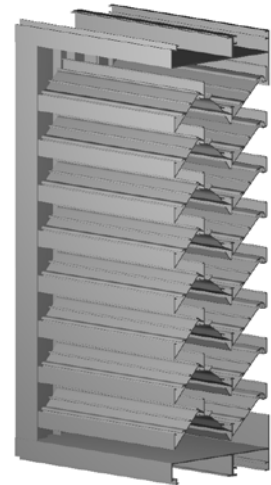


Construction Specialties Inc. certifies that Model RS-8400 shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to wind driven rain and air performance ratings only.

**DESIGN DATA:**

- To maintain a **CLASS A (99%) effectiveness** rating with a 29 mph wind speed and a rainfall rate of 3in/hr
- Maximum intake core velocity 2.5 m/s (483 FPM)
  - Maximum intake free area velocity 4.4 m/s (873 FPM)
  - Intake pressure drop 118.7 Pa (0.48 in. H<sub>2</sub>O)
  - Intake capacity 2.45 m<sup>3</sup>/s (5194 CFM)



- To maintain a **CLASS B (95%) effectiveness** rating with a 29 mph wind speed and a rainfall rate of 3in/hr
- Maximum intake core velocity 3.0 m/s (590 FPM)
  - Maximum intake free area velocity 5.4 m/s (1067 FPM)
  - Intake pressure drop 177.3 Pa (0.71 in. H<sub>2</sub>O)
  - Intake capacity 3.0 m<sup>3</sup>/s (6348 CFM)
- \*louver tested with 1m<sup>2</sup> core area, mill finish and no screen

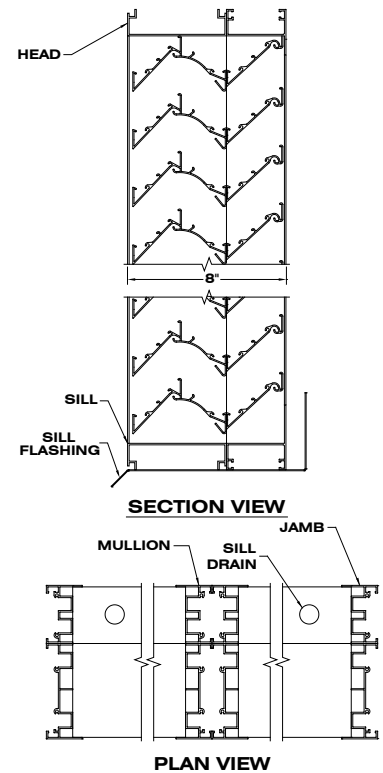
**SUGGESTED SPECIFICATIONS:**

**GENERAL:** Furnish and install where indicated on the drawings C/S 8" (203.2 mm) STORM RESISTANT FIXED HORIZONTAL LOUVER **MODEL RS-8400** as manufactured by Construction Specialties, Inc., Cranford, NJ; Mississauga, Ontario. Complete details shall be submitted to the architect for approval prior to fabrication. The supplier must be a member of AMCA or BSRIA.

**MATERIAL:** Frames and blades to be fabricated from 6063-T5 aluminum alloy. Blades to be minimum 0.060" (1.52 mm) thick extrusions and frames to be a minimum 0.080" (2.03 mm) thick. Louver to be mechanically fastened using stainless steel or aluminum fasteners. Louvers to be supplied with 4" (101.6 mm) high by full depth sill flashing formed from minimum 0.050" (1.27 mm) thick aluminum. Sill flashing to have welded side panels. Louvers and sill flashing to be installed in accordance with the manufacturer's recommended procedures to ensure complete water integrity performance of louver system. All louvers to be furnished with 5/8" (15.87 mm) flattened expanded mesh, aluminum bird screen with a .055" (1.4 mm) thick extruded aluminum frame.

