Installation data

Silt Traps

It is recommended that all stormwater drainage systems that discharge into infiltration or attenuation tanks have upstream filtration to minimise the build-up of silt and protection of the storage facility and flow control components from the ingress of debris and silts.

Marley silt traps are available in 250mm and 600mm, with or without additional filters.

250mm silt trap, UG60

600mm silt trap, USW30 (shown with riser kit)

Filtration

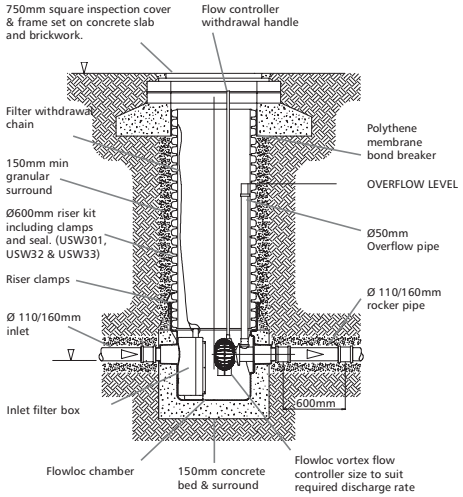
The UG60, 250mm silt trap is suitable for catchment areas up to 250m^2. For improved protection, the UG61 filter can be added, which will retain debris as small as 5mm.

For larger catchment areas, the 600mm silt trap, USW30 should be used. This can be used with or without the USW29 filter which will retain debris particles as small as 10mm.

600mm silt trap and Flowloc chamber base

The USW30 can be used as a 600mm silt trap, with or without the USW29 filter. It is also used as the housing for the range of Flowloc control units and orifice plates.

The chamber base can be installed within a precast concrete manhole or with a riser piece (available separately.) Both installation methods require the base to be level and bedded into a 150mm concrete base and surround. The base has spigot connections suitable for either 110mm or 150mm pipe sizes at the inlet and outlet, with additional 110mm side connections for use in 'off-line' installations. All pipe connections should be fitted with 600mm long rocker pipes to allow for ground movement.



Chamber Riser

To fit the 600mm riser to the chamber base, fit the inlet ring seal into the first corrugation of the riser, lubricate the seal with silicone grease and insert fully into the socket of the base with firm pressure. Fit the clamp ring between the grooves of the base socket and locate the four clamps in the corrugations of the riser before tightening.

Prior to backfilling with granular material, leak test the seal by capping the inlet and outlet connections and filling the riser with water to approximately 0.5m above the seal.

The riser should be cut back to within approximately 200mm of finished ground level before casting a concrete collar with a bond breaker membrane around the riser to prevent load transfer to the shaft. A cast iron inspection cover and frame with a minimum clear opening of 750mm can then be set on engineering brickwork to complete the installation.

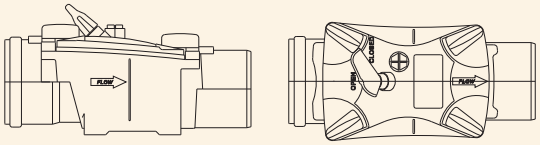
Filter

Attach the end of the filter chain to the inside of the riser with the 'P' clip and screw provided, then lower the filter into the base so that it locates against the inlet.

Flowloc vortex flow control unit

Using the solvent cement supplied with the kit, bond the 20mm pipe socket to the length of 20mm pipe, then bond the socket to the handle attachment on the Flowloc device. Allow the solvent to set before lowering the controller into the base and engaging the square flange into the coupling slot. The handle can be cut to length.

To set the overflow level, fit the 50mm pipe into the socket in the chamber base aluminium coupling and mark the pipe at a point coinciding with the top, or just below the top of the storage tank. Cut the pipe at this point and bond into the socket with solvent cement, then secure the open end to the inside of the riser wall with the pipe clip and screws provided.



Anti-flood valve

T110mm or 160mm anti-flood valve (USW130 or USW140) is required when connecting to a foul sewer system. Can also be used for connection to a watercourse.

250mm silt trap, UG60

The 250mm silt trap, UG60 can be used with or without a filter, UG61. The 250mm silt trap must be installed with the flow indication arrow in the base of the unit in line with the direction of flow. This will ensure that the filter is always correctly located against the inlet connection, and that the UG60 leaf guard is fitted to the outlet.

The silt trap should be installed with a pea shingle bed and surround at the appropriate depth. The riser is then trimmed back to suit the ground level, before the UCL2/3 cover and frame is bonded in place with solvent cement. When inserting the filter into the UG60, make sure that the base is positioned against the location ramps and that the wire retainer is lowered to lock it into position.