PREMIER TECH

Installation guide

ECOFLO®

Polyethylene compact biofilter | EC5, EC7, and ST/STB model series

This guide contains the information required to install the polyethylene Ecoflo compact biofilter EC5, EC7, and ST/STB model series. The installation must be performed by a duly trained installer. A list of installers can be provided by contacting Premier Tech at 1 800 632-6356.

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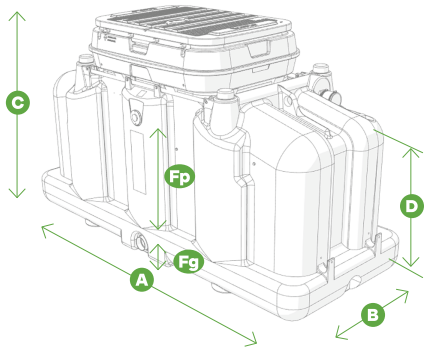
Ecoflo® compact biofilter — Polyethylene EC5 and EC7 model series

Material used

- **shell:** polyethylene
- **lid, central support, tipping bucket, distribution plates and sampling device:** plastic
- **filtering media:** organic natural fibers

If you have any questions or comments please contact the customer service at 1 800 632-6356.

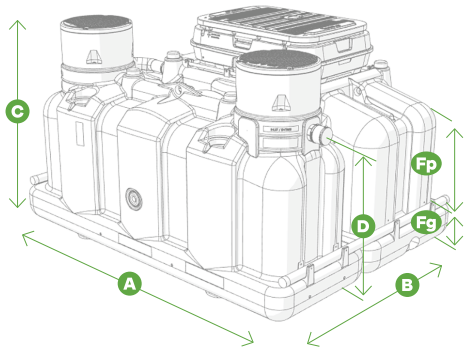


Unit size	2.8		3.4				4.1			
Model series	EC5	EC7	EC5		EC7		EC5		EC7	
Models		EC7-500-P-G	EC7-500-P-P	ECP-450-P-G	ECP-450-P-P	EC7-600-P-G	EC7-600-P-P	ECP-530-P-G	ECP-530-P-P	EC7-750-P-G	EC7-750-P-P
Type of bottom		watertight									
Treatment capacity		500 gal/day (1,895 L/day)		450 gal/day (1,700 L/day)		600 gal/day (2,270 L/day)		530 gal/day (2,000 L/day)		750 gal/day (2,840 L/day)	
Discharge		gravity	pumped	gravity	pumped	gravity	pumped	gravity	pumped	gravity	pumped
Length A		10' 2-3/4" (3,120 mm)		11' 7-3/4" (3,550 mm)				13' 3-1/2" (4,050 mm)			
Width B		4' 2-1/2" (1,280 mm)									
Height C		5' 9-3/4" (1,770 mm)									
Inlet height D		4'-1/2" (1,230 mm)									
Outlet height Fg		1-1/2" (38 mm)		1-1/2" (38 mm)		1-1/2" (38 mm)		1-1/2" (38 mm)		1-1/2" (38 mm)	
Outlet height Fp			3' 9" (1,140 mm)		3' 9" (1,140 mm)		3' 9" (1,140 mm)		3' 9" (1,140 mm)		3' 9" (1,140 mm)
Water inlet diameter (nominal)		4" (100 mm)									
Water outlet diameter (nominal)		1-1/2" (25 mm)									
Height of filtering media		26" (660 mm)									
Treatment surface area		30 ft² (2.8 m²)		37 ft² (3.4 m²)				44 ft² (4.1 m²)			
Maximum dosing volume			160 gal (225 L)		180 gal (680 L)		180 gal (680 L)		200 gal (755 L)		200 gal (755 L)
Total storage volume above alarm float			545 gal (2,060 L)		665 gal (2,515 L)		665 gal (2,515 L)		760 gal (2,875 L)		760 gal (2,875 L)
Weight*		1,235 lb (560 kg)		1,345 lb (610 kg)				1,455 lb (660 kg)			

* Weights are approximate and not binding (for handling and lifting purposes only), and include all possible components.

Not applicable

Ecoflo® compact biofilter — Polyethylene EC5 and EC7 PACK model series



Material used

- **shell:** polyethylene;
- **monobloc configuration:** Pack
- **lid, central support, tipping bucket, distribution plates and sampling device:** plastic
- **filtering media:** organic natural fibers

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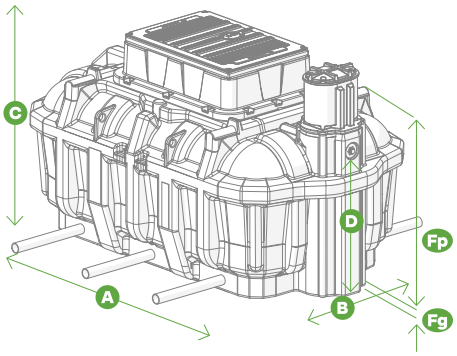
Unit size	2.8			3.4				4.1			
Model series	EC5	EC7		EC5		EC7		EC5		EC7	
Models		EC7-500-P-G PACK	EC7-500-P-P PACK	ECP-450-P-G PACK	ECP-450-P-P PACK	EC7-600-P-G PACK	EC7-600-P-P PACK	ECP-530-P-G PACK	ECP-530-P-P PACK	EC7-750-P-G PACK	EC7-750-P-P PACK
Type of bottom		watertight									
Treatment capacity		500 gal/day (1,895 L/day)		450 gal/day (1,700 L/day)		600 gal/day (2,270 L/day)		530 gal/day (2,000 L/day)		750 gal/day (2,840 L/day)	
Discharge		gravity	pumped	gravity	pumped	gravity	pumped	gravity	pumped	gravity	pumped
Length A		10' 2-3/4" (3,120 mm)		11' 7-3/4" (3,550 mm)				13' 3-1/2" (4,050 mm)			
Width B		8' 1-3/4" (2,480 mm)									
Height C		5' 9-3/4" (1,770 mm)									
Inlet height D		4' 2-1/2" (1,285 mm)									
Outlet height Fg		1-1/2" (38 mm)		1-1/2" (38 mm)		1-1/2" (38 mm)		1-1/2" (38 mm)		1-1/2" (38 mm)	
Outlet height Fp			3' 9" (1,140 mm)		3' 9" (1,140 mm)		3' 9" (1,140 mm)		3' 9" (1,140 mm)		3' 9" (1,140 mm)
Water inlet diameter (nominal)		4" (100 mm)									
Water outlet diameter (nominal)		1-1/2" (25 mm)									
Height of filtering media		26" (660 mm)									
Treatment surface area		30 ft² (2.8 m²)		37 ft² (3.4 m²)				44 ft² (4.1 m²)			
Maximum dosing volume			160 gal (225 L)		180 gal (680 L)		180 gal (680 L)		200 gal (755 L)		200 gal (755 L)
Total storage volume above alarm float			545 gal (2,060 L)		665 gal (2,515 L)		665 gal (2,515 L)		760 gal (2,875 L)		760 gal (2,875 L)
Weight*		1,670 lb (760 kg)		1,870 lb (850 kg)				2,090 lb (950 kg)			

* Weights are approximate and not binding (for handling and lifting purposes only), and include all possible components.

Not applicable

Ecoflo® compact biofilter — Polyethylene EC5, EC7, and ST/STB model series



Material used

- **shell:** polyethylene
- **lid, central support, tipping bucket, distribution plates and sampling device:** plastic
- **filtering media:** organic natural fibers

If you have any questions or comments please contact the customer service at 1 800 632-6356.

Unit size	5.7							7.3						
Model series	EC5		EC7		ST/STB			EC5		EC7		ST/STB		
Models	ECP-750-P-G*	ECP-750-P-P	EC7-1050-P-G*	EC7-1050-P-P	ST-570-P	STB-570-P	STB-570-PR	ECP-970-P-G*	ECP-970-P-P	EC7-1350-P-G*	EC7-1350-P-P	ST-730-P	STB-730-P	STB-570-PR
Type of bottom	watertight				perforated	watertight		watertight				perforated	watertight	
Treatment capacity	750 gal/day (2,840 L/day)		1,050 gal/day (4,000 L/day)		530 gal/day (2,000 L/day)			970 gal/day (3,670 L/day)		1,350 gal/day (5,000 L/day)		675 gal/day (2,555 L/day)		
Discharge	gravity	pumped	gravity	pumped	gravity	gravity	pumped	gravity	pumped	gravity	pumped	gravity	gravity	pumped
Length A	11' 1" (3,380 mm)							13' 6-1/2" (4,135 mm)						
Width B	6' 6-3/4" (2,000 mm)							6' 8-3/4" (2,050 mm)						
Height C	6' 1/2" (1,840 mm)													
Inlet height D	4' 1-1/2" (1,260 mm)													
Outlet height Fg	3" (76 mm)		3" (76 mm)			3" (76 mm)		3" (76 mm)		3" (76 mm)			3" (76 mm)	
Outlet height Fp		4' 3/4" (1,240 mm)		4' 3/4" (1,240 mm)			4' 3/4" (1,240 mm)		4' 3/4" (1,240 mm)		4' 3/4" (1,240 mm)			4' 3/4" (1,240 mm)
Water inlet diameter (nominal)	4" (100 mm)													
Water outlet diameter (nominal)	1-1/2" (38 mm)													
Height of filtering media	26" (650 mm)				32" (800 mm)			26" (650 mm)				32" (800 mm)		
Treatment surface area	61 ft² (5.7 m²)							79 ft² (7.3 m²)						
Maximum dosing volume		230 gal (870 L)		230 gal (870 L)			230 gal (870 L)		295 gal (1,120 L)		295 gal (1,120 L)			295 gal (1,120 L)
Total storage volume above alarm float		1,155 gal (4,400 L)		1,155 gal (4,400 L)			1,155 gal (4,400 L)		1,595 gal (6,000 L)		1,595 gal (6,000 L)			1,595 gal (6,000 L)
Weight**	2,640 lb (1,200 kg)							3,120 lb (1,415 kg)						

* Available upon request in perforated bottom – Discharge mode "O" on NSF listing
** Weights are approximate and not binding (for handling and lifting purposes only), and include all possible components

Not applicable

1 DESCRIPTION OF SYSTEM COMPONENTS

1.1 PRIMARY/SEPTIC TANK

The primary/septic tank clarifies wastewater by letting suspended solids settle to the bottom and by retaining floating matter to avoid clogging the secondary or advanced secondary treatment system. Any septic tank **that complies with local regulations** can perform primary treatment.

