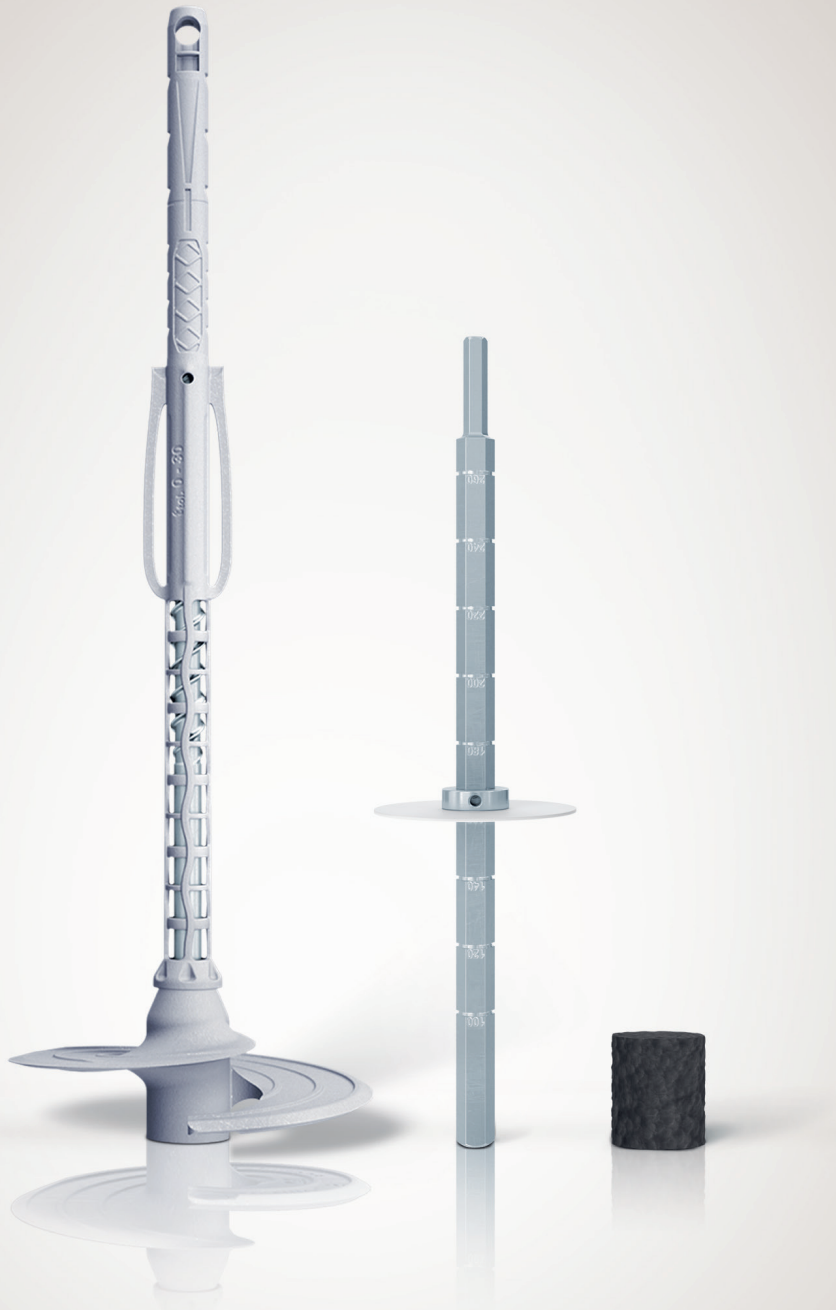
fischer

TermoZ SV II Ecotwist.

The innovative countersinkable ETICS fixing for all building material classes.



