

## Ceramica del Conca SpA Technical Characteristics

**SERIE HUP**, UPGRADE collection.

EN 14411:2016 Annex G Required for BIa

Reference	Characteristics	Standard	Required values		CdC Values:
Dimensional standard	Length and width	ISO 10545-2	± 0.6%	± 2.0 mm	<b>Comply</b>
	Straightness of sides	ISO 10545-2	± 0.5%	± 1.5 mm	<b>Comply</b>
	Rectangularity	ISO 10545-2	± 0.5%	± 2.0 mm	<b>Comply</b>
	Flatness-Centre curvature	ISO 10545-2	± 0.5%	± 2.0 mm	<b>Comply</b>
	Flatness - Edge curvature	ISO 10545-2	± 0.5%	± 2.0 mm	<b>Comply</b>
	Flatness - Warpage	ISO 10545-2	± 0.5%	± 2.0 mm	<b>Comply</b>
	Thickness	ISO 10545-2	± 5%	± 0.5 mm	<b>Comply</b>
	Surface quality	ISO 10545-2	Minimum 95%		<b>Comply</b>
Mechanical Standard	Water absorption	ISO 10545-3	Maximum 0.5%		<b>~ 0.1%</b>
	Modulus of rupture	ISO 10545-4	> 35 N/mm <sup>2</sup>		<b>Comply</b>
	Breaking Strength	ISO 10545-4	> 1300 N		<b>Comply</b>
	Impact resistance	ISO 10545-5	Declared value		<b>~ 0.89 (COR)</b>
	Linear thermal expansion	ISO 10545-8	Declared value		<b><math>\alpha = \sim 6.4 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}</math></b>
	Thermal shock resistance	ISO 10545-9	Pass		<b>Comply</b>
	Moisture Expansion	ISO 10545-10	Declared value		<b>~ 0.04 mm/m</b>
	Crazing Resistance	ISO 10545-11	Pass		<b>Comply</b>
	Frost resistance	ISO 10545-12	Pass		<b>Comply</b>
	Chemical resistance	ISO 10545-13	Minimum class GB		<b>Comply</b>
	DEEP Abrasion	ISO 10545-6	<175mm <sup>3</sup>		<b>135 mm<sup>3</sup></b>
	MOHS		Declared value		<b>Mohs <math>\geq 6</math></b>

Safety Standard	International requirements	Stain resistance	ISO 10545-14	Minimum class 3		<b>Comply</b>
		Fire reaction - floor	EN 13823	Not Required		<b>A1fl class (No reaction)</b>
		Fire reaction - wall	EN 13823	Not Required		<b>A1 class (No reaction)</b>
		VOC				<b>No VOC</b>
	EU requirements	Ramp resistance	DIN51130	Not Required	Nat	<b>R10</b>
					20 mm	<b>R11</b>
		Barefoot ramp resistance	DIN51097	Not Required	Nat	<b>B</b>
					20 mm	<b>C</b>
	US Requirements	Dynamic coefficient of Friction DCOF	ANSI A326.3-2017 release 2019	Wet value $\geq$ 0.42	Nat	<b>0.62</b>
					20 mm	<b>0.64</b>
	IT Requirements	Determination of slipperiness BCR tortus	DM 236-89	$> 0.40$	Nat	<b>DRY: 0.70</b> <b>WET: 0.66</b>
					20 mm	<b>DRY: 0.95</b> <b>WET: 0.90</b>
	UK requirements	PENDULUM	BS 7976-2: 2002	$> 36$	Nat	<b>DRY: 60</b> <b>WET: 40</b>

Values reflect an average among test performed in our laboratory according to the standard requirements and/or through third party laboratory.

Test are performed on actual production, first choice material. Values may vary between single individual production run.

Ceramica del Conca Technical team will be pleased to integrate and answer specific questions.