

Product Data Sheet

Smartbloc System I

N-BLOC Product description

Cementitious building block with EPS with two layers for strength and insulation. Smartbloc is designed for supporting insulated wall structures.

Blocks are stacked without the use of mortar. EPS Ø12cm locking pins to adjust the blocks into correct position. Steel rebar's are placed and concrete is poured into the remaining pillars.

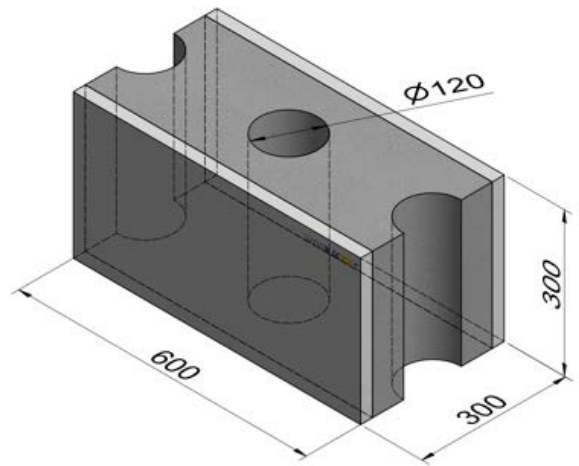
Stated thermal conductivity, U-value presupposes that blocks assembled by the manufacturer's instructions.

Concrete per m² wall is approx. 25L.

Fire resistance is REI60/R120. Wall contribution to fire is equivalent to Euroclass A1 with Smartbloc plaster and A2 without plaster. Bloc is Euroclass B.

Insulated building block

Properties	Values	Reference
Length	600 mm ±1mm	
Width	300 mm ±1mm	
Height	300 mm ±1mm	
Number of blocks per. m ²	5,5	
Pillar size	120 mm	
Density dry	230 kg/m ³	
Sound insulation	39,0 dB	
Sound insulation*	53,5 dB	
Sound insulation**	66,0 dB	
Compressive Strength	700 kN/m ²	
Thermal conductivity	0,05 W/mk <	CSN EN 12664
U-value	0,18 W/m ² k	ISO 6946:2007
U-value*	0,15 W/m ² k	ISO 6946:2007
U-value**	0,12 W/m ² k	ISO 6946:2007
Fire Resistance	REI 60	CSN EN 1365-1
Load Bearing	R120	CSN EN 1365-1
Contribution to Fire		
Built wall with plaster	A1	ISO 1182/ISO 1716
Built wall without plaster	A2	ISO 1716/ISO 13823
Bloc	B	EN 13823/ISO 11925-2



*With 50 mm Rockwool X33 and 13mm plaster board

**With 100 mm Rockwool X33 and 13mm plaster board

13mm plaster board: 0,2100 Lambda [W/mKm²]

Rockwool X33: 0,0330 Lambda [W/mKm²]



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Smartbloc System I

U-BLOC Product description

Cementitious building block with EPS with two layers for strength and insulation. Smartbloc is designed for supporting insulated wall structures.

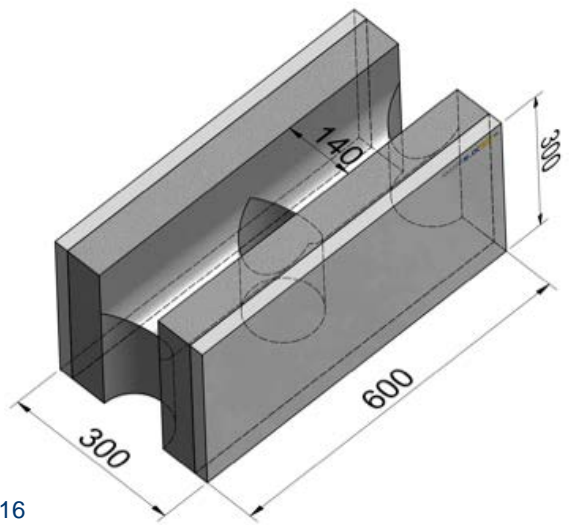
Blocks are stacked without the use of mortar. EPS Ø12cm locking pins to adjust the blocks into correct position. Steel rebar's are placed and concrete is poured into the remaining pillars.

Stated thermal conductivity, U-value presupposes that blocks assembled by the manufacturer's instructions. Concrete per m² wall is approx. 25L.

