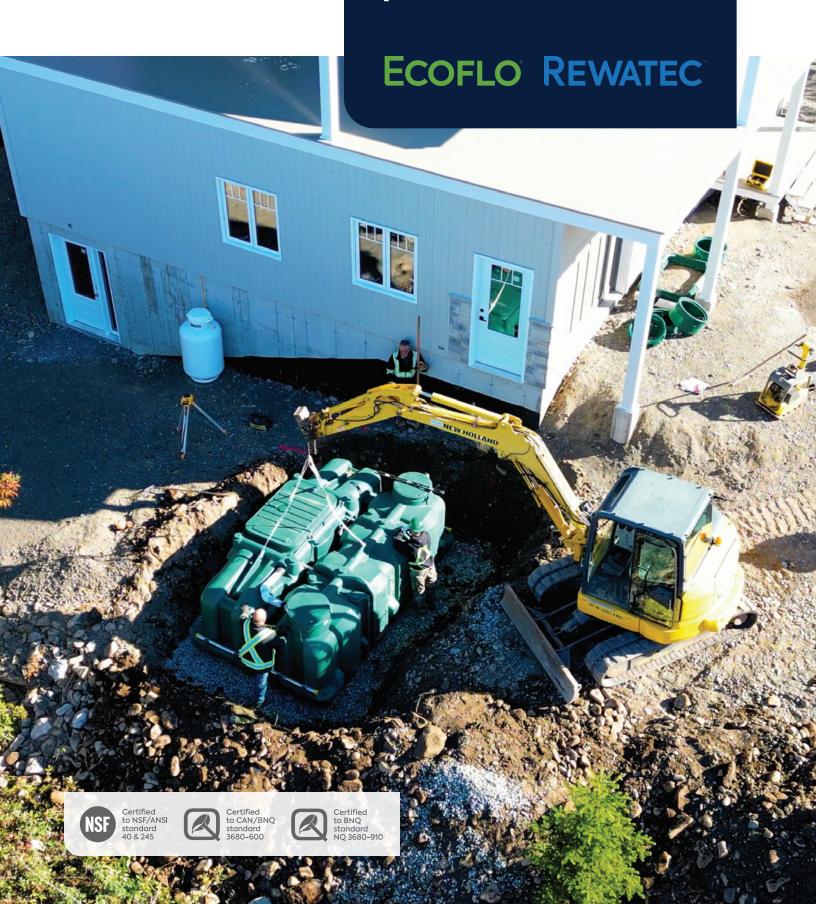


Guide for professionals



# People and Technologies making a difference

Premier Tech brings to life products that help feed, protect, and improve our world:

- founded in 1923
- family business
- 3,000 team members in North America
- 5,200 team members worldwide in 28 countries
- 25 manufacturing facilities in North America
- 48 factories in 16 countries



Through its Water and Environment business group, Premier Tech is a world leader in designing and manufacturing sustainable local solutions for:

### **Wastewater treatment**

Residential



### Commercial



### Rainwater management



Together, we make green technologies accessible and continuously innovate to create lasting solutions.

# Premier Tech's 360° support

Since 1995, professionals have been the heart of our business.

### **IMMEDIATE ASSISTANCE**

Experts available Monday to Friday to answer your questions.



### **IN-PERSON FIELD SUPPORT**

Experts go on-site to assist in resolving challenges.





### **ACCESSIBLE TRAINING**

Online and in-person training programs for installers, designers, and regulators.





# MOST COMPLETE WARRANTY IN THE INDUSTRY

Since 1995, we have proudly developed sustainable products with warranties that are clear and complete.

\* See owner's manual for details.





# AFTER-SALES SERVICE FROM THE MANUFACTURER

Largest network of local partners to maintain systems and honor warranties.



