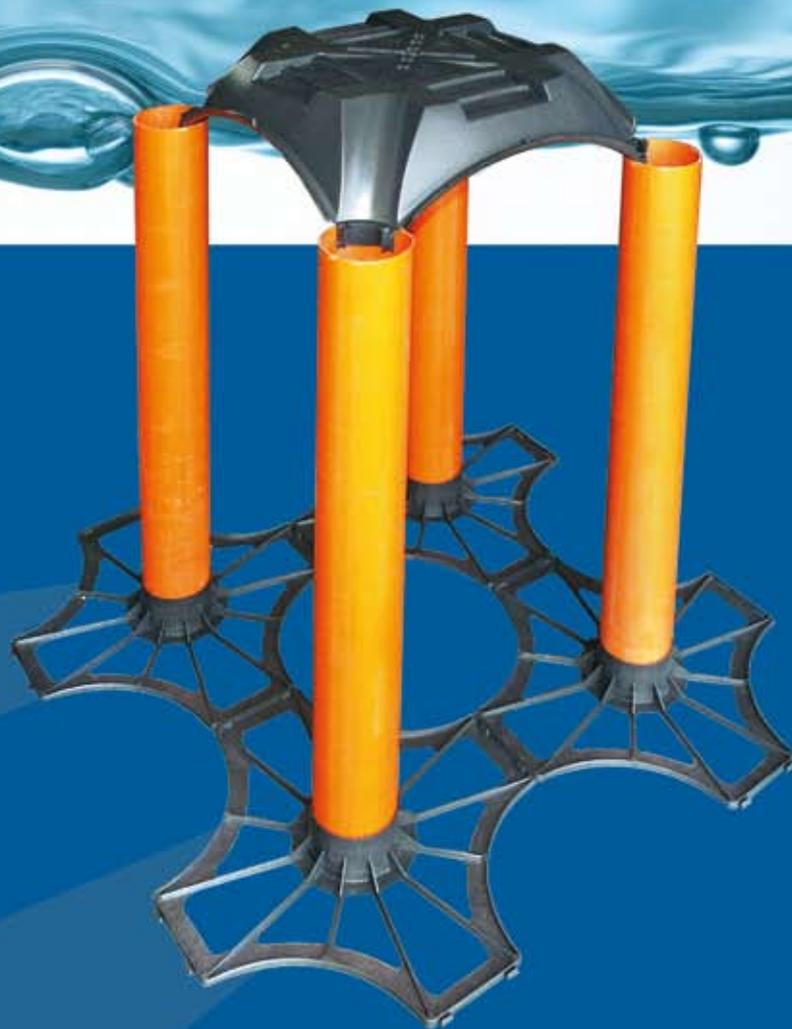




www.geoplast.it

TANK ELEVETOR®

ELEVETOR® TANK is the solution for large and compact stormwater storage tanks.
With the modular **ELEVETOR®** system from Geoplast any custom cistern shape, depth and size is formed very quickly for the in situ concrete pour.



ELEVETOR® TANK / USE AND CHARACTERISTICS

- In situ cast reinforced concrete stormwater storage and attenuation tanks
- Custom shape and size cisterns
- Tank depth up to 2 m
- Creates a high load-bearing capacity structure
- Formwork simple and fast to lay



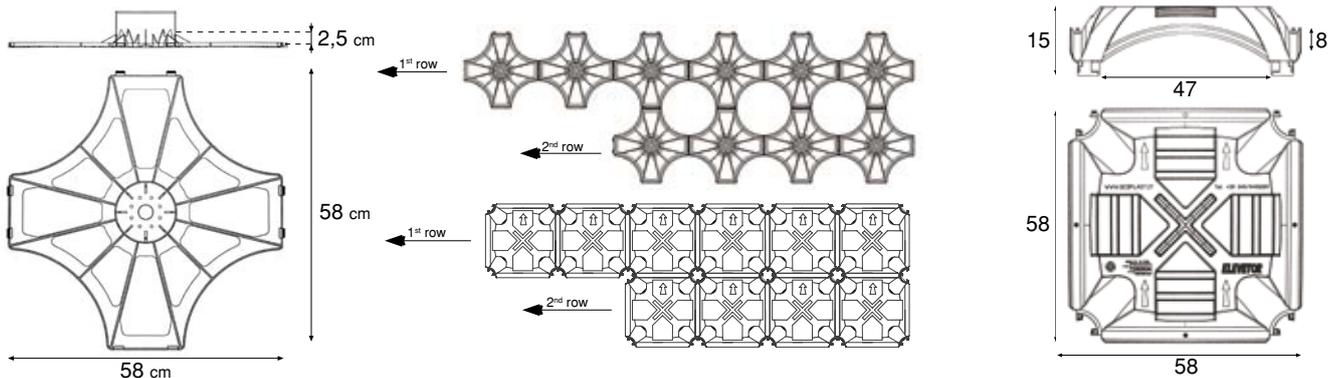
ELEVETOR® TANK is an application of **Geoplast's ELEVETOR®** system. The forms are placed after the creation of the tank foundation, floor and walls, including the water inlets and outlets. All the elements of system are made of plastic material that does not degrade in water.

