

Standard Construction

Frame	Heavy gauge extruded 6005-T5 aluminum, 6 in. (152 mm) x 0.188 in. (5 mm) nominal wall thickness
Blades	Front: Chevron design, heavy gauge extruded 6005-T5 aluminum, 0.188 in. (5 mm) nominal wall thickness, positioned 45° on approximately 1.625 in. (41 mm) centers Back: Vertical rain resistant style design, heavy gauge extruded 6005-T5 aluminum, 0.07 in. (2 mm) nominal wall thickness, positioned on approximately 0.875 in. (22 mm) centers
Louver Depth	6 in. (152 mm)
Finish	Mill
Mounting	Channel Frame Recessed/Flush
Mounting Angles	Continuous angles along the jambs, or head and sill, with mounting holes
Minimum Section Size	12 in. W x 12 in. H (305 mm W x 305 mm H)
Maximum Single Section Size	48 in. W x 96 in. H (1219 mm W x 2438 mm H)
Maximum Opening Width	Unlimited, larger openings may be configured of multiple louver panels without additional structural reinforcing when configured as head and sill mount
Approx. Weight	15 PSF (0.7 kPa), integral lifting lugs included
Wind Load	+/-350 PSF (16.8 kPa) ASD

Performance Ratings

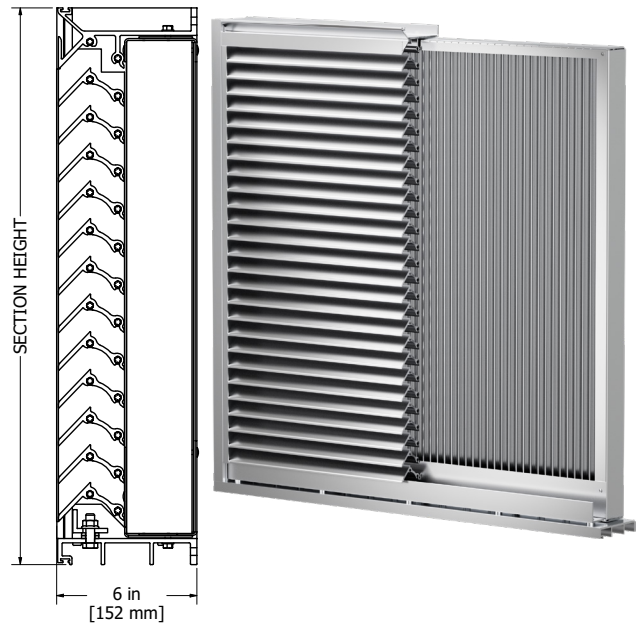


Greenheck Fan Corporation certifies that the AFL-601 recessed/flush frame louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to Water Penetration, Air Performance, and Wind-Driven Rain ratings.

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

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

Free Area	
Area	6.97 sq. ft. (0.648 sq. m)
Percent	43.6%
Performance at Beginning Point of Water Penetration	
Free Area Velocity	above 1250 fpm (6.35 m/s)
Max Intake Volume	8713 cfm (4.11 m³/s)
Performance at 6,000 CFM (2.832 m³/s) Intake	
Pressure Drop	0.293 in. wg (0.073 kPa)



The AFL-601 is a UL Classified Wind-Storm Rated Assembly in accordance with FEMA Guidelines P-320 and P-361, and ICC 500 (2020 & 2023) to static and cyclical design pressures of positive/negative 350 PSF and debris impact of a 15 lb sawn lumber 2x4 traveling at 100 MPH (6.8 kg at 44.7 m/s).



Options and Accessories

- Head and Sill Mounting Configuration
- [Bird Screen](#)
- Cosmetic Front Flange
- [Extended Sill](#)
- Flange Frame
- [Insect Screen](#)
- [Variety of Architectural Finishes](#)

Standard Details and IOMs

[AFL-601 Standard Details](#)

[Flush Mount \(IOM #486736\)](#)

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.

