

Recovery and use of rainwater

Make rain
your good weather



**Rainwater collection tanks
from 1,000 liters to 102,000 liters**



Economisez votre eau Save your water for ...À

**WC
Washing machine
Floor cleaning
Watering the garden
Car cleaning
Feed ponds, pondsetc.**

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Everyone is talking about sustainable development

« So let's go for it ! »

By using rainwater, you contribute to the preservation of the environment, save money and enjoy the quality benefits of intelligent and above all long-term sustainable products.

Drinking water is the most important element in the world and must be of the highest quality. A private home consumes about 180 litres of drinking water per person per day. We consume about half of it for food and body care.

What about the other half?

Expensive drinking water should not be used for the washing machine, to flush the toilet and for the garden. The soft rainwater is particularly suitable for the washing machine. It preserves the laundry and the washing machine, and requires less washing product. It is also ideal for the garden and the toilet.

Many water users in the home and garden can be supplied with "free" water. Think about the amount of water consumed for toilet flushing. The washing machine is also very often used and the taps in the garage, the laundry room or the DIY workshop can also be connected to the water circuit of the tank ! Not to mention the grass wick, as well as the flowers, wilts when it dries.

The economy capacity is optimised for home and garden installations. All possibilities for the use of rainwater are presented here. Appliances such as flushing and washing machines already consume a significant amount of drinking water, which can be replaced by rainwater.

Let's be responsible

It is wise to invest in a facility for the recovery of rainwater, which bring a lot of advantages :

- It limits the consumption of drinking water and reduces bills while saving freshwater supplies.
- It reduces network loading during heavy rainfall and delays network congestion, so limiting the risk of flooding.
- It reduces the expensive treatments used to produce drinking water that, in fact, is used for everything but what it is treated for.
- It is a source for watering the garden, washing cars and floors, supplying natural ponds, flushing toilet, washing machines and central heating.

Did you know ?

For uses that do not require drinking water and large capacities, the heavy water consumptions are as follows :



Choice of package / system

Indeed, the runoff water recovered from the roof can be stored in order to use it for the different tasks explained later. To do this, simply clean it by removing all soiling with filters delivered in one of our packages.

In addition, the telescopic dome on the Carat tanks rotates 360° and facilitates connections. Its extension and its cover (pedestrian passage or passage for vehicles) allow a precise adjustment with the surface of the ground. Thanks to this innovation, mowing your lawn will be greatly facilitated.

Depending on the nature of your project, it is possible to implement different systems with our tanks :

Comfort Garden System

Watering the garden and washing cars.

Eco Plus Home System

Watering the garden, washing cars, flushing toilets, washing-machine.

Professional Home System

Watering the garden, washing cars, flushing toilets, washing machine **with microprocessors**.

Package systems available

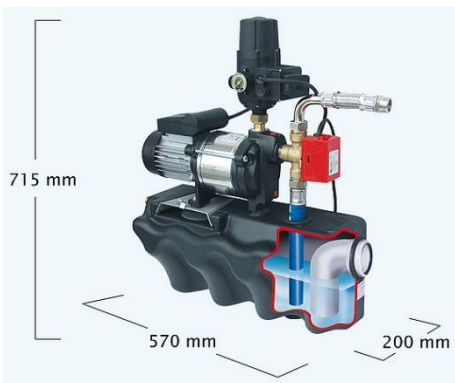
Comfort Garden System



The submerged pump of the Carat Comfort garden kit automatically manages starting and stopping of the pump with an integrated automation kit.

- To be used on the surface or immersed.
- Integrated automation kit.
- Automatic start and stop.
- With "lack of water+security.
- Very quiet.
- Treated against corrosion.
- Equipped with a strainer with float and 10 m of cable.
- Internal and external connection manhole.
- 2-year guarantee.

