PREMIER TECH

# Installation guide

# ECOFLO®

Ecoflo compact biofilter — Concrete EC7-500, EC7-750, and EC7-1200 model series | New Jersey

This guide contains the information required to install the concrete Ecoflo compact biofilter EC7-500, EC7-750, and EC7-1200 model series in New Jersey. The installation must be performed by a duly trained installer.

**IMPORTANT: The concrete Ecoflo compact biofilter can be partly or completely assembled at the concrete manufacturer plant or assembled directly on site. Storage, transportation, and handling requirements will differ depending on the model.**

If you have any questions about installing the Ecoflo compact biofilter or about installer training, please call Premier Tech at 1 800 632-6356.

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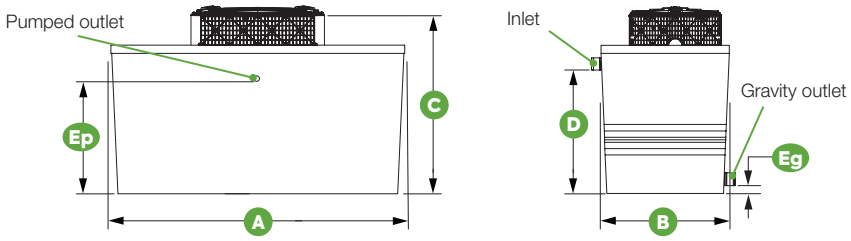
# TECHNICAL DATA SHEETS

## MATERIALS USED:

- **Tank and top slab:** reinforced concrete
- **Lid, central support, tipping bucket, and distribution plates:** polyethylene
- **Filtering medium:** coconut husk fragment-based compound

| | 2.8 | 4.1 | 6.5 |
|---|---|---|---|
| **Model** | **EC7-500-C-G/PDV** | **EC7-750-C-G/PDV** | **EC7-1200-C-G/PDV** |
| **Hydraulic capacity** | 500 US gal/d | 750 US gal/d | 1,200 US gal/d |
| **Treatment surface area** | 31 ft² | 44 ft² | 70 ft² |
| **Length** (A) | 10’ 1/8”’ | 12’ 7-1/4” | 12’ 7” |
| **Width** (B) | 4’ 2-5/8” | 4’ 4-3/4” | 6’ 9-1/2” |
| **Height** (C) | 6’ 5-1/4” | 6’ 8-7/8” | 6’ 11” |
| **Inlet height from bottom** (D) | 4’ 6” | 4’ 10” | 4’ 11-1/2” |
| **Gravity water outlet height** (Eg) | 5” | 5” | 6” |
| **Pumped water outlet height** (Ep) | 4’ 3-1/2” | 5’ | 4’ 11-1/2” |
| **Water inlet and gravity outlet diameter** (nominal) | 4” | | |
| **Water outlet diameter** (nominal) | 1-1/2’’or 2’’ | | |
| **Additional riser allowed** | 16” | | 8” |
| **Weight*** Includes tank, upper slab, internal components, and coco filter | 9,900 lb | 15,840 lb | Slab: 5,200 lb<br>Tank: 14,320 lb |
| **Emergency storage above alarm float** | 500 US gal | 750 US gal | 1,360 US gal |

* Weights are approximate and not binding (for handling and lifting purposes only).



## PRODUCT NOMENCLATURE

There are several available Ecoflo compact biofilter models with different characteristics. Each one can be identified by its model number.

**EC7 models series:**

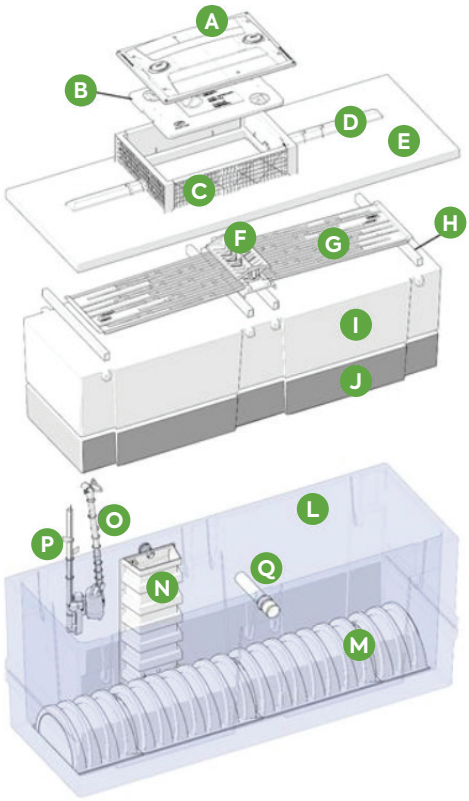
| | | | |
|---|---|---|---|
| **EC7 – 500 – C – P** | | **EC7** | **Ecoflo compact biofilter** |
| | Capacity (GPD or L/D) | **500** | **500 US gal/d or 1,900 L/d** |
| | | 750 | 750 US gal/d or 2,200 L/d |
| | | 1200 | 1200 US gal/d or 2,870 L/d |
| | Unit | **C** | **Concrete** |
| | | P | Polyethylene |
| | Discharge mode | **G** | Watertight with gravity discharge |
| | | **P** | **Watertight with pumped discharge** |
| | | **PDV** | Watertight with pumped dosing volume discharge |

Therefore, the EC7 – 500 – C – P refers to an Ecoflo compact biofilter model that can treat 500 US gallons per day and that is housed in a concrete unit with a watertight bottom and an integrated pump for effluent discharge.