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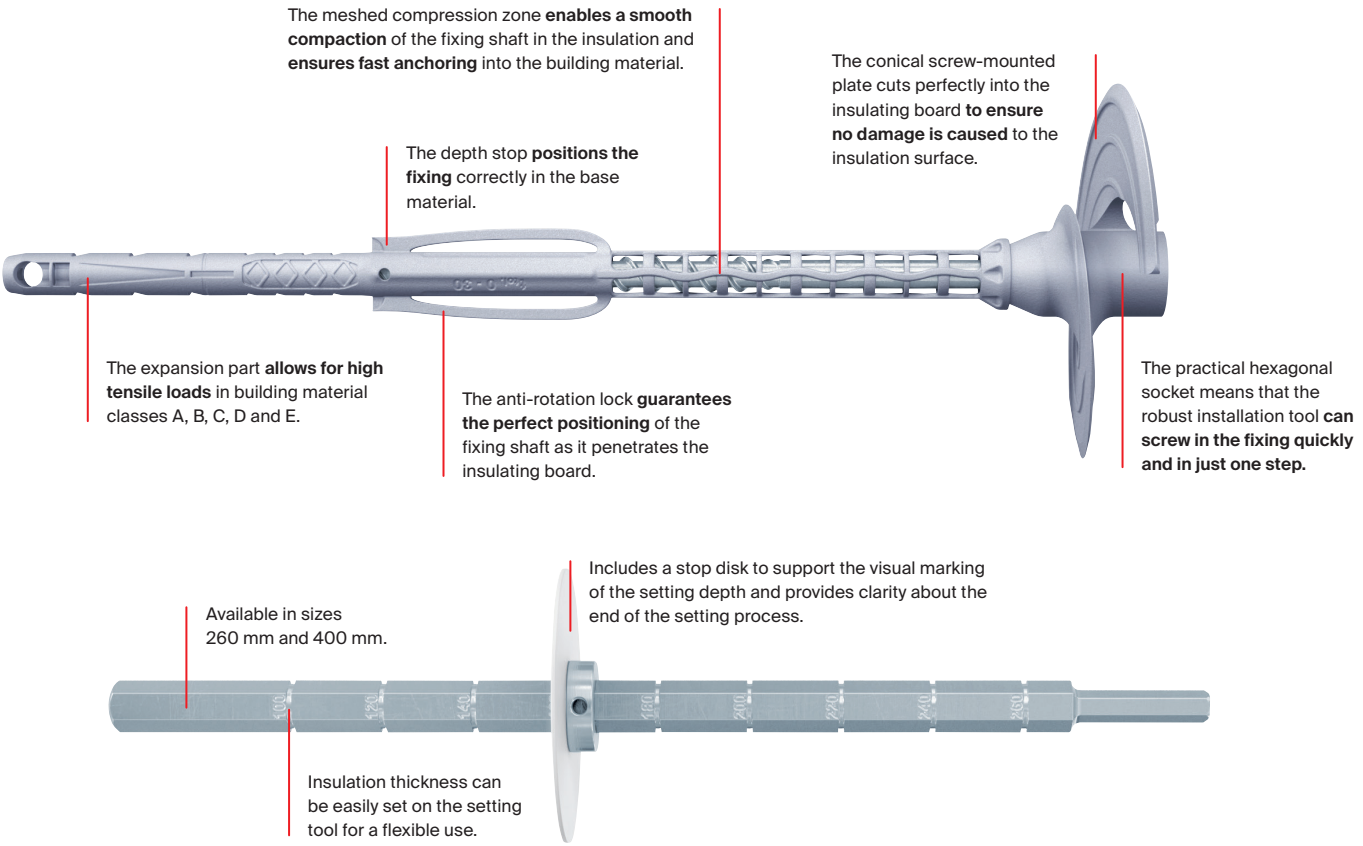
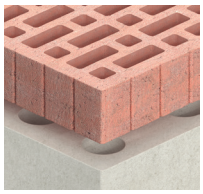
The innovative countersinkable ETICS fixing for all building material classes.

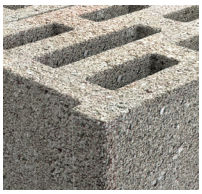


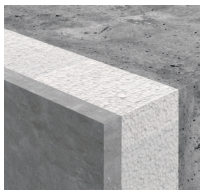
Building materials

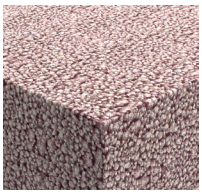
Suitable for building materials, such as

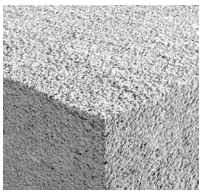

Solid building materials


Perforated building materials


Hollow blocks made from lightweight concrete


Weather shell


Lightweight aggregate concrete


Aerated concrete

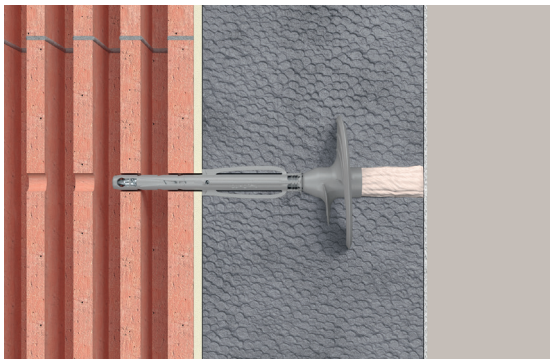
Advantages and functioning.

