

445RD/445RDS/445RD125

Drainable Stationary Louvers

Extruded Aluminum

RELIABLE

APPLICATION

The 445RD/445RDS/445RD125 are 4" deep, extruded aluminum, drainable, stationary louvers that are designed to protect air intake and exhaust openings on exterior walls. These louvers are designed with drainable gutter systems that channel water from the blades to downspouts in the jams. Here, water is exhausted out of the front of the louvers.

STANDARD CONSTRUCTION

Frame	4" (102) deep, 6063T6 extruded aluminum. 445RD – .081" (2.1) nominal wall thickness. 445RDS – .125" (3.2) nominal wall thickness. 445RD125 – .125" (3.2) nominal wall thickness. Downspouts and caulking surfaces provided.
Blades	6063T6 extruded aluminum. 445RD – .081" (2.1) nominal wall thickness. 445RDS – .081" (2.1) nominal wall thickness. 445RD125 – .125" (3.2) nominal 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 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 /m ²) 445RD125 – 6 lbs./ft. ² (29.3 kg /m ²)
Maximum Factory Assembly Size	Shall be 75 sq. ft. (7m ²) 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.

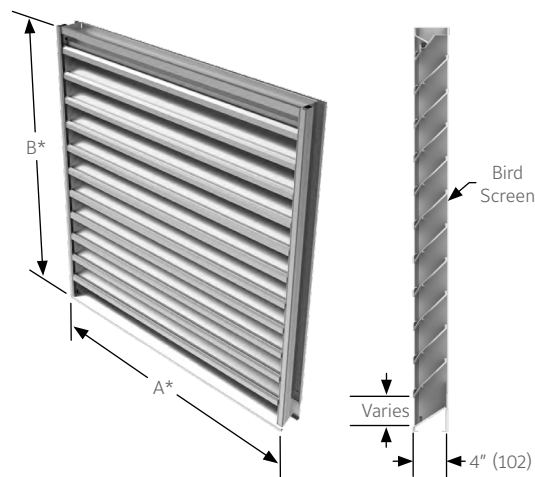
Consult Reliable for additional information.

FEATURES

- 52% Free Area
- Published performance ratings based on testing in accordance with AMCA Publication 511
- Beginning point of water penetration at .01 oz. sq/ft. is 1075 fpm (328 m/min)
- 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

Note:

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



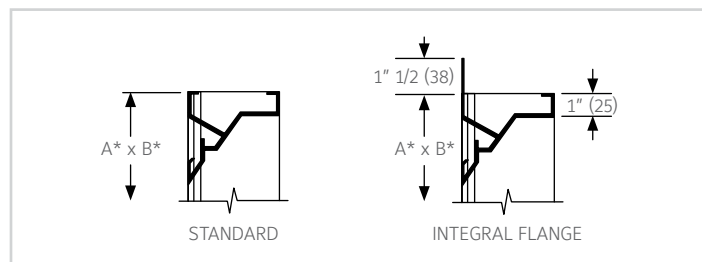
VARIATIONS

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
- Blank off panels
- Universal sleeve
- Frame caps
- 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.

