

PERFORMANCE

Performance Rating Standard	AMCA Standard 500L
Louver Type	Mullion Construction
Louver Depth	5" (127 mm)
Blade Angle	45°
Free Area – 4'x4' Unit	7.54 sq.ft. (0.70 m ²)
Percentage Free Area	47.1%
Free Area Velocity at Beginning Point of Water Penetration (0.01 oz / ft ²)	1100 FPM (5.59 m/s)
Air Volume at Beginning Point of Water Penetration 4' x 4' Unit (test duration of 15 minutes)	8294 CFM (4.0 m ³ /s)
Pressure Drop at Beginning Point of Water Penetration	0.40 in. H ₂ O (39.5 Pa)
Notes	Tested without bird screens
WIND DRIVEN RAIN WATER PENETRATION DATA (29 mph wind velocity with a 3 in./hr. rainfall rate):	
Effectiveness Ratio: 99.8% (Class "A" Rating)	Core Ventilation Rate: 0.7 m/s (133 fpm)
Effectiveness Ratio: 98.9% (Class "B" Rating)	Core Ventilation Rate: 1.0 m/s (192 fpm)

SUGGESTED SPECIFICATION

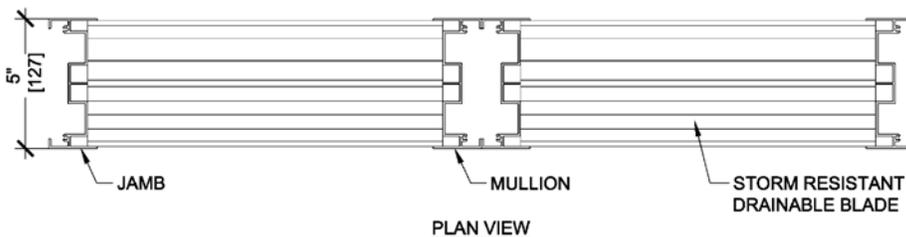
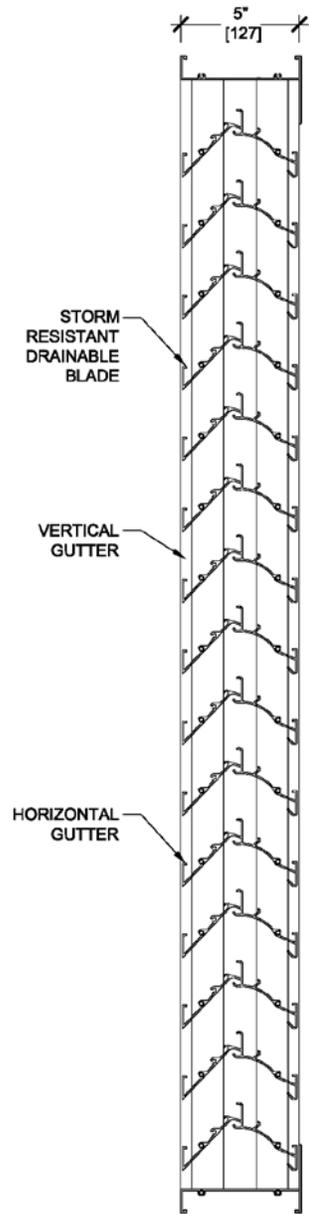
Where indicated on drawings, supply and install 5" (127 mm) deep louver Model R5455 with drainable blades, mullions and jambs as manufactured by Ten Plus Architectural Products Ltd. Submit all details to consultant for approval prior to fabrication.

Head, sill, jambs and mullions shall have a minimum thickness of 0.080" (2.0 mm) 6063-T52 aluminum alloy. Jambs and Mullions shall have integral, vertical gutters to direct water to the bottom of the exterior face of the louver and away from the building. Blades shall be continuous, 0.070" (1.77 mm) 6063-T52 aluminum alloy and include an integral horizontal gutter to lead water to the vertical gutters in the mullions and jambs; provided with a sill pan flashing. Louvers shall be supplied with a 1/2" (12 mm), 19 gauge (1 mm) welded and regalvanized wire mesh in a mill finish, aluminum frame. Fasteners shall be standard zinc plated steel or stainless steel.

Structural supports shall be designed and furnished by the louver manufacturer to support a wind load of 20 psf (955 Pa), unless specified otherwise. Any louver opening greater than 10' (3 m) high, will require a horizontal girt, at mid span by others.

