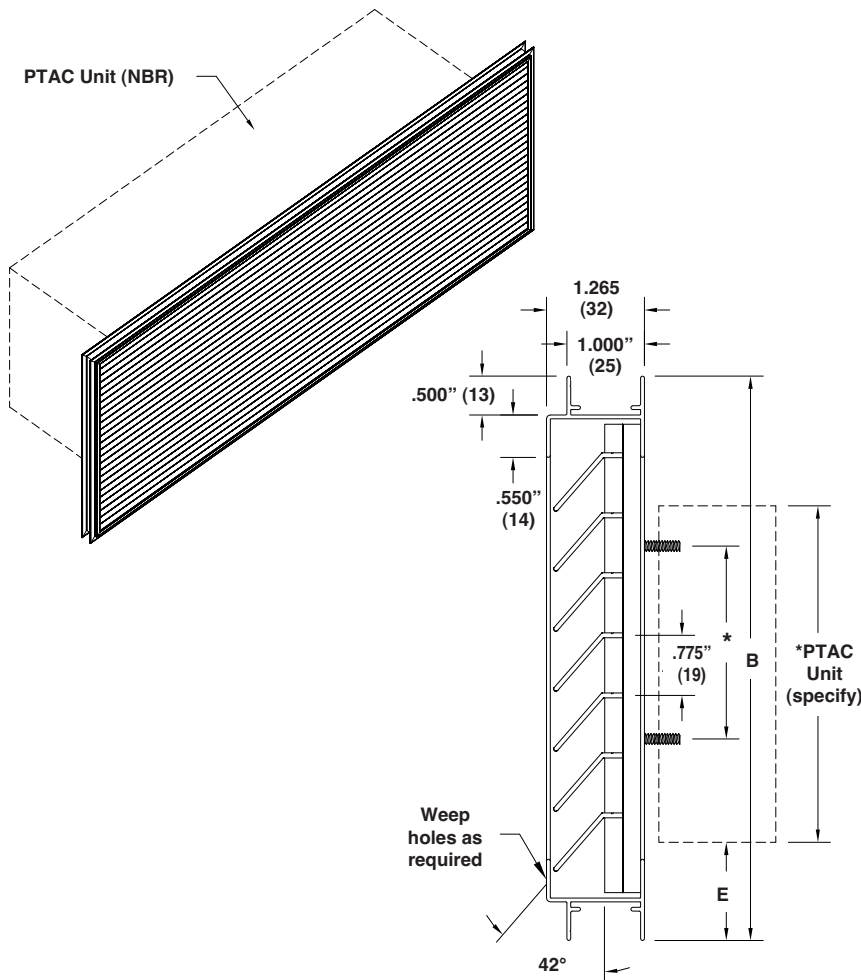
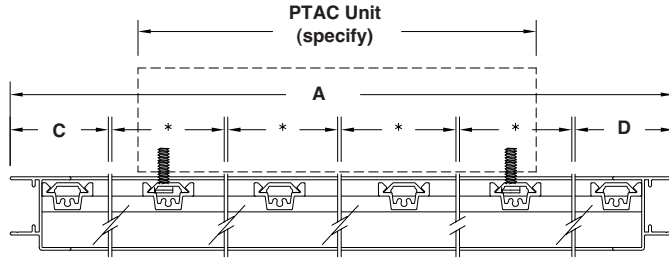
Notes:

1. Face view for illustration purposes only
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet
 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



AEL - 42 W/ 2361 FRAME (POSITION #1)



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/2361 frame post #1

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
 - Using drain kits
 - Left or Right
 - Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

Notes:

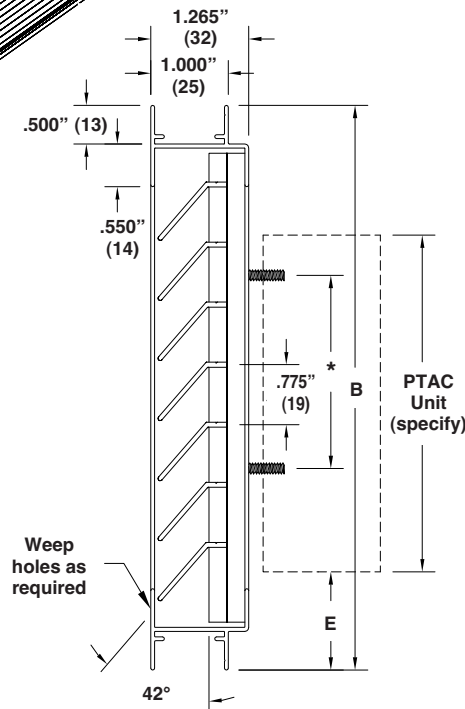
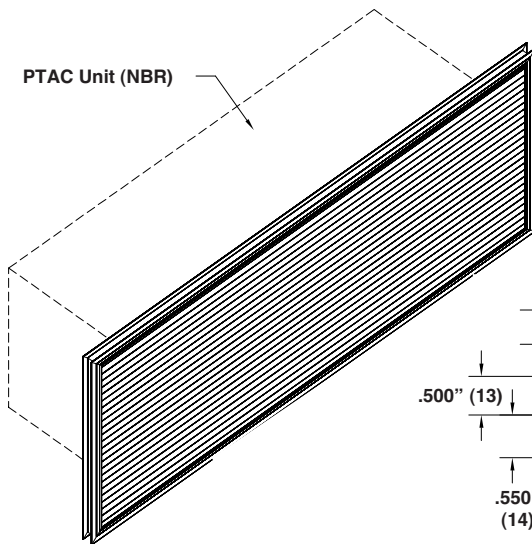
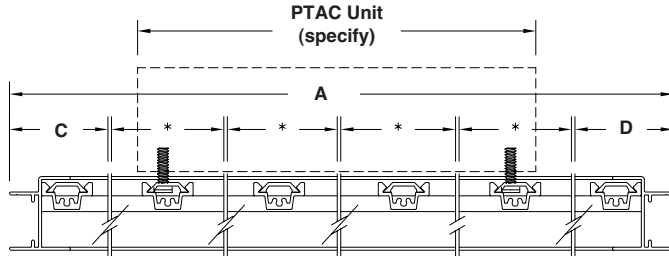
1. Face view for illustration purposes only
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 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



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AEL - 42 W/ 2361 FRAME (POSITION #2)



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/2361 frame post #2

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
- Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

Notes:

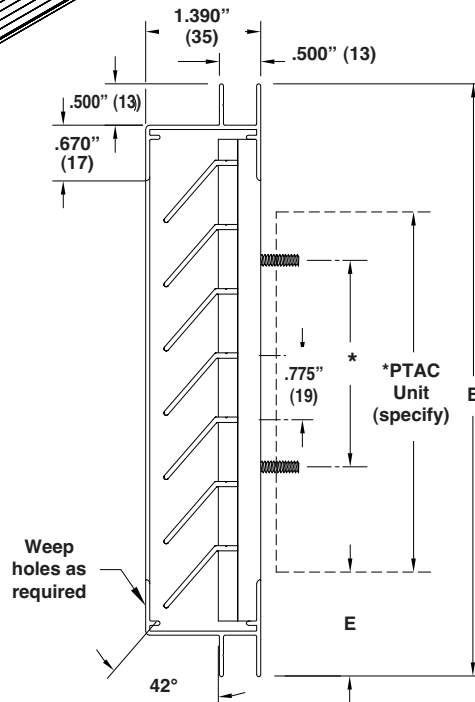
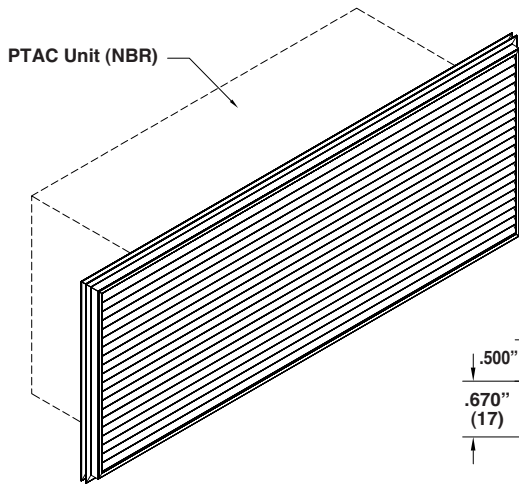
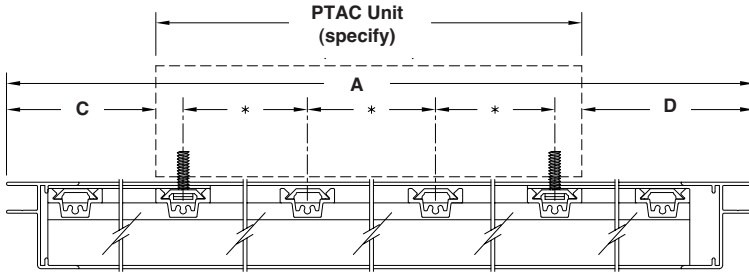
1. Face view for illustration purposes only
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet
 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



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AEL - 42 W/ 2371 FRAME (POSITION #1)



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/2371 frame post #1

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
 - Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

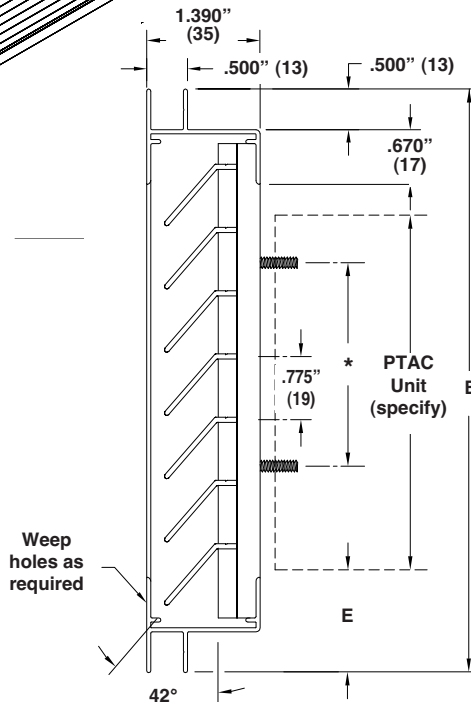
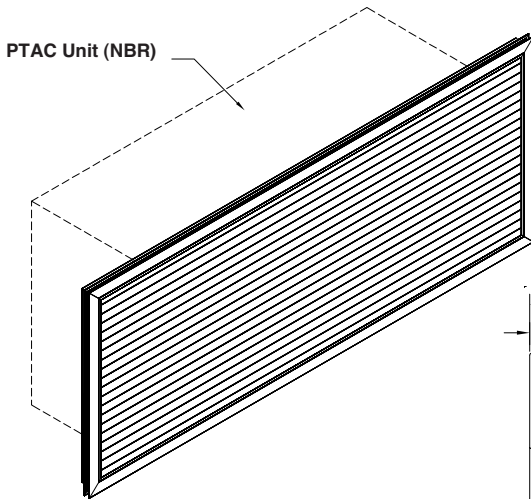
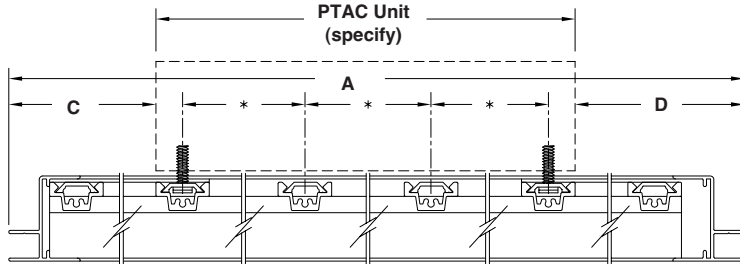
Notes:

1. Face view for illustration purposes only
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet
 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



AEL - 42 W/ 2371 FRAME (POSITION #2)



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/2371 frame post #2

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
 - Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

Notes:

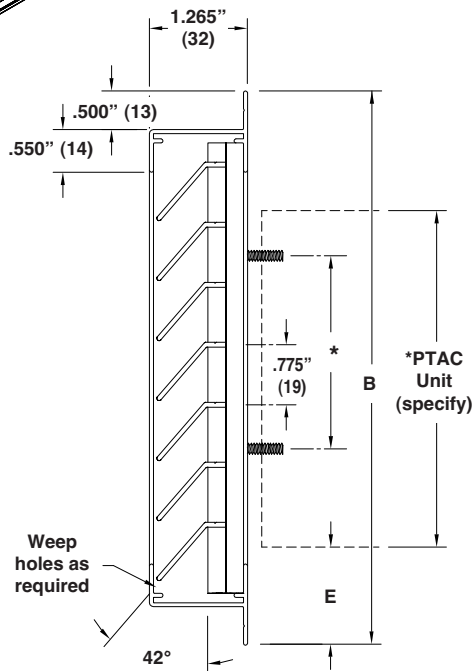
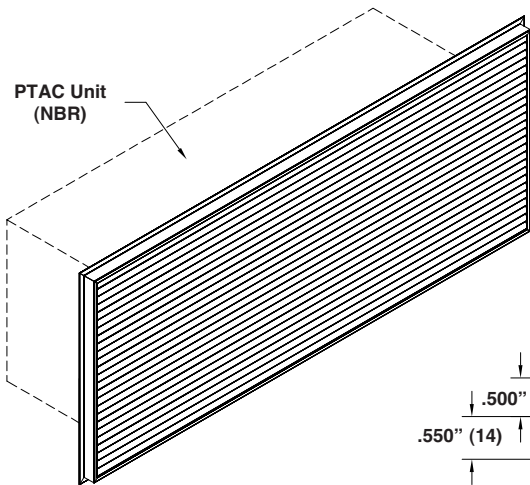
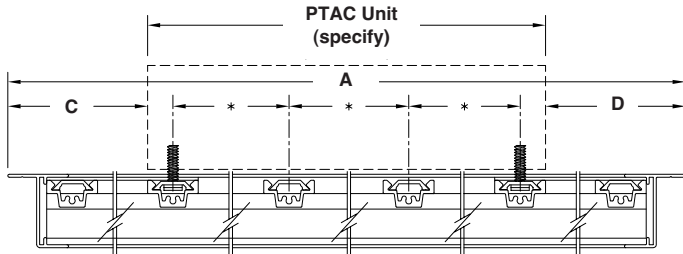
1. Face view for illustration purposes only
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet
 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

AEL - 42 W/ 2381 FRAME (POSITION #1)



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/2381 frame post #1

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
 - Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

Notes:

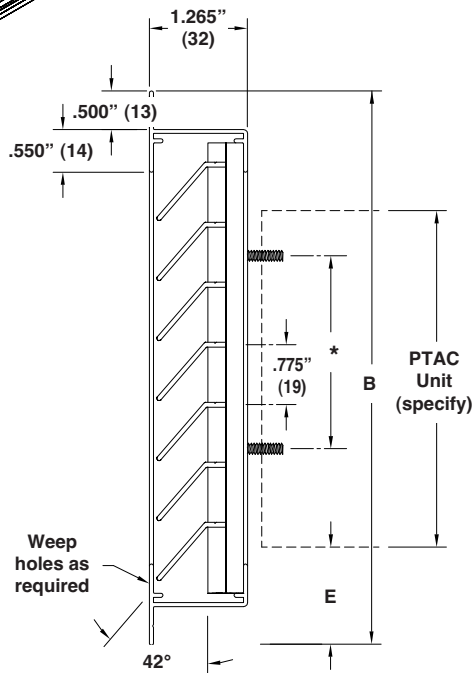
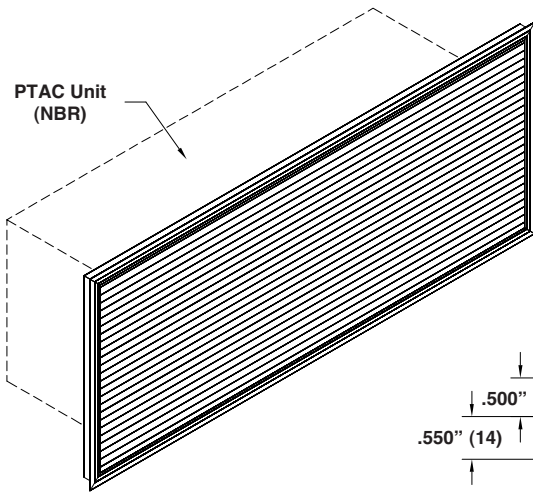
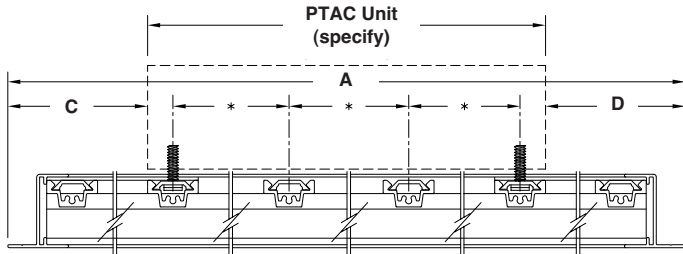
1. Face view for illustration purposes only
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet
 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



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AEL - 42 W/ 2381 FRAME (POSITION #2)



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/2381 frame post #2

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
 - Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

Notes:

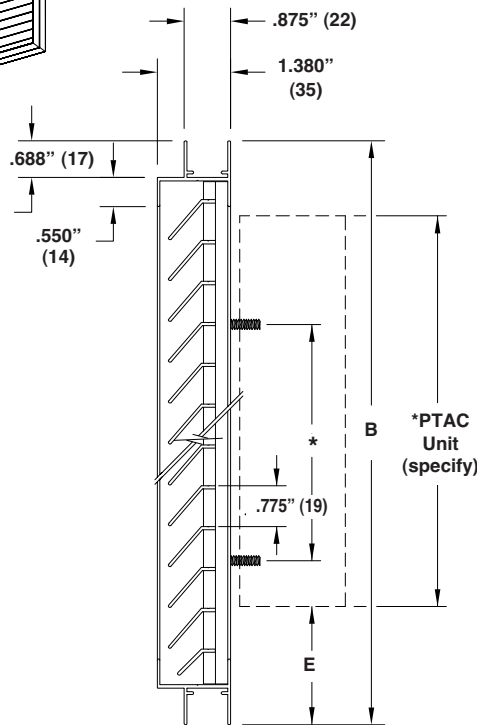
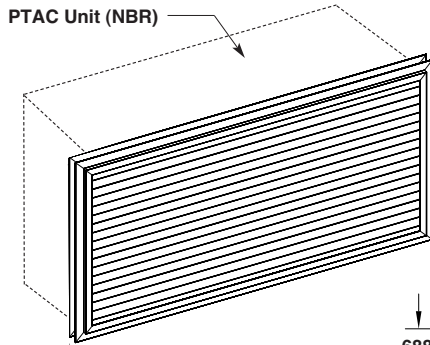
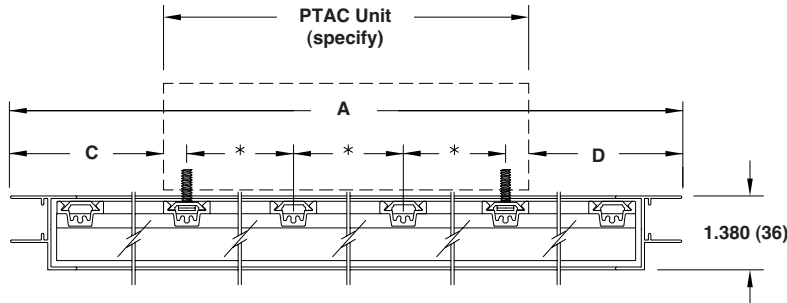
1. Face view for illustration purposes only
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet
 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



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AEL - 42 W/ 2351 FRAME (POSITION #1)



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/2351 frame post #1

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
 - Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

Notes:

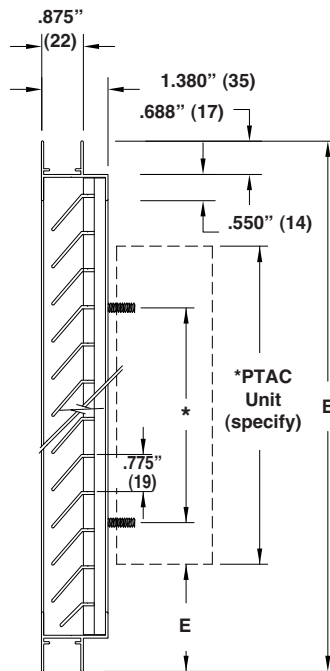
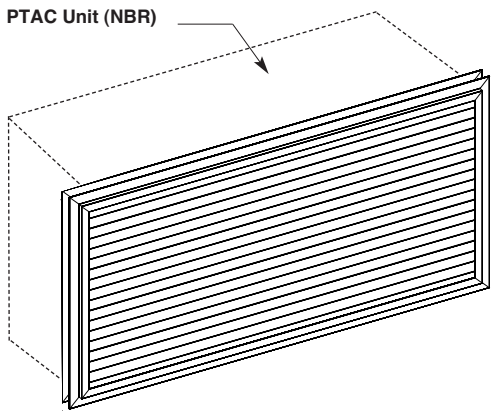
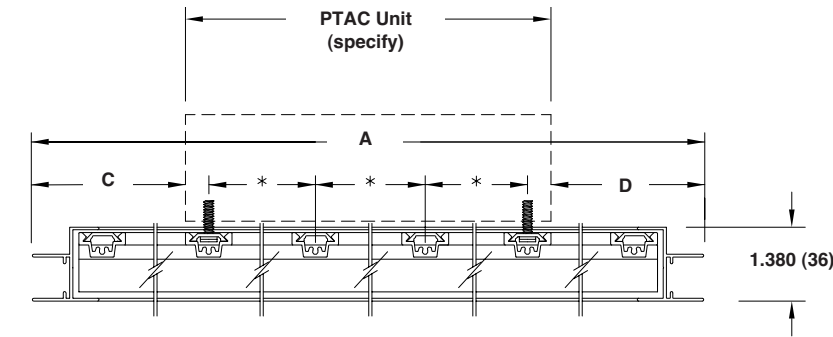
1. Face view for illustration purposes only
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet
 3. Dimensions in inches, parenthesis () indicate millimeters
- * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



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AEL - 42 W/ 2351 FRAME (POSITION #2)



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver PTAC wall application w/2351 frame post #2

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040 (1) aluminum sheet
- .040 (1) aluminum (1 side) with 1" (25) insulation
- .040 (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
- Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

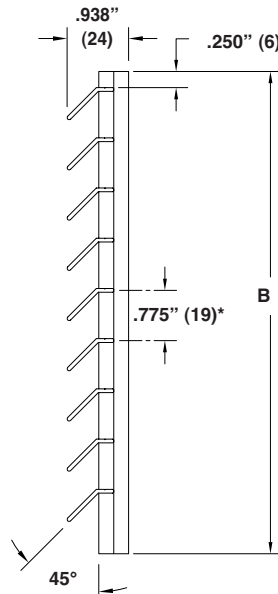
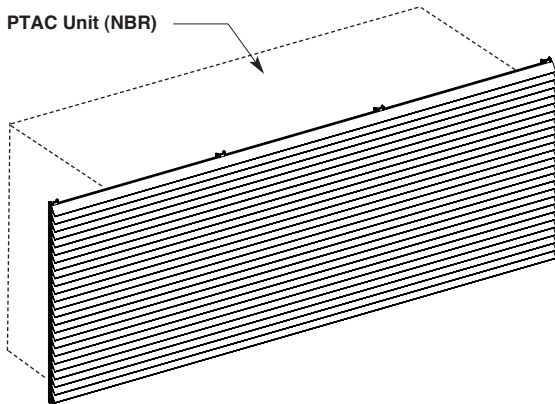
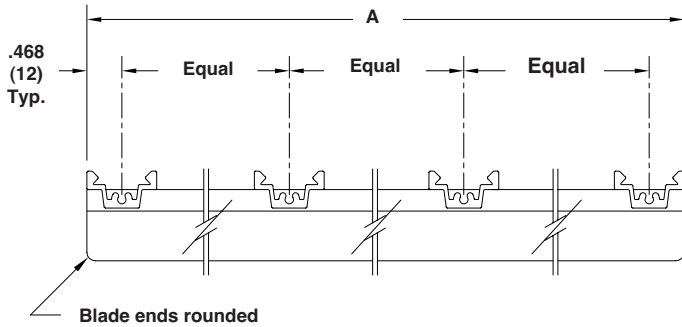
Notes:

1. Face view for illustration purposes only.
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet.
 3. Dimensions in inches, parenthesis () indicate millimeters.
- *Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



AEL-1



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 1" (25) 45° architectural decorative louver

OPTIONS

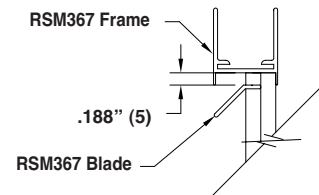
- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- Frames of choice. - see frame submittal sheet

VARIATIONS

- A as required, not to exceed 190" (4826)
- B as required, not to exceed 84" (2134)
- Brace bar as required, not to exceed 16" (406)

Notes:

1. Face view for illustration purposes only.
 2. Dimensions in inches, parenthesis () indicate millimeters.
- * 1" (25) blade spacing

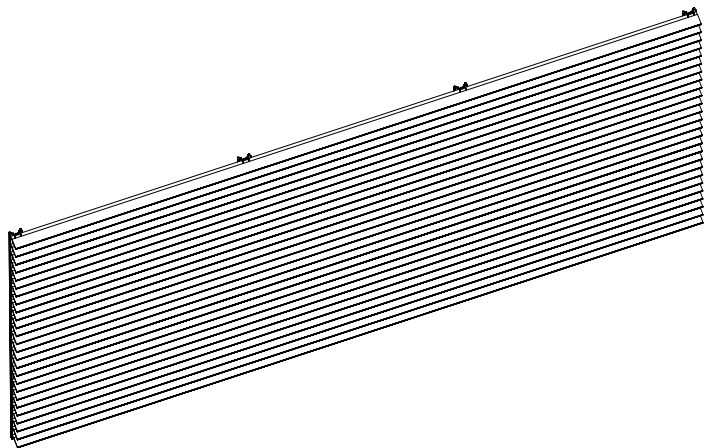
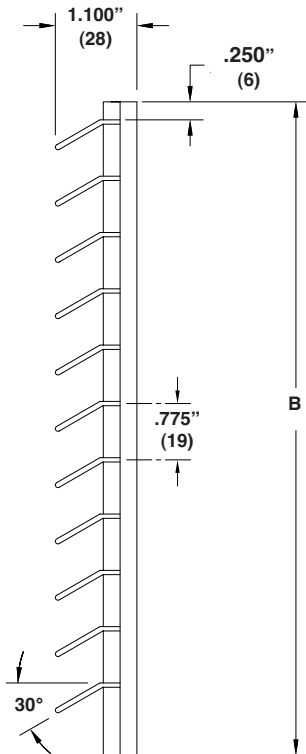
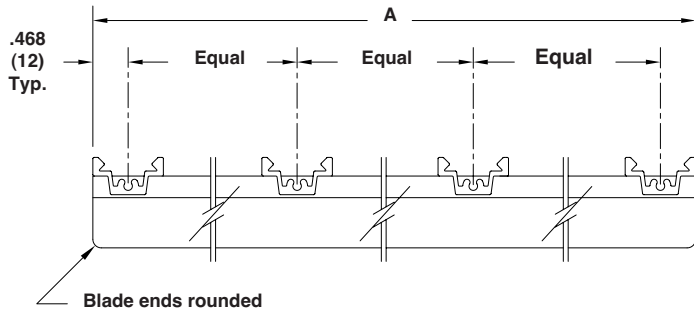


Detail w/ Frame

QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



AEL - 30



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 30° architectural decorative louver

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- Frames of choice - see frame submittal sheet

VARIATIONS

- A as required, not to exceed 190" (4826)
- B as required, not to exceed 84" (2134)
- Brace bar as required, not to exceed 16" (406)

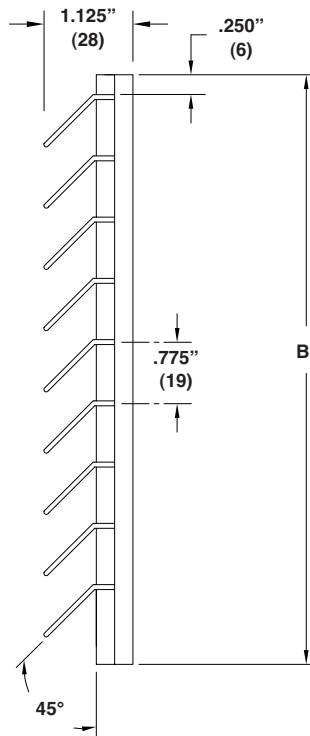
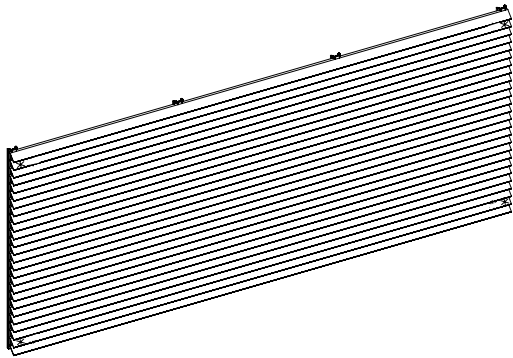
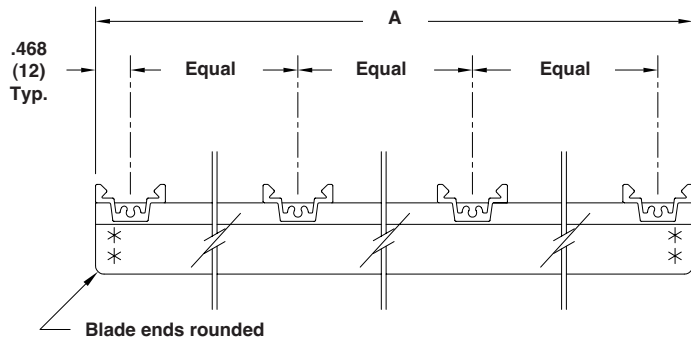
Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters.

QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



AEL - 45



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 45° architectural decorative louver

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- Frames of choice, see frame submittal sheet

VARIATIONS

- A as required, not to exceed 180" (4512)
- B as required, not to exceed 84" (2134)
- Brace bar as required, not to exceed 16" (406)

Notes:

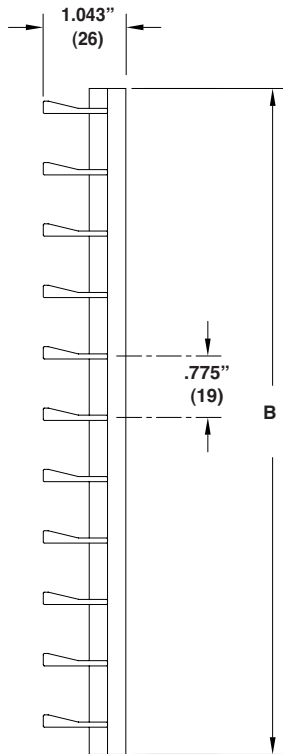
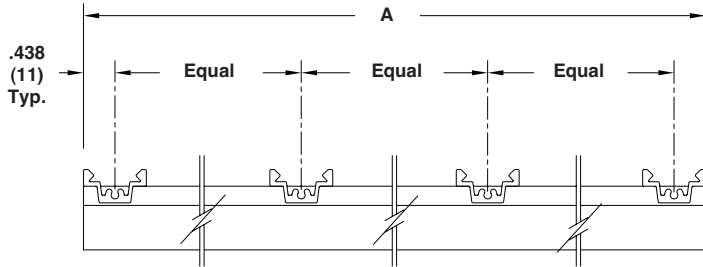
1. Face and end views for illustration purposes only
2. Dimensions in inches, parenthesis () indicate millimeters

*Extension mounting holes as required.

QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



AEL-112



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Architectural decorative louver w/112 blade

OPTIONS

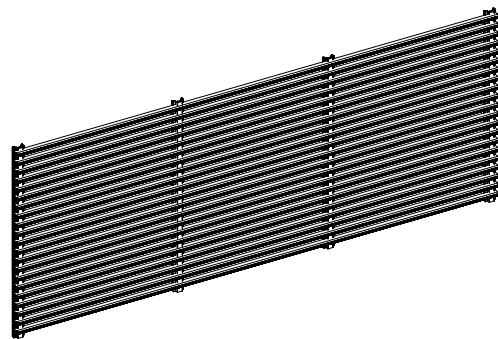
- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- Frames of choice. - see frame submittal sheet

VARIATIONS

- A as required, not to exceed 180" (4512)
- B as required, not to exceed 84" (2134)
- Brace bar as required, not to exceed 16" (406)

Notes:

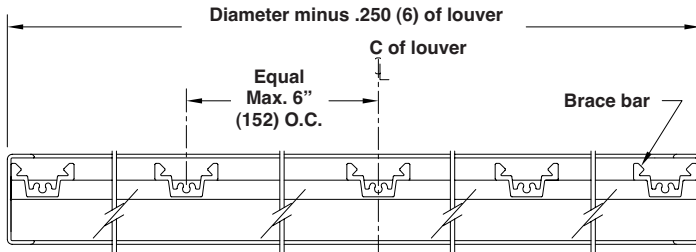
1. Face and end views for illustration purposes only
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



DIAMETER AEL-42 W/ 187 FRAME



STANDARD CONSTRUCTION

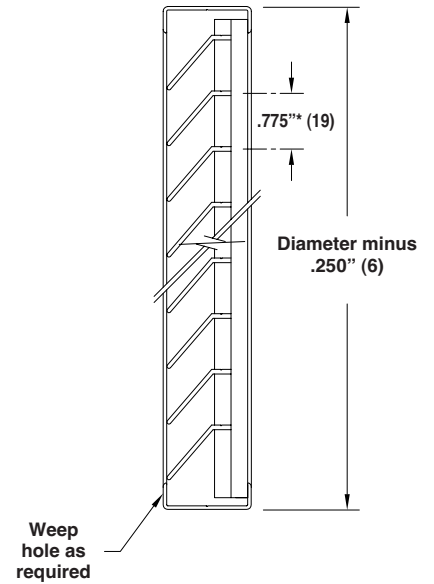
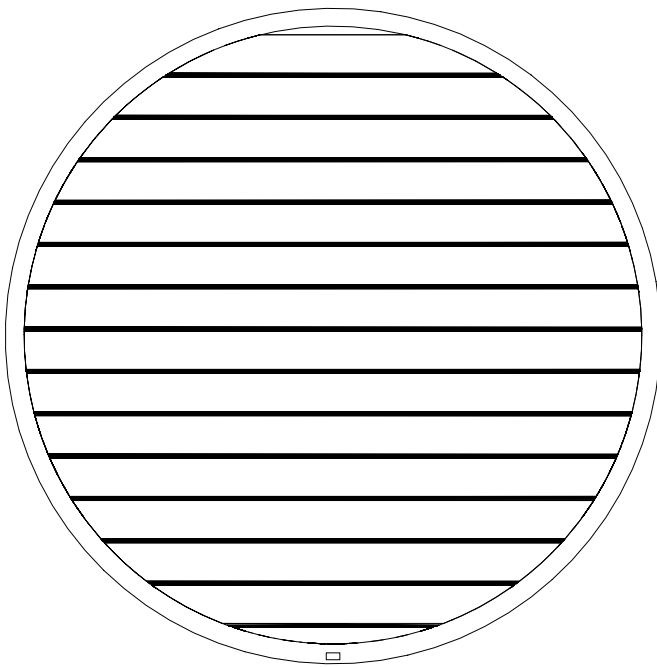
- Extruded aluminum; 6063-T5

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- 1" (25) blade spacing

Notes:

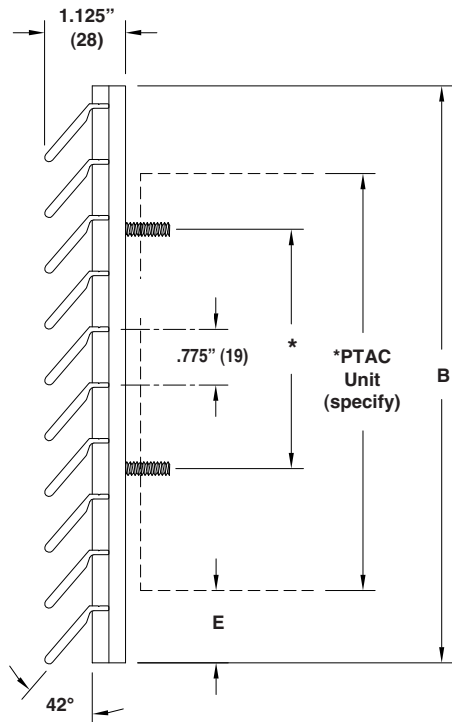
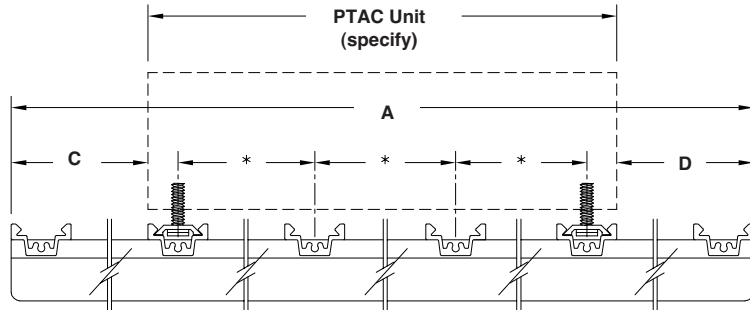
1. Face view for illustration purposes only
2. Dimensions in inches, parenthesis () indicate millimeters



UNIT TYPE	UNIT MODEL NO.	DIA.	VARIATIONS
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



AEL-42-7020



STANDARD CONSTRUCTION

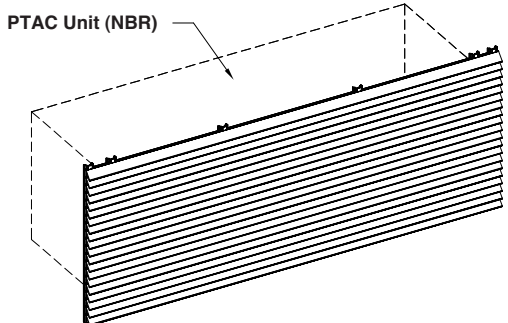
- Extruded aluminum; 6063-T5
- 42° architectural decorative louver w/heavy duty blades PTAC thru wall application
- .125" (3) blade thickness

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040" (1) aluminum sheet
- .040" (1) aluminum (1 side) with 1" (25) insulation
- .040" (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
- Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

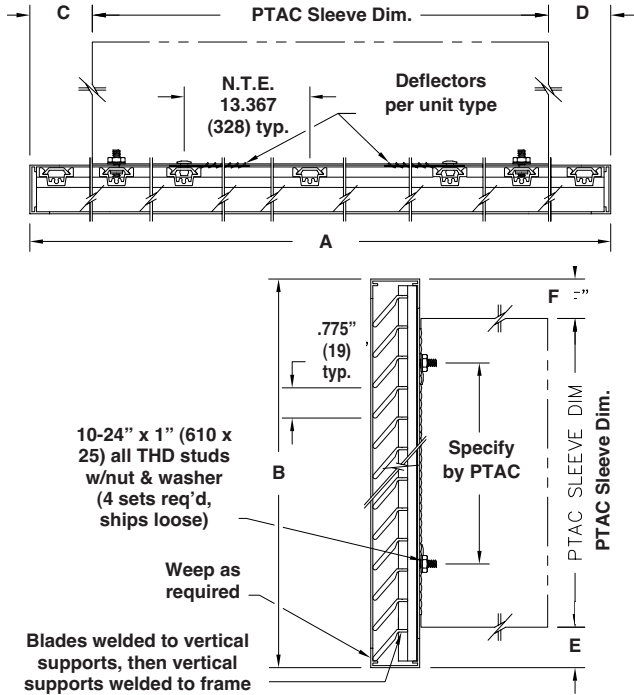


Notes:
 1. Face view for illustration purposes only
 2. Dimension "E" = bottom of louver to bottom of PTAC cabinet
 3. Dimensions in inches, parenthesis () indicate millimeters
 * Dimensions determined by unit, model, and type.

UNIT TYPE	UNIT MODEL NO.	SIZE					VARIATIONS
		A	B	C	D	E	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE			



AEL-42-7020W (IMPACT LOUVER)



Notes:

1. For installation instructions see sheet 08AR016 (SEQ #0478)
2. Dimensions in inches, parenthesis () indicate millimeters
3. A not to exceed 74" (1880)
4. B not to exceed 24" (610)

* Dimensions determined by unit, model, and type.

STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- 42° architectural decorative louver w/heavy duty blades PTAC wall application
- .125" (3) blade thickness

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040" (1) aluminum sheet
- .040" (1) aluminum (1 side) with 1" (25) insulation
- .040" (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
 - Using drain kits
 - Left or Right
 - Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

* Dimensions determined by unit, model, and type.

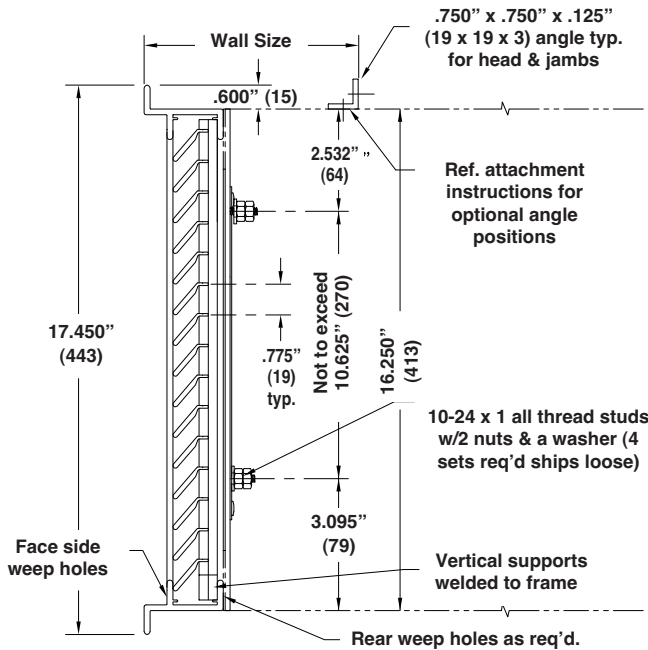
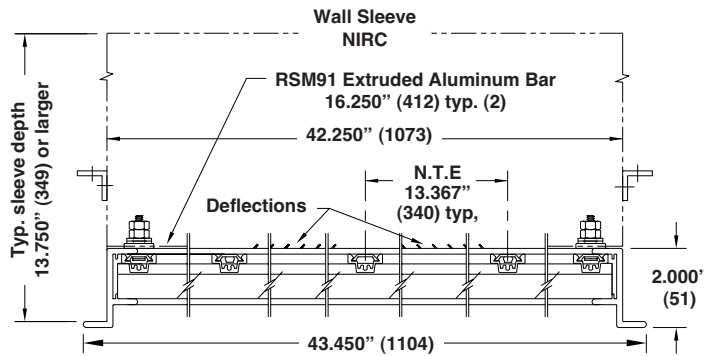
#7060	#1932	#2361	#186

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE						VARIATIONS
		A	B	C	D	E	F	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE				

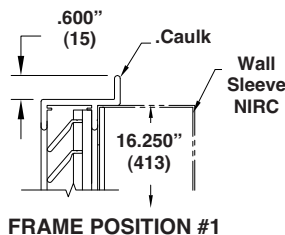


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AEL-42D-7060
NOA 11:0726.03 EXPIRES 9/22/16



FRAME POSITION #2



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Dade County 42° architectural decorative louver w/heavy duty blades PTAC through wall application
- .125" (3) blade thickness

OPTIONS

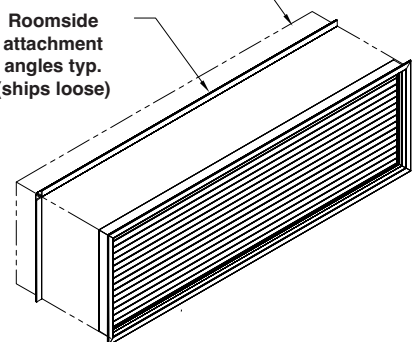
- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%
- .040" (1) aluminum sheet
- .040" (1) aluminum (1 side) with 1" (25) insulation
- .040" (1) aluminum (2 sides) with 2" (51) insulation
- Other blankoff required
- Exterior mounting holes as required
- See AEL frames for perimeter frame options

VARIATIONS

- External drains
- Using drain kits
 - Left or Right
- Internal drains
 - No drain holes in rear of louver
 - Drain holes for PTAC emergency over flow
- Unit type _____
- Model _____
- Add'l drain info _____

PTAC Wall Sleeve
 20 ga. alum or steel NIRC

Roomside attachment angles typ. (ships loose)



Notes:

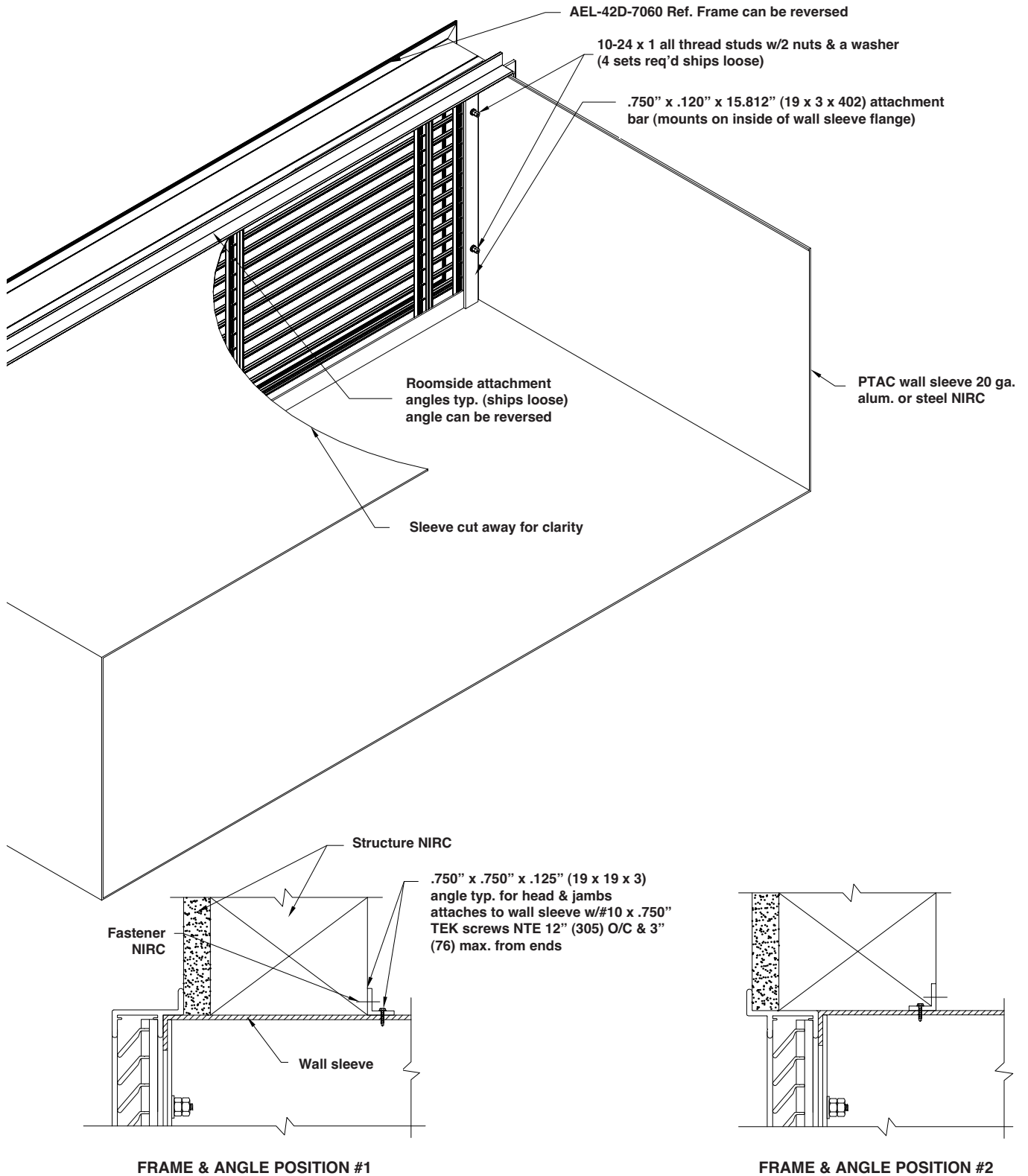
1. For detailed information see 03S358
2. NIRC = not in Reliable contract
3. Dimensions in inches, parenthesis () indicate millimeters

UNIT TYPE	UNIT MODEL NO.	VARIATIONS	
PROJECT		LOCATION	
ARCH./ENGR.		CONTRACTOR	
REPRESENTATIVE		DATE	



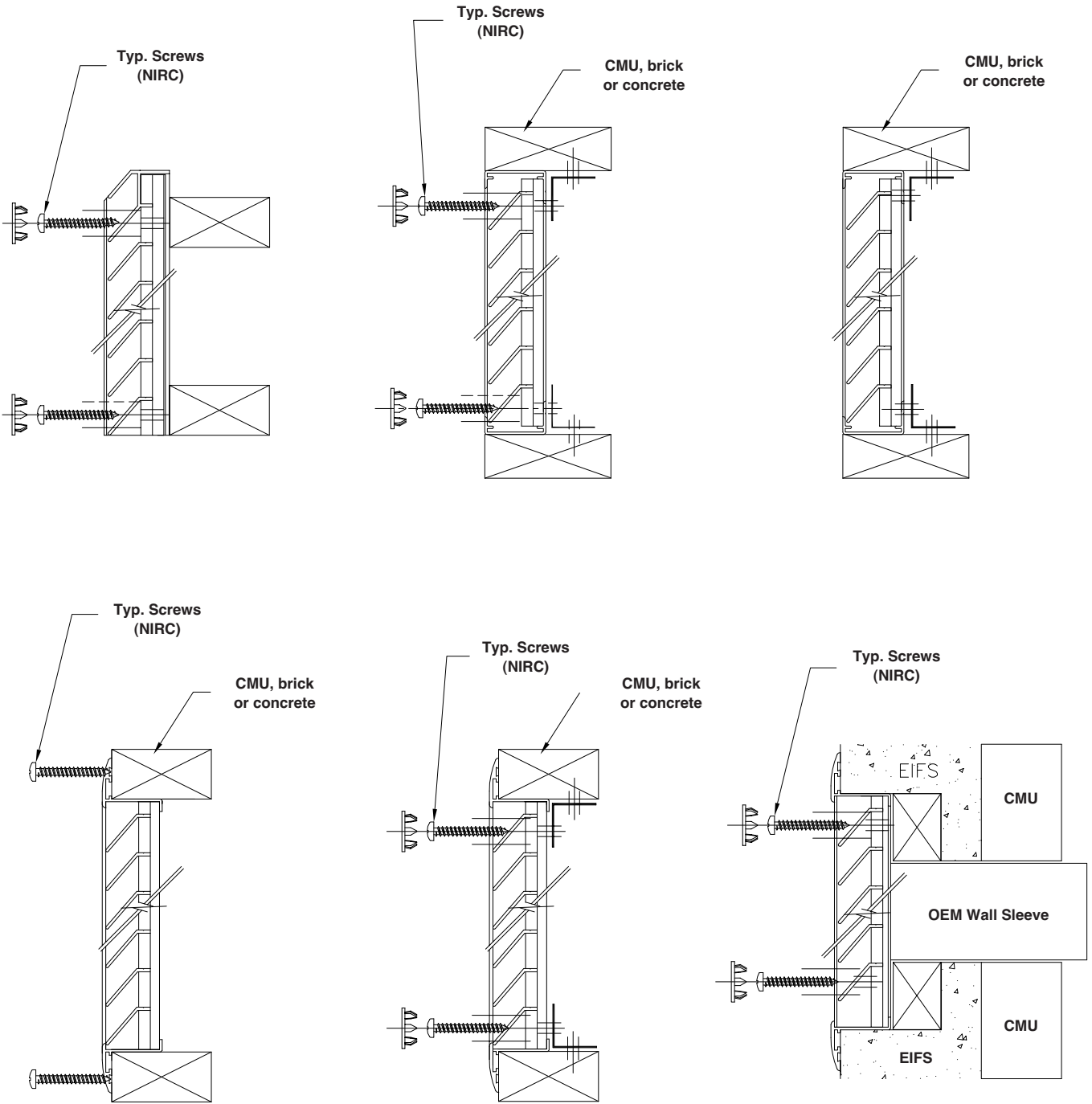
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AEL-42D-7060 ATTACHMENT





AEL-42 MOUNTING DETAILS



PROJECT
ARCH./ENGR.
REPRESENTATIVE

LOCATION
CONTRACTOR
DATE



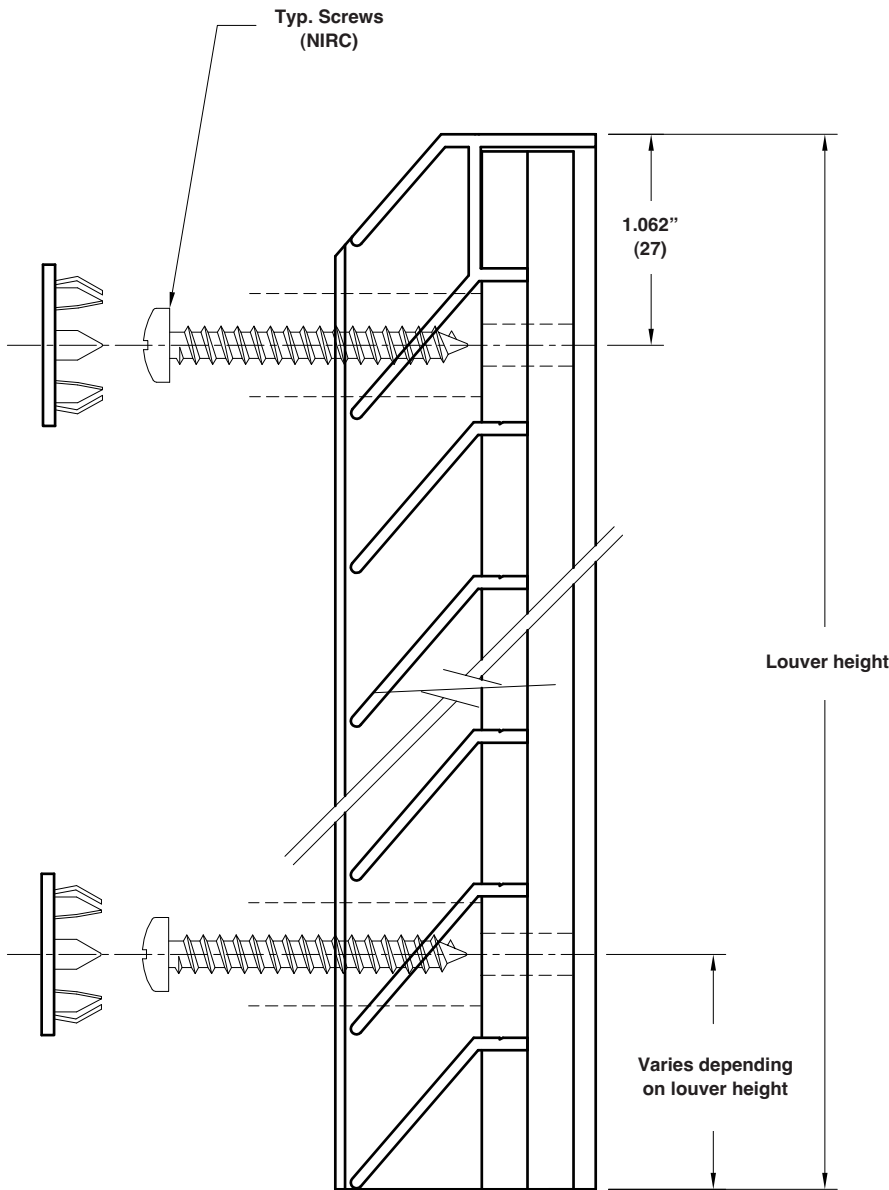
AEL-42 EXT. MOUNTING HOLE DETAILS

STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5

Note:

1. Shown w/196 end frame
2. Dimensions in inches, parenthesis () indicate millimeters
3. Please note locations and the number of mount holes desired.