Free Area Chart

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

	Recessed/ Flush Frame Actual Size	Width						
		12	18	24	30	36	42	48
Height		0.30	0.46	0.61	0.76	0.91	1.07	1.22
	12	0.13	0.24	0.36	0.48	0.60	0.72	0.84
	0.30	0.01	0.02	0.03	0.04	0.06	0.07	0.08
	18	0.29	0.52	0.79	1.06	1.33	1.60	1.86
	0.46	0.03	0.05	0.07	0.10	0.12	0.15	0.17
	24	0.45	0.79	1.20	1.61	2.02	2.42	2.83
	0.61	0.04	0.07	0.11	0.15	0.19	0.22	0.26
	30	0.62	1.10	1.66	2.22	2.78	3.35	3.91
	0.76	0.06	0.10	0.15	0.21	0.26	0.31	0.36
	36	0.78	1.39	2.11	2.82	3.54	4.25	4.96
	0.91	0.07	0.13	0.20	0.26	0.33	0.39	0.46
	42	0.93	1.67	2.52	3.37	4.22	5.08	5.93
	1.07	0.09	0.16	0.23	0.31	0.39	0.47	0.55
	48	1.10	1.96	2.96	3.96	4.97	5.97	6.97
	1.22	0.10	0.18	0.27	0.37	0.46	0.55	0.65
	54	1.27	2.26	3.42	4.58	5.74	6.90	8.06
	1.37	0.12	0.21	0.32	0.43	0.53	0.64	0.75
	60	1.42	2.54	3.83	5.13	6.43	7.73	9.03
	1.52	0.13	0.24	0.36	0.48	0.60	0.72	0.84
	66	1.58	2.82	4.26	5.70	7.15	8.59	10.03
	1.68	0.15	0.26	0.40	0.53	0.66	0.80	0.93
	72	1.76	3.13	4.73	6.34	7.94	9.54	11.15
	1.83	0.16	0.29	0.44	0.59	0.74	0.89	1.04
	78	1.91	3.41	5.15	6.90	8.64	10.38	12.13
	1.98	0.18	0.32	0.48	0.64	0.80	0.96	1.13
	84	2.06	3.68	5.56	7.45	9.33	11.22	13.10
	2.13	0.19	0.34	0.52	0.69	0.87	1.04	1.22
	90	2.24	3.99	6.03	8.08	10.12	12.17	14.21
	2.29	0.21	0.37	0.56	0.75	0.94	1.13	1.32
	96	2.40	4.28	6.47	8.66	10.85	13.04	15.23
	2.44	0.22	0.40	0.60	0.80	1.01	1.21	1.41



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
verification.

Greenheck Fan Corporation
certifies that the AFL-601
recessed/flush frame
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 48 in. (1219 mm) and to High Velocity Wind-Driven Rain Resistant Louvers tested in the fully open position that permits airflow through the louver.

Document Links

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

Core Area Chart

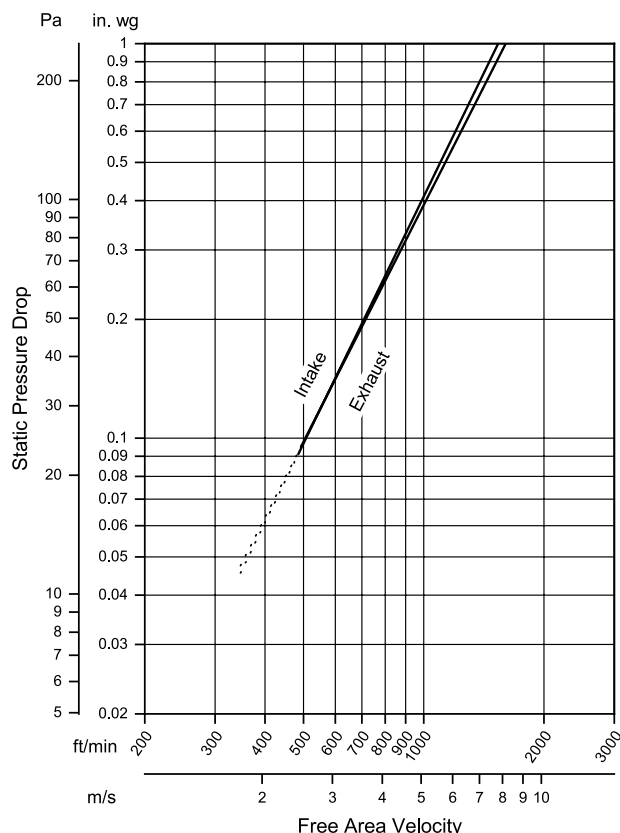
Core Area Chart shows core area in square feet and square meters.

