# INSTALLATION GUIDE

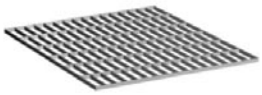
## RSF 1000 Solid Pollutant Filter

| | |
|---|---|
| Unit Location: | |
| Structure No: | Ecosol Ref: |
| Unit Code: | |

| **Unit Dimensions** (m) | |
|---|---|
| Length (external pit dimension): | |
| Width (external pit dimension): | |
| Overall unit depth (from SL to underside of unit): | |
| Depth to inlet invert level from SL: | |
| Inlet penetration diameter: | |
| Depth to outlet invert level from SL: | |
| Outlet penetration diameter: | |

| **Approx. Component Weights** (tonne) | |
|---|---|
| Pit Base (outlet): | |
| Pit Risers (each): | |
| Pit Inlet Collar: | |
| Inlet Shelf: | |
| Access Lid: | |
| Access Lid Loading: | |
| Internal Filtration Unit: | |

**Note:** 4 x 5 tonne Swiftlift lifting eyes required

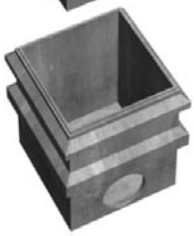


Trafficable, lockable ductile cast-iron or grated galvanised access lid

Removable, hot-dip galvanised or stainless steel filtration system

Pre-cast concrete inlet collar

Pre-cast concrete risers (if required)



Pre-cast concrete base and outlet

## Installation Procedures

### Excavation

- Excavate the hole to the required size and depth, confirming that the sub-grade and bearing capacity is adequate and compacted to not less than 95% standard compaction
- Ensure that the excavation is appropriately benched or shored, if applicable

### Dewatering

- Install an appropriate dewatering system capable of lowering the groundwater locally below the confines of the works for the unit installation
- It is important that all stormwater flows are temporarily diverted around the excavation for the duration of the unit installation

### Base Course

- A 100mm layer of quarry rubble must be placed under the base of the unit and compacted to not less than 98% standard compaction - the base course must be true to line and level and finished to provide a firm uniform base on which to place the unit

### Crane Hire

- Ensure a suitably sized crane is available on site and loaded with the necessary lifting chains and differential spreader beams necessary to safely lift all components into the excavation - for full details of the lifting requirements refer to the supplied engineered drawings

### Handling

- Lifting must only be carried out using the specified lifting points
- The minimum sling length is 6.0m, unless shorter slings are specified on the drawings
- A differential spreader beam must be used for all lifts - the spreader beam must be oriented across the unit so that the slings are parallel to the sides
- Adopting correct lifting techniques minimises adhesion forces between the unit and horizontal surfaces or moulds
- Care should be taken not to induce dynamic load effects while hoisting or moving the unit over rough terrain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# Installation Procedures (cont.)

**Pit Installation**

- Crane the pre-cast concrete base into position ensuring that it is correctly aligned with the outlet pipe
- Once positioned, ensure the unit is level across its width and length
- Connect the outlet pipe into the base pit penetration and bandage by mortaring both the inside and outside of the pipe connection to the unit
- Apply manhole sealant to the top edge of the unit base
- If required, lower the pre-cast riser section onto the base pit, apply manhole sealant, and then lower the inlet pit into position and align with the inlet pipe
- Fix the inlet shelf brackets into position below the inlet pipe penetration and then lower the inlet shelf into position and secure with fixings supplies
- Connect the inlet pipe into the inlet collar penetration and bandage by mortaring both the inside and outside of the pipe connection to the unit


**Internals Installation and Access Lid**

- Lift the internal filtration unit and lower it centrally into the positioned pre-cast concrete unit
- Place the access lid on top of the risers and secure as necessary
- Refer to the engineered drawings for concrete surround construction details for securing the access lid

**Backfill**

- The backfill around the pit should be comprised of natural soils, free from clay lumps, vegetation, or other deleterious materials, or quarry materials
- All backfill placed around the unit must be placed in uniform layers around each side of the unit
- The backfill around the unit should be compacted to not less than:
  - 98% standard compaction for units installed in roadways, paved or trafficable areas, etc;
  - 95% standard compaction for units in non-trafficable areas; or
  - any greater compaction if specified by others for the overall stormwater installation

**IMPORTANT NOTE**

**This document is only provided as a guide. It is the sole responsibility of the purchaser/ installer to familiarise themselves with the relevant drawings and specifications that they were provided with at the time of purchase.**

**The purchaser/installer must also employ appropriate procedures to deal with all likely contingencies so that the unit is installed safely and in line with the relevant codes of practice and Australian Standards.**

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