# 1 CONCRETE ECOFLO COMPACT BIOFILTER COMPONENTS

Please consult the following chart and illustrations.

| Component | Description |
|---|---|
| A **Lids** | • access for maintenance and inspection – main and secondary access (if applicable)<br>• air intake from the main access provides proper air flow throughout the system<br>• accesses secured with lag screw-bolted assemblies |
| B **Insulation boards** | • thermally insulate the system<br>• guide air flow into the unit's air ducts through the main access<br>• ensure safety by acting as a seal for the system |
| C D **Main access and air ducts** | • conduct air flow from the main access to the rest of the system |
| E **Top slab** | • allows connection of water and air pipes<br>• allows air to circulate through the air ducts |
| F **Tipping bucket** | • ensure proper distribution of wastewater onto the distribution plates |
| G **Distribution plates** | • ensures even distribution of wastewater throughout the filtering medium |
| H **Support rails** | • support the other end of the distribution plates |
| I **Filtering medium** | • made of renewable, compostable, and 100% natural coconut husk fragments<br>• promotes the biomass growth essential for biological wastewater treatment<br>• physically filters out solids contained in wastewater<br>• maintains proper humidity levels to sustain healthy biomass during low-use periods |
| J M **Aeration and drainage system** | • directs effluent from the collection area to the discharge pipe<br>• promotes aeration of the filtering medium |
| L **Unit (tank and top slab)** | • encloses the system's components<br>• collects treated effluent |
| M **Treated effluent collection area** | • layer of drainage media<br>• supports the filtering medium<br>• allows treated effluent to properly drain<br>• promotes aeration of the filtering medium |
| N **Pump vault** | • houses pumping equipment<br>• allows air circulation between the top and bottom of the filtering medium<br>• gives access to the bottom of the system to collect treated effluent samples |
| O P **Pump unit** | • includes a pump, a float tree, an ON/OFF float, an alarm float, and an alarm box<br>• pumps treated effluent towards the absorption area, watercourse, or tertiary treatment system |
| Q **Plates support** | • supports the tipping bucket and one end of the distribution plates |




**Blown-up view of the concrete Ecoflo compact biofilter**

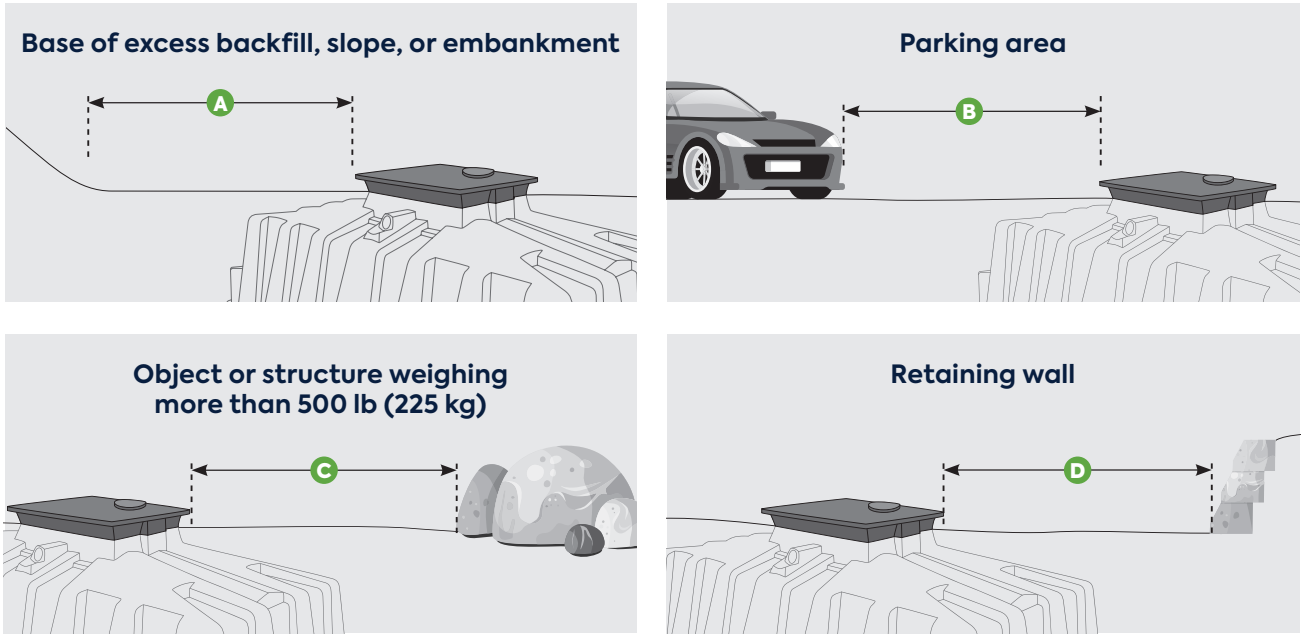
## 1.1 MINIMUM DISTANCES TO BE MAINTAINED IN ACCORDANCE WITH THE REGULATION IN FORCE

In the case of an isolated dwelling, a wastewater treatment system must be installed in a place:

- where there is no motorized traffic
- where it is not likely to be submerged
- that is accessible for haulage and maintenance
- that complies with the distances in Table 1

Table 1: Minimum distances to respect for the Ecoflo compact biofilter

| Reference point | Primary/septic tank | Concrete Ecoflo compact biofilter |
|---|---|---|
| Residence | 5’ (1,5 m) | |
| Drain line | Refer to manufacturer’s specifications | N/A |
| Property limits | 5’ (1,5 m) | |
| Top of excess backfill, slope, or embankment | Refer to manufacturer’s specifications | N/A |
| Base of excess backfill, slope, or embankment (A) | Refer to manufacturer’s specifications | 10’ (3 m) |
| Parking area (B) | | |
| Vehicle or object weighing more than 500 lb (225 kg) (C) | | |
| Retaining wall (D) | | |
| Tree | | N/A |
| Finished landscaping vs. base of Ecoflo compact biofilter lid | 2” (50 mm) | |
| Groundwater vs. base of Ecoflo compact biofilter unit | Below outlet invert | • Gravity: Up to the base<br>• Pumped: Below inlet invert |




Minimum distances to respect for Ecoflo compact biofilter

### 1.2 INSTALLATION CONDITIONS

#### 1.2.1 Primary/septic tank

The primary/septic tank must contain a septic effluent filter and be installed in compliance with the following instructions:

- Both openings must be extended to the soil surface through watertight and insulated chimneys and equipped with watertight lids.
- The installation must be 100% watertight and only receive the residence's domestic wastewater (no foundation, land, or roof drainage).
- The primary/septic tank must be placed where it is not at risk of being flooded or submerged (depending on the situation, it may be necessary to provide for drainage around the primary/septic tank to prevent groundwater from becoming a flooding risk).
- The manufacturer's specifications.

#### 1.2.2 Concrete Ecoflo compact biofilter

The **Ecoflo compact biofilter** must be installed according to the following recommendations:

- NEVER cover or bury the lid of the Ecoflo compact biofilter.
- The lid of the Ecoflo compact biofilter must be at least 2" (50 mm) above the surface of the landscaped lot.
- Ensure an upslope interceptor drain is installed to direct surface and/or groundwater away from the Ecoflo compact biofilter unit and soil absorption system.
- NEVER connect a drain pipe, roof gutter, sump pump, or air conditioner drain to the septic system.
- Make sure the ground cover grows back quickly to prevent soil erosion.
- Respect at all times the minimum setback distances presented in Table 1.

