

Facade Insulation Fixings



R-TFIX-8S Universal facade fixings

Versatile screw-in facade fixing with high performance in all base materials recommended for ETICS



Approvals and Reports

- ETA 17/0161



Product information

Features and benefits

- Quick and easy installation in all substrates (categories A,B,C,D,E)
- Unique sleeve compression zone for precision installations.
- The long plastic overmoulding on the R-TFIX-8S screw minimises thermal bridging (value 0,001-0,002W/K), contributing to energy-saving benefits
- Plate stiffness (value 0.6 kN/mm) ensures smooth elevation surface and stable insulation system.
- Unique design allows for high load-bearing capacities. This reduces the quantity of fixings required per square metre of insulation
- The shortest embedment depth at the maximum strength parameters
- Pre-assembled screw saves time and labour.

Applications

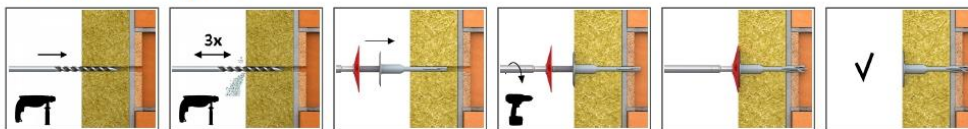
- External Thermal Insulation Composite Systems (ETICS)
- Polystyrene (EPS) boards
- Mineral wool (MW) boards
- Polyurethane (PU) boards
- Cork boards
- Light wood wool building boards

Base materials

Approved for use in:

- Concrete C12/15-C50/60 (Use category A)
- External wall panel of concrete C16/20 – C50/60 (Use category A)
- Solid Brick (Use category B)
- Solid Sand-lime Brick (Use category B)
- Vertically-perforated clay block (Use category C)
- Hollow Lightweight Concrete Block (Use category D)
- Autoclaved Aerated Concrete (Use Category E)

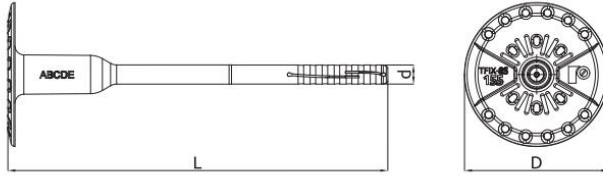
Installation guide



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. Clean drilled hole 3 times.
4. Insert driver bit into recess in head moulding of R-TFIX-8S screw.
5. Insert the fixing into the drilled hole.
6. After inserting the fixing in the hole, the plate should be pressed against the thermal insulation surface.
7. Embedment depth of min 25mm in A,B,C,D materials and 65mm in Aerated Concrete Block.
8. Apply steady axial pressure, ensuring the disc of the setting tool is kept perpendicular to the fixing axis.
9. Steadily drive in the screw with high revs until fixing is secure (when disc touches insulation surface).

Facade Insulation Fixings **RAWLPLUG®**

Product information



Size	Product Code	Fixing			Fixture	
		Diameter	Plate diameter	Length	Recommended thickness	
		d	D	L	t _{fix} A, B, C, D	t _{fix} E
[mm]						
Ø08	R-TFIX-85-115	8	60	115	80	40
	R-TFIX-85-135	8	60	135	100	60
	R-TFIX-85-155	8	60	155	120	80
	R-TFIX-85-175	8	60	175	140	100
	R-TFIX-85-195	8	60	195	160	120
	R-TFIX-85-215	8	60	215	180	140
	R-TFIX-85-235	8	60	235	200	160
	R-TFIX-85-255	8	60	255	220	180
	R-TFIX-85-275	8	60	275	240	200
	R-TFIX-85-295	8	60	295	260	220
	R-TFIX-85-335	8	60	335	300	260
	R-TFIX-85-355	8	60	355	320	280
	R-TFIX-85-375	8	60	375	340	300
	R-TFIX-85-395	8	60	395	360	320
	R-TFIX-85-415	8	60	415	380	340
R-TFIX-85-435	8	60	435	400	360	
R-TFIX-85-455	8	60	455	420	380	

Installation data

Substrate			A, B, C, D	A - external panel	E
Hole diameter in substrate	d ₀	[mm]	8	8	8
Min. installation depth	h _{hole}	[mm]	25	25	65
Min. hole depth in substrate	h ₀	[mm]	35	35	75
Min. hole depth in substrate - countersunk mounting	h ₀	[mm]	45	45	85
Min. substrate thickness	h _{min}	[mm]	100	40	100
Min. spacing	s _{min}	[mm]	100	100	100
Min. edge distance	c _{min}	[mm]	100	100	100
Fixing diameter	d	[mm]	8	8	8

