

INSULATING MATERIAL



AVAILABLE IN BIG BAG 102 M³

DESCRIPTION

Bio Beton® 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 CO₂ from the atmosphere.

CHARACTERISTICS

- Thermal, acoustic and hygrometric comfort, BioBeton® 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..

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|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Thickness - cm | 10 | 15 | 20 | 30 | 40 |
| Density - Kg/mc ³ dry | 175 | 175 | 175 | 175 | 175 |
| Thermal Conductivity - W/mk LAMBDA λ | 0,053 | 0,053 | 0,053 | 0,053 | 0,053 |
| K Thermal Transmittance - W/mqK U | 0,49 | 0,33 | 0,25 | 0,17 | 0,13 |
| Vapour permeability - μ | $2,8 \leq \mu \leq 3,5$ | $2,8 \leq \mu \leq 3,5$ | $2,8 \leq \mu \leq 3,5$ | $2,8 \leq \mu \leq 3,5$ | $2,8 \leq \mu \leq 3,5$ |
| 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 _{roof} (t2) | B _{roof} (t2) | B _{roof} (t2) | B _{roof} (t2) | B _{roof} (t2) |