



PVC Riser

Installation Instructions

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DOCUMENT

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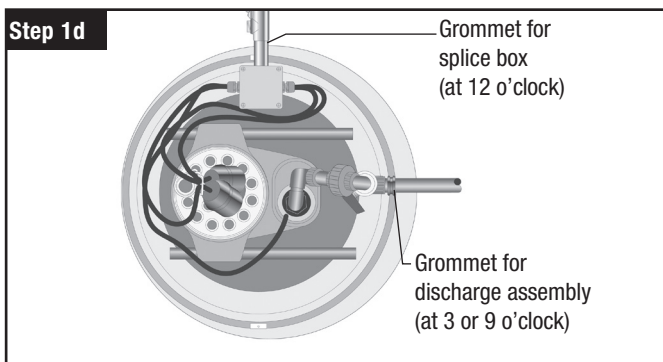
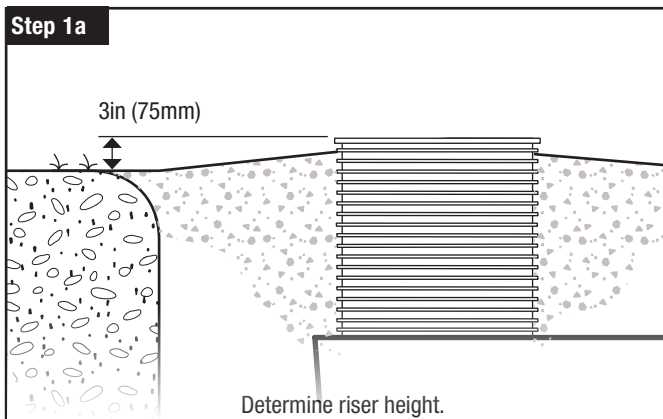
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Introduction

These instructions are for preparing and installing access risers and grommets. Access risers provide access to septic tank openings, simplifying inspection and maintenance procedures. Access riser-to-tank connections must be watertight for the proper functioning of an on-site septic system or effluent sewer system. Orenco strongly recommends watertightness testing of all access riser-to-tank connections after installation.

Installation Steps



Step 1. Prepare the Riser

Step 1a. Determine how high the riser needs to be.

- The top of the riser should be about 3in (75mm) above finished grade after installation and backfilling. This allows 2in (50mm) for tank settling and 1in (25mm) for ensuring drainage away from the riser.

Step 1b. If the riser needs to be cut to size, cut it with a circular saw or table saw.

- Always cut excess length from the bottom of the riser.
- For square, even cuts, a good fit, and a watertight joint between the riser and the adapter, use an Orenco riser-cutting saw guide.

Step 1c. Use the site plans or drawings to find out if riser penetrations are needed.

Step 1d. Use the plans or drawing to mark the locations of the penetrations.

- If plans or drawings aren't available, use the figure for Step 1d as a general guide for placing riser penetrations.
- If you have questions about where to place various riser penetrations, contact your distributor for more information.

Step 1e. Dry fit the riser to the adapter.

- Make sure riser penetration markings are the right sizes and in the correct locations.

Step 1f. If the riser is higher than 3in (75mm) above the estimated final grade, cut it to size per the instructions in Step 1b.

Step 1g. If the riser is too short, use an Orenco grade ring to extend it.

Installation Steps

Step 2. Cut Penetrations and Install Grommets

Step 2a. Drill holes for riser penetrations.

Using Orenco RKHS hole saws:

Cut the hole and grind the ribs down to make a flat, smooth surface for installing the grommet.

- Make sure your hole saw is the correct size and your drill is at least 18V.
- Don't grind too deeply – about 1/16in (1.6mm) is deep enough.

Using standard hole saws:

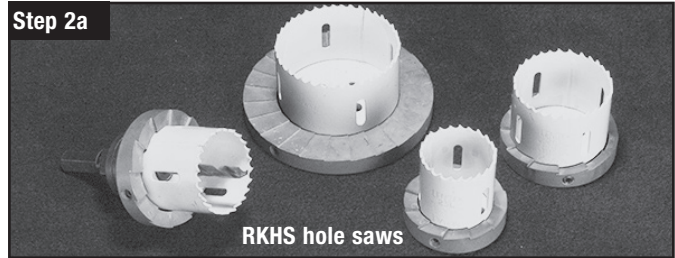
1. Use the correctly sized hole saw to cut a hole, centered on the mark.
2. Trim the riser ribs back 1 in (25mm) from around the hole.
 - Use a grinder or cutting tool to notch the ribs through to the riser wall.
 - Use a hammer and chisel to break off the notched rib sections.
 - Use a grinder to make a flat, smooth surface around the hole.

Step 2b. Clean and deburr the hole and flat surface with a wire brush and deburring knife or tool.

