Porotherm 30 RR Profi Dryfix

Grinded block for wall thickness 30 cm on masonry foam for robot masonry CE

Load-bearing exterior and interior wall

Application

Porotherm 30 RR Profi Dryfix grinded blocks are intended for plastered single-layer load-bearing internal and external masonry with a thickness of 300 mm for masonry in structural work, and specifically designed for use in robotic masonry. They can also be used for the internal load-bearing part of multi-layer masonry or in combination with thermal insulation and, if necessary, with other brick materials forming the external protective part of bonded masonry.

Advantages

- Proven block format
- Ideal tongue and groove joint
- High compressive strength of the masonry
- Load-bearing joints up to 1 mm thick - no mortar for masonry (dry construction)
- Ideal substrate for plaster
- Low resistance to water vapour diffusion
- Hygienically perfect
- Dimensions in modular system
- Simple planning and execution in the **Porotherm interlocking system**

Technical Data

Clay Block

Block size (LxWxH)	247x300x249 mm
Flatness of the loading surfaces	0.3 mm
Parallelism of the planes of loading surface	0.6 mm
Masonry group	2
Gross dry density	max. 800 kg/m³
Individual block weight	max. 14.8 kg/pc
Compressive strength (cat. I)	15/10/8 N/mm²
$\lambda_{10,dry,unit}$	0.17 W/(m·K)
Absorbency	NPD
Frost resistance	NPD (F0)
Active soluble salt	NPD (S0)
Dimensional stability	NPD
Bond strength	0.09 N/mm²

NPD – data not provided

Masonry

Wall thickness	300 mm
Required blocks	16.0 pcs/m² 53.3 pcs/m³
Foam (binding) consumption	1 can/6 m²

Characteristic compressive strength f_k and compression coefficient K_E of the masonry, determined from static tests according to ČSN EN 1996-1-1

Clay block with adhesive foam	Masonry	
	f_k [MPa]	K_E
P 15	xxx	xxx
P 10	2.0	600
P 8	1.8	600

tbc - to be confirmed

Sound insulation for Masonry

Plaster type	Wall Thk. [mm]	Plaster Thk. [mm]	R_w (C;Ctr) [dB]	Area weight incl. plaster [kg/m²]
Limestone	300	15	46**	280
Gypsum	300	10	tbc	tbc
xxx	300	8	tbc	tbc

* value obtained by measurement
** value obtained by calculation
tbc - to be confirmed

Thermal-technical data

Clay block with adhesive foam	u %	λ W/mK	R m²K/W	U_{int} W/m²K
Porotherm Dryfix				
without plaster	0	0.175	1.74	0.50
without plaster	0.5	0.180	1.70	0.50
with plaster*	0.5	0.190	1.76	0.50

* Lime-cement plaster on both sides, 15 mm thick

Reaction to fire

Fire partition wall with plaster on both sides.

Class of fire behaviour	A1-noncombustible
Fire Resistance	REI 180 DP1

ČSN EN 13501-2, ČSN EN 1996-1-2

Other building physics values

Specific heat capacity of unrendered masonry	c = 1000 J/kg·K
Diffusion resistance coefficient	μ = 5/10

ČSN EN 1745

Brickwork Speed

Area masonry	approx. 0.46 h/m²
Volumetric masonry	approx. 1.53 h/m³

Delivery

The **Porotherm 30 RR Profi Dryfix-Blocks** are supplied wrapped on returnable pallets (1180 x 1000 mm).

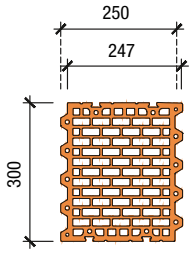
Pack quantity	80 pcs/pallet
Pallet weight	max. 1220 kg

The corresponding quantity of **Porotherm Dryfix masonry foam** is included in the scope of delivery.

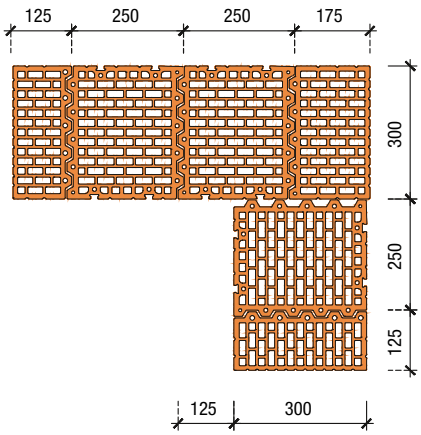
The required quantity of **Porotherm Profi AM** or **Porotherm Profi Thermo-UNI** foundation mortar is supplied for the foundation of the walls.

ČSN EN 771-1

Dimensions



Binding of Corners, Sides and Frames



Porotherm wienerberger

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Supplementary bricks

Note: these are not bricks from RR (Robot Ready) series

ČSN EN 771-1

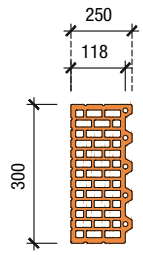
Block size (LxWxH)	125x300x249 mm
Flatness of the loading surfaces	0.3 mm
Parallelism of the planes of loading surface	0.6 mm
Masonry group	2
Gross dry density	830-900 kg/m^3
Individual block weight	max. 8.4 kg/pc
Compressive strength (cat. I)	10 N/mm^2
Absorbency	NPD
Frost resistance	NPD (F0)
Active soluble salt	NPD (S0)
Dimensional stability	NPD
Class of fire behaviour	A1-noncombustible
Bond strength	0.09 N/mm^2

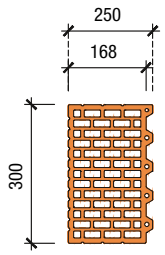
NPD – data not provided

ČSN EN 771-1

Block size (LxWxH)	175x300x249 mm
Flatness of the loading surfaces	0.3 mm
Parallelism of the planes of loading surface	0.6 mm
Masonry group	2
Gross dry density	820 kg/m^3
Individual block weight	max. 10.5 kg/pc
Compressive strength (cat. I)	10 N/mm^2
Absorbency	NPD
Frost resistance	NPD (F0)
Active soluble salt	NPD (S0)
Dimensional stability	NPD
Class of fire behaviour	A1-noncombustible
Bond strength	0.09 N/mm^2

NPD – data not provided





Delivery

The **Porotherm 30 Profi Dryfix 1/2-Blocks** are supplied wrapped on returnable pallets (1180 x 1000 mm).

Pack Quantity	160 pcs/pallet
Pallet weight	max. 1375 kg

The **Porotherm 30 Profi Dryfix R-Blocks** are supplied wrapped on returnable pallets (1180 x 1000 mm).

Pack Quantity	96 pcs/pallet
Pallet weight	max. 1100 kg

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