

# LEA

CERAMICHE

## Tender specifications L2 collection

Supply of LEA Ceramiche porcelain stoneware tiles for walls and floors.

### Product characteristics

LEA Ceramiche full body porcelain stoneware tiles, unglazed, composed of a very fine mixture of quality clay with the addition of feldspar, quartz and kaolin, manufactured by dry pressing of atomized powders and subsequently sintered by industrial firing at temperatures above 1200°C.

The complete vitrification of the tiles allows for a compact, non-absorbent, frost-proof product, resistant to bending, impacts, staining, chemical attack and thermal shock.

### Compliance with EN 14411-G / ISO 13006-G

The System L2 collection is in compliance with the regulations required for first quality products in Italy and Europe UNI 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 LEA Ceramiche in its plants and certified in accordance with UNI EN ISO 9001.

The collection is manufactured in plants with UNI 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 content of "pre-consumer" recycled material is 40%, as certified by a qualified external body (LEED V4 Regulations - MR Credit). The product contains no VOC (volatile organic compounds) and got the GREENGUARD GOLD certification. The Environmental Product Declaration (EPD) is available, this tool communicates clearly the environmental performances of the L2 collection based on its Life Cycle Assessment (LCA).

Commercial description of the product	
Company	LEA CERAMICHE (Panariagroup Industrie Ceramiche S.p.A.)
Collection	L2
Colours	IVORY FLOW L2, SILVER FLOW L2, GRAY FLOW L2, DARK FLOW L2, WHITE DOVER L2, BEIGE MADEIRA L2, TAUPE MOHER L2, GREY TENERIFE L2, NEXT WHITE L2, NEXT GRAY L2, NEXT TAUPE L2, NEXT DARK L2, OAK CLOVES L2, OAK NATURAL L2, 01 WHITE L2, 02 DESERT L2, 03 EARTH L2, 04 GRAY L2, 05 DARK L2
Sizes	30X120cm RTT (OAK NATURAL L2, OAK CLOVES L2)
	45X90cm RTT (IVORY FLOW L2, SILVER FLOW L2, GRAY FLOW L2, DARK FLOW L2)
	60X60cm RTT (WHITE DOVER L2, BEIGE MADEIRA L2, TAUPE MOHER L2, GREY TENERIFE L2, NEXT WHITE L2, NEXT GRAY L2, NEXT TAUPE L2, NEXT DARK L2, IVORY FLOW L2, SILVER FLOW L2, GRAY FLOW L2, DARK FLOW L2)
	90X90cm (IVORY FLOW L2, SILVER FLOW L2, GRAY FLOW L2, DARK FLOW L2, CONCRETO EXTRA LIGHT L2, CONCRETO LIGHT L2, CONCRETO MEDIUM L2, CONCRETO DARK L2)
	60x120cm (01 WHITE L2, 02 DESERT L2, 03 EARTH L2, 04 GRAY L2, 05 DARK L2 NEXT WHITE L2, NEXT GRAY L2, NEXT TAUPE L2, NEXT DARK L2)
Surfaces	GRIP, ROUGH
Edges	RETTIFICATI (RTT)
Thickness	20mm



ISO 9001

ISO 14001

EMAS

RECYCLED MATERIALS

GREENGUARD GOLD

EPD

LEED

LEED

CE MARK

MADE IN ITALY

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## Tender specifications L2 collection

### Technical features

Product type: full body porcelain stoneware (UGL)

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

Technical features		Test method	Required values ISO 13006-G, EN 14411-G	Average values SYSTEM L2
Water absorption		ISO 10545-3	≤ 0,5 %	0,05 %
Breaking strength (S)		ISO 10545-4	≥ 1300 N	13600 N
Modulus of rupture		ISO 10545-4	≥ 35 N/mm <sup>2</sup>	50 N/mm <sup>2</sup>
Deep abrasion resistance		ISO 10545-6	≤ 175mm <sup>3</sup>	145mm <sup>3</sup>
Linear thermal expansion		ISO 10545-8	No provision	$\alpha \leq 7 \cdot 10^{-6} \text{ } ^\circ\text{C}^{-1}$
Stain resistance		ISO 10545-14	Class 3 Min.	5 RESISTANT
Chemical resistance (*)		ISO 10545-13	As indicated by manufacturer	LA, HA RESISTANT
Frost resistance		ISO 10545-12	No alteration	RESISTANT
Dimensions	Lenght and width	ISO 10545-2	± 0,3 %, max ± 1 mm	COMPLIANT
	Straightness of sides	ISO 10545-2	± 0,3 %, max ± 0,8 mm	COMPLIANT
	Rectangularity	ISO 10545-2	± 0,3 %, max ± 1,5 mm	COMPLIANT
	Warpage	ISO 10545-2	± 0,4 %, max ± 1,8 mm	COMPLIANT
	Thickness	ISO 10545-2	± 5 %, max ± 0,5 mm	COMPLIANT
Slip resistance		DIN 16165 – Annex B	-	R11
		DIN 16165 – Annex A	-	A+B+C
		BCR-TORTUS	-	$\mu > 0,40$
		ANSI A 137.1	-	EW
		AS 4586:2013		P4
Shade variation		ANSI A 137.1	Come indicato dal produttore	V2 (WHITE DOVER L2, BEIGE MADEIRA L2, TAUPE MOHER L2, GREY TENERIFE L2) V3 (01 WHITE L2, 04 GRAY L2, IVORY FLOW L2, SILVER FLOW L2, GRAY FLOW L2, DARK FLOW L2, NEXT WHITE L2, NEXT GRAY L2, NEXT TAUPE L2, NEXT DARK L2, OAK NATURAL L2, OAK CLOVES L2, CONCRETO EXTRA LIGHT L2, CONCRETO LIGHT L2, CONCRETO MEDIUM L2, CONCRETO DARK L2) V4 (02 DESERT L2, 03 EARTH L2, 05 DARK L2)
Fire reaction		EN 13823	CPR (UE) 305/2011, 2000/147/CE, UNI EN 13501-1	Class A1 (wall)
		EN 9239-1		Class A1 <sub>fl</sub> (floor)
Thermal conductivity		EN 12524	-	$\lambda = 1,3 \text{ W/m } ^\circ\text{K}$

(\*) Excluding hydrofluoric acid and its derivatives.



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