

Friction rock anchors

Friction rock anchors are simply a long length of open seam, high strength steel tube. One end is equipped with a welded steel ring which retains a bearing plate. The opposite end is tapered to facilitate easy insertion into the drilled hole in the rock.

The friction rock anchor is driven into a drilled hole slightly longer and slightly smaller in diameter than the unit. The slot along the length of the tube is compressed as it is driven into the drill hole. The outward radial force generated by the compressed tube on the surrounding rock, anchors it in the hole.



APPLICATIONS

- As a temporary, quick and easy support in development ends prior to the installation of more permanent support (should this be needed)
- Securing of wire mesh in underground excavations, road cuttings, open pit highwalls and many more
- As an anchor to hang pipes and cables.

INSTALLATION PROCESS

These units are easy to install and all that is required is the appropriate driving tool and a percussive type drill (jackhammer, jackdrill, stopper etc).

- Drill a hole 1 to 4mm smaller in diameter than the FRA to be installed
- Place the driving tool into the chuck of the drill
- Place the bearing plate over the tapered end of the FRA
- Place the tapered end of the FRA into the collar of the drill hole and align
- Start the drill and drive the FRA home until the bearing plate is hard up against the rock face.

RECOMMENDED HOLE SIZES

Hole sizes should be 1 to 4mm smaller in diameter than the FRA to be installed, this is important for good performance.

FRA diameter	33 mm	39 mm	46 mm
Recommended hole diameter (mm)	30 - 32	35 - 38	41 - 45

SIZES

All three diameters are available in standard lengths from 0.6m to 3.0m in increments of 0.3m. Non-standard lengths are available on application.

DOMED BEARING PLATES (WITH OPTIONAL DOG EAR)

Length mm	Width mm	Thickness mm	Hole size mm*
125	125	5 or 6	34, 40 or 47
150	150	5 or 6	34, 40 or 47

* Determined by FRA diameter

DRIVING TOOLS

Tools are available for all three sizes of FRA.