Construction Specialties Inc. certifies that the louver model RS-4700 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 ratings, Water Penetration Ratings and Air Performance ratings.

**DESIGN DATA:**

To maintain a CLASS A (99%) effectiveness rating with a 29.1 mph wind speed and rainfall rate of 3 in/hr:

- Maximum intake core velocity 1.5 m/s (290 FPM)
- Maximum intake free area velocity 2.6 m/s (507 FPM)

*Louver tested with 1m² core area, mill finish and no screen

To maintain a CLASS A (99%) effectiveness rating with a 50 mph wind speed and rainfall rate of 8 in/hr:

- Maximum intake core velocity 1.5 m/s (290 FPM)
- Maximum intake free area velocity 5.3 m/s (1,049 FPM)

*Louver tested with 1m² core area, mill finish and no screen

**AIRFLOW DATA:**

For a 4 Foot by 4 Foot Unit. Tested with mill finish and no screen:

- Free area = 8.25 ft² (0.77 m²)
- Percent free area = 51.6%
- Free area velocity at the point of beginning water penetration (@0.01oz./ft² of free area based on a 15 minute interval test) = 1,250 FPM (6.35 m/s)
- Maximum recommended air intake velocity = 1,050 FPM (5.3 m/s) Air volume @ 1,050 FPM free area velocity = 8,663 CFM (4.1 m³/s) Pressure drop @ 1,050 FPM intake velocity = 0.37 in. H₂O (91.2 Pa)
- Maximum recommended air exhaust velocity = 1,357 FPM (6.9 m/s) Air volume @ 1,357 FPM free area velocity = 11,195 CFM (5.3 m³/s) Pressure drop @ 11,195 FPM free area velocity = 0.50 in. H₂O (124.2 Pa)

**SUGGESTED SPECIFICATIONS:**

**GENERAL:** Furnish and install where indicated on the drawings C/S 4" (101.6 mm) STORM RESISTANT FIXED HORIZONTAL LOUVER MODEL RS-4700 as manufactured by Construction Specialties, Inc., Cranford, NJ. Complete details shall be submitted to the architect for approval prior to fabrication.

**MATERIAL:** Frames and blades to be fabricated from 6063-T6 aluminum alloy. Blades to be minimum 0.060" (1.52mm) thick, silt to be minimum 0.070" (1.78 mm) thick, head and jambs to be 0.063"(1.60mm) 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 accordance with the manufacturer’s recommended procedures shall be one continuous operation in the plant of the manufacturer. Coating shall be 1.5 to 3 mil. thick full strength 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" per hour (75 mm/hr) and with a wind directed to the face of the louver at a velocity 29.1 mph (13 m/s) as well as a rainfall rate of 8" per hour (203 mm) and a wind of 50 mph (23.3 m/s). The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.
### PERFORMANCE DATA MODEL RS-4700

#### Water Penetration Statement

AMCA defines the point of beginning water penetration as the free area velocity at which the AMCA water test has yielded 0.01 or less ounces of water per square foot of louver free area during a 15-minute test period.

#### Width in Inches and Meters

<table>
<thead>
<tr>
<th>Height in Inches</th>
<th>18</th>
<th>24</th>
<th>36</th>
<th>42</th>
<th>48</th>
<th>54</th>
<th>60</th>
<th>72</th>
<th>78</th>
<th>84</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width in Inches</td>
<td>0.46</td>
<td>0.61</td>
<td>0.76</td>
<td>0.91</td>
<td>1.07</td>
<td>1.22</td>
<td>1.37</td>
<td>1.52</td>
<td>1.68</td>
<td>1.83</td>
<td>1.98</td>
</tr>
<tr>
<td>Meters</td>
<td>11.77</td>
<td>15.90</td>
<td>19.03</td>
<td>22.16</td>
<td>25.29</td>
<td>28.42</td>
<td>31.55</td>
<td>34.68</td>
<td>37.81</td>
<td>40.94</td>
<td>44.07</td>
</tr>
<tr>
<td>18</td>
<td>0.46</td>
<td>0.61</td>
<td>0.76</td>
<td>0.91</td>
<td>1.07</td>
<td>1.22</td>
<td>1.37</td>
<td>1.52</td>
<td>1.68</td>
<td>1.83</td>
<td>1.98</td>
</tr>
<tr>
<td>Width in Inches</td>
<td>2.60</td>
<td>3.12</td>
<td>3.64</td>
<td>4.16</td>
<td>4.68</td>
<td>5.20</td>
<td>5.72</td>
<td>6.24</td>
<td>6.76</td>
<td>7.28</td>
<td>7.80</td>
</tr>
<tr>
<td>Meters</td>
<td>66.00</td>
<td>73.66</td>
<td>81.33</td>
<td>89.00</td>
<td>96.66</td>
<td>104.33</td>
<td>112.00</td>
<td>119.66</td>
<td>127.33</td>
<td>135.00</td>
<td>142.66</td>
</tr>
<tr>
<td>36</td>
<td>0.61</td>
<td>0.76</td>
<td>0.91</td>
<td>1.07</td>
<td>1.22</td>
<td>1.37</td>
<td>1.52</td>
<td>1.68</td>
<td>1.83</td>
<td>1.98</td>
<td>2.13</td>
</tr>
<tr>
<td>Width in Inches</td>
<td>2.60</td>
<td>3.12</td>
<td>3.64</td>
<td>4.16</td>
<td>4.68</td>
<td>5.20</td>
<td>5.72</td>
<td>6.24</td>
<td>6.76</td>
<td>7.28</td>
<td>7.80</td>
</tr>
<tr>
<td>Meters</td>
<td>66.00</td>
<td>73.66</td>
<td>81.33</td>
<td>89.00</td>
<td>96.66</td>
<td>104.33</td>
<td>112.00</td>
<td>119.66</td>
<td>127.33</td>
<td>135.00</td>
<td>142.66</td>
</tr>
</tbody>
</table>

### Upper Numerals English Units/Lower Numerals Metric Units

For a 48" X 48" sized louver tested to figure 5.5. Data corrected to standard air density.

**Construction Specialties, Inc.**
Marketing & Sales Location

www.c-sgroup.com

To download details and specifications visit www.c-sgroup.com

For assistance with overseas requirements, call C/S International (908) 236-0800

©Copyright March 2019, Construction Specialties, Inc., reserves the right to make design changes or to withdraw any design without notice.

RS-4700-1