PAL36EX

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 m²	8,3	blocks/m²	
Bulk density	320*	kg/m³	
Maximum block weight	15,8	kg	
Weight of the masonry	1,38	kN/m²	
Adhesive consumption	6,8	kg/m²	
Dry thermal resistance	5,37	m²K/W	NBN EN 1745
Thermal resistance at 50% RH	5,07	m²K/W	NBN EN 1745
Thermal conductivity λui	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 100

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 (L x l x h)	120 x 100 x 114	cm
Maximum weight of a pallet	455	kg
Number of blocks per pallet	25	blocks/pallet
Number of m² per pallet	3	m²/pallet
Number of blocks per m²	8,3	blocks/m²
	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