



**SILBONIT SAFE** are asbestos free double pressed and autoclaved flat boards with smoothed surface and rectified edges. They are through colored, reinforced with mineralized cellulose fibers and with a fiberglass mesh applied to the back. **SILBONIT SAFE** boards are CE marked according to EN 12467

Technical Data Sheet (rev.5 del 11/03/2026)

## SILBONIT SAFE HYDROPLUS (transparent hydrophobic treatment)

|  | Unit of measure                           | Value   |
|--|---|---|
| <b>STANDARD DIMENSIONS** AND GEOMETRY</b>                    |   |   |
| Length   | mm  | 2500<br>3000<br>3050  |
| Width  | mm  | 1200<br>1250  |
| Thickness  |   | 5-6-8-10-12   |
| Tollerances 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)<br>10,8 (t=6mm)<br>14,4 (t=8mm)<br>18,0 (t=10mm)<br>21,6 (t=12mm) |
| <b>PHYSICAL PROPERTIES</b>                                   |   |   |
| Peso specifico allo stato secco                              | kg/m <sup>3</sup>                         | 1600 ± 50   |
| <b>PROPRIETA' MECCANICHE</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   |
| Moisture movement – Relative humidity change from 30% to 90% |   |   |
| - longitudinal   | mm/m                                      | 0,7   |
| - transversal  | mm/m                                      | 0,8   |



|   | Unit of measure            | Value                                      |
|---|----------------------------|--|
| <b>THERMAL AND WATER VAPOUR PROPERTIES</b>                              |                            |  |
| Vapor resistance factor, $\mu$ – according to EN 12572:2016             | ---                        | 49   |
| Thermal conductivity – according to EN 12664:2002                       | W/mK                       | 0,42                                       |
| <b>OTHER PROPERTIES</b>   |                            |  |
| Superior calorific power  | MJ/kg                      | $\leq 2,0$                                 |
| Fire rating class   | According to EN 13501-1    | A2 s1 d0                                   |
| Freeze-thaw performance   |                            | RL $\geq 0,75$                             |
| Durability classification   | According to EN 12467:2018 | category A                                 |
| Strength classification   | According to EN 12467:2018 | class 5                                    |
| Impact resistance   | NF F31-129: 2013           | Pass                                       |
| Hard body impact resistance   | ETAG 034-1:2012            | Pass                                       |
| Determination of the sound coefficient absorption in reverberation room | UNI EN ISO 354: 2003       | No reverberation effect                    |
| Cyclic pressure and depression test ( $10^5$ number of cycles)          | -----                      | No deformation or variation in performance |
| CE marked product according to  | ---                        | EN12467                                    |

\*\* On request are available smaller dimensions.

If not otherwise specified the tests are in accordance to EN 12467:2018.

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

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

The current document replaces any previous version.

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