**PROJECT
ARCH./ENGR.
REPRESENTATIVE**

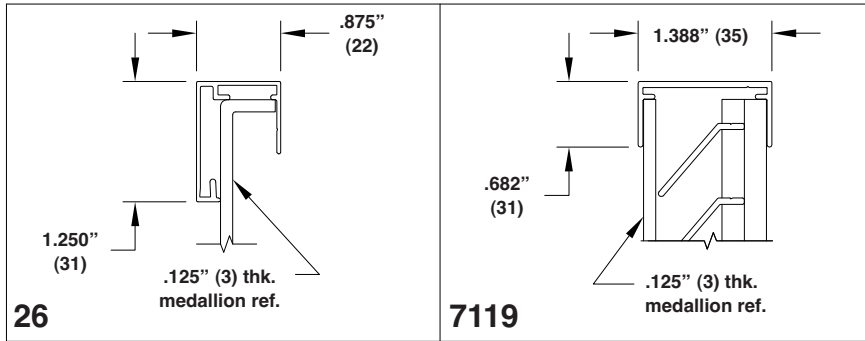
**LOCATION
CONTRACTOR
DATE**



FRAME OPTIONS FOR MEDALLION APPLICATIONS

ARCHITECTURAL FRAMES FOR MEDALLION/AEL SERIES LOUVERS

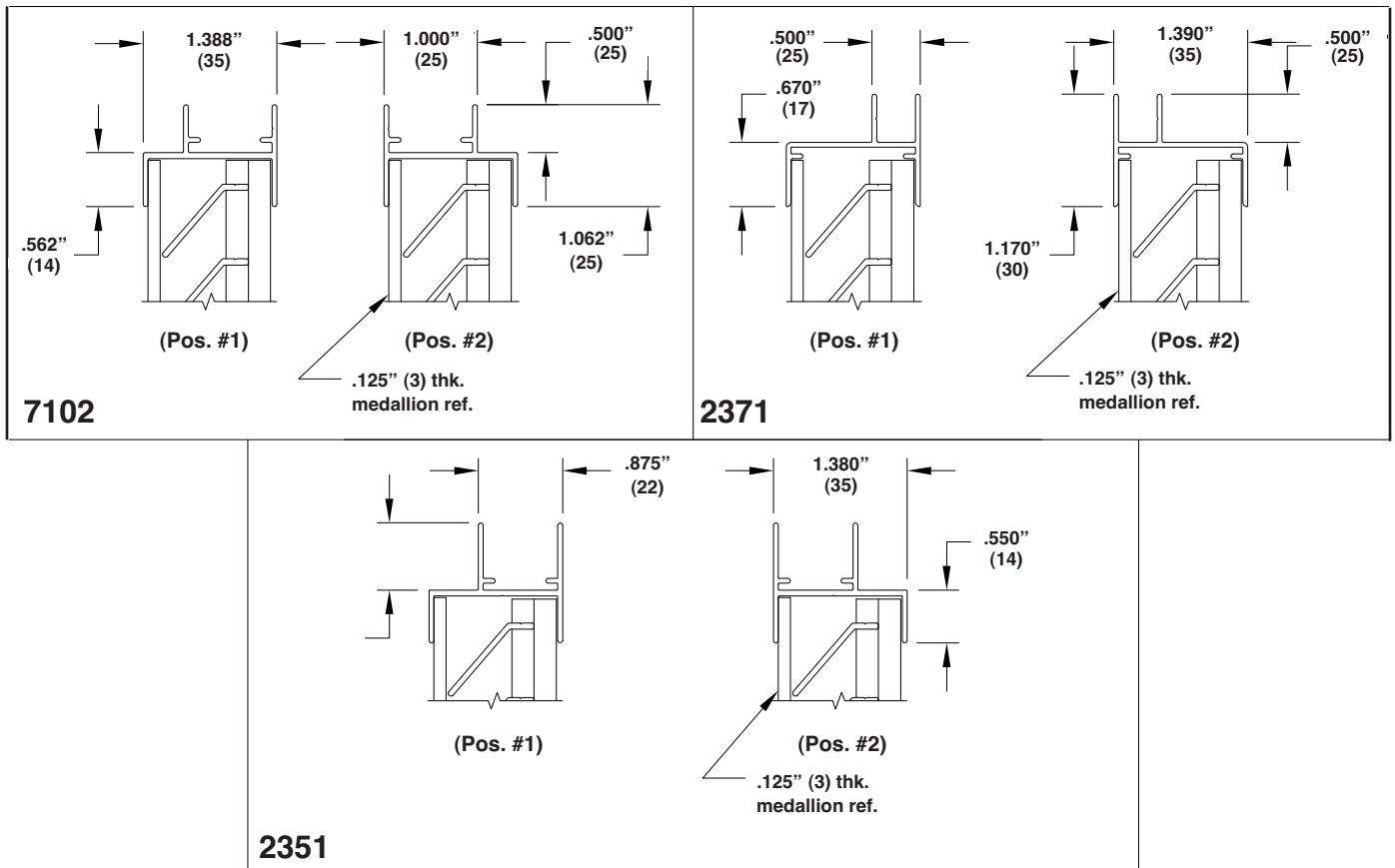
CHANNEL TYPE FRAMES



OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

GLAZING APPLICATION FRAMES



Any combination of medallion/AEL louvers and frames for use with wall and window sections

Note: Dimensions in inches, parenthesis () indicate millimeters.

PROJECT
ARCH./ENGR.
REPRESENTATIVE

LOCATION
CONTRACTOR
DATE



INTERIOR TRIM FRAMES

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Architectural Interior Frames

<p>351</p>	<p>216</p>	<p>210</p>	<p>104</p>	<p>20</p>
<p>172</p>	<p>34</p>	<p>3</p>	<p>151</p>	

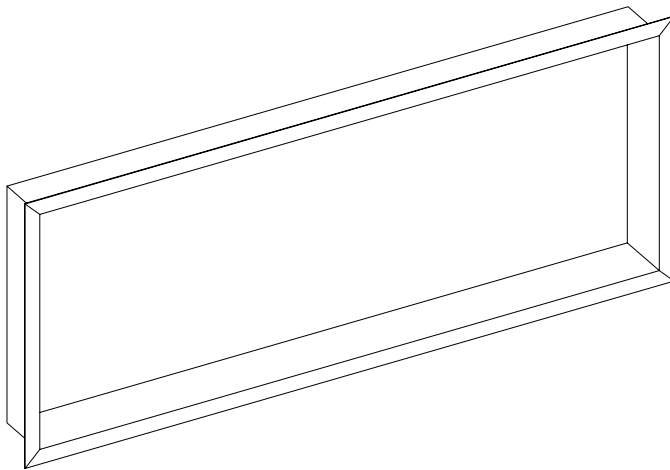
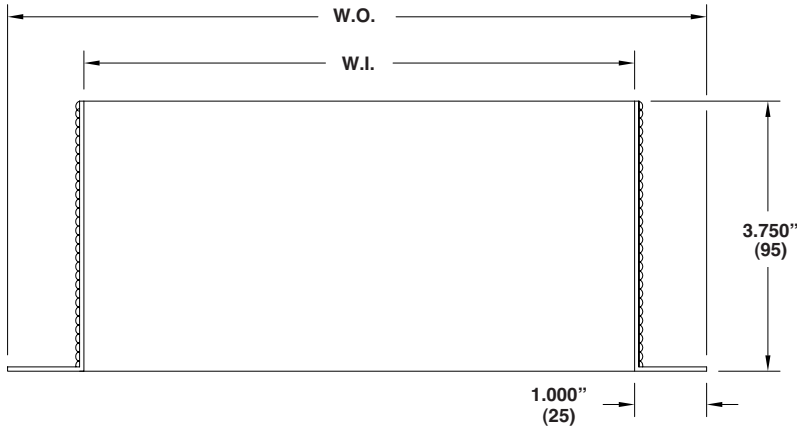
Note: Dimensions in inches, parenthesis () indicate millimeters

**PROJECT
ARCH./ENGR.
REPRESENTATIVE**

**LOCATION
CONTRACTOR
DATE**



FRAME 151



STANDARD CONSTRUCTION

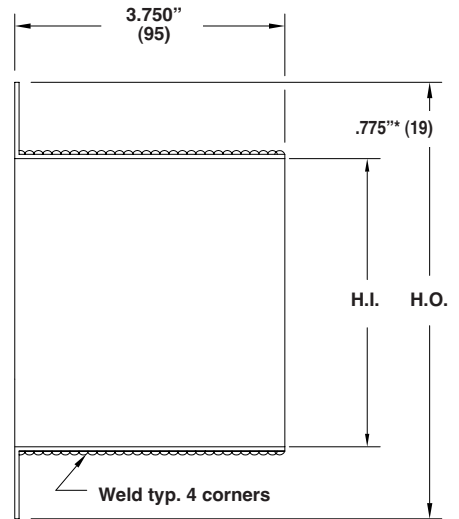
- Extruded aluminum; 6063-T5
- Builders frame for architectural louver

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

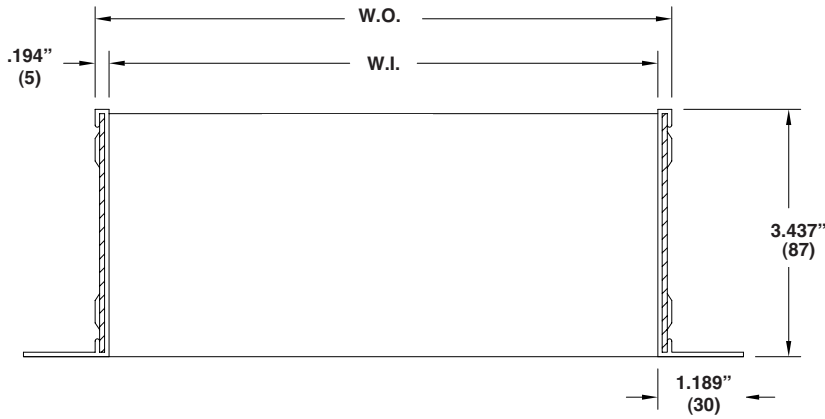
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters.



TYPE	W.I.	W.O.	H.I.	H.O.	VARIATIONS
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		



FRAME 342/343



STANDARD CONSTRUCTION

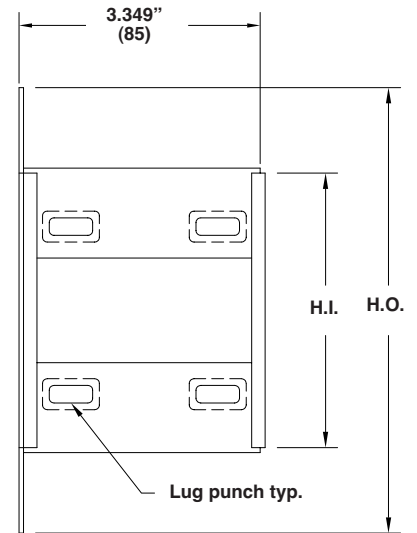
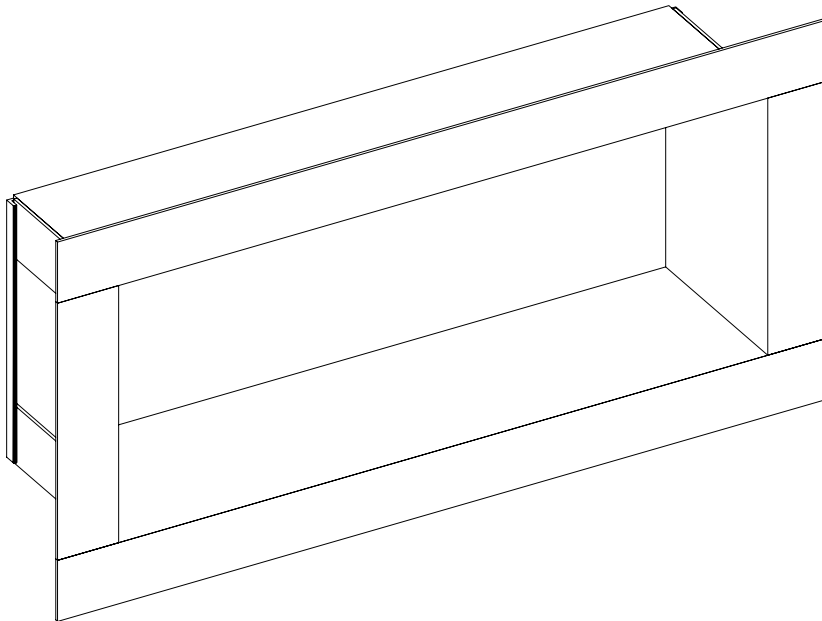
- Extruded aluminum; 6063-T5
- Builders frame for architectural louver

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

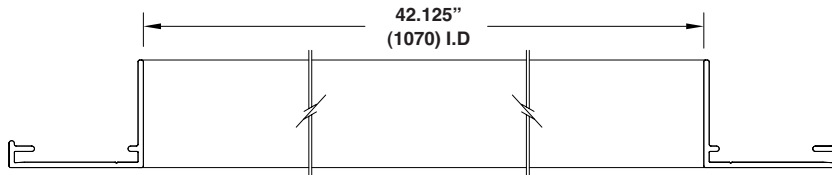
1. Face view for illustration purposes only
2. Dimensions in inches, parenthesis () indicate millimeters



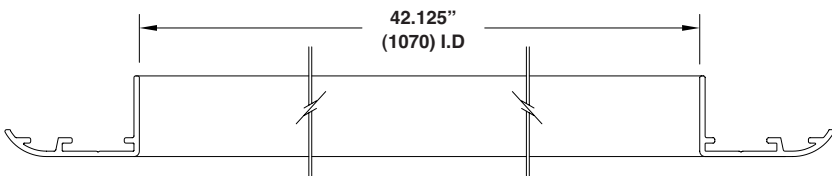
TYPE	W.I.	W.O.	H.I.	H.O.	VARIATIONS
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		



P.T.A.C. ROOMSIDE TRIM FRAMES



RSM-3 (Optional)



RSM-34

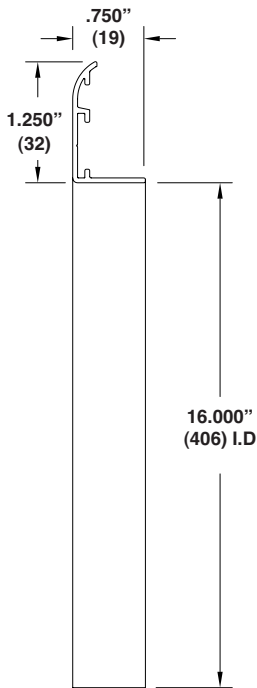
STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- SA clear anodized finish

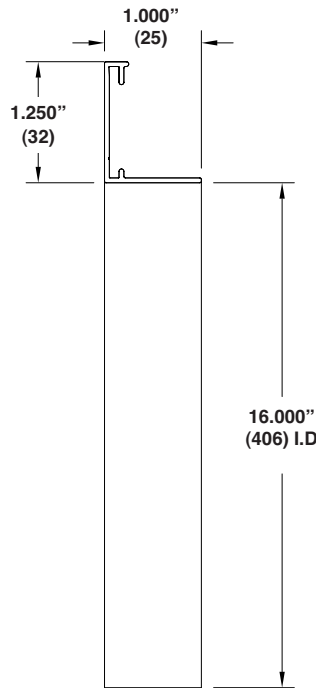
OPTIONS

- Baked Enamel (Kynar 50%)
- Kynar 70%
- Color anodized

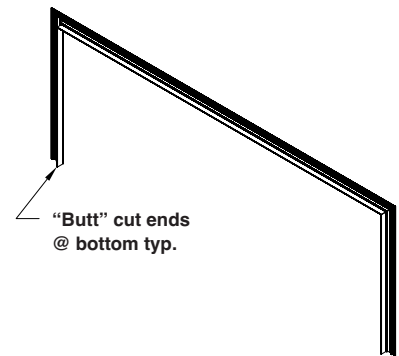
Note:
Dimensions in inches, parenthesis () indicate millimeters



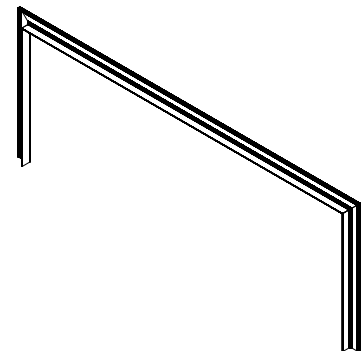
RSM-34



RSM-3 (Optional)



RSM-34



RSM-3 (Optional)

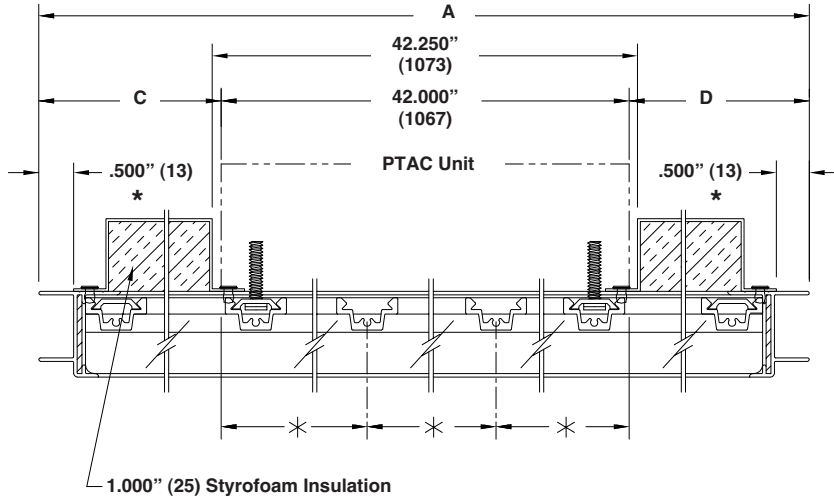
PROJECT
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.040 BLANK-OFF - 2 INS - 1 W/ UNIT CUTOUT



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5

FRAME OPTIONS

- 186
- 190
- 194
- 2371
- 1932
- 2381
- 2351
- Other

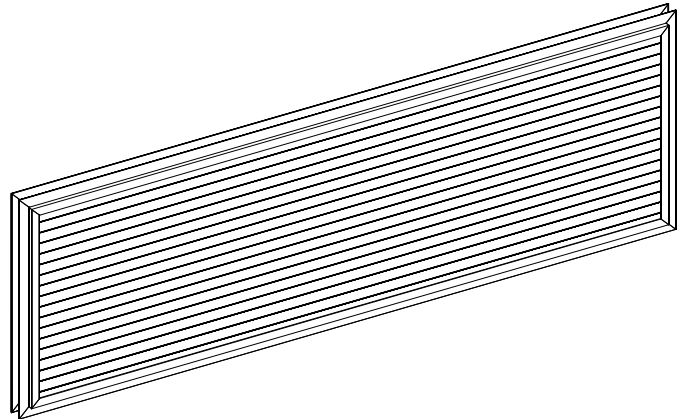
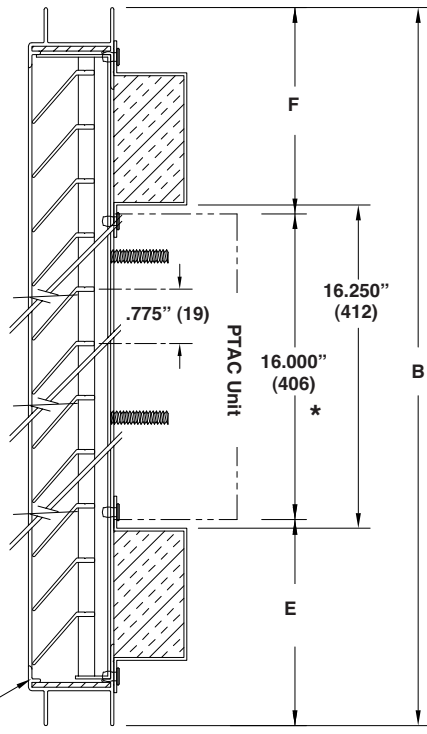
VARIATIONS

- A as required, not to exceed 190" (4826)
- B as required, not to exceed 84" (2134)
- C as required
- D as required
- E as required
- F as required

Notes:

- Face view for illustration purposes only.
- Exterior mounting holes as required
- Dimensions in inches, parenthesis () indicate millimeters

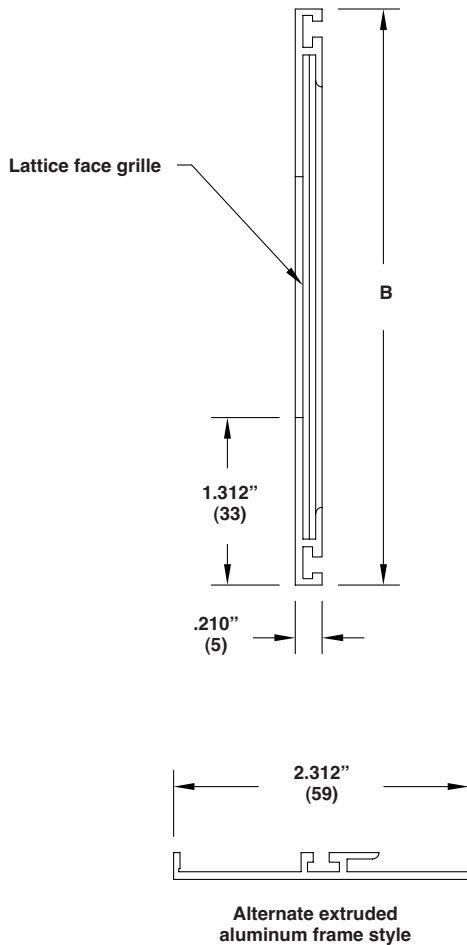
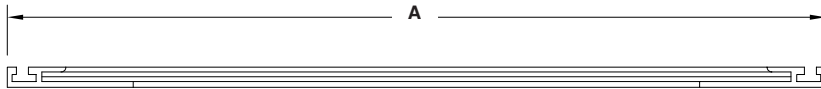
*Dimensions determined by unit type, model, and frame.



UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE						VARIATIONS
		A	B	C	D	E	F	
PROJECT ARCH./ENGR. REPRESENTATIVE				LOCATION CONTRACTOR DATE				



LATTICE GRILLE



STANDARD CONSTRUCTION

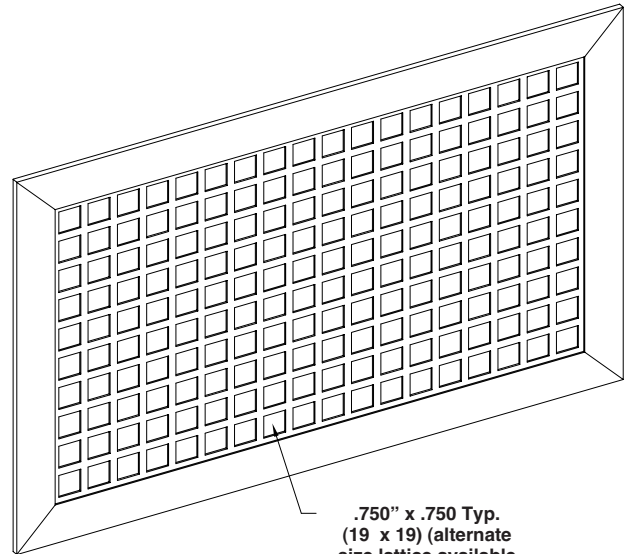
- Extruded aluminum; 6063-T5
- Min. size O.D. 6" x 6" (152 x 152)
- Max. size O.D. 144" x 48" (3658 x 1219)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters

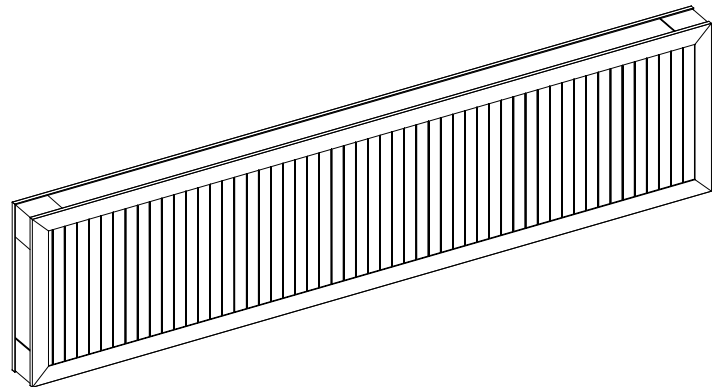
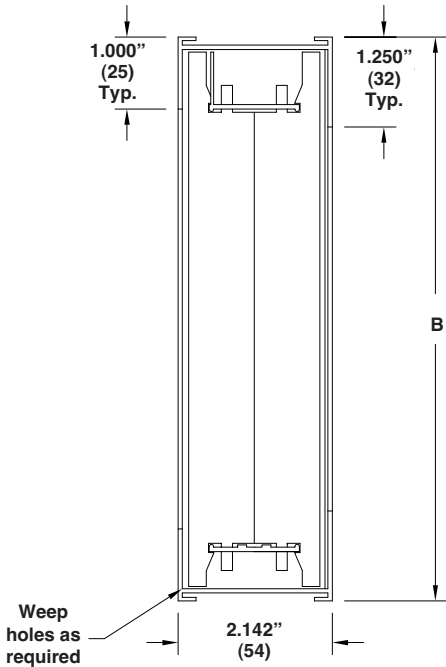
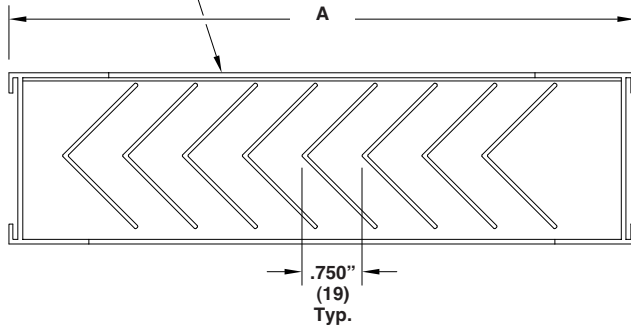


QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



AEL-268-266

Diamond pattern expanded aluminum bird screen (WBS-1)



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Vertical type unit ventilator louver w/channel frame
- Min. size O.D. 6" x 7" (152 x 178)
- Max. size O.D. 108" x 23" (2743 x 584)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

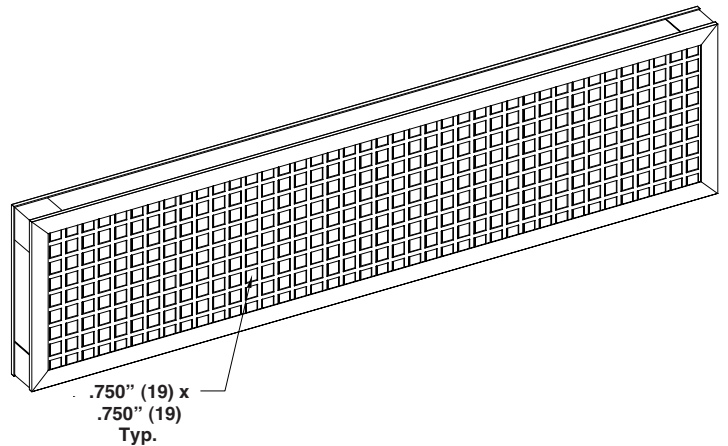
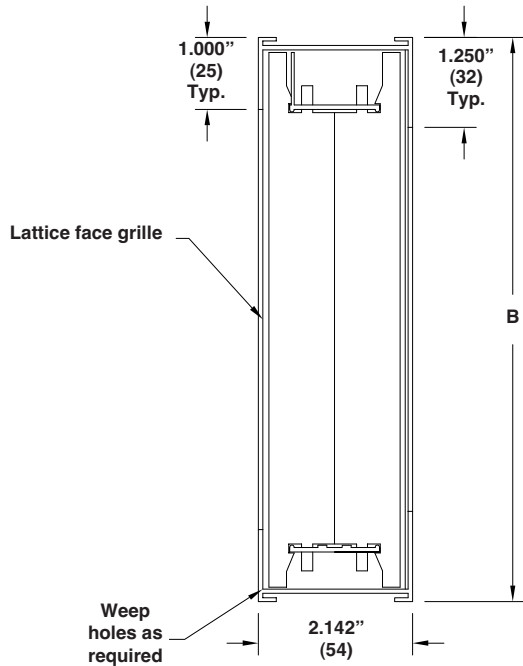
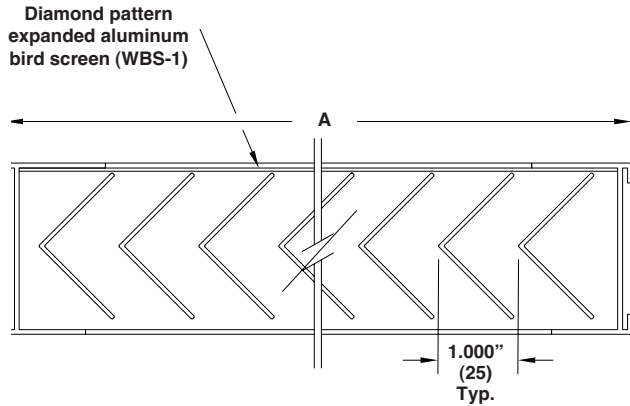
Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters

QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



AEL-268-266-L



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Vertical type unit ventilator louver w/flange frame
- Min. size O.D. 6" x 7" (152 x 178)
- Max. size O.D. 108" x 23" (2743 x 584)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

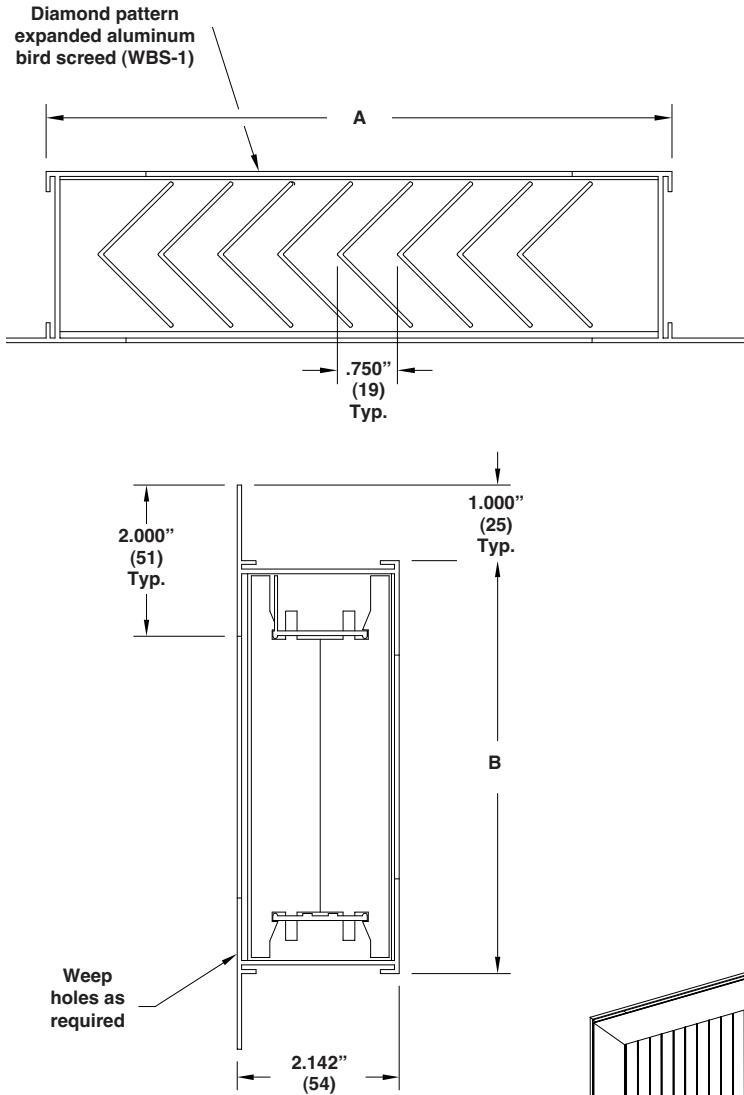
Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters

QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



AEL-268-267



STANDARD CONSTRUCTION

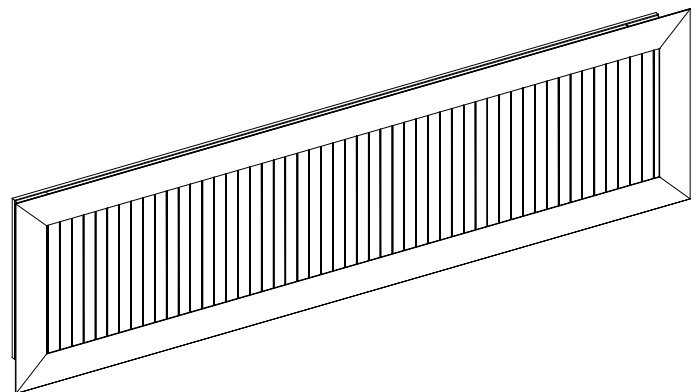
- Extruded aluminum; 6063-T5
- Vertical type unit ventilator louver w/flange frame
- Min. size B.S. 6" x 7" (152 x 178)
- Max. size B.S. 108" x 23" (2743 x 584)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

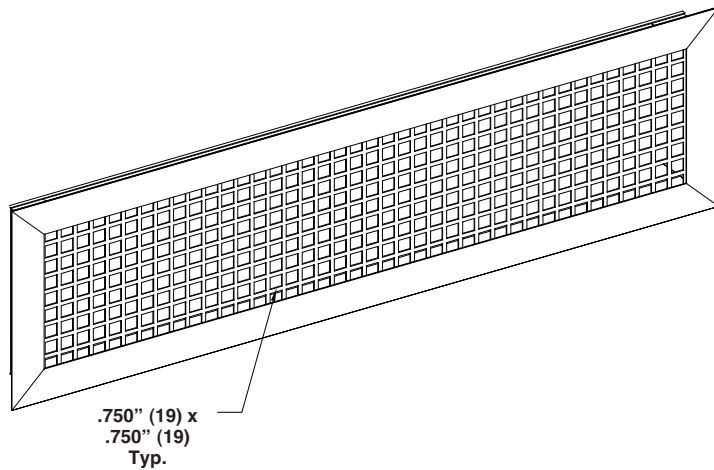
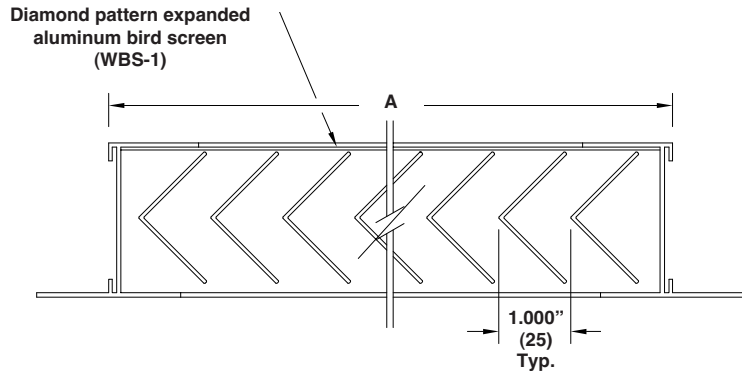
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



AEL-268-267-L



STANDARD CONSTRUCTION

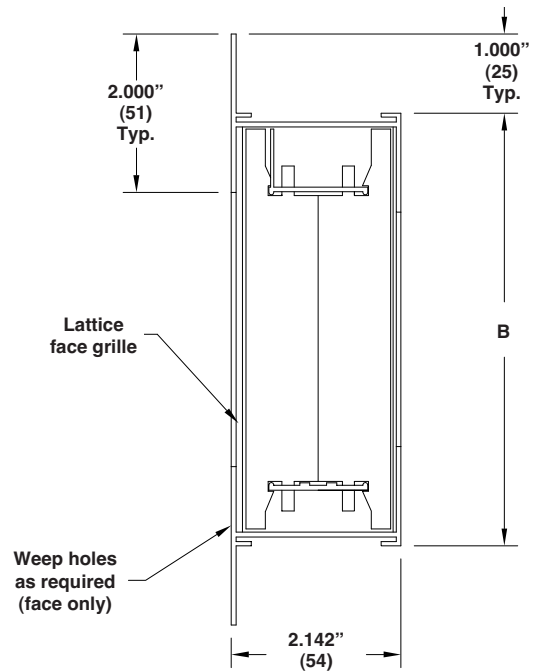
- Extruded aluminum; 6063-T5
- Vertical type unit ventilator louver w/flange frame and lattice
- Min. size B.S. 6" x 7" (152 x 178)
- Max. size B.S. 108" x 23" (2743 x 584)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

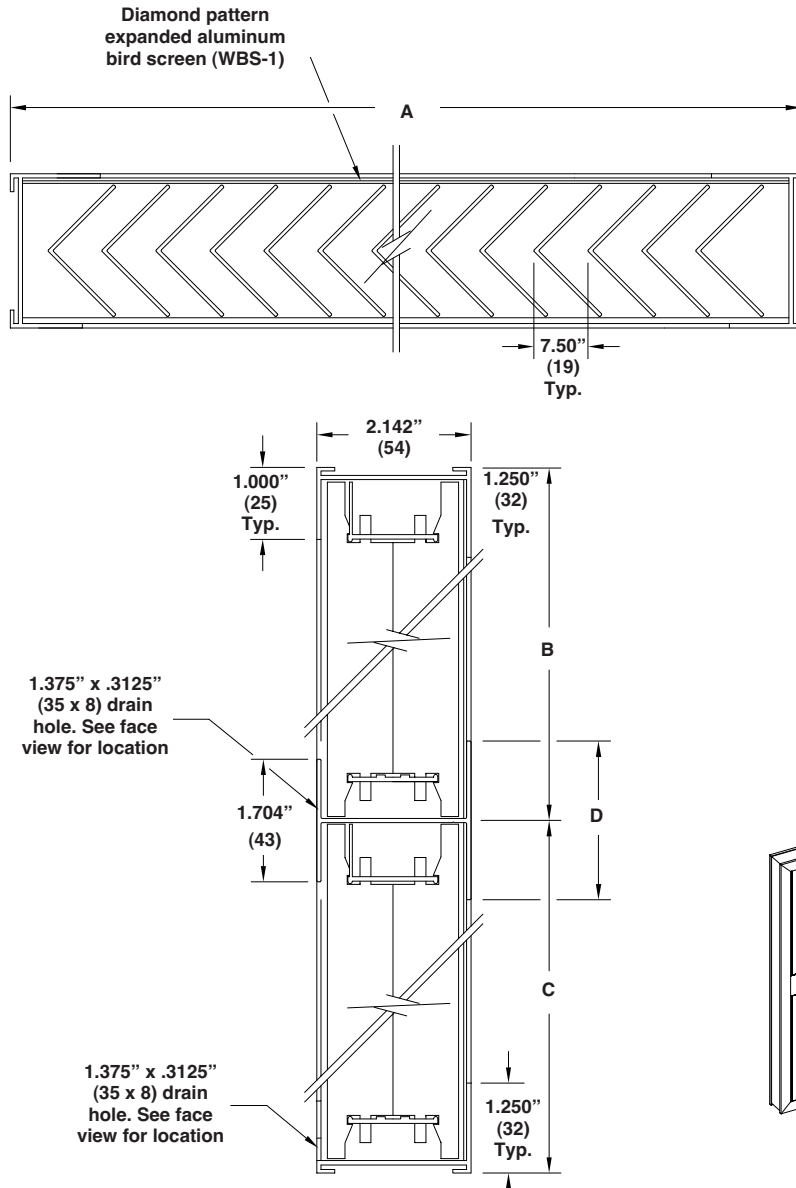
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



AEL-268-266-D



STANDARD CONSTRUCTION

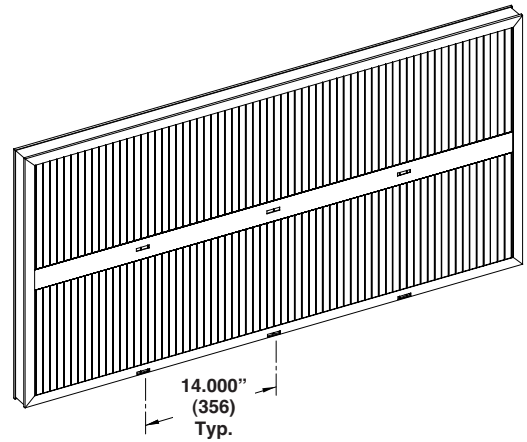
- Extruded aluminum; 6063-T5
- Double stack vertical type unit ventilator louver w/channel frame
- Min. size O.D. 6" x 14" (152 x 356)
- Max. size O.D. 108" x 23" (2743 x 584)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

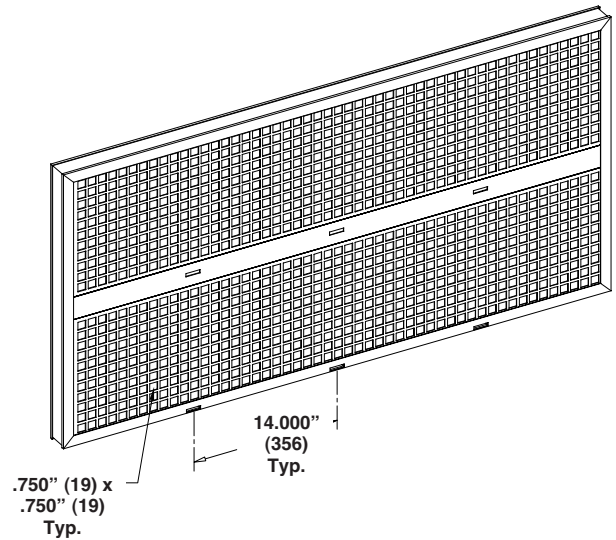
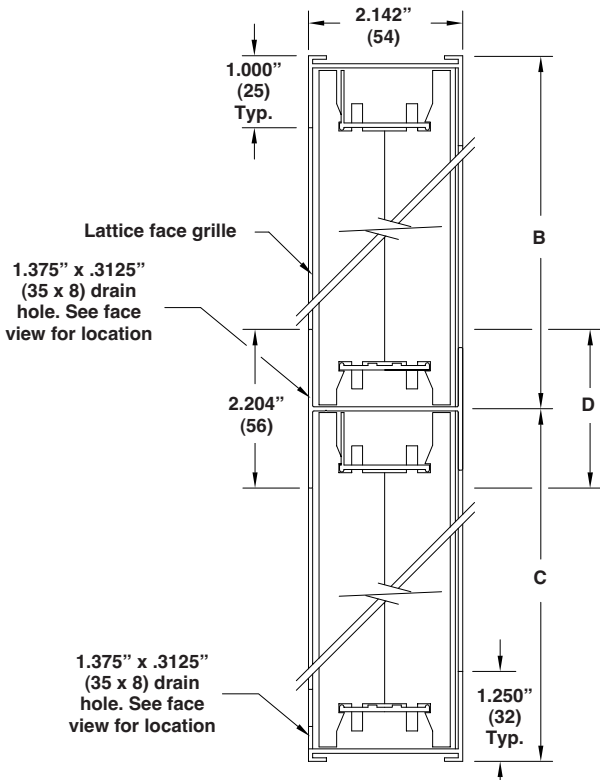
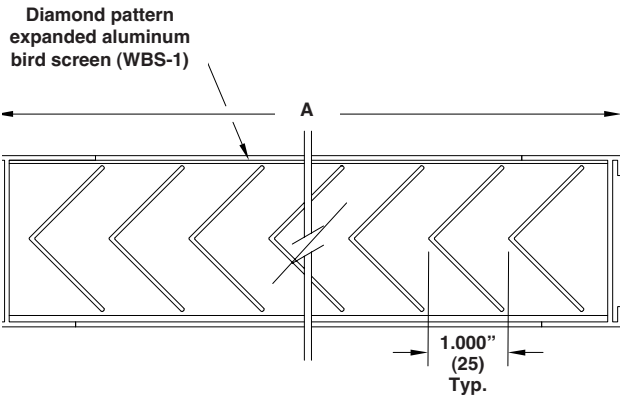
1. Face view for illustration purposes only.
2. D = Blank-off
3. Dimensions in inches, parenthesis () indicate millimeters



UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE				VARIATIONS
		A	B	C	D	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE			



AEL-268-266-D-L



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Double stack vertical type unit ventilator louver w/channel frame and lattice
- Min. size O.D. 6" x 14" (152 x 356)
- Max. size O.D. 108" x 23" (2743 x 584)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

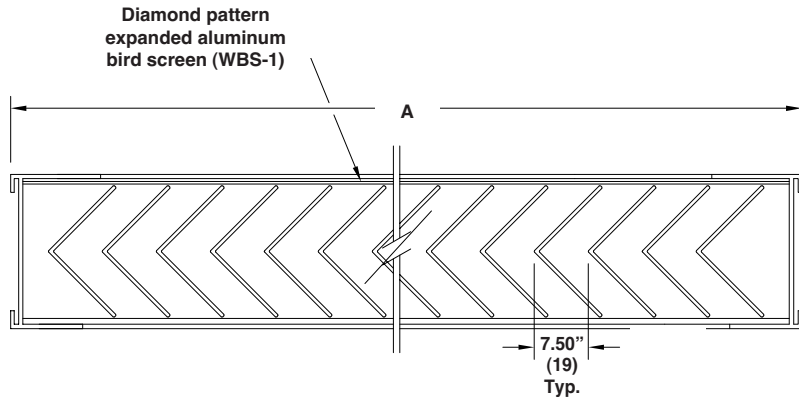
Notes:

1. Face view for illustration purposes only.
2. D = Blank-off
3. Dimensions in inches, parenthesis () indicate millimeters

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE				VARIATIONS
		A	B	C	D	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE			



AEL-268-267-D



STANDARD CONSTRUCTION

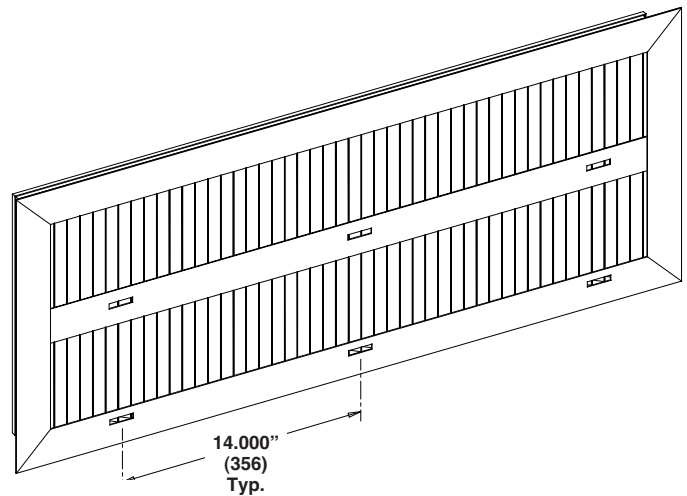
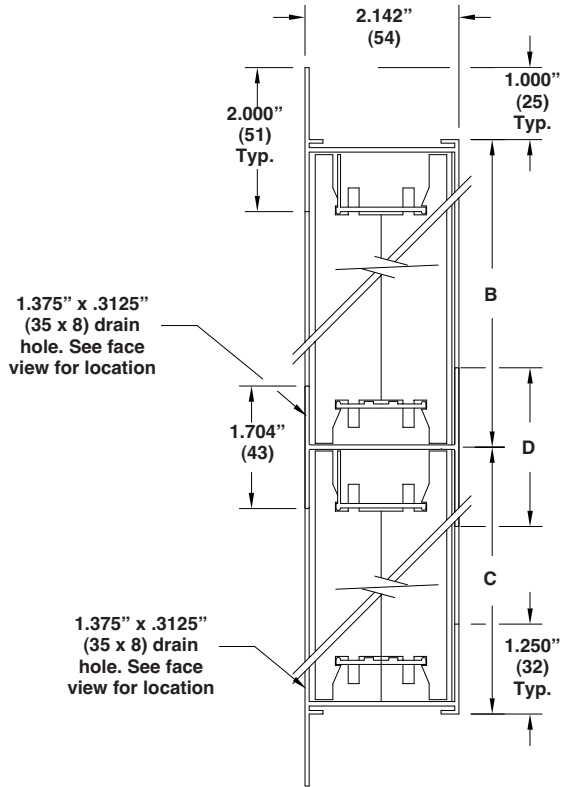
- Extruded aluminum; 6063-T5
- Double stack vertical type unit ventilator louver w/flange frame
- Min. size B.S. 6" x 14" (152 x 356)
- Max. size B.S. 108" x 23" (2743 x 584)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

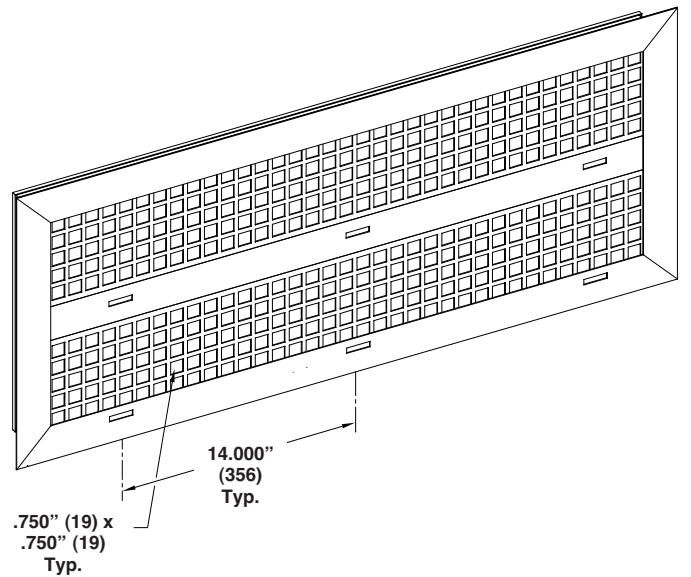
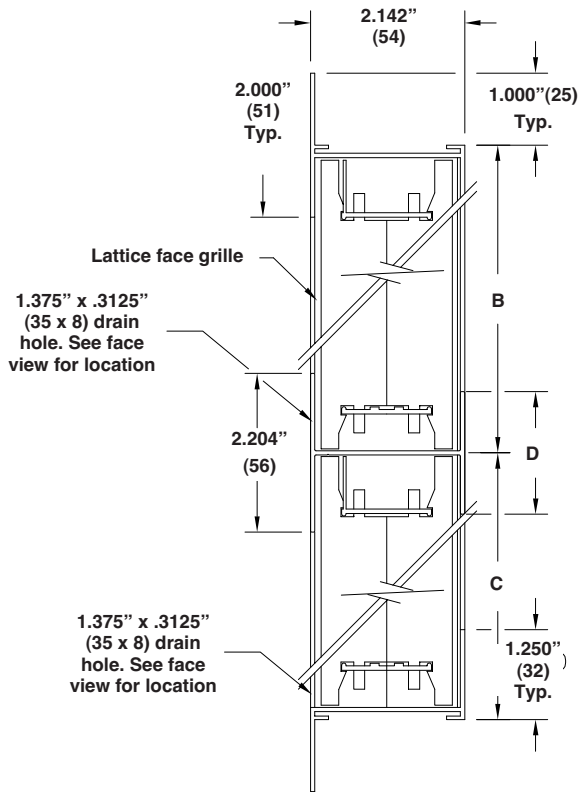
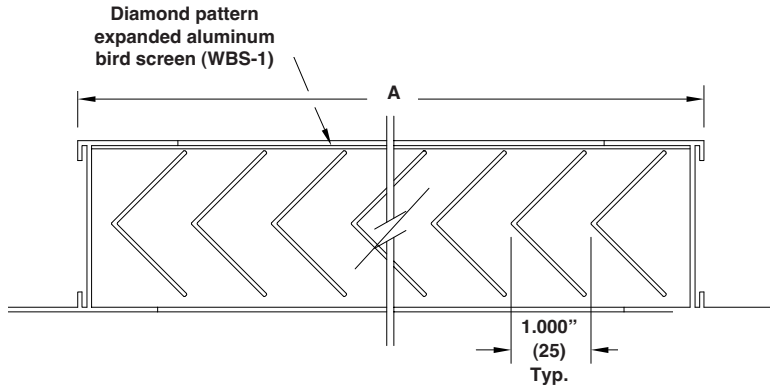
1. Face view for illustration purposes only.
2. D = Blank-off
3. Dimensions in inches, parenthesis () indicate millimeters



UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE				VARIATIONS
		A	B	C	D	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE			



AEL-268-267-D-L



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Double stack vertical type unit ventilator louver w/flange frame and lattice
- Min. size B.S. 6" x 14" (152 x 356)
- Max. size B.S. 108" x 23" (2743 x 584)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

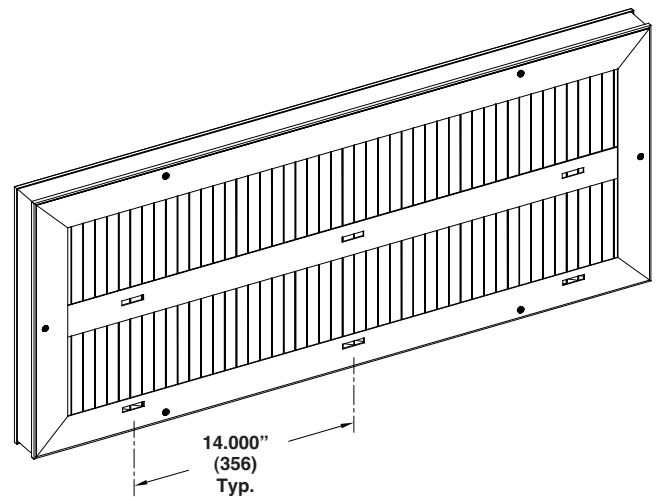
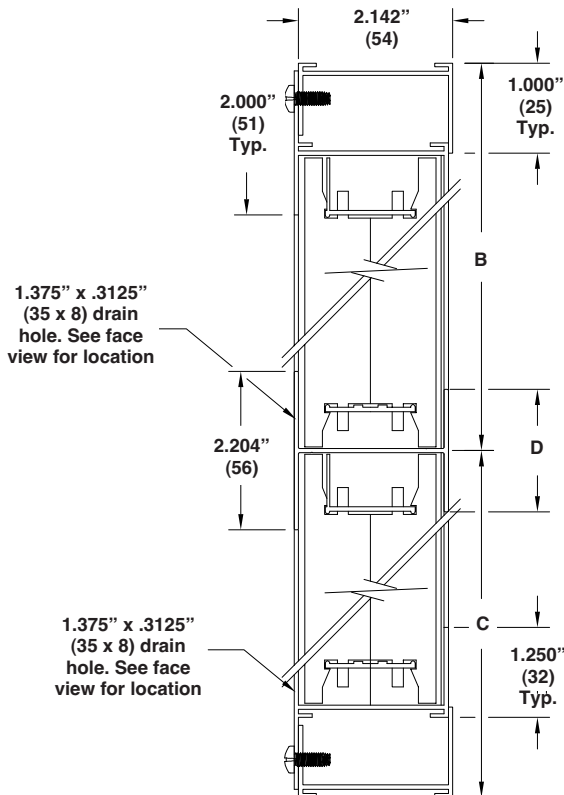
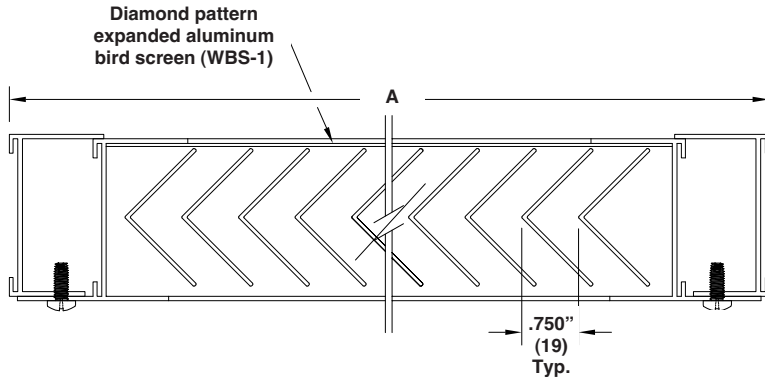
Notes:

1. Face view for illustration purposes only.
2. D = Blank-off
3. Dimensions in inches, parenthesis () indicate millimeters

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE				VARIATIONS
		A	B	C	D	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE			



