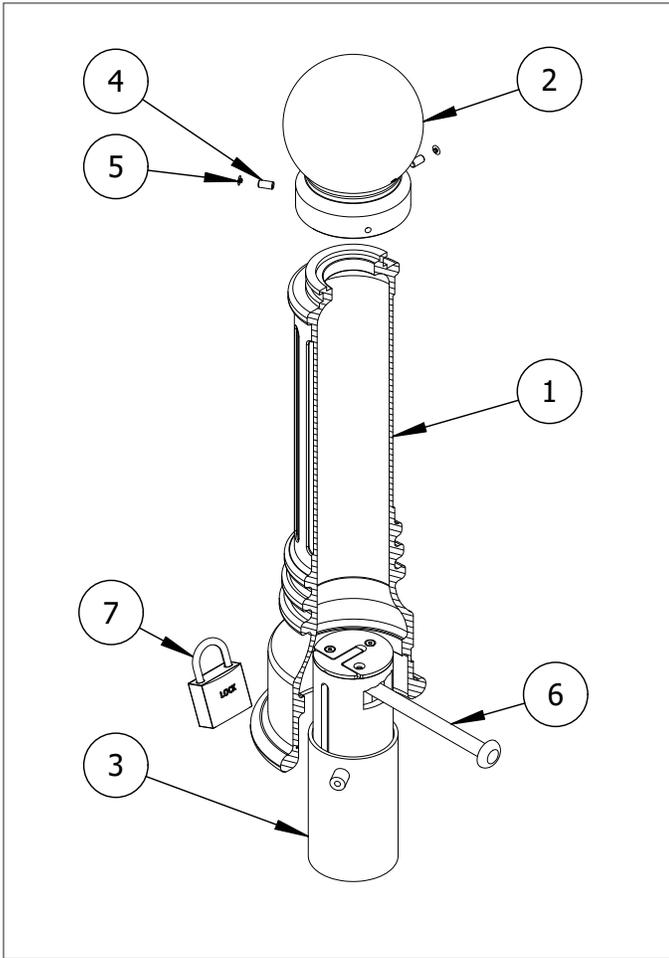


Removable Bollard Installation

Premium Retractable 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.



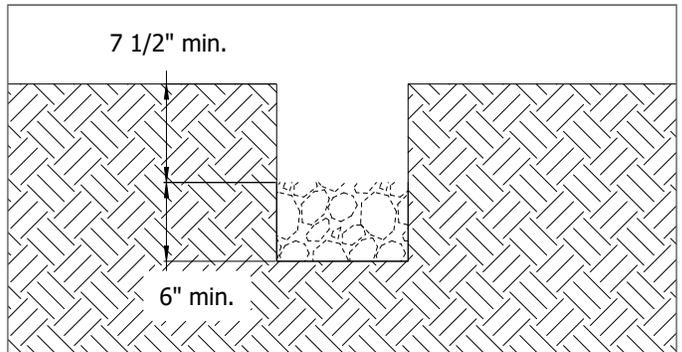
-  To protect the finish, keep bollards in original packaging until exact moment of installation.
-  Handle with care to avoid scratching or damaging bollard surfaces.
-  Once scratched, bollards cannot be repaired to original form without re-finishing the entire surface.
-  Consider local soil conditions 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 7-1/2", whichever is greater. Then add a minimum of 6" for holding the drain rock.* This is the total depth. The diameter of the hole differs based on the bollard model. Refer to product drawings to determine specific measurements.



* Recommended depth for drain rock is a minimum of 6". Depth will also depend on local soil conditions, weather conditions, and engineering requirements.

