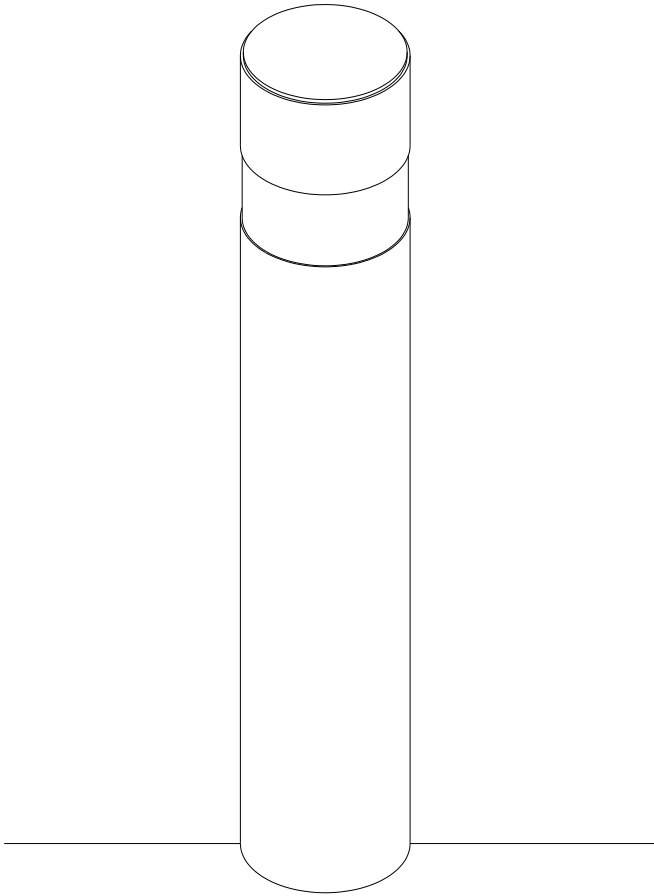


RhinoGuard 75/40 Bollards

Operation & Maintenance



75/40 Bollard - Sleeve Options



204mm



194mm

Introduction

Engineering Design

Engineering design, shop drawings and development by Marshalls Street Furniture

Manufacture

Marshalls Street Furniture manufacture components for products which are assembled in the Marshalls Street Furniture factory, checked and dispatched ready for installation. Replacement products or components should be ordered direct from Marshalls Street Furniture

Copyright

The design copyright for the product and drawing copyright remains the sole property of Marshalls Street Furniture

75/40 Bollard

General Specifications

Description

Bollard core, made from Ø168.3mm CHS and zinc rich finished.

Core Weight 210 Kg

Design use is for the protection of infrastructure. The system has been designed and tested showing it meets the requirements of PAS 68 and achieved a rating of V-Fixed Bollard 7500(N2)/64/90:8.7/0.0 as contained in MIRA report 10-1023300-057.

General Maintenance

Recommended Schedule & Guidelines

Monthly

Visually check all items for superficial or physical damage.

Three Monthly

Fully clean all items as detailed later in this section.
Check all fixings are seated correctly
Inspect bollard for superficial or physical damage, carry out repairs where necessary.

Six Monthly

Secure all fixings.
General Cleaning, Inspection & Repairs as above.

All Finishes

It is recommended that a trial repair be carried out on an unimportant surface first. ***No corrosive cleaners or other cleaners with added abrasives should be used.*** Any contamination, particularly carbon steel scuffs from vehicles, should be quickly removed to avoid corrosion.

In the event of serious damage to a bollard, replacements can be ordered from Marshalls Street Furniture.

In the event of serious surface contamination or staining, please contact Marshalls Street Furniture directly for detailed technical advice.

Cleaning and General Maintenance

For specific guidelines see Marshalls documents:

MSFCM – SS01 Stainless Steel
MSFCM – MS01 Mild Steel
MSFCM – GA01 Galvanised Steel

As Built Drawings

Drawing No	Item Description
PAS68-FO-7540-BL	75-40 Static Foundation Overview - [B]

