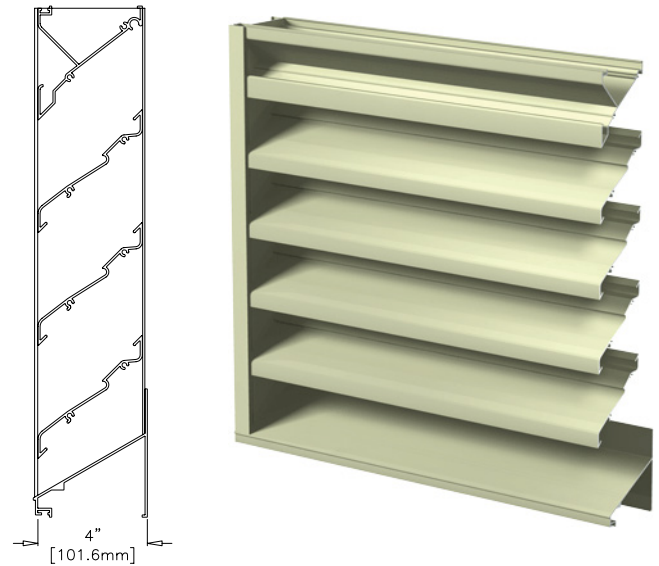


## Standard Construction

<b>Fame</b>	Heavy gauge extruded 6063-T5 aluminum, 4 in. (102 mm) x 0.081 in. (2 mm) nominal wall thickness
<b>Blades</b>	Drainable design, heavy gauge extruded 6063-T5 aluminum, 0.081 in. (2mm) nominal wall thickness, positioned 37° and 45° on approximately 4 in. (102 mm) centers
<b>Louver Depth</b>	4 in. (102 mm)
<b>Construction</b>	Mechanically fastened
<b>Finish</b>	Mill
<b>Minimum Size</b>	12 in. W x 12. H (305 mm W x 305 mm H)
<b>Maximum Single Section Size</b>	120 in. W or 120 in. H (limited to 70 ft. sq.) (3048 mm W or 3048 mm H) (limited to 6.5 sq. m)
<b>Wind Load</b>	25 PSF (1.2 kPa)



## Performance Ratings



Airolite certifies that the K638HP 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 and water penetration ratings.

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

<b>Free Area</b>	Area 8.49 sq. ft. (0.789 sq. m)
	Percent 53.1%
<b>Performance at Beginning Point of Water Penetration</b>	
Free Area Velocity	934 fpm (4.745 m/s)
Max Intake Volume	7930 cfm (3.742 m <sup>3</sup> /s)
<b>Performance at 6,000 CFM (2.832 m<sup>3</sup>/s) Intake</b>	
Pressure Drop	0.083 in. wg (0.021 kPa)

## Document Links

[Architectural Louvers Catalog](#)

[Finishes & Colors](#)

[Qwik Ship Guide](#)

[Airolite Warranty Statement](#)

## Options and Accessories

- [Bird Screen](#)
- [Blank Off Panels](#)
- [Extended Sill](#)
- [Flange Frame](#)
- [Filter Rack/Filter](#)
- [Glazing Frame](#)
- Hinged Frame
- [Insect Screen](#)
- [Mounting Angles](#)
- [Security Bars](#)
- Welded Construction
- 0.125 in. (3 mm) Nominal Frame and/or Blade Thickness
- [Variety of Architectural Finishes](#)

## Standard Details

### [K638HP 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 Airolite unless indicated otherwise by Airolite. 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 Airolite.

