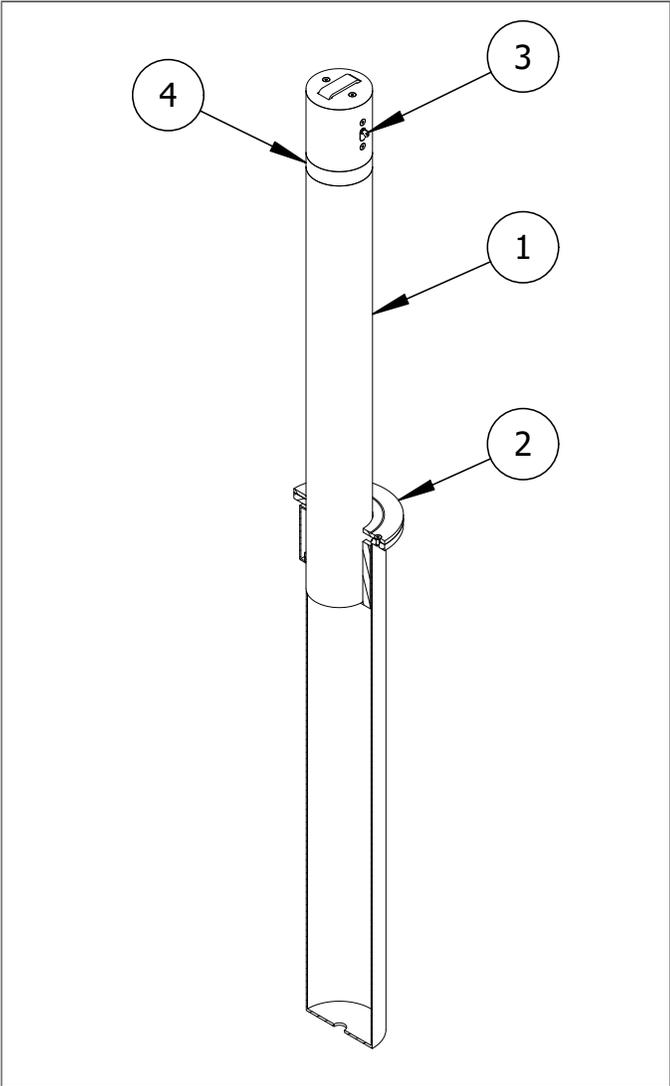


Retractable Bollard Installation

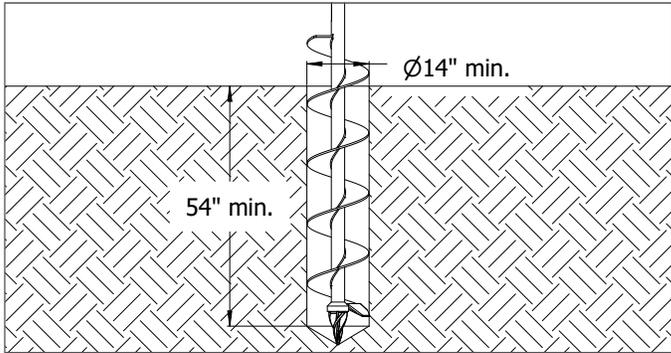
R-8471/R-8472



-  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:** Dig a hole to a minimum depth of 54". The diameter of the hole should extend to a minimum of 14".



