

Standard Construction

Frame	Heavy gauge extruded 6063-T5 aluminum, 5.5 in. (140 mm) x 0.081 in. (2 mm) nominal wall thickness
Blades	Front: Inverted drainable style design, heavy gauge extruded 6005-T5 aluminum, 0.081 in. (2 mm) nominal wall thickness, positioned on approximately 1.9 in. (48 mm) centers Back: Vertical rain resistant design, heavy gauge extruded 6005-T5 aluminum, 0.050 in. (1 mm) nominal wall thickness, positioned on approximately 0.88 in. (22 mm) centers
Louver Depth	5.5 in. (140 mm)
Construction	Mechanically fastened
Finish	Mill
Minimum Size	8 in. W x 12 in. H (203 mm W x 305 mm H)
Maximum Single Section Size	60 in. W x 96 in. H (1524 mm W x 2438 mm H)
Wind Load	25 PSF (1.2 kPa)

Performance Ratings



Greenheck Fan Corporation certifies that the EHV-550 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 air performance, water penetration, and wind-driven rain ratings.



HIGH VELOCITY RAIN
RESISTANT WITH BLADES
FULLY OPEN AND
IMPACT RESISTANT LOUVER
Enhanced Protection Level E

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

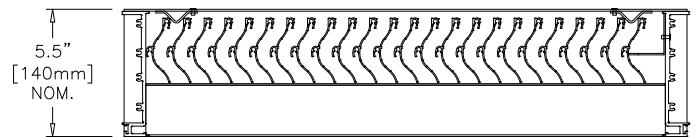
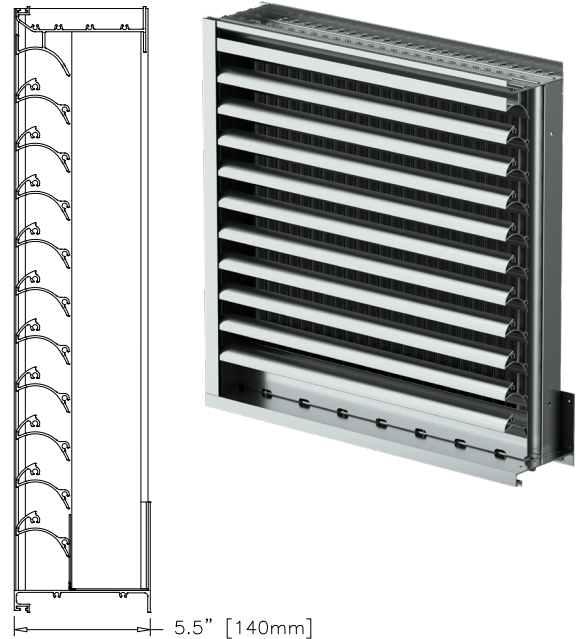
This label does not signify
AMCA airflow performance
certification.

Greenheck Fan Corporation certifies that the EHV-550 louver 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 rated for Enhanced Protection with a minimum blade span of less than 12 in. (305 mm) and a maximum unsupported blade span of 58 to 59.37 in. (1473 to 1508 mm) and to High Velocity Wind-Driven Rain Resistant Louvers tested in the fully open position that permits airflow through the louver.

Performance of 48 in. x 48 in. (1219 mm x 1219 mm) Louver

Free Area	
Area	8.02 sq. ft. (0.745 sq. m)
Percent	50.1%
Performance at Beginning Point of Water Penetration	
Free Area Velocity	1083 fpm (5.502 m/s)
Max Intake Volume	8686 cfm (4.100 m³/s)
Performance at 6,000 CFM (2.832 m³/s) Intake	
Pressure Drop	0.210 in. wg (0.052 kPa)



Options and Accessories

- [Bird Screen](#)
- [Blank-Off Panels](#)
- [Extended Sill](#)
- [Filter Rack/Filter](#)
- [Flange Frame](#)
- [Glazing Frame](#)
- [Insect Screen](#)
- [Mounting Angles](#)
- [Recessed Mullion](#)
- [Security Bars](#)
- [Variety of Architectural Finishes](#)

Product Details

EHV-550 Standard Details

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.

