

TFIX-8ST Universal facade fixing with integrated insulation cap

The first thermal insulation combination screw fixing that can be countersunk together with the integrated insulation cap.



Approvals and Reports

- ETA-11/0144



Product information

Features and benefits

- Accurate countersunk setting automatically sets the fixing flush with the insulation layer
- Integrated insulation cap (with unique surface reinforcement) equalizes thermal conductivity over the fixing point, whilst also leveling out drying times of render.
- Unique sleeve compression zone for precision installations.
- Simple countersunk installation in all substrates (A,B,C,D,E).
- The long plastic overmoulding on the TFIX-8ST screw minimises thermal bridging (value 0.001-0,002W/K), contributing to energy-saving benefits
- The shortest embedment depth at the maximum strength parameters
- Unique design allows for high load-bearing capacities. This reduces the quantity of fixings required per square metre of insulation
- Plate stiffness (value 0.6 kN/mm) ensures smooth elevation surface and stable insulation system.

Applications

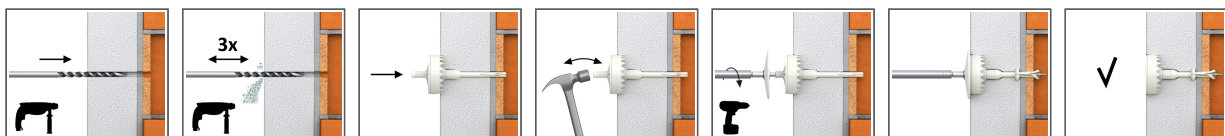
- External Thermal Insulation Composite Systems (ETICS)
- Polystyrene (EPS) boards
- Mineral wool (MW) boards
- Polyurethane (PU) boards

Base materials

Approved for use in:

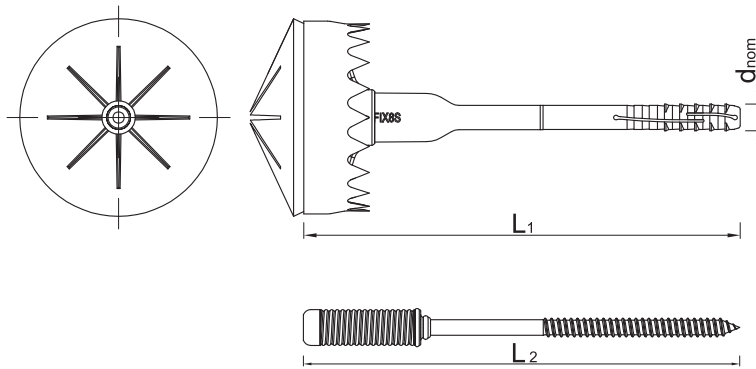
- Concrete C12/15-C50/60 (Use category A)
- Solid Brick (Use category B)
- Solid Sand-lime Brick (Use category B)
- Hollow Brick (Use category C)
- Hollow Sand-lime Brick (Use category C)
- Vertically-perforated clay block (Use category C)
- Lightweight Concrete Block (Use category C)
- Hollow Lightweight Concrete Block (Use category D)
- Reinforced components of lightweight aggregate concrete (Use category D)
- Aerated Concrete Block (Use category D)

Installation guide



1. Drill a hole of required diameter and depth
2. Drilling depth of min 35mm in A,B,C,D materials and 75mm in Aerated Concrete Block
3. Lightly tap the plastic sleeve through the insulation material into hole with a hammer, until fixing depth is reached
4. Embedment depth of min 25mm in A,B,C,D materials and 65mm in Aerated Concrete Block
5. When using the KWX-63 the teeth should be embedded in the insulation material after hammering.

Product information



Size	Product Code	Fixing			Fixture	
		Diameter	Length	Plate diameter	Recommended thickness	
		d	L	D	t _{fix} A, B, C, D	t _{fix} E
[mm]						
Ø08	TFIX-8ST-115	8	115	60	80	40
	TFIX-8ST-135	8	135	60	100	60
	TFIX-8ST-155	8	155	60	120	80
	TFIX-8ST-175	8	175	60	140	100
	TFIX-8ST-195	8	195	60	160	120
	TFIX-8ST-215	8	215	60	180	140
	TFIX-8ST-235	8	235	60	200	160
	TFIX-8ST-255	8	255	60	220	180
	TFIX-8ST-275	8	275	60	240	200
	TFIX-8ST-295	8	295	60	260	220
	TFIX-8ST-335	8	335	60	300	260
	TFIX-8ST-355	8	355	60	320	280
	TFIX-8ST-375	8	375	60	340	300
	TFIX-8ST-395	8	395	60	360	320
	TFIX-8ST-415	8	415	60	380	340
	TFIX-8ST-435	8	435	60	400	360
TFIX-8ST-455	8	455	60	420	380	

