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NEW!

Now with
DIBt approval

ACO Stormbrixx

Maintenance and Inspection Manual



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NEW! Now with DIBt approval Plan with certainty thanks to general building approval

On 26/4/2013 the German Institute for Building Technology (DIBt) issued general building type approval certificate number Z-42.1-500 to ACO Tiefbau Vertrieb GmbH for the ACO Stormbrixx modular infiltration system, confirming the positive material and product features of the system. This means that our innovative modular infiltration system now offers planners, building contractors and developers an additional level of certainty when installing infiltration and retention systems.



Information for Operators

If the owner and the operator are not one and the same, then it is helpful to agree:

- Who is responsible for day-to-day operations?
- Who is responsible for initiating maintenance or repairs for the plant?
- Who will react when there is a malfunction?
- The operator is responsible for the siting (design and dimensions), installation and operation of the system.
- The owner has to ensure that the operator or person responsible has a copy of the maintenance manual.

It is the responsibility of the operator to ensure the following points are respected:

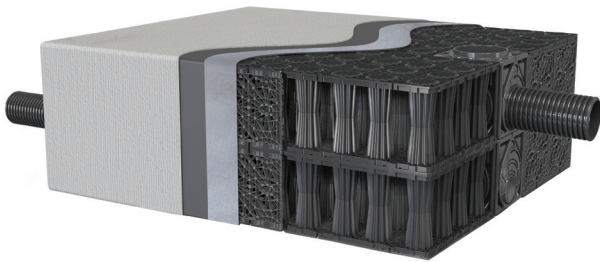
- The system must only be used as intended and in a good operating condition
- Maintenance timetables are adhered to and faults dealt with swiftly
- Only qualified and authorised staff are used

Visual Inspection, Maintenance and Cleaning of ACO Stormbrixx

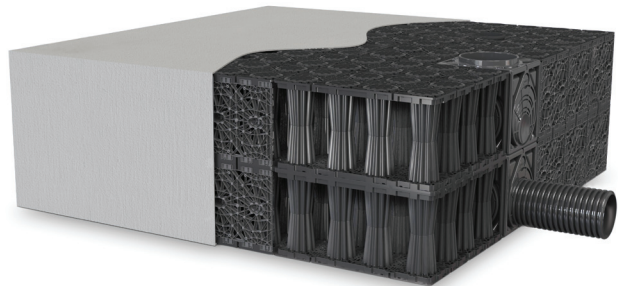
Thanks to the intelligent building block architecture of ACO Stormbrixx, which requires only an external perimeter to the entire system using easy-to-erect side walls, the total volume of the installed infiltration system is accessible for inspection and washing.

Basically, maintenance work needs to be thought about during the planning phase. In detail, this may mean: in addition to the maintenance instructions we always recommend adhering to all the current relevant legal requirements (DWA-A 138 with instructions for the maintenance of infiltration systems)

During and after the construction phase care must be taken to ensure that no sediment enters the inlet pipes, shafts and the infiltration system. During and immediately after the construction phase an increase in the volume of sediment must be expected from the connected surfaces and must be counteracted.



ACO Stormbrixx Infiltration system for block storage



ACO Stormbrixx Infiltration system for block infiltration

Maintenance Frequency

The initial inspection/cleaning of the ACO infiltration system should take place after completion and before handover, so forming part of the commissioning of the installation.

A visual inspection of the shafts and a camera passage through the pipes and the infiltration system is recommended. The results should be recorded in an operating logbook.

To guarantee long-term operability, the recommendations of the current relevant legal requirements must be respected (DWA-A 138, instructions for the maintenance of infiltration systems).

A visual inspection must be carried out at least twice a year, preferably in the spring (high pollen levels) and autumn (falling leaves). If necessary, maintenance/cleaning should be undertaken.

The operator is responsible for ensuring that all maintenance work is carried out by qualified expert staff, who are fully aware of the maintenance and operating instructions.

Relevant accident prevention regulations must be respected.

