

## Underground water tank specifications

Nabridas' underground reservoir is manufactured from UV-stabilized polyethylene (PE) material specifically designed for potable water storage. These high-quality reservoirs are engineered for subterranean water storage applications and can be installed in both traffic-bearing and non-traffic areas. The industrial-strength design features comprehensive structural ribbing, allowing for underground installation without requiring concrete backfilling or retaining walls.

Nabridas reservoir is ideal for underground rainwater harvesting applications with inherent advantages over conventional systems of significantly faster installation (hours vs. days) with consistent quality, Corrosion-resistant materials ensuring long service life with minimal maintenance requirements, and complete leak-proof construction that prevents both infiltration and exfiltration.



## Dimensions

Total Capacity (L)	2000 L	3000 L	4000 L	5000 L	6000 L	8000 L	10 000 L
Height (mm)	1400	1570	1570	1570	1570	1570	1570
Width (mm)	1190	1400	1400	1400	1400	1400	1400
Length (mm)	2300	2465	3270	4075	4880	6490	8100
No of openings	1	2	2	2	2	3	3
Top opening (mm)	600	600	600	600	600	600	600

## Specifications

- Manufactured out 100% Virgin Food Grade PE Material. No recycled PE is used in the process.
- Meets the requirement of U.S 21 CFR FDA regulation Part 177.1520 clauses (C) for food contact use and AS/NZS 4020: 2002 for drinking water.
- Does not promote algae growth by blocking out sunlight.
- No pigment wipe off. No water contamination.
- Industrial strength durable design with extra strength ribbing structure for underground installation without concrete backfilling and/or walls. It can be installed in both traffic areas and non traffic areas.
- The tank is fitted with an inlet seal 32mm at the end of the tank as outlet and a Ballcock 1/2" as inlet near the opening .

## A. General Installation procedures

The instructions are intended for installation up to 1.5 m depth. This type of installation is meant for non-traffic areas.

### Important :

Do not install in place where ground water might be found. Rain water should not be allowed in the tank.

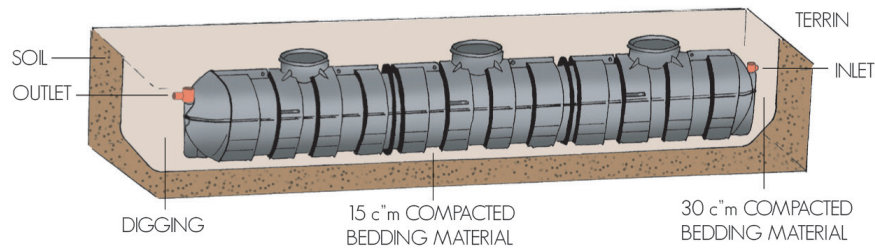


Illustration of the installation at up to 1.5 m depth

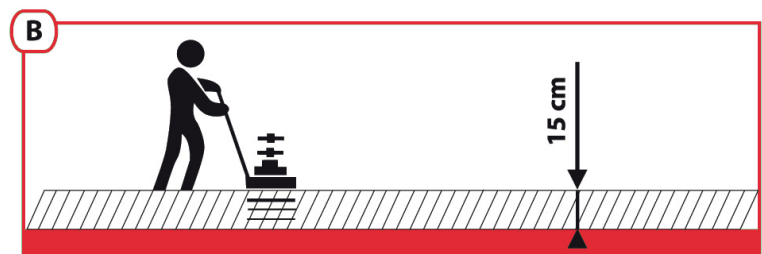
## B. Excavating, digging and assembling

Excavate 60 cm wider and 15 cm deeper than the tank size.

A base layer of 15 cm should be filled and compacted to 95% with rock sand or selected material with size less than 32mm and without any sharp objects/rocks.

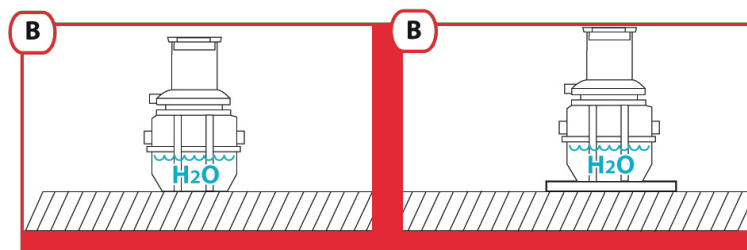
Place the tank on the compacted layer of 15 cm.

Check the levelling.



