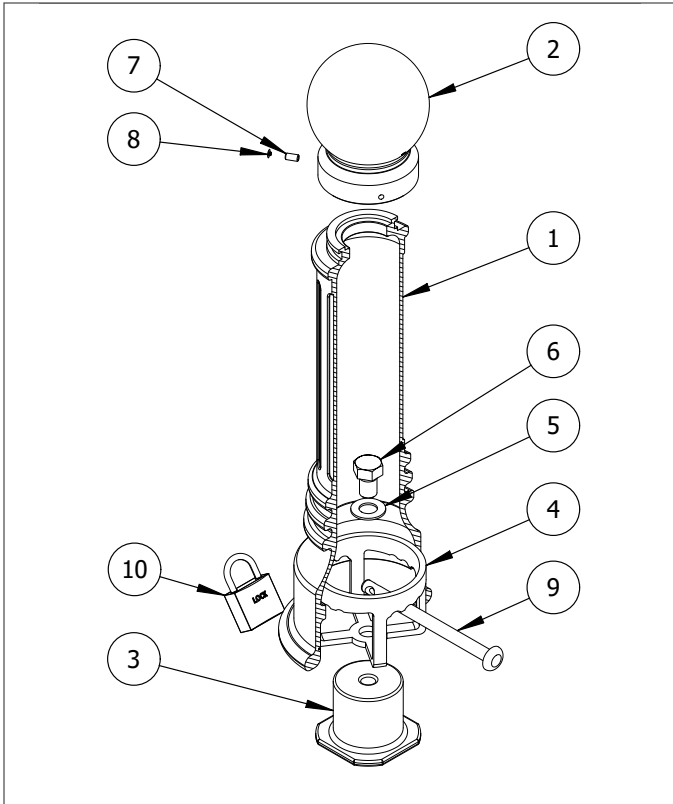


# Removable Bollard Installation

## Anchor Casting in New Concrete

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.



- 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.

### Parts List

#	PART	QTY
1	Bollard Base	1
2	Bollard Cap	1
3	Anchor Casting 1" (includes plug covering top hole)	1
4	Removable Mount 1"	1
5	Washer 1"	1
6	Hex Nut 1"	1
7	Hexagon Socket Set Screw	3
8	Plastic Plug	3
9	Lock Pin	1
10	Padlock (optional)	1

### Installation Equipment

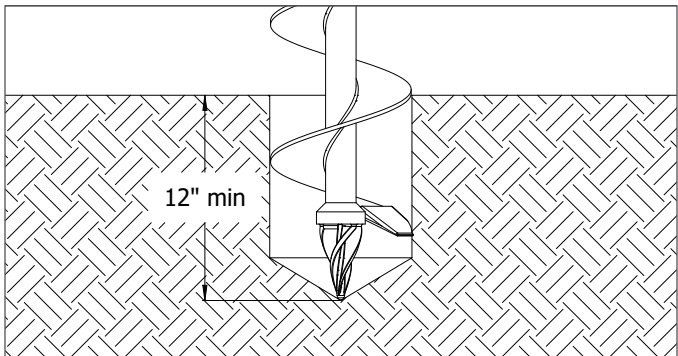
3/16" Hex Key	Level
1-1/2" Wrench	Measuring Tape
Auger	Chalk/Marker
Dirt Tamper	

### 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.

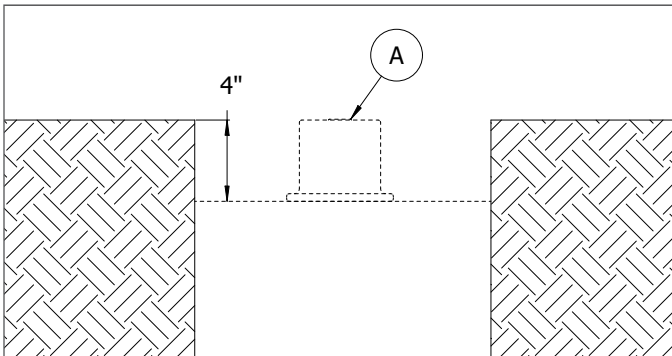
**STEP 3:** Please consult your local Building Code Department to determine the recommended depth below the frost line for digging in your area. Choose a minimum of this or 12", whichever is greater. The new concrete footing must reach this depth. The diameter of the hole differs based on the bollard model. Refer to product drawings to determine specific measurements.