Facade Insulation Fixings **RAWLPLUG®**

Basic performance data

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

Substrate		Concrete C12/15	Concrete min. C16/20	External wall panel of concrete	Solid clay brick min 20MPa (eg M20/2.0)	Sand-lime brick min. 30MPa	Hollow brick 15MPa	Prefabricated reinforced concrete elements of lightweight aggregate concrete 4MPa	Autoclaved aerated concrete AAC 4MPa
Effective embedment depth h_{ef}	[mm]	25	25	25	25	25	25	25	65
MEAN ULTIMATE LOAD N_{Rm}									
R-TFIX-85	[kN]	1.64	2.03	2.03	1.78	1.94	1.13	1.12	1.56
CHARACTERISTIC LOAD N_{Rk}									
R-TFIX-85	[kN]	1.20	1.50	1.50	1.50	1.50	0.90	0.90	1.20
DESIGN LOAD N_{Rd}									
R-TFIX-85	[kN]	0.60	0.75	0.75	0.75	0.75	0.45	0.45	0.60
RECOMMENDED LOAD N_{rc}									
R-TFIX-85	[kN]	0.43	0.54	0.54	0.54	0.54	0.32	0.32	0.43
Fixing type		R-TFIX-85							
Plate resistance	[kN]	2.04							
Plate stiffness	[kN/mm]	0.6							
Point thermal transmittance	[W/K]	0,001 - 0,002							

Product commercial data

Size	Product Code	Fixing			Diameter [mm]	Length [mm]	Quantity [pcs]			Weight [kg]			Bar Codes
		Diameter [mm]	Plate diameter [mm]	Length [mm]			Box	Outer	Pallet	Box	Outer	Pallet	
Ø8	R-TFIX-85-115 ¹⁾	8	60	115			200	200	8000	5.7	5.7	258.4	5906675417479
	R-TFIX-85-135 ¹⁾	8	60	135			200	200	8000	6.4	6.4	285.9	5906675417486
	R-TFIX-85-155 ¹⁾	8	60	155			200	200	6400	7.1	7.1	257.7	5906675417493
	R-TFIX-85-175 ¹⁾	8	60	175			200	200	6400	7.8	7.8	278.8	5906675417509
	R-TFIX-85-195 ¹⁾	8	60	195			200	200	6400	8.5	8.5	300.8	5906675417516
	R-TFIX-85-215 ¹⁾	8	60	215			100	100	4000	4.8	4.8	222.2	5906675417530
	R-TFIX-85-235 ¹⁾	8	60	235			100	100	4000	5.0	5.0	231.5	5906675417547
	R-TFIX-85-255 ¹⁾	8	60	255			100	100	4000	5.5	5.5	249.8	5906675417554
	R-TFIX-85-275 ¹⁾	8	60	275			100	100	4000	5.8	5.8	263.2	5906675417561
	R-TFIX-85-295 ¹⁾	8	60	295			100	100	4000	6.1	6.1	272.1	5906675417578
	R-TFIX-85-335 ¹⁾	8	60	335			100	100	4000	6.7	6.7	297.9	5906675417585
	R-TFIX-85-355 ¹⁾	8	60	355			100	100	3200	7.3	7.3	264.9	5906675417592
	R-TFIX-85-375 ¹⁾	8	60	375			100	100	3200	7.6	7.6	274.4	5906675417608
	R-TFIX-85-395 ¹⁾	8	60	395			50	50	1600	4.2	4.2	164.9	5906675417615
	R-TFIX-85-415 ¹⁾	8	60	415			50	50	1600	4.4	4.4	171.5	5906675417639
	R-TFIX-85-435 ¹⁾	8	60	435			50	50	1600	4.5	4.5	174.7	5906675417646
R-TFIX-85-455 ¹⁾	8	60	455			50	50	1600	4.8	4.8	183.8	5906675417653	
	R-TFIX-TOOL-RED				80	8	1	16	384	0.08	1.30	61.1	5906675412245
	R-TFIX-TOOL-GREEN				80	18	1	16	384	0.09	1.47	65.3	5906675412252

1) ETA 17/0161