

700HZDC

Extreme Performance Louver

AMCA 540/AMCA 550 | Miami Dade Approved NOA# 22-0407.03



APPLICATION

The 700HZDC is a double frame extreme performance louver that is Miami Dade Approved. Its two-piece blade design provides protection from wind-driven rain penetration, reducing damage and additional operating expenses. The 700HZDC has visible mullion construction and a horizontal front blade design for architecturally pleasing aesthetics.

STANDARD CONSTRUCTION

Frame	Double frame design produced from 6063T6 extruded aluminum with .080" (2.0) nominal wall thickness. Front frame depth is 4" (102) and rear frame depth is 3" (76). Combined frame depth is 7" (178).
Blade	6063T6 extruded aluminum with .080" (2.0) and .050" (1.3) nominal wall thickness. Blades are mounted vertically and spaced approximately at 3.8" (96.52) center to center.
Screen	5/8" x .040" (16x1) expanded, flattened aluminum bird screen in removable frame.
Finish	Mill
Approximate Shipping Weight	8 lbs./sq. ft. (39 kg/m ²)
Minimum Size	12" x 12" (305 x 305)
Maximum Size	60" x 120" (1524 x 3048). Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.
Installation	The 700HZDC 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 E) Listed
- Published performance ratings based on testing in accordance with AMCA 500-L
- Miami Dade Approved NOA# 22-0407.03
- Mechanically Fastened
- Beginning point of water penetration 803 fpm (245 m/min)
- Approved for applications with design pressure of +/- 130 PSF (6.7 kPa)
- TDI Listing



LOUVER OPTIONS

- Variety of bird screens
- Flange frame head and sill
- Extended sill
- Front flange
- CMU installation available
- Concrete
- Steel
- Optional finishes available at additional cost: Prime Coat, 50% PVDF (modified fluoropolymer), Epoxy, Acrodize, 70% PVDF

NOTES:

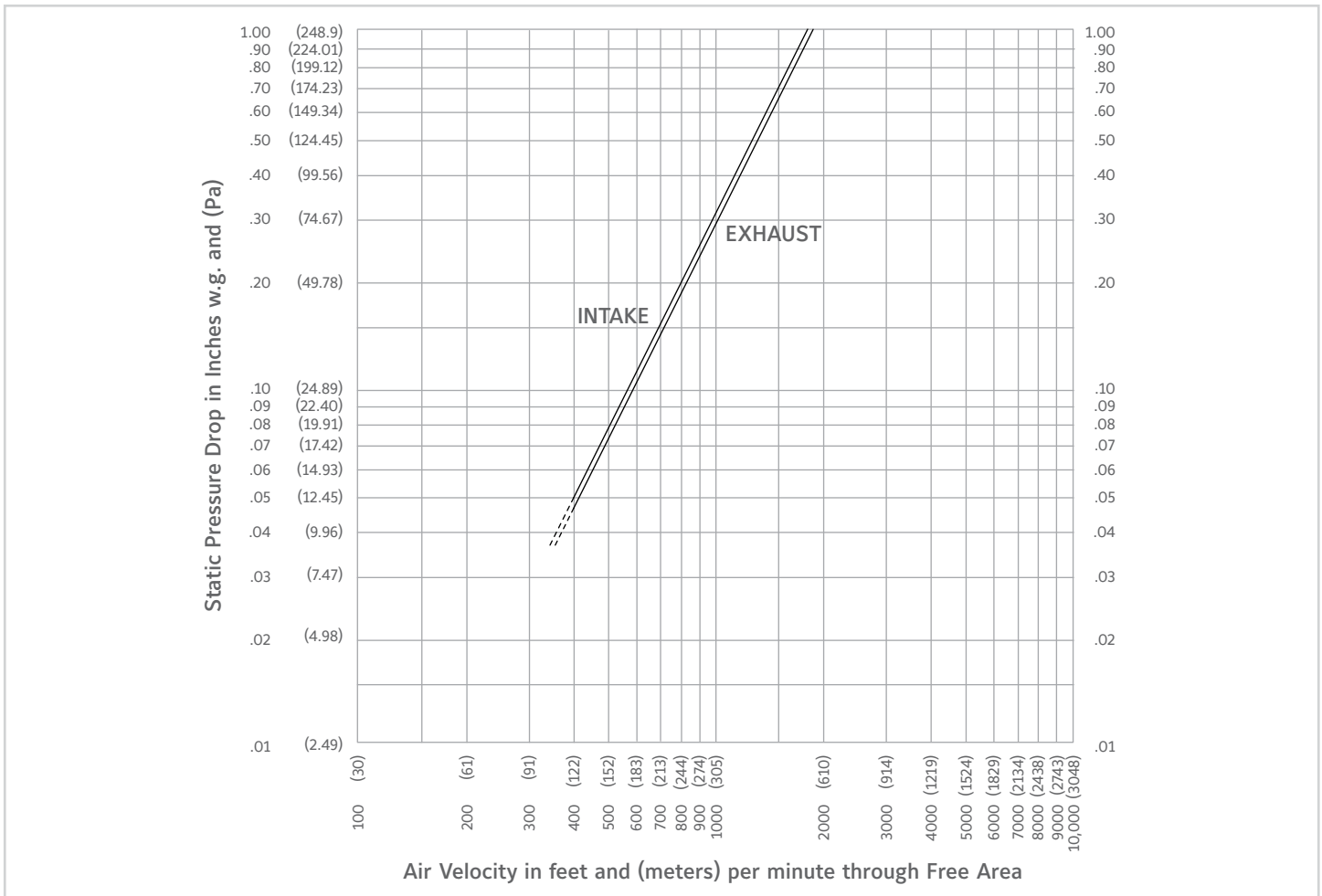
- Dimensions in inches, parenthesis () indicate millimeters.
- Units furnished 1/4" (6) smaller than given opening dimensions.

