System of drainage boxes STORMBOX II for infiltration and attenuation of Stormwater

NEW!

STORMBOX II

Raineo
Flood becomes fiction

PIPELIFE

NEW!

System for infiltration and attenuation of Stormwater STORMBOX II

Pipelife's offer includes new STORMBOX II boxes, which is a key element of the Raineo Stormwater management system. In this system, we have introduced a number of improvements, which ensure much greater functionality.
We also offer complex technical and design assistance in the selection, optimization and remote monitoring of the Smart Raineo system.

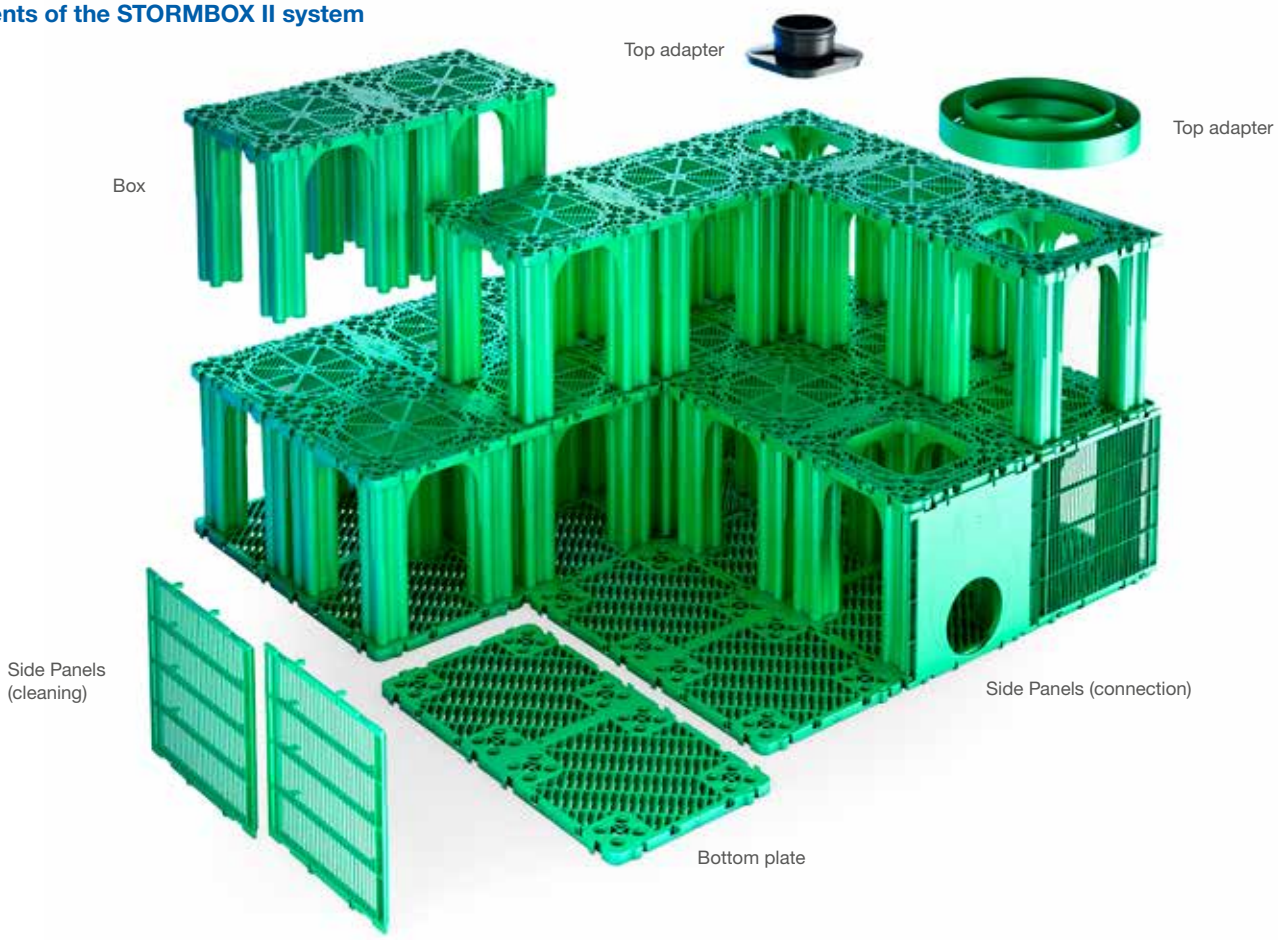
Main application

- Green areas and vehicles with wheel load SLW 60
- Groups of residential or industrial buildings
- Areas where flood protection is particularly important
- Water tank for further use

