

**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. Technical Data Sheet (rev.5 del 13/06/2024)

### **SILBONIT HYDRO** (transparent hydrophobic treatment)

	Unit of measure	Value
<b>STANDARD DIMENSIONS** AND GEOMETRY</b>		
Length	mm	2500 3000 3050
Width	mm	1200 1250
Thickness		5-6-8-10-12
Tolerances on nominal dimensions	Classification according to EN 12467:2018	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	± 0,5
Nominal weight	kg/m <sup>2</sup>	9 (t=5mm) 10,8 (t=6mm) 14,4 (t=8mm) 18,0 (t=10mm) 16,7 (t=10mm RIGO) 21,6 (t=12mm) 20,3 (t=12mm RIGO)
<b>PHYSICAL PROPERTIES</b>		
Density (dry)	kg/m <sup>3</sup>	1600 ± 50
<b>MECHANICAL PROPERTIES</b>		
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
Resistance (Charpy test)	According to EN 179-1:2010	
- longitudinal	kJ/m <sup>2</sup>	4,3
- transversal	kJ/m <sup>2</sup>	3,1
<b>HYGROMETRICAL PROPERTIES</b>		
Natural humidity	%	10 ÷ 15
Max water absorption (wet over dry)	%	≤25

	Unit of measure	Value
Moisture movement – Relative humidity change from 30% to 90%		
- longitudinal	mm/m	0,7
- transversal	mm/m	0,8
<b>THERMAL AND WATER VAPOUR PROPERTIES (untreated boards)</b>		
Vapor resistance factor, $\mu$ – 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
<b>OTHER PROPERTIES</b>		
Superior calorific power	MJ/kg	≤1,3
Fire rating class	According to EN 13501-1	A2 s1 d0
Freeze-thaw performance		RL ≥ 0,75
Durability classification	According to EN 12467:2018	category A
Strength classification	According to EN 12467:2018	class 5
CE marked product according to	---	EN12467

\*\* On request are available smaller dimensions.

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

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

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

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