

## SlatePlan

### Mounting Instructions

3x serrated flange nuts M10/M12

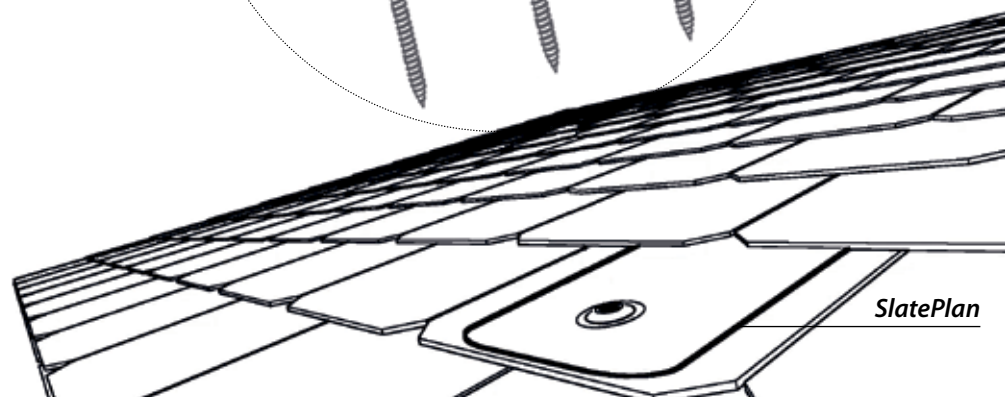
EPDM sealing gasket

Hanger bolt M10/12

### SlatePlan - accessories

KlickTop attachment

Mounting plate



### Required tools

Measuring aids  
 Chalk line  
 Drill for pre-drilling holes  
 Drill bit Ø 15.0 for customer installed shingle roofing  
 Wood drill bit Ø 7.0 (Hanger bolt M10)  
 Wood drill bit Ø 8.5 (Hanger bolt M12)  
 Socket wrench size 7 (Hanger bolt M10) respectively size 9 (hanger bolt M12)  
 Open-ended wrench size 15 (hanger bolt M10) respectively size 18 (hanger bolt M12)



The Schletter tool kit contains the equipment for all standard systems.

### Auxiliary equipment:

For this fastening solution, we recommend the following thread sealing agent:  
**195000-032 Thread sealant 50ml**

Further information can be found in the product sheet "Thread sealant I400210"

### Tightening torques

Bolted connections M10: 40 Nm  
 Bolted connections M12: 70 Nm

### Safety instructions



Planning, mounting and putting into operation of the solar plant must be performed by qualified personnel only. Poor quality execution can result in damage to the plant and to the building and can present a risk to people.



Risk of falling! There is a risk of falling when working on the roof as well as when ascending and descending the building. Accident prevention regulations must be observed and appropriate safety equipment must be used. PV mounting systems are not suitable as climbing aids or fall protection.



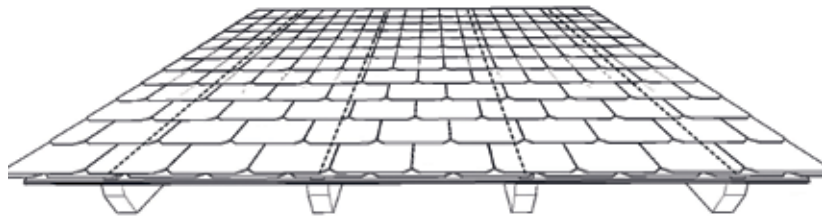
Risk of injury! Objects falling from the roof can cause injury to people. The danger area around the installation site must be secured and people present in the area must be warned of the risks.



Statutory provisions and technical regulations for the handling of hazardous materials are to be observed when working on a shingle roof containing asbestos. More information on this subject can be referenced on our website at [www.schletter.de](http://www.schletter.de).

