Compact Solar Roof with integrated photovoltaic system on trapezoidal metal deck

FOAMGLAS® READY BOARD with cold adhesive PC® 11

FOAMGLAS® Building

Schematic drawing

System 4.7.3

1 Trapezoidal metal deck
2 FOAMGLAS® READY BOARD, bonded with PC® 11
3 Two layers of bituminous waterproofing membranes
4 Photovoltaic laminate

FOAMGLAS® product properties

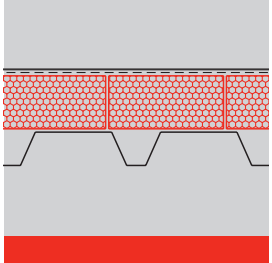
Waterproof – Resistant to vermin – High compressive strength – Non-combustible – Impervious to water vapour – Dimensionally stable – Acid resistant – Easily cut to shape – Ecological

Advantages of the FOAMGLAS® system

- **Quality:** Systems with high quality materials. Quality management by systematic site inspections and professional consulting.
- **Cost efficiency:** The high durability preserves maximum value and guarantees minimal maintenance costs.
- **Sustainability:** Optimum insulation and protection against moisture for generations. Gain of renewable solar energy with pioneering solar compact roof system.
- **Safety:** Compact, fully bonded waterproofing system preventing large-scale damages and renovations in the event of a leak caused by a puncture of the roofing membrane. No penetrations by mechanical fastening. No risk of condensate due to air leakage.
- **Functionality:** Easy and efficient application of the insulation. A bituminous waterproofing membrane can be directly torched on to it.

Recommendations for architects

- Normally used: FOAMGLAS® READY BOARD T4+, size 600 / 1200 mm.
- Insulation thickness to meet building regulations or project-specific U-value requirements. Please also consult our product overview. It contains information on all our products, their field of application and their specific properties.
- **The caracteristics of the steeldeck such as thickness, deflection, trough opening etc. are very important to choose the right type, thickness and / or application method of FOAMGLAS® (see TG1). Please contact our Technical Department to verify the criteria of the chosen steeldeck.**
- **For technically correct implementation, relevant standards and guidelines must be observed.**



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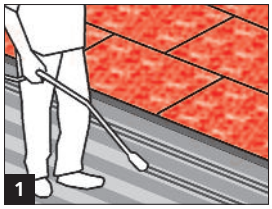
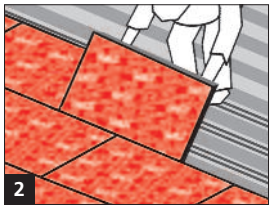
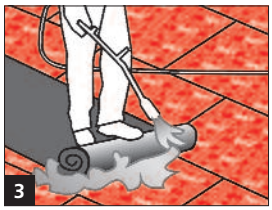
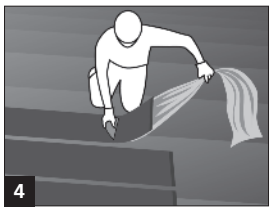
Installation instructions

- Clean and degrease the crowns of the profiled metal deck.
- Apply the FOAMGLAS® READY BOARDS with staggered and tight-butted joints with cold adhesive PC® 11, coverage ~ 1.0 kg/m²:
  Apply the cold adhesive PC® 11 in strips with a special pump to the tops of the trapezoidal sheets and bond the FOAMGLAS® READY BOARDS. In case of high requirements related to building physics (e. g. temperature and humidity in swimming pools), seal the joints. (1 / 2)
- Possible waterproofing variation: Apply two layers of bituminous waterproofing membranes covering the entire surface. First and second layer are torched on. Joints overlapping at least 100 mm, with staggered courses. (Further installation and waterproofing proposals with bituminous membranes or, for example, also with a combination of bituminous and synthetic membranes are available on request). (3)
- Bond the photovoltaic laminates. (4)









Recommendations for the contractor

- The build up and tolerences of the substrate have to be in accordance with relevant standards and guidelines.
- Ambient temperature and temperature of adhesive should not be below + 5° C.
- A layer of waterproofing membrane must be applied immediately after the insulation has been installed.
- Adequate measures should be taken in order to avoid any risks of damage by other contractors during construction.
- Protect sensitive components provided by other suppliers against blobs of adhesive and the effect of heat.
- The special pump for the application of the bituminous cold adhesive can be obtained from our company.
- **Please contact our technical consultants; they can help you by providing support or on-site assistance free of charge.**

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