

The D-Rainclean® Bioretention System provides treatment for surface water run-off and exceeds the required SuDS Mitigation Indices as outlined in C753, The SuDS Manual



Typical Application

- Driveways
- Car Parks
- HGV service yards

Features and Benefits

- Excellent SuDS Mitigation Indices calculated in accordance with the British Water 'How to Guide':
 - TSS – 0.98
 - Hydrocarbon – 0.99
 - Heavy Metals – 0.98
- Independently accredited and monitored by DiBt, supported with field test data
- Excellent hydraulic capacity
- Long media service life of up to 40 years
- Excellent silt retention
- Unique filter media – optimised grain size lowers clogging risk
- Adsorption agents ensure high retention of dissolved pollutants
- Active soil microbiology, gives a vitalised soil, assisting with decomposition of organic pollutants
- Retains adsorption in the presence of de-icing salt
- Simple replacement of filter media in the event of accidental spillage (e.g., oil spillages)
- Internal baffle walls allow the system to be laid level or to a fall
- Suitable for use in a range of trafficked areas, with grating options for loadings B125, D400 & E600
- Non-trafficked areas require no concrete reinforcement, reducing installation cost and time
- Emergency overflow allows exceedance events to be accommodated
- Aluminium edge rails allow installation without gratings where applicable, leading to cost savings

Maintenance

The D-Rainclean® Bioretention System requires very little maintenance, with only periodic inspection required. The filter media generally needs replacement at the end of its expected life, which can be accurately determined at the design stage, although DIBt recommends taking samples to measure pollutant loadings at 10-yearly intervals. If replacement is required, carefully remove the filter media using a standard suction and rinsing vehicle. A weak water jet can be used in order to accelerate the process if desired. Continue removing the media until the openings on the lower edge of the bioretention section's are visible. This will ensure that the substructure gravel remains in situ. Pour the new filter media into the bioretention section's. A 1.5m³ bag is sufficient for approx. 27 linear metres of bioretention section's. When laying the media, ensure that it is evenly spread along the bioretention section's to a depth of 200mm. Once completed, replace the cast iron gratings in their frames and lock in place. Regardless of pollutant loadings, the current DIBt certificate requires the media to be fully replaced after 40 years. A copy of the DIBt certificate is available on request.

D-Rainclean® Components & accessories



Bioretention Section
500mm



End Piece 250mm
LH or RH



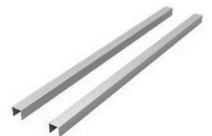
Overflow Section
500mm



Filter Media
14 Litre Bag



Filter Media
1.5 m³ Sack



Aluminium Rails
3000mm



Cast Iron Grating
500mm B125



Connecting Clamp for
B125 Grating



Cast Iron Grating
500mm D400



Cast Iron Grating
500mm E600



Special Screw Fixing
for D400/E600
Grating



Installation Wrench

Specification clause:

The bioretention system shall be D-Rainclean®, manufactured by Funke Kunststoffe and distributed in the UK by Stormwater Management Ltd. The system shall be loading Class B/D/E (delete as appropriate) to comply with EN1433 and have been tested and approved for Stormwater treatment in accordance with DIBt requirements, verified by field testing data. The system shall be designed to DWA138 to remove TSS to sub 63µg, hydrocarbons and nominated dissolved heavy metals (Zinc and Copper). Mitigation Indices, as defined by C753 The SuDS Manual, to be as per the manufacturer's published figures, calculated in accordance with the British Water 'How to Guide'.

- TSS – 0.98
- Hydrocarbon – 0.99
- Heavy Metals – 0.98 average (Zinc 0.97, Copper 0.99)