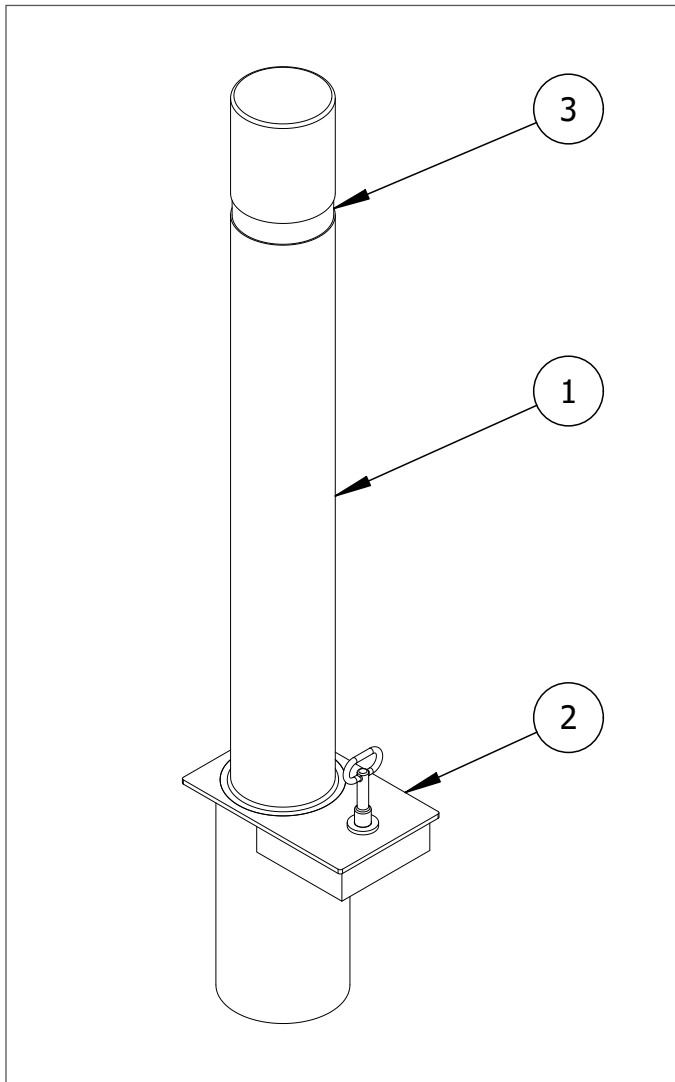




Flexible Bollard Installation

Removable 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.

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. Then add a minimum 6" for holding the drain rock.* This is the total depth.

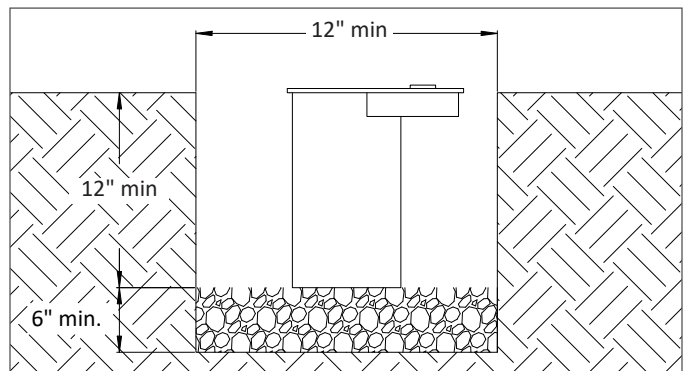
STEP 4: The diameter of the hole should extend a minimum of 12".

Parts List

#	PART	QTY
1	Flexible Bollard	1
2	Removable Receiver with Key	1
3	Reflective Tape (optional)	1

Installation Equipment

Auger	Chalk/Marker
Dirt Tamper	Level
Measuring Tape	

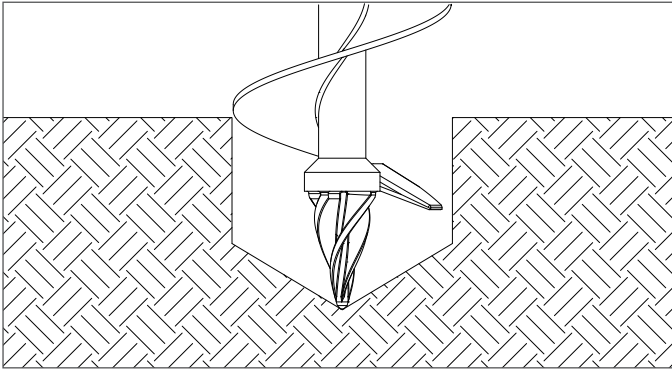


*Recommended depth for drain rock is a minimum of 6". Depth will also depend on local soil conditions, weather conditions, and engineering requirements.

