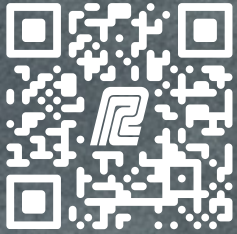




Stormwater Management and Treatment Solutions



roadstone.ie



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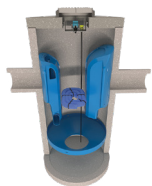


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Stormwater Management, Attenuation and Treatment Products



A



Downstream Defender® Select

Separator for treatment of stormwater runoff.

B



Stormbloc® Optimum

Geocellular Storage & Infiltration Systems.

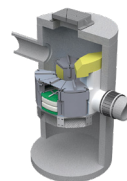
C



Hydro-Brake® Optimum

Manages low, moderate & high flows.

D



Up-Flo® Filter

Surface water filtration.

E



Hydro Biofilter™

Natural power of biofiltration.

Hydrochain®

Manufactured with Fiberglass Reinforced Plastic giving greater strength and stiffness which gives superior durability.

Completed using Roadstone's 50mm aggregate which gives >30% voids after compaction.



Downstream Defender® Select (Advanced Hydrodynamic Separator)



The Downstream Defender® Select separator is the new generation of hydrodynamic vortex separator for treatment of stormwater runoff to protect the environment and meet water quality requirements. Its customisable performance and an extended range of chamber sizes allows engineers to tailor their drainage designs to meet specific pollutant removal standards.

Targeted pollutants

- Coarse and fine sediments, retained up to 4 times the treatment flow rate.
- Litter, debris
- Liquid hydrocarbons (oils), plus option for enhanced retention.
- Sediment bound metals