**STRUCTURAL DESIGN:** Structural supports shall be designed and furnished by the louver manufacturer to carry a wind load of not less than \_\_\_\_\_psf. (kPa). (Note: If this paragraph is omitted or if the design wind load is not specified, the louvers will be manufactured in self supporting units up to a maximum of 5' (1524 mm) wide by 8' (2438 mm) high. Any additional structural supports required to adequately secure these units within the opening shall be the responsibility of others.)

**FINISH:** All louvers shall be finished with C/S Powder Coat, a coating to be 1.5 to 3 mil. thick full strength **100% resin Fluoropolymer coating, Finish to allow zero VOCs** to be emitted into facility of application. Finish to adhere to a 4H Hardness rating. All finishing procedures shall be one continuous operation in the plant of the manufacturer. **The coating shall meet or exceed all requirements of AAMA specification 2605-5** "Voluntary Specification for High Performance Organic Coatings on Architectural extrusions and Panels." The louver manufacturer shall supply an industry standard **20-year limited warranty against failure or excessive fading** of the Fluoropolymer Powder Coat finish. This limited warranty shall begin on the date of material shipment.



**WIND DRIVEN RAIN PERFORMANCE:**

The louver test was based on a 39.370" (1.00 m) x 39.370" (1.00 m) core area unit tested at a rainfall rate of 3 inches per hour (75mm/hr) and with a wind directed to the face of the louver at a velocity 29.1 mph (13m/s). The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.

Core Ventilation Rate (m/s):	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5
Core Ventilation Rate (ft/min):	0	98	197	295	382	483	590	687
Free Area Ventilation Rate (ft/min):	0	174	349	523	690	873	1067	1242
Rating Effectiveness:	A	A	A	A	A	A	B	C
Effectiveness Rating:	A = 1 to 0.99		B = 0.989 to 0.95		C = 0.949 to 0.80		D = 0.80 to 0	

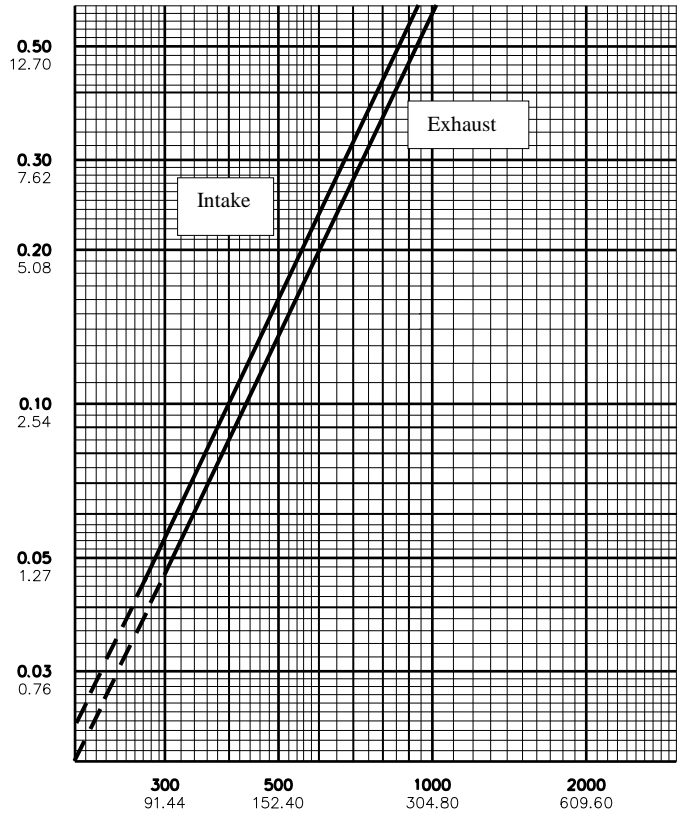
**Discharge Coefficient**  
Intake Cd = 0.17 (Class 4)  
The AMCA Seal applies to the Coefficient of Discharge class only

