



Quality for Professionals



Quality for Professionals



# CF1000

CHEMICAL ANCHOR  
PURE EPOXY

# CF1000

CHEMICAL ANCHOR  
PURE EPOXY



## INSTRUCTIONS FOR USE

**PROFI POWER COMES FROM PATTEX**



Henkel KGaA IPM PROFESSIONAL ADHESIVES  
Henkelstr. 67 · D - 40191 Düsseldorf · Germany



# CHEMICAL ANCHOR CF1000

PURE EPOXY ANCHORING works in solid material and is preferred for anchoring reinforcing bars and for post-installed rebar applications.

## EPOXY TECHNOLOGY

Hardened 2-component epoxy resin injection mortars are made from thermal and mechanical properties and an outstanding resistance to chemicals. The amount of shrinking due to hardening is very low, and good compound properties achieve outstanding load values in diamond-drilled holes and larger annular gaps.

## USAGE INSTRUCTIONS

### SUBSTRATE: CONCRETE, SOLID STONE



1. drill hole with percussion drill



2. clean drill hole (4x blowing 4x brushing 4x blowing)



3. screw mixer to cartridge



4. squeeze out and remove compound until a homogeneous grey color appears, then apply (approx. 10 cm)



5. fill in mortar fully from back of hole



6. push in anchor, turning slightly, up to base of hole



7. visual check of mortar filling



8. observe correct hardening time



9. install component, apply torque

## MINIMUM CURING TIME

STATIC CARTRIDGES	CURING START	CURING END
0 °C	180 min	50 h
10 °C	120 min	24 h
20 °C	30 min	10 h
30 °C	20 min	6 h
40 °C	12 min	4 h



N = Dangerous for the environment

Resin: • Irritating to eyes and skin. • Toxic to aquatic organisms, may cause longterm adverse effects in the aquatic environment. • Avoid contact with skin. • Wear suitable protective clothing, gloves and eye/face protection. • Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700); bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700); 1,6-Bis(2,3 epoxypropoxy) hexane. See information supplied by the manufacturer.



C = Corrosive

Hardener: • Harmful by inhalation, in contact with skin and if swallowed. • Causes burns. • Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. • Possible risk of irreversible effects. • Do not breathe vapour. • Avoid contact with skin and eyes. • Do not empty into drains; dispose of this material and its container in a safe way. • Wear suitable gloves and eye/face protection. • Use only in well-ventilated areas. • Contains 3-amino methyl-3,5-trimethylcyclohexylamine; diethylenetriamine; phenol; n-phenylencis(methylamine).

Resin / Hardener: • May cause sensitization by skin contact. • Keep out of the reach of children. • In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. • If swallowed, seek medical advice immediately and show this container or label. • Avoid release to the environment. Refer to special instructions/Safety data sheets.



PERFORMANCE DATA / CONCRETE

Performance data determined in accredited Chemofast testing laboratory

PERFORMANCE DATA / CONCRETE							
Recommended max. load (in all directions)							
Threaded rod							
Plug diameter [mm]		M8	M10	M12	M16	M20	
Load	Concrete $\geq$ C20/25	F <sub>rec.</sub> [kN]	10,5	14,7	21,6	32,8	49,5

F<sub>rec.</sub> [kN] = inc. safety factor calculated to ETAG.

Values valid for anchor rods 5.8, zinc galvanised / A4-70

DESIGN VALUES

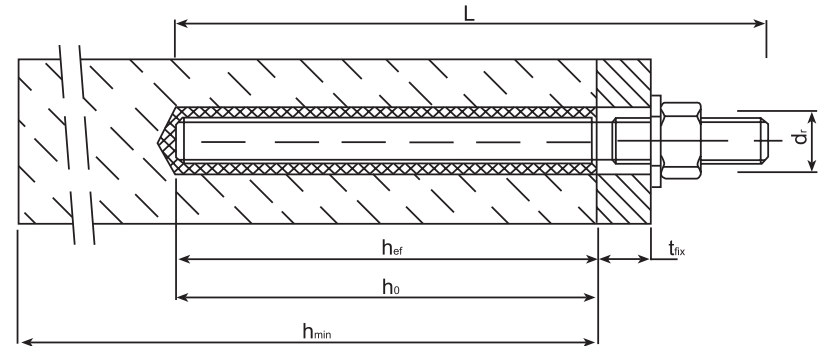
DESIGN VALUES							
Resin	Concrete		M8	M10	M12	M16	M20
Tension loads	$\geq$ C20/25	N <sub>Rk</sub> [kN]	26,4	37,2	54,5	82,6	124,7
		N <sub>Rd</sub> [kN]	14,7	20,6	30,3	45,9	69,3
Safety factor for tension loads 1,8 acc. to ETAG							
Shear loads	Steel quality 5.8	V <sub>Rk</sub> [kN]	9,9	15,8	22,9	43,2	67,5
		V <sub>Rd</sub> [kN]	7,9	12,6	18,3	34,6	54,0
		rec. torque	12,9	25,6	44,8	113,7	222,9
	Steel quality A4	V <sub>Rk</sub> [kN]	13,8	22,1	32,0	60,5	94,5
		V <sub>Rd</sub> [kN]	8,9	14,1	20,5	38,8	60,6
		rec. torque	12	23,9	41,9	106,7	207,9
Safety factor for shear loads 1,56 acc. to ETAG							