		Width						
Height	Recessed/ Flush Frame Actual Size	12	18	24	30	36	42	48
		0.30	0.46	0.61	0.76	0.91	1.07	1.22
	12	0.13	0.80	1.15	1.49	1.83	2.18	2.52
	0.30	0.01	0.07	0.11	0.14	0.17	0.20	0.23
	12.5	0.17	0.85	1.22	1.58	1.94	2.31	2.67
	0.32	0.02	0.08	0.11	0.15	0.18	0.21	0.25
	18	0.29	1.39	1.98	2.57	3.17	3.76	4.35
	0.46	0.03	0.13	0.18	0.24	0.29	0.35	0.40
	24	0.45	1.97	2.81	3.66	4.50	5.34	6.19
	0.61	0.04	0.18	0.26	0.34	0.42	0.50	0.58
	30	0.62	2.55	3.65	4.74	5.83	6.93	8.02
	0.76	0.06	0.24	0.34	0.44	0.54	0.64	0.75
	36	0.78	3.14	4.48	5.82	7.17	8.51	9.85
	0.91	0.07	0.29	0.42	0.54	0.67	0.79	0.92
	42	0.93	3.72	5.31	6.91	8.50	10.09	11.69
	1.07	0.09	0.35	0.49	0.64	0.79	0.94	1.09
	48	1.10	4.30	6.15	7.99	9.83	11.68	13.52
	1.22	0.10	0.40	0.57	0.74	0.91	1.09	1.26
	54	1.27	4.89	6.98	9.07	11.17	13.26	15.35
	1.37	0.12	0.45	0.65	0.84	1.04	1.23	1.43
	60	1.42	5.47	7.81	10.16	12.50	14.84	17.19
	1.52	0.13	0.51	0.73	0.94	1.16	1.38	1.60
	66	1.58	6.05	8.65	11.24	13.83	16.43	19.02
	1.68	0.15	0.56	0.80	1.04	1.28	1.53	1.77
	72	1.76	6.64	9.48	12.32	15.17	18.01	20.85
	1.83	0.16	0.62	0.88	1.14	1.41	1.67	1.94
	78	1.91	7.22	10.31	13.41	16.50	19.59	22.69
	1.98	0.18	0.67	0.96	1.25	1.53	1.82	2.11
	84	2.06	7.80	11.15	14.49	17.83	21.18	24.52
	2.13	0.19	0.72	1.04	1.35	1.66	1.97	2.28
	90	2.24	8.39	11.98	15.57	19.17	22.76	26.35
	2.29	0.21	0.78	1.11	1.45	1.78	2.11	2.45
	96	2.40	8.97	12.81	16.66	20.50	24.34	28.19
	2.44	0.22	0.83	1.19	1.55	1.90	2.26	2.62

Airflow Resistance

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

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



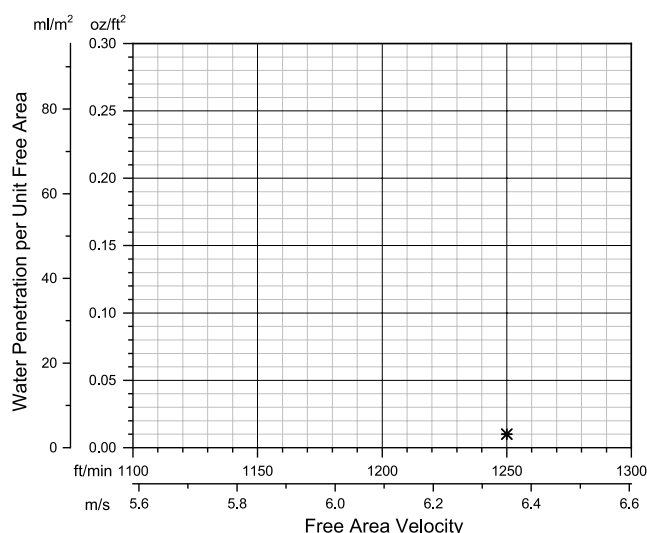
Model AFL-601 recessed/flush frame resistance to airflow (pressure drop) varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size. See louver selection information. (Test Figure 5.5-6.5)

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 AFL-601 recessed/flush frame is above 1250 fpm (6.35 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				Wind-Driven Rain Penetration Classes	
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	Class	Effectiveness
0 (0.0)	0 (0.0)	100.0	A	0 (0.0)	0 (0.0)		A	A	1 to 0.99
98 (0.5)	196 (1.0)	100.0	A	98 (0.5)	196 (1.0)		A	B	0.989 to 0.95
197 (1.0)	394 (2.0)	100.0	A	197 (1.0)	394 (2.0)		A	C	0.949 to 0.80
295 (1.5)	590 (3.0)	100.0	A	295 (1.5)	590 (3.0)		A	D	Below 0.80
394 (2.0)	789 (4.0)	100.0	A	394 (2.0)	789 (4.0)		A		
492 (2.5)	985 (5.0)	100.0	A	492 (2.5)	985 (5.0)		A		
591 (3.0)	1183 (6.0)	100.0	A	591 (3.0)	1183 (6.0)		A		
689 (3.5)	1379 (7.0)	100.0	A	689 (3.5)	1379 (7.0)		A		
787 (4.0)	1575 (8.0)	100.0	A	789 (4.0)	1580 (8.0)	99.9	A		
886 (4.5)	1773 (9.0)	100.0	A	883 (4.5)	1766 (9.0)	99.8	A		
984 (5.0)	1969 (10.0)	100.0	A	983 (5.0)	1968 (10.0)	99.5	A		

Water penetration classification ratings are based on the amount of simulated rain that penetrates the louver during a specific rainfall rate, wind velocity, and intake velocity. Ratings are based on a 39.4 in. x 39.4 in. (1 m x 1 m) core size.

