

445RDHBD

Drainable Combination Louver

Extruded Aluminum

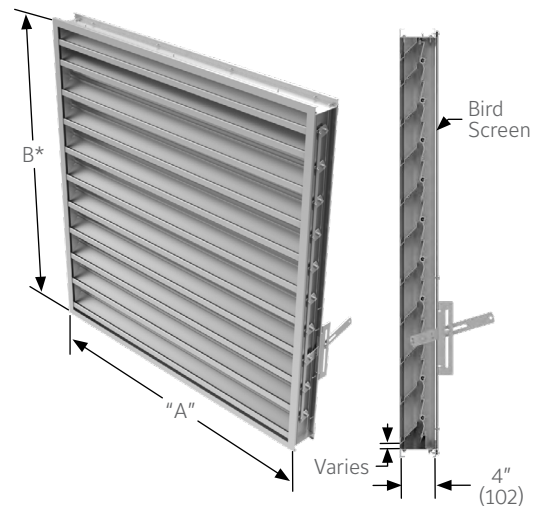
RELIABLE

APPLICATION

The 445RDHBD is an 4" deep extruded aluminum, combination louver. It includes a fixed front stationary blade and a rear adjustable blade that can be operated closed. This is beneficial when the occupant requires a tight air shut off for protection of air intake and exhaust openings in building exterior walls. The louver is designed with a drainable gutter system channeling water from the blades to downspouts in the jambs, where water is exhausted out of the front of the louver.

STANDARD CONSTRUCTION

Frame	4" (102) deep, 6063T6 extruded aluminum with .080" (2.0) nominal wall thickness. Downspouts and caulking surfaces provided.
Blades	Front stationary drainable blades 6063T6 extruded aluminum with .060" (1.5) nominal wall thickness, positioned at 45° angle and spaced approximately 4 7/16" (113) center to center. Rear adjustable blades - 6063T6 extruded aluminum, .80" (2.0) 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 Santoprene blade seals. 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 m ²).
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.



VARIATIONS

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

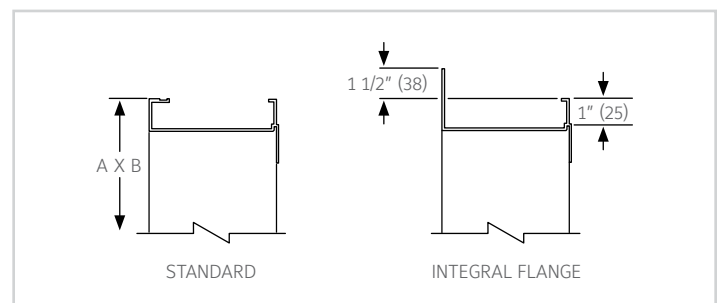
- Extended sill
- Electric or pneumatic actuators
- Front or rear security bars
- Filter racks
- Blade edge and jamb seals
- A variety of bird and insect screens
- Optional finishes available at additional cost: Prime coat, 50% PVDF (modified fluoropolymer), Epoxy, Pearledize, 70% PVDF, Clear and Anodized finishes. (Some variation in anodize color consistency is possible)

Consult Reliable for other special requirements.

FEATURES

- Published performance ratings based on testing in accordance with AMCA Publication 511
- Beginning point of water penetration at .01 oz. sq ft is 974 fpm (297 m/min)
- 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

FRAME CONSTRUCTION



Note:

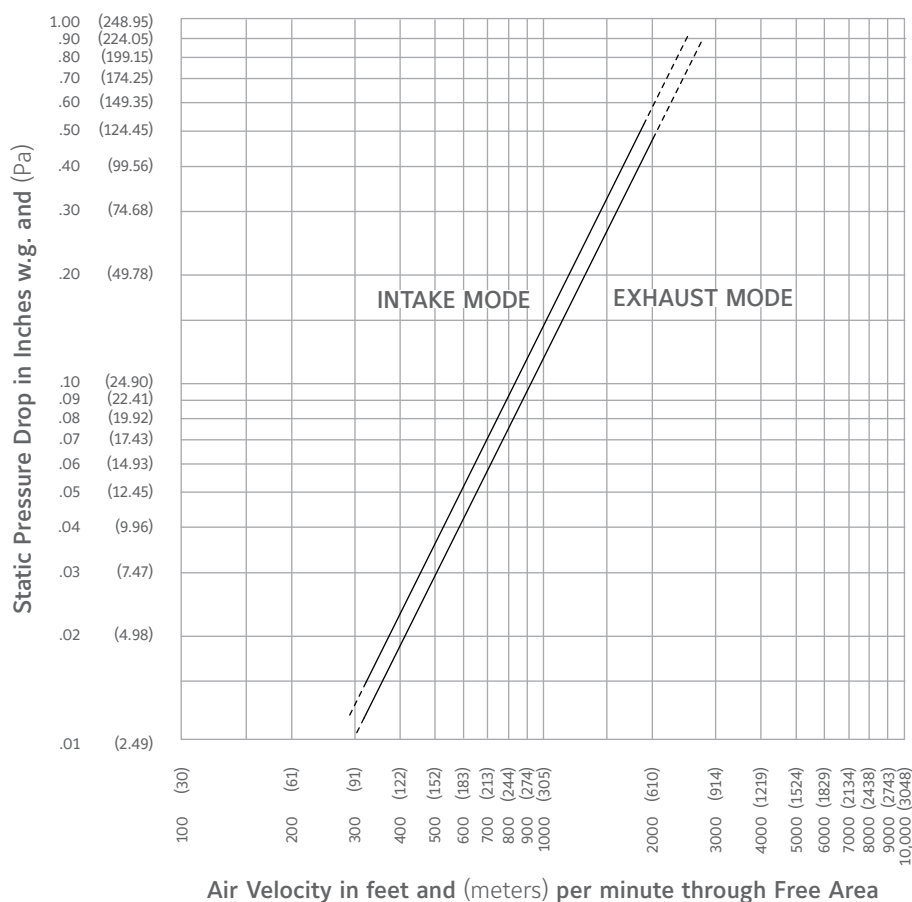
- Dimensions in inches, parenthesis () indicate millimeters.
- Units can be furnished actual size or with size deducts.

