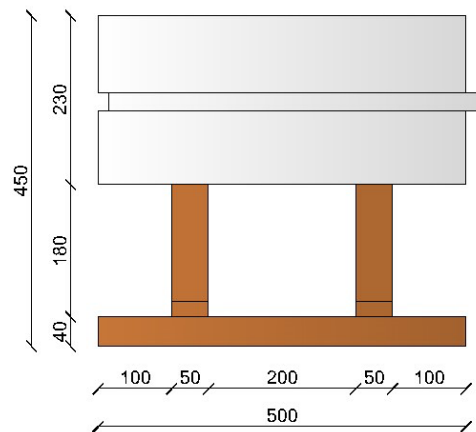
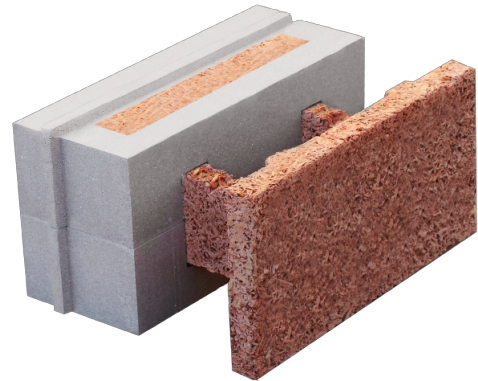
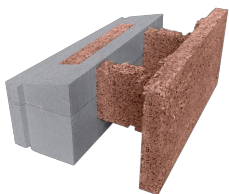


**Reference : IB HIS 45/18+23**

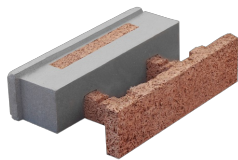
The Isobloc or Fixolite block is a formwork block 50 cm wide, 25 cm high and whose depth varies according to needs. The block is made of wood cement and, optionally, fire-retardant expanded polystyrene insulation (density 40 gr/m<sup>3</sup>).

**ISOBLOC HI Structurel** : block with exterior insulation (absence of thermal bridge) and 16 or 18 cm of concrete

Type	ISOBLOC HI Structurel
Total thickness	45.0 cm
Interior side thickness (1)	4.0 cm
Exterior side thickness (1)	0.0 cm
Insulation thickness (2)	23.0 cm
Concrete thickness (3)	18 cm
Concrete volume per m <sup>2</sup> (3)	160 l/m <sup>2</sup>
Concrete pillar section	360 cm <sup>2</sup>
Concrete pillar section per linear meter	1440 cm <sup>2</sup> /m
Equivalent concrete wall thickness	14.4 cm
Concrete beams section	198 cm <sup>2</sup>
Concrete beam section per meter height	792 cm <sup>2</sup> /m
Finished wall weight without coating	4.34 kN/m <sup>2</sup>
Finished wall weight with coating	4.98 kN/m <sup>2</sup>
R coefficient dry without coating (4)	7.2 m <sup>2</sup> K/W
U coefficient dry with coating (5)	0.134 W/m <sup>2</sup> K
R coefficient without coating (6)	7.07 m <sup>2</sup> K/W
U coefficient with coating (7)	0.137 W/m <sup>2</sup> K
Thermal offset (8)	-15.26 h
Sound insulation (9)	57 dB
REI with coating (10)	180

**Special blocs**

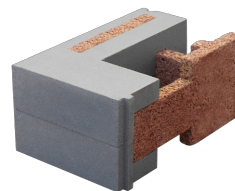
Slope block



Raising block



Edge block



Exterior corner block



Interior corner block

1. Net dry density = (500±50) Kg/m<sup>3</sup>
2. Sintered expanded polystyrene with additive graphite. Density = 0.15 KN/m<sup>3</sup>; λ = 0.031 W/m.K
3. Density of concrete 25 KN/ m<sup>2</sup>; λ dry = 1.72 W/m.K; λ = 1.91 W/m.K with a humidity level in equilibrium with the air at 23° C and 50% RH (ref. UNI EN 1745 and UNI EN 12524).
4. Dry thermal resistance without coating and without limitation of thermal resistance. Evaluation according to the theoretical method UNI EN 1745:2012. Three-dimensional method.
5. Dry thermal transmission, with a 2 cm lime and sand coating on the outside, a 2 cm lime and sand coating on the inside, with limited thermal resistance, in dry conditions. Evaluation according to the UNI EN 1745:2012 theoretical method. Three-dimensional method.
6. Thermal resistance, without plaster, without limitation of thermal resistance and with a humidity level in equilibrium with the air at 23° C and 50% RH. Evaluation according to the theoretical method UNI EN1745:2012. Three-dimensional method.
7. Thermal transmission, with a 2 cm lime and sand coating on the outside, a 2 cm lime and sand coating on the inside, with a limiting thermal resistance and a humidity level in balance with air at 23°C and 50% relative humidity. Evaluation according to the UNI EN 1745:2012 theoretical method. Three-dimensional method.
8. Ref. UNI - EN ISO 10456 standard for a period of 24 hours
9. Certified value of theoretical calculation UNI EN 12354-1:2002
10. Ref. standard UNI 1365-1. REI: Resistance: ability to maintain structural stability; Watertightness: ability to prevent the spread of fire and smoke through; Insulation: ability to thermally insulate adjacent areas and prevent the spread of heat

**English version:**[https://fixolite.eu/doc/IB\\_HIS\\_45\\_18\\_23.en.pdf](https://fixolite.eu/doc/IB_HIS_45_18_23.en.pdf)**Version française:**[https://fixolite.eu/doc/IB\\_HIS\\_45\\_18\\_23.fr.pdf](https://fixolite.eu/doc/IB_HIS_45_18_23.fr.pdf)