Contacts

Marshalls Street Furniture

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Lowfields Business Park

Elland

Halifax

West Yorks

HX5 9HT

Tel: 0870 600 2425

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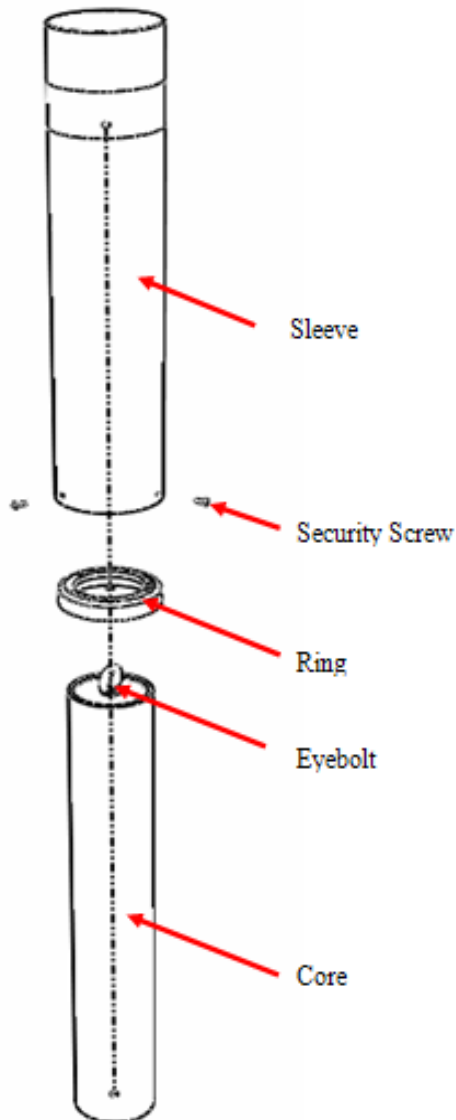
e-mail: msf.sales@marshalls.co.uk

Web: [www.marshalls.co.uk/street furniture](http://www.marshalls.co.uk/street_furniture)

75/40 Bollard

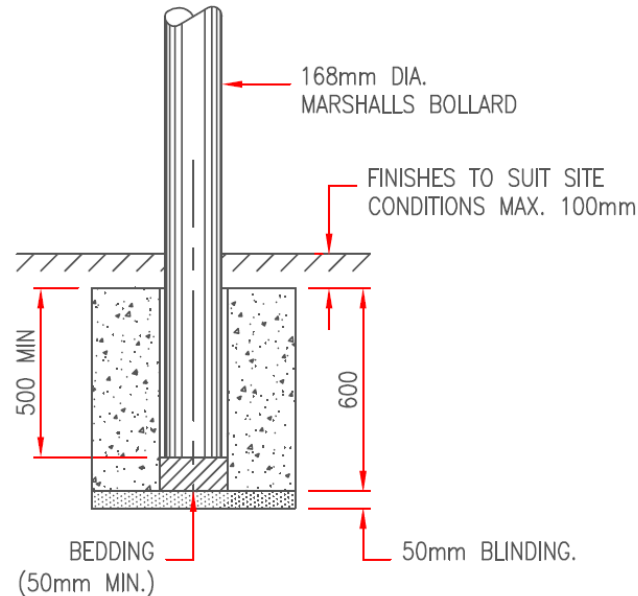
Bollard Assembly

Installation Instructions



1. Check the lifting eye is secured to the bollard core
2. Connect lifting equipment to the lifting eye and lift from vehicle or pallet (NB all lifting equipment must be suitable for lifting the bollard core mass)
Core Weight 210 Kg
3. Lower bollard core into position and level
4. Grout or if constructing own foundations concrete bollard core into position
5. Check the bollard core is plumb and level and leave for 24 hours to cure.
6. Remove the lifting eye
7. Remove any protective wrapping from the bollard and clean off any concrete splashes
8. Slide Ring over top of Core.
9. Fit sleeve over core and push until the top of the Sleeve is 1000mm above the finished ground level
10. Fit security screws into sleeve and tighten.
11. Check sleeve is level (use screws to fine adjust sleeve level)
12. Clean (if required) in accordance with attached documents
13. Note that paving materials will have to be cut around the bollard

Standard Foundation Mounting



All Foundations to be Fabricated and cast in accordance with MSF detailed design drawings

Foundation Installation

1. Excavate suitable foundations for the bollard
2. Fabricate retaining cage and locate in correct position
3. Cast concrete mass around the cage
4. Allow the foundation to cure

Refer to Marshalls foundation drawing PAS 68.FO.0003 for full details of foundation installation

IMPORTANT NOTICE:

Ensure that stainless steel is protected during site cutting of stone – contamination from disc cutters will produce corrosion on stainless steel components.