### **PRO SPACE**

Quickly find all the documents you need in one place:

- installation guides
- technical data sheets
- · technical drawings
- and more

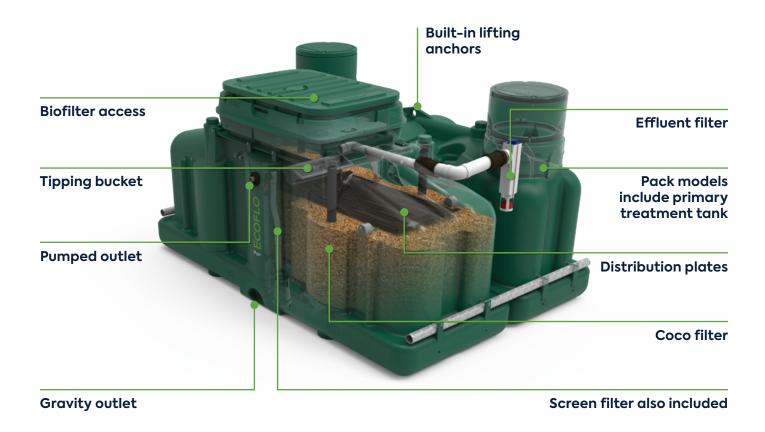


### **FULL CUSTOMER SUPPORT**

Our team supports you by assisting customers directly.

# Ecoflo<sup>®</sup> is how we make a sustainable difference. Together.

Join us in the movement to make the world a better, more sustainable place. Protect your client's property and the environment by recommending the Ecoflo biofilter, the most eco-responsible septic system available.



THE #1 COMPACT FILTER CHOICE!

VISIT OUR WEBSITE



### > QUICK INSTALLATION

- ready-to-use models
- easy-to-follow instructions
- can be installed in only one day

### > MODELS FOR ANY SITE

- · options for all soil conditions
- pumped or gravity discharge
- · compact models

### > PRODUCT AVAILABILITY

- 140 depots across North America
- quality-controlled inventory
- · reliable order tracking

### > 10-YEAR TOTAL WARRANTY

- all treatment-related parts and labor
- proper functioning of the filtering medium and its treatment performance
- no clogging or excess sludge



As a system designer, installer, maintenance tech, and licensed sewage enforcement officer, I am aware of all the solutions. The Ecoflo biofilter is the way to go. I like it so much, I even included one in the design I installed for my own home in 2021.

#### Brandt Fink Jr.

Operations Manager / Head of Operations RE Fink & Sons York County, PA

### **OUTPERFORMS STANDARDS**

NSF/ANSI standard 40 and 245		
Parameter Requirement* Ecoflo biofilter efflue		
TSS	< 25 mg/L	8 mg/L
CBOD <sub>5</sub>	< 30 mg/L 6 mg/	
Fecal coliforms	No requirement	_

<sup>\* 30-</sup>day average.

<sup>&</sup>lt;sup>†</sup> With 100% coconut husk fragment filtering medium.



## **Ecoflo benefits your clients**

# NATURAL, RENEWABLE, COMPOSTABLE FILTER



#### **INSTALLED FOR LIFE**

- · easy installation
- never needs to be moved or replaced
- never damages your client's landscaping

# PEACE-OF-MIND PERFORMANCE

- 24/7 autonomous operation
- never clogs your client's soil or contaminates their property
- · worry-free warranty

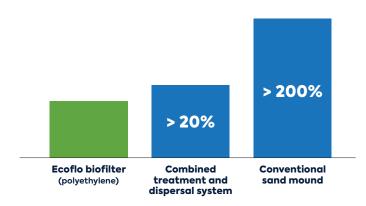
# BEST LONG-TERM INVESTMENT

- maintains the selling value of your client's property
- no energy bills for wastewater treatment
- no high-priced repairs or hidden costs
- no full-system replacements

# LOWEST CARBON FOOTPRINT

From production and shipping to installation, maintenance, and usage, the Ecoflo biofilter has the lowest carbon footprint of any product on the market.

#### Total after 50-year life cycle



#### **Notes**

- $\bullet$  Based on analysis of septic installations in Pennsylvania.
- Systems installed in soil with percolation rate of 60 mpi and rated for four bedrooms.
- Distances between installations and required materials assumed to be 40 miles for filtration sand and stone, 20 miles for backfill.
- Ecoflo biofilter installations include final dispersal to at-grade bed.