Base ELEVETOR® / Advantages and characteristics

Base Elevetor® is an element in recycled polypropylene that guarantees an easy and quick installation of the PVC tubes supporting the **Elevetor®** system. Installation is precise and the tubes remain perfectly vertical.

ELEVETOR® formwork/ Advantages and characteristics

Elevetor® is an innovative formwork system size 58x58 h15 cm for the creation of water tanks that offers a significant reduction in the amount of concrete required, and very low production time.



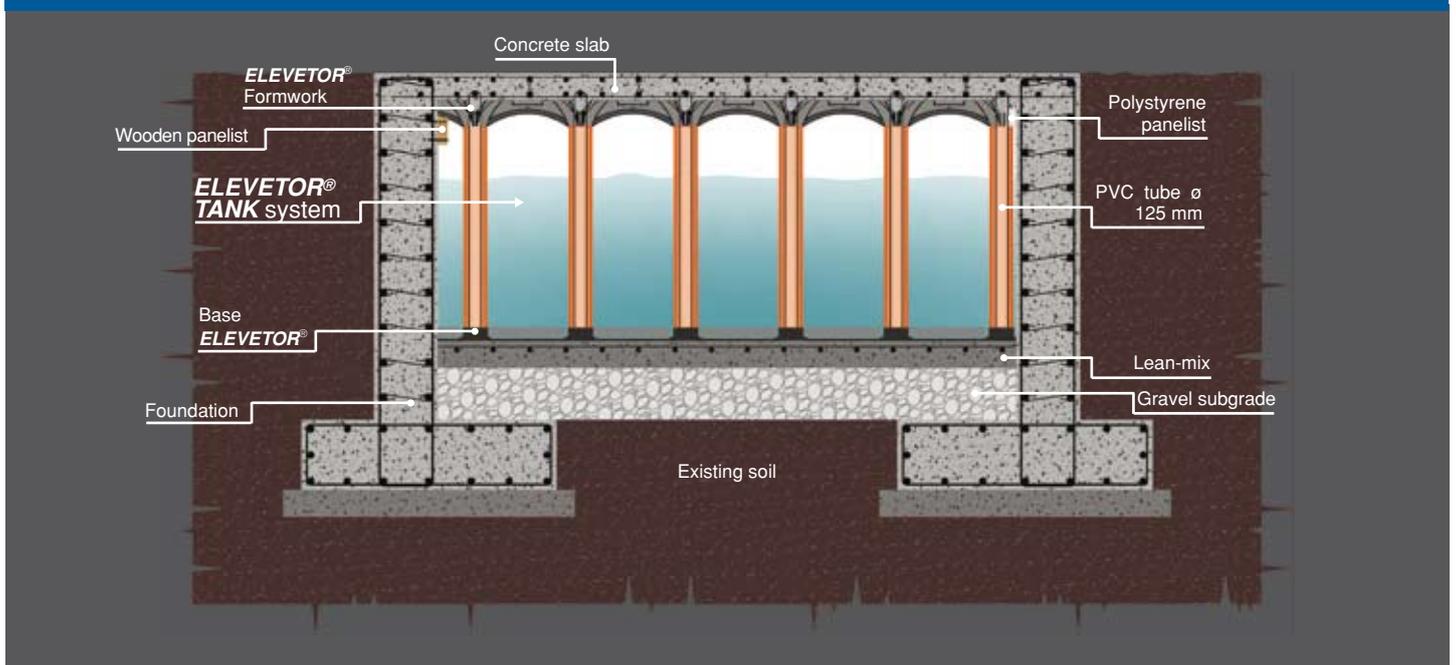
LOAD TABLE for ELEVETOR® H= 120 cm

TYPE OF LOAD	Overload kg/m ²	Min. slab thickness cm	Lean mix layer cm	Pressure on the subgrade kg/cm ²	Subgrade thickness cm	Pressure on the soil kg/cm ²	Rebar diameter mm	Rebar mesh cm x cm
RESIDENTIAL	1,000	4	0		0	3.44	6	20 x 20
			5		0	1.49		
			10		0	0.82		
			5	1.49	10	0.52		
	1,800	5	0		0	5.68	6	20 x 20
			5		0	2.45		
			10		0	1.36		
			5	2.45	10	0.86		
	5,000	7	10	3.48	25	0.67	6	20 x 20
INDUSTRIAL	10,000	10	15	4.30	30	0.87	8	20 x 20

ELEVETOR® TANK / HOW TO CREATE A CISTERN

- Pour the foundation and perimeter walls; use Rck 250 Kg/cm² concrete and steel armature;
- Place a gravel subgrade;
- Cover the subgrade with a layer of lean concrete to create an even surface for **ELEVETOR® TANK**, as per drawing or engineering spec;
- Pour a wall of waterproofed reinforced concrete around the perimeter of the cistern, height and thickness according to project spec., leaving holes for the water inlet and outlet;
- Lay the **ELEVETOR® TANK** system by Geoplast S.p.A., composed by modular formwork in polypropylene 58x58 H15 cm, fitted on PVC tubes ø 125 mm and cut to the desired length and sustained by the **ELEVETOR® TANK** grid.
- Lay the rebar mesh over the **ELEVETOR® TANK** formwork; hang the reinforcement rods from the mesh (the rods must reach the bottom of the PVC tube).
- Pour the concrete, Rck 250 Kg/cm², to fill the tubes and the formwork, and create a slab of the specified thickness.

ELEVETOR TANK® CROSS-SECTION



Compared to precast tanks, in situ pouring using the **ELEVETOR® TANK** system has a number of advantages:

- does not require any lifting equipment, as the all elements of the system can be carried by hand;
- low-depth tanks can be created, avoiding deep excavations in the case of high water table;
- the top slab can be covered with soil to create a green area, or used directly as a parking or a vehicle passage area (HGVs included);
- if the foundations and the perimeter walls are designed for it, it is possible to build further above the top slab.



ELEVETOR® TANK / TECHNICAL CHARACTERISTICS

The **ELEVETOR® TANK** system makes it possible to create reinforced concrete tanks of custom depth by cutting the PVC pipes to the desired length. The greatest depth achievable is 200 cm. Insert a steel rod in each pillar: each bar should reach the base of the pillar, and is U-shaped at the top end and hung to the wire mesh to connect the armature.



h ELEVETOR® cm	Cistern capacity		Concr. Consumption
	m ³ /m ²	l/m ²	m ³ /m ²
80	0.564	564	0.054
90	0.664	664	0.058
100	0.764	764	0.061
110	0.864	864	0.065
120	0.964	964	0.069
130	1.064	1,064	0.073
140	1.164	1,164	0.076
150	1.264	1,264	0.080
160	1.364	1,364	0.084
170	1.464	1,464	0.087
180	1.564	1,564	0.091
190	1.664	1,664	0.095
200	1.764	1,764	0.098

ELEVETOR® H=15 cm DATA

DIMENSION cm	HEIGHT H	CONCRETE QUANTITY to fill the formwork m ³ /m ²	PALLET HEIGHT m	No. OF UNITS/PALLET	QUANTITY m ²
58 X 58	15	0.030	2.5	225	75

The quantity of concrete required to fill the pillars is equal to 0.037 m³/m² per meter height

Concrete consumption calculation for ELEVETOR®:

$$\left[0.037 \times (\text{ELEVETOR}^{\circledR} \text{ system height in meters} - 0.15) \right] + 0.030 = \text{concrete consumption} \left[\text{m}^3/\text{m}^2 \right]$$

Example for an elevation of 2 meters:

Requires: Base ELEVETOR® + PVC tube ø 125 mm, 182.5 cm length + ELEVETOR® H15
Concrete consumption = (0.037 x 1.85) + 0.030 = 0.098 m³/m²

CUSTOMER SERVICE: PROJECT DEVELOPMENT

Send your projects in DWG format to ufficiotecnico@geoplast.it

ASSEMBLY HANDBOOK AND TECHNICAL SPECIFICATIONS

Available in our website www.geoplast.it in the "Documents and data" section

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