



FOAMGLAS® T4+

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FOAMGLAS® T4+

Form of delivery (content per package)

| length x width [mm] | 600 x 450 | | | | | | | | |
|------------------------|-----------|------|------|------|------|------|------|------|------|
| thickness [mm] | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| R _D [m²K/W] | 0.95 | 1.20 | 1.45 | 1.70 | 1.95 | 2.20 | 2.40 | 2.65 | 2.90 |
| units | 12 | 10 | 8 | 7 | 6 | 6 | 5 | 5 | 4 |
| square metre [m²] | 3.24 | 2.70 | 2.16 | 1.89 | 1.62 | 1.62 | 1.35 | 1.35 | 1.08 |

| length x width [mm] | 600 x 450 | | | | | | | | |
|------------------------|-----------|------|------|------|------|------|------|------|--|
| thickness [mm] | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 | |
| R _D [m²K/W] | 3.15 | 3.40 | 3.65 | 3.90 | 4.15 | 4.35 | 4.60 | 4.85 | |
| units | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | |
| square metre [m²] | 1.08 | 1.08 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | |

Other dimensions and thicknesses are available on request.

General FOAMGLAS® Cellular Glass Insulation characteristics

| | |
|---|--|
| <p>Description</p> <p>Reaction to fire (EN 13501-1)</p> <p>Service temperature limits</p> <p>Water vapour resistance (EN ISO 10456)</p> <p>Hygroscopicity</p> <p>Capillarity</p> <p>Melting point (cf DIN 4102-17)</p> <p>Thermal expansion coefficient (EN 13471)</p> <p>Specific heat (EN ISO 10456)</p> <p>FOAMGLAS® characteristics</p> | <p>: FOAMGLAS® Insulation is manufactured from specially graded recycled glass* and natural raw materials which are available in abundant supply (sand, dolomite, lime...). The insulation is totally inorganic, contains no ozone depleting propellants, flame resistant additives or binders. Without VOC or other volatile substances.</p> <p>: Material complying with Euroclass A1, non-combustible, no toxic fumes</p> <p>: from -265°C to +430°C</p> <p>: $\mu = \infty$</p> <p>: zero</p> <p>: zero</p> <p>: >1000 °C</p> <p>: $9 \times 10^{-6} \text{ K}^{-1}$</p> <p>: 1000 J/(kg·K)</p> |
|---|--|





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1. Product characteristics according to EN 13167¹⁾ and ETA17/0903²⁾

| | |
|---|--|
| Density ($\pm 15\%$) (EN 1602) | : 115 kg/m ³ |
| Thickness (EN 823) ± 2 mm | : from 40 to 200 mm |
| Length (EN 822) ± 2 mm | : 600 mm (half slabs 300 mm available) |
| Width (EN 822) ± 2 mm | : 450 mm |
| Thermal conductivity (EN ISO 10456) | : $\lambda_D \leq 0.041$ W/(m·K) |
| Reaction to fire (EN 13501-1) | : Euroclass A1 |
| Point load (EN 12430) | : PL ≤ 1.5 mm |
| Compressive strength (EN 826 annexe A) | : CS ≥ 600 kPa |
| Characteristic value of compressive stress (ISO 12491:1997) ³⁾ | : $\sigma_{0,05} = 633$ KPa (n=50, $\sigma_{\text{mean}} = 750$ kPa, $s_0 = 55$ kPa) |
| Bending strength (EN 12089) | : BS ≥ 450 kPa |
| Tensile strength (EN 1607) | : TR ≥ 150 kPa |
| Compressive creep (EN 1606) | : CC (1,5/1/50) 225 |

- 1) CE-marking ensures conformity with the mandatory essential requirements of CPR as mentioned in EN 13167; within the CEN Keymark certification all mentioned characteristics are certified by an empowered, notified and accredited 3rd party.
- 2) ETA-17/0903 in reference to EAD no. 040777-00-1201 for the intended use cellular glass boards as load bearing layer and thermal insulation outside the waterproofing.
- 3) Characteristic value of compressive stress or compressive strength, 5%-fractile value for a one-sided confidence level of 75 % under unknown or known variance using ISO 12491:1997.

2. Additional product characteristics

| | |
|----------------------------------|--|
| Thermal diffusivity at 0°C | : 4.2×10^{-7} m ² /sec |
| Flexural modulus of elasticity E | : 700 MN/m ² |
| BRE Green Guide Rating | : A |
| Certificate natureplus | : 0406-1101-101-1 |
| NBS plus | : yes |
| RIBA - CPD Assessed Material | : yes |
| Green Spec® Listed | : yes |

3. Applications

Insulation for:

- flat roofs
- façades
- belowgrade floors and walls
- metal and special roofs
- interior insulation (walls, floors, ceilings)

* recycled glass consists of highly selected postconsumer glass and highly selected production scrap/co-products.