



Carlson Commercial & Industrial Services Ltd.
1035 Mission Street
Winnipeg, MB, Canada R2J 0A4
204-233-0671 Phone
204-233-6938 Fax
info@carlsonindustrial.ca

COMPOSITE BURIAL TANK INSTALLATION INSTRUCTIONS & WARRANTY CARD

****IMPORTANT****
***INSTALLATION
INSTRUCTIONS AND
WARRANTY CARD
ENCLOSED.***
****DO NOT DESTROY****



***THIS PAGE HAS BEEN LEFT BLANK
INTENTIONALLY.***



USE ONLY SPECIFIED PEA GRAVEL or CRUSHED STONE AS BACKFILL MATERIAL THROUGHOUT.

It must **NOT** contain contaminants of any kind, such as sticks, rocks, lumps, etc.

The pea gravel or crushed stone shall be of material that is clean and free flowing and have no more than 3% passing a No. 8 sieve (2.38 mm screen size opening). The material shall have a minimum dry gravel density of 1520 kg/m³ and meet the requirements of ASTM C33, Standard Specification for Concrete Aggregates, paragraph 7.1 for quality and soundness.

Tanks are to be lowered into excavation using lifting lugs provided. Or by using straps rated for the load

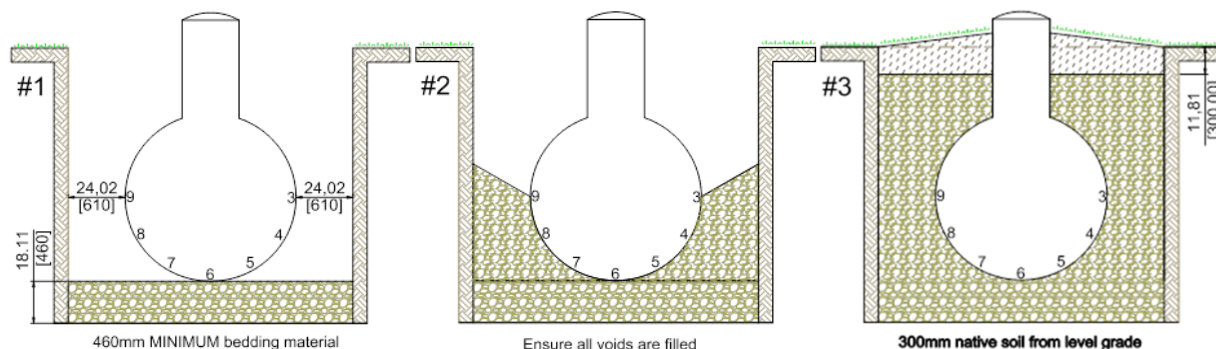
Carlson burial tanks must not be buried greater than the buried depth as indicated on the tank and lid and as described by model number (XXXXX .6, 2.14, 3.05), measured from the top of the tank to finished ground level.

(Illustration #1) Carefully lower tank onto compacted 460mm bed of either pea gravel or crushed stone. **LEVEL TANK.** This is critical for proper operation of all tanks. Fill tank with no more than 610mm of water above height of backfill material.

(Illustration #2) Connect inlet and outlet piping with flexible connectors to compensate for ground movement. Backfill around tank in uniform 300mm layers of either pea gravel or crushed stone, ensuring a firm envelope around tank. The quality of the envelope between 3 and 9 o'clock position is critical to ensure long term performance.

Continue backfilling from the 3 and 9 o'clock positions, in 305mm increments, with pea gravel **only** until you have reached 305mm from grade level and consistent tank cover is achieved.

(Illustration #3) Finish backfilling the last 305mm with native soil until you reach grade. It is recommended that the desired elevation at the manhole extension be slightly higher than the undisturbed edge of the excavation (#3). This will ensure proper drainage, and allow for the eventual settling of the backfill.



CAUTION:

To avoid flotation of tanks installed without ballast it is recommended that the tank be left 1/3 full over the winter months to avoid flotation in spring high water conditions.

