

# Model—RSR-7H

## 177.8mm DEEP STORM RESISTANT LOUVER

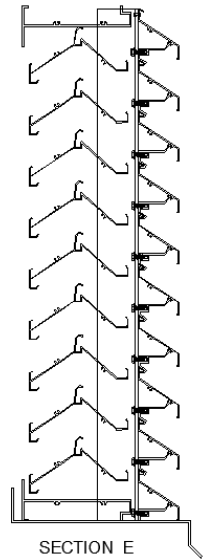


### WIND DRIVEN RAIN PERFORMANCE

- \* Maintains **Class A (99%)** rating with 29mph wind velocity @ 3in/hr rainfall rate
- \* Max. intake core velocity – 295fpm (1.5 m/s)
- \* Intake pressure drop at max. intake core velocity – 26pa
- \* Beginning point of water penetration: 705 FPM Free Area Velocity

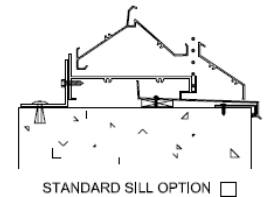
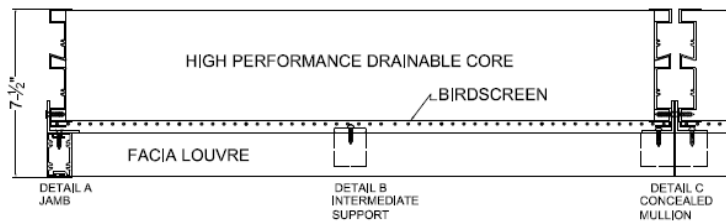
### AIRFLOW PERFORMANCE

- \* Discharge loss coefficient (Intake and Exhaust)—  $C_d = 0.23$
- \* Discharge loss coefficient Classification— **Class 3**
- \* Free Area 54% (8.64 ft<sup>2</sup> based on test sample size 48" x 48")



Class	1	2	3	4
Discharge Loss Coefficient Classification	0.4 & Above	0.3 to 0.399	0.2 to 0.299	0.199 & Below

Rainfall rate (in. per hour) : 3								
Wind velocity (mph) : 29								
Core Velocity m/s	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5
Effectiveness (%)	100	100	99.9	99.6	97.2	93.3	86.8	79.5
Penetration Class	A	A	A	A	B	C	C	D
Classification	A = 99.9% - 99%		B = 98.9% - 95%		C = 94.9% - 80%		D = below 80%	



### System Description:

OSA Rain Storm Resistant 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 to drain rain water to jamb and mullion downspouts; rated for an air performance and water penetration maintained effectiveness rate of 0.99 when tested in accordance with AMCA 500-L.

### Material & Finishes:

1. RSR-7H comprises 2" Continuous Fascia Louver and 5" Storm Core Louver
  - a. Blades: Horizontal – Storm resistant Multi Drain Profile
  - b. Frame depth: 7.75 inches (197 mm) deep..
2. Metal Thickness: Frame 0.081 inch (2 mm); blades 0.070 inch (1.78 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.

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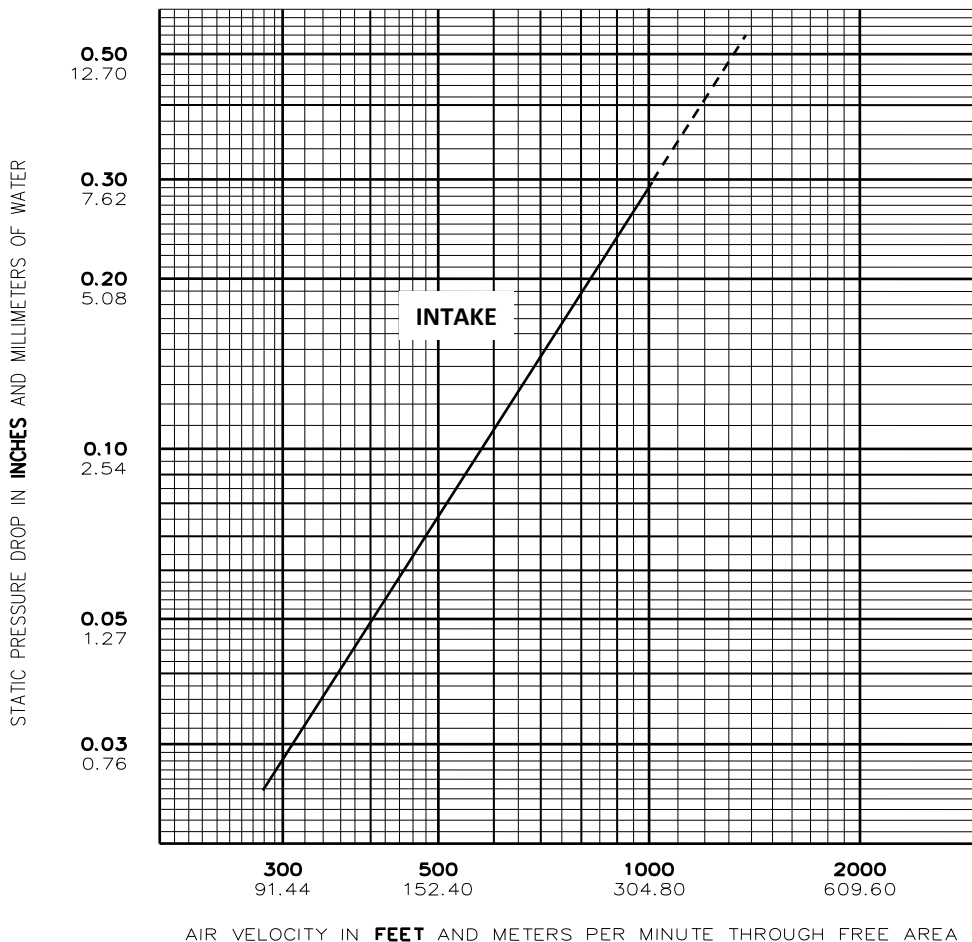
177.8mm DEEP STORM RESISTANT LOUVER



