

Torc Series I Ground Anchor

Fitting Instructions for Brick Walls

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Important Requirements

Caution: Be careful that you do not drop the anchor on your foot or allow the shackle to fall on a finger!

Any security installation is only as strong as its weakest link:

The Torc Ground Anchor must be used in conjunction with an appropriately fitted Sold Secure-approved lock and chain.

The integrity of the anchor is dependent upon the quality of the surface to which it is fitted. Brick walls are intrinsically weak: mortar joints are liable to separate and are inconsistent; bricks are generally not solid and vary widely in strength. Blocks are usually worse.

The Torc Ground Anchor should **not** be fitted to a block wall, or to a brick wall within 2.0 metres (6 feet) of its top edge – do not fit it to a low garden wall! Similarly, you should choose a location that is at least 0.3 metres (1 foot) from the nearest end of the wall – don't fit it close to an external corner. The wall fitting kit includes high quality double-cone Liebig expanding bolts but even these are liable to split the bricks apart if there is insufficient weight above the fixing or if it is too close to the edge. If the wall can be knocked over you have no security!

The minimum wall thickness recommended is 100mm. You should also avoid walls with a plaster/plasterboard covering – this product is designed to be fixed directly to the bricks. Coverings over the bricks create a vulnerability that could be exploited by a criminal.

A separate fitting kit is available for installation on concrete floors.

If you are unsure, please contact your supplier for advice.

What Tools Will I Need?

The fitting kit includes all parts that are required. The only tools you will require for wall mounting are:

- An electric hammer drill with at least a 12mm chuck capacity
- A medium sized hammer
- Eye protection – goggles or a visor should be worn
- A pencil or felt pen or similar for marking holes to drill
- Ideally a torque wrench and 5mm AF socket but these are not essential

How Long Should I Allow to Fit an Anchor to a Brick Wall?

30-60 minutes as a guideline. Be careful and don't rush.

What Parts Should be in a Wall Fitting Kit?

The Torc anchor floor fitting kit uses top quality Liebig expanding bolts (*shield anchors*) for maximum retention with minimum stress on the brickwork:

- Liebig SK12 shield anchors, complete (qty. 4)
- Hardened steel ball bearings to suit bolts (qty. 4)
- Blanking plug
- 5mm long-series hex wrench (*Allen key*)
- Hex rod 5mm AF to suit bolts
- M8 x 50mm hex head bolt
- Length of flexible PVC hose
- Masonry hammer drill bit 12mm straight shank
- Hole drilling template
- These instructions

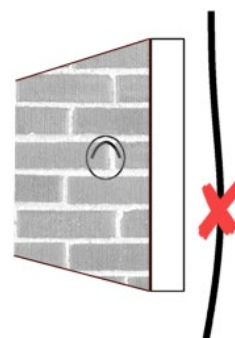
How to Fit a Torc Ground Anchor to a Brick Wall

The Torc ground anchor is designed to be fitted by any competent DIY enthusiast.

You should read through these instructions in their entirety before starting to fit an anchor. If you are not confident of your ability, you should ask an experienced person or professional builder to help.

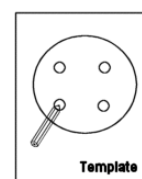
In the following instructions, the term *motorbike* is used to mean any valuable item that you wish to secure with your ground anchor.

- 1. Check the contents of the Fitting Kit:** Ensure the fitting kit is complete (the items are listed above). Contact your supplier if there are any parts missing or damaged.
- 2. Choose a good location:** Be careful to choose an appropriate location for fitting your anchor, clear of any pipes, cables etc (the use of a metal detector or other pipe/cable detector is recommended if you are unsure). The anchor is designed for permanent installation so take time to ensure the chosen position will allow you to secure your motorbike with the chain etc that you have chosen. Putting the anchor near a corner or other location such that the motorbike restricts access to the anchor can make it a lot harder for a criminal to attack, as can keeping chains and locks off the floor. We recommend that you lean the anchor against the wall and check that you can get the bike into position and then ensure you can actually fit the chain & lock. Time spent now checking the intended location is much better than realising later that you can't get the bike within the range of your chain!



