

Tender Specifications

Supply of ceramic wall and floor tiles

Product characteristics

Single Fired Wall Tiles

The white body product is composed of a mixture of quality clay with the addition of feldspar, quartz and kaolin. It is manufactured by dry pressing of atomized powder, with the application of enamel, and then sintered by industrial burning at temperatures above 1100°C.

The product is resistant to cracking, bending, impact, staining, chemical attack and thermal shock.

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

Glazed Porcelain Tiles (GL)

Glazed 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, followed by the application of enamel and then sintered by industrial firing 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 Precious 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 Gres 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.

Commercial description of the product				
Company	Love Ceramic Tiles			
Collection	Precious			
Colours	Calacatta, Calacatta Gold			
Sizes	Wall tiles	45x119 RET.	35x100 RET.	35x70 RET.
	Floor tiles	80x80 RET. _ 79x79 RET.	60x60 RET.	
Finish - Surface	Wall tiles	Matt - Matt looking surface. Recommended for interior wall cladding. Brilho/Shine - Glossy looking surface. Recommended for interior wall cladding.		
	Floor tiles	Matt - Matt surface. Recommended for indoor flooring. Polished - Very bright looking surface. Recommended for residential indoor floors or light foot traffic commercial spaces.		
Finish - Edge	Rectified (RET), Non Rectified			
Thickness	Wall tiles	10,5mm _ 45x119 8mm _ 35x100, 35x70		
	Floor tiles	9mm _ 80x80, 79x79, 60x60		



ERP are available on the website
www.lovetiles.com



Tender Specifications

Technical features

Product type: **Single Fired Wall Tiles**

According to: ISO 13006 - Annex L (Group BIII), EN 14411 - Annex L (Group BIII)

Technical features		Test method	Prescribed Value	Typical Value
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 - Center and edge curvature		Non Rect. $\pm 0,5\%$, max $\pm 2,0$ mm Rect. $\pm 0,4\%$, max $\pm 1,8$ mm	Conform
	Warpage		Non Rect. $\pm 0,5\%$, max $\pm 2,0$ mm Rect. $\pm 0,4\%$, max $\pm 1,8$ mm	Conform
	Thickness		$\pm 10\%$, max $\pm 0,5$ mm	Conform
Water absorption (E)		EN ISO 10545-3	E > 10%	16%
Modulus of rupture		EN ISO 10545-4	≥ 12 N/mm ²	19 N/mm ²
Breaking strength (S)			S ≥ 600 N	700 N
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
Resistance against acids and alkalis		EN ISO 10545-13	As indicated by manufacturer	GLB
Resistance to household cleaning proucts			Minimum: GB	GA
Stain Resistance		EN ISO 10545-14	Minimum: class 3	4
Recomended joint		Rectified Indoor	-	2 mm

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



Tender Specifications

Technical features

Product type: **Glazed Porcelain Tiles (GL)**

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

Technical features		Test method	Prescribed Value	Typical Value
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	$E \leq 0,5\%$	0,2%
Modulus of rupture		EN ISO 10545-4	≥ 35 N/mm ²	40 N/mm ²
Breaking strength (S)			$S \geq 1300$ N	2000 N
Abrasion resistance		EN ISO 10545-7	As indicated by manufacturer	3-4
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	GLB
Resistance to household cleaning products			Minimum: GB	GA
Stain Resistance		EN ISO 10545-14	Minimum: class 3	4
Slip Resistance	DIN 51130	As indicated by manufacturer	-	
	DIN 51097		-	
	BS 7976		-	
	AS/NZS 4586	As indicated by manufacturer	-	
Shade Variation		ANSI A137.1	V0 None _ V1 Minor V2 Low _ V3 Medium V4 Major	V1
Recomended joint		Non rectified Indoor Non rectified Outdoor Rectified Indoor Rectified Outdoor	-	3 mm 4 mm 2 mm 3 mm

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

Precious is suitable for light residential or commercial use, with low traffic.

Products with a polished finish are more sensitive to abrasion and stains, what requires special conditions. Please check technical information on chapter 9 from Love Tiles general catalogues.



ERP are available on the website
www.lovetiles.com

