

## **HANDLING AND INSTALLATION INSTRUCTIONS**

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# HANDLING AND INSTALLATION INSTRUCTIONS

## *ABOVE GROUND STORAGE TANKS*

The following handling and installation instructions are intended to help customers install tanks properly and efficiently.

Handling and installation instructions are only recommendations. They do not relieve the purchaser from full responsibility for proper inspection, handling and installation. Improper handling or installation, which results in damage or tank failure, is the sole responsibility of the purchaser. Failure by the customer to comply with the handling or installation instructions will void the tank warranty. Unknown situations or conditions are also the burden of the purchaser.

The presence of BELDING TANK TECHNOLOGIES personnel or an authorized representative at the installation site does not relieve the purchaser of their responsibilities.

## *INSPECTION*

At the time of delivery the customer shall be responsible for inspecting the tank for damage during transit. Both the inside and the outside of the tank must be inspected. If damage has occurred it should be noted on the delivery receipt prior to signing acceptance, whether it be a BELDING TANK TECHNOLOGIES truck or common carrier. In the case of a common carrier, claim should be immediately filed by the customer with the delivering carrier. If delivery is made by a BELDING TANK TECHNOLOGIES truck, the factory should be immediately contacted prior to unloading or acceptance. The customer accepts all future responsibility for a damaged tank if the procedures set forth are not followed.

Minor damage can be repaired at the delivery site.

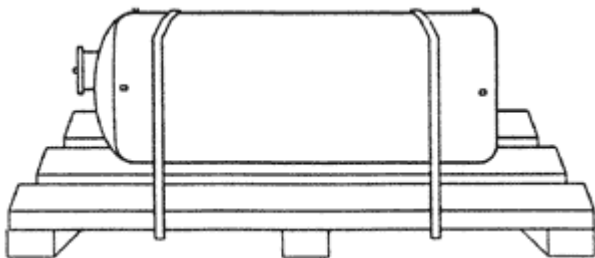
## HANDLING AND INSTALLATION INSTRUCTIONS

BELDING TANK TECHNOLOGIES tanks are designed to withstand normal handling. Note the following handling precautions.

1. NEVER roll or slide a tank. Lift the tank using a crane or other approved method.
2. Operators of hoist equipment should follow proper rigging procedures at all times. NEVER allow tank to swing out of control.
3. Do not drop or allow hard impact from tools, spreader bars, etc.
4. Avoid the use of equipment inside the tank that could scratch or damage the inner corrosion barrier
5. NEVER use cables or chains around tank.
6. NEVER lift tank by using fittings. Use designated lifting lugs.
7. If tanks are being stored prior to installation, be sure to lay on padded surface and tie down securely.

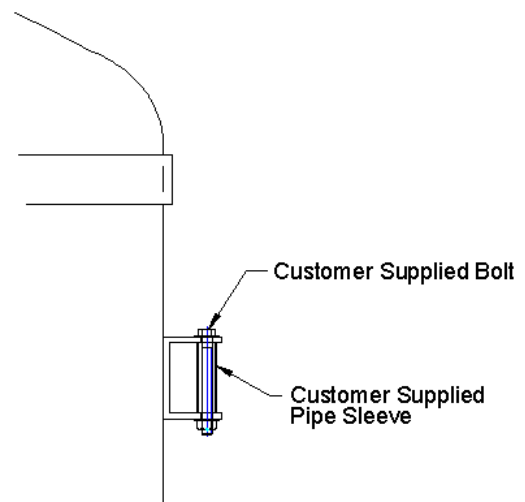
### *HANDLING TANKS SHIPPED HORIZONTALLY*

Small tanks shipped by common carrier are palletized to facilitate handling by forklift. To remove tank, pull on the bottom of the skid. DO NOT PULL ON THE TANK.



### *LIFTING / HANDLING LUGS*

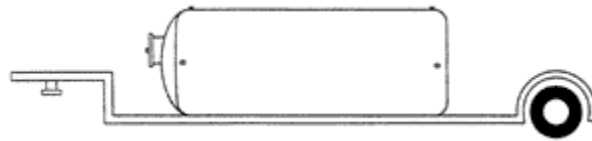
The lugs are designed for equal load on both ear tabs of the lug. BELDING TANK TECHNOLOGIES recommends using a pipe spacer between the ear tabs to achieve equal load.