By respecting these guidelines, you contribute to the proper operation of the wastewater treatment system. Failure to abide by these guidelines may void the warranty at Premier Tech's discretion.

# 2 INSTALLING THE CONCRETE ECOFLO COMPACT BIOFILTER

**IMPORTANT: The installer is responsible for all security measures applicable to all installation steps, including the use of a hard hat, gloves, boots, safety glasses, face mask, etc.**

## INSTALLATION SEQUENCE

The primary/septic tank and the final effluent disposal method affect all other septic system components. They must be properly considered during the installation process.

The following is the typical sequence for installing the concrete Ecoflo compact biofilter:

1) primary/septic tank

2) concrete Ecoflo compact biofilter

3) final infiltration zone, or final outlet pipe in case of surface discharge (refer to local regulations)

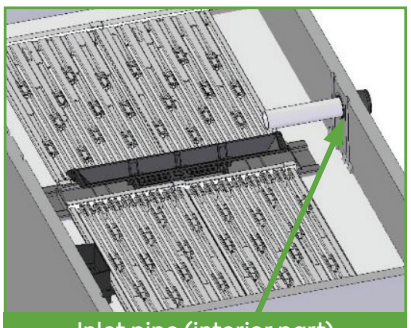
4) pipe and fitting connections

### 2.1 ON-SITE VERIFICATIONS

#### 2.1.1 For EC7-500 and EC7-750 model series

Ensure the following:

- the tipping bucket is secure and stays in place
- the end of the inlet pipe is lower than the water inlet to ensure the proper flow of water arriving in the system
- the tipping bucket has full range of motion, with nothing stopping it from tipping back and forth
- the distribution plates are properly installed
- the pump and float tree are correctly positioned



Inlet pipe (interior part)

### 2.1.2 For EC7-1200 model series

Verify that you have all of these parts on hand:

A. 1 concrete tank including:
   - A1. 1 polyethylene pump vault
   - A2. 1 aeration and drainage vault
   - A3. 1 Ø 4” (100 mm) inlet adapter
   - A4. 1 outlet adapter built into the tank (not illustrated):
     - Ø 1-1/2’’ (38 mm)
     - 4” (100 mm)
   - A5. One bag (not illustrated) containing the homeowner's documents, 4 plastic cable ties and 2 Premier Tech cable ties

B. 1 upper slab including:
   - B1. 1 main access cast into the concrete, including 1 insulating panel, 1 lid, and 4 lag screws
   - B2. 1 secondary access built into the concrete, including 1 insulating panel, 1 lid, and 4 lag screws
   - B3. 2 built-in air vents

C. 1 filtering medium pallet (30 bags of coco husk fragment filtering media)

D. 1 central support plate

E. 2 PVC plate support bars

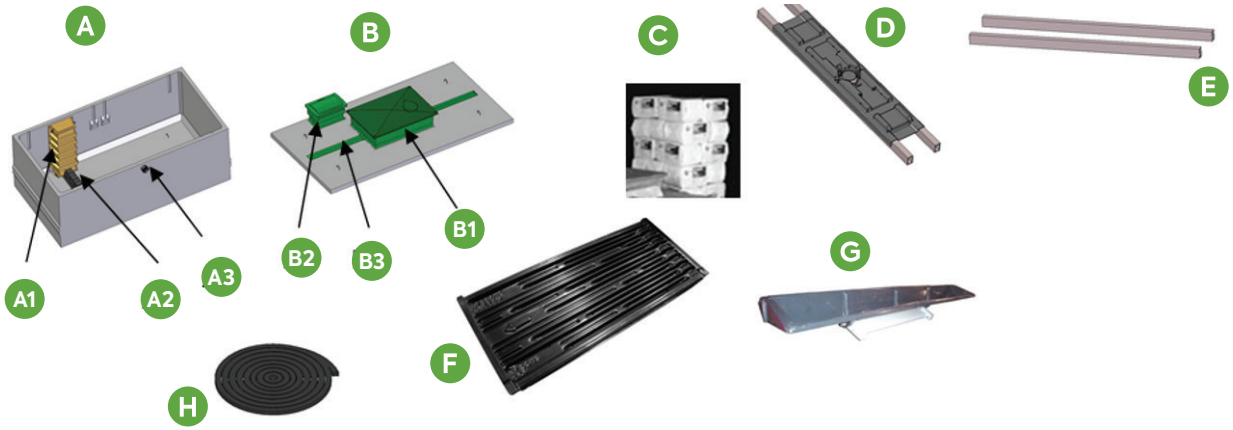
F. 4 distribution plates

G. 1 tipping bucket

H. butyl seal

**Additional parts for models with an integrated pump:**

- 1 Ø 1’’ (25 mm) barbed outlet fitting for flexible piping
- 1 Ø 1-1/2’’ (38 mm) fitting used to connect the water outlet pipe to the drain field
- 1 pumping unit with float tree installed in the pump vault
- 1 alarm box
- 1 electrical junction box with watertight connectors
- watertight electrical connectors (for electrical wires)




For any missing or broken piece, or to report a problem, contact Premier Tech at 1 800 632-6356.

## 2.2 EXCAVATION, LEVELING, AND INSTALLATION

Excavate an area large enough to clear at least 1’ (300 mm) around the concrete Ecoflo compact biofilter. Depending on soil conditions, it may be necessary to add a 6” (150 mm) gravel layer Ø ¾” (0-20 mm) in diameter that does not contain any vegetable matter, or a layer of clean crushed stone Ø ¾” (20 mm) in diameter surrounded by a geotextile. Ensure the gravel/clean crushed stone layer is compacted and level.

Lower the unit onto the excavation floor. Ensure that it is level and that it fully rests on the gravel/clean crushed stone layer.

