

TecSolaris Installation overview

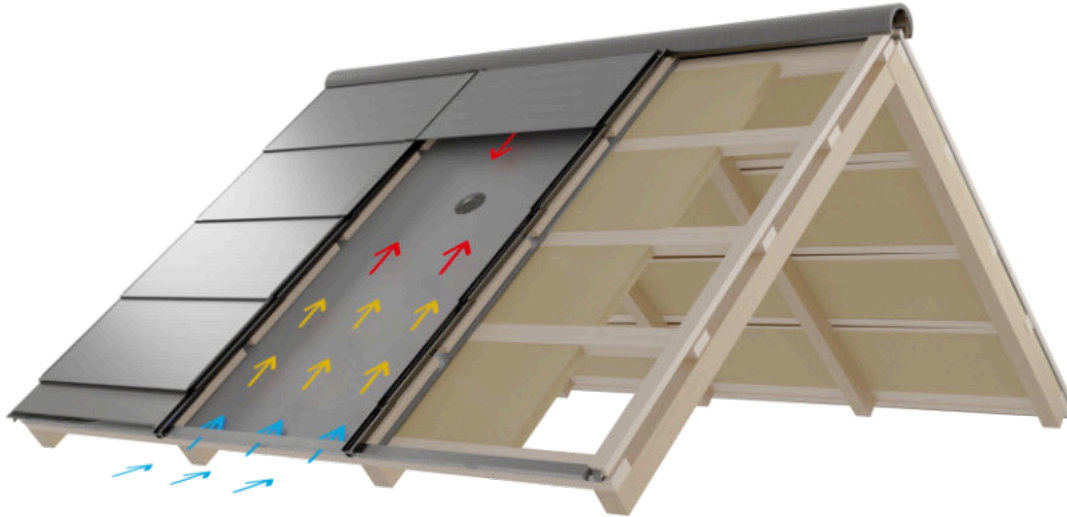


Quick Installation Guide for the TecSolaris® Climate Roof

Welcome to the future of sustainable roofing!

We are delighted by your interest in our TecSolaris® Climate Roof System.

By choosing innovative construction and sustainable energy generation, you are making a statement for the future – and we are proud to support you on this journey.



This quick guide provides you with an initial overview of the simple and well-designed installation of our system.

Please note:

This overview is intended solely to illustrate the installation steps and does not replace the complete installation manual.

The full, detailed manual is provided exclusively to our certified partner companies upon successful training and instruction.

This ensures that your TecSolaris® roof meets the highest quality standards and guarantees a long service life.

Immerse yourself in the world of TecSolaris – and experience how simple true innovation can be!

Parts List:

The parts list includes all components relevant to your project after pre-configuration and is therefore not listed separately in this quick guide.

A complete, project-specific parts list is provided to our certified partner companies along with the full installation manual after successful training and instruction.

Installation Materials:

The required installation materials are pre-configured according to the scope of your project and delivered accordingly.

They include, among other things:

- Counter battens
- Insulation material (Naturheld/Steico)
- Leveling cross battens
- Stainless steel gutter system incl. seals
- Front closures and air duct components
- Module carriers and fastening elements
- BIPVT modules (TecSolaris)
- Hold-down clamps for module fixation
- Sealing tapes, nail tapes, and connecting materials
- Side and ridge closures (optional)

All components are precisely coordinated to ensure smooth and secure installation.

Required Tools:

Depending on the project configuration and roof geometry, different tools may be needed.