## A product supported by the manufacturer

#### HOMEOWNER TOUCHPOINT

After each installation, we invite new owners to an informal session to explain the Ecoflo biofilter's do's and don'ts, how to make sure their septic system is working properly, and to answer their questions.

#### **ANNUAL MAINTENANCE**

We offer annual training to our coast-to-coast network of partners to maximize the lifespan of your client's coco filter and to protect their investment in their septic system.

- 15-point inspection
- · coco filter aeration to promote healthy bacterial activity
- coco filter scarification to ensure optimal biofiltration

# SYSTEM REFURBISHMENT AT A FRACTION OF THE PRICE

Changing the filtering medium is as good as getting a brand new system! All septic systems clog, and while the Ecoflo biofilter's all-natural filtering medium can extend beyond 15 years, it is no exception. But here's the good part:

- no excavation required
- no damage to landscaping
- 100% compostable filtering media
- completed within 2 hours
- renewal of original warranty







# Polyethylene

#### Solution for:

- up to 1,350 US gal/d maximum capacity
- simple and quick installations
- sites with limited space

#### Advantages:

- install primary treatment tank and biofilter with one excavation\*
- compact and lightweight\*
- ready to use
- install in up to 2' of groundwater (pumped models only)
- one additional 6" riser allowed (models for 750 US gal/d or less only)



SCAN ME TO SEE HOW TO INSTALL OUR PRODUCTS



POLYETHYLENE PACK MODEL



POLYETHYLENE MODEL 2.8/3.4/4.1



POLYETHYLENE MODEL 5.7/7.3

## Concrete

#### Solution for:

- up to 1,200 US gal/d maximum capacity
- all soil types
- high water tables

#### Advantages:

- robust tank
- ready to use (select models only)
- install in groundwater up to the inlet pipe (pumped models only)
- one additional 8" riser allowed



**HOW TO INSTALL OUR PRODUCTS** 

**SCAN ME TO SEE** 



CONCRETE MODEL 2.8/3.4/4.1



CONCRETE MODEL 6.5

Check the availability of concrete products with your regional representative.

# **Polyethylene • Pack**



	2.8 3.4		4.1
	EC7-500-P-G/P-PACK	EC7-600-P-G/P-PACK	EC7-750-P-G/P-PACK
Hydraulic capacity	500 US gal/d	600 US gal/d	750 US gal/d
Primary tank volume	800 US gal	1,000 US gal	1,250 US gal
Length	10' 2-3/4"	11' 7-3/4"	13' 3-1/2"
Width		8' 1-3/4"	
Height Includes 12" of risers		5' 9-3/4"	
Inlet height of primary tank from bottom	4' 2-1/2"		
Gravity water outlet height 😝	1-1/2"		
Pumped water outlet height 🏻 😜	3' 9"		
Riser height allowed		6"	
Weight Includes internal components and coco filter	1,675 lb	1,870 lb	2,090 lb
Built-in effective volume available for dosing Pumped discharge models only	160 US gal	180 US gal	200 US gal
Emergency storage above alarm float	545 US gal	665 US gal	760 US gal

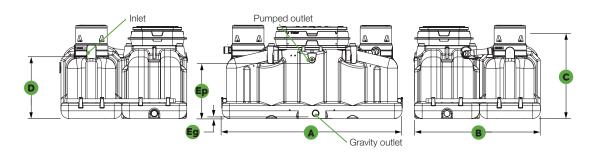
#### Water inlet

Ø 4" nominal

### Gravity water outlet

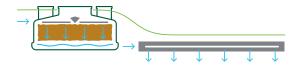
Ø 4" nominal

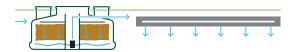
**Pumped water outlet** Ø 1-1/2" or 2" nominal



