

INSULATING MATERIAL



AVAILABLE IN BIG BAG 1 0 2 M³

DESCRIPTION

Bio Beton® is a massive insulating material that combines properties of insulation and thermal mass. It is composed of **Canapulo Grosso** (certified CenC), **Legante Dolomitico Naturale** (hydrated dolomitic lime) and **Additivo Probiotico** (symbiotic microorganisms). 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 CO₂ from the atmosphere.

CHARACTERISTICS

- Thermal, acoustic and hygrometric comfort, Bio Beton® is breathable (vapour permeable).
- Resistant to fire, frost, insects and rodents.
- Absence of toxic fumes in case of fire.
- Low energy consumption during manufacturing.
- Recyclable.

APPLICATIONS

- Insulation of roofs, floors and attics.
- 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 roofs, floor screeds, attics, 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	25	30	35	40
Density - Kg/m ³ dry	175	175	175	175	175	175	175
Thermal Conductivity - W/mk LAMBDA λ	0,053	0,053	0,053	0,053	0,053	0,053	0,053
Thermal Transmittance - W/m ² K U	0,49	0,34	0,26	0,21	0,17	0,15	0,13
Vapour permeability - μ	4,5	4,5	4,5	4,5	4,5	4,5	4,5
Specific heat capacity - J/KgK	1480	1480	1480	1480	1480	1480	1480
Compression behaviour (strain at 10%) - kPa	71	71	71	71	71	71	71
Thermal offset (according to ISO 13786)	2h 30'	4h 56'	7h 32'	10h 05'	12h 38'	15h 11'	17h 43'
Soundproofing index when placed on a wooden floor (Rw) - dB			40				
Reaction to fire on roof	B _{roof} (t2)	B _{roof} (t2)	B _{roof} (t2)	B _{roof} (t2)	B _{roof} (t2)	B _{roof} (t2)	B _{roof} (t2)
Total GWP - kg CO ₂ eq/m ³	-105,3	-105,3	-105,3	-105,3	-105,3	-105,3	-105,3