

Solar Systems by Schweizer: Quick Installation Guide – Solrif®



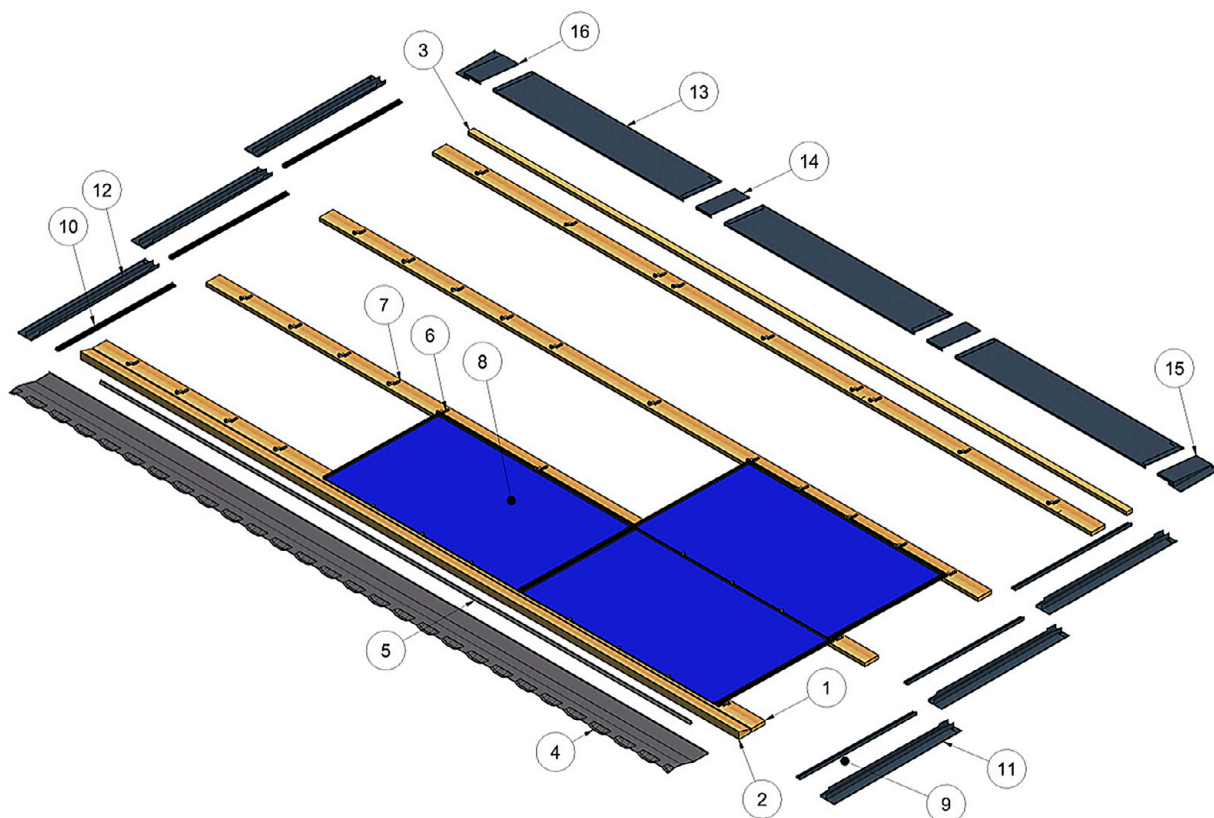
Scope

This quick Installation guide is part of the valid and current "Installation Instructions PV Roof Integration Solrif®" dated 6.5.2019. It describes a partial roof solution, but can also be used for complete roof solutions.



