

## MODEL H4451 STORMPROOF LOUVER

### PERFORMANCE

Performance Rating Standard	AMCA Standard 500L
Louver Type	Mullion or Continuous Line Construction
Louver Depth	4" (102 mm)
Blade Angle	45°
Free Area – 4'x4' Unit	8.12 sq.ft. (0.755 m <sup>2</sup> )
Percentage Free Area	51%
Free Area Velocity at Beginning Point of Water Penetration ( 0.01 oz / ft <sup>2</sup> )	658 FPM (3.34 m/s)
Air Volume at Beginning Point of Water Penetration 4' x 4' Unit ( test duration of 15 minutes)	5343 CFM (2.52 m <sup>3</sup> /s)
Pressure Drop at Beginning Point of Water Penetration	.077 in. H <sub>2</sub> O (19.18 Pa)
Notes	Tested without bird screens



### SUGGESTED SPECIFICATION

Where indicated on drawings, supply and install 4" (102 mm) deep louver Model H4451 with stormproof blades, mullions and jamba as manufactured by Ten Plus Architectural Products Ltd. Submit all details to consultant for approval prior to fabrication. Head, sill, jamba and mullions shall have a minimum thickness of 0.080" (2.0 mm) 6063-T52 aluminum alloy.

Blades shall be continuous, 0.080" (2.0 mm) 6063-T52 aluminum alloy with a storm hook design. 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 x 1.2 m) unit, showing that the louver performs to the following 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:

Free area = 8.12 sq. ft. (0.755 m<sup>2</sup>)

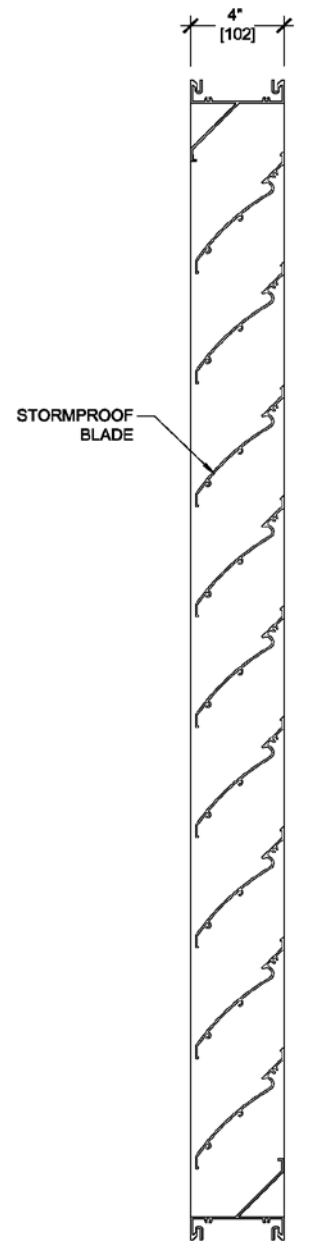
Free area velocity at point of beginning water penetration = 658 FPM (3.34 m/s)

Intake pressure drop at beginning point of water penetration = 0.077 in. H<sub>2</sub>O (19.18 Pa)

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.



PLAN VIEW



VERTICAL SECTION

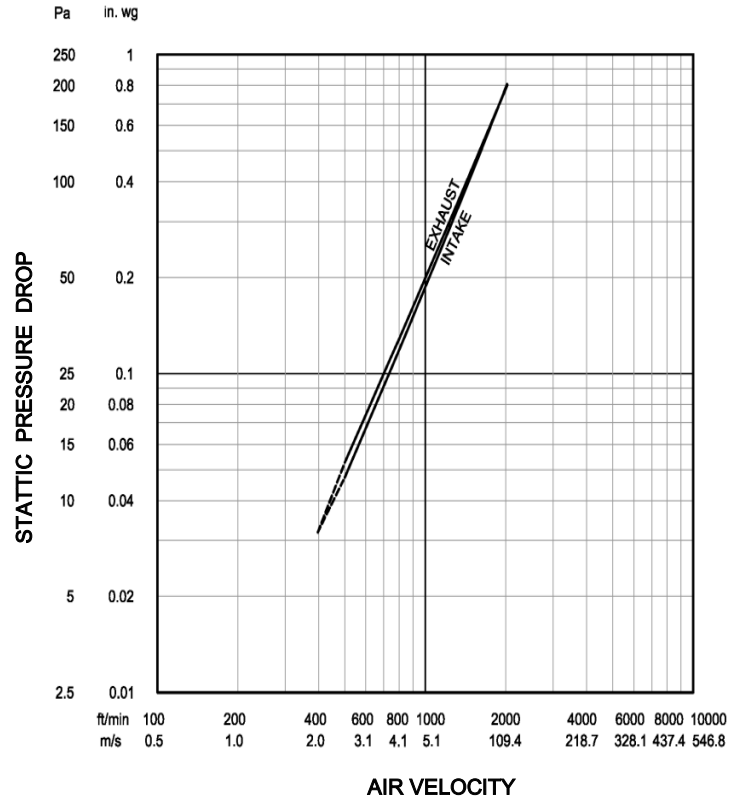
# PERFORMANCE RATINGS – LOUVER MODEL H4451

## FREE AREA CHART

		LOUVER WIDTH				
		12	24	36	48	60
INCHES	12	0.33	0.73	1.13	1.53	1.92
	MM	305	610	914	1219	1524
FREE AREA - SQUARE FEET / SQUARE METERS						
LOUVER HEIGHT	12	0.03	0.07	0.10	0.14	0.18
	MM	305	610	914	1219	1524
LOUVER HEIGHT	24	0.07	0.15	0.23	0.32	0.40
	MM	610	1219	1829	2438	3048
LOUVER HEIGHT	36	0.12	0.26	0.41	0.55	0.69
	MM	914	1829	2743	3658	4572
LOUVER HEIGHT	48	0.17	0.36	0.56	0.75	0.96
	MM	1219	2438	3658	4877	6096
LOUVER HEIGHT	60	0.21	0.46	0.71	0.96	1.21
	MM	1524	3048	4572	6096	7620
LOUVER HEIGHT	72	0.26	0.57	0.88	1.19	1.50
	MM	1829	3658	5487	7316	9145
LOUVER HEIGHT	84	0.32	0.71	1.09	1.48	1.86
	MM	2134	4268	6402	8536	10670
LOUVER HEIGHT	96	0.35	0.77	1.18	1.60	2.02
	MM	2438	4877	7316	9755	12194
LOUVER HEIGHT	108	0.39	0.85	1.31	1.78	2.24
	MM	2743	5487	8140	10793	13446
LOUVER HEIGHT	120	0.44	0.96	1.49	2.01	2.53
	MM	3048	6096	9145	12194	15243
LOUVER HEIGHT	132	0.49	1.07	1.66	2.24	2.83
	MM	3353	6706	10059	13446	16833
LOUVER HEIGHT	144	0.53	1.16	1.79	2.42	3.05
	MM	3658	7316	10974	14631	18316

## AIR FLOW RESISTANCE

(TEST SIZE OF 4' X 4')



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Ten Plus Architectural Products Ltd. certifies that louver model H4451 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 and Water Penetration ratings.

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