

# STORMWATER INFILTRATION SYSTEMS

## AQUAway



Living with nature means also taking care of it – especially in flood risk areas with the planned construction of buildings. Past experience has shown that in the construction of residential, commercial, recreational and industrial facilities as well as shopping centres, it is also necessary to ensure adequate rainwater infiltration and drainage during heavy rain or storms.

The company Aplast has developed **Aquaway** stormwater infiltration systems specifically for the purpose of the protection of buildings and water resources. These are innovative and advanced systems for the proper drainage of excess stormwater.

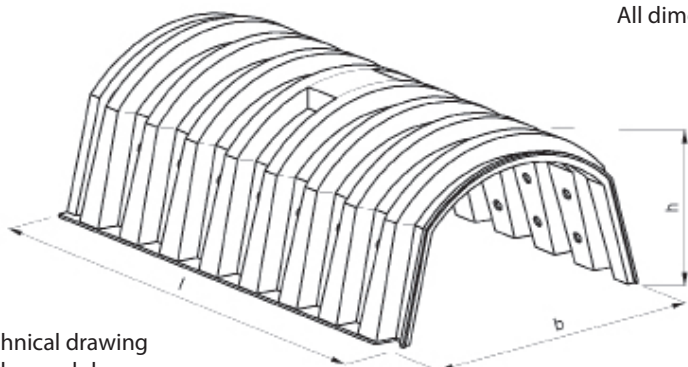
## Stormwater infiltration systems Aquaway

The **Aquaway** modular system is made from polyethylene and is particularly suitable for the execution of stormwater infiltration systems of various sizes with the ability of infiltration or return of stormwater back into the natural environment and into the sewerage system.

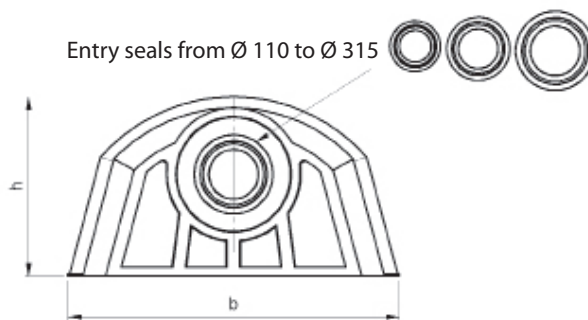
### Technical data

DESCRIPTION/ELEMENT	SINGLE INF. TUNNEL - C	INLET TUNNEL - MS	TRANS. TUNNEL - MM	CONCL. UNIT - ME
DIMENSIONS (l x b x h in mm)	1850x1050x550	1750x1050x550	1650x1050x550	1750x1050x550
CHAMBER CAPACITY (l)	770	750	750	750
ELEMENT WEIGHT (kg)	38	34	30	34
CIRCUMFERENTIAL STRENGTH	SN 8			
MATERIAL	PE			

All dimensions on the drawings in the leaflet are expressed in millimetres.



Technical drawing of the module



Technical drawing of the conclusion units

Single infiltration tunnel



- C -

Modular system



- MS -



- MM -



- ME -

## ADVANTAGES of Aquaway stormwater infiltration systems

- LOWER INSTALLATION COSTS – MAJOR SAVINGS;
- EASY TRANSPORT AND STORAGE  
(1 pallet contains 20 pieces or 34 m or 15 m);
- EASY INSTALLATION (1 module weighs only 30 kg);
- QUICK AND EASY MOUNTING OF **AQUAway** MODULES  
(in the construction of larger surfaces of stormwater infiltration systems);
- EASY CONNECTION OF INPUT/OUTPUT TUBES AND VENTING SYSTEMS;
- HIGHLY RESISTANT MATERIAL (the possibility of the use of **AQUAway** modular systems under parking surfaces, roads and other trafficable surfaces);
- HIGH DISCHARGE CAPACITY (400 litres per m<sup>2</sup>);
- LONG LIFE OF THE PRODUCT  
(according to the warranty of the producer, the life of the material is 50 years)
- MINIMUM REQUIREMENTS FOR MAINTENANCE AND EASY CONTROL OF **Aquaway** MODULES AFTER INSTALLATION
- VARIOUS OPTIONS FOR USE
  - > residential buildings
  - > sports, parking and road surfaces
  - > business buildings
  - > industrial buildings

