



Hemp blocks, much more than just insulation

# Catalogue.

# 2025

NEW  
PRODUCT  
REFERENCES



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## Why choose IsoHemp blocks?



### 1. Thermal regulation

They regulate the temperature thanks to their ability to diffuse accumulated heat. True thermal buffer; the internal temperature is kept constant and the impact of heat variations between day and night is significantly reduced.



### 2. Water regulation

They regulate humidity thanks to their high permeability to water vapour. They also act as a water buffer, thus providing a constant and healthy indoor climate for the building occupants.



### 3. Sound proofing

They dampen and absorb noise. As true sound dampeners, they allow the absorption or abatement of the majority of acoustic waves, thus protecting against noise pollution.



### 4. Resistance and reaction to fire

They do not catch fire and do not emit toxic fumes. Thanks to their excellent reaction to fire, they offer up to more than 4 hours of fire resistance depending on the finish and thickness.



### 5. 100% natural

Hemp blocks are a premier sustainable solution, combining remarkable longevity with a reduced environmental footprint. This bio-sourced material ensures reliable and environmentally-friendly construction.



## A certified and recognised material

**ATEX**  
DE CAS A  
N°3211\_V1



**atg**  
3169



## Syst'HEMP



### Build.

Whatever construction system you opt for, hemp blocks will fit in perfectly with your project!

#### Syst'HEMP Pro

Biosourced monolithic wall combining structure and insulation

#### Syst'HEMP Building

Low-carbon envelope for large-scale buildings

#### Syst'HEMP Wood

Inertia and summer comfort for timber constructions



## Renovate.

### Syst'HEMP Reno

Breathable interior insulation

### Syst'HEMP Facade

Durable external insulation



## Partition.

### Syst'HEMP Partition

Internal, industrial and fireproof partitions



## Other applications.

### Syst'HEMP Specific

Tailor-made solutions for technical projects, floors, classrooms, etc.

## Technical characteristics

The IsoHemp blocks are very versatile and respond to many challenges, both for new buildings as renovations, whether in single-family or multi-family dwellings or commercial buildings. It is non-load-bearing and forms the insulating envelope of the building in combination with the supporting structure of the building.

### Origin Range



A range of 6 thicknesses for all your construction and renovation projects.

### Plus Range



A range with tenons and mortises to fit into syst'Hemp monomur systems

### Technic Range



A range of hemp blocks to meet your technical requirements



## Summary table

Technical characteristics	Origin Range						Plus Range		Unit	
	Block 7	Block 9	Block 12	Block 15	Block 20	Block 25	Block 30	Block 36		
Thickness	7,5	9	12	15	20	25	30	36	cm	
Modular dimensions	60 x 30						60 x 20		cm	
Number of blocks per m <sup>2</sup>	5,5						8,3		blocks/m <sup>2</sup>	
Number of m <sup>2</sup> per pallet	15,12	12,96	9,72	7,56	5,4	4,32	3,6	3	m <sup>2</sup> /pallet	
Bulk density	355*		320*							kg/m <sup>3</sup>
Maximum block weight	5,1	5,9	7,9	9,9	13,2	16,5	13,1	15,8	kg	
Weight of the masonry	0,31	0,36	0,48	0,60	0,80	1,00	1,15	1,38	kN/m <sup>2</sup>	
Adhesive consumption	2,8	3,4	4,5	5,6	7,5	9,4	5,6	6,8	kg/m <sup>2</sup>	
Dry thermal resistance	1,12	1,34	1,79	2,24	3	3,73	4,48	5,37	m <sup>2</sup> K/W	
Thermal resistance at 50% RH	1,06	1,27	1,69	2,11	2,82	3,52	4,23	5,07	m <sup>2</sup> K/W	
Thermal conductivity λ	0,075		0,071							W/mK
Phase shift	4,9	5,9	7,9	9,8	13,1****	16,4****	19,7****	23,6****	h	
Sound reduction index** Rw	37 (0;-2)	37 (-1;-3)	38 (-1;-3)	38 (0;-3)	40 (-1;-5)	41 (-1;-5)	42 (-1;-5)	44 (-1;-6)	dB	
Acoustic absorption coefficient α	0,85									
Equivalent air layer thickness Sd	0,21	0,25	0,34	0,42	0,56	0,7	0,84	1	m	
Water vapour resistance factor μ	2,8									
Compressive strength	0,2									MPa
Reaction to fire	B, s1, d0									
Resistance to fire***	45		60		120		240		min	

Technical characteristics	Technic Range				Unit
	P Blocks		U Blocks		
Thickness	30		36		cm
Modular dimensions	60 x 20		60 x 30		
Maximum block weight	12,3		14,4		kg
Recess section	15 x 15		18 x 18		cm
Cross-section of the recess	225		324		cm <sup>2</sup>
Adhesive consumption	5,6		6,8		kg/m <sup>2</sup>

\* +/-10% - bulk density at delivery

\*\* Hemp block masonry with rendering on one side - Simulated value

\*\*\* Hemp block masonry with rendering on fire side

\*\*\*\* Insignificant in view of damping greater than 300



## IsoHemp Block 7

The 7cm block is the thinnest block in the IsoHemp range. It's ideal for insulating from the inside in small spaces. Its thickness allows for quick and easy installation, without loss of living space. It's therefore particularly suitable for insulating small rooms or technical returns. This efficient block provides good thermal inertia and natural regulation of humidity inside rooms. It's a solution suitable for brick or stone walls, damp walls as well as bay returns.

