

TECHNICAL DATA SHEET HEMPBOARD



Hempboard 350

It is the lightest version in the product range. It is made with larger granulometry particles to maintain its density. Thanks to its thermal resistance and breathability characteristics, it makes it an excellent insulator for green construction. Furthermore, by virtue of its porous structure, it has a high acoustic absorption capacity that allows its application as a ceiling panel.

Applications :

- Suitable for use as an enclosure panel in interior and exterior insulation solutions.
- Applications in which acoustic and thermal performance are mainly required.



Hempboard 700 with clay

This board results from the union of hemp biomass and clay (raw soil). Collaborative material, non-bearing, for use in high thicknesses. The breathability and hygrothermal capacity of the board, used as an interior lining, guarantees a stable and comfortable microclimate. The high density protects against polluting factors present in the atmosphere, reduces electromagnetic pollution, offering excellent acoustic insulation and positively affecting the phase change and heat attenuation of the wall. Raw soil is a perfect humidity regulator, capable of counteracting mold growth, neutralizing odors and making the air healthier..

Applications :

- Suitable for use as an enclosure panel in interior insulation solutions.
- Applications in which mainly thermal, acoustic and absorbent benefits are required (water vapor, odors). The panels can be applied directly to the wall using expansion screws. Fixation to structures is done with screws



Hempboard 1000

It is a board that adds to the important health and breathability properties of the 350 version, with much greater mechanical characteristics, resistance to water and fire. Precisely by virtue of these, it is possible to reduce the sections of the supporting frame structures, contributing to structural bracing and acoustic wall insulation.

Applications :

- It can be used as a bracing panel in structures, as a panel in ventilated facades, on pavements and on roofs.
- It was designed to be used in roof systems, attics, as a substitute for other wood panels, as an ennobling material. It cannot be used as a structural panel but rather as a collaborative *

* With prior authorization.

Type	ASPECT AND PROPERTIES TABLE		
	350	700 (with clay)	1000
Formats (mm)		600x1200	
Thickness (mm)	25, 30, 40, 50, 60	22	10, 12,5, 15, 20
	COMPOSITION		
Density (kg/m ³)	350	700	1000
Residual moisture content	9-11%	8-10%	9-11%
Board surface finishes	without sanding		
Thickness tolerance	±2 mm	±2 mm	±2 mm
Dimensional tolerance	Length/Width ± 2 mm / diagonal < 3 mm	Length/Width ± 2 mm / diagonal < 3 mm	Length/Width ± 2 mm / diagonal < 3 mm
Class of reaction to fire	EN 13501-1 C, s1 - d0	B, s1 - d0	B, s1 - d0
Acoustic isolation	to consult		
Water vapour diffusion resistance factor	EN 12572 μ = 6,6	μ = 12,3	μ = 23,3
Absorption after 24h under water	EN 12087 100,00%	55,50%	24,80%
Swelling after 24 hours under water	EN 317 < 5% (2,7%)	< 8% (6,1%)	< 5% (2,9%)
Thermal conductivity	EN 12667 λ = 0,09 W/mK	λ = 0,129 W/mK	λ = 0,165 W/mK
Thermal expansion coefficient	ASTM E228 -66 10-6 K-1	-60 10-6 K-1	-37 10-6 K-1
Formaldehyde level	FREE	FREE	FREE
Standard color	Beige / natural tone	Grey / Beige / natural tone	Beige / natural tone
	MECHANICAL QUALITIES		
	Load perpendicular to the board plane		
Compression strength (N/mm ²)	EN 310 1,1	1,5	10,4
Flexural strength (N/mm ²)	EN 826 1,4	2,5	6,9
Modulus of elasticity for bending (N/mm ²)	EN 310 292	442	2455
	Screw removal resistance		
Perpendicular to the surface (N)	EN 320 337	684	1059