FRAME CONSTRUCTION

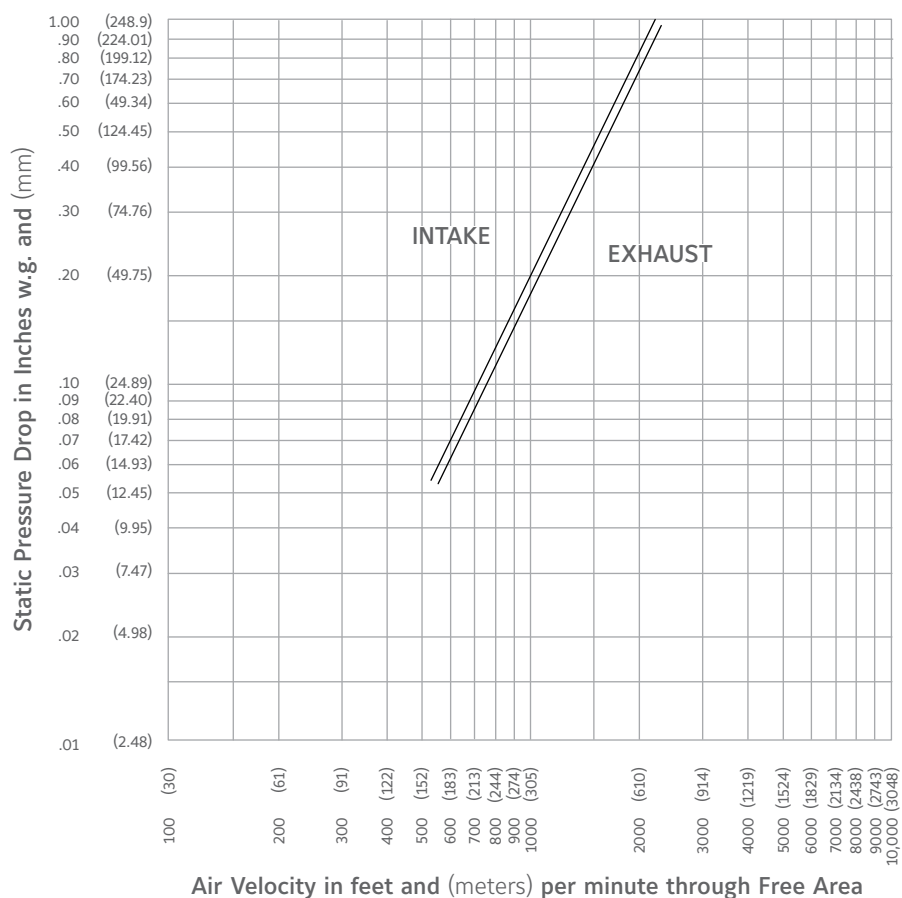


FREE AREA GUIDE

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	0.45	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	0.26	0.42	0.58	0.74	0.90	1.05	1.21	1.37	1.53	1.69	1.84	2.00	2.16	2.32	2.48	2.64	2.79	2.95	3.11
	0.30	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	0.27	0.29
	18	0.44	0.71	0.98	1.24	1.51	1.78	2.04	2.31	2.57	2.84	3.11	3.37	3.64	3.91	4.71	4.44	4.71	4.97	5.24
	0.45	0.04	0.07	0.09	0.12	0.14	0.17	0.19	0.21	0.24	0.26	0.29	0.31	0.34	0.36	0.39	0.41	0.44	0.46	0.49
	24	0.78	1.25	1.72	2.18	2.65	3.12	3.59	4.06	4.53	4.99	5.46	5.93	6.40	6.87	7.33	7.80	8.27	8.74	9.21
	0.60	0.07	0.12	0.16	0.20	0.25	0.29	0.33	0.38	0.42	0.46	0.51	0.55	0.59	0.64	0.68	0.73	0.77	0.81	0.86
	30	0.96	1.54	2.11	2.69	3.27	3.84	4.42	5.00	5.57	6.15	6.72	7.30	7.88	8.45	9.03	9.61	10.18	10.76	11.34
	0.75	0.09	0.14	0.20	0.25	0.30	0.36	0.41	0.46	0.52	0.57	0.63	0.68	0.73	0.79	0.84	0.89	0.95	1.00	1.05
	36	1.30	2.07	2.85	3.63	4.41	5.19	5.97	6.74	7.52	8.30	9.08	9.86	10.63	11.41	12.19	12.97	13.75	14.52	15.30
	0.90	0.12	0.19	0.27	0.34	0.41	0.48	0.55	0.63	0.70	0.77	0.84	0.92	0.99	1.06	1.13	1.21	1.28	1.35	1.42
	42	1.48	2.36	3.25	4.14	5.02	5.91	6.80	7.68	8.57	9.45	10.34	11.23	12.11	13.00	13.89	14.77	15.66	16.55	17.43
	1.05	0.14	0.22	0.30	0.38	0.47	0.55	0.63	0.71	0.80	0.88	0.96	1.04	1.13	1.21	1.29	1.37	1.46	1.54	1.62
	48	1.81	2.90	3.99	5.08	6.17	7.25	8.34	9.43	10.52	11.61	12.69	13.78	14.87	15.96	17.05	18.14	19.22	20.31	21.40
	1.20	0.17	0.27	0.37	0.47	0.57	0.67	0.78	0.88	0.98	1.08	1.18	1.28	1.38	1.48	1.59	1.69	1.79	1.89	1.99
	54	1.99	3.19	4.39	5.58	6.78	7.98	9.17	10.37	11.56	12.76	13.96	15.15	16.35	17.55	18.74	19.94	21.14	22.33	23.53
	1.35	0.19	0.30	0.41	0.52	0.63	0.74	0.85	0.96	1.08	1.19	1.30	1.41	1.52	1.63	1.74	1.85	1.97	2.08	2.19
	60	2.33	3.73	5.13	6.52	7.92	9.32	10.72	12.12	13.52	14.91	16.31	17.71	19.11	20.51	21.90	23.30	24.70	26.10	27.50
	1.50	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	2.04	2.17	2.30	2.43	2.56
	66	2.51	4.02	5.52	7.03	8.54	10.04	11.55	13.06	14.56	16.07	17.57	19.08	20.59	22.09	23.60	25.11	26.61	28.12	29.63
