

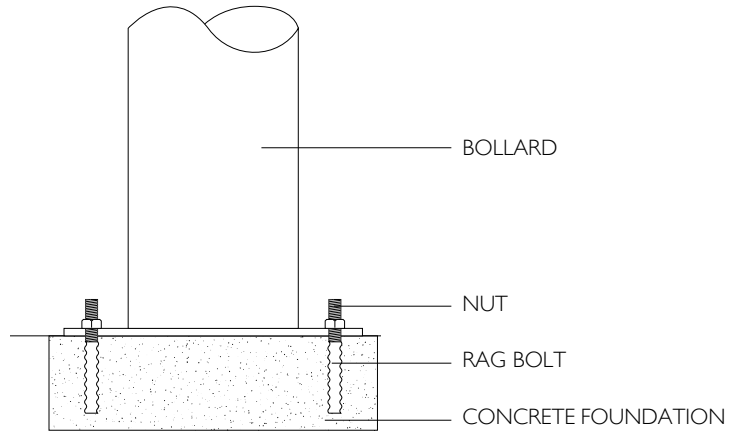


Recommended Baseplate Dimensions for Galvanised Mild Steel Bollards

BOLLARD DIAMETER	DIMENSIONS	MAXIMUM FIXING SIZE
ø76	150Sq x 8 Thick	M16 Bolt
ø88	150Sq x 8 Thick	M16 Bolt
ø114	200Sq x 8 Thick	M16 Bolt
ø139	200Sq x 8 Thick	M16 Bolt
ø168	250Sq x 8 Thick	M16 Bolt
ø193	250Sq x 8 Thick	M16 Bolt

Recommended Baseplate Dimensions for Stainless Steel Bollards

BOLLARD DIAMETER	DIMENSIONS	MAXIMUM FIXING SIZE
ø76	120Sq x 6 Thick	M12 Bolt
ø88	140Sq x 6 Thick	M12 Bolt
ø114	170Sq x 6 Thick	M16 Bolt
ø139	200Sq x 6 Thick	M16 Bolt
ø168	220Sq x 6 Thick	M16 Bolt
ø193	240Sq x 6 Thick	M16 Bolt



A bolt down installation can be done in a number of ways, depending on the ground conditions.

The common methods are:

**Rag Bolts** - These are threaded bars that can be cast in to a concrete base to create a bolt down fixing.

**Expansion Bolts** - This system is suitable for when a concrete base already exists. The concrete is drilled and as the bolt is turned the outer sheath expands to lock the bolt into the ground. The impact resistance of an expansion bolt installation can be further improved by setting the bolts in epoxy resin.

In cases of doubt, a Professional Engineer's opinion should be sought.

**NOTE:** Furnitubes does not supply the fixings for bolt down installation.

