

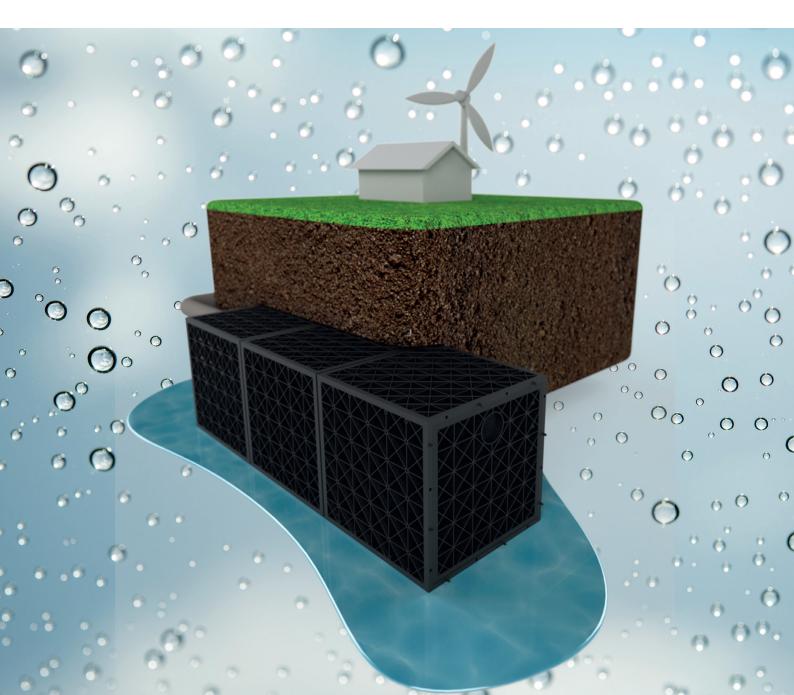
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### Rainwater management



Rainwater is one of the most valuable resources there is. Yet every day we let thousands of litres of clean rainwater disappear into the sewer system. We rarely give it a moment's thought, but this can be costly both for society and for our ecosystem.

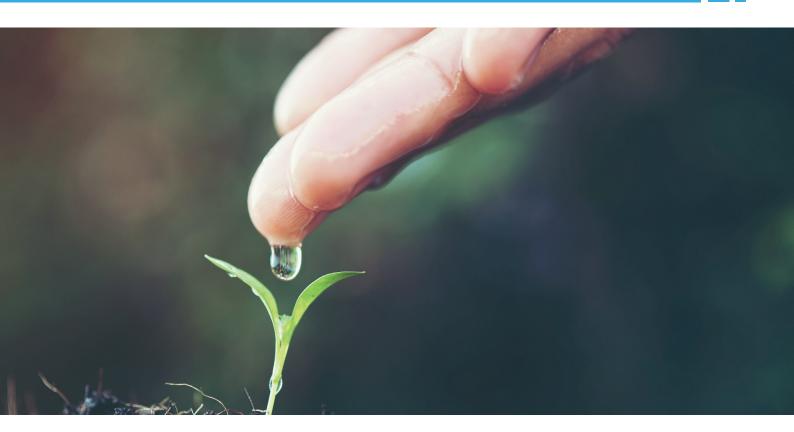
Rainwater infiltration systems such as Raincycle ensure that rainwater is gradually released into the ground in a controlled way. Via the groundwater, the rainwater is returned to the natural water cycle. You could say that we're giving **Mother Nature a helping hand**.

During periods of heavy rainfall, infiltration systems also reduce the chance of **flooding**. The high degree of permeability of this kind of system means that large quantities of water can be infiltraated into the ground in a controlled manner. This is advantageous, because a sudden large influx of rainwater into the sewers can cause major problems.

If the ground nevertheless becomes saturated with groundwater after a persistent downpour, the overfow of the infltration system removes the excess water to the sewer system. And since the geotextile allows groundwater to seep into the crates, Raincycle also functions as a **drainage system.** Waterlogged lawns and puddles in the flowerbeds will be a thing of the past.

EU policy strongly promotes the implementation of rainwater infiltration measures. Legislation is in the pipeline to make the use of infiltration systems **compulsory in both new-build and renovation projects**.

## A unique all-in-one system



#### Modular

Raincycle engineers have developed a very simple system that is suitable for both DIY and professional use. Unlike most industrial systems, Raincycle has been designed for small and medium-sized projects, such as car parks, residential homes and apartment buildings. It consists of separate modules that are connected together to form a customised unit. No need for specialised companies to do complicated calculations. You simply combine as many modules as you need.

#### **Quick and compact**

Each Raincycle infiltration crate is made up of seven individual panels, which can be fitted together to make a box shape in no time. The panels are already covered with a 100% water-permeable geotextile membrane. Once a crate has been assembled, it is fully ready for use. Raincycle infiltration crates are not pre-assembled, so they can be compactly packed and transported, which also reduces their environmental footprint.



