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 1100ºC.
The product is resistant to cracking, bending, impact, staining, chemical attack and thermal shock.

The Majestic 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 1200ºC.
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 Majestic collection complies with the regulations required for top quality products in Europe according to EN 14411-G and internationally through ISO 13006-G.

Commercial description of the product					
Company	Love Ceramic Tiles				
Collection	Majestic				
Colours	Calacatta Cloud, Carrara, Crema Marfil, Crystal White, Imperial Green, Calacatta Black				
Sizes	Wall tiles	45x119 RET.	35x100 RET.*		
	Wall tiles - Structures	45x119 RET. _ Wave*	35x100 RET. _ Shape*		
	Floor tiles	80x80 RET., RET. AS*	79X79 RET.	60x60 RET.*	
Finish - Surface	Wall tiles	Matt - Matt looking surface. Recommended for interior wall cladding. 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)				
Thickness	Wall tiles	9,5mm _ 45x119 RET.	8mm _ 35x100 RET.*		
	Wall tiles - Structures	Wave _ 9,5-10,5mm*	Shape _ 8,9-10,5mm*		
	Floor tiles	8mm _ 80x80	8,5mm _ 79x79	8mm _ 60x60 Pol.*	7mm _ 60x60 Matt*

* available only in colours Calacatta Cloud, Carrara and Crema Marfil.

ISO 9001 | ISO 14001 | ISO 50001 · EMAS · ENVIRONMENTAL PRODUCT DECLARATION · LEED · GREENGUARD GOLD · HEALTHY BUILDING PRODUCTS · HEALTH PRODUCT DECLARATION

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	Required value ISO 13006 / EN 14411	Typical Value Love Tiles
Dimensions	Lenght and width	EN ISO 10545-2	Non Rect. ± 0,6%, max ± 2,0 mm Rect. ± 0,3%, max ± 1,0 mm	Conform
	Side straightness		Non Rect. ± 0,5%, max ± 2,0 mm Rect. ± 0,3%, max ± 1,8 mm	Conform
	Rectangularity		Non Rect. ± 0,5%, max ± 2,0 mm Rect. ± 0,3%, max ± 1,5 mm	Conform
	Warpage - Center and edge curvature		Non Rect. ± 0,5%, max ± 2,0 mm Rect. ± 0,4%, max ± 1,8 mm	Conform
	Warpage		Non Rect. ± 0,5%, max ± 2,0 mm Rect. ± 0,4%, max ± 1,8 mm	Conform
	Thickness		± 10% , max ± 0,5 mm	Conform
Water absorption (E)		EN ISO 10545-3	E > 10%	16%
Modulus of rupture		EN ISO 10545-4	≥ 12 N/mm²	19 N/mm²
Breaking strength (S)			S ≥ 600 N	700 N
Linear thermal expansion		EN ISO 10545-8	As indicated by manufacturer	$\alpha \leq 7{,}5 \times 10^{-6}$ °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 products			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.

LOVE CERAMIC TILES

MAJESTIC COLLECTION

Tender Specifications

Technical features

Product type: **Glazed Porcelain Tiles (GL)**
According to: ISO 13006 - Annex G (Group BIa), EN 14411 - Annex G (Group BIa)

Technical features		Test method	Required value ISO 13006 / EN 14411	Typical Value Love Tiles
Dimensions	Lenght and width	EN ISO 10545-2	Non Rect. ± 0,6% , max ± 2,0 mm Rect. ± 0,3% , max ± 1,0 mm	Conform
	Side straightness		Non Rect. ± 0,5% , max ± 2,0 mm Rect. ± 0,3% , max ± 1,5 mm	Conform
	Rectangularity		Non Rect. ± 0,5% , max ± 2,0 mm Rect. ± 0,3% , max ± 1,5 mm	Conform
	Warpage		Non Rect. ± 0,5% , max ± 2,0 mm Rect. ± 0,4% , max ± 1,8 mm	Conform
	Thickness		± 5% max ± 0,5 mm	Conform
Water absorption (E)		EN ISO 10545-3	E ≤ 0,5%	0,2%
Modulus of rupture		EN ISO 10545-4	≥ 35 N/mm²	45 N/mm²
Breaking strength (S)			<7,5mm S ≥ 700 N	1300 N 60x60 7mm
			≥7,5mm S ≥ 1300 N	2000 N 60x60 8mm 1600 N 80x80 8mm, 79x79 8,5mm
Abrasion resistance		EN ISO 10545-7	As indicated by manufacturer	3-4
Linear thermal expansion		EN ISO 10545-8	As indicated by manufacturer	$\alpha \leq 7{,}5 \times 10^{-6}$ °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 proucts			Minimum: GB	GA
Stain Resistance		EN ISO 10545-14	Minimum: class 3	4
Slip Resistence		DIN EN 16165 _ Annex B	As indicated by manufacturer	R10 AS
		DIN EN 16165 _ Annex A		B AS
		DIN EN 16165 _ Annex C		≥36 AS
		AS/NZS 4586		P3 AS
		ENV 12633		Class 2 AS
Shade Variation		ANSI A137.1	V0 None _ V1 Minor V2 Low _ V3 Medium V4 Major	V2
Recomended joint		Rectified Indoor Rectified Outdoor	-	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.

Majestic 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.

ISO 9001 | ISO 14001 | ISO 50001 · EMAS · ENVIRONMENTAL PRODUCT DECLARATION · LEED · GREENGUARD GOLD · HEALTHY BUILDING PRODUCTS · HEALTH PRODUCT DECLARATION

Tender Specifications

Quality and environmental certifications

Certification ISO 9001 - ISO 14001 - ISO 50001
Quality, Environment and Energy Management Systems.
For establishments seeking low environmental impact and high efficiency.

download ISO 9001, ISO 14001 and ISO 50001

DoP - Performance Declaration
The CE mark is a safety certification required by the European Union with the intention of safeguarding health and safety.

download DoP single fired wall tiles and DoP porcelain tiles

EMAS
Community eco-management and auditing system. Being green and transparent.

download EMAS

LEED
Love Tiles is a member of the U.S. Green Building Council and of the Green Building Council ITALIA. These organizations promote the construction of buildings and other works which respect the environment as well as the health and well-being of the people who live and work within them.

download U.S. Green Building Council and Green Building Council Italy

---

EPD
The Environmental Product Declaration

download EPD sinlge fires wall tiles and EPD porcelain tiles

GREENGUARD GOLD
GREENGUARD certifies products that guarantee the highest standards of air quality in indoor environments.

download Greenguard Gold

HEALTHY BUILDING PRODUCTS

download Declare silgle fire wall tiles and Declare porcelain tiles

---

HPD
Health Product Declaration

CERTIF - Association for Certification in Portugal
Notified Body for the Regulation of Construction Products.

download Certif single fire wall tiles and Certif GL porcelain tiles