



BOL-OR-40-BK SERIES BOLLARDS INSTALLATION INSTRUCTIONS



VESTIL MANUFACTURING CORP.

2999 NORTH WAYNE STREET, P.O. BOX 507, ANGOLA, IN 46703

TELEPHONE: (260) 665-7586 -OR- TOLL FREE (800) 348-0868

FAX: (260) 665-1339

URL: WWW.VESTILMFG.COM EMAIL: SALES@VESTIL.COM

Table of Contents

Product Introduction.....	2
Safety Recommendations.....	2
Installation instructions.....	2 - 3

Table of Figures

Fig. 1 Determine depth of bollard socket.....	2
Fig. 2 Install drain tube.....	2
Fig. 3 Place socket in the hole	3
Fig. 4 Fill the hole with concrete	3
Fig. 5 Install bollard	3

MaterialHandling.com

PRODUCT INTRODUCTION

Thank you for purchasing an Ornamental Steel Bollard ("bollard"). As the name indicates, these bollards are designed to serve as ornamentation ONLY. Each bollard conforms to generalized specifications disclosed in this manual, and fulfills our demanding standards for quality, safety and durability. Although the steps required to install the product are relatively intuitive, all persons who might participate in the installation of this bollard should apply these instructions.

Specifications for BOL-OR-40-BK model bollards appear in the table below:

Model	Socket Mounting	Usable Height in Inches (cm)	Bollard Diameter in Inches (cm)	Net Weight in Pounds (kg)
BOL-OR-40-BK	Underground	40in. (~101.6cm)	4½ in. (~11.4cm)	84 (~38.2kg)

SAFETY RECOMMENDATIONS

Failure to read and understand the instructions included in this manual before installing the bollard constitutes misuse of the product. If questions remain after you finish reading this manual, contact Vestil for answers. DO NOT attempt to resolve any problems with the bollard unless you are certain that it will be safe to use afterwards.

⚠ DANGER DO NOT contact live electrical wires, buried cables, underground gas lines, etc. during installation. Determine the locations of all underground utility lines BEFORE beginning to dig the hole for the bollard sleeve. Choose a location that is at least 3 feet away from all underground lines on all sides.

⚠ WARNING Installing the bollard safely is the responsibility of the end-user!

- DO NOT attempt to install the bollard if you cannot comfortably lift it. Determine the net weight of the bollard from the table on p. 3.
- DO NOT modify the bollard or bollard sleeve without the express, written approval of Vestil. Unauthorized modifications could render the device unsafe to use. Additionally, unauthorized modification(s) automatically voids the warranty.**

INSTALLATION INSTRUCTIONS:

STEP 1 Determine ground level: Measure the bollard socket from the top to the bottom to determine the necessary depth of the hole. (See FIG. 1 at right).

Step 2 Dig a hole for the below ground portion: Dig a 10in. x 10in. x 10in. hole (~25½ cm x 25½ cm x 25½ cm) to contain the concrete and gravel that will fix the bollard socket in position.

Step 3 Partially fill hole and set bollard: Fill the bottom of the hole with approximately 4in. of gravel.

Step 4 Install drain tube: Press a short length (approx. 2in.) of ½in. (inner diameter) PVC pipe through the hole in the bottom of the bollard socket.

Step 5 Place the socket in the hole: Set the socket in the hole with the PVC pipe extending into the gravel. The bottom of the socket should rest on top of the gravel. (See FIG. 3)

Step 6 Fill the remainder of the hole with concrete: Pour 3,000psi compression rated concrete into the hole, until the surface of the concrete should be just below the top of the socket. Check the levelness of the socket and adjust the position of the socket if necessary to make sure the socket is level. It might be necessary to brace the socket to ensure that it does not shift as the concrete cures.

FIG. 1: Determine depth of bollard socket

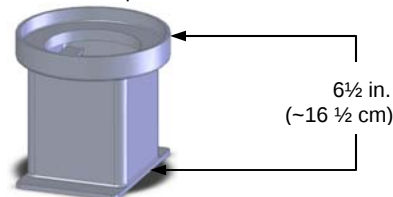


FIG. 2: Install drain tube

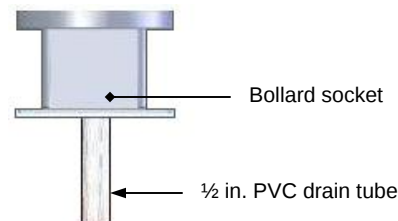
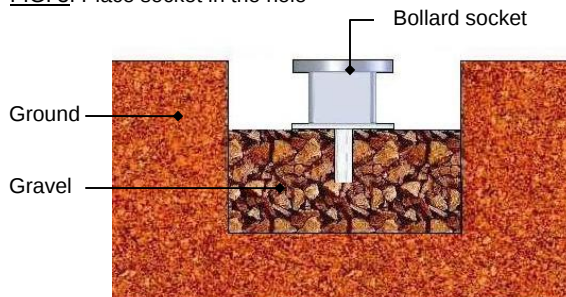


FIG. 3: Place socket in the hole



Step 5 Install the bollard: Lift the socket cover and set the base of the bollard inside the socket. Rotate the bollard so that one of the padlock loops aligns with the slot in the socket cover. (See. FIG. 5). To secure the bollard to the sleeve, connect a padlock to the padlock loop that extends through the socket cover.

FIG. 4: Fill the hole with concrete

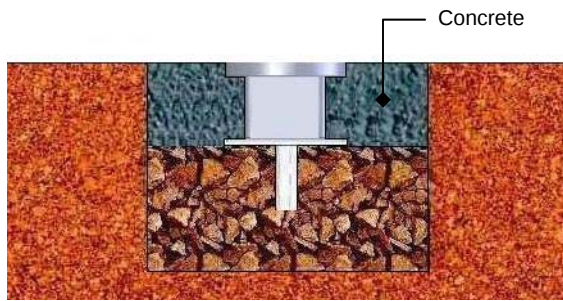


FIG. 5: Install bollard