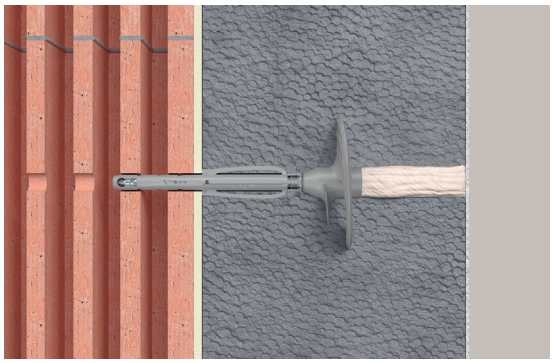
Your advantages at a glance

- One fixing for all insulating material thicknesses from 100 mm to 400 mm. This saves time and storage.
- Suitable for polystyrene and homogeneous mineral wool insulating boards.
- CHI-value of 0 W/K from 150 mm insulation thickness.
- The deep countersink helps to avoid fixing marks.
- With ETA approval for all building material classes A, B, C, D, E.
- Expansion part with optimised expansion zone of 35 mm requires just one drill hole depth in all conventional building materials.
- The robust installation tool is easy to use and ensures quick progress.
- Setting check through simple pressing test with the setting tool.
- Installation opening can be sealed with PU foam or a sealing plug.

Approval

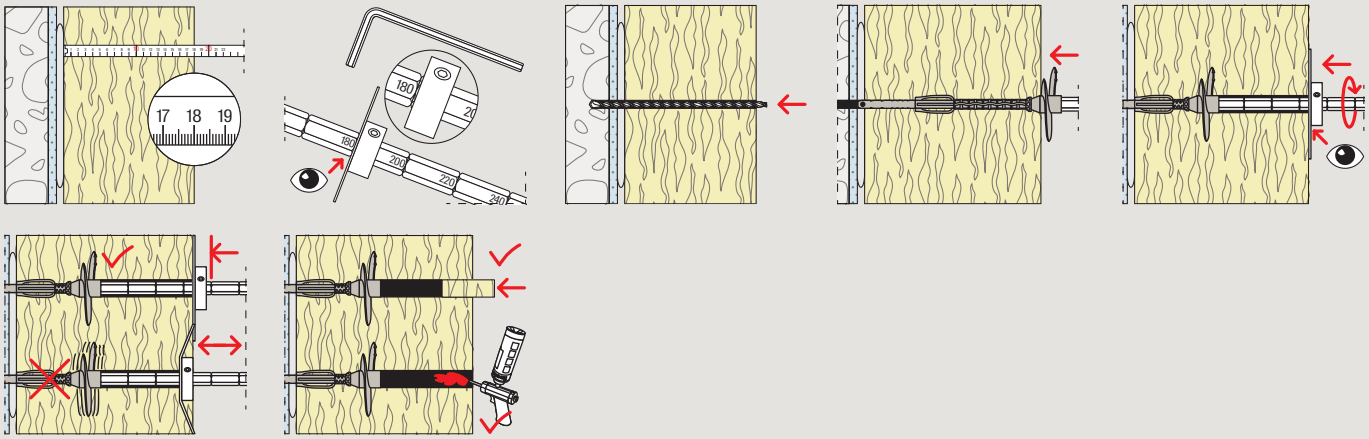
ETA-12/0208
for all building material classes A, B, C, D, E





One plug length for different insulating material thicknesses.

