FOAMGLAS® PERINSUL HL (High load)

CE

FOAMGLAS® PERINSUL HL is a very high density speciality product used to eliminate structural thermal bridging. The upper and the lower surface of the insulation are bitumen coated and laminated with a PE/Glass Fleece Composite, compatible with mortar. The upper side is green.

Form of delivery (content per package)

thickness x length [mm]	**65 x 450 mm**		
width [mm]	100	140	215
R_D [m^2K/W]	1.10	1.10	1.10
units	25	17	12
linear running metre [m]	11.25	7.65	5.40

thickness x length [mm]	**100 x 450 mm**		
width [mm]	100	140	215
R_D [m^2K/W]	1.70	1.70	1.70
units	15	10	7
linear running metre [m]	6.75	4.50	3.15

Other dimensions 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)	: 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 x 10^{-6} / K
Specific heat (EN ISO 10456)	: 1000 J/(kg.K)
FOAMGLAS® characteristics	:


Time-tested thermal performance


Waterproof

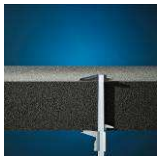

Resistant to attack


High compressive strength

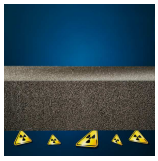

Acid resistant / chemical resistant


Non-combustible


Impervious to water vapour


Dimensionally stable


Ecological


Radon protection

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1. Product characteristics conforming to EN 13167

Density (± 15%) (EN 1602)	: 200 kg/m^3
Thickness (EN 823) ± 2 mm	: 65, 100 mm
Length (EN 822) ± 2 mm	: 450 mm
Width (EN 822) ± 2 mm	: from 90 to 365 mm
Thermal conductivity (EN ISO 10456) [1)]	: $\lambda_D \leq 0.068$ W/(m·K)
Reaction to fire (EN 13501-1)	: Euroclass E (Core material Euroclass A1)
Point load (EN 12430)	: PL ≤ 1.0 mm
Compressive strength (EN 826 annex A)	: CS ≥ 2.75 MPa

[1)] Horizontal thermal conductivity (EN ISO 10456) is $\lambda_D \leq 0.058$ W/(m·K)

2. Additional product characteristics

Thermal diffusivity at 0°C	: 3.5 x 10^{-7} m^2/sec	
Compressive strength CS-mean per unit capped with mortar (EN 772-1) [1)]	: f_b = 2,9 MPa ± 25%	
Compressive strength of masonry f_k [1)]	: **KZ**: limestone:	$f_k \geq 1.80$ MPa
	P: full ceramic stone:	$f_k \geq 1.60$ MPa
	SB: ceramic fast block:	$f_k \geq 1.50$ MPa
Flexural modulus of elasticity	: E = 1500 MN/m^2	

[1)] Tested in conformity with EN 1996-1-1 (Eurocode 6 'Masonry') and some test specimen in conformity with EN-1052-1 in MPa or N/mm^2. Also the ETA 013/0163 (European Technical Approval) is currently under revision to become an ETA-European Technical Assessment according the CPR-latest procedures.

3. Applications

- Floor-wall base element to eliminate structural thermal bridging and rising damp
- Parapet walls