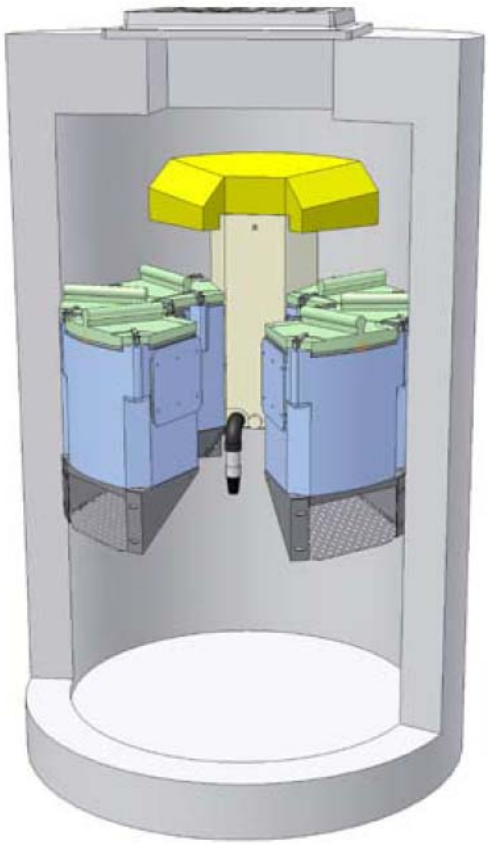

The Up-Flo™ Filter

Stormwater Treatment System

Installation and Handling Guide

Content

1.0 Introduction

In addition to these instructions, the contractor must also refer to the site-specific installation drawing issued by Rocla, together with the project site plans. The unit should be installed in a location that is easily accessible for the maintenance vehicle, preferably in a flat area close to a roadway or parking area.

The Rocla Up-Flo™ Filter is pre-assembled and delivered to the site ready to be installed into the excavated hole and connected to the drainage system piping.

After delivery of the Up-Flo™ Filter, inspect all components immediately for defects or shipping damage. If any discrepancies are found, notify Rocla before unloading.

The Up-Flo™ Filter unit comprise several components, depending on design requirements. The Up-Flo™ Filter unit should be installed as soon as possible after delivery. Before installation, all components must be protected from dirt, ultraviolet light, vandalism and impact.

2.0 Handling

At all times during unloading and installation, avoid unnecessary and extreme impacts to the internal components. All components should be fully supported during handling. At no time should anyone step, stand or otherwise place an unnecessary load on the internal components.

The Up-Flo™ arrives to site in a number of components dependent on the size of the unit and the depth to invert. Please refer to each units specific lifting requirements in the series of products guides in Section 5 of the Up-Flo™ Technical Manual.

Use spreader bars and chains for handling. Chains shall be 2.4 metres minimum length, if available, a spreader beam or similar should be used to lift the concrete components, to prevent damage to the chamber.

3.0 Connections

3.1 Seating Pipes

Refer to drawings for correct position of pipes when locating the inlet and outlet. Take care to ensure the pipes are connected and sealed into the factory-cored holes and spigots and sockets. Make certain that the pipes are fully supported by the wall of the chamber.

3.2 Pipe Material

The Up-Flo™ Filter is design to be used in conjunction with either a concrete or PVC drainage system. When using the Up-Flo™ in conjunction with a concrete drainage system inlet is grouted in to the cored inlet hole provided using a non-shrink grout and the outlet pipe is connected to the rubber ring joint pipe spigot provided. When using PVC pipe work the inlet is completed using a gasket that is pre-installed in the chamber and the outlet connection is completed using a Fernco style screw tighten coupling. Refer to installation instruction for detail of these connections.

4.0 Installation Procedure

4.1 Installation Guidelines for RRJ RCP

Step 1 – Excavation and foundation

Ensure the excavation is properly prepared for the installation in advance and it meets all standard specifications set by the relative drainage authority for construction. Install bedding material for the Up-Flo™ Filter as per drainage authority's guideline for precast drainage structures, typically 150mm of compacted crushed rock. Make certain that the dimensions of the excavation are correct and that the unit once installed with give the required finished height. Refer to the Site General Arrangement drawing for dimensions.

Step 2 – Up-Flo™ Base Unit

Install the Up-Flo™ Filter precast chamber in the properly prepared excavation. The chamber must be level prior to installation of risers (if required). Ensure that the inlet and outlet pipes penetrations are correctly orientated according to the engineering drawings. Inlet and out let pipe locations are marked on the structure. The inlet is visibly different only have a cored hole where as the outlet is fitted with a concrete spigot.

Step 3 – Pipe Connections

For RRJ RCP Drainage System
Once the Up-Flo™ Filter precast chamber is installed the pipe connections between the chamber and the connecting pipe work can be made. The inlet pipe should be fitted into the cored hole provided and a water tight connection should be made using non-shrink grout. A Rubber Ring Joint concrete pipe stub is provided on the outlet so the concrete drainage pipe network can be easily connected to the Up-Flo™ Filter.

For uPVC Drainage System

Once the Up-Flo™ Filter precast chamber is installed the pipe connections between the chamber and the connecting pipe work can be made. The inlet pipe is installed into the chamber using rubber sealing gaskets that is preinstalled in the chamber. The connection between the outlet stub and uPVC drainage network is made using a Fernco style screw tight coupling. The PVC pipe should be pushing into the coupling and then tightened using the screw tight thread.

Step 4 – Risers

Install riser(s), by placing supplied joint sealant around joint profile as per specifications. Lift he riser section into position lowering them together slowly ensure there is sufficient contact between precast and sealant.

Step 5 – Install Surround/Covers

Install precast concrete surround, using the supplied joint sealant, if a cast in cover/grate is supplied this will be the finished surface level. When a concrete surround with starter bars and a loose frame and cover are requested an insitu neck will need to be cast on top of the surround to meet the required surface level and grade.

Step 6 – Backfill

Carefully back fill and compacted around precast chamber following local authorities specification regarding backfill material compaction rates. Back fill may have to be complete is several lifts and combined with the riser installation depending on the specific depth to invert.