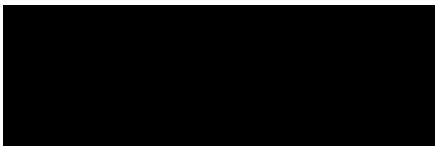




PAR COURRIEL [REDACTED]

Montréal, le 9 février 2024



Objet : Votre demande d'accès à l'information reçue le 3 février 2024 (réf Documents transmis en réponse à la demande traitée par la Commission d'accès à l'information dans la décision suivante : Premier Tech Eau et Environnement c. Investissement Québec, 2022 QCCAI 312)
N/D : 1-210-807

[REDACTED],

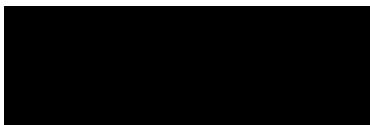
Nous confirmons avoir reçu, par courriel, le 3 février 2024, votre demande d'accès à l'information dont copie est jointe.

Par la présente, nous vous remettons les documents visés.

En terminant, si vous désirez contester cette décision, il vous est possible de le faire auprès de la Commission d'accès à l'information. À cet effet, vous trouverez en annexe l'avis concernant ce recours.

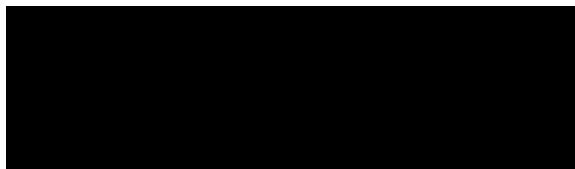
Nous vous prions d'agréer, [REDACTED], l'expression de nos sentiments les meilleurs.

La responsable de l'accès aux documents pour Investissement Québec et ses filiales,



Danielle Vivier
Directrice, Protection des renseignements personnels, accès à l'information et ombudsman

p.j. Votre demande d'accès reçue le 3 février 2024, Avis de recours et deux documents PDF



Répondre Répondre à tous Transférer mar. 2024-02-06 17:09

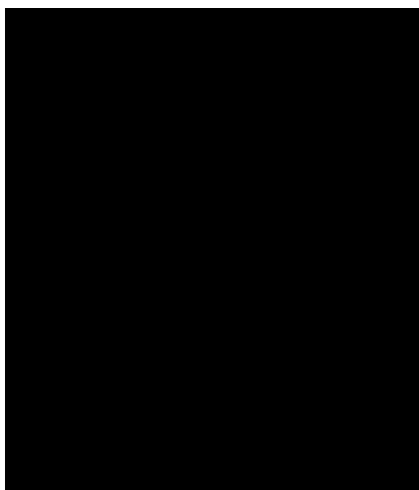
Madame Vivier,

En vertu de l'article 9 de la Loi sur l'accès aux documents des organismes publics et sur la protection des renseignements personnels, nous désirons obtenir copie des documents transmis en réponse à la demande traitée par la Commission d'accès à l'information dans la décision suivante : *Premier Tech Eau et Environnement c. Investissement Québec, 2022 QCCAI 312*

<https://www.canlii.org/fr/qc/qccai/doc/2022/2022qccai312/2022qccai312.html>

Nous comprenons des conclusions de la décision que certains, mais pas tous les documents demandés, ont été transmis. Ce sont ceux-là dont nous souhaitons obtenir copie. S'ils se trouvent déjà sur un site Internet, vous pouvez simplement nous en donner l'URL, mais nous n'avons rien trouvé à ce sujet en cherchant dans la liste disponible sur le site d'Investissement Québec.

En vous remerciant à l'avance.
Salutations cordiales,



AVIS DE RECOURS EN RÉVISION

RÉVISION

a) Pouvoir

L'article 135 de la Loi prévoit qu'une personne peut, lorsque sa demande écrite a été refusée en tout ou en partie par le responsable de l'accès aux documents ou de la protection des renseignements personnels ou dans le cas où le délai prévu pour répondre est expiré, demander à la Commission d'accès à l'information de réviser cette décision.

La demande de révision doit être faite par écrit; elle peut exposer brièvement les raisons pour lesquelles la décision devrait être révisée (art. 137).

L'adresse de la Commission d'accès à l'information est la suivante :

QUÉBEC

Commission d'accès à l'information
Bureau 2.36
525, boul. René-Lévesque Est
Québec (Québec) G1R 5S9

Tél : (418) 528-7741
Téléc : (418) 529-3102

MONTRÉAL

Commission d'accès à l'information
Bureau 900
2045, rue Stanley
Montréal (Québec) H3A 2V4

Tél : (514) 873-4196
Téléc : (514) 844-6170

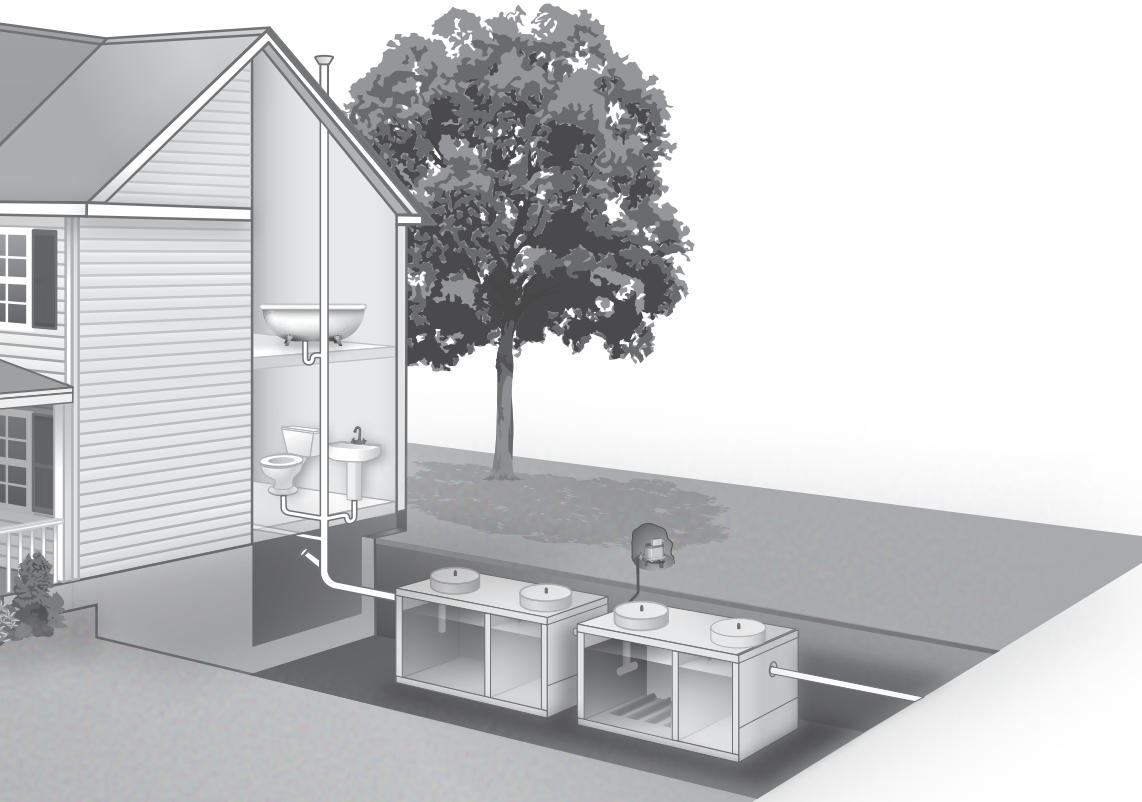
b) Motifs

Les motifs relatifs à la révision peuvent porter sur la décision, sur le délai de traitement de la demande, sur le mode d'accès à un document ou à un renseignement, sur les frais exigibles ou sur l'application de l'article 9 (notes personnelles inscrites sur un document, esquisses, ébauches, brouillons, notes préparatoires ou autres documents de même nature qui ne sont pas considérés comme des documents d'un organisme public).

c) Délais

Les demandes de révision doivent être adressées à la Commission d'accès à l'information dans les 30 jours suivant la date de la décision ou de l'expiration du délai accordé au responsable pour répondre à une demande (art. 135).

La loi prévoit spécifiquement que la Commission d'accès à l'information peut, pour motif raisonnable, relever le requérant du défaut de respecter le délai de 30 jours (art. 135).



Légende / Legend



Vérifier le matériel ; si une composante est manquante et/ou défectueuse, communiquer avec l'assembleur
Check material; if a component is missing and/or defective, contact the assembler



S'assurer que la conduite ne contient aucun point bas
Make sure the pipe contains no sagging sections



Visser / Serrer les collets de serrage à l'aide d'un tournevis
Screw / Tighten hose clamps using a screwdriver



Coller avec de la colle PVC
Glue using PVC cement



Remblayer par couches de 150 mm [6"] et compacter à l'aide d'une plaque vibrante entre chaque couche
Backfill by layers of 150 mm [6"] and compact using a vibrating plate between each layer



Indique la pente à respecter
Indicates the slope to meet



Installer l'isolant; bien recouvrir les adaptateurs
Install insulation; cover adapters



Effectuer les connexions électriques en respectant la réglementation en vigueur
Make electrical connections according to applicable standards and regulations in effect



Appliquer un joint de silicone; NE PAS utiliser de ciment plastique
Apply a silicone caulking joint; DO NOT use plastic cement

