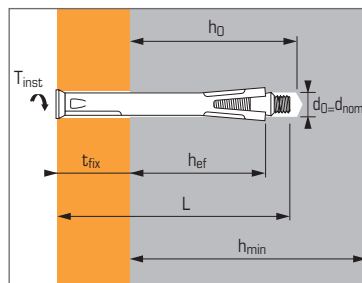




Deep embedment anchor for all frame types



Technical data

Anchor size	Anchor depth (mm) hef	Max. thick. of part to be fixed (mm) tfix	Anchor external diameter (mm) dnom	Min. base material thickness (mm) hmin	Drilling diameter (mm) d0	Drilling depth (mm) h0	Total anchor length (mm) L	Code
10X105/40	50	40	10	90	10	70	105	059660
10X125/60		60					125	059670
10X145/80		80					145	059680
10X165/100		100					165	059690

APPLICATION

- Fixing sub-frames
- Fixing doors and windows (wood, aluminium)
- Fixing other joinery products

MATERIAL

- Screw** : M6 zinc coated grade 4.6
- Head** : type PZ3
- Sleeve** : galvanised sheet
- Cone** : steel

Ultimate loads ($N_{Ru,m}$, $V_{Ru,m}$) in kN

TENSILE

Anchor size	$\varnothing 10$
Base material	
Concrete (C20/25)	
$N_{Ru,m}$	7,0
Clay bricks ($f_c = 55$ MPa)	
$N_{Ru,m}$	5,4
Aerated concrete ($M_{vn} = 500$ kg/m ³)	
$N_{Ru,m}$	1,35

SHEAR

Anchor size	$\varnothing 10$
Base material	
Concrete (C20/25)	
$V_{Ru,m}$	3,5
Clay bricks ($f_c = 55$ MPa)	
$V_{Ru,m}$	3,5
Aerated concrete ($M_{vn} = 500$ kg/m ³)	
$V_{Ru,m}$	2,5

Design loads (N_{Rd} , V_{Rd}) and recommended loads (N_{rec} , V_{rec}) for one anchor without edge or spacing influence in kN

$$N_{Rd} = \frac{N_{Ru,m}^{(1)}}{\gamma_M}$$

$$N_{rec} = \frac{N_{Ru,m}^{(1)}}{\gamma_M \cdot \gamma_F}$$

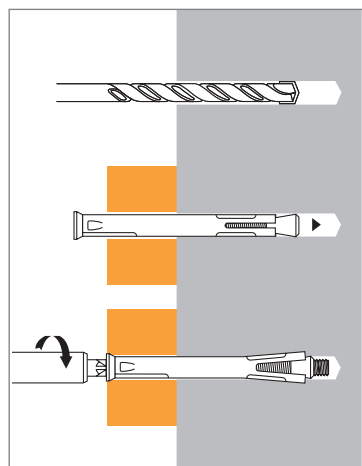
$$V_{Rd} = \frac{V_{Ru,m}^{(1)}}{\gamma_M}$$

$$V_{rec} = \frac{V_{Ru,m}^{(1)}}{\gamma_M \cdot \gamma_F}$$

⁽¹⁾ Derived from tests results

⁽¹⁾ Derived from tests results

INSTALLATION



WARNING:

For aerated concrete, drill with a drill bit diameter equal to 9 mm

TENSILE

Anchor size	$\varnothing 10$
Base material	
Concrete (C20/25)	
N_{Rd}	2,4
N_{rec}	1,7
Clay bricks ($f_c = 55$ MPa)	
N_{Rd}	1,25
N_{rec}	0,9
Aerated concrete ($M_{vn} = 500$ kg/m ³)	
N_{Rd}	0,28
N_{rec}	0,2

$\gamma_M = 2,85$ for concrete ; $\gamma_F = 1,4$

$\gamma_M = 4,3$ for clay bricks and aerated concrete ; $\gamma_F = 1,4$

SHEAR

Anchor size	$\varnothing 10$
Base material	
Concrete (C20/25)	
V_{Rd}	0,7
V_{rec}	0,5
Clay bricks ($f_c = 55$ MPa)	
V_{Rd}	0,7
V_{rec}	0,5
Aerated concrete ($M_{vn} = 500$ kg/m ³)	
V_{Rd}	0,56
V_{rec}	0,4

Spacing data

IN CONCRETE

	Minimum distance between anchors and from edges (mm)		
	$S_{cr,N}$	$C_{cr,N}$	S_{min}
$\varnothing 10$	50	50	50

IN MASONRIES

The anchor must be installed at the minimum distance of 100 mm from another anchor and near one edge.

Fire behaviour

Maximum tensile service loads recommended on concrete for stability (kN).

Fire duration	30 min.	1 h	1 h 30 min.	2 h
$\varnothing 10$	0,5	0,35	0,25	0,2

Fire tests performed by IBMB (N° 3005/0054).