This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement N° 817991

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Overview

- | | | | |
|--------------------|--------------------------------|--------------------------|-------------------------|
| ① Solrif® batten | ⑤ Valley sealing strip | ⑨ Flashing profile right | ⑬ Flashing top |
| ② Wedge plank | ⑥ Mounting clamp profile | ⑩ Flashing profile left | ⑭ Top flashing joiner |
| ③ Support batten | ⑦ Mounting clamp glass | ⑪ Flashing side right | ⑮ Corner flashing right |
| ④ Connecting sheet | ⑧ PV-Module with Solrif® frame | ⑫ Flashing side left | ⑯ Corner flashing left |

Material provided by the customer

- Suitable wood screws for fixing the battens
- ① Solrif® battens 120 × 30 mm
- ② Wedge plank
- ③ Support batten ridge side
- Project report "proSolrif"

Required tools

- Cordless screwdriver with Torx T20 bit insert
- Hammer
- Measuring equipment (e.g. tape measure and chalk line)
- Mounting gauge (recommended)
- Alignment cord

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Horizontal section

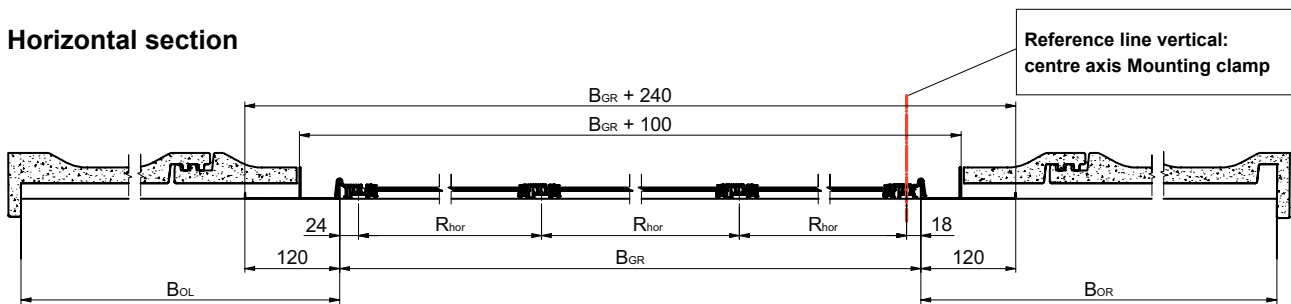


Figure: Horizontal section Solrif®

Vertical section

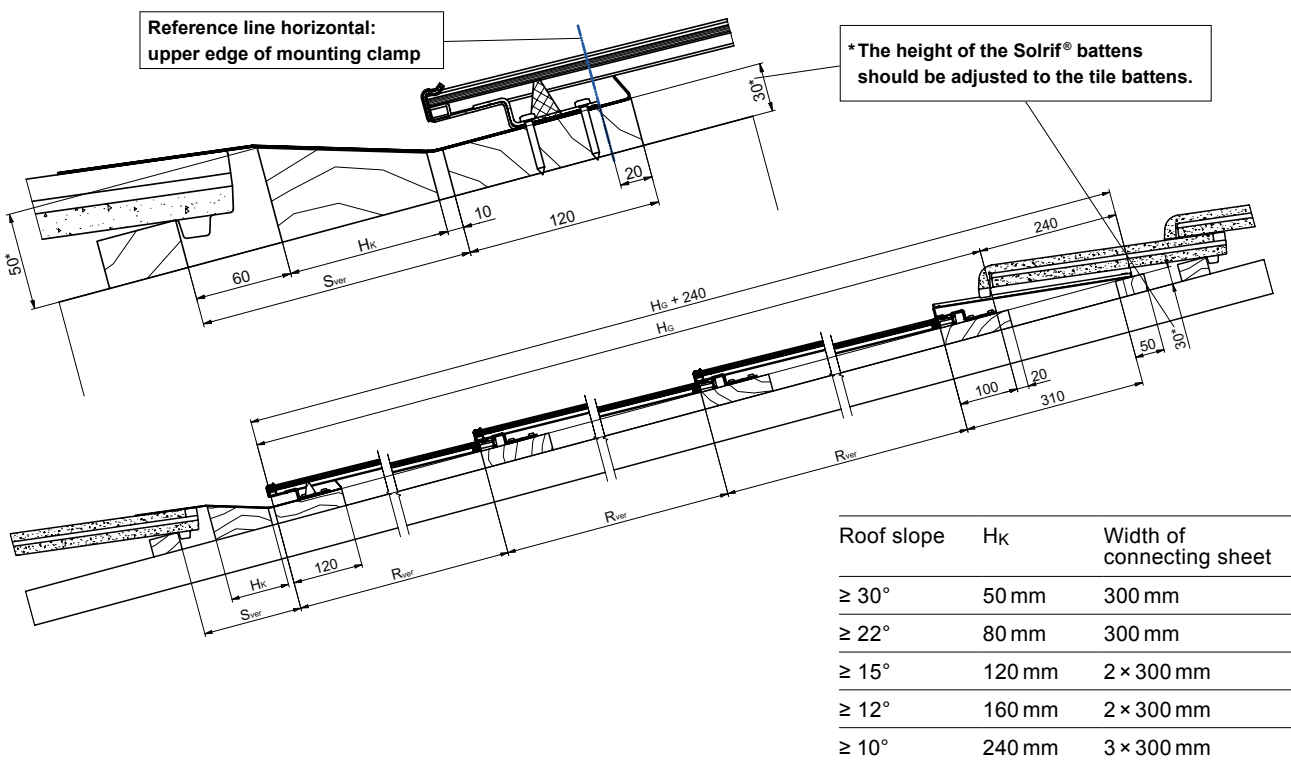


Figure: Vertical section Solrif®



proSolrif

These dimensions can be found in the proSolrif report:

B_{GR}: PV field width = (R_{hor} × number of modules horizontally) + 42

B_{OL}: Edge distance left

B_{OR}: Edge distance right

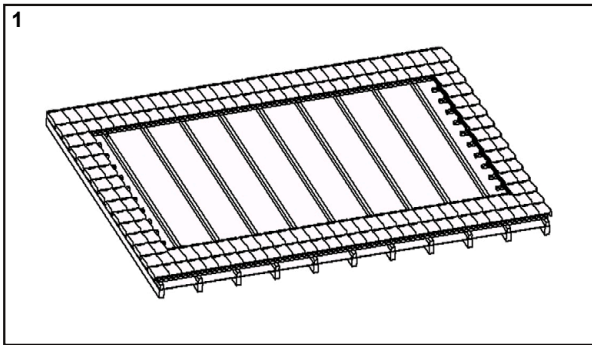
H_G: PV field height = (R_{ver} × number of modules vertical) + 100

R_{hor}: Grid dimension horizontal = module width - 18

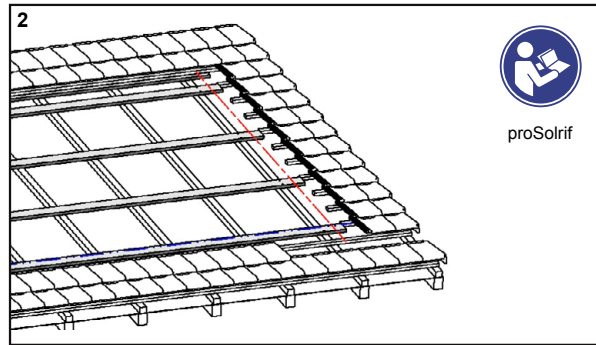
R_{ver}: Vertical grid dimension = module height - 32

S_{ver}: Distance 1st Solrif® batten

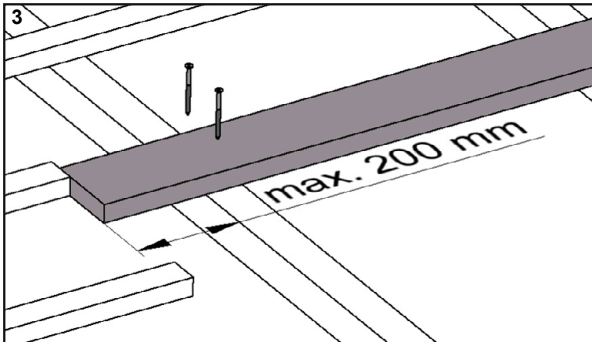
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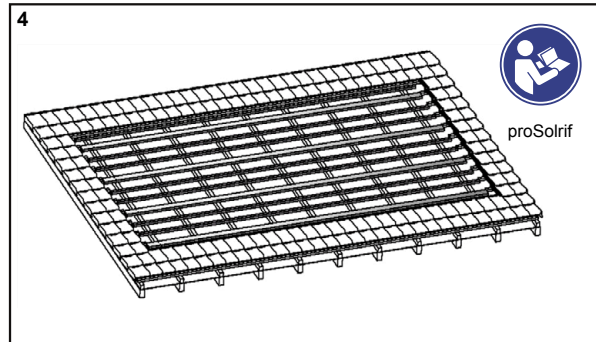
1
Generously remove tiles and, if necessary, tile battens in the area of the module surface.



