



# FOAMGLAS® BOARD T4+

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FOAMGLAS® BOARD T4+ consists of FOAMGLAS® slabs bonded together. The upper side is covered with a PE/Glass Fleece Composite, the bottom with Glass Fleece; the top side is green, the bottom side is white.

### Form of delivery (content per package)

length x width [mm]	1200 x 600									
thickness [mm]	40	50	60	70	80	90	100	110	120	
units	6	5	4	4	3	3	3	2	2	
square metre [m <sup>2</sup> ]	4.32	3.60	2.88	2.88	2.16	2.16	2.16	1.44	1.44	

length x width [mm]	1200 x 600									
thickness [mm]	130	140	150	160	170	180	190	200		
units	2	2	2	2	14*	14*	4.60	4.85		
square metre [m <sup>2</sup> ]	1.44	1.44	1.44	1.44	10.08	10.08	12*	12*		

Other dimensions and thicknesses are available on request.

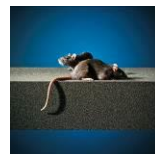
\* No single package, but all boards on a pallet.

### 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)	: Core 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	



Waterproof



Resistant to attack



High compressive strength



Acid resistant / chemical resistant



Easy cut to shape



Non-combustible



Impervious to water vapour



Dimensionally stable



Ecological



Radon protection



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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 up to 200 mm
Length (EN 822) $\pm 5$ mm	: 1200 mm
Width (EN 822) $\pm 2$ mm	: 600 mm
Thermal conductivity (EN ISO 10456)	: $\lambda_D \leq 0.041$ W/(m·K)
Reaction to fire (EN 13501-1)	: Euroclass E (Core material 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 data

Thermal diffusivity at 0°C	: $4.2 \times 10^{-7}$ m <sup>2</sup> /sec
$\lambda_D$ -value and mean $t^{\circ}$ range (EN ISO 13787)	: $+ 35$ °C $\leq 0.045$ W/(m·K)
BRE Green Guide Rating	: A
Environmental Product Declaration (ISO 14025 and EN 15804)	: EPD-PCE-20150042-IBA1-DE

## 3. Applications

Insulation with medium mechanical strength requirements of:

- façades
- cavity walls (in between 2 concrete shells)
- walls and soffits; interior insulation behind brick lining, plasterboard stud wall construction
- floors (incl. below ground structures)