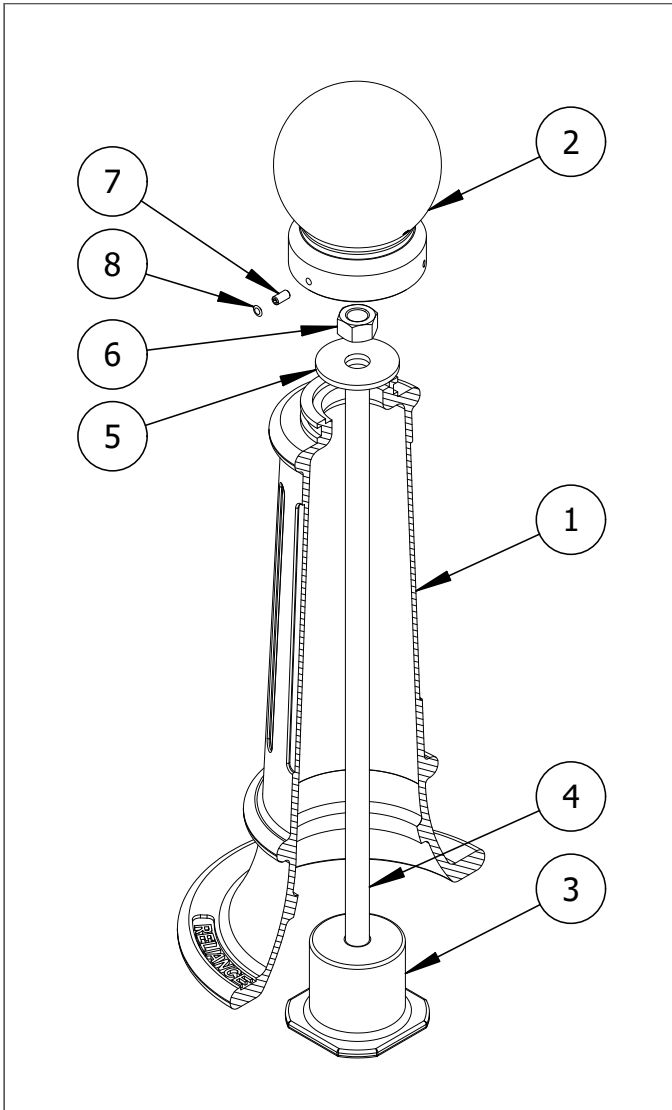


Decorative Bollard Installation

Concrete Form and Anchor Casting

Bollards shown in the diagrams may not be the same model as the bollards shipped in this order. This does not affect the integrity of the installation.







Parts List

#	PART	QTY
1	Bollard Base	1
2	Bollard Cap	1
3	Anchor Casting 1" (includes a plug covering top hole)	1
4	Threaded Bar 1"	1
5	Washer 1"	1
6	Hex Nut 1"	1
7	Hexagon Socket Set Screw	3
8	Plastic Plug	3

Installation Equipment

3/16" Hex Key	Chalk/Marker
1-1/2" Wrench	Duct Tape
Tubed Concrete Form	Measuring Tape
Dirt Tamper	Auger

-  To protect the finish, keep bollards in original packaging until exact moment of installation.
-  Handle with care to avoid scratching or damaging bollard surfaces.
-  Once scratched, bollards cannot be repaired to original form without re-finishing the entire surface.
-  Consider local soil conditions before proceeding with bollard installation.

