STORMBOX

Water

Water is our dearest asset on earth. Not very strange that water management is a subject with a fast growing attention.

Global warming, periods with intense rainfall followed by severe droughts and a stormy growth of the human population are factors that seem to collide.

And in fact they do. The growing population translates to an explosive growth in build up areas, leaving less space for water to flow freely.

As a result groundwater level problems occur, sewers are overloaded and water treatment plants become less effective.

Pipelife recognized this and introduced a complete family of innovative rainwater infiltration products consisting of:

- Complete assortment of pipes and fittings.
- Leave separator.
- Road gully with sand and debris collector.
- Full range of infiltration, transport and drainage pipes.
- STORMBOX
- Geo textiles.

STORMBOX

The STORMBOX is an innovative new product that finds its main application in rainwater infiltration and storage solutions.

General application areas:

- Per building.
- Per group of buildings.
- Per build area, behind the road gullies.
- As a transport system in line to open water.
- As a buffer, box wrapped in a waterproof textile.
- As a delay in a clean water sewer.
- As a nurturing system for trees, with or without filling opening

With the help of Pipelifeõs infiltration systems groundwater levels will be kept to an acceptable level, the water will be transported to a place were it is not in the way, the existing sewer system will not be overloaded and sewer treatment plants can use their capacity to do what they need to do; clean dirty water!

Key Features

- Low weight, highly manageable
- One of the strongest boxes in the market with a designed lifetime over 50 years
- Modular, fast and easy stacking
- Flexible configuration, box can be split in halves for brick bond formations
- Horizontal and vertical inspection and cleaning possible
- Very low height, ideal for low groundwater levels
- Flexibility in inlets from 110-200mm
- Nett capacity of 95.5%.

User Benefits

Use of the STORMBOX has many advantages

- Low in weight, highly manageable
- Modular system for fast and easy stacking
- Ground plate only needed on bottom
- Box can be split in two halves for flexible configuration
- Horizontal and vertical inspection possible
- Horizontal and vertical cleaning possible
- The box height of only 300 mm is ideal for low groundwater levels
- Suitable for horizontal and vertical transport of water
- Suitable for delay or buffering of water
- Flexibility in inlets of 110, 125, 160 and 200 mm
- Nett capacity of 95.5% or 206 litre
- Prefab package with geo textile and inlets available

Installation

In order to ensure a proper and durable functioning of your infiltration system, please take note of following installation guidelines

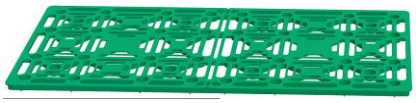
- The STORMBOX units should be installed according the installation instructions and according local regulations.
- The Stormbox Calculator provides you with an accurate calculation for dimensioning your system.
- The Stormbox Loader program calculates the influence of soil, depth of installation, and traffic on the loads acting on the system.
- The base of the excavated hole must be smooth and without any ponds, bulges or soft spots. If any, they should be removed and if necessary refilled with compacted granular fill material.
- The groundwater level should be minimal 0.5 m below the deepest STORMBOX installed
- Use a proper geotextiles for infiltration
- All boxes and ground plates should be connected with the available clips
- In case of infiltration: the base should be filled and compacted with a bedding of 10 cm coarse sand or other granular material ensuring infiltration from the STORMBOX units to the underlying grounds.
- In case of attenuation, the entire project should be closed with geomembranes.
- Make use of the family of rainwater infiltration products to prevent blockage of the system
- Use of drainage sand with a minimum of 300mm around infiltrating area.
- In case of traffic, the top of the project should be protected with at least 80 cm rough sand and a layer of asphalt or concrete.
- The STORMBOX will also be available as prefab packages, pre wrapped in geo textiles and including the desired connections

Technical Data

STORMBOX

Ground plate

Clips



Colour

Traffic Green RAL6024

Material

Polypropylene

Dimensions

Length:	1200 mm
Width:	600 mm
Height:	300 mm

Capacity

Nett capacity 95,5 %, 206 l

Weight

STORMBOX	8.0 kg
Ground plate	1.7 kg
Clip	0.01 kg

Maximum strengths short term

Vertical	500 kN/m^2
Lateral	85 kN/m^2

Maximum strengths long term

Vertical	100 kN/m^2
Lateral	20 kN/m^2

Inlets

From all side walls 110, 125 and 160 mm. From top up to 200 mm

Regulations

BRL 52250, KOMO approval pending, patents pending WO2008/140297, WO2008/140298, WO2008/140310

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