- Be careful not to enlarge the penetration.

Step 2c. Apply a bead of adhesive to the groove in the grommet's outer diameter. For adhesive recommendations, see [NTD-ADH-1, Orenco Adhesives and Dispensers Technical Data Sheet](#).

Step 2d. Firmly press the grommet into the penetration.

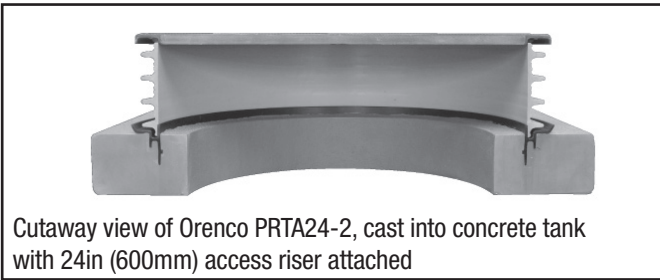


Grommet Hole Sizing Guide

Grommet size, inches (nominal IPS)	Hole saw size
1/2	1
3/4	1-1/4
1	1-9/16
1-1/4	1-3/4
1-1/2	2-1/8
2	2-3/4
3	3-7/8
4	5

For more information on grommet dimensions see Orenco's [NTD-RLA-PG-1, Pipe Grommets Technical Data Sheet](#).

Installation Steps



Step 3. Install the Riser – PRTA24-2 Adapters

Step 3a. Roughen the adapter channel and the bottom surfaces of the riser with sandpaper.

Step 3b. Use a clean cloth and acetone or alcohol to clean the channel and the bottom surfaces of the riser.

- The channel must be clean and dry for a good fit and watertight joint.
- Let the acetone or alcohol dry completely.

Step 3c. Fill the channel with methacrylate adhesive.

- For adhesive recommendations, see [NTD-ADH-1, Orenco Adhesives and Dispensers Technical Data Sheet](#).

Note — If you're using a methacrylate adhesive that's non-self-leveling, use enough to fully fill the channel, with no voids in the adhesive.

Step 3d. Install the riser, aligning any penetrations correctly.

Step 3e. Firmly press the bottom of the riser into the channel.

- Twist the riser back and forth slightly to fully seat it and to create a good bond.
- If the inside seam is not completely filled, add adhesive to form a complete fillet.

Step 3f. Use a tongue depressor, putty knife, or clean cloth to make a good fillet over the inside seam.

Note — If cold weather conditions or frost heave are a concern at the site, contact a qualified engineer or Orenco for additional recommendations on installing ribbed PVC risers.

IMPORTANT — Orenco strongly recommends that all tank risers 12in (300mm) and larger in diameter be equipped with a secondary safety barrier to help prevent falls or unintended entry.

Step 3g. See “[Step 5. Test Riser Watertightness](#)” on page 6 for testing the riser’s watertightness.

Note — Watertight connections are critical for the wastewater system to function effectively and efficiently.

Installation Steps

Step 4. Install the Riser – RRFTA24, RRFTA30, PRTA24, PRTA30, and FRTA24-RVF Adapters

Step 4a. Roughen the bonding surfaces of the adapter and riser with sandpaper.

Step 4b. Use a clean cloth and acetone or alcohol to clean the bonding surfaces of the adapter and the riser.

- The bonding surfaces must be clean and dry for a good fit and watertight joint.
- Let the acetone or alcohol dry completely.

Step 4c. Apply a bead of methacrylate adhesive to the outside of the adapter.

- For adhesive recommendations, see [NTD-ADH-1, Orenco Adhesives and Dispensers Technical Data Sheet](#).

Step 4d. Install the riser, aligning any penetrations correctly.

Step 4e. Firmly press the riser onto the adapter until the bottom of the riser is resting on the concrete (cast-in adapters) or the adapter flange (bolted-down adapters).

- Twist the riser back and forth slightly to fully seat it and to create a good bond.

Step 4f. Apply a bead of methacrylate adhesive to the inside of the access riser-adapter joint.

Step 4g. Use a putty knife, tongue depressor, or clean shop rag to make a continuous fillet on the inside of the access riser-adapter joint.



Note — If cold weather conditions or frost heave are a concern at the site, contact a qualified engineer or Orenco for additional recommendations on installing ribbed PVC risers.

