

Technical data

Injection anchor sleeve with net FIS H N

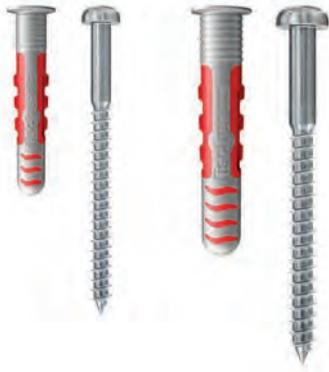


FIS H N

Item	Item No.	Drill hole diameter d_0 [mm]	Min. drill hole depth h_1 [mm]	Min. anchorage depth anchor h_v [mm]	Fill quantity per sleeve [scale units]	Match	Sales unit [pcs]
FIS H 16 x 85 N	050470	16	95	85	15	Ø8/M8	20
FIS H 18 x 85 N	050472	18	95	85	17	Ø10/M10	20
FIS H 20 x 85 N	050474	20	95	90	18	Ø12/M12	20

DuoSeal

The sealing plug for wet areas



Fixings on tiled surfaces



Accessories in wet areas

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Applications

Tiled surfaces in wet areas, like:

- Bathrooms, showers and toilets
- Kitchen
- Garage
- Laundry room
- Swimming pool
- Steam bath
- Sports facilities

Suitable for:

- Bathroom accessories
- Fittings
- Shower cubicles
- Mirrors
- Light shelves
- Trays
- Kitchen accessories

Advantages

- The DuoSeal completely seals drill holes in tiles without additional sealing compound and thus prevents structural damage caused by moisture in the building material.
- The DuoSeal is ideally suited for tiled surfaces which are exposed to very frequent splash water and temporarily accumulating water.
- The watertightness is confirmed in accordance with ETAG 022 and DIN 18534 up to the water exposure class W3-I. In any case, please take note of the general

national regulations on the use of plugs in wet areas.

- Its red component ensures a secure hold in all building materials. Thus, the DuoSeal achieves the same load values as conventional nylon plugs.
- The stainless-steel screw included in the set is ideally suited for installation in wet areas and avoids rusting.
- The soft plastic rim closes the drill hole completely and flexibly adapts to the shape of the attachment part.

Certificates



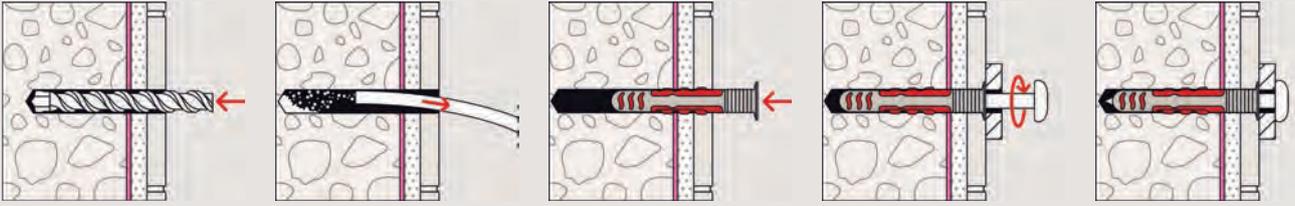
Building materials

- Concrete
- Solid brick
- Solid sand-lime brick
- Aerated concrete
- Vertically perforated brick
- Perforated sand-lime brick
- Gypsum plasterboard
- Gypsum fibreboard
- Plasterboard

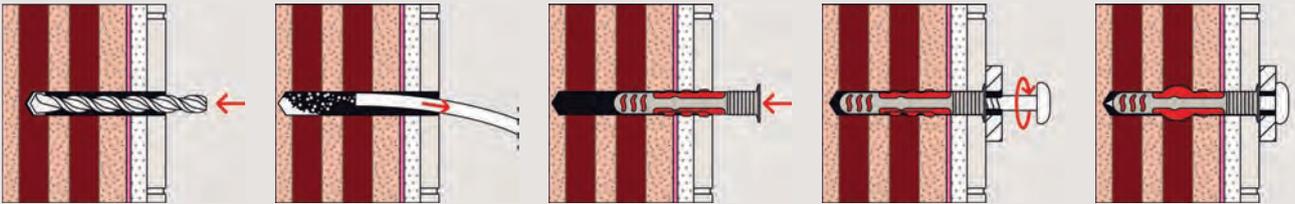
Functioning

- The DuoSeal is only suitable for application on tiles and can only be mounted as pre-position installation.
- The DuoSeal can be installed gently on tiles with just a few hammer blows. The rim of the shaft prevents the plug from being set too deep and additionally seals the drill hole.
- The red component made of high-quality nylon automatically activates the optimum function principle depending on the building material for best hold.
- The soft grey component is pressed against the drill hole wall by screwing in the screw and seals the drill hole completely.
- The grooves in the plug shaft compensate for unevenness in the hole, so that the sealing function is guaranteed even if the drill hole is not perfect.