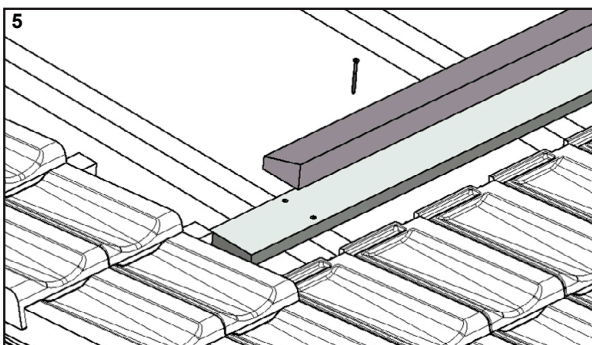
2
Install Solrif® battens, Wedge plank and Support batten Flashing top according to specifications.



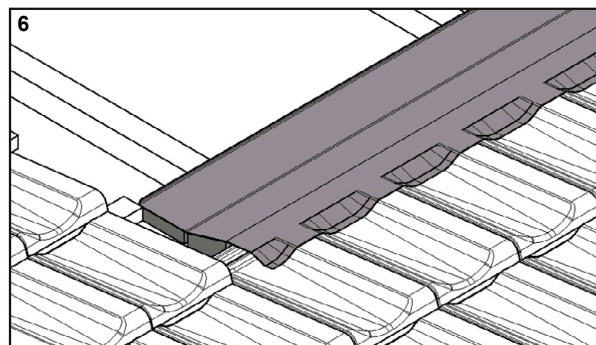
3
Fix Solrif® battens with suitable Wood screws in vertical grid dimension R_{ver} .



