



The above photo shows a proper installation for this style of septic tank – two manhole access risers and two smaller risers to access the inlet and outlet baffles of the tank. This is a very shallow septic tank installation, you will need to dispose of the concrete covers.

Step 2 - Fit risers to septic tank openings

Depending on the diameter of the septic tank manholes, large risers will either sit on top of the septic tank or fit down into the tank opening 1-3 inches. Keep this in mind when determining the height of the riser. It is EASY to trim off the extra – it is HARD to add a few inches more!!

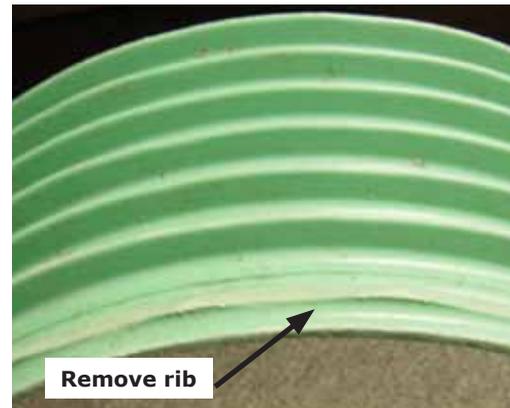


Measure the diameter of the manhole cover:

- If 26-29 inches, the riser will fit down into the tank opening. Measure the distance from ground to the top of the septic tank and ADD 3 inches.
- If more than 29 inches: a 3-foot square fiberglass plate (with 22-inch hole in the center) is needed. It sits over the manhole and reduces the opening so that a 24-inch riser can be used instead of a more expensive 30-inch riser. Measure distance from the ground to top of fiberglass plate.

Hint: To shorten a large riser with ribs, drill a 1/4-inch hole between the ribs above the cut line (photo above) and use the saber/jig saw to finish the cut by following one of the grooves between the ribs. File off any high spots, if needed.

The large riser can be made to fit snugly into a smaller manhole opening by removing one of the ribs (photo at right). Use a circular saw with the guard held open – plunge cutting around the riser until the rib is removed.



Step 3 - Attach risers to septic tank

Risers are sealed to the septic tank with a high strength flexible concrete patch mix that hardens in 15-20 minutes. Brand names include Jet-Set, Rapid-Set, Thorough-Set and Perco-Plug. Mix according to instructions but make small amounts at a time. The stuff hardens FAST. Use good gloves when handling these products.

All risers must be completely sealed to the septic tank. Small risers should have the bottom few inches sanded with rough sandpaper to facilitate a stronger bond. Holes and gaps between the riser and the tank are easily filled if the patch mix is mixed thick and held in place for a few minutes. A wad of newspaper stuffed into the inlet and outlet openings acts as a plug and holds the patch mix until hard.

The company where risers and lids are purchased is also a good source of information regarding proper installation of risers on septic tanks.

For more information, contact:
 Thurston County Environmental Health
 2000 Lakeridge Drive SW, Olympia WA 98502
 360-867-2673 (TDD 360-867-2603)
www.co.thurston.wa.us/health/ehoss



To receive this in an alternative format, please call 360-867-2674.

Septic Tank Manhole and Access Riser Installation



Thurston County
 Public Health & Social Services
 Environmental Health Division



Caution: If septic tank is 20 years old or older, it is advisable to pump the tank and verify its structural integrity and water-tightness. If the tank needs serious repairs, it is better to replace it with a modern septic tank and include risers with the installation. Replacing a septic tank requires a permit from the Health Department.

Exposure to sewage can cause illness and disease. Wear rubber gloves and wash with soap and water after the work is done.

Styles of Septic Tank Risers



Polylok Risers & Lids



Orengo Risers & Lids



Tuf-Tite Risers, & Lids/Covers

Tools and Materials

Tools needed to cut risers to correct size:

- Saws (circular, saber/jig and hand)
- Drill with 1/4" bit
- Rasp or file
- Marking pen
- Measuring tape

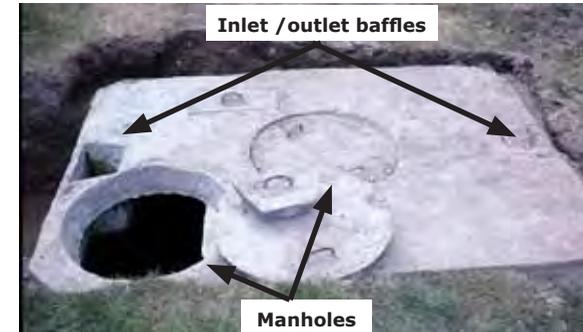
Materials needed to seal risers to the tank:

- High strength concrete patch mix
- Small bucket
- Mixing stick
- Gloves



Step 1 - Uncover top of septic tank

Expose all manholes and the inlet and outlet baffle covers. It is helpful to uncover the entire top of the tank. This allows plenty of room to work and leaves an area to stack the old concrete lids.



To properly install risers, all manholes (holes that are 24" or larger) must be retrofitted and the tank inlet and outlet baffle covers (if separate from the manholes) must also be retrofitted.

The photo at right is a partial installation of risers – the owner will still have to dig to expose the inlet and outlet baffles (arrows) to inspect and clean. Two additional 12" diameter risers are needed to complete this job.

Also, uncovering more of the tank would have allowed the old concrete covers to be left in the hole and backfilled. No disposal issues!