Before Installation

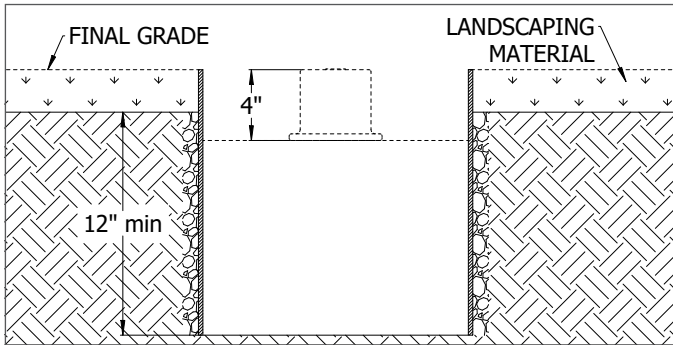
- STEP 1:** Study the site plans and mark the intended location of each bollard on the plan.
- STEP 2:** Always check for hazards such as water pipes, gas lines, and underground wiring before digging.
- STEP 3:** Please consult your local Building Code Department to determine the recommended depth below the frost line for digging in your area. Choose a minimum of this or 12", whichever is greater. The new concrete footing must reach this depth. The diameter of the hole differs based on the bollard model. Refer to product drawings to determine specific measurements.
- STEP 4:** Center the auger on the installation mark and bore a hole to the required depth and diameter.
- STEP 5:** Ensure the area is properly formed to create a perimeter that will hold wet concrete. Use a dirt tamper* to compact the soil below the intended surface.

* Dirt tamping is not required if working on undisturbed soil

Decorative Bollard Installation

Concrete Form and Anchor Casting

STEP 6

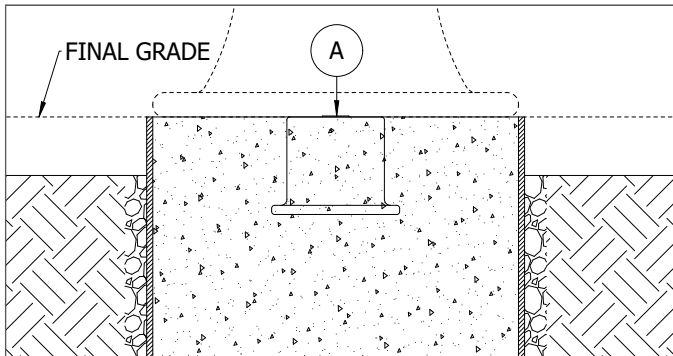


STEP 6: Measure 4" down from the top of the tube and mark on the inside. This marks the embedment depth for the anchor casting. Place the concrete form in the designated position. Ensure center of tubed form lines up with center point markings. Use dirt or gravel to fill any voids between the concrete form and the hole.

Pour the Concrete

STEP 7: Mix the concrete. Check that the proper ratio of water and concrete mix is used—the concrete should have a similar texture to moldable clay.

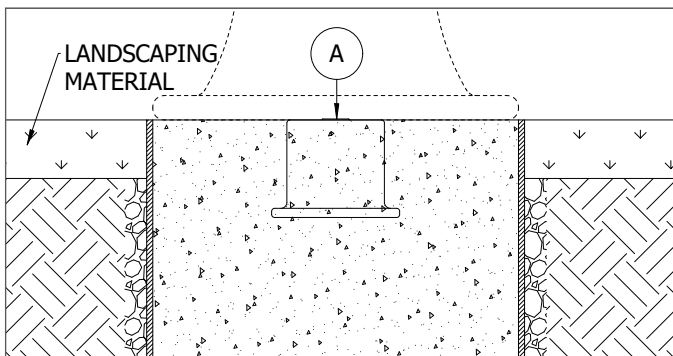
STEP 9



STEP 8: Pour the concrete into the concrete form until it reaches the previously marked embedment marking on the inside of the tubing. Take care to pour the concrete evenly and avoid disrupting the concrete form.

STEP 9: In extremely dirty/dusty areas, cover the bottom hole of the anchor casting with duct tape to prevent debris from entering. The top hole should already be covered with the plug (A). Lower the anchor casting into the concrete form—its top should be flush with the top of the concrete form and the intended final grade. Continue to pour the concrete until the concrete form is filled to the top.

STEP 11



STEP 10: Allow the concrete to cure for a minimum of 2–3 days. *Note: Moisture in the environment and cool temperatures can significantly slow the process.*

STEP 11: Once the concrete has fully cured, landscaping materials such as dirt, sand, and brick can be applied around the concrete form.