	1.65	0.23	0.37	0.51	0.65	0.79	0.93	1.07	1.21	1.35	1.49	1.63	1.77	1.91	2.05	2.19	2.33	2.47	2.62	2.76
	72	2.85	4.55	6.26	7.97	9.68	11.39	13.10	14.80	16.51	18.22	19.93	21.64	23.34	25.05	26.76	28.47	30.18	31.88	33.59
	1.80	0.26	0.42	0.58	0.74	0.90	1.06	1.22	1.38	1.54	1.69	1.85	2.01	2.17	2.33	2.49	2.65	2.81	2.97	3.12
	78	3.03	4.84	6.66	8.48	10.29	12.11	13.93	15.74	17.56	19.37	21.19	23.01	24.82	26.64	28.46	30.27	32.09	33.91	35.72
	1.95	0.28	0.45	0.62	0.79	0.96	1.13	1.30	1.46	1.63	1.80	1.97	2.14	2.31	2.48	2.65	2.82	2.98	3.15	3.32
	84	3.36	5.38	7.40	9.42	11.44	13.45	15.47	17.49	19.51	21.53	23.54	25.56	27.58	29.60	31.62	33.64	35.65	37.67	39.69
	2.10	0.31	0.50	0.69	0.88	1.06	1.25	1.44	1.63	1.81	2.00	2.19	2.38	2.57	2.75	2.94	3.13	3.32	3.50	3.69
	90	3.54	5.67	7.80	9.92	12.05	14.18	16.30	18.43	20.55	22.68	24.81	26.93	29.06	31.19	33.31	35.44	37.57	39.69	41.82
	2.25	0.33	0.53	0.73	0.92	1.12	1.32	1.52	1.71	1.91	2.11	2.31	2.50	2.70	2.90	3.10	3.30	3.49	3.69	3.89
	96	3.88	6.21	8.54	10.86	13.19	15.52	17.85	20.18	22.51	24.83	27.16	29.49	31.82	34.15	36.47	38.80	41.13	43.46	45.79
	2.40	0.36	0.58	0.79	1.01	1.23	1.44	1.66	1.88	2.09	2.31	2.53	2.74	2.96	3.18	3.39	3.61	3.83	4.04	4.26
	102	4.06	6.50	8.93	11.37	13.81	16.24	18.68	21.12	23.55	25.99	28.42	30.86	33.30	35.73	38.17	40.61	43.04	45.48	47.92
	2.55	0.38	0.60	0.83	1.06	1.28	1.51	1.74	1.96	2.19	2.42	2.64	2.87	3.10	3.32	3.55	3.78	4.00	4.23	4.46
	108	4.40	7.03	9.67	12.31	14.95	17.59	20.23	22.86	25.50	28.14	30.78	33.42	36.05	38.69	41.33	43.97	46.61	49.24	51.88
	2.70	0.41	0.65	0.90	1.14	1.39	1.64	1.88	2.13	2.37	2.62	2.86	3.11	3.35	3.60	3.84	4.09	4.33	4.58	4.83
	114	4.58	7.32	10.07	12.82	15.56	18.31	21.06	23.80	26.55	29.29	32.04	34.79	37.53	40.28	43.03	45.77	48.52	51.27	54.01
	2.85	0.43	0.68	0.94	1.19	1.45	1.70	1.96	2.21	2.47	2.72	2.98	3.24	3.49	3.75	4.00	4.26	4.51	4.77	5.02
	120	4.91	7.86	10.81	13.76	16.71	19.65	22.60	25.55	28.50	31.45	34.39	37.34	40.29	43.24	46.19	49.14	52.08	55.03	57.98
	3.00	0.46	0.73	1.01	1.28	1.55	1.83	2.10	2.38	2.65	2.92	3.20	3.47	3.75	4.02	4.30	4.57	4.84	5.12	5.39

PRESSURE DROP



Ratings do not include the effect of a bird screen.