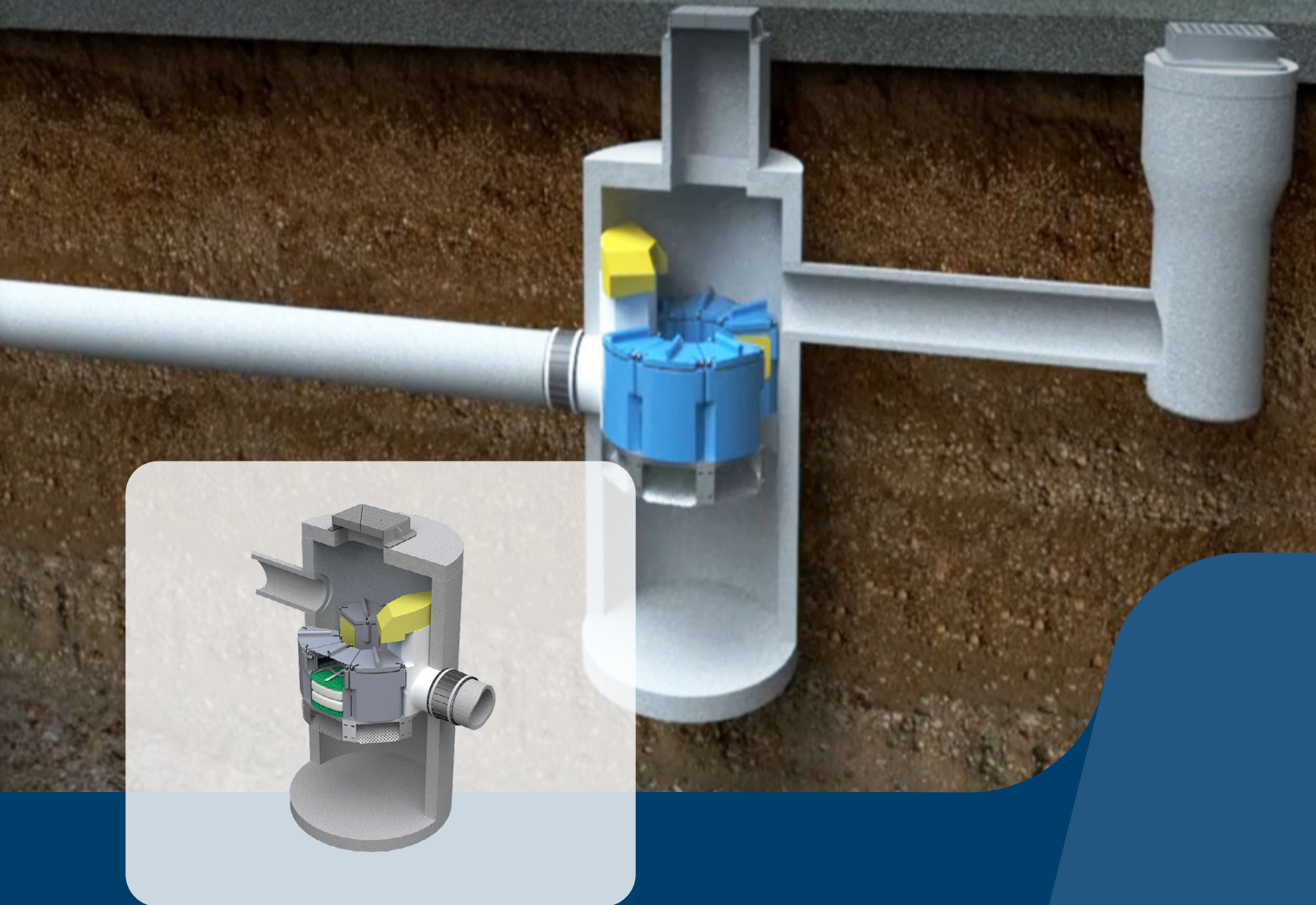
Applications

- Areas requiring a minimum of 50% TSS removal
- Highways, parking lots, industrial areas and urban developments
- Pre-treatment to ponds, storage systems, green infrastructure
- Areas where high solids and trash capture are a must

Our simple online tool will recommend the best separator, model size and online or offline arrangement based on site-specific data entered by the user. Scan the QR code to learn more.



Up-Flo™ Filter



Up-Flo™ Filter is an advanced stormwater best management practice (BMP) that combines sedimentation and screening with filtration to capture sediment, oils, heavy metals and nutrients from stormwater runoff, achieving total suspended solids (TSS) removal rates of up to 98%.

Up-Flo™ Filter is a flexible, high-performance treatment solution that can be customised to meet environmental discharge requirements specific to Local Authority planning conditions. Designed with efficiency, longevity and upkeep in mind, the Up-Flo™ Filter has high loading rates and long media life, which means you'll get high quality water treatment for longer periods between servicings.

Targeted pollutants

- Very fine particles
- Trash and Floatables
- Liquid and sediment bound hydrocarbons
- Sediment bound heavy metals
- Sediment bound nutrients

Applications

The Up-Flo™ Filter is perfectly suited to industrial sites, locations contributing runoff to wetlands/ protected regions, or any area requiring a high level of treatment.

- Remove solids, nutrients and metals from runoff
- Source control for redevelopment or new construction
- Treatment of water quality volume detention systems
- Sites operating under industrial or multi-sector general permits
- Low-impact development (LID), sustainable drainage (SuDS), LEED® and water-sensitive urban design (WSUD) projects

Our Range of Stormwater Treatment Solutions

We have a range of stormwater treatment devices to treat stormwater flows of varying quality. All our solutions can work alongside, enable or enhance natural SuDS, helping to meet or improve on biodiversity and amenity targets

PRODUCT		DESCRIPTION	TARGETED POLLUTANTS						
			Sediments	Litter, debris	Liquid hydrocarbons	Sediment bound hydrocarbons, nutrients and heavy metals	Dissolved metals	Nutrients	
Downstream Defender® Select	Vortex	Vortex separator	Coarse & fine	Retained up to 2 x treatment flow rate	×	×	✓	×	×
	Vortex Plus	Vortex plus separator	Coarse & fine	Retained up to 2 x treatment flow rate	✓	Option for increased retention on request	✓	×	×
	Advanced Vortex	Advanced hydrodynamic vortex separator	Coarse & fine	Retained up to 4 x treatment flow rate	✓	Option for increased retention on request	✓	×	×
Up-Flo™ Filter	Sand	Fluidised bed up flow filtration system with Sand media	Very fine sediment		✓	✓	✓	×	✓
	CPZ	Fluidised bed up flow filtration system with CPZ media	Very fine sediment		✓	✓	✓	✓	✓
Hydro BioFilter™		Biofiltration system	Very fine and dissolved sediments		✓	✓	✓	✓	✓

Hydro-Brake® Flood

Hydro-Brake® Flood delivers robust, large-scale flood protection at the watercourse level through precision-engineered vortex flow control, effectively managing floodwaters to safeguard downstream homes, businesses, and critical infrastructure from costly damage and disruption.