Fire resistance is REI60/R120. Wall contribution to fire is equivalent to Euroclass A1 with Smartbloc plaster and A2 without plaster. Bloc is Euroclass B.

Insulated building block

Properties	Values	Reference
Length	600 mm ±1mm	
Width	300 mm ±1mm	
Height	300 mm ±1mm	
Number of blocks per. m ²	5,5	
Pillar size	120 mm	
Density dry	230 kg/m ³	
Sound insulation	39,0 dB	
Sound insulation*	53,5 dB	
Sound insulation**	66,0 dB	
Compressive Strength	700 kN/m ²	
Thermal conductivity	0,05 W/mk <	CSN EN 12664
U-value	0,23 W/m ² k	ISO 6946:2007
U-value*	0,17 W/m ² k	ISO 6946:2007
U-value**	0,14 W/m ² k	ISO 6946:2007
Fire Resistance	REI 60	CSN EN 1365-1
Load Bearing	R120	CSN EN 1365-1
Contribution to Fire		
Built wall with plaster	A1	ISO 1182/ISO 1716
Built wall without plaster	A2	ISO 1716/ISO 13823
Bloc	B	EN 13823/ISO 11925-2



*With 50 mm Rockwool X33 and 13mm plaster board

**With 100 mm Rockwool X33 and 13mm plaster board

13mm plaster board: 0,2100 Lambda [W/mKm²]

Rockwool X33: 0,0330 Lambda [W/mKm²]



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Smartbloc System I

L-BLOC Product description

Cementitious building block with EPS with two layers for strength and insulation. Smartbloc is designed for supporting insulated wall structures.

Blocks are stacked without the use of mortar. EPS Ø12cm locking pins to adjust the blocks into correct position. Steel rebar's are placed and concrete is poured into the remaining pillars.

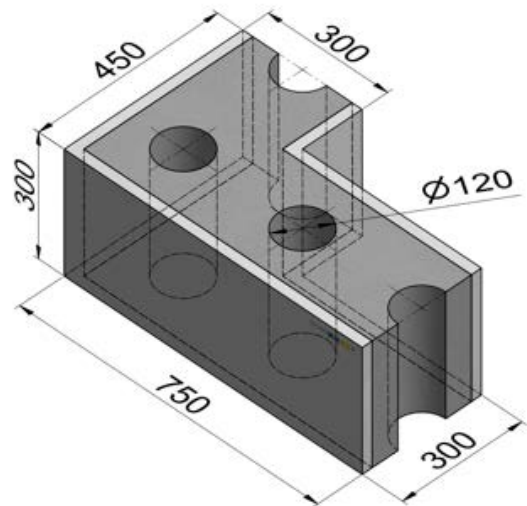
Stated thermal conductivity, U-value presupposes that blocks assembled by the manufacturer's instructions.

Concrete per m² wall is approx. 25L.

Fire resistance is REI60/R120. Wall contribution to fire is equivalent to Euroclass A1 with Smartbloc plaster and A2 without plaster. Bloc is Euroclass B.

Insulated building block

Properties	Values	Reference
Length	750 mm ±1mm	
Width	450 mm ±1mm	
Height	300 mm ±1mm	
Number of blocks per. m ²	2,78	
Pillar size	120 mm	
Density dry	230 kg/m ³	
Sound insulation	39,0 dB	
Sound insulation*	53,5 dB	
Sound insulation**	66,0 dB	
Compressive Strength	700 kN/m ²	
Thermal conductivity	0,05 W/mk <	CSN EN 12664
U-value	0,18 W/m ² k	ISO 6946:2007
U-value*	0,15 W/m ² k	ISO 6946:2007
U-value**	0,12 W/m ² k	ISO 6946:2007
Fire Resistance	REI 60	CSN EN 1365-1
Load Bearing	R120	CSN EN 1365-1
Contribution to Fire		
Built wall with plaster	A1	ISO 1182/ISO 1716
Built wall without plaster	A2	ISO 1716/ISO 13823
Bloc	B	EN 13823/ISO 11925-2



*With 50 mm Rockwool X33 and 13mm plaster board

**With 100 mm Rockwool X33 and 13mm plaster board

13mm plaster board: 0,2100 Lambda [W/mKm²]

Rockwool X33: 0,0330 Lambda [W/mKm²]



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Smartbloc System I

LUL/LUR-BLOC Product description

Cementitious building block with EPS with two layers for strength and insulation. Smartbloc is designed for supporting insulated wall structures.

