

STEEL CONCRETE SCREW ETA OPTION 7

BETABOLT SEVEN



EUROPEAN TECHNICAL APPROVAL



option 7
ETA n°18/0429



MATERIAL



NON CRAKED
CONCRETE



FEATURES

Material :

- 20 Mn B4 steel according EN10263-4
- Corrosion protection = Zinc plated (zinc)

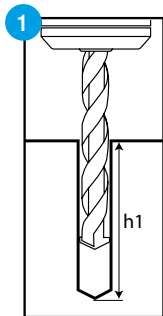
Advantages :

- Easy and fast installation with a wrench
- Removable, ideal for temporary fixing
- Optimal fit ; significant shear and tensile strength
- Versatile solution

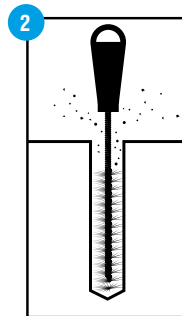
APPLICATION EXAMPLES

- Shuttering props
- Railing, shelving systems
- Industrial equipment
- Wooden or steel secondary structures
- Cable trays, steel banding

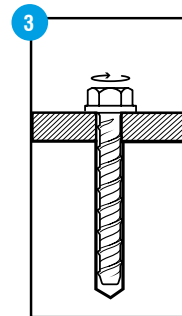
INSTALLATION



Drill a hole with a hammer drill to the recommended depth h_1 .



Remove dust with a wire brush or blow out with a manual hand pump or compressed air. Repeat 3 times.



Screw the BETABOLT concrete screw through the fixture with a wrench by applying sufficient torque t_{inst} to clamp the material to the concrete .

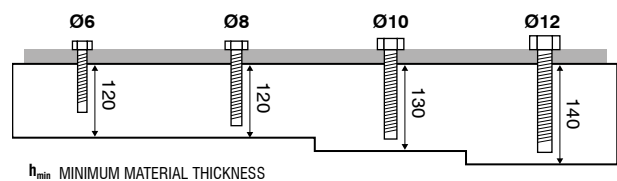
NB: the BETABOLT SCREW can only be used once.

Carbide tips and threads wear out during first use. In case of reuse, it does not allow to reestablish the initial performances.

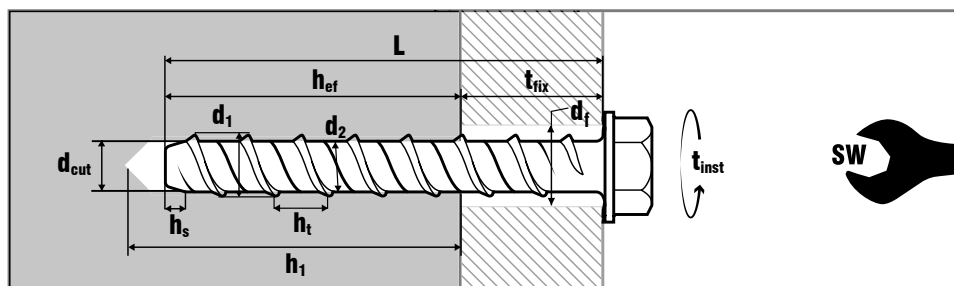
(h_1 and t_{inst} : technical data see overleaf)

INSTALLATION DATAS

	Ø6	Ø8	Ø10	Ø12	
S_{min}	45	50	60	70	MINIMUM SPACING
C_{min}	50	50	100	100	MINIMUM DISTANCE



DIMENSIONS & APPLICATION DATAS



		BT7-06	BT7-08	BT7-10	BT7-12	\emptyset	L	t_{fix}	h_1	h_{ef}	Reference
						Diameter	Length mm	Thickness to fix mm	Drill depth mm	Anchor depth mm	
\emptyset drill size (mm)	d_{cut}	6	8	10	12	6	50	20	40	30	BT7-06050
Clearance hole in the fixture (mm)	d_f	9	12	14	16		75	45	40	30	BT7-06075
Torque setting	T_{inst}	10	30	40	50	8	60	20	50	40	BT7-08060
Socket/wrench size	SW	10	12	14	17		75	35	50	40	BT7-08075
Bolt diameter	d_1	7,50	9,70	11,80	14,25	10	100	60	50	40	BT7-08100
Higher thread diameter	d_2	5,45	7,40	9,40	11,30		60	10	60	50	BT7-10060
Lower thread diameter	h_t	8	10	12	12	12	75	25	60	50	BT7-10075
Chamfer length	h_s	5	5	5	5		100	50	60	50	BT7-10100
							75	20	70	55	BT7-12075
							100	45	70	55	BT7-12100
							150	95	70	55	BT7-12150

h_{ef} : Anchor depth // h_t : Drill depth // t_{fix} : Fixture thickness

RECOMMENDED LOADS

- Loads are calculated from characteristic values published in the ETA on which partial safety factors from the ETAG001 and a partial action f coefficient $\chi = 1.4$ are applied. Values are given for standard anchor depths : 30 mm for $\emptyset 6$ / 40 mm for $\emptyset 8$ / 50 mm for $\emptyset 10$ / 55 mm for $\emptyset 12$.
- Values calculated in concrete C20 / 25, T = 24 ° C / 40 ° C.

