



36 Block – Thickness 36 cm

Hempro System

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 ²	8,3	blocks/m ²	
Bulk density	320 +/- 10%	kg/m ³	
Maximum block weight	17,2	kg	
Weight of the masonry	1,5	kN/m ²	
Adhesive consumption	6,8	kg/m ²	
Dry thermal resistance	5,37	m ² K/W	NBN EN 1745
Thermal resistance at 50% RH	5,07	m ² 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	

* Coated hempblok 15mm on one side – Simulated value

** Value validated and tested with a 30cm thick block- Hemp block masonry plastered on the fire side

*** Insignificant considering a damping of more 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 ² per pallet	3	m ² /pallet
Number of blocks per m ²	8,3	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

Applications

-  Interior insulation
-  External insulation
-  New buildings
-  Floor & roof