Blocks are stacked without the use of mortar. EPS Ø12cm locking pins to adjust the blocks into correct position. Steel rebar's are placed and concrete is poured into the remaining pillars.

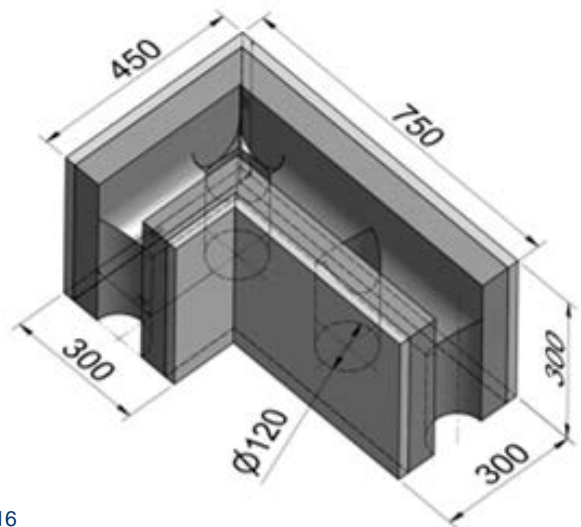
Stated thermal conductivity, U-value presupposes that blocks assembled by the manufacturer's instructions.

Concrete per m² wall is approx. 25L.

Fire resistance is REI60/R120. Wall contribution to fire is equivalent to Euroclass A1 with Smartbloc plaster and A2 without plaster. Bloc is Euroclass B.

Insulated building block

Properties	Values	Reference
Length	750 mm ±1mm	
Width	450 mm ±1mm	
Height	300 mm ±1mm	
Number of blocks per. m ²	2,78	
Pillar size	120 mm	
Density dry	230 kg/m ³	
Sound insulation	39,0 dB	
Sound insulation*	53,5 dB	
Sound insulation**	66,0 dB	
Compressive Strength	700 kN/m ²	
Thermal conductivity	0,05 W/mk <	CSN EN 12664
U-value	0,23 W/m ² k	ISO 6946:2007
U-value*	0,17 W/m ² k	ISO 6946:2007
U-value**	0,14 W/m ² k	ISO 6946:2007
Fire Resistance	REI 60	CSN EN 1365-1
Load Bearing	R120	CSN EN 1365-1
Contribution to Fire		
Built wall with plaster	A1	ISO 1182/ISO 1716
Built wall without plaster	A2	ISO 1716/ISO 13823
Bloc	B	EN 13823/ISO 11925-2



*With 50 mm Rockwool X33 and 13mm plaster board

**With 100 mm Rockwool X33 and 13mm plaster board

13mm plaster board: 0,2100 Lambda [W/mKm²]

Rockwool X33: 0,0330 Lambda [W/mKm²]



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Smartbloc System I

X-BLOC Product description

Cementitious building block with EPS with two layers for strength and insulation. Smartbloc is designed for supporting insulated wall structures.

Blocks are stacked without the use of mortar. EPS Ø12cm locking pins to adjust the blocks into correct position. Steel rebar's are placed and concrete is poured into the remaining pillars.

Stated thermal conductivity, U-value presupposes that blocks assembled by the manufacturer's instructions.

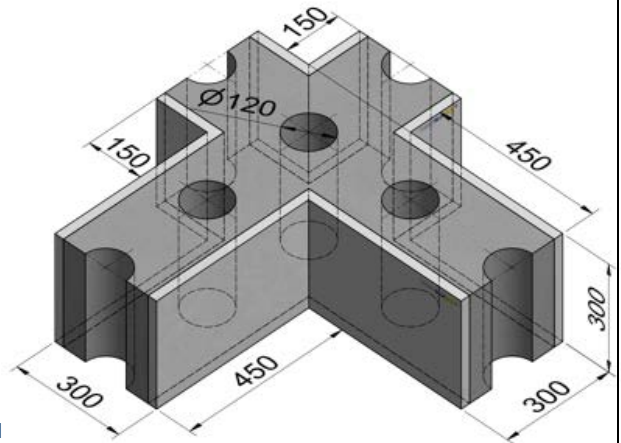
Concrete per m² wall is approx. 25L.

Tip! X-BLOC can be trimmed to T-BLOC.

