

Tender Specifications

Supply of ceramic wall and floor tiles

Product characteristics

Unglazed Porcelain Tiles (UGL)

Unglazed porcelain stoneware consists of a mixture of quality clay with the addition of feldspar, quartz and kaolin. It is manufactured by dry pressing of atomized powder and then sintered by industrial burning at temperatures above 1100°C. The glazing level of the material makes it possible to obtain a compact, non-porous product, resistant to ice, bending, impact, staining, chemical attack and thermal shock.

The Sense collection complies with the regulations required for top quality products in Europe according to EN 14411-G and internationally through ISO 13006-G.

Quality and environmental certifications

The conservation of the product characteristics is guaranteed by the Quality Management System put into practice by Panaria Portugal in its plants and certified in accordance with EN ISO 9001.

The collection is manufactured in plants with EN ISO 14001 certified Environmental Management Systems (internationally recognized standard) and EMAS (Regulation 1221/09 - eco-management and audit community system).

The collection helps to meet the criteria for obtaining LEED credits. The product contains no VOC (volatile organic compounds) and has obtained the GREENGUARD GOLD certification.

The Environmental Product Declaration (EPD) is available, this tool communicates clearly the environmental performances of the Sense collection based on its Life Cycle Assessment (LCA).

This range is made of 5% - 18% recycled content this way contributing to a more sustainable project.

Commercial description of the product	
Company	Panariagroup Deutschland GmbH
Collection	Habitat
Colours	Stone, Sand, Lava, Buff
Sizes	Floor Tiles (UGL)
	60x120 RET.
	60x60 RET. 30x60 RET.
Finish - Surface	Natural - Surface with a natural touch. Recommended for residential flooring or for commercial spaces with medium/high traffic and outdoor spaces that do not require anti-slip properties.
Finish - Edge	Rectified (Ret.)
Thickness	9mm_ 60x120 8mm_ 60x60, 30x60



EMAS



ISO 9001 | ISO 14001



RECYCLED CONTENT



LEED



GREENGUARD GOLD



ENVIRONMENTAL
PRODUCT DECLARATION

Tender Specifications

Technical features

Product type: **Unglazed Porcelain Tiles (UGL)**

According to: ISO 13006 - Annex G (Group Bla), EN 14411 - Annex G (Group Bla)

Technical features		Test method	Required value ISO 13006 / EN 14411	Typical Value Love Tiles
Dimensions	Lenght and width	EN ISO 10545-2	Non Rect. $\pm 0,6\%$, max $\pm 2,0$ mm Rect. $\pm 0,3\%$, max $\pm 1,0$ mm	Conform
	Side straightness		Non Rect. $\pm 0,5\%$, max $\pm 2,0$ mm Rect. $\pm 0,3\%$, max $\pm 1,5$ mm	Conform
	Rectangularity		Non Rect. $\pm 0,5\%$, max $\pm 2,0$ mm Rect. $\pm 0,3\%$, max $\pm 1,5$ mm	Conform
	Warpage		Non Rect. $\pm 0,5\%$, max $\pm 2,0$ mm Rect. $\pm 0,4\%$, max $\pm 1,8$ mm	Conform
	Thickness		$\pm 5\%$ max $\pm 0,5$ mm	Conform
Water absorption (E)		EN ISO 10545-3	$E \leq 0,5\%$	0,1%
Modulus of rupture		EN ISO 10545-4	≥ 35 N/mm ²	45 N/mm ²
Breaking strength (S)			$S \geq 1300$ N	2500 N
Abrasion resistance		EN ISO 10545-6	≤ 175 mm ³	139 mm ³
Linear thermal expansion		EN ISO 10545-8	As indicated by manufacturer	$\alpha \leq 7,5 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$ Maximum value
Thermal shock resistance		EN ISO 10545-9	Required	Resistant
Crazing resistance		EN ISO 10545-11	Required	Resistant
Frost resistance		EN ISO 10545-12	Required	Resistant
Resistance against acids and alkalis		EN ISO 10545-13	As indicated by manufacturer	ULB
Resistance to household cleaning products			Minimum: UB	UA
Stain Resistance		EN ISO 10545-14	As indicated by manufacturer	4
Slip Resistance	DIN EN 16165 _ Annex B	As indicated by manufacturer	R10 NATURAL	
	DIN EN 16165 _ Annex A		B NATURAL	
Shade Variation		ANSI A137.1	V0 None _ V1 Minor V2 Low _ V3 Medium V4 Major	V2
Recomended joint		Non rectified Indoor Non rectified Outdoor Rectified Indoor Rectified Outdoor	-	3mm 4mm 2mm 3mm

It is guaranteed the compliance with the values required by norm EN 14411_Group Bla UGL. Typical Value is merely indicative, which can vary from real data, and does not have the purpose of any trading proposal.