# PERFORMANCE DATA MODEL RS-8400

## Width in Inches and Meters

	18	24	30	36	42	48	54	60	66	72
	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83
<b>18</b>	<b>0.64</b>	<b>0.91</b>	<b>1.17</b>	<b>1.44</b>	<b>1.71</b>	<b>1.98</b>	<b>2.25</b>	<b>2.52</b>	<b>2.62</b>	<b>2.88</b>
	0.46	0.06	0.08	0.11	0.13	0.16	0.18	0.21	0.23	0.24
<b>24</b>	<b>1.00</b>	<b>1.42</b>	<b>1.83</b>	<b>2.25</b>	<b>2.67</b>	<b>3.09</b>	<b>3.51</b>	<b>3.93</b>	<b>4.09</b>	<b>4.51</b>
	0.61	0.09	0.13	0.17	0.21	0.25	0.29	0.33	0.37	0.38
<b>30</b>	<b>1.35</b>	<b>1.93</b>	<b>2.50</b>	<b>3.07</b>	<b>3.64</b>	<b>4.21</b>	<b>4.78</b>	<b>5.35</b>	<b>5.56</b>	<b>6.13</b>
	0.76	0.13	0.18	0.23	0.28	0.34	0.39	0.44	0.50	0.52
<b>36</b>	<b>1.71</b>	<b>2.44</b>	<b>3.16</b>	<b>3.88</b>	<b>4.60</b>	<b>5.32</b>	<b>6.04</b>	<b>6.76</b>	<b>7.04</b>	<b>7.76</b>
	0.91	0.16	0.23	0.29	0.36	0.43	0.49	0.56	0.63	0.65
<b>42</b>	<b>2.07</b>	<b>2.95</b>	<b>3.82</b>	<b>4.69</b>	<b>5.56</b>	<b>6.44</b>	<b>7.31</b>	<b>8.18</b>	<b>8.51</b>	<b>9.38</b>
	1.07	0.19	0.27	0.35	0.44	0.52	0.60	0.68	0.76	0.79
<b>48</b>	<b>2.43</b>	<b>3.46</b>	<b>4.48</b>	<b>5.50</b>	<b>6.53</b>	<b>7.55</b>	<b>8.57</b>	<b>9.60</b>	<b>9.98</b>	<b>11.00</b>
	1.22	0.23	0.32	0.42	0.51	0.61	0.70	0.80	0.89	0.93
<b>54</b>	<b>2.79</b>	<b>3.96</b>	<b>5.14</b>	<b>6.31</b>	<b>7.49</b>	<b>8.66</b>	<b>9.84</b>	<b>11.01</b>	<b>11.45</b>	<b>12.63</b>
	1.37	0.26	0.37	0.48	0.59	0.70	0.80	0.91	1.02	1.06
<b>60</b>	<b>3.15</b>	<b>4.47</b>	<b>5.80</b>	<b>7.13</b>	<b>8.45</b>	<b>9.78</b>	<b>11.10</b>	<b>12.43</b>	<b>12.93</b>	<b>14.25</b>
	1.52	0.29	0.42	0.54	0.66	0.79	0.91	1.03	1.15	1.20
<b>66</b>	<b>3.51</b>	<b>4.98</b>	<b>6.46</b>	<b>7.94</b>	<b>9.42</b>	<b>10.89</b>	<b>12.37</b>	<b>13.85</b>	<b>14.40</b>	<b>15.88</b>
	1.68	0.33	0.46	0.60	0.74	0.87	1.01	1.15	1.29	1.34
<b>72</b>	<b>3.87</b>	<b>5.49</b>	<b>7.12</b>	<b>8.75</b>	<b>10.38</b>	<b>12.01</b>	<b>13.63</b>	<b>15.26</b>	<b>15.87</b>	<b>17.50</b>
	1.83	0.36	0.51	0.66	0.81	0.96	1.12	1.27	1.42	1.47
<b>78</b>	<b>4.23</b>	<b>6.00</b>	<b>7.78</b>	<b>9.56</b>	<b>11.34</b>	<b>13.12</b>	<b>14.90</b>	<b>16.68</b>	<b>17.35</b>	<b>19.13</b>
