

Model—RSR-400

104mm DEEP DRAINABLE BLADE STORM RESISTANT LOUVER

“Ontario Specialty Architectural Products FZE certifies that the Storm Resistant Model “RSR-400” 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, Water Penetration and Wind Driven Rain ratings Only.”



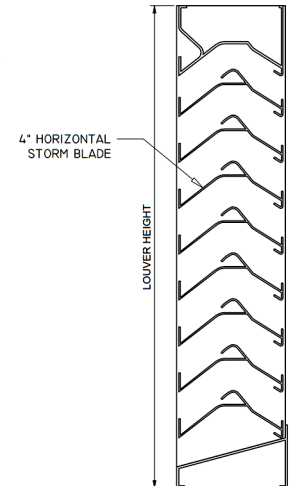
PERFORMANCE:

- Free Area: **50%**, based on a test sample of 48 in (1219 mm) x 48 in (1219 mm)
- Beginning point of water penetration (@0.01oz. / ft2 of free area)—**1,207 fpm (6.1 m/s)**
- Maintains **Class A** rating with 29mph wind velocity @ 3 in/hr rainfall rate @ Max. intake core velocity—**791 fpm (4.0 m/s)**
- Maintains **Class B** rating with 50mph wind velocity @ 8 in/hr rainfall rate @ Max. intake core velocity—**785 fpm (4.0 m/s)**
- Intake pressure drop at beginning point of water penetration – **0.39 in. wg (97 Pa)**
- Intake pressure drop @ 1,000 fpm free area velocity—**0.28 in. wg (70 Pa)**
- Discharge loss coefficient Classification —**Class 3**

WIND DRIVEN RAIN PERFORMANCE:

The louver test was based on a 39.375 in. (1.0 m) x 39.375 in. (1.0 m) core area unit tested at a rainfall rate of 3 in. per hour (75 mm/hr) and with a wind directed to the face of the louver at a velocity 29mph (13 m/s) as well as a rainfall rate of 8” per hour (203 mm) and a wind of 50 mph (23.3 m/s). The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.

Rainfall rate (in. per hour) : 3											
Wind velocity (mph) : 29											
Core Velocity, fpm (m/s)	0.0	97 (0.5)	197 (1.0)	292 (1.5)	396 (2.0)	489 (2.5)	593 (3.0)	690 (3.5)	791 (4.0)	889 (4.5)	986 (5.0)
Effectiveness (%)	100	100	100	100	100	100	99.4	99.2	99.1	97.7	94.0
Penetration Class	A	A	A	A	A	A	A	A	A	B	C
Rainfall rate (in. per hour) : 8											
Wind velocity (mph) : 50											
Core Velocity, fpm (m/s)	0.0	91 (0.5)	196 (1.0)	290 (1.5)	394 (2.0)	487 (2.5)	589 (3.0)	688 (3.5)	785 (4.0)	890 (4.5)	981 (5.0)
Effectiveness (%)	99.3	99.1	98.8	98.4	98.1	98.4	98.2	97.9	95.3	90.7	84.2
Penetration Class	A	A	B	B	B	B	B	B	B	C	C
Classification	A = 99.9% - 99% ; B = 98.9% - 95% ; C = 94.9% - 80% ; D = below 80%										



Suggested Specifications:

General: Furnish and install where indicated on drawings 104mm High Performance Storm Resistant Louver Model as manufactured by Ontario Specialty Architectural Products.

System Description:

OSA Rain Storm Resistant series; extruded aluminum construction; frame with channel profile; corner joints mitered and mechanically fastened, with continuous recessed caulking channel each side; intermediate mullions matching frame; gutters to drain rain water to jamb and mullion downspouts; rated for an air performance and water penetration maintained effectiveness rate of 0.99 when tested in accordance with AMCA 500-L.

