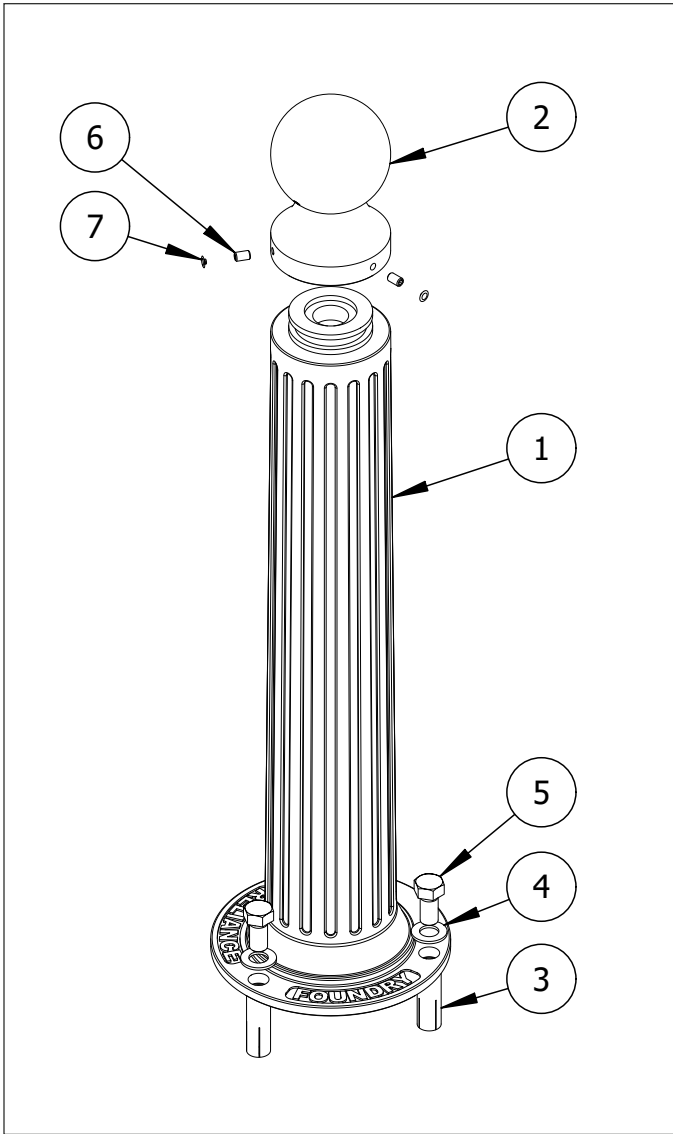


Decorative Bollard Installation

Flanged Surface Mounting

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	Flanged Bollard Base	1
2	Bollard Cap	1
3	Drop-In Concrete Insert 3/4"	3
4	Washer 3/4"	3
5	Hex Bolt 3/4"	3
6	Hexagon Socket Set Screw 3/8"	3
7	Plastic Plug	3

Installation Equipment

Broom/Pressure Washer	1" Masonry Drill Bit
Chalk	3/4" Insert Setting Tool
Level	1-1/8" Wrench
Measuring Tape	3/16" Hex Key
Vacuum	Hammer
Hammer Drill or Rotary Hammer	

- 
 To protect the finish, keep bollards in original packaging until exact moment of installation.
- 
 Handle with care to avoid scratching or damaging bollard surfaces as abrasions will lead to rust.
- 
 Once scratched, bollards cannot be repaired to original form without re-finishing the entire surface.

Before Installation

STEP 1: Always check for hazards such as water pipes, gas lines, and underground wiring before drilling.

STEP 2: Use a broom or pressure washer to clean the concrete surface prior to bollard installation.

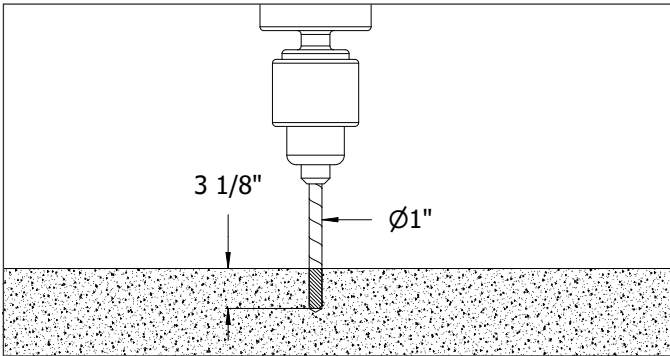
STEP 3: Study the site plans to locate and mark the precise center point of each bollard. For secure installation, ensure there is a minimum radius* of solid concrete around each mark.

*Concrete insert manufacturers such as www.ucanfast.com recommend specific measurements for minimum radii.

