

# LOADS

## termoz CS 8<sup>3)</sup>

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

<sup>1)</sup> 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.

<sup>2)</sup> Minimum possible axial spacings resp. edge distances acc. Assessment.

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

<sup>4)</sup> 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).

<sup>5)</sup> Embedment depth permitted up to 45 mm.

<sup>6)</sup> Hammer drilling

<sup>7)</sup> Rotary drilling

<sup>8)</sup> 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.