

Installation guide PLYCEM EUREKA CISTERN TANKS

















The Plycem Cistern Tanks are manufactured using the most advanced technology in rotomolding, using resistant, and durable rawmaterialsinpolyethylene; materials that provide great resistance and durability, constituting a solution to store the vital liquid without altering its physical properties. The Cistern Tank have 4 high resistance reinforced around the tank, 8 reinforcement elements and 3 straps that avoid deformations, giving it a greater resistance. Plycem Cistern Tanks are easy and fast to install, avoiding the high costs of masonry that a traditional tank requires.

Unique in the market with 100 years of warranty, more than a lifetime.



STORAGE AND HANDLING

-Store tanks on a flat surface free of objects that could damage the tank walls or floor.

-Stretch to one level.



-Avoid storing tanks on mezzanine edges or places where they can fall and hit.



-When handling, they should not be thrown from heights, dragged or hit against walls or floors.



-Protect the connection plans and other components of the system during handling and storage.





Capacity liters	OA mm	C mm	D mm	l mm	J mm	Weight Kg
1 200	1 070	1 680	1 370	310	215	30
2 800	1 620	1 735	1 360	375	275	60
5 000	2 170	1 815	1 360	455	360	110

These values are indicative and may have a variation of \pm 5%.

INSTALLATION OF BURIED CISTERN



Accessories

The Plycem Cistern Tanks are equipped with a float, valve and pump, the latter two of which are made of copper.



Accessories shown here are subject to change without notice; consult your distributor.

Installation instructions

Step 1

For the installation of your Plycem Cistern Tank, it is important to know the type of ground on which it will be installed, in order to determine the type of soil in which it will be installed, to determine the excavation process to follow, because there are 3 main types of soil according to its natural resistance: hard or rocky land, medium resistance land or soft land. The slope must be considered until reaching an angle such that the material remains stable without collapsing in the excavation. For this purpose, perform the free expansion test.

Hard or rocky land.

-It is all that where excavation is very difficult due to the consistency of the ground.

It is made up of rocks, in very compacted layers. In this case the instability is practically null.



Medium resistance soil.

- It is all the one that presents average resistance to the weight, does not suffer sinking so easily.

These are considered to be tepetate floors, clays of medium resistance, etc. In this case, the instability of the ground is not considerable, but a slope of 60° to 75° to avoid landslides.



Soft soil.

- It is all that which presents instability under heavy weight loads (subsidence) and does not present resistance to excavation. In this genus are those that are or were used for agricultural purposes, expansive sands or clays, soils with subway currents, etc. In this case the instability of the ground is quite high, so it is recommended to create a slope of 45° to 60° to avoid landslides.



Step 2

Perform the following test and determine the expansive potential of the soil where your tank will be installed.

1.- Take a clod of soil and grind it into fine soil.

2.- Place this material inside a glass or jar with vertical walls, measure the height that the land reaches inside the glass or jar (initial h) with the help of a ruler or tape measure.

3-Now add water until the volume of fine soil is completely covered and let it rest for at least 1 hour to allow the expansion of the material.

4.- After this time measure the final height (h final) reached by the volume of fine soil.

5.- Finally, determine the free expansion potential, substituting the values as follows:

% Expansion [(initial h - final h) / initial h)] x 100 The bottom of the excavation should be 50 cm larger than the

% Expansion	Potential for free expansion	Top Excavation Diameter	
% < 10	Does not exist	Same as bottom	
10 - 25	Very low	Ø Fund + 50 cm	
26 - 50	Under	Ø Fund + 100 cm	
51 - 100	Medium	Ø Fund+ 150 cm	
% > 100	High	Ø Fund + 200 cm	

Step 3

diameter of the tank.

Place at the bottom a concrete slab or template with welded mesh. It should be clean, leveled and flat to allow for a uniform the base of the Tank Cistern. The concrete slab should have a minimum thickness of 5 cm for 1200 and 2800 lt tanks and 10 cm for 5000 liters tanks. In soft soils it is recommended the walls be coated. This coating will be of 3 cm in a proportion of 1 part cement to 3 parts cement with fabric or chicken wire mesh anchored with short stretches of rods spaced at 50 cm intervals.





Concrete slab or flat slab

Step 4

The depth of the excavation will be the height of the tank to be installed plus 20 cm, considering the thickness of the concrete slab.



Step 5

Lower the Tank Cistern with the help of a polin supported on a simple wooden structure and a pulley. Avoid stones or other objects between the concrete floor and the base of the tank to avoid damaging the tank. damage to it. Center the tank in the excavation.



Step 6

According to the results of the free expansion test carried out on the material where you will install your tank, it will be known if the material produced by the excavation can be used as backfill as it was removed from the excavation. If so, 20 cm layers will be placed and compacted with manual equipment.

It is important to fill the cistern with water to prevent the cistern from deforming under the weight of the material and to facilitate the compaction.

In case the material presents an expansion percentage from very low to high, it will be indispensable to add cement to the material, in a percentage of 6% by weight, before using the material to backfill the excavation.

