Breakthrough in **building engineering**

U=0,15

HOTBLOK

NAJCIEPLEJSZY MATERIAŁ BUDOWLANY

System of single-leaf walls

PROGRAM REGIONALNY
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HOTBLOK
NAJCIEPLEJSZY MATERIAŁ BUDOWLANY
time saving
heat saving
savings in exploitation
savings in costs
the lowest insulation power factor U=0,15

Breakthrough in **building engineering**

System of single-leaf walls

Raising the walls in HOTBLOK System is the easiest possible way of the workmanship of building objects. The fundamental advantage of HOTBLOK System is its fantastic thermal insulation power factor, U=0,15 W/m^{2}K, which is enough for construction of energy-saving houses, and even passive houses. HOTBLOK System combines all expected features that are usually mutually exclusive i.e. insulation with resistance, water vapour permeability with freeze and water resistance, sound absorption with fire resistance. It is an unusual combination of parameters in today building engineering, especially in case of raising single-leaf walls.

The lowest insulation power factor

Modern technology of lightweight concrete block production that lies in using the insulation insert inside the product as well as the shape of block walls and polystyrene inserts (patented in the EU), excluding the possibility of formation of thermal bridges, allowed to create the construction material of the lowest thermal transmittance factor in the market: U=0,15 W/m^{2}K. HOTBLOK system is an innovative solution that sets the new quality in building engineering.

Technical data:

Water absorption - below 20%

Compressive strength - 1,5 N/mm^2

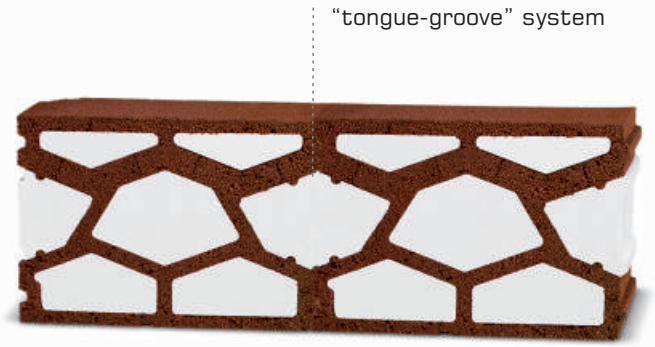
Insulation power factor - 0,15 W/m^{2}K

Freezing/defrosting resistance - yes, mass decrease below 5%

Fireproof material

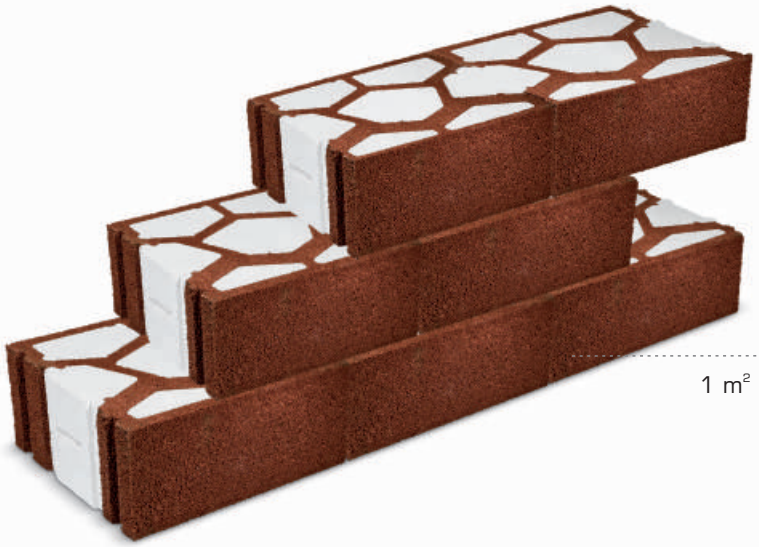
Time saving

Building in HOTBLOK System is one of the easiest and fastest methods of wall raising. Owing to the lowest insulation power factor, U=0,15 W/m^{2}K, walls constructed in HOTBLOK technique do not require insulation, thanks to which the time of building the house is much shorter. Due to optimally chosen size and weight of a single element, bricklaying is very fast (1 m^2 of wall – only 6,9 elements). Blocks have comfortable handles that make transport and putting elements in the wall easy, and "tongue-groove" system eliminates the necessity of using mortar in vertical joints. Complementary elements of HOTBLOK System – half, corner, angular and jamb blocks as well as ready lintels and insulation elements of ceilings make investment realisation much faster without the necessity of using technological breaks.



Heat saving

Thanks to unique solutions, a house built in HOTBLOK System is characterised by extreme heat saving. Light expanded clay aggregate (LECA), which is made of specially selected clay, is a traditional, healthy and natural material used in building engineering for many years. Wall insulation, not exceeding 0,15 W/m^{2}K, makes it possible to construct an energy-saving building. With regard to a considerable limit of heat amount required for its heating, the quantity of the emission of carbon dioxide to the atmosphere is reduced.



