Façade Insulation Systems

Composite façade system with mounting boards and plaster finish

FOAMGLAS® slabs with cold adhesive PC® 56 und PC® serrated fixing plates

**Schematic drawing**

1. Solid wall (concrete/brickwork)
2. Primer coat
3. Anchor bolt
4. Serrated fixing plates PC® SP 150/150 perforated
5. FOAMGLAS® slabs, bonded with PC® 56
6. AQUAPANEL mounting board
7. MARMORIT SM 700 primer with Aquapanel reinforcing mesh
8. Dispersion, synthetic resin or mineral render

**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 damages caused by damp either through condensate or water penetration. Cellular glass prevents fire spread, does not develop flaming droplets, nor fumes or toxic gases.
- **Functionality:** Minimal thermal bridges through thermally optimized fixing system.
  Easy to install and space-saving system for façades without rear ventilation.
  Insulation and vapour barrier in one single functional layer.

**Recommendations for architects**

- Normally used: FOAMGLAS® slabs T4+, T3+, 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.
- **The flatness and the general conditions of the substrate are important criteria when using FOAMGLAS® (see TG1). Please contact our Technical Department to verify the criteria for the substrate.**
- **For a 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: 09/2016.** We explicitly reserve the right to change the technical specifications. The current values can be found on our website under:

[www.foamglas.com/distributors](http://www.foamglas.com/distributors) ➔ **English** ➔ **Applications**
Installation instructions
- Primer PC® EM or emulsion PC® 56 diluted with 10 parts of water, applied with roller on the dust-free surface. Coverage ~ 0.3 l/m².  
- Apply the FOAMGLAS® slabs fully bonded to the substrate, with staggered and tight-butted joints filled with cold adhesive PC® 56. Coverage ~ 3.5 – 4.5 kg/m², dependent on the thickness of the insulation: Apply cold adhesive PC® 56 with a notched trowel (tooth size ~ 8 – 10 mm) to one short and one long side of the FOAMGLAS® slab (in stacks). Apply cold adhesive to the entire surface of the slab and push diagonally into the open corner. Remove squeezed-out adhesive with a trowel when slightly hardened. (2/3)
- Fixing aid and mechanical fastening of the FOAMGLAS® slabs in the base area and at lintels (e.g. support bracket).
- Remove irregularities of the insulation surface with a FOAMGLAS® slab or preferably with an emery board. Remove dust from the FOAMGLAS® surface.
- Measuring and placing of the serrated fixing plates PC® SP 150/150, size 150 x 150 mm. Number and spacing dependent on the size of the mounting boards and the structural requirements, consumption ~ 4 pieces/m². Press in the serrated fixing plates PC® SP 150/150 and bond with cold adhesive PC® 56. Fix the countersunk anchor bolts. Type and size of anchor bolts according to the specifications of the supplier. (4)
- Mechanical fastening of the AQUAPANEL Cement Board Outdoor with screws Knauf Maxi SB 25 on to the serrated fixing plates PC® SP 150/150. Consumption ~ 14 pieces/board. Apply the mounting boards with vertically staggered, tight-butted joints. Fill the joints and the screw heads with joint filler-grey. (5)
- Apply base coat MARMORIT SM 700 with a stainless steel trowel, coverage ~ 5.0 – 7.0 kg/m². Embed reinforcing mesh evenly and flatly, then smooth the surface. (6)
- AQUAPANEL outside primer coat. Coverage ~ 0.10 – 0.15 l/m².
- Apply the desired rendering system (dispersion, synthetic resin or mineral plaster). Coverage ~ 3.0 kg/m².

Recommendations for the contractor
- The build up and tolerances of the substrate must be in accordance with relevant standards and guidelines.
- Before the application of the façade system, the quality of the substrate must be checked. If needed, a levelling layer of sand/cement render must be applied in order to level off irregularities.
- Substrate and ambient temperature should not be below + 5°C.
- The joints of the top layer of the last course must be protected against driving rain in order to prevent water penetration or washing out of the cold adhesive.
- Protect sensitive components provided by other suppliers against blobs of adhesive.
- Please contact our technical consultants; they can help you by providing support or on-site assistance free of charge.