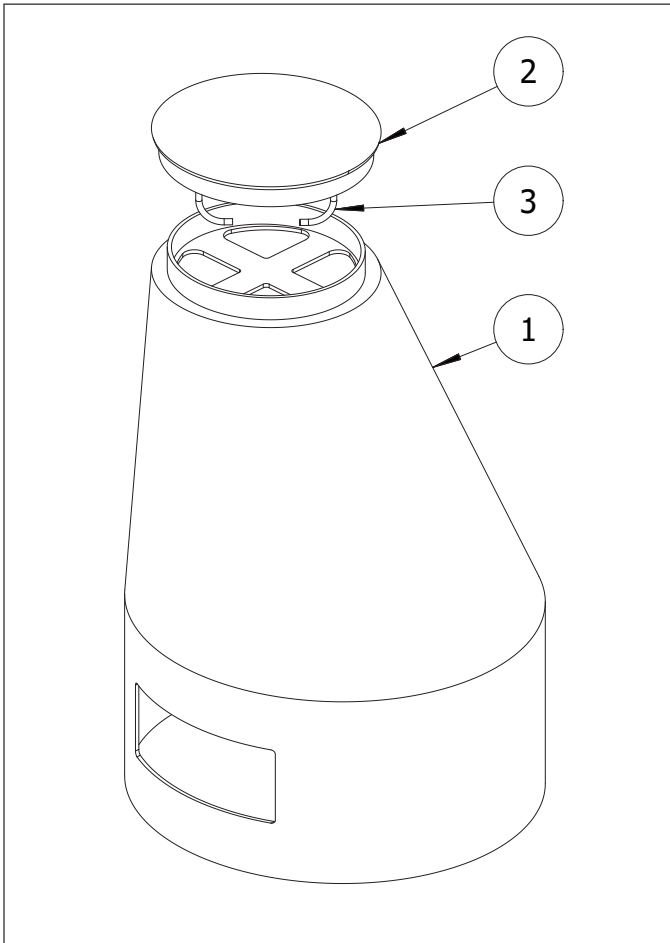


R-7651-EM Martello Bollard Installation

Revision A1

Embedded Footings into Concrete

Parts Diagram



Parts List

#	QTY	PART
1	1	Bollard Base
2	1	Bollard Cover with Reflective Strip
3	2	Concrete Anchor

Installation Equipment

Measuring Tape
Trowel
Touch-up Paint
Chalk / Chalk Line
Shovel

Before Installation



Bollards should be left in their packaging until the exact moment of installation.



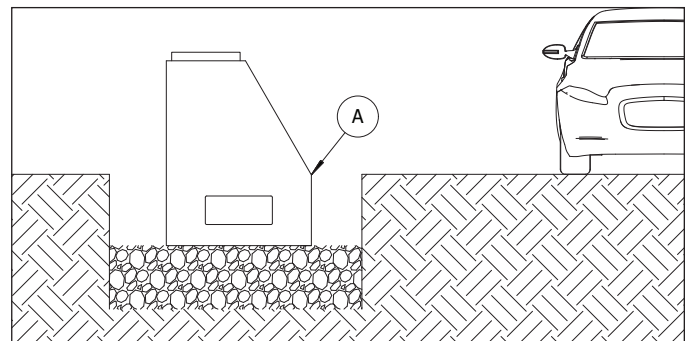
Ensure that the installation site does not intersect any utility lines or other hazards

STEP 1: Study Site Plans. Locate the intended center-point of each bollard, then carefully measure and mark each point to create a uniform arrangement.

Create Installation Holes

STEP 2: Dig a hole to create a foundation for the bollard. The climate and the substrate will determine the size requirements of the installation hole. In general, the hole should be 12" deep, noting that the installation hole should be dug to the depth of the area's frost line. Local frost line depths can be obtained from the local building inspection department. To determine the width requirement of your hole, you may wish to consult a professional engineer, however the hole should extend a minimum of 8–12" from every side of the Martello Bollard; larger width installation holes may be required depending on location.

STEP 3: Position the bollard in the installation hole so that the top of the footing will be flush with the intended concrete surface. Ensure that the sloped side of the Martello Bollard's body faces the road. If placed at a corner, ensure that the sloped side faces the center of the corner.



