

Loads

TermoZ CS II DT 110V

Permissible tension loads for a single anchor^{1) 2)} for multiple use for non-structural applications.
For the design the complete current assessment ETA-14/0372 has to be considered.

Type CS II DT 110V	Concrete and masonry							
	Brick raw density	Minimum compressive brick strength	Effective anchorage depth	Depth of drill hole ³⁾	Minimum member thickness	Permissible tension load ¹⁾	Minimum spacing ⁴⁾	Minimum edge distance ⁴⁾
	ρ [kg/dm ³]	f_b [N/mm ²]	$h_{ef} \geq$ [mm]	$\frac{h_{1,Flush}}{h_{1,CSK}}$ [mm]	h_{min} [mm]	N_{perm} [kN]	s_{min} [mm]	c_{min} [mm]
Concrete	-	$\geq C12/15$	25	40 / 55	100	0.50	100	100
	-	$\leq C50/60$	25	40 / 55	100	0.50	100	100
Weather resistant concrete shell	-	$\geq C20/25$	25	40 / 55	≥ 40	0.50	100	100
Solid Clay bricks e.g. acc. to DIN EN 771-1:2015, Mz	≥ 1.8	20	25	40 / 55	100	0.50	100	100
Calcium silicate solid bricks, e.g. acc. to DIN EN 771-2:2015, KS	≥ 1.4	20	25	40 / 55	100	0.50	100	100
	≥ 1.4	12	25	40 / 55	100	0.50	100	100
Solid lightweight concrete block, e.g. acc. to DIN EN 771-3:2015, Vbl	≥ 1.4	8	25	40 / 55	100	0.40	100	100
Solid concrete block, e.g. acc. to DIN EN 771-3:2015, Vbn	≥ 2.0	20	25	40 / 55	100	0.50	100	100
	≥ 2.0	12	25	40 / 55	100	0.50	100	100
Vertically perforated clay bricks e.g. acc. to DIN EN 771-1:2015, HLz	≥ 0.9	12	25	40 / 55	100	0.22	100	100
	≥ 0.9	12	25	40 ⁵⁾ / 55 ⁵⁾	100	0.33	100	100
	≥ 1.6	48	25	40 / 55	100	0.50	100	100
	≥ 1.6	48	25	40 ⁵⁾ / 55 ⁵⁾	100	0.50	100	100
Hollow calcium silicate brick, acc. to DIN EN 771-2:2015, KSL	≥ 1.4	12	25	40 / 55	100	0.50	100	100
Hollow brick lightweight concrete, e.g. acc. to DIN EN 771-3:2015 Hbl	≥ 0.9	4	25	40 / 55	100	0.17	100	100
Hollow brick concrete, e.g. acc. to DIN EN 771-3:2015 Hbn	≥ 1.2	10	25	40 / 55	100	0.50	100	100
	≥ 1.2	8	25	40 / 55	100	0.50	100	100
	≥ 1.2	6	25	40 / 55	100	0.37	100	100
	≥ 1.2	4	25	40 / 55	100	0.25	100	100
Lightweight aggregate concrete acc. to DIN EN 1520:2011-6, LAC	≥ 0.9	4	25	40 / 55	100	0.32	100	100
	≥ 0.9	6	25	40 / 55	100	0.50	100	100
Autoclaved aerated concrete blocks, e.g. AAC acc. to DIN EN 771-4:2015	≥ 0.5	4	25	40 ⁵⁾ / 55 ⁵⁾	100	0.22	100	100
	≥ 0.5	4	45	60 ⁵⁾ / 75 ⁵⁾	100	0.37	100	100

¹⁾ Plastic anchor for fixing of external thermal insulation composite systems with rendering acc. to ETA data. Only tension wind loads are permitted. The partial safety factors for material resistance as regulated in the assessment as well as a partial safety factor for load actions of $\gamma_L = 1.5$ are considered.

²⁾ The given loads are valid for installation and use of fixations in dry base material for temperatures in the substrate up to +24 °C (resp. short term up to +40 °C).

³⁾ Depth of the drilled hole to the deepest point for flush or countersunk installation. Drilling method Hammer drilling. For details on installation data, see ETA.

⁴⁾ Minimum possible axial spacing and edge distances acc. to ETA.

⁵⁾ Rotary drilling.