

ESD-635DE

AMCA 540 and 550* Listed Hurricane Louver

Miami-Dade and Florida Product Approved

Extruded Aluminum, Stationary

*AMCA 550 with optional VCD-40 Damper Florida Product Approval No.: FL19675 Miami-Dade, FL NOA No.: 25-0214.04, EXP. 2/4/2031

IVIIa



Standard Construction

Mounting	Continuous aluminum angle along the jambs				
Frame	Heavy gauge extruded 6063-T5 aluminum, 6 in. (152 mm) x 0.081 in. (2 mm) nominal wall thickness				
Blades	Drainable style design, heavy gauge extruded 6063-T5 aluminum, 0.081 in. (2 mm) nominal wall thickness, positioned at 37° angles on approximately 4 in. (102 mm) centers				
Louver Depth	6 in. (152 mm)				
Construction	Mechanically fastened				
Finish	Mill				
Minimum Rough Opening Size					
	12 in. W x 12 in. H (305 mm W x 305 mm H)				
Maximum Rough Opening Size					

48.75 in. W x 48.5 in. H (1238 mm W x 1232 mm H)

+/- 150 PSF (7.2 kPa)

Performance Ratings



Wind Load



Greenheck Fan Corporation certifies that the ESD-635DE channel frame and flange/sleeve frame louvers shown herein are 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 Water Penetration and Air Performance ratings.

Louvers were tested in accordance with AMCA Standard 500-L.

Performance of 48 in. x 48 in. (1219 mm x 1219 mm) Louver (channel frame and flange/sleeve frame)

Free Area

Area 9.41 sq. ft. (0.874 sq. m)

Percent 58.8%

Performance at Beginning Point of Water Penetration

Free Area Velocity Above 1250 fpm (6.350 m/s)

Max Intake Volume 11,763 cfm (5.551 m³/s)

Performance at 6,000 CFM (2.832 m³/s) Intake

Pressure Drop 0.061 in. wg (0.015 kPa)

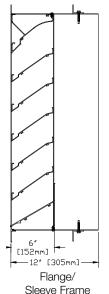
Options and Accessories

- Bird Screen
- Blank-Off Panels

Channe

Frame

- Filter Rack/Filter
- Flange/Sleeve Frame
- Insect Screen
- Security Bars
- Variety of Architectural Finishes
- VCD-40 Damper for AMCA 550



Product Details

ESD-635DE Standard Channel Frame Details
ESD-635DE Optional Flange/Sleeve Frame Details

Channel and Flange/Sleeve Installation (#481375 IOM)

Channel and Flange/Sleeve with VCD-40 Damper Installation (#487344 IOM)

Miami-Dade County, FL Notice of Acceptance

Structural reinforcing members may be required to adequately support and install multiple louver sections within a large opening. Structural reinforcing members along with any associated installation hardware is not provided by Greenheck unless indicated otherwise by Greenheck. Options and accessories including, but not limited to, screens, filter racks, louver doors, and blank off panels are not subject to structural analysis unless indicated otherwise by Greenheck.

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Free Area Chart

Free Area Chart shows free area in square feet and square meters. (channel frame and flange/sleeve frame)

Louver Louver Width in Inches (Meters)								
Louver		rs)						
Height Inches	12	18	24	30	36	42	48	
(Meters)	0.30	0.46	0.61	0.76	0.91	1.07	1.22	
12	0.19	0.32	0.44	0.57	0.69	0.82	0.94	
0.30	0.02	0.03	0.04	0.05	0.06	0.08	0.09	
18	0.48	0.80	1.11	1.42	1.74	2.05	2.36	
0.46	0.04	0.07	0.10	0.13	0.16	0.19	0.22	
24	0.77	1.27	1.77	2.27	2.77	3.27	3.76	
0.61	0.07	0.12	0.16	0.21	0.26	0.30	0.35	
30	1.05	1.73	2.41	3.09	3.77	4.45	5.13	
0.76	0.10	0.16	0.22	0.29	0.35	0.41	0.48	
36	1.35	2.22	3.09	3.97	4.84	5.71	6.59	
0.91	0.13	0.21	0.29	0.37	0.45	0.53	0.61	
42	1.62	2.67	3.71	4.76	5.81	6.86	7.91	
1.07	0.15	0.25	0.34	0.44	0.54	0.64	0.73	
48	1.92	3.17	4.42	5.67	6.91	8.16	9.41	
1.22	0.18	0.29	0.41	0.53	0.64	0.76	0.87	



IMPACT RESISTANT LOUVER Basic Protection Level D

See www.AMCA.org for all certified or listed products

This label does not signify AMCA airflow performand certification.



HIGH VELOCITY RAIN
RESISTANT WITH BLADES
FULLY CLOSED AND
IMPACT RESISTANT LOUVER
Basic Protection Level D

This label does not signify
AMCA airflow performance
certification.

Greenheck Fan Corporation certifies that the ESD-635DE channel frame and flange/sleeve frame louvers shown herein are 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 rated for Basic Protection with a minimum blade span of less than 12 in. (305 mm) and a maximum unsupported blade span of 46 in. (1168 mm). For louvers with the VCD-40 Damper, the AMCA Listing Label also applies to High Velocity Wind Driven Rain Resistant Louver-Damper combinations tested in the fully closed position that stops airflow through the louver.

Document Links

ESD-635DE Specification

Louver Finishes & Colors

Louver Product Selection Guide

Louver Products Catalog

Louver Warranty Statement

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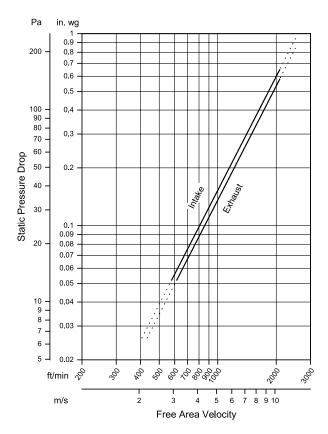
Extruded Aluminum, Stationary *AMCA 550 with optional VCD-40 Damper

Airflow Resistance

(channel frame and flange/sleeve frame)

Standard Air - 0.075 lb/ft3 (1.2 kg/m3)

Test size 48 in. x 48 in. (1219 mm x 1219 mm)



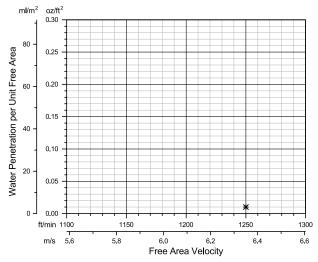
Model ESD-635DE resistance to airflow (pressure drop) varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size. See louver selection information. (Test Figure 5.5-6.5)

Water Penetration

(channel frame and flange/sleeve frame)

Standard Air - 0.075 lb/ft3 (1.2 kg/m3)

Test size 48 in. x 48 in. (1219 mm x 1219 mm) Test duration of 15 min.



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 beginning point of water penetration is defined as that velocity where the water penetration curve projects through 0.01 oz. (3 g) of water (penetration) per sq. ft. (m²) of louver free area. *The beginning point of water penetration for Model ESD-635DE (channel frame and flange/sleeve frame) is above 1250 fpm (6.350 m/s) free area velocity. These performance ratings do not guarantee a louver to be weatherproof or stormproof and should be used in combination with other factors including good engineering judgement in selecting louvers.

