

### Optimal performance down to the last detail - GEOMATERIALS Schaumglasschotter SGS

Load-bearing insulation material – DIBT Approval Z - 23.34 - 2163 + BTZ-0044			
Load-bearing bulk material – DIN EN 13055-2/2004			
Particle size distribution	EN 933-1	10 - 60	mm
Bulk density, dry <sup>(1)</sup>	EN 1097-3	130 - 170	kg/m <sup>3</sup>
Shear parameters for internal friction <sup>(2)</sup>	Factory spec.	42 - 45	°
max. water absorption at 30 % compression	Factory spec.	≤ 40	M %
max. water absorption per individual particle	EN 1097-6	≤ 10	V %
Water permeability in fill after 30% compression	EN 18130-1	≥ 10 <sup>-3</sup>	m/s
Bulk density of individual particle	EN 1097-6	0,220 - 0,300	g/cm <sup>3</sup>
Porosity of individual particle	Factory spec.	85 - 88	%
Unconfined compressive strength of individual particle	EN 17892-7	≥ 0,8	N/mm <sup>2</sup>
Unconfined compressive strength with transverse strain prevented at 30% pre-compression and further 10% compression <sup>(3)</sup>	EN 826	≥ 580	kPa
Thermal conductivity <sup>(4)</sup>	EN 12667	≤ 0,0800	W/mk
Cohesion (calculation value)	c	0,00	kN/m <sup>2</sup>
Condensation	Prevents condensation in the building component		
Frost resistance <sup>(5)</sup>	GEOMATERIALS Foam Glass is verifiably frost-resistant		
Diffusion properties	Breathable		
Capillarity <sup>(6)</sup>	GEOMATERIALS Foam Glass is non-capillary and thus resistant to rising water		
Fire behavior	A1: Non-combustible material as per DIN 4102-1		
Resistant against environmental influences	GEOMATERIALS Foam Glass is resistant against aging, acids and alkalies, rodents, bacteria and rot.		

There are no restrictions on the use of GEOMATERIALS Foam Glass in protected areas as per the provisions relating to water management and water law set out in the German Federal Soil Protection Act (BodSchG).

(1) Taking into consideration the proportion of bound water on the surface of the particle

(2) According to factory specifications

(3) According to the German National Technical Approval: unconfined compressive strength test in accordance with standard DIN EN 826 (1996-05)

(4) According to the German National Technical Approval: thermal conductivity test in accordance with standards DIN EN 12667 and DIN EN 12939

(5) According to the specifications of German National Technical Approval No. Z-23.34 - 2163, the manufacturer of GEOMATERIALS Foam Glass is required to demonstrably guarantee the frost resistance of the material by measuring its freeze-thaw fluctuating behavior (DIN 52 104-1) in its certificate of conformity

(6) Non-capillary characteristics result from the low proportion of fine particles and the void content

All specifications on technical parameters are minimum specifications. The manufacturer can exceed these by providing evidence in the form of the factory production control (FPC).

The technical guidelines for the application and installation of GEOMATERIALS Foam Glass are based on previous experience and the current state of technology. They are not based on an individual case. In light of this, we assume no liability for the completeness and suitability of a particular project. Furthermore, the scope of our liability and responsibility is governed solely by our general terms and conditions and cannot be extended either by statements made in this brochure or by advice given by our technical consultants.