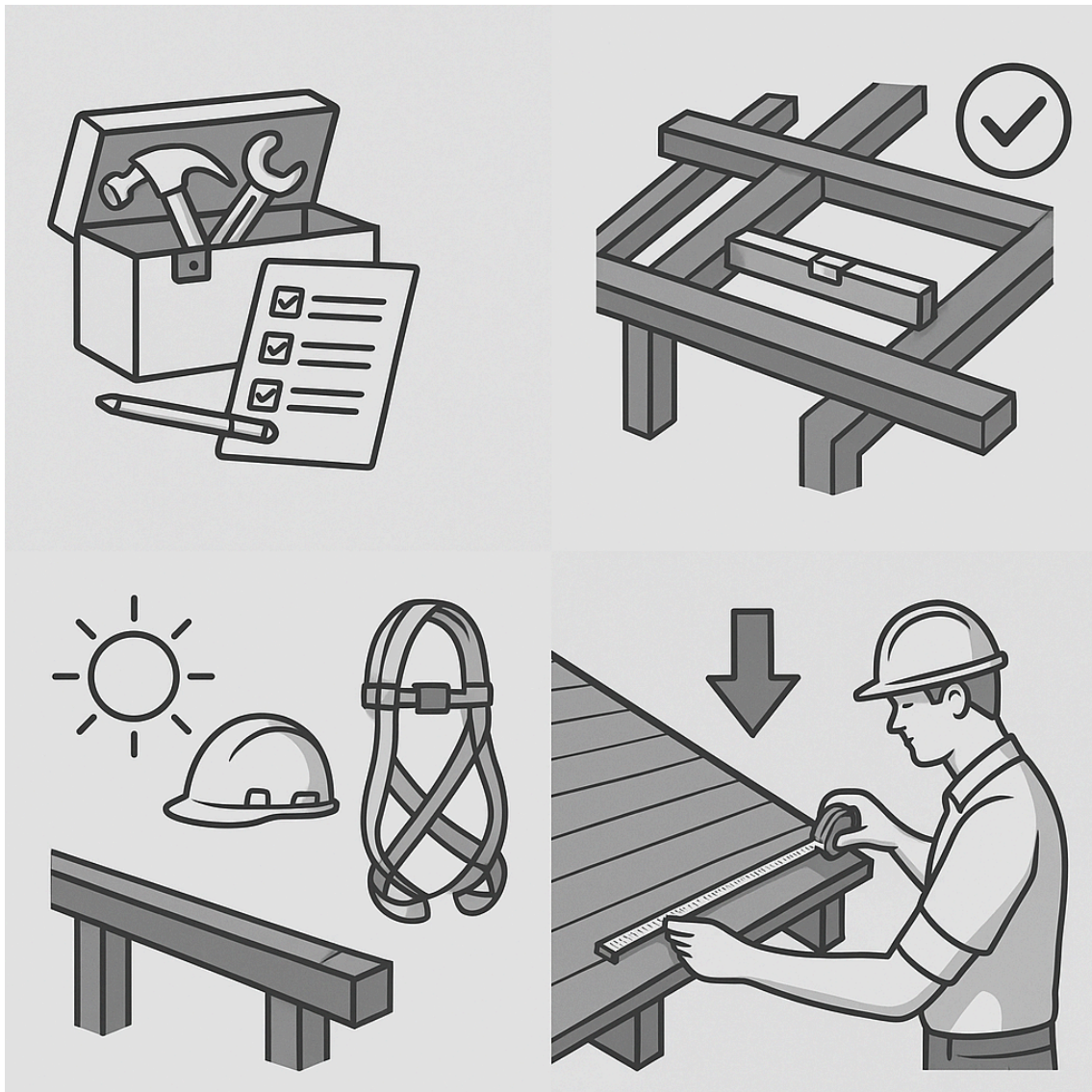
As a general recommendation, we suggest the following standard equipment:

- Cordless screwdriver with torque control
- Notch drill for counter battens
- Spirit level
- Installation wedges and spacers
- Multimeter for voltage testing
- Drill with hole saw (150 mm) for air outlets
- Installation tools for gutters and trim parts (e.g., TX screwdriver)
- If necessary, tin snips and rivet pliers for individual adjustments
- Protective gear (helmet, gloves, safety harness)

For special requirements such as snow guard systems or custom connections, you will receive additional tool recommendations during the partner training.

1. Preparation

- Check materials and tools according to the parts list.
- Inspect main rafters or beams for cleanliness and evenness.
- Assess weather conditions and take appropriate safety precautions.
- Measure the roof precisely and mark the position of the counter battens.
- Recheck the load-bearing capacity and stability of the substructure.



