

All components in Germany related to fixing solar products for PV installations need to carry a German approval by the DIBt (German Center of Competence for Civil Engineering - Authority of the German Government). Since March 2017 the S-5-Z- and S-5-E- Clamps have the national technical approval **by the DIBt: abZ aBG No. Z-14.4-719 - valid until May 2027.**

The S-5!® Z-clamp family have the national technical approval for the round „bulb“ seams for all these internationally operating producer:

- Kalzip-Aluminium-Stehfalzprofil from **Kalzip**
- BEMO-FLAT-ROOF from **Bemo**
- ALUFALZ and FALZ-RIPP from **Aluform**

The S-5-Z-Clamp, S-5-Z-Mini and S-5-Z-Mini-FL are currently the only clamps on the market with an approval for all these three round bulb seam profiles.

Please note this information from Kalzip:

Kalzip requires “an official approval for assembly with Kalzip” when using clamps from other manufacturers. For the installation of solar systems on Kalzip roofs, only tested system accessories approved for this purpose may be used. **Non-approved components invalidate the Kalzip warranty!**

Due to the approval by the DIBt, such proof is given for the S-5!® Z clamp family and they may therefore can be used for installations on such Kalzip roofs.

The S-5!® E-Clamp family was tested on the Rheinzink double folded seam system and currently the only clamps on the market with an official approval for this double-folded standing seam roof.

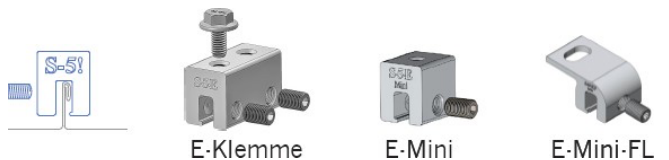
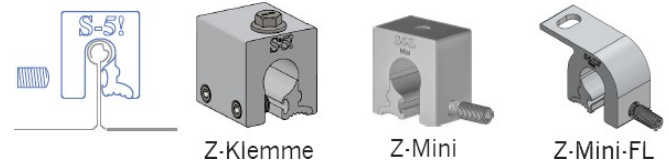
Please note this information from Rheinzink:

Rheinzink basically only recommends the use of the S-5! Clamps, as only these have the official approval in connection with their roofs and thus offer the only possibility that a structural engineer can provide a static proof for the entire system.

Should the tradesman or planner nevertheless work with other clamps and this causes damage to the roof, then of course the Rheinzink material warranty and system warranty no longer apply.

All S-5!® E and Z clamps have been completely tested in the required four load directions, and unlike other seam clamps, not only the clamps in connection with the seam, but in connection with the entire roof structure, including the standing seam profiles, the clips or holders and their attachment to the supporting structure!

The extensive test procedure was made by the well-known institute KIT (Karlsruhe Institute of Technology).



The result of all tests was, with very few exceptions, that the load capacity of each individual S-5!® clamp is stronger than the load capacity of the roof panels or profiled sheets and their attachment to the supporting structure. This applies not only to the Clamps with two setscrews but also to the S-5!® Mini clamps with one setscrew. **The load-bearing capacity values from this building approval may be used for static calculations.**

Please don't hesitate to contact us for further information and the test results.