The polyethylene Ecoflo compact biofilter also comes in the monobloc Pack configuration. The Pack model of the Ecoflo compact biofilter combines the primary/septic tank and the biofilter unit. Consult the respective technical data sheets and installation guides for more information on the Pack model of the Ecoflo compact biofilter.

You may decide to use an existing primary/septic tank for the installation. Carefully inspect it to ensure it is in good condition. Install an effluent filter at the final outlet of the primary/septic tank if it does not have one. Alternatively, you can install a tank with an effluent filter, such as Premier Tech Water and Environment's TLF-240P, downstream from the primary/septic tank. Learn more at *PT-WaterEnvironment.com/ProSpace*.

The effluent filter extends the life of any treatment system by keeping solids in the septic tank.

Premier Tech does not recommend using a garbage disposal unit. If you are using a garbage disposal unit, you must follow the state and local code for tank and absorption field sizing.

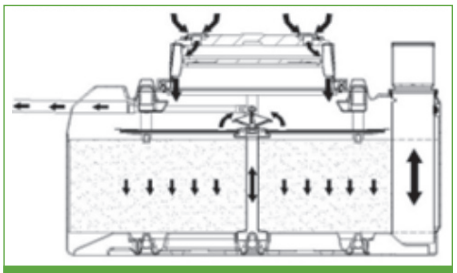
Effluent filters to be used with the Ecoflo compact biofilter shall be ANSI/NSF standard 46 certified and have a minimal flow area of 9 in^2 and filter particles 1/16" and larger. While many effluent filter brands meet those specifications, Premier Tech Water and Environment highly recommends Polylok's PL-122 effluent filter or an equivalent.

1.2 ECOFLO COMPACT BIOFILTER

Once wastewater has passed through the primary/septic tank, it flows toward the Ecoflo compact biofilter. Inside the biofilter, a tipping bucket disperses wastewater onto specially designed plates, which in turn evenly distribute wastewater onto the filtering medium. Wastewater then trickles through the natural filtering medium where aerobic microorganisms attached to the filtering medium pollutants decompose pollutants. Treated effluent can then be discharged to the environment in accordance with local regulations.

To ensure effective treatment, there must be enough oxygen in the Ecoflo compact biofilter to feed the microorganisms in the filtering medium. Air enters the system through vents located on the main access lid. Depending on the model, the pumping station and/or central support allows air to naturally circulate between the surface and base of the filtering medium. Convection circulates air (from a residential or standalone air vent) through the feed pipe to the septic tank.

The biofilter is either housed in a concrete, polyethylene, or fiberglass unit. The following table presents the different Ecoflo compact biofilter models available according to the filtering medium's surface area and treatment capacity. All of these models are certified and compliant with Standard NSF/ANSI 40.



Air flow diagram (polyethylene unit)

1.2.1 Product nomenclature

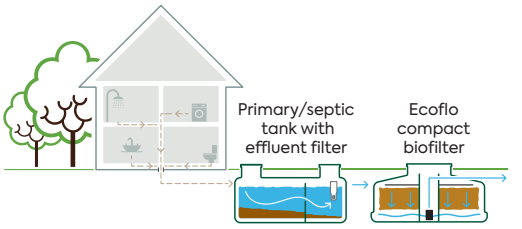
There are several available Ecoflo compact biofilter models with different characteristics. Each one can be identified by its model number.

EC7 – 500 – P – P		**EC7**	**Ecoflo compact biofilter EC7 model series**
	Capacity (gpd or L/d)	**500**	**500 gal/d or 1,900 L/d**
		600	600 gal/d or 2,200 L/d
		750	750 gal/d or 2,870 L/d
		1,050	1,050 gal/d or 4,000 L/d
		1,350	1,350 gal/d or 5,100 L/d
	Unit	C	Concrete
		P	**Polyethylene**
	Discharge mode	G	Watertight with gravity discharge
		P	**Watertight with pumped discharge**
		O	Perforated bottom - not watertight
	Configuration	Pack	Single piece, monobloc configuration

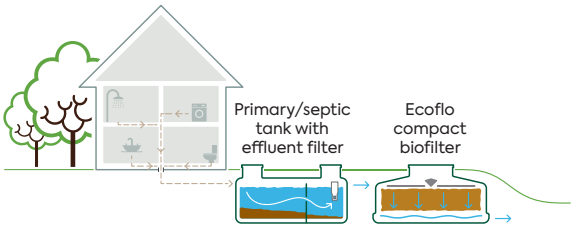
Therefore, the EC7 – 500 – P – P refers to an Ecoflo compact biofilter model that can treat 500 gallons per day (or 1,900 liters) and is housed in a polyethylene unit with a watertight bottom and an integrated pump for effluent discharge.

2 SYSTEM LAYOUT AND COMPONENTS

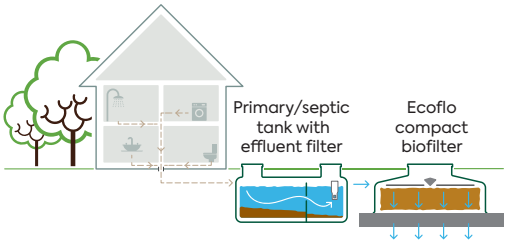
2.1 RESIDENTIAL SEPTIC SYSTEM COMPONENTS: SEPARATE PRIMARY/SEPTIC TANK AND ECOFLO COMPACT BIOFILTER UNIT



View of an Ecoflo compact biofilter treatment system (pumped discharge)



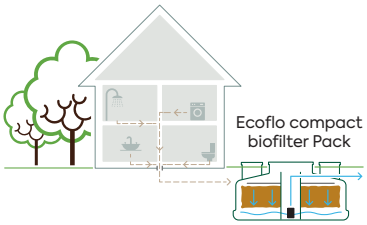
View of an Ecoflo compact biofilter treatment system (gravity discharge)



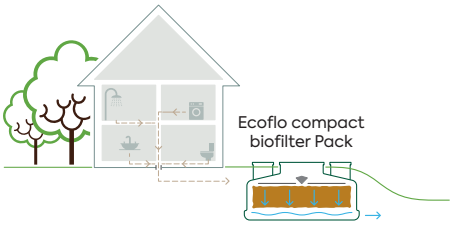
View of an Ecoflo compact biofilter treatment system (open bottom/perforated bottom configuration)

Ecoflo compact biofilters 5.7 and 7.3

2.2 RESIDENTIAL SEPTIC SYSTEM COMPONENTS: PACK CONFIGURATION



View of an Ecoflo compact biofilter Pack treatment system (with pump)



View of an Ecoflo compact biofilter Pack treatment system (gravity discharge)

2.3 INFLUENT PUMPING STATION (IF REQUIRED)

A septic installation will rely on a pumping station when it cannot use gravity to convey wastewater from the primary/septic tank to the Ecoflo compact biofilter. Premier Tech Water and Environment recommends a wastewater dose of 8 gal (30 L) for unit sizes 2.8, 3.4, and 4.1 and a wastewater dose of 16 gal (60 L) for unit sizes 5.7 and 7.3 per dosing cycle.

The pumping station must have adequate venting to avoid the buildup of harmful gases, air lock, and corrosion. This can be accomplished by using a vented lid, a separate vent pipe on the pumping station or primary/septic tank, or by connecting to the residence's vent stacks.

Premier Tech Water and Environment offers different pumping station models, such as the PSA-240 and the PSA-240H. Find more information about them or about Premier Tech Water and Environment's recommended pump station dosing *PT-WaterEnvironment.com/ProSpace*.

PSA-240 pumping station

2.4 DISCHARGE PUMP (WHEN APPLICABLE)

As presented in the table above, some polyethylene Ecoflo compact biofilter models have a watertight bottom and an integrated pump vault. This allows the Ecoflo compact biofilter to pump treated effluent towards the site-specific final dispersal method. The pump vault's dosing can be accomplished on demand (pump to gravity or pressure dosing) or set to timed dosing.

The integrated pump vault includes a pump, a quick disconnect, an alarm box, and a float tree with an ON/OFF float and an alarm float.

Each model listed below offers a certain built-in capacity for dosing and storage in case of emergency. In case of emergency, water can accumulate for a limited period of time in the filter bed without adversely affecting the system's performance. These are presented on each products' respective technical data sheets.

Dosing and emergency storage capacity

Ecoflo compact biofilter size	Maximum volume available for dosing	Emergency storage capacity (total – above alarm float)
2.8	160 gal (600 L)	545 gal (2,050 L)
3.4	180 gal (680 L)	665 gal (2,300 L)
4.1	200 gal (750 L)	760 gal (2,850 L)
5.7	230 gal (870 L)	1,155 gal (3,500 L)
7.3	295 gal (1,110 L)	1,595 gal (4,900 L)

2.5 FLOW DIVIDER

An installation with two Ecoflo compact biofilter units that cannot use gravity distribution or with three or more Ecoflo compact biofilter units must consider using a flow divider to create even distribution between the biofilter units.

Premier Tech Water and Environment offers several pressurized flow dividers. Learn more at *PT-WaterEnvironment.com/ProSpace*.

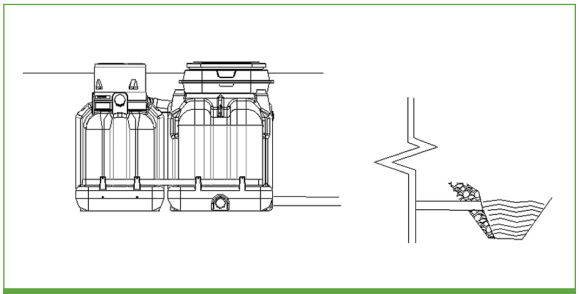
2.6 FINAL DISPERSAL

The final dispersal system must be designed in accordance with Premier Tech Water and Environment guidelines and/or state or local regulations.

2.7 TERTIARY TREATMENT – DISINFECTION

Depending on local regulations and jurisdictions, disinfection may be required. The Ecoflo compact biofilter can be combined with the Rewatec UV disinfection unit (DiUV) or other UV disinfection systems to reduce the fecal coliforms concentration below 200 UFC/100 ml.