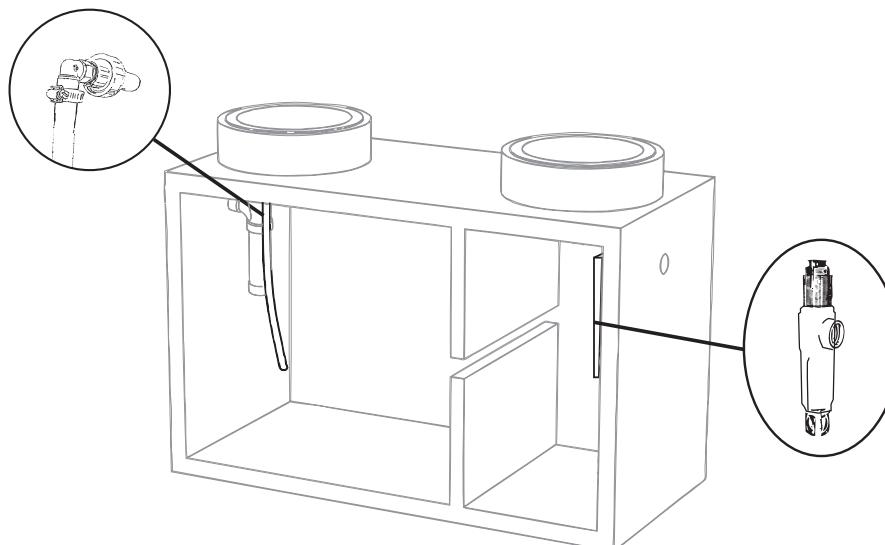


Connecteur électrique femelle
Female electrical connector

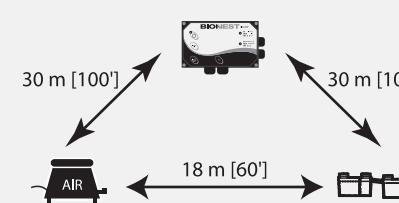


Connecteur électrique mâle
Male electrical connector

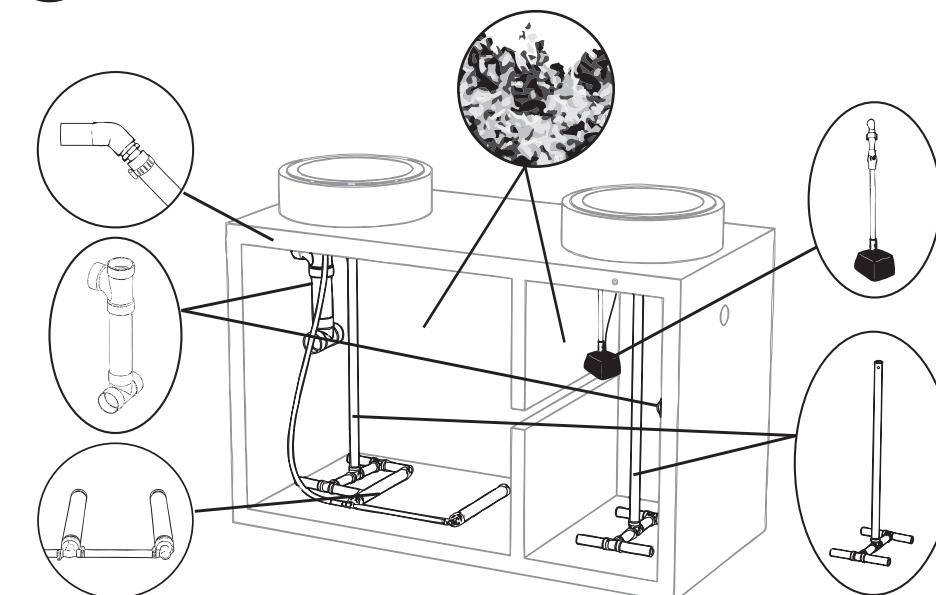
Fosse septique - Septic tank



Tout passage de véhicule ou stockage de charges lourdes sur et à moins de 3 m des réservoirs est interdit.
Passing vehicle or storage of heavy loads on and within 3 m of the tanks is forbidden.



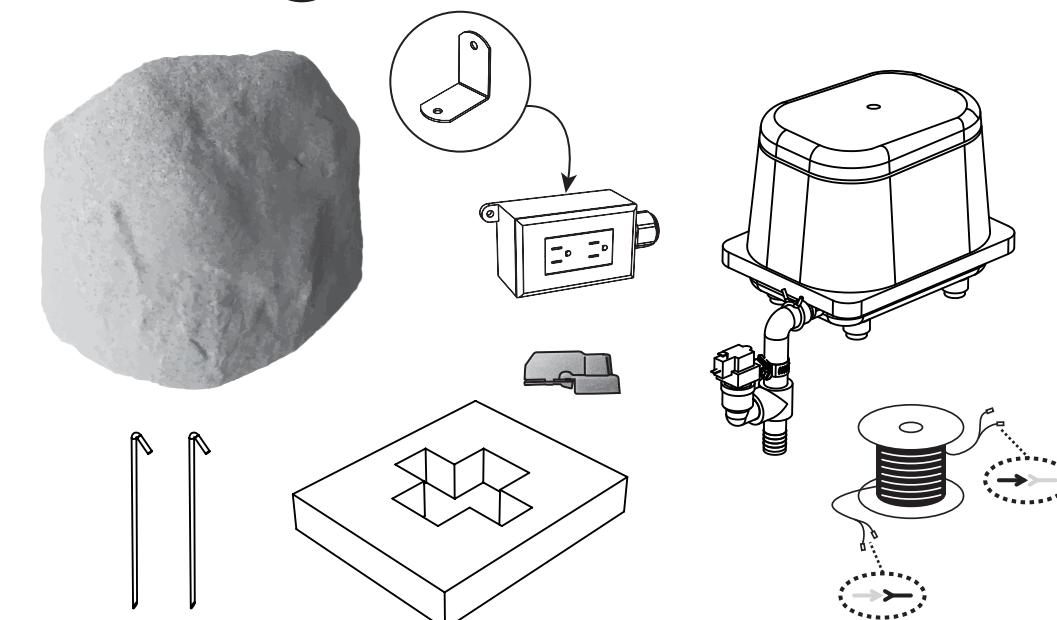
Réacteur BIONEST™ - BIONEST® reactor



Les composantes fournies avec les systèmes BIONEST™ permettent l'installation de l'aérateur dans un rayon de 18 m [60'] du réacteur BIONEST™. L'avertisseur sonore et visuel BIOLARM™ peut être installé dans un rayon de 30 m [100'] de l'aérateur et du réacteur BIONEST™. Si les distances indiquées ne peuvent être respectées, communiquer avec Bonest.

Components supplied with the BIONEST® systems were selected for the aerator installation within a 18 m [60'] radius of the BIONEST® reactor. The BIOLARM® can be installed within a 30 m [100'] radius of the aerator and the BIONEST® reactor. If the distances indicated can not be met, contact Bonest.

BIO-ROC™ - BIO-ROC™



L'installateur doit fournir le matériel, la main-d'œuvre et l'équipement nécessaire à la réalisation des travaux suivants:
1. Mise en place du système BIONEST™ 2. Conduites d'eaux usées et dispositif de rejet final de l'effluent 3. Raccordements électriques
De plus, il doit respecter les règles de sécurité en chantier.

The installer must provide materials, labour and equipment required for the realization of the following works:
1. Set-up of the BIONEST® system 2. Sewage pipes and final discharge of the effluent 3. Electrical connections
Moreover, the installer must respect the site safety rules.

Dans le cas de préparation de nourriture à des fin commerciales, les eaux de cuisine doivent être séparée et traiter adéquatement. Communiquer avec Bonest pour plus d'informations.

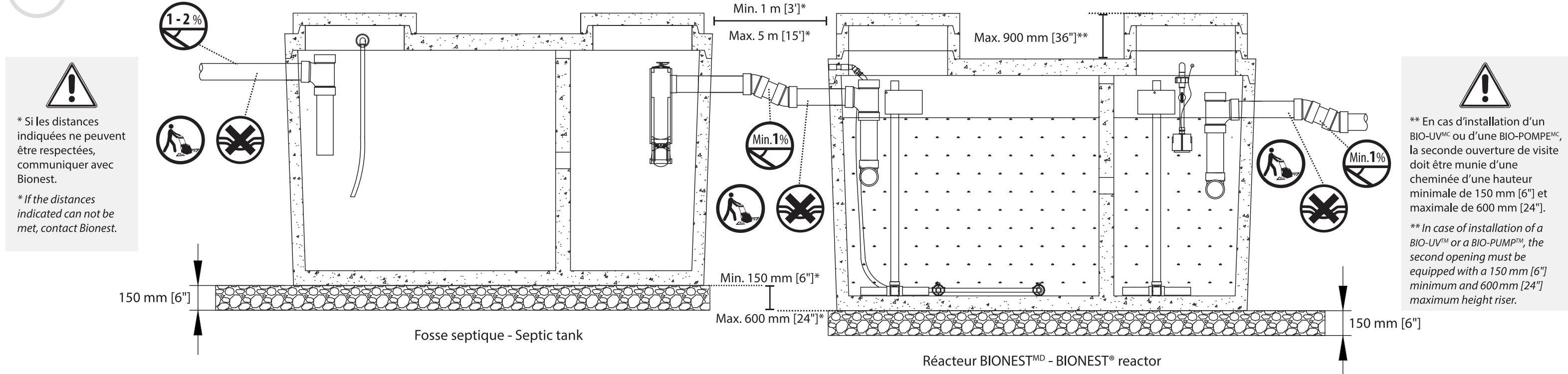
In the case of food preparation for commercial purposes, kitchen sewage must be separated and treated properly. Contact Bonest for further information.



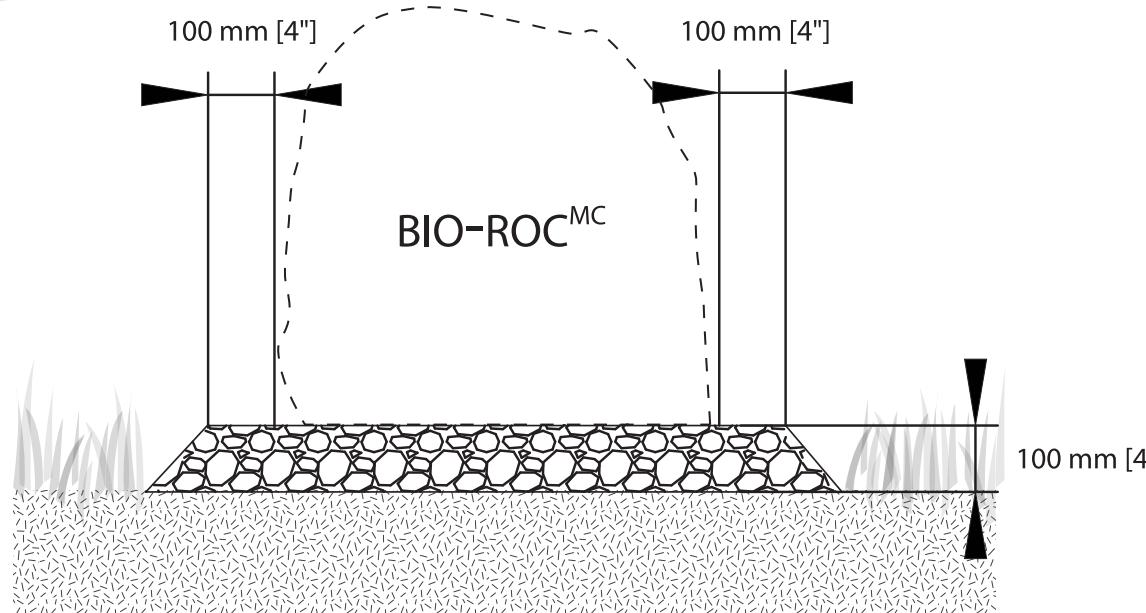
Les composantes du système BIONEST^{MD} peuvent être installées dans des réservoirs de béton ou de polyéthylène.
Disposer les réservoirs de manière à ce qu'ils s'adaptent à la pente du terrain tout en respectant les normes d'installation. Raccorder les réservoirs à la sortie de la résidence ou du bâtiment et au dispositif de rejet final, ainsi qu'entre eux, selon les règles de l'art. Consultez le Guide de l'installateur pour plus de détails.

BIONEST® system components can be installed either in concrete or polyethylene tanks.
Lay tanks so they adapt to the ground slope according to installation standards. Connect the tanks to the outlet of the building, to the final discharge device and with each other, according to good practice. See the Installer Guide for further details.