WARNING:

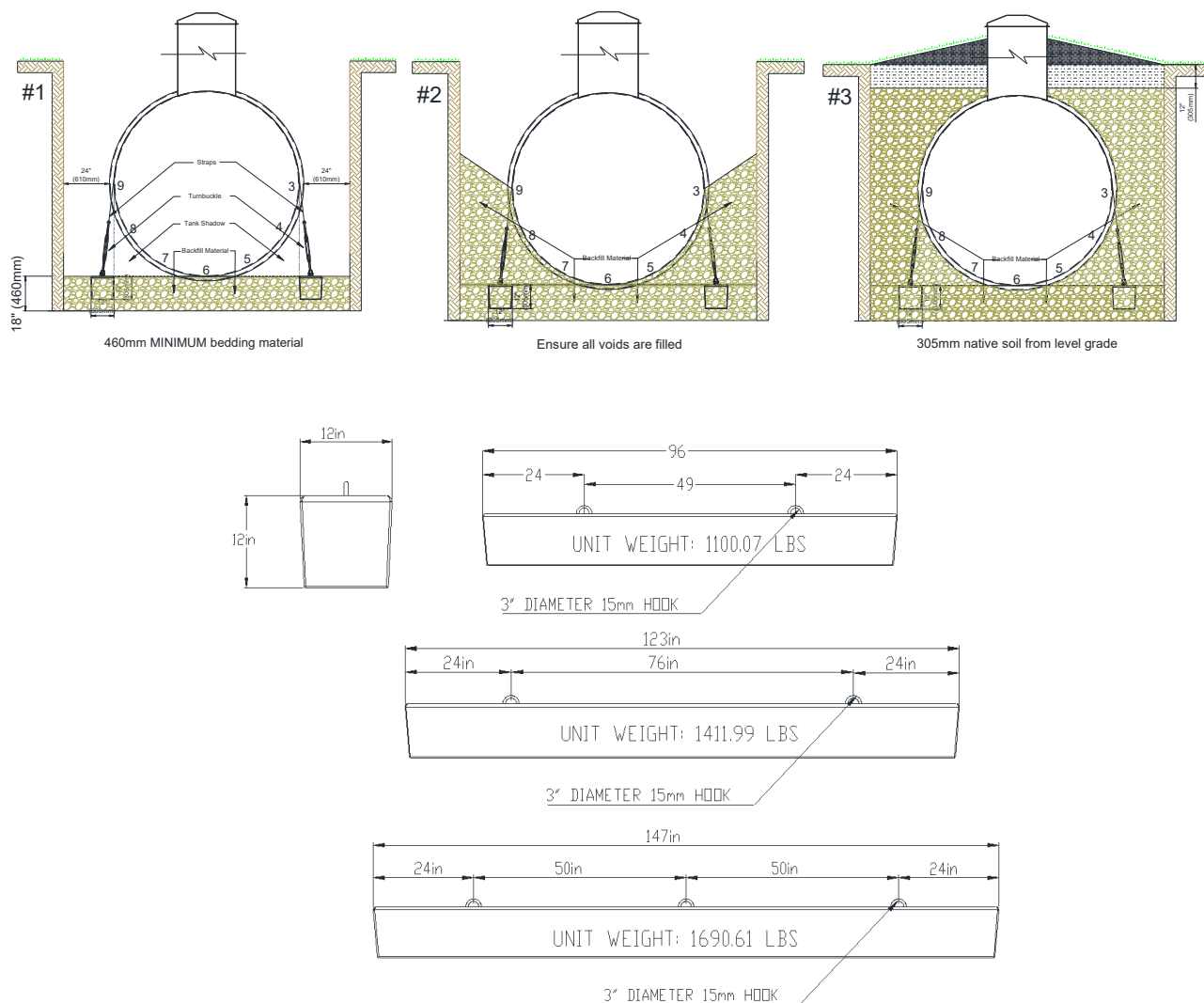
Failure to follow recommended installation may result in tank failure and void warranty.



CEC-AFD (Carlson Anti-Floatation Devices: These are used when there is a high-water table, and a request is made to provide a hold down system to prevent floatation. Stringent elevation of site conditions must be conducted by owner and installer.

To prevent tank flotation during the life of the installation due to **high water table**, Carlson recommends using our CEC-AFD (Carlson Anti-Floatation Devices) including concrete ballast anchors with a minimum of 460mm bedding material. The use of 75mm wide anchoring straps and galvanized turnbuckles is also recommended. Snug the turnbuckles only enough to straighten straps and provide slight resistance, backfill as per below instructions.

Concrete ballasts must be sized so that there is +/- 2ft of ballast at each end of the tank. A minimum of 2 straps are required per tank and each Strap requires 2 x Jaw-to-Jaw Turnbuckles. Straps should be placed a minimum of 48" to a maximum of 126" apart based on tank length, burial depth, sizing and quantity of ballasts, and water table.

