



## **RHINO TANK USER GUIDE**

Guidelines for Rhino Tanks above ground installation.

# **HANDLING & TRANSPORTING**

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## **PRE-LOADING**

Tanks 2000 to 5000 Gallons should be handled with care. Extra handling, utilizing machinery (e.g. crane) may be required due to large tank size. It is also recommended that only straps/slings be used for securing the tank prior to lifting to minimize product damage. Tanks MUST be empty.

### **Choker Hitch Sling for Securing Tank**

- The sling rating must exceed the weight of the tank.
- Slings must be free from damage or weak points.
- The sling length must exceed the tank circumference plus tank height.
- Clevis sling hooks must be 3ft – 6ft above the tank.
- Sling placement on the tank must avoid fittings to prevent unnecessary movement during handling.



## **LOADING**

A flatbed vehicle is recommended for transporting the tank. Ensure that the truck bed is free from sharp or loose debris and unnecessary objects. Attach the strap/sling around the tank circumference, positioned towards the center of tank. Slowly lift the tank, to allow tilting towards a horizontal position and gently place tank onto the bed of the truck. The tank should be properly secured to the truck to prevent shifting while in transit.

## **OFFLOADING**

Ensure that the offloading surface is clean/clear of any debris that may cause damage to the tank. The tank should be slowly lifted horizontally off the truck and placed on the ground.

Once the tank is steady on the ground, adjust the straps 1/3 from the top of the tank and slowly lift the tank to its vertical position, placing your tank in its designated area.

# **INSTALLATION GUIDELINES**

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## **Base/ Foundation**

### **SITE PREPARATION**

Determine the proposed location of tank, ensuring easy access for installation and maintenance. The tank should not be placed in a flood prone area or next to heat generating equipment. If the tank is located in close proximity to vehicular traffic, adequate impact barriers must be present.

## MATERIAL

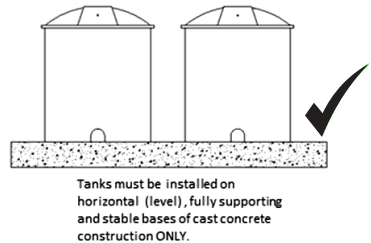
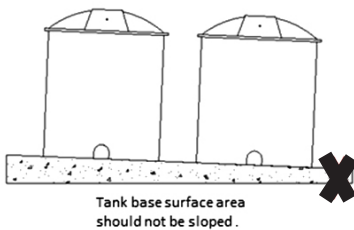
The foundation on which the tank is placed must be firm and capable of withstanding the maximum filled weight of the tank. The use of unstable materials such as sand, bitumen etc. must not be used as a bedding layer between the tank base and the flat surface. Tanks must be installed on a level, fully supporting and stable base of cast concrete construction only.

## SIZE

The base should safely exceed the tank base diameter by at least 6" on all sides. The tank base surface area should never be sloped for water run-off and must be exactly level in all directions. The area exceeding the tank base diameter can be designed for water runoff if needed.

## BASE CONSTRUCTION

The base must be level, smooth and clean of debris (e.g. stone/gravel) or sharp objects, prior to tank placement.



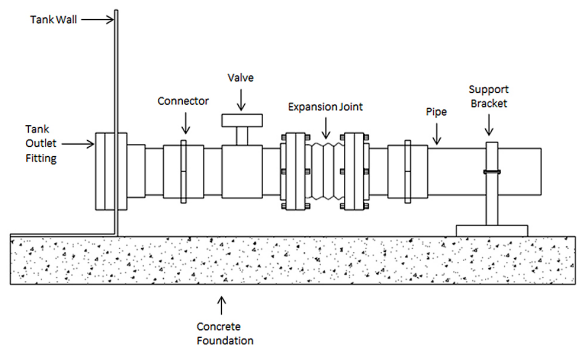
## INSTALLATION GUIDELINES

### Fittings, Connections, Plumbing

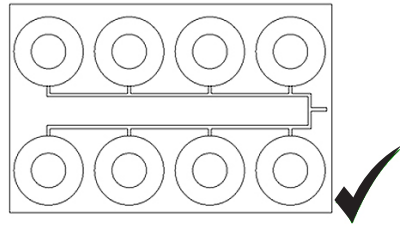
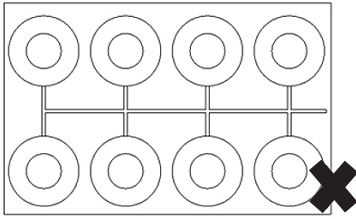
Polyethylene tanks expand / contract due to temperature and load changes and tank connections should allow for 4% dimensional movement in order to prevent flexural damages to the tank.