1

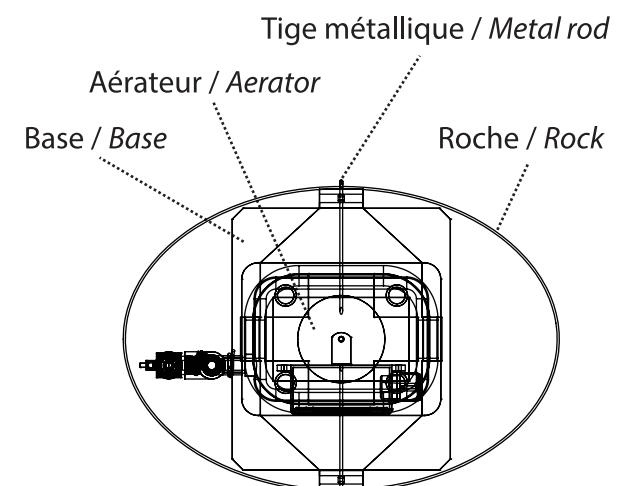


2



pierre ¾ nette concassée
¾ clean crushed stone

- L'installation ne doit pas être effectuée dans un point bas du terrain.
- Aucune accumulation d'eau ne doit être possible dans la couche de pierre concassée située sous le support de la pompe à air.
- *The installation shall not be done in a low point.*
- *No water accumulation shall be possible in the crushed stone layer underneath the air pump shelf.*
- Le BIO-ROC^{MC} ne doit pas être enfoui.
- Laisser un dégagement minimum de 100 mm [4"] autour de la base du BIO-ROC^{MC}.
- Les orifices d'aération doivent demeurer dégagés.
- Le BIO-ROC^{MC} doit être localisé dans un endroit accessible en tout temps.
- *The BIO-ROCTM must not be buried.*
- *Leave a 100 mm [4"] minimum clearance around the base of the BIO-ROCTM.*
- *Vent holes must remain clear of any obstruction.*
- *The BIO-ROCTM must be installed in a location accessible at all times.*

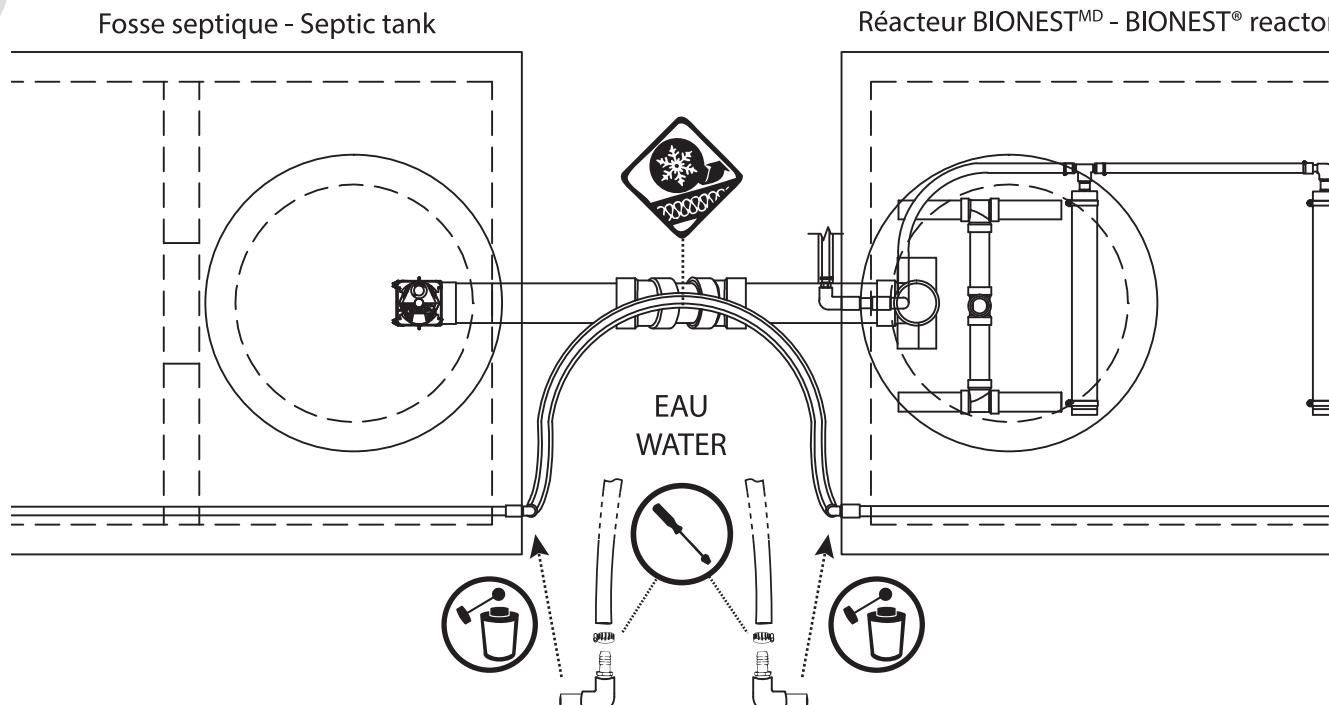


Positionner l'aérateur sur la base de polystyrène tel qu'il illustre

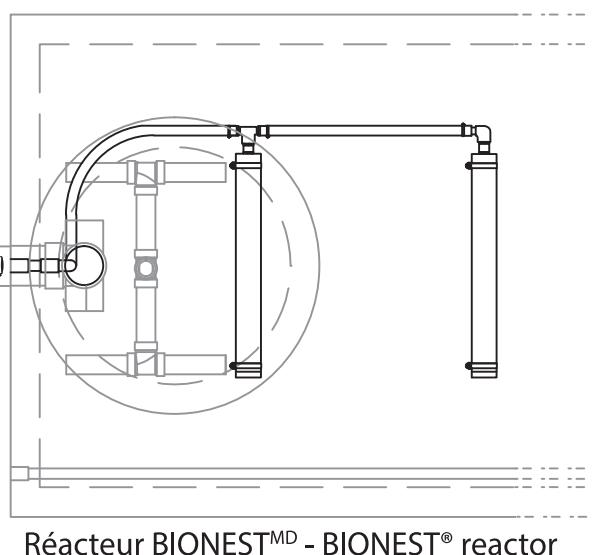
Position the aerator on the polystyrene base as shown

3

Fosse septique - Septic tank



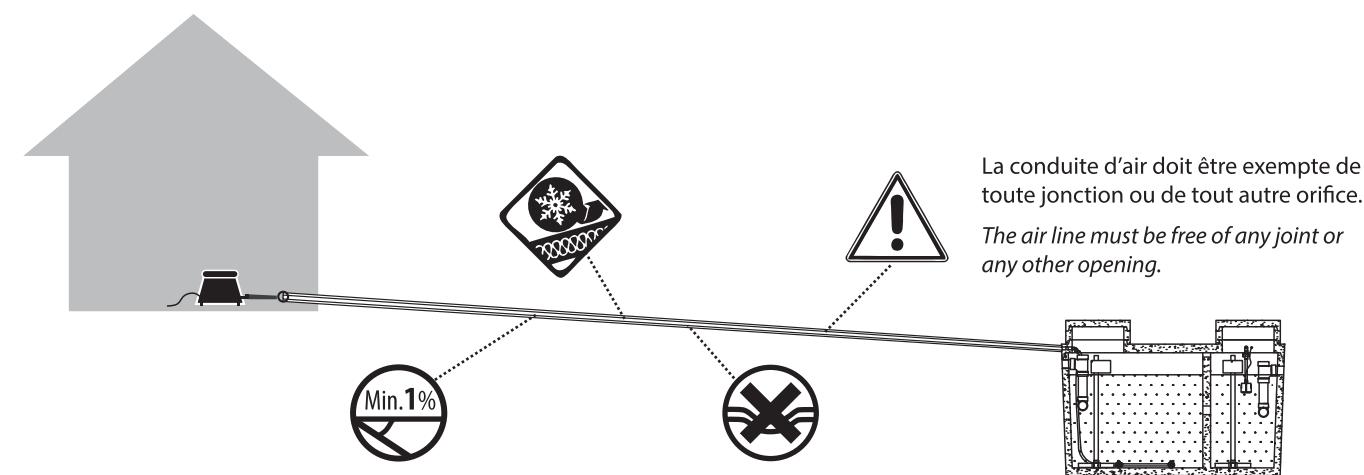
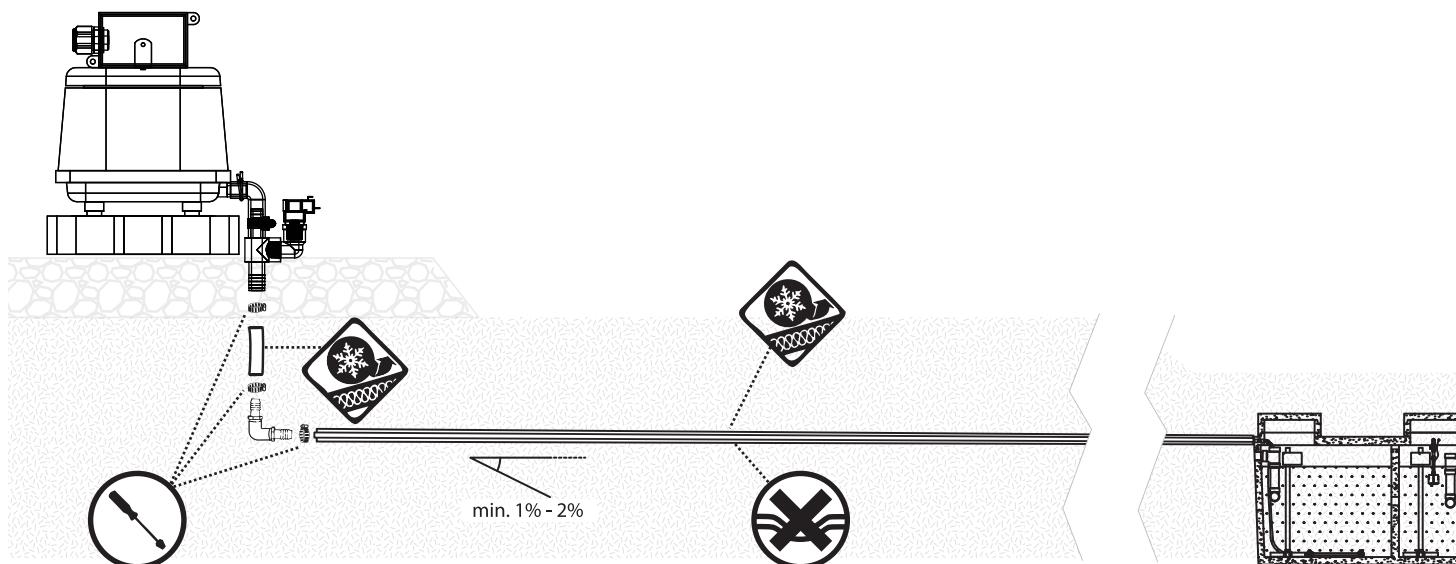
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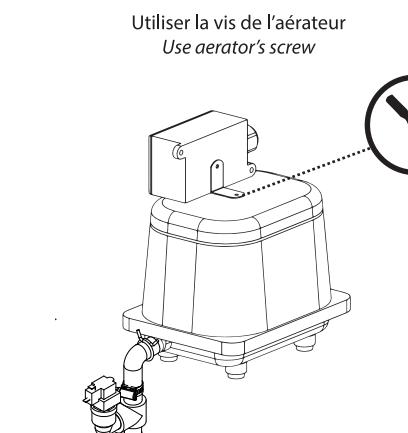
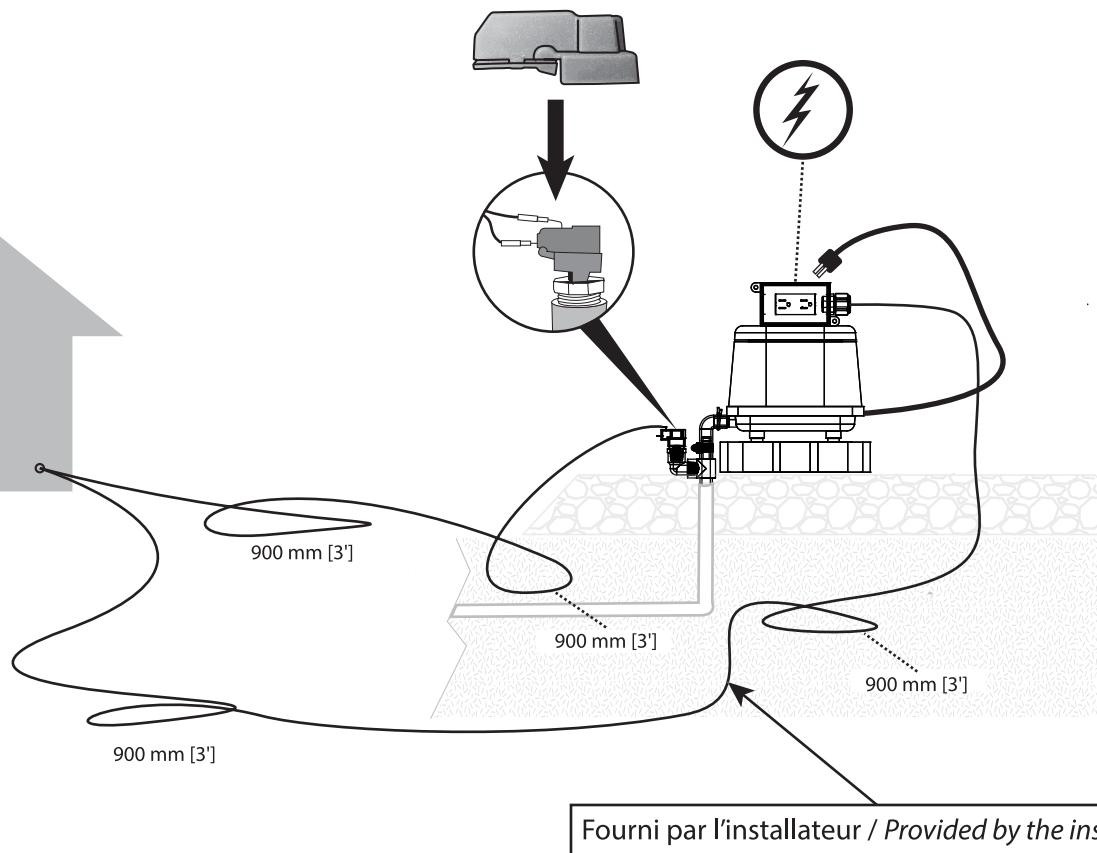
Réacteur BIONEST™ - BIONEST® reactor

