# ECOFIC BIOFILTERS



SEPTIC SYSTEM ECOFLO® FIBREGLASS ECOFLO® CONCRETE











There are 2 categories of onsite wastewater treatment systems: conventional and compact. Regardless of the type of system, it always includes a primary treatment, generally a septic tank.

Decentralized wastewater treatment systems increasingly used in rural regions and suburban areas. These installations must comply with the regulatory standards in force, which are oriented towards health and environmental protection.

The **Ecoflo**\* Biofilter is a modular system adaptable to several types of commercial and community projects. The number of shells installed depends on the daily flow rate, which makes **Ecoflo**\* a truly flexible and efficient system.

## ECOFLO<sup>®</sup>: THE MOST RECOMMENDED AND PROVEN SYSTEM INSTALLED ON THE MARKET!

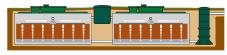
Ecoflo® is the most recommended, proven and performing compact filter on the market. In addition to being chosen by more than 30 000 families in North America and in Europe, it has received Canadian, American and European certifications. Since its launch on the market more than 10 years ago, Ecoflo® has accomplished incomparable performance, outstanding reliability and unparalleled stability.

#### SIMPLE AND EFFICIENT OPERATING PRINCIPLE

The process is very simple: wastewater from the septic tank is directed into a fibreglass or concrete shell where it is evenly distributed over the entire surface of the natural peat media using a mechanism that has no electromechanical parts.

Clustering consists in regrouping many Ecoflo® in parallel and functioning simultaneously on a same site. PTE offers a full line of Flow Dividers for clusters from 2 to 10 Ecoflo®. Depending on the project, it could be very economical to distribute clusters on many treatment sites in order to take advantage of the topography and to reduce costs associated with a collection and pumping system.





Ecoflo® fibreglass

Ecoflo® concrete

#### **APPLICATIONS**

#### Commercial

- Office building
- Hotel
- Golf club
- Campground
- Shopping mall
- Rest area
- Resort
- Forest camp

#### Municipal and community

- Small municipality
- Residential development
- Suburban new neighborhood
- Trailer park
- School
- Nursing home
- Retirement home

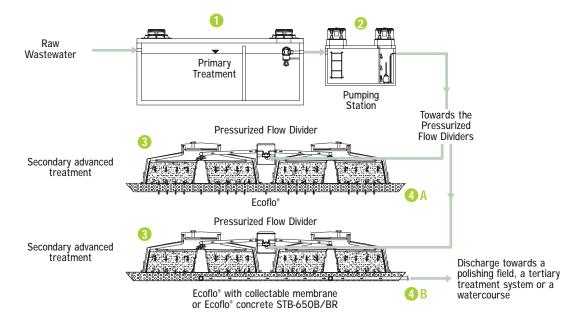








#### **ECOFLO® TREATMENT SYSTEM**



- 1 Primary treatment usually composed of a septic tank equipped with a commercial effluent filter and providing a minimal hydraulic retention time (HRT) of 36 hours at mean daily flow.
- 2 An equalization tank providing 12 hours HRT for commercial/institutional applications and 8 hours HRT for community applications.
- 3 The Ecoflo® Biofilters utilize a natural and organic media with quality controlled for filtration and pollutants retention until their degradation.
- 4 Polishing field, right under the Ecoflo® ST (open bottom), allowing treated effluent disposal by percolation directly
- into the soil.
  - B Sewage collection system with membrane (or shell with collecting bottom Ecoflo® STB) allowing to convey the treated effluent towards a polishing field, a tertiary treatment or a watercourse.

#### TREATMENT PERFORMANCES

PARAMETERS	EFFLUENT AVERAGE CONCENTRATIONS	COMMUNITY APPLICATION (80 BIOFILTERS)	COMMERCIAL APPLICATION (32 BIOFILTERS)
BOD <sub>5</sub> (mg/l)	< 10	3 (98%)	5 (98%)
TSS (mg/l)	<10	4 (90%)	4 (92%)
Fecal coliforms (FCU/100 ml)*	< 25 000	10 300 (2.2 log)**	1 139 (3.0 log)
Number of measures	-	41	35

<sup>\*</sup> Geometric averages

#### **TECHNICAL DATA**

	FIBREGLASS WITHOUT BOTTOM (ST-650)	FIBREGLASS WITH BOTTOM (STB-650)	CONCRETE (STB-650B/BR)
Surface area of filtering media	6,5 m <sup>2</sup> (70 sq. ft.)	6,5 m <sup>2</sup> (70 sq. ft.)	6,5 m <sup>2</sup> (70 sq. ft.)
Width	2,5 m (7'9")	2,5 m (7'9")	1,96 m (6'4")
Length	4,2 m (13'8")	4,2 m (13'8")	3,8m (12'5")
Height	1,3 m (4'4")	1,7 m (5'7")	1,82 m (6')
Weight	125 kg (275 lb)	250 kg (550 lb)	6 410 kg (14 130 lb)*
Flow rate for models ST-650, STB-650 and STB-650B/BR	<b>Annual average</b> 975 l/d	<b>20-day maximum sustained</b> 1 300 l/d	<b>Daily Maximum</b> 2015 l/d