The addition of cement and water for the stabilization will be done gradually until its complete incorporation and will be left to rest for 48 hours, after which the backfilling will proceed as indicated above.

At this point all the necessary connections will be made by perforating the neck or reinforcements of the At this point all the necessary connections will be made by perforating the neck or reinforcements of the cistern and will be concluded 10 cm below the mouth of the cistern.

In the installation of any area (patio, garden or garage) it is recommended that you build a reinforced concrete slab. Remember to install a vent pipe.





TANK INSTALLATION IN AIR CONDITION

Note: This condition is handled upon request, therefore the required accessories are as follows:

Included accessories



Accessories not included



Filter M-inox

Plastic accessories (PVC) necessary for its correct operation.

1 1/2" female adapter.
2 reductions from 3/4" to 1/2".
2 3/4" male adapters.
3 1/2" male adapters.
1/2" elbows.
1 1/2" check valve.
1 tee of 1/2".
1 ball valve of 1/2".
1/2" pipe.
Teflon tape / PVC glue.

Installation instructions

Step 1

Build a flat level base to place your cistern.

To obtain adequate pressure in the distribution line, verify that from the base of your cistern to the highest expected height (faucet or shower), there is a minimum height of 2 meters as shown.





Step 2

1. Control alternatives (1 and 2) valve and float.

To install the valve and float your Cistern has a hole (3) in the upper neck to insert the water supply pipe (5), at the end of the pipe, using a union (4) (not included). Install the valve and float (1 and 2) as shown.



2. With electronivel (electrode not included). Your new Cistern has a special base that allows the placement of an electric float or electronivel.



Step 3

Place Teflon tape (not included) on all pipe threads and fittings to be installed.

Multi connector installation.



Your Cistern (1) has a threaded flange (2). Screw on the multiconnector (3) with a 1/2" or 3/4" outlet. Use the one that corresponds to the diameter of your distribution pipe (5). To tighten use only your hands. Turn until the threaded plug of the air jug (4) is facing upwards and the cleaning plug (6) is on one side as shown in the figure. Remove the plug and insert the air jug tube (4). Connect the Multiconnector (3) to the distribution pipe (5).



INSTALLATION OF CISTERN AT GROUND LEVEL

For the correct installation of the Cistern at floor level, the following diagram should be considered.



Note: This condition is handled upon request. The accessories of the overhead tank condition will be included: multi-connector, float valve and air jug. Other accessories and the pumping system indicated in the diagram are not included.

Installation precaution

- Make sure the level of the support surface of the tank.
- Make sure that the support surface is larger than the bottom of the tank.
- Do not place the tank on irregular ground.
- Do not place the tank on separate parts or beams.
- Do not place the tank on irregular surfaces, vegetation, roots or elements that may damage the bottom of the tank.

General installation

- Cisterns should be washed before installation.
- The tank should always be cleaned every six months. Check the filter and connections and make necessary adjustments and repairs.
- The Cistern should always be covered.
- When using a pumping system, the inlet pipe should be anchored to cushion any movement on the Cistern connector.
- The system should be installed in an easily accessible location to allow for inspection and to facilitate proper maintenance.
- When storing the Cistern before installation, be sure to keep it in an upright position on a smooth, level surface.
- The temperature of the liquid to be stored must not exceed 60° Celsius.
- For the installation of additional accessories to the Cistern, it is important to consult your authorized supplier beforehand.
- Cistern tanks are not fire resistant. Do not store them near a flame or heat exceeding 80° Celsius.

Maintenance

- 1. Shut off the water supply to the Cistern.
- 2. Empty your cistern until there is about 5 cm of water at the bottom.
- 3. Shut off the water supply to your house by closing the valve.
- Wash the inside walls and the bottom of your Cistern with a plastic bristle brush and disinfectant liquid soap.



- 5. Remove the discharge plug from the multi-connector, remove all (5 contents and rinse.
- Do a final cleaning of the inside walls and bottom with a clean, dry frag or mop.
- 7. Install the discharge plug on the manifold and open the valve that supplies water to your home.
- Turn on the water supply to your Cistern, wait for it to fill and it is ready to use.



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Warranty

Plycem guarantees that in case it is proven that a product with its brand is defective regarding its materials or manufacturing process within 100 years (5 years for accessories) as of its manufacturing date, at the discretion of the company, fix or replace the said product. Plycem's responsibility is exclusively limited to the cost of the product, and it excludes the cost for installing or removing the product or for any resulting damage.

Neither Plycem nor its distributors authorized in Central America shall be responsible for any indirect damages or defects caused by the incorrect installation or by the omission of any steps described in this document. It does not cover transportation or labor costs that may result from the incorrect application of the installation procedures indicated. The manufacturer's warranty only covers manufacturing defects.

Using an Plycem Eureka Tank Product for a purpose different from any purpose described in this document is not recommended. Any other use will void the warranty for the Eureka Tank by Plycem





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