5

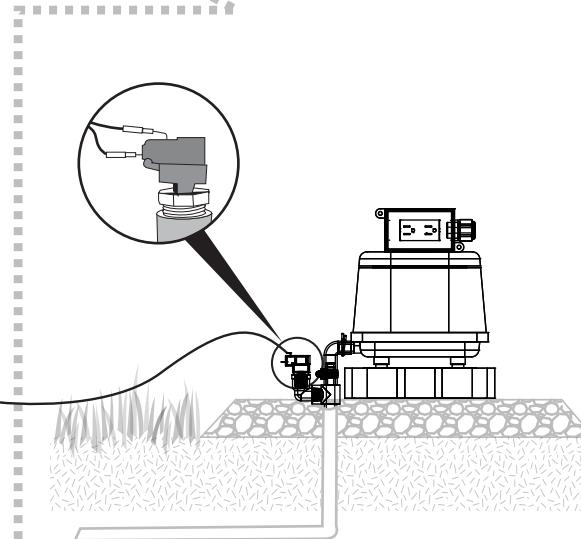
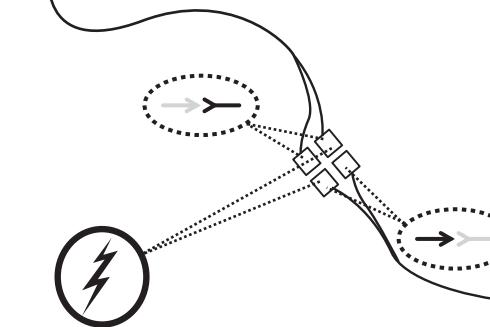
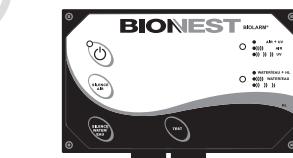
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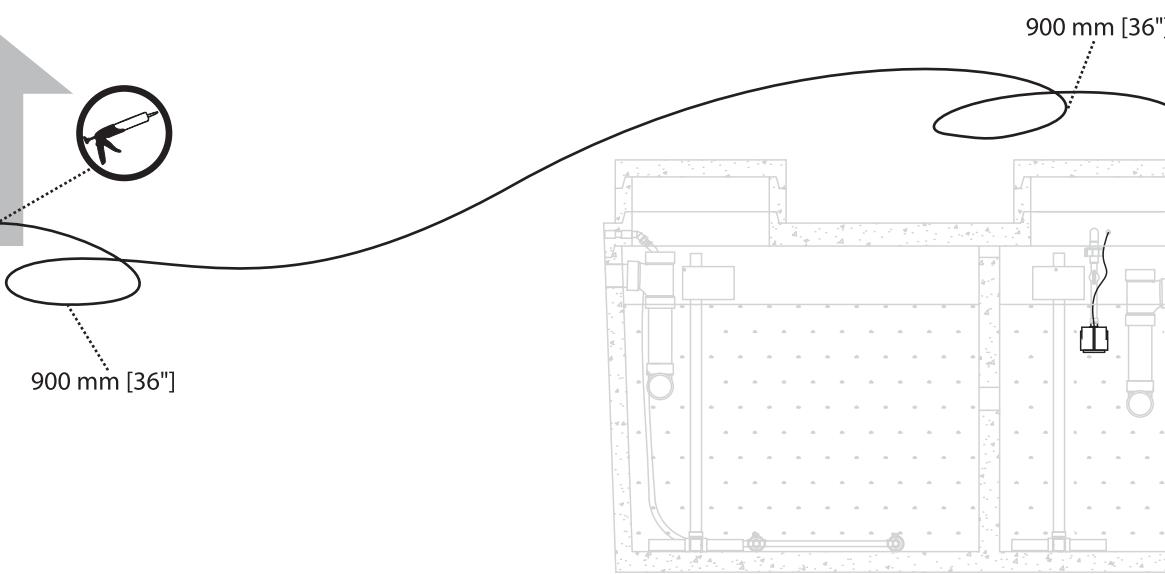
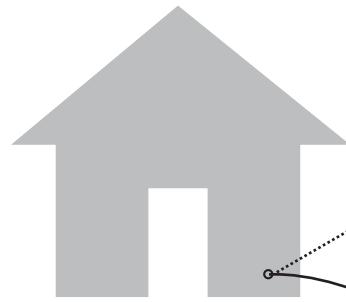
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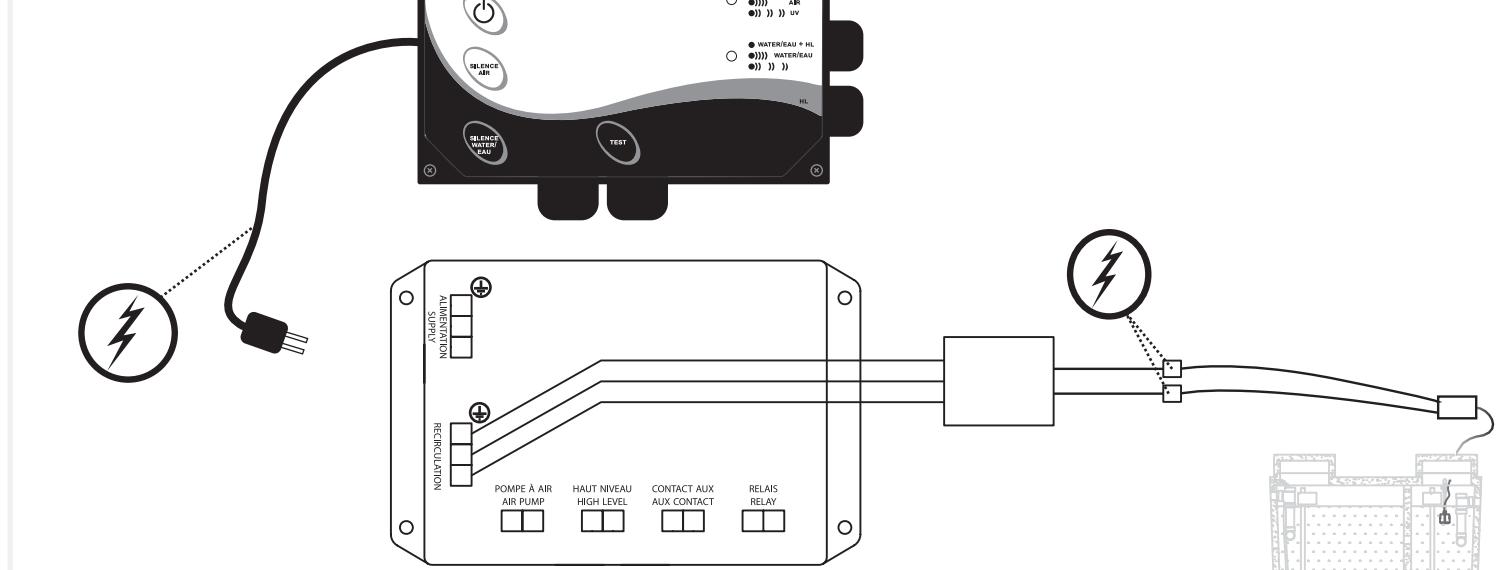
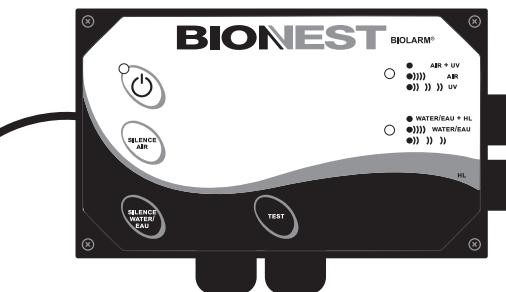
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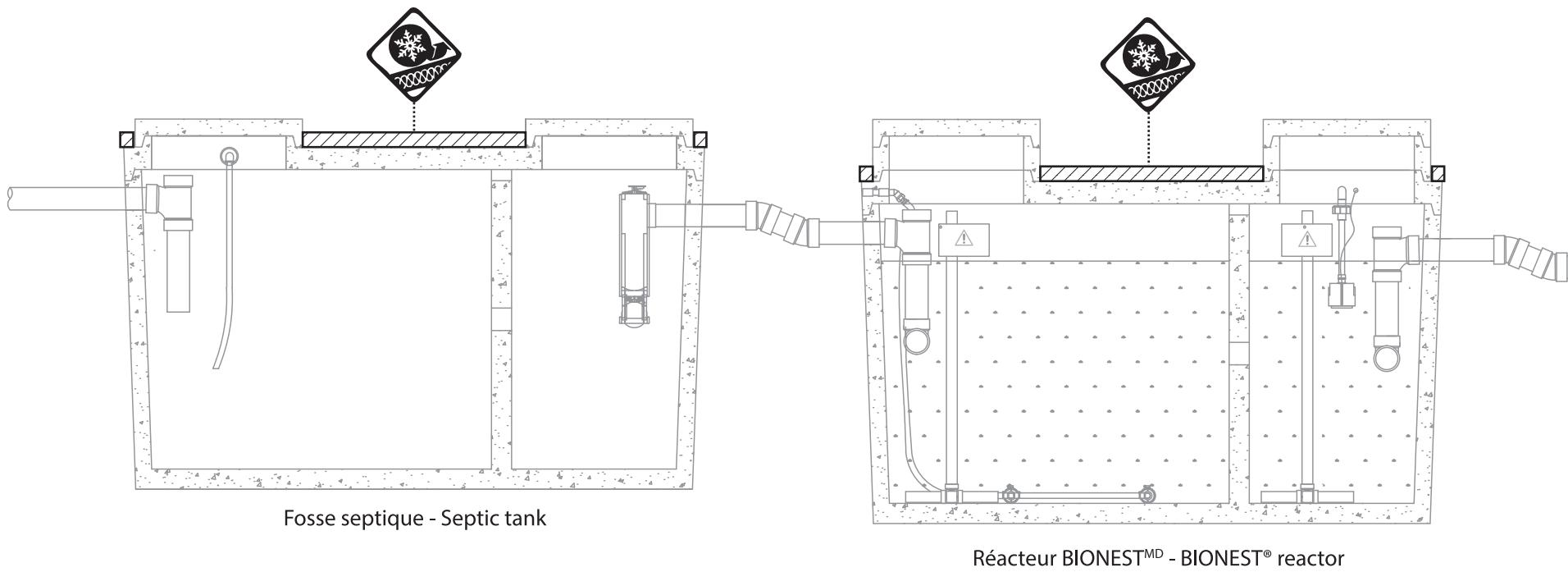
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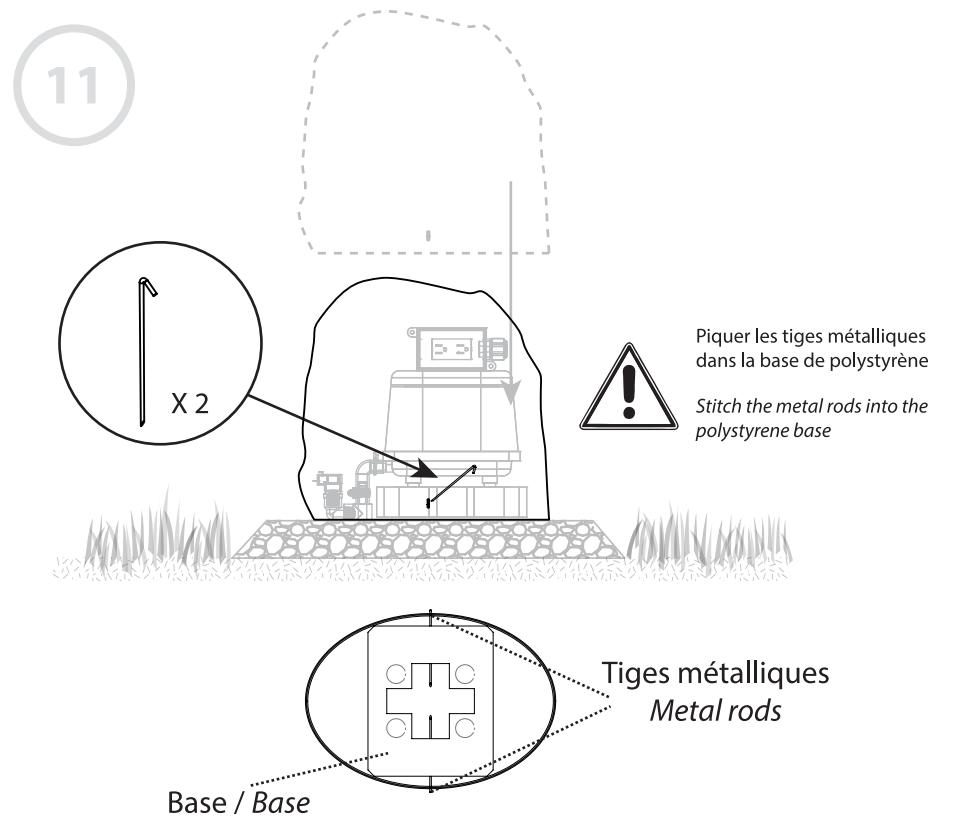
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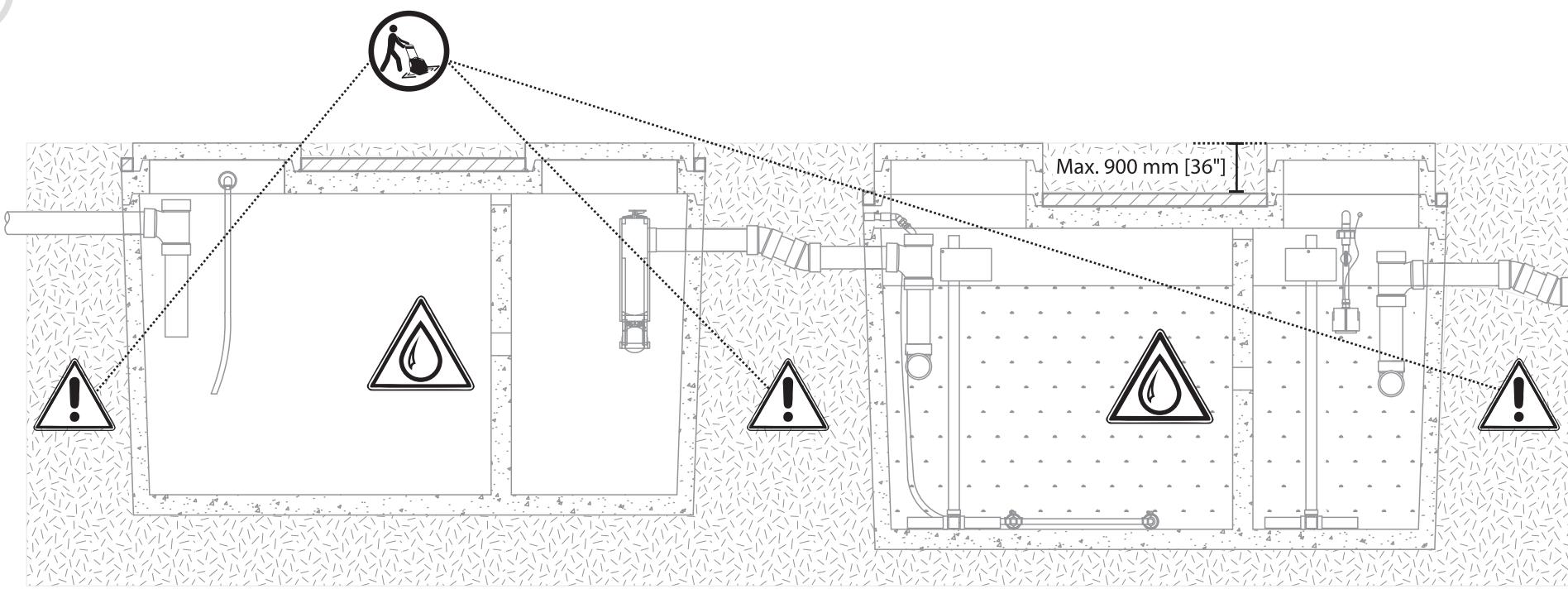
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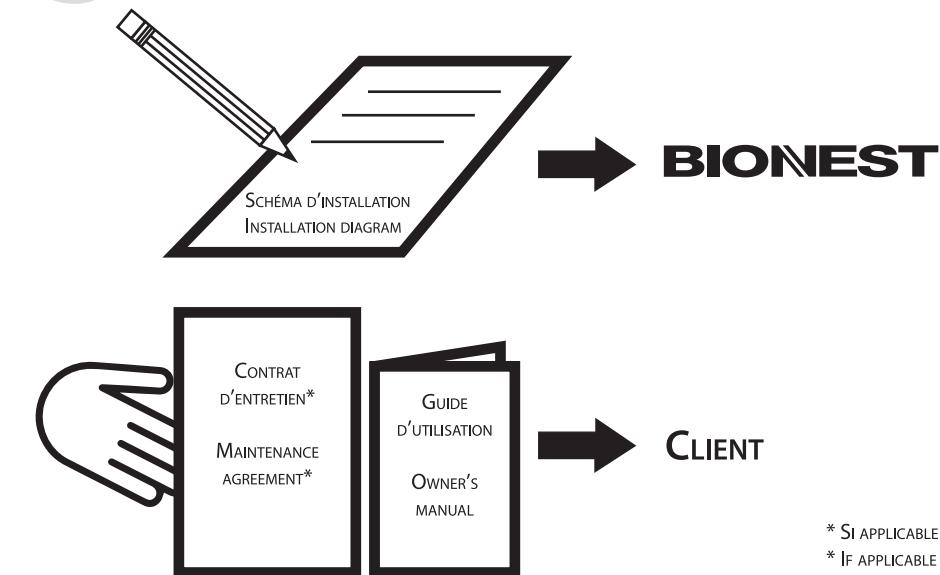
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12



13



* SI APPLICABLE
* IF APPLICABLE



BIONEST ZENITH™

INSTALLATION GUIDE

JUNE 2019

SECTION 1: BIONEST® SYSTEM

1.1	Operating principles	2
1.1.1	Model designation	
1.2	Components.....	6
1.2.1	Identification plate and serial number	
1.2.2	BIONEST® media	
1.2.3	Air diffuser	
1.2.4	Aerator	
1.2.5	Alarm	
1.2.6	Effluent filter	
1.3	Energy consumption.....	6

SECTION 1: BIONEST® SYSTEM

1.1 Operating principles

The BIONEST® system uses a technology which replicates an accelerated natural purification process normally occurring in the ground. This biological process takes place in a restricted and controlled environment removing organic and microbial pollutants harmful to your health and the environment.

The BIONEST® technology works according to the treatment principle of aerobic biological culture fixed on a self-supported synthetic support called "BIONEST® media".

Primary treatment collects wastewater and clarifies it by naturally separating solids and fat by settling and flotation. The water then flows to the BIONEST® reactor, filled with media. The reactor is aerated by an aerator and an air diffuser.

Finally, the treated water is discharged in accordance with the current regulations.