<sup>\*\*</sup>Obtained with wastewater temperatures in winter period varying between 3 and 5°C





#### SYSTEM IDEAL FOR:

- NEW CONSTRUCTION
- SMALL LOTS
- LOW PERMEABILITY SOILS OR HIGH WATER LEVEL
- WOODED, ROCKY OR SLOPING LOTS
- SENSITIVE ENVIRONMENT
- REPLACEMENT OF FAILING SYSTEMS

#### SO MANY MORE ADVANTAGES

- NO ELECTROMECHANICAL PARTS WORKING CONTINUOUSLY
- PASSIVE AND ECONOMICAL SYSTEM (LOW OPERATIONAL COSTS)
- RECYCLABLE AND RENEWABLE 100% NATURAL FILTER
- ENTIRELY SELF-CONTAINED, COMPACT AND PERMANENT SYSTEM
- REQUIRES HALF TO A QUARTER THE SPACE OF A CONVENTIONAL SYSTEMS
- ADAPTABLE TO ANY TYPE OF LOT

#### **COMMUNITY APPLICATIONS**

#### INDIVIDUAL



#### **SEMI-COLLECTIVE**



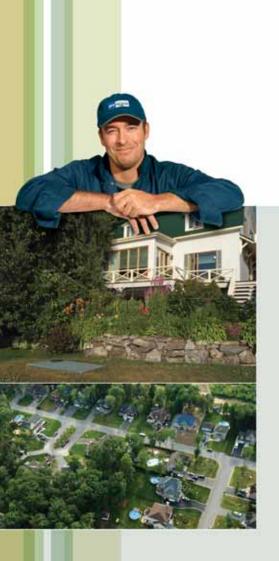
SMALL COLLECTIVE



### IT'S GUARANTEED: THE BEST SERVICE ON THE MARKET

When you buy a PTE solution, you don't just buy a product, you get true piece of mind. In addition to offer reliable and efficient solutions, PTE assures you an incomparable technical support before and after the purchase of a technology. A specialized team of engineers, agents, technicians and coordinators is available to answer all your questions and give you the technical support needed for your commercial and community projects: choice of appropriate technology (recommendation following the study of flow and charges to treat), collaboration to plans and quotes, presence on the field to assure installation quality, unparalleled after-sales service, required environmental follow-ups carried out by our team and many more.

The filtering media and the other components are guaranteed for a period of 2 years against all manufacturing fault.



Premier Tech is a company with over 80 years of experience in its field with more than 1,500 team members of which 175 work for **Premier Tech Environment** (PTE).

Internationally renowned, as much in Canada and the United States, as in Europe and Asia, PTE operates in the field of decentralized wastewater treatment for the residential, commercial, community, municipal and industrial sectors. PTE is considered a leader in its field through its innovative approach and its different technologies commercialized for the last 30 years.

PTE consolidates its services and local partners in an efficient network that brings peace of mind to its users, just as if they were connected to a municipal sewer system.

#### PTE coordinates its activities around three divisions:

- The **Residential division** offers an array of solutions for small flow rate applications for individual homes. This division supports a network of over 1 000 service providers through a complete training and marketing program and a multidisciplinary technical support.
- The **Municipal, Commercial, Community and Industrial division** (MCI) concentrates on larger flow rate and high strength applications with its team of engineers specialized in advanced biological treatment technologies; this division competes on the national and international markets by offering cost-effective solutions.
- The **Service division** is responsible for the entire technical support of all PTE technologies.

To learn more, to plan your construction or your renovation or to contact your local installer, contact us



Premier Tech Environment

1 800 632-6356
418 862-6642
pte@premiertech.com
www.ptenv.com

The information contained in this document is based upon the latest information available at the time of publication and is designed to provide you with a general introduction to our products. We make no warranties or representations as to its accuracy. We are continually updating and improving our products and reserve the right to discontinue, alter or change specifications and prices without prior notice. **Ecoflo\*** is a registered trademark of Premier Tech Ltd. The **Ecoflo\*** Biofilters are protected under patents: CDN 2 002 097 and 2 149 202, USA 5 618 414, 5 206 206, and Europe 0 836 585.

Quebec