## Technical characteristics

	Value	Unit	Standard
Thickness	7,5	cm	
Modular dimensions	60 x 30	cm	
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>	
Bulk density	355*	kg/m <sup>3</sup>	
Maximum block weight	5,1	kg	
Weight of the masonry	0,31	kN/m <sup>2</sup>	
Adhesive consumption	2,8	kg/m <sup>2</sup>	
Dry thermal resistance	1,12	m <sup>2</sup> K/W	NBN EN 1745
Thermal resistance at 50% RH	1,06	m <sup>2</sup> K/W	NBN EN 1745
Thermal conductivity λ	0,075	W/mK	NBN EN 1745
Phase shift	4,9	h	ISO 13786
Sound reduction index** Rw	37 (0 ; -2)	dB	ISO 10140-2
Acoustic absorption coefficient α	0,85		EN ISO 354 : 2003
Equivalent air layer thickness Sd	0,21	m	EN ISO 12572
Water vapour resistance factor μ	2,8		EN ISO 12572
Compressive strength	0,2	MPa	EN 772-1
Reaction to fire	B, s1, d0		NF EN 13501-1
Resistance to fire	45	min	

\* +-10% - bulk density at delivery

\*\* Hemp block masonry with rendering on one side - Simulated value

### Advantages

- Little loss of living space
- Natural humidity regulation
- The benefits of thermal inertia
- Quick and easy implementation

### Packaging

	Value	Unit
Dimensions of a pallet	120 x 100 x 120	cm
Maximum weight of a pallet	495	kg
Number of blocks per pallet	84	blocks/pallet
Number of m <sup>2</sup> per pallet	15,12	m <sup>2</sup> /pallet
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>

#### Storage

Pallet with shelf stored outside	6 months
Open pallet and exterior wall in progress	3 months
Masonry under completed roof	1 year with a maximum of 1 winter

### Solutions



> Syst'**HEMP**  
Specific



## IsoHemp Block 9

### Technical characteristics

The 9 cm block allows insulation from the inside with even higher thermal performance than block 7. Its thickness allows easy grooving to accommodate technical ducts. This block offers high moisture regulation, which allows it to be used to insulate old, damp walls or bay returns. From this thickness, hemp blocks also offer good sound absorption to improve the overall comfort of living rooms.

	Value	Unit	Standard
Thickness	9	cm	
Modular dimensions	60 x 30	cm	
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>	
Bulk density	320*	kg/m <sup>3</sup>	
Maximum block weight	5,9	kg	
Weight of the masonry	0,36	kN/m <sup>2</sup>	
Adhesive consumption	3,4	kg/m <sup>2</sup>	
Dry thermal resistance	1,34	m <sup>2</sup> K/W	NBN EN 1745
Thermal resistance at 50% RH	1,27	m <sup>2</sup> K/W	NBN EN 1745
Thermal conductivity $\lambda$	0,071	W/mK	NBN EN 1745
Phase shift	5,9	h	ISO 13786
Sound reduction index** Rw	37 (-1 ; -3)	dB	ISO 10140-2
Acoustic absorption coefficient $\alpha$	0,85		EN ISO 354 : 2003
Equivalent air layer thickness Sd	0,25	m	EN ISO 12572
Water vapour resistance factor $\mu$	2,8		EN ISO 12572
Compressive strength	0,2	MPa	EN 772-1
Reaction to fire	B, s1, d0		NF EN 13501-1
Resistance to fire	45	min	

\* +10% - bulk density at delivery

\*\* Hemp block masonry with rendering on one side - Simulated value

### Advantages

- Thermal and acoustic insulation
- Natural humidity regulation
- Thermal inertia input
- Easy to attach objects

### Packaging

	Value	Unit
Dimensions of a pallet	120 x 100 x 122	cm
Maximum weight of a pallet	486	kg
Number of blocks per pallet	72	blocks/pallet
Number of m <sup>2</sup> per pallet	12,96	m <sup>2</sup> /pallet
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>

#### Storage

Pallet with shelf stored outside	6 months
Open pallet and exterior wall in progress	3 months
Masonry under completed roof	1 year with a maximum of 1 winter

### Solutions



> Syst'**HEMP**  
Reno



## IsoHemp Block 12

The 12 cm block fulfils all interior insulation needs for renovations of old buildings. It regulates humidity naturally, which allows it to be used to insulate interior and exterior walls that are more humid. This block offers good thermal phase-shift, regulates heat, and improves living comfort significantly. Its thickness also allows it to be used in interior masonry. This block also offers very good sound insulation. From this thickness, hemp blocks are an efficient solution for exterior insulation of buildings.

## Technical characteristics

	Value	Unit	Standard
Thickness	12	cm	
Modular dimensions	60 x 30	cm	
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>	
Bulk density	320*	kg/m <sup>3</sup>	
Maximum block weight	7,9	kg	
Weight of the masonry	0,48	kN/m <sup>2</sup>	
Adhesive consumption	4,5	kg/m <sup>2</sup>	
Dry thermal resistance	1,79	m <sup>2</sup> K/W	NBN EN 1745
Thermal resistance at 50% RH	1,69	m <sup>2</sup> K/W	NBN EN 1745
Thermal conductivity λ	0,071	W/mK	NBN EN 1745
Phase shift	7,9	h	ISO 13786
Sound reduction index** Rw	38 (-1;-3)	dB	ISO 10140-2
Acoustic absorption coefficient α	0,85		EN ISO 354 : 2003
Equivalent air layer thickness Sd	0,34	m	EN ISO 12572
Water vapour resistance factor μ	2,8		EN ISO 12572
Compressive strength	0,2	MPa	EN 772-1
Reaction to fire	B, s1, d0		NF EN 13501-1
Resistance to fire	60	min***	

\* +/-10% - bulk density at delivery

\*\* Hemp block masonry with rendering on one side - Simulated value

\*\*\* Hemp block masonry with rendering on fire side

### Advantages

- Natural humidity control
- Thermal inertia input
- Quick and easy implementation
- Significant thermal phase-shift

### Packaging

	Value	Unit
Dimensions of a pallet	120 x 100 x 122	cm
Maximum weight of a pallet	490	kg
Number of blocks per pallet	54	blocks/pallet
Number of m <sup>2</sup> per pallet	9,72	m <sup>2</sup> /pallet
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>

#### Storage

Pallet with shelf stored outside	6 months
Open pallet and exterior wall in progress	3 months
Masonry under completed roof	1 year with a maximum of 1 winter

### Solutions





## IsoHemp Block 15

### Technical characteristics

The 15cm block, like the 20cm block, is a very versatile block. It can be used to build as well as to insulate, both inside and out. It offers excellent thermal insulation for optimal comfort in summer and winter alike. It also provides very good acoustic comfort and humidity regulation of walls. This block can be used as formwork for hemp concrete and as a masonry block in post-beam systems, as well as for partitions. It also offers very strong exterior insulation and provides excellent support for all types of rendering and cladding.

