

## FIX EXPANSION PLUG WITH COLLAR AND ROUND HOOK

Easy-to-install plug with collar and round hook 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.
- Round hook screw for many application scenarios
- Flange ensures flush fit to surface.

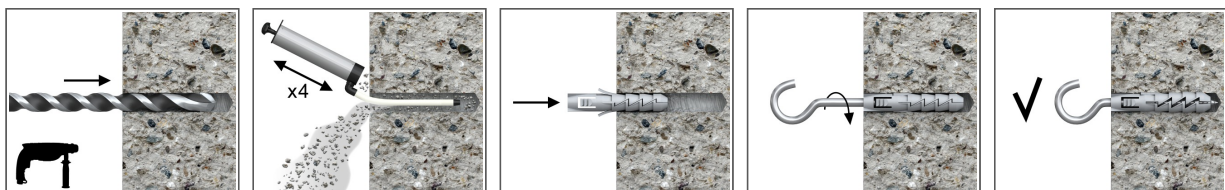
#### Applications

- Pictures
- Lighting
- Letterboxes

#### Base materials

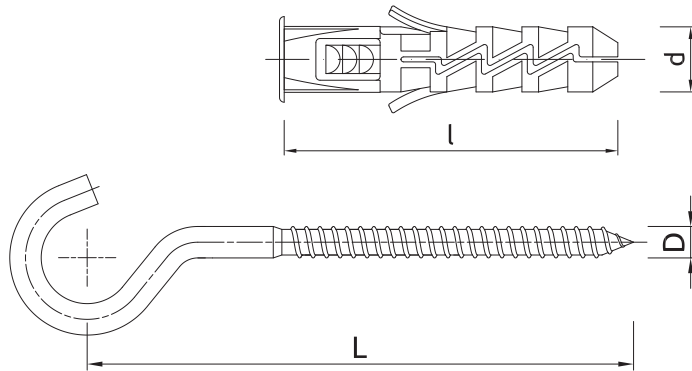
- Approved for use in:
- Concrete

### Installation guide



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

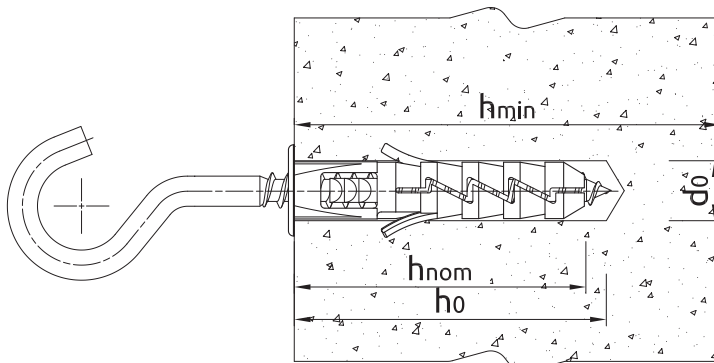
### Product information



Product dimensions

Size	Product Code
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### Installation data



Installation data for round hook

Size			Ø6	Ø8	Ø10
Hole diameter in substrate	$d_0$	[mm]	6	8	10
Min. hole depth in substrate	$h_0$	[mm]	40	50	60
Min. installation depth	$h_{nom}$	[mm]	30	40	50
Min. substrate thickness	$h_{min}$	[mm]	80	80	80
Min. spacing	$s_{min}$	[mm]	60	80	100
Min. edge distance	$c_{min}$	[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>						
<b>TENSION LOAD <math>N_{Rk}</math></b>						
Ø6, Embedment depth 30mm	[kN]	0.15	0.15	0.30	0.37	0.37
Ø8, Embedment depth 40mm	[kN]	0.43	0.43	0.43	0.43	-
Ø10, Embedment depth 50mm	[kN]	0.40	0.40	0.60	0.90	-
<b>SHEAR LOAD <math>V_{Rk}</math></b>						
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	-

## Basic performance data

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>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	0.34	0.34	-
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	0.23	0.25	-
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	0.23
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	-