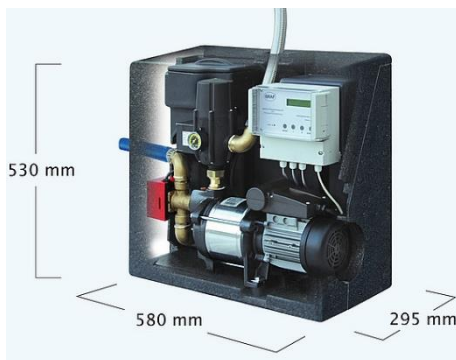
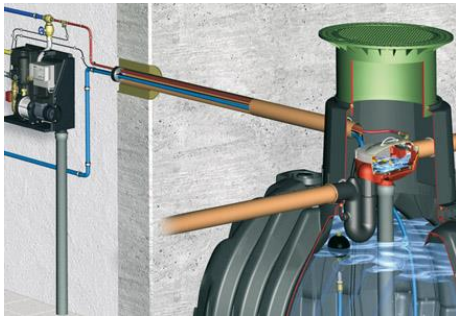
Eco Plus Home System



This complete pre-assembled power pack manages all your installation.

- Compliant with DIN 1988, Patent No. 10105173.
- Complete and pre-assembled.
- Integrated 10-litre tank.
- Delivered with float and 20 m of cable.
- Helps to overcome the lack of rainwater by automatically switching thanks to a 3-way solenoid valve on a tank supplied with tap water (manual operation possible).
- As soon as the float in the tank indicates the presence of rainwater, the pump feed switches automatically from mains water to rainwater.
- 2-year guarantee.

Professional Home System



Aqua-Center-Silentio
Automated microprocessor management centre.

- Complies with DIN 1988 and EN 1717 standards.
- Superinox pump 15/4 or 25/4.
- Integrated %ack of water+security.
- Display in%, digital display indicating the amount of water remaining in the tank.
- Automatic filter cleaning (optional).
- Total encapsulation of the station for maximum noise reduction.
- Integrated overflow according to DIN 1988 paragraph 3.
- Permanent display of pressure.
- Automatic switching on the mains network when the tank is empty (manual switch-over possible).
- 3-way solenoid valve.
- Multi-cellular KSB pump to increase performance and ensure a long life of the station.
- Aqua-Center-Silentio is an automated microprocessor management centre. The electronics control and manage the complete installation (possibility to switch into manual mode).
- It allows the automatic supply of water to the network, when there is a shortage of rain water.
- Micro-filter with fine mesh (100 microns).
- 2-year guarantee.

Retention tanks with flow limiter

100% Retention



Retain rainwater and evacuate to the network at a rate regulated by a flow limiter.

Retention Plus



Retain rainwater in its retention compartment and evacuate to the network at a rate regulated by a flow limiter.

Keep a volume of rainwater for personal use for the garden.

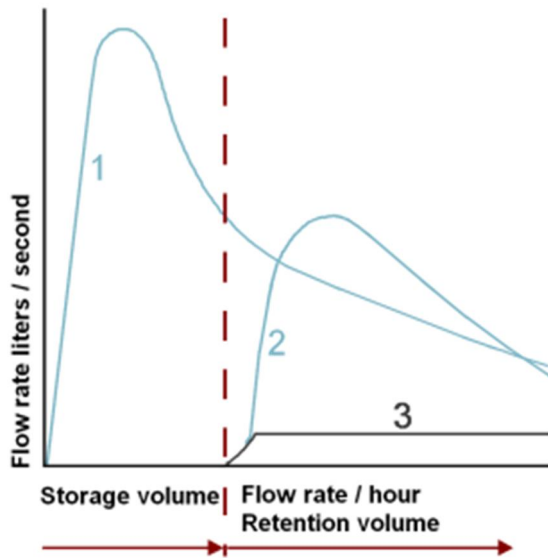
The retention capacity (from 1,500 litres to 16,000 litres) and the regulated discharge rate must be defined specifically according to the place of construction and the type of housing that needs to be equipped.

For retentions above 25,000 litres, it is preferable to install Rigofill modules Rigofill®. Indeed, starting at 25 m³ it is more advantageous, financially speaking, to install these elements.

More and more, the municipalities impose those tanks in order to reduce the discharge of rainwater into the natural environment. The retention capacity and the regulated discharge rate (which depends on the municipal General Water Evacuation Plan) are mentioned in the specifications.

These tanks are especially recommended when:

- The storm basins are saturated
- The networks are overloaded
- Infiltration into the soil is too slow
- The water table is shallow



- 1) Normal flow to the network without retention.
- 2) Flow with regulator without float.
- 3) Flow with regulator and with float (regular flow).

These retention tanks are increasingly imposed by certain municipalities or by the cantonal water department of certain regions.

Before entering the tank, rainwater must be filtered.