The Rewatec DiUV can either be integrated in the pump vault located inside the Ecoflo compact biofilter unit or installed separately as a standalone unit. The outlet pipe through which the effluent is discharged into the watercourse must always be located below the surface of the receiving watercourse. For more information on the Rewatec DiUV, such as technical data sheets and design or installation guides, go to *PT-WaterEnvironment.com/ProSpace*.



Side view of gravity discharge into a watercourse

Ensure that the profile of the final grade is such that runoff water flows away from the septic system, Ecoflo compact biofilter unit, and other septic system components.

Please check with your local representative for availability and flow ratings related to surface discharge systems.

3 SPECIFIC INSTRUCTIONS

3.1 MINIMUM DISTANCES TO BE MAINTAINED

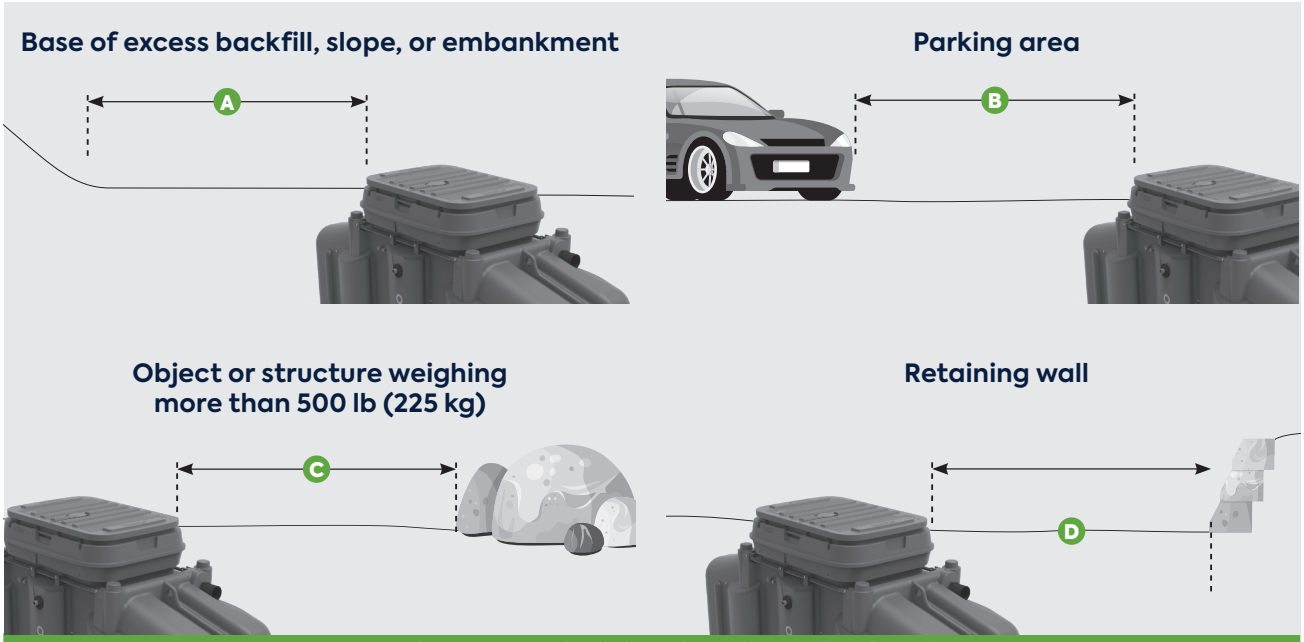
The wastewater treatment system must be installed in a place:

- where there is no motorized vehicle traffic
- in an area that is not likely to be flooded and where it will not be submerged (depending on the situation, a drain may be required around the primary/septic tank to prevent installing it in groundwater)
- that is accessible at all times for maintenance, inspection, and emptying

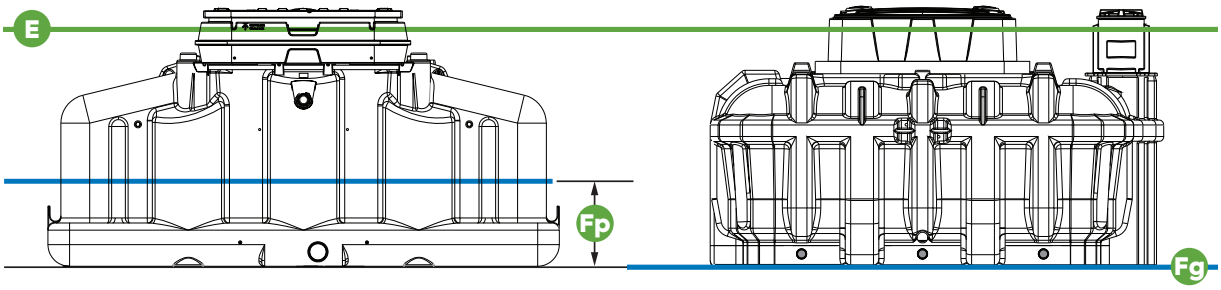
The treatment system's location must also comply with the distances in the following table:

Minimum distances to be maintained in accordance with Premier Tech Water and Environment specifications

Reference point	Polyethylene Ecoflo compact biofilter
Base of excess backfill, slopes, or embankments vs. compact biofilter lid (A)	13' (4 m)
Parking area (B)	13' (4 m)
Vehicle, object, or structure weighting more than 500 lb (225 kg) (C)	13' (4 m)
Base or retaining wall (D)	13' (4 m)
Finished landscaping vs. base of compact biofilter lid (E)	2" (50 mm)
Seasonal High Groundwater Table (SHGT) vs. base of Ecoflo compact biofilter unit with pumped discharge (Fp)	Maximum height of 2' (60 cm) up from the base of the unit for the Ecoflo compact biofilters 2.8, 3.4, and 4.1. SHGT shall not exceed the base of the unit for the Ecoflo compact biofilters 5.7 and 7.3.
Seasonal High Groundwater Table (SHGT) vs. base of Ecoflo compact biofilter unit with gravity discharge (Fg)	Do not install in groundwater.



Minimum distances may be higher, depending on local regulations



Seasonal High Groundwater (SHGT) levels to respect for an Ecoflo compact biofilter installation with pumped discharge

3.2 Installation conditions

3.2.1 Primary/septic tank

The primary/septic must be installed in compliance with the following instructions:

- The septic/primary tank must be placed in an area that is not likely to be flooded and where it will not be submerged (depending on the situation, a drain may be required around the primary/septic tank to prevent installing it in groundwater).
- The manufacturer's specifications.
- The installation must be 100% watertight and receive only domestic wastewater (no roof water, surface water, or discharge from footing drains).
- Both openings must be extended to the soil surface through watertight and insulated risers and equipped with watertight lids (keep minimum clearance of 2'' (50 mm) with final grade).
- For Ecoflo compact PACK primary tank, a maximum 18" (45 cm) of risers can be added.

3.2.2 Polyethylene Ecoflo compact biofilter

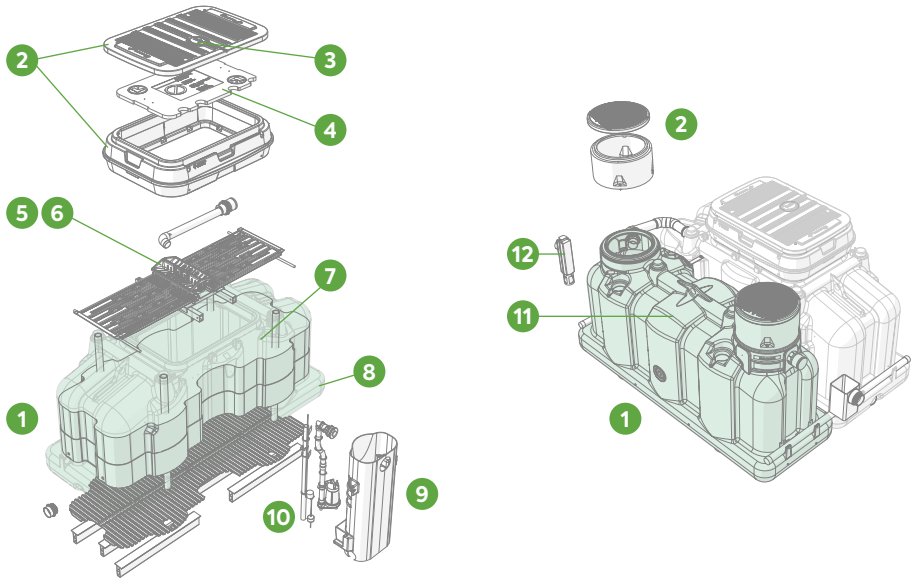
The Ecoflo compact biofilter must be installed in compliance with the following recommendations. **It is important to notify all relevant parties (installer, landscaper, owner, snow removal company, etc.) of these recommendations to prevent any damage** to the system and its components.

- NEVER obstruct access to the septic system's lids.
- NEVER cover or bury the lid of the Ecoflo compact biofilter (mulch, excess soil, fixed structure, etc.)
- The lid of the Ecoflo compact biofilter must be at least 2" (50 mm) above the surface of the final landscaping grade.
- **Ensure an upslope interceptor drain or water diversion berm is installed to direct surface and/or ground water away from the biofilter unit and the soil absorption system.**
- **The Ecoflo compact biofilters 2.8, 3.4, and 4.1 come with a 12" (300 mm) riser. One additional 6" (150 mm) riser may be added. The primary reactor of the Pack unit come with 12" (30 cm) risers. One 6" (150 mm) riser may be added to each access. The part number is STR-060 for the 6'' (150 mm) riser for the main access, PSR-060 for the 6'' (150 mm) riser for each access of the primary reactor, and STR-060P for the kit with all risers for Pack model.**
- **NEVER install risers over the access of Ecoflo compact biofilters 5.7 and 7.3.**
- NEVER connect a drain pipe, roof gutter, sump pump, or air conditioner drain to your septic installation.
- NEVER discharge content or water from a water softener, spa, or pool backwash into your septic system.
- NEVER discharge wastewater from a recreational vehicle (tent trailer, recreational vehicle, etc.) into your septic system.

