Installation Instructions

Static and lift out Bollards

Standard Root Fixing Bollard Installation

Root depth varies across our range of static bollards from 200mm-500mm depending on model. For details on root depths please refer to individual product pages.

- 1. Determine where the bollard is to be situated.
- 2. Check utilities/services drawings and perform a visual inspection to ensure there are none in the area. This may also require scanning the location for live cabling.
- 3. Excavate a cube in the substrate according to the bollard's specification. For example, a bollard with a 300mm root depth will require a cube to be excavated measuring 300mm x 300mm, fixed on the post centre, by 300mm deep.
- 4. Locate the bollard centrally into the hole and fill with grade C30 concrete, medium slump, including a rapid hardening agent if required.
- 5. Ensure the bollard is vertical in all planes.
- 6. Reinstate any surface finishes disturbed by the bollard. Where necessary, rinse off any concrete residue from the base of the bollard with a soft cloth and water, taking care not to scratch the surface of the bollard.
- Finish off top surface of in situ concrete to give a tight surface finish.
 Concrete should be protected by polythene during the first 24-hours following installation. This is particularly important during inclement and/or cold weather. Units should not be used until the concrete has cured.

Anti-Ram Bollard Installation

- 1. Determine where the bollard is to be situated.
- 2. Check utilities/services drawings and perform a visual inspection to ensure there are none in the area. This may also require scanning the location for live cabling.
- 3. Excavate a cube in the substrate according to the bollard's specification. For example, anti-ram bollards require a cube no less than 500mm x 500mm fixed on the post centre, by 600mm deep.
- 4. Where applicable, ensure the root cross bar is inserted through the core.
- 5. Locate the bollard centrally into the hole and fill with grade C30 concrete, medium slump, including a rapid hardening agent if required.
- 6. Ensure the bollard is vertical in all planes.
- 7. Where applicable, infill bollard with concrete and attach top T cap.*
- 8. Reinstate any surface finishes disturbed by the bollard. Where necessary, rinse off any concrete residue from the base of the bollard with a soft cloth and water, taking care not to scratch the surface of the bollard.
- Finish off top surface of in situ concrete to give a tight surface finish.
 Concrete should be protected by polythene during the first 24-hours following installation. This is particularly important during inclement and/or cold weather. Units should not be used until the concrete has cured.
- * Only applicable for Reinforced Steel Bollards.

Lift Out and Lockable Bollard Installation

- 1. Determine where the bollard is to be situated.
- 2. Check utilities/services drawings and perform a visual inspection to ensure there are none in the area. This may also require scanning the location for live cabling.
- 3. Excavate a cube in the substrate according to the bollard's specification. For example, Lift Out and Lockable bollards require a cube no less than 400mm x 400mm, fixed on the post centre, by 400mm deep.
- 4. Where applicable, ensure the root cross bar is inserted through the core of the socket.
- 5. Locate the socket centrally in the hole and fill with grade C30 concrete, medium slump, including a rapid hardening agent if required.
- 6. Ensure the socket is vertical in all planes.
- 7. Reinstate any surface finishes disturbed by the bollard. Where necessary, rinse off any residue concrete from base of bollard with a soft cloth and water, taking care not to scratch the surface of the bollard.
- 8. Finish off top surface of in situ concrete to give a tight surface finish.

 Concrete should be protected by polythene during the first 24-hours following installation. This is particularly important during inclement and/or cold weather. Units should not be used until the concrete has cured.

Base Plate Bollard Installation

Fix the post to a suitable homogeneous substrate using a suitable bolting system used in accordance with the manufacturer's instructions. If the base material is concrete then a chemical or drop in type anchor may be suitable. Anchors such as these are available through the local builder's merchants or direct from the manufacturer. Marshalls Street Furniture would be happy to assist in suitable bolt selection if required.