Pro-eco approach

- Maintains a stable level of groundwater
- Effective in fighting flood reduction
- Reduces the cost related to building new rainwater collectors
- The attenuation system keeps rainwater for further use, for example for irrigation
- Made of raw material that can be recycled

Elements of the STORMBOX II system



Technical specifications	
Material:	Polypropylene PP-B
Dimensions (length x width x height):	1200 x 600 x 600 mm
Number of tunnels:	2 on the long side, 1 on the short side
Volume:	432 l
Net capacity factor:	95,5%
Water net capacity:	412,6 l

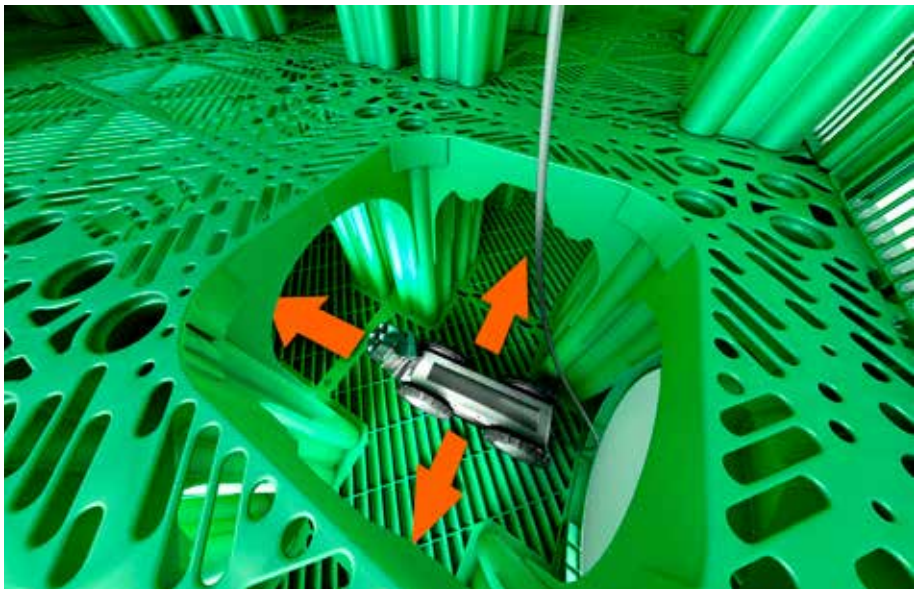
Documents

- National technical assessment ITB-KOT-2018-0616 Edition 1
- IBDiM-KOT-2018/0240 Edition 1

Green STORMBOX II boxes are made of high quality PP-B plastic.

Main advantages

- One of the most durable boxes on the market with over 50 years exploitation life-time
- Resistance to a maximum vertical load of more than 700 kN / m^2
- Modular design to facilitate and accelerate the assembly
- Patented and innovative side panels and bottom plates construction that protects the geotextile from damage during high-pressure cleaning, the bottom plate is marked with the direction of cleaning
- Three horizontal tunnels with a width of 295 mm and a height of 500 mm for cleaning and inspection with a CCTV



Wide spaces facilitate the passage of the control camera

Innovative construction of side panels and bottom plates - inclined ribbing, which during cleaning reverts the pressure water jet and prevents damage to the geotextile

- The structure of the box is more open, contributing to improved infiltration
- Possibility of variable arrangement (such as bricks)
- Two vertical opens with a maximum width of the hole in the top plate 400 mm
- Two times faster installation of the boxes
- Possibility for horizontal and vertical cleaning and inspection
- Connecting pipes with a diameter of 160-400 mm to the unit
- Innovative PP material adapter, which is located on the upper wall and allows inspection using double-layer pipes PP DN / OD 630 and 400 mm SN 8, SN 4 and single-layer pipes PP DN / ID 425 mm SN 4, SN 2
- High water net capacity 412.6 l, Net capacity coefficient 95.5%
- Patented method of connecting the boxes without clips
- The bottom plate is only used in the lower layer without the use of clips (“push-fit”)
- Thicker and stronger bottom plate
- Ability to cut boxes in the middle and variable brick bond stacking
- Suitable for delaying water removal or storage
- Complete delivery with the necessary elements, i.e. geotextile, membranes and top adapters