AEL-268-267-D W/ 266 SUB-FRAME



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Double stack vertical type unit ventilator louver w/flange frame and channel sub-frame
- Min. size B.S. 6" x 17" (152 x 432)
- Max. size B.S. 108" x 23" (2743 x 584)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

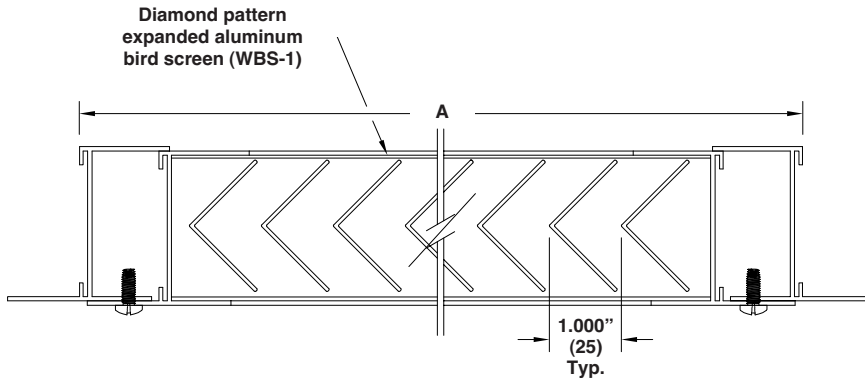
Notes:

1. Face view for illustration purposes only.
2. D = Blank-off
3. Dimensions in inches, parenthesis () indicate millimeters

UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE				VARIATIONS
		A	B	C	D	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE			



AEL-268-267-D-L W/ 267 SUB-FRAME



STANDARD CONSTRUCTION

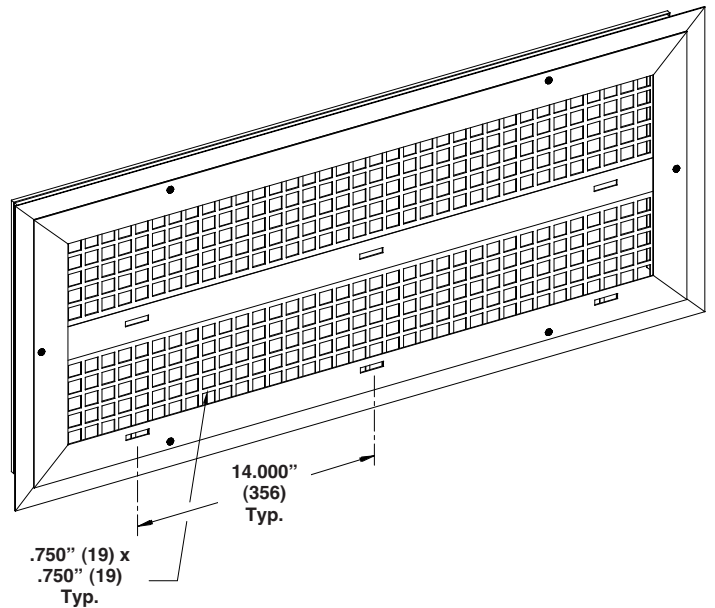
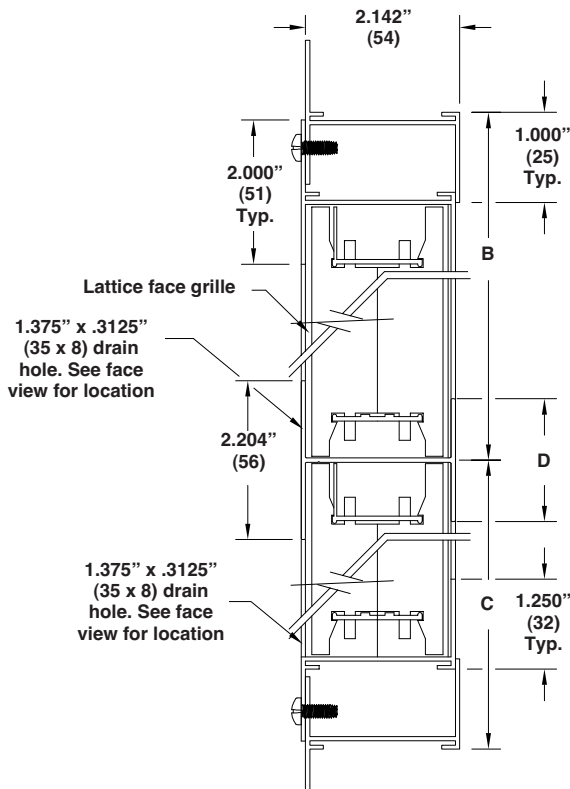
- Extruded aluminum; 6063-T5
- Double stack vertical type unit ventilator louver w/flange frame, lattice and flange sub-frame
- Min. size B.S. 6" x 19" (152 x 483)
- Max. size B.S. 108" x 23" (2743 x 584)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

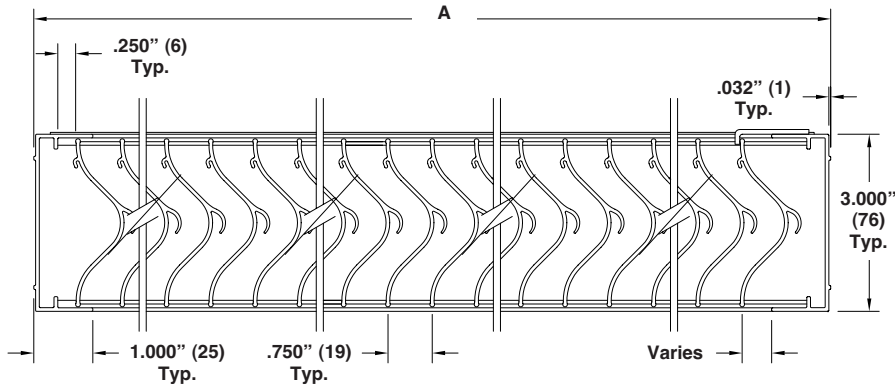
1. Face view for illustration purposes only.
2. D = Blank-off
3. Dimensions in inches, parenthesis () indicate millimeters



UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE				VARIATIONS
		A	B	C	D	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE			



AEL-3V



STANDARD CONSTRUCTION

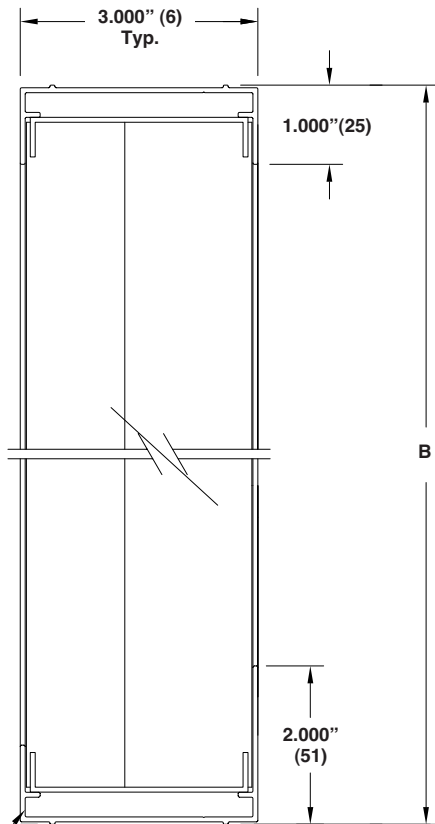
- Extruded aluminum; 6063-T5
- Vertical type unit ventilator louver

OPTIONS

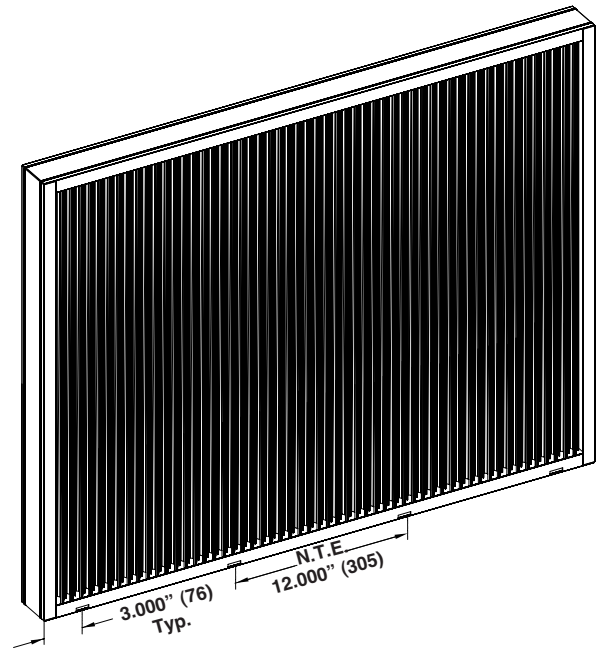
- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Note:

Dimensions in inches, parenthesis () indicate millimeters



1.000" x .250"
(25 x 6) Notch



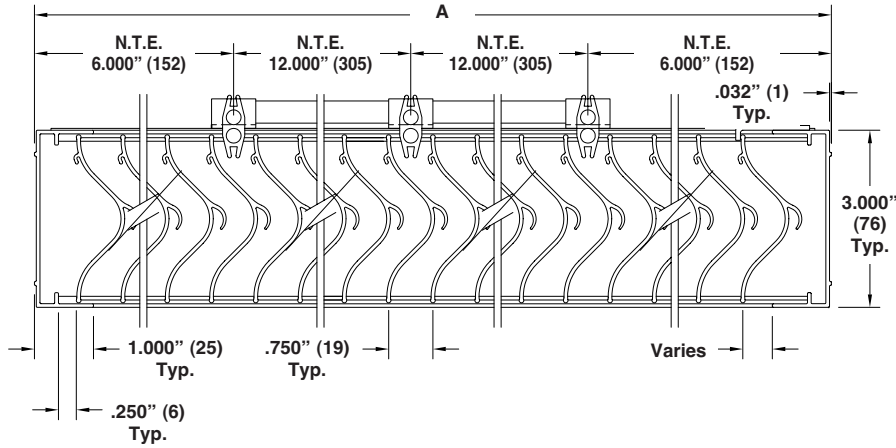
PROJECT
ARCH./ENGR.
REPRESENTATIVE

LOCATION
CONTRACTOR
DATE



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AEL-3V-AM



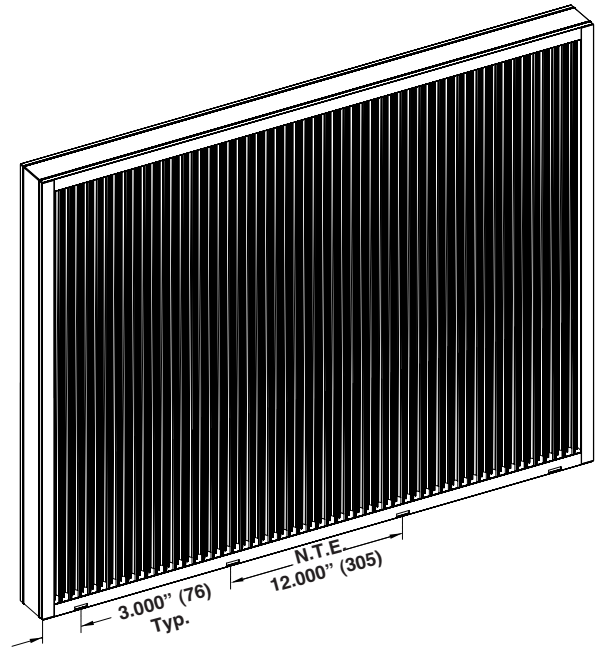
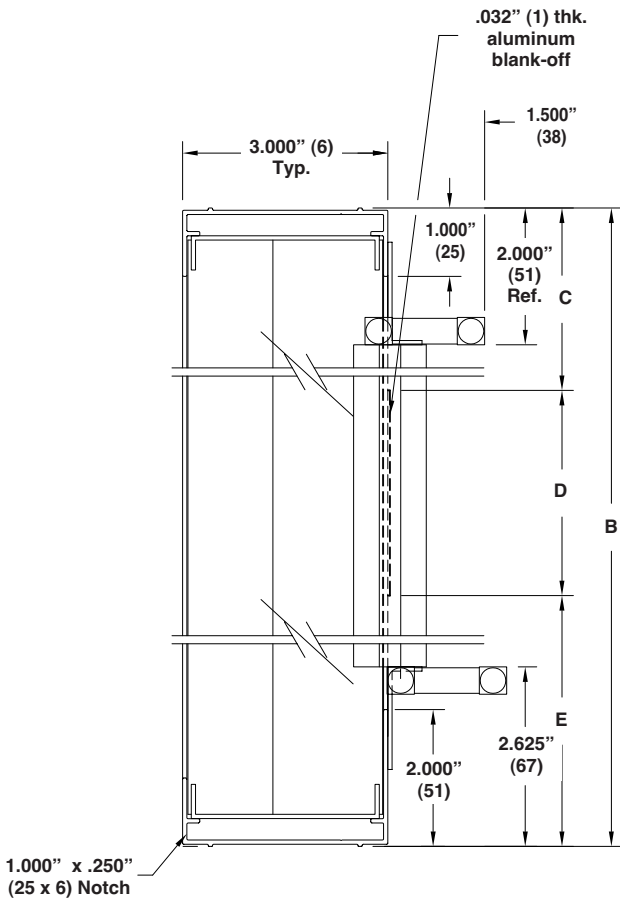
STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Vertical unit ventilator louver with air metering device

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

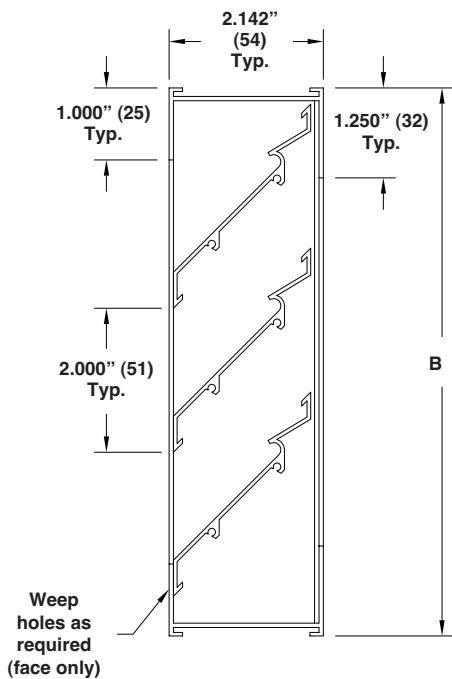
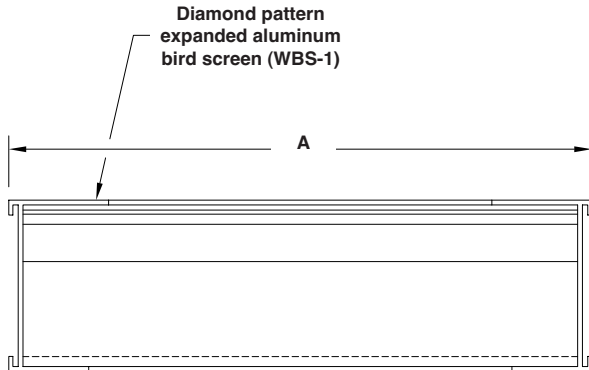
Note:
Dimensions in inches, parenthesis () indicate millimeters



PROJECT	LOCATION
ARCH./ENGR.	CONTRACTOR
REPRESENTATIVE	DATE



AEL-92-266



STANDARD CONSTRUCTION

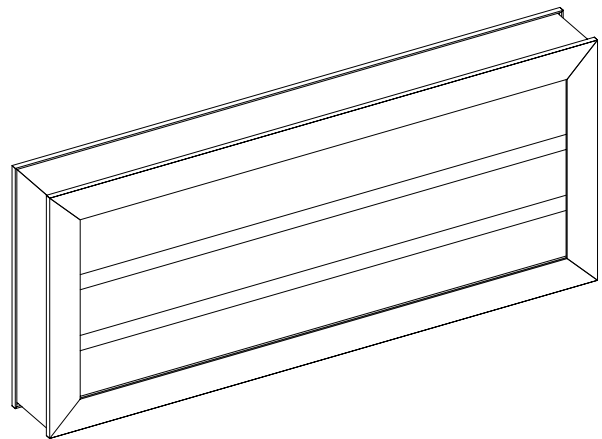
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/channel frame
- Min. size O.D. 6" x 6" (152 x 152)
- Max. size O.D. 117" x 90" (2973 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

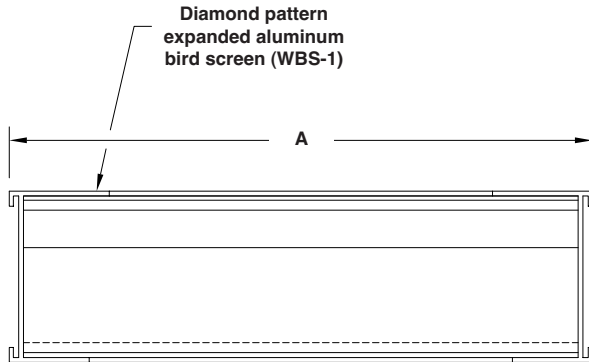
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



AEL-92-266-L



STANDARD CONSTRUCTION

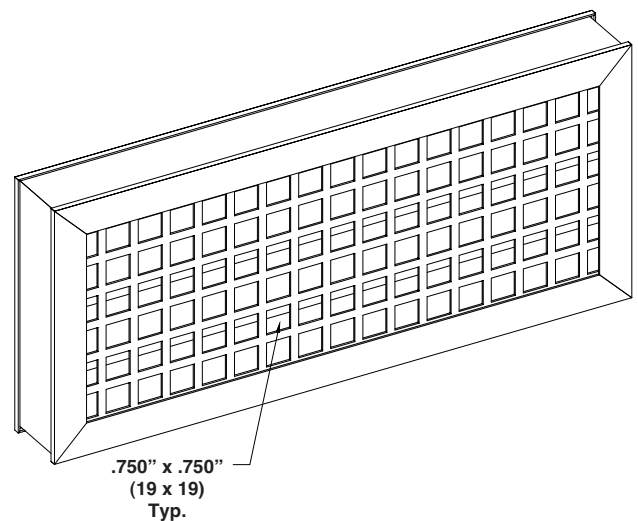
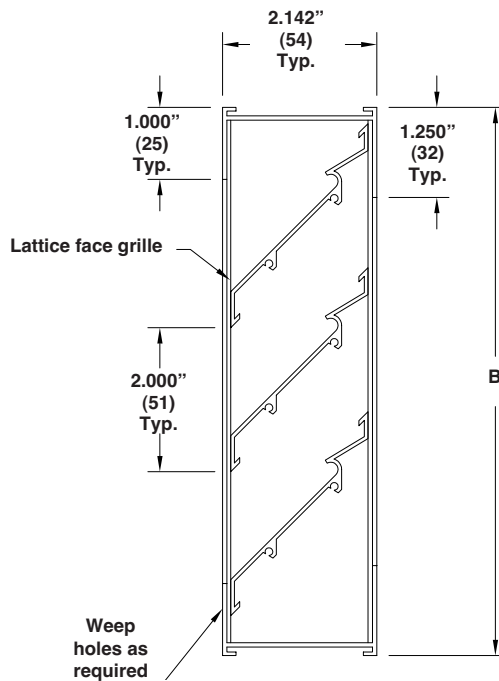
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/channel frame and lattice
- Min. size O.D. 6" x 6" (152 x 152)
- Max. size O.D. 120" x 90" (3048 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

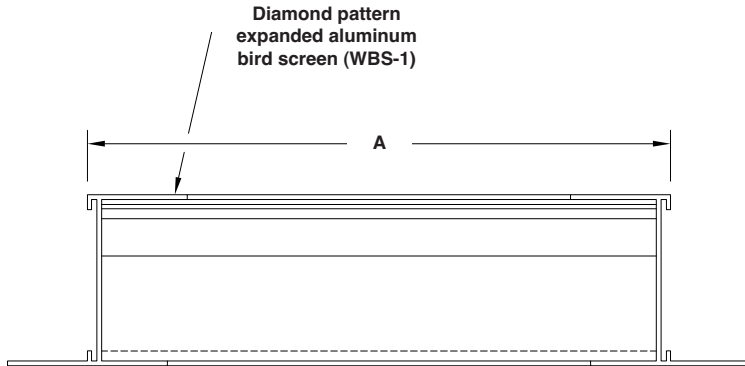
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE	LOCATION CONTRACTOR DATE	



AEL-92-267



STANDARD CONSTRUCTION

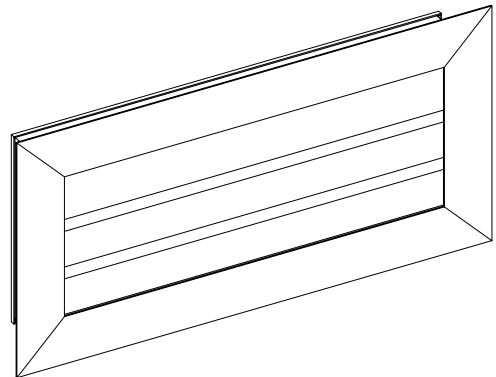
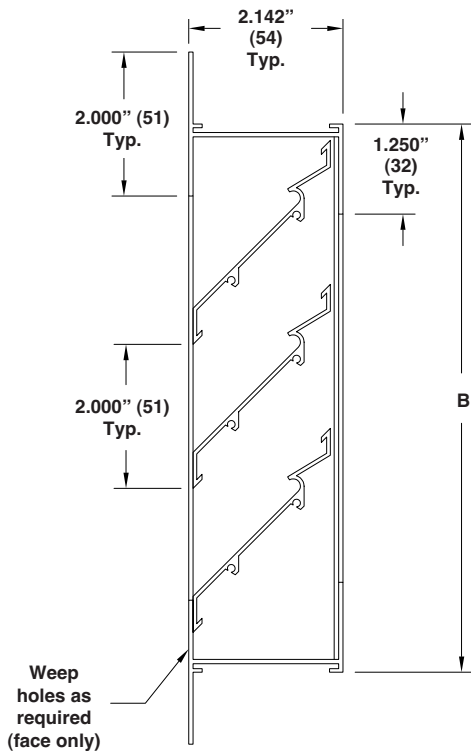
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/flange frame
- Min. size O.D. 6" x 6" (152 x 152)
- Max. size O.D. 117" x 90" (2973 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

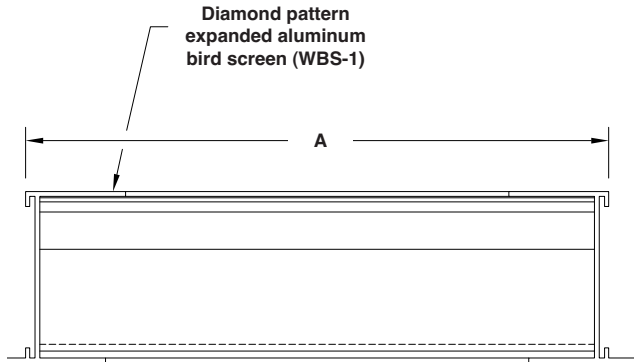
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE	LOCATION CONTRACTOR DATE	



AEL-92-267-L



STANDARD CONSTRUCTION

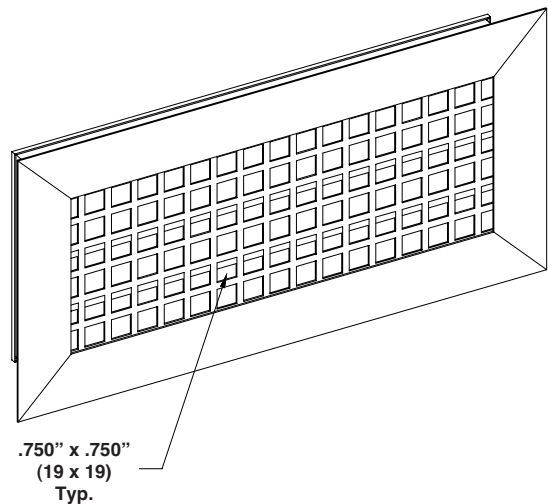
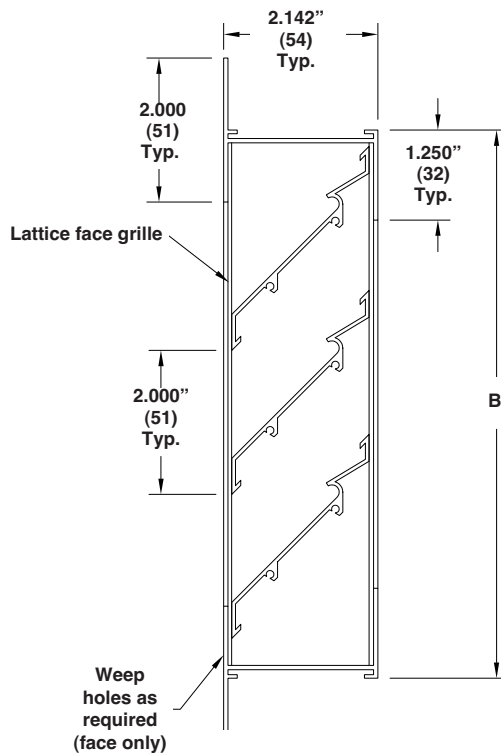
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/flange frame and lattice
- Min. size O.D. 6" x 6" (152 x 152)
- Max. size O.D. 120" x 90" (3048 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters

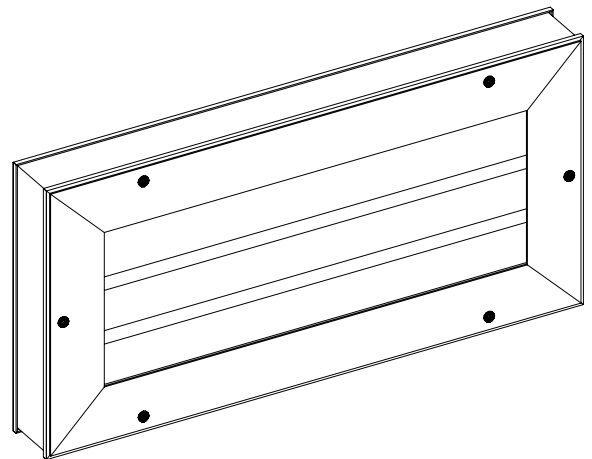
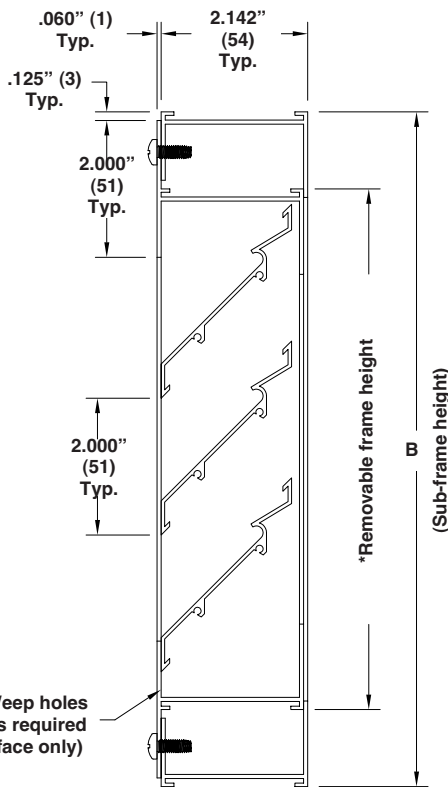
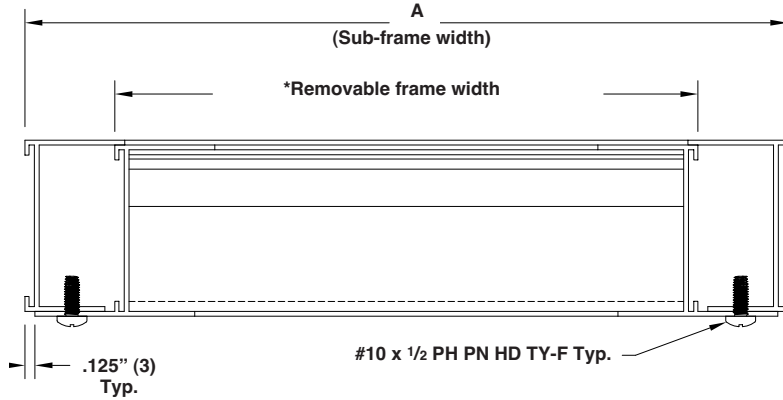


QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



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AEL-92-267 W/ 266 SUB FRAME



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/flange frame and channel sub-frame
- Min. size O.D. 6" x 9" (152 x 229)
- Max. size O.D. 117" x 90" (2973 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

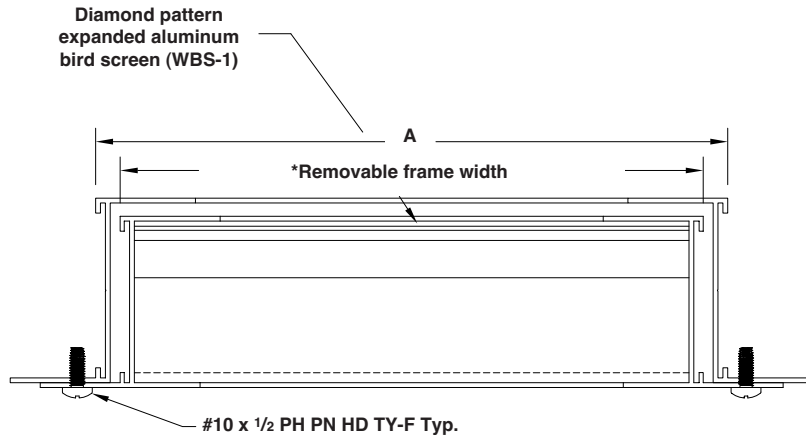
Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters
- * Removable louver size is sub-frame minus 2.250" (57)

QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



AEL-92-267 W/ 188 SUB FRAME



STANDARD CONSTRUCTION

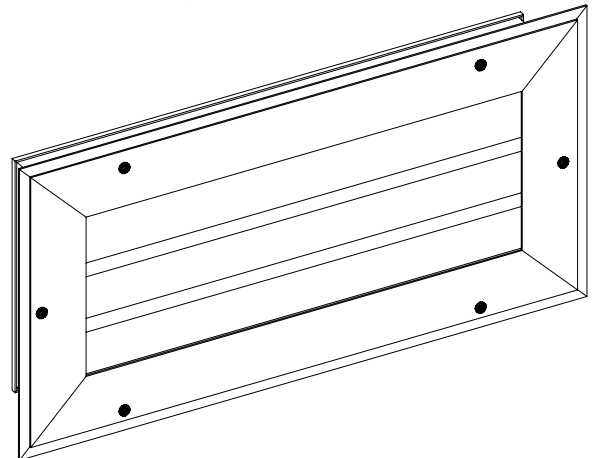
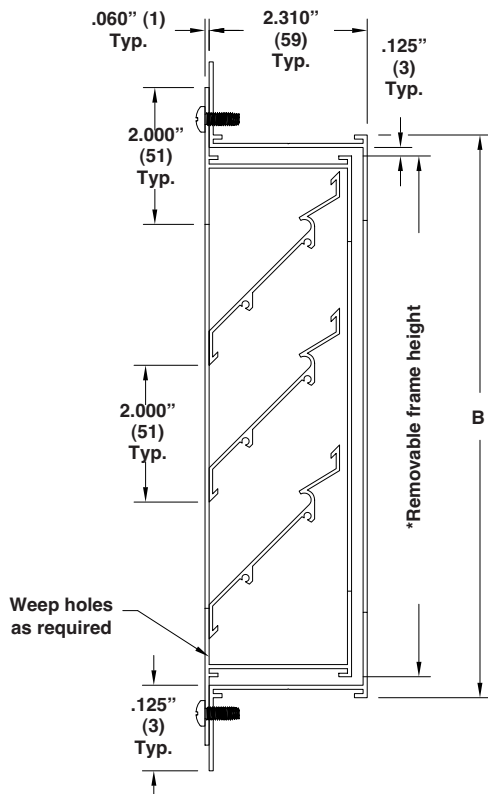
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/flange frame and flange sub-frame
- Min. size O.D. 6" x 9" (152 x 229)
- Max. size O.D. 117" x 90" (2973 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

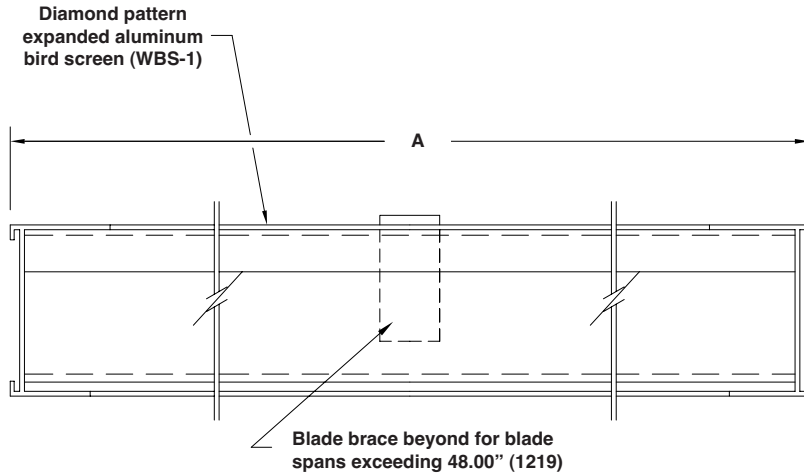
1. Face view for illustration purposes only.
 2. Dimensions in inches, parenthesis () indicate millimeters
- * Removable louver size is sub-frame minus .614" (16)



QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE	LOCATION CONTRACTOR DATE	



HDAL 45-H W/266 FRAME



STANDARD CONSTRUCTION

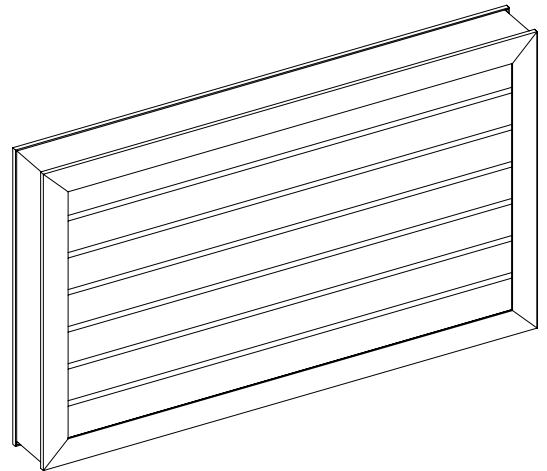
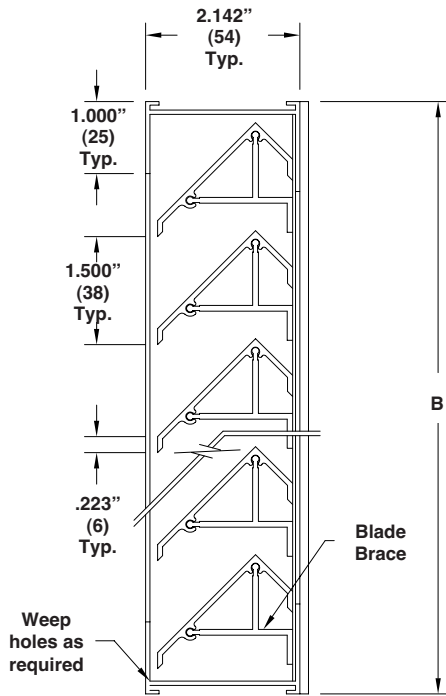
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/channel frame
- Min. size O.D. 6" x 6" (152 x 152)
- Max. size O.D. 117" x 90" (2972 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

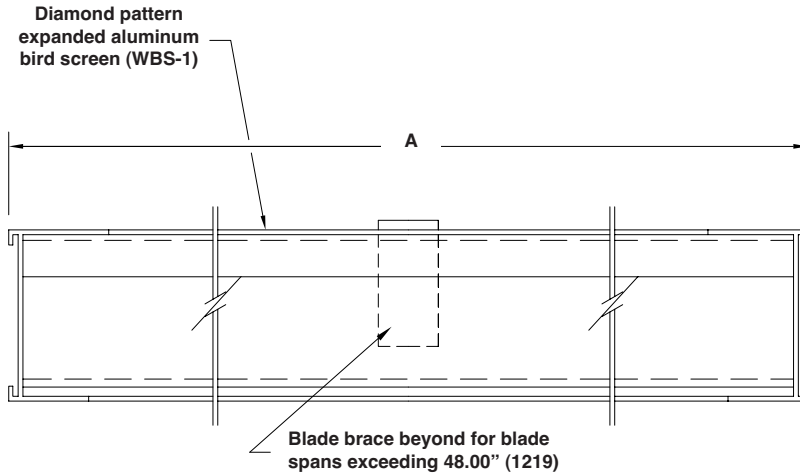
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



HDAL 45-H-L W/266 FRAME



STANDARD CONSTRUCTION

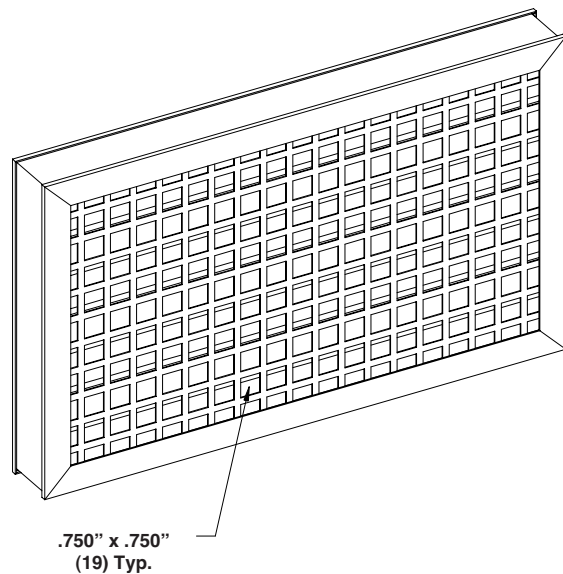
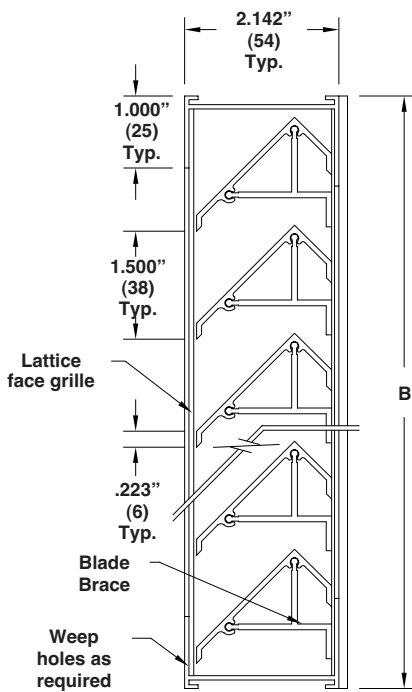
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/channel frame & lattice
- Min. size O.D. 6" x 6" (152 x 152)
- Max. size O.D. 117" x 90" (2972 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

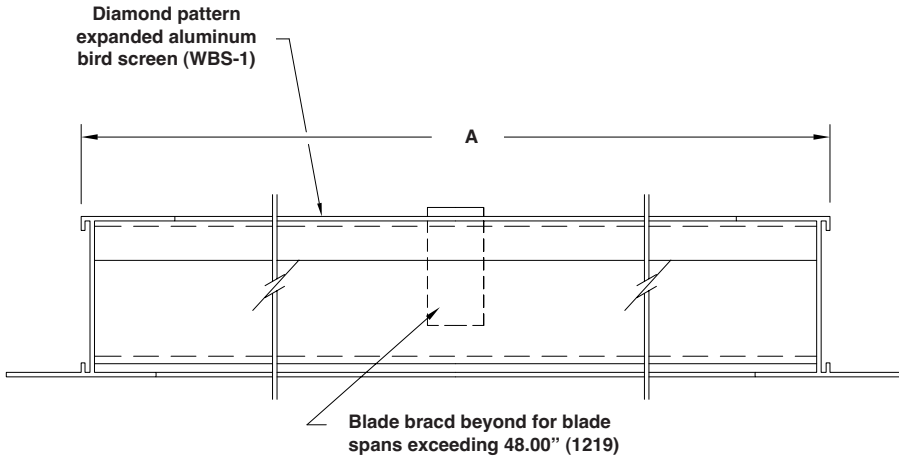
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



HDAL 45-H W/267 FRAME



STANDARD CONSTRUCTION

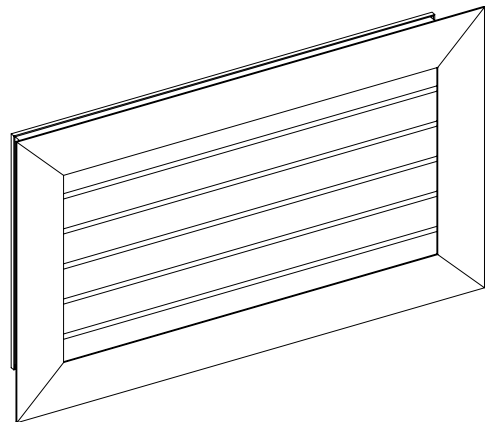
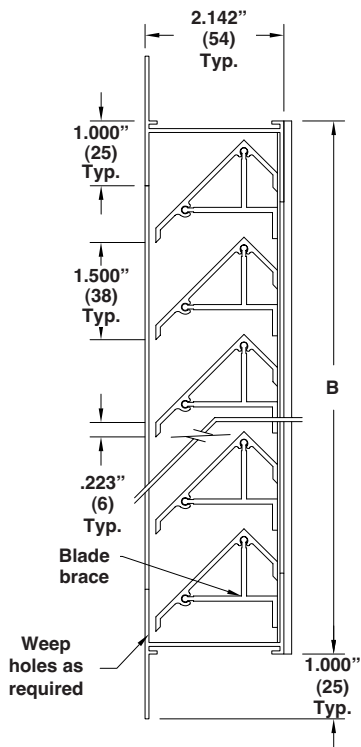
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/flange frame
- Min. size O.D. 6" x 6" (152 x 152)
- Max. size O.D. 117" x 90" (2972 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

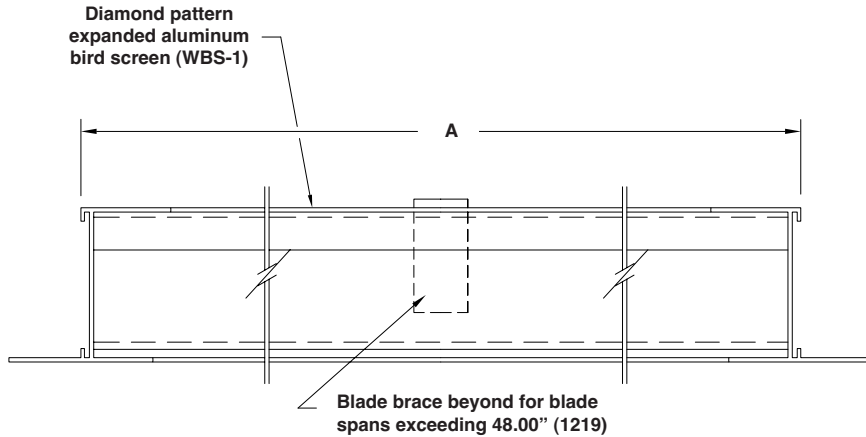
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE	LOCATION CONTRACTOR DATE	



HDAL 45-H-L W/267 FRAME



STANDARD CONSTRUCTION

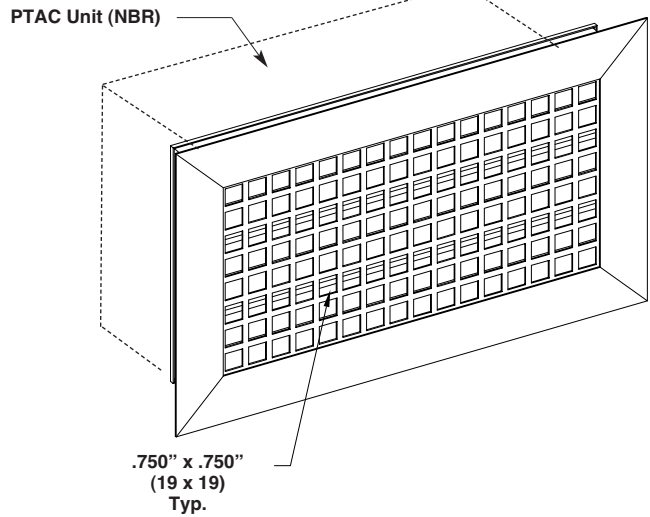
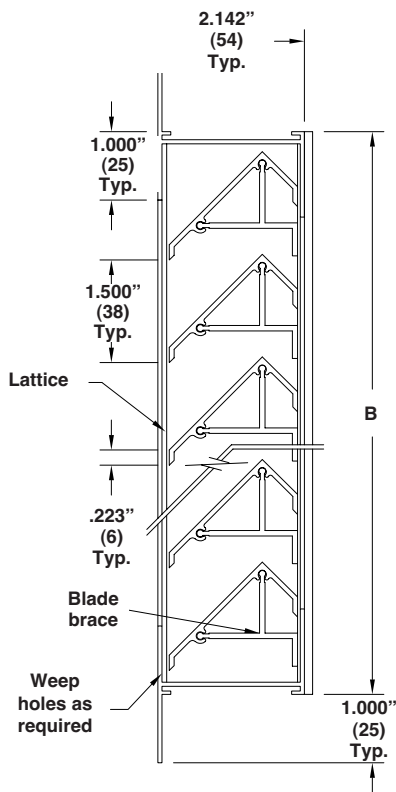
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/flange frame & lattice
- Min. size O.D. 6" x 6" (152 x 152)
- Max. size O.D. 117" x 90" (2972 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

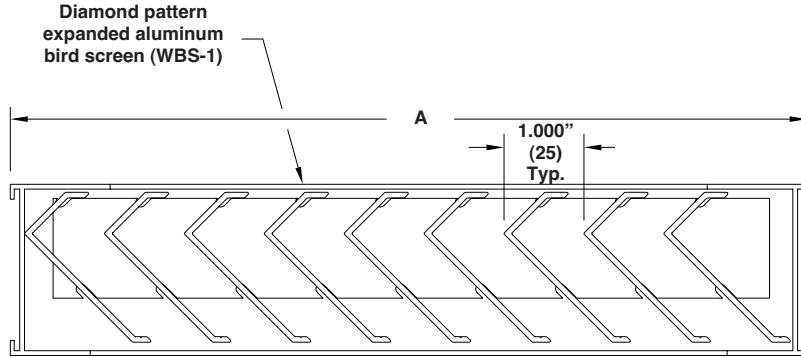
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT	LOCATION	
ARCH./ENGR.	CONTRACTOR	
REPRESENTATIVE	DATE	



HDAL 45-V W/266 FRAME



STANDARD CONSTRUCTION

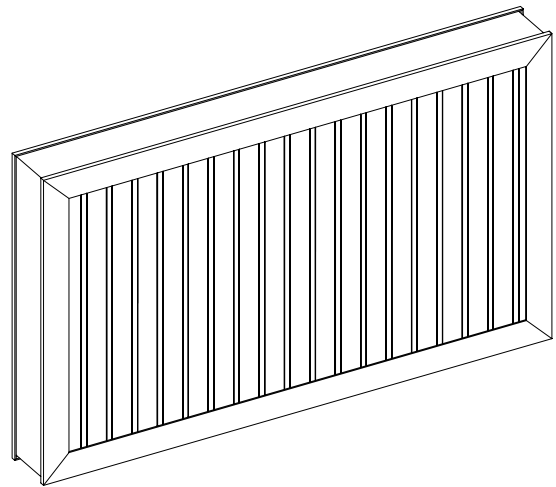
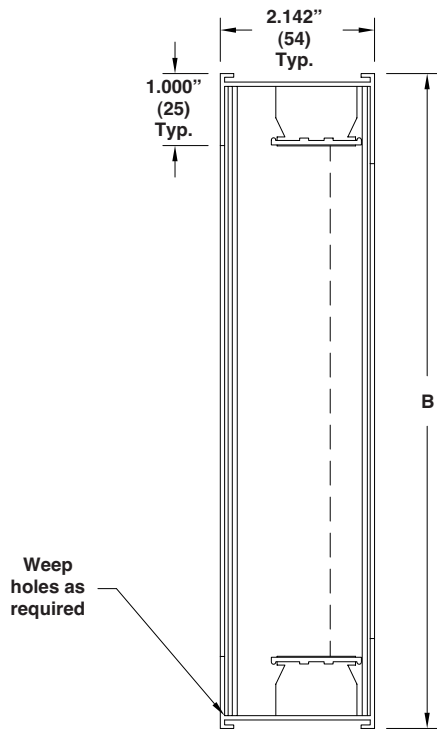
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/channel frame
- Min. size O.D. 6" x 6" (152 x 152)
- Max. size O.D. 120" x 90" (3048 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

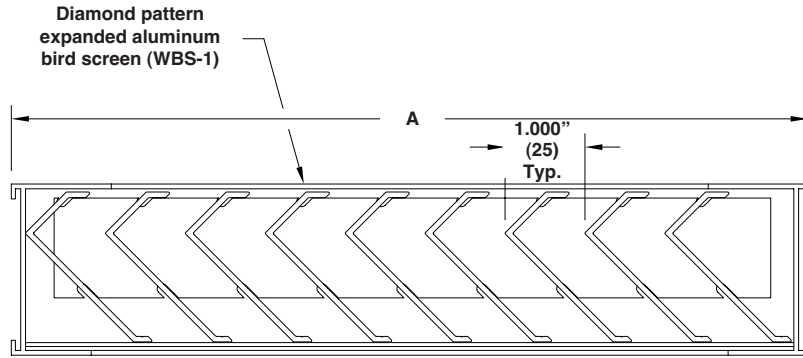
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



HDAL 45-V-L W/266 FRAME



STANDARD CONSTRUCTION

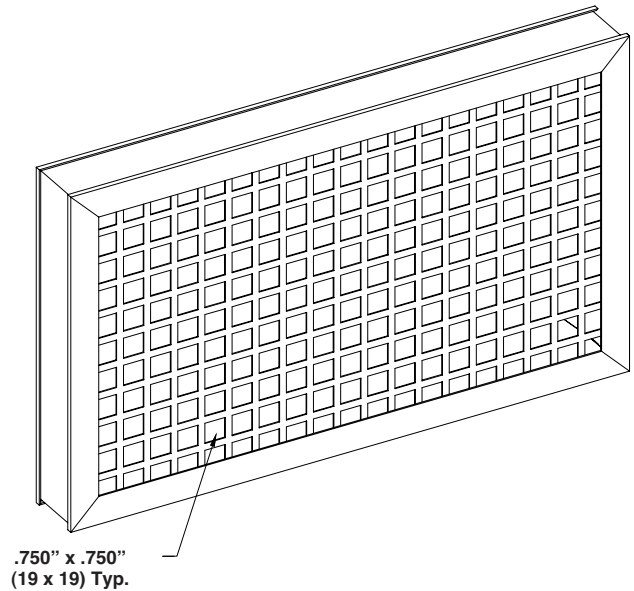
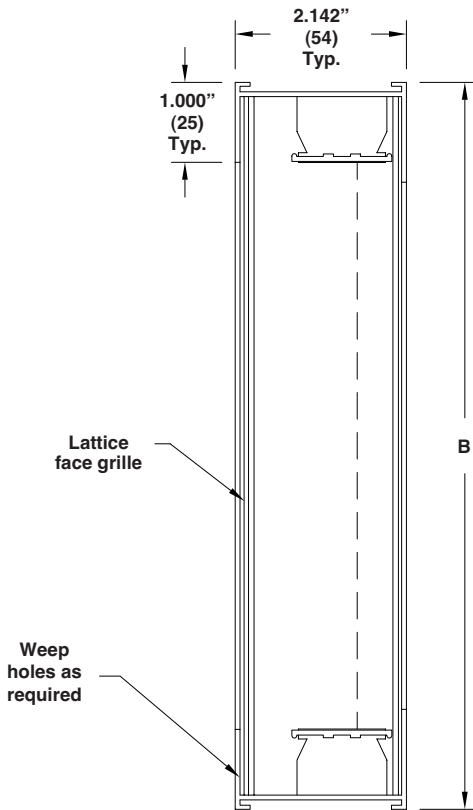
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/channel frame & lattice
- Min. size O.D. 6" x 6" (152 x 152)
- Max. size O.D. 120" x 90" (3048 x 2286)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters

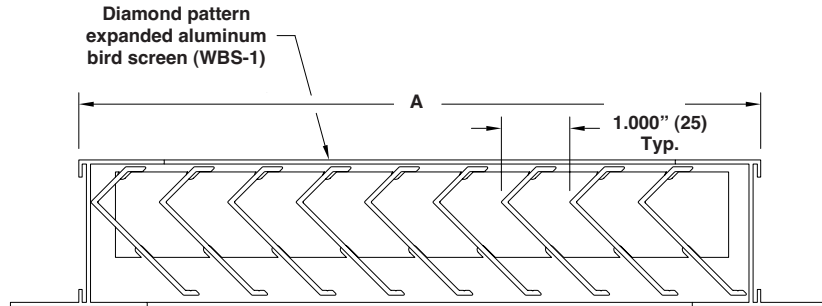


QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



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HDAL 45-V W/267 FRAME



STANDARD CONSTRUCTION

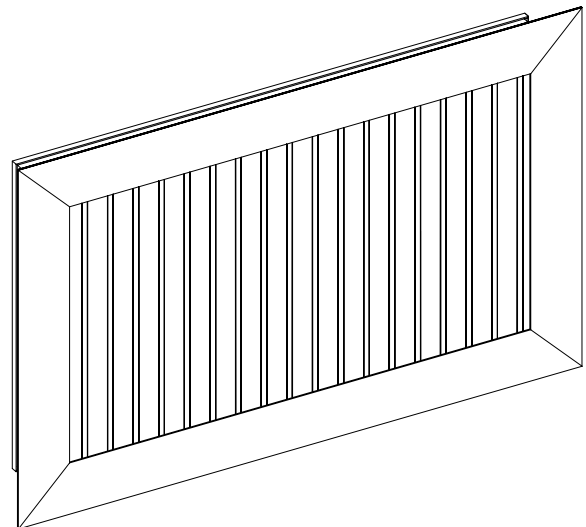
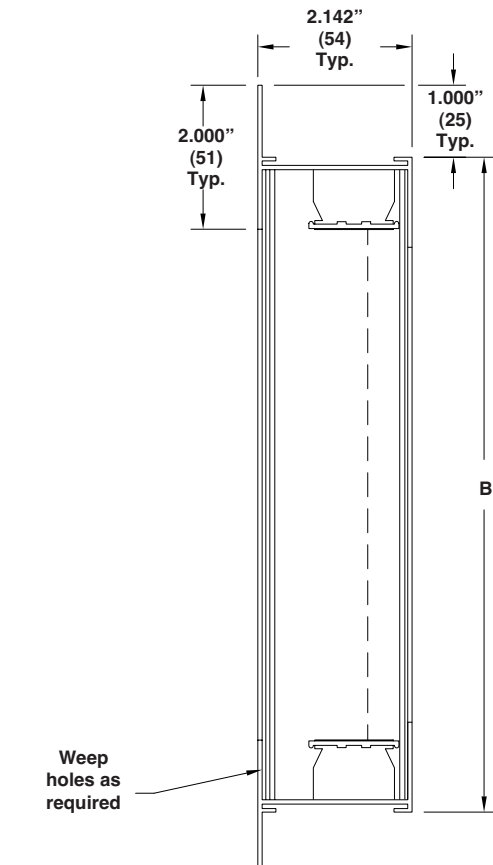
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/flange frame
- Min. size O.D. 6" x 7" (152 x 178)
- Max. size O.D. 82" x 35" (2083 x 889)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters

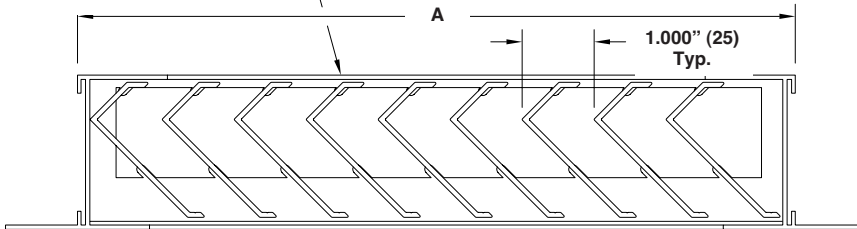


QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



HDAL 45-V-L W/267 FRAME

Diamond pattern expanded aluminum bird screen (WBS-1)