Parts List

#	PART	QTY
1	Bollard Base	1
2	Bollard Cap	1
3	Retractable Removable Mount	1
4	Hexagon Socket Set Screw	3
5	Plastic Plug	3
6	Lock Pin	1
7	Padlock (optional)	1

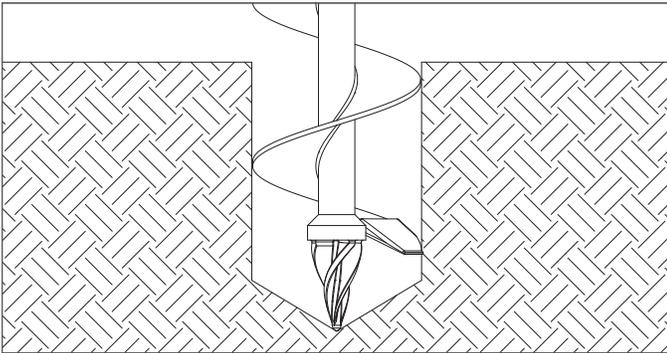
Installation Equipment

Auger	Chalk/Marker
Dirt Tamper	Measuring Tape
Level	3/16" Hex Key

Removable Bollard Installation

Premium Retractable Mounting

STEP 4



STEP 4: Center an auger on the installation mark and bore a hole to the required measurements.

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.

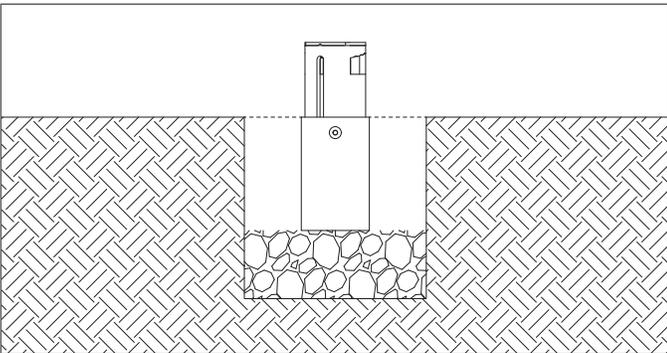
STEP 6: Add the drain rock to the excavation site, keeping in mind that the mount will be installed so that the top edge of the receiver plate is flush to the surface grade.

Prepare the Concrete

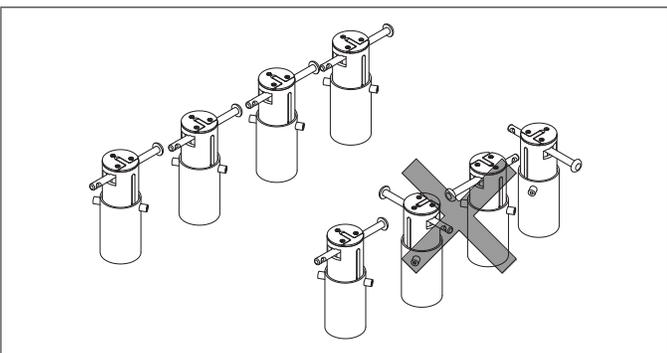
STEP 7: Ensure that the proper ratio of water and concrete mix is used. The concrete should have a similar texture to moldable clay.

STEP 8: Place the mount in the designated location so that the top edge of the outer housing is flush to the surface grade. *Note: If necessary, try dry fitting the bollard (with packaging still on) onto the mount and use a level to ensure it is plumb before proceeding with pouring concrete.*

STEP 8



STEP 9



STEP 9: Lift the handle of the inner housing and turn it to rest the lid in an upright position. Orient the opening window to the desired lock pin position and rest the lid of the inner housing in a closed position. **When installing multiple bollards in a row, it is recommended that the orientation of all mounts be the same.**

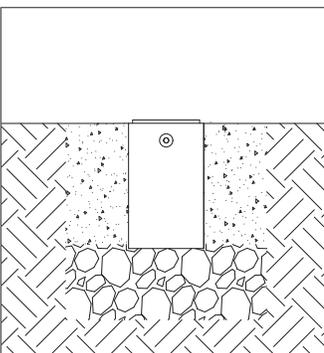
Pour the Concrete

Before pouring the concrete, determine if your local frost line is less than or greater than 7-1/2". When pouring concrete, pour it evenly and ensure that it is flush with the surface grade.

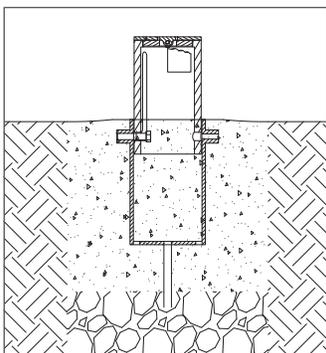
STEP 10 (A): If the local frost line is less than 7-1/2", simply pour the concrete into the site.

