



Den Hartog
INDUSTRIES, INC

ACE ROTO-MOLD • INJECTION MOLDING • BLOW MOLDING • SOWJOY
"Always At Your Service"

Publication 10149

Below Ground Cistern Tank Installation Guidelines

Important – Please read carefully before installing product

1. General Information

- a) Check with the governing agency in your county or city for specific installation requirements for cistern tank systems. These codes may specify different installation details than presented in this guideline and as a result will have precedence.
- b) Never install this product in an area with a high-water table or in a water-saturated clay mix. Failure to heed may result in tank damage and/or contamination from leakage.
- c) Site where tank is to be installed must provide adequate drainage away from tank. Failure to heed may cause a high-water table around the tank and cause tank to collapse and/or contamination from leakage.
- d) Never install this product beneath vehicular traffic. Tank is not designed for these traffic loads. Failure to heed may result in tank collapse and/or contamination from leakage.
- e) Use of this product in areas with frost depths below 36" will require suitable submersible tank heaters to be installed. Heaters must be UL rated for this application.
- f) It is recommended that if tank is to be utilized for drinking water that a suitable means of filtration and treatment be provided and that the water in the tank be checked regularly against your local drinking water standards.
- g) Tanks that are equipped with above ground access must have the access cover securely locked. The DHI riser option provides a locking ear so that access cover can be secured with a tamper proof lock.
- h) Be certain to provide venting to the tank to prevent pressure and vacuum loads. Failure to do so may result in tank damage.
- i) Tank is designed for maximum vertical load of 500 lbs. per square foot. Failure to heed may result in tank collapse and/or contamination from leakage.

2. Site Excavation- (Figure 1)

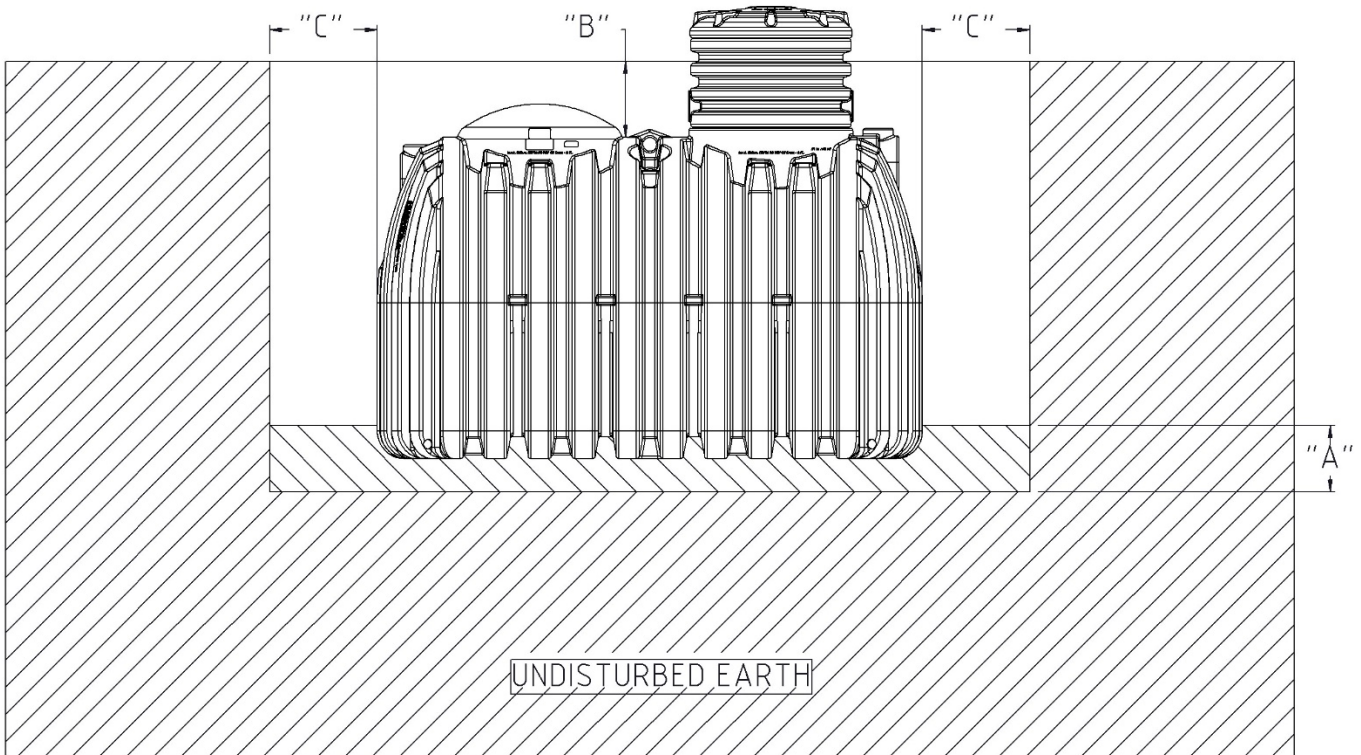
- a) Surrounding site soil must be undisturbed soil or a well-compacted engineering fill.
- b) Measure tank width, height and length to establish excavation profile.
- c) Excavate and provide a well-compacted support layer of sand / gravel mixture so that Dimension 'A' is a minimum of 6" for soil terrain and 12" for rocky terrain.
- d) Allow Dimension 'B' to be a maximum of 36".
- e) Allow Dimension 'C' to be a minimum of 18" and a maximum of 24".
- f) Place and center tank in excavated hole using lifting ears provided. Do not lift tank with lid opening.
- g) Be certain that once tank is placed in excavated hole it is level.