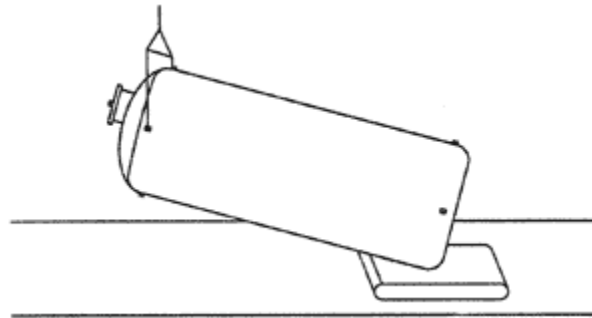
# HANDLING AND INSTALLATION INSTRUCTIONS

## *FLAT BOTTOM TANKS*

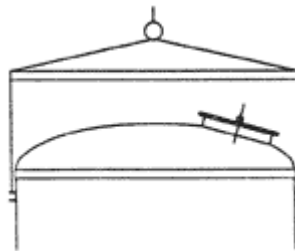
Larger tanks shipped by BELDING TANK TECHNOLOGIES truck and special built trailers, require a spreader bar and slings attached to the appropriate lifting lugs to unload tanks. Use a guide line to keep the load under control.



Large tanks should be stood up by hoisting with spreader bar and lines to lifting lugs, adequate padding is necessary to protect the pivot point. Control the tank with guide lines to insure tank is gently set on its base.



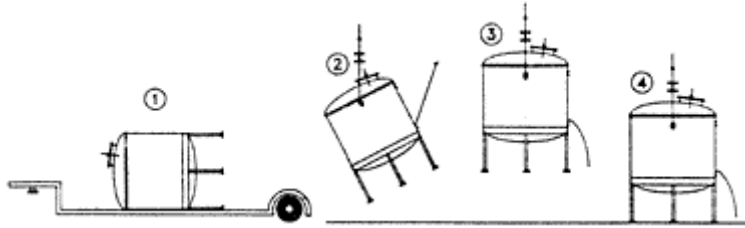
Use a spreader bar and lines attached to appropriate lifting lugs to move tank when in upright position.



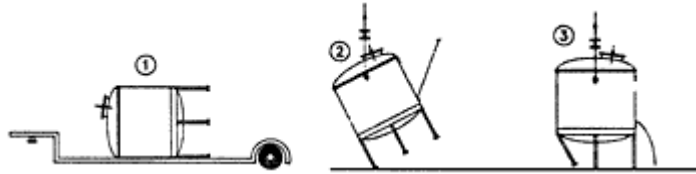
# HANDLING AND INSTALLATION INSTRUCTIONS

## *DISHED OR CONE BOTTOM TANKS*

NOTE: When standing a tank with legs, DO NOT pivot tank on legs. Lift the entire tank. Rotate to a vertical position. Set straight down on all legs.

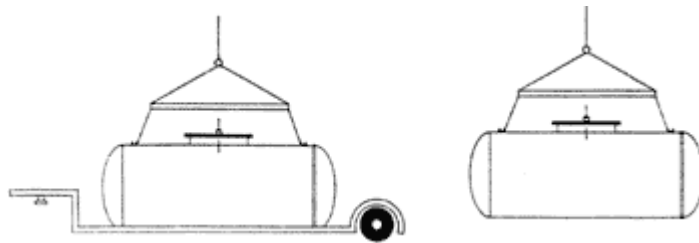


Proper



Improper

## *HORIZONTAL TANKS*



Proper

See Installation Page 10

## HANDLING AND INSTALLATION INSTRUCTIONS

### *TANK BOTTOM SUPPORT PAD*

BELDING TANK flat bottom and slope bottom tanks require continuous bottom support. The most common support pad is a concrete slab. However, any other support structure with sufficient strength to support the combined weight of the tank and its contents, with a reasonable factor of safety, is acceptable. Design for bearing strength of support pad is the responsibility of the purchaser. The support pad must exceed tank diameter by 6" minimum, and be flat within +/- 1/16".