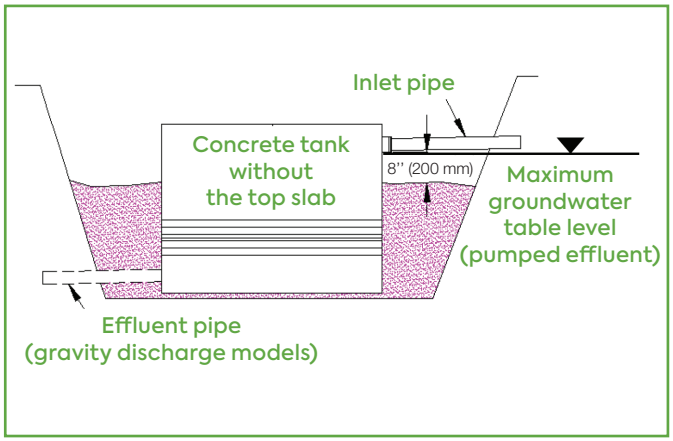
In the case of the concrete Ecoflo compact biofilter with gravity discharge, connect the effluent discharge pipe using the watertight flexible outlet adapter before moving on to the next step. Connect the pipe to the Ecoflo unit while ensuring to maintain a constant downslope along the full length of the pipe going toward the sand filter. Note that the soil beneath the pipes must be adequately compacted.

## 2.3 INITIAL BACKFILL

**Ensure that the seasonal high groundwater table level is below the unit's inlet pipe at all times.**

With an integrated pump, make sure the maximum seasonal groundwater table level is below the shell's inlet pipe at all times. However, with gravity discharge, the maximum seasonal groundwater table level must be at least 6" (150 mm) below the shell's base.

Backfill the unit up to 8'' (200 mm) below the inlet invert. When backfilling, start by the unit's two lateral sides, then backfill the two ends. The backfill material must be gently lowered instead of dumped. Premier Tech recommends against using a bulldozer for this step. **The backfill material must be sandy and free of rocks or stones larger than 2'' (50 mm) in diameter.**



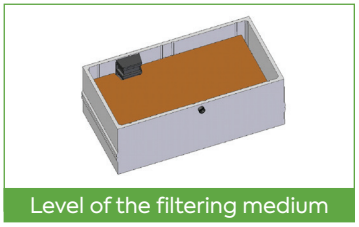

**WARNING: When backfilling, make sure that no backfill material gets into the shell.**

## 2.4 ASSEMBLY FOR ECOFLO COMPACT BIOFILTER - EC7-1200 MODEL ONLY

### 2.4.1 Putting the gravel and the filtering media down

Once inside the tank, evenly spread a 8" (200 mm) layer of clean crushed stone (with no fine particles or organic debris). To determine the upper level of the crushed stone layer to put, use the upper level of the draining chamber. Additional material is required by the contractor — 2 tons of 3/4" washed stone and you must load the coco media on site.

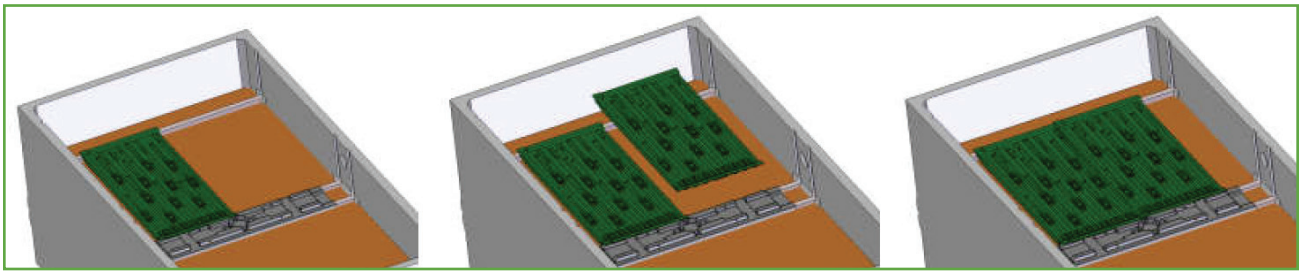
From the outside of the tank, break up the media and pour the bags of filtering media up to the lowest level of the grooves in the concrete walls where the support rails are located and level the surface (see illustration on the right). Remove any particles from the grooves and place the support rails in the end grooves and the central support plate in the center groove. Finish pouring the filtering media up to the top of the support rails and level it with a rake. In the end, the surface of the filtering media must be at the upper level of the support rails of the distribution plates. Media must be broken up into individual pieces. Do not leave clumps of media.


Level of the filtering medium

WARNING!

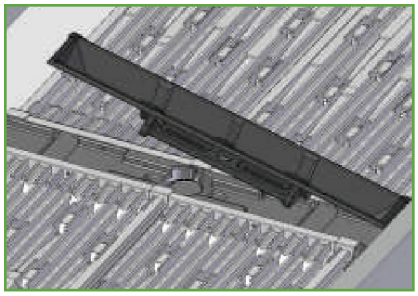
- When working in the tank, make sure the backfill material is not carried inside.
- Make sure not to compact the filtering media (do not walk on it).
- Carefully level the surface of the filtering media.
- Make sure no filtering media falls into the access well while the tank is being filled.

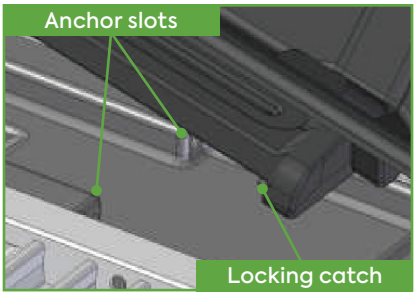
### 2.4.2 Installing the distribution plates

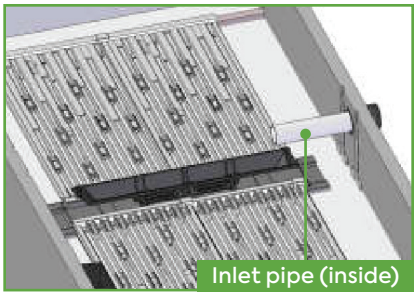


- Install the distribution plates by placing them on their support rails at both ends.
- The arrow on the distribution plates must be oriented toward the end of the tank.
- Place the first plate on the left side and place the second plate against the edge of the first one.
- Repeat on the right side of the shell (2 plates on each side of the shell). The distribution plates sit on top of the central support plate and must be attached to it with four plastic ty-wraps.

