The right way to attach almost anything to metal roofs!

**Installation Instructions**

*S-5!*® Warning! Please use these products responsibly! Visit our website or contact your S-5! distributor for available load test results. The user and/or installer of these parts is responsible for all necessary engineering and design to ensure the S-5-R465 has been properly spaced and configured.

Notice to S-5! users: Due to the many variables involved with specific panel products, climates, snow melt phenomena, and job particulars, the manufacturer cannot and does not express any opinions as to the suitability of any S-5! assembly for any specific application and assumes no liability with respect thereto. S-5! products are tested for ultimate holding strength on various profile types and materials. This information is available from the S-5! website: [www.S-5.com](http://www.S-5.com). This document is an installation guide only and the photographs and drawings herein are for the purpose of illustrating installation, tools and techniques, not system designs. Information contained within is intended to apply to the document as a whole.

The S-5-R465 and S-5-R465 Mini clamps are designed to fit the Zambelli RIB-ROOF 465, McElroy Metal’s Mirage II, Rib Roof Metal Systems’ Rib Roof, and similar roof profiles.

**Tools Needed**

- **Screw Gun**
- **T30 Torx Bit Tip (provided)**
- **Dial-Calibrated Torque Wrench**
  (For accurate tension values, do NOT use a clicking torque wrench; inquire with S-5! for proper tool sourcing)

**To Install S-5-R465**

1. Partially thread all four round-point setscrews into the clamp by hand.

2. Position the clamp at desired location along the seam with the bolt hole in the correct (upslope or downslope) orientation.

3. Use a screw gun* and the included bit tip to tighten the two upslope setscrews until flush with seam wall. Next, tighten the two downslope setscrews until flush with seam wall.

4. Finally, tension and re-tension each of the four setscrews as the seam material compresses, i.e. tighten the first setscrew, then the second; then repeat until each setscrew achieves the recommended torque. When relying on published load values, setscrew tension should be verified using a calibrated torque wrench as indicated below to ensure the tool is consistently achieving the proper torque range.

*For time-saving tool recommendations, call S-5!*

<table>
<thead>
<tr>
<th>Specified Torque</th>
<th>Inch Pounds</th>
<th>Foot Pounds</th>
<th>Nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>22ga steel</td>
<td>160–180</td>
<td>13–15</td>
<td>18–20</td>
</tr>
<tr>
<td>24ga steel and all other metals</td>
<td>130–150</td>
<td>11–12.5</td>
<td>15–17</td>
</tr>
</tbody>
</table>

Once installed correctly, these clamps require no maintenance or re-inspection for the life of the roof.

For critical attachment applications, tighten the included M8-1.25 X 16 mm Hex Flange Bolt to 160 inch pounds (13 foot pounds).

These instructions are for use by those experienced in the trade. Always follow appropriate safety precautions and use appropriate tools.
To Install the S-5-R465 Mini

1. Partially thread the setscrews into the clamp by hand.

2. Position the clamp at desired location along the seam with the bolt hole in the correct (upslope or downslope) orientation.

3. Use a screw gun* and the included bit tip to tighten one setscrew until flush with the seam wall. Then tighten the other setscrew until flush with the seam wall.

4. Finally, tension and re-tension both setscrews as the seam material compresses, i.e. tighten the first setscrew, then the second; then repeat until each setscrew achieves the recommended torque. Screw tension should be verified using a calibrated torque wrench as indicated below to ensure the tool is consistently achieving the proper torque range.

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Once installed correctly, these clamps require no maintenance or re-inspection for the life of the roof.

For critical attachment applications, tighten the M8-1.25 X 16 mm Hex Flange Bolt (sold separately) to 160 inch pounds (13 foot pounds).

NOTE: Any S-5! warranty and/or calculation may be void if hardware is used that was not furnished by S-5! directly or through one of their licensed distributors.

S-5!* Warning! Please use this product responsibly!

Products are protected by multiple U.S. and foreign patents. Visit the website at www.S-5.com for complete information on patents and trademarks. For maximum holding strength, setscrews should be tensioned and re-tensioned as the seam material compresses. Clamp setscrew tension should be verified using a calibrated torque wrench between 160 and 180 inch pounds when used on 22ga steel, and between 130 and 150 inch pounds for all other metals and thinner gauges of steel. Consult the S-5! website at www.S-5.com for published data regarding holding strength.

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