Pipe connections must be supported but not rigidly. Using flexible expansion joints and/or hose connections may prevent failure in the tank system.

## FITTING LAYOUT



## Proper Fitting Layout



## INSPECTION

Once the tank is installed and prior to being commissioned, an inspection must be completed. This is to ensure proper installation and to certify that all components are suitable for the application.



### GENERAL CHECK LIST

Ensure that:

- The tank is free of any signs of damage.
- The foundation is adequate for the operating requirements of the tank.
- Appropriate fittings are used, installed and properly supported.
- No foreign materials are present inside the tank.
- The tank is cleaned both internally and externally before use.
- The tank surroundings are clean/clear of any debris that can cause damage.

Regular inspection of your tank and documentation of such can extend its operational lifetime. If tanks are being used to store liquids other than water, a comprehensive check must be done, since the tank's properties vary based on the liquid characteristics.

Internal/External checks may determine tank or system failure as well as degradation. Inspect tank for the following:

- Erosion or corrosion of supporting structure and bases. Special attention should be paid to areas where tank shell and base meet, branch and manway attachments, supporting structures of piping and valves.
- Unusual visual discoloration.
- Cracks, leaks or seepage of water along tank walls or base.
- Correct liquids being used for the intended tank storage.
- No foreign materials present.



## POST INSPECTION

After inspection of the entire tank system, fill the tank with water and hold for at least 5 hours, to identify any leaks. If the fitting leaks, first check the tightness of each connection. If the leak persists, inspect the gasket to ensure it has full contact with the tank wall, checking for damage and proper gasket compression (25-50%). Recheck fitting tightness periodically.

## MAINTENANCE

General cleaning of your tank should be done to allow any changes in the tank to be easily visible as well as prevent contamination of the stored liquid. These cleaning guidelines are to be used if you are using your tank for water storage ONLY.



## MAINTENANCE CHECK LIST

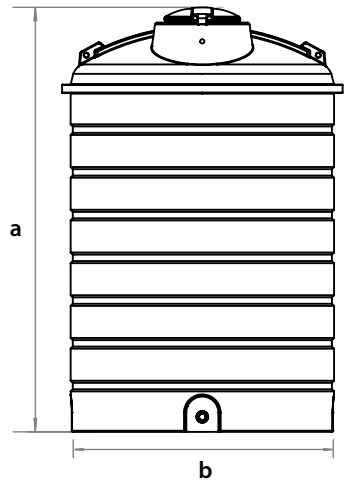
- Empty your water tank.
- The walls must be scrubbed or pressure washed to remove dirt and grime.
- Rinse thoroughly to remove dirt and grime.
- Household detergents can be used as a cleaning agent.
- This should be left to sit on the tank for at least 30 minutes and then thoroughly washed off.

*Note: if household bleach is to be used then 1 tablespoon or 15ml of bleach to every gallon of water should be used.*

- The tank can then be re-filled and used again for storage.

## TANK SPECIFICATIONS

TANK SIZES	a	b	TOTAL WEIGHT
200 GALLON	56"	37"	35 lb
400 GALLON	64"	45.5"	56 lb
650 GALLON	80.13"	55.38"	85 lb
800 GALLON	89"	61"	110 lb
1000 GALLON	94.5"	61.5"	150 lb
1500 GALLON	87"	81"	245 lb
2000 GALLON	110"	81"	365 lb
2850 GALLON	118"	90"	431 lb
3500 GALLON	154.5"	89.5"	808 lb
5000 GALLON	181"	93"	1108 lb
400 GAL Low Profile	45"	58"	55 lb
110 GAL Apt. Tank	75"	22"	35 lb
200 GAL Apt. Tank	80.25"	28"	45 lb



# **WARRANTY POLICY**

The warranty card must be filled out and submitted to Rhino Jamaica Limited according to when the tank was purchased from (here after referred to the “supplier”) along with your receipt to validate your warranty. This card should be kept attached to your invoice for the duration of the warranty period.

