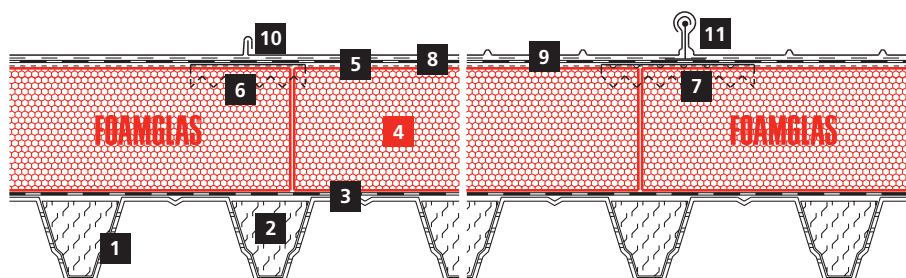


Compact Pitched Roof with standing seam or profiled metal sheet cladding on acoustic trapezoidal metal deck

FOAMGLAS® slabs with hot bitumen and PC® serrated fixing plates

Schematic drawing



System 4.6.4

- 1 Acoustic trapezoidal metal deck
- 2 Mineral fibre insulation infills
- 3 Self-adhesive layer
- 4 FOAMGLAS® slabs, laid in hot bitumen
- 5 Top coat of hot bitumen
- 6 Serrated fixing plate PC®SP 150/150
- 7 Serrated fixing plate PC®SP 200/200
- 8 Bituminous waterproofing membrane
- 9 Separating layer
- 10 Standing seam metal sheet
- 11 Profiled metal sheet

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

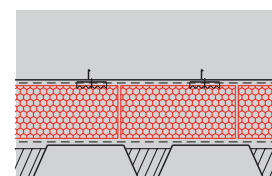
Advantages of the FOAMGLAS® system

- **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.
- **Safety:** Compact, fully bonded insulation 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:** Insulation and vapour barrier in one single functional layer. Flexible and easy installation of a gradient through prefabricated tapered slabs. Fixing of the metal roof cladding without thermal bridges. Easy and space-saving warm roof construction.

Recommendations for architects

- Normally used: FOAMGLAS® slabs T4+ or FOAMGLAS® TAPERED T4+, size 450/600 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.
- For the metal cladding a minimum gradient of 5 % (3 degrees) has to be observed.
- **A stop profile should be fixed to the deck at the bottom of the roof slope. The number of serrated fixing plates has to be calculated by the manufacturer of the metal cladding.**
- **The characteristics 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.**

Solutions for technical details and specification clauses on request. Further proposals and solutions are available any time from our technical consultants. **Updated: November 2010.** We explicitly reserve the right to change the technical specifications. The current values can be found on our website under: www.foamglas.co.uk/building/applications



Compact Pitched Roof with standing seam or profiled metal sheet cladding on acoustic trapezoidal metal deck

FOAMGLAS® slabs with hot bitumen and PC® serrated fixing plates

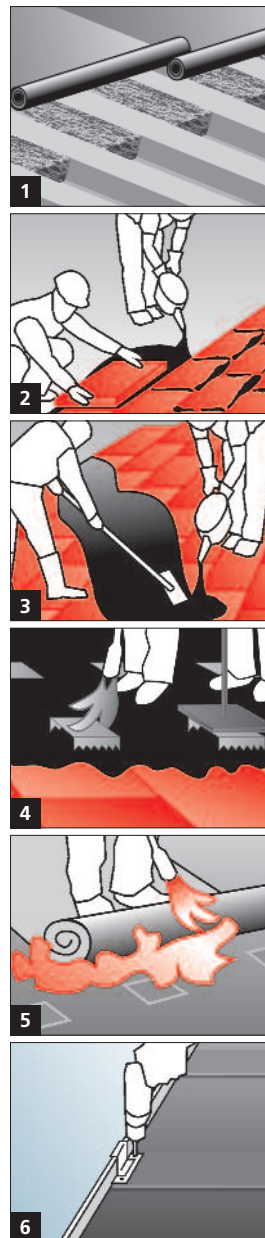
System 4.6.4

Installation instructions

- Clean and degrease the crowns of the profiled metal deck.
- Place the mineral fibre insulation infills in the profile depths of the trapezoidal metal sheets. (1)
- Apply a bituminous self-adhesive layer (appropriate product on request).
- Apply the FOAMGLAS® slabs fully bonded to the substrate with hot bitumen poured from a bitumen can, with staggered and bitumen-filled butted joints. Coverage $\sim 5.0 - 7.0 \text{ kg/m}^2$, dependent on the thickness of the insulation:
Dip a short as well as a long side of the slab in the poured bitumen and press into position against already laid slabs. Surplus bitumen spilt at the side must be removed with the next slab in order to avoid irregularities. (2)
- Top coat of hot bitumen, coverage $\sim 2.0 \text{ kg/m}^2$. Pour the hot bitumen and spread with the rubber spreader on the FOAMGLAS® surface. (3)
- Measuring and placing of the serrated fixing plates PC®SP 150/150, size 150 x 150 mm for standing-seam metal claddings or PC®SP 200/200, size 200 x 200 mm for claddings with profiled metal sheets. Number and spacing dependent on system-specific requirements and wind loads. Press in and bond the serrated fixing plates, while simultaneously heating up the bitumen layer lying underneath. (4)
- Torch on one layer of polyester-reinforced bituminous waterproofing membrane onto the full surface. Joints tight-butted, torched and sealed. (5)
- Separating layer according to the specifications of the metal cladding supplier and the acoustic requirements.
- Install the desired standing seam or profiled metal cladding. Fasten the fixing clips with appropriate self-drilling screws into the serrated fixing plates. (6)

Recommendations for the contractor

- The build up and tolerances of the substrate have to be in accordance with relevant standards and guidelines.
- Substrate and ambient temperature should not be below $+5^\circ \text{C}$.
- 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 hot bitumen and the effect of heat
- **Please contact our technical consultants; they can help you by providing support or on-site assistance free of charge.**



The technical guidelines for the application and the installation of FOAMGLAS® are based on historical experience and general site practice. They do not reflect individual examples. We therefore assume no liability as to the completeness and the suitability for a specific project. Furthermore, our liability and responsibility are subject to our general conditions of sale which are not extended either by this technical data sheet nor by the consulting of our technical sales representatives.

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