Material & Finishes:

1. RSR-400 comprises :
 - a. Blades: Horizontal – Multi Drain Profile
 - b. Frame depth: 104 mm deep
2. Metal Thickness: Frame 0.081 inch (2 mm); blades 0.060 inch (1.5 mm)
3. Finish: PE-SDF / PVDF / Anodize after fabrication
4. Color: As scheduled.
5. Mullions: Exposed
6. Screens: Bird mesh / Insect mesh
7. Screen location: Interior
8. Screening Material: Aluminium / Stainless Steel

Louver Construction:

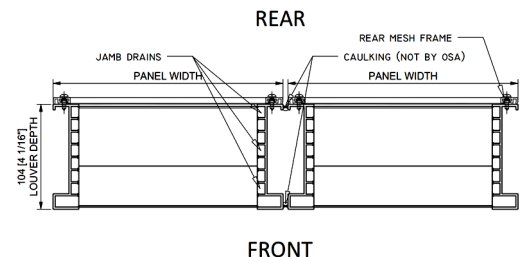
1. Wind Load Resistance: Design to resist +ve and –ve wind load of ___ psf (___kPa) without damage or permanent deformation.
2. Blades: One piece extrusions with reinforcing bosses, supported and lined up with heavy-gage extruded aluminum blade braces, positively interlocked to each blade and mechanically secured to structure by aluminum and stainless steel fastenings.
3. Exposed edges and ends of metal dressed smooth, free from sharp edges.
4. Exposed connections and joints constructed to exclude water.

Optional Accessories:

- Extended Sill Flashing
- Insulated and Non-insulated Bank-off Panels
- Sub-frames

Warranty:

OSA louvers warranted for 2 years against defective material and workmanship, and 20 Years for Finishes.



