

SHALE

SPECIFICATION



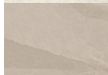



PORCELAIN STONEWARE

MATERIAL

Porcelain stoneware.

Classified in GROUP BIa UGL CON Ev ≤ 0,5%.

Complies with all the requirements of UNI EN 14411 ISO 13006 APP. G standards.

COLOR			SIZES	SURFACE	THICKNESS
	MOON	V3	MATTE RECTIFIED 120x120 (48"x48") . 80x160 (32"x62 ^{5/8} ") . 80x80 (32"x32") . 60x120 (23 ^{5/8} "x48") . 60x60 (23 ^{5/8} "x23 ^{5/8} ") . 30x60 (11 ^{7/8} "x23 ^{5/8} ") . 15x60 (6"x23 ^{5/8} ") . 10x30 (4"x11 ^{7/8} ") RIBBED RECTIFIED 60x120 (23 ^{5/8} "x48") . 30x60 (11 ^{7/8} "x23 ^{5/8} ") . 10x60 (4"x23 ^{5/8} ") ANTISLIP RECTIFIED 60x120 (23 ^{5/8} "x48") . 30x60 (11 ^{7/8} "x23 ^{5/8} ") ANTISLIP NOT RECTIFIED 30x60 (11 ^{7/8} "x23 ^{5/8} ") OPEN ANTISLIP RECTIFIED (20 MM) 60x120 (23 ^{5/8} "x48") . 60x60 (23 ^{5/8} "x23 ^{5/8} ")	MATTE RIBBED ANTISLIP OPEN ANTISLIP (20MM)	 9 MM 20 MM
	SAND	V3			
	TAUPE	V3			
	GREIGE	V3			
	ASH	V3			
	DARK	V3			

PROCESS certified according to the ISO 9001 quality standard

Product obtained from exceptionally pure, choice quality raw materials, including light-coloured clays, feldspar fluxes, kaolins, sands and coloured ceramic pigments. Pressing in hydraulic presses allows a pressure of over 500kg/cm² to be applied to the product, guaranteeing dimensional precision, planarity and high mechanical strength.

The product's colours and patterns are achieved with the innovative Digital Technology.

The materials are fired in single-layer roller kilns at temperatures of over 1,220°C.

GREEN BUILDING: CERTIFIED ENVIRONMENTAL SUSTAINABILITY

The tiles in the Shale collection are ideal for eco-sustainable building:

- They are produced in plants which have an EMAS-ISO 14001 certified environmental management system.
- They help to obtain credits for the construction of buildings in accordance with the LEED certification programme.

Size

Finishes

Color Type



SHALE



FLOOR



WALL



FACING SYSTEMS



RESIDENTIAL INDOOR



RESIDENTIAL OUTDOOR



PUBLIC INDOOR



PUBLIC OUTDOOR














HEAVY TRAFFIC

TECHNICAL TABLE PORCELAIN STONEWARE

CONFORMING TO STANDARDS

EN 14411 ISO 13006 ANNEX G GROUP BIa UGL CON Ev ≤ 0,5%

PHYSICAL PROPERTIES	TESTING METHOD	REFERENCE STANDARD	PRODUCT VALUES																												
 Sizes	EN ISO 10545-2		<table border="1"> <thead> <tr> <th></th> <th>7cm ≤ N < 15 cm (mm)</th> <th>N ≥ 15 cm (%) (mm)</th> <th>Rectified</th> </tr> </thead> <tbody> <tr> <td>Length and width</td> <td>±0.9</td> <td>±0.6 ±2.0</td> <td>±0.2 %</td> </tr> <tr> <td>Thickness</td> <td>±0.5</td> <td>±5.0 ±0.5</td> <td>±5 %</td> </tr> <tr> <td>Linearity</td> <td>±0.75</td> <td>±0.5 ±1.5</td> <td>±0.2 %</td> </tr> <tr> <td>Wedging</td> <td>±0.75</td> <td>±0.5 ±2.0</td> <td>±0.2 %</td> </tr> <tr> <td>Warpage</td> <td>±0.75</td> <td>±0.5 ±2.0</td> <td>±0.2 %</td> </tr> <tr> <td>Appearance: percentage of acceptable tiles, per lot</td> <td>95 % min.</td> <td>95 % min. -</td> <td></td> </tr> </tbody> </table>		7cm ≤ N < 15 cm (mm)	N ≥ 15 cm (%) (mm)	Rectified	Length and width	±0.9	±0.6 ±2.0	±0.2 %	Thickness	±0.5	±5.0 ±0.5	±5 %	Linearity	±0.75	±0.5 ±1.5	±0.2 %	Wedging	±0.75	±0.5 ±2.0	±0.2 %	Warpage	±0.75	±0.5 ±2.0	±0.2 %	Appearance: percentage of acceptable tiles, per lot	95 % min.	95 % min. -	
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 Water absorption %	EN ISO 10545-3	Ev ≤ 0,5%	< 0,1%																												
 Modulus of rupture	EN ISO 10545-4	Valore medio 35 N/mm ² min.	45 N/mm ²																												
 Breakage resistance		sp. > = 7,5 mm: min 1300 N sp. < 7,5 mm: min 700 N	2500 N (9 mm)																												
 Scratch resistance	EN ISO 10545-6	175 mm3 max.	Average < 150 mm3																												
 Thermal expansion coefficient	EN ISO 10545-8	Declared value	6,8 MK ⁻¹																												
 Thermal shock resistance	EN ISO 10545-9	Pass according to iso 10545-1	* Resistant																												
 Frost resistance	EN ISO 10545-12	Pass according to iso 10545-1	* Resistant																												
Resistance to low concentrations of acids and alkali	EN ISO 10545-13	Declared value	* Resistant																												
 Resistance to high concentrations of acids and alkali		Declared value	* Resistant																												
Resistance to domestic chemicals and additives for swimming pools		UB min.	UA																												
 Stain resistance of unglazed matte porcelain	EN ISO 10545-14	Declared value	* Resistant																												
 Friction coefficient (slipperiness)	DIN 51130	If needed	Declared value																												
	DIN 51097		Declared value																												
	B.C.R.A. - D.M.236/ 89		> 0,40 Dry / > 0,40 Wet																												
	ANSI A326.3		≥ 0,42 Wet																												




 Assessed by Ongreening, this product can potentially contribute to major green rating systems.
 For more info visit [Ongreening.com](https://www.ongreening.com)