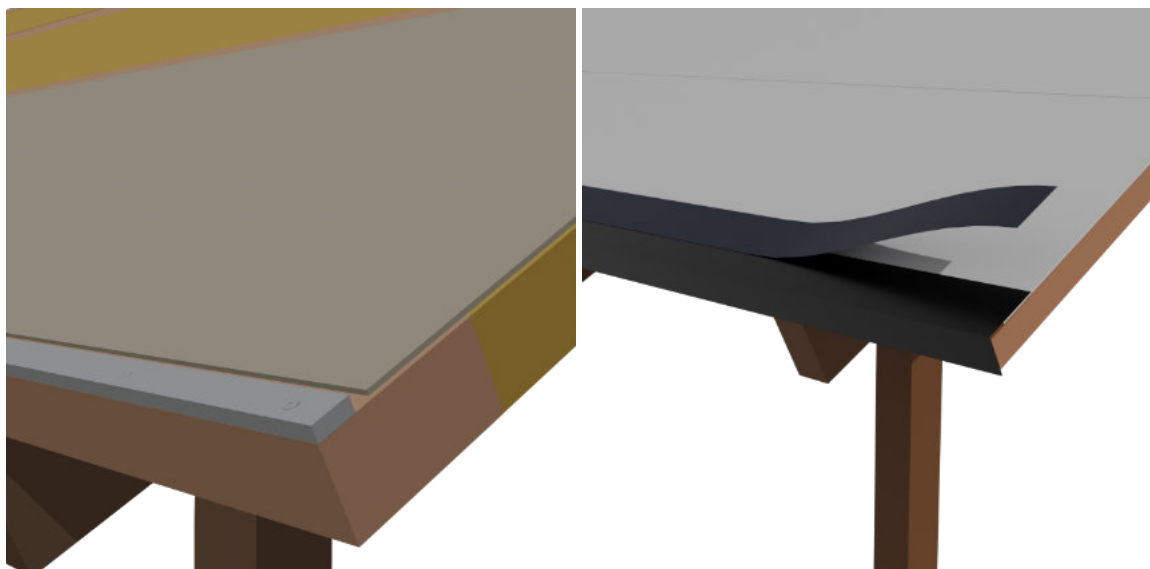
2. Installation of Counter Battens and Insulation

- Attach the counter battens to the rafters or beams (observe offset; use notch drill and nail tape).
- Lay the insulation (Naturheld/Steico) seamlessly between the counter battens.
- Use additional fasteners or foam binders if needed.



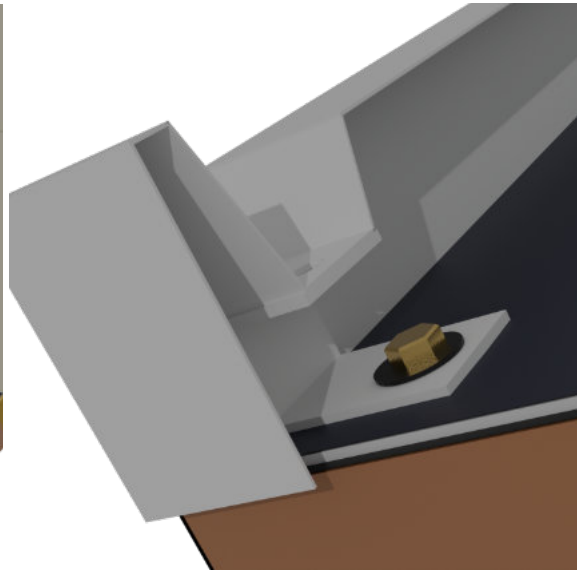
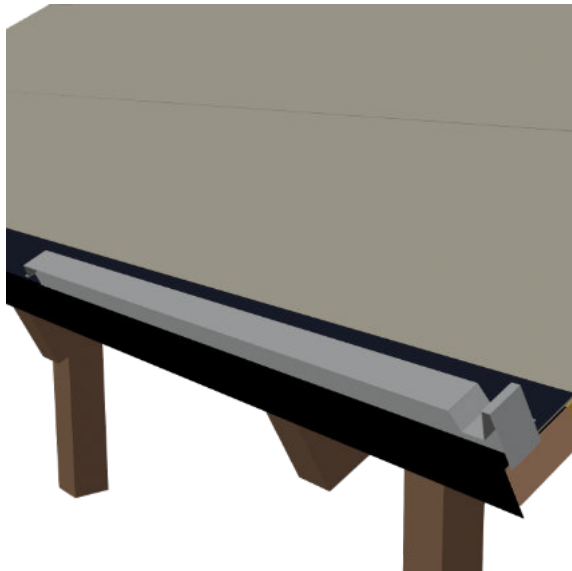
3. Applying the Top Layer

