

# Septic System Information

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## for Rhode Islanders

### ACCESS RISERS AND EFFLUENT FILTERS

#### What are access risers?

Access risers are installed on the septic tank to easily locate the tank and to provide access to the tank for inspection and maintenance. The risers are attached to the top of the tank over the outlet and the inlet openings of the tank (or the pump-out opening) and they extend to ground level. Risers can also be installed to allow access to other system components such as distribution boxes or treatment components of enhanced treatment systems.

#### Why do I need access risers?

- ▲ Risers make it easy to inspect and maintain your septic system. You don't have to search for the tank or pay an inspector to find it.
- ▲ Risers avoid the need to dig up the lawn for every inspection.
- ▲ Risers are required by Rhode Island regulations for new tanks, and some towns require them for both new and old tanks.
- ▲ Risers protect your investment. Regular maintenance is the best insurance that your system will operate for years to come, avoiding costly repairs or replacements.
- ▲ Risers encourage maintenance by making access easy and by reminding the homeowner they have a septic system.

#### Are there different types of access risers?

Yes, three types of risers are available: concrete, PVC, and high-density polyethylene.

- ▲ Concrete risers are bulky and heavy, making them a bit difficult to install. Their lids are also heavy, making it hard to lift when accessing the tank. Usually backhoes are needed to install this type of riser. Some people find the lids unsightly and hard to mow around. Concrete risers are not completely waterproof, both the lids and where the riser is connected to the tank can leak, causing problems if surface or ground water leaks into the tank.
- ▲ PVC risers are easy to install and have light fiberglass lids that make it easy to access the tank. Green covers at grade fit into the landscape. PVC risers are gasketed & waterproof, so your tank is fully protected from leaks. They fasten easily to tanks.

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For More Information: Technical Assistance, training programs and information. URI Cooperative Extension's On-Site Wastewater Training Center George Loomis, Program Director, (401) 874-4558, [gloomis@uri.edu](mailto:gloomis@uri.edu) David Dow, Program Manager, (401) 874-5950 [dbdow@uri.edu](mailto:dbdow@uri.edu) Website: [www.uri.edu/ce/wq](http://www.uri.edu/ce/wq)



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- ▲ Polyethylene risers are difficult to connect securely to the tank because most adhesives do not bond to polyethylene. The lids on these risers are also not as strong as fiberglass, requiring them to be domed to add strength, causing the lids to stick up above grade.

#### How much do risers cost?

The cost of a riser depends largely on the diameter and height you need. For the most accurate price information for your tank, call a local supplier or installation contractor.

#### Estimated Costs

- ▲ Concrete: \$50 - \$100
- ▲ PVC: \$150 - \$225
- ▲ Polyethylene: \$100 - \$200



*Access risers installed to grade allow for ease of maintenance and inspection. Here the effluent filter is being reinstalled after being cleaned.*

## Where can I get an access riser?

Ask your contractor for suppliers of the type of access riser you want. For more information, contact the On-Site Wastewater Training Center at (401) 874-5950.

## What is an effluent filter?

An effluent filter is an inexpensive plastic screening device designed to fit into the outlet end of a septic tank. The filter prevents solids from leaving the tank and clogging the drainfield.

## Why do I need an effluent filter?

Solids that get into the drainfield can clog pipes and crushed stone. Solids washing into the drainfield from the septic tank are one of the most common causes of septic system failure. The effluent filter helps to prevent solids carry over, protecting your system. Effluent filters can be installed in new or existing septic tanks. There is a filter to fit most tanks.

Effluent filters are relatively inexpensive and easy to maintain. A clogged filter means it's working. The solids captured by the filter were prevented from leaving the septic tank, entering the drainfield and clogging the drainfield. Filter maintenance is easy, especially if there are access risers. You simply remove the filter from the outlet end of the tank and hose it off over the inlet end of the tank. This can be done by the homeowner or service provider.

## How much do filters cost?

Effluent filters cost between \$25 to \$100 if you already have a sanitary tee at the tank outlet. The cost will rise if you need to install this tee.

## Where can I find these effluent filters?

Effluent filters are available from a variety of companies. Ask your contractor for suppliers or to order one for you. For more information, contact the On-Site Wastewater Training Center at (401) 874-5950.

Most septic pumpers, excavators, or septic service people can install your access riser and effluent filter.

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## Finding the tank

To save yourself time and money when having the risers and filter installed, locate the septic tank yourself before the installer arrives. To find the tank, first locate where the building sewer leaves the house through the foundation or slab. Then use a probe (make sure there are no underground wires nearby if the probe is metal) to poke into the ground until you find the inlet end of the tank. This inlet is usually within 15 feet from where the building sewer exits the house. Typically, the tank is located between one and three feet below the ground surface, though some could be deeper. After finding the inlet end, locate the four corners of the tank. A thousand-gallon tank is generally five to six feet wide and nine to ten feet long.

## SAFETY FIRST!!

When dealing with your septic system, be sure to use the proper safety precautions. Septic tanks produce noxious gases that can be deadly. Under no circumstances should you place your head down into a septic tank riser. In addition, always wear eye protection and gloves when coming in contact with any part of the system, whether it is a filter or manhole cover. If you open a manhole, be sure to recover it correctly and promptly. Do not leave an access open or unsecured. Always wash your hands thoroughly after working on the septic system.



*Locate the septic tank by probing with a metal rod. Be sure to avoid underground electric lines. Do not probe where there may be underground electric lines.*