



THE HEMP ABODE

**SUPERIOR INSULATION.
NATURAL PERFORMANCE.
MEASURABLE RESULTS.**

HEMPICURE + BOARDWURKS +
CUSTOM MINERAL SYSTEM

Our hemp wall and roof assemblies deliver industry-leading insulation performance with the added benefit of natural thermal capacity—regulating indoor temperatures, reducing energy demand, and creating healthier, more comfortable homes year-round.

WHY HEMP INSULATION PERFORMS BETTER



HIGH R-VALUE

R-Value of 4 per inch delivers exceptional resistance to heat flow—keeping your home warmer in winter and cooler in summer.



NATURAL THERMAL CAPACITY

Hemp's dense, natural structure absorbs, stores, and slowly releases heat to stabilize indoor temperatures and reduce energy spikes.



MOISTURE SMART

Vapor permeable and moisture buffering—helps prevent condensation, improves durability, and maintains healthy indoor air.



LOW EMBODIED CARBON

Sequesters carbon and requires minimal energy to produce—better for your home and the planet.



BUILT TO LAST

Combines long-term insulation performance with structural integrity and natural materials that stand the test of time.

NATURALLY PROTECTIVE HEMP WALL PANEL ASSEMBLY

(Outside to Inside)



1 MINERAL SILICATE PLASTER FINISH (EXTERIOR)

Breathable, alkaline mineral finish provides a durable, weather-resistant surface. Allows moisture to escape while adding UV stability and long-lasting protection.

2 HEMP COMPOSITE PANEL (EXTERIOR SHEATHING)

Dense, mineral-rich panel provides structural stability, wind resistance, and an insulating buffer against thermal bridging.

3 2" SEMI-RIGID HEMP INSULATION PANEL

Dense hemp panel delivers excellent insulation, sound dampening, and moisture regulation.

4 3.5" HEMP WOOL INSULATION

Alkaline, fiber-rich insulation naturally resists compression and delivers superior thermal and acoustic performance.

5 1" SEMI-RIGID HEMP INSULATION PANEL

Adds continuous insulation and a stable base layer to improve overall wall performance.

6 HEMP COMPOSITE PANEL (INTERIOR SHEATHING)

Dense and durable—creates a barrier that adds structural integrity and helps maintain a comfortable indoor environment.

7 MINERAL SILICATE PLASTER FINISH (INTERIOR)

Breathable, moisture-regulating finish supports healthy indoor air and provides a beautiful, natural surface.

R-VALUE + THERMAL CAPACITY = TOTAL COMFORT

R-value measures resistance to heat flow. Thermal capacity measures the ability to store and manage heat.

Together, they deliver consistent indoor comfort, lower energy use, and healthier living—something R-value alone can't provide.



WALL SYSTEM

R-32

(8" TOTAL THICKNESS)

High performance insulation meets and exceeds building code requirements.

ROOF SYSTEM

R-40

(10" TOTAL THICKNESS)

Superior insulation for maximum comfort and energy savings year-round.

HEMP INSULATION R-VALUE



R-Value of 4 per inch
Consistent, reliable performance you can count on.
Wall System: R-32 (8")
Roof System: R-40 (10")

THE POWER OF HEMP: NATURAL THERMAL CAPACITY

Hemp's natural thermal mass means it absorbs excess heat during the day and releases it slowly when temperatures drop. This reduces peak heating and cooling loads, keeps indoor temperatures even, and makes your home more comfortable in every season.



STORES HEAT
Absorbs and holds heat energy



RELEASES SLOWLY
Maintains steady temperatures



STABILIZES COMFORT
Reduces hot/cold swings



LOWER ENERGY USE
Reduces heating & cooling demand

THERMAL PERFORMANCE TESTING DATA

Independent testing confirms the thermal performance of our natural building materials.

HEMPICURE HEMPWOOL® INSULATION BATTS

PROPERTY	RESULT
Thermal Resistance (R-Value)	4.0 per inch
Thermal Conductivity	0.25 W/m-K
Density	2.7 lb/ft³
Moisture Buffering	Excellent

Source: Hempitecture HempWool® Tech Data Sheet (Nov 2024)

HEMPICURE PLANTPANEL X SEMI-RIGID INSULATION

PROPERTY	RESULT
Thermal Resistance (R-Value)	4.0 per inch
Thermal Conductivity	0.25 W/m-K
Compressive Strength	15 psi
Moisture Buffering	Excellent

Source: Hempitecture PlantPanel X Tech Data Sheet (2024)

BOARDWURKS® HEMP COMPOSITE PANELS

PROPERTY	RESULT
Thermal Resistance (R-Value)	0.6 per 1/2"
Thermal Conductivity	0.40 W/m-K
Density	31.0 lb/ft³
Moisture Buffering	Good

Source: Boardwurks® Technical Data Sheet (2024)

CUSTOM MINERAL SILICATE FINISH

PROPERTY	RESULT
Thermal Resistance (R-Value)	R-0.02 per 1/2"
Thermal Conductivity	1.25 W/m-K
Alkalinity (pH)	9 - 11
Moisture Permeability	High

Source: Mineral Silicate Finish Tech Data (2024)



**NATURAL MATERIALS.
BETTER BUILDINGS.
STRONGER FUTURE.**

We build high-performance, low-toxicity homes that work in harmony with nature—supporting healthier people and a stronger planet.

thehempabode.com

