

ANNEX TO THE BNQ CERTIFICATE OF CONFORMITY

WATERLOO BIOFILTER SYSTEMS INC.

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143 Dennis Street
Rockwood (Ontario) N0B 2K0

CAN/BNQ 3680-600/2009-05-15

Onsite Residential Wastewater Treatment Technologies

Certificate number: **2312**

Issue date: **2016-08-08**

Expiry date: **2018-07-31**

Stand-alone wastewater treatment systems

Model Waterloo Biofilters®

Anaerobic Digester

Capacity:

Waterloo Biofilter Treatment capacity (L/d)	Minimum Digester Volume (L)	Minimum InnerTube™ Volume (L) ⁽¹⁾
1,100	2,077	220
1,600	3,021	320
2,000	3,776	400
2,500	4,720	500
3,000	5,664	600
3,500	6,608	700
4,000	7,552	800
4,500	8,496	900
5,000	9,440	1,000
5,500	10,384	1,100
6,000	11,328	1,200
6,500	12,272	1,300
7,000	13,216	1,400
7,500	14,160	1,500
8,000	15,104	1,600
8,500	16,048	1,700
9,000	16,992	1,800
9,500	17,936	1,900
10,000	18,880	2,000

(1) The "Inner tube" is the term used to describe the long corrugated pipe forcing a longer path of water in the digester. The volume of the inner tube is included in the minimum effective volume of the digester.

Designation: **AD.**

Material: Constructed using concrete, plastic, or fibreglass tank that conforms with the strength and watertightness requirements of Standard CAN/CSA-B66 or Standard BNQ 3680-905, or equivalent acceptable to the Authority having jurisdiction.

Dosing: External or internal pump chamber.
Demand or timed dosed.

Others: Single or double compartment tank.
No effluent filter required.
InnerTube outlet opposite tank outlet or pump.
One or multiple tanks.

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Waterloo Biofilter

Capacity:

Designation	Waterloo Biofilter Treatment capacity (L/d)	Minimum Foam Filter Media Volume (m ³)	Minimum Foam Filter Media Volume (ft ³)
11	1,100	1.5	54
16	1,600	2.2	79
20	2,000	2.8	99
25	2,500	3.5	124
30	3,000	4.2	148
35	3,500	4.9	173
40	4,000	5.6	198
45	4,500	6.3	222
50	5,000	7.0	247
55	5,500	7.7	272
60	6,000	8.4	297
65	6,500	9.1	321
70	7,000	9.8	346
75	7,500	10.5	371
80	8,000	11.2	396
85	8,500	11.9	420
90	9,000	12.6	445
95	9,500	13.3	470
100	10,000	14.0	494

Configuration: SH = Shed with open-bottom.
SHFB = Shed with full bottom.
BA = Baskets in concrete tank.
BFCN = Bulk filled concrete tank.
BFHD = Bulk filled plastic tank.
BFFG = Bulk filled fibreglass tank.

Certificate Precisions

Treatment Class: Class B-IV.

Influent Temperature: The tests specified in articles 8.1 and 8.2 were carried out with influent wastewater, at a minimum controlled temperature of 11 °C ± 1 °C.

Others: This treatment chain has no septic tank. The anaerobic digester is the first step of the treatment chain.

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Model Designation

Class B-IV: AD-SH11, AD-SHFB11, AD-BA11, AD-BFCN11, AD-BFHD11, AD-BFFG11
AD-SH16, AD-SHFB16, AD-BA16, AD-BFCN16, AD-BFHD16, AD-BFFG16
AD-SH20, AD-SHFB20, AD-BA20, AD-BFCN20, AD-BFHD20, AD-BFFG20
AD-SH25, AD-SHFB25, AD-BA25, AD-BFCN25, AD-BFHD25, AD-BFFG25
AD-SH30, AD-SHFB30, AD-BA30, AD-BFCN30, AD-BFHD30, AD-BFFG30
AD-SH35, AD-SHFB35, AD-BA35, AD-BFCN35, AD-BFHD35, AD-BFFG35
AD-SH40, AD-SHFB40, AD-BA40, AD-BFCN40, AD-BFHD40, AD-BFFG40
AD-SH45, AD-SHFB45, AD-BA45, AD-BFCN45, AD-BFHD45, AD-BFFG45
AD-SH50, AD-SHFB50, AD-BA50, AD-BFCN50, AD-BFHD50, AD-BFFG50
AD-SH55, AD-SHFB55, AD-BA55, AD-BFCN55, AD-BFHD55, AD-BFFG55
AD-SH60, AD-SHFB60, AD-BA60, AD-BFCN60, AD-BFHD60, AD-BFFG60
AD-SH65, AD-SHFB65, AD-BA65, AD-BFCN65, AD-BFHD65, AD-BFFG65
AD-SH70, AD-SHFB70, AD-BA70, AD-BFCN70, AD-BFHD70, AD-BFFG70
AD-SH75, AD-SHFB75, AD-BA75, AD-BFCN75, AD-BFHD75, AD-BFFG75
AD-SH80, AD-SHFB80, AD-BA80, AD-BFCN80, AD-BFHD80, AD-BFFG80
AD-SH85, AD-SHFB85, AD-BA85, AD-BFCN85, AD-BFHD85, AD-BFFG85
AD-SH90, AD-SHFB90, AD-BA90, AD-BFCN90, AD-BFHD90, AD-BFFG90
AD-SH95, AD-SHFB95, AD-BA95, AD-BFCN95, AD-BFHD95, AD-BFFG95
AD-SH100, AD-SHFB100, AD-BA100, AD-BFCN100, AD-BFHD100, AD-BFFG100

List of recognized manufacturers for system components

Concrete Precasters

MACGREGOR CONCRET PRODUCTS P.O. Box 142 Beachburg (Ontario) K0J 1C0	WINONA CONCRETE & PIPE PRODUCTS LTD. 489 Main Street West Grimsby (Ontario) L3M 1T4	UNIT PRECAST (BRESLAU) LTD. 268 Woolwich Street South Breslau (Ontario) N0B 1M0
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Plastic Component Manufacturers

ROTH INDUSTRIES, INC.
268 Bellew Ave. South
Watertown, NY 13601
USA

List of recognized assemblers

BOYD BROS CONCRETE
5450 Cuddy Street
Osgoode (Ontario) K0A 2W0

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CAN/BNQ 3680-600/2009-05-15

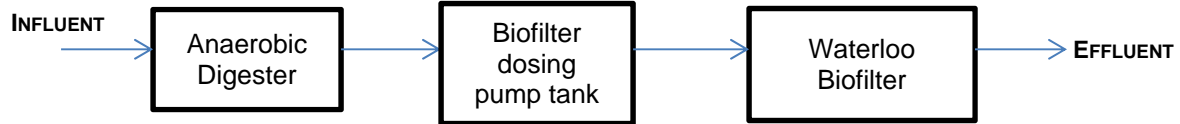
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FLOW DIAGRAM OF WATERLOO BIOFILTER ®



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HISTORY	
Date	Modification description
2016-07-05	Issuance of certificate.
2016-07-28	Minor Corrections of different sections.

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