## Free Area Chart

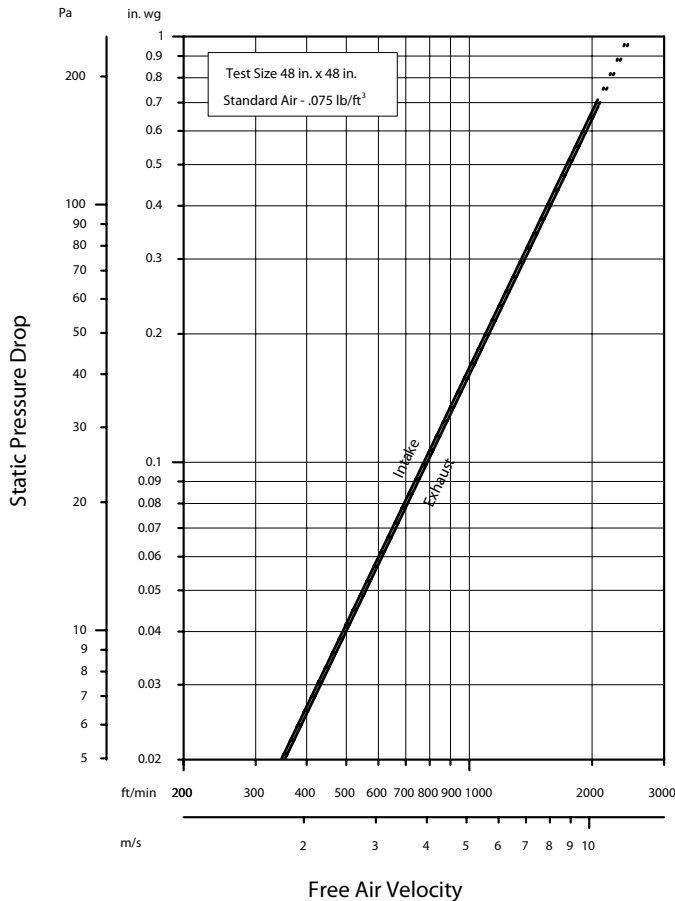
Free Area Chart shows free area in square feet and square meters.