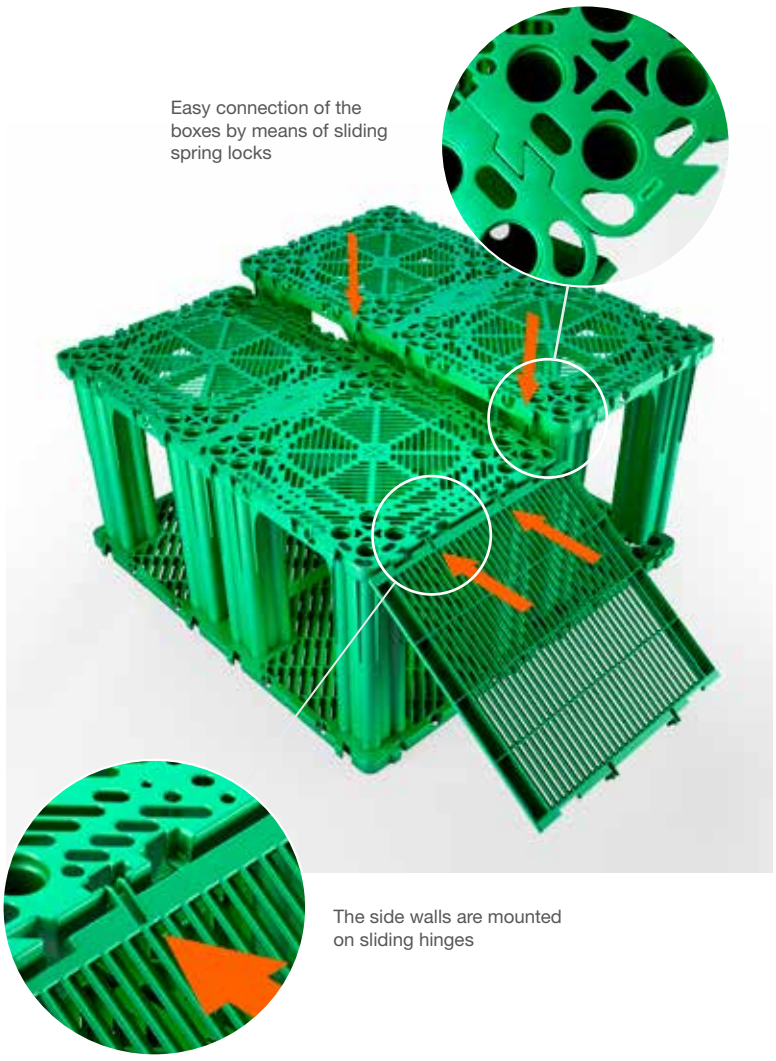
Installation

3To ensure the correct and stable operation of the STORMBOX II system, follow the instructions below

- All equipment must be installed in accordance with the instructions, CEN TR 17179 and local regulations
- The base of the trench should be flat, smooth and without any ponds, bulges or soft spots. The base should be filled and compacted with a bedding of 10 (15) cm coarse sand

System of drainage boxes STORMBOX II for infiltration and attenuation of Stormwater

- When installing infiltration system, the groundwater level must be at least 0.5 - 1.0 m below the bottom of the boxes
- Use a suitable geotextile, as material. High-density is recommended, and usage of woven geotextile!
- The sidewalls should be filled with fine gravel
- The traffic area of the wheeled vehicles must be covered with at least 80 cm layer of compacted soil, which has to be covered with asphalt or concrete
- When applying geotextile or foil (in the case of attenuation), they must be overlapped with minimal 15 cm
- Bottom plates are laid on the geotextile and connected by the slide locks
- Mount the vertical columns of the box into the bottom holes
- The side panels are installed only on the outside of the tank in the designated locations
- Do not forget about the correct positioning of the connecting panels
- The entire reservoir must be covered with geotextile and foil (for attenuation tanks)
- On the top of the upper box, the appropriate adapters are installed, depending on the design requirements



Example assembly diagram for the STORMBOX II box modules