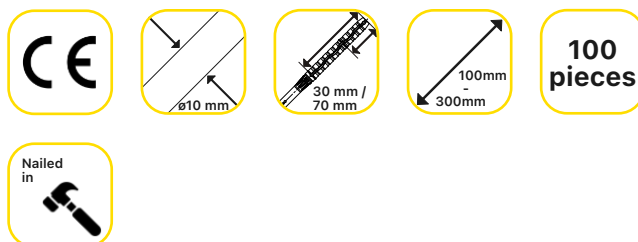


# Fastener FIX-S



Nailed in plastic anchors with a metal specific nail for fixing of external thermal insulation composite systems with rendering



## Product description

FIX insulation fasteners are versatile, featuring a dual anchoring zone: 30 mm and 70 mm. For standard applications, 30 mm anchoring shortens drilling time and allows for a shorter fastener. In more demanding conditions, when substrate quality is uncertain, anchoring to 70 mm increases the fastener's strength and load capacity.

### Features and Benefits

- ▶ Quality confirmed by the European CE certificate.
- ▶ Additional ribbing prevents the pin from backing out during installation and slipping from the sleeve under wide temperature fluctuations over years of use.
- ▶ Faster installation thanks to the short anchoring zone.
- ▶ The new design of the anchoring zone with a diameter of 10mm influenced to increase the strength parameters (up to 1,5 kN).
- ▶ Very high plate stiffness: 1,0kN/mm.

### Applications

- ▶ Facade insulation system (ETICS)
- ▶ Styrofoam plates
- ▶ Mineral wool plates
- ▶ Polyurethane plates
- ▶ Cork
- ▶ Wood wool plates

### Material

- ▶ Sleeve – polypropylene
- ▶ Pin - galvanized steel

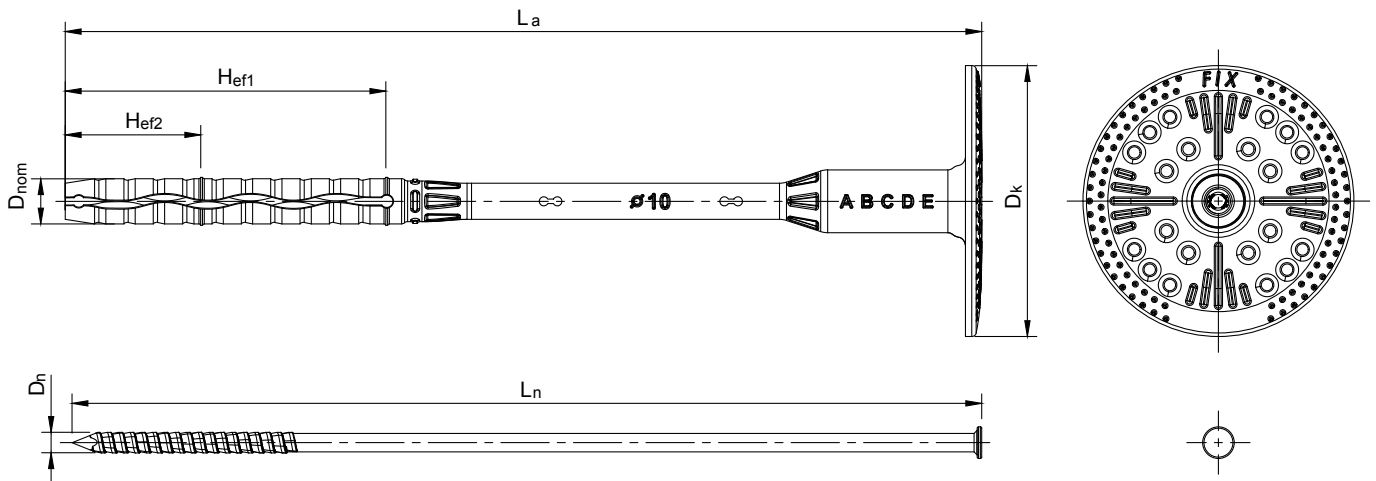
### Approval

- ▶ European Technical Assessment ETA-24/1085

### Substrate categories

- ▶ **A** - Concrete C12/15, Normal concrete of class C20/25 – C50/60
- ▶ **B** - Solid clay brick MZ, Solid silicate brick KS
- ▶ **C** - Perforated silicate brick KSL, Hollow brick Hlz, Porothersm 25
- ▶ **D** - Lightweight aggregate concrete LAC
- ▶ **E** - AAC2-AAC7 Autoclaved aerated concrete

