

6RRSV

Wind-Driven Rain Resistant Drainable Stationary Louver

Extruded Aluminum

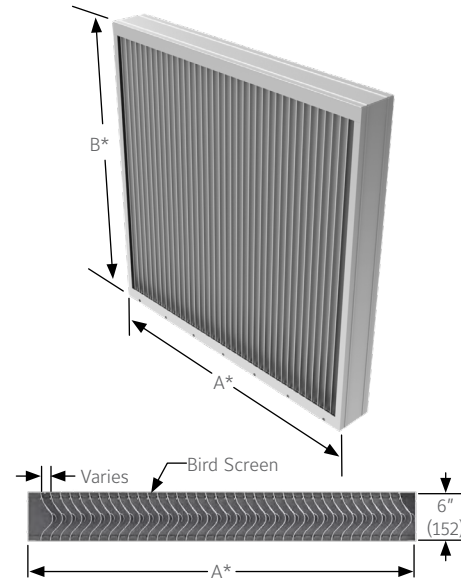


APPLICATION

The 6RRSV is a 6" deep extruded aluminum louver with closely spaced vertical blades that prevent the penetration of wind-driven rain. This louver is designed with exceptional protection against wind-driven rain under severe conditions.

STANDARD CONSTRUCTION

Frame	6" (152) deep, 6063T6 extruded aluminum with .095" (2.4) nominal wall thickness.
Blades	6063T6 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/m ²).
Maximum Single Section Size	Shall be 48" x 96" (1219 x 2438). Lifting lugs provided on louvers 48" x 72" (1219 x 1828) and larger. Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.



FEATURES

The 6RRSV offers:

- 43% 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 louvers are available at additional cost. They include:

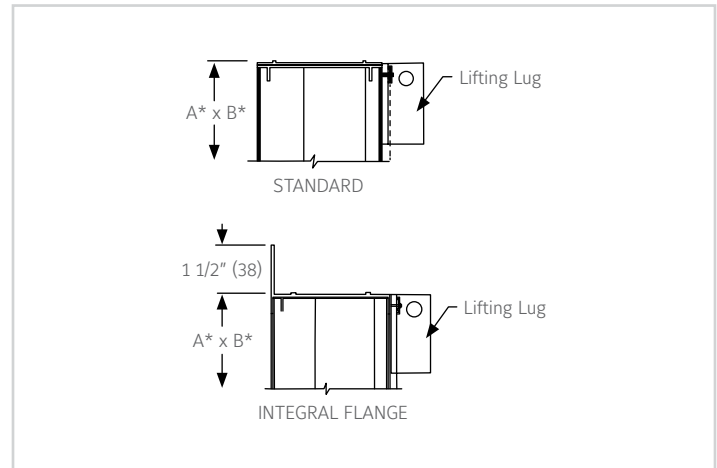
- Filter racks.
- A variety of bird and insect screens.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, PVDF, Pearledize 50 & 70, prime coat, clear and color anodize. (Some variation in anodize color consistency is possible)

Consult Reliable for other special requirements.

Note:

