



LISTONE D

SPECIFICATION PORCELAIN STONEWARE

MATERIAL

Porcelain stoneware.

Classified in GROUP BIa UGL CON $E_b \leq 0,5\%$.

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

Six sophisticated colours, carefully selected to deliver all the beauty of the natural material, at the original and versatile colors: Canyon, Steppa, Vulcano, Tundra, Bruma, Deserto.

The surface finishes in the range have been designed down to the tiniest detail for an absolutely natural, genuine feel: Matte, Shabby R11 A+B (ideal for public places and outdoor) and Antislip (R11 A+B+C) 2 cm thickness in 40x80 size.

COLOR		SIZES	SURFACE	THICKNESS
	TUNDRA	V2	MATTE SHABBY ANTISLIP 20 MM	9,5 MM
	DESERTO	V2		
	CANYON	V2		
	BRUMA	V2		
	STEPPA	V2		
	VULCANO	V2		
		MATTE RECTIFIED 20x120 (8"x48") . 15x90 (6"x36")		
		SHABBY RECTIFIED 15x90 (6"x36")		
		ANTISLIP RECTIFIED (20 MM) 40x80 (16"x32") (only DESERTO, CANYON e BRUMA)		

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/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 Listone 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



放射性水平 A



EMAS
GESTIONE AMBIENTALE
VERIFICATA
N. Registro IT-000058



LISTONE D



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 Eb ≤ 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. -	Rectified Conforming
 Water absorption %	EN ISO 10545-3	Eb ≤ 0,5%		Conforming
 Modulus of rupture	EN ISO 10545-4	Valore medio 35 N/mm ² min.		Conforming
 Breakage resistance		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 ⁻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		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