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

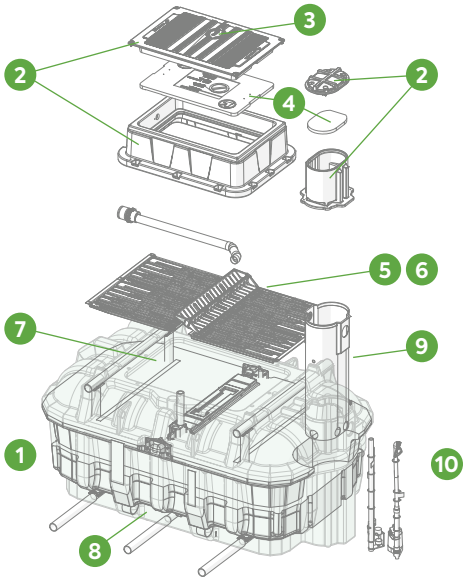
4 EXPLODED VIEW OF THE POLYETHYLENE ECOFLO COMPACT BIOFILTERS

4.1 ECOFLO COMPACT BIOFILTERS 2.8, 3.4, AND 4.1



Component	Material	Description
1 **Casing**	Polyethylene	• houses the system's components • allows for the connection of the water and air supply lines • collects treated effluent
2 **Lid(s)/riser(s)**	Polyethylene	• protects inner components and provides access into the system
3 **Vent cap**	Polyethylene	• allows for air circulation into the system
4 **Insulation board**	Expansed polystyrene	• directs airflow towards the far ends of the unit • seals the interior of the system (using cable ties)
5 **Central support**	ABS	• supports the tipping bucket and one end of the distribution plates • allows air exchange between the surface and base of the filtering medium
6 **Tipping bucket and distribution plates**	ABS	• uniformly distributes wastewater on both sides of the filtering medium • uses hydraulic events to ensure self-cleaning of the distribution plates
7 **Filtering medium**	Coconut husk fragments	• supports the microbial flora that digests the matter in percolating wastewater • filters the solid wastes contained in effluent • maintains humidity levels to maintain biomass in absence of hydraulic events
8 **Treated effluent collection area**	—	• ensures proper filtering medium drainage • ensures air circulation beneath the filtering medium
9 **Pump vault**	Polyethylene	• houses pumping equipment (or dosing devices for gravity systems) • allows air exchange between the surface and base of the filtering medium
10 **Pumping equipment**	—	• discharges effluent to the dispersal area
11 **Baffle wall**	—	• only for the Pack model
12 **Effluent filter**	—	• NSF 46 rated effluent filter

4.2 ECOFLO COMPACT BIOFILTERS 5.7 AND 7.3



Component	Material	Description
1 **Casing**	Polyethylene	• houses the system's components • allows for the connection of water and air supply lines • collects treated effluent
2 **Lid(s)/riser(s)**	Polyethylene	• protects inner components and provides access into the system
3 **Vent caps**	Polyethylene	• allow for air circulation into the system
4 **Insulation board**	Expansed polystyrene	• directs the air flow towards the far ends of the unit • seals the interior of the system (using cable ties)
5 **Central support**	ABS	• supports the tipping bucket and one end of the distribution plates • allows air exchange between the surface and base of the filtering medium
6 **Tipping bucket and distribution plates**	ABS	• uniformly distributes wastewater on both sides of the filtering medium • uses hydraulic events to ensure self-cleaning of the distribution plates
7 **Filtering medium**	Coconut husk fragments	• supports the microbial flora that digests the matter in percolating wastewater • filters the solid wastes contained in effluent • maintains humidity levels to maintain biomass in absence of hydraulic events
8 **Treated effluent collection area**	—	• ensures proper filtering medium drainage • ensures air circulation beneath the filtering medium
9 **Pump vault**	Polyethylene	• houses pumping equipment (or dosing devices for gravity systems) • allows air exchange between the surface and base of the filtering medium
10 **Pumping equipment**	—	• discharges effluent to the dispersal area

5 INSTALLATION SEQUENCE

IMPORTANT: THE INSTALLER IS RESPONSIBLE FOR TAKING THE NECESSARY SAFETY MEASURES AT ALL STEPS OF THE INSTALLATION. THIS INCLUDES THE USE OF HARDHATS, GLOVES, BOOTS, SAFETY GLASSES, MASKS, ETC.

During a typical installation, the components are installed in the following sequence:

1- primary/septic tank

2- Ecoflo compact biofilter

3- water inlet and discharge pipe connections

5.1 EXCAVATION, BASE, AND INSTALLATION OF THE ECOFLO COMPACT BIOFILTER

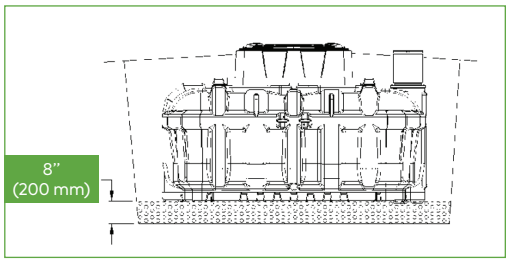
Excavate a sufficiently large area to free up approximately 12'' (300 mm) around the Ecoflo compact biofilter. The excavated area for the Ecoflo compact biofilters 5.7 and 7.3 will need 36" (91.5 cm) excavated on the long side to account for the anti-buoyancy system. Depending on soil conditions, it may be necessary to add a 6'' (150 mm) layer of Ø 0 – ¾" (0-20 mm) clean crushed stone that is free of organic matter or fillers. The layer of clean stone must be wrapped in engineering fabric (geotextile). Place the unit down on the surface of the soil and ensure that the installation elevation is adequate. There is **no extension available for the Ecoflo compact biofilters 5.7 and 7.3. However, it is possible to add a 6" (150 mm) riser to the Ecoflo compact biofilters 2.8, 3.4, and 4.1.** Ensure that the unit is level and rests fully on the leveled and compacted base.

5.1.1 Perforated bottom

Premier Tech Water and Environment recommends that the minimal **vertical distance** between the clean crushed stone (treated effluent distribution zone) and the limiting layer (groundwater, bedrock, or impervious layer) be at least 12" (300 mm).

Excavation, bedding and placing of the perforated bottom Ecoflo compact biofilter (ST models)

- Excavate and prepare the absorption bed according to the standards specified in the applicable Design Guide.
- Use clean 15 to 60 mm (½" to 2") diameter gravel. It is highly recommended to use a 20 mm (3/4") diameter clean crushed stone.
- Minimum thickness of the bed: 200 mm (8").



NOTE:

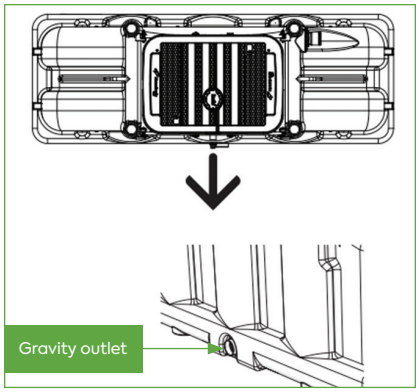
- Never install the absorption bed of the Ecoflo compact biofilter within 2 m (6,5') of a tree.
- **There are no risers available for polyethylene of the perforated bottom Ecoflo compact biofilter models**, this is important to take into consideration when determining the absorption bed's depth.

Center the shell onto the absorption bed area. Make sure the shell is levelled and rests on all points of the previously levelled bed.

Place geotextile (material permeable to air and water) on top of the crushed stone around the outside of the shell extending 12" beyond the edge of the unit. This is to prevent backfil material or other material from migrating into the crushed stone layer under the unit. Do not place any geotextile under the Ecoflo compact biofilter.

5.1.2 Systems with gravity discharge

NOTE: refer to the next section for information on modifying a pumped unit into a gravity unit.

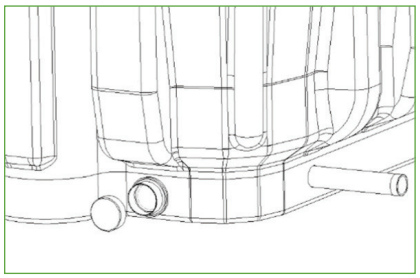


Ecoflo compact biofilters 2.8, 3.4, and 4.1

For models with gravity discharge, remove the protective cap, remove the gravity outlet's punch-out prior to connecting the discharge pipe if it was not already removed, and use a watertight and flexible outlet adapter to connect the effluent discharge pipe. Make sure that the maximum seasonal high ground water level is never higher than the base of the unit.

Connect the Ecoflo compact biofilter's discharge pipe while making sure to maintain a constant downslope over the entire length of the pipe towards the dispersal area or final discharge. Note that the soil under the pipes must be adequately compacted.

Ecoflo compact biofilters 5.7 and 7.3



For models with gravity discharge, remove the protective red cap, remove the gravity outlet's punch-out prior to connecting the discharge pipe if it was not already removed, and use a watertight and flexible outlet adapter to connect the effluent discharge pipe. Make sure that the maximum seasonal high ground water level is never higher than the base of the unit.

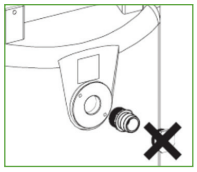
Connect the Ecoflo compact biofilter's discharge pipe while making sure to maintain a constant downslope over the entire length of the pipe towards the dispersal area or final discharge. Note that the soil under the pipes must be adequately compacted.

5.1.3 Modifying a pumped unit into a gravity unit

For all models

To modify an Ecoflo compact biofilter with an integrated pump into a gravity discharge biofilter, remove the protective red cap, remove the punch-out baffle in the outlet fitting, and use a watertight and flexible outlet adapter to connect the effluent discharge pipe. Ensure that the maximum water table level is never higher than the base of the unit. Remove the pump and float tree from the pump vault.

5.1.4 Systems with pumped discharge

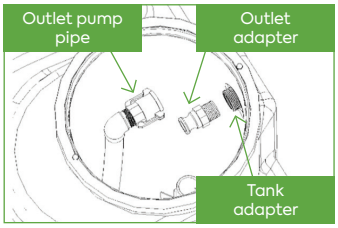


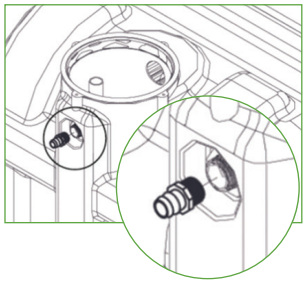
Ecoflo compact biofilters 2.8, 3.4, and 4.1

Unscrew the cap and screw on the appropriate outlet adapter from the component box.

