



## GLASS - A SOLID FOUNDATION

# Technical data

### TECHNOpor GLASS FOAM-GRANULAT SPECIFICATIONS

Properties	Unit	Standard				Special specifications - manufactured on request			
		PERIMETER 50	FILL 100	PRESSURE 50	Highways <sup>1)</sup>	PERIMETER 50	FILL 100	PRESSURE 50	Highways <sup>1)</sup>
Grain size, uncompacted	mm	30/50	30/100	30/50	typ. 30/50	30/50	30/100	30/50	typ. 30/50
Loose weight	kg/m <sup>3</sup>	~ 170	~ 130	~ 220	~ 150 bis ~ 250	~ 170	~ 130	~ 220	~ 150 bis ~ 250
Water absorption (grain)	vol. %	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7
Equilibrium moisture content	M %	≤ 0,01	≤ 0,01	≤ 0,01 <sup>2)</sup>	-	≤ 0,01	≤ 0,01	≤ 0,01 <sup>2)</sup>	-
Lambda, grain	W/mK	0,045 <sup>2)</sup>	0,050 <sup>2)</sup>	0,055 <sup>2)</sup>	-	0,045	0,050	0,055	-
Lambda, dry repose ≤ 25 cm	W/mK	0,085	0,08	0,09 <sup>2)</sup>	-	0,085	0,08	0,09	-
Lambda, dry repose > 25 cm	W/mK	0,075	0,07	0,08 <sup>2)</sup>	-	0,075	0,07	0,08	-
Effective heat capacity	J/m <sup>3</sup> K	~ 144500	~ 110500	~ 187000 <sup>2)</sup>	-	~ 144500	~ 110500	~ 187000	-
Specific effective heat capacity	J/kgK	~ 850	~ 850	~ 850 <sup>2)</sup>	-	~ 850	~ 850	~ 850	-
Minimum installation depth, uncompacted	cm	15	15	15	15	15	15	15	15
Compacting factor, type	Factor	1,1 bis 1,3:1	1,0 bis 1,4:1	1,1 bis 1,3:1	1,2 bis 1,3:1	1,1 bis 1,3:1	1,0 bis 1,4:1	1,1 bis 1,3:1	1,2 bis 1,3:1
Voids content, compacted repose	%	≤ 35	≤ 35	≤ 35	≤ 35	≤ 35	≤ 35	≤ 35	≤ 35
Repose angle	°	~ 45	~ 45	~ 45	~ 45	~ 45	~ 45	~ 45	~ 45
Softening point (grain)	° C	ca. 700	ca. 700	ca. 700	ca. 700	ca. 700	ca. 700	ca. 700	ca. 700
Fire behaviour (grain)	Category	A1	A1	A1	A1	A1	A1	A1	A1
Smoke and drop formation		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Frost resistance (repose)		yes	yes	yes	yes	yes	yes	yes	yes
Modulus of deformation, subsoil with low load bearing capacity, E <sub>v2</sub>	MN/m <sup>2</sup>	~ 45 <sup>3)</sup>	-	~ 50 <sup>3)</sup>	~ 50	~ 45	-	~ 50	~ 50
Modulus of deformation, subsoil with good load bearing capacity, E <sub>v2</sub>	MN/m <sup>2</sup>	~ 80 bis ~ 120 <sup>3)</sup>	-	~ 120 bis ~ 500 <sup>3)</sup>	~ 120 bis ~ 500	~ 80 bis ~ 120	-	~ 120 bis ~ 500	~ 120 bis ~ 500
Grain pressure resistance	N/mm <sup>2</sup>	~ 6 <sup>5)</sup>	~ 2 <sup>5)</sup>	~ 10 <sup>5)</sup>	~ 3 bis ~ 12 <sup>5)</sup>	~ 6	~ 2	~ 10	~ 3 bis ~ 12
Compression strength repose	N/mm <sup>2</sup>	0,50 <sup>4)</sup>	-	-	-	0,50	-	-	-
Inert building material		yes	yes	yes	yes	yes	yes	yes	yes
Capillary breaking, repose		yes	yes	yes	yes	yes	yes	yes	yes
Recyclability	%	100	100	100	100	100	100	100	100
u-value 0.5 W/ m <sup>2</sup> K solid measure	cm	16	15	17 <sup>2)</sup>	-	16	15	17	-
u-value 0.4 W/m <sup>2</sup> K solid measure	cm	20,5	19	22 <sup>2)</sup>	-	20,5	19	22	-
u-value 0.3 W/m <sup>2</sup> K solid measure	cm	24,5	23	26 <sup>2)</sup>	-	24,5	23	26	-
u-value 0.2 W/m <sup>2</sup> K solid measure	cm	36,5	34	39 <sup>2)</sup>	-	36,5	34	39	-
u-value 0.1 W/m <sup>2</sup> K solid measure	cm	74	69	79 <sup>2)</sup>	-	74	69	79	-
<b>Delivery types:</b>									
Big Bag 1,5 m <sup>3</sup> / 3 m <sup>3</sup>	m <sup>3</sup>	yes	yes	yes	no/yes	yes	yes	yes	no/yes
Tarpaulin, app. 8 m <sup>3</sup>	m <sup>3</sup>	yes	yes	yes	yes	yes	yes	yes	yes
Lorry, bulk	m <sup>3</sup>	yes	yes	yes	yes	yes	yes	yes	yes

- 1) Technical data subject to application and specification.
- 2) Currently not determined by way of measurement techniques, data for the rough calculation of the thermal transmittance values.
- 3) Load capacity ratings of the plate load bearing test (E<sub>v1</sub>, E<sub>v2</sub>, E<sub>v3</sub>) in accordance with DIN 18 134 /Austrian Standard B4417
- 4) Measuring process according to EN 826 – not suitable for glass foam reposes.  
An investigation of alternative standardized measuring procedures is currently taking place
- 5) Non-standardized measuring procedure, fluctuations of +/- 50% possible.

DIBt/general building authority approval has been issued: Z-23.34-1526 Measured Bem.:  $\sigma_{zul} = 270kPa$ ,  $t^{\Delta}$  Calculation value = 0,14 W/mK

CE - Technopor Perimeter 50 – certification number: DIN EN 13055-2:2004-07

**Note:** The information contained herein is based on our knowledge at the time of publication.  
In individual cases, responsibility for the completeness and correctness cannot be assumed.  
Changes resulting from further technical developments reserved. Errors and typing errors excepted.  
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