**Modular boxes for infiltration and storage of stormwaters Stormbox I**

1. **Application:** for non-pressure detention or retention of storm water. Rainwater can be used for drainage into the soil, controlled discharge to the sewage system or to channels and rivers, reuse, irrigation, etc.
2. **The system is usable for:**
* **Infiltration** — water is collected in the units during rainfall and allowed to drain away by soaking into the surrounding ground over a substantial period of time after the rain has stopped
* **Attenuation** — water is collected in the units during rainfall and released at a reduced flow rate through a flow control device, into an appropriate outfall. This reduces peak flows in the watercourse and, therefore, minimizes the risk of flooding
* **Combined systems** — water is collected in the units during rainfall and able to flow out of the tank via infiltration and through an outlet flow control device into an appropriate outfall.
1. **Product description**: modular boxes with open-worked walls, to be connected (vertically or horizontally) and secured with clips, wrapped in geotextile placed in a trench on a gravel bedding, and in case of poor permeability of the soil, surrounded by gravel pack; used for rainwater infiltration and attenuation.
2. **Production:** The units are manufactured using conventional injection moulding techniques.
3. **Material:**   must be a virgin material PP-B with MFI <6
4. **Color:** different than black
5. **Storage factor:** min 95,5%
6. **Net water capacity:** 206 dm3
7. **Dimensions of boxes:** width-60cm, length-120cm and height-30cm
8. **Total surface area of opening:**  ≥ 50% of the open box area.
9. **Structure of boxes:** cuboid with Five faces (without bottom), with special vertical and lateral reinforcements.
10. **Type of connection between boxes:**  clips and bottom plates.
11. **Brick bond formation:** Yes
12. **Cutting:** The box and the bottom plate are designed in such a way that they may be cut in two halves widthwise.
13. **Inlets, vertical and horizontal for filling and revision:** DN**/**OD110, 125, 160, 200
14. **Adapters for lateral entry into the system:** from DN/OD250, 315, 400 and 500
15. **Short term vertical loading on top face:** 505 kN/m2
16. **Short term lateral loading on side face :** 99 kN/m2
17. **Long term vertical loading on top face (for 50years):** 119 kN/m2
18. **Long term  lateral loading on side face load (for 50years):  :** 28 kN/m2
19. **Durability:** The boxes, when used in accordance with requirements, will have a life of 50 years when maximal loaded.
20. **Marking, according the requirements:** manufacturer’s logo, product name, material symbol, manufacturing date, box capacity.
21. **System kit:** Infiltration boxes, bottom plates, clips and geotextile or membrane.
22. **Installation parameters for areas subject to traffic loads:** min. depth-0.8m, max depth-4.15m
23. **Installation parameters for green areas:** min. depth-0.4m, max depth-4.15m
24. **Compatibility with drainage and sewerage system elements ( manholes and inspection chambers, waste water treatment plants, different types of pipes-smooth or profiled, etc. )**: Yes
25. **Inspection and cleaning:** Inspection via CCTV and hydro-dynamically cleaning with a pressure of up to 180 bars.
26. **Resistance to chemicals:** The components of the system are suitable for use in contact with the chemicals likely to be found in rainwater
27. **Software:** Software that guarantees conformity with the standards of product, way of application and methods of calculations for hydraulic and static dimensioning of the boxes (systems for infiltration or storage).
28. **Standards:**AT-15-7731 / 2008 ITB, AT/2008-03-2402 INDiM, BRL 52250
29. **Certificates and approvals:** KOMO KIWA N.V.K54088/01, IBAK KOKS RIDDERKERK, IBAK retell IPEK, 403388-4 OFI Technologie & Inovation GmbH
30. **Reuse and recyclability:** The product comprises polypropylene that can be recycled.
31. **Manufactured:** conformity  with ISO 9001