

MODEL D-HV-5 5 DEEP HORIZONTAL/VERTICAL BLADE WIND DRIVEN RAIN / HURRICANE LOUVER

MIAMI-DADE COUNTY, FLORIDA NOTICE OF ACCEPTANCE #: 25-0819.01
FLORIDA BUILDING CODE PRODUCT APPROVAL #: 47657.1

STANDARD CONSTRUCTION:

AMCA 540 (Enhanced) & 550 Listed

Design Pressure: +/- 110 psf

FRAME:

.080 Extruded Aluminum 5" (127mm) Deep

BLADES:

Front/Horizontal: .080 (2.03mm) Extruded Aluminum on 2-7/16" (62mm) centers

Rear/Vertical: 0.10 (2.54mm) Extruded Aluminum on 13/16" (20.638mm) centers

BIRDSCREEN:

0.50" x 0.051" [13mm x 1.30mm] Flattened Aluminum in removable frame. Screen is mounted as standard on inside (rear) as looking from exterior of building.

FINISH:

Mill Aluminum (Std)

MINIMUM SIZE:

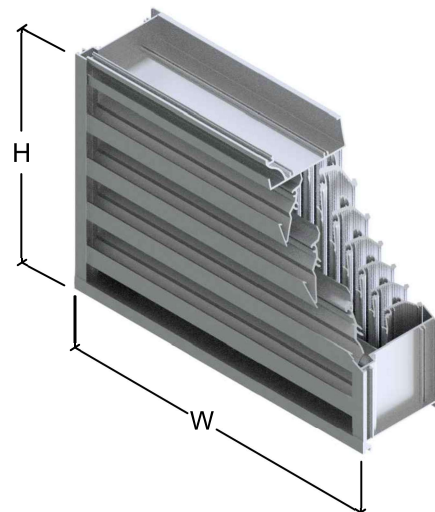
12"w x 12"h (305mm x 305mm)

MAXIMUM SIZE:

Factory Assembled 60"w x 100"h

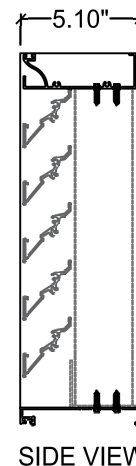
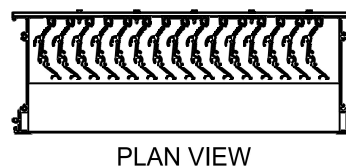
(1524mm x 2540mm)

Multi-section: Unlimited Width x 100"h (2540mm)



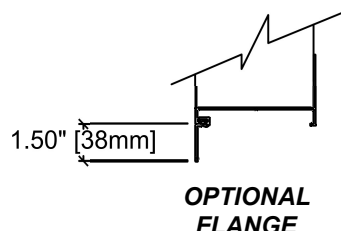
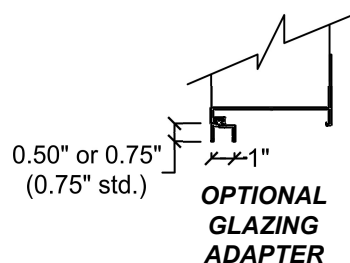
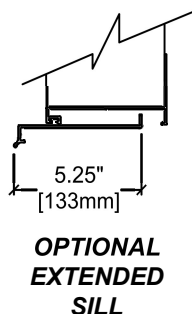
OPTIONS:

- ☐ Flanged Frame (1.50" std. [38mm])
- ☐ Custom Flange (1", 2" , or 3" [25mm, 51mm, or 76mm])
- ☐ Glazing adapter (0.50" or 0.75" wide x 1" deep)
- ☐ Extended Sill
- ☐ Insect Screen (Other Screens Available, See Screen Page)
- ☐ Filter Racks (no screen)
- ☐ Security Bars



AVAILABLE FINISHES:

- ☐ Durable Polyester (AAMA 2604)
- ☐ 70% PVDF Fluoropolymer (AAMA 2605)
- ☐ Yellow Primer
- ☐ Clear Anodize
- ☐ Dark Bronze Anodize



*Width and Height dimensions are approximately 1/4" (6mm) under listed size.

 Air Performance Experts in Architectural Exterior Metal Products		159 Genco Drive Hartford, Alabama 36344 Tel: (334) 588-0070 www.airperformancellc.com		
		MODEL D-HV-5 (5" Deep Horizontal/Vertical Extreme Weather Louver)		
DRAWN BY: CLJ	DATE: August 2025	REV. DATE:	REV. NO.	DWG. NO.: A-23a

Due to continuing research, Air Performance reserves the right to change specifications without notice.

D-HV-5 Specifications

Furnish and install louver as hereinafter specified where shown on plans or as described in schedules. Louver shall be stationary type with horizontal blades positioned on 2.438" centers and vertical rain resistant style blades positioned on approximately 0.8125" centers within a 5" deep frame. Louver frame material to be .080 thick 6063-T5 extruded aluminum, and blade materials to be .080 and .1" thick (respectively) 6063-T5 extruded aluminum. Louver shall have a design wind load of +/-110 psf. Louver shall have a minimum free area of 7.21 sq. ft. based on the standard 48"w x 48"h test specimen. Louver shall have a maximum static pressure drop of 0.25" (exhaust) & 0.33" (intake) water gage based on 1000 FPM free area intake velocity. Louver shall carry Class A water penetration classifications based on a ventilation air core velocity of 690 FPM at a rainfall rate of 3" per hour and a 29 mph simulated wind velocity and ventilation air core velocity of 674 FPM at a rainfall rate of 8" per hour and a 50 mph simulated wind velocity.

