

# Porotherm 24 RR Profi Dryfix

**Grinded block for wall thickness 24 cm on masonry foam for robot masonry** 

Load-bearing exterior and interior wall

## Application

**Porotherm 24 RR Profi Dryfix** grinded blocks are intended for plastered single-layer load-bearing internal and external masonry with a thickness of 240 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)	372x240x249 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. 770 kg/m <sup>3</sup>
Individual block weight	max. 17.1 kg/pc
Compressive strength (cat. I)	15/10/8 N/mm <sup>2</sup>
$\lambda_{10,dry,unit}$	0.23 W/(m·K)
Absorbency	NPD
Frost resistance	NPD (F0)
Active soluble salt	NPD (S0)
Dimensional stability	NPD
Bond strength	0.13 N/mm <sup>2</sup>
NPD – data not provided	

### Masonry

Wall thickness	240 mm
Required blocks	10.7 pcs/m <sup>2</sup> 44.4 pcs/m <sup>3</sup>
Foam (binding) consumption	1 can/6 m <sup>2</sup>
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	2.6	650
P 10	2.5	900
P 8	2.1	900

## Sound insulation for Masonry

Plaster type	Wall Thk. [mm]	Plaster Thk. [mm]	$R_w$ (C;Ctr) [dB]	Area weight incl. plaster [kg/m <sup>2</sup> ]
Limestone	240	15	47* (-1;-5)	225
Gypsum	240	10	tbc	tbc
tbc	240	8	tbc	tbc

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

## Thermal-technical data

Clay block with adhesive foam	$\mu$ %	$\lambda$ W/mK	$R$ m <sup>2</sup> K/W	$U_{int}$ W/m <sup>2</sup> K
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### Porotherm Dryfix

without plaster	0	0.24	1.02	0.84
without plaster	0.5	0.24	1.00	0.86
with plaster*	0.5	0.26	1.04	0.83

\* 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  $\mu = 5/10$

ČSN EN 1745

## Brickwork Speed

Area masonry approx. 0.40 h/m<sup>2</sup>

Volumetric masonry approx. 1.67 h/m<sup>3</sup>

## Delivery

The **Porotherm 24 RR Profi Dryfix-Blocks** are supplied wrapped on returnable pallets (1180 x 1000 mm).

Pack quantity 60 pcs/pallet

Pallet weight max. 1060 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.