### **TYPICAL INSTALLATIONS**

Gravity discharge to leaching field





# Polyethylene



	2.8	3.4	4.1
	EC7-500-P-G/P	EC7-600-P-G/P	EC7-750-P-G/PDV
Hydraulic capacity	500 US gal/d	600 US gal/d	750 US gal/d
Length	10' 2-3/4"	11' 7-3/4"	13' 3-1/2"
Width		4' 2-1/2"	
Height Includes 12" of risers		5' 9-3/4"	
Inlet height from bottom		4' 1/2"	
Gravity water outlet height	1-3/4"		
Pumped water outlet height 🕞	3' 8-7/8"		
Riser height allowed		6"	
Weight Includes internal components and coco filter	1,235 lb	1,345 lb	1,455 lb
Built-in effective volume available for dosing Pumped discharge models only	160 US gal	180 US gal	200 US gal
Emergency storage above alarm float	545 US gal	665 US gal	760 US gal

#### Water inlet

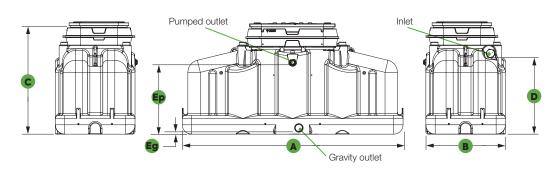
Ø 4" nominal

#### **Gravity water outlet**

Ø 4" nominal

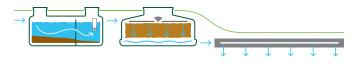
#### Pumped water outlet

Ø 1-1/2" or 2" nominal



### **TYPICAL INSTALLATIONS**

Gravity discharge to leaching field





# Polyethylene



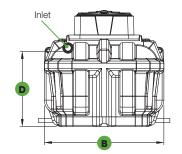
	5.7	7.3	
	EC7-1050-P-G/PDV	EC7-1350-P-G/PDV	
Hydraulic capacity	1,050 US gal/d	1,350 US gal/d	
Length	11' 3/4"	13' 5-1/2"	
Width	6' 6-3/4"	6' 8-3/4"	
Height C	6' 3	3/4"	
Inlet height from bottom	4' 1-	-1/2"	
Gravity water outlet height	4"		
Pumped water outlet height 🏻 🗊	4' 3/4"		
Riser height allowed	No additional	risers allowed	
Weight Includes internal components and coco filter	2,640 lb	3,120 lb	
Built-in effective volume available for dosing Pumped discharge models only	230 US gal	295 US gal	
Total emergency storage capacity	1,155 US gal	1,595 US gal	

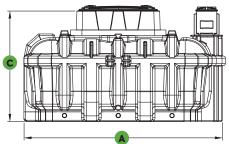
### Water inlet

Ø 4" nominal

**Gravity water outlet** Ø 4" nominal

Pumped water outlet Ø 1-1/2" or 2" nominal

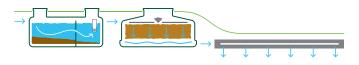


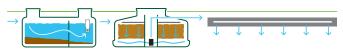




### **TYPICAL INSTALLATIONS**

Gravity discharge to leaching field





## Concrete



	2.8	3.4	4.1	6.5
	EC7-500-C-G/PDV	EC7-600-C-G/P	EC7-750-C-G/PDV	EC7-1200-C-G/P
Hydraulic capacity	500 US gal/d	600 US gal/d	750 US gal/d	1,200 US gal/d
Length	10' 1/8"'	11' 9-3/4"	12' 7-1/4"	12' 7-1/2"
Width	4' 2-5/8"	4' 2-5/8"	4' 4-3/4"	6' 10"
Height C	6' 5-1/4"	5' 10-7/8"	6' 8-7/8"	6' 9-1/4"
Inlet height from bottom <b>D</b>	4' 6"	3' 11-5/8"	4' 10"	4' 8"
Gravity water outlet height	5"	4-3/4"	5"	6"
Pumped water outlet height	4' 3-1/2"	3' 10"	5'	4' 9-3/4"
Riser height allowed	8"			
Weight Includes tank, upper slab, internal components, and coco filter	9,900 lb	10,000 lb	15,840 lb	19,520 lb
Built-in effective volume available for dosing Pumped discharge models only	150 US gal	34 US gal	200 US gal	220 US gal
Emergency storage above alarm float	500 US gal	145 US gal	750 US gal	1,360 US gal

Check product availability with your regional representative.