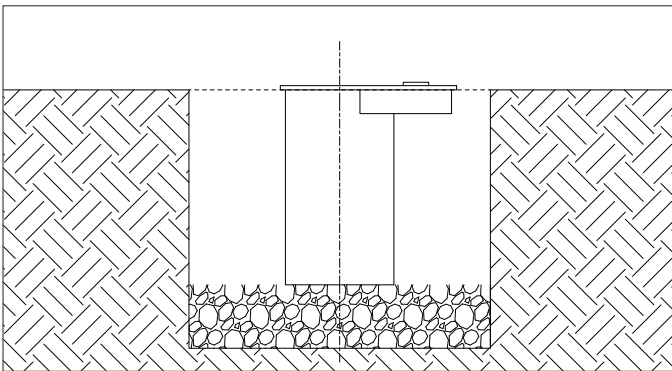
Flexible Bollard Installation

Removable Mounting

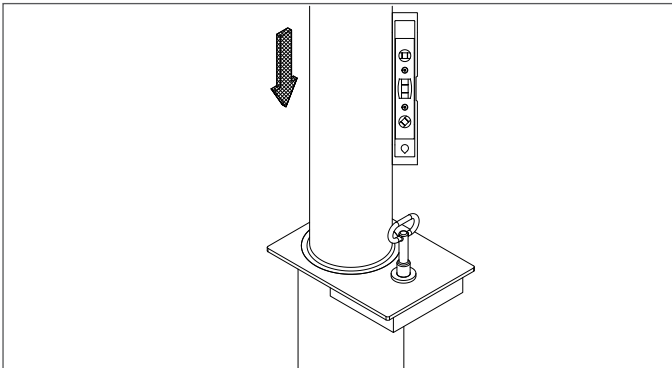
STEP 5



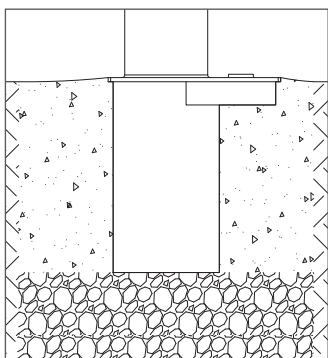
STEP 9



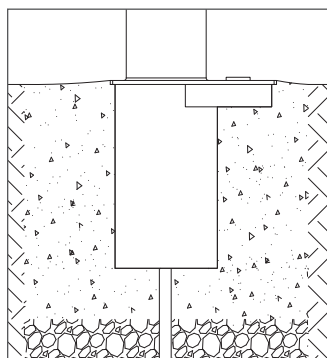
STEP 10



STEP 11 (A)



STEP 11 (B)



STEP 5: Center an auger on the installation mark and bore a hole to required measurements.

STEP 6: 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 7: Prepare the bollard and removable mount for designated location. Keep the bollard in its protective packaging. Add the drain rock to the excavation site, keeping in mind that the receiver will be installed so that the bottom edge of the receiver plate will be level with the finished surface of the concrete grade. A slight berm is recommended to help with water drainage.

Insert the Bollard

STEP 8: Ensure that the proper ratio of water and concrete mix is used. The concrete should have a similar texture to moldable clay.

STEP 9: Lower the receiver into the excavation site so that the bottom edge of the receiver plate is level with the finished surface of the concrete grade. *Note: Make sure the opening of the receiver is centered in the excavation site.*

STEP 10: Insert the bollard (with packaging still on) into the receiver and ensure it is centered. Check with a level to ensure the bollard is plumb. To lock the bollard in place, insert the key into the socket and turn. Verify that the bollard is locked, then remove the key and keep in your possession.

Pour the Concrete

Before pouring the concrete, determine if your local frost line is less than or greater than 12". When pouring concrete, be sure to pour it evenly. The concrete should also be slightly raised up towards the top edge of the receiver plate to create a slight berm.

STEP 11 (A): If the local frost line is less than 12", simply pour the concrete into the site.

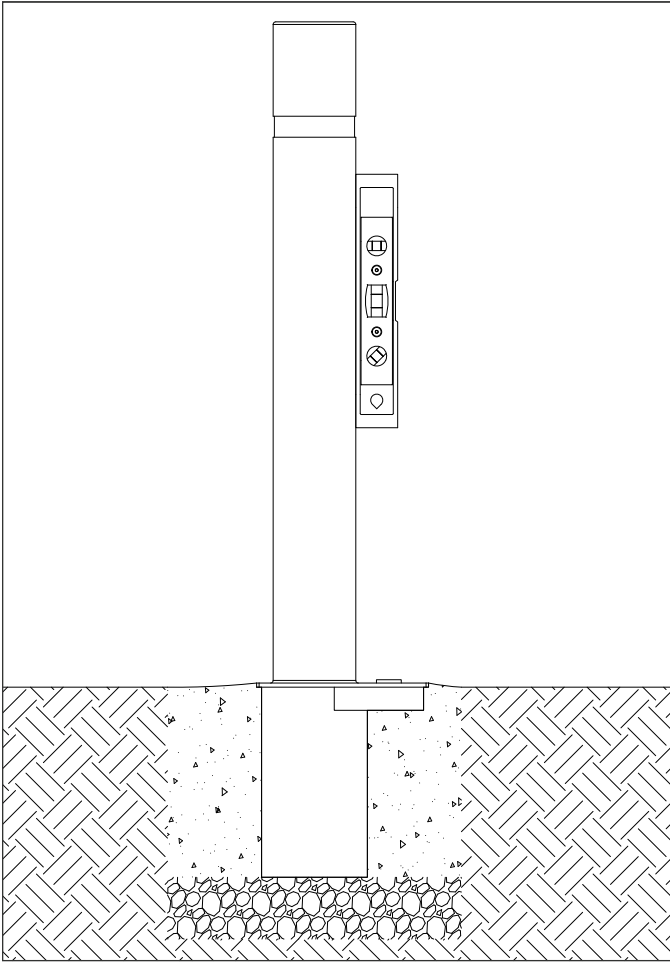
STEP 11 (B): If the local frost line is greater than 12", pour the concrete into the site and then provide adequate drainage by piping through the concrete and connecting to the drain rock layer underneath.

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

Flexible Bollard Installation

Removable Mounting

STEP 12



STEP 12: Remove the bollard's protective packaging and clean the surface. Ensure that the bollard is plumb.



Inspect the installation. For damage repair or other servicing needs, please contact Reliance Foundry's sales department.