

NH1.5-Clamps

The S-5!® NH1.5 clamps, made of Aluminium, are suitable for 1.5 inch (38mm) high Nailstrip profiles with abase widthof 12mmto 20mm.

These S-5!® NH1.5 clamps **have an innovative insert** that engages the female portion of the panel and forms to the shape of the seam to prevent damage, while offering optimal holding strength.

The NH1.5 Clampwith twoset-screws, two M8 threads on top and one M8 stainless steel bolt, is used for heavy-duty applications and ColorGard snow retention.

NH1.5-Clamp is packed with 25 pcs. perbox (not on stock available)

The **NH1.5-Mini with one set-screw**, insert and with a M8 thread on top are utilized in various instances when multiple clamps are required for the attachment of rigid objects to the seams, e.g. S-5-PVKIT® 2.0, rail systems, walkways, cable trays, etc.

For mounting rails with screw channels underside or beside, the NH1.5-Mini can be combined with different adapter plates.

The S-5!® Mini clamps are now supplied without M8x16 stainless steel screws. These screws can be ordered separately from us. PU: 200 pieces per box.

NH1.5-Mini is packed with 40 pieces per box







NH1.5-Clamp



NH1.5-Mini



Examples of applications: Snow guard, handrailings, walkways, rails, solar mounting, steps, satellite dishes and much more.

All S-5!® Clamps are tested on different materials and profiles by a third-party A2LA accredited US-lab - the highest regarded in the industry - and follow strict ASTM standards. This type of test tests the clamp itself and the connection of the clamp to the profile under test conditions. Tests made with load pulling parallel (shear) to seam and with load pulling normal (tensile) to seam. The test results proved the outstanding performance of the S-5!® clamps.

Please don't hesitate to contact us for more information and technical assistance.

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NH1.5-Mini

To Install S-5!® NH1.5-Clamp and S-5!® NH1.5-Mini:

- Screw the set screws into the clamps a little beforehand and push the insert in sideways. The insert can be used on both sides with its different curvature, depending on the width of the seam.
- Then place the clamp flush on the seam, as shown in the illustration on the right top, so that the set screws are screwed in against the insert on the back of the seam and the "nose" of the clamp sits under the seam.
- In the area where the clamps are attached, the nail strips should also be screwed in without restricting the expansion possibilities too much.
- Check the correct fit of the clamp and the insert (Fig. 3b) and tighten the set screws with the S-5! mounting bit supplied in each box with a tightening force of 15 - 17 Nm. For flashings made of galvanized sheet steel with a thickness of more than 0,7mm with 18 - 20 Nm.
- With the NH1.5-Clamp tighten the set screws and re-tighten both again.
- After set screw(s) are torqued, the insert will "form" to the seam. This allows the insert to better engage with a variety of seams.
- Many cordless screwdrivers do not always offer a constant tightening force. The tightening force must therefore be checked with a calibrated torque spanner and the set screws re-tightened if necessary.
- If an M8x16 stainless steel screw in the M8 thread on the top side is used for mounting the further application, it must be tightened with a torque of 18 Nm.

Please note in general:

- Please make sure that the load coming into the clamp will be taken by the structure of the roof. Assumption is that the determination has been made that the roof to which
 the S-5! clamps will be attached is structurally adequate. Any loads imposed on the S-5! clamps will be transferred to the panels. Panel seams must have sufficient flexural
 strength to carry these loads. Panels must also be adequately attached to the building structure, and the structure must be sufficient to carry these loads. In particular, the
 snow and wind loads, the additional loads from the installations attached to the clamps, as well as the increased loads in the edge and corner areas of the roof
 construction must be considered.
- A sufficient number of clamps must be provided. For statically relevant clamps, a distance of at least 500mm from the end of the standing seam profile must be
 maintained. RoofTech and the makers of the S-5! clamps make no representations with respect to these variables. It is the responsibility of the user to verify this
 information, or seek assistance from a qualified design professional or stress analyst, if necessary.
- Responsible for the stability of a building structure is the building owner or the owner or operator. The installer is responsible not only for the installation but also for the
 roof on which the system is installed. Whoever installs a system on an existing roof without having checked the stability beforehand, violates existing law! For critical
 installations, inquire for specific test data of ultimate tensile load on specific panel materials and seam types. The sufficient holding force of the roofing to the supporting or
 substructure must always be ensured. The sufficient holding force of the roofing on the supporting or substructure runst always be guaranteed. Proof must be provided by
 the customer or installer. In cases of doubt, a structural engineer must be consulted to determine the loads and its effects.
- In the case of handcrafted metal roofing on wooden formwork, the edge and corner areas should not be covered with installations, PV-modules etc. due to the limited loadbearing capacity of the roofing and the adhesives. In the central area, the skipping of seams is usually not possible. Therefore, we recommend to install clamps on each seam. The installation of e.g. PV systems represents a punctual load entry; therefore, we recommend reduced clip distances and screwed clips. The mounting and fastening of the clamp should be carried out between the clips to achieve an optimal load sharing.
- When mounting rigid objects such as rails, pipes, cable trays, etc. on the clamps, they must be separated at regular intervals (max. 3m) in order to limit deformations due to thermally induced length changes of the mounted materials.
- The material properties of the respective metals, the combination with each other as well as the installation instructions and regulations of all manufacturers involved (including those of the metal roof) must be observed.
- S-5! Clamps are not suitable as fall protection applications. The S-5! clamps may only be used for this purpose in a certified and approved fall protection system. The respective system provider is responsible for this and must provide proof of this.
- The user and/or installer must always clarify in advance the application possibilities and application of our products in connection with the other used materials and products at the single project. The user and/or installer of all our products is responsible for all necessary engineering and design to ensure that the S.5! clamps and other products has been properly spaced and configured.
- RoofTech GmbH and S-5![®] Metal Roof Innovations Ltd. recommend that the planned installation, PV system, snow guard system, etc. should be verified by a qualified
 professional who is responsible for the snow and wind loads, the additional loads from the installations attached to the clamps, the statics and assembly as well as the
 planning and construction of and on metal roofs.
- The photographs and drawings herein are for the purpose of illustrating installation, tools and techniques, not system designs. RoofTech GmbH and S-5!® Metal Roof Innovations Ltd. do not assume any liability. S-5! products are protected by international patents of Metal Roof Innovations, Ltd..
- RoofTech GmbH and S-51® Metal Roof Innovations Ltd. assume no responsibility and liability for assembly, suitability and applications.

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3b

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