



36 Block – Thickness 36 cm

NEW 2.0 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 | |
| Maximum block weight | 19,8 | kg | |
| Weight of the masonry | 1,71 | kN/m ² | |
| Adhesive consumption | 7,5 | kg/m ² | |
| Dry thermal resistance | 5,37 | m ² K/W | EN 12667 |
| Thermal resistance at 50% RH | 5,07 | m ² K/W | EN 12667 |
| Phase shift λ | 0,071 | W/mK | EN 12667 |
| 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 | 0,22 | MPa | EN 772-1 |
| Compressive strenght at ULS fd | 0,099 | MPa | |
| Reaction to fire | B, s1, d0 | | NF EN 13501-1 |
| Resistance to fire with render | EI 120 | min** | EN 1364-1 |

* 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 | 521 | 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

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