

# **Septic tank**Specifications

Nabridas septic tank is used where a building, a house or a development can not be connected to the mains sewer line as it is too difficult for access or inexistent. Nabridas septic tank is made of UV stabilized polyethylene (PE) material and it is intended for use in underground drainage and sewerage systems. It can be installed in both traffic areas and non traffic areas. The ribs on the septic tank have been carefully designed to provide extra strength to the product and to allow for installation without concrete backfilling and/or walls.

Units are available in several capacities suitable for applications from a single household to a large industrial or commercial complex.



## **Dimensions**

Total Capacity (L)	2000 L	3000 L	4000 L	5000 L	6000 L	8000 L	10 000 L
Height at cover (mm)	1400	1550	1550	1550	1550	1550	1550
Width (mm)	1190	1450	1450	1450	1450	1450	1450
Length (mm)	2300	2400	3200	4000	4800	6400	8000
Inlet/Outlet Ø (mm)	110	110	110	110	110	110	110
No of openings	1	2	2	2	2	3	3
Top opening (mm)	450	450	450	450	450	450	450
Indicative No of Person	2-4	4-10	11-15	16-20	21-30	31-45	46-60

<sup>\*</sup>All septic tank supplied with 110mm inlet/outlet fittings.

# Benefits

- High quality industrial strength design
- Robust construction for challenging site conditions
- Can be installed on or off road
- · Unique cylindrical design for strength and reduced excavation depth
- Inlet seal is used at inlet/outlet for more flexibility of connection pipes.
- The tank is fitted with screw lid.
- An Extension can be screwed on openings in case of not reaching ground.

A septic tank consists of a chamber that retains sewer from a property for sufficient time to allow the solid to form into sludge at the base of the tank, where it is partially broken down through anaerobic digestion. The remaining liquid in the tank then over-flow from the tank by means of an outlet pipe to apit or leaching field as per local regulations & engineer's instructions.

Nabridas cylindrical septic tank are available from 2000 litres to 10000 litres (please refer to the table) and allows reduced depth excavation in comparison with the same size of spherical septic tank, offering considerable savings where ground conditions are difficult or where there is a high water table.

Total no. of people is calculated for household as an estimate only for all wastewater generated.

## A. General Installation procedures

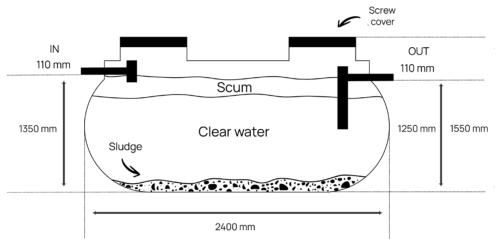
The instructions are intended for installation up to 2 m depth. This type of installation is meant for non-traffic areas.

#### 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 2 m depth



Cross section diagram of Nabridas septic tank

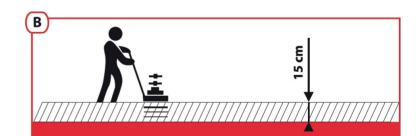
# B. Excavating, digging and assembling

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.

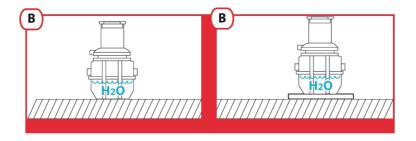
Place the tank on the compacted layer of 15 cm.

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.

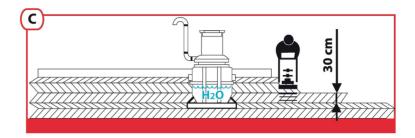
The height difference between the inlet and the outlet should be at least 3 cm. If this difference is less than 3 cm then the installation will not work efficiently. Gradient of inlet and outlet pipes should be maintained at 2% for proper drainage.



### 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.

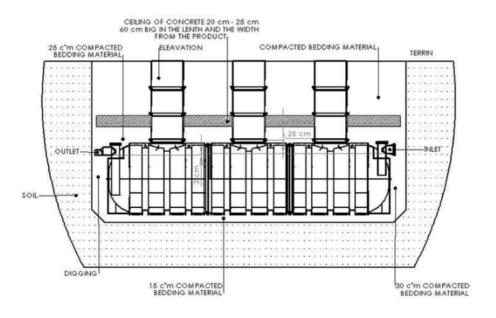


Illustration of the installation at depths greater than 1.5m in traffic areas

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.