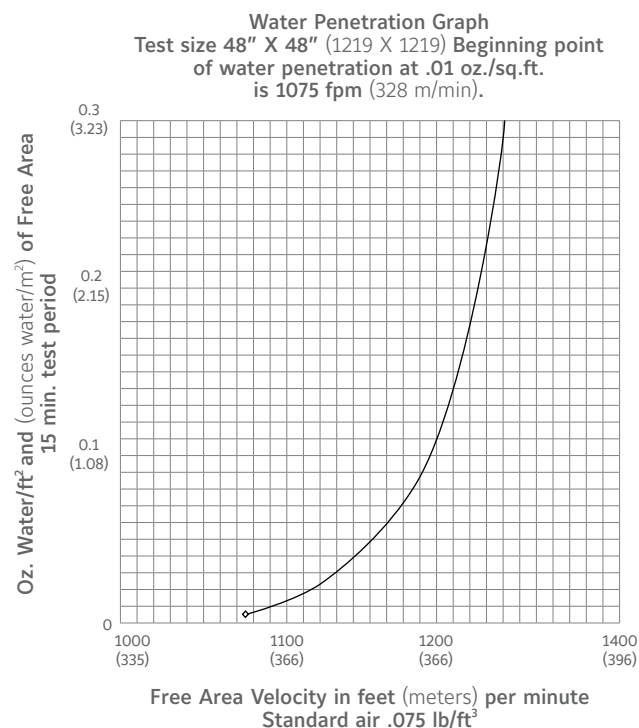
PERFORMANCE DATA

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.

