

Render fixing FIF-PN 8

The pre-assembled hammerset anchor with reinforced plastic nail



Polystyrene rigid foam boards



Setting the hammerset fixing on polystyrene rigid foam boards

Applications

- Fixing of ETICS insulation boards on concrete and masonry
- Flush-to-surface installation in ETICS insulating materials e.g. polystyrene

Approvals



ETA-18/0253, for concrete and masonry

Advantages

- To set with few hammer blows.
- The disc fits tight into the insulation thanks to its thickness of only 2.7 mm. Thus allows the application of low-cost, thin reinforcement layers.
- Optimised retention forces thanks to the glass fibre reinforced plastic nail (GRP).
- Small anchoring depth of 35 mm saves

Building materials

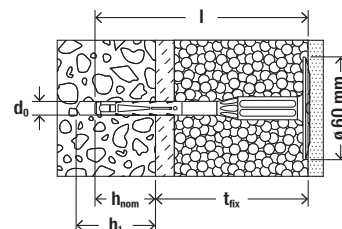
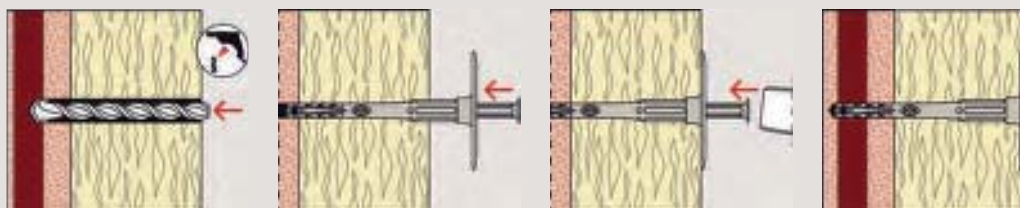
- Building material classes A, B, C, D, E
- Concrete
- Building brick
- Solid sand-lime brick
- Hollow blocks made from lightweight concrete
- Vertically perforated brick
- Perforated sand-lime brick
- Lightweight aggregate concrete
- Aerated concrete

- on drilling times.
- Thanks to the GRP nail, the fixing is free of thermal bridging with the Chi value 0.000 [W/K].
- The compression zone in the shank allows the disc to be drawn precisely into the insulation.
- For insulating material thicknesses up to 180 mm.

Functioning

- The fixing is set in push-through installation.
- Simple, fast setting by driving the GRP nail in using a standard hammer.
- Non load bearing layers such as adhesive and old plaster are included in the maximum useful length.

Installation FIF-PN 8



Technical data for building material categories A, B, C

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Item	Item No.	Approval	Drill hole diameter d_0 [mm]	Min. drill hole depth h_1 [mm]	Min. anchorage depth h_{nom} [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]	Disc Ø [mm]	Sales unit [pcs]
		ETA							
FIF-PN 8/60	546803	●	8	45	35	108	70	60	100
FIF-PN 8/80	546804	●	8	45	35	128	90	60	100
FIF-PN 8/100	546805	●	8	45	35	148	110	60	100
FIF-PN 8/120	546806	●	8	45	35	168	130	60	100
FIF-PN 8/140	546807	●	8	45	35	188	150	60	100
FIF-PN 8/160	546808	●	8	45	35	208	170	60	100
FIF-PN 8/180	546809	●	8	45	35	228	190	60	100

Technical data for building material categories D, E

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Item	Item No.	Approval	Drill hole diameter d_0 [mm]	Min. drill hole depth h_1 [mm]	Min. anchorage depth h_{nom} [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]	Disc Ø [mm]	Sales unit [pcs]
		ETA							
FIF-PN 8/60	546803	●	8	65	55	108	50	60	100
FIF-PN 8/80	546804	●	8	65	55	128	70	60	100
FIF-PN 8/100	546805	●	8	65	55	148	90	60	100
FIF-PN 8/120	546806	●	8	65	55	168	110	60	100
FIF-PN 8/140	546807	●	8	65	55	188	130	60	100
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FIF-PN 8/180	546809	●	8	65	55	228	170	60	100

Loads

Render fixing FIF-PN³⁾

Highest permissible loads for a single anchor¹⁾ for fixing of external thermal insulation composite systems with rendering.
For the design the complete assessment ETA-18/0253 has to be considered.

Type FIF-PN	Brick raw density ρ [kg/dm ³]	Minimum compressive brick strength f_b [N/mm ²]	Minimum embedment depth h_{nom} [mm]	Minimum member thickness h_{min} [mm]	Concrete and masonry		
					Permissible tensile load N_{perm} [kN]	Minimum-spacing ⁵⁾ s_{min} [mm]	Minimum edge distance ⁵⁾ c_{min} [mm]
Concrete according to EN 206-1:2013	-	C12/15 – C50/60	35 ⁶⁾	100	0.15	100	100
Solid clay bricks Mz according to EN 771-1:2011	≥ 2.0	12	35 ⁶⁾	100	0.15	100	100
Vertically perforated clay bricks HLz according to EN 771-1:2011	≥ 1.0	12	35 ⁷⁾	100	0.13	100	100
Lightweight aggregate concrete LAC according to EN 1520:2011	≥ 0.8	6	55 ⁶⁾	100	0.10	100	100
Autoclaved aerated concrete blocks AAC according to EN 771-4:2011	≥ 0.5	6	55 ⁷⁾	100	0.10	100	100

¹⁾ The partial safety factors for material resistance as regulated in the assessment as well as a partial safety factor for load actions of $\gamma_L = 1,5$ are considered.

²⁾ Possible minimum spacing resp. edge distance according to assessment.

³⁾ Plastic anchor for fixing of external thermal insulation composite systems with rendering according to. Only tensile wind loads are permitted.

⁴⁾ The given loads are valid for installation and use of fixations in dry base material for temperatures in the substrate up to +24 °C (resp. short term up to +40 °C).

⁵⁾ Restrictions concerning the manufacturer and the permissible hole patterns as well as the web thickness see assessment.

⁶⁾ Drill method hammer drilling.

⁷⁾ Rotary drilling.