INSTALLATION NOTE: Support pad must be clean and free of all foreign objects prior to settling tank in place.

### *TANK BOTTOM BUFFER PAD*

Liquid grout such as concrete, epoxy, etc., MUST NOT be used under standard flat bottoms. BELDING TANK recommends using two layers of 30 pound roofing felt as a buffer between tank support and tank bottom. When applying the roofing felt, be sure there are no overlaps or wrinkles causing ridges under the bottom. It is the responsibility of the purchaser to see that tanks are properly installed. Any deviation from the above outlined procedure must be approved by BELDING TANK TECHNOLOGIES or it will void your warranty.

### *PIPE CONNECTIONS*

Flexible pipe connections should be used wherever possible. If rigid piping must be used, be certain it is self-supporting. If rigid piping is used and is not self-supporting, and results in damage to a tank fitting, your warranty will be void. CAUTION: METALLIC FITTINGS MUST NOT BE USED ON FRP NIPPLES OR COUPLINGS.

### *WATER FILL TESTING*

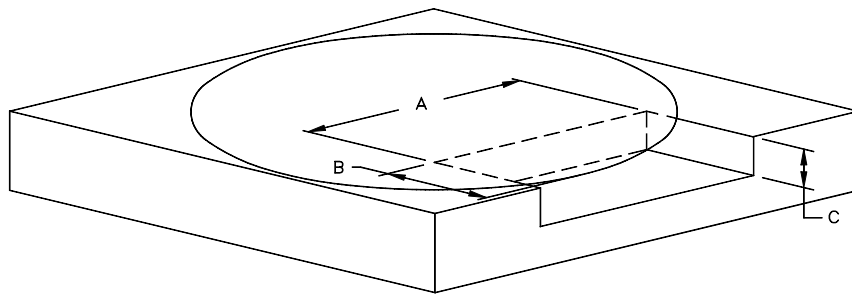
BELDING TANK recommends that each tank be water filled (hydro tested) for a 24 hour period after the tank is installed, and prior to use.

# HANDLING AND INSTALLATION INSTRUCTIONS

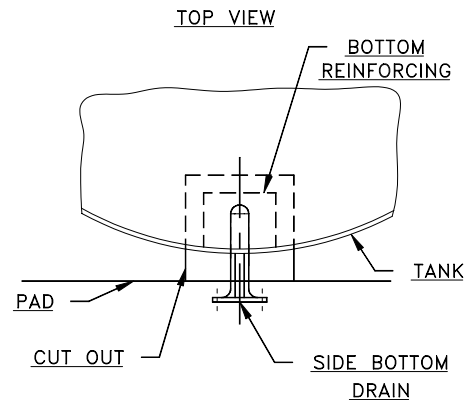
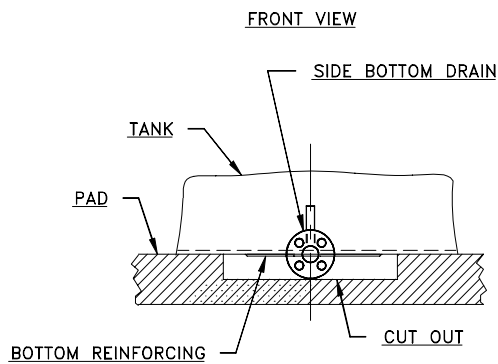
## *SIDE BOTTOM FLANGE PAD CUT OUT:*

**CAUTION:** When installing any BELDING TANK TECHNOLOGIES tank with a side bottom flange, your pad cut-out dimensions must conform to the specifications as detailed below. Any deviation without the written consent of BELDING TANK TECHNOLOGIES may cause serious damage and will void warranty.

Consult the factory if you have any questions. 1-800-253-4252.



