

# Polylok Riser Installation Instructions

To ensure the desired performance is achieved from the Polylok riser system, the riser and cover must be installed properly. The following is a list of instructions that must be followed to achieve a successful watertight installation.

1. The most critical joint for water testing purposes is the joint where the riser is cast into the lid of the tank. Although this connection should not be a problem, visual inspection is required to make sure there are no cracks or gaps between the riser and concrete. Should you find it necessary, seal any areas in question with sealant.
2. Gaskets are installed in all riser sections and covers. Although they are held in place with adhesive, there is always a chance that a gasket could be dislodged or become damaged. These gaskets must be in place if a watertight installation is required. A riser section or cover with a damaged or missing gasket should not be installed. Should you find a gasket damaged or missing, you can repair by applying a bead of silicone or butyl mastic over the area in question before attempting an installation.
3. When adding additional riser sections use **#10 x 1.5" stainless steel square drive screws** to fasten the sections and covers together. **ALL** screws must be installed in each riser section and cover to ensure a watertight connection. In addition, the structural integrity of the risers is also dependent on the fact that all screws are installed properly. We recommend an alternate screw tightening pattern be used to insure even pressure on the risers and cover. Failure to do this could cause the riser sections to compromise the seals and possibly fail. **Note:** It is recommended to use #10 x 1.5" square drive stainless steel screws to fasten riser sections and covers together.
4. Once the appropriate number of risers has been installed, the cover should be installed and screwed down before backfilling. The fill should be distributed as evenly as possible around the riser as it is brought up to grade. You can cause deformation or failure of the riser sections if the fill puts excessive lateral pressure on the riser column during installation. Proper compaction is also important to eliminate the chance of shifting and placing undue stress on the riser column in the future.
5. Each riser section has a ring around the outside. In cold weather climates where frost heave may be a potential problem, this ring needs to be removed. This should be done to each riser section before it is screwed in place. You can simply run a knife between the ring and the riser. This will separate the two pieces and the ring will be removed.
6. Although the Polylok risers and covers are very strong, it should be noted that they are not rated for H-20 loading. We have had risers tested to accept a uniform load of 6,000 lbs. and covers center load tested at 2,500 lbs.  
**Note:** It is not recommended that they be buried more than 3 feet below grade.
7. **Recommended:** Use Polylok's Safety Screens for installations near children and pets. Safety Screens act as a secondary layer of protection if the riser cover is unknowingly damaged or removed. The screen fits in the upper most riser stack of our Polylok Risers and prevents entry into the septic tank.
8. Should a riser boss (internal riser ribbing) crack when screwing riser sections together, simply rotate the riser so that a new boss can be used to screw the sections together. If there are no undamaged bosses available due to over torquing then it is recommended that the riser be replaced. If all the bosses are damaged on a riser that is at grade level then it must be replaced.

# Installation Precautions for Severe Situations

Although the Polylok riser system is designed to be watertight, there are circumstances where extra measures should be taken to ensure a totally watertight installation. Common sense will dictate most of these situations, but some areas of concern are as follows:

1. When there is a potential for ground water levels to be high on a regular basis
2. Installations at or near sea level where tides can be a factor
3. When soils are very sandy and abnormal amounts of shifting may occur

There are likely several methods to ensure that even in poor installation conditions, a watertight installation can be achieved. In addition, many different products can also be used.

## Three options to consider:

### **Option 1:**

Before the risers are installed and screwed together as described in our installation instructions, a bead of caulking material can be used between the joints. In most cases, any type of regular silicone caulking should be fine. The risers can then be screwed together.

### **Option 2:**

With the risers installed as per the installation instructions, the joints may be wrapped on the outside. This can be done with a material known as ConWrap. This product is a butyl resin sealant laminated to a chemical resistant polyolefin plastic barrier. With the backing paper removed, the ConWrap simply wraps around the outside of the joint making it impervious to infiltration of any kind. No primer is required, as the butyl material will stick to the plastic. In order to ensure a good bond the riser sections must be clean and dry. It is recommended that a minimum 3" width ConWrap be used. This is to ensure there is enough material to adhere to the smooth portion of the riser.

### **Option 3:**

With have added heavy duty rubber gaskets which can also be used in the above situations to seal the risers, we also use these in our riser and filter basins to seal all joints.

