

## Liquid plugs and repair compounds for serious cases



Repairing damaged drill holes



Repairing damaged hinges

### BUILDING MATERIALS

- Concrete
- Vertically perforated brick
- Hollow blocks made from lightweight concrete
- Cavity floor slabs made from bricks and concrete
- Wooden materials
- Perforated sand-lime brick
- Solid sand-lime brick
- Natural stone with dense structure
- Panel building materials
- Aerated concrete
- Solid panel made from gypsum
- Solid brick made from lightweight concrete
- Solid brick

### ADVANTAGES

- The Fill & Fix injection fixing works whatever the drill hole size and building material. As a result, a number of applications can be completed with just one product.
- Wood screws can be screwed directly into the hardened injection fixing. This allows for a fast and simple installation.
- Due to the special formulation, the screw can be screwed into the injection fixing and removed. Thus, components can be reattached to the same point.
- Fill & Fix can be sanded and painted, and is suitable for filling drill holes that are no longer needed prior to painting.

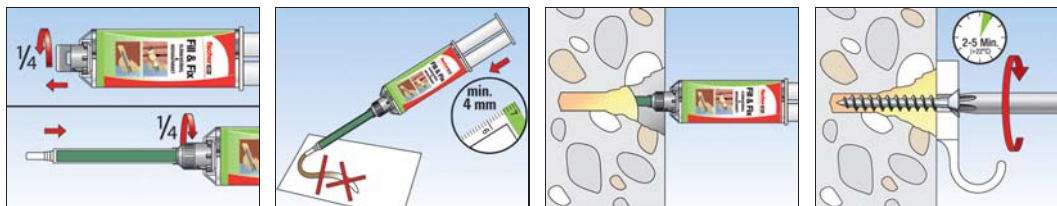
### APPLICATIONS

- Repairing cracked or over-sized drill holes
- Repairing broken furniture hinges etc.
- Fixing lightweight objects in difficult or damaged building materials (old buildings)
- Fixing lightweight objects in internal and UV-protected external areas

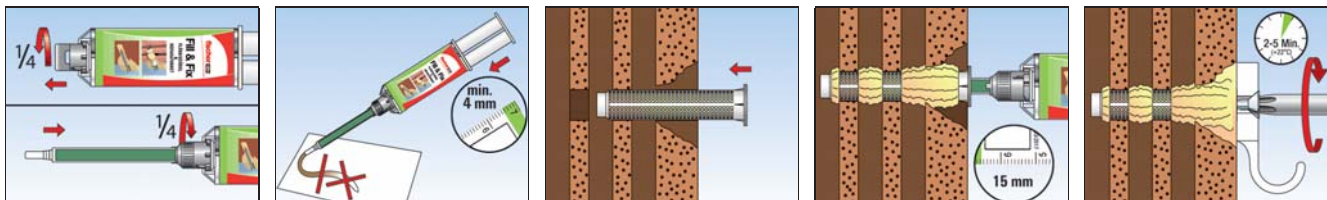
### FUNCTIONING

- Fill & Fix is a 2-component, solvent-free injection compound based on polyurethane. It is applied into the drill hole, where it foams lightly and sets quickly.
- The increase in volume during the setting process guarantees a secure hold, even in dilapidated or difficult building materials.
- After approx. 2 minutes, screws, hooks, eye screws etc. with a diameter of up to 6 mm that are normally used in wood can be screwed into and removed from the set material without pre-drilling.
- Use the perforated sleeves (included) for hollow and board building materials.

## INSTALLATION IN SOLID BUILDING MATERIALS



## INSTALLATION IN HOLLOW AND PANEL BUILDING MATERIALS



## TECHNICAL DATA



Fill & Fix Injection fixing

Item	Art.-No.	Contents	Languages on the cartridge	Sales unit [pcs]
Fill & Fix K (D)	051097	1 cartridge 25 ml, 2 static mixer, 4 anchor sleeves, 2 extension tubes	DE	4
Fill & Fix K (D/F)	503227	1 cartridge 25 ml, 2 static mixer, 4 anchor sleeves, 2 extension tubes	D, F	8
Fill & Fix K (F)	513500	1 cartridge 25 ml, 2 static mixer, 4 anchor sleeves, 2 extension tubes	F	8
Fill & Fix K (I)	051098	1 cartridge 25 ml, 2 static mixer, 4 anchor sleeves, 2 extension tubes	I	8
Fill & Fix K (S/DK)	505083	1 cartridge 25 ml, 2 static mixer, 4 anchor sleeves, 2 extension tubes	S, DK	8
Fill & Fix K (GR)	505084	1 cartridge 25 ml, 2 static mixer, 4 anchor sleeves, 2 extension tubes	GR	8
Fill & Fix Static mixer	502735	6 static mixer	-	1

## LOADS

### Fill & Fix

Highest recommended loads<sup>1)</sup> for a single anchor.

The given loads are valid for chipboard screws with the specified diameters.

Type			Fill & Fix		
Diameter of chipboard screw	Ø	[mm]	4,0	5,0	6,0
Nominal drill diameter	d <sub>0</sub>	[mm]	10	10	10
Anchorage depth	h <sub>ef</sub> ≥	[mm]	45	45	45
Drill hole depth	h <sub>1</sub> ≥	[mm]	50	50	50
Anchorage in solid substrates					
Recommended load <sup>2)</sup> in concrete	≥ C12/15	[kN]	0,50	0,60	0,70
Recommended load <sup>2)</sup> in sand-lime bricks	≥ KS 20 a. ≥ NF	[kN]	0,50	0,60	0,70
Anchorage in perforated bricks/hollow blocks using the perforated sleeve					
Recommended load <sup>2)</sup> in vertically perforated bricks	≥ HLz 12, ρ ≥ 0,9 kg/dm3 a. ≥ 16DF	[kN]	0,20	0,25	0,30
Recommended load <sup>2)</sup> in per forated sand-lime bricks	≥ KSL 12, ρ ≥ 1,4 kg/dm3 a. ≥ 5DF	[kN]	0,20	0,25	0,30
Recommended load <sup>2)</sup> in lightweight concrete hollow blocks		[kN]	0,20	0,25	0,30
Anchorage in aerated concrete					
Recommended load <sup>2)</sup> in aerated concrete	≥ PP2	[kN]	0,10	0,15	0,20
Anchorage in board materials using the perforated sleeve					
Recommended load <sup>2)</sup> in gypsum plasterboard	12,5 mm	[kN]	0,12	0,12	0,12
Recommended load <sup>2)</sup> in gypsum plasterboard	25 mm (= 2 × 12,5 mm)	[kN]	0,20	0,20	0,20
Recommended load <sup>2)</sup> in gypsum fibreboard	12,5 mm	[kN]	0,21	0,21	0,21

<sup>1)</sup> Required safety factors are considered.

<sup>2)</sup> Valid for tensile load, shear load and oblique load under any angle.