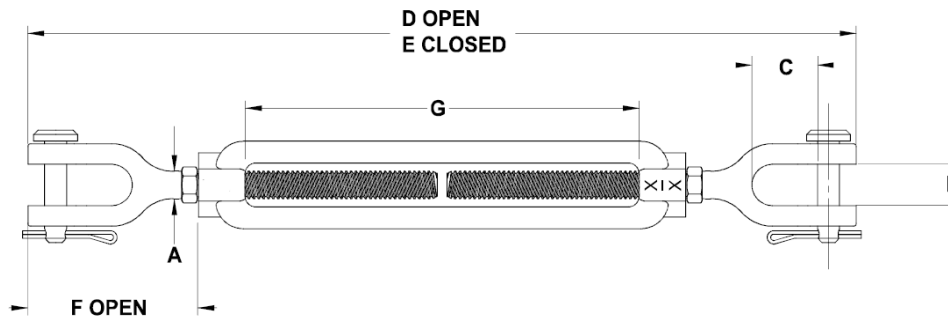


WET HOLE INSTALLATION: Use only one-piece tank with the bonded leak proof manway collar. Also be sure to seal any manway extension connections to ensure fluid does not enter or exit the tank.



Carlson Part No.	EE	3	9	03	T3	Rated Capacity * (lbs.)		
EE3903T3x(L)	Eye to Eye	3 Ply	9,800# Webbing	3 inch Wide Webbing	Eye Type 3	Vertical	Choker	Basket
						12,500	10,000	25,000

5ft Ø Tank	6ft Ø Tank	8ft Ø Tank	10ft Ø Tank
Strap Length (ft)	Strap Length (ft)	Strap Length (ft)	Strap Length (ft)
9	12	16	22



Carlson Part No.	Diameter x Take-Up	B	C	D (Open)	E (Closed)	F (Open)	Approx. Weight (lbs)	WLL (lbs)
TB-5-6-.75X9	3/4 x 9	1.01	1.76	28.5	19.5	4.19	5.46	5,200
TB-8-10-.75X12	3/4 x 12	1.02	1.75	34.75	22.75	4.29	6.43	5,200

5ft Ø Tank	6ft Ø Tank	8ft Ø Tank	10ft Ø Tank
Jaw-to-Jaw Turnbuckle (in)	Jaw-to-Jaw Turnbuckle (in)	Jaw-to-Jaw Turnbuckle (in)	Jaw-to-Jaw Turnbuckle (in)
9	9	12	12

WARNING:

Failure to follow recommended installation may result in tank failure and void warranty.



***THIS PAGE HAS BEEN LEFT BLANK
INTENTIONALLY.***



CEC INC. WARRANTY REGISTRATION FORM

10 YEAR FIBERGLASS LIMITED WARRANTY CARD

CARLSON fiberglass tanks are warranted against defects in material and workmanship according to our specifications, providing that assembly and installation is proved to be correct, and in accordance with CARLSON installation and assembly instructions.

Manufacturer's Warranty applies only to products manufactured by Carlson. Fibreglass tanks are warranted against defects in material and workmanship and will perform according to our specifications provided assembly and installation has proved satisfactory to Carlson or its agents.

Should a CARLSON tank prove to be defective, a replacement tank would be provided at no cost or repaired at our option, up to the second year free. Prorated, Customer/Carlson% Costs (3rd year 20/80%, 4th year 30/70%, 5th year 40/60%, 6th year 50/50%, 7th year 60/40%, 8th year 70/30%, 9th year 80/20, 10th year 90/10%).

What is not covered?

1. This warranty does not cover:
2. A product which has been repaired or altered without written authorization from the manufacturer or authorized Dealer or Distributor as to affect its use or operation.
3. Equipment or accessories, which are not manufactured by Carlson, whether or not warranted by other manufacturers.
4. Leakage from customer tanks that have been improperly assembled/installed.
5. Product that has been abused, mishandled, accidentally damaged or operated contrary to printed instructions provided.
6. Loss of time, inconvenience, travel expense or other matters not covered hereunder.
7. Excavation, landscaping, or other installation/removal costs.
8. Products not paid in full per terms of sale.
9. Any force majeure.
10. For additional warranty information see CEC INC. WARRANTY CLAIM FORM or contact the factory

No oral or written information or advice given by Dealers, representatives, agents, or employees shall create a warranty or in any way increase the scope of this warranty. The manufacturer does not authorize any person to extend the time of this warranty or to create or assume for it any other obligation or liability with respect to its products. No person, including Dealers and Distributors are authorized to make repairs or replacements under this warranty without the prior written approval from the Manufacturer. This warranty is not transferable or assignable.

