



**SELF-RECOVERING IMPACT RECOVERY SYSTEM
DIRECTIONS FOR USE**

You can secure the Impact Recovery Bollards on Smart Sustainable Foundations (150/350 or 650 mm depth, or Surface mount using our Smart Reusable Base Plate

INTERNAL CORE

You can increase the strength of the internal core on the 650 mm Depth in-ground version to a solid steel rod if you wish to stop a vehicle in its tracks

TOOLS REQUIRED

Industrial Removal Tool or Foot tool is required to remove internal securing core from ground socket (internal core requires pin to enable removal using foot tool). An Allen key is required to remove core from surface mount base plate.

You will need PH2 Phillips drive to install Self drilling screws. If using medium or heavy gauge pipe you might want to pre-drill to make installing screws easier (4.5 mm drill bit required.) We supply Internal securing core pre-drilled with Taper attached.

A Security Allen key is required to remove vandal proof studs



BOLLARDS AND SMART FOUNDATIONS ARE RE-USABLE IMPACT AFTER IMPACT

Bollards self-recover from impact, are removable, replaceable and interchangeable.

SURFACE MOUNT UNIT INCLUDES

1. Impact Recovery Rings x 2
2. Internal Core 300 mm H 3.6 Steel pipe
3. Solid Steel Spigot
4. Base Plate
5. Concrete anchors



IN GROUND UNIT INCLUDES

1. Impact Recovery Rings x 2
2. Internal Core 300 mm H 3.6 Steel pipe
3. Depth to suit ground socket
4. Self-locking Taper
5. Ground Socket
6. Cap



650 mm Length Core for 350mm Ground socket
950 mm Length Core for 650 mm Ground socket
See back page for altering the strength of the core

ASSEMBLING SURFACE MOUNT UNIT

The core is slipped over the spigot and secured using an Allen key to tighten the grub screw. The Impact Recovery Rings are slipped over the core and secured using an Allen key

INSTALLING BOLLARD

1. Slip bollard over the Impact Recovery Rings (use lubricant if tight)
2. Insert security stud in hole near base of bollard using security Allen key so it sits beneath the bottom Impact Recovery Ring

ASSEMBLING IN-GROUND VERSION

The Smart Self-locking Taper is attached to the internal core 10 mm below the top of the ground socket, (340 mm for 350 mm socket) using self-drilling screws supplied.

The Impact Recovery Rings are slipped over the core leaving room for insertion of the industrial removal tool near base. For foot tool position the bottom ring above the pin.

INSTALLING BOLLARD

If using protective base plate (nylon washer) - place on surface of ground before installing Impact Recovery System. Posts simply drops through hole in centre of the plate

3. Drop the internal post (with taper) firmly into the ground socket to secure
4. Slip bollard over the Impact Recovery Rings (use lubricant if tight)
5. Insert security stud in hole near base of bollard using security Allen key so it sits beneath the bottom Impact Recovery Ring

REMOVING BOLLARD

1. Remove stud near the base of the bollard using Security Allen key and slip bollard off the Impact Recovery Rings
2. Place base of industrial removal tool as close as possible to the base of the core and hook the base of the tool around the internal core. Handle will rise as you do this- Simply move handle down with jerking action, to remove the core
3. If using foot tool Place base of removal tool under the pin on the core, and use foot to apply pressure with jerking action, to remove the core

The strength of the core will determine the impact force the bollard can take before requiring replacement. If using the 650 mm depth in-ground version, you can increase the strength of the core to stop a passenger vehicle in its tracks