STANDARD CONSTRUCTION

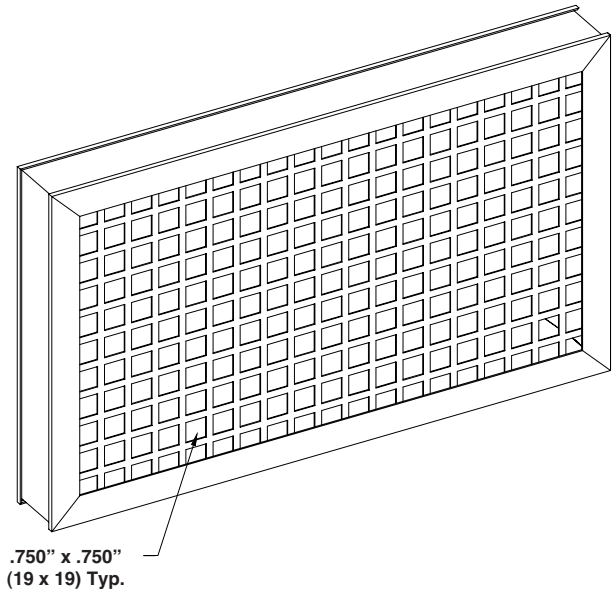
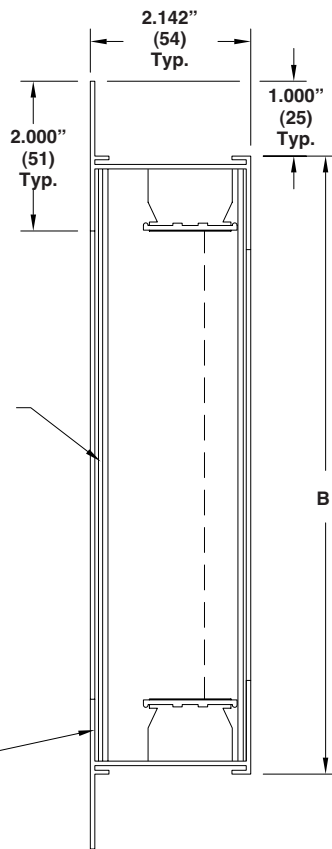
- Extruded aluminum; 6063-T5
- Horizontal type unit ventilator louver w/flange frame & lattice
- Min. size O.D. 6" x 7" (152 x 178)
- Max. size O.D. 82" x 35" (2083 x 889)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE	VARIATIONS
	A x B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



ADL SERIES FRAMES

STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Frames for Air Discharge Louvers

4		1		104	
216		264		170	
A902*		54		39	

*Optional removable core

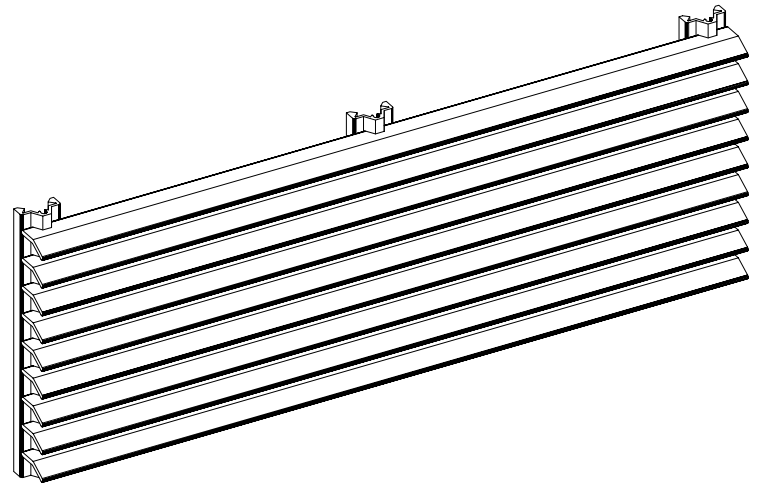
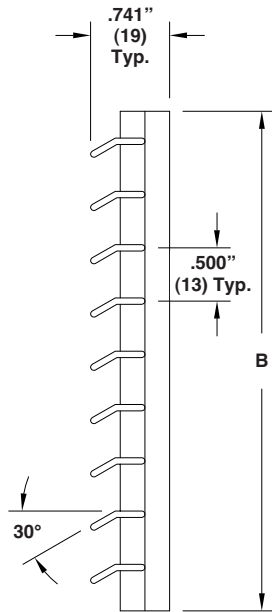
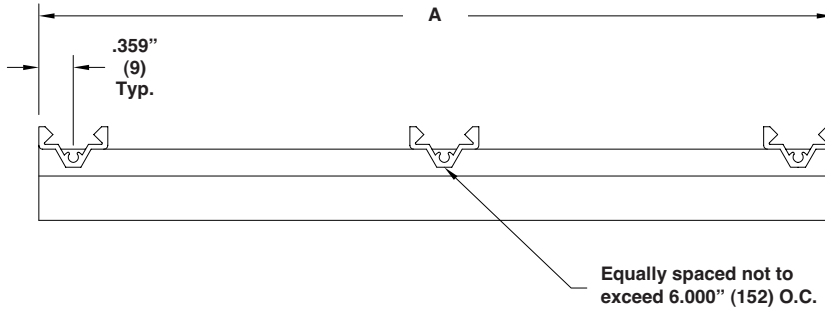
COMBINATION OF ADL LOUVERS AND FRAMES FOR USE WITH COUNTER SECTIONS AND WALL CABINETS.

Note: Dimensions in inches, parenthesis () indicate millimeters

QTY.	VARIATIONS
PROJECT ARCH./ENGR. REPRESENTATIVE	LOCATION CONTRACTOR DATE



ADL-130-500



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Min. size O.D. 4" x 2" (102 x 51)
- Max. size O.D. 72" x 12" (1829 x 305)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

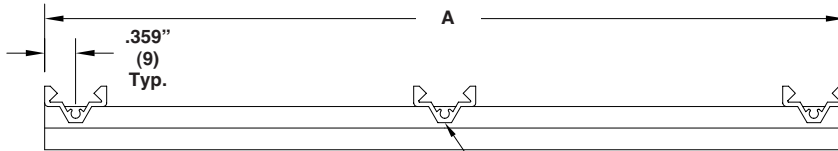
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters

QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE

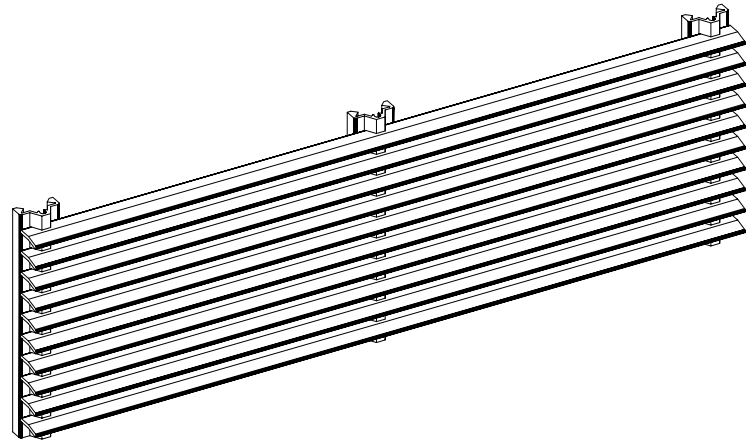
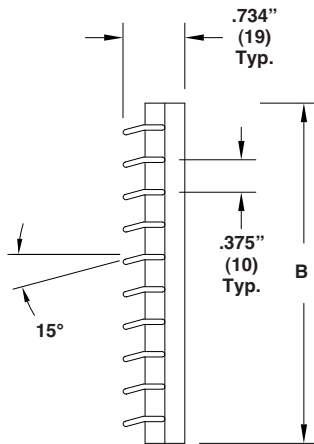


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ADL-333-375-181



Equally spaced not to exceed 6.000" (152) O.C.



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Min. size O.D. 4" x 2" (102 x 51)
- Max. size O.D. 72" x 12" (1829 x 305)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

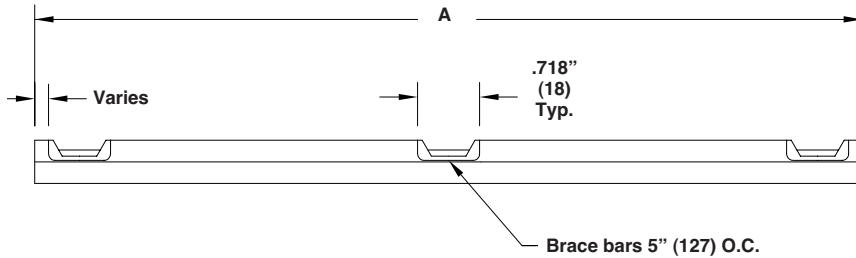
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters

QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

ADL-333-375-332



STANDARD CONSTRUCTION

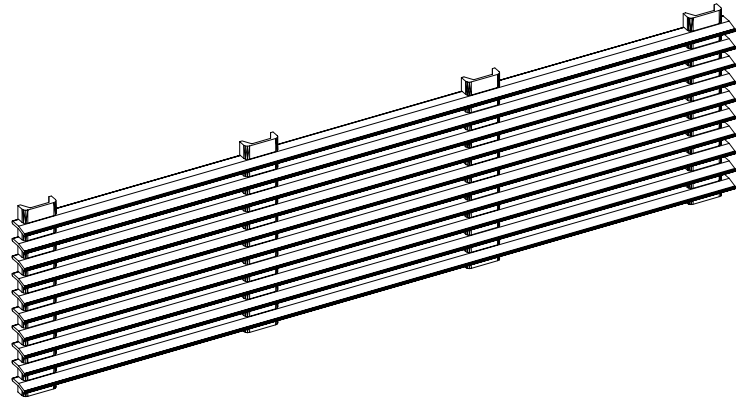
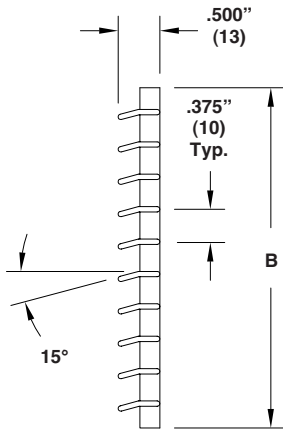
- Extruded aluminum; 6063-T5
- Min. size O.D. 5" x 2" (127 x 51)
- Max. size O.D. 72" x 12" (1829 x 305)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

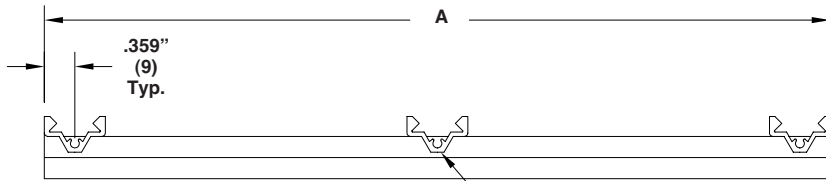
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



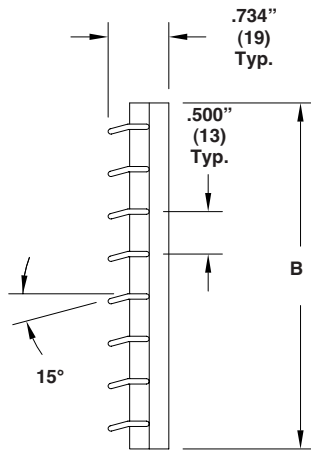
QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



ADL-333-500



Brace bars not to exceed 6" (152) O.C.



STANDARD CONSTRUCTION

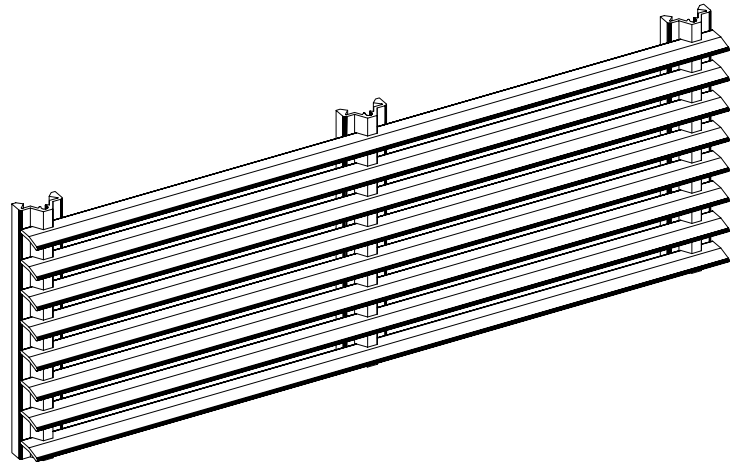
- Extruded aluminum; 6063-T5
- Min. size O.D. 4" x 2" (102 x 51)
- Max. size O.D. 72" x 12" (1829 x 305)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

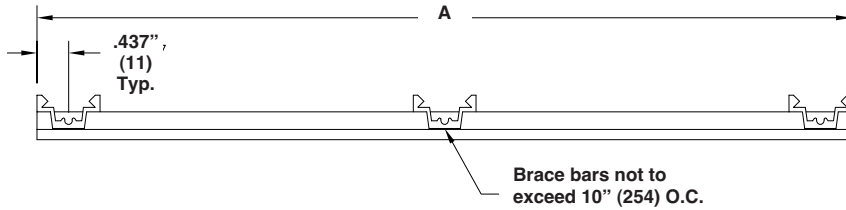
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE



ADL-5TC-500



STANDARD CONSTRUCTION

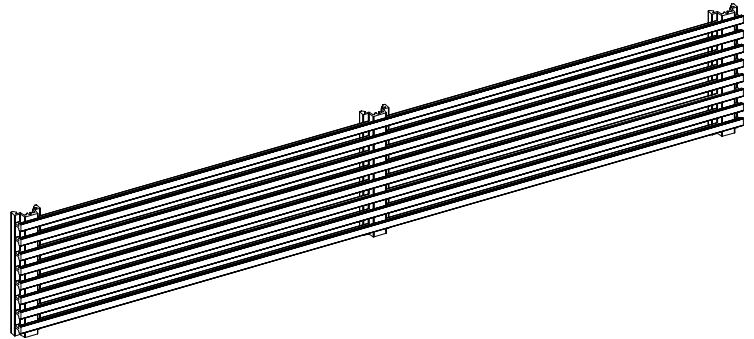
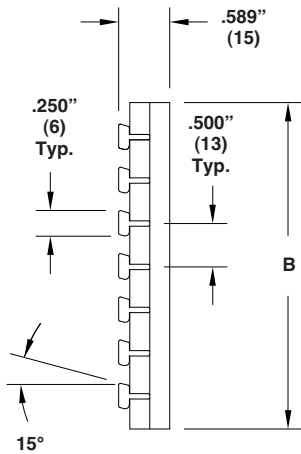
- Extruded aluminum; 6063-T5
- Min. size O.D. 4" x 2" (102 x 51)
- Max. size O.D. 72" x 72" (1829 x 1829)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

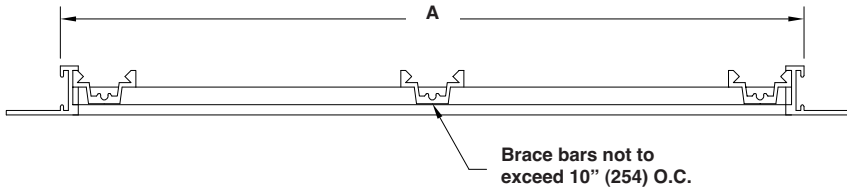
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



ADL-5TC-500-4



STANDARD CONSTRUCTION

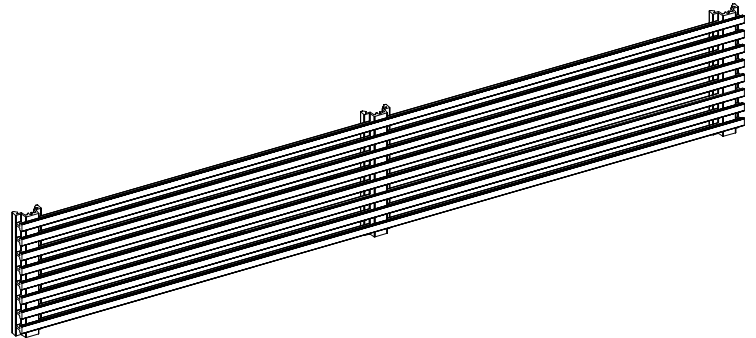
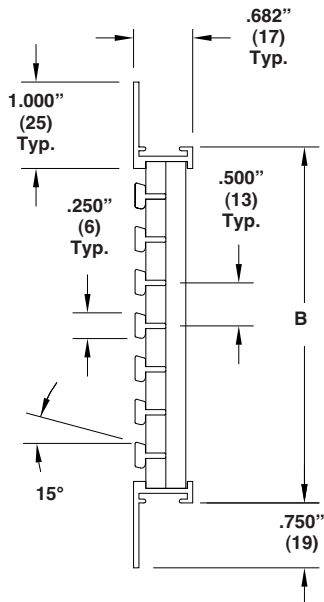
- Extruded aluminum; 6063-T5
- ADL w/4 frame
- Min. size B.S. 4" x 1.500" (102 x 38)
- Max. size B.S. 72" x 72" (1829 x 1829)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

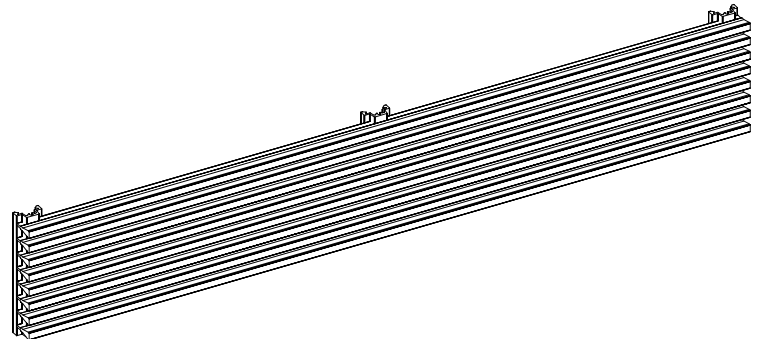
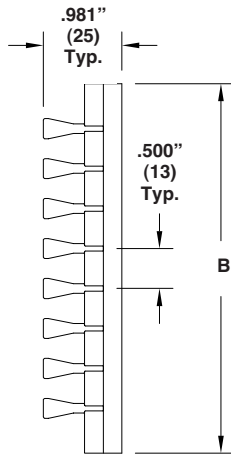
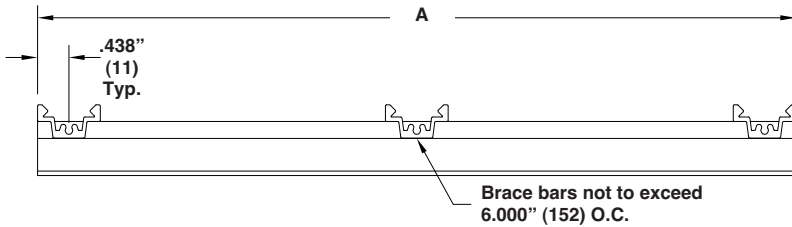
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



ADL-57-500



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Min. size O.D. 4" x 1" (102 x 25)
- Max. size O.D. 72" x 72" (1829 x 1829)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

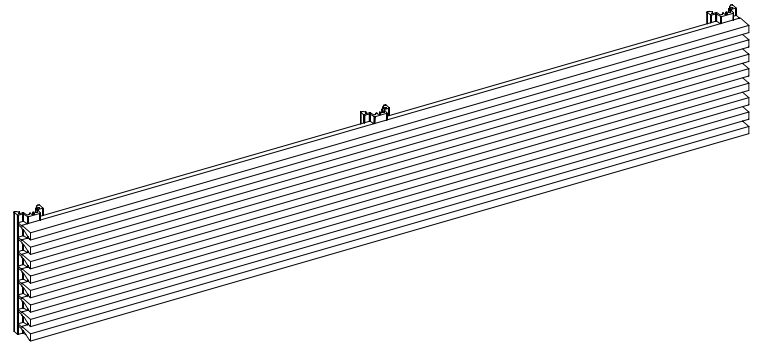
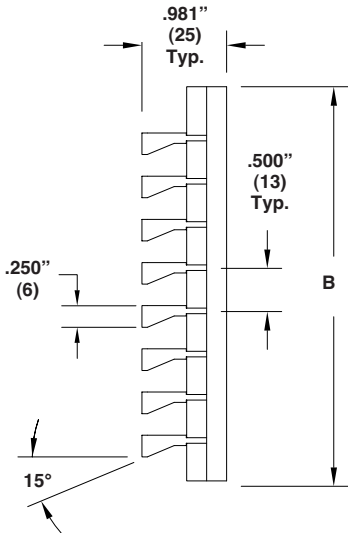
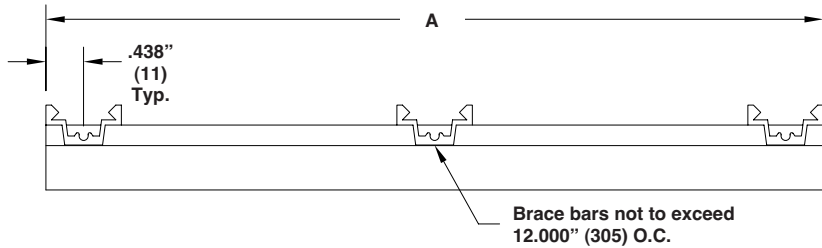
Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters

QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



ADL-58-500



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Min. size O.D. 4" x 1" (102 x 25)
- Max. size O.D. 72" x 72" (1829 x 1829)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

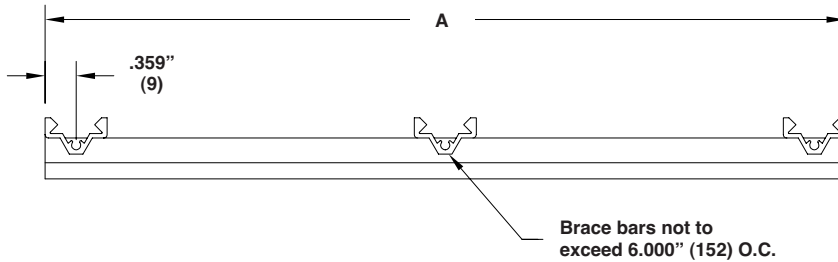
Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters

QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



ADL-63-375



STANDARD CONSTRUCTION

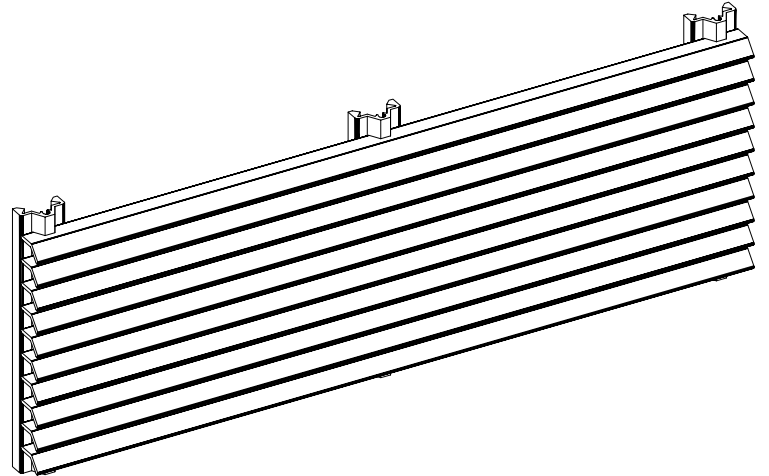
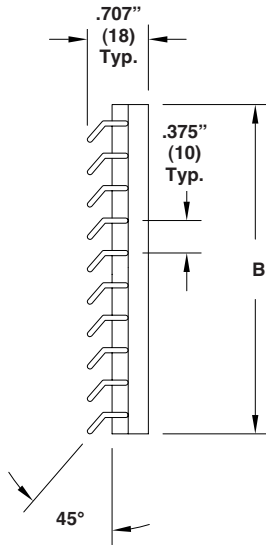
- Extruded aluminum; 6063-T5
- Min. size O.D. 4" x 2" (102 x 51)
- Max. size O.D. 72" x 12" (1829 x 305)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

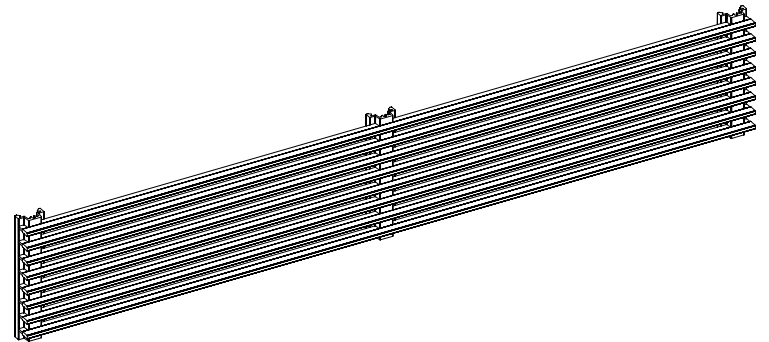
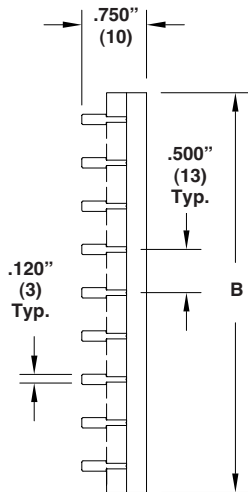
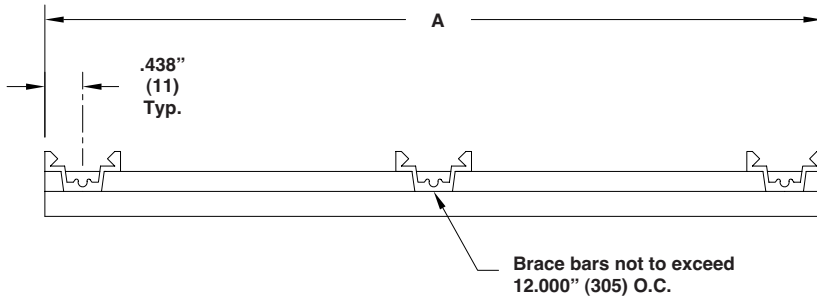
1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



ADL-93-500



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Min. size O.D. 4" x 1" (102 x 25)
- Max. size O.D. 72" x 72" (1829 x 1829)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

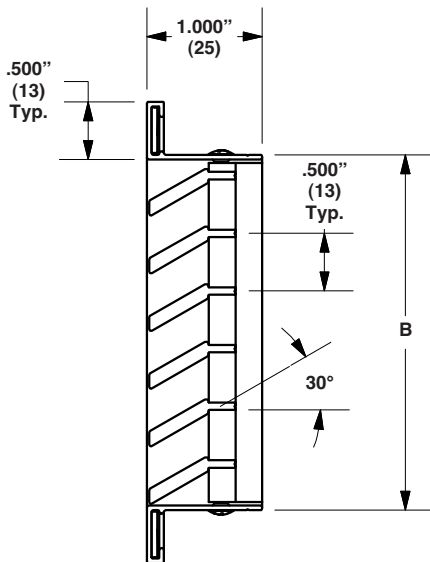
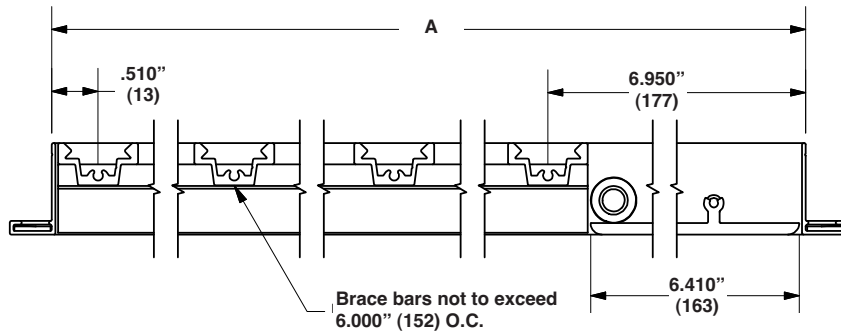
Notes:

1. Face view for illustration purposes only.
2. Dimensions in inches, parenthesis () indicate millimeters

QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE	



ADL-94-500-170-301D



STANDARD CONSTRUCTION

- Extruded aluminum; 6063-T5
- Max. size O.D. 120" x 10" (3048 x 254)

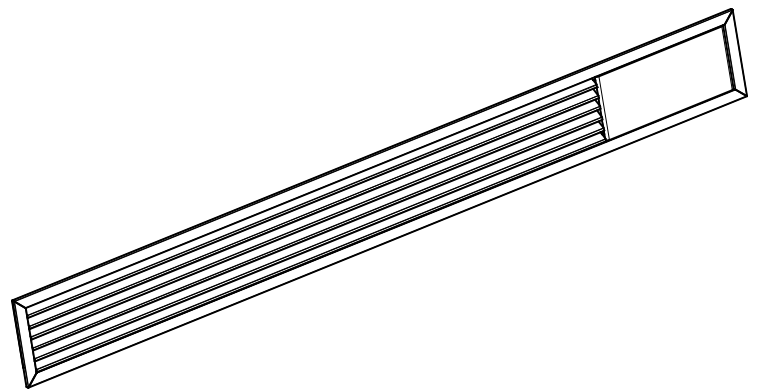
OPTIONS

- Position: R/H shown
- Door L/H
 - Door R/H
- Door: (Open) L/H to R/H shown
- Bottom to top
 - L/H to R/H
 - R/H to L/H

- Finish
- Clear or anodized finish
 - Prime coat
 - Baked Enamel (Kynar 50%)
 - Pearledized 50 or 70
 - Kynar 70%

Notes:

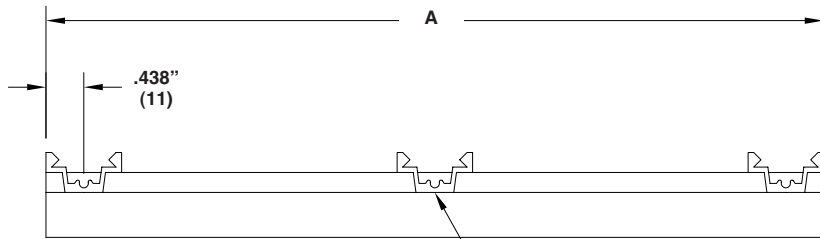
1. Face view for illustration purposes only.
2. Not for floor application
3. Dimensions in inches, parenthesis () indicate millimeters



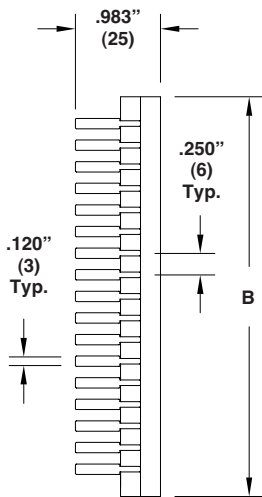
QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE



ADL-95-250



Brace bars not to exceed 12.000" (305) O.C.



