

# FX-L Hammer-in fixing with countersunk head

The hammer fixing for fast, simple, cost-effective installations.



## Approvals and Reports

- ETA-13/0088



## Product information

### Features and benefits

- Rapid hammer-set installation reduces the time required and allows for cost-effective, high-volume installation.
- Combination of PZ recess and the helical thread makes removal of the nail possible, facilitating disassembly when necessary.
- The extensive range of product lengths and diameters with countersunk head type ensures availability of the correct fixing for every scenario
- Designed for push-through installation.

### Applications

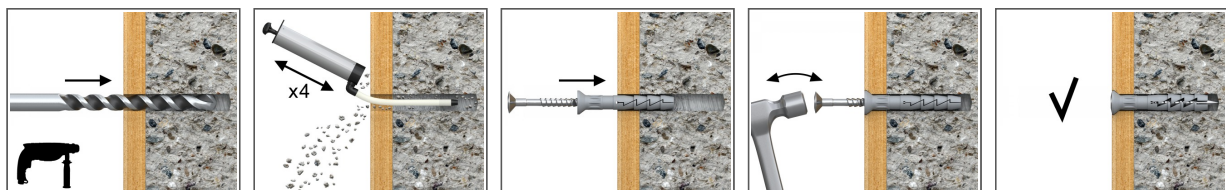
- Timber or metal battens
- Drywall structures
- Skirting / Dado railing
- Cable clamps
- Pipe clamps

### Base materials

#### Approved for use in:

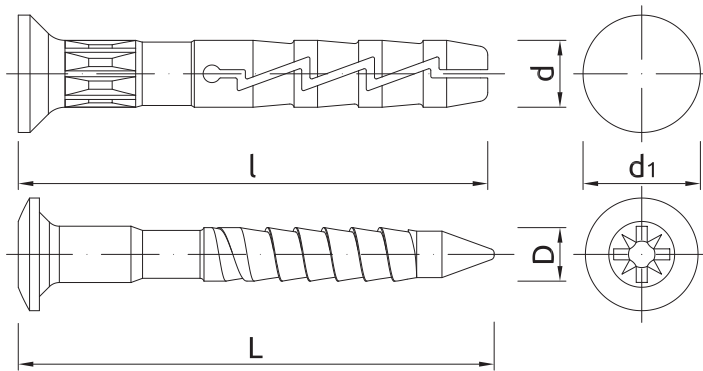
- Concrete
- Solid Brick
- Solid Sand-lime Brick
- Hollow Sand-lime Brick
- Lightweight Concrete Block
- Hollow Lightweight Concrete Block
- Aerated Concrete Block

## Installation guide



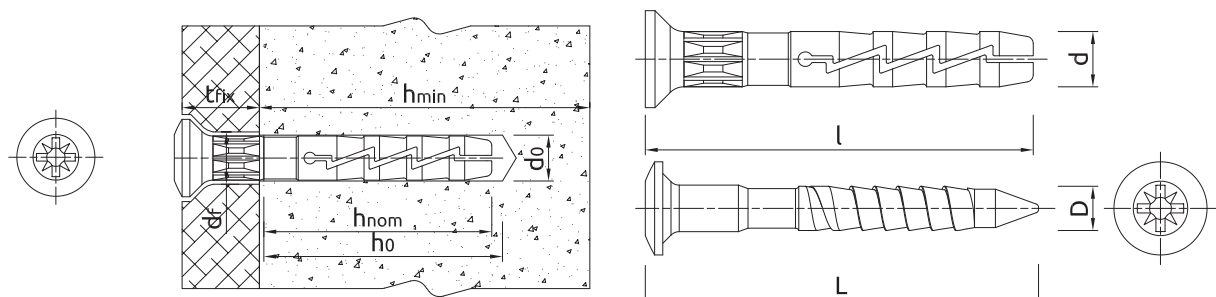
1. Drill a hole of required diameter.
2. Insert FX plug into hole through fixture.
3. Hammer the nail into the plastic sleeve until fixing is secure and flush with the fixture.

**Product information**



Size	Product Code	Plug		Nail		Fixture		Diameter
		Diameter	Length	Diameter	Length	Max. thickness	Hole diameter	
		d	l	D	L	t <sub>fix</sub>	d <sub>f</sub>	d <sub>1</sub>
[mm]								
Ø5	FX-05L025	4.9	25	3.3	28	1	6	8.5
	FX-05L030	4.9	30	3.3	33	5	6	8.5
	FX-05L035	4.9	35	3.3	38	10	6	8.5
	FX-05L040	4.9	40	3.3	43	15	6	8.5
	FX-05L050	4.9	50	3.3	54	25	6	8.5
Ø6	FX-06L035	5.9	35	3.8	39	6	7	10
	FX-06L040	5.9	40	3.8	44	11	7	10
	FX-06L045	5.9	45	3.8	49	16	7	10
	FX-06L050	5.9	50	3.8	54	21	7	10
	FX-06L055	5.9	55	3.8	59	26	7	10
	FX-06L060	5.9	60	3.8	64	31	7	10
Ø8	FX-06L080	5.9	80	3.8	84	51	7	10
	FX-08L045	7.9	45	4.8	51	5	9	11.5
	FX-08L060	7.9	60	4.8	66	20	9	11.5
	FX-08L080	7.9	80	4.8	86	40	9	11.5
	FX-08L100	7.9	100	4.8	106	60	9	11.5
	FX-08L120	7.9	120	4.8	126	80	9	11.5
	FX-08L140	7.9	140	4.8	146	100	9	11.5
FX-08L160	7.9	160	4.8	166	120	9	11.5	

