Construction Specialties Inc. certifies that Model GS-407 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 water penetration and air performance ratings only.

**AIRFLOW DATA**

*For a 4 Foot by 4 Foot Unit*

- Free area = 8.40 ft² (0.780 m²)
- Percent Free Area = 52.5%
- Free area velocity at the point of beginning water penetration @ (0.01oz./ft²) = 775 FPM (3.94 m/s)
- Maximum recommended air intake velocity = 575 FPM (2.92 m/s)
  Air Volume @ 575 FPM free area velocity = 4830 CFM (2.28 m³/s)
  Pressure Drop @ 575 FPM intake velocity = 0.05 in. H₂O (12.9 Pa)
- Maximum recommended air exhaust velocity = 1790 FPM (9.09 m/s)
  Air Volume @ 1790 FPM free area velocity = 15036 CFM (7.10 m³/s)
  Pressure Drop @ 1790 FPM exhaust 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) DRAINABLE FIXED GALVANIZED STEEL LOUVER MODEL GS-407 as manufactured by Construction Specialties, Inc., Cranford, NJ. Louvers shall be constructed entirely of galvanized steel. Complete details shall be submitted to the architect for approval prior to fabrication. The supplier must be a member of AMCA or BSRIA.

**MATERIAL:** Heads, sills, jambs, and mullions to be one piece structural members of galvanized steel. Mullions and jambs shall have integral internal drains. Member thicknesses to be any combination of 16 gauge (1.52 mm), 18 gauge (1.21 mm), or 20 gauge (0.91 mm) material. Blades shall be fastened to each jamb frame and vertical member with two fillet welds produced with the Metal Inert Gas (MIG) welding process with a minimum 0.125" (3.18 mm) throat. Frames shall be joined at each corner with a full length MIG filled weld. 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’ wide by 8’ high. Any additional structural supports required to adequately secure these units within the opening shall be the responsibility of others.

**TEST DATA:** The Louver Manufacturer shall submit test on a 4’ x 4’ unit showing that the Louver conforms to the following.

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Area</td>
<td>8.40 ft² (0.780 m²)</td>
</tr>
<tr>
<td>Free area velocity at point of beginning water penetration (0.01 oz./ft²)</td>
<td>775 FPM (3.94 m/s)</td>
</tr>
<tr>
<td>Intake pressure drop at 0.01 oz./ft² free area velocity</td>
<td>0.10 in. H₂O (24.8 Pa)</td>
</tr>
<tr>
<td>Exhaust pressure drop at 1000 FPM free area velocity (5.08 m/s)</td>
<td>0.16 in. H₂O (39.7 Pa)</td>
</tr>
</tbody>
</table>

**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.

To download details and specifications visit www.c-sgroup.com. For technical and design assistance call 800-631-7379
### PERFORMANCE DATA MODEL GS-407

#### Width in Inches and Metric

<table>
<thead>
<tr>
<th>Width</th>
<th>18</th>
<th>24</th>
<th>30</th>
<th>36</th>
<th>42</th>
<th>48</th>
<th>54</th>
<th>60</th>
<th>66</th>
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<th>78</th>
<th>84</th>
<th>90</th>
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</thead>
<tbody>
<tr>
<td>Metric</td>
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<td>0.61</td>
<td>0.76</td>
<td>0.91</td>
<td>1.07</td>
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<td>1.37</td>
<td>1.52</td>
<td>1.68</td>
<td>1.83</td>
<td>1.98</td>
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<table>
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</thead>
<tbody>
<tr>
<td>Metric</td>
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<td>5.64</td>
<td>5.91</td>
<td>6.18</td>
<td>6.45</td>
<td>6.72</td>
<td>6.99</td>
<td>7.26</td>
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<td>7.80</td>
<td>8.07</td>
<td>8.34</td>
<td>8.61</td>
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</table>

#### Height in Inches and Metric

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<td>8.51</td>
</tr>
</tbody>
</table>

### 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.

### Outdoor Temperatures

<table>
<thead>
<tr>
<th>Temperature</th>
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<th>-10°C</th>
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<th>20°C</th>
<th>30°C</th>
<th>40°C</th>
<th>50°C</th>
<th>60°C</th>
<th>70°C</th>
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<tbody>
<tr>
<td>Metric</td>
<td>-4°F</td>
<td>-14°F</td>
<td>32°F</td>
<td>50°F</td>
<td>68°F</td>
<td>86°F</td>
<td>104°F</td>
<td>122°F</td>
<td>140°F</td>
<td>158°F</td>
</tr>
</tbody>
</table>

### Intake and Exhaust

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

### Construction Specialties, Inc.

**Manufacturing & Sales Location**

34000-0714-Cranford, New Jersey

Fax: (908) 272-2920

Tel: (800) 631-7397

For assistance with overseas requirements, call C/S International at (208) 386-2800.

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Upper Numerals English Units/Lower Numerals Metric Units

- **Intake and Exhaust**
- **Pressure Drop**
- **Volume of Inlets and Outlets**
- **Inlets and Outlets per Minute**
- **Inlets and Outlets per Minute (Metric)**
- **Inlets and Outlets per Minute (English)**
- **Inlets and Outlets per Minute (SI)**
- **Inlets and Outlets per Minute (US)**

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GS-407-07

- **Cranford, New Jersey**
- **Meeker Avenue 07016**
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- **Data corrected to standard air density.**