Fire resistance is REI60/R120. Wall contribution to fire is equivalent to Euroclass A1 with Smartbloc plaster and A2 without plaster. Bloc is Euroclass B.

Insulated building block

Properties	Values	Reference
Length	900 mm ±1mm	
Width	900 mm ±1mm	
Height	300 mm ±1mm	
Number of blocks per. m ²	2,22	
Pillar size	120 mm	
Density dry	230 kg/m ³	
Sound insulation	39,0 dB	
Sound insulation*	53,5 dB	
Sound insulation**	66,0 dB	
Compressive Strength	700 kN/m ²	
Thermal conductivity	0,05 W/mk <	CSN EN 12664
U-value	0,18 W/m ² k	ISO 6946:2007
U-value*	0,15 W/m ² k	ISO 6946:2007
U-value**	0,12 W/m ² k	ISO 6946:2007
Fire Resistance	REI 60	CSN EN 1365-1
Load Bearing	R120	CSN EN 1365-1
Contribution to Fire		
Built wall with plaster	A1	ISO 1182/ISO 1716
Built wall without plaster	A2	ISO 1716/ISO 13823
Bloc	B	EN 13823/ISO 11925-2



*With 50 mm Rockwool X33 and 13mm plaster board

**With 100 mm Rockwool X33 and 13mm plaster board

13mm plaster board: 0,2100 Lambda [W/mK²]

Rockwool X33: 0,0330 Lambda [W/mK²]



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Smartbloc System I

XU-BLOC Product description

Cementitious building block with EPS with two layers for strength and insulation. Smartbloc is designed for supporting insulated wall structures.

Blocks are stacked without the use of mortar. EPS Ø12cm locking pins to adjust the blocks into correct position. Steel rebar's are placed and concrete is poured into the remaining pillars.

Stated thermal conductivity, U-value presupposes that blocks assembled by the manufacturer's instructions.

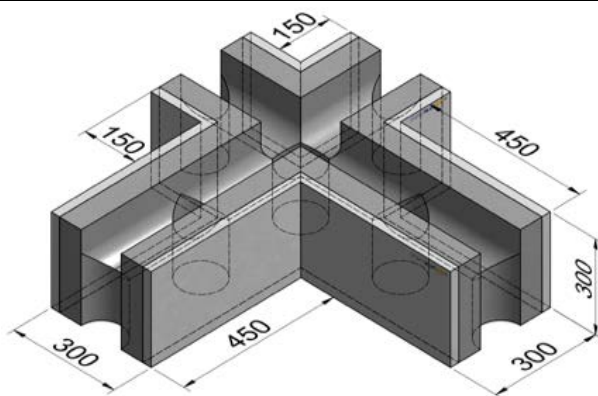
Concrete per m² wall is approx. 25L.

Tip! XU-BLOC can be trimmed to TU-BLOC.

Fire resistance is REI60/R120. Wall contribution to fire is equivalent to Euroclass A1 with Smartbloc plaster and A2 without plaster. Bloc is Euroclass B.

Insulated building block

Properties	Values	Reference
Length	900 mm ±1mm	
Width	900 mm ±1mm	
Height	300 mm ±1mm	
Number of blocks per. m ²	2,22	
Pillar size	120 mm	
Density dry	230 kg/m ³	
Sound insulation	39,0 dB	
Sound insulation*	53,5 dB	
Sound insulation**	66,0 dB	
Compressive Strength	700 kN/m ²	
Thermal conductivity	0,05 W/mk <	CSN EN 12664
U-value	0,23 W/m ² k	ISO 6946:2007
U-value*	0,17 W/m ² k	ISO 6946:2007
U-value**	0,14 W/m ² k	ISO 6946:2007
Fire Resistance	REI 60	CSN EN 1365-1
Load Bearing	R120	CSN EN 1365-1
Contribution to Fire		
Built wall with plaster	A1	ISO 1182/ISO 1716
Built wall without plaster	A2	ISO 1716/ISO 13823
Bloc	B	EN 13823/ISO 11925-2



*With 50 mm Rockwool X33 and 13mm plaster board

**With 100 mm Rockwool X33 and 13mm plaster board

13mm plaster board: 0,2100 Lambda [W/mKm²]

Rockwool X33: 0,0330 Lambda [W/mKm²]