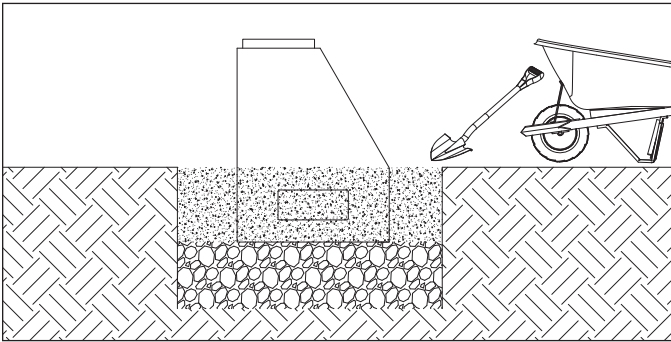
R-7651-EM Martello Bollard Installation

Revision A1

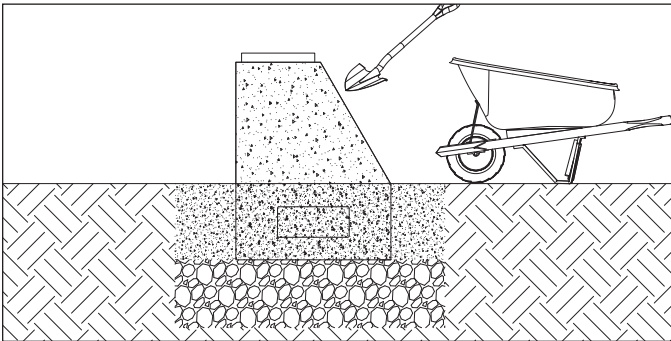
Embedded Footings into Concrete

Pouring the concrete

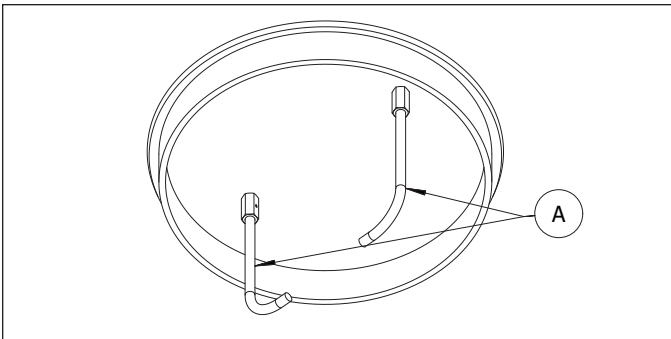
STEP 4: Begin to fill the hole with concrete. As the hole fills, direct and tamp the wet concrete into the Martello Bollard's footing.



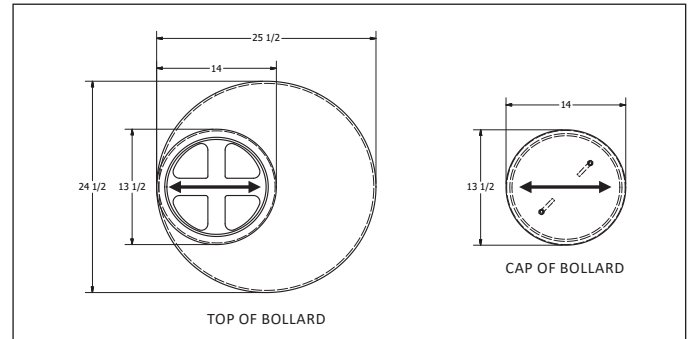
STEP 5: When the concrete fills the installation hole, begin filling the body of the bollard through the holes at the top. Continue to pour until the wet concrete fills the base of the bollard to within 1/2" of the top.



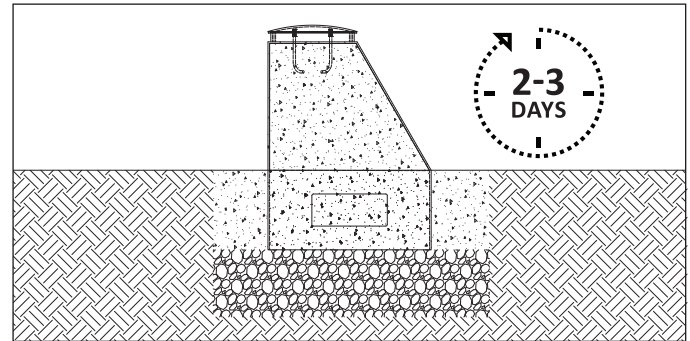
STEP 6: Remove the bollard cap from its packaging and screw the J-anchors (A) into the cap.



STEP 7: Fit the cap onto the bollard, ensuring that the longer axis of the cap aligns with the long axis of the bollard base. Press the cap and the J-anchors into the wet concrete until the cap sits flat on the base.



STEP 8: Allow the concrete to cure. The time required will vary based on the environment, but it generally requires 2–3 days to cure the inside of the bollard.



STEP 9: Inspect the installation. The vertical side of each bollard should be perpendicular to the surface of the concrete. The sloped side of the Martello Bollard's body should face the road. If placed at a corner, the sloped side should face the center of the corner.



Inspect the bollard for damage.

If the bollard was scratched during installation, apply touch up paint immediately to prevent corrosion.