4
Add additional Support battens 30 × 50 mm for high snow load if necessary.

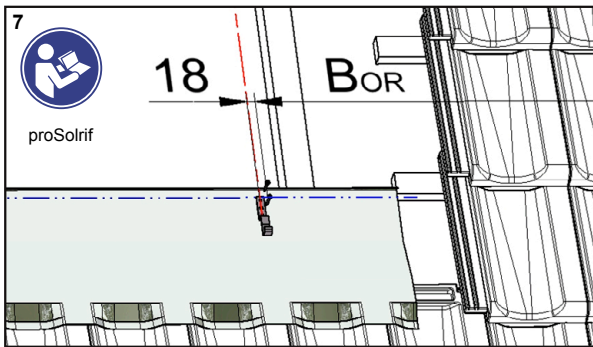


5
Fix Wedge plank.

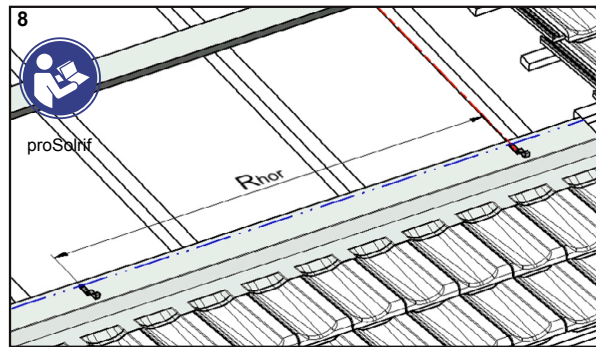


6
Mount the connecting sheet.

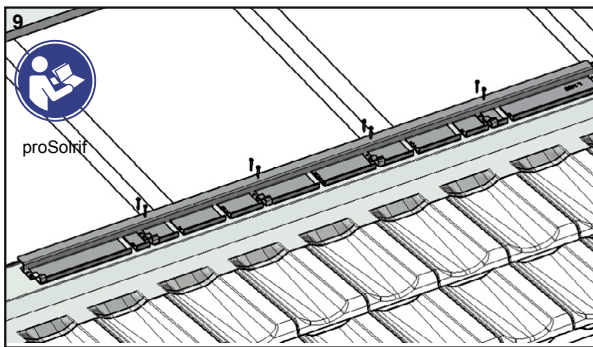
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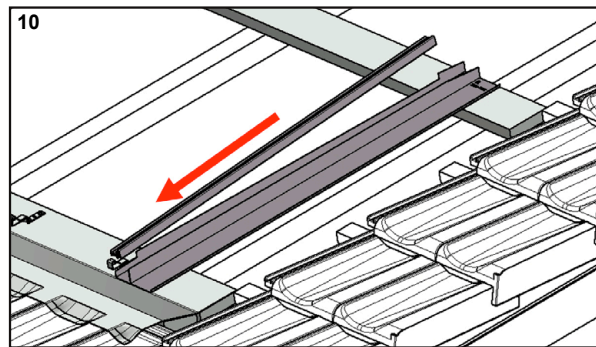
Fix first Mounting clamp profile.



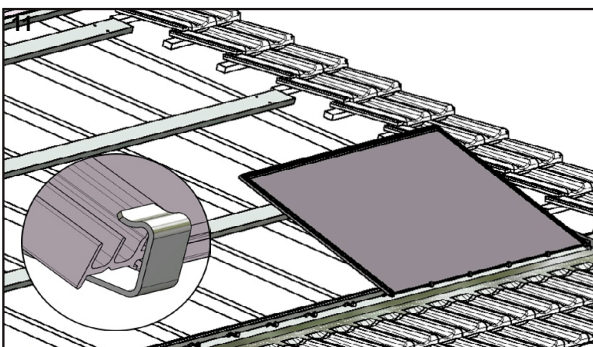
Align and mount additional Mounting clamps profile.



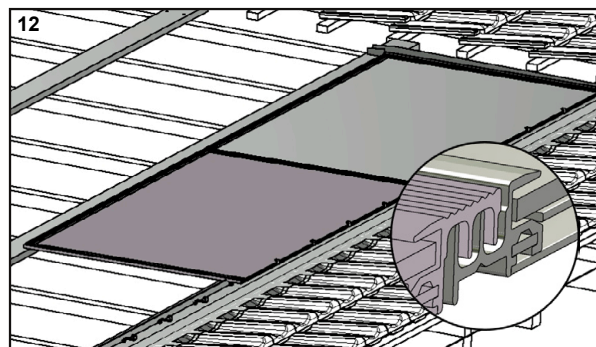
Fix the number of Mounting clamps Glass as specified by proSolrif (by using the Mounting gauge).



Insert Flashing side right with Flashing profile right into the Mounting clamp.

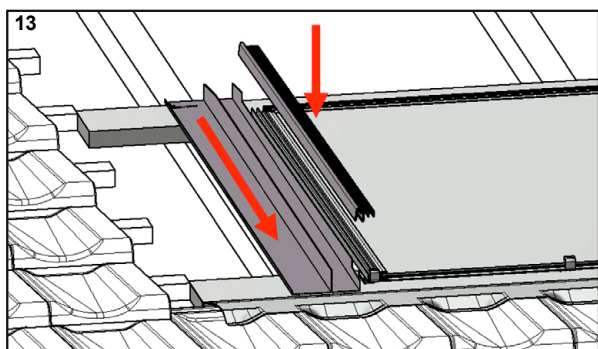


First place the PV Module with the left side frame profile in the Mounting clamp, then lay it down.

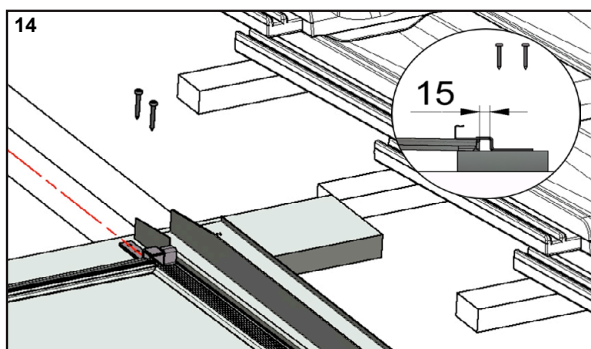


Laying further PV Modules.