Drain Size	A	B	C
2"	9	8	3-1/4
3"	10	8	3-3/4
4"	11	8	4-3/4
6"	13	8	5-3/4
8"	15	8	6-3/4
10"	18	8	8-1/2
12"	21	8	10

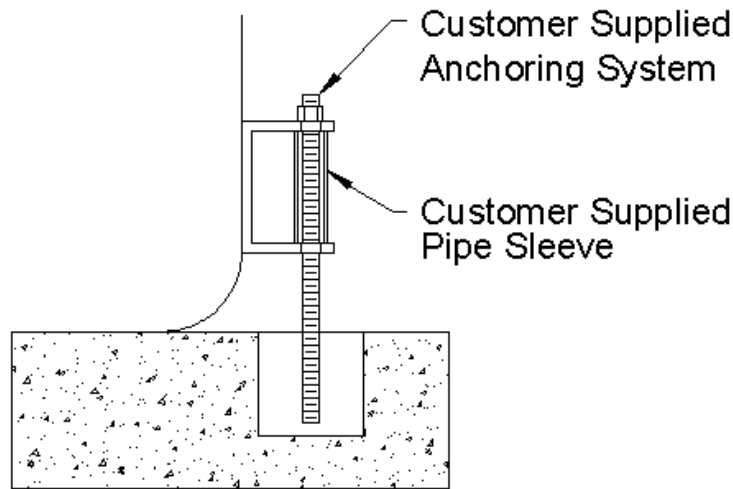


## HANDLING AND INSTALLATION INSTRUCTIONS

### *HOLD DOWN LUGS*

The required hold down lugs are supplied as standard equipment on all BELDING TANK TECHNOLOGIES tanks. Anchor bolts and hold down hardware are supplied by the customer.

### **Preferred Method of Anchor Installation:**



**Expansion anchor or resin capsule anchor.**

**Do not over tighten hold down lugs.**

INSTALLATION NOTE: Do not locate or pre-set anchor holes/bolts in the tank pad before receipt of tank. BELDING TANK will not be responsible for pre-set anchor holes/bolts.

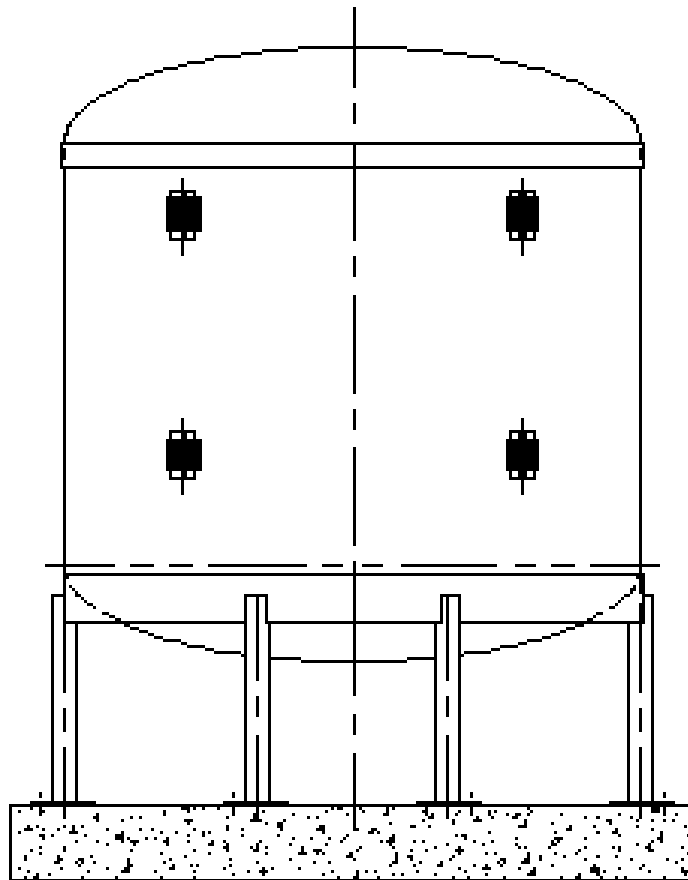
## HANDLING AND INSTALLATION INSTRUCTIONS

### *DISHED BOTTOM TANKS*

The pad surface must be smooth and level. Consideration must be given to the concentrated nature (4-10 points) of the loading, the magnitude of which could require footings beneath each leg to spread the load over a larger area. The design of footings is the responsibility of the purchaser.

