

SERBATOI IN POLIETILENE SERIE CHU PER INSTALLAZIONE INTERRATA SERBATOI IN POLIETILENE SERIE CHU PER INSTALLAZIONE INTERKATA POLYETHYLENE STORAGE TANKS CHU SERIES FOR UNDERGROUND INSTALLATION

AZIENDA CON SISTEMA DI GESTIONE QUALITÀ CERTIFICATO DA DNV GL = ISO 9001 =

Dati dimensionali / Ratings data sheet

		Modello / Type			
Pos.	Descrizione Description				
Cod.	Codice Code	1720551	1720557	1720563	
	Capacità Capacity (lt.)	3000	5000	10000	
ø	Diametro Diameter (mm)	1585	1860	2130	
L	Lunghezza Length (mm)	1920	2380	3410	
н	Altezza Height (mm)	1850	2150	2215	
А	Larghezza Width (mm)	1370	1640	1150	
В	Larghezza nicchia Niche width (mm)	130	130	130	
С	Altezza nicchia Niche height (mm)	260	185	205	
DN1	Diametro foro d' ispezione Inspection hole diameter (mm)	500	500	700	

Tabella materiali / Part list

Pos.	Descrizione Description	Materiale Material	Quantità Quantity	Ricambi Spare parts
1	Serbatoio Cylinder	Polietilene Polyethylene LLDPE	1	-
2	Coperchio Cover	Polietilene Polyethylene LLDPE	1	1

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INSTRUCTIONS FOR CORRECT UNDERGROUND PLACEMENT OF ALL PLASTO UNDERGROUND TANKS

Material index of backfill and/or landfill

SOIL



SAND



CONCRETE



GRAVEL



SOIL CLAY



For the choice of backfill material and compaction methods, refer to European Standards ENV 1046 and UNI EN 1610.

REQUIREMENTS

Verify and make a preliminary evaluation of the hydrogeological and morphological characteristics of the soil for the compatibility to lay underground the tank.

If, during the excavation, the aquifer is higher than the bottom of the tank, it is necessary to provide a suitable insulation.

The tank must not be buried in sloping areas, and the surrounding land must not generate unbalanced lateral forces.

The maximum depth of the excavation must not exceed 80 cm.

1. PREPARATION OF THE EXCAVATION

Prepare an adequately sized pit, so that a space of at least 30 cm is left around the tank (in the presence of clay soil, the distance must be at least 50 cm). The excavation site must be dug at least 1 m from any buildings. Lay on the bottom of the pit a layer of sand of at least 15 cm so that the tank rests on a flat and uniform base without any roughness. Proceed with the position of the tank, which must be completely empty.

2. STANDARD BUILDING AND FILLING

Proceed to fill the excavation site in subsequent layers of 15 - 20 cm at a time, filling the tank firstly with water and then the pit with compacted sand. Comply with the diagram sequence: 1 Water - 2 Sand - 3 Water - 4 Sand etc.

2.1 Extension installation

If the tank is buried at a depth of 40 cm, notwithstanding the walkability of the site, we suggest installing the Elbi extension in polyethylene directly on the inspection holes.

2.2 Installation of the pump

When installing a pump both external and internal, make sure that the hole for the open-air vent is free and sized for the pump installed (otherwise the tank will go into depression during operation). Bring the vent pipe over the highest point of the building or however far from the home to avoid the formation of bad odours. Connect and test the connections.

2.3 Construction of wells

For the installation of wells or manholes weighing more than 50 kg, a concrete slab should be produced, so the weight is distributed on the whole tank. It is forbidden to build parts in masonry work that prejudices any maintenance and possible replacement of the tank itself.

3. STANDARD LAYING UNDERGROUND

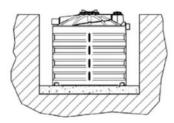
Having filled the tank with water and supported it with sand, cover the tank with topsoil, leaving the inspection openings free. With the underground laying method, the area becomes walkable, and passage of the vehicles is forbidden at a distance of less than 2 m from the excavation site.

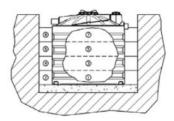
Bring the vent pipe over the highest point of the building or however far from the home to avoid the formation of bad odours.

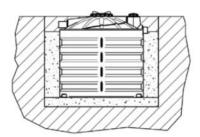
4. LAYING WITH CLAY SOIL

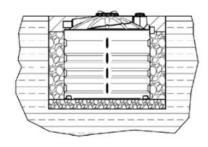
Prepare an adequately sized pit, so that a space of at least 50 cm is left around the tank. Lay on the bottom of the pit a layer of gravel (diameter of gravel about 10 mm) of at least 15 cm so that the tank rests on a flat and uniform base without any roughness. Proceed with the position of the tank, which must be completely empty. Fill the excavation site with subsequent layers of 15 - 20 cm at a time. Fill the tank firstly with water and then the pit with gravel (diameter of circa 20-30 mm); for this phase comply with the procedure in point 2 with layer filling. You are advised to install a drainage system on the bottom of the excavation site.

Bring the vent pipe over the highest point of the building or however far from the home to avoid the formation of bad odours.









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5. BURIAL IN SURFACE WATER AREAS

The presence of surface water represents a critical situation; we recommend that you consult a specialized professional for a geomorphological report on the land. According to this the intensity of the thrust of the ground will be defined, and the backfill and the slab will be re-dimensioned. If, during the excavation, the aquifer is higher than the bottom of the tank, it is necessary to provide a suitable insulation.

The resistance to ground forces can be increased by inserting electro welded meshes. Produce the concrete slab on the bottom of the excavation site and spread a bed of washed gravel 2/6 of 10 cm to fill the corrugations on the base of the tank. Filling and backfilling should take place gradually, so it is best to half fill the tank, backfilling simultaneously with concrete and leave it to set for 24/36 hours. Then finish the filling and backfilling.

6. BURIAL NEAR A SLOPE

When burying is done in the vicinity of an altitude or slope, you should consult a specialized professional for a geomorphological report on the land. According to this, the reinforced concrete wall will be sized, which will confine the tank to balance the pressure of the soil and protect the surrounding area from any losses.

7. LAYING UNDERGROUND - LIGHT DRIVEWAY

By LIGHTWEIGHT DRIVEWAY, we intend a maximum weight applied of 12.5 tons (Class B125 according to EN 124/95).

So that ELBI tanks for underground can be installed in driveway zones according to class B125, you must build a self-supporting slab in reinforced cement. The slab should be bigger than the excavation site to avoid the weight overloading on the tank. Furthermore, between the slab and the tank, there must be at least 10 cm of air.

You are advised to build a concrete slab also under the tank, and then to lay a 10 cm bed of sand. A qualified professional should size the slabs.

As for the laying of the underground tank, refer to the previously described points 1, 2 and 3.

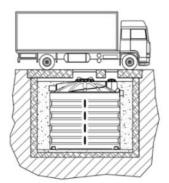
8. LAYING UNDERGROUND - HEAVY DRIVEWAY

By HEAVY DRIVEWAY, we intend a maximum weight applied of 40.0 tons (Class B400 according to EN 124/95).

So that ELBI tanks for underground can be installed in driveway zones according to class B400, you must build a reinforced concrete formwork and a self-supporting slab in reinforced cement. The slab should be bigger than the excavation site in order to avoid the weight overloading on the tank, and make sure that the weight discharges on the formwork. Furthermore, between the slab and the tank, there must be at least 10 cm of air. You are advised to lay under the tank a 10 cm bed of sand. A qualified professional should size both the formwork and the slab.

As for the laying of the underground tank, refer to the previously described points 1, 2 and 3.





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