

## Standard Construction

<b>Frame</b>	Heavy gauge extruded 6005-T5 aluminum, 6 in. (152 mm) x 0.188 in. (5 mm) nominal wall thickness
<b>Blades</b>	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
<b>Louver Depth</b>	6 in. (152 mm)
<b>Finish</b>	Mill
<b>Mounting</b>	Channel Frame Recessed/Flush
<b>Mounting Angles</b>	Continuous angles along the jambs, or head and sill, with mounting holes
<b>Minimum Section Size</b>	12 in. W x 12 in. H (305 mm W x 305 mm H)
<b>Maximum Single Section Size</b>	48 in. W x 96 in. H (1219 mm W x 2438 mm H)
<b>Maximum Opening Width</b>	Unlimited, larger openings may be configured of multiple louver panels without additional structural reinforcing when configured as head and sill mount
<b>Approx. Weight</b>	15 PSF (0.7 kPa), integral lifting lugs included
<b>Wind Load</b>	+/-350 PSF (16.8 kPa) ASD

## Performance Ratings

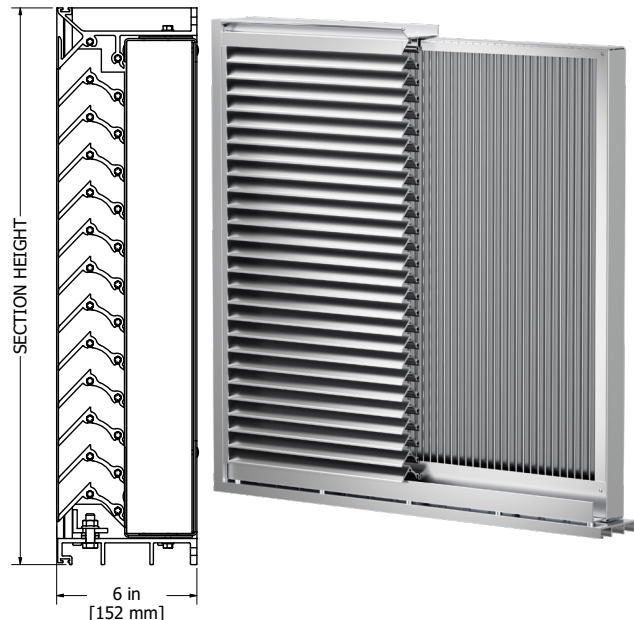


Greenheck Fan Corporation certifies that the AFL-601 recessed/flush frame louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program.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

<b>Free Area</b>	
Area	6.97 sq. ft. (0.648 sq. m)
Percent	43.6%
<b>Performance at Beginning Point of Water Penetration</b>	
Free Area Velocity	above 1250 fpm (6.35 m/s)
Max Intake Volume	8713 cfm (4.11 m <sup>3</sup> /s)
<b>Performance at 6,000 CFM (2.832 m<sup>3</sup>/s) Intake</b>	
Pressure Drop	0.327 in. wg (0.081 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.

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

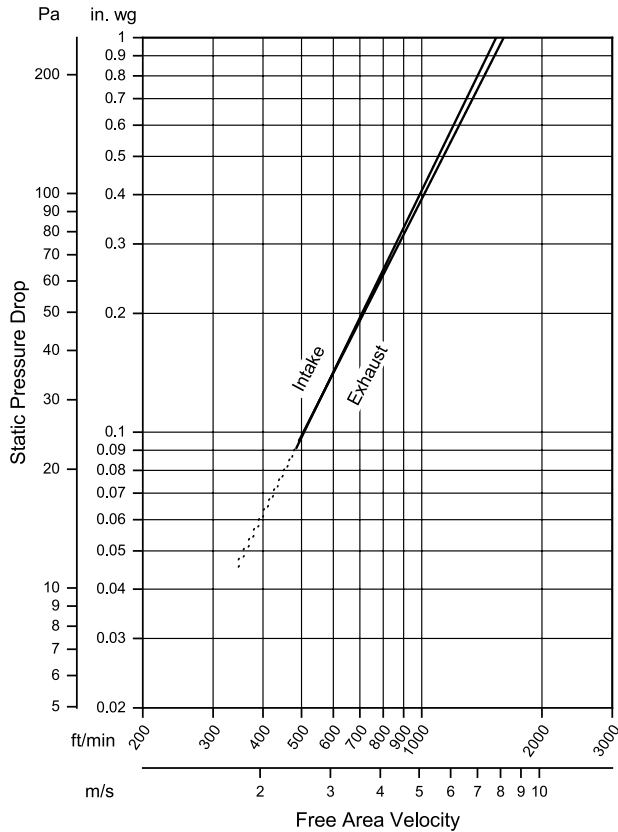
Core Area Chart shows core area in square feet and square meters.

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

## Airflow Resistance

Standard Air - 0.075 lb/ft<sup>3</sup> (1.2 kg/m<sup>3</sup>)

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



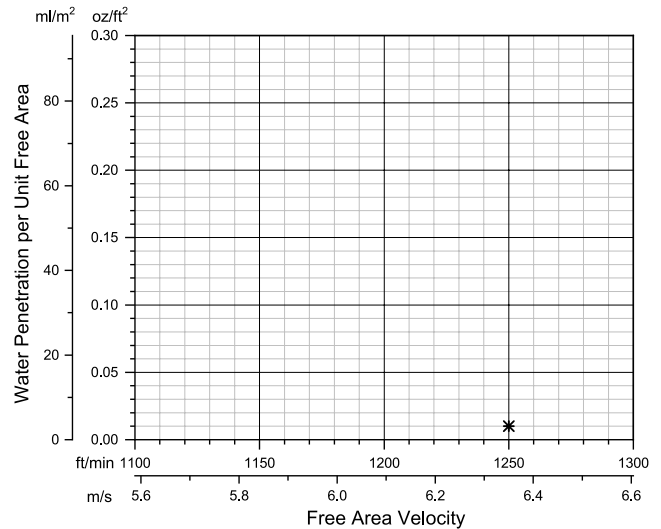
Model AFL-601 recessed/flush frame resistance to airflow (pressure drop) varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size. See louver selection information. (Test Figure 5.5-6.5)

## Water Penetration

Standard Air - 0.075 lb/ft<sup>3</sup> (1.2 kg/m<sup>3</sup>)

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. (m<sup>2</sup>) 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	1 to 0.99
98 (0.5)	196 (1.0)	100.0	A	98 (0.5)	196 (1.0)			B	0.989 to 0.95
197 (1.0)	394 (2.0)	100.0	A	197 (1.0)	394 (2.0)			C	0.949 to 0.80
295 (1.5)	590 (3.0)	100.0	A	295 (1.5)	590 (3.0)			D	Below 0.80
394 (2.0)	789 (4.0)	100.0	A	394 (2.0)	789 (4.0)				
492 (2.5)	985 (5.0)	100.0	A	492 (2.5)	985 (5.0)				
591 (3.0)	1183 (6.0)	100.0	A	591 (3.0)	1183 (6.0)				
689 (3.5)	1379 (7.0)	100.0	A	689 (3.5)	1379 (7.0)				
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.