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

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

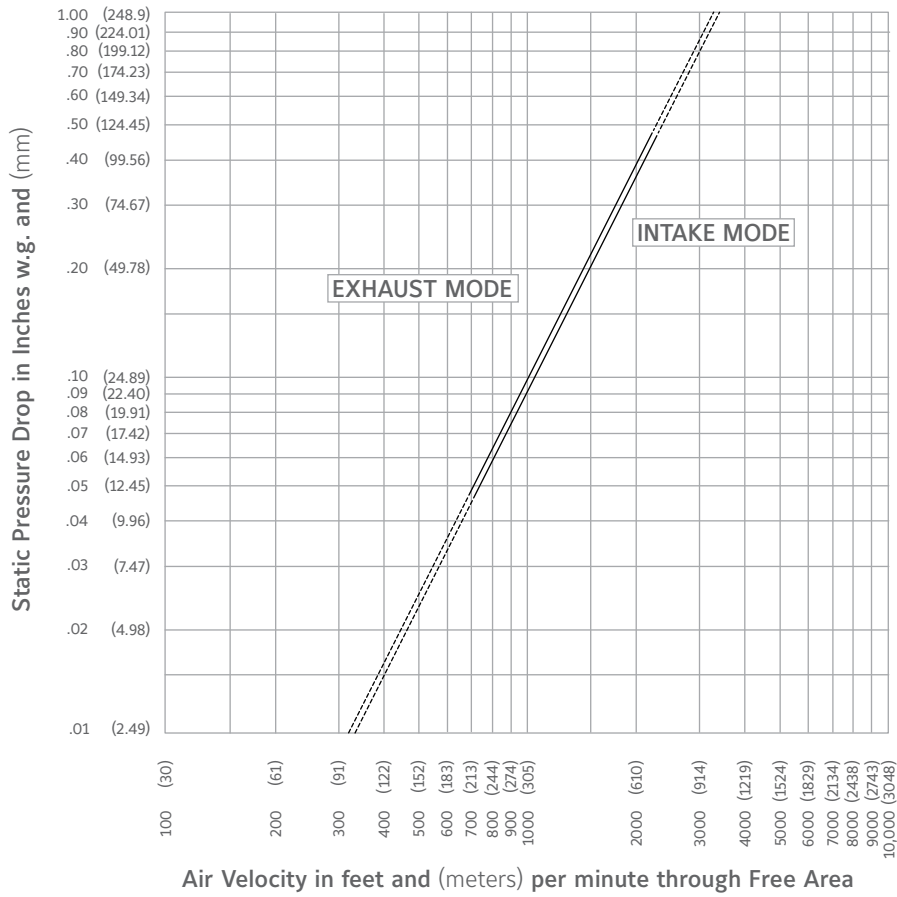
30% Pre-Consumer

FREE AREA GUIDE

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

		Width – Inches and Meters							
			12 0.30	18 0.45	24 0.60	30 0.75	36 0.90	42 1.05	48 1.20
Height – Inches and Meters	12 0.30	0.09 0.01	0.16 0.02	0.23 0.02	0.31 0.03	0.38 0.04	0.45 0.04	0.52 0.05	
	18 0.45	0.27 0.03	0.49 0.05	0.70 0.07	0.92 0.09	1.14 0.11	1.35 0.13	1.57 0.15	
	24 0.60	0.45 0.04	0.81 0.08	1.17 0.11	1.53 0.14	1.89 0.18	2.26 0.21	2.62 0.24	
	30 0.75	0.63 0.06	1.14 0.11	1.64 0.15	2.15 0.20	2.65 0.25	3.16 0.29	3.66 0.34	
	36 0.90	0.81 0.08	1.46 0.14	2.11 0.20	2.76 0.26	3.41 0.32	4.06 0.38	4.71 0.44	
	42 1.05	0.99 0.09	1.79 0.17	2.58 0.24	3.37 0.31	4.17 0.39	4.96 0.46	5.76 0.54	
	48 1.20	1.17 0.11	2.11 0.20	3.05 0.28	3.99 0.37	4.93 0.46	5.86 0.55	6.80 0.63	
	54 1.35	1.35 0.13	2.44 0.23	3.52 0.33	4.60 0.43	5.68 0.53	6.77 0.63	7.85 0.73	
	60 1.50	1.53 0.14	2.76 0.26	3.99 0.37	5.21 0.48	6.44 0.60	7.67 0.71	8.89 0.83	
	66 1.65	1.71 0.16	3.09 0.29	4.46 0.41	5.83 0.54	7.20 0.67	8.57 0.80	9.94 0.92	
	72 1.80	1.89 0.18	3.41 0.32	4.93 0.46	6.44 0.60	7.96 0.74	9.47 0.88	10.99 1.02	
	78 1.95	2.07 0.19	3.73 0.35	5.39 0.50	7.05 0.66	8.71 0.81	10.37 0.96	12.03 1.12	
	84 2.10	2.26 0.21	4.06 0.38	5.86 0.55	7.67 0.71	9.47 0.88	11.28 1.05	13.08 1.22	
	90 2.25	2.44 0.23	4.38 0.41	6.33 0.59	8.28 0.77	10.23 0.95	12.18 1.13	14.13 1.31	
	96 2.40	2.62 0.24	4.71 0.44	6.80 0.63	8.89 0.83	10.99 1.02	13.08 1.22	15.17 1.41	

PRESSURE DROP



Ratings do not include the effect of a bird screen.

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)	2,191 (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