### 2.4.3 Installing the tipping bucket and the inlet pipe



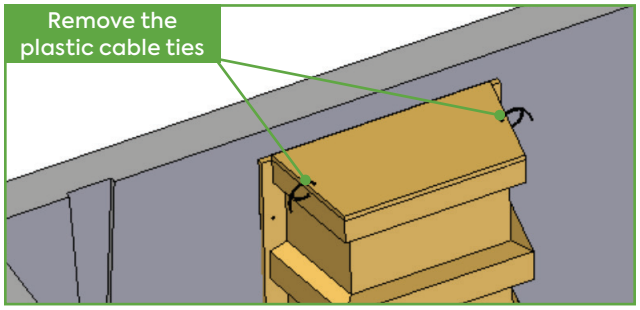


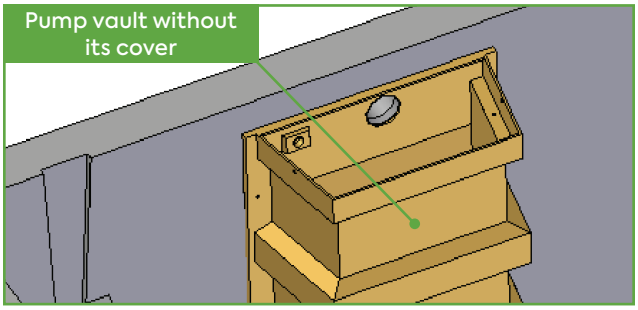




Once the distribution plates are in place, install the tipping bucket by inserting its locking catches in the anchor slots of the central support plate and push down the other end to make sure the tipping bucket stays in place. Be sure that the end of the inlet pipe is lower than the water inlet in order to have a good water flow coming inside the system. Check that the installation of the tipping bucket by tipping it from left to right to make sure nothing is blocking it. If needed, the tipping bucket level can be adjusted by adjusting the feet on the bottom of the tipping bucket.

### 2.4.4 Opening of the pump vault

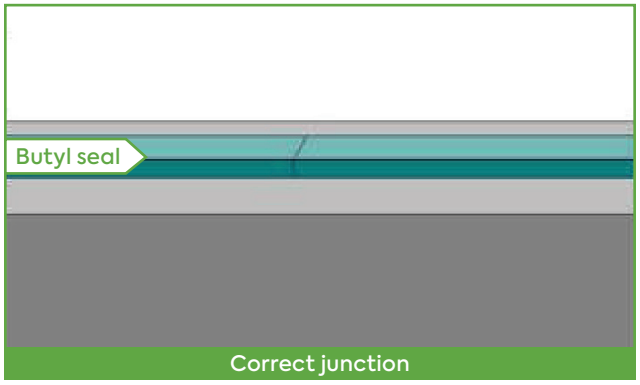
In model with gravity discharge, the main function of the pump vault is to allow air to flow between the top and the bottom of the system. In models with integrated pump, the access well is also used as a vault for the pumping unit. The cover of the pump vault is there to prevent gravel or particles of filtering media to fall into the access well during installation. Therefore, once the filtering media has been put in, remove the cover (taking care not to let the ty-wraps fall inside the vault) and do NOT put it back on.

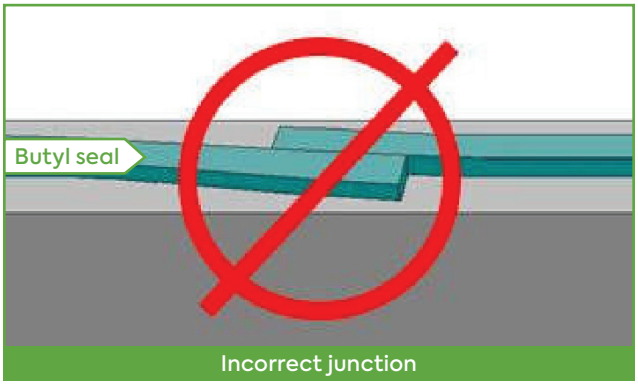



### 2.4.5 Installing the top slab and doing the final backfilling of the system

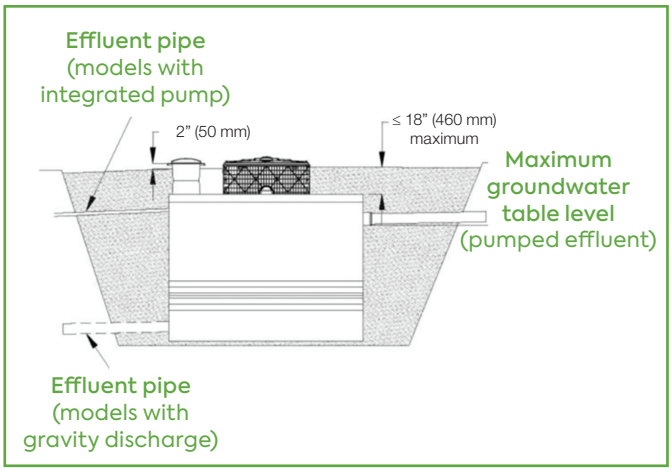
WARNING! The top slab must be installed before finishing to backfill. Before laying the butyl seal, carefully clean the rim of the tank. To ensure the seal is watertight, it must be put down in one continuous section without overlapping where the two ends meet, as shown below. Proper cleaning of the bottom of the top slab is required to ensure the seal is watertight and that no backfill material can get into the filtering media.



The tank includes a cast in 10” riser. If necessary, you may ADD ONLY ONE (1) 8” (20 cm) riser on the main access (STR-080). The maximal burial depth is 18” (460 mm) over the top slab.