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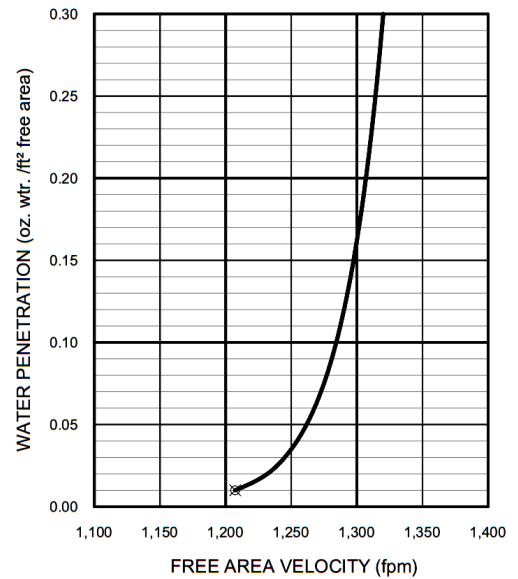
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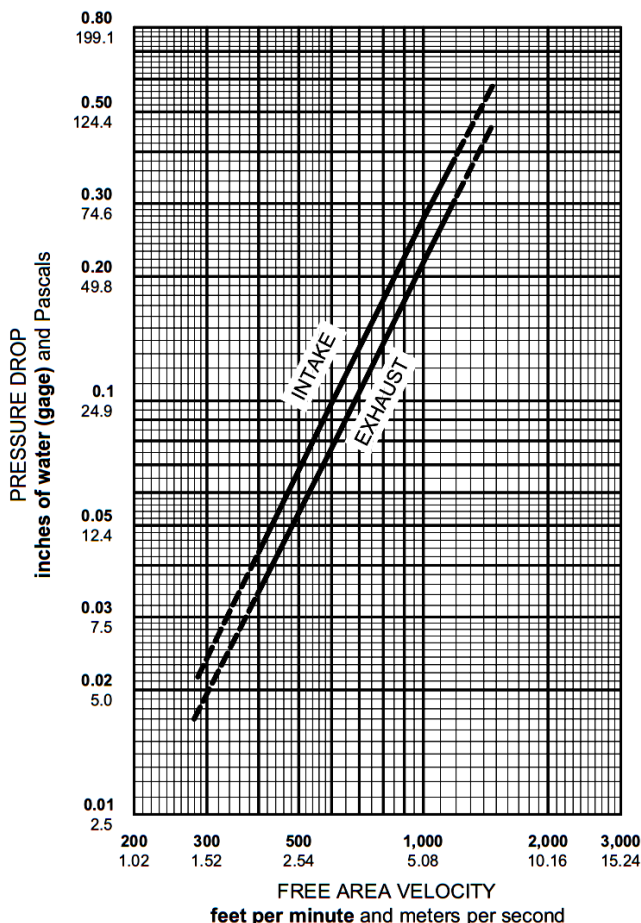
		FREE AREA (ft ² and m ²)									
		WIDTH (IN & mm)									
		12	24	36	48	60	72	84	96	108	120
		305	610	914	1219	1524	1829	2134	2438	2743	3048
HEIGHT (IN & mm)	12	0.26	0.60	0.93	1.27	1.61	1.95	2.28	2.62	2.96	3.30
	305	0.02	0.06	0.09	0.12	0.15	0.18	0.21	0.24	0.28	0.31
	24	0.71	1.65	2.58	3.52	4.45	5.39	6.32	7.25	8.19	9.12
	610	0.07	0.15	0.24	0.33	0.41	0.50	0.59	0.67	0.76	0.85
	36	1.17	2.70	4.23	5.76	7.29	8.83	10.36	11.89	13.42	14.95
	914	0.11	0.25	0.39	0.54	0.68	0.82	0.96	1.10	1.25	1.39
	48	1.62	3.75	5.88	8.01	10.14	12.27	14.40	16.52	18.65	20.78
	1219	0.15	0.35	0.55	0.74	0.94	1.14	1.34	1.54	1.73	1.93
	60	2.08	4.81	7.52	10.25	12.98	15.71	18.43	21.15	23.88	26.60
	1524	0.19	0.45	0.70	0.95	1.21	1.46	1.71	1.97	2.22	2.47
	72	2.53	5.84	9.14	12.45	15.76	19.07	22.38	25.68	28.99	32.30
	1829	0.23	0.54	0.85	1.16	1.46	1.77	2.08	2.39	2.69	3.00
	84	2.97	6.87	10.76	14.66	18.55	22.45	26.35	30.24	34.13	38.03
	2134	0.28	0.64	1.00	1.36	1.72	2.09	2.45	2.81	3.17	3.54
	96	3.42	7.90	12.37	16.85	21.33	25.82	30.30	34.77	39.25	43.73
	2438	0.32	0.73	1.15	1.57	1.98	2.40	2.82	3.23	3.65	4.06
	108	3.87	8.94	13.99	19.06	24.13	29.20	34.27	39.32	44.39	49.46
2743	0.36	0.83	1.30	1.77	2.24	2.71	3.19	3.66	4.13	4.60	
120	4.32	9.97	15.61	21.27	26.93	32.58	38.24	43.88	49.53	55.19	
3048	0.40	0.93	1.45	1.98	2.50	3.03	3.55	4.08	4.60	5.13	

WATER PENETRATION

Standard Air = 0.75 lb. / ft³



The AMCA Water Penetration Test provides a method for comparing various louver models and designs as to their efficiency in resisting the penetration of rainfall under specific laboratory test conditions. The point of zero water penetration is defined as that velocity where the water penetration curve projects through .01 oz of water penetration per sq. ft. of louver area. **The beginning point of water penetration for RSR-400 is 1,207 fpm free area velocity.**



Test Data

- Published data is in accordance with ANSI/AMCA 500-L, Figure 5.5. The AMCA Certified Ratings Seal applies to Air Performance in the intake & exhaust airflow directions. Data corrected to standard air density. Test Sample Size 48"x48".
- Ratings include the effects of a drain pan.