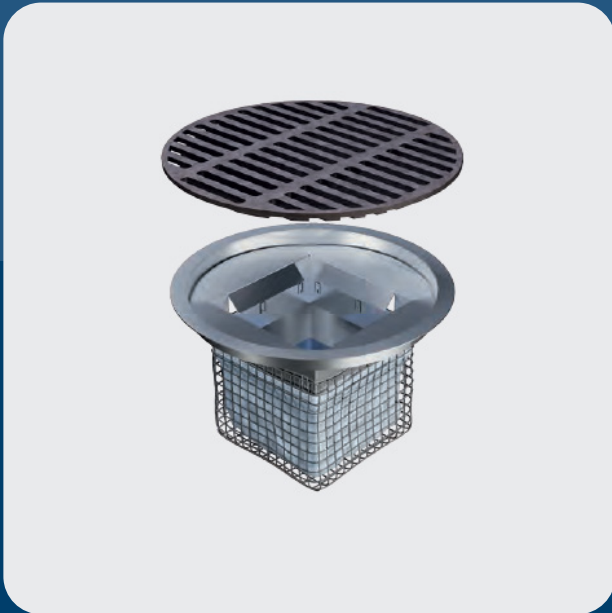
Hydro-Brake® Flood:

- Brings over 30 years of expertise
- Has a demonstrated history of effective flood defense
- No power supply requirements
- Passive and low-maintenance design



Hydro-Shield® FD

Clean up road runoff by removing pollutants at source.



Product Summary

The Hydro-Shield® FD is a heavy-duty catch pit insert that provides physical screening of pollutants such as gross solids, litter and debris using a support basket with filter fabric liner. The system also includes non-chemical, oil sorbent media pouches for removal of petroleum hydrocarbons.

Applications

Hydro-Shield® FD catch pit insert filters are recommended for areas subject to silt and debris as well as low-to-moderate levels of petroleum hydrocarbons (oils and grease). Examples of such areas include vehicle parking lots, aircraft ramps, truck and bus storage yards, business parks, residential and public streets.

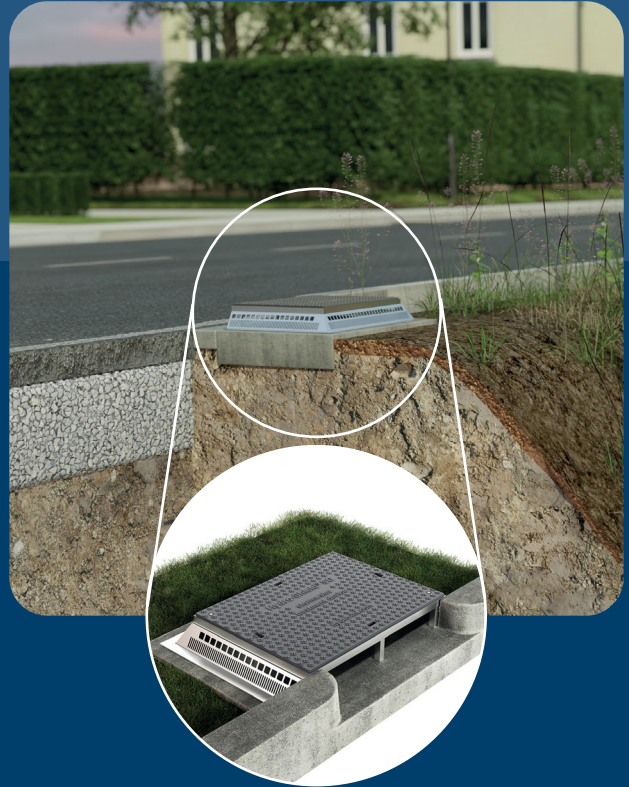
- Commercial areas.
- Residential or city streets.
- Car parks.
- For use with other natural Sustainable Drainage Systems
- (SuDS) treatment to meet required performance standards.
- Retrofit surface water treatment for space constrained urban areas.

Targeted Pollutants

- Coarse sediments ~ 100-1000 microns.
- Gross pollutants, eg. litter and floating debris.
- Liquid and sediment bound hydrocarbons.
- Sediment bound heavy metals.
- Total Phosphorus (TP) associated with organic debris.

Hydro-Shield® SG

Preserve the appearance of swales, rain gardens and bioretention systems.



Product Summary

The Hydro-Shield® SG is a pollutant trap that removes and retains litter and debris from flows from hard-surfaced areas into naturebased Sustainable Drainage Systems (SuDS) such as swales, rain gardens and bioretention systems.

Applications

The Hydro-Shield® SG is suitable for all surface SuDS features, eg. swales, rain gardens, bioretention systems and filter strips. These are commonly found on:

- Residential developments
- Commercial/industrial developments
- Roads and surface paths