Porotherm 19 RR AKU Profi Dryfix

Grinded block for wall thickness 19 cm on masonry foam for robot masonry CE

Load-bearing exterior and interior wall

Application

Porotherm 19 RR AKU Profi Dryfix grinded blocks are intended for single-layer load-bearing masonry with a thickness of 190 mm for robotic masonry (they can be used in the construction of hotels,hostels, offices, etc.). They can also be used for the internal load-bearing part of the layered masonry in combination with a thermal insulator and possiblywith other brick materials. Facing bricks act as the outer protective layer of the masonry.

Advantages

- Excellent noise protection
- High compressive strength of masonry
- 50 % less masonry work compared to conventional masonry
- Load-bearing joint thickness up to 1 mm - no mortar for masonry (dry construction)
- Ideal substrate for plaster
- Low resistance to water vapour diffusion
- Excellent heat accumulation
- Hygienically safe
- Simple planning and execution in the **Porotherm interlocking system**

Technical Data

Clay Block

Block size (LxWxH)	372x190x249 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	1000 kg/m³
Individual block weight	cca 17.6 kg/pc
Compressive strength (cat. I)	15/10 N/mm²
$\lambda_{10,dry,unit}$	0.29 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	190/240 mm
Required blocks	10.7 pcs/m² 21.4 pcs/m³
Foam consumption at 190mm thickness	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	3.0	650
P 10	2.0	650

Sound insulation for Masonry

Plaster type	Wall Thk. [mm]	Plaster Thk. [mm]	R_w (C;Ctr) [dB]	Area weight incl. plaster [kg/m²]
Limestone	190	15	50**	230
Gypsum	190	10	49* (-1;-4)	206

* value obtained by measurement
** value obtained by calculation

Thermal-technical data

Clay block with adhesive foam	u %	λ W/mK	R m²K/W	U_{int} W/m²K
Porotherm Dryfix				
without plaster	0	0.29	0.65	1.10
without plaster	0.5	0.30	0.63	1.15
with plaster*	0.5	0.30	0.69	1.05

* Lime-cement plaster on both sides, 10 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. 0.38 h/m²
Volumetric masonry	approx. 2.00 h/m³

Delivery

The **Porotherm 19 RR AKU Profi Dryfix-Blocks** are supplied wrapped on returnable pallets (1180 x 1000 mm).

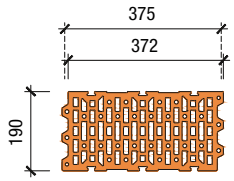
Pack quantity	75 pcs/pallet
Pallet weight	max. 1350 kg

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

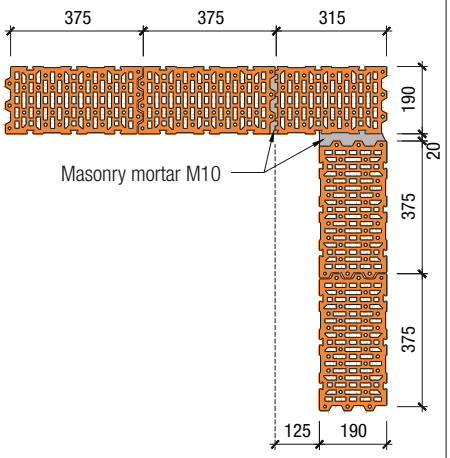
The required quantity of **Porotherm Profi AM** or **Porotherm Profi Thermo-UNI** foundation mortar is supplied for the foundation of the walls.

ČSN EN 771-1

Dimensions



Binding of Corners, Sides and Frames



Porotherm wienerberger