

hempitecture®



NATURALLY EFFICIENT

The insulating **hemp block**
for **building & renovation.**

Official US Distributor of:

ISOHEMP

KEY ADVANTAGES

Hemp brings a true sensation of comfort. It makes the atmosphere warm. There's nothing else like it.

Richard | Homeowner, Montana

TECHNICAL DATA



THERMAL RESISTANCE

R = 2.795 / inch



PHASE SHIFT

from 4 to 24h



ACOUSTICS

sound reduction from 37 to 45dB



RESISTANCE TO FIRE

from 60 to 120 minutes



RESISTANCE TO COMPRESSION

300kPa



Thermal regulation



Water regulation



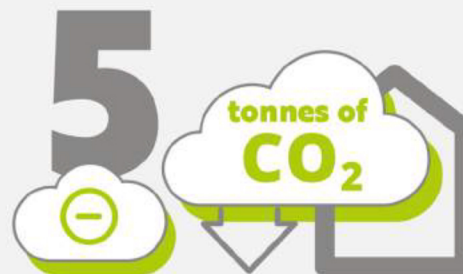
Sound proofing



Resistance & reaction to fire

I used hemp blocks for the first time following a request from one of my clients who wanted to integrate it into their construction project. I discovered a product with very interesting characteristics that's also easy to implement. It's a very nice, natural alternative to other products available on the market.

David | Architect, Montana



Constructing 1 single-family house with IsoHemp hemp blocks **saves 5 tonnes of CO₂**

6" THICK BLOCK

The 6" hemp block has numerous applications, mainly in exterior insulation but also in interior insulation, as cladding in hempcrete, or as filling in column and beam systems in new builds. It's mechanical strength and high inertia guarantee high thermal comfort in the building.



ADVANTAGES

- ✓ Highly resistant exterior insulation
- ✓ Significant thermal phase-shift
- ✓ Summer and winter comfort
- ✓ Excellent medium for renders and cladding

USA True Dimensions

Hemp Blocks are produced in the EU. The true dimensions of BLOCK10 are:

5.9" x 23.62" x 11.81"

Technical characteristics	Value	Unit	Standard
Thickness	15	cm	
Modular dimensions	60 x 30	cm	
Number of blocks per m ²	5,5	blocs/m ²	
Maximum block weight	11,5	kg	
Bulk density when dry	340	kg/m ³	EN 772-13
Adhesive consumption	5,8	kg/m ²	
Dry thermal resistance	2,24	m ² K/W	EN 12667
Thermal resistance at 50% RH	2,11	m ² K/W	EN 12667
Thermal conductivity λ	0,071	W/mK	EN 12667
Phase shift	9,8	h	ISO 13786
Sound reduction index* Rw	38 (0 ;-3)	dB	ISO 10140-2
Acoustic absorption coefficient α	0,85		EN ISO 354 : 2003
Equivalent air layer thickness Sd	0,42	m	EN ISO 12572
Water vapour resistance factor μ	2,8		EN ISO 12572
Compressive strength	300	kPa	EN 772-1
Dimensional tolerance	+4 ; -2	mm	EN 772-16
Reaction to fire	Without render	B, S1, d0	NF EN 13501-1
	With render	A2	NF EN 13501-1

Coated hempblok 15mm on one side – Simulated value

NOTE: Because ISOHEMP Blocks are produced in Europe, testing results and dimensions are listed in metric. Customer is responsible for conversions.

FIELD OF APPLICATION



INTERIOR INSULATION

The 6 inch block is the ideal partner in important interior renovations of old buildings with large rooms and areas. For example, it is used in the conversion of old masonry based buildings such as CMU and brick structures with poor thermal performance.



EXTERIOR INSULATION

Thanks to its high mechanical strength, the 6 inch block is ideal for exterior renovation. It enables the cladding of all types of exterior walls and provides an excellent medium for renders and cladding

Packaging	Value	Unit
Dimensions of a pallet	48" x 40" x 57"	in
Maximum weight of a pallet	1323	lbs
Number of blocks per pallet	48	blocks / pallet
Number of ft ² per pallet	93	ft ² / pallet
Number of blocks per ft ²	1.9375	blocks / ft ²
Storage	3	months / exterior
Storage life	2	years if covered



NEW BUILD

The 15cm block may be placed between column and beam structures as insulation filling or as an envelope block in timber frame buildings. In this case, it also serves as an excellent medium for finishes.

MORTAR ADHESIVE

SKU: MP

Natural adhesive for hemp blocks

IsoHemp adhesive mortar has been specially developed for the implementation of hemp blocks for interior and exterior use. It is a lime based mortar that is used in place of traditional mortar. It is applied as a thin seal of approximately 3mm by using a dedicated adhesive comb or trowel.



ADVANTAGES

- ✓ Quick and easy installation
- ✓ A 100% natural product
- ✓ Manual or machine mixing
- ✓ Fast implementation

Technical Characteristics	Value	Unit
Bulk Density	286.7	lbs/sqft
Mixing	2	lbs/sqft
Usage time	1	hours
Drying time	36 to 72	hours

Consumption for 1/8" mortar joints		
Thickness	Quantity	Unit
6" BLOCK	1.19	lbs/sqft
10" BLOCK	2	lbs/sqft

*2 bags / pallet on average

Packaging	Value	Unit
Dimensions of a pallet	48" x 40" x 48"	in
Maximum weight of a pallet	2000	lbs
Number of bags per pallet	40	bags / pallet
Bag weight	46.5	kg
Storage	Dry and away from moisture	
Storage life	6	months





Do you wish to build or renovate your home without compromising?

To not have to make the choice between comfort and respect for your health, your family's health or our planet? This is the challenge taken up by the IsoHemp engineering team who are actively working on the development of innovative and unique products to enable the design of your future home. With IsoHemp, you will no longer have to choose between thermal, acoustic or humidity comfort because we offer a quality solution to respond to your environmental concerns.

To reach this goal, six years ago we created IsoHemp, the industrial manufacturer of products for sustainable construction. The company quickly specialised in the production of a block with appealing technical features and which meets the challenges of tomorrow: the hemp block IsoHemp was born.

Intended for insulating buildings, it is ideal for regulating temperature, humidity and noise pollution. Thanks to its high inertia, it is capable of sustainably storing heat in the house and radiating it over several hours. Its excellent hygrometric capacity helps maintain a stable humidity level inside the dwelling thereby avoiding an uncomfortable too dry or too humid environment. In addition, its mass and highly porous nature prevents the reverberation of most airborne noises and accordingly makes it possible to obtain unparalleled acoustics.

In addition to its excellent technical performance, the hemp block also offers exceptional standards of health and environmental quality. It complies perfectly with the most stringent requirements in terms of sustainable development: it is manufactured using a very energy-efficient production process from 100% natural materials (lime and hemp), sourced from local industries. Better still, building or insulating your house with hemp blocks enables the sustainable storage of over 2 tons of atmospheric CO₂, so a (very) positive carbon footprint!

 **ISOHEMP**
IN PARTNERSHIP WITH


hempitecture®

Why Hemp Blocks?

"Building with hemp blocks from Hempitecture made our project quick, easy, with no specialty trades required. We knew we wanted a home that was better for us and better for the environment. Hempitecture supplied us a solution that worked, and we couldn't be happier"

Mary | Homeowner, Montana

