



MINERAL D

SPECIFICATION PORCELAIN STONEWARE

MATERIAL

Porcelain stoneware.

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

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

Mineral D marks innovation in technical surfaces for architecture: inspiration to the natural stone has been enhanced with planning and creativity. Five colors born to architectural projects (Dolomite, Zolfo, Rame, Galena, Pirite) in modular sizes and surface Antislip 30x60 R11 A+B+C.

COLOR			SIZES	SURFACE	THICKNESS
	DOLOMITE	V3	MATTE RECTIFIED 60x120 (23 ^{5/8} "x48") . 45x90 (17 ^{3/4} "x36") . 15x90 (6"x36") . 60x60 (23 ^{5/8} "x23 ^{5/8} ") . 30x60 (11 ^{7/8} "x23 ^{5/8} ") . 20x60 (8"x23 ^{5/8} ") . 10x60 (4"x23 ^{5/8} ") ANTISLIP NOT RECTIFIED 30x60 (11 ^{7/8} "x23 ^{5/8} ") ANTISLIP RECTIFIED (20 MM) 60x120* (23 ^{5/8} "x48") . 60x60** (23 ^{5/8} "x23 ^{5/8} ") (*only ZOLFO)(**all except for: RAME)	MATTE ANTISLIP ANTISLIP (20 MM)	9 MM 20 MM
	ZOLFO	V3			
	RAME	V3			
	GALENA	V3			
	PIRITE	V3			

PROCESS certified according to the ISO 9001 quality standard

UGL: 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 Mineral D 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





MINERAL D



PAVIMENTO



RIVESTIMENTO



FACCIATE VENTILATE



INTERNO RESIDENZIALE



ESTERNO RESIDENZIALE



INTERNO PUBBLICO



ESTERNO PUBBLICO



TRAFFICO PESANTE

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. -	-
			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. -	-																												
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