#### Water inlet

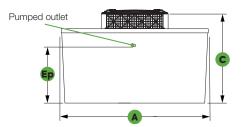
Ø 4" nominal

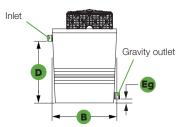
#### **Gravity water outlet**

Ø 4" nominal

#### Pumped water outlet

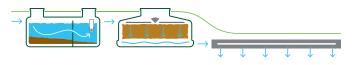
Ø 1-1/2" or 2" nominal

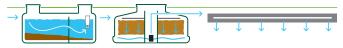




### **TYPICAL INSTALLATIONS**

Gravity discharge to leaching field





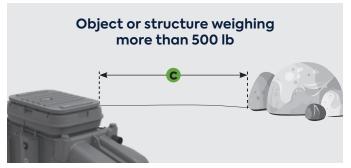
## **Recommended distances**

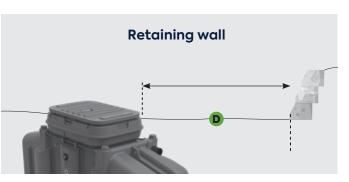
We recommend the following distance guidelines. Failure to abide by these guidelines may void the warranty of the installation.

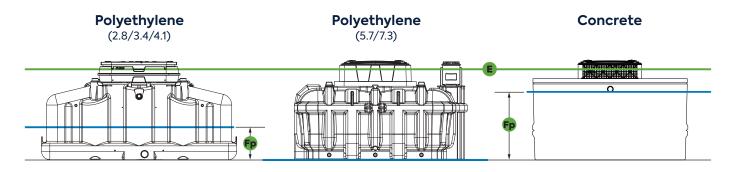
Deference neinke	Polye	Polyethylene	
Reference points	2.8/3.4/4.1	5.7/7.3	Concrete
Base of excess backfill, slopes, or embankments vs. biofilter lid		13'	10'
Parking area vs. biofilter lid		13'	10'
Object or structure weighing more than 500 lb (225 kg) vs. biofilter lid		13'	
Retaining wall vs. biofilter lid	13'		10'
Finished landscaping vs. base of biofilter lid	2"		
Seasonal high groundwater table vs. base of gravity-discharge unit	Do not install in groundwater		er
Seasonal high groundwater table vs. base of pumped-discharge unit	2'	Do not install in groundwater	Up to bottom of inlet pipe





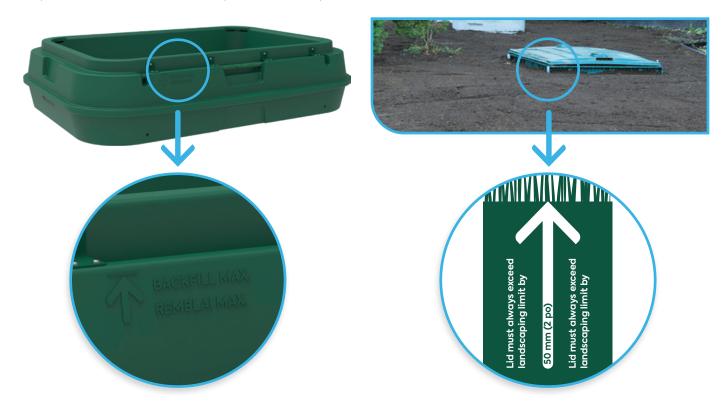






## Lid clearance

Keep 2" distance between the landscape level and the top of the lid.



## **Components and accessories**

### **PUMPING STATIONS**

- up to 67 US gal effective dosing volume
- high-strength polyethylene

Refer to page 22 for technical information.



### **PUMPS**

- up to 0.5 hp
- reliable and durable

Refer to page 22 for technical information.

### **FLOW DIVIDERS**

- pressurized or gravity flow
- two to 10 outlets





### **RISERS**

• from 6" to 14"



## Integrated UV disinfection (DiUV)

Our integrated DiUV option reliably kills wastewater pathogens, allowing for safe direct discharge into a watercourse or ditch.

#### Wi-Fi system

Instant alerts allow us to help your client protect their investment and the environment. A service team will follow-up on any problem.

