STORM RESISTANT LOUVERS



Architectural Louvers	R7355 / 7"Storm Resistant Louver			
Louver Type	Mullion or Continuous Line			
Louver Depth	7" (178 mm)			
Blade Angle	35°			
Free Area - 4'x4' Unit	8.03 sq.ft. (0.75 m²)			
Percentage Free Area	50.3 %			
Free Area Velocity at Beginning Point of Water Penetration [0.01 oz/ft²]	759 FPM (3.86 m/s)			
Air Volume at Beginning Point of Water Penetration 4'x4' Unit [test duration of 15 minutes]	6097 CFM (2.9 m³/s)			
Pressure Drop at Beginning Point of Water Penetration	0.25 in. H ₂ 0 (62.3 Pa)			
Notes	Tested without bird screens			
Wind Driven Rain Water Penetration Data [29 mph (13 m/s) wind velocity with a 3 in/hr (75 mm/hr) rainfall rate]:				
Effectiveness Ratio: 99.1 % (Class A" Rating)	Core Ventilation Rate: 1.0 m/s (196 fpm) Free Area Velocity: 1.7 m/s (342 fpm)			
Effectiveness Ratio: 98.7 % (Class "B" Rating)	Core Ventilation Rate: 1.4 m/s (280 fpm) Free Area Velocity: 2.5 m/s (490 fpm)			

System Description

Extruded aluminum construction; frame with channel profile; corner joints mitered and Mechanically fastened, with continuous recessed channel each side.

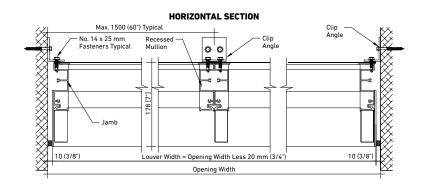
Material

Head, sill, jambs, mullions and blades shall have a nominal thickness of 0.080" (2.0 mm) 6063-T5 aluminum alloy. Jambs and mullions to be recessed and concealed, and shall have integral vertical gutters to direct water to the bottom of the exterior face of the louver. Front blades shall be continuous, with no exposed vertical mullions, with rear blades that include an integral horizontal gutter to lead water to the vertical gutters in the mullions and jambs. Provide a sill pan flashing at base of louvers.

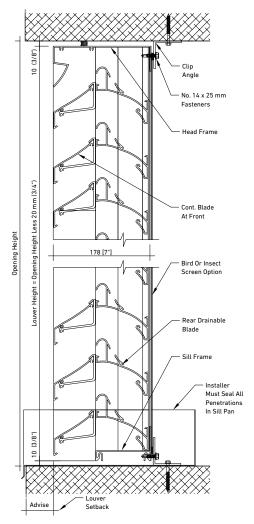
Louvers shall be supplied with a 1/2" (12 mm), 19 gauge (1 mm) welded and re-galvanized wire mesh in a mill finish, with aluminum frame. Fasteners shall be standard zinc plated steel or stainless steel.

Structural Design

Structural supports shall be designed and furnished by the louver manufacturer to support a wind load of 20 psf (958 Pa), unless specified otherwise. Any louver opening greater that 10' (3 m) high, will require a horizontal girt, at mid span by others.



VERTICAL SECTION



R7355 / 7"STORM RESISTANT LOUVER

MIGUSHIELD

ARCHITECTURAL LOUVERS

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Louver	Louver width in inches/millimeters				
height in inches/millime-	12 305	610	36 914	1219	60 1524
ters	Free area in	square ft/sq	uare meters		
12 305	0.30 0.03	0.67	0.10	0.13	0.17
24 610	0.76 0.07	1.72 0.16	2.69 0.25	3.65 0.34	4.61 0.43
36 914	1.22 0.11	2.76 0.26	4.30 0.40	5.84 0.54	7.38 0.69
48 1219	1.68 0.16	3.79 0.35	5.91 0.55	8.03 0.75	10.15
60 1524	2.13 0.20	4.83	7.52 0.70	10.22	12.91
72 1829	2.59 0.24	5.86 0.54	9.14 0.85	12.41	15.68
84 2134	3.05 0.28	6.90	10.75	14.60	18.45
96 2438	3.51 0.33	7.93 0.74	12.36	16.79	21.22
108 2743	3.96 0.37	8.97	13.97	18.98	23.98
120 3048	4.42 0.41	10.00 0.93	15.58	21.17	26.75
132 3353	4.88 0.45	11.04	17.20	23.36	29.52
144 3658	5.33 0.50	12.07	18.81	25.55 2.37	32.28

Wind Driven Rain Performance

Core velocity m/s (f/m)	0 (0)	0.6 (126)	1.0 (196)	1.4 (280)	1.9 (377)	2.4 (476)	3.0 (588)	3.5 (680)
Free area velocity m/s (f/m)	0 (0)	1.1 (220)	1.7 (342)	2.5 (490)	3.4 (659)	4.2 (832)	5.2 (1027)	6.0 (1188)
Effectiveness classification	А	А	А	В	В	В	С	D
Effectiveness ratio	99.8%	99.6%	99.1 %	98.7 %	98.0 %	95.1 %	84.1 %	71.3%

Discharge Loss Coefficient Class (intake) = 3

This test is based on a 1 m x 1 m (39.37" x 39.37") louver core size, at a rainfall rate of 76 mm/hr (3 in/hr), with wind driven rain applied to the face of the louver at a velocity of 13 m/s (29 mph). The above table shows the effectiveness against water penetration at each corresponding ventilation airflow rate.

Note:

- 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 (1 m \times 1 m).
- Wind Driven Rain Penetration Classes:

Class	А	В	С	D
Effectiveness	100 % to 99 %	98.9 % to 95 %	94.9 % to 80 %	Below 80 %

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 louver's airflow characteristics. The higher the coefficient, the less resistance to airflow.

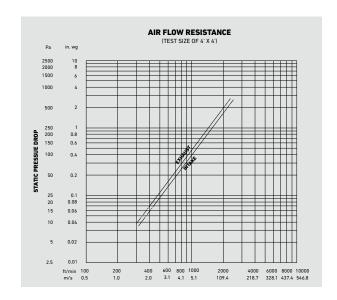
Class	1	2	3	4
Discharge Loss Coefficient	0.4 and above	0.3 to 0.399	0.2 to 0.299	0.199 and below

Finishes

- PE-SDF
- PVDF
- · Anodize after fabrication

Options & Accessorries

- Bird Screen
- Insect Mesh



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