	1.98	0.39	0.56	0.72	0.89	1.05	1.22	1.38	1.55	1.61
<b>84</b>	<b>4.58</b>	<b>6.51</b>	<b>8.44</b>	<b>10.37</b>	<b>12.31</b>	<b>14.24</b>	<b>16.17</b>	<b>18.10</b>	<b>18.82</b>	<b>20.75</b>
	2.13	0.43	0.61	0.78	0.96	1.14	1.32	1.50	1.68	1.75
<b>90</b>	<b>4.94</b>	<b>7.02</b>	<b>9.11</b>	<b>11.19</b>	<b>13.27</b>	<b>15.35</b>	<b>17.43</b>	<b>19.51</b>	<b>20.29</b>	<b>22.37</b>
	2.29	0.46	0.65	0.85	1.04	1.23	1.43	1.62	1.81	1.89
<b>96</b>	<b>5.30</b>	<b>7.53</b>	<b>9.77</b>	<b>12.00</b>	<b>14.23</b>	<b>16.46</b>	<b>18.70</b>	<b>20.93</b>	<b>21.77</b>	<b>24.00</b>
	2.44	0.49	0.70	0.91	1.11	1.32	1.53	1.74	1.94	2.02
<b>102</b>	<b>5.66</b>	<b>8.04</b>	<b>10.43</b>	<b>12.81</b>	<b>15.19</b>	<b>17.58</b>	<b>19.96</b>	<b>22.34</b>	<b>23.24</b>	<b>25.62</b>
	2.59	0.53	0.75	0.97	1.19	1.41	1.63	1.85	2.08	2.16
<b>108</b>	<b>6.02</b>	<b>8.55</b>	<b>11.09</b>	<b>13.62</b>	<b>16.16</b>	<b>18.69</b>	<b>21.23</b>	<b>23.76</b>	<b>24.71</b>	<b>27.25</b>
	2.74	0.56	0.79	1.03	1.27	1.50	1.74	1.97	2.21	2.30
<b>114</b>	<b>6.38</b>	<b>9.06</b>	<b>11.75</b>	<b>14.44</b>	<b>17.12</b>	<b>19.81</b>	<b>22.49</b>	<b>25.18</b>	<b>26.18</b>	<b>28.87</b>
	2.90	0.59	0.84	1.09	1.34	1.59	1.84	2.09	2.34	2.43
<b>120</b>	<b>6.74</b>	<b>9.57</b>	<b>12.41</b>	<b>15.25</b>	<b>18.08</b>	<b>20.92</b>	<b>23.76</b>	<b>26.59</b>	<b>27.66</b>	<b>30.49</b>
	3.05	0.63	0.89	1.15	1.42	1.68	1.94	2.21	2.47	2.57
<b>126</b>	<b>7.10</b>	<b>10.08</b>	<b>13.07</b>	<b>16.06</b>	<b>19.05</b>	<b>22.03</b>	<b>25.02</b>	<b>28.01</b>	<b>29.13</b>	<b>32.12</b>
	3.20	0.66	0.94	1.21	1.49	1.77	2.05	2.32	2.60	2.71
<b>132</b>	<b>7.45</b>	<b>10.59</b>	<b>13.73</b>	<b>16.87</b>	<b>20.01</b>	<b>23.15</b>	<b>26.29</b>	<b>29.43</b>	<b>30.60</b>	<b>33.74</b>
	3.35	0.69	0.98	1.28	1.57	1.86	2.15	2.44	2.73	2.84
<b>138</b>	<b>7.81</b>	<b>11.10</b>	<b>14.39</b>	<b>17.68</b>	<b>20.97</b>	<b>24.26</b>	<b>27.55</b>	<b>30.84</b>	<b>32.08</b>	<b>35.37</b>
	3.51	0.73	1.03	1.34	1.64	1.95	2.25	2.56	2.87	2.98
<b>144</b>	<b>8.17</b>	<b>11.61</b>	<b>15.05</b>	<b>18.50</b>	<b>21.94</b>	<b>25.38</b>	<b>28.82</b>	<b>32.26</b>	<b>33.55</b>	<b>36.99</b>
