

# Model—SP-445

## 102 mm DEEP HORIZONTAL STEP BLADE LOUVER



McGill Architectural Products certifies that the Rain Defense Louver Model “SP-445” 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 and air performance ratings Only.”



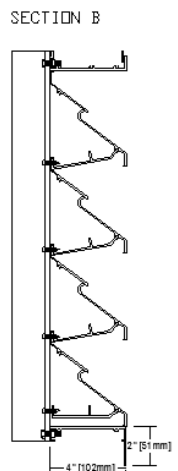
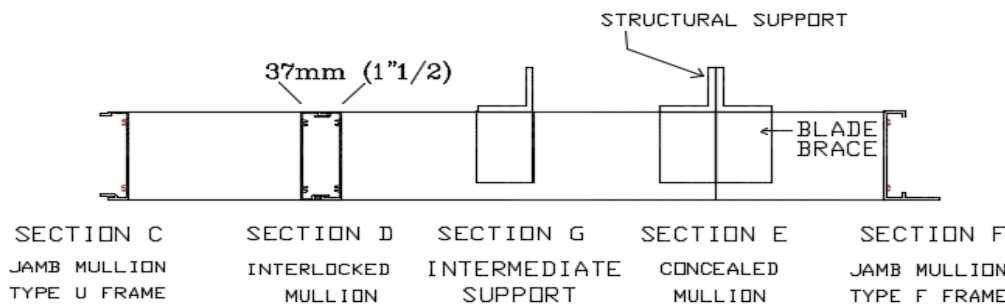
### WATER PENETRATION PERFORMANCE

- \* Free Area Velocity at Beginning Point of Water Penetration: 699 fpm (3.56 m/s)
- \* Air Flow Rate at Beginning Point of Water Penetration — 48in x 48in unit:  
4,728 cfm (2.23 m<sup>3</sup>/s)
- \* Pressure Drop at Beginning Point of Water Penetration: 0.072 in. H<sub>2</sub>O (18 Pa)



### AIRFLOW PERFORMANCE

- \* Free Area: 42% , based on a test sample of 48in (1220mm) x 48in (1220mm)
- \* Airflow Classification—Class 2



### System Description:

McGill Rain high performance series; extruded aluminum construction; frame with channel profile; corner joints mitered and mechanically fastened, with continuous recessed caulking channel each side; intermediate mullions matching frame; gutters rated for an air performance and water penetration maintained effectiveness rate tested in accordance with AMCA 500-L.

### Material & Finishes:

1. SP-445 comprises
  - a. Blades: Horizontal Step Blade
  - b. Frame depth: 4 inches (102 mm)
2. Metal Thickness: Frame 0.081 inch (2 mm); blades 0.081 inch (2 mm).
3. Finish: PE-SDF / PVDF / Anodize after fabrication
4. Color: As scheduled.
5. Mullions: Concealed or Exposed.
6. Screens: Bird mesh / Insect mesh
7. Screen location: Interior
8. Screening Material: Aluminium / Stainless Steel

### Louver Construction:

1. Wind Load Resistance: Design to resist +ve and -ve wind load of \_\_\_ psf (\_\_\_ kPa) without damage or permanent deformation.
2. Blades: One piece extrusions with reinforcing bosses, supported and lined up with heavy-gage extruded aluminum blade braces, positively interlocked to each blade and mechanically secured to structure by aluminum and stainless steel fastenings.
3. Exposed edges and ends of metal dressed smooth, free from sharp edges.
4. Exposed connections and joints constructed to exclude water.

### Warranty:

OSA-McGill louvers warranted for 2 years against defective material and workmanship, and 20 Years for Finishes.

