

Loudoun Onsite Wastewater Tank Structural Requirements

Tank structural standards

These load factors must be calculated or verified by test and certified by a Professional Engineer licensed by the State of Virginia.

The tank must be designed, as a minimum, to withstand 300 pounds per square foot live load top loading.

For every 1 ft. increase in depth beyond 2', the tank must support an additional 150 lbs per square ft. for each foot of soil or portion thereof in excess of 2 feet. Maximum tank burial is 4 ft. below final grade.

Septic and pump tanks must also be able to withstand 2500 lbs of concentrated wheel load in the center of the tank, at the surface, in addition to the above loading. It is possible for the weight bearing standards to be met with specific construction parameters such as depth or backfill subject to review.

Additional considerations

Precast tanks must be labeled as a Loudoun tank on the inlet end top surface. The label shall also be embossed with the name of the manufacturer, liquid capacity in gallons, and date of pour.

Risers must be cast into tanks over all access ports.

Boots for concrete tanks must meet ASTM C-923 and have a clamp assembly to resist pipe deformation. For poly and fiberglass tanks gaskets/grommets must meet ASTM C-923.

For questions call Jerry Franklin @ (703) 771-5802 (Effective 4/1/2010)