Secure the Bollard

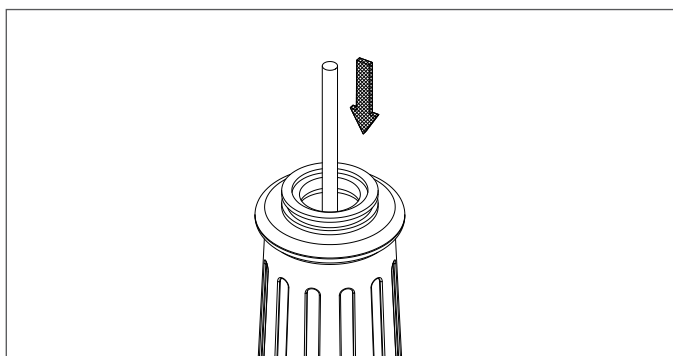
STEP 12: Keep the bollard in its protective packaging. After ensuring the concrete surface has fully cured, carefully place the bollard beside the anchor casting.

STEP 13: When ready to install, remove the bollard's protective packaging. Remove the plug (A) from the top hole of the anchor casting.

STEP 14: Set the bollard base upright and maneuver it so the center lines up with threaded hole in the anchor casting.

STEP 15: Lower the threaded rod through the bollard base.

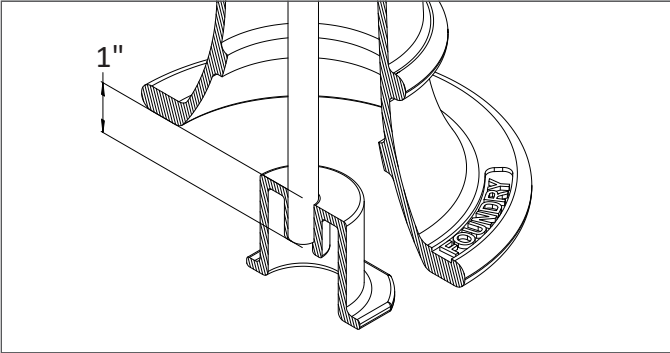
STEP 15



Decorative Bollard Installation

Concrete Form and Anchor Casting

STEP 16

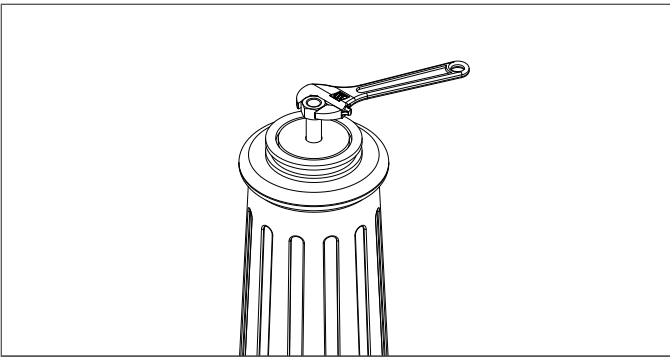


STEP 16: Continue to thread the rod into the anchor casting. Tighten** the rod by hand until it is secure.

STEP 17: Place the washer over the threaded rod so that it rests on top of the shaft of the bollard. Apply the 1" nut and use a wrench to tighten until the bollard is secure.

STEP 18: Remove the bollard cap from its packaging and place it on top of the shaft of the bollard. **Secure and align the cap to the bollard base with the three set screws.** Tighten in equal amounts to ensure that the cap remains centered.

STEP 17



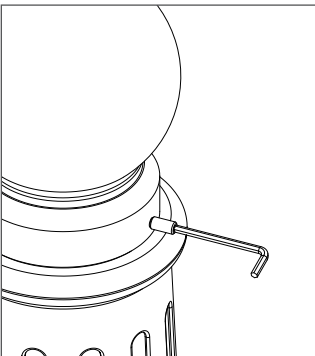
STEP 19: Place the plastic plugs (B) over the set screws.



Inspect the installation. Abrasions should be covered as soon as possible. For damage repair or other servicing needs, please contact Reliance Foundry's sales department.

**Recommended tightness is until the threaded rod reaches a depth of approximately 1" in the anchor casting.

STEP 18



STEP 19

