HEMPSULATION®

NATURAL SUSTAINABLE CARBON FREE

INSULATION

100% NATURAL & NEGATIVE CARBON FOOTPRINT

ANTI-MOLD | NON-TOXIC & ALLERGERN FREE | NATURAL RESISTANCE TO PESTS | ACOUSTIC BARRIER | ABSORBS MOISTURE

Technical Data Sheet

Thermal and acoustic wa floor & ceiling insulation in hemp fiber batt.

ACTIVE INGREDIENT

92% hemp fiber insulation

OTHER INGREDIENTS

8% textile polyester binder

No VOCs. No additives. Allergen Free.

STANDARDS REFERENCES

CAN/ULCS-129 Standard method of test for smoulder resistance of insulation

CAN/ULC-S702 Standard for mineral fibre thermal insulation for buildings

CAN/ULS-S703 Standard for cellulose fibre insulation for buildings

PERFORMANCE CRITERIA

- Excellent thermal resistance (R-value) of 3.7 per inch
- Thermal efficiency, air quality and acoustic comfort
- Hygrothermal behavior, a real competitive advantage in bio-based materials by its ability to retain and release moisture without loss of efficiency. Limits condensation.
  Less humidity = less daily heating
- More efficient phase shift (greater insulation heat retention = longer phase shift time = longer cool room time) Hempsulation insulation phase shift = 10 hours in 190 mm (7.5")
- Humidity management; hemp fibers have better resistance and a favorable behavior face to humidity
- Mechanical strength without sagging or settling during installation without thermal point between wood and steel frames
- Natural repellent for a habitat preserved from moths termites, insects and rodents

MAIN USES

Preformed and flexible vegetal batt designed to be inserted by friction between wooden or steel frames. Offered in panel thicknesses of:

Width x Length	Thickness	Ft2/panel	R-Value
2x15.25x48	2"	5.33	7
2x23.25x48	2"	8	7
3.5x15.25x48	3.5"	5.33	13
3.5x23.25x48	3.5"	8	13
5.5x15.25x48	5.5"	5.33	20
23.25x48	5.5"	8	20
15.25x48	7.5"	5.33	28
23.25x48	7.5"	8	28
Felt 1/4 x 47 1/4	645	645	n/a

**Other dimensions available on request*

ENVIRONMENTAL PERFORMANCE CRITERIA

- 100% natural plant fibers, non-allergenic and without VOC emissions
- Low energy of 30 kWh/m^3 for a less harmful environment
- Reduction of greenhouse gases (GHGs)
- Biobased material contributing significantly to the storage of atmospheric carbon (CO2) and to the sanitation of building
- Reduction of building's environmental footprint
- Product life cycle analysis (LCA) available

TECHNICAL DATA SHEET

Thermal and acoustic wa floor & ceiling insulation in hemp fiber batt.

CONFORMITY PERFORMANCE

Description	
ASTM	C518 Thermal resistance: 3.7/inch (R-Value)
LAMBDA	Thermal conductivity: 0.040
ASTM E84	Surface Combustion Characteristics 20 Class A or Class 1
ASTM E96	Water vapor transmission: 37ng/Pa.s m^2
ASTM 1338	Microbiological Resistance to Fungi: Conclusive ASTM
D3806	Flame Retardant Assessment: Class A or 1 (2-ft tunnel method)
S129-2015	Standard method of test for smoulder resistance of insulation (basket method): Loss of mass: 1.59%. Smoulder Time: 55 min
S703 6.3.2	Corrosiveness: Aluminium (√), Copper (√), Steel (x) S703 6.3.8 Water vapor absorption: 6.3%
S703 6.3.9	Flammability: CRF (W/cm^2) 0.06
S703 6.3.10	Permanence of flammability: CRF (W/cm^2) 0.06
S702 6.2.2	Volumetric mass: 35 kg/m^3 + 3.5

DELIVERY AND STORAGE

Products delivered in their original packaging. Stored in a closed, dry place.

NO PROTECTIVE WEAR REQUIRED

It is recommended that the installer wear a dust mask and eye protection.

DISCLAIMER

The information described in this Technical Sheet is established to help select the right insulation board for your use. It is user's responsibility to determine if the product meets their needs. Technical information contained herein is furnished without charge or obligation and is given and accepted at recipient's sole risk. Because conditions of use may vary and are beyond our control, manufacturer makes no representation about, and is not responsible or liable for, the accuracy or reliability of data associated with particular uses of any product described herein. Independent Verification report available upon request.

WARRANTY

Only the product is subject to replacement.

INSTALLATION

The insulation must be installed in accordance with manufacturer's "Installation Manual and Guide". Measure width of framing cavities to be filled. Add ¾ inch to this measurement to allow installation by compression. Laying the compressed panel is done by manual pressure. Best cutting tools are an angled grinder, a circular saw, and a long-serrated blade. Installation does not cause skin irritation. To properly regulate water vapor permeability, install vapor retarder on the "warm side."

ENVIRONMENTAL & SUSTAINABILITY STATEMENT

Hempsulation is committed to delivering non-toxic, sustainable, negative carbon footprint building material insulation solutions that improve the environment and human health. Visit www.buyhempsulation.com for more information.