Free Area Chart

Free Area Chart shows free area in square feet and square meters.

Louver Height Inches (Meters)	Louver Width in Inches (Meters)									
	8	12	18	24	30	36	42	48	54	60
0.20	0.20	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52
12	0.14	0.23	0.38	0.52	0.66	0.81	0.95	1.09	1.24	1.38
0.30	0.01	0.02	0.04	0.05	0.06	0.08	0.09	0.10	0.12	0.13
18	0.27	0.47	0.75	1.04	1.33	1.61	1.90	2.19	2.47	2.76
0.46	0.03	0.04	0.07	0.10	0.12	0.15	0.18	0.20	0.23	0.26
24	0.42	0.72	1.16	1.60	2.04	2.48	2.92	3.36	3.80	4.24
0.61	0.04	0.07	0.11	0.15	0.19	0.23	0.27	0.31	0.35	0.39
30	0.57	0.97	1.56	2.16	2.75	3.35	3.94	4.54	5.13	5.73
0.76	0.05	0.09	0.14	0.20	0.26	0.31	0.37	0.42	0.48	0.53
36	0.72	1.22	1.97	2.72	3.47	4.22	4.97	5.72	6.47	7.22
0.91	0.07	0.11	0.18	0.25	0.32	0.39	0.46	0.53	0.60	0.67
42	0.87	1.47	2.38	3.28	4.19	5.10	6.00	6.91	7.81	8.72
1.07	0.08	0.14	0.22	0.30	0.39	0.47	0.56	0.64	0.73	0.81
48	1.01	1.71	2.76	3.81	4.86	5.92	6.97	8.02	9.07	10.12
1.22	0.09	0.16	0.26	0.35	0.45	0.55	0.65	0.75	0.84	0.94
54	1.15	1.94	3.14	4.33	5.53	6.72	7.92	9.11	10.31	11.50
1.37	0.11	0.18	0.29	0.40	0.51	0.62	0.74	0.85	0.96	1.07
60	1.28	2.18	3.52	4.86	6.20	7.54	8.88	10.22	11.56	12.90
1.52	0.12	0.20	0.33	0.45	0.58	0.70	0.82	0.95	1.07	1.20
66	1.43	2.43	3.93	5.42	6.92	8.41	9.91	11.40	12.90	14.39
1.68	0.13	0.23	0.37	0.50	0.64	0.78	0.92	1.06	1.20	1.34
72	1.58	2.68	4.33	5.98	7.63	9.29	10.94	12.59	14.24	15.89
1.83	0.15	0.25	0.40	0.56	0.71	0.86	1.02	1.17	1.32	1.48
78	1.73	2.93	4.74	6.55	8.35	10.16	11.97	13.77	15.58	17.38
1.98	0.16	0.27	0.44	0.61	0.78	0.94	1.11	1.28	1.45	1.61
84	1.88	3.19	5.15	7.11	9.07	11.03	12.99	14.95	16.91	18.87
2.13	0.17	0.30	0.48	0.66	0.84	1.02	1.21	1.39	1.57	1.75
90	2.02	3.42	5.52	7.63	9.73	11.83	13.94	16.04	18.14	20.25
2.29	0.19	0.32	0.51	0.71	0.90	1.10	1.30	1.49	1.69	1.88
96	2.15	3.65	5.90	8.14	10.39	12.64	14.89	17.13	19.38	21.63
2.44	0.20	0.34	0.55	0.76	0.97	1.17	1.38	1.59	1.80	2.01

Document Links

[Louver Finishes & Colors](#)
[Louver Product Selection Guide](#)
[Louver Products Catalog](#)
[Louver Warranty Statement](#)