FREE AREA GUIDE

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

		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	0.45	0.60	0.75	0.90	1.05	1.20	1.35	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	3.00
	12	0.16	0.26	0.36	0.45	0.55	0.65	0.75	0.85	0.94	1.04	1.14	1.24	1.34	1.44	1.53	1.63	1.73	1.83	1.93
		0.30	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	0.16	0.17	0.18
	18	0.33	0.54	0.74	0.95	1.15	1.36	1.56	1.77	1.97	2.18	2.38	2.59	2.80	3.00	3.21	3.41	3.62	3.82	4.03
		0.45	0.03	0.05	0.07	0.09	0.11	0.13	0.15	0.16	0.18	0.20	0.22	0.24	0.26	0.28	0.30	0.32	0.34	0.37
	24	0.51	0.82	1.13	1.44	1.76	2.07	2.38	2.69	3.00	3.32	3.63	3.94	4.25	4.57	4.88	5.19	5.50	5.81	6.13
		0.60	0.05	0.08	0.11	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	0.57
	30	0.75	1.21	1.67	2.13	2.59	3.05	3.51	3.97	4.43	4.89	5.36	5.82	6.28	6.74	7.20	7.66	8.12	8.58	9.04
		0.75	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	0.71	0.76	0.84
	36	0.92	1.49	2.06	2.63	3.19	3.76	4.33	4.90	5.46	6.03	6.60	7.17	7.73	8.30	8.87	9.44	10.01	10.57	11.14
		0.90	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	0.82	0.88	0.93	1.04
	42	1.10	1.77	2.45	3.12	3.80	4.47	5.14	5.82	6.49	7.17	7.84	8.52	9.19	9.87	10.54	11.22	11.89	12.57	13.24
		1.05	0.10	0.16	0.23	0.29	0.35	0.42	0.48	0.54	0.60	0.67	0.73	0.79	0.85	0.92	0.98	1.04	1.11	1.17
	48	1.34	2.16	2.98	3.81	4.63	5.45	6.28	7.10	7.92	8.75	9.57	10.39	11.22	12.04	12.86	13.69	14.51	15.33	16.16
		1.20	0.12	0.20	0.28	0.35	0.43	0.51	0.58	0.66	0.74	0.81	0.89	0.97	1.04	1.12	1.20	1.27	1.35	1.50
	54	1.51	2.44	3.37	4.30	5.23	6.16	7.09	8.02	8.95	9.88	10.81	11.74	12.67	13.60	14.53	15.47	16.40	17.33	18.26
		1.35	0.14	0.23	0.31	0.40	0.49	0.57	0.66	0.75	0.83	0.92	1.01	1.09	1.18	1.27	1.35	1.44	1.52	1.70
	60	1.69	2.72	3.76	4.80	5.83	6.87	7.91	8.95	9.98	11.02	12.06	13.10	14.13	15.17	16.21	17.24	18.28	19.32	20.36
		1.50	0.16	0.25	0.35	0.45	0.54	0.64	0.74	0.83	0.93	1.02	1.12	1.22	1.31	1.41	1.51	1.60	1.70	1.89
	66	1.93	3.11	4.30	5.48	6.67	7.86	9.04	10.23	11.41	12.60	13.78	14.97	16.16	17.34	18.53	19.71	20.90	22.08	23.27
		1.65	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	2.16
	72	2.10	3.39	4.69	5.98	7.27	8.56	9.86	11.15	12.44	13.74	15.03	16.32	17.61	18.91	20.20	21.49	22.79	24.08	25.37
		1.80	0.20	0.32	0.44	0.56	0.68	0.80	0.92	1.04	1.16	1.28	1.40	1.52	1.64	1.76	1.88	2.00	2.12	2.36
	78	2.34	3.78	5.22	6.67	8.11	9.55	10.99	12.43	13.87	15.31	16.76	18.20	19.64	21.08	22.52	23.96	25.40	26.84	28.29
		1.95	0.22	0.35	0.49	0.62	0.75	0.89	1.02	1.16	1.29	1.42	1.56	1.69	1.83	1.96	2.09	2.23	2.36	2.63
	84	2.52	4.06	5.61	7.16	8.71	10.26	11.81	13.35	14.90	16.45	18.00	19.55	21.10	22.64	24.19	25.74	27.29	28.84	30.39
		2.10	0.23	0.38	0.52	0.67	0.81	0.95	1.10	1.24	1.39	1.53	1.67	1.82	1.96	2.11	2.25	2.39	2.54	2.83
	90	2.69	4.35	6.00	7.66	9.31	10.97	12.62	14.28	15.93	17.59	19.24	20.90	22.55	24.21	25.86	27.52	29.17	30.83	32.49
		2.25	0.25	0.40	0.56	0.71	0.87	1.02	1.17	1.33	1.48	1.64	1.79	1.94	2.10	2.25	2.41	2.56	2.71	3.02
	96	2.93	4.74	6.54	8.34	10.15	11.95	13.75	15.56	17.36	19.17	20.97	22.77	24.58	26.38	28.18	29.99	31.79	33.60	35.40
		2.40	0.27	0.44	0.61	0.78	0.94	1.11	1.28	1.45	1.61	1.78	1.95	2.12	2.29	2.45	2.62	2.79	2.96	3.29
	102	3.11	5.02	6.93	8.84	10.75	12.66	14.57	16.48	18.39	20.30	22.21	24.12	26.04	27.95	29.86	31.77	33.68	35.59	37.50
		2.55	0.29	0.47	0.64	0.82	1.00	1.18	1.36	1.53	1.71	1.89	2.07	2.24	2.42	2.60	2.78	2.95	3.13	3.49
	108	3.28	5.30	7.31	9.33	11.35	13.37	15.39	17.40	19.42	21.44	23.46	25.48	27.49	29.51	31.53	33.55	35.56	37.58	39.60
		2.70	0.30	0.49	0.68	0.87	1.06	1.24	1.43	1.62	1.81	1.99	2.18	2.37	2.56	2.74	2.93	3.12	3.31	3.68
	114	3.52	5.69	7.85	10.02	12.19	14.35	16.52	18.69	20.85	23.02	25.18	27.35	29.52	31.68	33.85	36.02	38.18	40.35	41.52
		2.85	0.33	0.53	0.73	0.93	1.13	1.33	1.54	1.74	1.94	2.14	2.34	2.54	2.75	2.95	3.15	3.35	3.55	3.95
	120	3.69	5.97	8.24	10.51	12.79	15.06	17.33	19.61	21.88	24.15	26.43	28.70	30.97	33.25	35.52	37.80	40.07	42.34	44.62
		3.00	0.34	0.55	0.77	0.98	1.19	1.40	1.61	1.82	2.03	2.25	2.46	2.67	2.88	3.09	3.30	3.51	3.73	4.15

PRESSURE DROP



Ratings do not include the effect of a bird screen.

