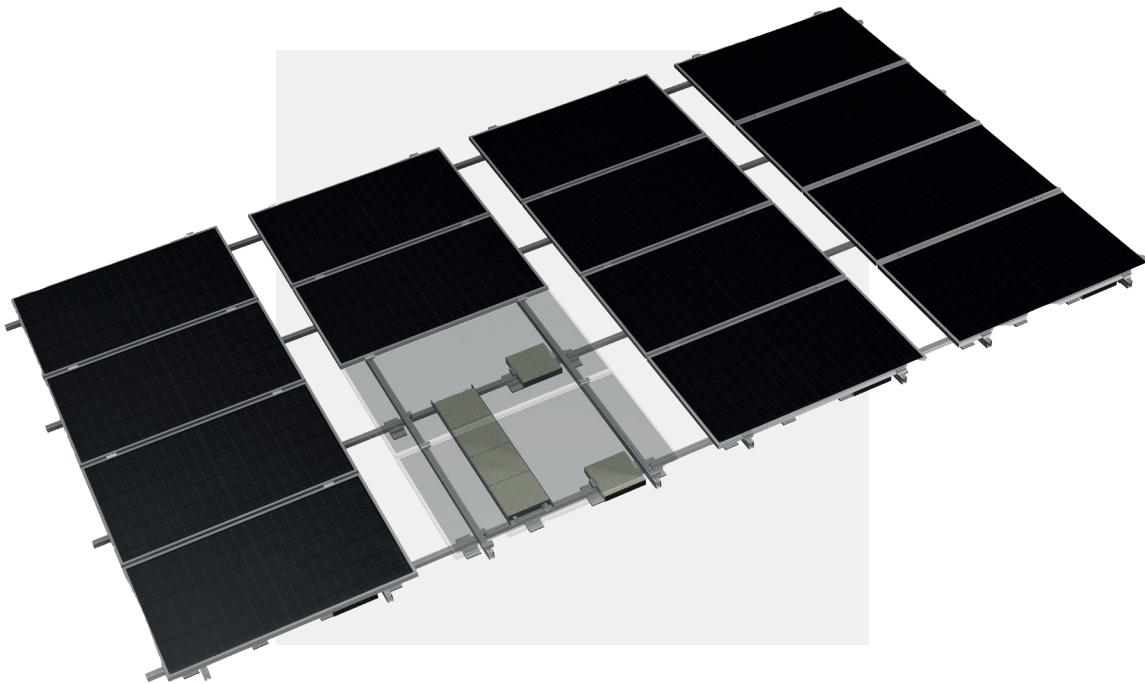




# SL RACK

## BALLASTED PITCHED ROOF

IDEAS FROM **GERMANY**



**Product**

**SL Rack Ballasted Pitched Roof**

**Type**

SL Rack Ballasted Pitched Roof

**Project name**

\_\_\_\_\_

**Project number**

\_\_\_\_\_

**Manufacturer/Address**

**SL Rack GmbH**

Münchener Straße 1

D-83527 Haag i. OB

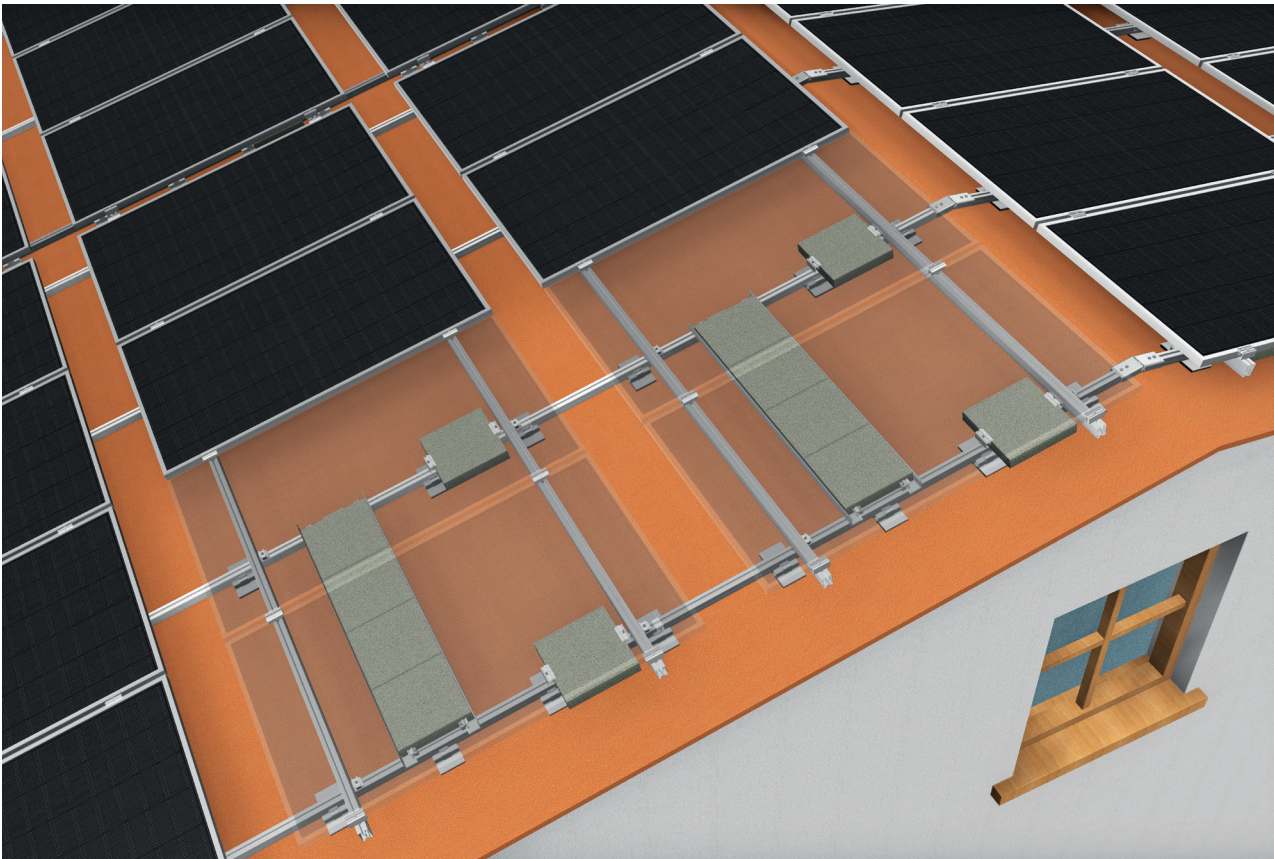
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The Ballasted Pitched Roof is a flat roof system, which