

## FIX EXPANSION PLUG WITH COLLAR AND SCREW

Easy-to-install plug with collar and screw giving exceptional performance in solid base materials



### Product information

#### Features and benefits

- Anti-rotation fins prevent spinning during tightening of the screw.
- Engineered grip feature for extra holding power.
- Two-way expansion mechanism provides a strong anchorage in solid base materials.
- Flange ensures flush fit to surface.

#### Applications

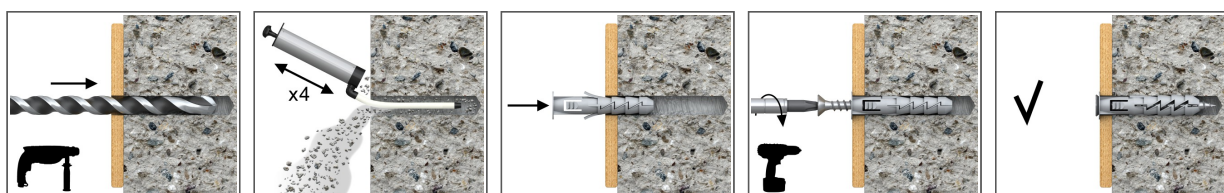
- Pictures
- Lighting
- Skirting / Dado railing
- Shelves
- Trunking
- Cable trays
- Electrical fittings
- Letterboxes

#### Base materials

##### Approved for use in:

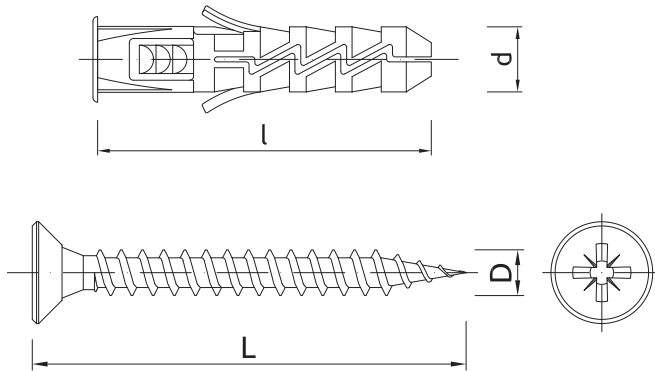
- Concrete
- Solid Brick
- Solid Sand-lime Brick
- Aerated Concrete Block

### Installation guide



1. Drill a hole of required diameter.
2. Insert FIX plug into hole and tap home.
3. Insert screw of required diameter into plug through fixture and tighten.

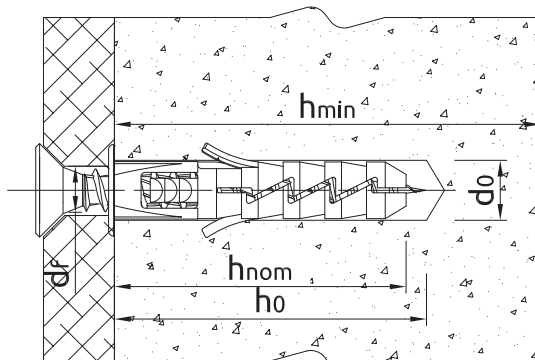
**Product information**



Product dimensions

Size	Product Code	Plug		Fixture		Screw	
		Diameter	Length	Max. thickness	Hole diameter	Diameter	Length
		d	l	t <sub>fix</sub>	d <sub>f</sub>	D	L
[mm]							
Ø8	FIX-K-08+450	8	40	10	5	4,5	50
	FIX-K-08+460	8	40	20	5	4,5	60
	FIX-K-08+550	8	40	10	6	5,0	50
Ø10	R-FIX-K-10+560	10	50	10	6	5,0	60

**Installation data**



Installation data for countersunk head screw

Size			Ø6	Ø8	Ø10
Hole diameter in substrate	d <sub>0</sub>	[mm]	6	8	10
Min. hole depth in substrate	h <sub>0</sub>	[mm]	40	50	60
Min. installation depth	h <sub>nom</sub>	[mm]	30	40	50
Min. substrate thickness	h <sub>min</sub>	[mm]	80	80	80
Min. spacing	s <sub>min</sub>	[mm]	60	80	100
Min. edge distance	c <sub>min</sub>	[mm]	60	80	100
Fixing diameter	d	[mm]	6	8	10

## Basic performance data

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

Substrate		Concrete C20/25 - C50/60	Solid clay brick min 20MPa (eg Mz20/2.0)	Sand-lime solid brick	Aerated concrete 600 Mark V	Hollow lightweight concrete block
<b>CHARACTERISTIC LOAD</b>						
TENSION LOAD $N_{Rk}$						
Ø6, Embedment depth 30mm	[kN]	0.15	0.15	0.30	0.40	0.40
Ø8, Embedment depth 40mm	[kN]	0.50	0.50	1.20	0.75	-
Ø10, Embedment depth 50mm	[kN]	0.40	0.40	0.60	0.90	-
SHEAR LOAD $V_{Rk}$						
Ø6, Embedment depth 30mm	[kN]	0.15	0.15	0.30	0.40	0.40
Ø8, Embedment depth 40mm	[kN]	0.50	0.50	1.20	0.75	-
Ø10, Embedment depth 50mm	[kN]	0.40	0.40	0.60	0.90	-
<b>DESIGN LOAD</b>						
TENSION LOAD $N_{Rd}$						
Ø6, Embedment depth 30mm	[kN]	0.08	0.06	0.12	0.20	0.16
Ø8, Embedment depth 40mm	[kN]	0.28	0.20	0.48	0.38	-
Ø10, Embedment depth 50mm	[kN]	0.22	0.16	0.24	0.45	-
SHEAR LOAD $V_{Rd}$						
Ø6, Embedment depth 30mm	[kN]	0.12	0.12	0.24	0.32	0.32
Ø8, Embedment depth 40mm	[kN]	0.40	0.40	0.96	0.60	-
Ø10, Embedment depth 50mm	[kN]	0.32	0.32	0.48	0.72	-
<b>RECOMMENDED LOAD</b>						
TENSION LOAD $N_{rec}$						
Ø6, Embedment depth 30mm	[kN]	0.06	0.04	0.09	0.14	0.11
Ø8, Embedment depth 40mm	[kN]	0.20	0.14	0.34	0.27	-
Ø10, Embedment depth 50mm	[kN]	0.16	0.11	0.17	0.32	-
SHEAR LOAD $V_{rec}$						
Ø6, Embedment depth 30mm	[kN]	0.09	0.09	0.17	0.23	23.00
Ø8, Embedment depth 40mm	[kN]	0.29	0.29	0.69	0.43	-
Ø10, Embedment depth 50mm	[kN]	0.23	0.23	0.34	0.51	-

## Product commercial data

Product Code	Plug	Screw	Quantity [pcs]			Weight [kg]			Bar Codes
	Diameter [mm]	Length [mm]	Box	Outer	Pallet	Box	Outer	Pallet	
FIX-K-08+450	8	50	200	2400	57600	0.92	11.0	295.0	5906675072722
FIX-K-08+460	8	60	100	1600	38400	0.55	8.8	241.2	5906675072821
FIX-K-08+550	8	50	100	1600	38400	0.66	10.6	283.4	5906675072920
R-FIX-K-10+560	10	60							