

## **Guardsman™ Reinforced Bollard**

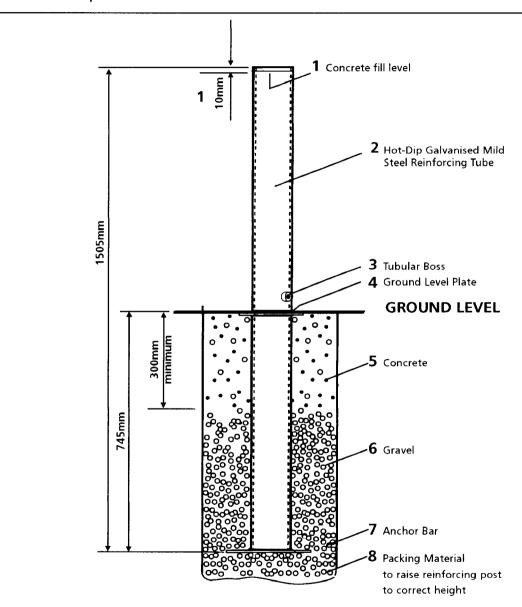
### INSTALLATION OF REINFORCING TUBE

Note:- Ensure that all relevant personnel read the points listed below and that a copy is passed on to the staff involved with the installation

PRIOR TO STARTING INSTALLATION, PLEASE REFER TO 'THE MANUAL HANDLING OPERATIONS REGULATIONS 1992'

#### WARNING: Check for buried services.

During the installation please be safe. Where necessary sign and guard your works safely with reference to New Road & Streetworks Act 1991 Chapter 8 T.S.R. & G.D.



- a) The size of the hole required to site the bollard is 400mm diameter minimum to a depth of 750mm minimum.
- b) Place the reinforcing Tube (2) into the hole and position centrally. Rotate the tube so that the bosses (3) face in the direction you wish the Glasdon roundels to be seen from. If necessary pack the base with gravel until the ground level plate (4) is at ground level.
- c) Once the Reinforcing Tube is correctly positioned hold it vertical and pour gravel (6) to 300mm minimum below the lip of the hole.
- d) Pour concrete (5) on top of the gravel until the hole is filled and flush with the ground. Ensure that the bollard remains vertical throughout this operation. (THE TOP SURFACE OF THE GROUND LEVEL PLATE (4) MUST BE KEPT FREE OF CONCRETE OR DEBRIS).
- e) For maximum strength we recommend that you pour concrete down the center of the tube to level about 10mm from the top lip. (1)

# **Fitting of Bollard**

**NEOPOLIAN 20** ONLY FIXING METHOD FOR 150/SIGNHEAD/ENSIGN & MINI ENSIGN 9 Guardsman Bollard ONLY Guardsman **Bollard** 12 Plúg 10 Coupling 10 **Bolt** Coupling Bolt 11 12 Plug 11/Roundel Roundel **GROUND LEVEL** 0 ο. FOR NEOPOLITAN 20 ONLY

- f) Once the concrete has set, slide the Guardsman Bollard (9) over the reinforcing tube until it rests on the ground plate. (4).
- g)
  Insert the coupling bolt (10) through either side of the
  Bollard and tighten them together using both square keys
  through the tubular boss (3) on the reinforcing tube.
- h) Clean and de-grease the area around the bolts with methylated spirits then stick the Glasdon roundel (11) over the head of both bolts thus concealing the fixings.

#### FOR NEOPOLITAN 150/SIGNHEAD/ENSIGN & MINI-ENSIGN ONLY

i) Locate the plugs (12) over the coupling bolts through either side of the bollard and 'click' into place. Clean and degrease the 2 off Roundel recess with methylated spirits then stick the Glasdon roundel (11) on the front and the rear of the bollard.

- A planned maintenance schedule of regular inspection is recommended, replacing components as necessary.
- Replacement components are available direct from GLASDON.
- GLASDON cannot be held responsible for claims arising from incorrect installation, unauthorised modifications or misuse of the product.

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June 2004 Stock no. C000/0112 ISSUE 5 ©Copyright June 2004

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