FIGURE 1-1: BIONEST® REACTOR COMPONENTS

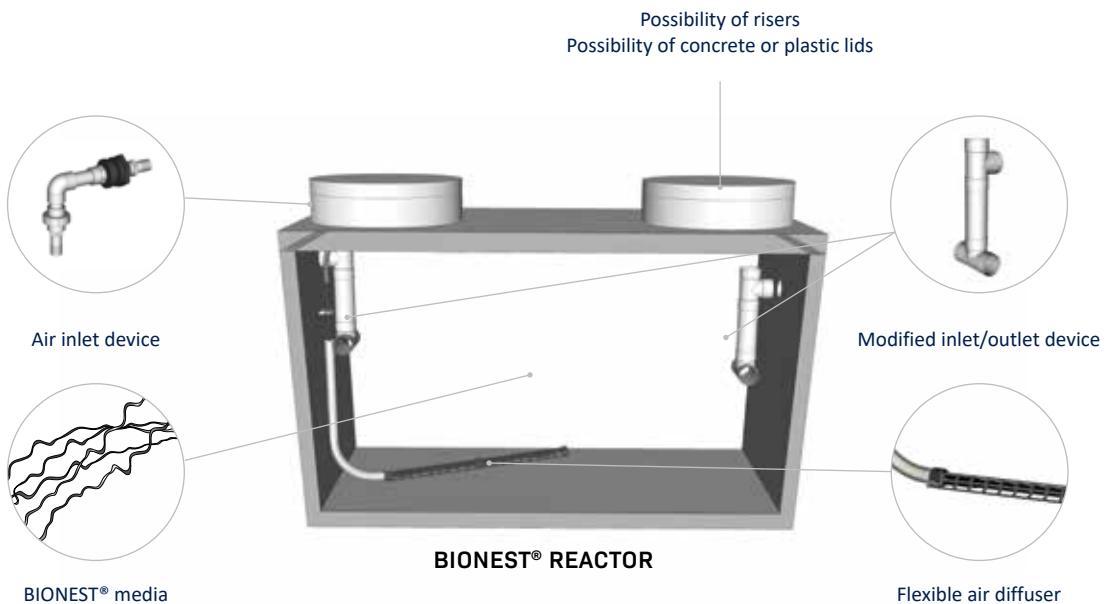
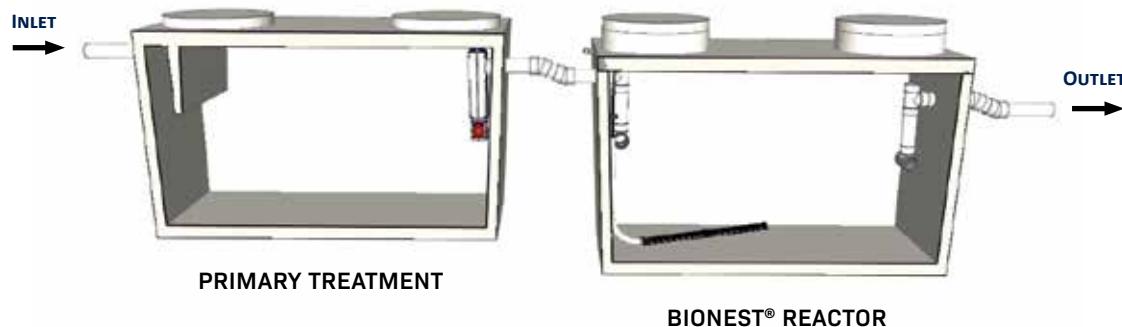


FIGURE 1-2: FLOW DIAGRAM*



* Also available in single tank configuration

1.1.1 Model designation

The models are designed to treat domestic wastewater from dwellings and other buildings with less than or equal to 10,000 L /d flow rates. The BIONEST® system consists of units pre-assembled and ready to ship for easy and quick installation. This range adapts to all field configurations, regardless of the type of soil.

The next table shows the required model according to the number of bedroom(s) and daily flow rate of an isolated dwelling.

TABLE 1-1: RESIDENTIAL AND OTHER BUILDINGS APPLICATIONS

Model	Treatment capacity	
	Daily flow rate (L/d)	
TWO TANK SYSTEMS	BTT-1100	1,100
	BTT-1800	1,800
	BTT-2250	2,250
	BTT-2750	2,750
	BTT-3400	3,400
	BTT-3900	3,900
	BTT-4900	4,900
	BTT-6250	6,250
	BTT-8900	8,900
	BTT-10000	10,000
ONE TANK SYSTEMS	BST-1100	1,100
	BST-1600	1,600
	BST-2100	2,100
	BST-2600	2,600

TABLE 1-2: Design elements for residential and other buildings applications - Two tank systems

Model	Daily flowrate (L/d)	Primary treatment Minimal treatment volume (m ³)	BIONEST® reactor Minimal treatment volume (m ³)	Aerator(s)	
				Number	Model
BTT MODELS	BTT-1100-BK	1,100	2.8	2.8	1 HP-60
	BTT-1100-MAC	1,100	2.8	2.8	1 HP-60
	BTT-1800-BK	1,800	3.7	3.7	1 HP-80
	BTT-1800-IN	1,800	4.1	4.1	1 HP-80
	BTT-1800-MAC	1,800	3.7	3.7	1 HP-80
	BTT-1800-MO	1,800	3.7	3.7	1 HP-80
	BTT-1800-RD	1,800	3.7	3.7	1 HP-80
	BTT-2250-BK	2,250	4.7	4.7	1 HP-100
	BTT-2250-MAC	2,250	4.7	4.7	1 HP-100
	BTT-2250-MO	2,250	4.7	4.7	1 HP-100
	BTT-2250-RD	2,250	4.7	4.7	1 HP-100
	BTT-2250-WN	2,250	4.7	4.7	1 HP-100
	BTT-2750-BK	2,750	6.2	6.2	1 HP-100
	BTT-2750-IN	2,750	5.8	5.8	1 HP-100
	BTT-2750-MAC	2,750	6.2	6.2	1 HP-100
	BTT-2750-MO	2,750	5.7	5.7	1 HP-100
	BTT-2750-RD	2,750	6.1	6.1	1 HP-100
	BTT-2750-WN	2,750	5.9	5.9	1 HP-100
	BTT-3400-BK	3,400	7.6	7.6	1 HP-150
	BTT-3400-MAC	3,400	7.6	7.6	1 HP-150
	BTT-3400-RD	3,400	7.1	7.1	1 HP-150
	BTT-3400-WN	3,400	7.0	7.0	1 HP-150
	BTT-3900-BK	3,900	9.4	9.4	1 HP-150
	BTT-3900-MAC	3,900	9.5	9.5	1 HP-150
	BTT-3900-MO	3,900	7.1	7.1	1 HP-150
	BTT-3900-RD	3,900	9.2	9.2	1 HP-150
	BTT-3900-WN	3,900	7.9	7.9	1 HP-150
	BTT-4900-BK	4,900	11.6	11.6	1 HP-200
	BTT-4900-MAC	4,900	11.8	11.8	1 HP-200
	BTT-4900-MO	4,900	10.5	10.5	1 HP-200
	BTT-4900-WN	4,900	10.2	10.2	1 HP-200
	BTT-6250-BK	6,250	14.1	14.1	2 HP-150
	BTT-6250-MAC	6,250	14.2	14.2	2 HP-150
	BTT-6250-RD	6,250	14.0	14.0	2 HP-150
	BTT-6250-WN	6,250	13.0	13.0	2 HP-150
	BTT-8900-BK	8,900	18.5	18.5	2 HP-200
	BTT-8900-MAC	8,900	19.0	19.0	2 HP-200
	BTT-10000-BK	10,000	23.3	23.3	2 HP-200
	BTT-10000-MAC	10,000	23.6	23.6	2 HP-200
	BTT-10000-WN	10,000	26.0	26.0	2 HP-200

TABLE 1-3: Design elements for residential and other buildings applications - One tank systems

Model	Daily flowrate (L/d)	Primary treatment Minimal treatment volume (m ³)	BIONEST® reactor Minimal treatment volume (m ³)	Aerator(s)	
				Number	Model
BST MODELS	BST-1100-BK	1,100	2.3	2.1	1 HP-60
	BST-1100-IN	1,100	1.8	2.3	1 HP-60
	BST-1100-MAC	1,100	2.3	2.3	1 HP-60
	BST-1100-MO	1,100	2.3	2.3	1 HP-60
	BST-1100-RD	1,100	2.2	2.3	1 HP-60
	BST-1100-WN	1,100	2.3	2.3	1 HP-60
	BST-1600-BK	1,600	2.7	3.3	1 HP-80
	BST-1600-IN	1,600	2.5	3.3	1 HP-80
	BST-1600-MAC	1,600	2.7	3.3	1 HP-80
	BST-1600-MO	1,600	3.0	3.3	1 HP-80
	BST-1600-RD	1,600	3.4	3.5	1 HP-80
	BST-1600-WN	1,600	2.4	3.3	1 HP-80
	BST-2100-BK	2,100	3.0	4.3	1 HP-100
	BST-2100-MAC	2,100	3.1	4.3	1 HP-100
	BST-2100-MO	2,100	3.5	4.3	1 HP-100
	BST-2100-RD	2,100	2.6	4.3	1 HP-100
	BST-2100-WN	2,100	3.4	4.3	1 HP-100
	BST-2600-BK	2,600	3.8	5.4	1 HP-100
	BST-2600-MAC	2,600	3.9	5.4	1 HP-100
	BST-2600-MO	2,600	4.9	5.4	1 HP-100
	BST-2600-RD	2,600	3.6	5.4	1 HP-100
	BST-2600-WN	2,600	4.6	5.4	1 HP-100

1.2 Components

1.2.1 Identification plate and serial number

Identification plates, located on the alarm and on BIONEST® reactor, show your system's own specifications.

The system's serial number is located on the alarm.

1.2.2 BIONEST® media

The media is a non-toxic patented polymer ribbon, scored to promote growth of the bacterial biofilm.

1.2.3 Air diffuser

Aeration is provided by a diffuser which is connected to an aerator. The diffuser is installed in the BIONEST® reactor. Diffuser's lenght varies depending on model.

1.2.4 Aerator

The aerator provides oxygen to the system continuously. The continuous aeration allows to maintain ideal conditions for biological treatment.

1.2.5 Alarm

The BIONEST® system is equipped with a visual and audible alarm allowing to detect aeration malfunction. The alarm complies with CAN/CSA C22.2 No. 205 standard (where applicable).

1.2.6 Effluent filter

An effluent filter is installed at the outlet of the primary treatment. The effluent filter holds those solid particles larger than the filtration slots, thus preventing premature clogging of the downstream treatment system.

1.3 Energy consumption

The following table shows the energy consumption of a BIONEST® treatment system based on the type of aerator used.

MODEL*	POWER (W)	ENERGY CONSUMPTION (kWh/year)	ANNUAL ENERGY COST** (\$/YEAR)
HP-60	51	446.8	50.49 \$
HP-80	71	622.0	70.29 \$
HP-100	100	876.0	98.99 \$
HP-150	155	1,357.8	153.43 \$
HP-200	250	2,190.0	247.47 \$

* Or equivalent

** Data calculated from information provided by Hydro Ontario in June 2019 (11.3 ¢/kWh, taxes included)

SECTION 2: INSTALLATION

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SECTION 2: INSTALLATION

2.1 Important instructions

The height of the backfill above the tanks **shall not exceed 60 cm**. Contact the tank manufacturer for the maximum recommended installation depth for its products.

Tanks must be watertight and must receive only water from the dwelling.