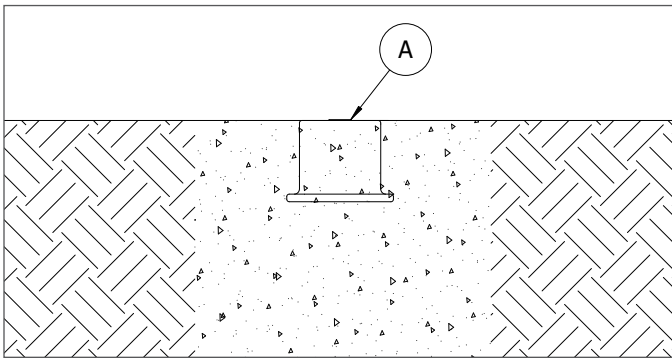
# Removable Bollard Installation

## Anchor Casting in New Concrete

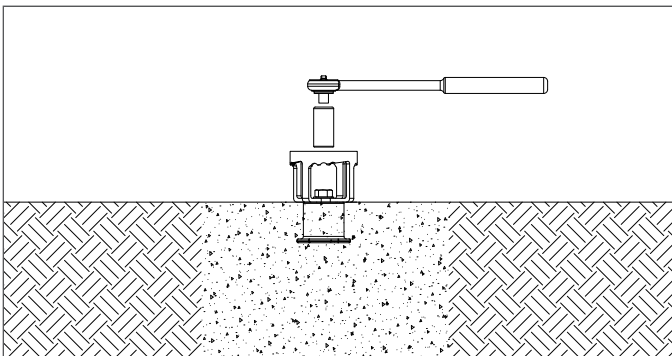
STEP 6



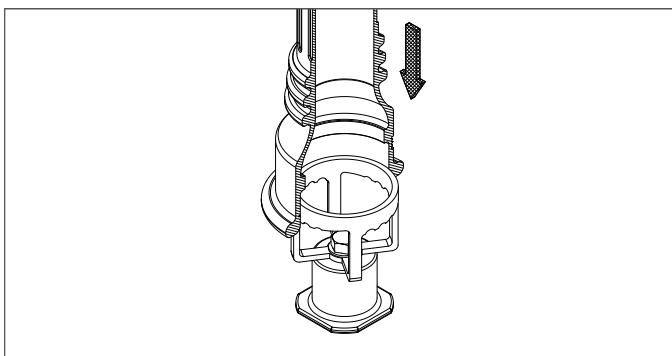
STEP 8



STEP 11



STEP 13



**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.

**STEP 6:** In extremely dirty/dusty areas, cover the bottom hole of the anchor casting with duct tape. The top hole is already covered with the plug (A). Place the anchor casting in designated location and ensure that its top will be flush with the finished surface of the concrete grade (anchor casting is 4" high).

### 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 8:** Pour the concrete evenly, ensuring surface is level, and avoid disrupting the anchor casting.

**STEP 9:** 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.*

### Secure the Bollard

**STEP 10:** Remove the plug (A) from the top hole of the anchor casting.

**STEP 11:** Place the mount on top of the anchor casting so that the center holes line up. Place the washer over top of the center hole. Insert the 1" bolt and use a wrench to tighten until the mount is secure.

**STEP 12:** Keep the bollard in its protective packaging. When ready to install, remove the bollard's protective packaging.

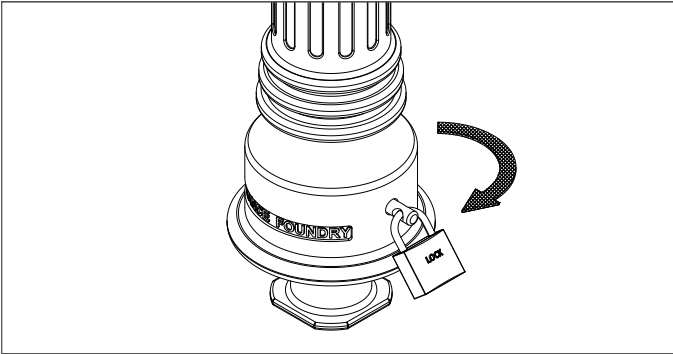
**STEP 13:** Set the bollard base upright and place over the mount.

\*\* Dirt tamping is not required if working on undisturbed soil

# Removable Bollard Installation

## Anchor Casting in New Concrete

STEP 14



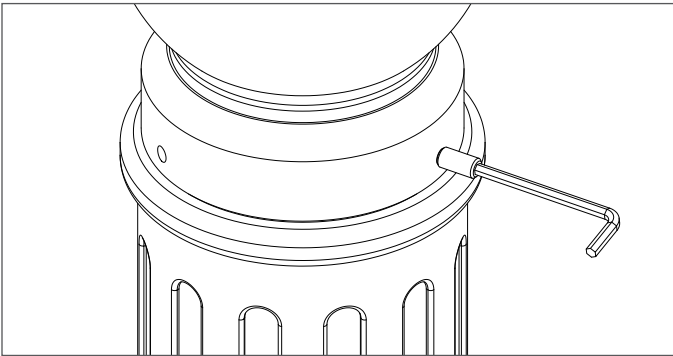
**STEP 14:** Insert the lock pin through the holes of the bollard base. Twist the bollard in a clockwise motion to secure into position. Fasten the padlock.

### Secure the Bollard

**STEP 15:** Remove the bollard cap from its packaging.

**STEP 16:** 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 16



**STEP 17:** 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.

STEP 17

