

### MATERIAL

Porcelain stoneware. Classified in GROUP BIa UGL CON Ev  $\leq$  0,5%. Complies with all the requirements of UNI EN 14411 ISO 13006 APP. G standards.

Metaline is a metal-concrete project which takes inspiration from metal surfaces. The color range includes 5 different colors (Plate, Zinc, Steel, Corten and Iron), 2 warm colors and 3 cold colors. The collection has 3 different surface finishes and 3 special thickness: big slabs 6mm (Matte finish), 9,5mm (Matte and Melt finish) and 20mm thick (Antislip finish R11 A+B+C). The project is also enriched both by a wide variety of big different slabs sizes (160x320, 120x260, 80x160) perfect for high traffic areas, both in standard and small sizes (60x60, 30x60, 20x60, 10x60) perfect for residential projects.

 COLOR		SIZES	SURFACE	THICKNESS
PLATE	V2	MATTE RECTIFIED (MEGA) 160x320* (62 <sup>78</sup> "x125 <sup>34</sup> ") . 120x260 (48"x102 <sup>1/3</sup> ") (*only STEEL, IRON, CORTEN)		
ZINC	V2	MATTE RECTIFIED 120x120 (48"x48") . 80x160 (32"x64") . 20x160 (8"x64") . 60x120 (23 <sup>58</sup> "x48") . 20x120 (6"x48") . 80x80 (32"x32") . 60x60 (23 <sup>56</sup> x23 <sup>56</sup> m) . 30x60 (11 <sup>76</sup> x23 <sup>56</sup> m) . 20x60	MATTE (MEGA) MATTE	6MM (MEGA)
STEEL	V2	(8"x23 <sup>ser</sup> ). 10x60 (2 x23 <sup>ser</sup> ). 10x60 (1 x23	MELT	9 MM
CORTEN	V2	<b>ANTISLIP NOT RECTIFIED</b> 30x60 (11 <sup>7/6</sup> "x23 <sup>56</sup> ")	ANTISLIP ANTISLIP (20MM)	20 MM
IRON	V2	ANTISLIP RECTIFIED (20 MM) 80x80 (32"x32"). 60x60 (23 <sup>56</sup> "x23 <sup>56</sup> ") (only ZINC, PLATE, IRON, CORTEN)		

#### 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 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.

# METALINE



















# TECHNICAL TABLE PORCELAIN STONEWARE

CONFORMING TO STANDARDS

EN 14411 ISO 13006 ANNEX G GROUP BIa UGL CON Ev  $\leq 0,5\%$ 

	PHYSICAL PROPERTIES	TESTING METHOD	REFERENCE STANDARD			PRODUCT VALUES
				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 %
	Sizes	EN ISO 10545-2	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	$Ev \leq 0,5\%$			< 0,1%
	Modulus of rupture		Valore medio 35 N/mm² min.			45 N/mm²
	Breakage resistence	EN ISO 10545-4	sp. > = 7,5 mm: min 1300 N sp. < 7,5 mm: min 700 N			2500 N (9 mm)
Ó	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
A	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
		DIN 51130				Declared value
		DIN 51097				Declared value
	Friction coefficient (slipperiness)	B.C.R.A D.M.236/ 89	If needed			> 0,40 Dry / > 0,40 Wet
		ANSI A326.3				≥ 0,42 Wet