# Model—SP-445

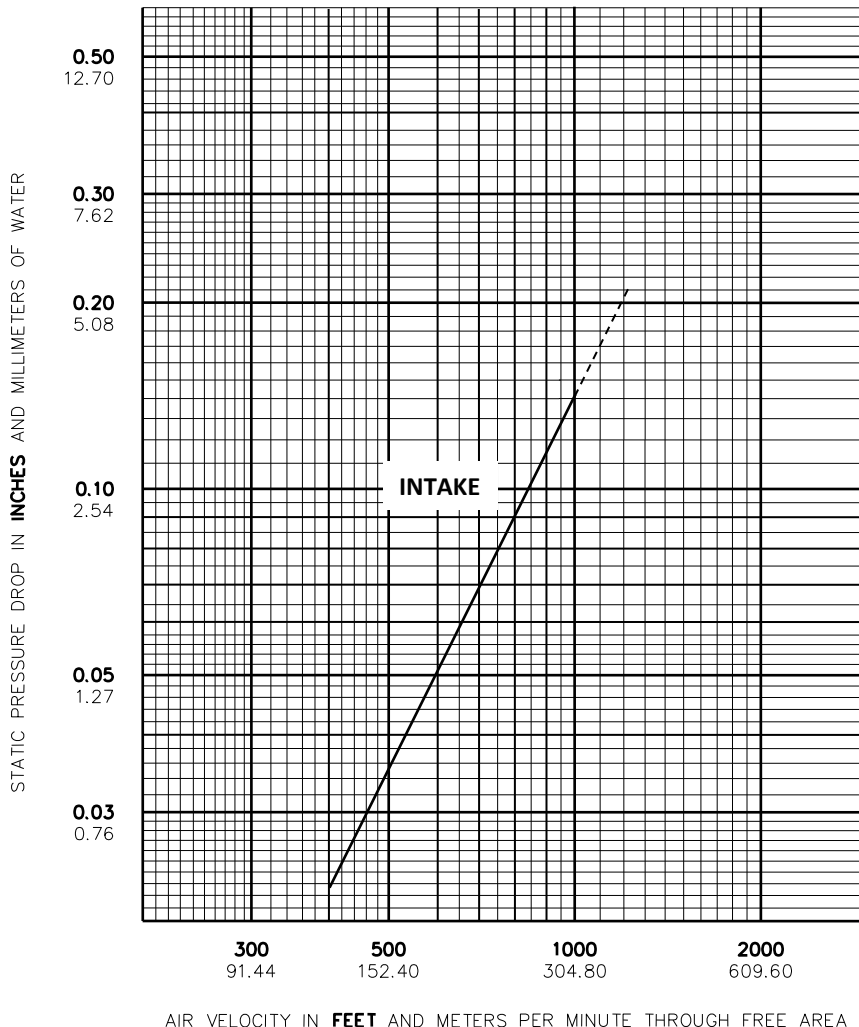
## 102 mm DEEP HORIZONTAL STEP BLADE LOUVER