Core Area Chart

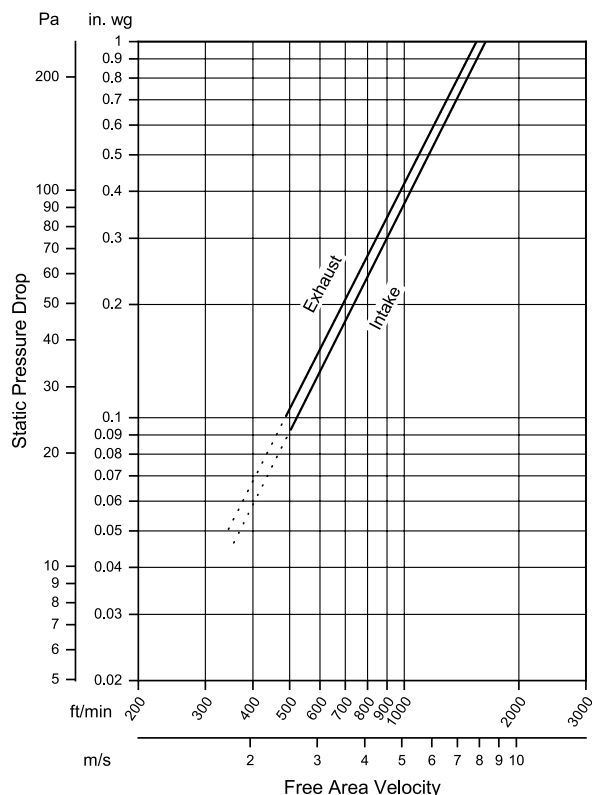
Core Area Chart shows core area in square feet and square meters.

Louver Height Inches (Meters)	Louver Width in Inches (Meters)									
	8	12	18	24	30	36	42	48	54	60
0.20	0.20	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52
12	0.37	0.62	1.01	1.39	1.78	2.16	2.55	2.93	3.32	3.70
0.30	0.03	0.06	0.09	0.13	0.17	0.20	0.24	0.27	0.31	0.34
18	0.61	1.03	1.67	2.30	2.93	3.57	4.20	4.84	5.47	6.11
0.46	0.06	0.10	0.16	0.21	0.27	0.33	0.39	0.45	0.51	0.57
24	0.85	1.44	2.32	3.21	4.09	4.97	5.86	6.74	7.63	8.51
0.61	0.08	0.13	0.22	0.30	0.38	0.46	0.54	0.63	0.71	0.79
30	1.09	1.84	2.98	4.11	5.25	6.38	7.52	8.65	9.78	10.92
0.76	0.10	0.17	0.28	0.38	0.49	0.59	0.70	0.80	0.91	1.01
36	1.33	2.25	3.63	5.02	6.40	7.79	9.17	10.56	11.94	13.32
0.91	0.12	0.21	0.34	0.47	0.59	0.72	0.85	0.98	1.11	1.24
42	1.57	2.66	4.29	5.92	7.56	9.19	10.83	12.46	14.10	15.73
1.07	0.15	0.25	0.40	0.55	0.70	0.85	1.01	1.16	1.31	1.46
48	1.81	3.06	4.95	6.83	8.72	10.60	12.48	14.37	16.25	18.14
1.22	0.17	0.28	0.46	0.63	0.81	0.98	1.16	1.34	1.51	1.69
54	2.05	3.47	5.60	7.74	9.87	12.01	14.14	16.27	18.41	20.54
1.37	0.19	0.32	0.52	0.72	0.92	1.12	1.31	1.51	1.71	1.91
60	2.29	3.87	6.26	8.64	11.03	13.41	15.80	18.18	20.57	22.95
1.52	0.21	0.36	0.58	0.80	1.02	1.25	1.47	1.69	1.91	2.13
66	2.52	4.28	6.92	9.55	12.18	14.82	17.45	20.09	22.72	25.36
1.68	0.23	0.40	0.64	0.89	1.13	1.38	1.62	1.87	2.11	2.36
72	2.76	4.69	7.57	10.46	13.34	16.22	19.11	21.99	24.88	27.76
1.83	0.26	0.44	0.70	0.97	1.24	1.51	1.78	2.04	2.31	2.58
78	3.00	5.09	8.23	11.36	14.50	17.63	20.77	23.90	27.03	30.17
1.98	0.28	0.47	0.76	1.06	1.35	1.64	1.93	2.22	2.51	2.80
84	3.24	5.50	8.88	12.27	15.65	19.04	22.42	25.81	29.19	32.57
2.13	0.30	0.51	0.82	1.14	1.45	1.77	2.08	2.40	2.71	3.03
90	3.48	5.91	9.54	13.17	16.81	20.44	24.08	27.71	31.35	34.98
2.29	0.32	0.55	0.89	1.22	1.56	1.90	2.24	2.57	2.91	3.25
96	3.72	6.31	10.20	14.08	17.97	21.85	25.73	29.62	33.50	37.39
2.44	0.35	0.59	0.95	1.31	1.67	2.03	2.39	2.75	3.11	3.47