Performance Data

Test size 1m x 1m(39"w x39"h) core
40.88"w x 45.63"h Nominal

Wind Driven Rain Penetration Classes	
Class	Effectiveness
A	1 to 0.99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.8

* Discharge Loss Intake		
Wind Velocity (mph)	Class	
	Intake	Exhaust
29	3	3
50	3	3

* Discharge loss coefficient is the theoretical air flow of an opening divided by the actual flow rate of a louver the same size.

Class	Discharge Loss Coefficient
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	.0199 and below

(the higher the coefficient, the less resistance to airflow.)

75 mm/h (3in/h) Rainfall & 13 m/s (29 mph) Wind Velocity		
Ventilation Air Core Velocity m/s (fpm)	Water Penetration Effectiveness %	*Water Penetration Classification
3.42 (674)	99.2	A

*AMCA Classes for maximum allowable water penetrations

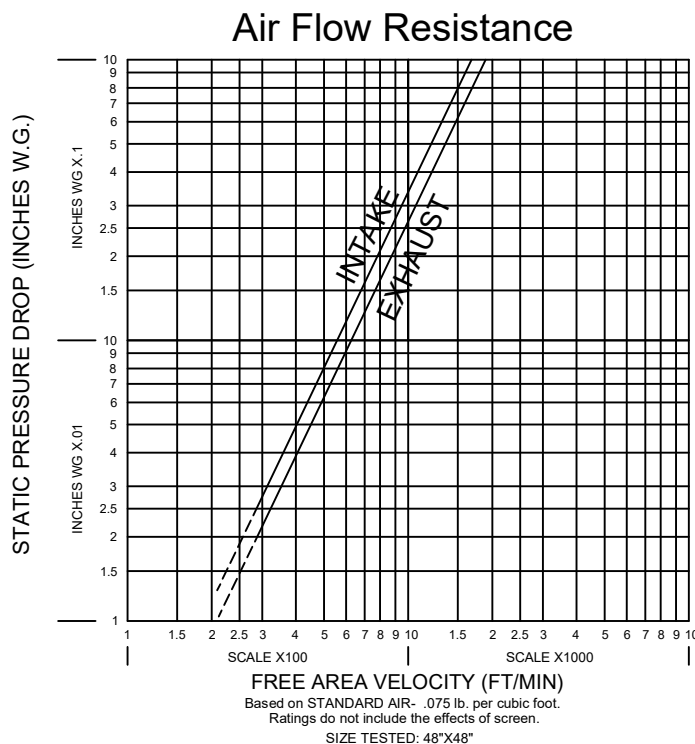
200 mm/h (8in/h) Rainfall & 32 m/s (50 mph) Wind Velocity		
Ventilation Air Core Velocity m/s (fpm)	Water Penetration Effectiveness %	*Water Penetration Classification
3.50 (690)	99.0	A

*AMCA Classes for maximum allowable water penetrations

D-HV-5 FREE AREA CHART (SQUARE FEET)									
Louver Height (inches)	Louver Width (inches)								
	12	18	24	30	36	42	48	54	60
12	0.27	0.43	0.59	0.75	0.91	1.07	1.23	1.39	1.55
18	0.49	0.77	1.06	1.34	1.63	1.91	2.20	2.48	2.77
24	0.66	1.04	1.43	1.81	2.20	2.58	2.97	3.35	3.74
30	0.92	1.46	2.00	2.54	3.08	3.62	4.17	4.71	5.25
36	1.15	1.82	2.50	3.18	3.85	4.53	5.20	5.88	6.55
42	1.36	2.16	2.96	3.75	4.55	5.35	6.15	6.95	7.75
48	1.59	2.53	3.47	4.40	5.34	6.27	7.21	8.15	9.08
54	1.79	2.85	3.90	4.96	6.01	7.07	8.12	9.18	10.23
60	2.01	3.19	4.37	5.55	6.73	7.91	9.08	10.26	11.44
66	2.22	3.53	4.84	6.15	7.45	8.76	10.07	11.38	12.68
72	2.44	3.87	5.30	6.74	8.17	9.60	11.03	12.47	13.90
78	2.67	4.24	5.81	7.39	8.96	10.53	12.10	13.67	15.24
84	2.87	4.55	6.24	7.92	9.61	11.30	12.98	14.67	16.35
90	2.91	4.62	6.33	8.04	9.75	11.46	13.17	14.88	16.59
96	3.30	5.24	7.18	9.12	11.05	12.99	14.93	16.87	18.81
100	3.45	5.48	7.50	9.53	11.56	13.58	15.61	17.64	19.66

Beginning point of **WATER PENETRATION** for **MODEL D-HV-5** lies above **1250 fpm**
free area velocity at .01 oz. of water (penetration)

WATER PENETRATION, OZ. PER SQ. FT. OF FREE AREA
(TEST SIZE: 48X48, 15 MINUTE DURATION)



Air Performance certifies that the D-HV-5 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 Listed Label applies to Wind Borne Debris Impact Resistant Louvers and High Velocity Rain Resistant Louvers



Air Performance certifies that the louver D-HV-5 shown herein is licensed to bear the AMCA Seal. The ratings shown are base 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 rating seal applies to water penetration, air performance, and wind driven rain.