## Product information

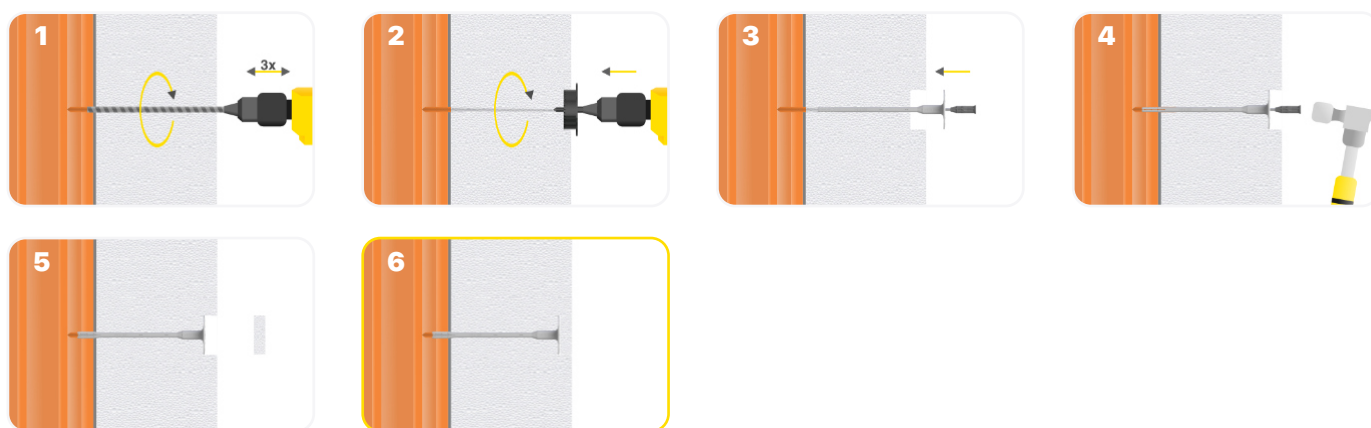


Type	Diameter $D_{nom}$ [mm]	Length $L_a$ [mm]	Plate diameter $D_k$ [mm]	Effective anchoring depth $H_{ef1}$ [mm]	Effective anchoring depth $H_{ef2}$ [mm]	Recommended thickness of ETICS for long anchoring zone (countersunk assembly) [mm]	Recommended thickness of ETICS for short anchoring zone (countersunk assembly) [mm]
FIX-S 10x100	10	100	60	70	30	20 (40)	60 (80)
FIX-S 10x120	10	120	60	70	30	40 (60)	80 (100)
FIX-S 10x140	10	140	60	70	30	60 (80)	100 (120)
FIX-S 10x160	10	160	60	70	30	80 (100)	120 (140)
FIX-S 10x180	10	180	60	70	30	100 (120)	140 (160)
FIX-S 10x200	10	200	60	70	30	120 (140)	160 (180)
FIX-S 10x220	10	220	60	70	30	140 (160)	180 (200)
FIX-S 10x240	10	240	60	70	30	160 (180)	200 (220)
FIX-S 10x260	10	260	60	70	30	180 (200)	220 (240)
FIX-S 10x280	10	280	60	70	30	200 (220)	240 (260)
FIX-S 10x300	10	300	60	70	30	220 (240)	260 (280)

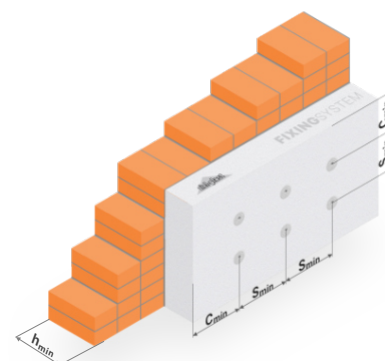
**Characteristic resistance**

Substrate	Concrete C12/15	Concrete C16/20 ÷ C50/60	Thin concrete members C16/20 ÷ C50/60	Clay brick MZ	Calcium silicate brick KS	Calcium silicate hollow block KSL, a=40mm	Vertically perforated clay bricks Porotherm 25, a=12mm	Vertically perforated clay bricks Porotherm 25, a=17mm	Lightweight concrete hollow block HBL, a=33mm	Lightweight concrete hollow block Tekno Amerblok PK178 a=30mm	Lightweight concrete hollow block Tekno Amerblok PK19 a=30mm	Lightweight concrete block LAC	Autoclaved aerated concrete block AAC2	Autoclaved aerated concrete block AAC7
	Substrate categories													
	A	A	A	B	B	C	C	C	C	C	C	D	E	E
Drilling method														
	hammer	hammer	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary	rotary	rotary	rotary	rotary
Characteristic resistance [kN]														
H <sub>ef2</sub> - 30mm	0,70	1,00	1,00	1,00	1,00	1,00	0,50	0,55	0,60	1,00	1,00	0,60	0,60	0,70
H <sub>ef1</sub> - 70mm	1,30	1,50	1,50	1,50	1,50	1,50	0,60	0,80	0,90	1,50	1,50	0,90	0,90	1,20

Fastener type	FIX-S	
The strength of the plate	[kN]	2,60
The stiffness of the plate	[kN/mm]	1,0
Point thermal conductivity	[W/K]	0,003

**Installation instructions**


The minimum thickness of the substrate	$h_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$S_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$C_{min} \geq$ [mm]	100
Recommended number of pieces	pieces / m <sup>2</sup>	6-8 / m <sup>2</sup>
Recommended number of pieces at the corners of the building	pieces / m <sup>2</sup>	8-10 / m <sup>2</sup>



**Logistics information**

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit package (carton)	Pallet (120x80x180 [cm])	Unit package (carton)	Pallet (120x80x180 [cm])	
FIX-S 10x100	S100	100	10000	2,3	250	5908275918141
FIX-S 10x120	S120	100	10000	2,8	300	5908275918158
FIX-S 10x140	S140	100	10000	3,2	340	5908275918165
FIX-S 10x160	S160	100	10000	3,6	380	5908275918172
FIX-S 10x180	S180	100	8400	3,9	350	5908275918189
FIX-S 10x200	S200	100	8400	4,3	380	5908275918196
FIX-S 10x220	S220	100	8400	4,6	405	5908275918202
FIX-S 10x240	S240	100	5600	5,0	295	5908275918219
FIX-S 10x260	S260	100	5600	5,4	325	5908275918226
FIX-S 10x280	S280	100	5600	5,7	340	5908275918233
FIX-S 10x300	S300	100	5600	6,0	355	5908275918240