

Vanguard Concrete Anchors

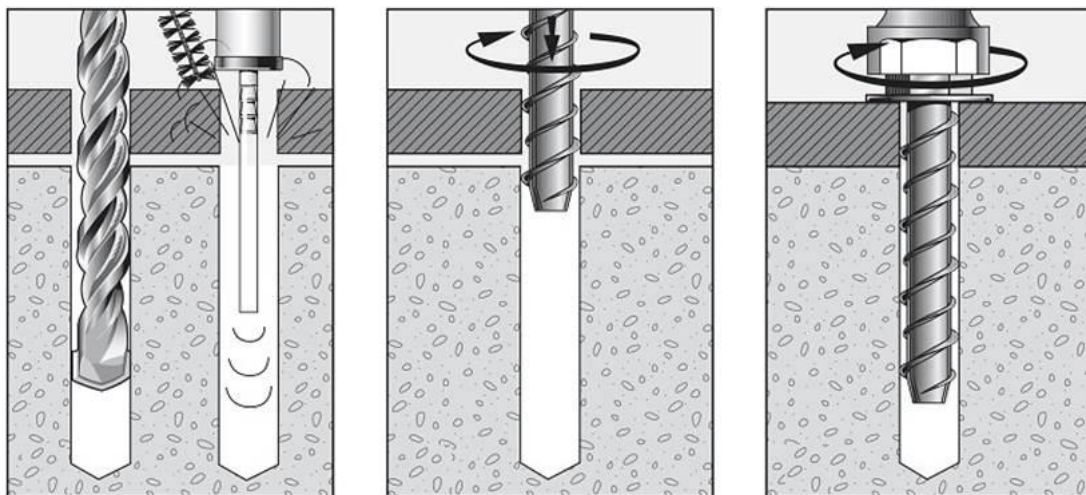
Guidelines and tips for safe and secure installation of concrete anchor screws

1. **Regularly check your drill bits.** If they're worn out they won't drill sufficient holes, which will create resistance when you drive in the bolts.
2. **Make the right size hole.** Ensure you've drilled the correct diameter and depth. Bolts can be compromised if the hole is not big enough. A general rule of thumb for hole depth is the length of the bolt, plus twice the width. E.g. for an M10 x 100mm bolt, the hole should be 120mm deep
3. **Clean out the dust.** Even a little concrete dust can jam up a screw bolt. Use a vacuum cleaner or compressed air to get rid of every last bit.
4. **Get the bolt started gently.** Hand screw or gently drive the screw bolt into position to begin with, checking the bolt is entering the hole at the right angle.
5. **Tighten bolts flush but do not over-tight.** Drive the screw bolt in with your impact driver until it is tight and flush with the fixture. If resistance is experienced when tightening, unscrew the bolt one turn and then re-tighten it. Take care not to over-tighten as this creates excessive pressure on the bolt.
6. **Check your torque!** Impact drills must be set to the correct Nm torque measure applicable for the screw bolt. Many drills output much higher than necessary and will put too much pressure on the bolts. See table below for maximum torque ratings:

For 8mm screw bolts: max torque = 300Nm

For 10mm screw bolts: max torque = 400Nm

For 12mm screw bolts: max torque = 650Nm



Failure to follow these installation guidelines may result in breakages or bolt failure.

It is recommended that all of the above steps are followed to ensure long life and the full performance of the supplied Fixings.