	Value	Unit	Standard
Thickness	15	cm	
Modular dimensions	60 x 30	cm	
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>	
Bulk density	320*	kg/m <sup>3</sup>	
Maximum block weight	9,9	kg	
Weight of the masonry	0,60	kN/m <sup>2</sup>	
Adhesive consumption	5,6	kg/m <sup>2</sup>	
Dry thermal resistance	2,24	m <sup>2</sup> K/W	NBN EN 1745
Thermal resistance at 50% RH	2,11	m <sup>2</sup> K/W	NBN EN 1745
Thermal conductivity $\lambda$	0,071	W/mK	NBN EN 1745
Phase shift	9,8	h	ISO 13786
Sound reduction index** Rw	38 (0 ; -3)	dB	ISO 10140-2
Acoustic absorption coefficient $\alpha$	0,85		EN ISO 354 : 2003
Equivalent air layer thickness Sd	0,42	m	EN ISO 12572
Water vapour resistance factor $\mu$	2,8		EN ISO 12572
Compressive strength	0,2	MPa	EN 772-1
Reaction to fire	B, s1, d0		NF EN 13501-1
Resistance to fire	60	min***	

\* +/-10% - bulk density at delivery

\*\* Hemp block masonry with rendering on one side - Simulated value

\*\*\* Hemp block masonry with rendering on fire side

### Advantages

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

### Packaging

	Value	Unit
Dimensions of a pallet	120 x 100 x 119	cm
Maximum weight of a pallet	474	kg
Number of blocks per pallet	42	blocks/pallet
Number of m <sup>2</sup> per pallet	7,56	m <sup>2</sup> /pallet
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>

#### Storage

Pallet with shelf stored outside	6 months
Open pallet and exterior wall in progress	3 months
Masonry under completed roof	1 year with a maximum of 1 winter

### Solutions



> Syst'**HEMP**  
Reno



> Syst'**HEMP**  
Facade



> Syst'**HEMP**  
Partition



> Syst'**HEMP**  
Building



## IsoHemp Block 20

The 20 cm block is very versatile and is specifically suited to new constructions and extensions. This masonry block is compatible with all construction systems (wood frame, post-beam system, classic construction, etc.). This breathable and insulating block guarantees excellent thermal phase shift in summer and winter alike. When used for interior partitions, it offers very high acoustic comfort. It can also be used in interior and exterior insulation of existing buildings that require very high thermal performance.

## Technical characteristics

	Value	Unit	Standard
Thickness	20	cm	
Modular dimensions	60 x 30	cm	
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>	
Bulk density	320*	kg/m <sup>3</sup>	
Maximum block weight	13,2	kg	
Weight of the masonry	0,80	kN/m <sup>2</sup>	
Adhesive consumption	7,5	kg/m <sup>2</sup>	
Dry thermal resistance	3	m <sup>2</sup> K/W	NBN EN 1745
Thermal resistance at 50% RH	2,82	m <sup>2</sup> K/W	NBN EN 1745
Thermal conductivity λ	0,071	W/mK	NBN EN 1745
Phase shift****	13,1	h	ISO 13786
Sound reduction index** Rw	40 (-1 ; -5)	dB	ISO 10140-2
Acoustic absorption coefficient α	0,85		EN ISO 354 : 2003
Equivalent air layer thickness Sd	0,56	m	EN ISO 12572
Water vapour resistance factor μ	2,8		EN ISO 12572
Compressive strength	0,2	MPa	EN 772-1
Reaction to fire	B, s1, d0		NF EN 13501-1
Resistance to fire	120	min***	

\* +/-10% - bulk density at delivery

\*\* Hemp block masonry with rendering on one side - Simulated value

\*\*\* Hemp block masonry with rendering on fire side

\*\*\*\* Insignificant in view of damping greater than 300

### Advantages

- Summer and winter comfort
- Significant thermal phase-shift
- Quick and easy implementation
- Significant durability of the insulation and its performance






### Packaging

	Value	Unit
Dimensions of a pallet	120 x 100 x 114	cm
Maximum weight of a pallet	454	kg
Number of blocks per pallet	30	blocks/pallet
Number of m <sup>2</sup> per pallet	5,4	m <sup>2</sup> /pallet
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>

#### Storage

Pallet with shelf stored outside	6 months
Open pallet and exterior wall in progress	3 months
Masonry under completed roof	1 year with a maximum of 1 winter

### Solutions

-  > **Syst'HEMP Reno**
-  > **Syst'HEMP Facade**
-  > **Syst'HEMP Partition**
-  > **Syst'HEMP Building**
-  > **Syst'HEMP Specific**



## IsoHemp Block 25

### Technical characteristics

The 25 cm block has the ideal thickness for interior or exterior insulation. It's very efficient and suitable for construction of new walls. It can be used in all existing building systems as an insulating masonry block. Its thermal resistance above 3.5 m<sup>2</sup>K/W guarantees high energy efficiency for optimal comfort in summer and winter alike. It provides humidity regulation and acoustic insulation for your building.