STANDARD CONSTRUCTION

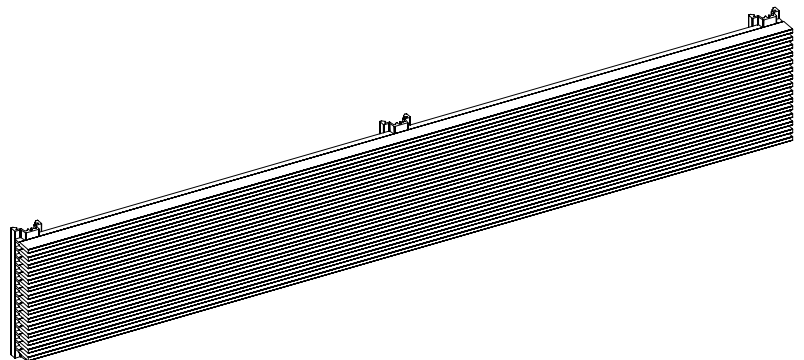
- Extruded aluminum; 6063-T5
- Min. size O.D. 4" x 1" (102 x 25)
- Max. size O.D. 72" x 72" (1829 x 1829)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

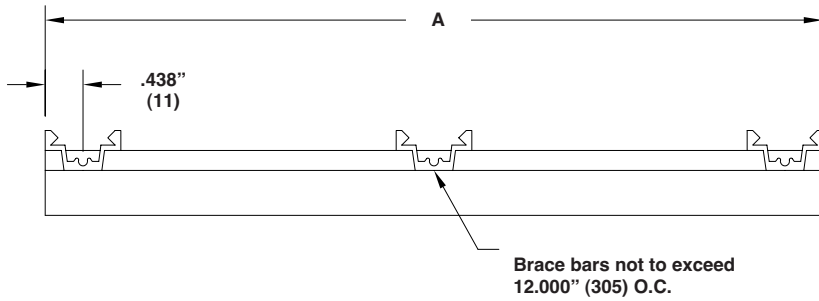
1. Face view for illustration purposes only.
2. Not for floor application
3. Dimensions in inches, parenthesis () indicate millimeters



QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE



ADL-96-250



STANDARD CONSTRUCTION

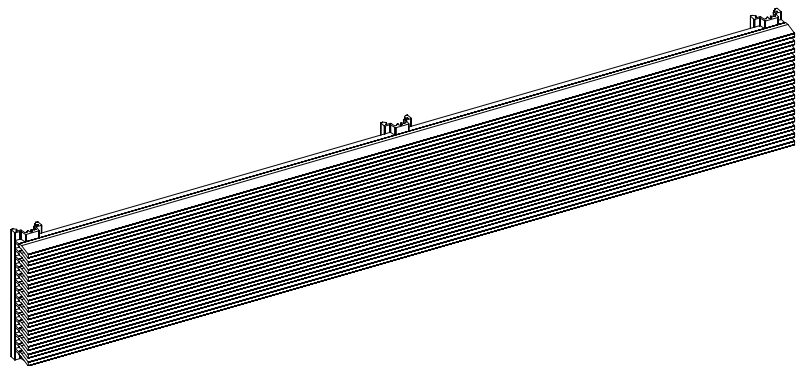
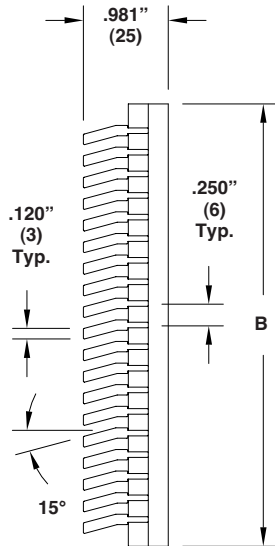
- Extruded aluminum; 6063-T5
- Min. size O.D. 4" x 1" (102 x 25)
- Max. size O.D. 72" x 72" (1829 x 1829)

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

1. Face view for illustration purposes only.
2. Not for floor application
3. Dimensions in inches, parenthesis () indicate millimeters

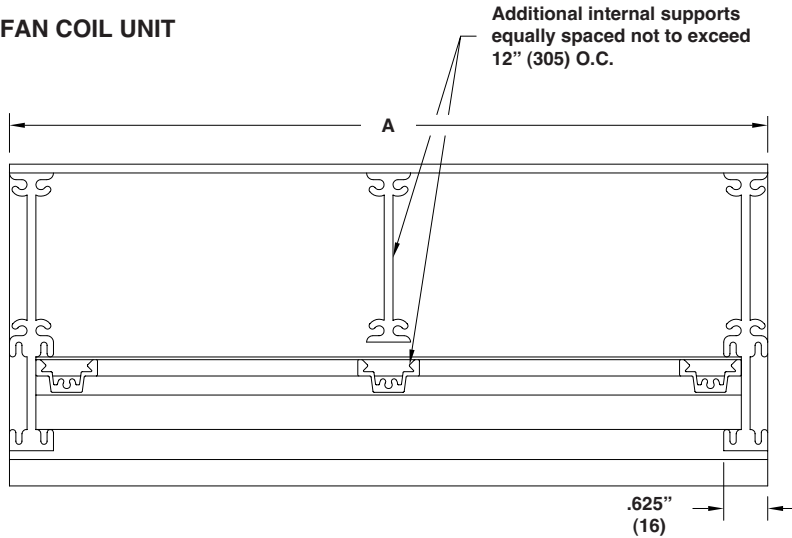


QTY.	ACTUAL SIZE		VARIATIONS
	A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE



XHD-AEL-42

FAN COIL UNIT



STANDARD CONSTRUCTION

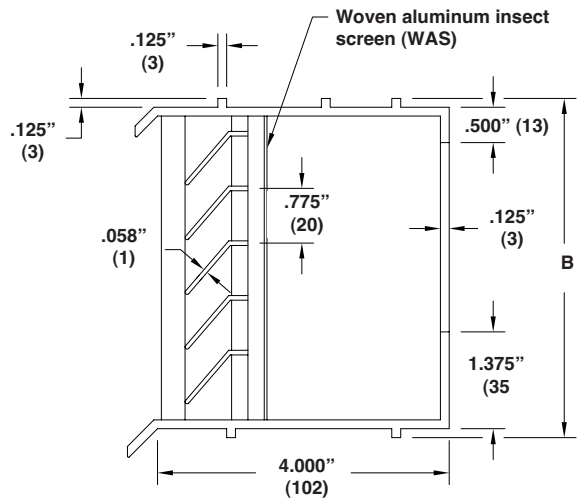
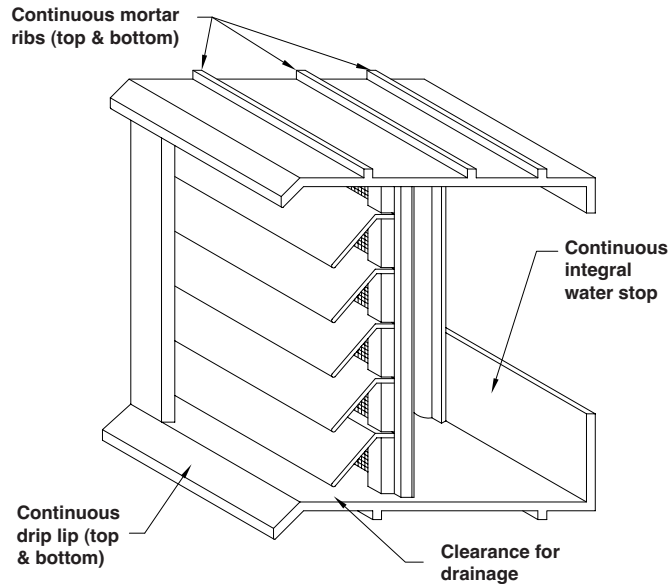
- Extruded aluminum; 6063-T5

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

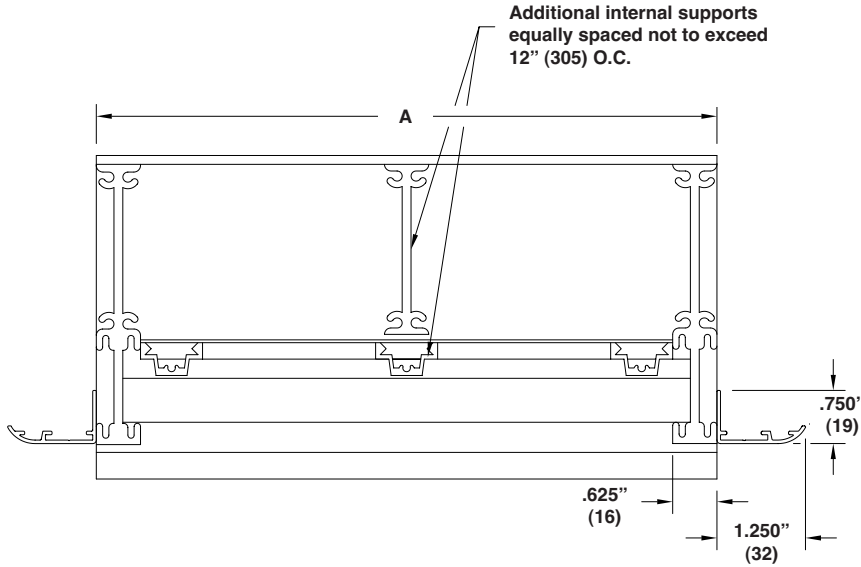
1. Face view for illustration purposes only
2. Dimensions in inches, parenthesis () indicate millimeters



UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE		VARIATIONS
		A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE		



XHD-AEL-42 W/ 34 FRAME



STANDARD CONSTRUCTION

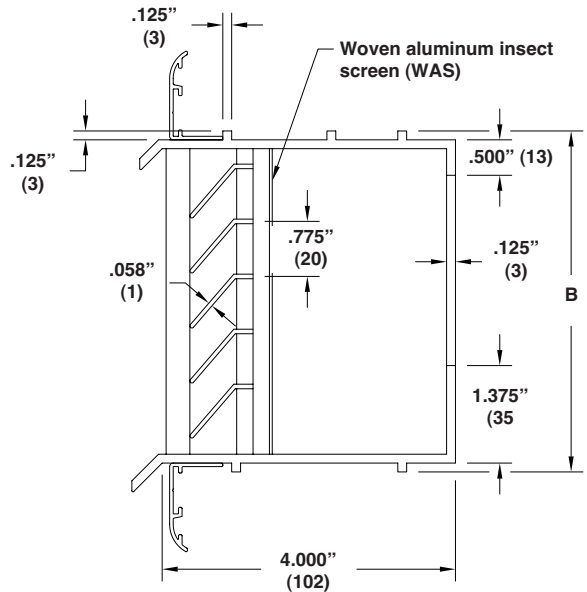
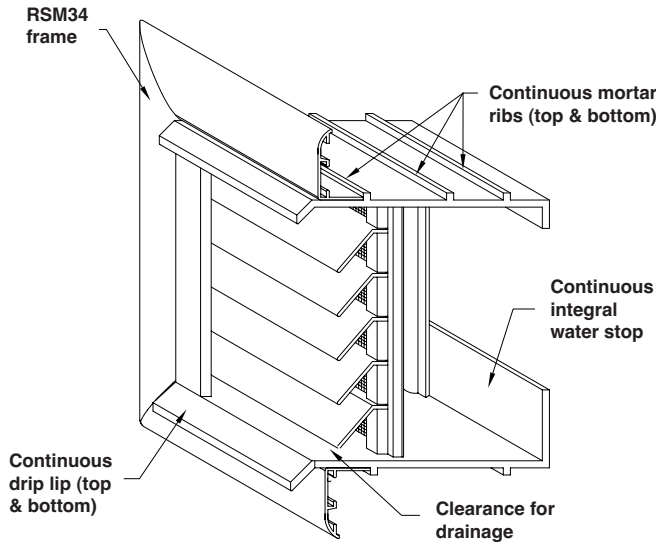
- Extruded aluminum; 6063-T5

OPTIONS

- Clear or anodized finish
- Prime coat
- Baked Enamel (Kynar 50%)
- Pearledized 50 or 70
- Kynar 70%

Notes:

1. Face view for illustration purposes only
2. Dimensions in inches, parenthesis () indicate millimeters

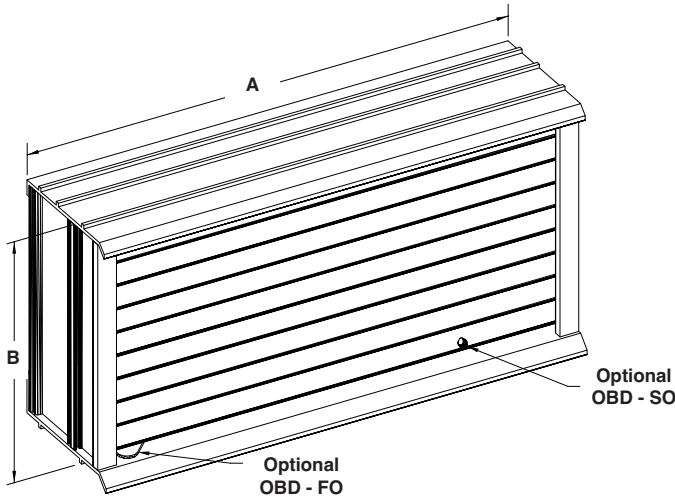


UNIT TYPE	UNIT MODEL NO.	ACTUAL SIZE		VARIATIONS
		A	B	
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE		



1300 ENTERPRISE ROAD GENEVA, ALABAMA 36340-0580 800-239-4621 FAX 1-800-508-1469 www.reliablelouvers.com

RBV7020-4 / RBV7020-8 (BRICK/BLOCK VENTS)

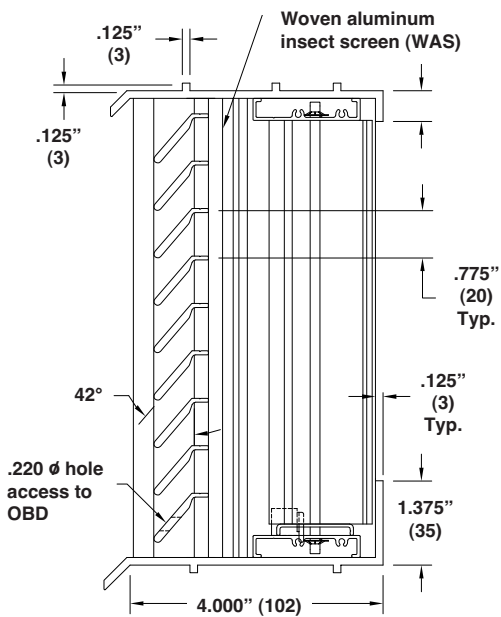


STANDARD CONSTRUCTION

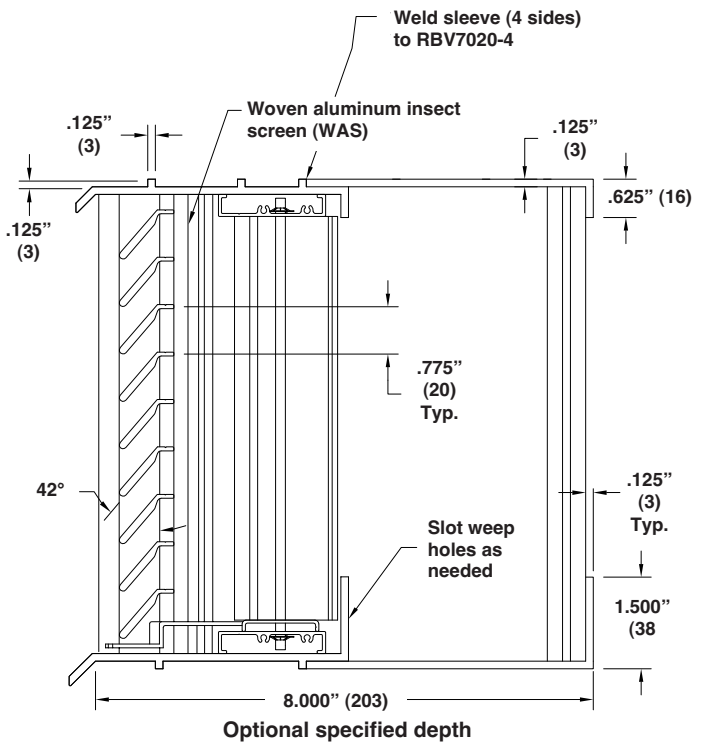
- Brick and block vents in 2 standard depths, 4" (102) and 8" (203)
- Special design features afford maximum weather protection
- .125" (3) extruded aluminum construction; 6063-T5 alloy
- Clear anodized finish is standard. Call factory for other available finishes.

OPTIONS

- Opposed blade damper.
Specify: Face operator Slot operator
- Sleeve extension
 Specify total depth: _____ inches



RBV7020-4 OBD
Shown with optional OBD-SO



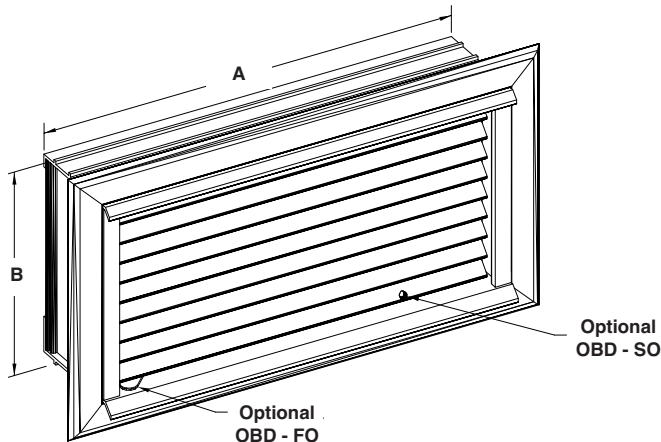
Optional specified depth

Note: Dimensions in inches, parenthesis () indicate millimeters

UNIT TYPE	UNIT MODEL NO.	VARIATIONS
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



RBV7020-4FF / RBV7020-8FF

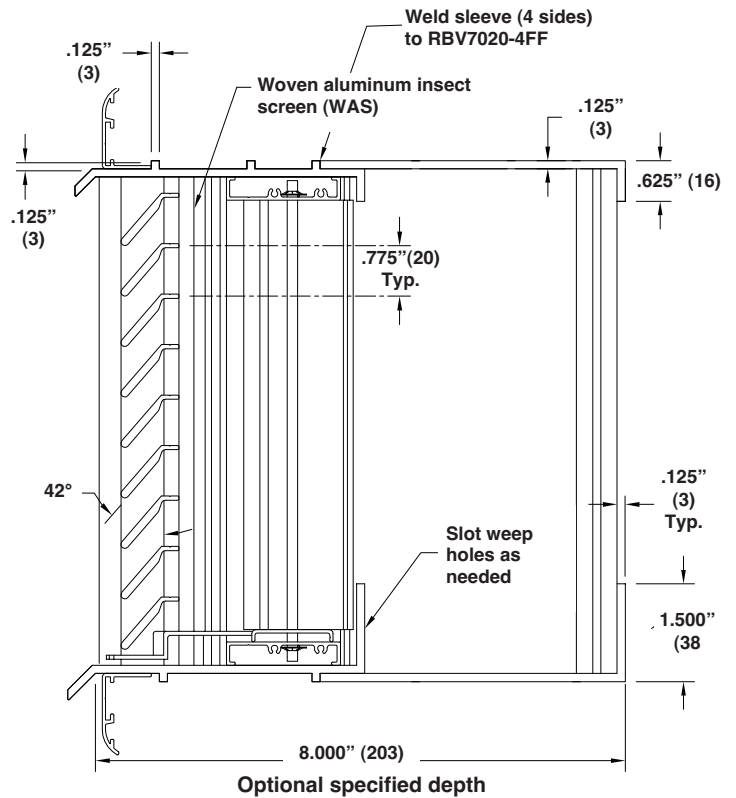
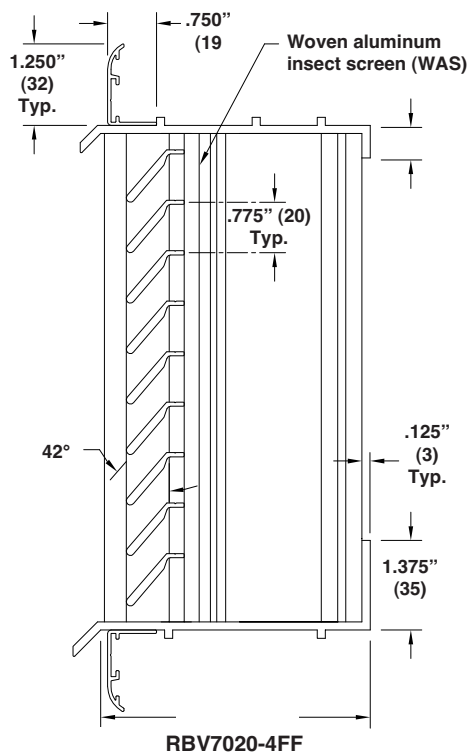


STANDARD CONSTRUCTION

- Brick and block vents in 34 flange frame in 2 standard depths, 4" (102) and 8" (203)
- Special design features afford maximum weather protection
- .125" (3) extruded aluminum; 6063-T5 alloy

OPTIONS

- Opposed blade damper.
Specify: Face operator Slot operator
- Sleeve extension: Specify total depth: _____ inches



Note: Dimensions in inches, parenthesis () indicate millimeters

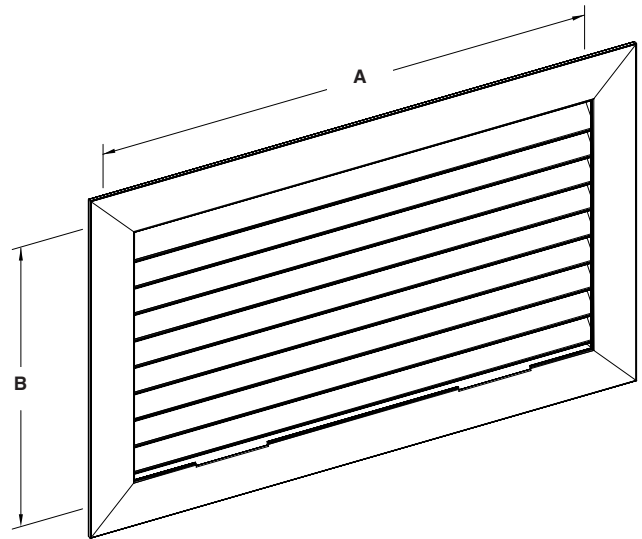
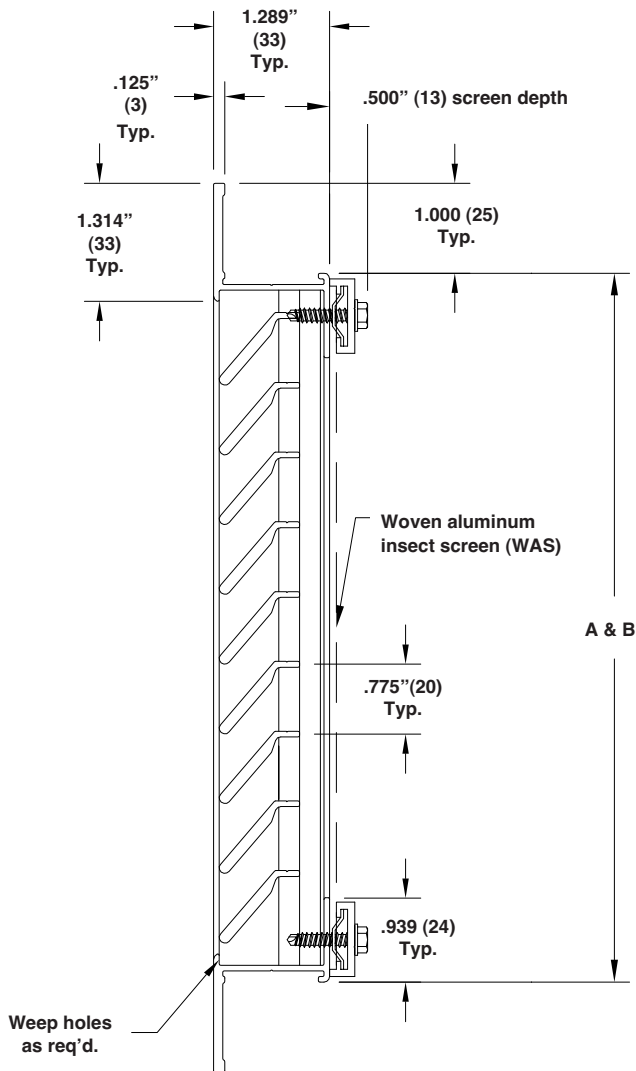
UNIT TYPE	UNIT MODEL NO.	VARIATIONS
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE



RBV7020-FF

STANDARD CONSTRUCTION

- Brick and block vents in 1" (25) depth
- Special design features afford maximum weather protection
- .125" (3) extruded aluminum construction; 6063-T5 alloy
- Clear anodized finish is standard. Call factory for other available finishes



Note: Dimensions in inches, parenthesis () indicate millimeters

UNIT TYPE	UNIT MODEL NO.	VARIATIONS
PROJECT ARCH./ENGR. REPRESENTATIVE		LOCATION CONTRACTOR DATE