The BIONEST® treatment system must be installed so that :

- No gutter or drain is connected;
- No flooding or underground water infiltration is possible;
- To ensure rapid recovery of vegetation to prevent soil erosion;
- To ensure easy access for emptying and inspection.

It is also important that :

- No vehicle passes within 3 m of the tank;
- No storage of heavy loads (200 kg or more) be placed within 3 m of the system (vehicle, blown snow, earth or gravel pile, etc.).

Remember to advise the owner to inform the different sub-contractors (landscape architect, snow removal contractor, etc.) of the location of the system.

2.2 Hydrostatic displacement

In order to avoid any movement of the system in the ground, it is essential:

- To perform compaction in consecutive layers with backfill material, respecting the Proctor value recommended by the consultant and using the appropriate compaction equipment (vibrating plate, jumping jack);
- To fill the tanks completely with clear water PRIOR to system start up.

2.3 Venting

The stale air from the primary treatment and the BIONEST® reactor is exhausted through the plumbing vent of the residence. The latter must be in good condition and high enough to evacuate the air throughout the year. The compaction of the material during the installation is important to avoid the pipes collapse.

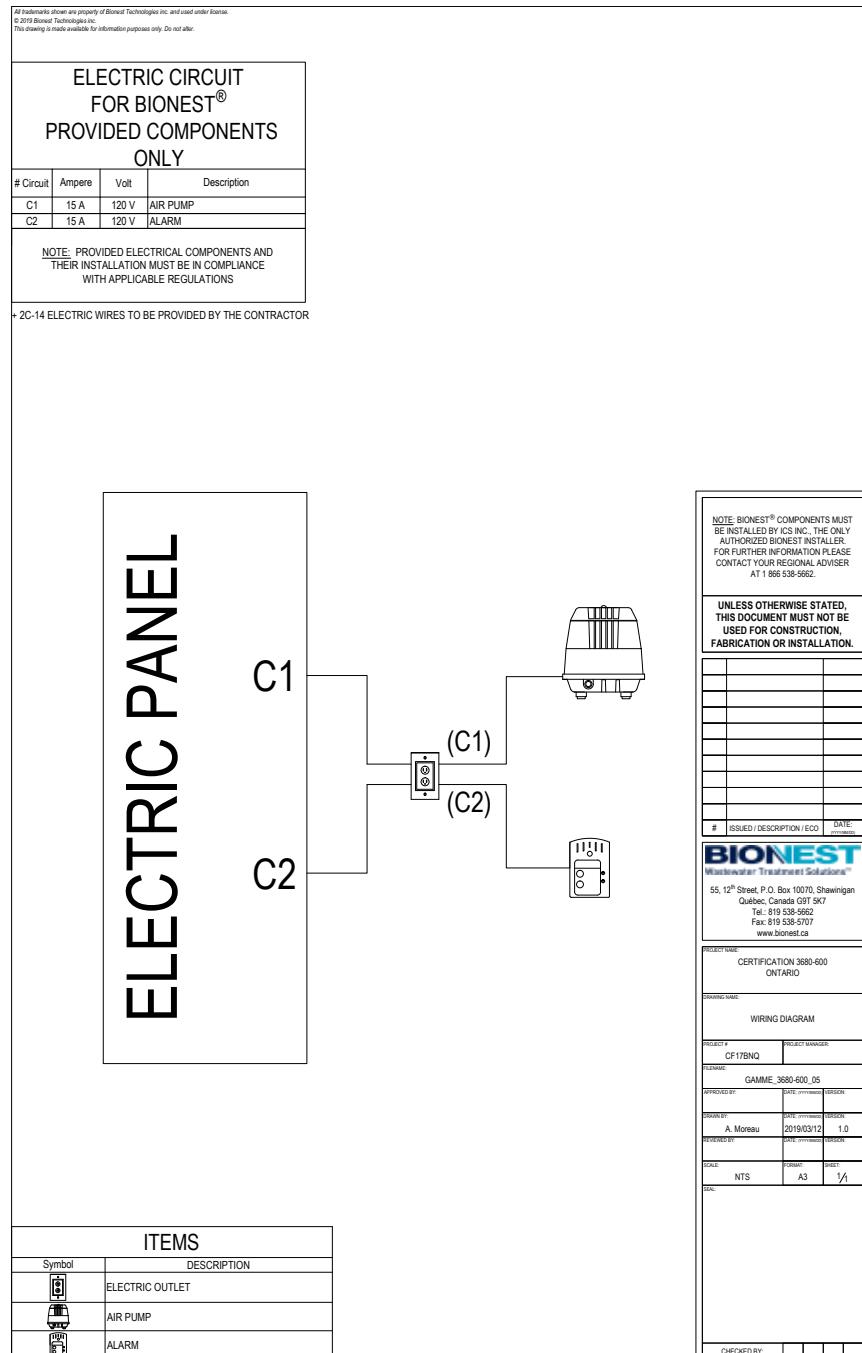
Where a pumping station is located between the building and the primary treatment or between the primary treatment and the reactor, an air line must be installed at the BIONEST® reactor's outlet. It is important to make sure that the opening is high enough so that it won't be blocked by snow during winter.

The vent and plumbing of the residence or building must comply with the applicable Building Code standards. In addition, the primary treatment must be vented by an air duct of at least 10 cm diameter or be connected to the air duct of the residence.

2.4 Electricity

The wire (NMWU 3C-14 size) for the aerator and alarm connections must be provided by the contractor.

All electrical connections must be made by a qualified electrician and in accordance with current standards and regulations.



2.5 Off-loading and unpacking

Upon receiving the BIONEST® wastewater treatment system, inspect the system to insure that no component is missing. In the event that the system you receive is incomplete or defective, please contact the assembler to get instructions and/or replacement components.

CAUTION: **The aerator should be handled with care. It should never be dropped. This may cause serious damage to the aerator.**

The components supplied with the BIONEST® systems have been selected for installation within 15 m of the aerator.

If the installation is to be within a 50 m radius, it is the responsibility of the installer to completely replace the polyethylene pipe for the BIONEST® reactor air supply. The air line must be free of any joint or any other opening that may cause a drop of air pressure in the line.

If installation is to be between a 15 m radius and a 50 m radius, arrange a special order with your assembler.

However, if the installation should be at a distance greater than 50 m, contact Bonest to assess the requirements and determine if the equipment provided is adequate for this type of application.

2.6 System installation

BIONEST® system components can be installed either in concrete, fibreglass or polyethylene tanks. The installation is carried out the same way; refer to the installation sequence (section 2.9).

2.6.1 Visual inspection of BIONEST® components

Prior to installing the tanks, make sure that all components of the BIONEST® system are installed in the tanks and that there is no sign of breakage or malfunction.

Primary treatment :

- The tank must comply with structural integrity and watertightness testing described in the Clauses 9.2 and 9.4 of Standard CAN/CSA-B66 or the Clauses 8.6 and 8.7 of Standard BNQ 3680-905.
- The inlet device may be a deflector, a baffle or an open-topped T or TY fitting. The top of this device must be at least 25 mm from the top of the tank and its bottom must extend below the liquid level to a depth of 100 mm to 125 mm.
- Effluent filter

BIONEST® reactor :

- The tank must comply with structural integrity and watertightness testing described in the Clauses 9.2 and 9.4 of Standard CAN/CSA-B66 or the Clauses 8.6 and 8.7 of Standard BNQ 3680-905.
- The inlet device may be a baffle or an open-topped T or TY fitting. The top of this device must be at least 25 mm from the top of the tank and its bottom must extend below the liquid level to a depth of 100 mm to 125 mm.
- Modified outlet device
- Air line (do not pull on the line to avoid moving or damaging the air diffuser installed at the bottom of the BIONEST® reactor)
- BIONEST® media (make sure that the media is evenly spreaded through the BIONEST® reactor)

2.6.2 Primary treatment installation

Concrete only → 1. Primary treatment must lie on a 150 mm minimal thickness coarse stone free draining material (over 25 mm) bedding.

2. Lay tank so it adapts to the ground slope according to installation standards.
3. Connect the primary treatment to the building with a 100 mm sewer pipe. Ensure the minimal slope is 1 to 2% between the outlet of the building and the inlet of the primary treatment.
4. When backfilling, use a coarse stone free draining material (over 25 mm). Backfill by layers of 150 mm and compact using a vibrating plate between each layer.

Caution: Sealed risers may be required so that both tank covers are at ground level. Risers must not exceed 600 mm in height.

Access covers must remain accessible at all times. Lids can be made of concrete, fiberglass or plastic.

Make sure that a butyl join or equivalent sealant is installed to ensure a watertight seal between primary treatment and risers.

2.6.3 BIONEST® reactor installation

1. BIONEST® reactor must lie on a 150 mm minimal thickness coarse stone free draining material (over 25 mm) bedding.

1. BIONEST® reactor must be installed at least 150 mm deeper than the primary treatment (except for a single tank system).

2. Lay tank so it adapts to the ground slope according to installation standards.
3. Connect the outlet of the primary treatment to the BIONEST® reactor inlet using a 100 mm sewer pipe and keeping a 1% slope towards the BIONEST® reactor (except for a single tank system).
4. Connect BIONEST® reactor outlet to next component inlet (tertiary treatment, polishing field, etc.) using a 100 mm sewer pipe and keeping a 1% slope.
5. When backfilling, use a coarse stone free draining material (over 25 mm). Backfill by layers of 150 mm and compact using a vibrating plate between each layer.

Caution: Sealed risers may be required so that both tank covers are at ground level. Risers must not exceed 600 mm in height.

Access covers must remain accessible at all times. Lids can be made of concrete, fiberglass or plastic.

Make sure that a butyl join or equivalent sealant is installed to ensure a watertight seal between BIONEST® reactor and risers.

2.6.4 Air line installation

1. Secure preassembled straight adapter at 19 mm end of the polyethylene roll using hose clamps.
2. Unwind the 19 mm polyethylene air line from the BIONEST® reactor up to the aerator.

Caution: **Make sure each air line keeps a 1% minimum slope towards the BIONEST® reactor and that pipes contains no sagging section.**

Caution: **Air line must be carefully backfilled with a coarse stone free draining material (over 25 mm) so not to puncture the air line.**

2.6.5 Alarm installation

DANGER



The power supply must always be shut off before working on electrical components of the BIONEST® system.

Please refer to the manufacturer's installation specifications in order to install this component. Connect the pressure switch of the aerator into the alarm using the supplied 2C-22 wire.

IMPORTANT: Leave a ± 900 mm length close to the aerator and another one by the building so to avoid tension build up while backfilling.

Properly seal the opening once the aerator connected to the alarm.

2.7 System start up

The tanks must be filled completely with **clear water** prior to system start up. water from lakes, rivers or ditch is prohibited.

To start the system:

- Connect the aerator's power supply;
- Connect the alarm's power supply.

2.8 Disposal of treated effluent

The water treated by the BIONEST® system must be discharged in accordance with the current regulations.

