



FOAMGLAS®

PRODUCT DATA SHEET

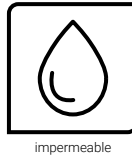
FOAMGLAS® S3



FOAMGLAS® S3 slab is a high performance and long-lasting cellular glass insulation material. It offers insulation for areas with high load requirements. It is a lightweight, rigid and durable insulation, composed of millions of completely sealed glass cells.



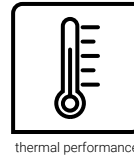
Product features



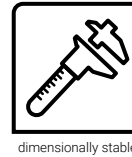
impermeable



non-combustible



thermal performance



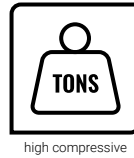
dimensionally stable



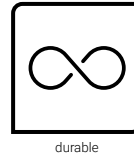
pest-proof



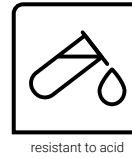
vapour-tight



high compressive strength



durable



resistant to acid



resistant to radon gas

Applications

Insulation for high compressive strength requirements:

- flat roofing systems including concrete, timber and metal substrates
- heavy load roofs, including vehicle access and equipment plant
- internal floor insulation in industrial environments
- below ground and perimeter insulation
- foundation slabs

Dimensions

Length x width (mm)	600 x 450								
Thickness (mm)	40	50	60	70	80	90	100	110	120
R _D (m ² K/W)	0.85	1.10	1.30	1.55	1.75	2.00	2.20	2.40	2.65

Length x width (mm)	600 x 450								
Thickness (mm)	130	140	150	160	170	180	190	200	
R _D (m ² K/W)	2.85	3.10	3.30	3.55	3.75	4.00	4.20	4.40	

Product characteristics conforming to EN 13167 and ETA-20/0221

Density (EN 1602) ± 10%	123 kg/m ³
Thickness (EN 823) ± 2 mm	40 - 200 mm
Length (EN 822) ± 2 mm	600 mm
Width (EN 822) ± 2 mm	450 mm
Thermal conductivity (EN ISO 10456)	$\lambda_D \leq 0.045 \text{ W/(m}\cdot\text{K)}$
Reaction to fire (EN 13501-1)	Euroclass A1
Point load (EN 12430)	≤ 1.0 mm
Compressive strength (EN 826 annexe A)	≥ 900 kPa
Characteristic value of compressive stress (ISO 12491:1997) ¹⁾	$\sigma_{0,05} = 905 \text{ KPa}$ ($n=50, \sigma_{\text{mean}} = 1097 \text{ kPa}, s_0 = 127 \text{ kPa}$)
Compressive creep (EN 1606)	(1.5/1/50) 350
Bending strength (EN 12089)	≥ 500 kPa
Tensile strength (EN 1607)	≥ 200 kPa

1) Characteristic value of compressive stress or compressive strength, 5%-fractile value for a one-sided confidence level of 75% underunknown or known variance using ISO 12491:1997.

CE-marking ensures conformity with the mandatory essential requirements of CPR as mentioned in EN 13167; within the Keymark certification all mentioned characteristics are certified by an empowered, notified and accredited 3rd party. ETA-20/0221 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.

Certificates

Keymark certificate	Environmental Product Declaration (EPD)
natureplus® certificate	FM approved

General FOAMGLAS® characteristics

FOAMGLAS® insulation is made of recycled glass and natural raw materials which are available in abundant supply (sand, dolomite, lime, etc.). The insulation is inorganic, contains no ozone depleting propellants, flame resistant additives, binders, Volatile Organic Compounds (VOC's) or other volatile substances.

Water vapour resistance (EN ISO 10456)	$\mu = \infty$
Hygroscopicity (EN ISO 12571)	zero
Capillarity (EN 1015-18)	zero
Thermal expansion coefficient (EN 13471)	$9 \times 10^{-6} \text{ K}^{-1}$
Specific heat (EN ISO 10456)	1000 J/(kg·K)

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