

SUSTAINABLE URBAN DRAINAGE SYSTEMS



Climate change is highlighting the serious risk of flooding in urban areas and has exposed the inadequacies of conventional and often old fashioned storm water drainage systems. These can become overwhelmed by heavy, prolonged rainfalls and subsequent rainwater run off.

With heavier and more frequent rainfalls predicted by climate change models, the resulting disruption, environmental damage and costs threatened will increase if no action is taken to mitigate flood risk.

reducing flood risks, enhancing water quality and helping the environment

As a result the UK Government has introduced a requirement for Sustainable Urban Drainage Systems (SUDS), a design philosophy which uses a range of techniques to manage surface water by Attenuation and Filtration.

The fundamental philosophy of SUDS recognises the need to keep excess rainwater out of the underground drainage system and use the huge potential capacity of the landscape to absorb, store and convey water.

INCORPORATING

Plaspave[®]
PERMi-8

PERMEABLE LANDSCAPING PRODUCTS

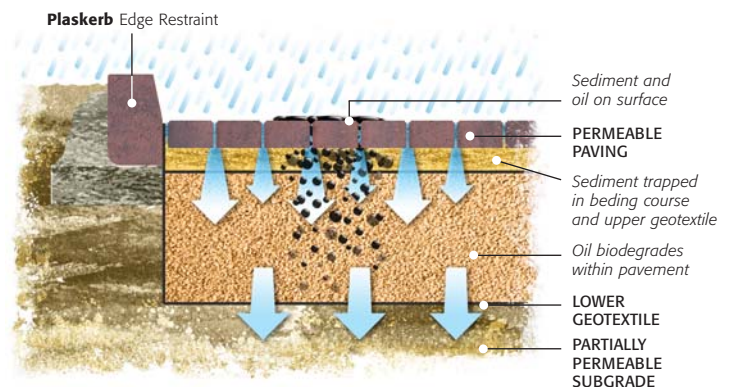
SUDS is concerned with water flow and water quality

WATER FLOW

SUDS aims to deal with surface water close to where rainfall hits the ground by using "source control" techniques. Permeable paving is particularly suited to providing a durable, long-lasting, hard wearing landscaping surface atop a range of SUDS water management systems. Permeable paving is a well recognised source control technique because rainfall only flows over one single block before it is managed in the underlying permeable sub base.

WATER QUALITY

Hard surfaces in our urban landscapes collect pollution such as oil, petrol, tyre dust, brake dust, silts etc., which is washed off by rainwater into the underground drainage system. In excessive rainfall and surface water run-off situations the drains become overwhelmed and the pollution runs off into rivers, streams and watercourses not only causing calamitous flooding but polluting and damaging wildlife and the wider environment.



Permeable block paving systems are very effective at removing pollution from run off. The pollutants are flushed into the underlying pavement layers where they are filtered and trapped or degraded over time which reduces downstream pollution and improves the local environment.