2.9 Installation sequence

INSTALLATION SPECIFICATION

Pt. 2

Model	Daily flowrate (L/d)	Primary treatment volume (m³)	Minimal treatment volume (m³)	BIONEST® reactor Minimal treatment volume (m³)	Number	Model	Aerators(s)
BTT-100-BK	1,100	2.8	2.8	2.8	1	HP-80	
BTT-100-MAC	1,100	2.8	2.8	2.8	1	HP-80	
BTT-100-BK	1,800	3.7	3.7	3.7	1	HP-80	
BTT-100-N	1,800	4.1	4.1	4.1	1	HP-80	
BTT-100-MAC	1,800	3.7	3.7	3.7	1	HP-80	
BTT-100-MO	1,800	3.7	3.7	3.7	1	HP-80	
BTT-1800-RD	1,800	3.7	3.7	3.7	1	HP-80	
BTT-2250-BK	2,250	4.7	4.7	4.7	1	HP-100	
BTT-2250-MAC	2,250	4.7	4.7	4.7	1	HP-100	
BTT-2250-MO	2,250	4.7	4.7	4.7	1	HP-100	
BTT-2250-RD	2,250	4.7	4.7	4.7	1	HP-100	
BTT-2250-WN	2,250	4.7	4.7	4.7	1	HP-100	
BTT-2750-BK	2,750	6.2	6.2	6.2	1	HP-100	
BTT-2750-IN	2,750	5.8	5.8	5.8	1	HP-100	
BTT-2750-MAC	2,750	6.2	6.2	6.2	1	HP-100	
BTT-2750-MO	2,750	5.7	5.7	5.7	1	HP-100	
BTT-2750-RD	2,750	6.1	6.1	6.1	1	HP-100	
BTT-2750-WN	2,750	5.9	5.9	5.9	1	HP-100	
BTT-3400-BK	3,400	7.6	7.6	7.6	1	HP-150	
BTT-3400-MAC	3,400	7.6	7.6	7.6	1	HP-150	
BTT-3400-RD	3,400	7.1	7.1	7.1	1	HP-150	
BTT-3400-WN	3,400	7.0	7.0	7.0	1	HP-150	
BTT-3900-BK	3,900	9.4	9.4	9.4	1	HP-150	
BTT-3900-MAC	3,900	9.5	9.5	9.5	1	HP-150	
BTT-3900-MO	3,900	7.1	7.1	7.1	1	HP-150	
BTT-3900-RD	3,900	9.2	9.2	9.2	1	HP-150	
BTT-3900-WN	3,900	7.9	7.9	7.9	1	HP-150	
BTT-4900-BK	4,900	11.6	11.6	11.6	1	HP-200	
BTT-4900-MAC	4,900	11.8	11.8	11.8	1	HP-200	
BTT-4900-MO	4,900	10.5	10.5	10.5	1	HP-200	
BTT-4900-RD	4,900	10.2	10.2	10.2	1	HP-200	
BTT-4900-WN	4,900	14.2	14.2	14.2	2	HP-200	
BTT-6250-BK	6,250	14.0	14.0	14.0	2	HP-200	
BTT-6250-MAC	6,250	13.0	13.0	13.0	2	HP-200	
BTT-6250-RD	6,250	18.5	18.5	18.5	2	HP-200	
BTT-6250-WN	6,250	19.0	19.0	19.0	2	HP-200	
BST-1000-BK	10,000	23.3	23.3	23.3	2	HP-200	
BST-1000-MAC	10,000	23.6	23.6	23.6	2	HP-200	
BST-1000-MO	10,000	26.0	26.0	26.0	2	HP-200	
BST-100-BK	1,100	2.3	2.1	2.1	1	HP-60	
BST-100-N	1,100	1.8	2.3	2.3	1	HP-60	
BST-100-MAC	1,100	2.3	2.3	2.3	1	HP-60	
BST-100-MO	1,100	2.3	2.3	2.3	1	HP-60	
BST-100-RD	1,100	2.2	2.3	2.3	1	HP-60	
BST-100-WN	1,100	2.3	2.3	2.3	1	HP-60	
BST-1600-BK	1,600	2.7	3.3	3.3	1	HP-80	
BST-1600-IN	1,600	2.6	3.3	3.3	1	HP-80	
BST-1600-MAC	1,600	2.7	3.3	3.3	1	HP-80	
BST-1600-MO	1,600	3.0	3.3	3.3	1	HP-80	
BST-1600-RD	1,600	3.4	3.5	3.5	1	HP-80	
BST-1600-WN	1,600	2.4	3.3	3.3	1	HP-80	
BST-2000-BK	2,100	3.0	4.3	4.3	1	HP-100	
BST-2000-MAC	2,100	3.1	4.3	4.3	1	HP-100	
BST-2000-MO	2,100	3.5	4.3	4.3	1	HP-100	
BST-2000-RD	2,100	2.6	4.3	4.3	1	HP-100	
BST-2000-WN	2,100	3.4	4.3	4.3	1	HP-100	
BST-2600-BK	2,600	3.8	5.4	5.4	1	HP-100	
BST-2600-MAC	2,600	3.9	5.4	5.4	1	HP-100	
BST-2600-MO	2,600	4.9	5.4	5.4	1	HP-100	
BST-2600-RD	2,600	3.6	5.4	5.4	1	HP-100	
BST-2600-WN	2,600	4.6	5.4	5.4	1	HP-100	

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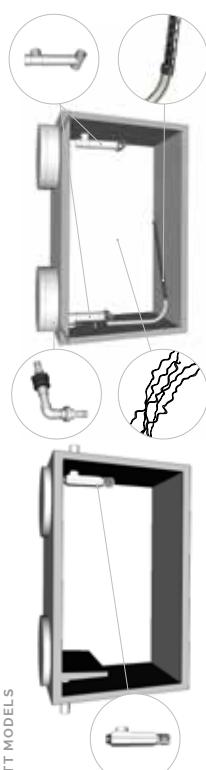
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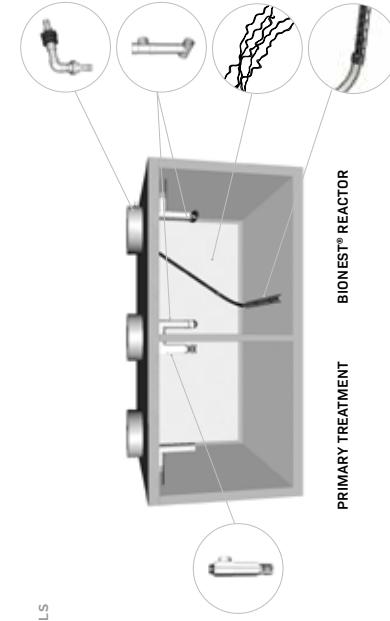
- Check material; if a component is missing and/or defective, contact the assembler.
- Indicates the slope to meet
- Glue using PVC cement
- Tighten hose clamps using a screwdriver
- Install insulation; cover adapters
- Backfill by layers of 150 mm [6"] and compact using a vibrating plate between each layer
- Make electrical connections according to applicable standards and regulations in effect

Legend

BTT MODELS



BIONEST® REACTOR



PRIMARY TREATMENT

BST MODELS



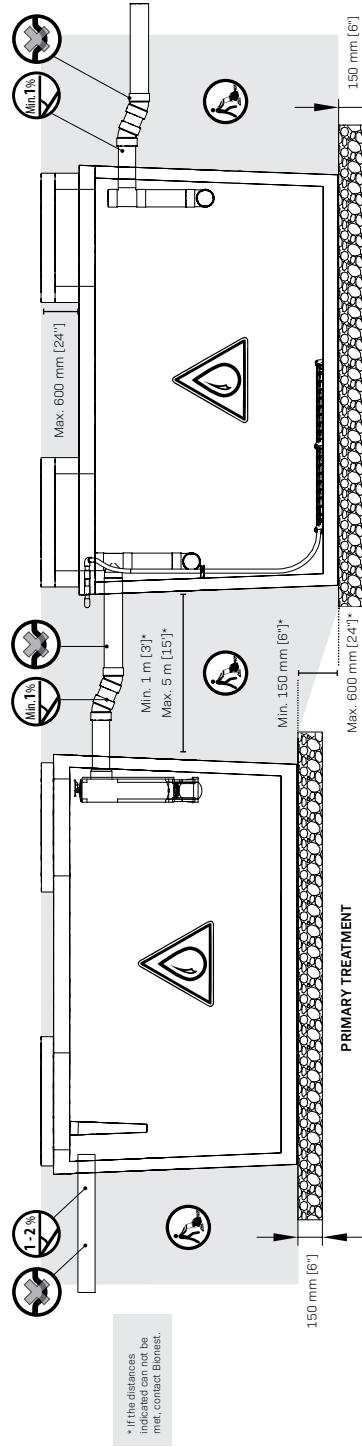
PRIMARY TREATMENT

BIONEST® REACTOR

INSTALLATION SPECIFICATION

Fr ed 2

Lay tanks so they adapt to the ground slope according to installation standards. Connect the tanks to the outlet of the building, to the final discharge device and with each other, according to good practice.



- The installer must respect the site safety rules and provide materials, labour and equipment required for the realization of the following works:
1. Set-up of the BIONEST® system
 2. Sewage pipes and final discharge of the effluent
 3. Electrical connections

All trademarks are property of Bonest Nederland BV, and its distributor for the European market. The BONEST® technology is protected and registered under PCT EP Patent Application No. 979000777777, and registered in the 27 countries members of the European Patent Office, patents 798-807-000-213 in the United States of America, and registered in Canada, 0353520. In these countries, BONEST® is used as a brand name for wastewater tanks in Europe and as a trade name for the plant documents. We may also use BONEST® in other countries.

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ALARM

The BONEST® system is equipped with an alarm to detect a malfunction of the aeration. Please refer to the manufacturer's installation specifications to install this component. Connect then the alarm switch located on the air pump in the air line using the supplied EZ-2 wire. The alarm complies with Standards CAN/CSA-C22.1 and CAN/CSA-C22.2 (where applicable).

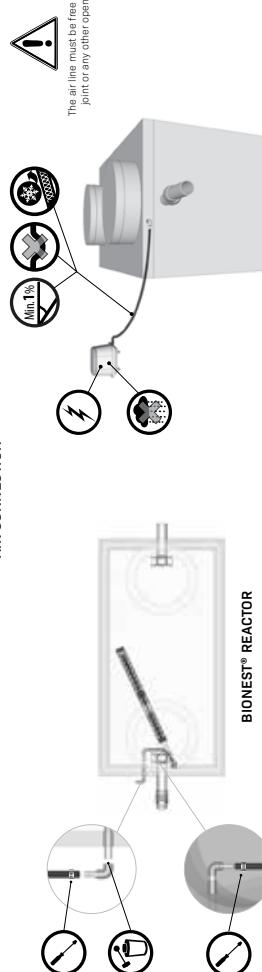
TO GIVE TO THE CUSTOMER



Handle the aerator with care. This one must not be dropped or moved abruptly.



AIR CONNECTION



BIONEST® REACTOR

2.10 Replacement parts

In case of onsite breakage or component failure, replacement parts are available; contact Bonest for more information.

Description	Model*	BIONEST code
Aerator	HP-60	P00025
	HP-80	P00009
	HP-100	P00005
	HP-150	P00004
	HP-200	P00008
Aerator repair kit (diaphragms)	HP-60	RP0004
	HP-80	
	HP-100	RP0005
	HP-150	RP0006
	HP-200	
Diffuser	0.75 m	ZA0306
	1.0 m	ZA0307
	1.3 m	ZA0308
	2.1 m	ZA0309

* Or equivalent