

“We see the use of SUDS as a prerequisite for sustainable infrastructure and the Maxdrain system as an ideal delivery method. The benefits in cost and time to construct compared to traditional point source drainage are easily visible and the flexibility of the system to cope with awkward levels is a true advantage. The system has performed well over a period of 4 years with no maintenance required to this point. The surface has proved hard wearing and by high pressure washing achieves similar hydraulic capacity to when it was installed.”

WDR & RT Taggart
Consulting Engineers at Marks & Spencers, Newtownabbey

	Results	Requirements	
Permeability	In excess of 2,000 l/s/ha (720mm/hour)	Heaviest rainfall event recorded in Ireland is 269 l/s/ha (97mm/hour) Normal heavy rainfall event in Ireland would be 55 l/s/ha (22mm/hour)	
Relative Hydraulic Conductivity	0.20 s ⁻¹	>0.12 s ⁻¹	Specification for Highway Works (Porous Asphalt)
Moisture Sensitivity	95%	>75%	EN12697-12
Cantabro (Durability)	4.81%	<25%	EN12697-17



Contact Details

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What is Maxdrain?

Maxdrain is Northstone's new porous surfacing system designed with the environment in mind. It allows large quantities of rainwater to pass through the porous bituminous surface. The water is filtered through the voids and retained in the pavement structure. Subsequently the storm water is released at a controlled rate either into a conventional drainage system or by infiltration into the subsoil. Installation of Maxdrain SUDS can therefore significantly reduce the risk of flooding at the point of collection and downstream.

The Right Product

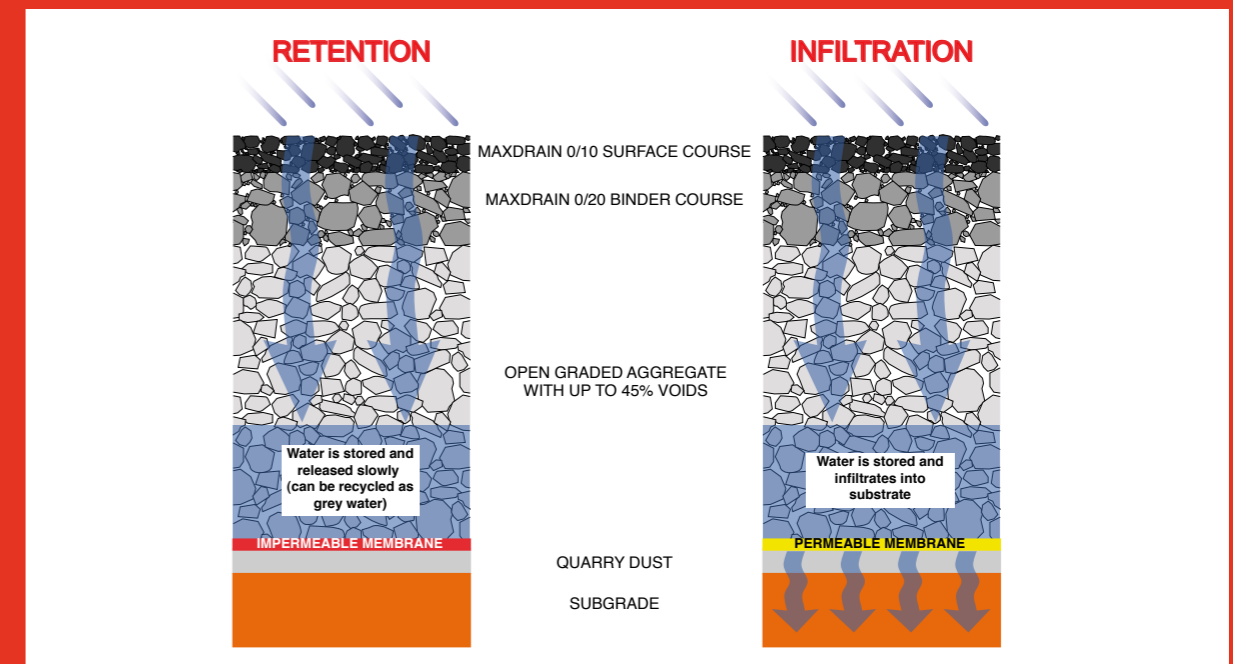
- Quick to install
- Treats water at source
- Drains the water quickly, eliminating standing water
- Reduced spray
- Less chance of ice forming
- Acts as a balancing pond to reduce the risk of flooding
- Filters pollutants from the water
- Easy maintenance

The Right Location

- Ideal for low traffic areas such as car parks, housing developments, driveways, playgrounds etc.
- No extra land is needed as the water is stored under the footprint of the paving
- Ideal for flat sites
- Enhances planning approval

The Science

- Northstone has invested heavily in Research and Development, working in partnership with Queen's University, Belfast
 - Full scale trials have successfully proven the performance, durability and the maintenance of the system
 - The porous asphalt has been specially designed using polymer modified binder
 - The aggregate matrix is designed to provide a void content of up to 45%
- Infiltration** – water infiltrates into the natural groundwater system
Retention – water is stored and released at a controlled rate (determined by the regulator)



The Right Solution

- Water can be recycled as grey water
- The system can cope with in excess of 1 in 100 year storm events
- Excellent rideability compared with block paviers – ideal for shopping trolleys & wheelchair users
- Costly conventional drainage system (gullies, gully pots) not required
- Reduced need of earthworks
- Faster installation compared to block paviers
- 0% gradient surfacing ability