	Value	Unit	Standard
Thickness	25	cm	
Modular dimensions	60 x 30	cm	
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>	
Bulk density	320*	kg/m <sup>3</sup>	
Maximum block weight	16,5	kg	
Weight of the masonry	1,00	kN/m <sup>2</sup>	
Adhesive consumption	9,4	kg/m <sup>2</sup>	
Dry thermal resistance	3,73	m <sup>2</sup> K/W	NBN EN 1745
Thermal resistance at 50% RH	3,52	m <sup>2</sup> K/W	NBN EN 1745
Thermal conductivity $\lambda$	0,071	W/mK	NBN EN 1745
Phase shift****	16,4	h	ISO 13786
Sound reduction index** Rw	41 (-1;-5)	dB	ISO 10140-2
Acoustic absorption coefficient $\alpha$	0,85		EN ISO 354 : 2003
Equivalent air layer thickness Sd	0,7	m	EN ISO 12572
Water vapour resistance factor $\mu$	2,8		EN ISO 12572
Compressive strength	0,2	MPa	EN 772-1
Reaction to fire	B, s1, d0		NF EN 13501-1
Resistance to fire	120	min***	

\* +/-10% - bulk density at delivery

\*\* Hemp block masonry with rendering on one side - Simulated value

\*\*\* Hemp block masonry with rendering on fire side

\*\*\*\* Insignificant in view of damping greater than 300

### Advantages

- Significant thermal phase-shift
- Summer and winter comfort
- Quick and easy implementation
- Significant durability of the insulations and its performance

### Packaging

	Value	Unit
Dimensions of a pallet	120 x 100 x 114	cm
Maximum weight of a pallet	455	kg
Number of blocks per pallet	24	blocks/pallet
Number of m <sup>2</sup> per pallet	4,32	m <sup>2</sup> /pallet
Number of blocks per m <sup>2</sup>	5,5	blocks/m <sup>2</sup>

#### Storage

Pallet with shelf stored outside	6 months
Open pallet and exterior wall in progress	3 months
Masonry under completed roof	1 year with a maximum of 1 winter

### Solutions



> Syst'**HEMP**  
Reno



> Syst'**HEMP**  
Facade



> Syst'**HEMP**  
Specific



> Syst'**HEMP**  
Building



## IsoHemp Block 30

The 30 cm block is particularly suited to new low-energy constructions. This insulating masonry block can be combined with all construction systems and offers optimal compatibility with the Hempro system. The thermal phase shift of this very efficient block exceeds 19h and ensures optimal temperature in summer and winter while regulating the humidity of your home. The block also dampens sound waves and eliminates noise pollution. Like block 36, it can be used in existing constructions as state-of-the-art interior or exterior insulation.

## Technical characteristics

	Value	Unit	Standard
Thickness	30	cm	
Modular dimensions	60 x 20	cm	
Number of blocks per m <sup>2</sup>	8,3	blocks/m <sup>2</sup>	
Bulk density	320*	kg/m <sup>3</sup>	
Maximum block weight	13,1	kg	
Weight of the masonry	1,15	kN/m <sup>2</sup>	
Adhesive consumption	5,6	kg/m <sup>2</sup>	
Dry thermal resistance	4,48	m <sup>2</sup> K/W	NBN EN 1745
Thermal resistance at 50% RH	4,23	m <sup>2</sup> K/W	NBN EN 1745
Thermal conductivity λ	0,071	W/mK	NBN EN 1745
Phase shift****	19,7	h	ISO 13786
Sound reduction index** Rw	42 (-1 ; -5)	dB	ISO 10140-2
Acoustic absorption coefficient α	0,85		EN ISO 354 : 2003
Equivalent air layer thickness Sd	0,84	m	EN ISO 12572
Water vapour resistance factor μ	2,8		EN ISO 12572
Compressive strength	0,2	MPa	EN 772-1
Reaction to fire	B, s1, d0		NF EN 13501-1
Resistance to fire	240	min***	

\* +/-10% - bulk density at delivery

\*\* Hemp block masonry with rendering on one side - Simulated value

\*\*\* Hemp block masonry with rendering on fire side

\*\*\*\* Insignificant in view of damping greater than 300

### Advantages

- Durability of the insulator and its performances
- Phase shift (>19h)
- Summer and winter comfort
- Open to water vapour diffusion

### Packaging

	Value	Unit
Dimensions of a pallet	120 x 100 x 114	cm
Maximum weight of a pallet	455	kg
Number of blocks per pallet	30	blocks/pallet
Number of m <sup>2</sup> per pallet	3,6	m <sup>2</sup> /pallet
Number of blocks per m <sup>2</sup>	8,3	blocks/m <sup>2</sup>

#### Storage

Pallet with shelf stored outside	6 months
Open pallet and exterior wall in progress	3 months
Masonry under completed roof	1 year with a maximum of 1 winter

### Solutions





## IsoHemp Block 36

### Technical characteristics

The 36 cm block is the reference block for new construction with very high thermal performance (very low energy). When associated with a load-bearing structure (Hempro system, post-beam system, etc.), it creates the entire envelope of a building. With high-level insulation (thermal phase shift > 23h), the block provides optimal comfort both through its thermal and acoustic qualities and its humidity regulation properties.