**Installation data**



Installation data

Product dimensions

## Installation data

Size			Ø5	Ø6	Ø8
Hole diameter in substrate	$d_0$	[mm]	5	6	8
Min. hole depth in substrate	$h_0$	[mm]	30	35	45
Min. installation depth	$h_{nom}$	[mm]	25	29	40
Min. substrate thickness	$h_{min}$	[mm]	100	100	100
Min. spacing	$s_{min}$	[mm]	100	100	100
Min. edge distance	$c_{min}$	[mm]	100	100	100
Fixing diameter	$d$	[mm]	5	6	8

## Basic performance data

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

Substrate		Concrete C12/15	Concrete C20/25 - C50/60	Solid brick	Sand-lime solid brick	Sand-lime hollow brick	Lightweight concrete hollow block	Lightweight concrete block	Autoclaved aerated concrete
<b>POLYPROPYLENE PLUG</b>									
<b>MEAN ULTIMATE LOAD <math>N_{Ru,m}</math></b>									
<b>TENSION LOAD <math>N_{Ru,m}</math></b>									
Ø05, Effective embedment depth 25 mm	[kN]	0.27	0.38	0.42	0.35	0.45	0.37	0.51	0.09
Ø06, Effective embedment depth 29 mm	[kN]	0.46	0.66	0.43	0.48	0.63	0.39	0.68	0.14
Ø08, Effective embedment depth 40 mm	[kN]	0.45	0.64	0.80	1.07	-	0.49	0.63	0.19
<b>CHARACTERISTIC LOAD <math>N_{Rk}</math></b>									
<b>TENSION LOAD <math>N_{Rk}</math></b>									
Ø05, Effective embedment depth 25 mm	[kN]	0.10	0.20	0.20	0.20	0.30	0.20	0.30	0.10
Ø06, Effective embedment depth 29 mm	[kN]	0.20	0.40	0.20	0.30	0.30	0.20	0.30	0.10
Ø08, Effective embedment depth 40 mm	[kN]	0.30	0.50	0.60	0.75	-	0.40	0.50	0.10
<b>DESIGN LOAD <math>N_{Rd}</math></b>									
<b>TENSION LOAD <math>N_{Rd}</math></b>									
Ø05, Effective embedment depth 25 mm	[kN]	0.05	0.10	0.10	0.10	0.15	0.10	0.15	0.05
Ø06, Effective embedment depth 29 mm	[kN]	0.10	0.20	0.10	0.15	0.15	0.10	0.15	0.05
Ø08, Effective embedment depth 40 mm	[kN]	0.15	0.25	0.30	0.38	-	0.20	0.25	0.05
<b>RECOMMENDED LOAD <math>N_{rec}</math></b>									
<b>TENSION LOAD <math>N_{rec}</math></b>									
Ø05, Effective embedment depth 25 mm	[kN]	0.04	0.07	0.07	0.07	0.11	0.07	0.11	0.04
Ø06, Effective embedment depth 29 mm	[kN]	0.07	0.14	0.07	0.11	0.11	0.07	0.11	0.04
Ø08, Effective embedment depth 40 mm	[kN]	0.11	0.18	0.21	0.27	-	0.14	0.18	0.04

## Product commercial data

Product Code	Plug	Quantity [pcs]			Weight [kg]			Bar Codes
	Diameter [mm]	Box	Outer	Pallet	Box	Outer	Pallet	
FX-05L025 <sup>1)</sup>	4.9	200	4800	115200	0.80	19.2	490.8	5906675001081
FX-05L030 <sup>1)</sup>	4.9	200	4800	115200	0.48	11.5	306.5	5906675001098
FX-05L035 <sup>1)</sup>	4.9	200	4800	115200	0.54	13.0	341.0	5906675001104
FX-05L040 <sup>1)</sup>	4.9	200	3200	76800	0.61	9.7	263.1	5906675001111
FX-05L050 <sup>1)</sup>	4.9	200	2400	57600	0.77	9.2	250.9	5906675200439
FX-06L035 <sup>1)</sup>	5.9	200	2400	57600	0.72	8.7	238.2	5906675001166
FX-06L040 <sup>1)</sup>	5.9	200	2400	57600	0.79	9.4	256.1	5906675099224
FX-06L045 <sup>1)</sup>	5.9	200	2400	76800	0.80	9.6	337.2	5906675121222
FX-06L050 <sup>1)</sup>	5.9	100	1200	28800	0.51	6.1	176.6	5906675210933
FX-06L055 <sup>1)</sup>	5.9	100	1200	28800	0.56	6.7	191.3	5906675124025
FX-06L060 <sup>1)</sup>	5.9	100	1200	28800	0.58	7.0	197.9	5906675123622
FX-06L080 <sup>1)</sup>	5.9	100	1200	28800	0.73	8.7	238.8	5906675124421
FX-08L045 <sup>1)</sup>	7.9	100	1200	28800	0.80	9.6	259.8	5906675121628
FX-08L060 <sup>1)</sup>	7.9	100	1200	28800	0.97	11.7	310.5	5906675122021
FX-08L080 <sup>1)</sup>	7.9	50	600	14400	0.61	7.3	206.3	5906675122427
FX-08L100 <sup>1)</sup>	7.9	50	600	14400	0.77	9.3	252.9	5906675122823
FX-08L120 <sup>1)</sup>	7.9	50	600	14400	0.88	10.6	283.4	5906675123226
FX-08L140 <sup>1)</sup>	7.9	50	600	14400	1.05	12.6	331.5	5906675001173
FX-08L160 <sup>1)</sup>	7.9	50	600	14400	1.18	14.2	370.4	5906675001180

1) ETA-13/0088