	3.66	0.76	1.08	1.40	1.72	2.04	2.36	2.68	3.00	3.12
<b>150</b>	<b>8.53</b>	<b>12.12</b>	<b>15.72</b>	<b>19.31</b>	<b>22.90</b>	<b>26.49</b>	<b>30.08</b>	<b>33.68</b>	<b>35.02</b>	<b>38.62</b>
	3.81	0.79	1.13	1.46	1.79	2.13	2.46	2.79	3.13	3.25
<b>156</b>	<b>8.89</b>	<b>12.63</b>	<b>16.38</b>	<b>20.12</b>	<b>23.86</b>	<b>27.61</b>	<b>31.35</b>	<b>35.09</b>	<b>36.50</b>	<b>40.24</b>
	3.96	0.83	1.17	1.52	1.87	2.22	2.56	2.91	3.26	3.39
<b>162</b>	<b>9.25</b>	<b>13.14</b>	<b>17.04</b>	<b>20.93</b>	<b>24.83</b>	<b>28.72</b>	<b>32.61</b>	<b>36.51</b>	<b>37.97</b>	<b>41.86</b>
	4.11	0.86	1.22	1.58	1.94	2.31	2.67	3.03	3.39	3.53
<b>168</b>	<b>9.61</b>	<b>13.65</b>	<b>17.70</b>	<b>21.74</b>	<b>25.79</b>	<b>29.83</b>	<b>33.88</b>	<b>37.93</b>	<b>39.44</b>	<b>43.49</b>
	4.27	0.89	1.27	1.64	2.02	2.40	2.77	3.15	3.52	3.66
<b>174</b>	<b>9.97</b>	<b>14.16</b>	<b>18.36</b>	<b>22.56</b>	<b>26.75</b>	<b>30.95</b>	<b>35.15</b>	<b>39.34</b>	<b>40.92</b>	<b>45.11</b>
	4.42	0.93	1.32	1.71	2.10	2.49	2.88	3.27	3.65	3.80
<b>180</b>	<b>10.33</b>	<b>14.67</b>	<b>19.02</b>	<b>23.37</b>	<b>27.72</b>	<b>32.06</b>	<b>36.41</b>	<b>40.76</b>	<b>42.39</b>	<b>46.74</b>
	4.57	0.96	1.36	1.77	2.17	2.57	2.98	3.38	3.79	3.94
<b>186</b>	<b>10.68</b>	<b>15.18</b>	<b>19.68</b>	<b>24.18</b>	<b>28.68</b>	<b>33.18</b>	<b>37.68</b>	<b>42.17</b>	<b>43.86</b>	<b>48.36</b>
	4.72	0.99	1.41	1.83	2.25	2.66	3.08	3.50	3.92	4.07
<b>192</b>	<b>11.04</b>	<b>15.69</b>	<b>20.34</b>	<b>24.99</b>	<b>29.64</b>	<b>34.29</b>	<b>38.94</b>	<b>43.59</b>	<b>45.33</b>	<b>49.98</b>
	4.88	1.03	1.46	1.89	2.32	2.75	3.19	3.62	4.05	4.21
<b>198</b>	<b>11.40</b>	<b>16.20</b>	<b>21.00</b>	<b>25.80</b>	<b>30.61</b>	<b>35.41</b>	<b>40.21</b>	<b>45.01</b>	<b>46.81</b>	<b>51.61</b>
	5.03	1.06	1.51	1.95	2.40	2.84	3.29	3.74	4.18	4.35

Height in Inches and Meters



For a 48" X 48" sized louver

**Construction Specialties, Inc.**  
**Manufacturing & Sales Location**  
[www.c-sgroup.com](http://www.c-sgroup.com)

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Upper Numerals English Units/Lower Numerals Metric Units