- Level the front edge precisely using a leveling counter batten.
- Install the first layers of the water-bearing layer (ESB/insulation board).
- Mount the eaves flashing and seal it carefully.
- Connect the boards accurately and apply all necessary seals.



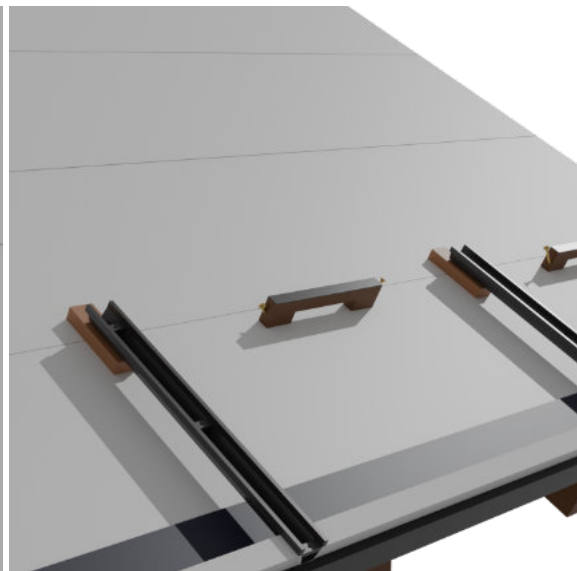
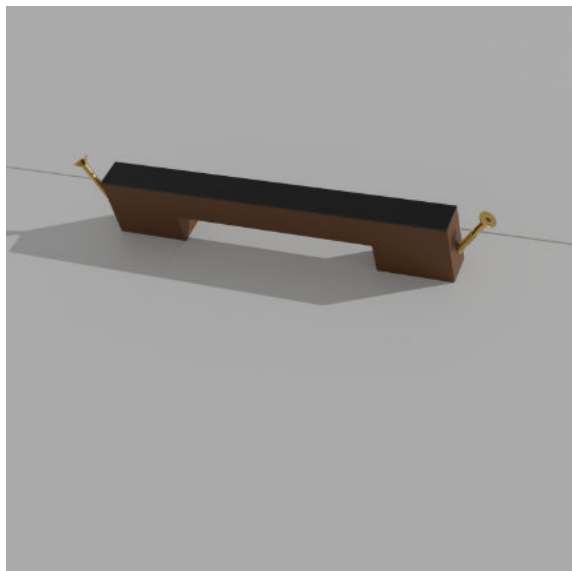
4. Installation of Front Closures

- Install front closures (air intake ducts).
- Ensure precise alignment and moisture protection.