Special tanks for drinking water (source)

The nature of the coating of **drinking water** storage tanks is a major problem, particularly its resistance, its compatibility with the characteristics of water and, more importantly, its sanitary compliance.

The tank liner must meet the following criteria so that it can preserve the quality of the stored water :

- Watertightness
- Low roughness
- Low porosity
- High compactness
- Abrasion resistance
- Easy maintenance

Canplast offers underground tanks for drinking water in various forms. All tanks are **food grade** polyethylene, neutral in smell and taste.

In order to have enough source water available during peak consumption or during long periods of drought, an intermediate tank can be installed.

Drinking water tanks can be equipped with different elements (e.g. inlets, outlets, overflow, strainers, etc.) or additional connections.

The main advantages are :

- Robust and durable polyethylene container.
- Model for food use with control certificate.
- Simple and easy to clean thanks to the smooth inner surface of the tank.
- Easy to carry thanks to its reduced weight, easy installation and quick assembly.
- Special extension for drinking water.
- Rehausse spéciale eau potable.
- Certified food grade (KTW).
- Certified by TÜV DIN standard.
- Available as an accessory, 200-litre catchment manhole.

A tank intended for the storage of drinking water must not be used for other applications. It must be cleaned once before commissioning.

The special telescopic extension for drinking water tank equipped with a top cover for pedestrian passage with locking key and a lower cover with ventilation and insect filter.



Drinking water tank



Catchment manhole



Special extension

Design tanks from 300 to 2,000 litres (above-ground tanks)

Or how to give an aesthetic added value to your home !

Canplast offers you a large selection in surface-mounted storage tanks. All tanks are made of polyethylene and can be equipped with additional connections as required (tap, collector, etc.).



Amphore Antik



2 in 1



Sunda



Woody



Rocky

Tanks placed on the surface are intended for several uses and are more advantageous to install than underground tanks. For water quality, it is preferable to place the tanks in a cool and shady place.

Collectors

All our collectors are filtering and make it possible to obtain quality rainwater by preserving it from contamination coming from the roof such as leaves, twigs, insects, foams, etc.

The automatic overflow function, common to the entire range, keeps the tank from overflowing.

The Canplast/Graf collectors are among the easiest to install on the market, it will take you for example only 5 minutes to install the "Speedy+collector".



Speedy



Regendieb



Eco de luxe

Useful information:

1) How much water will I recover?

You can recover a lot of rainwater per m² of roofing. Even during periods of little rain, you can still recover a significant amount of rainwater per m² of roofing.

2) What is the main purpose of collecting rainwater?

Storage for outdoor use (watering the garden, washing cars...)

Storage for home use (toilets, washing machine...)

Retention with limited flow output.

3) Where to place the tank?

Outdoor above-ground/underground

Indoor (cellar, basement, etc.)

4) Should all tanks be emptied in winter?

Not all. The underground or cellar tanks can be used all year round.

Only tanks placed outdoors will need to be emptied (and if possible stored indoors).

5) How to overcome the lack of rainwater?

Thanks to our pre-fitted and pre-assembled power supply units (page 4-5), the transfer between rainwater and mains water is automatic and safe (EN1717 standard).

6) What happens when your tank is full?

Whatever the installation, you must provide an overflow. This will be connected to the rainwater network (manhole). On most of our tanks, a sleeve serves as an overflow, this is also the case for the filter.

7) Is the nature of your soil compatible with our tanks ?

Warning! Before installing an underground tank, always check the exact nature of your soil and the depth of the water table. If your soil is clay (or porous) or the water table is high, consult us before you buy in order to find out exactly how to proceed (or call a specialist of your choice).

8) Should the installation be regularly checked?

The following points should be checked once a year:

- Condition, connections and inclines of gutters and downpipes.
- Appearance and smell of rainwater in the tank.
- Watertightness, connections and covering of the tank.
- Overpressure installation and electrical installation.
- Rainwater distribution pipes and power sources.
- The filter must be checked and, if necessary, cleaned in accordance with the manufacturer's guidelines.

9) What is the lifespan of an underground tank?

The underground tank is protected against decomposition. The tank is guaranteed for 20 years.

10) Can my tank become dirty with soot, pollen, dust or other dirt?

Several self-cleaning filters stop dirt, pollen, leaves and bird droppings, so that about 90 % of the water flows "clean" into the tank.

