

AQUALITY Flow Control Manhole

(Item No. G72200)

Flow control system which regulates stormwater flow before discharging into sewer networks or water-courses.



Typical applications:

- Source control/SUDS schemes
- Traditional attenuation storage
- Energy dissipation/Velocity Control

Key Features:

- Pre-fabricated to customer specification
- Choice of depth up to a maximum invert level of 6m
- Choice of chamber size from 600-3000mm
- A sealed chamber, built to exacting specification and delivered to site ready to be installed
- Bespoke fabrication with inlets and outlets in twin-wall pipe for simple connection
- Solid welded HDPE baseplate
- All interfaces fully welded, watertight and spark tested
- The chamber is manufactured with an integral sump for silt catchment and an optional drain down system to ease maintenance and silt removal
- The flow control chamber can be integrated with any SUDS solution

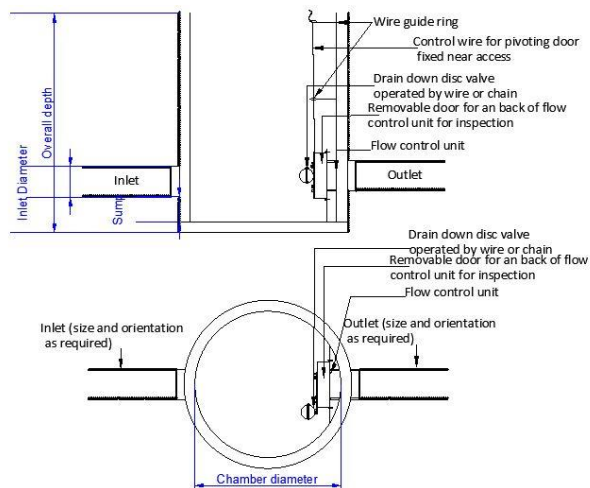
Chamber Diameter (mm)	600-3000
Manhole Depth (m)	
Inlet Diameter (mm)	
Outlet Diameter (mm)	
Internal Headwall	
Ladders	
Sump Depth (mm)	
Pipe Orientation Inlet to Outlet	0-180 grade
Flow control height (mm)	

*fill in table as appropriate

Key Benefits:

- Easy to install and more cost efficient than concrete chamber
- Lightweight chamber design, made with durable, chemical resistant materials.
- No power supply required
- Maintenance free
- Self-activating flow controller with regulated forward flow of water
- Integral benching
- Integral lifting points available on request to improve Health and Safety, during handling and installation

Functioning principles:



Flow control systems are essential to regulate storm water flow before discharging into water courses or sewer networks. Aquality Storm water Flow control chambers are designed as a totally integrated solution to this problem. Our chambers are fabricated through a range of depths and diameters to meet precise containment and flow criteria.

All chambers are prefabricated by using specialist plastic welding techniques which will render the structure completely water tight and each unit is tested for structural integrity before leaving our fabrication workshops.

Incorporated within the chamber is a Vortex control device. The design of a vortex flow control is based on the fluid mechanics principal of the forced vortex, which permits flow regulation without moving parts. This incorporated device employs the upstream head orifice size and flow path to predefined flow rates and to ensure downstream flooding is prevented.

Specification clause:

The Flow control system shall be Flow control manhole by Aquality Ltd, 6 Wadsworth Rd, Perivale, London. UB6 7JJ. All the fabrications are tailor-made, fully-welded, watertight structured wall chambers to suit project-specific requirements. Health and Safety benefits become apparent during handling and installation, due to our fabrications' strong but light in weight nature. In addition, off-site construction ensures uncompromised, high quality products being delivered to site ready-to-install, reducing installation time and costs.

NBS specification:

The Flow control chamber should be specified in NBS section R12:437 Below ground drainage systems. Assistance in completing this clause can be found in Aquality Trading and Consulting Ltd entry in NBS Plus or a model specification can be downloaded from www.aqua-lity.co.uk. For further assistance please contact the Aquality Engineering team.