



RAIL FASTENINGS



UNDERWATER APPLICATIONS

BUILDING MATERIALS

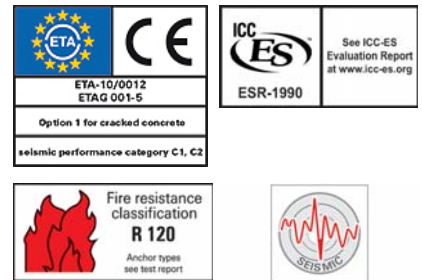
Approved for anchorings in:

- Concrete C20/25 to C50/60, cracked and non-cracked

Also suitable for:

- Natural stone with dense structure

APPROVALS



EPOXY MORTAR FIS EM WITH THREADED ROD

The powerful injection mortar for rebar connections and cracked concrete

ADVANTAGES

- High bond strength and minor mortar shrinkage allow maximum load application in cracked and non-cracked concrete, even with large threaded rod diameters of up to M30.
- Variable anchorage depths from 4x to 20x the threaded rod diameter allows for ideal adaptation to the load being applied, and ensures an optimised installation time and use of materials.
- FIS EM is approved for diamond-drilled and water-filled drill holes, thus ensuring more flexibility on the construction site.
- The wide range of approved steel types allows for use in all corrosion resistance classes and offers the best possible application safety.

APPLICATIONS

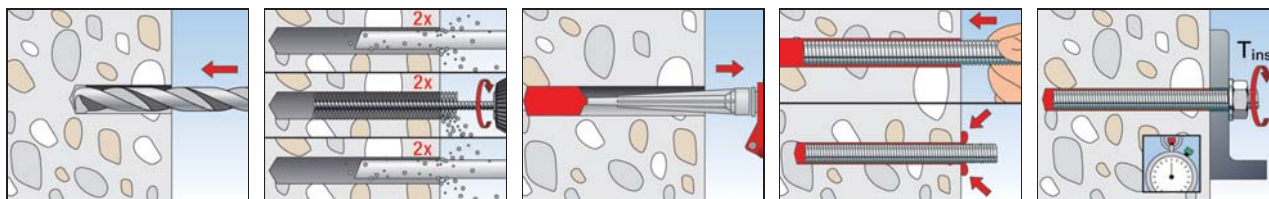
- Heavy steel constructions
- Silo installations
- High racks
- Sound insulation walls
- Anchorings in diamond-drilled drill holes
- Anchorings in waterfilled drill holes

FUNCTIONING

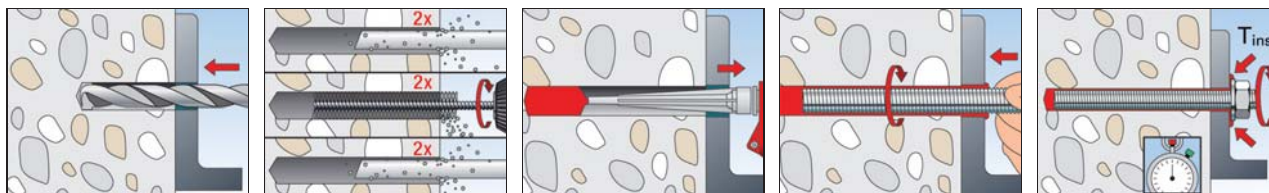
- The injection system, comprising the epoxy resin mortar FIS EM combined with threaded rod, is suitable for pre-positioned and push-through installation.
- Resin and hardener are stored in two separate chambers and are not mixed and activated until extrusion through the injection capsule in the static mixer.
- The mortar is injected bubble-free from the drill hole base.
- The mortar bonds the entire surface of the anchor rod with the drill hole wall and seals off the drill hole.
- The anchor rod is set manually by lightly rotating it until it reaches the drill hole base.
- During push-through installation, the annular gap between the anchor rod and attachment is filled with FIS EM.

EPOXY MORTAR FIS EM WITH THREADED ROD

PRE-POSITIONED INSTALLATION



PUSH-THROUGH INSTALLATION



TECHNICAL DATA



Injection mortar
FIS EM 390 S



Injection mortar
FIS EM 585 S



FIS MR

Item	Art.-No.	Approval		Languages	Scale units	Contents	Qty
		ETA	ICC				
FIS EM 390 S	093049	■	▲	GB, CZ, PL, GR, PRC, ROK	180	1 cartridge 390 ml, 1 x FIS MR	20
FIS EM 585 S	508831	■	▲	D, GB, F, NL, E, P	270	1 cartridge 585 ml + 2 static mixer	6
FIS MR Static Mixer	096448	—	—	6/223	—	10 static mixer	10

CURING TIME

Cartridge temperature (mortar)	Gelling time	Temperature at anchoring base	Curing time
+ 5°C - +10°C	2 hrs.	+ 5°C - +10°C	40 hrs.
+10°C - +20°C	30 min.	+10°C - +20°C	18 hrs.
+20°C - +30°C	14 min.	+20°C - +30°C	10 hrs.
+30°C - +40°C	7 min.	+30°C - +40°C	5 hrs.

The above times apply from the moment of contact between resin and hardener in the static mixer.

For installation, the cartridge temperature must be at least +5 °C. For longer installation times, i.e. when interruptions occur in work, the mixer should be replaced.