IKO® | Metals™
ROOFING SYSTEMS

SOLAR HOLDER
INSTALLATION PROCEDURE

IKO Metals constantly strive to meet the changing needs of our customers, either by upgrading our existing product range or by developing new products. Our objective is always to improve ease of installation and the aesthetic qualities of every roof.

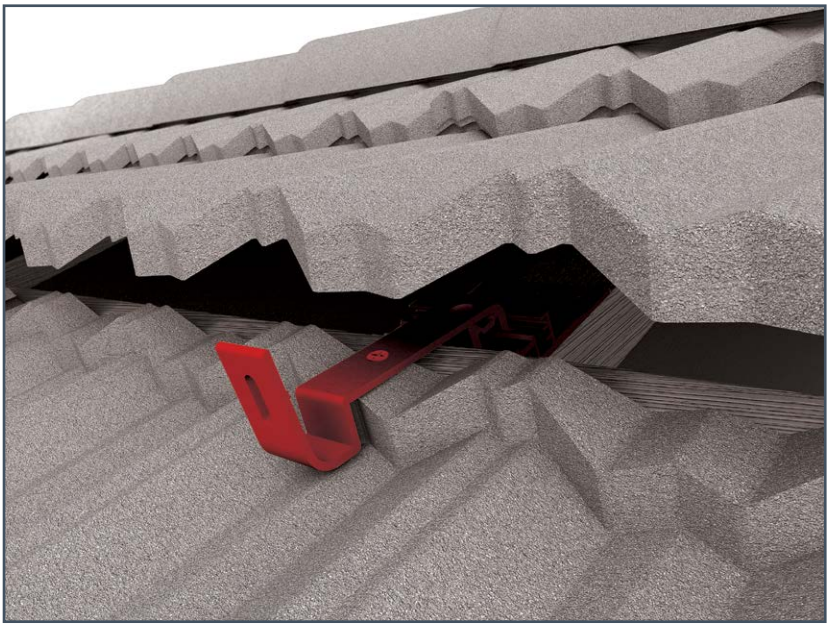
Renewable energy resources, such as solar power, are becoming increasingly popular. We are proud, therefore, to introduce our solar panel holder, **Solar Holder 2G**, the holder for Photovoltaic ('PV' throughout this document) panel installations on IKO Metals roofs.

HOW TO DO IT SAFELY AND RELIABLY

Remove metal tile - Remove upper bracket

The rafters, where the roof hooks will be fixed to, have to be uncovered. In case of timber boarding or sarking boards instead of battens the exact position of the rafter has to be determined to ensure proper fixing of the roof hook.

Remove the upper bracket to place the remaining roofhook (base plate and lower bracket) on rafter and adjust the parts that the hook can be fixed. The height under bracket of the hook has to be checked and, if necessary, to be adjusted. The lower bracket position has to be in the valley of the tile.



Fix and Aline Remaining RoofHook

The roof fastener must be mounted with a minimum of 2 stainless steel timber screws on the wooden rafters (at least one screw per row of holes).

Choosing the dimensions and position of the screws has to be carried out according to the applicable regulations. With a layer of timber boarding or sarking boards it has to be ensured to fix the roof hook through the boards into the rafter.

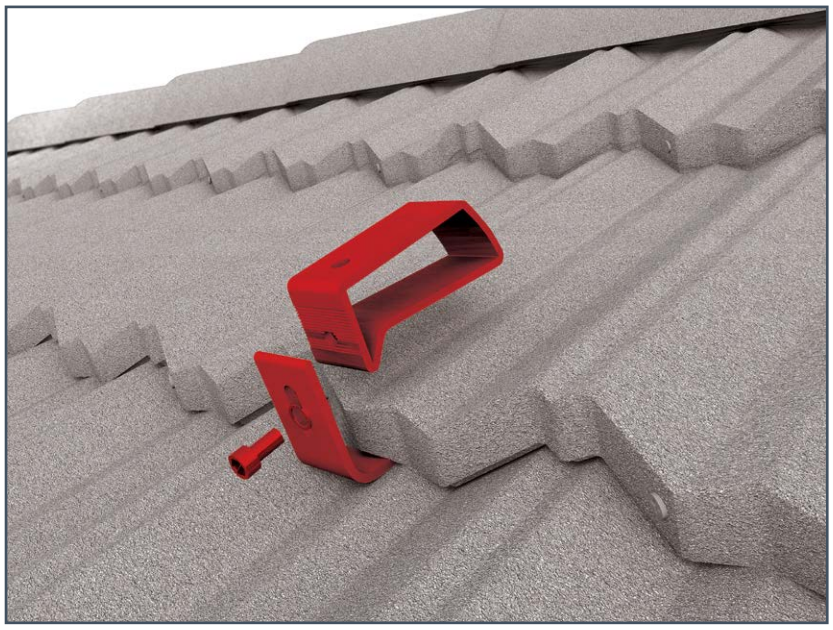
After adjusting the brackets fasten the Allen bolt.

Torque: 16 Nm

In addition, the bracket is fixed to the batten with a selfdrilling screw.

Torque: flush

Required materials: Solar Holder, Timber screw



Remount Tile

Subsequently the previously demounted metal tile goes back in and is, moulded‘ to the roof hook with a suitable rubber mallet without damaging the surface of the tile. Afterwards the tile is fixed according to the tile manufacturers instructions. There is no cut-out of the tile necessary.