Airflow Resistance

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

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

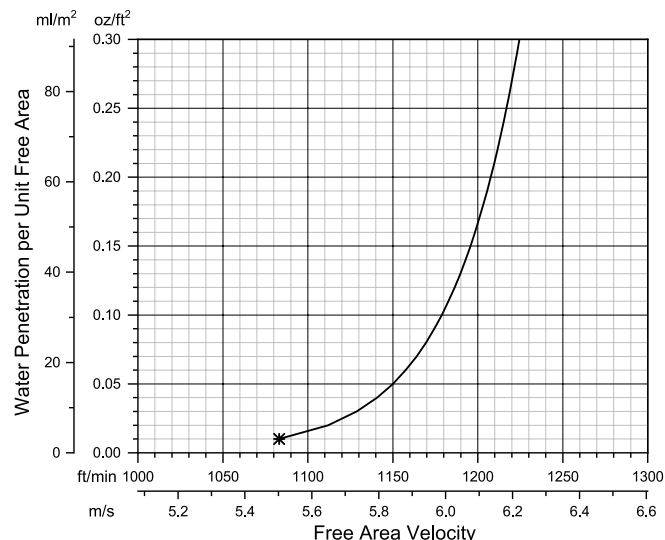


Model EHV-550 resistance to airflow (pressure drop) varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size. See louver selection information. (Test Figure 5.5-6.5)

Water Penetration

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 EHV-550 is 1083 fpm (5.502 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.

Wind-Driven Rain Performance

3 in./hr. (75 mm/hr.) Rainfall Rate & 29 mph (13 m/s) Wind Velocity				8 in./hr. (203 mm/hr.) Rainfall Rate & 50 mph (22.4 m/s) Wind Velocity			
Ventilation Air Core Velocity fpm (m/s)	Ventilation Air Free Area Velocity fpm (m/s)	Water Penetration Effectiveness %	Water Penetration Classification	Ventilation Air Core Velocity fpm (m/s)	Ventilation Air Free Area Velocity fpm (m/s)	Water Penetration Effectiveness %	Water Penetration Classification
0 (0.0)	0 (0.0)	100	A	0 (0.0)	0 (0.0)		A
98 (0.5)	177 (0.9)	100	A	98 (0.5)	177 (0.9)		A
197 (1.0)	356 (1.8)	100	A	197 (1.0)	356 (1.8)		A
295 (1.5)	533 (2.7)	100	A	295 (1.5)	533 (2.7)		A
394 (2.0)	712 (3.6)	100	A	394 (2.0)	712 (3.6)		A
492 (2.5)	889 (4.5)	100	A	492 (2.5)	889 (4.5)		A
591 (3.0)	1068 (5.4)	100	A	591 (3.0)	1068 (5.4)		A
689 (3.5)	1245 (6.3)	100	A	689 (3.5)	1245 (6.3)		A
787 (4.0)	1422 (7.2)	100	A	782 (4.0)	1413 (7.2)	99.7	A
886 (4.5)	1600 (8.1)	100	A	883 (4.5)	1595 (8.1)	99.6	A
980 (5.0)	1770 (9.0)	100	A	980 (5.0)	1770 (9.0)	99.5	A

Louvers shall be classified by their ability to reject simulated rain. The table shows different classifications based on the maximum simulated rain penetration of the louver. Water penetration rating at a given core or free area velocity is determined by the water penetration while the louver is subjected to a selected simulated rainfall rate and wind velocity.

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 0.80