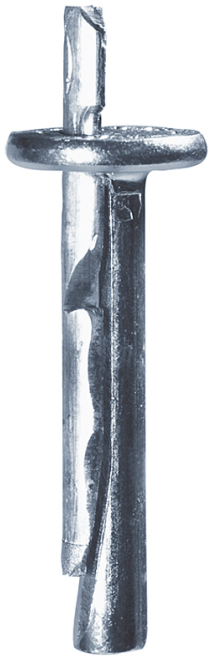
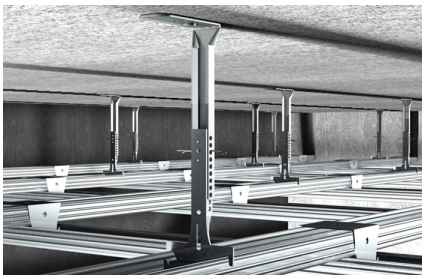
The cost-efficient push-through anchor for multiple fixings





VERSIONS

- zinc-plated steel

BUILDING MATERIALS

Approved for:

- Concrete C20/25 to C50/60, cracked, for the multiple fixings of non-load-bearing systems

Also suitable for:

- Concrete C12/15
- Natural stone with dense structure

APPROVALS

ETA-07/0144
ETAG 001-6
Multiple use for non-structural applications in concrete

Fire resistance classification
R 120
Anchor types see test report

ADVANTAGES

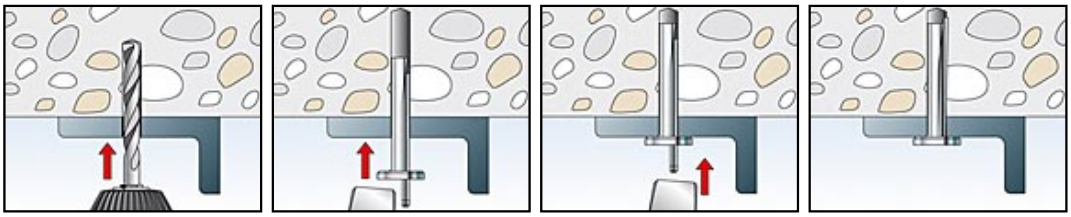
- The simple active principle allows for cost-efficient hammerset installation.
- The flush-sunk expansion nail signifies the complete expansion of the anchor, and thereby ensures minimum movement when under load.
- The two hit zones (first nail head, then expansion pin) ensure correct installation - especially in narrow drill holes - and also ensure high safety in use.
- The head embossing offers a simple control of the anchoring, and thus saves time.

APPLICATIONS

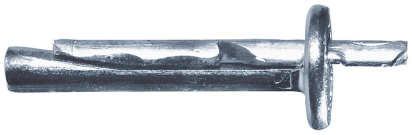
- Wire and nonious hangers
- Ventilation systems
- Slats
- Metal profiles
- Punched tapes
- Sub-structures made of metal

FUNCTIONING

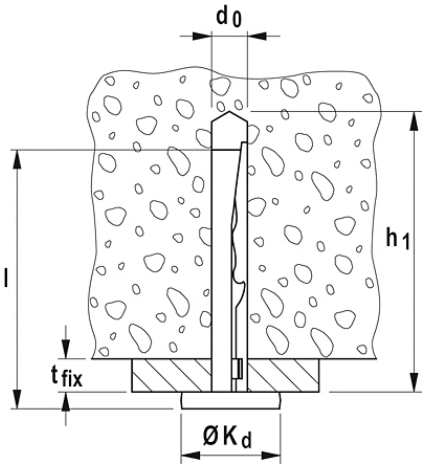
- The FDN is suitable for push-through installation.
- The FDN ceiling nail is driven into the drill hole with a hammer until it is firmly in position. Do not hit the expansion wedge at this stage.
- Then, drive the expansion wedge in flush to the nail head. This causes the FDN to expand against the drill hole wall.



TECHNICAL DATA



Ceiling nail FDN



Article name	Art.-No.	ETA-approval	Drill hole diameter d_0 [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]
FDN 6/5 (6 x 35)	**078644**	■	6	43	5
FDN 6/35 (6 x 65)	**078645**	■	6	73	35

LOADS

Ceiling nail FDN

Highest permissible loads[1] for a single anchor for multiple use for non-structural applications in concrete C20/25 up to C50/60.
For the design the complete approval ETA - 07/0144 has to be considered.

				Cracked or Non-cracked concrete		
Type	**Effective anchorage depth** h_{ef} [mm]	**Min. member thickness** h_{min} [mm]	**Installation torque** T_{inst} [Nm]	**Permissible load** F_{perm}[3] [kN]	**Min. spacing** s_{min}[2] [mm]	**Min. edge distance** c_{min}[2] [mm]
FDN 6	32	80	-	2,4	130	100

[1] The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of γ_L = 1,4 are considered.

[2] Minimum possible axial spacings resp. edge distance while reducing the permissible load.

[3] Valid for tensile load, shear load and oblique load under any angle. For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.