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FIGURE 1: SITE EXCAVATION



(Tank may vary from what is shown)

3. Tank Plumbing

- Tank features a variety of fitting installation options. Be certain all plumbing materials are rated for the intended application for the tank.
- Supply lines should have flexible couplings installed to accommodate soil expansion, contraction and settlement.

4. Site Backfilling- (Figure 2)

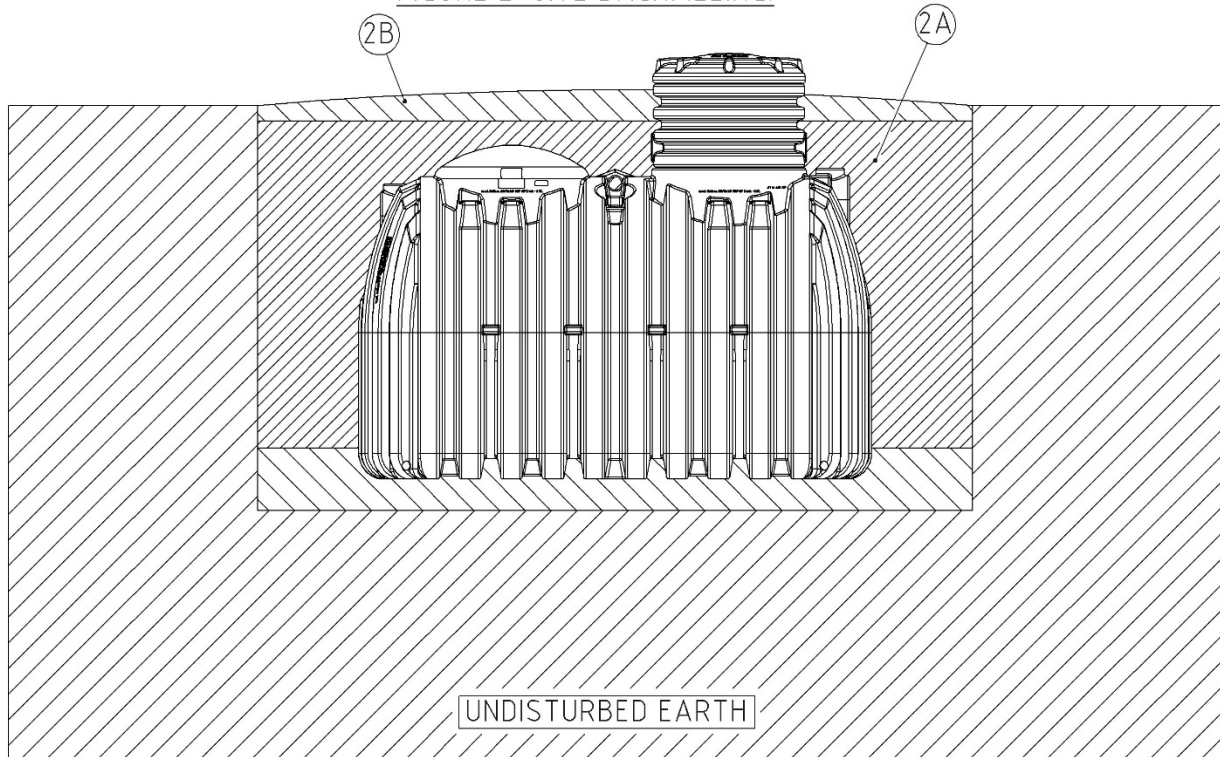
- Backfill around tank using a sand / gravel mixture
- Mound soil over tank to provide sufficient site drainage and to prevent pooling around tank lid and riser opening.
- Site should be periodically checked for soil settlement and maintenance provided as necessary for adequate drainage.
- See 4c in publication 10039 for sentence.



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FIGURE 2: SITE BACKFILLING.



5. Warranty

- a) Reference Warranty Document, *Limited Warranty Polyethylene Tanks* (WIR7.5-57)