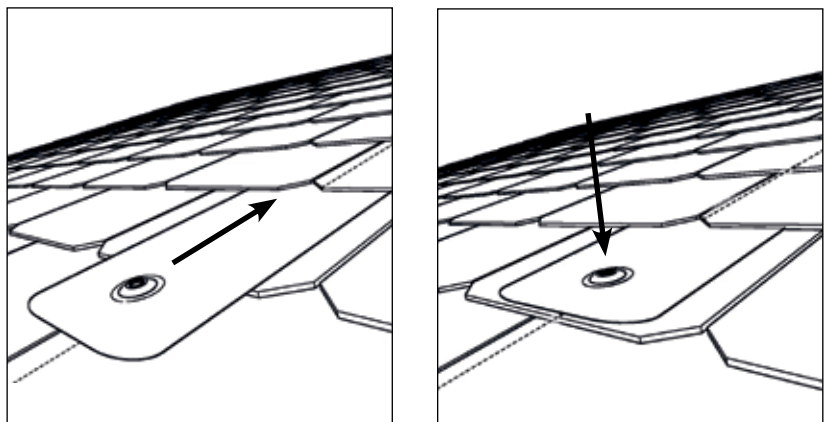
## 1 Locate rafters

- ⚠ Mark out the center of the rafter using a chalk line.



The position and direction of the rafters must now be marked out centrally on the roof in order to correctly position the SlatePlan.

## 2 Determine the position for SlatePlan installation

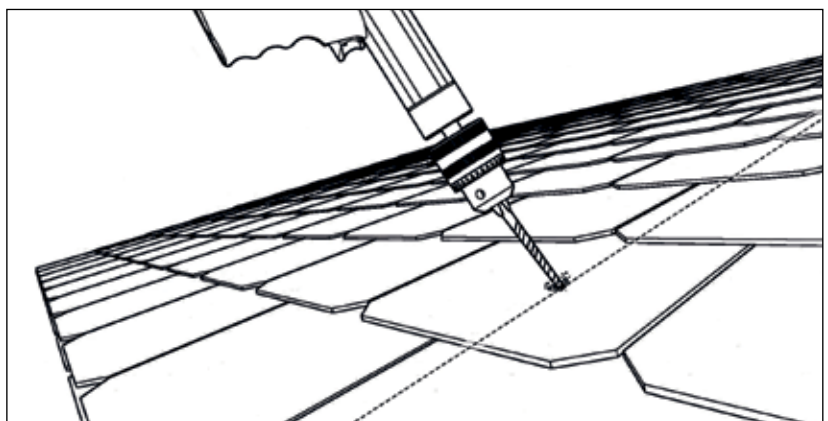


Insert Slide SlatePlan along the axis between the shingles. Now mark the penetration points for the hanger bolts. The SlatePlan must now be removed before carrying out the next steps.

## 3 Pre-drilling of the penetration points

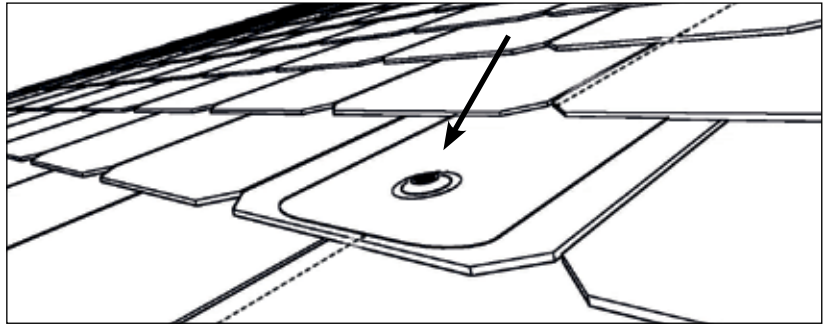
- ⚠ The standard drilling depth of the hanger bolt is to be observed. For M10 hanger bolts this drilling depth is 60mm and for M12 hanger bolts it is 100mm.

- ⚠ Please note: It is crucial that the appropriate distances from the edge are observed when drilling into wood. For M10 hanger bolts this distance is 30mm and for M12 hanger bolts it is 36mm.



