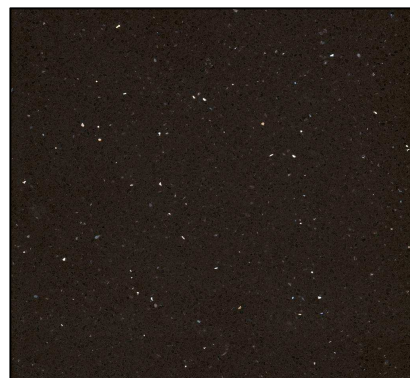


## TECHNICAL DATA FOR QUARTZ BASED ENGINEERED STONES

Product:	<b>MARRONE STARDUST</b>
Brand name:	<b>SM QUARTZ®</b>
Composition:	<b>6 - 8 % Resin, 92 - 94 % Quartz or Mirror</b>
Pre-consumer recycled:	<b>32 % by weight</b>
Surface finish:	<b>Polished, Honed, Brushed, Antique</b>
Slabs size (cm):	<b>305x140</b>
Slabs thickness* (cm):	<b>2,0 - 3,0</b>
Tiles size* (cm):	<b>30x30x1,2 - 40x40x1,2 - 60x60x1,2 - 60x30x1,2 - 50x30x1,2 - 60x40x1,2</b>



\* Other sizes and thicknesses available on request

Characteristics	Standard	Value	Notes
Apparent density	EN 14617-1	2325 - 2400 Kg/m <sup>3</sup>	
Water absorption	EN 14617-1	≤ 0,10 %	
Flexural strength	EN 14617-2	28 - 45 MPa	
Abrasion resistance	EN 14617-4	29 - 33 mm	
Frost resistance	EN 14617-5	KM <sub>f25</sub> 0,9 - 1,2	
Thermal shock resistance	EN 14617-6	Δm% ≤ 0,07 %	Test temperature: 70°C
		ΔR <sub>f,20</sub> % ≤ 25 %	
Impact resistance	EN 14617-9	1,5 - 2,5 J	For thickness 12 mm
		≥ 2,5 J	For thickness 20 mm, 30 mm
Chemical resistance	EN 14617-10	C4	
Linear thermal expansion coefficient	EN 14617-11	21 - 32 x 10 <sup>-6</sup> °C <sup>-1</sup>	
Dimensional stability	EN 14617-12	Class A (<0,3 mm)	
Electrical resistivity	EN 14617-13	ρ <sub>s</sub> ≥ 10 <sup>10</sup> Ω	Referred to surface
		ρ <sub>v</sub> ≥ 10 <sup>8</sup> Ω m	Referred to volume
Compression resistance	EN 14617-15	150 - 250 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 7 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