is installed as a cross-rail connection parallel to the roof and does not require roof penetration. A ridge connector at the top of the roof can secure both sides against slipping; alternatively, attachment anchors can be built into the roofing at the ridge.

Ballasted Pitched Roof is used for membrane or bitumen roofs with a pitch greater than 3°.



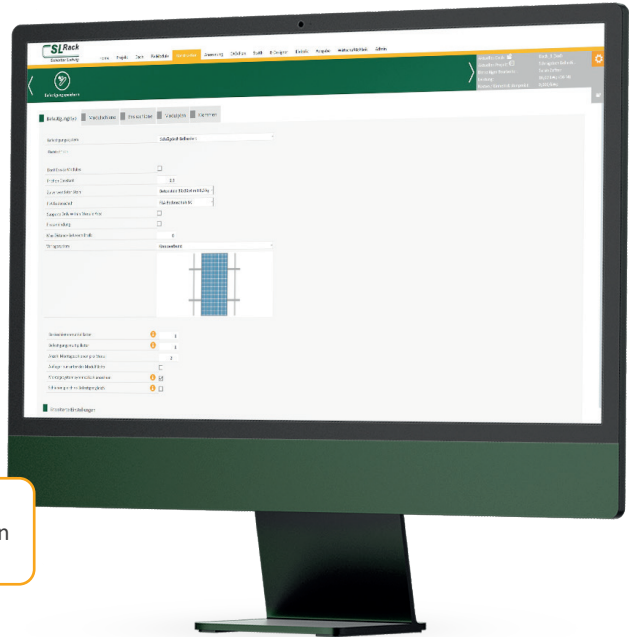
\*Our warranty conditions apply.  
They are available at [www.sl-rack.de](http://www.sl-rack.de)