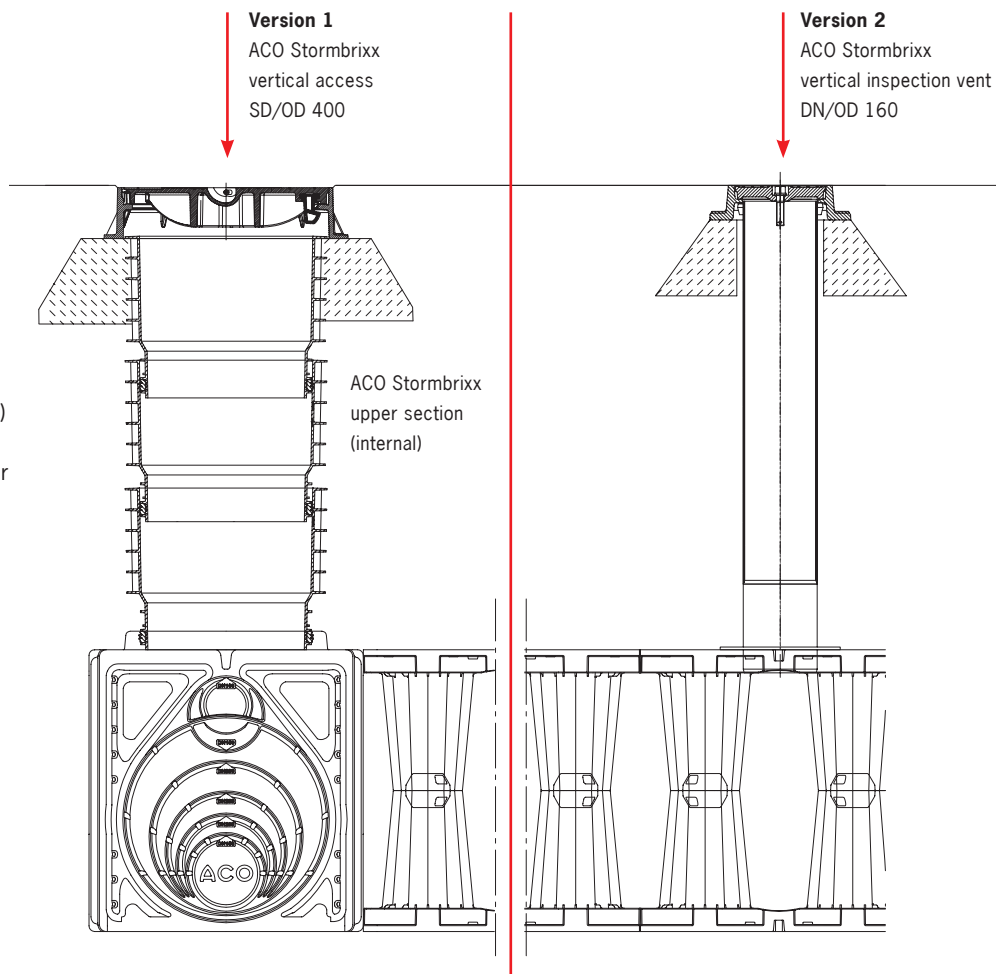
The results of the inspections carried out can then be used to determine the frequency of maintenance interventions in future.

If unusual weather conditions occur (heavy rainfall or similar), additional inspections and/or maintenance are recommended.

Access to the Infiltration System

The ACO Stormbrixx infiltration system can be accessed from two different points.

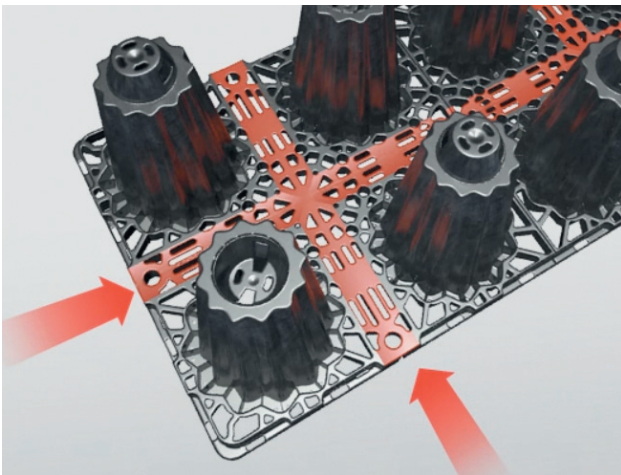
- Through the ACO Stormbrixx upper section (internal diameter = 339 mm) together with the lower and intermediate shaft sections (internal diameter = 400 mm), which allow passage of the camera and also pressure washing
- Through the vertical SD/OD 160 access which only supports inspection of the infiltration system.



Introducing the camera through the upper parts and the lower and intermediate shaft sections of the ACO Stormbrixx



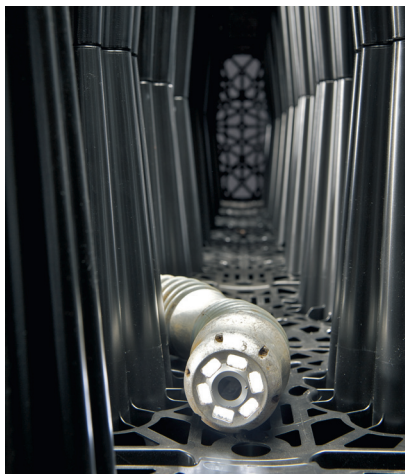
Vertical access directly through the infiltration system



Inspection of Infiltration Systems: After the system has been successfully accessed, the inspection equipment (the self-propelling or push camera) can be moved freely through the trough-shaped indentations in the base plates of the infiltration system.