While the roof covering is pre-drilled with  $\varnothing$  15mm, the substructure must also be pre-drilled with  $\varnothing$  7mm for M10 hanger bolts and with  $\varnothing$  8.5mm for M12 hanger bolts. When pre-drilling into wooden substructures, please make sure that a  $90^\circ$  angle is maintained. Please remove all splinters and cuttings prior to continuing with the work.

## 4 Arrange the SlatePlan

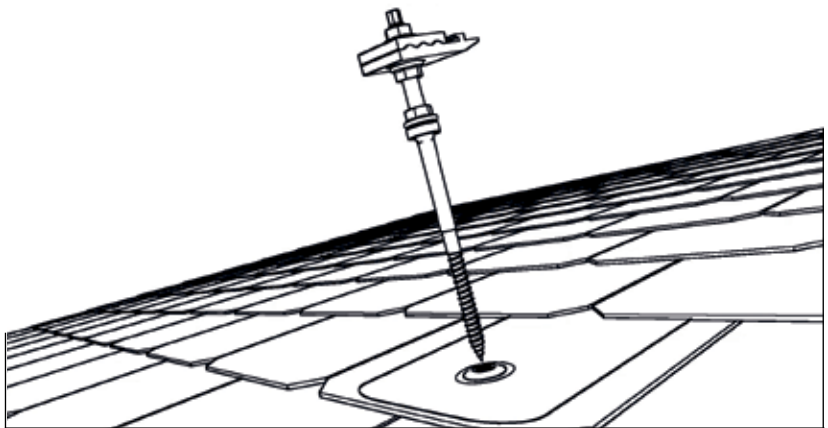


Reinsert the SlatePlan and arrange the drill holes exactly one above the other.

## 5 Fasten the SlatePlan



Hanger bolts are not included in the scope of delivery and must be ordered separately as accessories.



Please observe the minimum specified thread engagement when placing the hanger bolts. For M10 hanger bolts, this minimum thread engagement is 60mm and for M12 hanger bolts it is 100mm. You will need a size 7 socket for M10 hanger bolts and a size 9 socket for M12 hanger bolts.

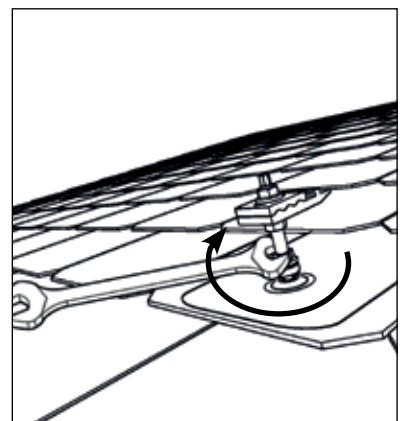
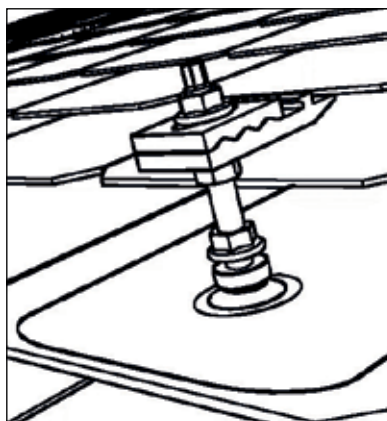
## 6 Seal the SlatePlan



Contact pressure of the EPDM rubber seal

with flange nut M10:  
1.5 - 2 turns

with flange nut M12:  
1 - 1.5 turns



The pre-assembled hanger bolt seal is pressed into the drill-hole of the nub. The conical end of the seal must be fully inserted. The flange nut is then tightened until it sits flush with the sealing ring. Now turn the flange nut the corresponding number of times to compress the seal.

For further information relating to our systems, please visit our website:  
[www.schletter-group.com](http://www.schletter-group.com) under "Downloads" in the Solar Mounting section.