

LOADS

termoz CS 8³⁾

Highest permissible loads for a single anchor¹⁾⁴⁾ for multiple use for non-structural applications.

For the design the complete assessment ETA-14/0372 has to be considered.

					Beton und Mauerwerk		
Type	Brick raw density ρ [kg/dm ³]	min. compressive brick strength f_b [N/mm ²]	min. embedment depth h_{nom} [mm]	min. member thickness h_{min} [mm]	permissible tensile load ³⁾ N_{perm} [kN]	min. spacing ²⁾ s_{min} [mm]	min. edge distance ²⁾ c_{min} [mm]
Concrete							
CS 8	C12/15 - C45/55		35 ⁶⁾	100	0,40	100	100
	C50/60				0,50		
Weather shell							
CS 8	C20/25 - C45/55		35 ⁶⁾⁵⁾	42	0,40	100	100
	C50/60				0,50		
Solid Clay bricks e.g. acc. to DIN 105-100:2012-01, EN 771-1:2011, Mz							
CS 8	≥ 1,8	20	35 ⁶⁾	100	0,50	100	100
Calcium silicate solid bricks, e.g. acc. to DIN V 106:2005-10, EN 771-2:2011, KS							
CS 8	≥ 1,8	20	35 ⁶⁾	100	0,50	100	100
		12			0,30		
Solid lightweight concrete block, e.g. acc. to DIN V 18152-100:2005-10 EN 771-3:2011 Vbl							
CS 8	≥ 1,4	8	35 ⁶⁾	100	0,17	100	100
Solid concrete block, e.g. acc. to DIN V 18152-100:2005-10 EN 771-3:2011, Vbn							
CS 8	≥ 2,0	20	35 ⁶⁾	100	0,40	100	100
		12			0,25		
Vertically perforated clay bricks e.g. acc. to DIN 105-100:2012-01, EN 771-1:2011, HLz							
CS 8	≥ 1,0	12	35 ⁷⁾⁸⁾	100	0,20	100	100
	≥ 1,6	48			0,50		
Hollow calcium silicate brick, acc. to DIN V 106:2005-10, EN 771-2:2011, KSL							
CS 8	≥ 1,4	20	35 ⁷⁾⁸⁾	100	0,30	100	100
		12			0,17		
Hollow brick light-weight concrete, e.g. acc. to DIN V 18153-100: 2005-10, EN 771-3:2011 Hbl							
CS 8	≥ 0,9	4	35 ⁶⁾⁸⁾	100	0,17	100	100
Hollow brick concrete, e.g. acc. to DIN V 18153-100: 2005-10, EN 771-3:2011 Hbn							
CS 8	≥ 1,2	10	35 ⁶⁾⁸⁾	100	0,40	100	100
		8			0,30		
		6			0,25		
		4			0,17		
Lightweight Aggregate Concrete acc. to DIN EN 1520, LAC							
CS 8	≥ 0,9	6	35 ⁶⁾	100	0,25	100	100
Autoclaved aerated concrete blocks, e.g. AAC acc. to DIN V 4165-100:2005-10, EN 771-4							
CS 8	≥ 0,5	4	35 ⁷⁾	100	0,10	100	100
		4	55 ⁷⁾		0,20		

¹⁾ The partial safety factors for material resistance as regulated in the assessment as well as a partial safety factor for load actions of $\gamma_F = 1,5$ are considered.

²⁾ Minimum possible axial spacings resp. edge distances acc. Assessment.

³⁾ Plastic anchor for fixing of external thermal insulation composite systems with rendering acc. ETAG014. Only tensile wind loads are permitted.

⁴⁾ The given loads are valid for installation and use of fixations in dry masonry for temperatures in the substrate up to +24 °C (resp. short term up to 40 °C).

⁵⁾ Embedment depth permitted up to 45 mm.

⁶⁾ Hammer drilling

⁷⁾ Rotary drilling

⁸⁾ In masonry of the building material class C an embedment depth of $h_{nom} = 25$ mm is possible with the same loads than with 35 mm embedment depth.