

## TECHNICAL DATA FOR MARBLE BASED ENGINEERED STONES

Product: **NERO PORTORO**

Brand name: **SM MARBLE®**

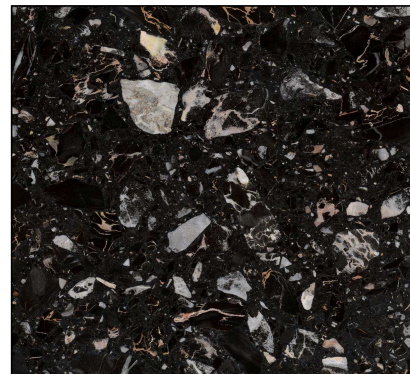
Composition: **4 - 6 % Resin, 94 - 96 % Marble**

Surface finish: **Polished, Honed, Brushed, Antique**

Slabs size (cm): **305x124**

Slabs thickness\* (cm): **1,2 - 2,0 - 3,0 - 4,0**

Tiles size\* (cm): **30x30x0,9 - 30x30x1,2 - 40x40x1,2 - 60x60x1,2 - 60x30x1,2 - 50x30x1,2 - 60x40x1,2**



\* Other sizes and thicknesses available on request

Characteristics	Standard	Value	Notes
Apparent density	EN 14617-1	2525 - 2625 Kg/m <sup>3</sup>	
Water absorption	EN 14617-1	≤ 0,25 %	
Flexural strength	EN 14617-2	10 - 20 MPa	
Abrasion resistance	EN 14617-4	35 - 39 mm	
Frost resistance	EN 14617-5	KM <sub>f25</sub> 0,6 - 1,0	
Thermal shock resistance	EN 14617-6	Δm% ≤ 0,12 % ΔR <sub>f,20</sub> % ≤ 60 %	Test temperature: 70°C
Impact resistance	EN 14617-9	1,0 - 2,0 J ≥ 1,5 J	For thickness 12 mm For thickness 20 mm, 30 mm
Chemical resistance	EN 14617-10	C1	
Linear thermal expansion coefficient	EN 14617-11	14 - 19 x 10 <sup>-6</sup> °C <sup>-1</sup>	
Dimensional stability	EN 14617-12	Class A (< 0,3 mm)	Referred to tiles 30x30x1,2 cm
Electrical resistivity	EN 14617-13	ρ <sub>s</sub> ≥ 10 <sup>10</sup> Ω ρ <sub>v</sub> ≥ 10 <sup>8</sup> Ω m	Referred to surface Referred to volume
Compression resistance	EN 14617-15	90 - 150 MPa	
Length and width	EN 14617-16	± 0,5 mm	Referred to tiles
Thickness	EN 14617-16	± 0,7 mm	Referred to tiles
Straightness of sides	EN 14617-16	± 0,3 mm	Referred to tiles
Rectangularity	EN 14617-16	± 0,9 mm	Referred to tiles
Centre curvature	EN 14617-16	± 0,2% referred to length	Referred to tiles
Edge curvature	EN 14617-16	± 0,2% referred to length	Referred to tiles
Warping	EN 14617-16	± 0,2% referred to length	Referred to tiles
Mohs hardness	EN 101	up to 3 Mohs	
Thermal conductivity	EN 12524	1,3 W/(m K)	From tabulated values
Reaction to fire	EN 13501-1	A2fl-s1	
Slip resistance	EN 14231	≥ 35 (Dry) ≥ 3 (Wet)	
Slip resistance	DIN 51130	R9	For Honed H9