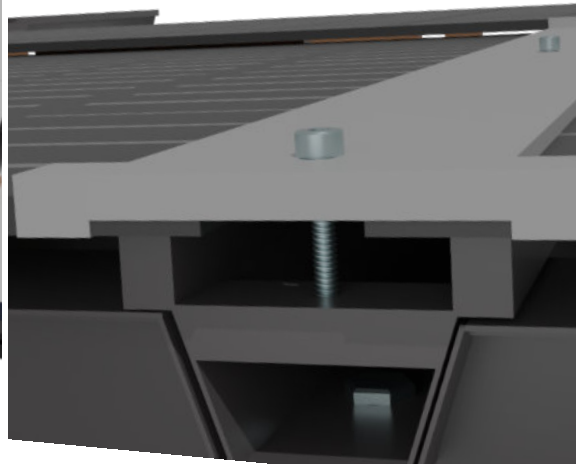
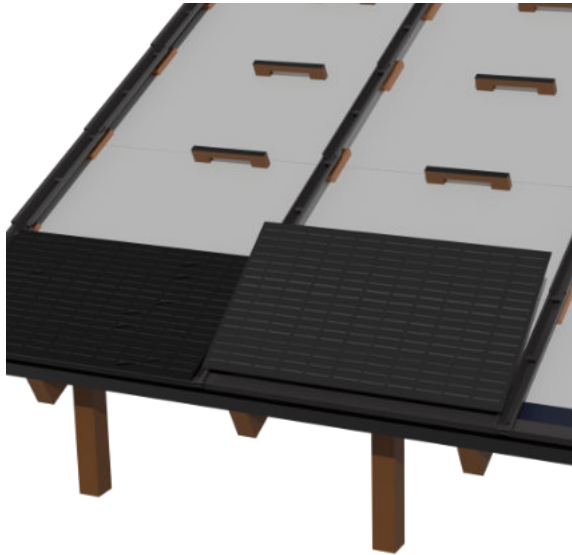
5. Construction of the Gutter Structure

- Place squared timbers as support padding.
- Secure the gutter structure with suitable screws and proper torque.
- Carefully check slope and watertightness.



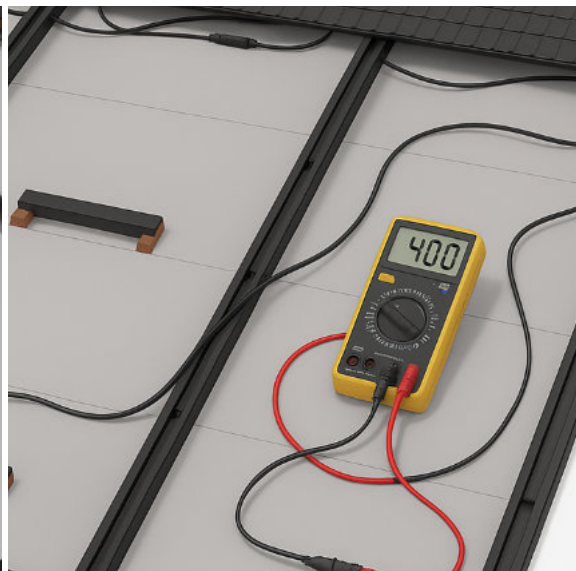
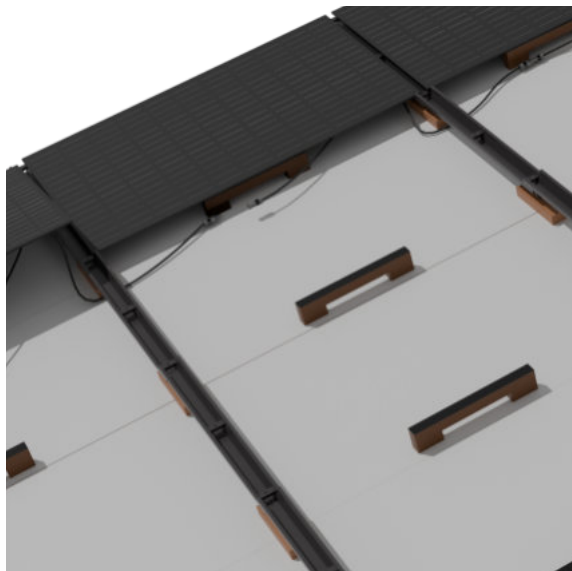
6. Laying the First Module Row

- Position the BIPVT modules on the gutters according to the grid dimensions.
- Install hold-down clamps with the specified torque.
- Ensure correct cabling without kinks.