SL Rack Ballasted Pitched Roof consists of known components from Flat Roof Gen 2.0 and pitched roofs. Depending on the version, a row of modules is shipped with the following assemblies:

Module Bearing Components	Connection Components	Accessories	Wind Deflection/ Ballasting
<ul style="list-style-type: none"> <li>» FLA Base Plate with Building Protection Mat SK (item no. 21112-10) or AKSK (item no. 21112-20)</li> <li>» RAIL 40 as base rail in various length (item no. 81140-XXXX) RAIL 40, black anodized (item no. 86140-4750)</li> <li>» RAIL 60 as module bearing rail in various length (item no. 81160-XXXX) RAIL 60, black anodized (item no. 86160-4750)</li> </ul>	<ul style="list-style-type: none"> <li>» External Connector 3.0 (item no. 81110-00, 86110-00)</li> <li>» FLA Ridge Connector RAIL (item no. 23400-00)</li> <li>» Mid clamp Vario with grounding (item no. 91121-01, black anodized 96141-01) without grounding (item no. 91151-01, black anodized 96151-01)</li> <li>» End clamp Vario with grounding (item no. 91114-00, black anodized 96114-00) without grounding (item no. 91112-00, black anodized 96112-00)</li> <li>» Cross Connector (item no. 91202-00) or Cross Connector 2.0 (item no. 91204-00)</li> </ul>	<ul style="list-style-type: none"> <li>» Lightning Protection Clamp top (item no. 91518-00)</li> <li>» Cable Clip RAIL (item no. 91402-00)</li> <li>» RAIL 40 and RAIL 60 Cover (item no. 91740-00, 91760-00)</li> <li>» Plastic End Cap RAIL 40 and RAIL 60 in gray or black (item no. 94640-05, 94640-06, 94660-05, 94660-06)</li> </ul>	<ul style="list-style-type: none"> <li>» FLA Universal Clamp (item no. 21114-00)</li> <li>» Ballast Bracket (item no. 21116-2300)</li> </ul>

- » **Before starting the installation**, check complete shipment.
- » Report wrong shipment and/or damaged components immediately to SL Rack GmbH.
- » **Tools required:** Cordless screwdriver with Torx 40; torque wrench (5 - 20 Nm) with Torx 40
- » Ballast is not part of the scope of delivery.

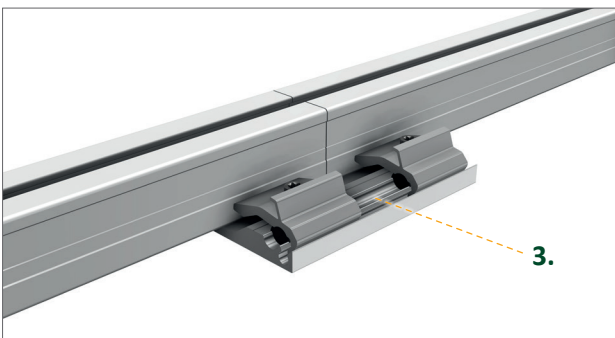
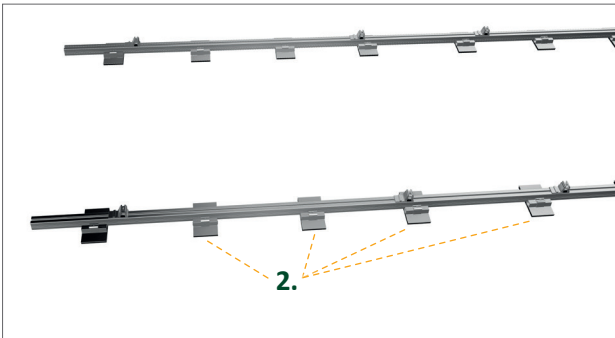
## Step 1: Design with Solar.Pro.Tool



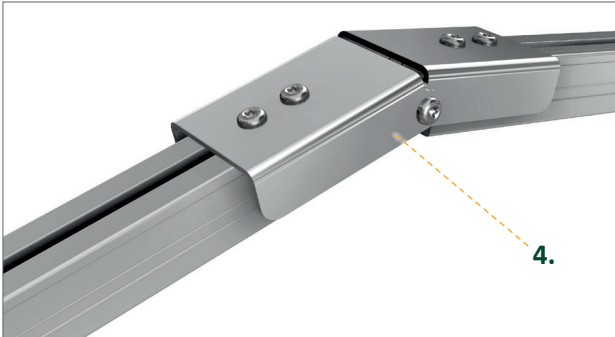
**!** In order to calculate the number and location of the Base Plates, the correct specification of the substrate insulation is essential.

