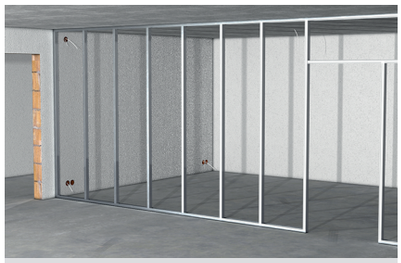
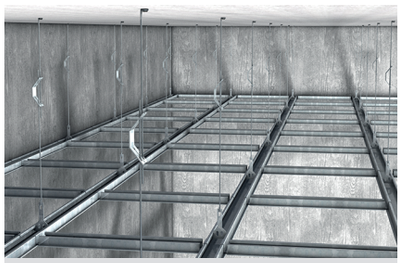
The cost-efficient push-through anchor for multiple fixings



Drywall profiles



Suspended ceilings with Nonius hangers

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

CERTIFICATES

ETA-17/0737
ETAG 001-6
Multiple use for non-structural applications in concrete

Fire resistance classification
R 120
Anchor types see test report

ADVANTAGES

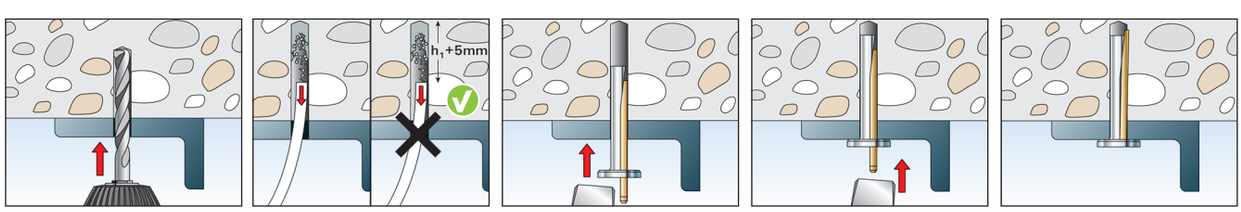
- The simple active principle allows for fast hammerset installation.
- The efficient anchor offers the perfect price-performance ratio for an economical installation.
- The flush-sunk expansion nail signifies the complete expansion of the anchor, and thereby ensures minimum movement when under load.
- The head embossing offers a simple control of the anchoring, and thus saves time.

APPLICATIONS

- Drywall profiles
- Wire and Nonius hangers
- Ventilation systems
- Slats
- Metal profiles
- Perforated tapes
- Sub-structures made of metal

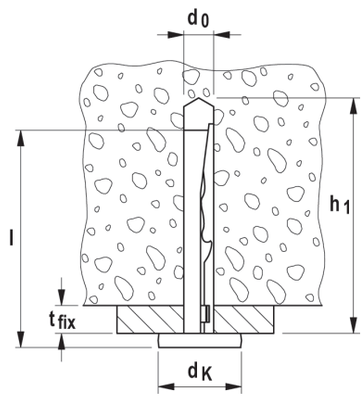
FUNCTIONING

- The FDZ is suitable for push-through installation.
- The FDZ 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 FDZ to expand against the drill hole wall.



TECHNICAL DATA

Ceiling nail **FDZ**



	Art.-No.	Approval ETA	Drill diameter d_0 [mm]	Anchor length l [mm]	Max. usable length t_{fix} [mm]	Min. drill hole depth without cleaning h_1 [mm]	Min. drill hole depth with cleaning h_1 [mm]	Head-Ø d_K [mm]	Sales unit [pcs]
Item									
FDZ 6/5	**544103**	■	6	40	5	47	42	15	200
FDZ 6/35	**544104**	■	6	70	35	77	72	15	200

LOADS

Ceiling nail FDZ
zinc-plated steel

Permissible loads[1] for a single fixing point[5] as part of a multiple fixing[4] in cracked and non-cracked normal concrete of strength classes C20/25 up to C50/60[3]							
Type	**Effective anchorage depth h_{ef} [mm]**	**Min. member thickness h_{min} [mm]**	**Permissible load F_{perm} [2] [kN]**	**Required edge distance for maximum load c [mm]**	**Required spacing for maximum load s [mm]**	**Min. spacing s_{min} [mm]**	**Min. edge distance c_{min} [mm]**
FDZ 6/5	32	80	1,0	60	50	50	60
FDZ 6/35	32	80	1,0	60	50	50	60

For the design the complete European Technical Assessment ETA-17/0737 has to be considered.

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

[2] Valid for tensile load, shear load and oblique load under any angle. For shear load with lever arm (bending) see assessment.

[3] For concrete strength class C12/15 see assessment.

[4] A multiple fixing in accordance with ETAG 001 Part 6 is defined by at least 3 fixing points with at least one anchor each and a permissible load per fixing point of 1,4 kN or by at least 4 fixing points with at least one anchor each and a permissible load per fixing point of 2,1 kN.

[5] A fixing point is defined as a single anchor or a group of 2 or 4 anchors.