Ecoflo compact biofilters 5.7 and 7.3

Install the screwed adapters provided in the component box (placed in the main access at the time of delivery of the unit) for the pumped discharge outlet. The component box contains the 1" (25 mm) and 1-1/2" (38 mm) outlet adapters as selected by the installer.





5.2 ANCHORING

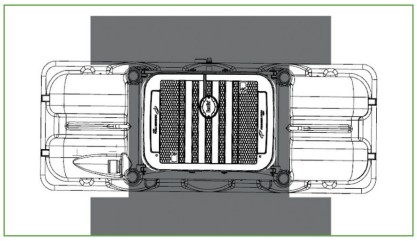
5.2.1 Anchoring kit for Ecoflo compact biofilters 2.8, 3.4, and 4.1

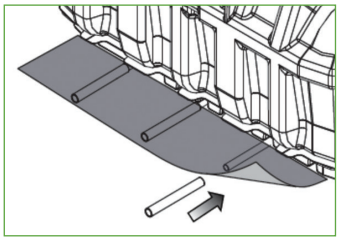
When you use the 6'' (150 mm) main access riser instead of the 12'' (300 mm) riser for installing these models in sites with shallow depth, the unit must be anchored with geotextile before the final backfill to maximize its stability, as illustrated below. The geotextile must be a Mirafi S800 or an equivalent.

Spread out the geotextile as illustrated in the following figures and make sure it overextends by 20" (500 mm) on each side. Next, use 6 cable ties to secure the geotextile at each of the pulstrations. Add backfill material over the geotextile to anchor it in place.

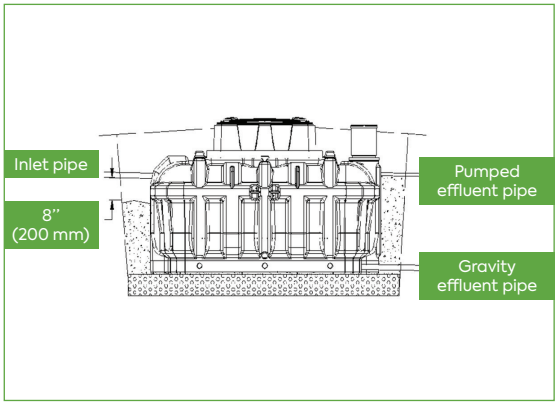
5.2.2 Anchoring for Ecoflo compact biofilters 5.7 and 7.3 — Installation of the extension pipes and membranes

To ensure that the unit stays secure, install the six included extension pipes onto the ends of the unit's pipes. Place a section of the included geotextile fabric over the three extension pipes on each side of the unit. Adequately spread out and level the backfill material beneath and above the geotextile fabric.





5.3 INITIAL BACKFILL OF THE UNIT



Backfill around the unit up to 8" (200 mm) below the invert of the inlet pipe. Begin with the two longest sides and end with the extremities. Note that the backfill material must be laid down rather than pushed. Do not compact the backfill material using the bucket of the machine. When installing the Pack model of the Ecoflo compact biofilter, backfill the primary reactor in alternating 12" (300 mm) lifts of backfill material and adding water inside the primary reactor starting with the backfill material. Continue this until you reach the invert of the outlet pipe, then complete backfill of the unit.

The backfill material must be sandy and free of rocks or stones.

ATTENTION: Make sure that no backfill material enters the biofilter unit during the backfilling operation.

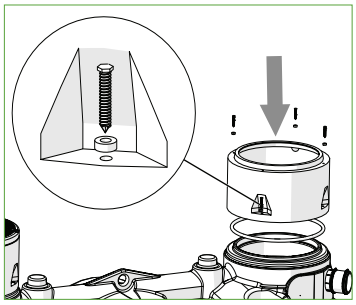
5.4 COMPONENTS ASSEMBLY

5.4.1 Ecoflo compact biofilters 2.8, 3.4, and 4.1

Primary reactor/septic tank for Pack models

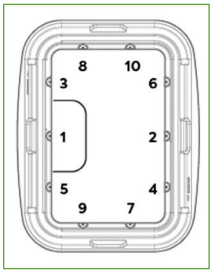
To assemble the riser on the primary reactor:

- Clean the rim of the primary reactor's access (where four holes have been punched to allow for the installation of the lag screws).
- Install the watertight gasket on the rim.
- Place the extension on the access by aligning the holes on the base of the extension with the holes on the primary reactor.
- Insert the plastic washers in the four lag screws provided with the extension and screw the lag screws into the holes to secure the extension in place.



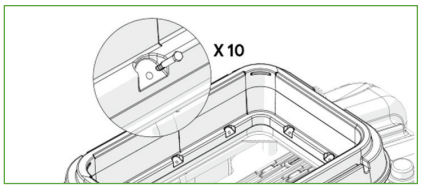
Ecoflo compact biofilter

Remove the access lid by turning the two ¼ turn locks. Remove the insulation board.



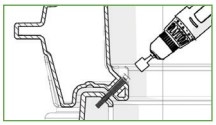
Using the 3/8" screws provided and a 9/16" socket driver (not provided), loosely fasten the riser through the hole above the pump vault (1 on the accompanying diagram). Center the riser on the Ecoflo compact biofilter by running your hand along the riser's outer rim and repositioning it if necessary. Follow this process for the 12" and 6" main access risers.

Using the provided drill bit, pre-drill a hole on the opposite side and loosely fasten the riser to the Ecoflo compact biofilter (2 on the accompanying diagram). Drill a new hole only once the previous screw is positioned. Do not drill all holes at once. Loosely fasten all 10 bolts while alternating sides and following the order shown. Evenly secure and compress the gasket by progressively tightening each bolt at least twice.

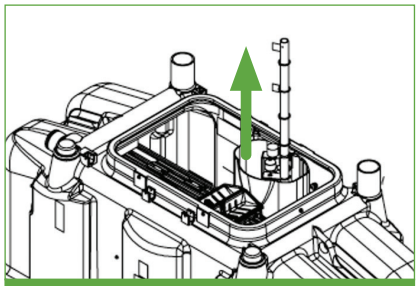


At this stage, the D-shaped gasket is about 30% compressed. The best practice is to alternate screws and sides instead of going from one screw to the next.

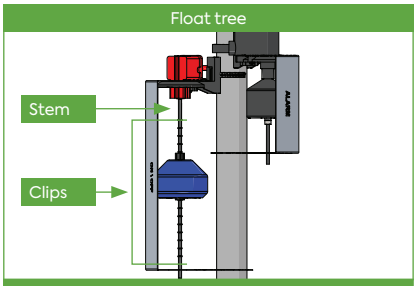
Completely tighten each screw by going over each of them one last time. By securing the riser in multiple tightening sequences, you evenly compress the gasket and ensure maximum sealing.



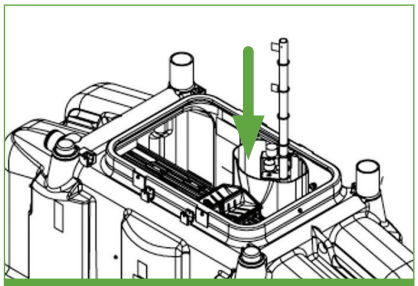
Note for pumped models: If the installation includes a pressurized dispersal area, higher dosing volumes may need to be attained. Be sure to check elevation changes and distances to the dispersal area to determine if dose adjustments are needed.



1. Remove the float tree from the pump vault

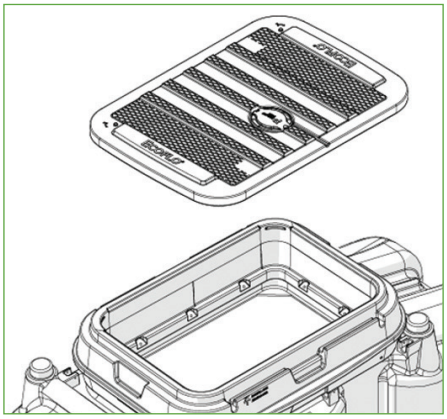


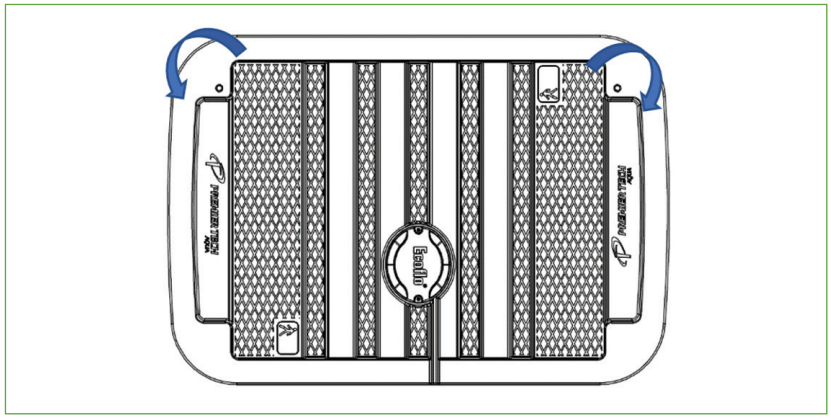
2. See adjustable dosing volume on section 5.10, page 22



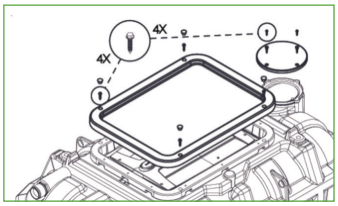
3. Put the float tree back into the pump vault

- Put the insulation board and the lid back in place. Use the quarter turns to secure the lid: first, insert the two metal tabs and tip the lid while making sure that the metal tabs properly insert into the slot provided to this effect. Next, lock the fasteners toward the outside.