Louver Height Inches (Meters)	Louver Width in Inches (Meters)																		
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
0.30	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
<b>12</b>	<b>0.31</b>	<b>0.51</b>	<b>0.71</b>	<b>0.91</b>	<b>1.11</b>	<b>1.32</b>	<b>1.46</b>	<b>1.66</b>	<b>1.87</b>	<b>2.07</b>	<b>2.27</b>	<b>2.47</b>	<b>2.67</b>	<b>2.87</b>	<b>3.07</b>	<b>3.22</b>	<b>3.42</b>	<b>3.62</b>	<b>3.82</b>
0.30	0.03	0.05	0.07	0.08	0.10	0.12	0.14	0.15	0.17	0.19	0.21	0.23	0.25	0.27	0.29	0.30	0.32	0.34	0.35
<b>18</b>	<b>0.53</b>	<b>0.87</b>	<b>1.22</b>	<b>1.56</b>	<b>1.90</b>	<b>2.25</b>	<b>2.51</b>	<b>2.85</b>	<b>3.19</b>	<b>3.54</b>	<b>3.88</b>	<b>4.22</b>	<b>4.57</b>	<b>4.91</b>	<b>5.25</b>	<b>5.50</b>	<b>5.84</b>	<b>6.19</b>	<b>6.53</b>
0.46	0.05	0.08	0.11	0.14	0.18	0.21	0.23	0.26	0.30	0.33	0.36	0.39	0.42	0.46	0.49	0.51	0.54	0.58	0.61
<b>24</b>	<b>0.80</b>	<b>1.32</b>	<b>1.85</b>	<b>2.37</b>	<b>2.89</b>	<b>3.41</b>	<b>3.80</b>	<b>4.33</b>	<b>4.85</b>	<b>5.37</b>	<b>5.89</b>	<b>6.41</b>	<b>6.93</b>	<b>7.45</b>	<b>7.97</b>	<b>8.35</b>	<b>8.87</b>	<b>9.39</b>	<b>9.91</b>
0.61	0.07	0.12	0.17	0.22	0.27	0.32	0.35	0.40	0.45	0.50	0.55	0.60	0.64	0.69	0.74	0.78	0.82	0.87	0.92
<b>30</b>	<b>1.04</b>	<b>1.71</b>	<b>2.38</b>	<b>3.05</b>	<b>3.72</b>	<b>4.39</b>	<b>4.90</b>	<b>5.57</b>	<b>6.25</b>	<b>6.92</b>	<b>7.59</b>	<b>8.26</b>	<b>8.93</b>	<b>9.60</b>	<b>10.28</b>	<b>10.76</b>	<b>11.43</b>	<b>12.10</b>	<b>12.77</b>
0.76	0.10	0.16	0.22	0.28	0.35	0.41	0.46	0.52	0.58	0.64	0.71	0.77	0.83	0.89	0.96	1.00	1.06	1.12	1.19
<b>36</b>	<b>1.30</b>	<b>2.14</b>	<b>2.98</b>	<b>3.82</b>	<b>4.67</b>	<b>5.51</b>	<b>6.15</b>	<b>6.99</b>	<b>7.83</b>	<b>8.67</b>	<b>9.51</b>	<b>10.35</b>	<b>11.20</b>	<b>12.04</b>	<b>12.88</b>	<b>13.48</b>	<b>14.33</b>	<b>15.17</b>	<b>16.01</b>
0.91	0.12	0.20	0.28	0.35	0.43	0.51	0.57	0.65	0.73	0.81	0.88	0.96	1.04	1.12	1.20	1.25	1.33	1.41	1.49
<b>42</b>	<b>1.58</b>	<b>2.61</b>	<b>3.63</b>	<b>4.66</b>	<b>5.69</b>	<b>6.71</b>	<b>7.49</b>	<b>8.52</b>	<b>9.54</b>	<b>10.57</b>	<b>11.60</b>	<b>12.62</b>	<b>13.65</b>	<b>14.68</b>	<b>15.70</b>	<b>16.44</b>	<b>17.46</b>	<b>18.49</b>	<b>19.52</b>
1.07	0.15	0.24	0.34	0.43	0.53	0.62	0.70	0.79	0.89	0.98	1.08	1.17	1.27	1.36	1.46	1.53	1.62	1.72	1.81
<b>48</b>	<b>1.79</b>	<b>2.96</b>	<b>4.12</b>	<b>5.29</b>	<b>6.45</b>	<b>7.61</b>	<b>8.49</b>	<b>9.66</b>	<b>10.82</b>	<b>11.99</b>	<b>13.15</b>	<b>14.31</b>	<b>15.48</b>	<b>16.64</b>	<b>17.80</b>	<b>18.64</b>	<b>19.80</b>	<b>20.97</b>	<b>22.13</b>
1.22	0.17	0.27	0.38	0.49	0.60	0.71	0.79	0.90	1.01	1.11	1.22	1.33	1.44	1.55	1.65	1.73	1.84	1.95	2.06
<b>54</b>	<b>2.07</b>	<b>3.42</b>	<b>4.77</b>	<b>6.11</b>	<b>7.46</b>	<b>8.80</b>	<b>9.82</b>	<b>11.17</b>	<b>12.51</b>	<b>13.86</b>	<b>15.21</b>	<b>16.55</b>	<b>17.90</b>	<b>19.24</b>	<b>20.59</b>	<b>21.55</b>	<b>22.90</b>	<b>24.24</b>	<b>25.59</b>
1.37	0.19	0.32	0.44	0.57	0.69	0.82	0.91	1.04	1.16	1.29	1.41	1.54	1.66	1.79	1.91	2.00	2.13	2.25	2.38
<b>60</b>	<b>2.29</b>	<b>3.77</b>	<b>5.26</b>	<b>6.74</b>	<b>8.23</b>	<b>9.71</b>	<b>10.84</b>	<b>12.32</b>	<b>13.81</b>	<b>15.29</b>	<b>16.78</b>	<b>18.26</b>	<b>19.74</b>	<b>21.23</b>	<b>22.71</b>	<b>23.78</b>	<b>25.26</b>	<b>26.75</b>	<b>28.23</b>