FACTOR FOR WET OR SUBMERGED CONCRETE

Dry concrete	Wet concrete	Submerged concrete
1.0	0.9	0.6

INSTALLATION PARAMETERS

Installation parameters		M8	M10	M12	M16	M20
Edge distance	C <sub>cr,N</sub> [mm]	80	90	110	130	170
Min. edge distance	C <sub>min</sub> [mm]	40	50	60	70	90
Axial distance	S <sub>cr,N</sub> [mm]	160	180	220	250	340
Min. axial distance	S <sub>min</sub> [mm]	80	90	110	125	170
Anchorage depth	h <sub>ef</sub> [mm]	80	90	110	125	170
Min. partthickness	h <sub>min</sub> [mm]	130	140	160	175	220
Thread diameter	d [mm]	8	10	12	16	20
Drill diameter	d <sub>B</sub> [mm]	10	12	14	18	24
Hole diameter in part	d <sub>Bau</sub> [mm]	9	11	13,5	17,5	22
Tightening torque	T <sub>inst.</sub> [Nm]	10	20	40	60	120



## CHEMICAL ANCHORS ARE BASED ON TWO DIFFERENT TYPES OF CHEMICAL SYSTEMS:

### REACTION RESIN MORTAR SYSTEM

- Materials**
- ▶ for use in various solid stones
  - ▶ concrete
  - ▶ hollow brick
- Boring Method** ▶ cannot be used in diamond-drilled holes
- Drill Holes** ▶ suitable for drill holes with an annular gap of up to 2mm between anchor and substrate (due to shrinkage)
- Curing time** ▶ fast



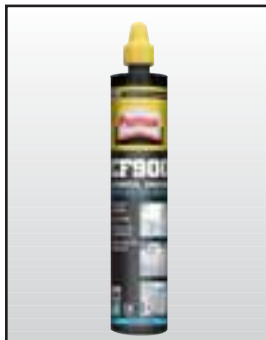
**UNSATURATED POLYESTER**  
Pattex CF800

- German and French certification for anchoring in hollow bricks
- Meets basic expectations for all general applications
- Highest shrinkage
- Lowest loads
- Limited chemical resistance
- Not recommended for wet and water-filled drill holes



**STYRENE FREE POLYESTER**  
Pattex CF850

- Meets basic expectations for all general applications
- Limited chemical resistance
- Not recommended for wet and water-filled drill holes



**VINYLESTER** Pattex CF900

- National and European approvals for brickwork and concrete
- Certified as fire resistant up to F 120
- Very good thermal and mechanical properties
- Highest chemical resistance of the reaction resins
- Suitable for wet and water-filled drill holes

### EPOXIDE SYSTEM

- Materials**
- ▶ for use only in solid materials
  - ▶ for underwater and wet applications
  - ▶ for highest performance under all conditions
- Boring Method** ▶ for use in smooth, diamond-drilled holes with an annular gap of up to 4mm
- Drill Holes** ▶ suitable for drill holes with a gap of up to 4mm between anchor and substrate (due to shrinkage)
- Curing time** ▶ slow

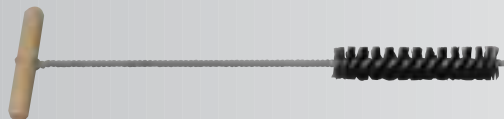


**PURE EPOXY** Pattex CF1000

- Newest technology
- Highest chemical resistance & highest strength of all four systems
- Can even be used underwater
- NO shrinkage
- More flexible in elevated temperatures



PATTEX CLEANING PUMP



PATTEX NYLON-CYLINDER-BRUSH  
with woodhandle for hollow materials



PATTEX WIRE BRUSH  
with M6 steel thread, for anchor rods  
M8 115x80x12mm / M10 115x80x14mm



PATTEX SLEEVES  
13x100mm / 15x100mm



PATTEX STANDARD  
ANCHOR RODS  
M8x100mm / M10x110mm, quality 5.8



PATTEX SPECIAL STATIC  
MIXERS



PATTEX UNIVERSAL GUN  
can be used with:

- Foil tube 300ml
- Peeler 280ml
- Coaxial 150ml, 380ml, 410ml
- Side by side 385ml (special mixer recommended)