Remember that any anchor is only as good as the substrate it is fitted to.

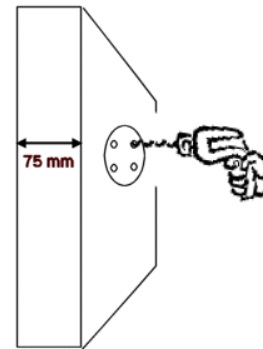
- 3. Mark the holes to drill:** Either using the anchor itself or the template provided, choose the precise combination of hole positions relative to the mortar joints in



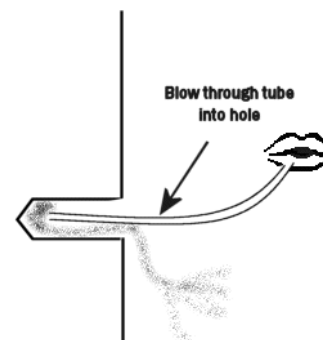
the brickwork. The short end of a brick is usually strong and is preferable to the *frog* (the indented long side, usually at the bottom of the brick when it is laid). You can also put one or more holes into mortar joints between the bricks. Try to choose a position and orientation of the four holes so that the combination is as solid as possible. Then *carefully* mark the holes to drill using a pencil or felt pen, for example. If you are using the template, pierce *small* holes through the centres of the bolt marks; If you are using the anchor, rotate the top plate to expose each bolt hole, being careful that the anchor doesn't move as you mark the holes (it helps if you hold it by the shackle).

Check carefully that all four holes are marked at the centres of the bolt holes in the anchor. Accuracy is important here.

4. Move the anchor out of the way and then, using eye protection, good ventilation and a hammer drill, carefully **drill the holes** to 80mm depth. Be careful to avoid the drill drifting sideways as you drill and keep it perpendicular to the wall. The drill bit supplied is marked with tape at the right depth – the tape should just touch the surface of the wall as you finish drilling each hole – **don't drill too deep or you may burst through the other side of the wall!** Take care not to breathe the dust.

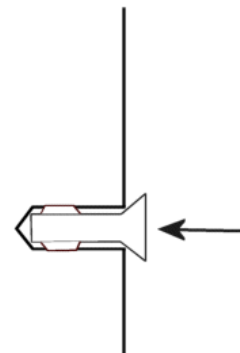


5. **Clean dust from inside the holes:** It is very important that the holes are as clean as possible if the anchor is to achieve maximum strength. The drill will often leave a lot of dust at the bottom of the hole so it is a good idea to spin the drill up and down to *screw* dust out of each hole.



Then, still wearing eye protection and taking care to avoid breathing the dust, use the plastic tube provided to blow any remaining dust out of each hole. Place one end of the tube in your mouth and, whilst blowing, move the other end of the tube in and out of each hole. Keep doing this until the holes are clean and no more dust blows out. This stage is easier if you have a source of compressed air, a vacuum cleaner running in reverse, or any other suitable blowing device, but take care to protect your eyes however you clean the holes.

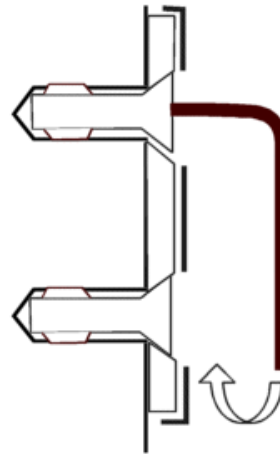
6. **Check that the holes are clean and deep enough:** Slide one of the bolts, complete, into each hole in turn and check that it will sit with the underside of the countersunk head resting on the surrounding wall. It is surprising how easily compacted dust can remain at the bottom of the holes – if the holes are not clear or simply not deep enough, repeat the relevant steps above to achieve the correct depth and holes clear of dust.



- 7. Fit the anchor loosely** by holding it against the wall and inserting all four bolts, turning the top plate to gain access to each hole in turn. Do not tighten any of the bolts at this stage.