1 m^2 of wall – only 6,9 elements

Savings in **costs**

Using HOTBLOK System considerably reduces building costs. HOTBLOK is a complete system for raising single-leaf walls that do not require additional insulation. Very high insulation power, at the level of U=0,15 W/m^{2}K, makes it possible to build a low-energy house at lower prices than technologies of two-layer walls that are now used and that can have similar parameters. Using HOTBLOK System visibly reduces labour and material costs.

heat-insulating mortar

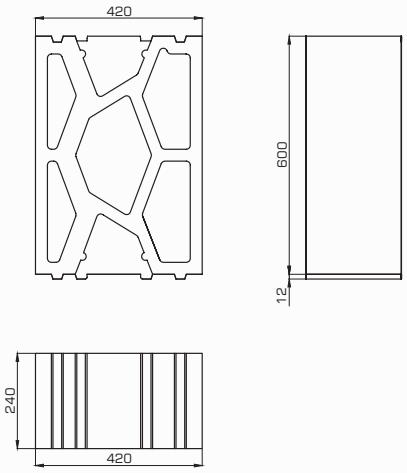
Savings in **exploitation**

Thanks to the insulation power factor, U=0,15 W/m^{2}K, a house built in HOTBLOK System will allow you to save measurable sums of money designed for its heating during exploitation, which is of great importance in further, forecasted increase of energy prices. System solutions allow you to limit heat losses to minimum. Thanks to this combination of parameters, uncommon in today building engineering, especially in case of single-leaf walls, a house built in HOTBLOK System will be comfortably warm, breathing, durable and healthy.

HOTBLOK

length/width/height
600 x 420 x 240 mm
6,94 pcs./m²

Block made of lightweight concrete, with a foamed polystyrene insulation insert. A big size and a "tongue-groove" system make constructing of walls much easier and faster, eliminating vertical joints at the same time.



HOTBLOK P

HALF ELEMENT

length/width/height
300 x 420 x 240 mm

Fine dimension lightweight concrete element with a foamed polystyrene insulation insert. Half elements guarantee a good binding in the horizontal layer without the necessity of trimming the blocks.

HOTBLOK NW 90

INSIDE CORNER

length/width/height
600 x 420 x 240 mm

A lightweight concrete block with foamed polystyrene filling, designed for shaping 90° corner blocks inside the building.

HOTBLOK NZ 90

OUTSIDE CORNER

length/width/height
600 x 420 x 240 mm

A lightweight concrete block with foamed polystyrene filling, designed for shaping 90° corners.

HOTBLOK NW 45

INSIDE CORNER

length/width/height
597 x 420 x 240 mm

Bevelled brick block (45°) for shaping corners inside the building.

HOTBLOK NZ 45

OUTSIDE CORNER

length/width/height
597 x 420 x 240 mm

Bevelled brick block (45°) for shaping corners outside the building.

HOTBLOK W

JAMB

length/width/height
600 x 420 x 240 mm

A special lightweight concrete brick block, with a foamed polystyrene insulation insert. Designed for shaping window and door openings. It guarantees perfect insulation power of the wall in the place where it adheres to the frame.

COMPLEMENTARY ELEMENTS OF **HOTBLOK** SYSTEM

HOTBLOK WP

HALF JAMB

length/width/height
300 x 420 x 240 mm

A half, special lightweight concrete element, with a foamed polystyrene insulation insert, designed for shaping window and door openings.

STARTER HOTBLOK

length/width/height
300 x 420 x 240 mm

A starter block to be used on continuous footing. It evenly takes over the loads of a single-leaf wall (42 cm thick).

LINTEL INSULATION

length/width/height
1 - 1450 x 250 x 240 mm
2 - 2450 x 250 x 240 mm
3 - 3450 x 250 x 240 mm

Lintel insulation is designed for closing window and door openings in carrier walls.

CARRIER LINTEL

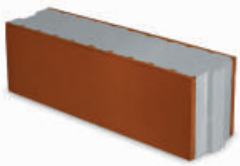
length/width/height
1 - 1450 x 170 x 240 mm
2 - 2450 x 170 x 240 mm
3 - 3450 x 170 x 240 mm

It guarantees the continuity of wall layer, fulfilling carrier functions immediately after mounting. Lintel filled with concrete enables mortar works without a technological break.

WINDOW SILL

length/width/height
1 - 1450 x 250 x 105 mm
2 - 2450 x 250 x 105 mm

This moulder solves the problem of proper window insulation and is a nice, ready outside window sill.



RIM INSULATION

length/width/height
940 x 240 x 300 mm

Element of the reinforcement rim, mounted outside, on heat-insulating mortar. It guarantees uniform thermal insulation of the ceiling and elbow rim on the whole surface of the wall, eliminating thermal bridges.

ELBOW BEAM

length/width/height
1000 x 170 x 240 mm

Elbow beam is mounted from the inside side of the wall and it runs around the whole building. After being reinforced and filled with concrete, it fastens and stiffens the whole construction.

LOCK PIN STRIP

length/width/height
2000 x 50 x 30 mm

It is used in anchoring ceilings and it eliminates the necessity of boarding. A strip mounted outside the wall can be cut and adjusted to the length and shape of walls.

HOTBLOK

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