# ISOHEMP NATURAL BUILDING



## IsoHemp

Rue du Grand Champ, 18 5380 Fernelmont Belgium

Tel: +32 (0) 81/39 00 13 Fax: +32 (0) 81/39 00 14 Mail: info@isohemp.be

## ISOHEMP NATURAL BUILDING



BUILD WITH A SINGLE INSULATING MATERIAL
CHOOSE NATURAL QUALITY

Images shown are non-contractual V20171

## **ONE CONSTRUCTION**

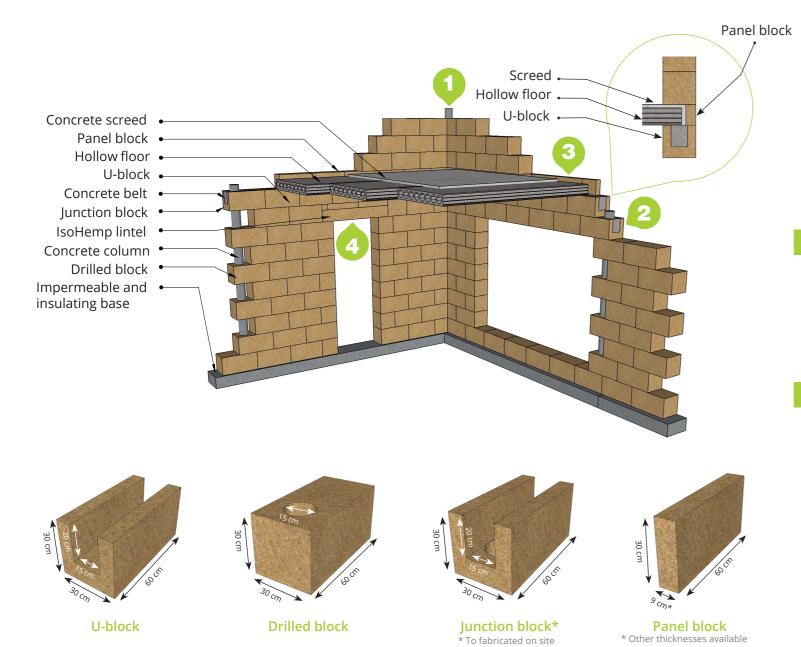
The construction of a sustainable and efficient building using IsoHemp blocks has never have been so simple: using a single insulating material, you can quickly erect your bespoke project.

With the Hempro system from IsoHemp, there's no need for any other insulating materials. It is now possible to construct the whole of a building using solely the full range of hemp blocks supplied by IsoHemp. In this way the outcome is a homogeneous building benefiting from all the properties and qualities of the product: thermal and sound insulation, fire resistance and permeability to allow the diffusion of vapour.

Moreover, thanks to their large size and lightness, hemp blocks are quickly laid so reducing construction time. Interior and exterior finishes can be applied directly to the masonry.

The Hempro system responds to a number of technical challenges so that different types of building can be constructed, both for custom projects as well as single-family homes.

## THE HEMPRO SYSTEM AND HEMPRO TECHNICAL PRODUCTS



## **SIMPLE & HIGH PERFORMANCE**



Use of drilled blocks for making reinforced concrete columns in the holes\*.



Use of panel blocks as a solution for construction joints, to be positioned on the U-blocks\*.



Use of U-blocks for making the beam of the reinforced concrete belt in the recess\*.



Use of IsoHemp lintels as load bearing elements above each opening\*.

## **ADVANTAGES & APPLICATIONS**

#### **ADVANTAGES**

Quickness of building

Homogeneity of the wall: a single product

Healthy and natural product

#### **APPLICATIONS**

Residential - Single family house - Annex

Multiple dwelling - Block of flats

Service sector

## PERFORMANCE TO MEET YOUR REQUIREMENT

The Hempro system is suitable for the construction of low energy, very low energy and even passive houses and buildings. The standard wall of the Hempro system is built with an IsoHemp block of 30 cm thickness. It is easily possible to improve the performance of the building by adding a second layer of IsoHemp hemp blocks of thickness 6, 9, 12, 15, 20 or 30 cm.

	Block 30cm						
			+ Block 9cm	+ Block 12cm	+ Block 15cm	+ Block 20cm	+ Block 30cm
Wall thickness**	33cm	39cm	42cm	45cm	48cm	53cm	63cm
Wall R values**	4,43 m <sup>2</sup> K/W	5,28 m <sup>2</sup> K/W	5,70 m <sup>2</sup> K/W	6,12 m <sup>2</sup> K/W	6,54 m <sup>2</sup> K/W	7,25 m <sup>2</sup> K/W	8,66 m <sup>2</sup> K/W
Wall U values**	0,23 W/m <sup>2</sup> K	0,19 W/m <sup>2</sup> K	0,18 W/m <sup>2</sup> K	0,16 W/m <sup>2</sup> K	0,15 W/m <sup>2</sup> K	0,14 W/m <sup>2</sup> K	0,12 W/m <sup>2</sup> K
	LOW AND VERY LOW ENERGY				PASSIVE		

- \* The length of steel-reinforced concrete bearing, column and beam must be calculated by a design office.
- \*\* With interior rendering of 1cm and exterior rendering of 2cm

www.isohemp.be www.isohemp.fr