	Value	Unit	Standard
Thickness	36	cm	
Modular dimensions	60 x 20	cm	
Number of blocks per m <sup>2</sup>	8,3	blocks/m <sup>2</sup>	
Bulk density	320*	kg/m <sup>3</sup>	
Maximum block weight	15,8	kg	
Weight of the masonry	1,38	kN/m <sup>2</sup>	
Adhesive consumption	6,8	kg/m <sup>2</sup>	
Dry thermal resistance	5,37	m <sup>2</sup> K/W	NBN EN 1745
Thermal resistance at 50% RH	5,07	m <sup>2</sup> K/W	NBN EN 1745
Thermal conductivity λ	0,071	W/mK	NBN EN 1745
Phase shift****	23,6	h	ISO 13786
Sound reduction index** Rw	44 (-1 ; -6)	dB	ISO 10140-2
Acoustic absorption coefficient α	0,85		EN ISO 354 : 2003
Equivalent air layer thickness Sd	1	m	EN ISO 12572
Water vapour resistance factor μ	2,8		EN ISO 12572
Compressive strength	0,2	MPa	EN 772-1
Reaction to fire	B, s1, d0		NF EN 13501-1
Resistance to fire	240	min***	

\* +10% - bulk density at delivery

\*\* Hemp block masonry with rendering on one side - Simulated value

\*\*\* Hemp block masonry with rendering on fire side

\*\*\*\* Insignificant in view of damping greater than 300

### Advantages

- Very significant phase shift (>23h)
- Summer and winter comfort
- Open to water vapour diffusion
- Excellent support for renders and claddings

### Packaging

	Value	Unit
Dimensions of a pallet	120 x 100 x 114	cm
Maximum weight of a pallet	455	kg
Number of blocks per pallet	25	blocks/pallet
Number of m <sup>2</sup> per pallet	3	m <sup>2</sup> /pallet
Number of blocks per m <sup>2</sup>	8,3	blocks/m <sup>2</sup>

#### Storage

Pallet with shelf stored outside	6 months
Open pallet and exterior wall in progress	3 months
Masonry under completed roof	1 year with a maximum of 1 winter

### Solutions



> Syst'**HEMP**  
Reno



> Syst'**HEMP**  
Facade



> Syst'**HEMP**  
Building



> Syst'**HEMP**  
Specific



**NEW DIMENSIONS**

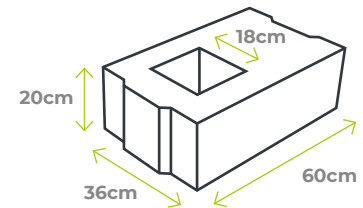
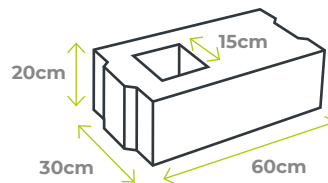
### IsoHemp drilled block

#### Vertical chaining block of 30cm or 36cm

Used for new constructions, 30 cm or 36 cm perforated blocks allow the creation of load-bearing structures (Hempro system) to create the complete envelope of your home from hemp blocks. This block has a vertical rectangular recess intended to create a reinforced concrete supporting column. The drilled block serves as formwork and insulation for the concrete column. Using this system creates optimal homogeneity while preventing thermal bridges and regulating humidity. It's associated with U-blocks to create collar beams.

### Technical characteristics

	P Blocks		Unit
	30	36	
Thickness	30	36	cm
Modular dimensions	60 x 20	60 x 20	cm
Maximum block weight	12,3	14,4	kg
Recess section	15 x 15	18 x 18	cm
Cross-section of the recess	225	324	cm <sup>2</sup>
Adhesive consumption	5,6	6,8	kg/m <sup>2</sup>



#### Advantages

- Homogeneity of the wall
- Economical solution
- Summer and winter comfort
- Open to water vapour diffusion

#### Packaging

	Value		Unit
	PAL30P-h20	PAL36PEX	
Dimensions of a pallet	120 x 100 x 114	120 x 100 x 114	cm
Maximum weight of a pallet	390	380	kg
Number of blocks per pallet	30	25	blocks/pallet
Number of m <sup>2</sup> per pallet	3,6	3	m <sup>2</sup> /pallet
Number of blocks per m <sup>2</sup>	8,3	8,3	blocks/m <sup>2</sup>

#### Solutions

 > Syst'**HEMP** Building

 > Syst'**HEMP** Specific

# PAL30UEX | PAL36UEX



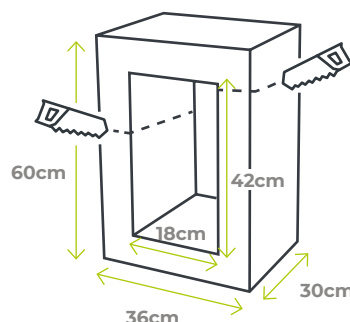
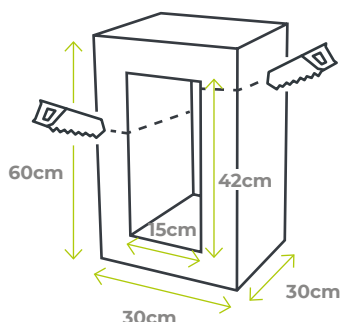
## IsoHemp U-block

### Technical characteristics

#### Horizontal chaining block of 30cm or 36cm

The 30 cm or 36 cm U-block is a hemp block intended for new constructions, allowing the creation of a complete load-bearing structure. This block has a horizontal recess intended to create a reinforced concrete supporting column for the building. It serves as formwork and allows the beams to be cast on which the floor and roof are placed. When associated with drilled blocks, it makes it possible to create a complete hemp block envelope, preventing thermal bridges and allowing your building to achieve homogeneous thermal performance over the whole of its envelope while ensuring good moisture regulation over its entire surface.