## Step 2: Implementation of the installation plan

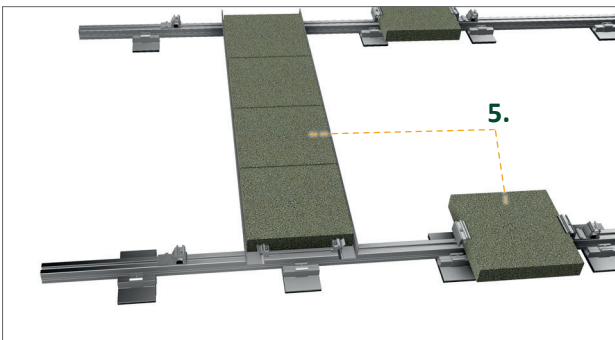
1. Measure the distances between the RAILS and lay them out.
2. Hook the Base Plate into the continuous RAIL, slide it to the correct position according to the specifications in the design report (Solar.Pro.Tool) and fasten it.
3. Hook the RAIL into the External Connector and fasten it with a tightening torque of 6 Nm.



## Step 2: Implementation of the installation plan



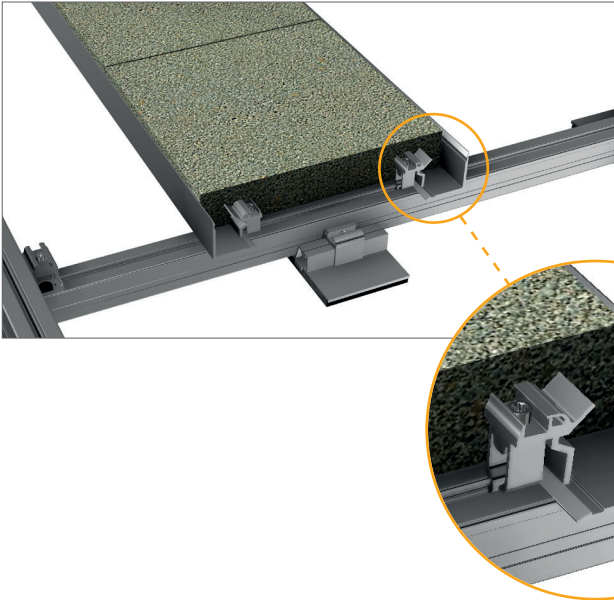
1. If ridge connectors are to be used, determine the position according to the specifications in the design documents (Solar.Pro.Tool), hook the RAILS into the pre-assembled ridge connectors and fasten them by tightening the screws with 6 Nm.



2. Position the specified number of ballast blocks according to the ballast plan, either onto the ballast brackets or, if flat ballast blocks are used, **directly onto the RAILS** (fixation with end clamps). See [Step 3: Ballasting](#).

**The tightening torque for all M6 screws is 6 Nm.**

## Step 3: Ballasting



Place the ballast brackets onto the RAIL according to the ballast plan and align them. When doing so adhere to the stipulated distances. Click the FLA Universal Clamps into the RAIL, hook them into the groove of the ballast brackets and fixate them with a tightening torque of 6 Nm.



**Optional:**

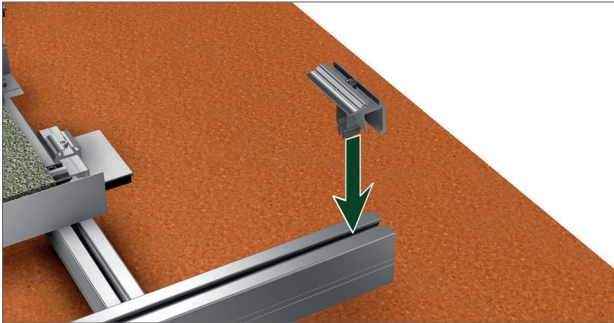
Flat pavers (up to 50 mm in height) can be attached directly to the RAIL, using module end clamps.