FREE AREA GUIDE

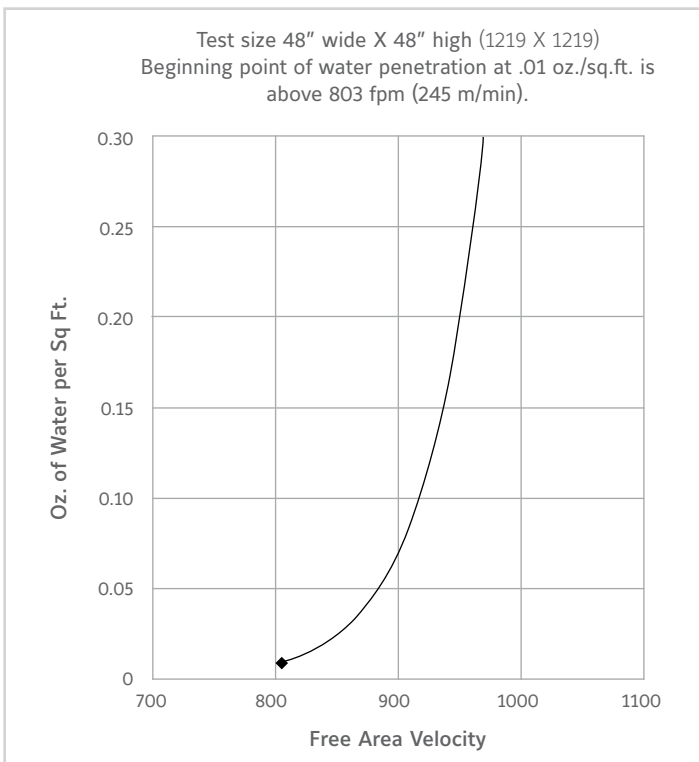
Free Area Guide shows free area in ft² and m² for various sizes of 700HZDC.