#### Improved design

Strong, reliable parts ensure easy operation and maintenance.

#### **New UV lamp**

Maximizes flow while lowering energy consumption.

#### Integrated pump

Discharges treated wastewater in sites of any condition and keeps ditch water out of the treatment unit.

#### **READY TO INSTALL**

We make installation fast and simple by pre-assembling and pre-wiring our UV disinfection units.

### **SOLUTIONS FOR ANY SITE**

UV disinfection can be integrated in many polyethylene and concrete Ecoflo biofilter models. It is also available in a separate tank.

Also available in stand-alone UV disinfection system



# **UV** specifications

		REW	ATEC	
	E	COFLO	ed UV tion	UV disinfection in separate tank
Hydraulic capacity	Size	Model	Integrated UV	/ disinf separ
POLYETHYLEN	NE		트譜	3.5
500 LIC and /d	0.0	EC7-500-P-G/P	<b>~</b>	<b>~</b>
500 US gal/d	2.8	EC7-500-P-G/P-Pack	<b>~</b>	~
0001101/-1	0.4	EC7-600-P-G/P	~	<b>~</b>
600 US gal/d	3.4	EC7-600-P-G/P-Pack	<b>~</b>	~
750110 1/1	4.4	EC7-750-P-G/P	<b>~</b>	~
750 US gal/d	4.1	EC7-750-P-G/P-Pack	<b>~</b>	~
1,050 US gal/d	5.7	EC7-1050-P-G/P	X	~
1,350 US gal/d	7.3	EC7-1350-P-G/P	X	~
CONCRETE	<u>'</u>			
500 US gal/d	2.8	EC7-500-C-G/PDV	~	<b>~</b>
600 US gal/d	3.4	EC7-600-C-G/P	<b>~</b>	<b>~</b>
750 US gal/d	4.1	EC7-750-C-G/PDV	~	<b>~</b>
1,200 US gal/d	6.5	EC7-1200-C-G/PDV	X	<b>~</b>

Check regional product availability with your regional representative.

#### TREATMENT RESULTS

Parameter	BNQ* effluent standard	DiUV effluent
TSS	< 15 mg/L	4 mg/L
CBOD <sub>5</sub>	< 15 mg/L	4 mg/L
Fecal coliforms	< 20 CFU /100 mL <sup>†</sup>	< 2 CFU /100 mL <sup>†</sup>

 <sup>\*</sup> Bureau de normalization du Québec certification, similar to NSF certification.

## RECOMMENDED INFLUENT QUALITY

Parameter	Level	
Iron	< 0.3 ppm (0.3 mg/L)	
Manganese	< 0.05 ppm (0.05 mg/L)	
Water hardness	< 7 gpg (120 mg/L)	

## **UV** pumps

The **maximum length of the pressurized pipe** (flexible pipe) starting from the pump with a pipe measuring 25 mm (1") or 38 mm (1.5") 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	4.5 m (15')	3 m (10')	1.5 m (5')
Maximum Ø 25 mm (1") pipe length	30 m (100')	30 m (100')	30 m (100')
Maximum Ø 38 mm (1.5") pipe length*	30 m (100')	30 m (100')	30 m (100')

<sup>\*</sup> Does not apply to EC-2.8-C-P model

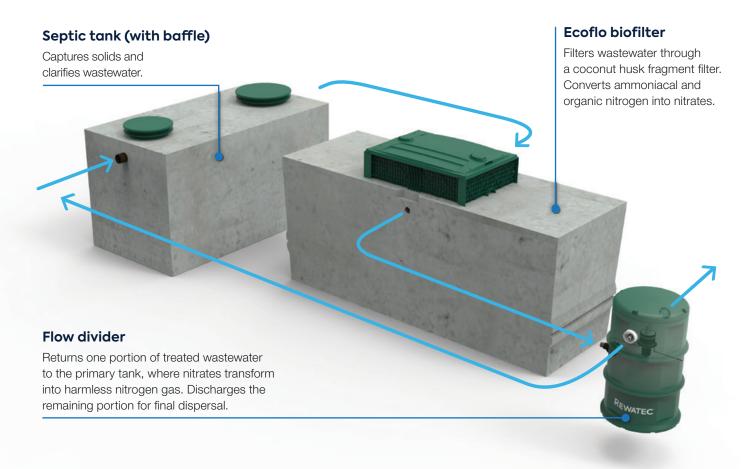


Champion 0.4 hp pump is for UV usage only 6.6 A, 1 phase, 60 Hz, 115 V

<sup>†</sup> Before photoreactivation.

