

## Static Bollard Fixing Details



### Static Bollards Root Fixed

Standard specification root fixed – steel, concrete, cast iron, timber and polymer bollards.

1. Client to mark post locations.
2. Check service drawings provided by client if available.
3. Visual inspection for services, ie; inspection chambers.
4. Scan the location for live cables.
5. Existing surface to be broken out and cube to be excavated in accordance with the bollard's specification. (Standard 300mm root length excavate a 300mm cube)
6. Haunch base of bollard with a lean (1:2:4) concrete mix and hold whist leveling off.
7. Hold leveled position securely supporting the bollard, Continue infill of cube with a 1:2:4 concrete mix.
9. Rinse off-residue concrete from base of bollard, using soft cloth and water, taking care not to scratch the surface of the bollard. Finish off top surface of in situ concrete to give tight surface finish. Concrete should be protected by polyethylene during the first 24-hours following installation. This is particularly important during inclement and/or cold weather. Units should not be used until concrete has cured.



Installation Images and advice kindly provided by K Darlington Builders.



## Removable Bollard Fixing Details



### Removable Bollards

1. Client to mark post locations.
2. Check service drawings provided by client if available.
3. Visual inspection for services, ie; inspection chambers.
4. Scan the location for live cables.
5. Existing surface to be broken out and 400mm cube to be excavated. Dry chippings to be placed in the base of the excavated hole. Place mild steel socket to fit flush with top of excavation.



6. Haunch base of Socket with a lean mix (1:2:4 concrete mix) and hold whilst leveling off. The top on the socket should be level with the roadway. The lid should sit slightly proud of the roadway and should be free of any concrete. Test the top hinge to ensure correct operation. DO NOT allow the concrete to enter the inside of the socket.

7. Hold leveled position securely supporting the socket, Continue infill of cube, smooth off to road level.

9. Rinse off-residue concrete from top of the socket, using soft cloth and water, taking care not to scratch the surface of the socket. Finish off top surface of in situ concrete to give tight surface finish. Concrete should be protected by polyethylene during the first 24-hours following installation. This is particularly important during inclement and/or cold weather. Units should not be used until concrete has cured.