Installation data

Substrate			A, B, C, D	E
Fixing diameter	d	[mm]	8	8
Hole diameter in substrate	d ₀	[mm]	8	8
Min. hole depth in substrate	h ₀	[mm]	40	80
Min. installation depth	h _{nom}	[mm]	25	65
Min. substrate thickness	h _{min}	[mm]	100	100
Min. spacing	s _{min}	[mm]	100	100
Min. edge distance	c _{min}	[mm]	100	100

Basic performance data

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

Substrate	Effective embedment depth h_{ef}	Concrete C12/15	Concrete C16/20	Concrete C50/60	Solid brick Nz	Vertically perforated clay brick HLZ	Sand-lime solid brick KS	Sand-lime perforated brick KSL	Lightweight concrete solid brick V	Lightweight concrete hollow block HBL 4MPa	Lightweight concrete hollow block HBL 6MPa	Prefabricated reinforced components of lightweight aggregate concrete 4MPa	Prefabricated reinforced components of lightweight aggregate concrete 6MPa	Autoclaved aerated concrete AAC 4MPa	Autoclaved aerated concrete AAC 6MPa
		[mm]	25	25	25	25	25	25	25	25	25	25	25	25	65
MEAN ULTIMATE LOAD $N_{R,u,m}$															
TFIX-8ST	[kN]	1.64	2.03	1.74	1.68	0.94	1.32	1.15	0.64	0.48	0.71	0.66	0.99	1.08	1.61
CHARACTERISTIC LOAD $N_{R,k}$															
TFIX-8ST	[kN]	1.20	1.50	1.20	1.20	0.75	0.90	0.90	0.50	0.40	0.60	0.40	0.60	0.90	1.20
DESIGN LOAD $N_{R,d}$															
TFIX-8ST	[kN]	0.60	0.75	0.60	0.60	0.38	0.45	0.45	0.25	0.20	0.30	0.20	0.30	0.45	0.60
RECOMMENDED LOAD $N_{R,rec}$															
TFIX-8ST	[kN]	0.43	0.54	0.43	0.43	0.27	0.32	0.32	0.18	0.14	0.21	0.14	0.21	0.32	0.43

Fixing type		TFIX-8ST
Plate resistance	[kN]	2.04
Plate stiffness	[kN/mm]	0.6
Point thermal transmittance	[W/K]	0.002

Product commercial data

Size	Product Code	Fixing			Quantity [pcs]			Weight [kg]			Bar Codes
		Diameter [mm]	Length [mm]	Plate diameter [mm]	Box	Outer	Pallet	Box	Outer	Pallet	
Ø08	TFIX-8ST-115 ¹⁾	8	115	60	100	100	3200	4.4	4.4	169.8	5906675034690
	TFIX-8ST-135 ¹⁾	8	135	60	100	100	3200	4.6	4.6	176.9	5906675034706
	TFIX-8ST-155 ¹⁾	8	155	60	100	100	3200	5.0	5.0	188.6	5906675034713
	TFIX-8ST-175 ¹⁾	8	175	60	100	100	3200	5.2	5.2	196.2	5906675033846
	TFIX-8ST-195 ¹⁾	8	195	60	100	100	3200	5.5	5.5	206.7	5906675034737
	TFIX-8ST-215 ¹⁾	8	215	60	100	100	3200	5.9	5.9	218.5	5906675034720
	TFIX-8ST-235 ¹⁾	8	235	60	100	100	3200	6.1	6.1	226.4	5906675034744
	TFIX-8ST-255 ¹⁾	8	255	60	100	100	3200	6.6	6.6	241.1	5906675049687
	TFIX-8ST-275 ¹⁾	8	275	60	100	100	3200	6.8	6.8	248.9	5906675018959
	TFIX-8ST-295 ¹⁾	8	295	60	100	100	3200	7.1	7.1	258.0	5906675018966
	TFIX-8ST-335 ¹⁾	8	335	60	100	100	2400	8.0	8.0	222.7	5906675018973
	TFIX-8ST-355 ¹⁾	8	355	60	100	100	2400	8.7	8.7	238.1	5906675088051
	TFIX-8ST-375 ¹⁾	8	375	60	50	50	1600	4.6	4.6	178.3	5906675087795
	TFIX-8ST-395 ¹⁾	8	395	60	50	50	1600	4.8	4.8	183.4	5906675087801
	TFIX-8ST-415 ¹⁾	8	415	60	50	50	1600	4.5	4.5	172.4	5906675088839
	TFIX-8ST-435 ¹⁾	8	435	60	50	50	1600	5.1	5.1	194.4	5906675117157
TFIX-8ST-455 ¹⁾	8	455	60	50	50	1600	5.2	5.2	197.2	5906675335148	

1) ETA-11/0144