

HARD & SOFT - Technical specifications

ISO 13006 - EN 14411 - ISO 10545 Standards

Nominal sizes (cm): 15x61;15x100;20.5x100;40x120	Thickness (mm) : 9 ; 9.5 ; 20
Sides: Rectified, Natural	Surface: natural
	Product Group: Bla-GL

Technical characteristics		Test method	EN 14411 and ISO 13006 requirements	Italcer Average values
Dimensions	Length and width	ISO 10545-2	±0.6% and ± 2.0mm Rect. : ±0.3% and ± 1.0mm	Compliant
	Straightness of sides	ISO 10545-2	±0.5% and ± 1.5mm Rect. : ±0.3% and ± 0.8mm	Compliant
	Rectangularity	ISO 10545-2	±0.5% and ± 2.0mm Rect. : ±0.3% and ± 1.5mm	Compliant
	Flatness	ISO 10545-2	±0.5% and ± 2.0mm Rect. : ±0.4% and ± 1.8mm	Compliant
	Thickness	ISO 10545-2	±5% and ± 0.5mm	Compliant
Water absorption		ISO 10545-3	≤ 0.5%	<0.15%
Modulus of rupture		ISO 10545-4	≥ 35 N/mm ²	>40 (soft) ; >55 (hard) N/mm ²
Breaking strength (S)		ISO 10545-4	≥ 1300 N	Compliant
Abrasion resistance		ISO 10545-7	Declared class	Soft: PEI 5 (bianco), PEI 4; PEI 3 (nut); Hard: PEI 4 (Grey), PEI 3
Linear thermal expansion		ISO 10545-8	Declared value	$\alpha \leq 7.1 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$
Thermal shock resistance		ISO 10545-9	No alterations	Resistant
Frost resistance		ISO 10545-12	No alterations	Resistant
Chemical resistance		ISO 10545-13	Declared value	LA – HA
Household chemicals resistance		ISO 10545-13	B min.	A
Stain resistance		ISO 10545-14	Class 3 min.	5
Mohs Hardness		UNI EN 101	5 Min.	6 (soft) ; 8 (hard)
Slip Resistance	DIN 51130	Declared value	R10 ; R11(hard)	
	DIN 51097	Declared value	C ; C(hard, h20)	
	ANSI A137.1	Declared value	>0.42	
	B.C.R.A. Rep. CEC/81	Declared value	/	
	BS 7976	Declared value	Dry/Wet : >36/25<x<35 (Soft) ; >36(Hard, h20)	
Shade variation		ANSI A 137.1	Not required	V3
Fire reaction		UNI EN 13501-1	-	A1 _{FL} class
Thermal Conductivity		EN 12524	Not required	$\lambda = 1.3 \text{ W/m}\cdot\text{K}$
Light and colour fastness		DIN 51094	Not required	No variations