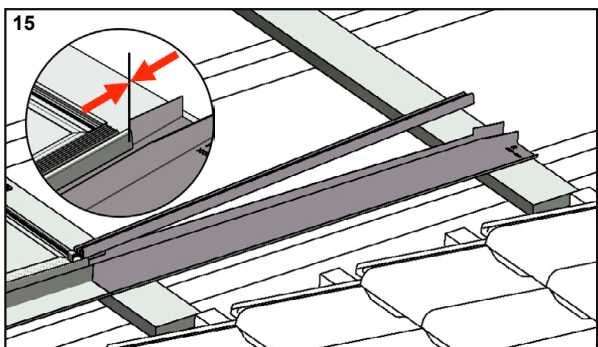
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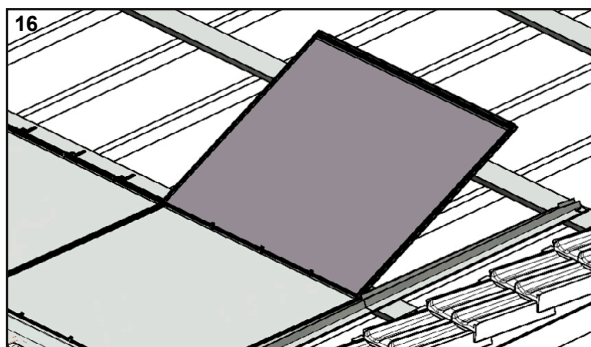
Finish on left side with Flashing side left and Flashing profile left.



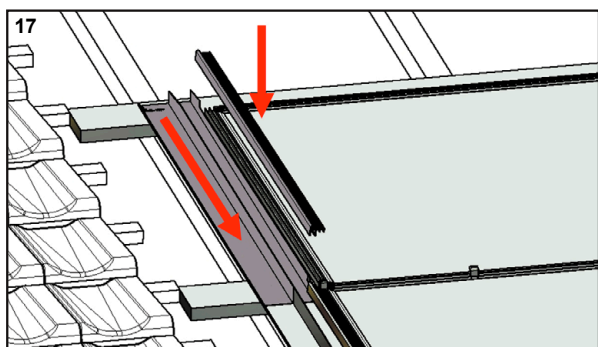
Fix next row of Mounting clamps.



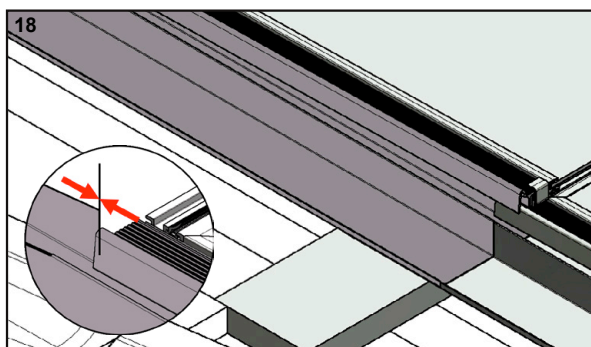
Place Flashing side right and Flashing profile right completely in the Mounting clamp profile.



Laying further PV Modules.

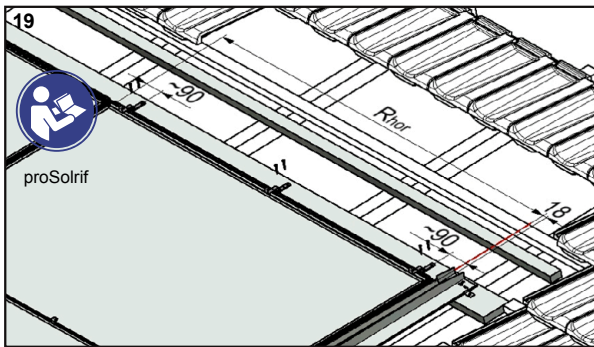


End left with Flashing side left and Flashing profile left.