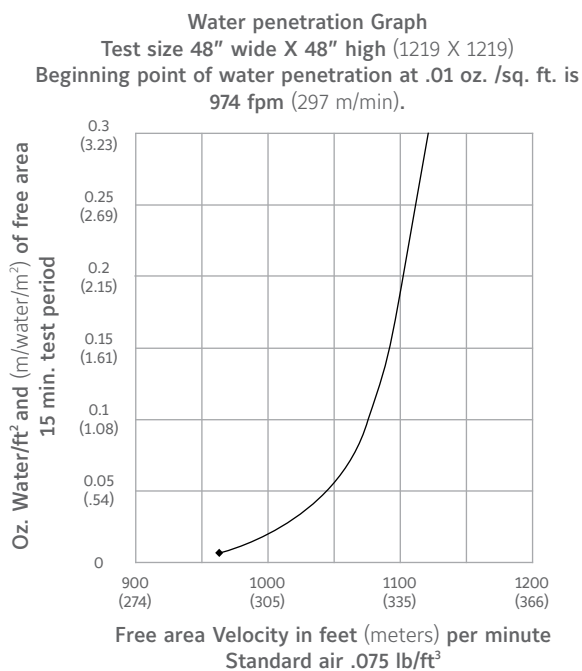
PERFORMANCE DATA

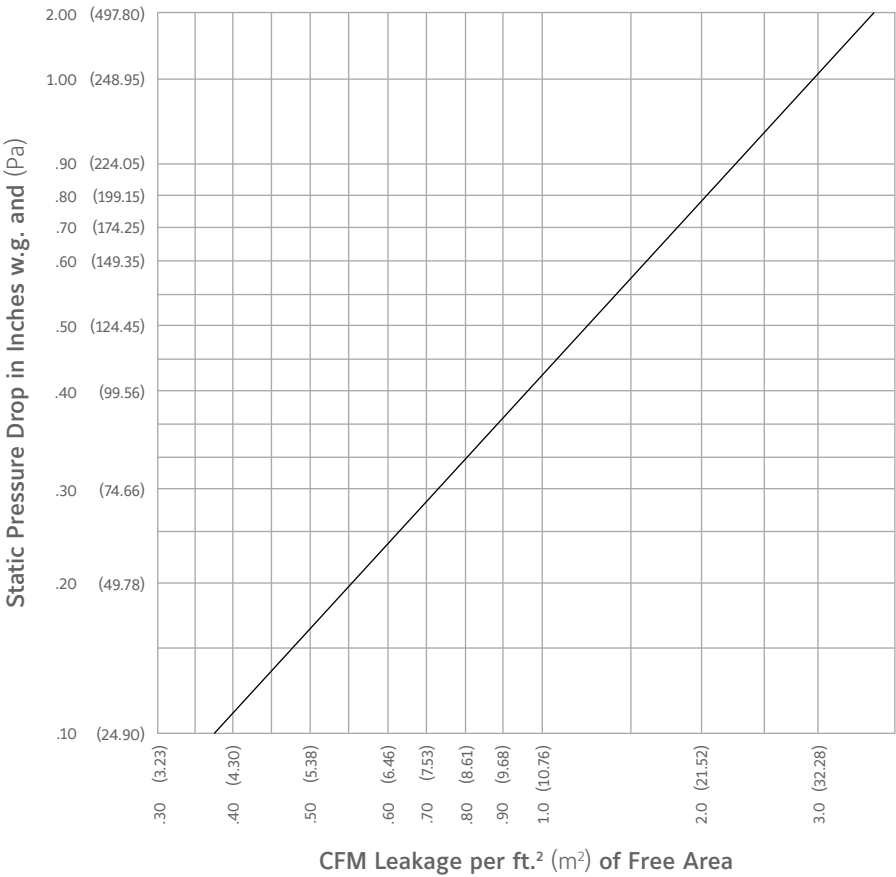
AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

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.