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>0.31</b>	<b>0.50</b>	<b>0.68</b>	<b>0.87</b>	<b>0.99</b>	<b>1.16</b>	<b>1.34</b>	<b>1.51</b>	<b>1.68</b>	<b>1.86</b>	<b>2.03</b>	<b>2.21</b>	<b>2.38</b>
304.8	0.03	0.05	0.06	0.08	0.09	0.11	0.12	0.14	0.16	0.17	0.19	0.21	0.22
<b>18</b>	<b>0.56</b>	<b>0.90</b>	<b>1.24</b>	<b>1.58</b>	<b>1.94</b>	<b>2.28</b>	<b>2.62</b>	<b>2.96</b>	<b>3.30</b>	<b>3.65</b>	<b>3.99</b>	<b>4.33</b>	<b>4.67</b>
457.2	0.05	0.08	0.12	0.15	0.18	0.21	0.24	0.28	0.31	0.34	0.37	1.00	0.43
<b>24</b>	<b>0.81</b>	<b>1.29</b>	<b>1.78</b>	<b>2.26</b>	<b>2.70</b>	<b>3.18</b>	<b>3.66</b>	<b>4.14</b>	<b>4.61</b>	<b>5.09</b>	<b>5.57</b>	<b>6.04</b>	<b>6.52</b>
609.6	0.08	0.12	0.17	0.21	0.25	0.30	0.34	0.38	0.43	0.47	0.52	0.56	0.61
<b>30</b>	<b>1.02</b>	<b>1.63</b>	<b>2.25</b>	<b>2.86</b>	<b>3.40</b>	<b>4.00</b>	<b>4.60</b>	<b>5.20</b>	<b>5.80</b>	<b>6.41</b>	<b>7.01</b>	<b>7.61</b>	<b>8.21</b>
762	0.09	0.15	0.21	0.27	0.32	0.37	0.43	0.48	0.54	0.60	0.65	0.71	0.76
<b>36</b>	<b>1.29</b>	<b>2.06</b>	<b>2.83</b>	<b>3.60</b>	<b>4.26</b>	<b>5.01</b>	<b>5.77</b>	<b>6.52</b>	<b>7.27</b>	<b>8.02</b>	<b>8.77</b>	<b>9.53</b>	<b>10.28</b>
914.4	0.12	0.19	0.26	0.33	0.40	0.47	0.54	0.61	0.68	0.75	0.82	0.89	0.95
<b>42</b>	<b>1.53</b>	<b>2.45</b>	<b>3.37</b>	<b>4.29</b>	<b>5.12</b>	<b>6.02</b>	<b>6.93</b>	<b>7.83</b>	<b>8.73</b>	<b>9.64</b>	<b>10.54</b>	<b>11.44</b>	<b>12.34</b>
1066.8	0.14	0.23	0.31	0.40	0.48	0.56	0.64	0.73	0.81	0.90	0.98	1.06	1.15
<b>48</b>	<b>1.74</b>	<b>2.79</b>	<b>3.83</b>	<b>4.88</b>	<b>5.82</b>	<b>6.84</b>	<b>8.64</b>	<b>9.76</b>	<b>10.89</b>	<b>12.02</b>	<b>13.14</b>	<b>14.27</b>	<b>15.40</b>
1219.2	0.16	0.26	0.36	0.45	0.54	0.64	0.80	0.91	1.01	1.12	1.22	1.33	1.43
<b>54</b>	<b>2.01</b>	<b>3.21</b>	<b>4.41</b>	<b>5.62</b>	<b>6.68</b>	<b>7.86</b>	<b>9.03</b>	<b>10.21</b>	<b>11.39</b>	<b>12.57</b>	<b>13.75</b>	<b>14.93</b>	<b>16.10</b>
1371.6	0.19	0.30	0.41	0.52	0.62	0.73	0.84	0.95	1.06	1.17	1.28	1.39	1.50
<b>60</b>	<b>2.25</b>	<b>3.60</b>	<b>4.95</b>	<b>6.30</b>	<b>7.49</b>	<b>8.81</b>	<b>10.13</b>	<b>11.46</b>	<b>12.78</b>	<b>14.10</b>	<b>15.42</b>	<b>16.74</b>	<b>18.07</b>
1524	0.21	0.33	0.46	0.59	0.70	0.82	0.94	1.06	1.19	1.31	1.43	1.56	1.68
<b>66</b>	<b>2.46</b>	<b>3.94</b>	<b>5.42</b>	<b>6.89</b>	<b>8.23</b>	<b>9.68</b>	<b>11.14</b>	<b>12.59</b>	<b>14.04</b>	<b>15.49</b>	<b>16.95</b>	<b>18.40</b>	<b>19.85</b>
1676.4	0.23	0.37	0.50	0.64	0.76	0.90	1.03	1.17	1.30	1.44	1.57	1.71	1.84



### 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.