



SILBONIT are asbestos free double pressed and autoclaved flat boards. They are reinforced with mineralized cellulose fibers and through colored, with smoothed surface and rectified edges. SILBONIT boards are CE marked according to EN 12467:2016.

Technical Data Sheet (rev.0 del 23/05/2019)

SILBONIT PIGMENTA (anti-graffiti coloured acrylic treatment)
SILBONIT SPECTRA (coloured acrylic treatment)

* wet over dry	Unit of measure	Value
STANDARD DIMENSIONS** AND GEOMETRY		
Length	mm	2500 3000 3050
Width	mm	1200 1250
Thickness		5-6-8-10-12-15-20
Tolerances on nominal dimensions	Classification according to EN 12467:2016	Level 1
- on length	mm	± 2
- on width	mm	± 1
- on straightness of edges	%	0,1
- on squareness of edges	mm/m	2
- on thickness for smooth sheets	mm	± 0,2
Nominal weight	kg/m ²	14,4 (t=8mm) 18,0 (t=10mm) 21,6 (t=12mm)
PHYSICAL PROPERTIES		
Density (dry)	kg/m ³	1600 ± 50
MECHANICAL PROPERTIES		
E modulus of elasticity (dry)		
- longitudinal	GPa	14
- transversal	GPa	12
E modulus of elasticity (wet)		
- longitudinal	GPa	11
- transversal	GPa	9
Bending strength (wet)	MPa	≥24
Bending strength (dry)		
- longitudinal	MPa	32
- transversal	MPa	22
Compressive strength	MPa	40
Resistance (Charpy test)	According to EN 179-1:2010	
- longitudinal	kJ/m ²	4,3
- transversal	kJ/m ²	3,1
HYGROMETRICAL PROPERTIES		
Natural humidity	%	10 ÷ 15



* wet over dry	Unit of measure	Value
Max water absorption* SILBONIT SPECTRA	%	9 ± 3
Max water absorption* SILBONIT PIGMENTA	%	3 ± 2
Moisture movement – Relative humidity change from 30% to 90%		
- longitudinal	mm/m	0,7
- transversal	mm/m	0,8
THERMAL AND WATER VAPOUR PROPERTIES (untreated boards)		
Vapor resistance factor, μ – according to EN 12572:2016	---	49
Thermal conductivity – according to EN 12664:2002	W/mK	0,42
Thermal expansion coefficient – according to EN 10545-8:2014		
- longitudinal	1/°C	1,71•10-6
- transversal	1/°C	0,58•10-6
OTHER PROPERTIES		
Superior calorific power (through coloured)	MJ/kg	1,2 (12 mm) 1,3 (5 mm)
Superior calorific power (not through coloured)	MJ/kg	1,0
Fire rating class	According to EN 13501-1	A2 s1 d0
Freeze-thaw performance		RL ≥ 0,75
Durability classification	According to EN 12467:2016	category A
Strength classification	According to EN 12467:2016	class 5
Oils, acids, bases, salts resistance		good
Waterproof - inalterability		absolute
Wet-scrub resistance and cleanability of coatings (PIGMENTA)	UNI EN ISO 11998:2006 UNI EN 13300:2002	Class 1
CE marked product according to	---	EN12467:2016

** On request are available smaller dimensions.

If not otherwise specified the tests are in accordance to EN 12467:2016.

Please refer to the latest Technical Data Sheet available in the download area at:

<http://www.sil-lastre.com/download/>

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