**Before the final backfilling, do not forget to connect the pump’s power supply.**




## 2.5 CONNECTING THE INLET AND EFFLUENT PIPES

General specifications:

- all pipe connections to a wastewater treatment unit must be flexible and watertight
- always cut pipes at a right angle to maximize the surface to be glued
- clean all plastic residues inside and outside the pipes and dry them before applying glue
- apply a coat of PVC primer inside the fitting connections and around the pipes before gluing them
- use standard PVC cement for connections
- promptly complete the connections once glue is applied
- keep a slight pressure on the connections for a few seconds
- for threaded fitting connections, use Teflon© tape or an equivalent
- ensure the soil under the pipes is well compacted
- protect the pipes against freezing if the soil depth is not sufficient to offer proper protection

### 2.5.1 Inlet pipe

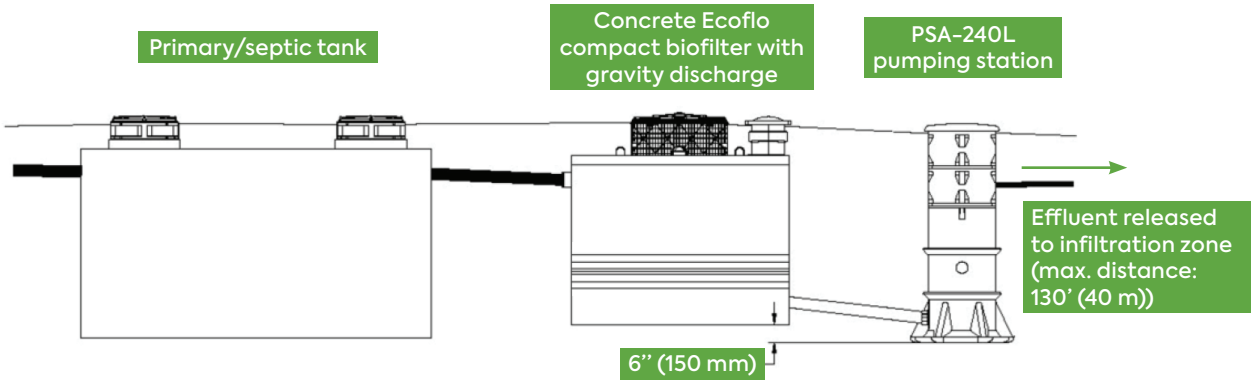
Connect the inlet pipe from the primary/septic tank to the Ecoflo compact biofilter’s water inlet, ensuring that the pipe runs downward along its length towards the Ecoflo compact biofilter’s water inlet (minimum slope of 1%). The soil underneath the pipe must be well compacted. The Ecoflo compact biofilter is equipped with a standard flexible inlet adapter and is connected with a regular pipe clamp. Inside the unit, set the provided inlet pipe in the inlet adapter so that it is positioned over the tipping bucket. Do not glue the pipe inside the unit.

### 2.5.2 Outlet pipe

The Ecoflo compact biofilter’s outlet pipe must be connected to the treated effluent’s dispersal area (absorption area, watercourse, or tertiary treatment system) by a Ø 1-1/2’’ (38 mm) pipe that can support at least 100 PSI (700 kPa) of pressure and that is compatible with underground applications when utilizing the unit’s pumped distribution outlet. The other end of the pipe must be connected to the drain field using the supplied coupling. Precautionary measures against freezing must be taken on sites where the unit discharges into a watercourse.

When using the gravity outlet, connect a 4” (100 mm) PVC pipe to the outlet connection through a coupling. Prior to connecting the pipe, remove the cap and ensure the outlet is free and clear of any obstructions.

- The Premier Tech PSA-240L pumping station can be installed downstream from the Ecoflo compact biofilter if needed. In this situation, the Ecoflo compact biofilter with gravity discharge must be installed with the PSA-240L pumping station equipped with a 14” (355 mm) riser, as illustrated below. The pipe running from the PSA-240L to the infiltration zone must be 1-1/2’’ (38 mm) in diameter. The float in the pumping station does not need to be adjusted.




**NOTE:** The pipes must be positioned such that they can drain by gravity.

**WARNING!** In this configuration, the maximum seasonal groundwater table level must be at least 6’’ (150 mm) below the unit’s base. If the terrain layout is such that surface run-off accumulation is possible, a drain pipe must be added to evacuate excess water and prevent any risk of infiltration.

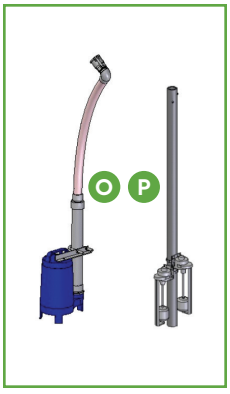
## 2.6 FINAL BACKFILL

**Finish backfilling.** The backfill material must be gently lowered instead of dumped. Premier Tech recommends against using a bulldozer for this step. **The backfill material must be sandy and free of rocks or stones larger than 2’’ (50 mm) in diameter**. Allow space for plant cover. Ensure that the lids are 2’’ (50 mm) above the finished landscaping.

**If necessary, you may add only two (2) 8” (200 mm) risers on the main access (STR-080) on models EC7-500 and EC7-750.**

Remember to connect the pump’s power supply before starting the final backfill (refer to section 2.7).

## 2.7 PUMP AND ELECTRICAL WIRING INSTRUCTIONS (MODELS WITH INTEGRATED PUMP)



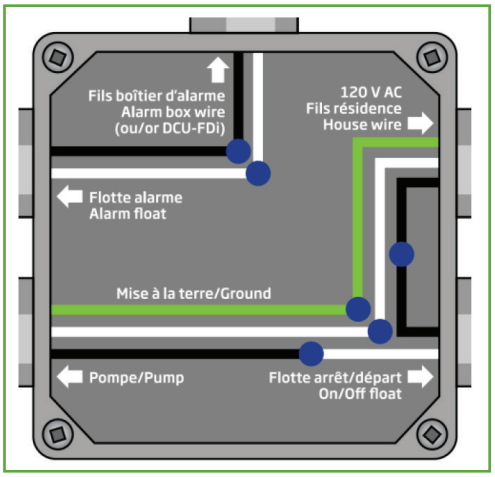

### Pump verification

**Ensure there is no debris (sand, stone, gravel, cable tie, electrical component, tape, etc.) in the access vault when the electrical wiring is complete.** Visually inspect the components inside the access vault (pump, float tree, floats) to ensure they are properly installed and will function properly.

According to N.J.A.C. 7:9A-8.3(b)6 code requirement, the pump tank alarm must be Internet-based or be connected to an active phone line equipped with an auto-dialer to notify the authorized service provider of alarm conditions, including if power to any of the system components is disconnected. Wi-Fi enabled tank alarms are available at New Jersey Ecoflo depots. Follow the manufacturer’s instructions for the alarm.

## Electrical wiring

**All wiring and electrical connections must be in accordance with local regulations**. The electrical wiring must be performed by a professional electrician. Two (2) in-ground double strand supply cables are required to connect the system to the residence. Premier Tech recommends protecting the wires with the appropriate piping before burying them. The wire rating must also be done by a professional electrician. One of the wires must be used for the power supply line, while the other must be used for sending the alarm float signal to the alarm box or control panel (when required).




