

FIX EXPANSION PLUG WITH ANGLE HOOK

Easy-to-install plug with angle 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.
- Angle hook for many application scenarios

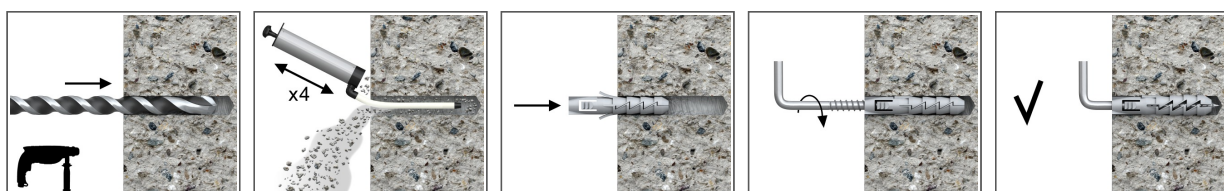
Applications

- Pictures
- Lighting
- Shelves
- Letterboxes

Base materials

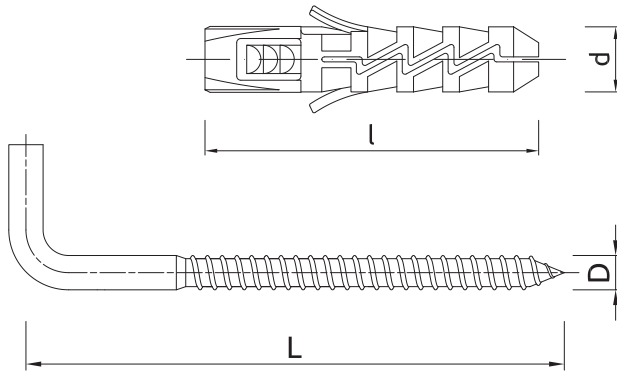
- Approved for use in:
- Concrete

Installation guide



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

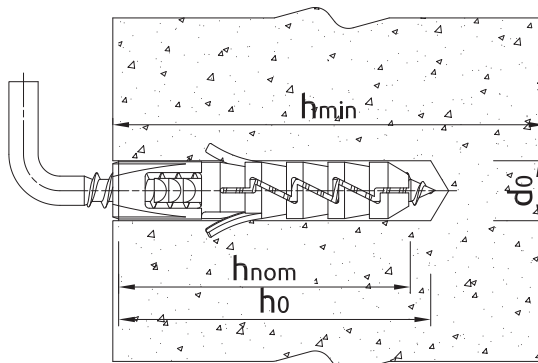
Product information



Product dimensions

Size	Product Code
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Installation data



Installation data for angle hook screws

Size			Ø6	Ø8	Ø10	Ø12
Hole diameter in substrate	d_0	[mm]	6	8	10	12
Min. hole depth in substrate	h_0	[mm]	40	50	60	70
Min. installation depth	h_{nom}	[mm]	30	40	50	60
Min. substrate thickness	h_{min}	[mm]	80	80	80	90
Min. spacing	s_{min}	[mm]	60	80	100	120
Min. edge distance	c_{min}	[mm]	60	80	100	120
Fixing diameter	d	[mm]	6	8	10	12

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
CHARACTERISTIC LOAD						
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	0.88	0.75	-
Ø10, Embedment depth 50mm	[kN]	0.40	0.40	0.60	0.90	-
Ø12, Embedment depth 60mm	[kN]	1.20	1.20	3.00	2.00	-
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	-
Ø12, Embedment depth 60mm	[kN]	1.20	1.20	3.00	2.00	-

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
DESIGN LOAD						
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	-
Ø12, Embedment depth 60mm	[kN]	0.67	0.48	1.20	1.00	-
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	-
Ø12, Embedment depth 60mm	[kN]	0.96	0.96	2.40	1.60	-
RECOMMENDED LOAD						
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	-
Ø12, Embedment depth 60mm	[kN]	0.48	0.34	0.86	0.71	-
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	-
Ø12, Embedment depth 60mm	[kN]	0.69	0.69	1.71	1.14	-