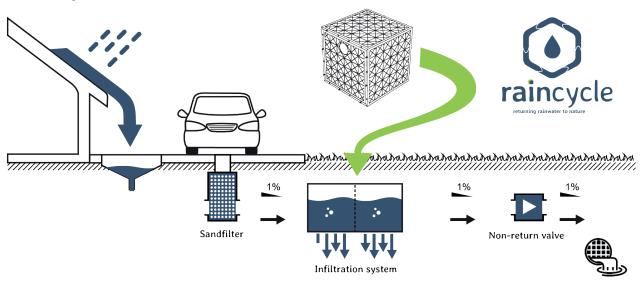
#### **Environmentally responsible**

To complete the picture, Raincycle always opts for sustainable and recycled materials. This means that we are committed to using environmentally responsible plastics, which can be fully recycled again. In this way, Raincycle contributes to the circular economy.

# How do I connect up my Raincycle infiltration crate?

#### Direct connection to the drains

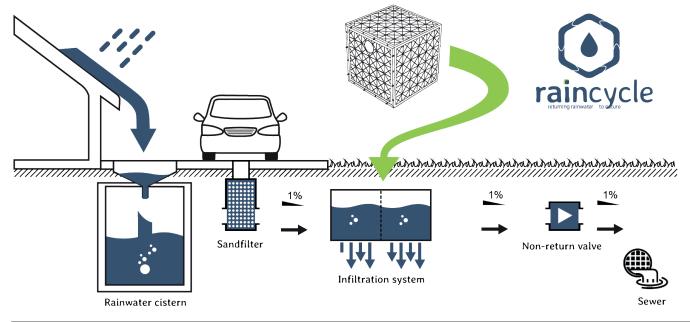
When the drains collecting rainwater from the roof, patio or car park are directly connected to Raincycle (without a rainwater cistern), it is important to place a sand filter upstream of the infiltration crates to prevent dirt and sand fouling the infiltration system. If the infiltration system overflow is connected to the sewers, a non-return valve should be fitted. Lay all pipes with a fall of 1 cm per metre to ensure that the water runs freely.



#### Connection to the drains via a rainwater cistern

When the drains collecting rainwater from the roof, patio or car park are connected to a rainwater cistern, the infiltration crates are directly connected to the overflow. If the infiltration system overflow is connected to the sewers, a non-return valve should be fitted. Lay all pipes with a fall of 1 cm per metre to ensure that the water runs freely.

Sewer



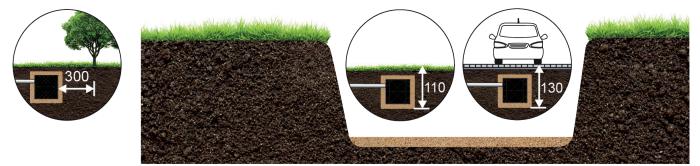
## **Assembly and installation**

#### How do I determine the capacity of my infiltration system?

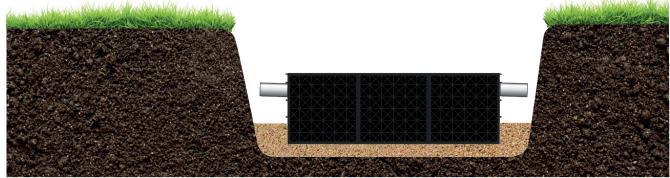
One Raincycle infiltration crate has sufficient capacity for 7 m<sup>2</sup> of roof or patio.

#### Installing the infiltration system

**1.** Dig a trench with a surface area as large as the infiltration crates to be installed, plus 30 cm all round. The trench should be 110 cm deep if there is to be low vegetation above it, or 130 cm in the case of a patio or drive. Add a 10 cm layer of drainage sand and level it off. Make sure that the sand does not contain any sharp objects.



**2**. Place the infiltration crates against each other. Ensure that there is a section of sewer pipe about 50 cm in length at the entrance to the first unit. Fill the space around the in Itration crates with 10 cm of drainage sand.



**3.** Connect up the pipework (and if necessary a sand filter). Continue filling with drainage sand up to 10 cm above the infiltration crates. If the area above is to be planted, place a sheet of plastic over the infiltration system and cover with earth.



## Advantages





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## **Technical specifications**

### **Infiltration crate**

Dimensions:
Material:
Colour:
Weight:
Max. vertical load:
Max. horizontal load:
Storage capacity:
Permeability coefficient:
<b>Biological resistance:</b>
Chemical resistance:
Connections

### 575 x 575 x 575 mm Recycled polypropylene Black Approx. 12 kg 270 kN/m² (T NBN-42 606) 25 kN/m² (T NBN-42 606) 190 litres 75 % Very good Very good 100 mm - 110 mm - 125 mm - 160 mm



### Geotextile

Material: Colour: Weight: Production method: O value: Polypropylene, UV stabilised Black 150 g/m<sup>2</sup> Machanically bonded, non-woven 70 μm



### Packaging

Cardboard box:: Weight per box: Quantity per pallet: Weight per pallet: Quantity per load: 1 infiltration crate (7 panels) Approx. 13 kg 36 pieces Approx. 483 kg 864 pieces (24 pallets)



### THANK YOU FOR TRUSTING US!





Pioneering Sustainable Solutions