STEP 10 (B): If the local frost line is greater than 7-1/2", pour the concrete into the site and then provide adequate drainage by piping through the concrete and connecting to the drain rock layer underneath.

STEP 10 (A)



STEP 10 (B)

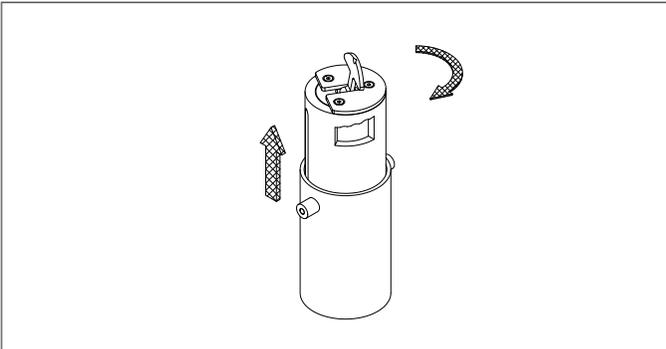


** Dirt tamping is not required if working on undisturbed soil

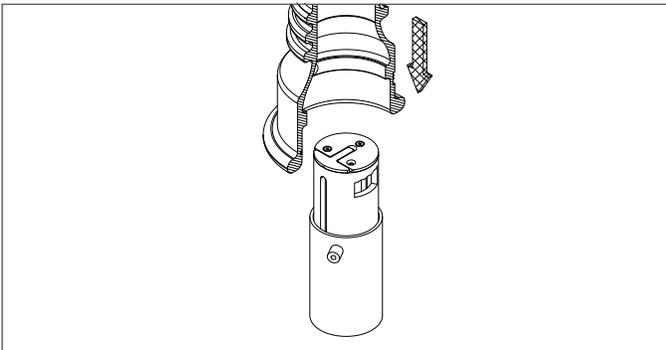
Removable Bollard Installation

Premium Retractable Mounting

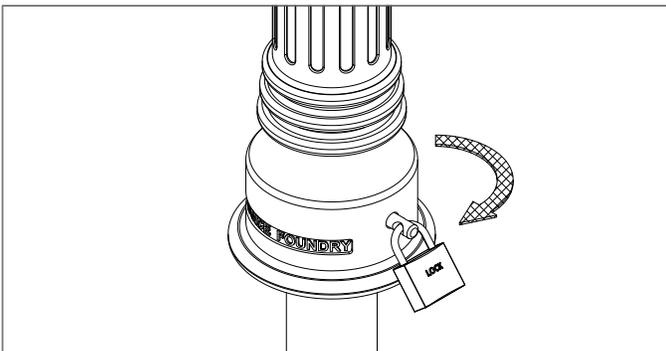
STEP 14



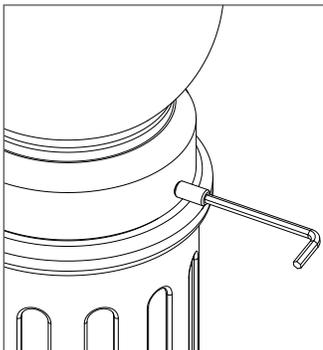
STEP 15



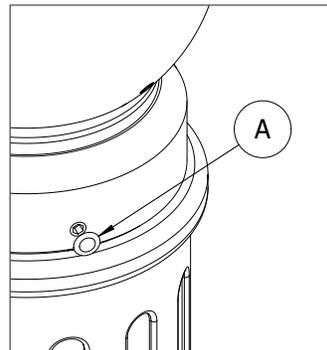
STEP 16



STEP 17



STEP 18



STEP 11: 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 12: Keep the bollard in its protective packaging. After ensuring the concrete surface has fully cured, carefully place the bollard near the installation site.

STEP 13: When ready to install, remove the bollard's protective packaging.

STEP 14: Lift the inner housing of the mount and turn clockwise so it rests in an upright position.

STEP 15: Place the bollard on top of the mount.

STEP 16: Align and insert the lock pin through the bollard base and through the inner housing window. Twist the bollard in a clockwise motion to secure into position. Fasten the padlock.

STEP 17: 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 18: Place the plastic plugs (A) 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.