

Wind Clamps for Metal Roofs

1. MANUFACTURER

S-5![®] Attachment Solutions
Metal Roof Innovations, LTD.
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Colorado Springs, CO 80908

TECHNICAL ASSISTANCE:

888-825-3432
Support@S-5.com
Fax: 719-495-0045

WEBSITE:

www.S-5.com

CSI MASTERFORMAT CATEGORY:

07 41 13 Metal Roof Panels
07 72 00 Roof Accessories
13 34 19 Metal Building Systems

2. PRODUCT DESCRIPTION

BASIC USE:

Wind Clamps are designed to maintain the integrity of a standing seam metal roof when exposed to negative uplift pressure caused by high winds, reducing the probability and severity of metal roof or building damage, and lessening the potential for roof failure leading to damage to building contents and injury or death to occupants.

ADVANTAGES:

Independent laboratory tests have been performed on standing seam metal roofs per ASTM E 1592 by metal roof and metal building manufacturers using S-5![®] Wind Clamps across numerous roof profiles and materials. No other solution is as lab tested, time tested or durable.

S-5![®] Wind Clamps protect standing seam metal roofs against the two major forms of roof failure when subjected to negative uplift pressure caused by high winds – clip disengagement and seam deformation/disengagement. S-5![®] Wind Clamps allow standing seam metal roof systems achieve much higher wind resistance designs.

S-5![®] Wind Clamps replace much more costly and time consuming alternatives to increasing the wind resistance of standing seam metal roofs by reducing the need for increased structural support, increased clip numbers, narrower panel profiles and/or heavier gauge metals.

S-5![®] Wind Clamps maintain the sleek aesthetics of metal roofs and compliment the design with matching color coatings*.

S-5![®] Wind Clamps do not penetrate the standing seam metal roof panel nor void the roof manufacturer's warranties. The systems utilize round-point setscrews to securely grip the metal roof panel seam without penetrating the weathering membranes. The round-point setscrews mechanically attach to the roof by tightening the setscrews with an



industrial-grade screw gun to “dimple” the seam material and creating a mechanical interlock with the clamp.

3. COMPOSITION & MATERIALS

S-5![®] Wind Clamps are made of mill-finished, 6000 series aircraft quality aluminum. All associated hardware is 300 series stainless steel.

S-5![®] Wind Clamps are completely compatible with painted or unpainted G-90 galvanized steel, bare or painted Aluminized, Galvalume[®], Zinalume[®], Zinalume[®] Plus, Acrylume[®], Galvalume[®] Plus, Galfan[®] and Galvannealed steel, aluminum (painted, bare or anodized), titanium-zinc (VM & Rheinzink[®]), and stainless steel metal roofs. (S-5! brass standard clamps can be used in place of the S-5! wind clamp to provide metallurgical compatibility with copper roofs.)

All S-5![®] Wind Clamps can accept powder coated finishes to match the metal roof color if desired*.

4. TECHNICAL DATA

S-5! products are manufactured to meet or exceed the following standards:

- A. Aluminum Association (AA) - Aluminum Standards and Data, 2003 Edition.
- B. ASTM International (ASTM):
 1. B85-03 - Standard Specification for Aluminum-Alloy Die Castings.
 2. AB221-04a - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

ENVIRONMENTAL CONSIDERATIONS:

Where possible, S-5![®] products include a high percentage of recycled material, which lowers the environmental footprint. Additionally, S-5![®] products offer service lives equal to the roof itself, and are 100% recyclable at the end of their extended service life, which may reduce the solid waste stream.

*Optional; Not supplied by S-5!

5. INSTALLATION

Detailed installation instructions can be obtained from manufacturer's website: www.S-5.com

Store materials protected from harmful weather, damage or abuse. Verify that site conditions are acceptable before proceeding with installation.

Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

6. LIMITATIONS

Any loads imposed on the S-5!® Wind Clamps will be transferred to the roof panels to which they are attached. Roof panels must be adequately fastened to building structure to resist these loads. For critical installations, contact the roof panel manufacturer for specific test data of ultimate tensile load on specific panel materials and seam types. When relying upon testing load values, setscrew tensions should be verified and factors of safety should be used as appropriate.

Setscrew tensions must be verified onsite using a dial-type torque wrench or pre-set automatic shut-off power tool and must be tightened to the manufacturer required and tested settings.

S-5!® Wind Clamps systems are used in accordance with standing seam metal roofs and tested for specific design loads by metal roof manufacturers

and third-party independent labs on specific seam profiles, materials and thicknesses. Always install S-5!® Wind Clamps in strict accordance with the metal roof manufacturer's and S-5!®'s published installation instructions and in the required spacing and configuration dictated by the appropriate specific test information for each metal roof manufacturer, material and profile.

7. COST AND AVAILABILITY

Contact manufacturer-authorized distributors listed at www.S-5.com/ Distributors for the most current product prices and product availability.

8. WARRANTY

Free 25-Year Limited Warranty: All S-5! products and components are warranted to be free from defects in material and workmanship.

9. MAINTENANCE

Maintenance is not normally required. If cleaning is desired, systems can be washed with mild soap and water with a clean water rinse.

10. TECHNICAL SERVICES

Technical assistance, including more detailed information, product literature, test results, project lists, assistance in preparing project specifications and arrangements for application supervision, is available by contacting S-5!® or the nearest S-5!® distributor.

APPROVED

(PLACE SUBMITTAL APPROVALS HERE)

JOB NAME _____

CONTRACTOR _____

DATE _____