## Step 4: Cross-rail installation

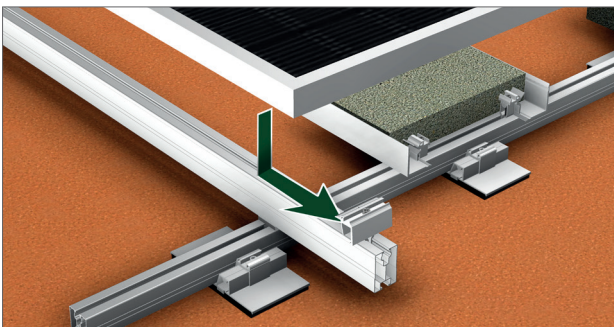


Click Cross Connector into RAIL 40, connect RAIL 60 (running horizontally to the ridge) and fixate it with a tightening torque of 10 Nm.

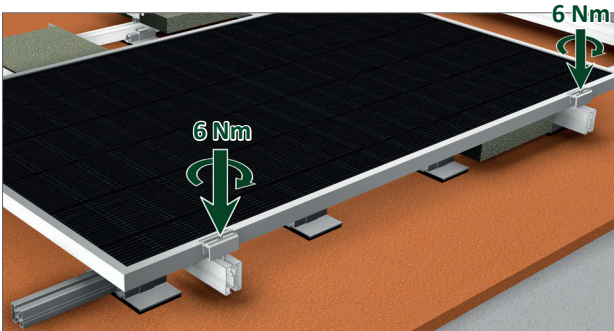
## Step 5: Module clamping



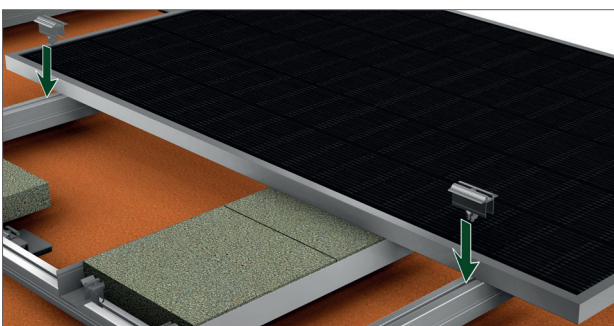
1. Click end clamp into RAIL 60.



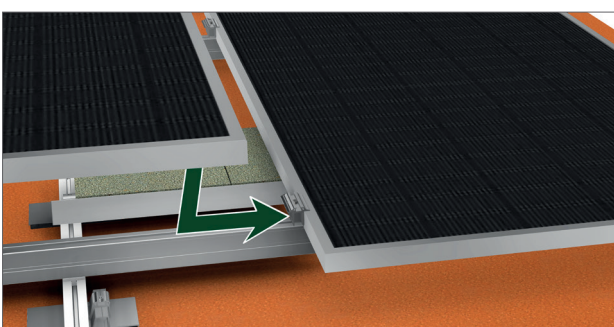
2. Place the module onto RAIL 60 and slide it underneath the end clamp.



3. Fasten the end clamp by fixating the screw with a tightening torque of 6 Nm.



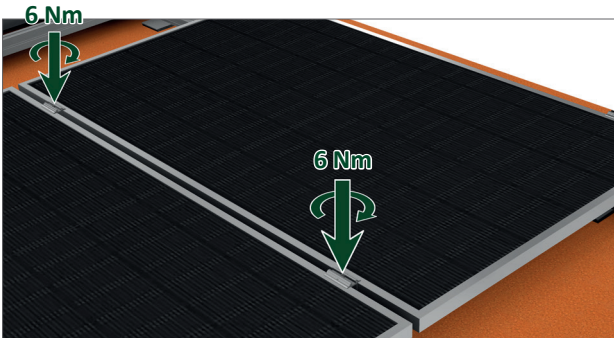
4. Click mid clamp into the RAIL and push it towards the module frame.