The louver manufacturer shall submit data, on a 4' x 4' (1.2 x1.2 m) unit, showing that the louver performs to the above criteria, based on tests & procedures performed in accordance with the AMCA Publication 511, and comply with the "Certified Ratings Program" licensed to bear the AMCA seal.

Louvers shall be fabricated with mill finish aluminum and the finish shall be applied after assembly. Select desired finish from the following: fluoropolymer resin with a two or three coat application; thermosetting acrylic; Clear Anodic; Color Anodic or Prime Coat for field painting.



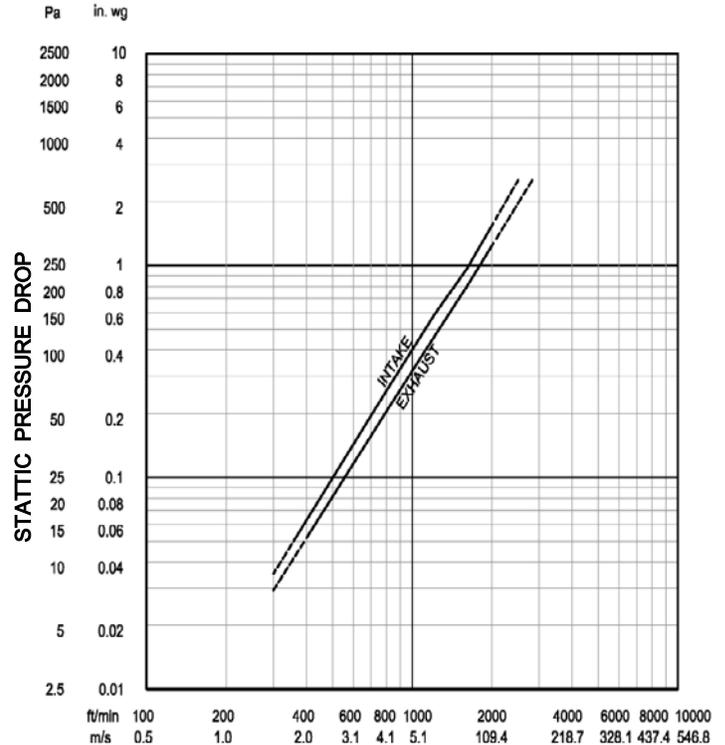
PERFORMANCE RATINGS – LOUVER MODEL R5455

FREE AREA CHART

		LOUVER WIDTH				
		12	24	36	48	60
INCHES	12	0.27	0.60	0.92	1.25	1.58
	MM	305	610	914	1219	1524
FREE AREA - SQUARE FEET / SQUARE METERS						
LOUVER HEIGHT	12	0.02	0.06	0.09	0.12	0.15
	MM	305	610	914	1219	1524
24	610	0.06	0.14	0.21	0.29	0.36
	914	0.11	0.23	0.36	0.49	0.62
36	1219	0.16	0.35	0.55	0.70	0.94
	1524	0.19	0.41	0.64	0.87	1.10
48	1829	0.23	0.51	0.79	1.08	1.36
	2134	0.27	0.61	0.95	1.28	1.62
60	2438	0.33	0.73	1.13	1.54	1.94
	2743	0.35	0.78	1.20	1.63	2.06
72	3048	0.39	0.87	1.35	1.83	2.31
	3353	0.43	0.97	1.50	2.04	2.57
84	3658	0.48	1.07	1.66	2.24	2.83
	144	5.15	11.48	17.81	24.14	30.48

AIR FLOW RESISTANCE

(TEST SIZE OF 4' X 4')



AIR VELOCITY

Wind Driven Rain Penetration Classifications	
Class	Effectiveness
A	99% to 100%
B	95% to 98.9%
C	80% to 94.5%
D	Below 80%

Discharge Loss Coefficient Classifications	
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

Class 1 Loss Coefficient has the least resistance to airflow.

WIND-DRIVEN RAIN PERFORMANCE

Core Velocity - m/s (fpm)	0 (0)	0.7 (133)	1.0 (192)	1.4 (279)	1.9 (382)	2.4 (473)	3 (595)	3.5 (697)
Free Area Velocity - m/s (fpm)	0 (0)	1.36 (268)	1.97 (387)	2.86 (562)	3.91 (770)	4.84 (953)	6.09 (1199)	7.13 (1404)
Effectiveness Classification	A	A	B	B	C	C	C	D

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.



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Ten Plus Architectural Products Ltd. certifies that louver model R5455 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 only to Air Performance, Water Penetration and Wind Driven Rain ratings.

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