

TECHNICAL DATA

Unglazed porcelain tiles – ISO 13006 and EN 14411 - Annex G - Group Bla

SIZES:	M(=N) W	10x10 96x96x8	10x30 96x296x8	7.5x15 71x146x8	15x15 146x146x8	30x30 296x296x8.5
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PHYSICAL PROPERTIES	TEST STANDARD	REQUIREMENTS	TOPCER VALUE
DIMENSION AND SURFACE QUALITY:		7 cm ≤ N < 15 cm	N ≥ 15 cm
Length and width	ISO 10545-2	± 0,9mm	± 0,6% / ± 2,0mm
Thickness	ISO 10545-2	± 0,5mm	± 5,0% / ± 0,5mm
Straightness of sides	ISO 10545-2	± 0,75mm	± 0,5% / ± 1,5mm
Rectangularity	ISO 10545-2	± 0,75mm	± 0,5% / ± 2,0mm
Surface flatness, (curvature and warpage)	ISO 10545-2	± 0,75mm	± 0,5% / ± 2,0mm
Surface quality	ISO 10545-2	≥ 95%	Conforms
PRODUCT QUALITY AND DURABILITY:			
Water absorption	ISO 10545-3	≤ 0,5%	≤ 0,1%
Breaking strength	ISO 10545-4	≥ 1300 N	≥ 1800 N
Modulus of rupture	ISO 10545-4	≥ 35 N/mm ²	≥ 50 N/mm ²
Impact resistance	ISO 10545-5	Declared Value	No visible defects
Resistance to deep abrasion (unglazed tiles)	ISO 10545-6	≤ 175 mm ³	123 mm ³
Coefficient of linear thermal expansion	ISO 10545-8	Declared Value	5,6 x 10 ⁻⁶ °C ⁻¹
Thermal shock resistance	ISO 10545-9	No visible defects	Conforms
Moisture expansion	ISO 10545-10	Declared Value	< 0,1 mm/m
Frost resistance	ISO 10545-12	No visible defects	Conforms
Resistance to chemicals	ISO 10545-13	No visible defects	Conforms
Resistance to staining	ISO 10545-14	No permanent staining	Conforms
SLIP RESISTANCE:			
Areas with footwear	Dynamic Coefficient of Friction (DCOF)		
		VALUES:	
	ASTM - ANSI A 137.1-2012 (INTERTEK - CA)	0.62	10x10 / 4"x4 Plain Finish (smooth)
		0.65	10x10 / 4"x4 Riven (RT) finish
	AS 4586:2013 Apendix B (ATTAR - AU)	0.65	10x10 / 4"x4 Plain Finish (smooth)
	Wet Pendulum Slip Resistance		
	AS 4586:2013 Apendix A (ATTAR - AU)	47	10x10 / 4"x4 Plain Finish (smooth)
	Pendulum		
		VALUES:	
		DRY	WET
BS-7976-2 (CERAM - UK)	60	37	10x10 / 15x15 Plain finish (smooth)
	61	53	15x15 Riven (RT) finish
	67	54	15x15 Square studs (SS) finish
	81	70	15x15 Round studs (RC) finish
	87	72	15x15 Diamond studs (DD) finish
UNE-ENV 12633 (ITC - SPAIN)	USRV	Class	SIZES / SURFACE TEXTURE
	25	1	10x10, 15x15, 30x30 Plain finish (smooth)
	48	3	30x30 Dies lined with spec. rubber (R) Plain finish
	42	2	10x10 / 15x15 Dies lined with spec. rubber (R) Plain finish
	46	3	10x10 Riven (RT) finish
	52	3	15x15 Riven (RT) finish
	55	3	10x10 Square studs (SS) finish
	48	3	15x15 Square studs (SS) finish
	52	3	10x10 Round studs (RC) finish
	56	3	15x15 Round studs (RC) finish
49	3	10x10 Diamond studs (DD) finish	
59	3	15x15 Diamond studs (DD) finish	
Ramp Test			
	VALUES:		
DIN 51130 (HS-KOBLENZ - DE)	6° ≤ R9 ≤ 10°	30x30 Plain finish (smooth)	
	10° < R10 ≤ 19°	10x10 (also Hexagon and Octagon) / 10x30 / 15x15 Plain finish (smooth)	
	19° < R11 ≤ 27°	10x10 / 15x15 Square studs (SS) and in Round studs (RC)	
	30x30 Rubber (R), 30x30 Riven (RT)		
27°	R12 ≤ 35°	10x10 / 15x15 Riven (RT) and in Diamond studs (DD)	
DIN 51130/BGR 181 (HS-KOBLENZ - DE)	V5	15x15 Square studs (SS) and Riven (RT)	
	V6	10x10 Square studs (SS) and Riven (RT), 15x15 Round studs (RC)	
	V7	15x15 Diamond studs (DD)	
	V8	10x10 Round studs (RC)	
Areas with bare-footed	DIN 51097 (HS-KOBLENZ - DE)	12° ≤ A < 18°	30x30 Plain finish (smooth)
	(HS-KOBLENZ - DE)	18° ≤ B < 24°	10x10 (also Hexagon and Octagon) / 10x30 / 15x15 Plain finish (smooth)
	(CERAM - UK)	18° ≤ B < 24°	30x30 Rubber (R), 30x30 Riven (RT)
	(CERAM - UK)	C ≥ 24°	10x10 / 15x15 Plain finish (smooth)
	(HS-KOBLENZ - DE)	C ≥ 24°	15x15 Round studs (RC)+Diamond studs (DD)+Riven (RT)+Square studs (SS)
	C ≥ 24°	10x10 / 15x15 Round studs (RC)+Diamond studs (DD)+Riven (RT)+Square studs (SS)	