Self-propelling camera



Push camera



Camera checking the internal spaces

Cleaning of Infiltration Systems

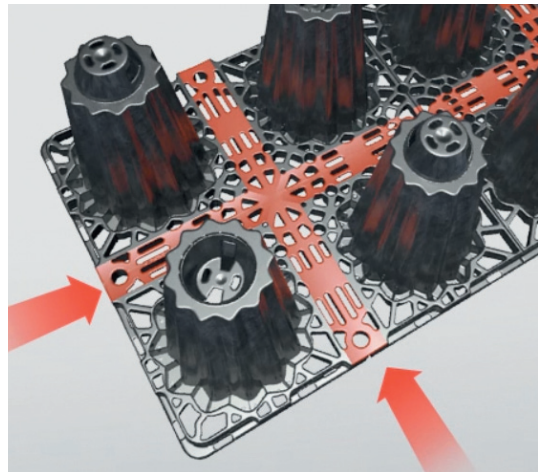
The cleaning of the ACO Stormbrixx infiltration system can if necessary be carried out using sewer cleaning equipment (sewer cleaning technology/high-pressure washing). The maximum water pressure must not exceed 100 bar.

The water can be sucked out through the upper sections and the lower and intermediate shaft sections.

When disposing of the cleaning water/sediment all applicable legal requirements must be observed.



Cleaning equipment with a rinsing head



Cleaning routes between the individual pillars

Documentation

Visual Inspection

Visual inspection includes the following points:

- The condition of the infiltration space (side walls, bases, covers, columns)
- Connecting pipes

If there are signs of leakage, the watertightness of the system must be re-established by suitable tests.

Maintenance Measures

If faults are detected during the visual inspection (dirt, distortions etc.) these must be corrected immediately.

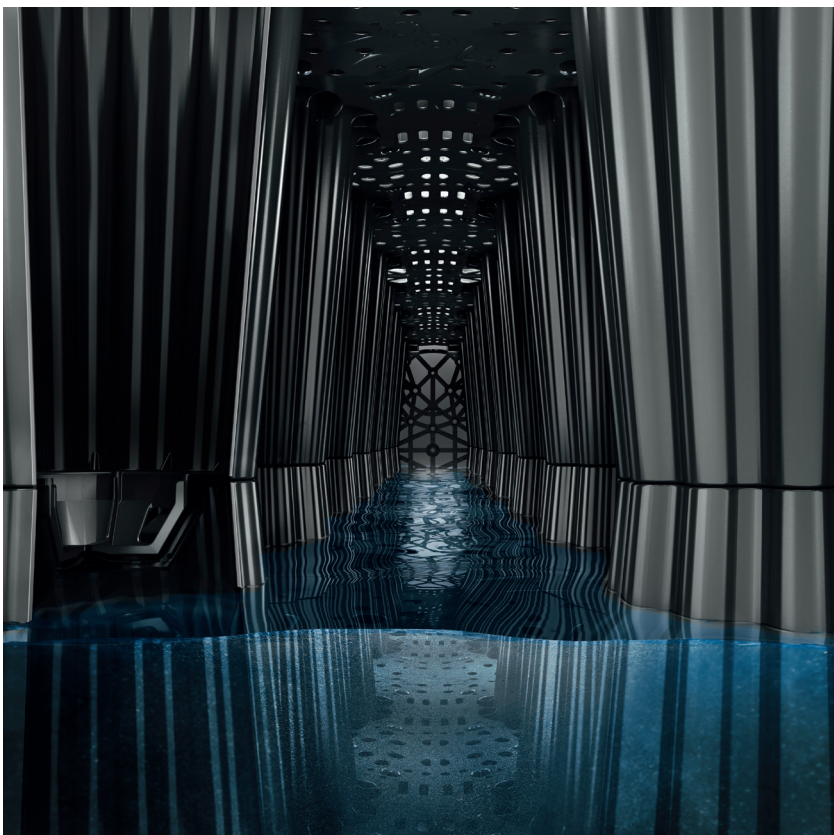
Operating Logbook

The results of the visual inspection and any maintenance and repair measures undertaken must be recorded in an operating logbook. These records then allow decisions to be made about the necessary frequency of future visual inspections and maintenance measures.

The following data and information must be recorded in the operating logbook:

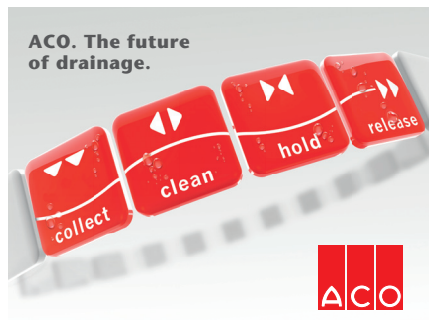
- Completeness of the operating log book
- Date of visual inspection or maintenance work
- Identity of staff involved
- Problems arising (also causes of problems)
- Measures taken

Keeping a logbook has many benefits, e.g. traceability of sources of problems, targeted error analysis and determination of follow-up measures.



Warranty

The guarantee in the general terms and conditions of sale of ACO Civil Engineering Sales GmbH at www.aco-tiefbau.de apply.



Every product from ACO Civil Engineering supports the ACO system series

- Drainage channels
- Road and yard drains
- Top sections
- Manhole covers
- Separators
- Protecting watercourses
- Bulk storage and bulk percolation
- Pumping stations
- Tree grids

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