	U-block		Unit
Thickness	30	36	cm
Modular dimensions	60 x 30		cm
Maximum block weight	13,7	16,5	kg
Recess section	15 x 42	18 x 42	cm
Cross-section of the recess	630	756	cm <sup>2</sup>
Adhesive consumption	3,8	6,8	kg/m <sup>2</sup>



### Advantages

- Homogeneity of the wall
- Economical solution
- Summer and winter comfort
- Open to water vapour diffusion

### Packaging

	Value		Unit
	PAL30UEX	PAL36UEX	
Dimensions of a pallet	120 x 100 x 104	120 x 100 x 114	cm
Maximum weight of a pallet	295	295	kg
Number of blocks per pallet	18	15	blocks/pallet
Number of m <sup>2</sup> per pallet	3,24	2,7	m <sup>2</sup> /pallet
Number of blocks per m <sup>2</sup>	5,5		blocks/m <sup>2</sup>

### Solutions



> Syst'**HEMP** Building



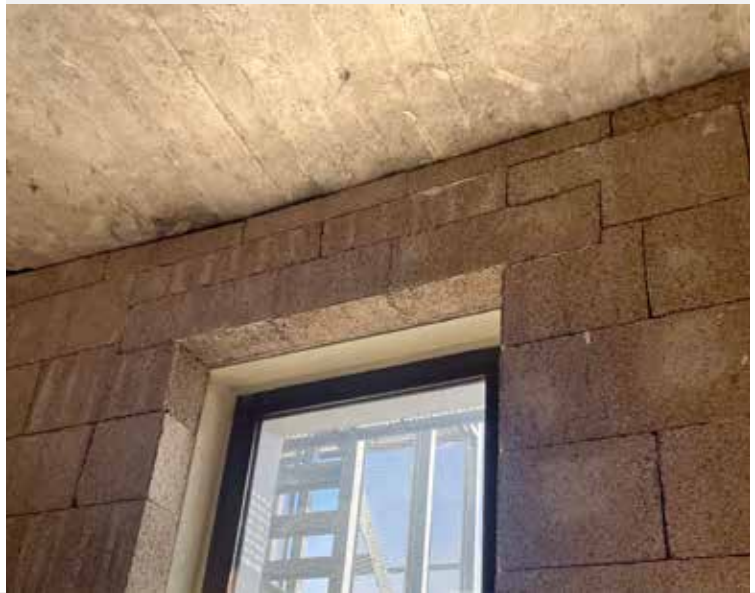
> Syst'**HEMP** Specific

## IsoHemp Lintels

IsoHemp lintels are prefabricated hemp concrete lintels strengthened by a reinforced concrete centre used for door and window openings in hemp block masonry construction. They are ideally suited for new build and interior and exterior renovations. They enable the elimination of thermal bridges and the achievement of an encompassing and continuous insulating envelope IsoHemp lintels are available in 9cm, 12cm, 15cm, 20cm and 30cm and in various lengths.

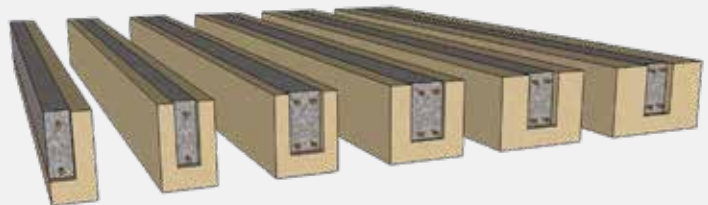
### How to choose your lintel?

The lintel supports the masonry above the opening that's been created. According to the vault principle, the IsoHemp lintel only takes on the triangular load of the masonry ( $P\Delta$ ).



### Advantages

- Suppression of thermal bridges
- Identical and continuous support for the final render
- Saves time on-site
- Quick and easy implementation



### Packaging

	Availabilities
Sale	By unit and on order
Availability period	15 working days
Storage	3 months/exterior
Storage life	2 years/covered

References	Window opening max. (cm)	Dimensions (cm)			Weight max. (kg)	Handling hooks*
		L (Length)	t (Thickness)	h (Height)		
<b>9 cm thickness</b>						
LIN09-120-20	80	120	9	20	31	no
LIN09-160-20	120	160	9	20	42	no
LIN09-200-20	160	200	9	20	52	no
LIN09-240-20	180	240	9	20	63	no
<b>12 cm thickness</b>						
LIN12-120-20	80	120	12	20	35	no
LIN12-160-20	120	160	12	20	46	no
LIN12-200-20	160	200	12	20	58	no
LIN12-240-20	180	240	12	20	69	no
<b>15 cm thickness</b>						
LIN15-120-20	80	120	15	20	51	no
LIN15-160-20	120	160	15	20	68	no
LIN15-200-20	160	200	15	20	85	yes
LIN15-240-20	180	240	15	20	102	yes
LIN15-300-20	240	300	15	20	127	yes
<b>20 cm thickness</b>						
LIN20-120-20	80	120	20	20	69	yes
LIN20-160-20	120	160	20	20	92	yes
LIN20-200-20	160	200	20	20	115	yes
LIN20-240-20	180	240	20	20	139	yes
LIN20-300-20	240	300	20	20	173	yes
<b>25 cm thickness</b>						
LIN25-120-20	80	120	25	20	75	yes
LIN25-160-20	120	160	25	20	100	yes
LIN25-200-20	160	200	25	20	125	yes
LIN25-240-20	180	240	25	20	150	yes
LIN25-300-20	240	300	25	20	187	yes
<b>30 cm thickness</b>						
LIN30-120-20	80	120	30	20	80	yes
LIN30-160-20	120	160	30	20	107	yes
LIN30-200-20	160	200	30	20	134	yes
LIN30-240-20	180	240	30	20	160	yes
LIN30-300-20	240	300	30	20	201	yes

\* From 70kg the lintels are equipped with hooks for easy handling.

IsoHemp SA declines all responsibility for misinterpretation of this table. If in doubt, please contact the IsoHemp technical department.



## HLM B - HLM S

### HL Mix

HL Mix IsoHemp is a plant-based insulating aggregate. The product is dry and ready to use for rapid application.

It is mainly used as a filler in the cavity between an existing wall and IsoHemp hemp block masonry to fill in any unevenness and ensure perfect water vapour transfer between the walls.