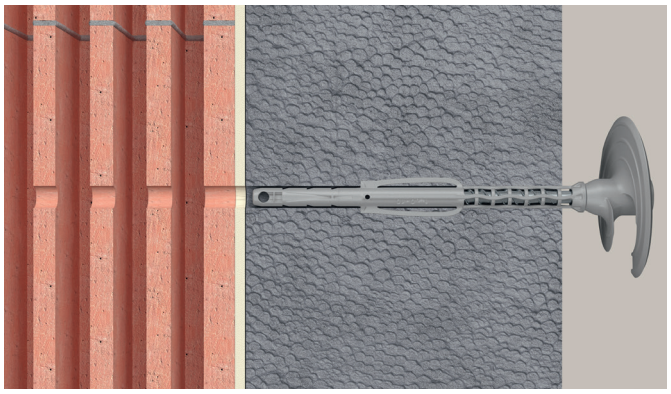
Installation



Quick, easy and securely anchored.

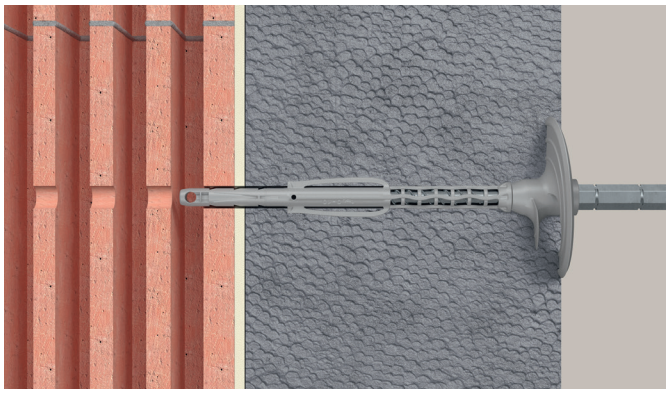
Preparation of the installation

- Set the insulation thickness on the installation tool.
- After drilling, put the Ecotwist into the drill hole.
- Place the installation tool in the appropriate hexagonal socket and press the plate firmly against the insulation material.



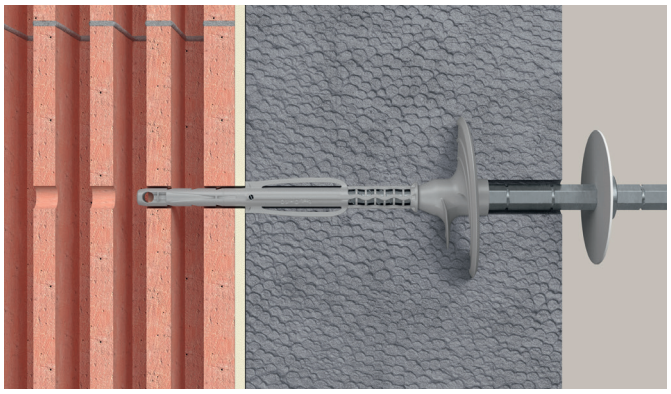
Screwing into the insulation

- The TermoZ SV II Ecotwist's plate cuts into the insulating board without damaging it.
- The anti-rotation lock keeps the fastener in the correct position.



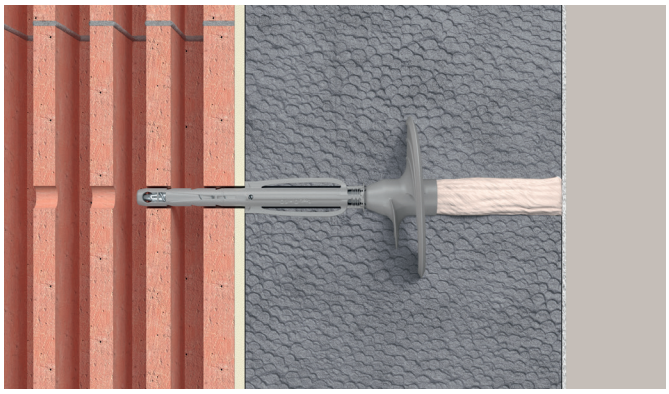
Screwing into the expansion zone

- When the depth stop reaches the solid base material, the screw is rotated in the expansion zone and the plug is compressed in the meshed compression zone.
- The identical thread pitch of the steel screw and of the plate guarantees an even drive.