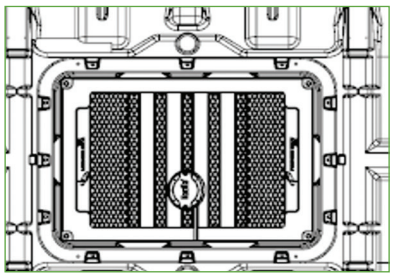


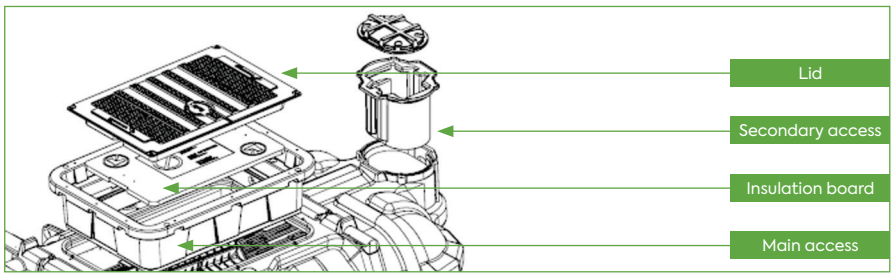


5.4.2 Ecoflo compact biofilters 5.7 and 7.3



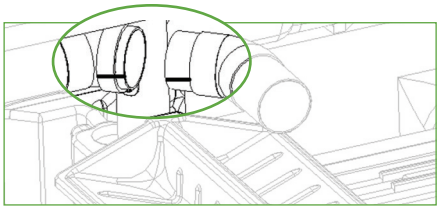
- Unscrew and remove the packaging material from both accesses.
- Remove the main and secondary accesses by lifting them up. The main access assembly includes the lid and the insulation board. To remove the lid, unscrew the four lag screws in the corners.
- Remove the box and internal components located on the distribution plates.



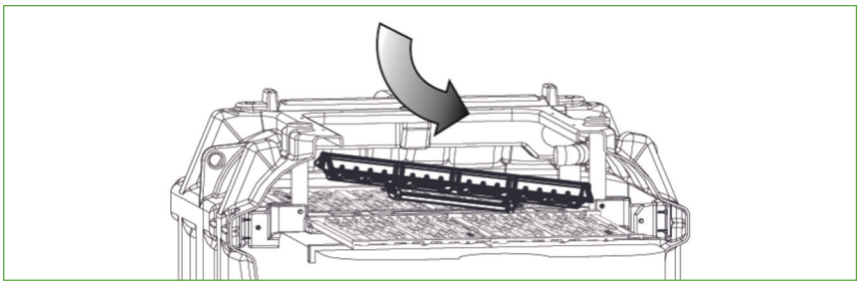


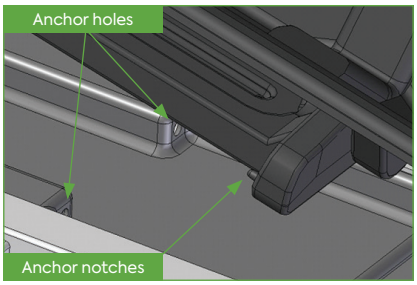
- Glue the elbow assembly onto the water inlet pipe. Line up the alignment marks to properly position the elbow assembly. Once in place, the inlet pipe must be centered with the tipping bucket. The elbow assembly can be found in the component box, placed in the main access at the time of delivery of the biofilter unit.

  ATTENTION: Do not invert the direction of the elbow. This may decenter the water inlet pipe.

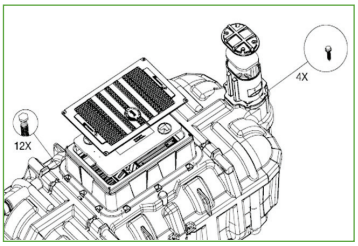


- Set the tipping bucket on the central support by inserting the two anchor pins into the central support's anchor holes and fold back the opposite end to maintain the tipping bucket in place. Verify the installation of the tipping bucket by tipping it from left to right. It must not block along its course.



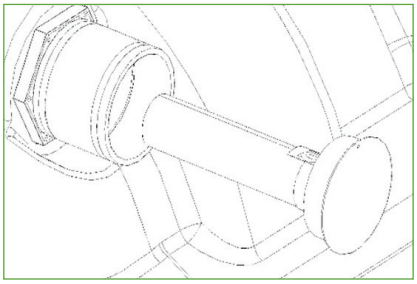


- If installing a tipping bucket alarm, please contact Premier Tech Water and Environment to receive the assembly instructions included with the kit.
- **Verify that:**
  - the plates are firmly in place
  - the top of the filtering medium is level
  - the float tree and the pump are firmly in place (for models equipped with a pump)
  - the tipping bucket operates correctly on either side and has a full range of motion
- Screw both accesses in place using the lag screws provided and place the insulation boards and lids on both accesses. Close the main access lid using the four lag screws and close the secondary access lid using the two quarter turns. The secondary access lid and insulation board are in the component box (placed in the main access at the time of delivery of the unit).



5.5 CONNECTING THE WATER INLET PIPE

- Remove the protective cap before making the connection. Set aside the documents rolled up under the cap, which are to be provided to the owner. These documents include the owner's manual and maintenance agreement to be signed by the homeowner and submitted to Premier Tech Water and Environment.
- Connect the pipe arriving from the primary reactor/septic tank to the water inlet of the Ecoflo compact biofilter while making sure to maintain a constant downslope along the entire length of the pipe to the inlet of the Ecoflo compact biofilter. The soil under the pipe must be adequately backfilled with proper material to prevent any settling under this connection. The Ecoflo compact biofilter is equipped with a standard flexible inlet adapter. A standard pipe clamp is used to make the connection.

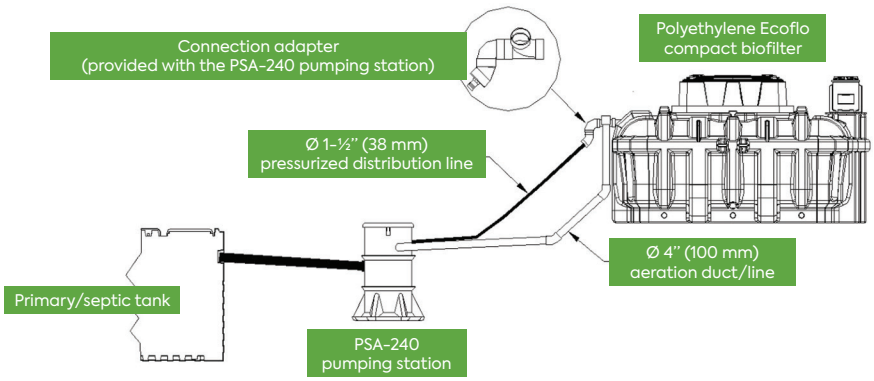


5.5.1 Details concerning the installation of pipes when an influent pumping/lifting station is needed to feed water to the Ecoflo compact biofilter

If the installation includes a pumping station upstream of the Ecoflo compact biofilter, the following instructions must be taken into consideration:

- When the pumping station is used, it is important to verify that the volume of water reaching the Ecoflo compact biofilter is of the order of 8 gal (30 L) per hydraulic event (approximately 15 tipping bucket cycles for Ecoflo compact biofilters 2.8, 3.4, and 4.1) or 16 gal (60 L) per hydraulic event (approximately 15 tipping bucket cycles for Ecoflo compact biofilters 5.7 and 7.3).
- The pumping station must be watertight from the outside (infiltration) and the inside (exfiltration).
- The water inlet pipe (Ø 1-1/2" [38 mm] flexible pipe) is connected to a connection adapter (provided with Premier Tech Water and Environment's PSA-240 pumping station). This pipe shall also be connected to the inlet of the Ecoflo compact biofilter (nominal diameter of 4" [100 mm]). **Note that the connection adapter must be installed to break up the jet of water coming from the pumping station.**
- A ventilation pipe must be installed between the pumping station and the Ecoflo compact biofilter to ensure adequate ventilation. This ventilation pipe is connected to the adapter equipped with a true Y bend.
- The residence must be equipped with a functional air vent that meets the applicable standards.
- Depending on site conditions, a standalone vent may be required if it is not possible to connect the unit to the home air vent.
- The pumping station must be accessible at all times.

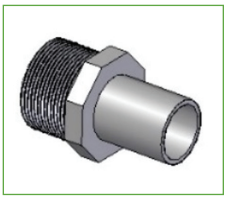
For further clarity regarding these instructions, please refer to the diagram below and to Premier Tech Water and Environment's pumping station installation guide on *PT-WaterEnvironment.com/ProSpace*.



5.6 CONNECTING THE WATER OUTLET PIPE (PUMPED DISCHARGE)

Connect the pipe between the primary/septic tank and the Ecoflo compact biofilter to the biofilter unit's water inlet while making sure to maintain a constant downslope along the entire length of the pipe to the inlet of the Ecoflo compact biofilter. Note that the soil under the pipe must be adequately compacted. The Ecoflo compact biofilter is equipped with a standard flexible inlet adapter. Use a standard pipe clamp to make the connection.

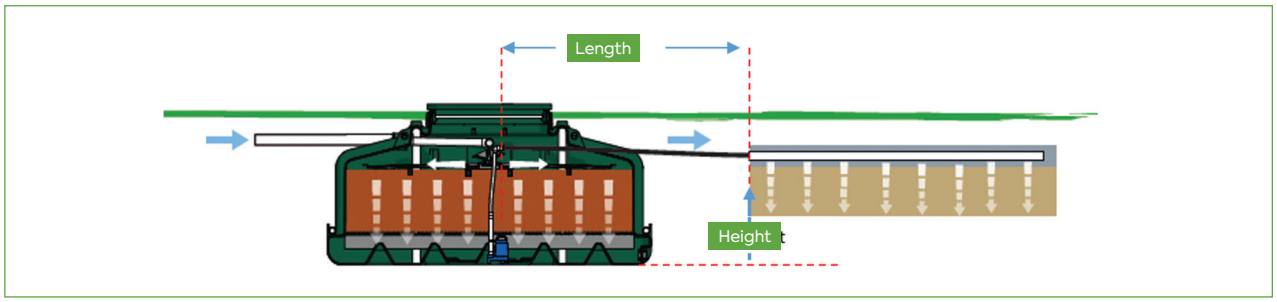
Additionally, the effluent of models equipped with a built-in pump must be directed toward the inlet of the final discharge dispersal area with a Ø 1" (25 mm) or Ø 1-1/2" (38 mm) flexible pipe that is capable of supporting a pressure of at least 700 kPa (100 PSI) and that is compatible with underground applications. A Ø 1" (25 mm) or Ø 1-1/2" (38 mm) notched connector, provided in the component box, is used to connect the pipe to the biofilter unit's outlet. The other end of the pipe is connected from the distribution pipes to the final discharge dispersal area. Specific measures must be taken against freezing if the discharge spills into a watercourse.