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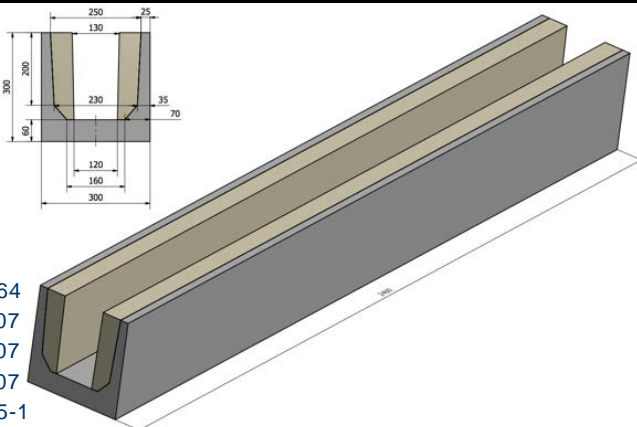
Smartbloc System I

W-BLOC Product description

Cementitious building block with EPS with two layers for strength and insulation. Smartbloc W-BLOC is designed for openings in combinations with Smartbloc System I
Stated thermal conductivity, U-value presupposes that blocks assembled by the manufacturer's instructions.
Concrete per m W-BLOC is approx. 31L.

Fire resistance is REI60/R120. Wall contribution to fire is equivalent to Euroclass A1 with Smartbloc plaster and A2 without plaster. Bloc is Euroclass B.

Insulated building block

Properties	Values	Reference	
Length	2400 mm ±1mm		
Width	300 mm ±1mm		
Height	300 mm ±1mm		
Number of blocks per. m ²	1,38		
Density dry	350 kg/m ³		
Sound insulation	39,0 dB		
Sound insulation*	53,5 dB		
Sound insulation**	66,0 dB		
Compressive Strength	1215 kN/m ²		
Thermal conductivity	0,05 W/mk <		CSN EN 12664
U-value	0,17 W/m ² k		ISO 6946:2007
U-value*	0,15 W/m ² k		ISO 6946:2007
U-value**	0,12 W/m ² k		ISO 6946:2007
Fire Resistance	REI 60		CSN EN 1365-1
Load Bearing	R120		CSN EN 1365-1
Contribution to Fire			
Built wall with plaster	A1	ISO 1182/ISO 1716	
Built wall without plaster	A2	ISO 1716/ISO 13823	
Bloc	B	EN 13823/ISO 11925-2	

*With 50 mm Rockwool X33 and 13mm plaster board

**With 100 mm Rockwool X33 and 13mm plaster board

13mm plaster board: 0,2100 Lambda [W/mKm²]

Rockwool X33: 0,0330 Lambda [W/mKm²]



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Smartbloc System I

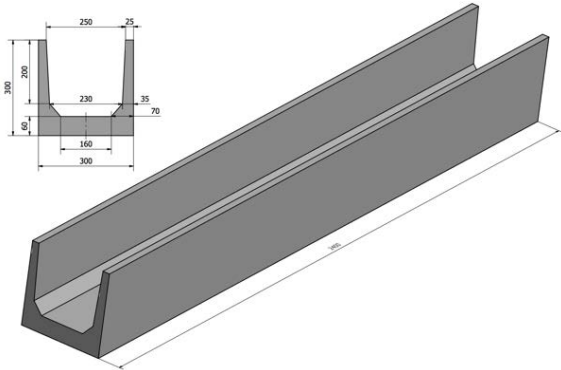
F-BLOC Product description

Cementitious building block with EPS. SMARTBLOC F-BLOC is developed for use in combination with SMARTBLOC System I as start bloc where the ground is compressed with a minimum of 300 kN/m²

Blocks are stacked without the use of mortar.
Concrete per m wall is approx. 58L.

Fire resistance is REI60/R120. Wall contribution to fire is equivalent to Euroclass A1 with Smartbloc plaster and A2 without plaster. Bloc is Euroclass B.

Insulated building block

Properties	Values	
Length	2400 mm ±1mm	
Width	300 mm ±1mm	
Height	300 mm ±1mm	
Weight	24kg	
Number of blocks per. m ²	1,38	
Density dry	350 kg/m ³	
Compressive Strength	1215 kN/m ²	
Strength with B30 concrete	>35 MPa	
Contribution to Fire		
Built wall with plaster	A1	
Built wall without plaster	A2	ISO 1716/ISO 13823
Bloc	B	EN 13823/ISO 11925-2



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