

FOAMGLAS® Insulation

Thermal Insulation System for the entire building envelope.

www.foamglas.ae

FOAMGLAS Building FOAMGLAS Building

## **Unique Product Properties**

- 1 Waterproof
- 2 Pest-proof
- 3 Compression-proof
- 4 Incombustible
- 5 Vapour-tight
- 6 Dimensionally stable
- 7 Acid-resistant/Chemical resistant
- 8 Easy to work with
- 9 Ecological

FOAMGLAS® is ecologically irreproachable and neutral in terms of building physics. FOAMGLAS® does not contain any propellants harmful to the ozone layer, flame retardants or binding agents. The main raw material consists of recycled glass (60%) obtained from plate glass. For the production green energy (from hydro-plants and wind turbines) is used. Consequently FOAMGLAS® is ecologically at the leading edge and doesn't need to shy away from any comparison with its competitors.

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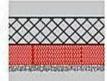
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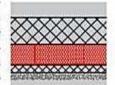


# Floor insulation FOAMGLAS® FLOOR BOARD

Thermal insulation in floors in contact with the soil requires especially stringent detailing. This is true above all because this part of the building is hardly accessible again – or only at great expense – throughout the whole service life of the building. Therefore, floor insulation must guarantee suitability for use without damage, a long service life and appropriate stability. FOAMGLAS® fulfils these criteria without problems, and may be used in accordance with building supervision approval even as load-bearing thermal insulation.

FOAMGLAS® may also be used in areas with constant water pressure (groundwater). For floors with a high surface, point or rolling load, FOAMGLAS® is the ideal insulation. Resistant to termites, rodents and insects, micro-organisms, roots and humic acid, with a high load capacity and deformation-free – these are the unsurpassed advantages of FOAMGLAS® for lasting thermal and moisture protection of structural elements in contact with the soil.









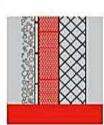
# Underground walls insulation FOAMGLAS® READY BOARD

FOAMGLAS® T4+

Underground walls create a very demanding environment as the insulation is prone to damage from moisture, soil pressure stresses and vermin or microorganisms.

The material is impermeable to water and forms a screen against the diffusion of water vapour. Using the compact application technique, there is no possibility of uncontrolled infiltration from saturated ground behind the insulation slabs. As a result, heat losses by thermal transfer and the infiltration of water behind the insulation on the wall cannot occur.

As an option, waterproofing membranes may be applied to FOAMGLAS® insulation. Only FOAMGLAS® insulation, which is non-compressible and non-deformable, provides a sufficiently stable support for fully adhering a damp-proofing finish. This also applies under conditions of permanent hydrostatic pressure, or a more sustained mechanical pressure from the ground.



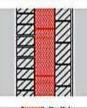


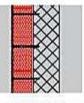
## Insulation system for façades FOAMGLAS® W+F FOAMGLAS® WALL BOARD

FOAMGLAS® is totally impervious to any form of moisture. No need for any additional vapour barrier. Other outstanding physical qualities of the glass material are: non-combustibility, dimensional stability (it cannot shrink or swell), it is not attacked by insects or rot, it's vermin and acid proof. The thermal insulation value remains as installed, for the lifetime of the building.

The FOAMGLAS® solution enables architect's schemes to be realised and adds to the structural stability of the whole concept. Independent of the finishing (natural stones, metal, glass, brick, exposed concrete, etc.): cellular glass insulation ensures exacting insulation values and the avoidance of thermal bridges with a particularly thin façade structure. Nearly all façade materials are suited.









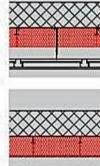


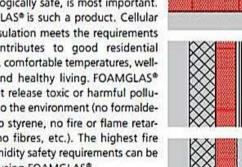
Interior insulation systems

FOAMGLAS® T4+

As FOAMGLAS® is considered to exert no adverse impacts on health and the environment, the insulation offers the perfect solution for rooms which are subject to the most demanding clean air requirements (museums, hospitals, schools, living areas, offices, high-tech production sites, etc.). Even under extreme conditions, as wet rooms, the system is extremely reliable.