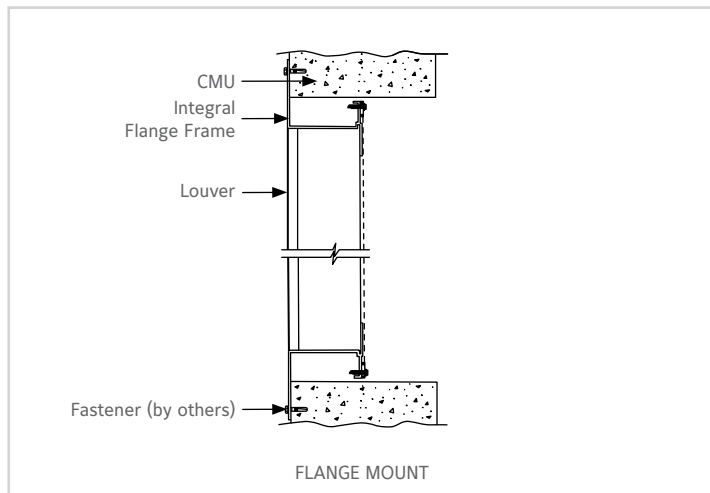
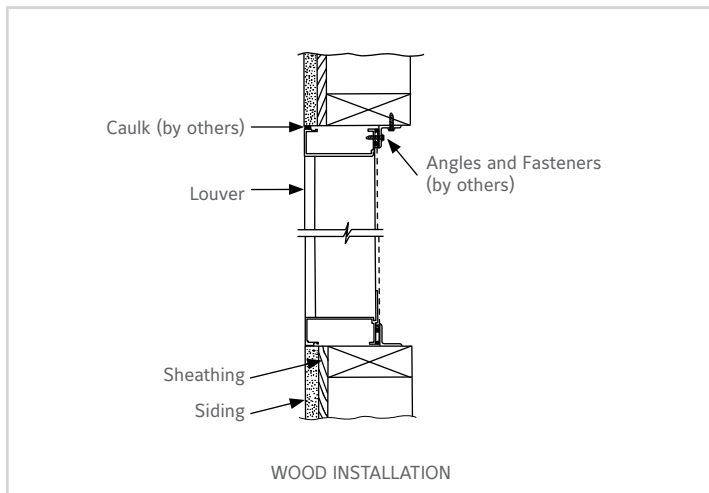
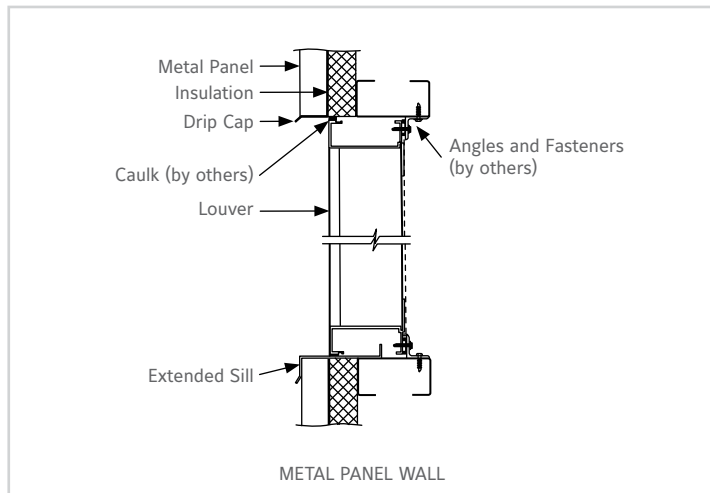
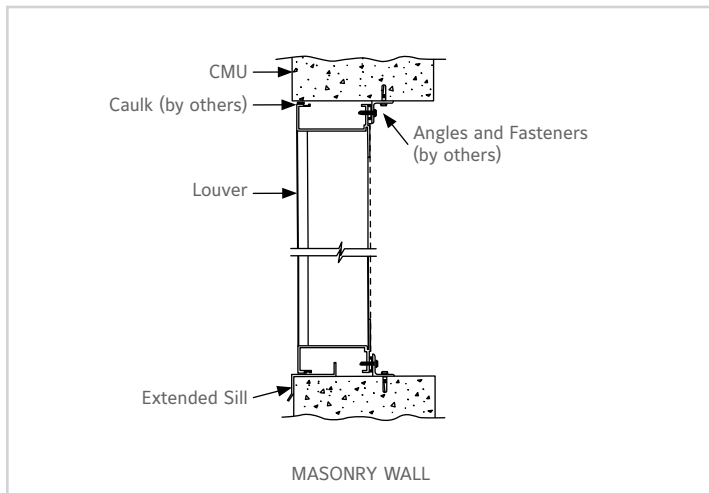


Reliable Products certifies that the 445RDHBD Louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings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





TYPICAL INSTALLATION DETAILS



*Accessories at additional cost.

SUGGESTION SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be manufactured in an ISO 9001 certified factory. Louvers shall be stationary type contained within a 4" (102) 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 limit single section blade span to 48" (1219) and shall incorporate such other structural supports required to withstand a wind load of 30 lbs. per sq. ft. (1.44kPa) equivalent to 110 mph (177 kph).

Material

Frame: .080" (2.0) aluminum channel.

Blades: Front stationary drainable blades 6063T6 extruded aluminum with .060" (1.5) nominal wall thickness, positioned at 45° angle and spaced approximately 4 7/16" (113) center to center. Rear adjustable blades – 6063T6 extruded aluminum, .80" (2.0) 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. Drainable blades are positioned at 45°.

Finish: Select finish specification from Reliable Finishes Brochure.

LINKS TO IMPORTANT DOCUMENTS

Document Title

Finishes and Color Guide

Limited Warranty Document

RELIABLE

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