Connect your inlet and outlet with Nabridas inlet seals. The direction of the inlet/outlet should be taken into consideration as it can be adjusted. Please note that the diameter of the outlet pipe should be equal to or larger than the diameter of the inlet pipe.

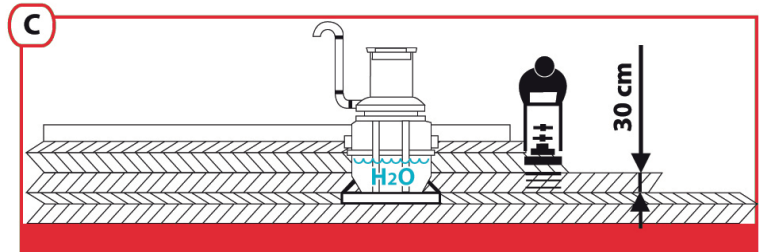
The height difference between the inlet and the outlet should be at least 3 cm. If this difference is less than 3 cm then the installation will not work efficiently. Gradient of inlet and outlet pipes should be maintained at 2% for proper drainage.



## C. Back filling

Back filling material should be inserted under the tank in order to fill-in the gap between the tank and the compacted layer. Back fill around the tank with rock sand or selected material with size less than 32mm and without any sharp objects/rocks in layer of 30 cm and compact to 95%.

In parallel fill the tank with water up to same height. When the compacted layers around the tank reach half the height of the tank, the inlet/outlet level should be checked. Continue to fill-in and compact layers up to ground/cover level while filling the tank with water at the same time.



## D. Opening height adjustment

In case the ground level is higher than the tank cover level, PE elevation /extension can be used. The extension should be installed with rubber seal between parts. The seal is provided with the extension. In situation where ventilation is necessary, a 50cm pipe should be connected with a rubber seal on the opening neck of the tank.

## E. Cover

PE covers can be used for installation in the garden or non-traffic areas (PE covers come with the tank). For installation in parking area a cover of CLASS C is required.

## F. Depth more than 1.5/ Road installation instruction

For installation over 1.5 m in depth in traffic areas, a concrete ceiling of 20-25 cm should be used at 20-25 cm above. This concrete ceiling should be 60 cm longer and wider.

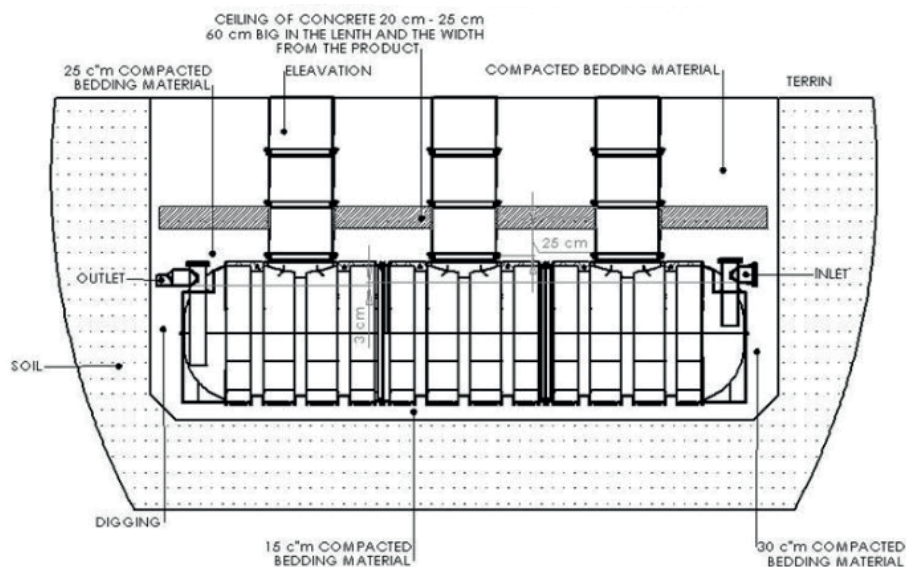


Illustration of the installation at depths greater than 1.5m in traffic areas

Whenever the tank needs to be emptied for maintenance, it should be refilled with water immediately, so as to avoid risk of collapse of the tank due to external pressures (soil and or high water table).

All descriptions, illustrations and installation instructions are provided in good faith for guidance only. Installation instruction of consulting Engineer based on exact site considerations and local Government guidelines must be followed. All dimensions are nominal and Nabridas reserves the right to modify products without prior notice.