



FOAMGLAS® INVATHERM™

Page: 1 Date: 26.06.2020 Supersedes: 29.01.2020 www.foamglas.com



FOAMGLAS® INVATHERM™, as part of the inverted roof system, is cellular glass with a pre-applied inorganic coating* on the topside. Both the core material and the coating have an A1 -fire reaction classification and therefore is incombustible.

Form of delivery (content per pallet)

length x width [mm]	600 x 450					
thickness [mm]	50**	100	120	140	160	200
units	96	48	40	32	28	24
square metre [m²]	25.92	12.96	10.8	8.64	7.56	6.48

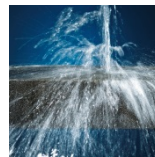
* Color: Shade of grey cannot be guaranteed and can vary in batch
 ** this thickness is for vertical use (upstands etc) only.

General FOAMGLAS® Cellular Glass Insulation characteristics

- Description : FOAMGLAS® Insulation is manufactured from specially graded recycled glass (≥ 60%)* 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 :



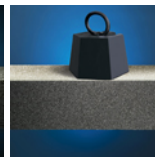
Time-tested thermal performance



Waterproof



Resistant to attack



High compressive strength



Acid resistant / chemical resistant



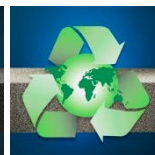
Non-combustible



Impervious to water vapour



Dimensionally stable



Ecological



Radon protection



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1. Product characteristics according to EN 13167

Density ($\pm 15\%$) (EN 1602)	: 100 kg/m ³
Thickness (EN 823) ± 2 mm	: from 50 to 200 mm
Length (EN 822) ± 2 mm	: 600 mm ± 3 mm
Width (EN 822) ± 2 mm	: 450 mm ± 3 mm
Squareness (EN 824)	: $S_{l,b} \leq 5$ mm/m, $S_d \leq 2$ mm
Flatness (EN 825)	: ≤ 2 mm
Thermal conductivity (EN ISO 10456)	: $\lambda_D \leq 0,038$ W/(m·K) : $\lambda_{cor} \leq 0.043$ W/(m·K) = worst case
Reaction to fire (EN 13501-1)	: Euroclass A1
Point load (EN 12430)	: PL ≤ 1.5 mm
Point load Top (EN 12430)	: PL ≤ 1 mm ($\leq 0,5$ mm)
Compressive strength (EN 826 annexe A)	: CS ≥ 400 kPa
Bending strength (EN 12089)	: BS ≥ 400 kPa
Tensile strength (EN 1607)	TR ≥ 100 kPa
Dimensional stability after 48h @ 70°C & 90% RH (EN 1604)	: DS(70,90), $\Delta\epsilon_{l,b} \leq 0,5$ %, $\Delta\epsilon_d \leq 1$ %
Water absorption on short term (EN 1609)	: WS $\leq 0,5$ kg/m ²
Water vapour transmission (EN 12086)	: ∞
Color	: grey ¹⁾
Freeze-Thaw	: resistant

1) Color: Shade of grey cannot be guaranteed and can vary in batch.

2. Applications

Inverted Roof with a non-combustible insulation

* $\geq 60\%$ recycled glass consists of highly selected postconsumer glass and highly selected production scrap/co-products.