## Nitrogen reduction (ECDn)

Safely discharge near ecologically sensitive areas with our nitrogen reduction offer that converts ammoniacal nitrogen into harmless nitrogen gas.



### **COMPACT SIZE**

Our nitrogen reduction option is ideal for sites with limited installation space.

### **SOLUTIONS FOR ANY SITE**

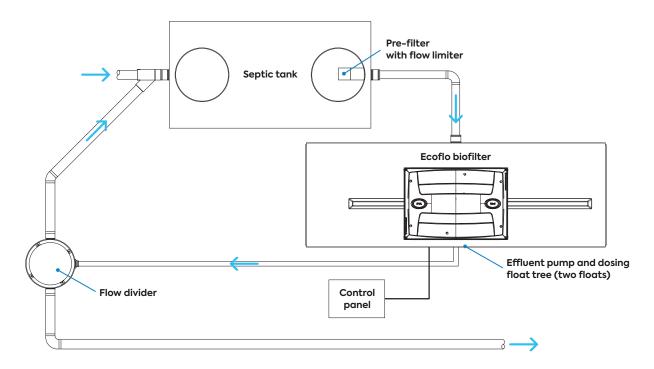
Nitrogen reduction is available with many polyethylene and concrete Ecoflo biofilter models.

#### TREATMENT RESULTS

Parameter	NSF effluent standard	ECDn effluent
TSS	< 30 mg/L	2 ± 2 mg/L
CBOD₅	< 25 mg/L	4 ± 3 mg/L
Total nitrogen reduction	> 50%	54%
рН	6 to 9	7.1

# Nitrogen reduction (ECDn)

### **TYPICAL INSTALLATION**



#### **Polyethylene**

Hydraulic capacity	Model
500 US gal/d	ECDN-500-P
600 US col/d	ECDN-600-P
600 US gal/d	ECDN-600-P-PACK
865 US gal/d	ECDN-865-P
1,100 US gal/d	ECDN-1100-P

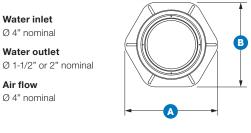
#### Concrete

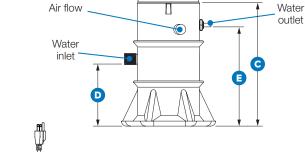
Hydraulic capacity	Model	
600 US gal/d	ECDN-600-C	
1,000 US gal/d	ECDN-1000-C	

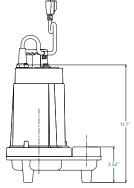
## **Pumping stations**

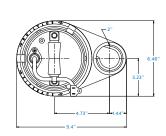
	PSA-240	PSA-240H
Pump	0.4 hp	0.5 hp
Float	On/off pump switch and alarm switch	
Length of base	3' 1-1/2"	
Width of base B	2' 10"	
Height G	4' 2"	5' 4"
Inlet height D	2' 1"	3' 5-3/4"
Outlet height	3' 4"	
Riser height allowed	2' 4"	
Weight	110 lb	123 lb
Effective dosing volume	40 US gal	67 US gal
<b>Total volume</b> At water inlet level	63 US gal	106 US gal







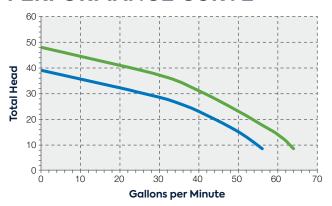




# **Pumps**



### **PERFORMANCE CURVE**



#### Legend

 Champion 0.4 hp pump (supplied with all pumping stations) 6.6 A, 1 phase, 60 Hz, 115 V  Champion 0.5 hp pump (supplied with all pumped Ecoflo biofilter) 8.5 A,
 1 phase, 60 Hz, 115 V

#### **ELECTRICAL SPECIFICATION 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	

Pumps that exceed the currents in these specifications require a pump controller that will allow the stock floats to be used for signal rather than providing power.

