



# 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 <sub>D</sub> [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 <sub>D</sub> [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

Description	: 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.
Reaction to fire (EN 13501-1)	: Material complying with Euroclass A1, non-combustible, no toxic fumes
Service temperature limits	: from -265°C to +430°C
Water vapour resistance (EN ISO 10456)	: $\mu = \infty$
Hygroscopicity	: zero
Capillarity	: zero
Melting point (cf DIN 4102-17)	: >1000 °C
Thermal expansion coefficient (EN 13471)	: $9 \times 10^{-6} \text{ K}^{-1}$
Specific heat (EN ISO 10456)	: 1000 J/(kg·K)
FOAMGLAS® characteristics	: 





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## 1. Product characteristics according to EN 13167 <sup>1)</sup> and ETA17/0903 <sup>2)</sup>

Density ( $\pm 15\%$ ) (EN 1602)	: 115 kg/m <sup>3</sup>
Thickness (EN 823) $\pm 2$ mm	: from 40 to 200 mm
Length (EN 822) $\pm 2$ mm	: 600 mm (half slabs 300 mm available)
Width (EN 822) $\pm 2$ 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 $\leq 1.5$ mm
Compressive strength (EN 826 annexe A)	: CS $\geq 600$ kPa
Characteristic value of compressive stress (ISO 12491:1997) <sup>3</sup>	: $\sigma_{0,05} = 633$ KPa (n=50, $\sigma_{\text{mean}} = 750$ kPa, $s_0 = 55$ kPa)
Bending strength (EN 12089)	: BS $\geq 450$ kPa
Tensile strength (EN 1607)	: TR $\geq 150$ 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 3<sup>rd</sup> 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	: $4.2 \times 10^{-7}$ m <sup>2</sup> /sec
BRE Green Guide Rating	: A
Certificate natureplus	: 0406-1101-101-1
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.