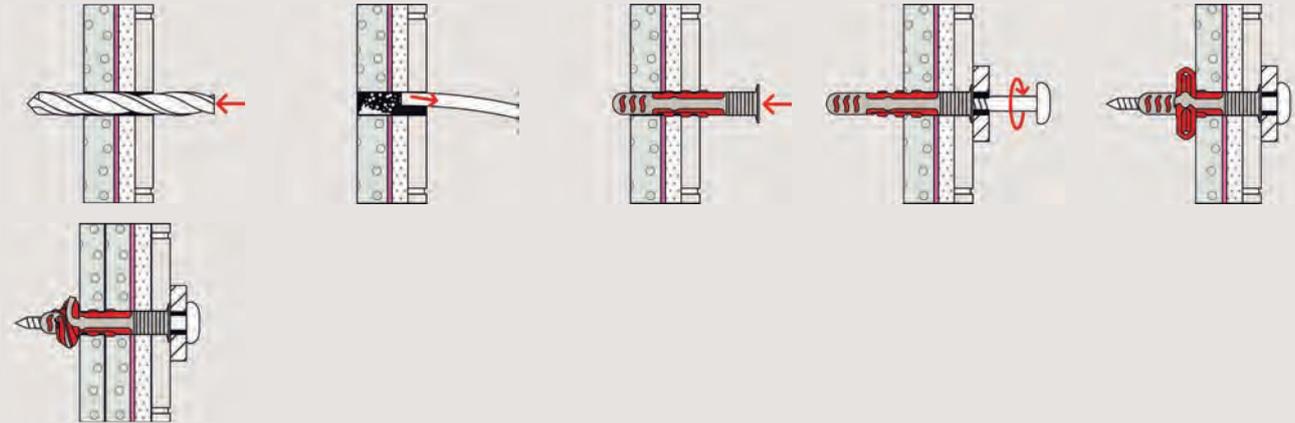
Installation in solid building materials

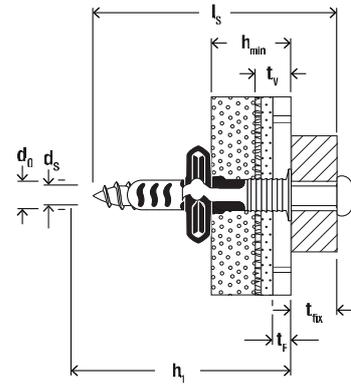


Installation in masonry



Installation in panel building materials





Technical data

DuoSeal

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DuoSeal 6

DuoSeal 8

Item	Item No.	Drill diameter d_0 [mm]	Drill hole diameter tolerance [mm]	Min. drill hole depth h_1 [mm]	Max. fixture thickness t_{fix} [mm]	Min. building material thickness h_{min} [mm]	Screw $d_s \times l_s$ [mm]	Drive	Sealing depth t_v [mm]	Tile thickness t_F [mm]	Sales unit [pcs]
DuoSeal 6 x 38 S A2	557727	6	6,0 - 6,40	65 - t_{fix}	12	22	4,5 x 60	TX20	5 - 14	5 - 10	50
DuoSeal 8 x 48 S A2	557728	8	8,0 - 8,45	75 - t_{fix}	16	25	6 x 70	TX30	5 - 14	5 - 10	25

Loads

DuoSeal

Recommended loads¹⁾ for a single anchor.

Type		DuoSeal 6	DuoSeal 8
Screw diameter	[mm]	4.5	6.0
Recommended loads in the respective base material F_{rec} ^{2) 3)}			
Concrete	≥ C20/25	[kN] 0.40	0.60
Solid brick	≥ Mz 12	[kN] 0.20	0.30
Solid sand-lime brick	≥ KS 12	[kN] 0.30	0.40
Aerated concrete	≥ ACC 2	[kN] 0.10	0.10
Vertically perforated brick	≥ HLZ 12	[kN] 0.20	0.30
Perforated sand-lime brick	≥ KSL 12	[kN] 0.30	0.40
Gypsum plasterboard impregnated (green)	12.5 mm	[kN] 0.10	0.10 ⁴⁾
Gypsum plasterboard impregnated (green)	2 x 12.5 mm	[kN] 0.15	0.15
Gypsum plasterboard hard and impregnated (e. g. Knauf Diamant board or Rigipis Die Harte)	12.5 mm	[kN] 0.15	0.15
Gypsum plasterboard hard and impregnated (e. g. Knauf Diamant board or Rigipis Die Harte)	2 x 12.5 mm	[kN] 0.20	0.20
Gypsum fibreboard	12.5 mm	[kN] 0.20	0.20
Gypsum block	$\rho \geq 0.85 \text{ kg/dm}^3$	[kN] 0.10	0.10

¹⁾ Required safety factor is considered.

Load values are valid for using the supplied screws and under consideration of the total tile thickness: tile + tile glue + sealing compound.

²⁾ Valid for tensile load, shear load and oblique load under any angle.

³⁾ Values apply to tile thickness 5 - 10 mm and total tile thickness 9.5 - 14.5 mm.

⁴⁾ Value applies to tile thickness 8 - 10 mm and total tile thickness 12.5 - 14.5 mm.