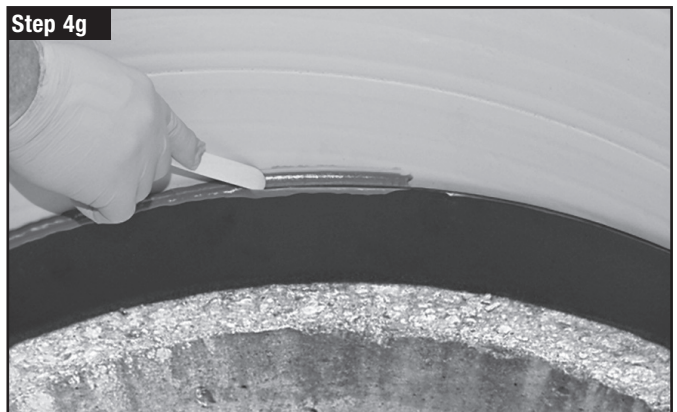
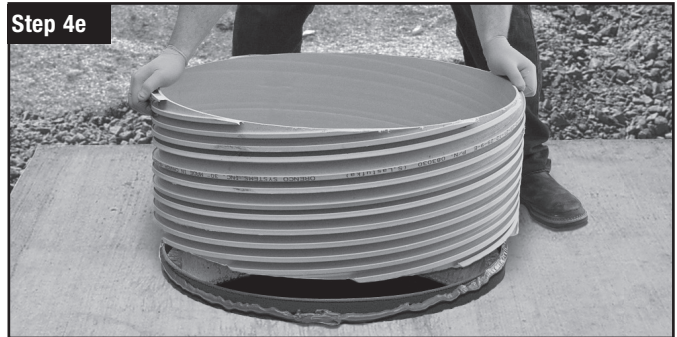
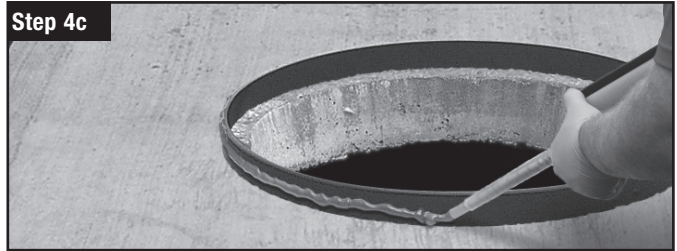


IMPORTANT — Orenco strongly recommends that all tank risers 12in (300mm) and larger in diameter be equipped with a secondary safety barrier to help prevent falls or unintended entry.

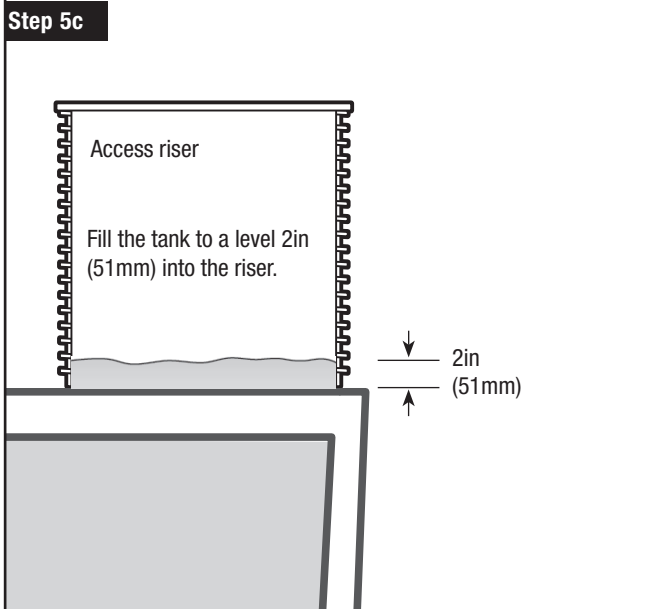
Step 4h. See “[Step 5. Test Riser Watertightness](#)” on page 6 for testing the riser’s watertightness.



Note — Watertight connections are critical for the wastewater system to function effectively and efficiently.



Installation Steps



Step 5. Test Riser Watertightness



IMPORTANT — A watertight tank and watertight riser-to-tank connections are critical for the wastewater system to function effectively and efficiently.

Step 5a. Make sure the adhesive seams have set and the tank has been backfilled according to the manufacturer's instructions – typically to the tank's midpoint.

Step 5b. Plug the inlet (and outlet, if present) of the tank with watertight plugs.

Step 5c. Fill the tank with water to a level 2in (51mm) into the riser.

Step 5d. Wait for the required time before inspecting the riser-to-tank connections for leakage.

- Follow the tank manufacturer's recommendations (or applicable local regulations) for wait times before inspecting the tank for leaks.

Step 5e. Check for any drop in the liquid level inside of the riser and any visible leakage from the riser-to-tank connections.

- At the end of the test, there should be no drop in liquid level and no visible leakage from seams, pinholes, or other imperfections.
- If leaks are found during the test, seal the leaks and repeat the test.

Step 5f. After the riser-to-tank connections are proven watertight, remove the plug(s) and drop the water level in the tank to just below the invert of the inlet or outlet, whichever is lower.