For the preservation of health, a conscientious selection of materials, which are ecologically safe, is most important. FOAMGLAS® is such a product. Cellular glass insulation meets the requirements and contributes to good residential hygiene, comfortable temperatures, wellbeing and healthy living. FOAMGLAS® does not release toxic or harmful pollutants into the environment (no formaldehyde, no styrene, no fire or flame retardants, no fibres, etc.). The highest fire and humidity safety requirements can be met by using FOAMGLAS®.





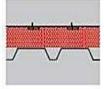


# Metal roof finishing

FOAMGLAS® T4+ FOAMGLAS® READY BLOCK/BOARD

The metal roof with FOAMGLAS® thermal insulation fulfils all stringent requirements, in terms of both aesthetics and safety. FOAMGLAS® offers great building physics safety, as it's incombustible and in the event of a fire, does not propagate the flames. At the same time, it provides long service live, high-performance thermal protection that remains unchanged over decades. The specially designed compatible fixing plate (PC® serrated plate) allows the standing seam brackets to be fixed without through fixings which create thermal bridges and without the need for ventilation spaces.

Independently of whether the substrate is straight or curved, FOAMGLAS® can be installed with an optimum adhered surface to the substrate. The surface is adjusted to the desired shape by sliding. With FOAMGLAS® there are no limits to freedom of design.







### FOAMGLAS® insulation

Proven durability

The outstanding characteristics of cellular glass insulation ensure optimal protection of the building. Due to the cell geometry with a "built-in" vapour barrier, moisture cannot enter the material. Damage caused by moisture or mould can be excluded with professional design and workmanship.

For more than 50 years architects, engineers, contractors and owners have chosen FOAMGLAS® insulation systems for housing and industrial construction, public buildings, commercial and institutional buildings.

#### The reasons are:

- FOAMGLAS® solutions are designed for high performance and durability
- Constant thermal insulation value
- Low cost due to easy installation and ultra-long service life
- Environmental sustainability from cradle to grave (production, use and disposal)

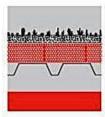




### Flat roof insulation on steel deck FOAMGLAS® READY BOARD

The fact that FOAMGLAS® cellular glass is completely incombustible is of prime significance in an industrial environment and fulfils the highest fire safety standards. For any steel deck application FOAMGLAS® is the prime material. Due to the high compressive strength it considerably stiffens the roof system, reduces the deflection, providing the optimal sub-ground to the weather-proofing membrane. Highly efficient and very cost effective solution for industrial building as well for commercial developments.







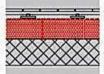
# Flat roof insulation on concrete FOAMGLAS® T4+

In the FOAMGLAS® compact roof all layers are homogeneously bonded to each other. As a result, water flow within the layers is impossible. Soaking through of the insulation layer and water infiltration are therefore excluded by the system. FOAMGLAS® is totally vapour-tight and cannot absorb any moisture. FOAMGLAS® is the only insulating material in which the vapour barrier, due to its material structure, is already "built in".

On the FOAMGLAS® Compact Roof any surface or finishing can be implemented. Depending on the use, terraces, green roofs, parking, gravelled or roofs with roofing membranes can be done on the high load bearing insulation (60 - 120 t/m²).

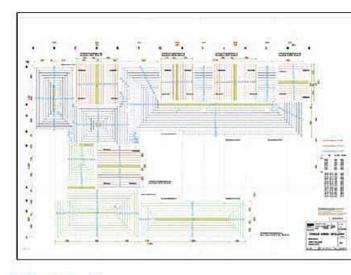












### **TAPERED Roof System**

FOAMGLAS® T4+ FOAMGLAS® S3, F

FOAMGLAS® TAPERED ROOF SYSTEM: insulation with integrated falls. The insulation system for flat roofs developed by Pittsburgh Corning is simply ingenious. The insulation slabs are cut-to-fall according to the requirements. Various gradients are available.

With the FOAMGLAS® Tapered Roof System water can be drained off quickly and completely. No more problems with stagnant water. There is no need for a concrete deck with falling gradient. This saves time and building material. In addition, the structure of the roof is lighter and safer. Long-term practical experience with the product has proven its effectiveness.