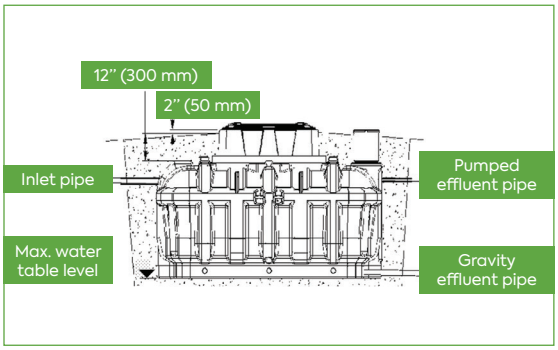
What you need to know:

- The **maximum length of the pressurized pipe** starting from the pump with a pipe measuring 1" (25 mm) or 1-1/2" (38 mm) in diameter depends on the pressure head (for instance, the difference in gradient between the base of the pump and the end of the pressurized pipe). The following table indicates the different pressurized pipe lengths allowed.

Height of the pressure head	25' (7.5 m)	20' (6 m)	15' (4.5 m)	10' (3 m)	5' (1.5 m)
Maximum Ø 1" (25 mm) pipe length	25' (7.5 m)	60' (18 m)	70' (21 m)	80' (24 m)	90' (27 m)
Maximum Ø 1-1/2" (38 mm) pipe length	100' (30 m)		200' (60 m)		



5.7 FINAL BACKFILL OF THE ECOFLO COMPACT BIOFILTER (STANDALONE OR PACK)



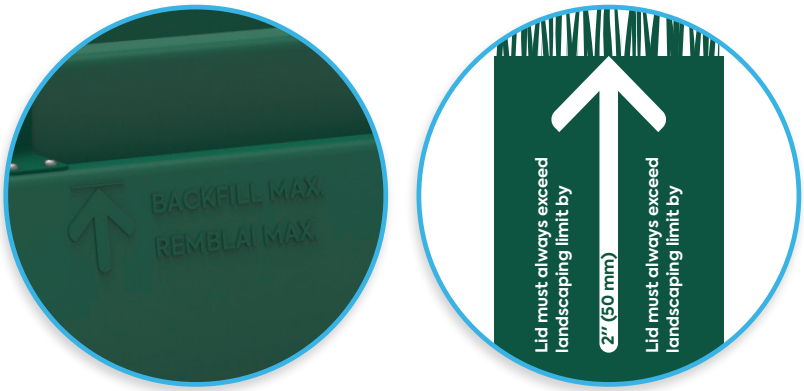
Important: You must pass the two electrical wires from the house through the tank wall by the watertight connector **before** completing the final backfill.

Note: Installing the watertight connector may be required for some models. Refer to the following section for more details.

For the Ecoflo compact biofilter Pack model, start by carefully backfilling the area under the pipe which connects the septic tank and the Ecoflo compact biofilter unit by hand. Ensure there are no air gaps between the pipe and the backfill material. Premier Tech Water and Environment recommends wetting backfill sand to improve compaction. Do not compact soil above the PVC pipe after the final backfill.

Complete the backfill. Note that the backfill material must be laid down rather than pushed onto the unit. For that reason, do not use a bulldozer at this stage. **The backfill material must be sandy and free of rocks or stones.** Plan for the layer of vegetation and make sure that the system's lids are 2" (50 mm) above the surface once the landscaping has been completed. This height is noted on the side of the risers for Ecoflo compact biofilters 2.8, 3.4, and 4.1.

Make sure that the profile of the final grade is such that runoff water flows away from the septic system, the Ecoflo compact biofilter unit, and any other septic system components.



5.8 PUMP PERFORMANCE CURVE

The figure below illustrates the performance curve of the pump built into the polyethylene Ecoflo compact biofilter. Note that this curve was produced with clean water and that the pump's performance may differ with wastewater. Follow the instructions below to make the necessary adjustments to increase the dosing volume. If you have questions on how to interpret this curve, please contact Premier Tech at 1 800 632-6356.

Pump characteristics:

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

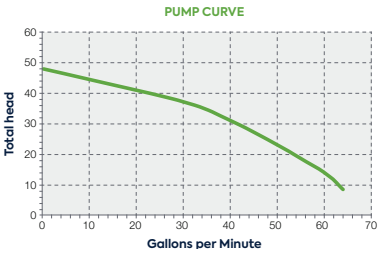
If you are using a pump other than the one provided, first ensure it will be compatible with the provided float tree as noted on the float tree's tag. If the pump's running amperage exceeds that of the float tree (13A), a separate pump control panel should be used.

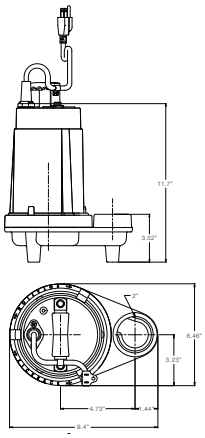
Champion 0.5 HP pump | 8.5 A | 1 phase, 60 Hz, 115 V

Electrical specifications for floats

Float switches must be used with pumps that provide integral thermal overload protection.

	Single phase	
	Maximum pump running current	Maximum pump starting current
120 VAC 50/60 Hz	13 A	60 A
230 VAC 50/60 Hz	12 A	60 A





5.9 VERIFICATION AND ELECTRICAL CONNECTIONS OF THE PUMP (MODELS EQUIPPED WITH A BUILT-IN PUMP)

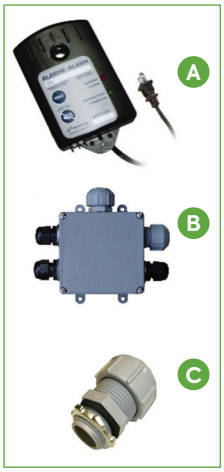
Step 1 – Pump verification

Make sure not to send debris (earth, clean stone, cable ties, electrical connectors, tape, etc.) into the unit while making the electrical connections. All debris must be removed. Carry out a visual inspection of the pump vault's interior components (float tree, floats, pump) to make sure that everything is in the right place. If using a pump other than the one provided with the Ecoflo compact biofilter, please ensure that its running amperage is compatible with the float tree's electrical specifications above. Ensure that the aftermarket pump fits in the pump vault prior to installation.

Step 2 – Electrical wiring

A professional electrician must make the electrical connections. To make the system's electrical connections (from the residence to the system), two double-stranded electrical wires are needed. Premier Tech recommends using a pipe/conduit to protect the buried wires. The professional electrician will choose the appropriate wire size. One of these wires will provide the power supply, whereas the other one will send current from the alarm float to the alarm box **(Item A)** or the control panel (when required).

The use of watertight electrical connectors (**Item C**) are required to pass through the interior of the secondary or main access, depending on the model. The wires must enter beneath the channel built into the access. Use a reference point to this effect (refer to the secondary access diagram when applicable).



Make the appropriate electrical connections using the parts provided (electrical junction box [**Item B**], watertight wire screw connectors, and electrical connectors [**Item C**]). First, the float and pump wires' plugs must be removed by cutting them at 2" (50 mm) from their ends. The junction box is located on the insulation board of the secondary or main access, depending on the model.

For Ecoflo compact biofilters 5.7 and 7.3 only, drill two holes measuring 20 mm (13/16") in one of the sides of the pump vault to later pass the two connectors through that side. Regardless of the model, pass the electrical wiring entering the system through these two holes.

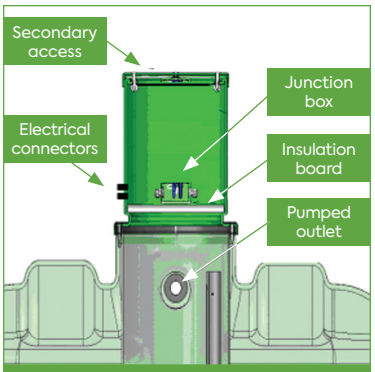
Identify and insert the wires in the junction box as per the electrical diagram on the following page. Make the electrical connections using the provided watertight wire screw connectors to prevent water from affecting the electrical circuit. Follow the diagram's color code.

The ON/OFF float's white wire is connected to the pump's black wire ("hot" wire). Premier Tech strongly recommends wrapping the white wire with black electrical tape.

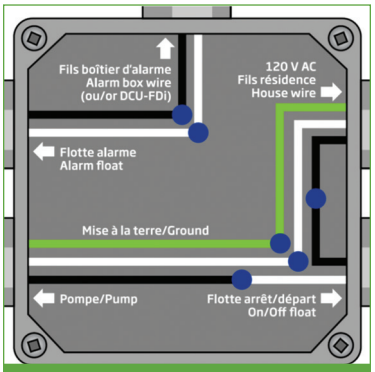
Close the electrical junction box. Pass the electrical wires arriving from the pumping unit through the groove of the insulation board. Place the insulation board within the access with the electrical box on top of it, or as prescribed by a local authority, and close the secondary access cover, if applicable.

Unless otherwise prescribed by state regulation or local jurisdiction, use two standalone breakers: one for the pump's power supply and the other for the alarm box. Do not connect anything else to these breakers (for example, household appliances). They are to serve exclusively for the pump and alarm box.

Please follow all applicable local regulations as it applies to electrical connections, components, and the location of any junction boxes.



Ecoflo compact biofilter models EC7-1050 and EC7-1350



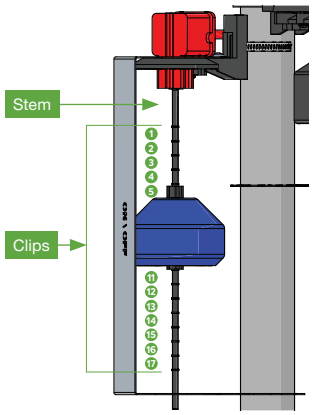
Electrical diagram

5.10 DOSE ADJUSTMENT

The factory setting will give the minimum dose. To customize the setting to accommodate local regulations or on-site requirements, please refer to the following table.