Anchoring into the building material

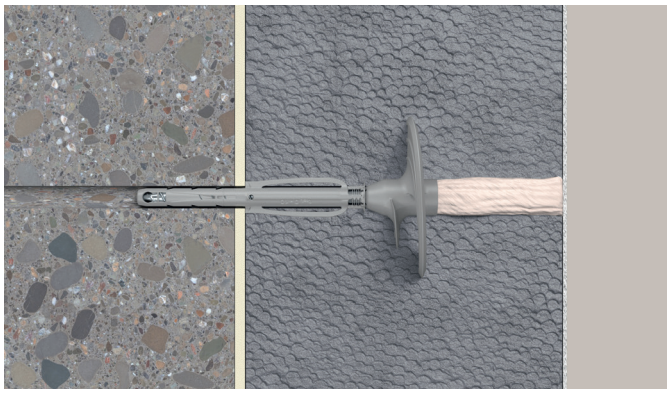
- Screwing in the screw causes the fixing sleeve to expand, anchoring the TermoZ SV II Ecotwist into the building material.
- During the installation process, the compression zone is compressed to the maximum.
- The fixing is fully installed when the marking ring / stop disc on the installation tool is flush with the surface of the insulation.
- After the pressure test, the installation tool can be removed and the drill hole sealed using PU foam or the sealing plug.



The right fixing for every application.

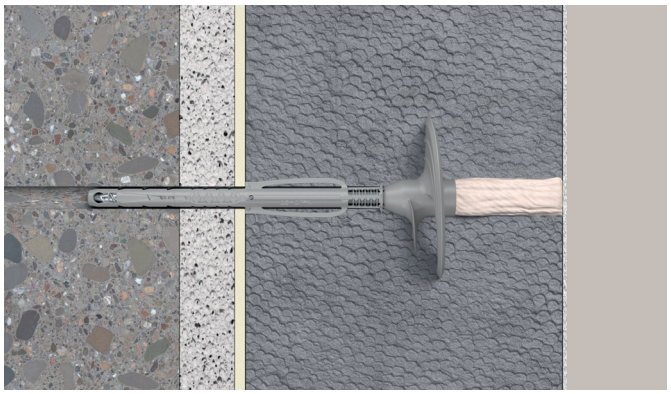
TermoZ SV II Ecotwist 0 – 10

- The fixing for all insulation thicknesses from 100 bis 400 mm of new buildings.
- Tolerance compensation 0 – 10 mm
  (The tolerance compensation corresponds to the sum of the non-bearing layers, e.g. plaster, adhesive, etc.)



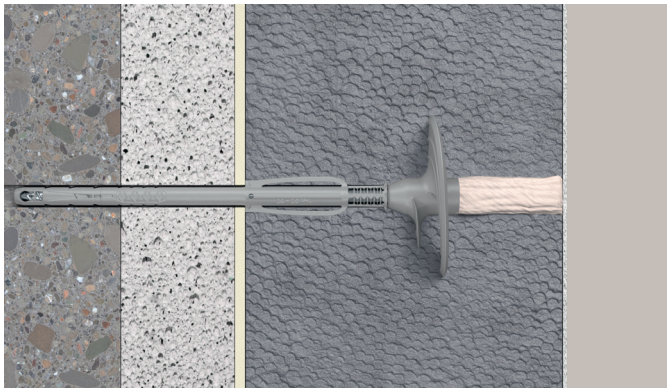
TermoZ SV II Ecotwist 10 – 30

- The fixing for all insulation thicknesses from 100 bis 400 mm for standard renovations.
- Tolerance compensation 0 – 30 mm
  (The tolerance compensation corresponds to the sum of the non-bearing layers, e.g. plaster, adhesive, etc.)

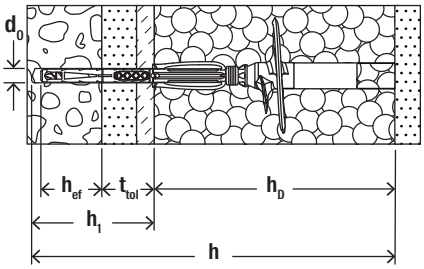


TermoZ SV II Ecotwist 30 – 60

- The fixing for all insulation thicknesses from 100 bis 400 mm for renovations with especially thick, old plaster or old layers of insulation.
- Tolerance compensation 30 – 60 mm
  (The tolerance compensation corresponds to the sum of the non-bearing layers, e.g. plaster, adhesive, etc.)



