

Frame fixing URD

Load table

Permissible loads¹⁾²⁾ of a single anchor as part of a multiple fixing of non-structural systems

For the design, the entire assessment ETA-17/0811 must be considered.

Type			URD 8	URD 10
Anchor diameter	d_0	[mm]	8	10
Anchoring depth	h_{ef}	[mm]	50	50
Anchoring in concrete ≥ C12/15				
Permissible tensile load N_{perm}		[kN]	0.99	1.79
Permissible shear load V_{perm}	z_p	[kN]	4.2	5.98
Permissible shear load V_{perm}	R	[kN]	3.93	5.98
Minimum member thickness	h_{min}	[mm]	100	100
Characteristic edge distance	$c_{cr,N}$	[mm]	85	140
Characteristic spacing distance	a resp. $s_{cr,N}$	[mm]	100	100
Minimum spacing distance	s_{min}	[mm]	100	70
At an edge distance	$c \geq$	[mm]	85	210
Minimum edge distance	c_{min}	[mm]	85	85
At a spacing distance	$s \geq$	[mm]	100	100
Anchoring in masonry				
Permissible load in solid brick	Mz	[kN]	0,86	1,43
Permissible load $F_{perm}^{3)}$ in solid sand-lime brick	KS	[kN]	0.86	1,43
Permissible load $F_{perm}^{3)}$ in lightweight concrete solid brick	Vbl	[kN]	0.71	0,86
Permissible load $F_{perm}^{3)}$ in normal concrete solid brick	Vbn	[kN]	0,71	1,29
Permissible load $F_{perm}^{3)4)}$ in perforated brick	HLz	[kN]	0,34	0,86
Permissible load $F_{perm}^{3)}$ in perforated sand-lime brick	KSL	[kN]	0,11	0,43
Permissible load $F_{perm}^{3)4)}$ in hollow light-weight concrete block	Hbl	[kN]	0,71	0,71
Permissible load $F_{perm}^{3)}$ in hollow block lightweight concrete Hbn	Hbn	[kN]		0,71
Permissible load $F_{perm}^{3)}$ in thermal insulation block WDB	WDB	[kN]		0,43
Minimum member thickness	h_{min}	[mm]	100	100
Minimum spacing distance (single anchor)	a_{min}	[mm]	250	250
Minimum edge distance (single anchor)	c_{min}	[mm]	100	100
Minimum spacing distance (anchor group)	s_{min}	[mm]	100	100
Minimum edge distance (anchor group)	c_{min}	[mm]	100	100
Anchoring in aerated concrete				
Permissible load $F_{perm}^{3)}$ in aerated concrete	$PB \geq 2 \text{ N/mm}^2$	[kN]		0.3
Minimum component thickness	h_{min}	[mm]		100
Minimum spacing distance (single anchor)	a_{min}	[mm]		250
Minimum edge distance (single anchor)	c_{min}	[mm]		100
Minimum spacing distance (anchor group)	s_{min}	[mm]		400
Minimum edge distance (anchor group)	c_{min}	[mm]		100

¹⁾ The partial safety factors of resistance regulated in the assessment, as well as a partial safety factor for action of $\gamma_L = 1.4$, are taken into account. For example, a single anchor is defined as an anchor with a minimum spacing distance "a" according to the ETA.

²⁾ Valid for temperatures in the anchoring base up to +50 °C (or temporarily up to +80 °C). For long-term temperatures up to +30 °C, higher permissible loads are possible.

³⁾ Valid for tensile load, shear load, and oblique pull at any angle. For combinations of tensile and shear loads as well as bending moments, see the assessment.

⁴⁾ Drilling method: rotary drilling.