

HempWool®



Product: **Natural Fiber Thermal Insulation**

Characteristics

Natural Fiber insulation used primarily for exterior walls, including floors, ceilings, and walls

Primary Uses

Pre-formed and flexible plant based insulation designed to be inserted by friction fit between wooden or steel frames. It is offered in panel thickness of: 2" (R-7), 3,5" (R-13), 5,5" (R-20), 7,5" (R-28). Other dimensions on request.

Delivery and Storage

Panels are shrink wrapped and pallet wrapped for safe delivery. The outer pallet wrap is compostable plastic film. The bundle stacks of insulation make for easy job site storage and placement of insulation.

Performance

- Excellent thermal resistance value (R-value) of 3.7 per inch
- Thermal efficiency, air quality and acoustic comfort
- Hygrothermal behavior: a competitive advantage in bio-based materials thanks to its ability to retain and release moisture without loss of efficiency. Inorganic fibers, such as glass or mineral fibers, lose performance with moisture passing through the insulation.
- Limits condensation. Less humidity = less daily heating
- More efficient phase shift regulation: the greater the heat retention of the insulation is, the longer the phase shift time will be, and the longer the room will be kept cool. HempWool Phase Shift = 10 hours for 7.5" of insulation.
- Humidity management; hemp fibers have a high resistance and a favorable interaction with humidity
- Dimensional Stability: HempWool has a high Mechanical strength which means no saggings or settling during or after installation
- Treated with biobased, nontoxic fire retardants and biocides that increase fire and pest resistance

Safety

It is recommended that the person doing the installation wear a dust mask and eye protection. HempWool is safe to touch and handle, causing no skin irritation. Always follow OSHA guidelines when working with insulation.

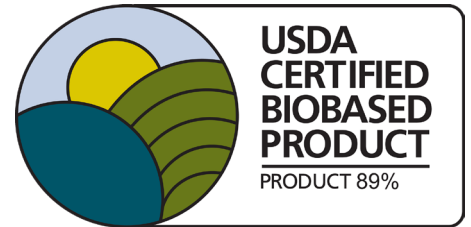
Responsibility

The information described in this guide is established to help select the right insulation product for your use. It is the user's responsibility to determine if the product meets their needs, and is subject to local code compliance.

Standards

USDA Biobased	HempWool is a USDA Certified Biobased Material, with 89.9% organic carbon content
ASTM Testing	HempWool is tested against various ASTM Standards, see our Technical Data Sheet
ICC-ES	HempWool is currently being evaluated for International Code Compliance (2023)

The certified performance of HempWool Insulation is in the process of being recognized by official bodies, like the ICC-ES. ASTM and ICC-ES Certification and Technical Assessments are real guarantees of the thermal and acoustic performance of our insulators.



Environmental

- 90% natural plant fibers, non-allergenic and containing no VOC's
- Low embodied energy, utilizing energy efficient manufacturing
- Reduction of greenhouse gases (GHGs), currently being analyzed for an Environmental Product Declaration.
- Biobased material feedstock contributes to storage of GHG
- VOC and Red List Chemical Free
- Complete Product life cycle analysis (LCA) available in 2023
- Recoverable, recyclable, compostable biobased material

Installation

The insulation must be installed in accordance with the installation instructions in the manufacturer's "Installation manual and guide".

Technical Services

For all technical questions in the United States, please contact our sales department at Sales@Hempitecture.com