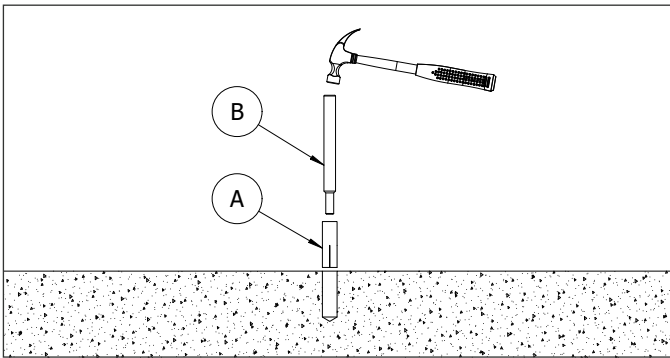
Decorative Bollard Installation

Flanged Surface Mounting

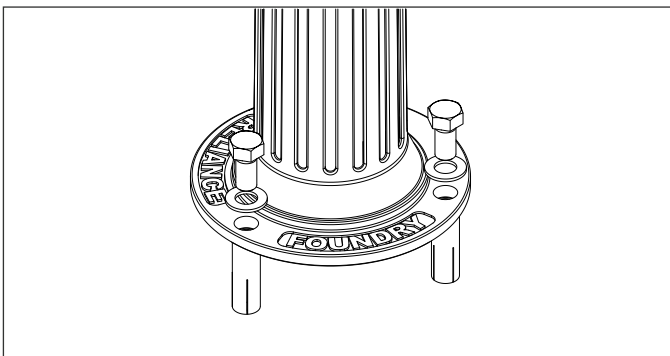
STEP 7



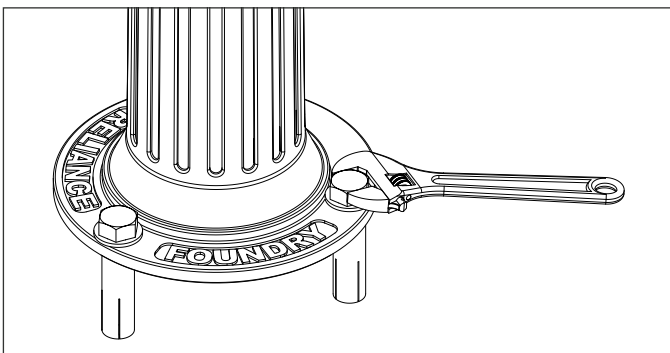
STEP 9



STEP 11



STEP 12



STEP 4: Keep the bollard in its protective packaging. Place the bollard over each center point marking so that the bollard's middle coincides with the center point. Use chalk to create drill-markings for each bolt. Remove the bollard. *Note: Be sure to make any necessary adjustments to the orientation now. Once drilled and installed, there is no way to reposition the bollard.*

Drill the Holes

STEP 5: Tap pilot divot holes in the center of each mark.

STEP 6: Set the depth control on the hammer drill (or rotary hammer) to 3-1/8". If depth control is not available, mark 3-1/8" on the masonry bit.

STEP 7: Drill holes with a 1" diameter and 3-1/8" depth. Drill on high speed, using the hammer function if available.

Secure the Bollard

STEP 8: Clear the holes of all debris and/or standing water using the vacuum.

STEP 9: Tap the drop-in insert (A) into the hole with the slotted end facing down, and drive it down until its top sits flush with the concrete surface. Insert a setting tool (B) into the threaded hole, then hammer down. This will cause the internal expansion plug to set the concrete insert in place. *Note: If a proper setting tool is not available, an equivalent flat-end punch can be used.*

STEP 10: Keep the bollard in its protective packaging. Carefully set the bollard base over the installation position so that the bollard's bolt holes are directly on top of the drilled holes and concrete inserts. When ready to install, remove the protective packaging.

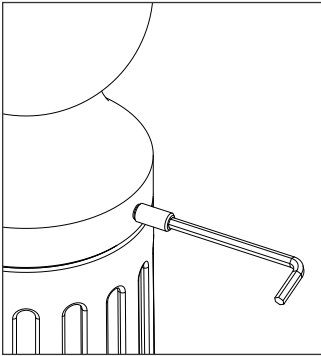
STEP 11: Place the washers over the holes on the bollard and set the bolts into place.

STEP 12: Use a wrench to tighten the bolts until secure. Tighten bolts evenly in a circle.

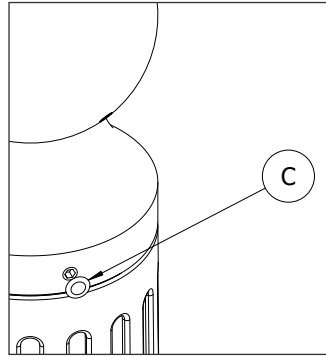
Decorative Bollard Installation

Flanged Surface Mounting

STEP 13



STEP 14



STEP 13: Remove bollard cap from its packaging. Place the cap on the 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 14: Place the plastic plugs **(C)** over the set screw heads.



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.