Waterproof electrical connectors must be used to go through the secondary access. The wires must pass under the groove in the access.

All wiring must be done in accordance with Section 7:9A-9.2 iv.:

> All electrical splices, junction boxes, contacts and relays shall be located outside of the dosing tank and a gas-tight seal shall be provided where electrical conduits enter the tank.

Section 7:9A-9.2 v.

> All electrical service lines to or from the pump control panel shall be installed in electrical conduit.

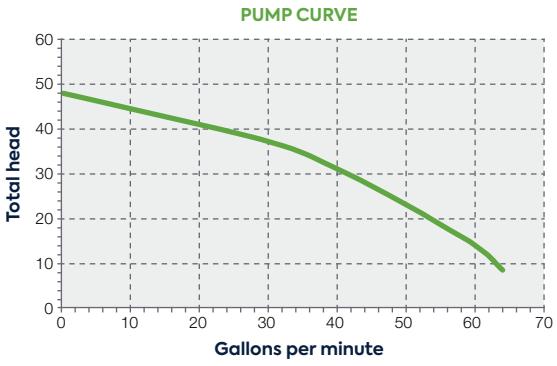
**NOTE: Use two (2) separate circuit-breakers, one for the electrical power of the pump and the other for the alarm box connection. Do not connect anything else on these circuit-breakers (household appliances, for example). They must be used for the pump and the alarm box only.**

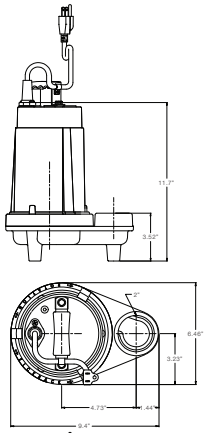
## The pumping unit uses 0.25 kWh of power per day

The figure on the right represents the performance curve of the pump that is integrated into certain models of the concrete Ecoflo compact biofilter. Note that this curve was obtained with clear water; performance with wastewater may vary. For any questions about concrete models with integrated pumps or about the interpretation of this figure, please contact Premier Tech.

Pump characteristics:

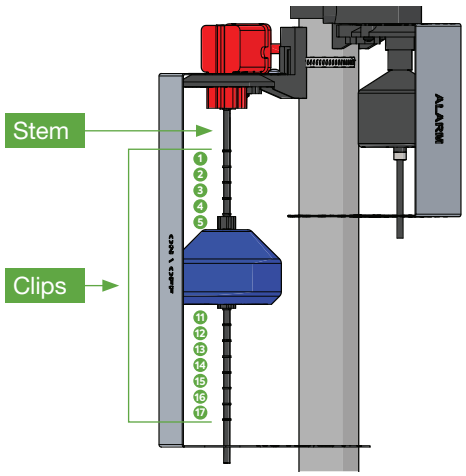
- Champion 0.5 HP CPE5
- 8.5 A
- single phase, 60 Hz, 115 V



## 2.8 FLOAT AND DOSING ADJUSTMENTS

| 2.8 | 4.1 | 6.5 | Adjustment |
|---|---|---|---|
| EC7-500 | EC7-750 | EC7-1200 | |
| Desired dose volume | | | |
| 20 US gal | 30 US gal | 95 US gal | None (factory setting) |
| 70 US gal | 95 US gal | n/a | Place a clip at the 5th and 15th spaces from the top of the stem. |
| 90 US gal | 120 US gal | 130 US gal | Place a clip at the 3rd and 15th spaces from the top of the stem. |
| 110 US gal | 140 US gal | 165 US gal | Place a clip at the 2nd and 16th spaces from the top of the stem. |
| 125 US gal | 165 US gal | 200 US gal | Place a clip at the 1st and 17th spaces from the top of the stem. |
| 150 US gal | 195 US gal | 220 US gal | Place a clip at the 17th space from the top of the stem. **DO NOT PLACE ANY OTHER CLIPS.** |



### 2.9 SYSTEM VERIFICATION AND WARRANTY SEALS

Ensure that the tipping bucket is fully operational and that the distribution plates are properly installed. Then, install the insulating board inside the main access. Seal it shut by attaching the handle of the insulating board to the access of the concrete Ecoflo compact biofilter using the two plastic fasteners. Finally, close the lid of the concrete Ecoflo compact biofilter.

**DON'T FORGET THE INSPECTION PERMIT, WHERE APPLICABLE.**

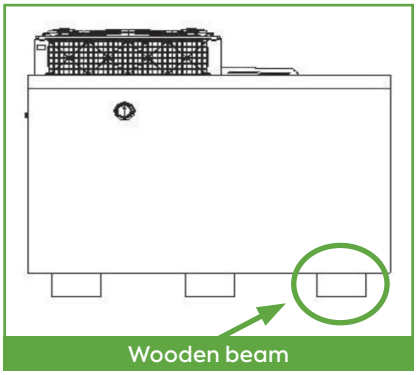
# 3 STORAGE

### 3.1 COMPONENTS TO BE CAST AND COMPONENTS TO BE ASSEMBLED

- Store the pallets containing the internal components in a location that is sheltered from the weather. Pallets containing components to be cast in the concrete tank can be stored outside.
- The pallets containing the filtering medium must be placed on well-drained soil to prevent deterioration.

### 3.2 PRE-ASSEMBLED CONCRETE ECOFLO COMPACT BIOFILTER UNITS

- Pre-assembled concrete Ecoflo compact biofilter units must rest on wooden beams so as to not sit directly on the ground.
- Each pre-assembled concrete Ecoflo compact biofilter unit contains distribution plates, a tipping bucket, one (1) or two (2) support bar(s), a support plate, pump and drainage vaults, an inlet pipe, a pump unit with a float tree, a pressure flow divider, a control panel, and a package containing the owner's manual.




# 4 HANDLING AND SHIPPING

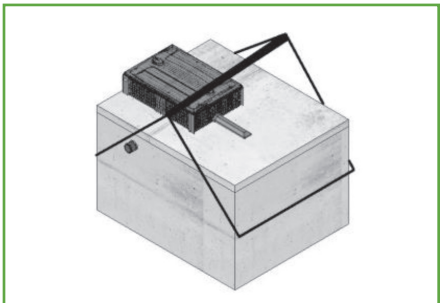
### 4.1 TRANSPORTATION OF THE UNIT FROM THE MANUFACTURER TO THE INSTALLATION SITE

- Use a vehicle with enough space to load the unit without any part of it extending outside of the vehicle.
- The vehicle must have the capacity to unload the unit at the appropriate location on the installation site.
- Ensure the concrete Ecoflo compact biofilter is properly tied down with appropriate straps.
- The transporter is responsible for any damage. They must also respect all highway code regulations and all traffic laws.