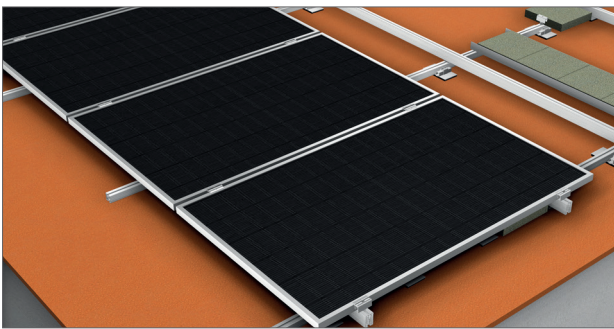
5. Place next module onto RAIL 60 and slide it below the mid clamp.



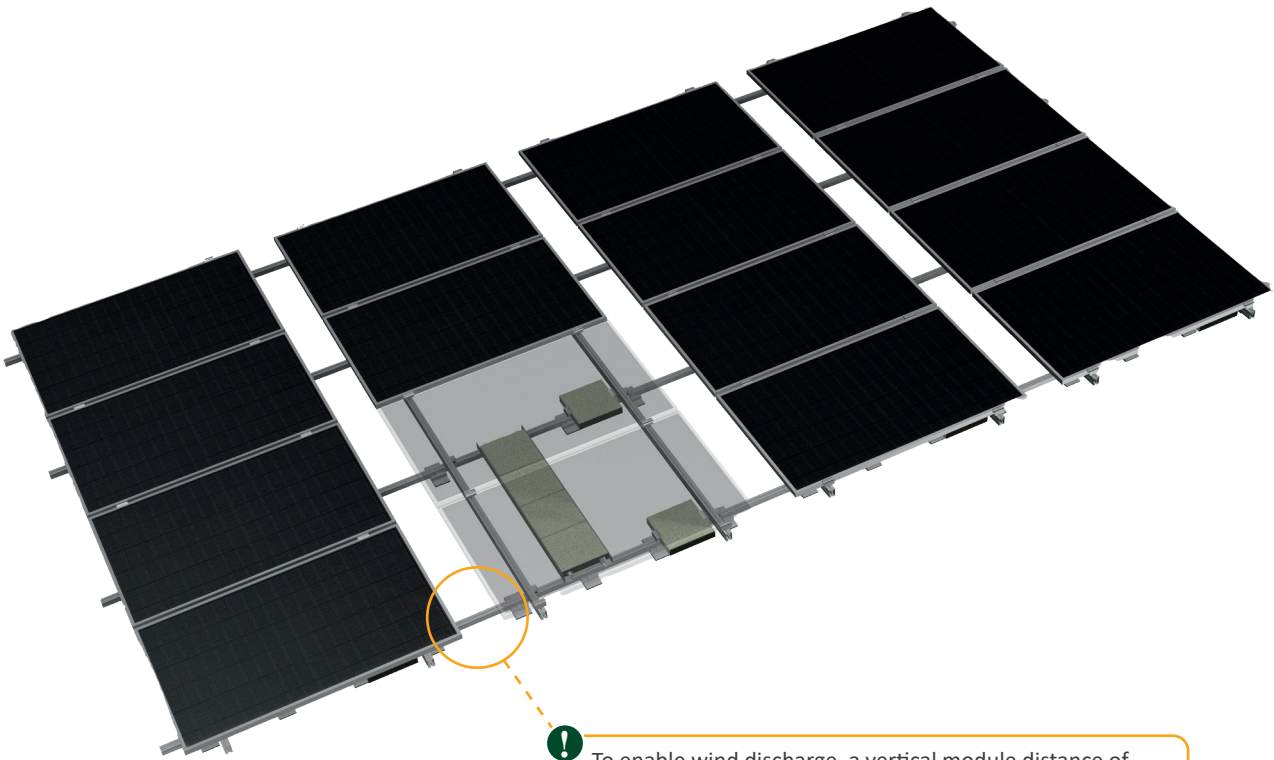
## Step 5: Module clamping



6. Fixate mid clamps by tightening the screws to 6 Nm.



7. Repeat until the end of the row. Finalize with end clamps.



! To enable wind discharge, a vertical module distance of 257 mm must be maintained, in order to prevent wind pressure from building up underneath the modules.



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Your praise, criticism and suggestions for improvement help us to do this.  
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