

INSTALLATION MANUAL

**COLLECTOR FIXINGS
ON THE ROOF OF SLATE (item number 20220)**

suitable for df and hp



AKOTEC
SOLARTHERMIE



Notes

General safety information:

Solar thermal collectors generate heat under solar radiation. All components such as tubes, connectors, sensors etc. carry the risk of injury from hot surfaces. In addition, solar thermal systems are operated with overpressure. Opening a solar thermal system can cause steam or hot water to escape. Persons working on solar thermal systems have to consider this, to wear protective clothing and to adopt safe working practices.

The tube sets have to be transported horizontally. A maximum of seven cartons may be stacked on top of each other. Our mounting sets are suitable for snow load zones 1 and 2. Collectors must not be installed in the roof edge areas of one meter because of increased turbulence. In stormy areas, separate static calculations must be carried out.

Working on the roof:

When working on the roof, suitable accident prevention measures must be taken. Before carrying out installation work, acquaint with the accident prevention regulations for construction work of your employers' liability insurance association or have yourself instructed by suitable persons. The following points must be noted to ensure safe installation of the solar components:

- Fall protection must be used for the installation of the collectors
- Keep the safety regulations when using a single ladder
- Workplaces on the steep roof must be secured
- Safety glasses and gloves must be worn when working with the angle grinder
- Collectors can reach a stagnation temperature of up to 200°C during installation and operation due to incident light. There is a risk of burns at the flow and return connections

Occupational safety information:

- wear helmet, hearing protection and safety glasses!
- put on a fall protection!
- only touch glass tubes with gloves!



Required tools:

- drilling machine
- measuring tape (folding rule)
- spirit level
- open-jawed spanner SW 13
- socket spanner SW 13
- hammer
- angle grinder



2

on the roof of slate (item number 20220) for mounting of AKOTEC collectors on roof of slate

scope of delivery:

- 4x slate-mounting plates including mounting hardware
- 4x L-angle 30 x 40
- 4x locking nut M10
- 2x mounting rail 1,98m
- 4x hammer head screw M8 x30
- 4x hexagon socket screw M8 x 45
- 8x locknut M8

Installation of the slate roof connection:

->mounting dimensions see profile rail set page 15.

1

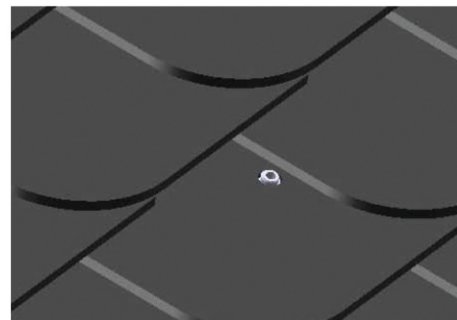
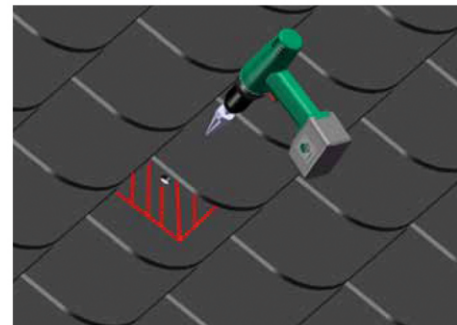
Tip: to screw the threaded socket, use a hexagon screw M10x50 with two lock nuts.

2

Drill the slate or shingle with a conical drill to a diameter from 19 - 20 mm. Put that drilling in the upper third of the slate or shingle cover.

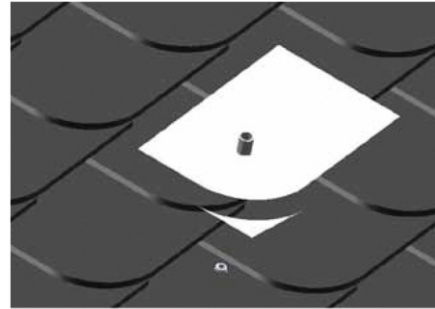
3

Screw the threaded sleeve completely in to the hole. (Note that the rafters below with a diameter of 15mm and a minimum depth of 60mm has to be pre-drilled).



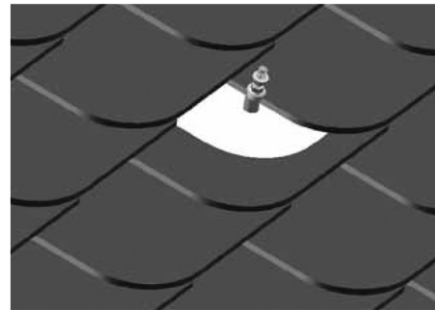
3

Now adjust the base plate to the cover image (e.g. edge rounding, Recesses)



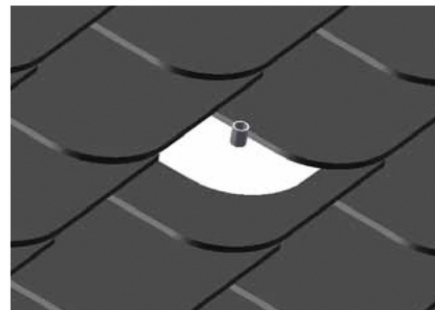
4

Slide the base plate under the top shingles and over the screwed threaded sleeve that both of the openings lie on top of each other.



5

Turn the threaded rod through the Sleeve of the base plate into the threaded sleeve until it stops. Slide the seal onto the sleeve and lock it with the pre-assembled nut.



6

Screw the L-bracket to the threaded rod with 2 nuts



7

further assembly as with the profile rail set 20150
Page 14.

WE ARE GLAD TO BE HERE FOR YOU:



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