



## 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.

Italgraniti masters the natural essence of slate, creating an intense new porcelain stoneware. Shale banishes artificial solutions, showcasing the product of in-depth, creative research through coordinated indoor and outdoor surfaces

COLOR		SIZES		SURFACE	THICKNESS
	MOON	V3	<b>MATTE RECTIFIED</b> 80x160 (32"x62 7/8") . 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")  <b>RIBBED RECTIFIED</b> 60x120 (23 5/8"x48") . 30x60 (11 7/8"x23 5/8") . 10x60 (4"x23 5/8")  <b>ANTISLIP NOT RECTIFIED</b> 30x60 (11 7/8"x23 5/8")  <b>ANTISLIP RECTIFIED (20 MM)*</b> 60x120 (23 5/8"x48") (*Only SAND, GREIGE)	MATTE  RIBBED  ANTISLIP  ANTISLIP (20MM)	9,5 MM   20 MM
	SAND	V3			
	GREIGE	V3			
	ASH	V3			
	DARK	V3			

### PROCESS

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/cm<sup>2</sup> 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 Metaline 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	
			7cm ≤ N < 15 cm (mm)	N ≥ 15 cm (%) (mm)
 Sizes	EN ISO 10545-2		Length and width	±0.9 ±0.6 ±2.0
			Thickness	±0.5 ±5.0 ±0.5
			Linearity	±0.75 ±0.5 ±1.5
			Wedging	±0.75 ±0.5 ±2.0
			Warpage	±0.75 ±0.5 ±2.0
Appearance: percentage of acceptable tiles, per lot	95 % min.	95 % min.	-	
				<b>Rectified</b>
				Conforming
 Water absorption %	EN ISO 10545-3	Eb ≤ 0,5%		Conforming
 Modulus of rupture		Valore medio 35 N/mm <sup>2</sup> min.		Conforming
 Breakage resistance	EN ISO 10545-4	sp. > = 7,5 mm: min 1300 N sp. < 7,5 mm: min 700 N		Conforming
 Scratch resistance	EN ISO 10545-6	175 mm3 max.		Average < 150 mm3
 Thermal expansion coefficient	EN ISO 10545-8	Declared value		6,8 MK <sup>-1</sup>
 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		Declared value		* Resistant
 Resistance to high concentrations of acids and alkali	EN ISO 10545-13	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
 Brilliance				More or equal to that of marble and granite
 Color resistance to light	DIN 51094	No noticeable color change.		No alteration after testing
 Friction coefficient (slipperiness)	DIN 51130			Declared value
	DIN 51097			Declared value
	B.C.R.A. - D.M.236/ 89	If needed		> 0,40 Dry / > 0,40 Wet
	ASTM C1028-2007			> 0,60 Dry / ≥ 0,60 Wet
	ANSI A 137.1-2012			≥ 0,42 Wet