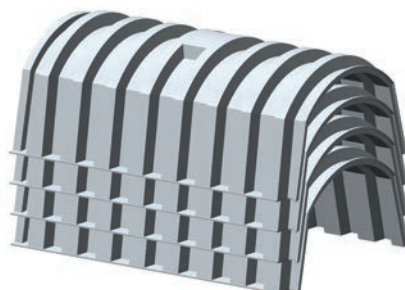
## USE of Aquaway stormwater infiltration systems

Due to its innovative design, the modular system **AQUAway** is an effective solution for a wide range of installations in cases of:

- inadequate or non-existent sewerage system;
- soil erosion due to stormwater run-off;
- connection to infiltration pits and conclusion units of roadside ditches;
- large quantity of rain;
- flood risk areas (sports surfaces – golf, roadside ditches, etc.);
- return of water back to the environment;
- low permeability of the soil;
- high level of ground water and
- protection of vegetation.

## TRANSPORT of Aquaway stormwater infiltration systems

Thanks to the shape and design of the tunnels of **Aquaway** modules, it is possible to fit them into one another. It means that it is possible to load up to 20 modules on one pallet, which provides savings in storage and transport.



The modules may be loaded one on top of the other

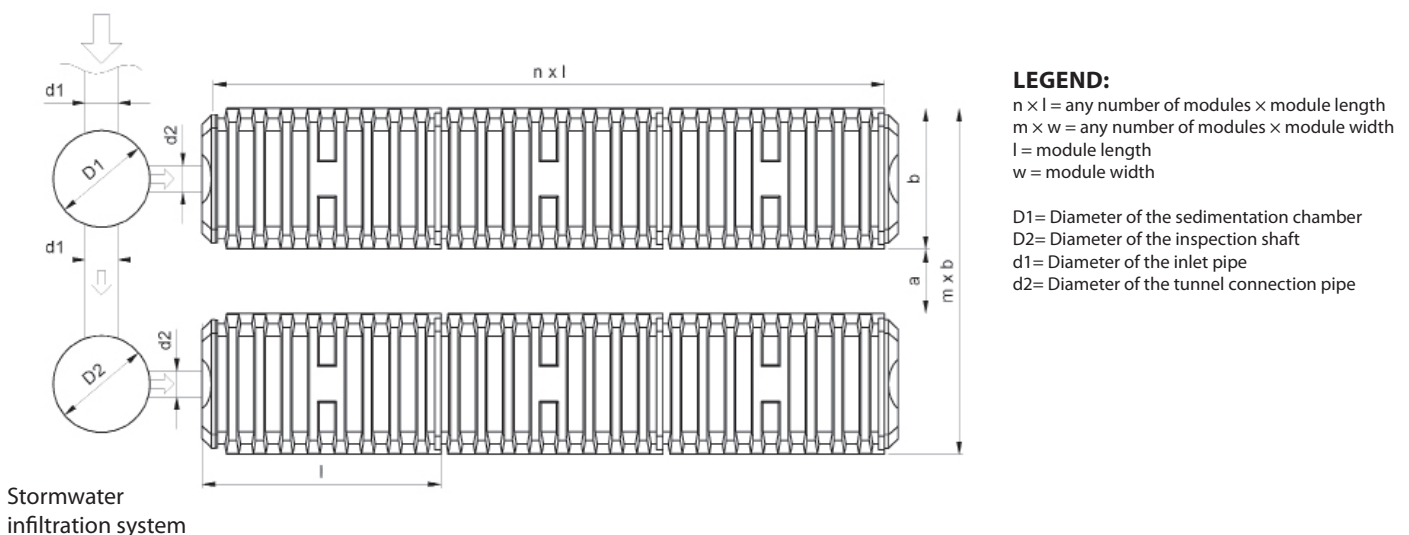
## SELECTION OF LOCATION

**Aquaway** modules as one or more stormwater infiltration systems are suitable for installation into all types of terrain, as we can adjust the depth of the excavation to the project's requirements, to the characteristics of the terrain, and to the height of the underground water.

After excavation, it is necessary to place gravel on the bottom of the excavated hole (washed gravel of a granulation of 20/40 mm with a minimum depth of 100 mm) to prevent any possible congestion of the lateral openings of the **Aquaway** modules.

