

WALL SYSTEM

HEMPLITH® *Modular*

Non-loadbearing wall system of hempcrete blocks, also serving as permanent formwork for a reinforced concrete post-and-beam frame.

4.21

R in m²K/W

EI 90

Fire resistance of the wall

43 dB

Airborne sound insulation R_w , with plaster



APPLICATION

External walls with distributed insulation for residential, public and commercial buildings up to ground floor plus one upper floor, storey height max. 3.00 m. Dry-laid with tongue and groove, without mortar. Inside clay or lime plaster, outside lime-based mineral render, timber cladding or clinker brick. Loads are carried by the reinforced concrete frame.

TECHNICAL DATA

Thermal resistance R	4.21 m ² K/W
Thermal conductivity λ_{tile}	0.071 W/(m·K)
Reaction to fire, block	B-s1,d0
Fire resistance of wall	EI 90
Fire resistance of wall with reinforced concrete frame	REI 30
Airborne sound insulation R_w , with plaster	43 dB
Compressive strength, characteristic	≥ 0.2 MPa
Dry density	≤ 302 kg/m ³
Emissions to indoor air	A+
Composition	Hemp shives, mineral binder, water

BLOCK TYPES AND SUPPLY

Block type	Dimensions W × L × H (mm)	Weight	Blocks/m ²	Blocks/pallet	m ² /pallet
Standard block	300 × 600 × 308	approx. 21 kg	5.4	24	4.4
Post block	300 × 600 × 308	approx. 16 kg	5.4	24	4.4
Double post block	300 × 600 × 308	approx. 15 kg	5.4	24	4.4
U-block	300 × 600 × 308	approx. 14 kg	5.4	24	4.4

Recesses: post block 150 × 150 mm, double post block 2 × 150 × 150 mm, U-block 150 × 220 mm.

INSTALLATION

- Dry-laid with tongue and groove, without mortar.
- Cast reinforced concrete posts and beams in the recesses.
- Inside clay or lime plaster, outside mineral lime render, timber cladding or clinker brick.
- For details see the installation guide.

STORAGE AND TRANSPORT

- Supplied on pallets; the blocks dry for at least 28 days at the plant before delivery.
- Protect from rain and excessive moisture on site.
- Do not stack pallets too high; avoid impacts and rough handling.
- Coordinate delivery dates with construction progress.

SAFETY INFORMATION

- Concrete, mortars and plasters are alkaline: avoid skin and eye contact; wear safety goggles, work gloves and full-body clothing.
- When sawing and milling, extract dust at source and wear respiratory protection where dust occurs.
- Observe the safety data sheets of the building materials used.

Basis: Declaration of Performance No. 007/2026. This technical information has been compiled on the basis of the latest state of the art and our experience. Owing to the variety of substrates and site conditions, the purchaser/user is not released from the obligation to check the materials professionally for their suitability for the intended purpose.