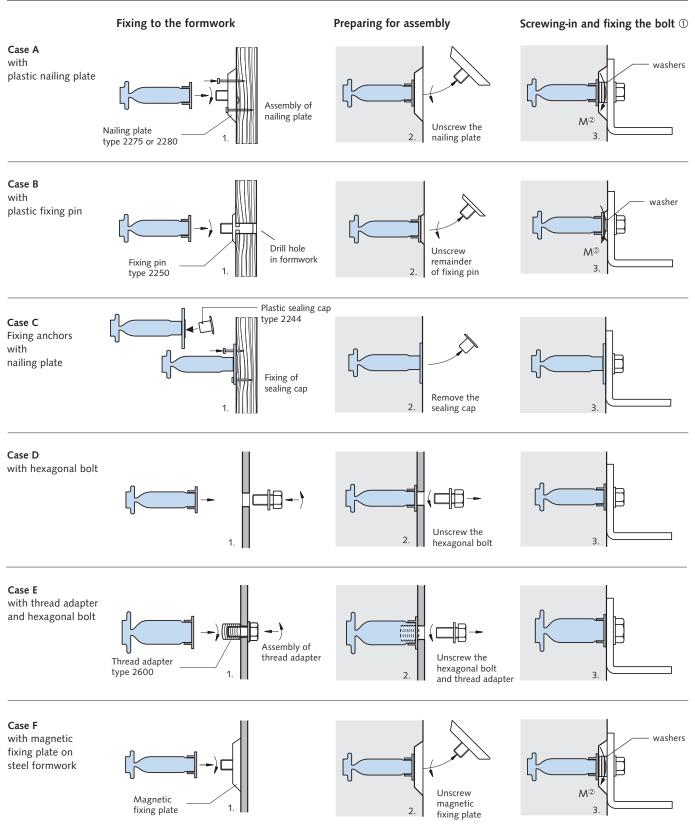
# INSTALLATION INSTRUCTIONS

## **Fixing Anchors**

Assembly steps



① Torque  $T_{inst} \rightarrow$  see table on page 38

2 Bending of bolt has to be verified! (Bolt is not included in scope of delivery)

# INSTALLATION INSTRUCTIONS

# **Fixing Anchors and Accessories**

# Installation parameters

### General notes on installation

Before installing the fixing components, check whether the inside of the sockets and sleeves are dry and free from any contamination. To guarantee best possible bond between the fixing anchor and the concrete, make sure that the surface of the anchor is free from dirt, oil, etc.

The concrete has to be poured carefully; please avoid direct contact between the compacting device and the fixing anchor.

The fixing anchors may be embedded flush or recessed in the concrete. It is strongly recommended to use washers to shim if anchors are recessed. After striking the formwork, the inside of the threaded sockets must be protected against ingress of water, dirt or oil until required for use i.e. for fixing components. Ensure the inside of the socket remains dry after final assembly.

The fixing component (bolt with standard metric thread) has to be selected according to the static engineer's specifications. Minimum screwin length (s) for bolts and maximum installation torque ( $T_{inst}$ ) can be found in the adjacent tables.

The fixing anchor must not be subjected to full load capacity until the concrete has reached its final strength.

The complete assembly instruction for DEMU Fixing anchors in various languages can be found at www.halfen.com



Thread-sizeMinimum screw-in length s [mm]Torque $T_{inst}$ [Nm]*M1017.0 $\leq 8$ M1220.0 $\leq 10$ M1626.0 $\leq 20$	T-FIXX®				
M12 20.0 ≤ 10	Thread-size	Minimum screw-in length s [mm]	Torque T <sub>inst</sub> [Nm]*		
	M10	17.0	≤ 8		
N1C 2C0 < 20	M12	20.0	≤ 10		
1/11/16 26.0 ≤ 30	M16	26.0	≤ 30		
M20 32.0 ≤ 60	M20	32.0	≤ 60		

Bolt anchor 1988		
Thread-size	Minimum screw-in length s [mm]	Torque T <sub>inst</sub> [Nm]*
M12	16.4	≤ 10
M16	21.2	≤ 30
M20	26.0	≤ 50
M24	30.8	≤ 90
M30	38.0	≤ 180
M36	45.2	≤ 250
M42	52.4	≤ 300

#### Bolt anchor 1985 Thread-size Minimum screw-in length s<sup>1</sup> [mm] Torque T<sub>inst</sub> [Nm]\* M12 18.0 ≤ 10 24.0 ≤ 30 M16 M20 30.0 ≤ 50 M24 36.0 ≤ 90

① value s = 1.5 x  $d_{nom}$ 

### Bolt anchor 1980-P / Bar ancho

Thread-size	Minimum screw-in length s $^{\textcircled{0}}$ [mm]	Torque T <sub>inst</sub> [Nm]*		
M12	14.4	≤ 10		
M16	19.2	≤ 30		
M20	24.0	≤ 50		
M24	28.8	≤ 90		
M30	36.0	≤ 180		
M36	43.2	≤ 250		
M42	50.4	≤ 300		

② value s = 1.2 x d<sub>nom</sub>; for bar anchors type 3016 (secured to the formwork with integrated nailing plates), the values have to be increased by 25% → (s =  $1.5 \times d_{nom}$ )

Socket anchors		
Thread-size	Minimum screw-in length s $^{\textcircled{3}}$ [mm]	Torque T <sub>inst</sub> [Nm]*
M6	7.2	≤ 1
M8	9.6	≤ 2
M10	12.0	≤ 4
M12	14.4	≤ 8
M16	19.2	≤ 17
M20	24.0	≤ 25
M24	28.8	≤ 53
M30	36.0	≤ 96

③ value s = 1.2 x d<sub>nom</sub>; for socket anchors type 1130, 1130-G (secured to the formwork with integrated nailing plates), the values have to be increased by 25% → (s = 1.5 × d<sub>nom</sub>)

\*Tightening torque values apply for unlubricated bolts.