### FREE AREA IN FT<sup>2</sup> & M<sup>2</sup>

#### WIDTH (in & mm)

HEIGHT (in & mm)	FREE AREA IN FT <sup>2</sup> & M <sup>2</sup>													
	12	18	24	30	36	42	48	54	60	66	72	78	84	
	304.8	457.2	609.6	762	914.4	1066.8	1219.2	1371.6	1524	1676.4	1828.8	1981.2	2133.6	
<b>12</b>	<b>0.20</b>	<b>0.32</b>	<b>0.43</b>	<b>0.55</b>	<b>0.67</b>	<b>0.79</b>	<b>0.91</b>	<b>1.03</b>	<b>1.14</b>	<b>1.26</b>	<b>1.38</b>	<b>1.50</b>	<b>1.62</b>	
304.8	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.10	0.11	0.12	0.13	0.14	0.15	
<b>18</b>	<b>0.47</b>	<b>0.75</b>	<b>1.03</b>	<b>1.31</b>	<b>1.59</b>	<b>1.87</b>	<b>2.15</b>	<b>2.43</b>	<b>2.71</b>	<b>2.99</b>	<b>3.28</b>	<b>3.56</b>	<b>3.84</b>	
457.2	0.04	0.07	0.10	0.12	0.15	0.17	0.20	0.23	0.25	0.28	0.30	1.00	0.36	
<b>24</b>	<b>0.67</b>	<b>1.07</b>	<b>1.47</b>	<b>1.87</b>	<b>2.27</b>	<b>2.67</b>	<b>3.07</b>	<b>3.47</b>	<b>3.87</b>	<b>4.27</b>	<b>4.67</b>	<b>5.07</b>	<b>5.47</b>	
609.6	0.06	0.10	0.14	0.17	0.21	0.25	0.28	0.32	0.36	0.40	0.43	0.47	0.51	
<b>30</b>	<b>0.86</b>	<b>1.38</b>	<b>1.89</b>	<b>2.41</b>	<b>2.92</b>	<b>3.44</b>	<b>3.95</b>	<b>4.47</b>	<b>4.98</b>	<b>5.50</b>	<b>6.02</b>	<b>6.53</b>	<b>7.05</b>	
762	0.08	0.13	0.18	0.22	0.27	0.32	0.37	0.42	0.46	0.51	0.56	0.61	0.65	
<b>36</b>	<b>1.13</b>	<b>1.81</b>	<b>2.49</b>	<b>3.16</b>	<b>3.84</b>	<b>4.52</b>	<b>5.20</b>	<b>5.88</b>	<b>6.56</b>	<b>7.23</b>	<b>7.91</b>	<b>8.59</b>	<b>9.27</b>	
914.4	0.10	0.17	0.23	0.29	0.36	0.42	0.48	0.55	0.61	0.67	0.73	0.80	0.86	
<b>42</b>	<b>1.33</b>	<b>2.13</b>	<b>2.93</b>	<b>3.73</b>	<b>4.53</b>	<b>5.33</b>	<b>6.13</b>	<b>6.93</b>	<b>7.73</b>	<b>8.53</b>	<b>9.33</b>	<b>10.13</b>	<b>10.93</b>	
1066.8	0.12	0.20	0.27	0.35	0.42	0.50	0.57	0.64	0.72	0.79	0.87	0.94	1.02	
<b>48</b>	<b>1.52</b>	<b>2.43</b>	<b>3.35</b>	<b>4.26</b>	<b>5.17</b>	<b>6.09</b>	<b>7.00</b>	<b>7.91</b>	<b>8.82</b>	<b>9.74</b>	<b>10.65</b>	<b>11.56</b>	<b>12.48</b>	
1219.2	0.14	0.23	0.31	0.40	0.48	0.57	0.65	0.74	0.82	0.90	0.99	1.07	1.16	
<b>54</b>	<b>1.79</b>	<b>2.87</b>	<b>3.94</b>	<b>5.02</b>	<b>6.09</b>	<b>7.17</b>	<b>8.25</b>	<b>9.32</b>	<b>10.40</b>	<b>11.47</b>	<b>12.55</b>	<b>13.62</b>	<b>14.70</b>	
1371.6	0.17	0.27	0.37	0.47	0.57	0.67	0.77	0.87	0.97	1.07	1.17	1.27	1.37	
<b>60</b>	<b>2.00</b>	<b>3.20</b>	<b>4.40</b>	<b>5.60</b>	<b>6.80</b>	<b>8.00</b>	<b>9.20</b>	<b>10.40</b>	<b>11.60</b>	<b>12.80</b>	<b>14.00</b>	<b>15.20</b>	<b>16.40</b>	
1524	0.19	0.30	0.41	0.52	0.63	0.74	0.85	0.97	1.08	1.19	1.30	1.41	1.52	
<b>66</b>	<b>2.18</b>	<b>3.49</b>	<b>4.80</b>	<b>6.12</b>	<b>7.43</b>	<b>8.74</b>	<b>10.05</b>	<b>11.36</b>	<b>12.67</b>	<b>13.98</b>	<b>15.29</b>	<b>16.60</b>	<b>17.91</b>	
1676.4	0.20	0.32	0.45	0.57	0.69	0.81	0.93	1.06	1.18	1.30	1.42	1.54	1.66	



#### Test Data

Published data is in accordance with ANSI/AMCA 500-L, Figure 5.5. Data corrected to standard air density. Test Sample Size 48"x48"

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 point of zero water penetration is defined as that velocity where the water penetration curve projects through .01 oz of water penetration per sq. ft. of louver area.