# hempitecture°



### PRODUCT DESCRIPTION

HempWool is a natural fiber thermal insulation made of 90% hemp fiber and 10% polymer fiber. At R3.69/in, the thermal resistance of HempWool insulation is comparable to commonly used insulation products. HempWool does not contain any VOCs and is non-toxic.



#### CHARACTERISTICS

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

#### PRIMARY USE

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.

# TECHNICAL DATA

#### ASTM C209

Density of insulation - 2.81lbs/ft3 / 45Kg/m3

#### ASTM C518

Thermal Resistance - R3.69/in Thermal Conductivity 0.040W/m.K

# **ASTM E1354**

Vapor Permeability - 37 Perms / .647 ng/Pa.s.m<sup>2</sup>

#### ASTM E1321 - 13

Ignition Time - 6.67 sec. Average Heat Release Rate - 5.74 (Btu/s/ft<sup>2</sup>) Total Heat Release - 642.8 (Btu/s/ft<sup>2</sup>) Heat Release Maximum Rate - 10.98 (Btu/s/ft<sup>2</sup>) Total Smoke Release by Surface Unit - 217.26 (Btu/s/ft<sup>2</sup>)







Testing data obtained by our manufacturing partner for our imported HempWool® insulation. Our Idaho made HempWool® is made to the same specifications, but has not been independently tested. A new technical data sheet covering the results of our improved HempWool® formulation is pending. Please consult with your local building department to use the product that meets your local inspector's compliance threshold.

# **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 constributes to storage of GHG



- · VOC and Red List Chemical Free
- Complete Product life cycle analysis (LCA) available in 2024
- · Recoverable, recyclable, compostable biobased material