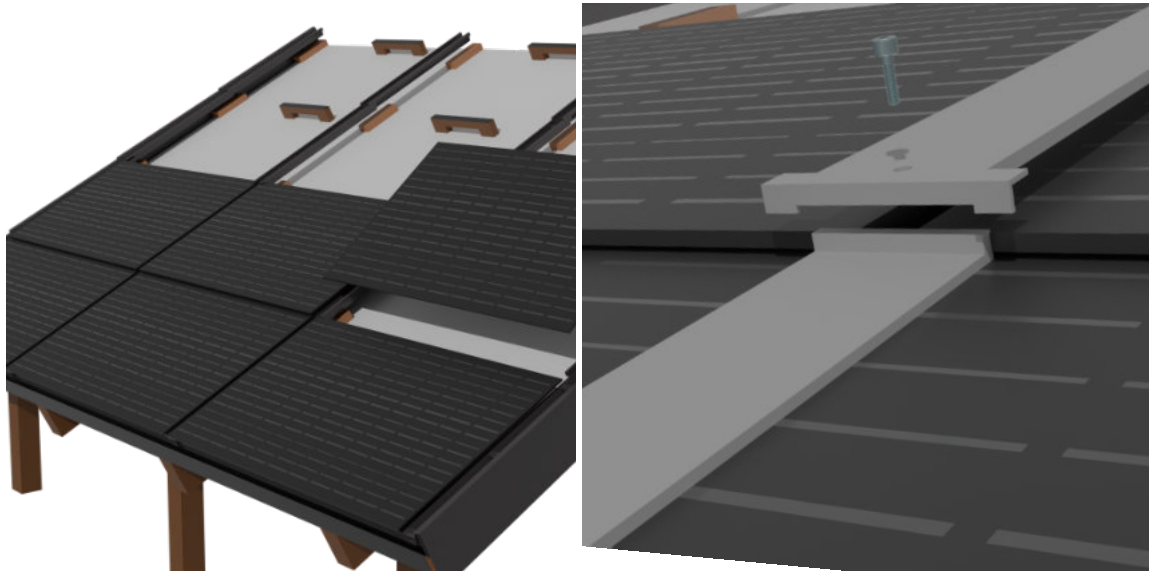
7. Electrical Wiring

- Wire the modules according to the pre-planned string layout.
- Route cables securely and neatly.
- Check voltage and connections using a multimeter.



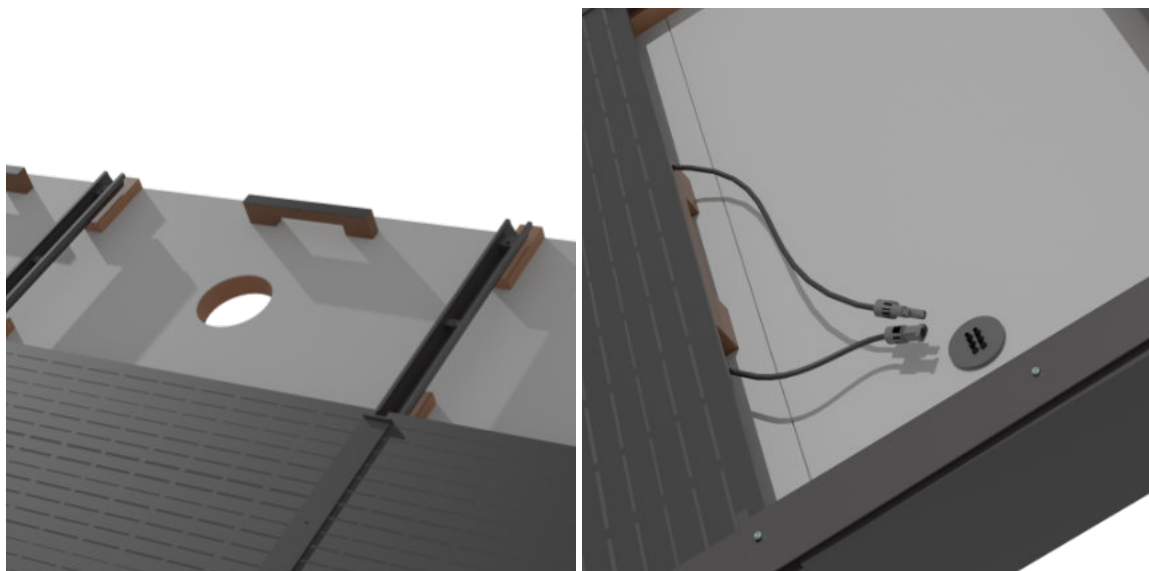
8. Laying Additional Module Rows

- Lay and secure additional rows in the same manner as the first.
- Ensure correct interlocking of the hold-down clamps.