1.52	0.21	0.35	0.49	0.63	0.76	0.90	1.01	1.14	1.28	1.42	1.56	1.70	1.83	1.97	2.11	2.21	2.35	2.49	2.62
<b>66</b>	<b>2.57</b>	<b>4.23</b>	<b>5.90</b>	<b>7.56</b>	<b>9.23</b>	<b>10.89</b>	<b>12.15</b>	<b>13.82</b>	<b>15.49</b>	<b>17.15</b>	<b>18.82</b>	<b>20.48</b>	<b>22.15</b>	<b>23.81</b>	<b>25.48</b>	<b>26.67</b>	<b>28.33</b>	<b>30.00</b>	<b>31.66</b>
1.68	0.24	0.39	0.55	0.70	0.86	1.01	1.13	1.28	1.44	1.59	1.75	1.90	2.06	2.21	2.37	2.48	2.63	2.79	2.94
<b>72</b>	<b>2.78</b>	<b>4.59</b>	<b>6.39</b>	<b>8.20</b>	<b>10.00</b>	<b>11.81</b>	<b>13.18</b>	<b>14.98</b>	<b>16.78</b>	<b>18.59</b>	<b>20.39</b>	<b>22.20</b>	<b>24.00</b>	<b>25.81</b>	<b>27.61</b>	<b>28.91</b>	<b>30.71</b>	<b>32.52</b>	<b>34.32</b>
1.83	0.26	0.43	0.59	0.76	0.93	1.10	1.22	1.39	1.56	1.73	1.89	2.06	2.23	2.40	2.57	2.69	2.85	3.02	3.19
<b>78</b>	<b>3.06</b>	<b>5.04</b>	<b>7.03</b>	<b>9.01</b>	<b>11.00</b>	<b>12.98</b>	<b>14.49</b>	<b>16.47</b>	<b>18.46</b>	<b>20.44</b>	<b>22.43</b>	<b>24.41</b>	<b>26.40</b>	<b>28.38</b>	<b>30.37</b>	<b>31.79</b>	<b>33.77</b>	<b>35.76</b>	<b>37.74</b>
1.98	0.28	0.47	0.65	0.84	1.02	1.21	1.35	1.53	1.71	1.90	2.08	2.27	2.45	2.64	2.82	2.95	3.14	3.32	3.51
<b>84</b>	<b>3.28</b>	<b>5.41</b>	<b>7.54</b>	<b>9.67</b>	<b>11.79</b>	<b>13.92</b>	<b>15.54</b>	<b>17.66</b>	<b>19.79</b>	<b>21.92</b>	<b>24.05</b>	<b>26.18</b>	<b>28.31</b>	<b>30.43</b>	<b>32.56</b>	<b>34.09</b>	<b>36.22</b>	<b>38.34</b>	<b>40.47</b>
2.13	0.30	0.50	0.70	0.90	1.10	1.29	1.44	1.64	1.84	2.04	2.23	2.43	2.63	2.83	3.02	3.17	3.36	3.56	3.76
<b>90</b>	<b>3.55</b>	<b>5.86</b>	<b>8.16</b>	<b>10.47</b>	<b>12.77</b>	<b>15.08</b>	<b>16.83</b>	<b>19.13</b>	<b>21.44</b>	<b>23.74</b>	<b>26.04</b>	<b>28.35</b>	<b>30.65</b>						
2.29	0.33	0.54	0.76	0.97	1.19	1.40	1.56	1.78	1.99	2.21	2.42	2.63	2.85						
<b>96</b>	<b>4.01</b>	<b>6.61</b>	<b>9.22</b>	<b>11.82</b>	<b>14.42</b>	<b>17.02</b>	<b>19.00</b>	<b>21.60</b>	<b>24.20</b>	<b>26.80</b>	<b>29.41</b>	<b>32.01</b>	<b>34.61</b>						
2.44	0.37	0.61	0.86	1.10	1.34	1.58	1.77	2.01	2.25	2.49	2.73	2.97	3.22						
<b>102</b>	<b>1.05</b>	<b>6.67</b>	<b>9.30</b>	<b>11.92</b>	<b>14.55</b>	<b>17.18</b>	<b>19.17</b>	<b>21.79</b>	<b>24.42</b>	<b>27.04</b>	<b>29.67</b>	<b>32.30</b>	<b>34.92</b>						
2.59	0.10	0.62	0.86	1.11	1.35	1.60	1.78	2.02	2.27	2.51	2.76	3.00	3.24						
<b>108</b>	<b>4.33</b>	<b>7.14</b>	<b>9.95</b>	<b>12.76</b>	<b>15.57</b>	<b>18.38</b>	<b>20.51</b>	<b>23.32</b>	<b>26.13</b>	<b>28.94</b>	<b>31.75</b>	<b>35.56</b>	<b>37.37</b>						
2.74	0.40	0.66	0.92	1.19	1.45	1.71	1.91	2.17	2.43	2.69	2.95	3.30	3.47						
<b>114</b>	<b>1.54</b>	<b>7.49</b>	<b>10.44</b>	<b>13.39</b>	<b>16.34</b>	<b>19.28</b>	<b>21.52</b>	<b>24.47</b>	<b>27.42</b>	<b>30.36</b>	<b>33.31</b>	<b>36.26</b>	<b>39.21</b>						
2.90	0.14	0.70	0.97	1.24	1.52	1.79	2.00	2.27	2.55	2.82	3.09	3.37	3.64						
<b>120</b>	<b>4.82</b>	<b>7.95</b>	<b>11.08</b>	<b>14.21</b>	<b>17.34</b>	<b>20.47</b>	<b>22.84</b>	<b>25.97</b>	<b>29.10</b>	<b>32.23</b>	<b>35.36</b>	<b>38.49</b>	<b>41.62</b>						
3.05	0.45	0.74	1.03	1.32	1.61	1.90	2.12	2.41	2.70	2.99	3.29	3.58	3.87						

