Recommended Upgrades for Your Septic Tank

ACCESS RISERS, EFFLUENT SCREENS, & TWO COMPARTMENT TANKS

Managing your septic system

Basic septic tank upgrades can simplify maintenance, improve system function, and protect your drainfield for long-term savings. Access risers and effluent screens are low-cost improvements for existing or new tanks. Two-compartment tanks are a cost-saving option, if you are installing a new tank.

ACCESS RISERS

Access risers are installed on the septic tank. They help owners and inspectors easily locate the tank, and they provide access for maintenance and repair. They also avoid the need to repeatedly dig up the lawn for routine inspections. In Rhode Island, risers are required on new tanks, and in some towns, they are required on older tanks as well. Check with your town hall for their guidelines.

PVC Risers Are Recommended

PVC risers are watertight, and they have lightweight, yet strong, fiberglass lids. The lids are safely secured using bolts and cannot be removed without proper equipment. As shown above right, the risers can be cut to grade and are less conspicuous in the landscape.

Concrete Risers

Concrete risers, such as the one shown in the lawn to the right, are sometimes cheaper than alternative risers, such as the PVC riser shown above. However, the heavy lids of concrete risers make access difficult. In addition, lids are not waterproof, causing problems if water leaks into the tank. Most homeowners also find concrete risers unsightly in the landscape, as they often cannot be cut to grade.

EFFLUENT SCREENS

An effluent screen is an inexpensive plastic filtering device that fits into the outlet end of the septic tank, as shown below left. The screen helps prevent solids from leaving the tank and clogging the drainfield, *one of the most common causes of septic system failure.*

If your screen is clogged, then it's working! Screens usually have to be cleaned more frequently than routine inspections occur, especially if you have a garbage disposal. You can hire someone to clean the screen, or you can clean it yourself. Simply remove the screen from the outlet end of the tank and hose it off over the inlet end. It is always wise to use rubber gloves and eye protection when cleaning the screen.

TWO-COMPARTMENT TANKS

If you are installing a new system or upgrading an existing one with a new tank, a two-compartment tank offers several advantages. The vertical wall positioned about two-thirds from the tank inlet helps trap solids more effectively and offers better protection of the drainfield. The larger size – generally 1500 gallons vs. 1000 gallons for a single compartment tank – means less frequent pump-outs.

Two-compartment septic tanks require only slightly more space than single compartment tanks, but they do cost a little more initially. For most homeowners, this cost difference is more than outweighed by long-term savings in pump-out and extra protection to the drainfield.

Some towns believe so strongly in the risk prevention offered by two-compartment tanks that they require all new systems to use them, so check with your local town hall.

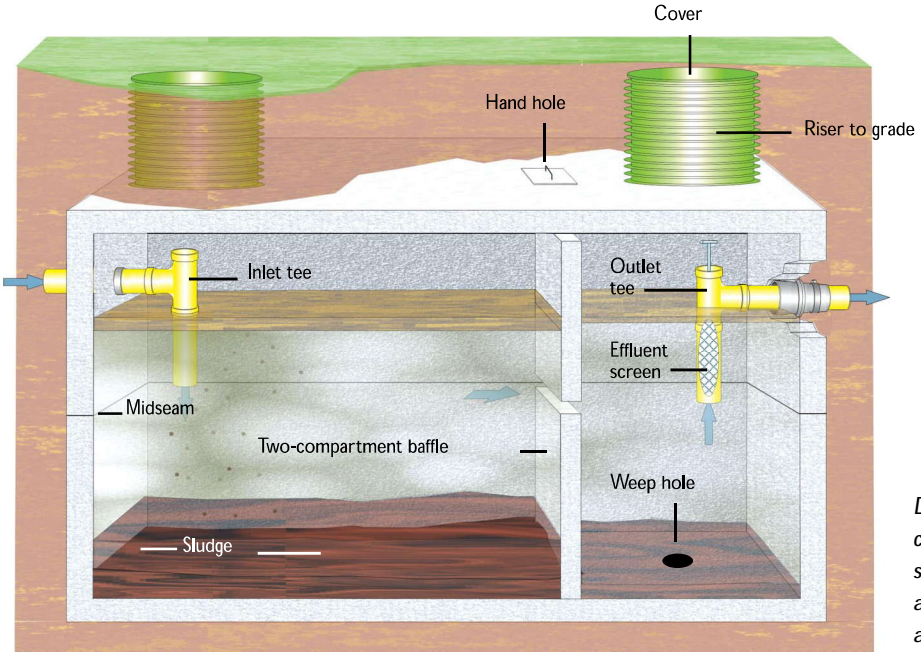

Diagram of a two-compartment septic tank with access risers and an effluent screen.

Additional Information Is Available

This series also includes fact sheets about first maintenance inspections, routine maintenance, and pump-outs. Additional information is available at: www.uri.edu/ce/wq or call the URI Onsite Wastewater Training Center at 401-874-5950.

Septic System Checkup: The Rhode Island Handbook for Inspection. RI Department of Environmental Management. Available at www.state.RI.us/dem. Additional information is available at: www.uri.edu/ce/wq/owtc/html/owtc.html

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