

## INSULATING MATERIAL



**BIO BETON<sup>®</sup>  
PRONTO**



AVAILABLE IN BIG BAG 1 0 2 M<sup>3</sup>

## DESCRIPTION

**Bio Beton<sup>®</sup>** is a low-density hemp and lime biocomposite that combines properties of insulation and thermal mass. It is composed of hemp shiv (certified CenC) and hydrated dolomitic lime. Respecting the principles of social and environmental sustainability, it has all the characteristics required of a building material in line with sustainable development: high insulating capacity, low embodied energy and the ability to absorb CO<sub>2</sub> from the atmosphere.

## CHARACTERISTICS

- Thermal, acoustic and hygrometric comfort, BioBeton<sup>®</sup> is breathable (vapour permeable).
- Resistant to fire, frost, insects and rodents.
- Absence of toxic fumes in case of fire.
- Low embodied energy.
- Recyclable.

## APPLICATIONS

- Insulation of roofs, attics and lofts.
- Construction of insulating and breathable masonry walls.
- External wall insulation system for existing buildings.
- Internal wall insulation system for existing buildings.
- Subfloor insulation.

## LAYING

- The product is laid by casting it onto roof, floor screeds, attic, subfloor or into formwork.
- The product is delivered already mixed and ready for use in 2 cubic meter big bags..

Thickness - cm	10	15	20	30	40
Density - Kg/mc <sup>3</sup> dry	175	175	175	175	175
Thermal Conductivity - W/mk	LAMBDA $\lambda$	0,053	0,053	0,053	0,053
K Thermal Transmittance - W/mqK	U	0,49	0,33	0,25	0,13
Vapour permeability - $\mu$	$2,8 \leq \mu \leq 3,5$	$2,8 \leq \mu \leq 3,5$	$2,8 \leq \mu \leq 3,5$	$2,8 \leq \mu \leq 3,5$	$2,8 \leq \mu \leq 3,5$
Specific heat capacity - J/KgK	1480	1480	1480	1480	1480
Compression behaviour (tension al 10%) - kPa	71	71	71	71	71
Thermal offset (according to ISO 13786)	3h 40'	6h 20'	9h	14h 30'	20h
Soundproofing index when placed on a wooden floor (Rw) - dB			40		
Reaction to fire on roof	B <sub>roof</sub> (t2)	B <sub>roof</sub> (t2)	B <sub>roof</sub> (t2)	B <sub>roof</sub> (t2)	B <sub>roof</sub> (t2)