### **COST EFFECTIVE, SIMPLE, SMART**



**Planning -** Rain Activ provides developers with a new tool to maximise building area and reduce SuDS costs. By controlling the discharge rate at source, expensive and 'space intensive' secondary storm attenuation devices such as balancing ponds and wetlands can be minimised or even excluded from plans.



**Installation -** Rain Activ arrives fully assembled ready to fit. The use of single piece, shallow dig tanks mean even large tanks (7500L) require just 1.5m of excavation. Costs are further reduced as no concrete or specialist training is required.



Maintenance - Rain Activ contains no moving parts and is fully self cleaning. Once installed, all maintenance (typically one annual visual check) should be the responsibility of the homeowner.



### ADD RAINWATER HARVESTING.

Rainwater Harvesting can make a fantastic addition to a new development. Rain Activ can be configured to act as a dual purpose SuDS and Rainwater Harvesting system for a relatively small additional cost.

By simply adding a pump and management unit, Rain Activ can be turned into a full domestic Rainwater Harvesting system.

A full domestic system reduces mains water consumption by up to 50%. Whilst latest management systems cost less than 1p per person per day to run.

From the UK's market leader in domestic rainwater harvesting systems.



SuDS-Solutions.co.uk Unit A, Harrier Park, Southgate Way, Orton Southgate, Peterborough PE2 6YQ

Phone **01733 405111** Fax 01733 230996 SuDS-Solutions.co.uk Email info@SuDS-Solutions.co.uk



- Ultra-low discharge SuDS system.
- Peak discharge rates as low as 0.05 L/sec per property.
- Primary solution reduces secondary SuDS infrastructure and costs.
- Each system individually calibrated to site requirement. Micro Drainage™ calculations included.
- Can be used in combination with Rainwater Harvesting.





# ULTRA LOW DISCHARGE FLOW CONTROL

## Rain A REVOLUTIONARY NEW SUDS DEVICE WITH INCREDIBLY LOW DISCHARGE RATE **Activ ULTRA LOW DISCHARGE RATES, 50X LOWER THAN SOME VORTEX FLOW CONTROL SYSTEMS**

### WHAT IS RAIN ACTIV?

Rain Activ is a totally new concept within the storm attenuation market. Utilising shallow dig underground water tanks as well as a filtration and controlled discharge module. Rain Activ collects water from the roof and removes debris via a self-cleaning filter. Once inside the tank, the clean water is attenuated and discharged slowly at a calculated rate through an orifice.

Rain Activ is ideal for sites where low rates of storm water discharge are required. With peak discharge rates as low as 0.05 L/sec, the system provides a solution for applications where flow is typically not sufficient for vortex flow control systems.

By collecting and slowing the water at source, the scale and cost of secondary SuDS infrastructure such as balancing ponds and geocellular storage can be heavily reduced. For many developments this can increase the available land for development.

Our professional drainage consultants specify each system individually to meet design criteria. All designs can be modelled using the latest version of Micro Drainage™

Where applicable, Rain Activ can be used in conjunction with Rainwater Harvesting by simply adding a pump and management system.





For a typical new build domestic home, peak discharge can be reduced to as little as 0.05 L/sec. The graph Site using above shows different flow rates with 3 sizes of orifice. traditional Typically, vortex flow control systems require high SuDS levels of flow to be effective, this can dramatically reduce their effectiveness for smaller storm events (e.g. 1 in 5 year storm). Rain Activ's orifice design produces relatively linear discharge rates, therefore maintaining effectiveness for a full range of storm events. Rain Activ's specification is hugely variable depending on the following factors; Site using • Desired peak discharge rate. Rain • Geographical location. Activ • Roof size. Space availability for underground tank. • Rainwater Harvesting requirement (if specified.) Using the above factors, our professional drainage consultants generate a specification before testing using Micro Drainage<sup>™</sup> hydraulic design software. When a specification of system has been fully finalised, the data is provided to the client for submission to planning authorities.

#### **HOW WE SPECIFY**