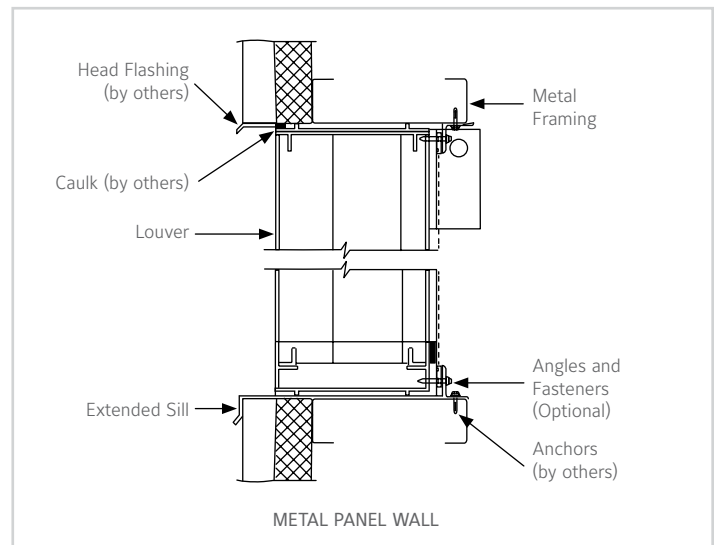
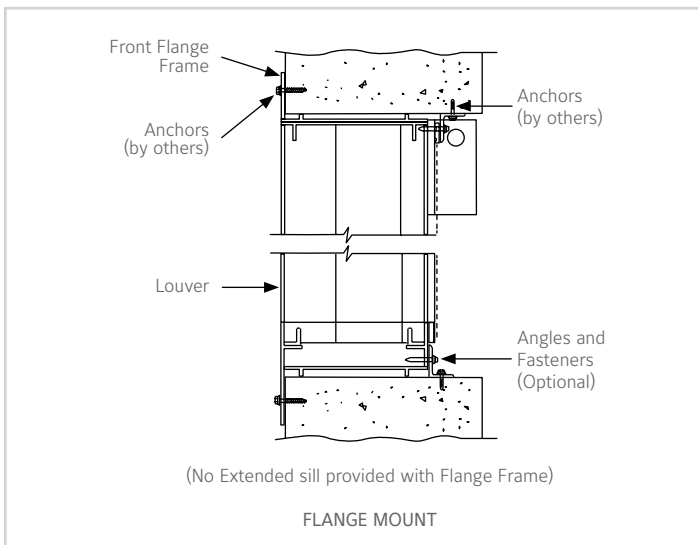
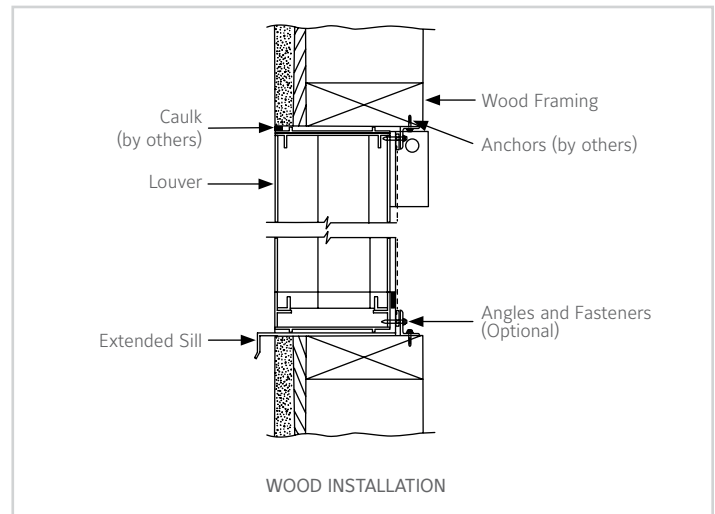
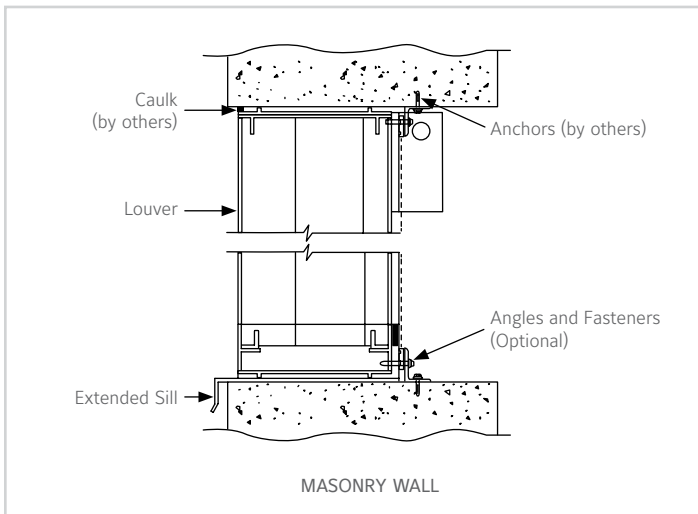
(The higher the coefficient, the less resistance to airflow.)

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.

TYPICAL INSTALLATION DETAILS



Options available at additional cost.

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, 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 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 6063T6 aluminum alloy construction as follows:

- Frame: .095" (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.

LINKS TO IMPORTANT DOCUMENTS

Document Title

Finishes and Color Guide

Limited Warranty Document

RELIABLE

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