Fix upper Bracket

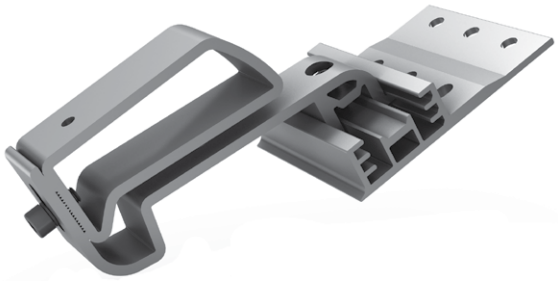
The upper bracket of the Solar Holder is fixed to the lower bracket again with an Allen bolt and serrated nut. The upper bracket is pushed on to the lower end of the metal tile until touching the metal tile.

The assembly instructions of the metal tile manufacturer have to be adhered to. The upper bracket now has to be levelled, then fixed with the bolt of the upper bracket. The upper edges of all upper roof hook bracket have to be on the same height level.

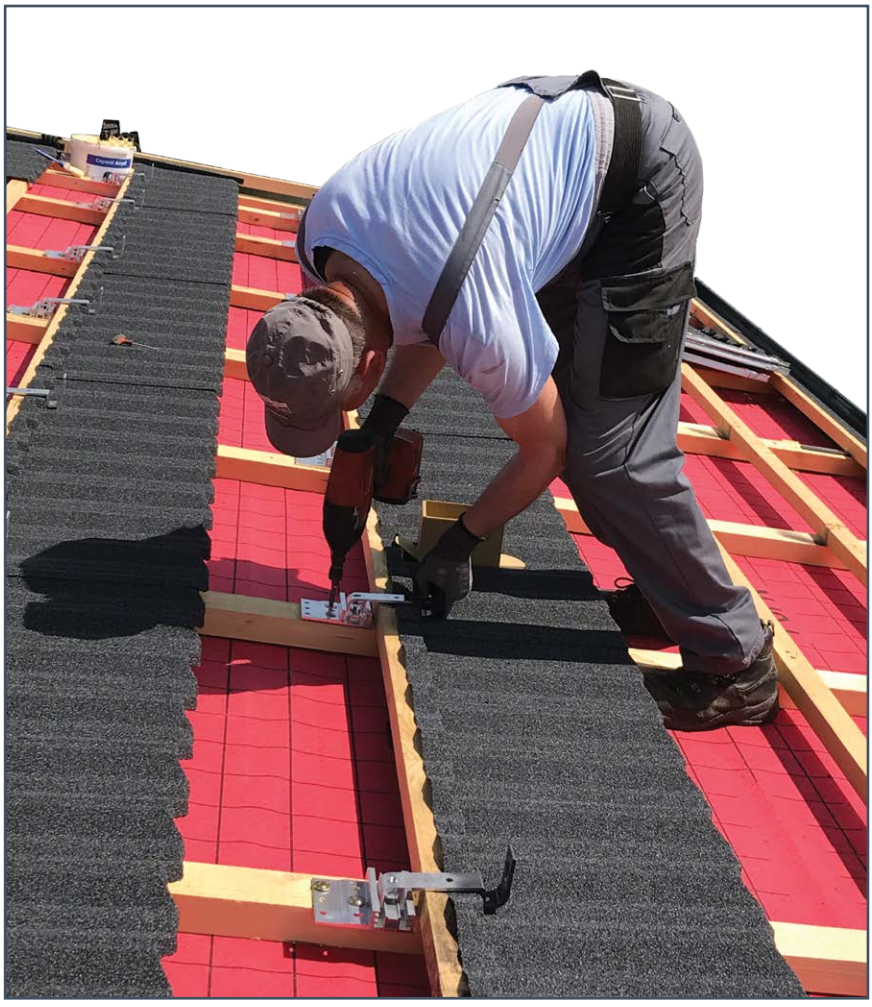
Torque moment 16 Nm

Required materials: Allen bolt M8, Washer

Advantages of the Solar Holder 2G



- Fits beneath the tile panel, avoiding penetration of the roof covering. Thus, water-tightness is ensured and the original 50-year warranty of the roof is not compromised.
- Made solely of high-grade Aluminum. Therefore, there is no possibility of galvanic corrosion of the roof tiles.
- Easy to install.
- Great flexibility: base plate with 3 adjustable height settings (40/47/54 mm) for use with different batten/tile heights.
- Compatible with most of roof tiles.



The size of the rails attached to the roof hooks and carrying the PV module is dependent on local conditions such as snow and wind loads, shape and height of the building, national and local building regulations and standards, and environmental regulations.

IKO Metals is not responsible for the design of the PV installation or any load calculations. Before installation, therefore, professional advice regarding the mounting system for each PV project (e.g. design, load calculations, structural verification of the substructure) should be obtained.

The complete system is purchased from the PV specialist to provide the fulfil calculation in accordance to Eurocode 1 and 9.

Should you require any further information regarding prices or delivery, please do not hesitate to contact your IKO Metals Regional Manager.

IKO Metals Europe NV | Michielenweg 3, 3700 Tongeren, Belgium | **VAT** BE 0460.680.219
tel +32 12 39 88 01 | **fax** +32 12 24 18 02 | **mail** info@ikometals.com | **web** www.ikometals.com