



Semi-rigid, eco-friendly insulation boards made from technical hemp fibre. The boards are designed to adapt to the various shapes of buildings.

Bio Wall insulation is ideally suited for external thermal and acoustic insulation wall systems.

The advantages of these boards are their very low water vapour diffusion resistance and excellent thermal and acoustic insulation properties.

Thanks to these properties, they can fully replace polystyrene, glass or mineral wool insulation. As a result, Bio boards are perfect for use in sustainable construction.



**Use as thermal and acoustic non-loaded insulation for:**

External walls  
External panelling  
Internal thermal and acoustic wall  
Flat roofs with mechanical fixing  
Pitched roofs

**Advantages of our hemp insulation:**

Natural and sustainable  
Excellent thermal insulation properties  
Excellent acoustic insulation properties  
Low water vapour diffusion resistance  
Safe- supporting a healthy living environment  
Simple and fast assembly  
Ability to adapt to the various shapes of buildings

**Packaging, storage and transportation:**

Boards are stored on pallets 1100mm (W) X 1200mm (D) and a maximum height of 2200mm  
Pallets and boards must be stored in a dry place

**European assessment documentation:**

EAD No. 040005-00-1201 / June 2015

**Declaration of performance no.:**

DoP-20/01-002-01 (according to Annex III. of regulation (EU) No. 305/2011)



## Dimensions and packaging:

LENGTH (MM)	WIDTH (MM)	THICKNESS (MM)	BOARDS PER PALLET	M <sup>2</sup> PER PALLET	M <sup>2</sup> PER PALLET
1100	600	30*	134	88.44	2650
1100	600	40*	100	66	2640
1100	600	50	80	52.80	2640
1100	600	60*	68	44.88	2690
1100	600	80*	50	33	2640
1100	600	100	40	26.40	2640
1100	600	120*	34	22.44	2690
1100	600	140*	30	19.80	2770
1100	600	160*	26	17.16	2740

Transport size of pallets: 1100 X 1200 X 2200 (Width X Length X Height)

\*Please contact the team for bespoke sizes and dimensions. Minimum quantities apply.

**European technical assessment:** European technical assessment 16/0947

### Technical Details:

Essential Characteristics:	Values:	Technical specifications:
Bulk density	85-115* KG	EN1602
<b>Product Composition:</b> Hemp Fibre Binding fibres (PES BiCo)	Hemp fibres 85** % Binding fibres (PES BiCo) 15%	
<b>Thermal Properties:</b> Declared thermal conductivity $\lambda_D$	0.038 W/m.K	EAD 04005-00-1201 - Annex A EN ISO 10456
<b>Reaction to fire:</b> Class of reaction to fire	Class E	EAD 040005-00-1201 EN 13501-1 + A1
<b>Reaction to moisture:</b> Water vapour resistance $\mu$	$\leq 2$	EAD 040005-00-1201 EN 12086
<b>Sound absorption:</b> Acoustic absorption index $a_w$ Class of sound absorption	1.00 CLASS A	EAD 040005-00-1201 EN ISO 354; EN ISO 11654
<b>Geometry:</b> Width Length Thickness - tolerance class Squareness Flatness	+1.5% +2.0% T3 $\leq 5$ mm/m $\leq 6$ mm	EN 822 EN 822 EN 822; EN 13171 +A1 EN 824 EN 825
<b>Mechanical properties:</b> compressive stress at 10% deformation tensile strength parallel to faces - longitudinal tensile strength parallel to faces - transversely	$\leq 25$ kPa $\leq 100$ kPa $\leq 15$ kPa	EAD 040005-00-1201; EN 826 EAD 040005-00-1201; EN 1608 EAD 040005-00-1201; EN 1608
<b>Carbon (net storage)</b>	-1.257 kgCO <sub>2</sub> eq/kg	

\* the bulk density is not constant and varies with the nominal thickness of the product

\*\* the hemp fibres are treated with a fire retardant soda



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