

# HELUZ P15 25 grinded

## USE

Rinded bricks laid on system thin-layer mortar designed for protected brickwork of perimeter walls with sufficient thermal insulation and for internal load-bearing walls with increased load-bearing capacity requirements.

## GENERAL INFORMATION

Manufacturing plant	Hevlín I.
Compressive strength (MPa)	15
$\Lambda_{10, dry, unit}$ (W/(m.K))	0,26
Dimensions l x w x h (mm)	375 x 250 x 249
Reaction to fire class	A1
Bulk density (kg/m <sup>3</sup> )	810
Average weight inf. (kg)	18,9
Additional brick production (yes/no)	No

## MASONRY PROPERTIES ON MORTAR

	SBC	SB	PU	SIDI
Bricks consumption per 1 m <sup>2</sup> (pcs)	10,7	10,7	10,7	10,7
Bricks consumption per 1 m <sup>3</sup> (pcs)	42,7	42,7	42,7	42,7
Mortar consumption (kg/m <sup>2</sup> , m <sup>2</sup> /dose, kg/m <sup>2</sup> )	2,66	3,28	5,0	1,13

## THERMAL PROPERTIES

	SBC	SB	PU	SIDI
$\Lambda_{design, mas}$ (W/(m.K))	0,272	0,281	0,272	0,273
$U_{design, mas}$ (W/(m <sup>2</sup> .K)) without plasters	0,85	0,87	0,85	0,85
$U_{design, mas}$ (W/(m <sup>2</sup> .K)) with plasters	0,82	0,85	0,82	0,83
$U_{dry, mas}$ (W/(m <sup>2</sup> .K)) with plasters	0,8	0,8	0,8	0,81
Diffusion resistance factor $\mu$ (-)	5/10	5/10	5/10	5/10
Specific heat capacity c (kJ/(kg.K))	1,0	1,0	1,0	1,0

## FIRE RESISTANCE

	REI 120	REI 120	REI 120	REI 90
Wall plastered on both sides				
Wall utilisation degree $\alpha$	1,0	1,0	1,0	0,6

## STATIC SPECIFICATIONS

	SBC	SB	PU	SIDI
Surface weight of walls with plasters (kg/m <sup>2</sup> )	258	258	258	258
A group of masonry elements	2	2	2	2
Masonry element strength (MPa)	15	15	15	15
Compressive strength of masonry $f_k$ (MPa)	5,1	5,1	2,4	5,1
Coefficient of elasticity $K_e$	1000	1000	600	700
Initial shear strength of masonry $f_{vko}$ (MPa)	0,3	0,3	0,12	0,3

## SOUNDPROOFING

	SBC	SB	PU	SIDI
Weighted sound reduction index $R_w$ (dB)	49	49	48	48
Measured/informative value	indicative	measured	indicative	indicative
Surface weight of walls with plasters (kg/m <sup>2</sup> )	245	245	241	241
Bulk density of mortar min. (kg/m <sup>3</sup> )	NPD	NPD	NPD	NPD
Bulk density of plaster min. (kg/m <sup>3</sup> )	1600	1600	1600	1600
Plaster thickness (mm)	2x15	2x15	2x15	2x15

**General information:** The masonry properties are determined by the combination of the masonry element, mortar and surface treatment. It is therefore necessary to respect the principles for designing and building structures in accordance with the HELUZ documents and general regulations and technical standards. Detailed and up-to-date information, which always takes precedence over the technical specification, is available at [constructionselector.heluz.com](http://constructionselector.heluz.com). The technical specifications contain a summary of selected product and structure properties to provide basic information for structure design. Unless otherwise stated, the individual data is based on harmonised European standards and their localisation for the Czech Republic.

**Product properties** are given according to the harmonised EN 771-1:2011+A1:2015 standard. All of the declared product parameters are listed in the declaration of performance.

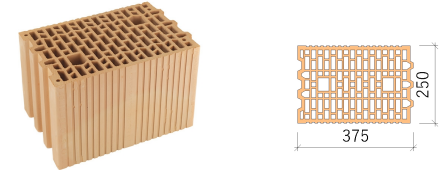
**Masonry properties for mortar** are given for the selected mortar types in the individual columns. The mortar consumption corresponds to the execution of the masonry in accordance with the technological regulations - HELUZ Performance Manual. Indicative labour content excludes scaffolding.

**Thermal properties.** The values are stated in accordance with EN 1745.  $\Lambda_{design, mas}$  and  $U_{design, mas}$  correspond to the design values. Coating are considered with the thickness of 2 x 15 mm with  $\Lambda = 0.88$  W/m.K. The heat transfer resistance used for internal structures is  $R_{si} = 0.13$  m<sup>2</sup>.K/W.  $U_{dry, mas}$  indicates the values for coated brickwork with the bricks and mortar in the dry state.

**Fire resistance** is stated for walls with rendering on both sides. The HELUZ SBC and HELUZ SB mortar values are stated in accordance with EN 1996-1-2, Annex B or based on test results. HELUZ Foam (PU) and HELUZ SIDI mortars are determined based on test results.

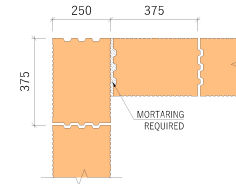
**Statics:** The group of masonry elements is specified according to EN 1996-1-1. The mechanical properties of the brickwork are based on calculations according to EN 1996-1-1 and test results. The HELUZ Foam (PU) and HELUZ SIDI mortars are determined based on test results.

**Soundproofing:**  $R_w$  values are determined by both wall measurement in an accredited laboratory at the specified material composition of the wall and surface weight of the masonry. The indicative values correspond to a qualified estimate based on test results of a similar brick type and material composition of the structure.

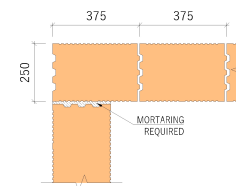


## CORNER AND LINING CONNECTION

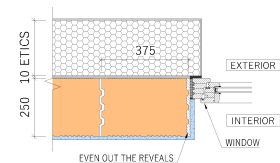
- CORNER BONDING, 1ST ROW OF BRICKWORK



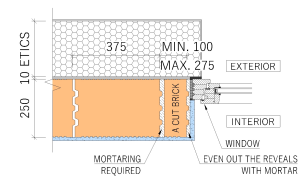
- CORNER BONDING, 2ND ROW OF BRICKWORK



- BONDING AT THE WINDOW REVEAL, 1ST ROW OF BRICKWORK



- BONDING AT THE WINDOW REVEAL, 2ND ROW OF BRICKWORK



- NEVER INSERT A BRICK WITH THE CUT SIDE TOWARDS THE REVEAL