### Technical characteristics

	Value	Unit
Bulk density	270	kg/m <sup>3</sup>
Wet thermal conductivity at 50% RH	0,070	W/mK



### Advantages

- Ease of implementation
- Dry product
- Circular economy
- 100% natural product

### Solutions



> **Syst'HEMP  
Reno**



> **Syst'HEMP  
Specific**

### Packaging

	Value		Unit
	BigBag	Sac	
Dimensions of a pallet	120x100x115	120x100x123	cm
Weight	335	12	kg
Volume	1000	45	litres
Number per pallet	1	30	
Maximum weight of a pallet	350	385	kg
Storage	<b>Dry and away from moisture</b>		
Storage life	6	6	months



## Hempbag

### Technical characteristics

	Value	Unit
Bulk density	~ 100	kg/m <sup>3</sup>
Particle size	2 to 25	mm

#### Hemp for construction

The bag of IsoHemp hemp is the guarantee of using quality aggregate especially suitable for building applications. Mixed with ProKalk lime, this hemp enables the manufacture of lightweight insulating concrete quickly and easily prepared on site.

#### Advantages

- Very low dust levels
- Performance guarantee with ProKalk

#### Packaging

	Value	Unit
Dimensions of a pallet	120 x 80 x 240	cm
Weight d'une palette	420	kg
Number of bags per pallet	21	bags/pallet
Volume of a bag	200	L
Storage	Dry and in the shade	
Storage life	6	months



## ProKalk

### Technical characteristics

	Value	Unit
Bulk density	700	kg/m <sup>3</sup>
Usage time	30	min

#### Pre-formulated binder for Hempcrete

ProKalk lime is a preformulated binder specially adapted for the manufacturing of hempcrete. It is used both for manual application in a mixer, as well as in a dedicated hemp concrete spraying machine.

### Applications

	Dry density	Dosage		
		ProKalk (kg)	Hemp (L)	Water (L)
Wall	300 kg/m <sup>3</sup>	40	200	50
Filling	200 kg/m <sup>3</sup>	20	200	25

#### Packaging

	Value	Unit
Dimensions of a pallet	120 x 100 x 95	cm
Maximum weight of a pallet	1000	kg
Number of bags per pallet	48	bags/pallet
Weight des sacs	20	kg
Storage	<b>Dry and away from moisture</b>	
Storage life	9 months from production date	

#### Advantages

- A preformulated binder composed of hydraulic lime and aerated lime
- Suitable for mixing and spraying machines



## Adhesive mortar

### 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.

#### 💡 Tips :

25kg of adhesive mortar represents 20l of unmixed product.

\* It is laid in a thin joint of approx. 3 mm using the dedicated trowel (see tools).

## Technical characteristics

	Value	Unit
Bulk density	1400	kg/m <sup>3</sup>
Mixing	7-8	l/bag
Usage time	1	hour
Lifespan	5 to 30	degrees
Drying time	36	hours

## Consumption

### Consumption for thin joints of 3mm\*

Thickness	Quantity	Unit
7 cm block	2,8	kg/m <sup>2</sup>
9 cm block	3,4	kg/m <sup>2</sup>
12 cm block	4,5	kg/m <sup>2</sup>
15 cm block	5,6	kg/m <sup>2</sup>
20 cm block	7,5	kg/m <sup>2</sup>
25cm block	9,4	kg/m <sup>2</sup>
30 cm block	5,6	kg/m <sup>2</sup>
36 cm block	6,8	kg/m <sup>2</sup>
30 cm P block	5,6	kg/m <sup>2</sup>
36 cm P block	6,8	kg/m <sup>2</sup>
30 cm U block	3,8	kg/m <sup>2</sup>
36 cm U block	6,8	kg/m <sup>2</sup>

## Advantages

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

## Packaging

	Value	Unit
Dimensions of a pallet	120 x 100 x 85	cm
Maximum weight of a pallet	1000	kg
Number of bags per pallet	40	bags/pallet
Weight des sacs	25	kg
Storage	<b>Dry and away from moisture</b>	
Storage life	6 months from production date	

## Tools and saws

Tools and saws available for sale, recommended for on-site use with hemp blocks.

### Trowel



Teeth : 7mm x 7mm

**Ref.**

**TRU07** For 7cm and 30cm blocks

**TRU09** For 9cm and 36cm blocks

**TRU12** For 12cm blocks

**TRU15** For 15cm blocks

**TRU20** For 20cm blocks

**TRU25** For 25cm blocks

### Blocks scraper



**Ref. : GRAT**

### Tun



**Ref. : CUV**

### Mallet



Weight : 0,720kg

**Ref. : MAIL**

### Widia blade hand saw



**Ref. : SCIE MAN**

### Alligator saw



Cutting length : 45 cm  
Power : 1700 W

We recommend this electric Alligator saw for cutting IsoHemp hempcrete blocks on all types of construction sites.

**Ref. : SCIE ALL**

### Band saw



Cutting height : 50 cm  
Single phase 220volts

We recommend this band saw for cutting IsoHemp blocks for larger projects.

**Ref. : SCIE RUB**

## Hammer-in hooks

The use of hammer-in hooks is essential for fixing hemp blocks to a supporting concrete, terracotta, or brick masonry structure. The hook is fixed in the existing wall and is then sealed in the IsoHemp hemp block masonry joint. The hooks are manufactured from galvanised wire with a 3,5mm thickness.

Reference*	Usage	Length total	Depth of anchor	Working length
<b>CROF</b>	All types of blocks	18 cm	4 cm	14 cm
<b>Packaging</b>		500 pieces		
<b>Number of fasteners per m<sup>2</sup>**</b>				
For renovation from the inside			3 hooks per m <sup>2</sup>	
For renovation from the outside			5 hooks per m <sup>2</sup>	



\* Plug not supplied  
 \*\* Calculated with a wind load of 65 daN/m<sup>2</sup> at ULS. For other configurations, please contact our technical department.

## Connector brackets

The use of brackets is recommended to create a mechanical link between the hemp blocks and the existing structure. They are recommended for securing to the frame (timber frame and beam-column) and on their own for interior and exterior use.

