

UNDERGROUND TANKS

INSTALLATION INSTRUCTIONS

Underground Water Storage Systems

2008
Revision 01

Water runoff caused by sloping terrain, adjacent structures, or paved surfaces can be problematic if the site selection and installation are not managed properly.

When selecting a site, care must be taken to insure all provincial and municipal regulation are adhered to including the appropriate permits, setbacks and inspections. A critical step is the site survey; the installer must first assess the proposed site in terms of its existing environmental conditions — geology, prior land use, slopes, swales, wetlands, areas of potential flooding, landscape, vegetation/roots, water wells, utilities, lot lines, site improvements/structures, ect... in particular current runoff and water shed conditions need to be assessed, so the tank will function without concerns for ground water infiltration. Landscape position, landforms, sloping terrain, structures and paves surfaces affect surface and subsurface drainage patterns that can in turn affect system location.

Avoid areas where water runoff from any of these features is directed. Landscape features that retain or concentrate surface and subsurface flows such as swales, depressions and or floodplains must be avoided.

Excavation: figure 1

- Burial depth [A] (top of the tank to finished grade) may range from 9" to 36".
- Side wall and end wall allowance [B] should be between 18" and 24".
- Bedding [C] must be a well-compacted 50% sand/gravel mixture with a minimum depth of 6" in soil terrain and 12" in rock terrain. Shift tank from side to side to help settle tank into bedding. Use 3/8" to 1/2" pea or river gravel. **DO NOT USED CRUSHED ROCK.**
- Do not over excavate or 'belly-out' the excavation – **KEEP BOTTOM OF EXCAVATION FLAT** (as shown).

- All tanks must be properly vented.

Lid and Manhole Extension: figure 2

- Instal manhole extension (riser) in accordance with provincial, municipal and local code requirements.
- Install the lid/manhole extension before the addition of backfill.

Backfilling Exterior: figure 3

- Clean debris-free native soil can be used as backfill material, provided it does not create voids greater than 1/4"
DO NOT USE ANY SOIL CONTAINING CLAY AS BACKFILL
- Backfill around the perimeter of the tank in 12" layers: lightly compact each layer. **NEVER BACKFILL ON ONE SIDE ONLY. BACKFILL ALL OF THE OUTLINE OF THE TANK UNIFORMLY IN 12" LAYERS.**

Finishing: figure 4

- Backfill to the finished grade to a maximum of 36".
- Important! Mound the soil over the tank to provide settling in the excavated area. The lid with riser must extend a maximum of 3" above finish grade or per applicable code.

