# INSTALLATION GUIDE

RSF 4300 - 4450 Solid Pollutant Filter/Oil & Grease Arrester

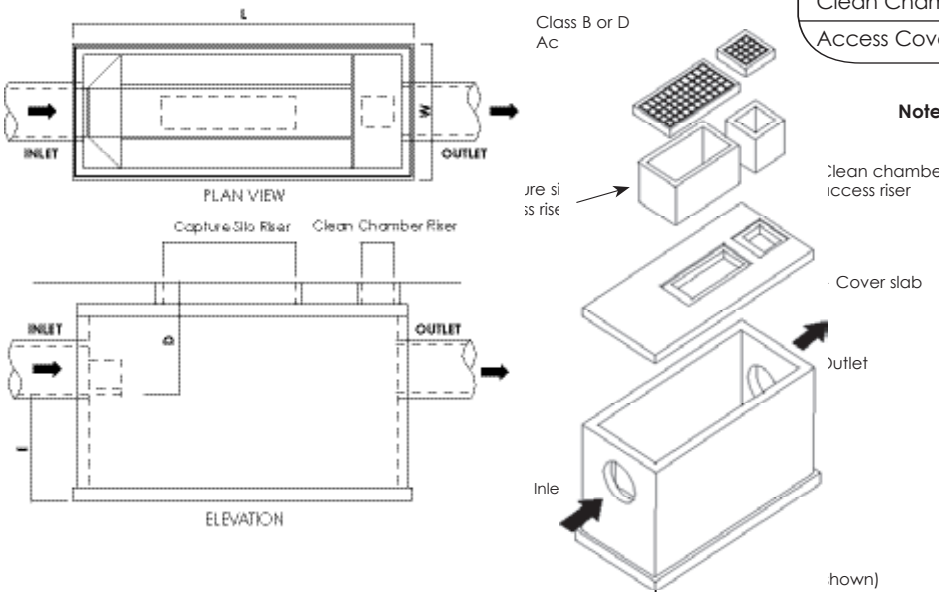
| | |
|---|---|
| Unit Location: | |
| Structure No: | Ecosol Ref: |
| Unit Code: | |

| **Approx. Component Weights** (tonne) | |
|---|---|
| Pit Base: | |
| Cover Slab: | |
| Capture Silo Access Riser: | |
| Clean Chamber Access Riser: | |
| Capture Silo Access Cover: | |
| Clean Chamber Access Cover: | |
| Access Cover Loading: | |

**Note:** tonne Swiftlift lifting eyes required

| **Unit Dimensions** (m) | |
|---|---|
| Length (L): | |
| Width (W): | |
| Depth to invert (D): | |
| Depth below invert (E): | |
| Inlet Penetration size: | |
| Outlet Penetration size: | |

## Unit Components and Dimensions




## 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

### 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
- Ensure a minimum fall of 1% along the unit length (L) and that the unit is level across the unit width (W)

### 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


**Adelaide** +61 8 8212 9733
**Brisbane** +61 7 3368 3966
**Darwin** +61 1300 663 225
**Hobart** +61 1300 768 922
**Melbourne** +61 3 9543 5644
**Perth** +61 1300 794 654
**Sydney** +61 2 9669 6000
**Townsville** +61 7 4728 5711
**Auckland** +64 9 272 7010
**Kuala Lumpur** +60 3 7710 6514

Website: www.ecosol.com.au

# Installation Procedures (cont.)

**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 long 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

**Pit Installation**

- The unit must be installed to the correct line and level and in a manner that is safe and that does not cause it damage
- Installations must comply with statutory workplace regulations
- Connect the pipes into the penetrations at both the inlet and outlet of the unit and mortar inside and outside of the bandage joint ensuring a smooth transition between the unit and the invert of connecting pipes
- The unit is suitable for installation in non-aggressive soils. Soils with ph <4.0, or with groundwater containing more than 1gm per litre of sulphate ions, or salt-rich soils in arid areas, are considered aggressive
- An Ecosol representative will be present for the installation of the unit

**Cover Slab and Risers**

- Bostik 5240 sealing strip or Sikadur-31 adhesive mortar, or equivalent, should be provided between all joints in or between the walls, cover slab, and access risers, as applicable - the sealing strip or mortar must be installed in accordance with the manufacturer's specification
- Steel shims must be provided between members to provide a minimum separation of 2mm for the mortar
- Shims should be either galvanised or have 40mm cover of mortar to the edges
- Apply the manhole sealant to the top edge of the internal steel filtration unit
- Apply the manhole sealant or mortar to the top of the pit wall prior to lowering the cover slab into position
- Apply the manhole sealant or mortar to the rebates in the top of the cover slab prior to lowering the access risers into position
- Place the access covers on top of the risers and secure as necessary
- Refer to the engineered drawings for concrete surround construction details for the securing of the access covers

**Backfill**

- The backfill around the pit should be comprised of natural soils, free from clay lumps, vegetation, or other deleterious materials, or quarry materials
- The backfill around the access risers for a pit with Class C loading or higher should be crushed rock or quarry rubble - other materials may be specified on the drawings
- All backfill placed around the unit must be placed in uniform layers around each side of the unit and 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**

**Once installed it is important that the unit is filled with water immediately to prevent any possibility of flotation in a severe rain event.**

**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.**

## IMPORTANT NOTICE

**1.** The inlet pipe **MUST** be aligned with the unit (see opposite)

**2.** A maximum deflection of 15 deg. is permitted at the outlet

**3.** Ensure the cover slab is correctly orientated