Ref.	Usage	L Length	h Height	w Width	Thickness
<b>EQLI08</b>	Connection 7, 9 and 12 cm blocks	80 mm	5 cm	2 cm	
<b>EQLI14</b>	Connection 15, 20, 25, 30 and 36 blocks	140 mm	5 cm	2 cm	
<b>EQLI-IPE</b>	Metal structure connection	155		4	2,5 mm
<b>EQLI-PLA</b>	Ceiling connection	103	90	22	0,7 mm
<b>EQLI-DIL</b>	Movement joint connection	175		22	0,7 mm
<b>Packaging</b>		100 pieces			



Please refer to the Hempro conception guide before ordering. If in doubt, contact IsoHemp's technical department.

## Screws for blocks

These screws are suitable for fastening objects. They can be fixed directly in the hempcrete blocks without pegs. If a plaster or a finishing plate has been added to the hempcrete blocks, you can still insert these screws directly into the wall. These screws are made of galvanised steel.

References	Usage	Packaging
<b>VIS06-100</b>	6x100mm screw	150 pieces
<b>VIS08-160</b>	8x160mm screw	50 pieces





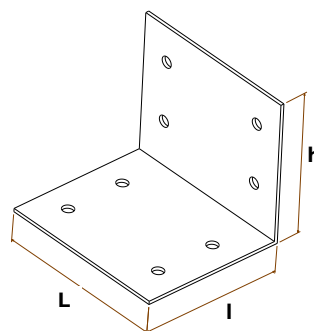
## Brackets

### Technical characteristics

#### Window passage

The use of brackets is advised to maintain hemp blocks above doors and windows when an IsoHemp lintel is not being used. This solution should be favoured in interior renovation mainly when the height to be insulated above the bay is low and there are only a few rows of blocks to be laid. The bracket can also be used as a link between two long thin lintels as well as to distribute and support the load in some applications.

Ref.	Usage	Weight approx	L	l	h
EQ07	7cm block	0,4 kg	15 cm	5 cm	5 cm
EQ09	9cm block	0,5 kg	15 cm	7 cm	7 cm
EQ12	12cm block	0,7 kg	15 cm	10 cm	10 cm
EQ15	15cm block	0,9 kg	15 cm	13 cm	13 cm
EQ20	20cm block	1,3 kg	15 cm	18 cm	18 cm
EQ25	25cm block	1,5 kg	15 cm	22 cm	20 cm
EQ30	30cm block	2,7 kg	25 cm	25 cm	20 cm
EQ36	36cm block	3 kg	25 cm	32 cm	20 cm



### Advantages

- Flexibility on-site
- Fast implementation
- Adapts to any support
- Galvanised steel

### Packaging

Sale

By unit and on order

Storage

Dry





## Angle bars

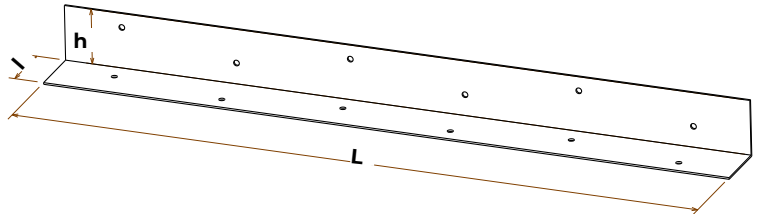
### Technical characteristics

#### Masonry base

The use of angle bars is recommended when laying the first row of hemp blocks in some applications. This solution shall be preferred for exterior insulation as an alternative to a base (silica-limestone, cellular glass, etc.) when there is no adequate foundation. They can also be used in new builds to support hemp masonry blocks when the latter are suspended. In general, the angle bar can be used as a lintel in certain applications or can be used as a connection between two long very thick lintels.

Ref.	Usage	Weight approx	L	l	h
COR12	12cm block	5,7kg	120 cm	10 cm	10 cm
COR15	15cm block	7,4kg	120 cm	13 cm	13 cm
COR20	20cm block	10,2kg	120 cm	18 cm	18 cm
COR25	25cm block	11,7KG	120 cm	22 cm	20 cm
COR30	30cm block	12,7kg	120 cm	25 cm	20 cm
COR36	36cm block	14,5kg	120 cm	32 cm	20 cm

Ref.	Allowable loads at ULS	Max block height with 1 side coated	
COR12	705	7,8	
COR15	542	5,1	
COR20	391	3	
COR25	321	2	m
COR30	282	1,7	
COR36	220	1	



#### Advantages

- Adapts to any support
- Fast implementation
- Flexibility on-site
- Galvanised steel

#### Packaging

Sale	By unit and on order
Storage	Dry





## PCS interior plaster

### Technical characteristics

#### Natural interior plaster

PCS interior plaster is an economic, sustainable, and high-quality solution. It comprises a workable mixture of gypsum, lime, and sand, ideal for plastering your walls and ceilings both for renovation and new build projects. The PCS interior plaster provides a smooth white modern finish that is ready for painting.

	Value	Unit
Bulk density	1200	kg/m <sup>3</sup>
μ	10-12	
λ	0,73	W/mK
Layer thickness	5-25	mm
Mixing	11-12	l/sac
Consumption	12,5	kg/m <sup>2</sup> /cm
Usage time	1,5	hours
Lifespan	5 to 30	degrees

To guarantee the watertightness of a wall, a minimum thickness of 1 cm is needed.

### Advantages

- Manual or mechanical application
- Ease of use
- Open to water vapour
- A 100% natural product

### Packaging

	Value	Unit
Dimensions of a pallet	120 x 100 x 90	cm
Maximum weight of a pallet	1000	kg
Number of bags per pallet	40	bags/pallet
Weight des sacs	25	kg
Storage	<b>Dry and away from moisture</b>	
Storage life	6 months from production date	



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