

3RRDC

Wind-Driven Rain Resistant Stationary Louver

AMCA 540/AMCA 550 | Miami-Dade Approved | Miami Dade NOA#21-0728.04

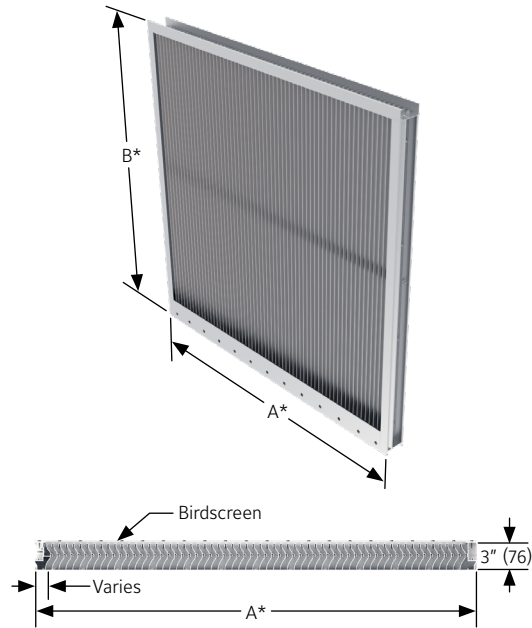


APPLICATION

The 3RRDC is a stationary, wind driven rain resistant louver that is Miami Dade approved. Constructed of extruded aluminum for low maintenance and high resistance to corrosion, the 3RRDC is listed to AMCA 540 and 550 standards.

STANDARD CONSTRUCTION

Frame	3.125" (76.375) deep, 6063T6 extruded aluminum with .080" (2.0) nominal wall thickness.
Blade	.050" (1.3) 6063T6 extruded aluminum. Blades are mounted vertically and spaced approximately at .75" (19.1) center to center.
Screen	5/8" x .040" (16 x 1) expanded, flattened aluminum bird screen in removable frame.
Finish	Mill.
Approximate Shipping Weight	5 lbs./sq. ft. (24.4 kg/m ²)
Minimum Size	12"w x 12"h (305 x 305)
Maximum Size	60" x 96" (1524 x 2438) Unlimited width x 96" tall Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.
Installation	The 3RRDC must be installed per the appropriate installation detail. Reference the appropriate separate installation instruction sheets.



FEATURES

- 53% Free Area
- AMCA 550 Listed
- AMCA 540 (Missile D) Listed
- Approved for applications with design pressure of +/- 120 PSF (5.75 kPa)
- Mechanically fastened
- Published performance ratings based on testing in accordance with AMCA 500-L
- Miami Dade Approved NOA#21-0728.04
- Excellent Water Performance
- Aluminum construction for low maintenance and high resistance to corrosion

VARIATIONS

- Variety of bird screens
- Blank offs
- Extended sill
- Front and rear flange
- CMU, Concrete, Steel, Aluminum and Wood installation available
- Universal Sleeve
- Glazing Frame
- Filter racks
- Optional finishes available at additional cost: prime coat, 50% PVDF (modified fluoropolymer), epoxy, Acrodize, 70% PVDF & Anodized available

NOTES:

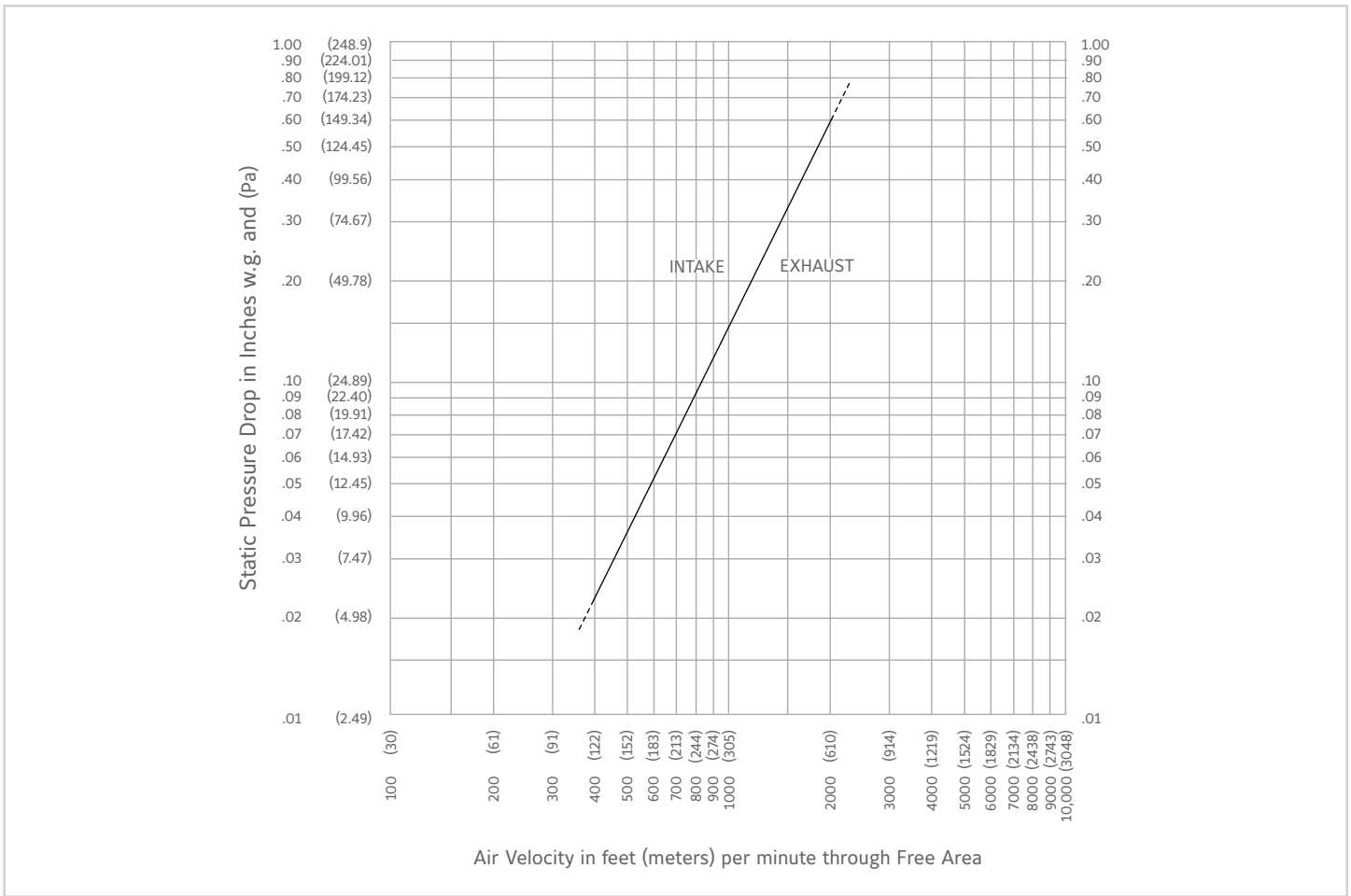
- Dimensions in inches, parenthesis () indicate millimeters.
- Units can be furnished actual size or with size deducts.

FREE AREA GUIDE

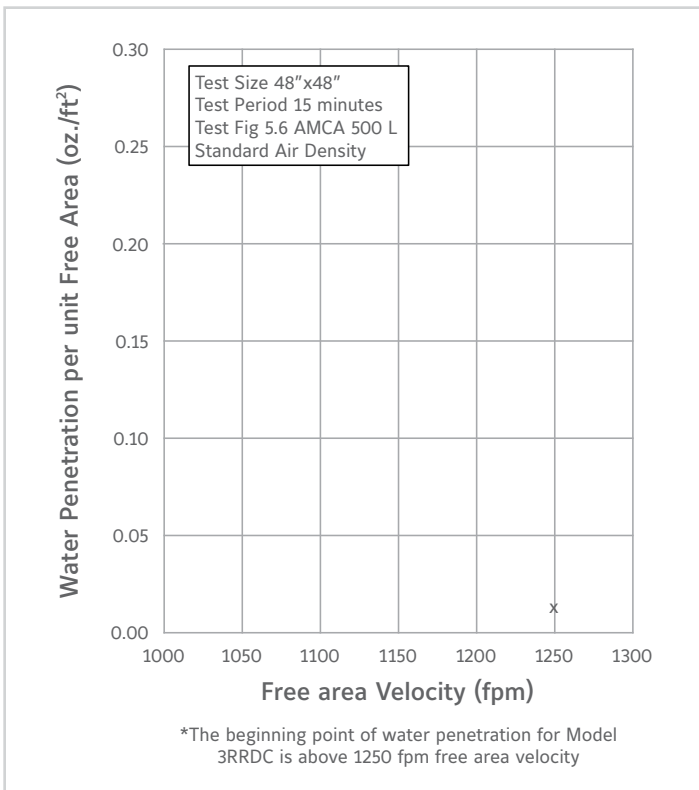
Free Area Guide shows free area in ft² and m² for various sizes of 3RRDC.

