



IsoHemp Block 20

Technical characteristics

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.

	Value	Unit	Standard
Thickness	20	cm	
Modular dimensions	60 x 30	cm	
Number of blocks per m ²	5,5	blocks/m ²	
Bulk density	320*	kg/m ³	
Maximum block weight	13,2	kg	
Weight of the masonry	0,80	kN/m ²	
Adhesive consumption	7,5	kg/m ²	
Dry thermal resistance	3	m ² K/W	NBN EN 1745
Thermal resistance at 50% RH	2,82	m ² K/W	NBN EN 1745
Thermal conductivity λ _{ui}	0,071	W/mK	NBN EN 1745
Phase shift****	13,1	h	ISO 13786
Sound reduction index** R _w	40 (-1 ; -5)	dB	ISO 10140-2
Acoustic absorption coefficient α	0,85		EN ISO 354 : 2003
Equivalent air layer thickness S _d	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 100

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 (L x l x h)	120 x 100 x 114	cm
Maximum weight of a pallet	455	kg
Number of blocks per pallet	30	blocks/pallet
Number of m ² per pallet	5,4	m ² /pallet
Number of blocks per m ²	5,5	blocks/m ²

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**