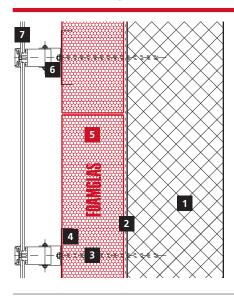
#### Façade Insulation Systems

### Solar façade with photovoltaic system

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



#### Schematic drawing



#### 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. Gain of renewable solar energy with pioneering solar panels for façades.
- 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. Insulation and moisture barrier in one single functional layer.

#### **Recommendations for architects**

- Normally used: FOAMGLAS® slabs 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.
- The flatness and the general conditions of the substrate are important criteria when using FOAMGLAS<sup>®</sup> (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: 01/03/2021.** We explicitly reserve the right to change the technical specifications. The current values can be found on our website under: **www.foamglas.ae** 

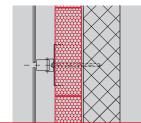
#### 1 Solid wall

(concrete/brickwork)

- 2 Primer coat
- 3 Anchor bolt
- 4 Serrated fixing plates PC<sup>®</sup>SP 150/150 perforated

**System 2.4.1** 

- 5 FOAMGLAS® slabs, bonded PC® 56
- 6 Substructure (e.g. metal)
- 7 Photovoltaic panel (Rainwater-proof)



## Solar façade with photovoltaic system

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

# CORNING FOAMGLAS

System 2.4.1

#### Installation instructions

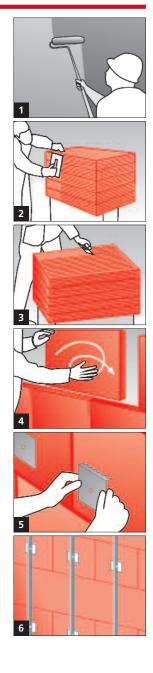
- Primer PC<sup>®</sup>EM or emulsion PC<sup>®</sup>56 diluted with 10 parts of water, applied with roller on the dust-free surface. Coverage ~ 0.3  $I/m^2$ . (1)
- Apply the FOAMGLAS<sup>®</sup> slabs fully bonded to the substrate, with staggered and tight-butted joints filled with cold adhesive PC<sup>®</sup> 56. Coverage ~ 3.5-4.5 kg/m<sup>2</sup>, dependent on the thickness of the insulation:

Apply cold adhesive PC<sup>®</sup> 56 with a notched trowel (tooth size  $\sim 8-10$  mm) to one short and one long side of the FOAMGLAS<sup>®</sup> 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. (2/3/4)

- 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 site conditions or structural requirements. 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. (5)
- Mechanical fastening of the substructure (e.g. metal) on to the serrated fixing plates  $PC^{\circ}SP$  150/150. Substructure according to the specifications of the supplier. (6)
- Install the crystalline photovoltaic panels.

#### **Recommendations for the contractor**

- The build up and tolerances of the substrate must be in accordance with relevant standards and guidelines.
- Substrate and ambient temperature should not be below  $+5^{\circ}$  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.



The technical guidelines for the application and the installation of FOAMGLAS<sup>®</sup> 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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