THE MANUFACTURER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INCIDENTAL DAMAGE RESULTING FROM A BREACH OF THE EXPRESSED OR IMPLIED WARRANTY WHICH IS NOT DISCLAIMED HEREIN NOR ANY OTHER LOSS OR DAMAGE, EXCEPT AS SET FORTH ABOVE.

**PLEASE COMPLETE AND RETURN FORM ON BACK OF THIS PAGE TO
ENSURE WARRANTY COVERAGE**



This form must be completed at the time of installation and returned to Carlson for warranty registration within fifteen (15) days of burial. Warranty protection may not be validated if not returned within (15) days of burial.

END USER INFORMATION

NAME: _____ DATE: _____
OPERATING NAME: _____ PHONE: _____
PHYSICAL ADDRESS: _____ FAX: _____
CITY: _____ PROVINCE: _____ EMAIL: _____
POSTAL CODE: _____

INSTALLER INFORMATION (IF DIFFERENT FROM ABOVE)

FIRST NAME: _____ PHONE: _____
LAST NAME: _____ FAX: _____
PHYSICAL ADDRESS: _____ EMAIL: _____
CITY: _____ PROVINCE: _____ POSTAL CODE: _____

PRODUCT INFORMATION

PURCHASED DATE: _____ INVOICE No.: _____
PURCHASED FROM: _____ PHONE NUMBER: _____
TYPE OF PRODUCT: (Example: Septic Holding Tank, Pump-out Tank, Chemical Storage Tank, etc.) _____
MODEL: _____ SERIAL NUMBER: _____
DATE INSTALLED: _____

PREINSTALLATION CHECKLIST:

READ ALL BURIAL INSTRUCTIONS FOR TANK: YES ☐ NO ☐
VISUAL INSPECTION COMPLETED: YES ☐ NO ☐
No evidence of physical damage to tank or accessories (Loose items, holes, cracks, separation, Inlet and Outlet are located according to drawing)
If any physical damage is found DO NOT INSTALL tank! Contact your dealer or the manufacturer prior to proceeding.
BACKFILL MATERIAL CONFORMS TO INSTALLATION INSTRUCTIONS: YES ☐ NO ☐
EXCAVATION (HOLE DIMENSIONS CONFORM TO INSTALLTION INSTRUCTIONS): YES ☐ NO ☐
HOLE CONDITION:
Water is not anticipated to reach the tank and area is not subject to flooding DRY ☐
Excavation hole may see water accumulation and/or area is subject to flooding (If wet please refer to special condition installation instructions) WET ☐

DURING INSTALLTION CHECKLIST:

460MM (18") BEDDING MATERIAL HAS BEEN INSTALLED AND COMPACTED YES ☐ NO ☐
VISUAL INSPECTION OF TANK AFTER SETTING IN HOLE COMPLETED: YES ☐ NO ☐
No evidence of physical damage to tank or accessories (Loose items, holes, cracks, separation, Inlet and Outlet are located according to drawing)
If any physical damage is found DO NOT BACKFILL tank! Contact your dealer or the manufacturer prior to proceeding.
IF WET HOLE TANK IS PROPERLY SECURED AS PER SPECIAL INSTALLTION INSTRUCTIONS USING CEC-AFD: YES ☐ NO ☐
FLEXIBLE PIPING CONNECTIONS HAVE BEEN USED TO REDUCE STRESSES ON TANK AND PIPING: YES ☐ NO ☐
BACKFILL INSTALLED AND COMPACTED IN 305MM (12") LAYERS: YES ☐ NO ☐
INDICATE FINAL BACKFILL OVERBURDEN FROM TOP OF TANK TO GRADE: (MUST BE \leq RATED BURIAL ON TANK LABEL) _____/____ METERS/FEET

SIGNATURE OF OWNER/END USER

NAME: _____
SIGNATURE: _____
DATE: _____

I affirm that the foregoing is true and correct.

SIGNATURE OF INSTALLER/CONTRACTOR

NAME: _____
SIGNATURE: _____
DATE: _____

I affirm that the foregoing is true and correct.

RETURN COMPLETED FORM TO INFO@CARLSONINDUSTRIAL.CA