### 4.2 HANDLING

#### 4.2.1 For EC7-500 and EC7-750 models

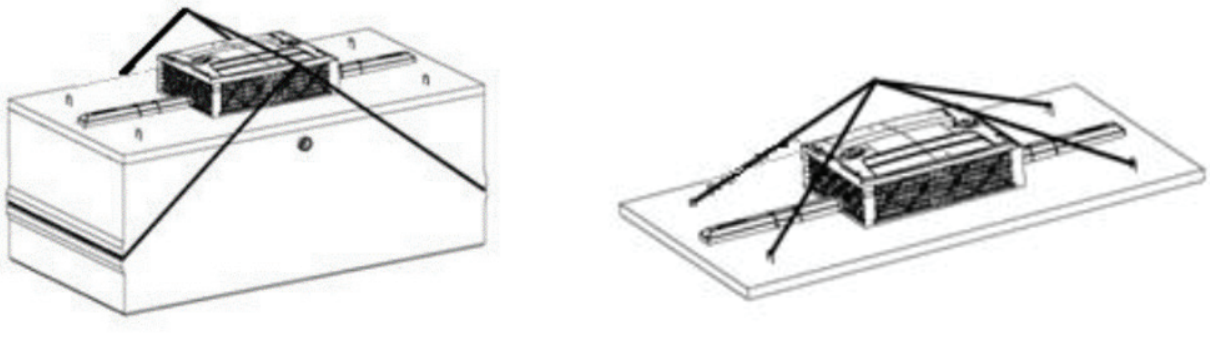
- Only use lifting equipment with appropriate lifting capacity.
- Always ensure the unit is level during handling.
- Ensure no one is inside the unit while it is being handled.
- Apply appropriate security measures to ensure maximum safety.
- To handle the concrete tank and the top slab together, use the lifting grooves and attach chains to both ends of the tank (if possible).
- Avoid using handling methods that might damage the material.
- The on-site handler is responsible for any damage to the material caused by his handling of it.



Suggested handling method for the concrete Ecoflo compact biofilter

### 4.2.2 For EC7-1200 model

- To handle the concrete unit and the top slab together, use the lifting grooves and attach chains to both ends of the unit (if possible).
- Avoid using handling methods that might damage the material.
- The on-site handler is responsible for any damage to the material caused by their handling of it.
- The concrete tank and the top slab can be moved when they are assembled or still separate.
- Only one unit can be moved at a time.
- Use only lifting equipment with appropriate lifting capacity.
- Always keep the tank levelled when handling.
- Make sure no one is inside the tank while it is being handled.
- Apply appropriate security measures to ensure maximum safety



Handling methods for concrete model EC7-1200

### Suggested handling method

- To handle the concrete tank and the top slab separately, you may use hoisting rings or the lifting grooves.
- Make sure to place lid on a levelled surface to avoid damage.
- Avoid using handling methods that might damage the material.
- The on-site handler is responsible for any damage to the material caused by his handling of it.

## 4.3 LOAD CONFIGURATION

- The load configuration depends on the type of vehicle used to transport the concrete Ecoflo compact biofilter to the installation site.
- Consult the technical datasheets of the specific concrete Ecoflo compact biofilter model to be handled to find the minimum surface area required for the vehicle so that the concrete Ecoflo compact biofilter can fit inside without any part extending outside.

## CHECK POINTS FOLLOWING INSTALLATION AND SYSTEM START-UP:

- Hand the package containing the owner's manual and the maintenance agreement to the homeowner.
- Ensure the different installation steps described in section 2.2 to 2.8 above are duly completed prior to start-up. Start-up does not requires any other specific actions.
- NEVER open the lids or go inside the primary/septic tank or biofilter unit once the installation is complete.
- NEVER cover or bury the lids of your septic system with mulch, soil, or any permanent structure. Always keep the lids accessible.
- Never install the concrete Ecoflo compact biofilter unit infiltration area within 6' 6'' (2 m) of a tree.
- On EC7-500 and EC7-750 models, you can add up to two (2) risers (extensions) to the concrete Ecoflo compact biofilter's access.
- On EC7-1200 model, you can add only one (1) riser (extension) to the Ecoflo concrete compact biofilter's accesses, and the soil layer above the top slab must be 20'' (500 mm) thick maximum. Use the STR-080 riser kit.
- Ensure the maximum seasonal groundwater table level is below the unit's inlet pipe at all times.
- Never connect a drain pipe, roof gutter, sump pump, or air conditioner drain to your septic system.
- Never empty the backwash of a spa or pool into your septic system.
- NEVER empty wastewater from a recreational vehicle (camping trailer, caravan, etc.) into your septic system.
- If there is a delay in finishing the landscape after the initial installation of the system, place reference posts and protective fences to identify the location of the concrete Ecoflo compact biofilter unit. This will prevent any circulation on the unit and will help indicate the system's final level.
- NEVER use automatic toilet cleaners.
- NEVER let anything accumulate on top of your septic system (compacted snow, for example). The weight could accumulate and damage your system.
- Never operate a vehicle or place objects weighing more than 500 lb (225 kg) within 10' (3 m) of the Ecoflo compact biofilter unit's lid. Pass on this information to all those who will work within your system's vicinity (landscaper, snow blower, etc.).
- Households must be equipped with a properly working air vent that complies with the applicable standards. Premier Tech Water and Environment strongly recommends using a 4'' (100 mm) pipe.
- The homeowner must complete and sign Premier Tech's maintenance agreement. The homeowner must keep the white copy, give the yellow copy to their municipality, and send the pink copy to Premier Tech Water and Environment.

Respecting these guidelines contributes to the wastewater treatment system's proper proper operation. Failure to abide by these guidelines may, at Premier Tech Water and Environment's discretion, render the system's warranty invalid.

**If you have any problems, questions or comments, do not hesitate to contact Premier Tech Water and Environment at 1 800 632-6356.**

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