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

Parts List

#	PART	QTY
1	Retractable Bollard Assembly	1
2	Retractable Bollard Receiver	1
3	Key	1
4	Reflective Tape	1

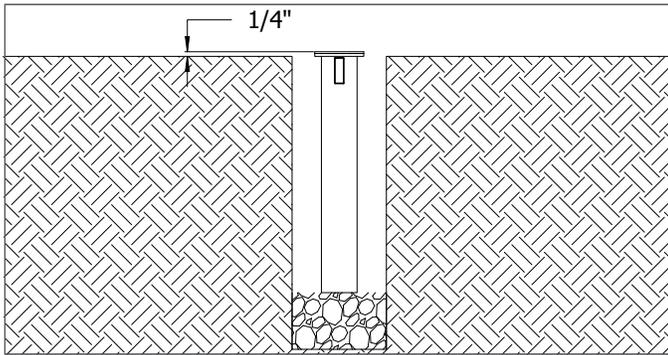
Installation Equipment

Auger	Measuring Tape
Level	Chalk/Marker
Dirt Tamper	

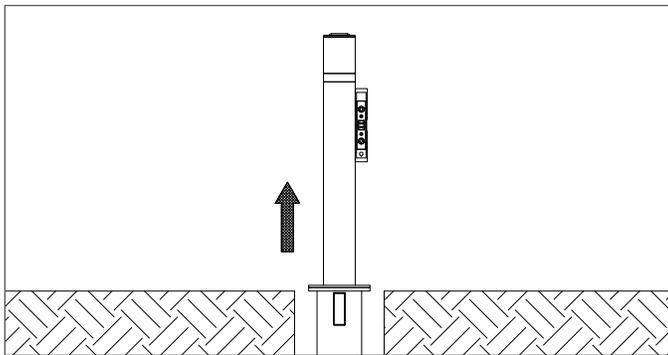
Retractable Bollard Installation

R-8471/R-8472

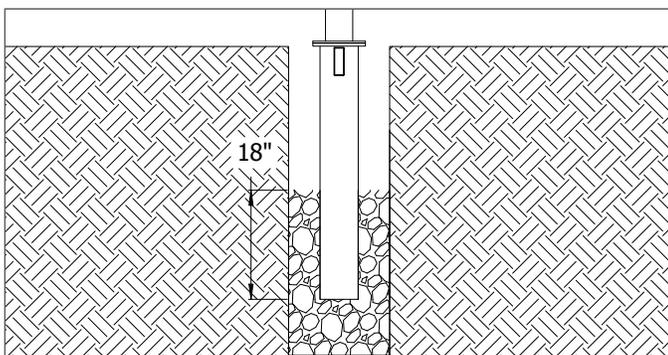
STEP 8



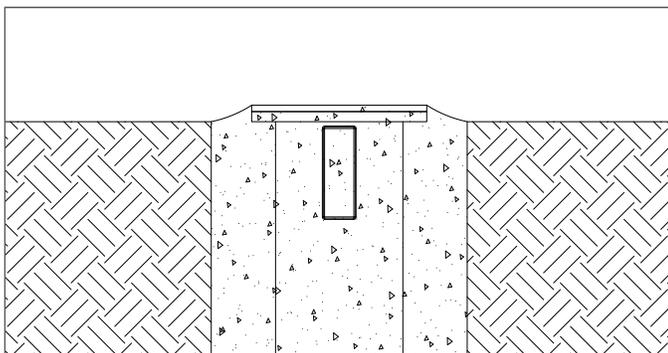
STEP 9



STEP 10



STEP 13



STEP 6: Back fill the drilled hole with drain rock so that when the bollard assembly is placed in the site, the top edge of the receiver will sit at approximately 1/4" above grade.

Install the Bollard Assembly

STEP 7: Keep the bollard assembly in its protective packaging. When ready to install, remove the protective packaging.

STEP 8: Place the bollard assembly in the center of the installation hole. Ensure that the top edge of the receiver sits at approximately 1/4" above grade. This will allow a slight berm to be created with concrete.

STEP 9: Extend or raise the bollard from the bollard assembly to its upright position. Hold a level against it and ensure that the bollard is plumb.

STEP 10: Back fill around the receiver up to approximately 18" with the frost line in mind. Fill from the bottom tamp to ensure the bollard is stable and still plumb.

STEP 11: Turn the key to collapse the bollard back into the bollard assembly, ensuring not to disrupt the assembly's position. *Note: For the R-8471/R-8471-RA models, the key is used only used for collapsing the bollard into the bollard assembly. For the R-8472/R-8472-RA models, the key is used for both extending and collapsing the bollard from the bollard assembly.*

Pour the Concrete

STEP 12: 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 13: Pour the concrete evenly into the site. The concrete should be slightly raised towards the top edge of the receiver to create a slight berm. Avoid disrupting the bollard assembly.

STEP 14: 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.*



Inspect the installation. Abrasions should be covered as soon as possible. For damage repair or other servicing needs, please refer to

<http://www.reliance-foundry.com/wp-content/uploads/retractable-bollard-service-guide.pdf>