The tank is designed to rely upon firm even support at each of its legs. In order to allow for uneven pads, floors, and legs, the floor pads on each leg may require shims to insure uniform support.

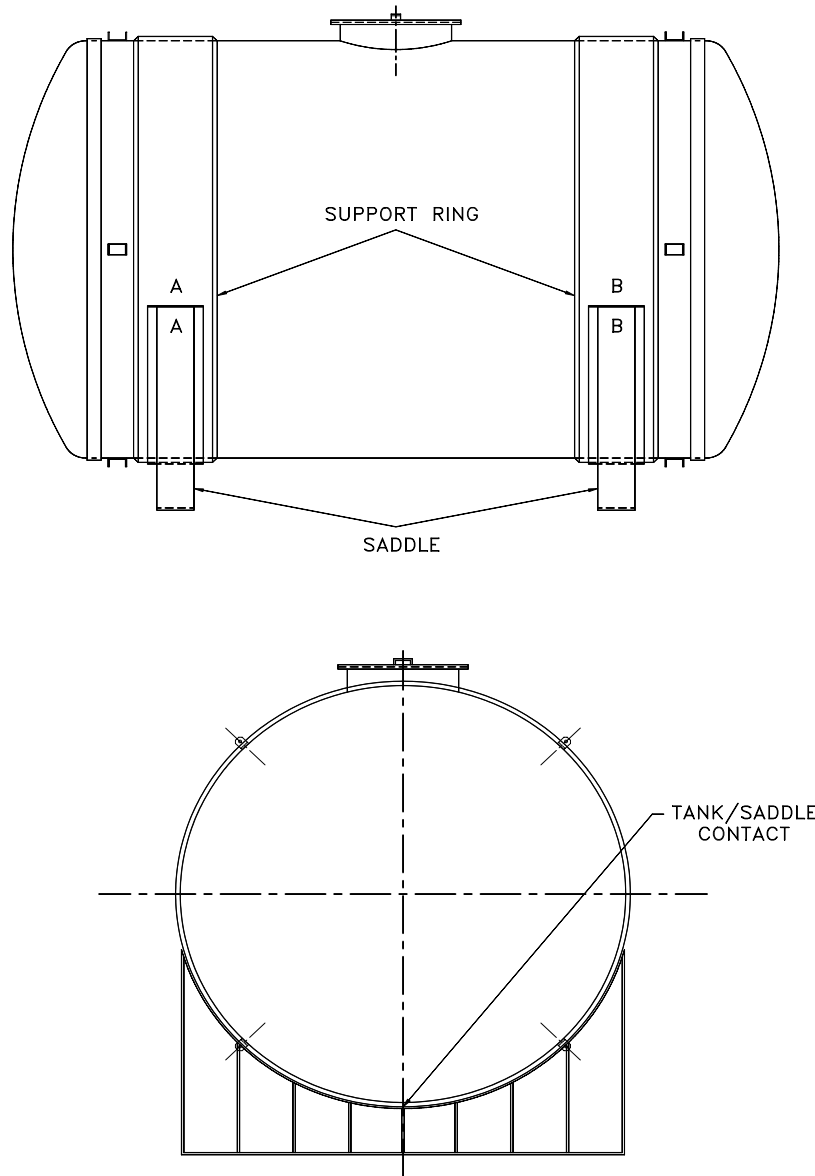
Consult factory if you have any questions. (1-800-253-4252)



# HANDLING AND INSTALLATION INSTRUCTIONS

## *HORIZONTAL TANK INSTALLATION*

Installation of horizontal tanks is much the same as the dished bottom. Tanks are supplied with the required number of steel support saddles. These saddles are to be placed under the designated support rings. The saddles must be centered on the support ring and through the centerline of the tank. Caution must be taken to insure that the tank support ring is in contact with each saddle.



Caution: Modification of saddles in any way voids your warranty.