

Technical Properties

Nonvitreous

In acc. with DIN EN 14411, Group BIII (Water Absorption E > 10%)

Areas of application: Table ZA.3 Walls inside 	Tiles and slabs without spacers		Tested in acc. with DIN EN ISO
Length and width:			
e) Deviation in % of the average size of each tile (2 or 4 sides) from the work size	l ≤ 12 cm: ± 0,75%	l > 12 cm: ± 0,5%	10545-2
f) Deviation in % of the average size of each (2 or 4 sides) tile from the average size of 10 test specimens	l ≤ 12 cm: ± 0,50%	l > 12 cm: ± 0,3%	10545-2
Thickness:			
Deviation in % of the average thickness of each tile from the work size	± 10		10545-2
Straightness of sides:			
Max. deviation in % in relation to the corresponding work size	± 0,3		10545-2
Rectangularity:			
Max. deviation in % in relation to the corresponding work size	± 0,5		10545-2
Surface flatness:			
Max. deviation in %			
a) Central dome, in relation to the diagonal calculated from the work size	+0,5 / -0,3%		10545-2
b) Edge dome, in relation to the work size	+0,5 / -0,3 %		10545-2
c) Skew, in relation to the diagonal calculated from the work size	± 0,5%		10545-2
Surface quality:			
≥ 95% of tiles shall be free from visible defects that would impair the appearance of a major area of tiles	Achieved		10545-2
Water absorption in %			
Average 10%. If the value exceeds 20%, this must be declared by the manufacturer. Individual min. 9%	Achieved		10545-3
Breaking strength in N: min. 600N with thickness ≥ 7.5mm / min. 200N with thickness < 7.5mm	Achieved		10545-4
Flexural strength in N/mm² (not applicable on tiles and slabs with a breaking strength ≥ 3000N)			
Min. 12 with thicknesses ≥ 7.5mm / min 15 with thicknesses < 7.5mm	Achieved		10545-4
Coefficient of linear thermal expansion at ambient temperature of up to 100o C in K⁻¹	Testing method available		10545-8
Thermal shock resistance	Testing method available		10545-9
Crazing resistance required	Achieved		10545-11
Moisture expansion	Testing method available		10545-10
Minor colour deviations	Testing method available		10545-16
Impact resistance (measurement of coefficient of restitution)	Testing method available		10545-5
Resistance to staining of glazed tiles (class 1 to 5) – min. class 3	Achieved		10545-14
Resistance to acids and alkalis – low concentration	Testing method available		10545-13
Resistance to acids and alkalis – high concentration	Testing method available		10545-13
Resistance to household chemicals and bath water additives (for swimming pools)			
Class GA to GC – min. GB	Achieved		10545-13
Lead and cadmium release	Testing method available		10545-15