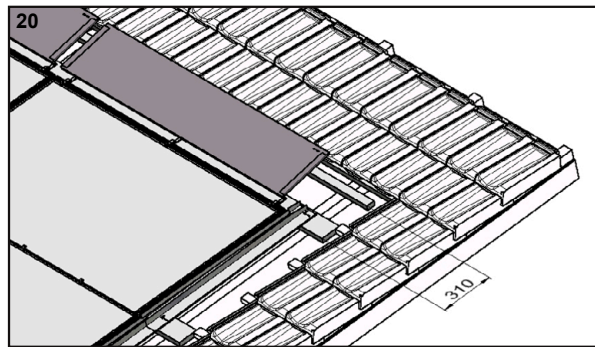


Flashing side must always stop at the top of the Flashing profile below.

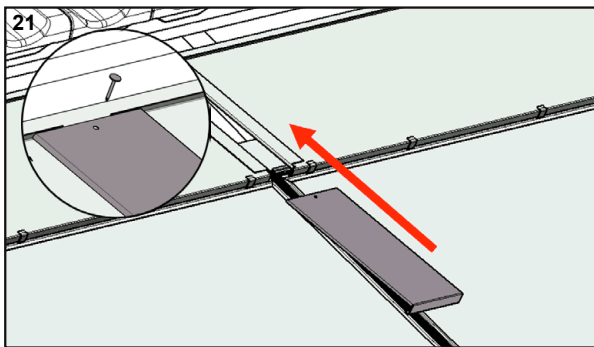
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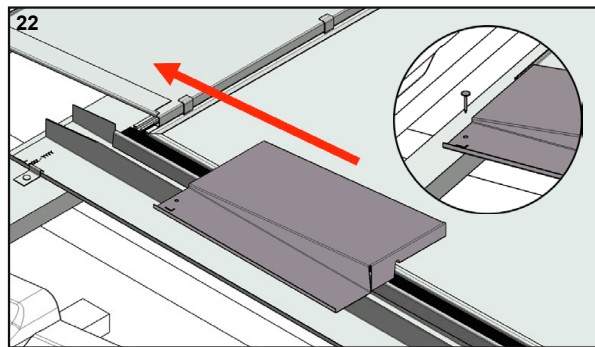
Fixing the top row of Mounting clamps.



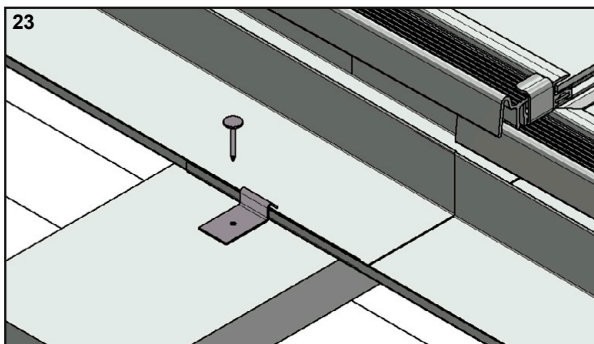
Mount Flashing top elements.



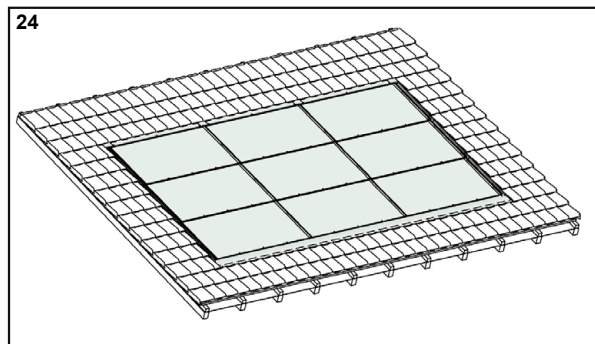
Mount Top flashing joiner.



Mount Corner flashing.



Fix all Flashing side elements with the fixings for flashing.



Fill roof with tiles, cut tiles to size if necessary.



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Page 8/8