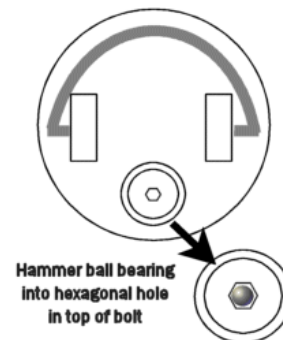
Ensure that each bolt slides fully home against the countersink in the anchor. Alignment errors up to 1mm can be corrected by redrilling; greater errors need you to start again or seek advice from your supplier.

- 8. Tighten the bolts:** Using the long series hex wrench (*Allen key*) provided, tighten all four bolts evenly until they are all tight. There is no need to use any extra leverage than the long arm of the hex wrench but if you have a torque wrench and 5mm AF socket available, you should use them with the 5mm hexagonal rod provided to finally tighten each bolt to 25Nm/19lbf-ft.

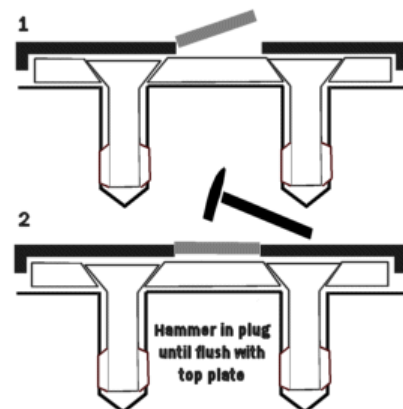


- 9. Check all four bolts are fully home:** Once you have tightened all four bolts, rotate the top plate again as you check that they are all fully home and in contact with the base plate of the ground anchor. The ground anchor should now be held tightly against the wall.

- 10. Insert the ball bearings:** This is optional but it is recommended for maximum drill resistance that you to hammer one of the ball bearings supplied into the hexagonal head of each bolt. You may find the M8 x 50mm bolt is useful as a *punch* to reach the bolt heads – the end of the bolt has a slight dimple that will locate on the ball bearing. The ball bearings are a very tight fit so it will take a few hammer blows to drive them into the bolt heads. Be careful not to hit your fingers! ☺ It is important that the ball bearings are hammered sufficiently into the bolt heads so that they don't obstruct the rotation of the top plate.



- 11. Insert the plug into the top plate:** Once all four bolts and optionally ball bearings are in position, you can block off the access hole in the top plate with the blanking plug supplied. The plug has a slight taper on its edge so it is important that it is inserted the right way: The smaller side is marked with an 'X' and this should face towards the anchor base plate. Rotate the anchor top plate so that the hole is *not* above any of the bolt heads. Carefully place the edge of the plug against the edge of the



hole in the top plate such that the top of the plug is 1-2mm above the plate surface. Then lower the other side of the plug into the hole so that it is slightly proud of the top plate and parallel with it. Use a hammer to carefully tap the plug into position – it should rest flush with the top plate. The plug is a tight fit so take care not to hit your fingers.

12.The installation is complete. Well done 😊

Using a Torc Ground Anchor

A properly installed anchor should give you many years of trouble free service.

Remember that you must use an appropriately fitted Sold Secure-approved lock and chain to be confident in your security provisions.

The only maintenance required by the anchor is an occasional drop of oil on the pivots for the shackle. Do not use chrome polish.

Brick Wall Fixing Queries

I only have a Plastered Wall Available?

Although longer bolts would compensate for the thickness of the plaster, this is not recommended as a criminal could attack the plaster and thereby gain access to the bolts. The best solution is to cut away the plaster so that the bare bricks are exposed and to then mount the anchor directly on them.

What about Cavity Walls?

The anchor is fitted to a single skin of brickwork so its fixings do not bridge the cavity and should not cause problems with damp etc.

What about 9-inch Solid Walls?

Excellent! Providing you are not fitting the anchor within 2.0 metres (6 feet) of its top edge, a thick solid wall is ideal.

I can't get to the 25Nm torque?

If you are tightening the bolts and the torque is not increasing it may be because the brick is splitting. If so, you should try again with a wall that is in better condition.

My bricks appear very soft or crumbly?

Bricks that are in poor condition are not suitable for fitting a ground anchor. You should find an alternative location.