Adjustable dosing volume

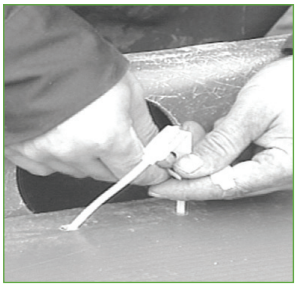
Desired dose volume					Adjustment
2.8	3.4	4.1	5.7	7.3	
EC7-500	EC7-600	EC7-750	EC7-1050	EC7-1350	
25 gal (95 L)	30 gal (115 L)	35 gal (130 L)	30 gal (115 L)	40 gal (150 L)	None (factory setting)
80 gal (300 L)	95 gal (360 L)	100 gal (380 L)	85 gal (320 L)	115 gal (435 L)	Place a clip at the 5th and 15th spaces from the top of the stem.
105 gal (400 L)	120 gal (455 L)	130 gal (490 L)	110 gal (415 L)	155 gal (585 L)	Place a clip at the 3rd and 15th spaces from the top of the stem.
130 gal (490 L)	150 gal (570 L)	165 gal (625 L)	140 gal (530 L)	195 gal (740 L)	Place a clip at the 2nd and 16th spaces from the top of the stem.
160 gal (605 L)	180 gal (680 L)	200 gal (760 L)	175 gal (660 L)	235 gal (890 L)	Place a clip at the 1st and 17th spaces from the top of the stem.
			230 gal (870 L)	295 gal (1,115 L)	Place a clip at the 17th space from the top of the stem. **DO NOT PLACE ANY OTHER CLIPS.**

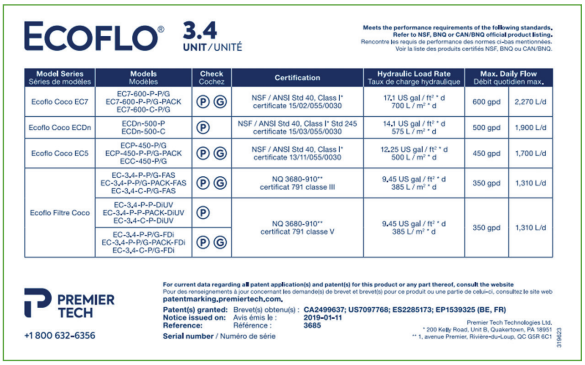


5.11 IDENTIFICATION AND WARRANTY SEALS

Check the Ecoflo compact biofilter model installed and the type of discharge on the provided sticker.

Install the insulation board and seal it in place using the two Premier Tech fasteners. Once in place, these fasteners secure the Ecoflo compact biofilter's collar to the handle of the insulation board. Finally, use the lag screws to close the main access lid. Note that no specific actions are needed from the owner to begin using the system.




ECOFLO® 3.4 UNIT / UNITÉ

Meets the performance requirements of the following standards. Refer to NSF, BNQ or CAN/BNQ official product listing.
Rencontre les requis de performance des normes ci-das mentionnées. Voir la liste des produits certifiés NSF, BNQ ou CAN/BNQ.

Model Series Séries de modèles	Models Modèles	Check Cocher	Certification	Hydraulic Load Rate Taux de charge hydraulique	Max. Daily Flow Débit quotidien max.
Ecoflo Coco EC7	EC7-600-P-P/G EC7-600-P-P/G-PACK EC7-600-C-P/G	P G	NSF / ANSI Std 40, Class I* certificate 15/02/055/0030	17,1 US gal / ft² * d 700 L / m² * d	600 gpd	2,270 L/d
Ecoflo Coco ECDn	ECDn-500-P ECDn-500-C	P	NSF / ANSI Std 40, Class I* Std 245 certificate 15/03/055/0030	14,1 US gal / ft² * d 575 L / m² * d	500 gpd	1,900 L/d
Ecoflo Coco EC5	ECP-450-P/G ECP-450-P-P/G-PACK ECC-450-P/G	P G	NSF / ANSI Std 40, Class I* certificate 13/11/055/0030	12,25 US gal / ft² * d 500 L / m² * d	450 gpd	1,700 L/d
Ecoflo Filtre Coco	EC-3,4-P-P/G-FAS EC-3,4-P-P/G-PACK-FAS EC-3,4-C-P/G-FAS	P G	NQ 3680-910** certificat 791 classe III	9,45 US gal / ft² * d 385 L / m² * d	350 gpd	1,310 L/d
	EC-3,4-P-P-DiUV EC-3,4-P-P-PACK-DiUV EC-3,4-C-P-DiUV	P	NQ 3680-910** certificat 791 classe V	9,45 US gal / ft² * d 385 L / m² * d	350 gpd	1,310 L/d
	EC-3,4-P-P/G-FDI EC-3,4-P-P/G-PACK-FDI EC-3,4-C-P/G-FDI	P G				

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+1 800 632-6356

For current data regarding all patent application(s) and patent(s) for this product or any part thereof, consult the website
Pour des renseignements à jour concernant les demande(s) de brevet et brevet(s) pour ce produit ou une partie de celui-ci, consultez le site web
patentmarking.premiertech.com,
Patent(s) granted: Brevet(s) obtenu(s) : CA2499637; US7097768; ES2285173; EP1539325 (BE, FR)
Notice issued on: Avis émis le : 2019-01-11
Reference: Référence : 3685
Serial number / Numéro de série

Premier Tech Technologies Ltd.
* 200 Kelly Road, Unit B, Quakertown, PA 18951
** 1, avenue Premier, Rivière-du-Loup, QC G5R 6C1

DON'T FORGET THE INSPECTION PERMIT, WHERE APPLICABLE.

6 SHIPPING AND HANDLING

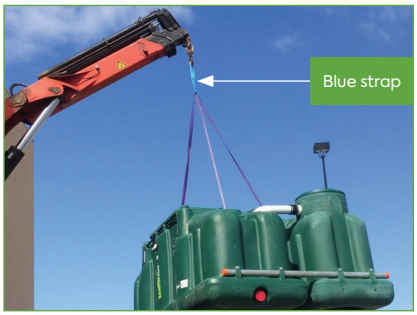
6.1 SHIPPING FROM THE DISTRIBUTOR TO THE INSTALLATION SITE

- Use a vehicle with enough space to load and ship the Ecoflo compact biofilter.
- Use appropriate straps to adequately fasten the Ecoflo compact biofilter.
- The carrier is responsible for complying with traffic regulations and for any damage occurring during shipping and handling.

6.2 HANDLING

6.2.1 Suggested instructions for the Ecoflo compact biofilter

- It is always recommended to use the lift rings built into the upper casing of the Ecoflo compact biofilter.
- The lift rings must always be used in combination with lift straps or shackles of appropriate size and capacity.
- Also, a unit may only be lifted from underneath using a forklift if the forks are long enough to ensure even and stable load distribution. This applies only to polyethylene **Ecoflo compact biofilters 2.8, 3.4, and 4.1**, including equivalent Pack models (see photo below).
- Lift straps are provided with all Pack models. They must be used whenever the system is handled from above. Always use the blue strap to handle the system.



All handling methods

- Always use the lifting points (lift rings, galvanized pipes, etc.) to lift the system. Make sure that the load is spread out evenly between the lifting points.
- Always keep the system level during handling operations to avoid shifting its internal components.
- Safely move the unit by making sure that all people are kept at a safe distance from the system and any on-site equipment.
- The system must always be handled smoothly and evenly.
- Never handle more than one system at a time.
- Avoid using handling methods that may cause any damage.
- Use the two lift rings (or lift straps provided with the Pack model) built into the upper casing of the Ecoflo compact biofilter to unload the unit. Otherwise, use a forklift with forks of sufficient length to pass all the way underneath the Ecoflo compact biofilter.
- The handler is responsible for any damage that occurs during handling operations.

6.3 LOAD CONFIGURATION

- The configuration depends on the type of vehicle used to ship the Ecoflo compact biofilter to the site.
- The vehicle must have a minimum surface area of 14’ x 8’ (4.2 m x 2.4 m) to accommodate the Ecoflo compact biofilter.

IMPORTANT REMARKS

- NEVER open the lids or enter the primary/septic tank, primary reactor, pre-treatment chamber, or Ecoflo compact biofilter once fully installed.
- Always keep your septic system lids accessible. NEVER cover them with mulch, dirt, or any permanent structure.
- Once the landscaping work has been completed, the lids of your septic system must be 2” (50 mm) higher than the surface of the landscaped terrain.
- Ensure the profile of the final grade around the Ecoflo compact biofilter is such that water flows away from the septic system and all of its components.
- NEVER install extensions on the accesses of the polyethylene Ecoflo compact biofilters 5.7 and 7.3.
- NEVER connect a drainpipe, roof gutter, sump pump, or air conditioner drain to the septic system.
- NEVER discharge content or water from a water softener, spa, or pool backwash into your septic system.
- NEVER discharge wastewater from a recreational vehicle into your septic system.
- NEVER use automatic toilet bowl cleaners.
- NEVER pile material that creates an excessive load (for instance, compacted snow) on top of your septic system.
- Never drive a vehicle or place objects weighing more than 500 lb (225 kg) within a radius of 16’ 5” (4 m) from the septic system’s lids (remember to notify the landscapers of this instruction).
- If there is a delay between the initial installation and the final landscaping work, install reference marks and protective barriers that identify the Ecoflo compact biofilter’s location to prevent any motor vehicle traffic on the unit and to take note of the system’s final grade.
- The residence must be equipped with a functional air vent that meets the applicable standards. Premier Tech Water and Environment strongly recommends using a pipe measuring 4” (100 mm) in diameter.
- Hand the plastic bag containing the owner’s manual and maintenance contract to the owner. The pouch is located under the water inlet cap.
- 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 operation. Failure to abide by these guidelines may, at Premier Tech Water and Environment’s discretion, render the system’s warranty invalid.

Problems, questions, or comments?
Please contact Premier Tech Water and Environment by calling 1-800-632-6356.

APPENDIX 1 NEW JERSEY SPECIFIC ELECTRICAL REQUIREMENTS

NEW JERSEY – PUMP VERIFICATION AND ELECTRICAL CONNECTIONS

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.

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.

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PT Water and Environment

+1 800 632-6356
info.ptwe.na@premiertech.com
PT-WaterEnvironment.com