

To Fix a Screwbolt into Concrete Page 1 of 2

TOOLING

Use hammer drill and SDS drill bit for concrete, for brick and block work use rotary percussion.

Drill bit diameter:- ensure correct diameter is selected for the fixing to be used and is not worn below minimum tolerance.

NB. when drilling into dense concrete observe the maximum efficient working life of the drill bit.

PREPARATION

Hole depth must be 2 times diameter plus the full working length of the bolt, to allow for the dust created when the bolt is installed into the pre-drilled hole.

Remove surplus dust from the drilled hole by easing the drill bit up and down within the hole and blowing clear.

INSTALLATION

To install the screwbolt use a branded ratchet spanner with a full hexagon socket, or impact wrench. We recommend the use of the Bosch GDS 18E (up to 16mm bolts) or Bosch GDS 30 (20-24mm bolts) or similar.

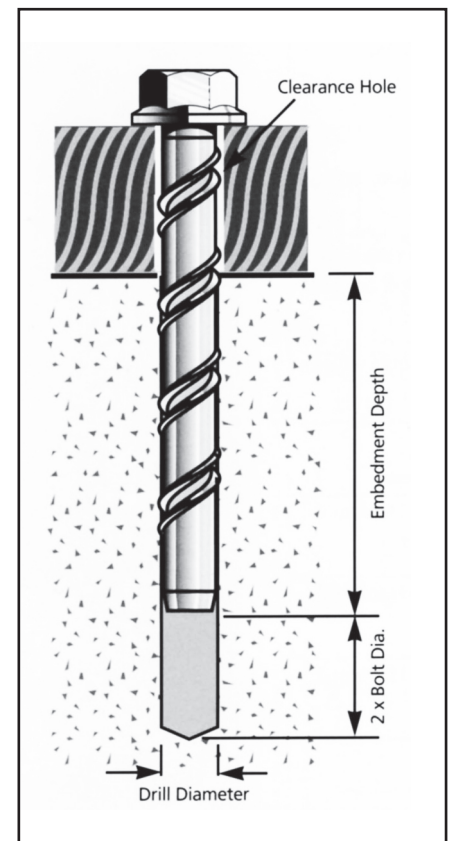
To ensure that you do not ream out the drilled hole set the impact wrench to slow start, this will also avoid any excessive torque stress being applied to the bolt.

Apply pressure to head of bolt to ensure engagement of first thread.

If resistance is encountered when screwing down the bolt, simply unscrew two turns to release trapped dust, and then continue to tighten down.

The bolt is set when the built-in washer, at the underside of the head of the bolt, meets the face of the object being fixed to the substrate.

No further tightening of the fixing is necessary.



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Please follow this guide when fixing EXCALIBUR SCREWBOLTS	
<p>Do use the correct diameter drill</p> <p>Do drill square to face of structure</p> <p>Do take note of Correct drilling depth (embedment plus two diameters), Do use depth gauge on drill</p> <p>Do check hole is clear of dust and check depth is correct</p> <p>Do apply pressure on head of bolt to ensure thread starts to cut into the substrate</p> <p>If insertion appears to 'jam' Do rotate Screwbolt backwards two turns to release trapped dust</p> <p>Do screw the Screwbolt fully down, so that the underside of the flange is in contact with the item being fixed.</p> <p>Do refer to below for correct drill sizes, minimum hole depths, etc.</p>	<p>Do not use airlines to install or remove bolts</p> <p>Do not use hammers to install</p> <p>Do not use worn or wrong diameter drills</p> <p>Do not drill holes at an angle</p> <p>Do not fix into shallow holes</p> <p>Do not allow dust and debris to fall into the hole</p> <p>Do not allow the Screwbolt to simply turn without cutting into the substrate</p> <p>Do not exceed maximum torque (see chart below)</p> <p>Do not ignore these instructions</p> <p>See below for drill sizes, hole depths, torque etc</p>
<p>The Excalibur Screwbolt is guaranteed for single use. If used more than once, it will be at the customer's risk</p>	

FIXING DETAILS FOR THE EXCALIBUR SCREWBOLT				
Sub- strate	Concrete	Brick	Soft Brick & Block	Hole Depth
Drilling Tool	Hammer	Rotary Impact	Rotary Only	
Drill Bit	SDS	SDS / Masonry	Masonry	E+2 x DIA
Dia- meter	Drill Dia (mm)			
6mm	6	6	5.5	E + 12mm
8mm	8	8	7	E + 16mm
10mm	10	10	9	E + 20mm
12mm	12	12	11	E + 24mm
16mm	16	*	*	E + 32mm
20mm	20	*	*	E + 40mm
24mm	24	*	*	E + 48mm
Embedment (E) * not recommended				

MAXIMUM TORQUE LOADS NOT TO BE EXCEEDED WHEN USING IMPACT WRENCHES TO INSTALL THE EXCALIBUR PRODUCT RANGE:	
RECOMMENDED IMPACT WRENCHES (OR EQUIVALENT) Into Concrete only use	
Bolt size 6mm - 16mm BOSCH GDS 18E Torque 70Nm - 250Nm	Bolt size 20mm - 24mm BOSCH GDS 30 Torque 250Nm - 1000Nm
Extensive testing when using the tools listed within the torque parameters shown into varying grades of concrete and complying with our published setting instructions will ensure our products are safe for use in critical load situations.	
6-12mm into all substrates hand calibrated torque wrenches can be used. Ensure wrench is minimum 450mm long.	