Technical specification

162x324 cm - 63³/₄"x127¹/₂"
NOT RECTIFIED SLAB

159x324 cm - 62³/₄"x127¹/₂"
NOT RECTIFIED SLAB

160x320 cm - 63"x126"
RECTIFIED MONOCALIBER

Complies with EN 14411 (ISO 13006) Appendix G Group Bla

(*) The permissible deviation, in % or mm, of the average size for each tile (2 or 4 sides) from work size (WS).
(**) The permissible deviation, in % or mm, of the average thickness for each tile from the work size thickness (WS).
(***) The maximum permissible deviation from straightness, in % or mm, related to the corresponding work sizes (WS).
(****) The maximum permissible deviation from rectangularity, in % or mm, related to the corresponding work sizes (WS).
c.c. The maximum permissible deviation from centre curvature, in % or mm, related to diagonal calculated from the work sizes (WS).
e.c. The maximum permissible deviation from edge curvature, in % or mm, related to the corresponding work sizes (WS).
w. The maximum permissible deviation from warpage, in % or mm, related to diagonal calculated from the work sizes (WS).
(1) Determination of slip resistance of pedestrian surfaces; it does not cover sports surfaces and road surfaces for vehicles (skid resistance).
(2). Anti-slip performance is guaranteed at the time of delivery of the product.
(3). However, tiles with a DCOF of 0.42 or greater are not necessarily suitable for all projects. The specifier shall determine tiles appropriate for specific project conditions, considering by way of example, but not in limitation, type of use, traffic, expected contaminants, expected maintenance, expected wear, and manufacturers' guidelines and recommendations."
(4). For further details, please refer to outdoor design general catalogue.
(5). Only for products with 20 mm thickness.

Technical features

				Requirements for nominal size N		162x324 cm - 63³/₄"x127¹/₂" 159x324 cm - 62³/₄"x127¹/₂" Not Rectified			160x320 cm - 63"x127" Rectified		
				N ≥ 15 cm							
				(%)	(mm)	Silk	Matte Hammered Leathered	Polished Satin	Silk	Matte Hammered	Polished
Regularity characteristics		**Length and width**	ISO 10545-2	± 0,3 (*)	± 1 (*)	N.A.			**Suitable for**		
		Thickness		± 5 (**)	± 0,5 (**)	**Suitable for** Conforme			**Suitable for**		
		Straightness of sides		± 0,3 (***)	± 0,8 (***)	N.A.			**Suitable for**		
		Rectangularity (Measurement only on short edges when L/l ≥ 3)		± 0,3 (****)	± 1,5 (****)	N.A.			**Suitable for**		
		Surface flatness		c.c. ± 0,4 e.c. ± 0,4 w. ± 0,4	c.c. ± 1,8 e.c. ± 1,8 w. ± 1,8	**Suitable for**			**Suitable for**		
Structural characteristics		**Water absorption**	ISO 10545-3	**E, ≤ 0,5% Individual max 0,6%**		≤ 0,1 %			≤ 0,1 %		
			ASTM C373-18	**Requirement ANSI A137.1 Water Absorption Max ≤ 0,5%**		≤ 0,5 %			≤ 0,5 %		
Bulk mechanical characteristics		**Breaking strength**	ISO 10545-4	S ≥ 700 N **for thickness < 7,5mm**	S ≥ 1300 N **for thickness ≥ 7,5mm**	12 mm -> S ≥ 3500N 20 mm -> S ≥ 10000N			S ≥ 1000N		
		Modulus of rupture		R ≥ 35 N/mm²		R ≥ 40 N/mm²			R ≥ 40 N/mm²		
		Impact resistance, as coefficient of restitution	ISO 10545-5	**Declared value**		≥ 0,55			≥ 0,55		
Surface mechanical characteristics		**Resistance to deep abrasion of unglazed tiles (removed volume)**	ISO 10545-6	≤ 175 mm³		**Suitable for**			**Suitable for**		
Thermal and hygrometric characteristics		**Coefficient of thermal linear expansion**	ISO 10545-8	**Declared value**		≤ 7 MK⁻¹			≤ 7 MK⁻¹		
		Thermal shock resistance	ISO 10545-9	**Pass according to EN ISO 10545-1**		**Resistant**			**Resistant**		
		Moisture expansion (in mm/m)	ISO 10545-10	**Declared value**		≤ 0,01% (0,1mm/m)			≤ 0,01% (0,1mm/m)		
		Frost resistance	ISO 10545-12	**Pass according to EN ISO 10545-1**		**Resistant** Resiste			**Resistant** Resiste		
Physical properties		**Bond strength/adhesion for improved cementitious adhesives**	EN 1348	**Declared value**		≥ 1,0 N/mm² (Class C2 - EN 12004)			≥ 1,0 N/mm² (Class C2 - EN 12004)		
		Reaction to fire	-	A1 or Afl		A1 without fiberglass - A2 with fiberglass			A1 - A1fl		
Chemical characteristics		**Resistance to household chemicals and swimming pool salts**	ISO 10545-13	**Minimum Class B (B for unglazed tiles)**		A			A		
		Resistance to low concentrations of acids and alkalis		**Declared Class**		LA			LA		
		Resistance to high concentrations of acids and alkalis		**Declared Class**		HA	HA	-	HA	HA	-
		Resistance to staining	ISO 10545-14	**Declared Class**		5			5		
		Release of dangerous substances: Cadmium (in mg/dm²) and Lead (in mg/dm²)	ISO 10545-15	**Declared value**		≤ 0,01 mg/dm² Cd ≤ 0,1 mg/dm² Pb			≤ 0,01 mg/dm² Cd ≤ 0,1 mg/dm² Pb		
Safety characteristics (1)(2)		**Shod Ramp Test**	DIN EN 16165 ANNEX B (EX DIN 51130)	**Declared Class**		-	-	-	-	R9	N.C.
		Barefoot Ramp Test	DIN EN 16165 ANNEX A (EX DIN 51097)	**Declared Class**		-	-	-	-	A	-
		Coefficient of friction (COF)	B.C.R.A. Rep. CEC/81	**D.M. 236/89 dated 14/06/89** μ >0,40 for leather sliding element on dry flooring μ >0,40 for hard rubber sliding element on wet flooring		-	-	-	-	> 0,40 dry > 0,40 wet	> 0,40 dry < 0,40 wet
		Dynamic coefficient of friction (DCOF)	ANSI A 326,3	-		-	-	-	-	wet DCOF > 0,42	dry DCOF > 0,42
		Resistance to scratching	UNI EN 15186:2012 met.B	-		**CEN/TS 16209 Class A**			**CEN/TS 16209 Class A**		
		Tendency to retain dirt	UNI 9300:2015	-		**No visible change (5)**			**No visible change (5)**		
		Surface resistance to cold liquids	UNI EN 12720:2013	-		**CEN/TS 16209 Class A**			**CEN/TS 16209 Class A**		
		Surface resistance to wet heat	UNI EN 12721:2013	-		**CEN/TS 16209 Class A**			**CEN/TS 16209 Class A**		
		Surface resistance to dry heat	UNI EN 12722:2013	-		**CEN/TS 16209 Class A**			**CEN/TS 16209 Class A**		
		Assessment of resistance to impact	ISO 4211-4:1988	-		**Maximum drop height according to thickness**			**Maximum drop height according to thickness**		