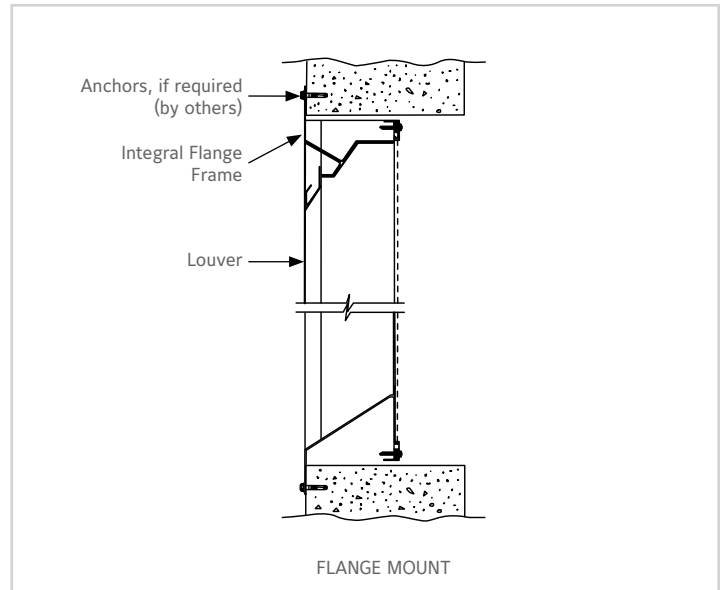
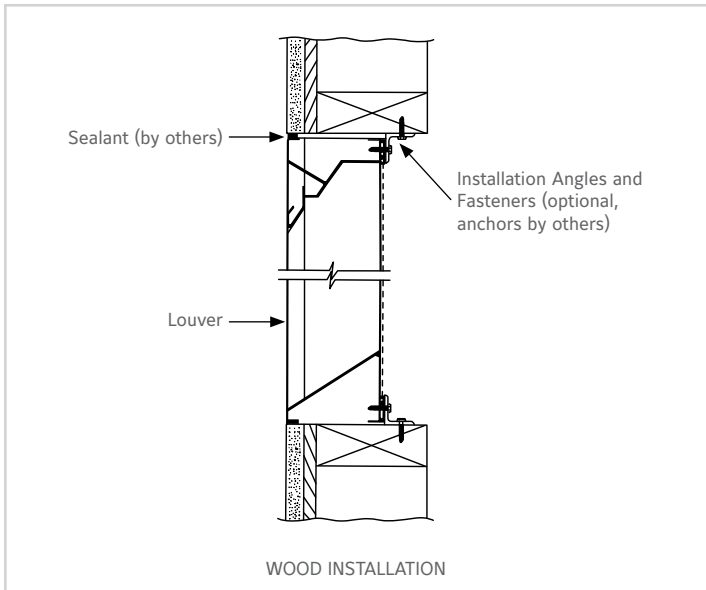
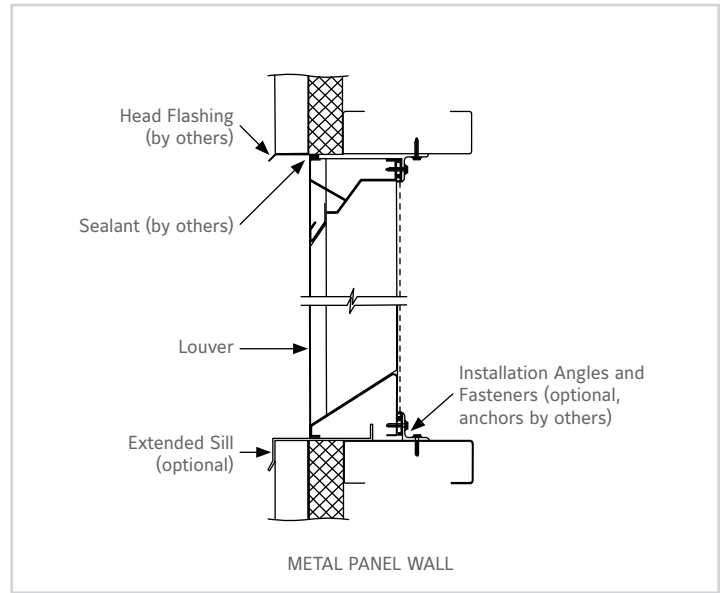
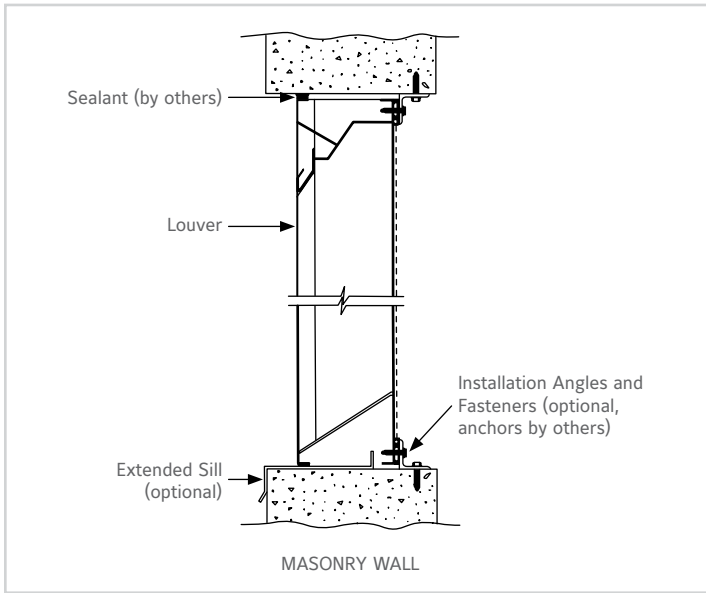
The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.



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.



TYPICAL INSTALLATION DETAILS



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

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 windload of 30 lbs. per sq. ft. (1.44kPa) (equivalent of a 110 mph [177 KPH] wind – specifier may substitute any loading required).

Louvers shall be Reliable Model 445RD, 445RDS or 445RD125 extruded 6063T6 aluminum construction as follows:

- Frame: 445RD – .081" (2.1) nominal wall thickness.
4445RDS – .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.

LINKS TO IMPORTANT DOCUMENTS

Document Title
Finishes and Color Guide
Limited Warranty Document



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