- ❶ The supplier warrants that, subject to the terms of this warranty, it will either, at its sole discretion, replace or repair any water tank affected by a defect or fault caused during manufacturing for a period limited to ten (10) years from the date of purchase as noted on original invoice for all water tanks.
- ❷ A purchaser of a water tank (in this warranty referred to as “you”) will only be entitled to make a claim under this warranty if the defect or fault first appears, and the supplier is informed of the claim, within the duration of that warranty period and in accordance with this warranty.
- ❸ Tanks that are replaced under warranty are only covered within the duration of the initial tank’s warranty of ten (10) years from the date of purchase as noted on the original invoice. Replacement tanks will hold a warranty for the balance of the warranty period of which the original tank held, as noted on the original invoice.  
e.g. if the original tank had a 10 yr warranty, and it failed when it was 8 ++66years old, the remaining warranty of 2 years will be now be applied to the replacement tank.

## **HOW TO MAKE A CLAIM**

To make a warranty claim under this warranty, you must:

- Notify the supplier within fourteen (14) days of the existence of any defect or fault becoming apparent and provide the supplier. With the opportunity to inspect the defective or faulty water tank. The water tank must not be moved or adjusted in any way prior to inspection
- Provide the original invoice as evidence of the purchase of your water tank along with your warranty card to a supplier.

## **LIMITATIONS ON CLAIMS**

### **WHEN DOES THIS WARRANTY NOT APPLY?**

This warranty has no application in any of the following circumstances:

- The defect or fault is caused by you or any person (other than the supplier) by using your water tank other than for its manufactured purpose.  
E.g. defect or fault caused by the storage of water at temperatures in excess of 40° C.
- The water tank is subjected to unauthorized modifications i.e. the defect or fault is the result of after sale modifications, repairs or the installation of fittings which are not suitable for the water tank or weaken its integral properties.

- The defect or fault is caused by negligence (other than supplier), abuse, willful damage or other deliberate act. E.g. someone walking on or applying any load to the top of the water tank.
- Your water tank is not installed or maintained in accordance with supplier's Recommended Site Installation Guide which is available on page 3 and 4 of this user guide, as well as at the manufacturer's website: [www.rhinojamaica.com](http://www.rhinojamaica.com). Examples of inadequate or incorrect site preparation that may result in the defect or fault your water tank, including, but not limited to the following:
  1. Water tank placed on an unsound base or the base erodes and/or is not maintained by you or is subjected to unauthorized modifications.
  2. Pipe work which is connected to your water tank is not adequately supported so as to not to put undue pressure or strain on fittings.
  3. The overflow capacity of your water tank is less than the inflow, causing excessive hydraulic pressure.
- Your water tank is damaged during relocation, including, but not limited to, installation and/or transportation (other than the supplier.) e.g. defect of fault due to transporting water tank with liquids in it.
- The defect or fault is caused by an act of God, an act of war/civil conflict, storm, hurricane, earthquake, hail, tree roots, wind or other natural event or force of nature.
- The defect or fault is caused by reasonable weathering/degradation over time. Note: this warranty does not apply to the color or appearance of the tank, which may alter over time.
- The serial number or identification marked on your water tank is removed, defaced or altered.
- The supplier is not responsible for any freight or delivery charges to or from its factory or subsidiaries relating to the repair or replacement of your water tank as a result of a claim being made under this warranty, which cost shall be borne by you.
- If shipping is not directly handled by the supplier, the supplier is not responsible for any loss or damage to your water tank which occurs in the course of shipping.
- Any payment under this warranty is limited to the cost of repairing or replacing the tank (at the supplier's sole discretion) and does not extend to any indirect or consequential loss, claim, expense or damage resulting from or caused by any defect or fault in your water tank, including, but not limited to, the cost of liquid replacement, the cost of cartage of liquid, loss sustained through leakage, loss of income, profits or goodwill or loss sustained by third parties.

# WARRANTY CARD

## CUSTOMER'S INFORMATION

NAME:.....

ADDRESS:.....

COUNTRY:.....

CONTACT NUMBER:.....

EMAIL:.....

## PRODUCT INFORMATION

PRODUCT NAME:.....

PRODUCT SIZE:.....

DATE MANUFACTURED:.....

OPERATOR:.....

SERIAL NUMBER:.....

DATE PURCHASED:.....

INSTALLED BY:.....

INSTALLATION INSPECTOR:.....

## REPLACEMENT TANK

REPLACEMENT CODE:.....

WARRANTY EXPIRY:.....

WARRANTY VALIDATOR SIGNATURE:.....