- A **"first"** filter (usually already installed) that blocks large elements (e.g. leaves, twigs) and prevents them from entering the gutter.
- A **"second"** filter (supplied by us - 0.35 mm mesh filter) is installed at the height of the manhole for easy cleaning and before the water falls into the tank.
- A **"third"** filter (supplied by us) Garden system: 1.2 mm mesh strainer / Home system: 0.23 mm mesh strainer
- A **"fourth"** filter (provided by us, optional) essential for the washing machine and to be placed after the pump: 0.1 mm (100 microns)

You will need to clean the tank approximately every 5 to 10 years.

11) Do bacteria and algae form in still water?

No, if the water is stored in a cool and dark place (opaque tank, shaded place).
If green algae or bacteria do not receive light or heat, they will not grow.

12) How do we prevent small particles of dirt suspended in the tank from getting into the pipeline despite the presence of a filter?

These small particles fall to the bottom. So that they are not swept away in a whirlpool, water flows at a low flow rate.

13) How long does it take for the installation to be cost-effective ?


It depends on several factors:

- What is the cost of water and wastewater taxes?
- Are there opportunities for development ?
- Can you benefit from state subsidies ?
- What are your daily habits ?
- Do you use a lot of water or very little ?
- Is the collected rainwater intended exclusively for watering the garden or also for the home (WC, washing machine, etc.) ?


Depending on these factors, your installation will be profitable after 5 to 20 years.

Characteristics of our tanks

Platine tanks

	Capacity (liters)	Length (m)	Width (m)	Height without dome (m)	Height with dome (m)	Weight (kg)	Item N° (n°)
	1500	2,10	1,25	0,70	1,01	080	390 000
	3000	2,45	2,10	0,73	1,05	170	390 001
	5000	2,80	2,30	0,95	1,26	240	390 002
	7500	3,60	2,25	1,25	1,56	360	390 005

Carat tanks

	2700	2,08	1,56	1,40	2,01	120	370 001
	3750	2,28	1,75	1,59	2,20	150	370 002
	4800	2,28	1,98	1,82	2,43	185	370 003
	6500	2,39	2,19	2,10	2,70	220	370 004

Carat tanks XL

	8500*	3,50	2,04	2,08	2,70	355	370 005
	10000*	3,52	2,24	2,28	2,90	410	370 006

Carat tanks XXL

	16'000	04,66	2,50	2,55	3,20	0805	380 001
	22'000*	06,15	2,50	2,55	3,20	1015	380 000
	26000	07,05	2,50	2,55	3,20	1150	380 002
	32000*	08,53	2,50	2,55	3,20	1360	380 003
	36000	09,43	2,50	2,55	3,20	1495	380 004
	42000*	10,98,91	2,50	2,55	3,20	1705	380 005
	46000	11,82	2,50	2,55	3,20	1840	380 006
	52000*	13,30	2,50	2,55	3,20	2050	380 007
	56000	14,20	2,50	2,55	3,20	2185	380 008
	62000*	15,68	2,50	2,55	3,20	2395	380 009
	66000	16,59	2,50	2,55	3,20	2530	380 010
	72000*	18,07	2,50	2,55	3,20	2740	380 011
	76000	18,97	2,50	2,55	3,20	2875	380 012
	82000*	20,46	2,50	2,55	3,20	3085	380 013
	86000	21,36	2,50	2,55	3,20	3220	380 014
	92000*	22,84	2,50	2,55	3,20	3430	380 015
	96000	23,74	2,50	2,55	3,20	3565	380 016
	102000*	25,23	2,50	2,55	3,20	3775	380 017

* => with 2 domes

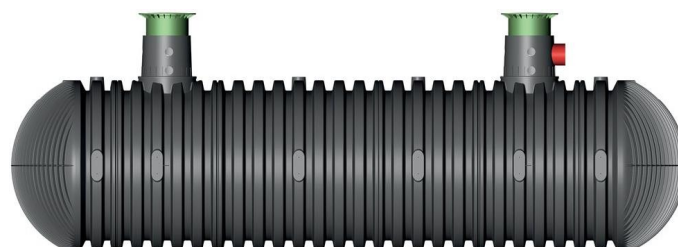




Figure 1 : 42,000 liters tank



Figure 2 : 102,000 liters tank