Assortment and Loads



TermoZ SV II Ecotwist

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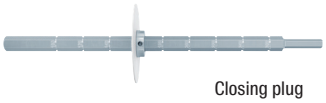

Closing plug

Item	Item No.	Insulation thickness h_D [mm]	Plate Ø [mm]	Drill hole diameter d_0 [mm]	Thickness of tolerance compensation non-bearing layers t_{tol} [mm]	Effect. anchorage depth h_{ef} [mm]	Min. drill hole depth in the building material incl. non-bearing layers h_1 [mm]	Min. total drill hole incl. insulation and non-bearing layers h [mm]	Sales unit [pcs]
TermoZ SV II Ecotwist 0 – 10	**530353**	100 - 400	66	8	0 – 10	35	55	$h_D + 55$	100
TermoZ SV II Ecotwist 10 – 30	**530354**	100 - 400	66	8	10 – 30	35	75	$h_D + 75$	100
TermoZ SV II Ecotwist 30 – 60	**530355**	100 - 400	66	8	30 – 60	35	105	$h_D + 105$	100
TermoZ SV II installation tool 260 mm	**530356**	–	–	–	–	–	–	–	1
TermoZ SV II installation tool 400 mm	**530357**	–	–	–	–	–	–	–	1
TermoZ SV II closing plugs	**530654**	–	–	–	–	–	–	–	200

TermoZ SV II Ecotwist

Permissible loads for a single anchor[1)2)] for multiple use for non-structural applications.
For the design the complete current assessment ETA-12/0208 of 18.10.2022 has to be considered.

					Concrete and masonry		
Base material	Brick raw density ρ [kg/dm³]	Minimum compressive brick strength f_b [N/mm²]	Effective anchorage depth[3)] $h_{ef} \geq$ [mm]	Minimum member thickness h_{min} [mm]	Permissible tension load[1)2)] N_{zul} [kN]	Minimum spacing[4)] s_{min} [mm]	Minimum edge distance[4)] c_{min} [mm]
Concrete according to EN 206:2013	-	≥ C12/15	35	100	0.50	100	100
	-	≤ C50/60	35	100	0.50	100	100
Concrete thin members (weather resistant concrete shell) to EN 206:2013	-	≥ C20/25	35	40	0.30	100	100
	-	≤ C50/60	35	40	0.30	100	100
Sand-lime solid brick acc. to EN 771-1:2011+A1:2015, KS	≥ 2	12	35	100	0.40	100	100
	≥ 2	20	35	100	0.50	100	100
Solid clay bricks acc. to EN 771-1:2011+A1:2015, Mz	≥ 1,8	12	35	100	0.40	100	100
Solid concrete block acc. to EN 771-3:2011+A1:2015, Vbn	≥ 2	12	35	100	0.40	100	100
	≥ 2	20	35	100	0.50	100	100
Vertically perforated sand-lime brick acc. to EN 771-2:2011+A1:2015, KSL	≥ 1,4	12	35[5)]	100	0.25	100	100
	≥ 1,4	20	35[5)]	100	0.40	100	100
Vertically perforated clay bricks acc. to EN 771-1:2011+A1:2015, HLz	≥ 1,0	12	35[5)6)]	100	0.25	100	100
Lightweight concrete solid block acc. to EN 771-3:2011+A1:2015, Vbl	≥ 1,4	8	35[5)]	100	0.20	100	100
Lightweight concrete hollow blocks acc. to EN 771-3:2011+A1:2015, Hbl	≥ 1,2	8	35[5)]	100	0.30	100	100
	≥ 1,2	10	35[5)]	100	0.40	100	100
Lightweight aggregate concrete acc. to EN 1520:2011, LAC	≥ 0,9	6	35	100	0.25	100	100
Autoclaved aerated concrete blocks acc. to EN 771-4:2011+A1:2015, AAC	≥ 0,5	4	35[6)]	100	0.15	100	100

1) Plastic anchor for fixing of external thermal insulation composite systems with rendering acc. to ETA data. Only tension wind loads are permitted. 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) 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).
3) Drilling method Hammer drilling. For details on installation data, see ETA.
4) Minimum possible axial spacing and edge distances acc. to ETA.
5) Restrictions concerning the manufacturer and the permissible hole patterns, see ETA.
6) Rotary drilling.

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