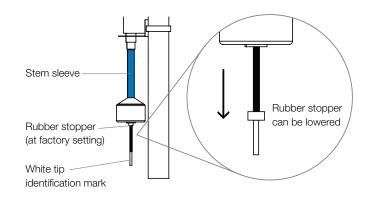
Refer to the technical datasheet for the vault dimensions.

## Float adjustments

The dose given by the on/off float depends on the length of the float stem, the length of the stem sleeve, and the position of the rubber stopper.

The factory setting will give the minimum dose. To customize the setting to accommodate local regulations or on-site requirements:

- cut a section of the stem sleeve
- lower the rubber stopper along the stem



#### **POLYETHYLENE**

Desired dose volume				Final		
2.8 – 500	3.4 – 600	4.1 – 750	5.7 – 1050	7.3 – 1350	Adjustment	sleeve length
21 US gal	24 US gal	26 US gal	20 U	S gal	None (factory setting)	4-1/2"
22 US gal	30 US gal	35 US gal	30 US gal	40 US gal	Lower rubber stopper 1/4" along stem	4-1/2"
80 US gal	95 US gal	100 US gal	85 US gal	115 US gal	Lower rubber stopper <b>2-1/2</b> " along stem*	4-1/2"
105 US gal	120 US gal	130 US gal	110 US gal	155 US gal	Make sleeve 3-1/2" long and lower rubber stopper <b>2-1/2</b> " along stem*	3-1/2"
130 US gal	150 US gal	165 US gal	140 US gal	195 US gal	Make sleeve 2-1/2" long and lower rubber stopper <b>2-1/2"</b> along stem*	2-1/2"
160 US gal	180 US gal	200 US gal	175 US gal	235 US gal	Make sleeve 1-1/2" long and lower rubber stopper <b>2-1/2"</b> along stem*	1-1/2"
			230 US gal	295 US gal	Remove sleeve and lower rubber stopper 2-1/2" along stem*	0"

<sup>\*</sup> Or until identification mark.

#### **CONCRETE**

Desired do	se volume	Adjustment	Final sleeve
2.8 – 500	4.1 – 750		length
20 US gal	20 US gal	None (factory setting)	4-1/2"
70 US gal	95 US gal	Lower rubber stopper <b>2-1/4"</b> along stem	4-1/2"
90 US gal	120 US gal	Make sleeve 3-1/2" long and lower rubber stopper <b>2-1/4"</b> along stem*	3-1/2"
110 US gal	140 US gal	Make sleeve 2-1/2" long and lower rubber stopper 2-1/4" along stem*	2-1/2"
125 US gal	170 US gal	Make sleeve 1-1/2" long and lower rubber stopper 2-1/4" along stem*	1-1/2"
150 US gal	200 US gal	Remove sleeve and lower rubber stopper <b>2-1/4</b> " along stem*	0"

Desired dose volume 6.5 – 1200	Adjustment	Final sleeve length
95 US gal	None (factory setting)	3-1/2"
130 US gal	Make sleeve 2-1/2" long and lower rubber stopper 2-1/2" along stem*	2-1/2"
165 US gal	Make sleeve 1-1/2" long and lower rubber stopper 2-1/2" along stem*	1-1/2"
200 US gal	Make sleeve 1/2" long and lower rubber stopper 2-1/2" along stem*	1/2"
220 US gal	Remove sleeve and lower rubber stopper <b>2-1/2</b> " along stem*	0"

<sup>\*</sup> Or until identification mark.



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# MAINTENANCE AND SERVICES

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We aren't slowing down. Premier Tech is 100 years young, and our experts continue to innovate and redefine what is possible through effective, efficient, and sustainable solutions. We are driven by our shared passion, and are committed to spend our next 100 years protecting our resources for the future.





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