## 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)

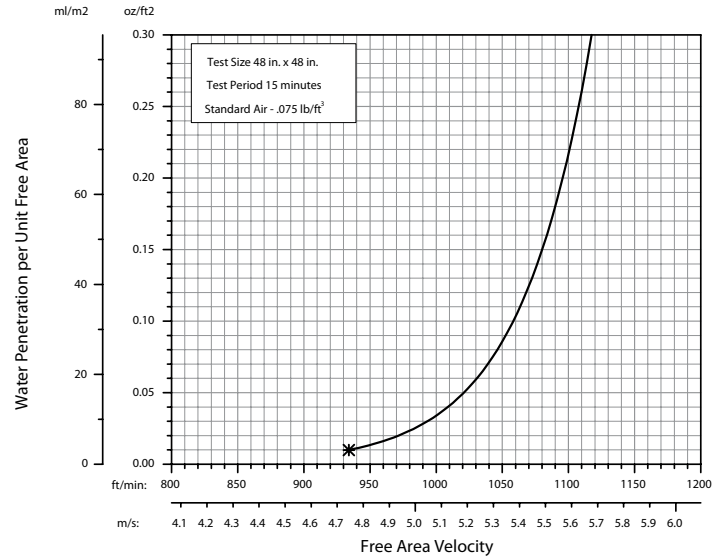


Model K638HP resistance to airflow (pressure drop) varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size. See louver selection information. (Test Figure 5.5-6.5)

## 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 K638HP is above 934 fpm (4.745 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.