Later on, we cover the **Aquaway** modules with washed gravel of a certain granulation to the height of 150 mm and more, and compact the gravel filling. This gravel filling is expected to accumulate about 30% of the volume of water.

The loading capacity and speed of the infiltration in accordance with the results of the geological survey are the responsibility of the project engineer and the contractor.



## SIMPLE INSTALLATION

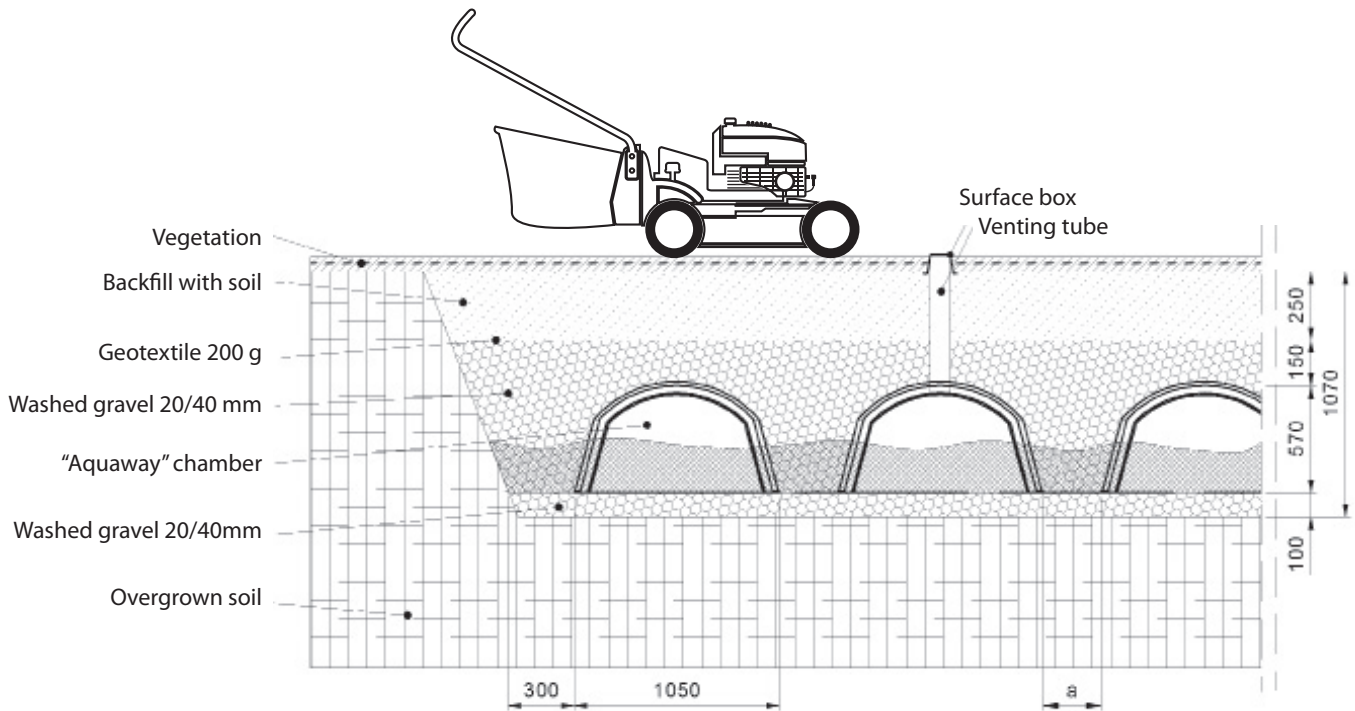
The **Aquaway** modular system is adapted to the different requirements of installations – every individual surface has its prescribed volume. Installation is easy – without heavy machinery and equipment, it is quick and adaptable at the site of installation (construction site), as every individual **Aquaway** module weights only 30 kg, the modules may be folded to a desired length, and are finished at each end with conclusion units.