		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	54 1.35	60 1.50	
Height – Inches and Meters	12 0.30	0.29 0.03	0.48 0.04	0.67 0.06	0.87 0.08	1.06 0.10	1.25 0.12	1.44 0.13	1.64 0.15	1.83 0.17	
	18 0.45	0.52 0.05	0.87 0.08	1.22 0.11	1.57 0.15	1.92 0.18	2.27 0.21	2.62 0.24	2.97 0.28	3.32 0.31	
	24 0.60	0.76 0.07	1.26 0.12	1.77 0.16	2.28 0.21	2.78 0.26	3.29 0.31	3.79 0.35	4.30 0.40	4.81 0.45	
	30 0.75	0.99 0.09	1.66 0.15	2.32 0.22	2.98 0.28	3.64 0.34	4.31 0.40	4.97 0.46	5.63 0.52	6.29 0.59	
	36 0.90	1.23 0.11	2.05 0.19	2.87 0.27	3.69 0.34	4.51 0.42	5.33 0.50	6.14 0.57	6.96 0.65	7.78 0.72	
	42 1.05	1.46 0.14	2.44 0.23	3.42 0.32	4.39 0.41	5.37 0.50	6.34 0.59	7.32 0.68	8.30 0.77	9.27 0.86	
	48 1.20	1.70 0.16	2.83 0.26	3.96 0.37	5.10 0.47	6.23 0.58	7.36 0.68	8.49 0.79	9.63 0.90	10.76 1.00	
	54 1.35	1.93 0.18	3.22 0.30	4.51 0.42	5.80 0.54	7.09 0.66	8.38 0.78	9.67 0.90	10.96 1.02	12.25 1.14	
	60 1.50	2.17 0.20	3.61 0.34	5.06 0.47	6.51 0.61	7.95 0.74	9.40 0.87	10.84 1.01	12.29 1.14	13.74 1.28	
	66 1.65	2.40 0.22	4.01 0.37	5.61 0.52	7.21 0.67	8.81 0.82	10.42 0.97	12.02 1.12	13.62 1.27	15.22 1.42	
	72 1.80	2.64 0.25	4.40 0.41	6.16 0.57	7.92 0.74	9.68 0.90	11.44 1.06	13.19 1.23	14.95 1.39	16.71 1.55	
	78 1.95	2.87 0.27	4.79 0.45	6.71 0.62	8.62 0.80	10.54 0.98	12.45 1.16	14.37 1.34	16.29 1.51	18.20 1.69	
	84 2.10	3.11 0.29	5.18 0.48	7.25 0.67	9.33 0.87	11.40 1.06	13.47 1.25	15.54 1.45	17.62 1.64	19.69 1.83	
	90 2.25	3.34 0.31	5.57 0.52	7.80 0.73	10.03 0.93	12.26 1.14	14.49 1.35	16.72 1.55	18.95 1.76	21.18 1.97	
	96 2.40	3.58 0.33	5.96 0.55	8.35 0.78	10.74 1.00	13.12 1.22	15.51 1.44	17.89 1.66	20.28 1.89	22.67 2.11	

PRESSURE DROP



WATER PENETRATION GRAPH



Reliable Company certifies that the 3RRDC 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, water penetration ratings, and wind driven rain ratings only.

WIND-DRIVEN RAIN PERFORMANCE

Test size is 39" x 39" (1m x 1m) core area, 42" x 42" (1.07m x 1.07m) nominal. Free Area of test louver is 6.32 ft² (1.93m²).

Wind Velocity mph (kph)	Rain Fall Rate In./hr. (mm/hr.)	Core Velocity fpm (m/s ¹)	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)	967 (5)	10,412 (294)	2,010 (10.0)	100%	A	1
50 (80.5)	8 (203)	974 (5)	10,484 (296)	2,024 (10.1)	100%	A	1

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).
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 .095
C	0.949 to 0.80
D	Below 0.8

4. 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.)



Reliable certifies that the 3RRDC shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA Publications and comply with the requirements of the AMCA Listing Label Program.

The AMCA Listing Label applies to Wind Borne Debris Impact Resistant Louvers with Basic Protection Level D.

The AMCA Listing Label applies to High Velocity Rain Resistant Louvers with blades fully open.

SUGGESTED SPECIFICATION

Furnish and install louvers 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 3.125" (76.375) frame. Louver components (heads, jams, 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.

Louvers shall be manufactured in an ISO 9001 certified factory.

Louvers shall be Reliable Model 3RRDC extruded 6063T6 extruded aluminum alloy construction as follows:

Frame:	.080" (2.0) wall thickness.
Blades:	.50" (1.3) wall thickness.
Extended Sill:	.080 (2.0) wall thickness.
Screen:	5/8" x .040" (16 x 1) expanded, flattened 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



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