		Width – Inches and Meters									
		12	18	24	30	36	42	48	54	60	
Height – Inches and Meters	12	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	1.50	
	0.30	0.29	0.48	0.67	0.87	1.06	1.25	1.44	1.64	1.83	
	18	0.45	0.05	0.08	0.11	0.15	0.18	0.21	0.24	0.28	0.31
	0.45	0.52	0.87	1.22	1.57	1.92	2.27	2.62	2.97	3.32	
	24	0.60	0.07	0.12	0.16	0.21	0.26	0.31	0.35	0.40	0.45
	0.60	0.76	1.26	1.77	2.28	2.78	3.29	3.79	4.30	4.81	
	30	0.75	0.09	0.15	0.22	0.28	0.34	0.40	0.46	0.52	0.59
	0.75	0.99	1.66	2.32	2.98	3.64	4.31	4.97	5.63	6.29	
	36	0.90	0.11	0.19	0.27	0.34	0.42	0.50	0.57	0.65	0.72
	0.90	1.23	2.05	2.87	3.69	4.51	5.33	6.14	6.96	7.78	
	42	1.05	0.14	0.23	0.32	0.41	0.50	0.59	0.68	0.77	0.86
	1.05	1.46	2.44	3.42	4.39	5.37	6.34	7.32	8.30	9.27	
	48	1.20	0.16	0.26	0.37	0.47	0.58	0.68	0.79	0.90	1.00
	1.20	1.70	2.83	3.96	5.10	6.23	7.36	8.49	9.63	10.76	
	54	1.35	0.18	0.30	0.42	0.54	0.66	0.78	0.90	1.02	1.14
	1.35	1.93	3.22	4.51	5.80	7.09	8.38	9.67	10.96	12.25	
	60	1.50	0.20	0.34	0.47	0.61	0.74	0.87	1.01	1.14	1.28
	1.50	2.17	3.61	5.06	6.51	7.95	9.40	10.84	12.29	13.74	
	66	1.65	0.22	0.37	0.52	0.67	0.82	0.97	1.12	1.27	1.42
	1.65	2.40	4.01	5.61	7.21	8.81	10.42	12.02	13.62	15.22	
72	1.80	0.25	0.41	0.57	0.74	0.90	1.06	1.23	1.39	1.55	
1.80	2.64	4.40	6.16	7.92	9.68	11.44	13.19	14.95	16.71		
78	1.95	0.27	0.45	0.62	0.80	0.98	1.16	1.34	1.51	1.69	
1.95	2.87	4.79	6.71	8.62	10.54	12.45	14.37	16.29	18.20		
84	2.10	0.29	0.48	0.67	0.87	1.06	1.25	1.45	1.64	1.83	
2.10	3.11	5.18	7.25	9.33	11.40	13.47	15.54	17.62	19.69		
90	2.25	0.31	0.52	0.73	0.93	1.14	1.35	1.55	1.76	1.97	
2.25	3.34	5.57	7.80	10.03	12.26	14.49	16.72	18.95	21.18		
96	2.40	0.33	0.55	0.78	1.00	1.22	1.44	1.66	1.89	2.11	
2.40	3.58	5.96	8.35	10.74	13.12	15.51	17.89	20.28	22.67		
102	2.55	0.35	0.59	0.83	1.06	1.30	1.54	1.77	2.01	2.25	
2.55	3.81	6.36	8.90	11.44	13.98	16.53	19.07	21.61	24.15		
108	2.70	0.38	0.63	0.88	1.13	1.38	1.63	1.88	2.13	2.38	
2.70	4.05	6.75	9.45	12.15	14.85	17.55	20.24	22.94	25.64		
114	2.85	0.40	0.66	0.93	1.20	1.46	1.73	1.99	2.26	2.52	
2.85	4.28	7.14	10.00	12.85	15.71	18.56	21.42	24.28	27.13		
120	3.00	0.42	0.70	0.98	1.26	1.54	1.82	2.10	2.38	2.66	
3.00	4.52	7.53	10.54	13.56	16.57	19.58	22.59	25.61	28.62		

PRESSURE DROP



WATER PENETRATION GRAPH



Reliable Company certifies that the 700HZDC 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 39.375" w x 39.375" h (1m x 1m) core area, 41.375" w x 44.2" h (1.05m x 1.12m) nominal. Free Area of test louver is 6.8 ft² (10.63m²).

Wind Velocity mph (kph)	Rain Fall Rate In./hr. (mm/hr.)	Core Velocity ₁ fpm (m/s)	Airflow cfm (m ³ /min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class _{3, 4}	Discharge Loss Class ₄ Intake
29 (46.4)	3 (76.2)	986 (5)	10610 (300.70)	1562 (7.9)	99.8%	A	3
50 (80.0)	8 (203)	984 (5)	10593 (299.96)	1558 (7.9)	99.8%	A	3

NOTES:

- 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).
- Free Area of test size is calculated per AMCA standard 500-L.
- 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

- 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 700HZDC 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 Enhanced Protection Level E.

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

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans. Louvers shall be manufactured in an ISO9001 certified factory and tested in accordance with AMCA 540 –Test Method for Louvers Impacted by Wind Borne Debris and AMCA 550 –Test Method for High Velocity Wind Driven Rain Resistant Louvers. Louvers shall have vertical wind driven rain (WDR) louver blades in the rear and horizontal architectural blades in the front for high performance and aesthetics.

Extended sill shall be provided to capture and drain water to exterior of building. Louver drainable blades shall be contained within a combined 7" (178) frame. Louver components including heads, jambs, blades and extended sill 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 Reliable Model 700HZDC extruded 6063T6 extruded aluminum alloy construction as follows:

Material

Frame:	.080" (2.0) wall thickness
Blades:	.080" (1.5) 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

1300 Enterprise Road, P.O. Box
580, Geneva, Alabama 36340
Tel: 334-684-3621
Tel: 800-624-3914
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