

Installation instruction fischer concrete screw ULTRACUT FBS II



fischer ULTRACUT FBS II US



fischer ULTRACUT FBS II SK



fischer connecting nut and Torx

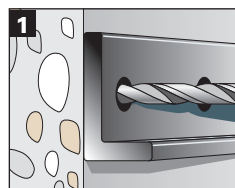


fischer socket nut hexagon

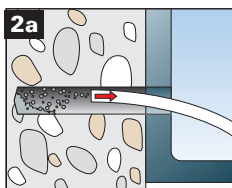


fischer ULTRACUT FBS II ring gauge

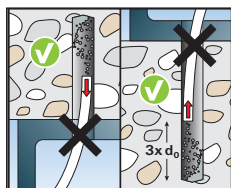
Installation according to ETA - 15 / 0352



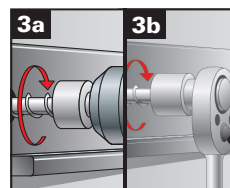
Drill the hole using hammer-drill, hollow drill or diamond core drill.



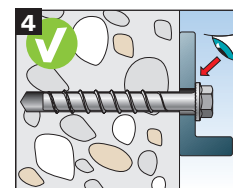
Clean the drill hole. Step 2 can be omitted in the preparation of the hole with hollow drill (complete).



Cleaning drill hole can be omitted, if drilling vertically upwards or if drilling vertically downwards and the hole depth has been increased. We recommend to increase the drill hole depth by an additional 3 x drill \varnothing when drilling in soils.



Installation with any torque impact screw driver at a max. mentioned torque moment ($T_{imp,max}$) and with simultaneous axial pressure on the torque impact.

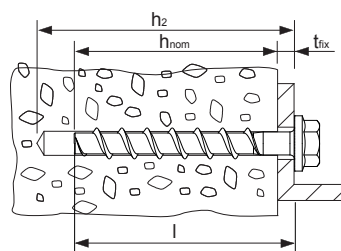


After installation a further turning of the screw must not be possible. The head of the screw must be supported on the fixture and is not damaged.

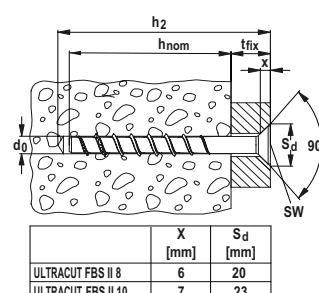
Installation parameters concrete C 20/25 - C50/60

ULTRACUT FBS II Concrete screw		8	10	12	14
Drill hole diameter [mm]	d_0	8	10	12	14
Nominal screw-in depth h_{nom}	h_{nom1}	50	55	60	65
	h_{nom2}	-	65	75	85
	h_{nom3}	65	85	100	115
Drill hole depth (push-through installation) [mm]	$h_2 \geq$	$l + 10$	$l + 10$	$l + 10$	$l + 15$
Clearance hole diameter [mm]	d_f	10,6 - 12	12,8 - 14	14,8 - 16	16,9 - 18
Maximum torque for in-stallation with impact screw driver in concrete	$T_{imp,max}$	600	650	650	650
Maximum torque for manual installation in concrete	T_{max}	65	100	150	250
Width across flat	SW	13	15	17	21
Drive	Torx	T 40 (SK u. US)	T 50 (SK)	-	-

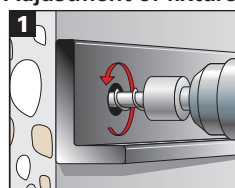
Type US



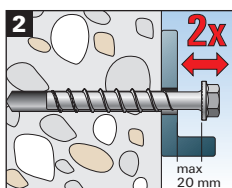
Type SK



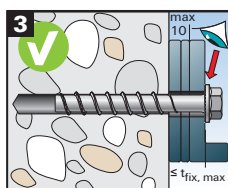
Adjustment of fixture



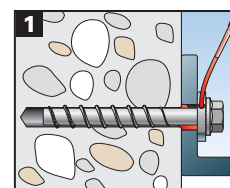
Optional: It is permissible to adjust the screw two times.



Therefore the screw may be tighten to a maximum of 20 mm of the surface of the initial fixture. The total permissible thickness of shims added during the adjustment process is 10 mm.



Filling (e.g. for Seismic)



For Seismic Performance Category C2 applications: The gap between screw shaft and fixture must be filled with mortar, compressive strength $\geq 50 \text{ N/mm}^2$ e.g.: FIS V, FIS EM, FIS HB oder FIS SB.

Temporary fixing and reusability in green concrete according to Z-21.8 - 2049

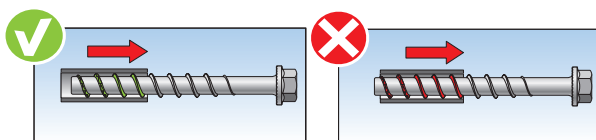
(Concrete strength $\geq 10 - \leq 20 \text{ N/mm}^2$)

ULTRACUT		FBS II 8		FBS II 10		FBS II 12		FBS II 14	
Screw in depth [mm]	h_{nom}	50	65	55	85	60	100	65	115
Max. torque on installation with impact screw driver	$T_{imp,max}$	400	600	400	650	400	650	400	650

Check of reusability



fischer ULTRACUT FBS II Ring gauge



The concrete screw has to be checked for damages (e. g. corrosion) before each usage and if necessary it has to be changed.

Installation parameters masonry (not regulated in ETA-15/0352)

ULTRACUT FBS II Concrete screws					
Base material	Compressive strength class [N/mm ²]	Size	[mm]		
			h_{nom}	[mm]	
Solid clay brick (EN771-1)	≥ 12	T_{inst}	[Nm]	8	10
Solid sand-lime brick (EN771-2)	≥ 12	T_{inst}	[Nm]	65	85
Aerated concrete (EN771-4)	≥ 6	T_{inst}	[Nm]	5	5