**Aquaway** stormwater infiltration systems may be installed only if:

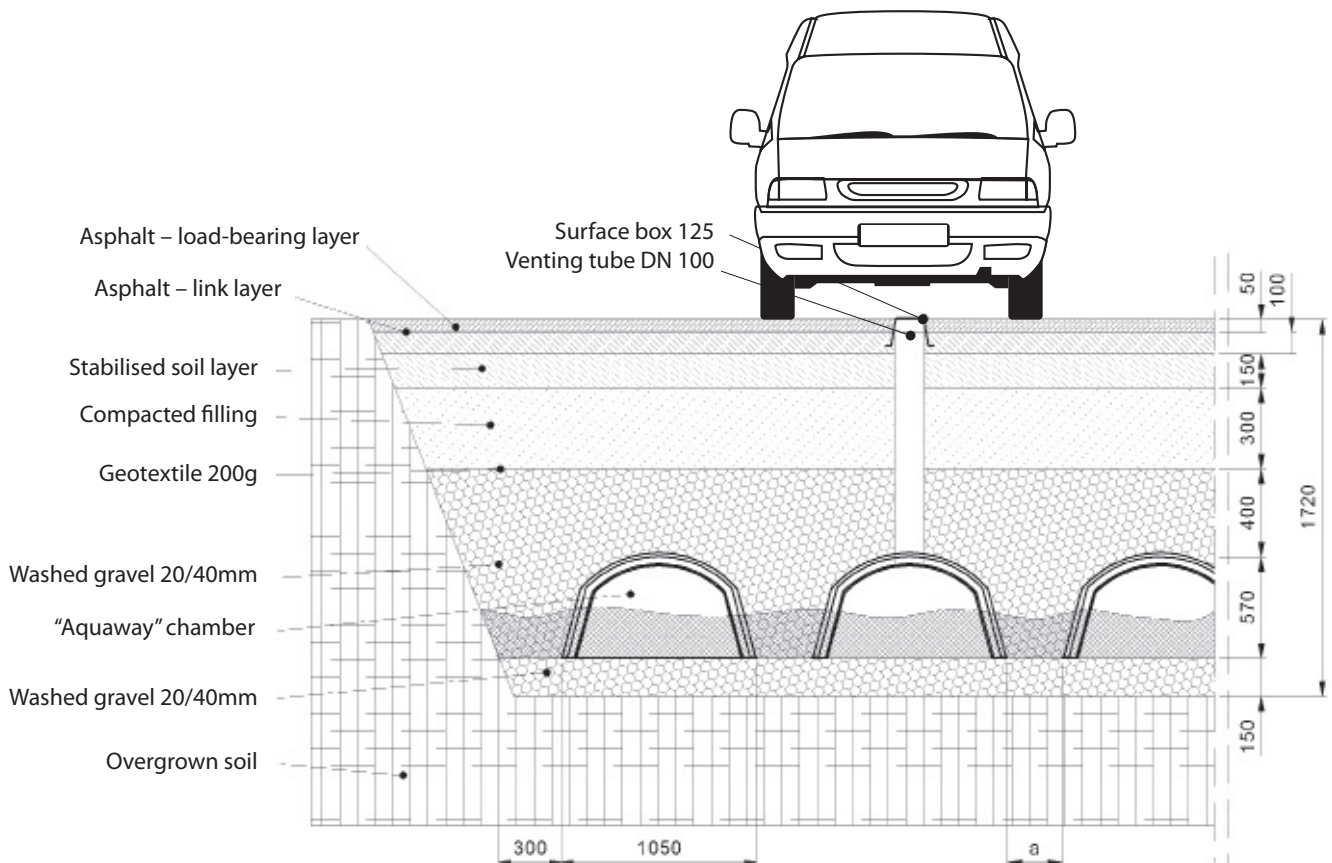
- the depth of excavation, shape of the infiltration systems, and the number of chambers necessary are based on a geological survey of the terrain, the calculations and other necessary project requirements;
- the distance from basement rooms in the building is more than 6m (if the basement is not waterproof);
- the distance from underground water level and the calculated surface of the infiltration field is a minimum of 1 m;
- the distance from existing or planned tree plantations is at least the same as the diameter of the crown.

Clayey soils are not suitable for the use of **Aquaway** stormwater infiltration systems.

**CASE 1: INSTALLATION IN PEDESTRIAN SURFACES**



**CASE 2: INSTALLATION INTO SURFACES TRAFFICABLE BY VEHICLES**





**Call today and protect your facility from stormwater with the Aquaway modular system.**

YOUR RETAILER: