

WHO Frame screw

Special frame screw for window and door installation



Product information

Features and benefits

- Cylinder head for flush installation with the window and door frames.
- Expansion-free fixing imposes less stress on substrate during installation
- High load resistances from a relatively small hole diameter
- Easily removed for temporary works

Applications

- Door and window frames
- Securing formwork
- Suspended ceilings
- Lightweight steel angles
- Timber constructions

Base materials

Approved for use in:

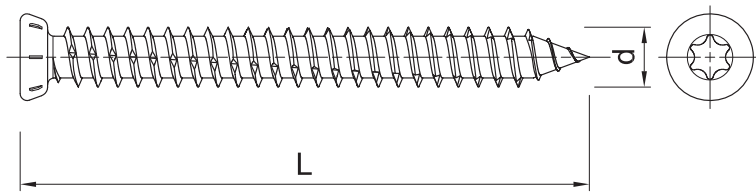
- Concrete
- Solid Brick
- Hollow Brick
- Aerated Concrete Block

Installation guide



1. Drill a hole of required diameter and depth
2. Lightly screw into hole through the fixture, until fixing depth is reached and fixture is secure

Product information



Size	Product Code	Screw		Fixture		
		Diameter	Length	Max. thickness		Hole diameter
		d	L	t _{fix} Concrete	t _{fix} Other	d _f
		[mm]				
Ø7.5	R-WHO-75052	7.5	52	22	-	8
	R-WHO-75072	7.5	72	42	12	8
	R-WHO-75092	7.5	92	62	32	8
	R-WHO-75112	7.5	112	82	52	8
	R-WHO-75132	7.5	132	102	72	8
	R-WHO-75152	7.5	152	122	92	8
	R-WHO-75182	7.5	182	152	122	8
	R-WHO-75202	7.5	202	172	142	8
	R-WHO-75212	7.5	212	182	152	8

Installation data

Substrate			Concrete	Aerated concrete	Other
Fixing diameter	d	[mm]	7.5	7.5	7.5
Hole diameter in substrate	d ₀	[mm]	6	6	6
Min. hole depth in substrate	h ₀	[mm]	40	-	70
Min. installation depth	h _{nom}	[mm]	30	60	60
Min. substrate thickness	h _{min}	[mm]	60	90	90
Min. spacing	s _{min}	[mm]	15	30	30
Min. edge distance	c _{min}	[mm]	15	50	50

Basic performance data

Performance data for single fixing without influence of edge distance and spacing

Substrate		Concrete C20/25	Solid brick 7.5MPa	Aerated concrete 400	Perforated brick K3
MEAN ULTIMATE LOAD F _{Ru,m}					
Ø7.5, Effective embedment depth 30	[kN]	6.15	-	-	-
Ø7.5, Effective embedment depth 60	[kN]	-	2.58	1.27	1.02
CHARACTERISTIC LOAD F _{Rk}					
Ø7.5, Effective embedment depth 30	[kN]	5.21	-	-	-
Ø7.5, Effective embedment depth 60	[kN]	-	2.11	1.14	0.90
DESIGN LOAD F _{Rd}					
Ø7.5, Effective embedment depth 30	[kN]	2.08	-	-	-
Ø7.5, Effective embedment depth 60	[kN]	-	0.84	0.46	0.36
RECOMMENDED LOAD F _{rec}					
Ø7.5, Effective embedment depth 30	[kN]	1.49	-	-	-
Ø7.5, Effective embedment depth 60	[kN]	-	0.60	0.33	0.26

Product commercial data

Product Code	Screw	Quantity [pcs]			Weight [kg]			Bar Codes
	Length [mm]	Box	Outer	Pallet	Box	Outer	Pallet	
R-WHO-75052	52	100	1600	38400	1.06	17.0	436.7	5906675174648
R-WHO-75072	72	100	1600	38400	1.47	23.5	594.0	5906675174662
R-WHO-75092	92	100	100	19200	1.89	1.89	392.7	5906675174686
R-WHO-75112	112	100	100	19200	2.3	2.3	470.8	5906675174709
R-WHO-75132	132	100	100	19200	2.7	2.7	551.7	5906675174723
R-WHO-75152	152	100	100	19200	3.1	3.1	630.2	5906675174747
R-WHO-75182	182	100	100	27300	3.7	3.7	1048.3	5906675174761
R-WHO-75202	202	100	100	27300	4.2	4.2	1161.6	5906675174785
R-WHO-75212	212	100	100	27300	4.3	4.3	1206.1	5906675174808