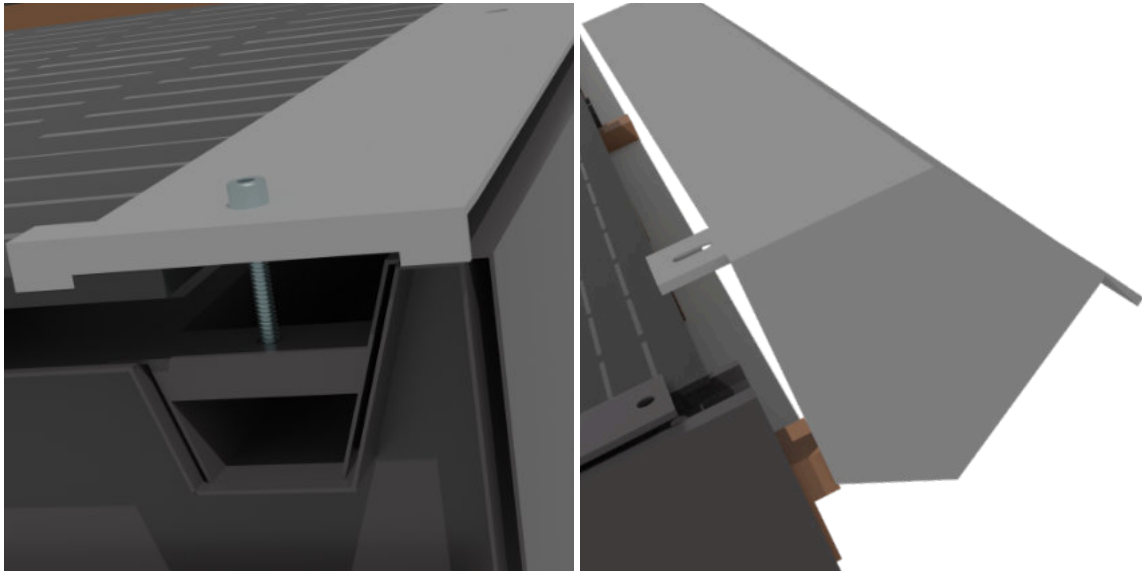
9. Ventilation Openings for the Air Chamber

- Create ventilation openings every three rows as planned.
- Bond sleeves over the entire surface of the water-bearing layer.
- Install cable penetrations, seal them, and feed cables through.



10. Final Work (Optional)

- Tighten hold-down clamps for side closures and install ridge solutions.
- Perform a final inspection for watertightness and structural stability.
- Carry out cleaning work and remove any excess materials.



11. Final Inspection and Commissioning

- Check all fastenings and connections.
- Test electrical functionality and document the connection layout for the inverter.
- Complete a visual inspection of the entire roof surface.



This quick guide provides you with a compact overview of the essential installation steps for the TecSolaris® Climate Roof System.

- The complete and detailed installation manual is available exclusively to certified partner companies following appropriate training and instruction.
- This ensures that the highest quality and safety standards are upheld for every project.
- We greatly appreciate your interest in TecSolaris® and would be happy to assist you. For questions or if you are considering an implementation, please contact us directly, your roofer, or one of our future certified partner companies.

Together, we are laying the foundation for a sustainable, efficient, and aesthetically sophisticated roof – perfectly tailored to your individual needs.

Your Energyhaus Team

Would you like to actively use TecSolaris® with your customers and become a certified partner company?

Then feel free to register directly using the contact details below.

We look forward to a successful collaboration!

EnergyHaus GmbH – Partner Registration

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