User Manual

installation of SOTRALENTZ and Plastepur®
(household wastewater decontamination).

Ten Year Guarantee

in accordance with the law 78/12, 4.01.1978 (the professional responsibility of professionals that fabricate and assimilate construction material) by the police act IARD.

Conformity

These products conform to the:
- French Standard NF DTU 64-1,
- European Standard EN 1085, technical vocabulary,
- European Standard EN 12 566-1+A1, CE mark on septic tanks.
- Serial number engraved on every product.

You want to buy and install the independent sewage disposal system PLASTEPUR for the pre-treatment and purification of sewage and domestic wastewater from your building.

Read this booklet carefully before any installation or fitment of our sewage disposal systems.
This book contains information concerning the description, the installation, the proper usage and the maintenance of our Principal and Secondary treatment Units and Accessories.

PLASTEPUR installation comprising:
- **SG 500 Grease extractor**
- **Inspection chamber RVISIT (new),**
- **EPURBLOC**
- **Vertical flow sand filter-bed with surface water discharge, equipped with inspection areas for: distribution SL-RR, looping SL-RBOU and vertical collection SL-RCOLV**

Find our kits: **Kit FD** for drained filter systems and **Kit FND** for non-drained filter systems

Summary

Principal Pre-treatment Units:

CE mark on all septic tanks

Secondary Treatment Units

Accessories

SOTRALENTZ
HABITAT

All information available on our site: www.sotralentz.com, under the tab "Habitat", and link "direct access", then "Technical brochure"

Plastepur®, a complete range

in anaerobic pre-treatment and aerobic purification

1 - ANAEROBIC PRE-TREATMENT (see document A64)

- Grease extractor (SL-SG) optional: for pre-treatment of sewage and household wastewater, retaining large solid particles and grease which floats after solidification.
- Septic tanks (SL-FS) and settling tanks (SL-FSDC), CE mark:
  - Pre-treatment of raw sewage and household wastewater in septic tanks, settling tanks and Epurblocs.
  - Settling and separation of raw sewage from the water, followed by anaerobic microbial fermentation of the sludge leading to its partial liquefaction
- Pre-filters (SL-FD): the siphoned pre-treated effluent is then filtered, trapping particles in suspension (SOM*) and reducing the BOD5** when placed downstream of a septic tank (SL-FS). Pre-filtering is necessary after septic tanks with capacities greater than 10 000 litres.
- EPURBLOC® or clarification tank, CE marked : septic tank taking all household sewage, comes with an integrated detachable pre-filter clogging indicator, equipped with "Performance" filtering mesh, ensuring good functioning of the septic tank and of the Pre-filter, replacing the succession of septic tank (SL-FS) + pre-filter (SL-FD).
- Higher ventilation (VH - obligatory), forcibly draws away fermentation gases. Principal and secondary pre-treatment PLASTEPUR® units come with a built-in opening for the Higher ventilation Ø 110 mm. All Principal and Secondary Treatment Units must be equipped with Higher ventilation to remove gases

Diagram of Higher ventilation (VH) from the DTU (Unified Technical Document) shows the ventilation inserted into the outlet (downstream) of the septic tank, towards the filter bed or soak-a-way (distribution/irrigation)

Sotralentz suggests inserting the Higher ventilation (VH) into the inlet (IN) of the septic tank, grease extractor and pre-filter (upstream) and not into the outlet (OUT) of the septic tank, grease extractor and pre-filter (downstream).

Sotralentz's experience shows that clogging often occurs at the insertion point downstream of the septic tank, this clogging co-occurs with a settling of the gas extraction pipe placed in the backfilling (sand) around the septic tank.

A low pressure (suction effect) is essential for the extraction of fermentation gases, emptying them via the Higher ventilation pipes to the roof apex.

A pressure differential occurs after the arrival of domestic wastewater into the septic tank. When the raw domestic wastewater (density 1.0 to 1.1) enters the septic tank, the raw domestic wastewater and that in course of pre-treatment (density 1.3) in the septic tank do not mix immediately due to their density differential.

(Example: take a drop of oil falling into a glass of water: the drop falls and then floats instantly to the surface.)

The arrival of raw domestic wastewater into the septic tank causes a wave (a rise of water in the septic tank). This wave effect (water displacement of between 5 and 10 cm in the septic tank) compresses fermentation gases between the ceiling of the septic tank and the hat (layer of floating matter and dry grease).

This compression enables the evacuation of gases by causing a pressure differential in the Higher ventilation pipe, which is slotted into the inlet (upstream) of the septic tank. Gases always circulate in a direction opposite to the wastewater (wastewater = downward movement, and gas = upward movement).

When the ventilation is slotted into the outlet (downstream) of the septic tank, only residual gases are captured and vented in the rest period (between arrivals of raw wastewater) because of low pressure in the Higher ventilation pipe. Some septic tanks are equipped with a slot for the ventilation placed in the outlet (downstream). This slot does not allow any gas evacuation. It needs to have a succession of two (2) tube bends at 45 degrees installed. Gases moving through a tube bend of 45 degrees or more collide with the inside surface and bounce back towards their point of origin (the septic tank). However, the evacuation of gas can only occur in the presence of a single angle of less than 30 degrees. In this case, it is impossible to send the gases to the roof apex.

2 - AEROBIC PURIFICATION

(see document A64 or the Standard NF DTU 64-1)

Pre-treated sewage and wastewater are evacuated either by:

- gravitational overspill
- dosing tank outflow, standard or sequential
- or with a lift pump

towards the aerobic purification element by vertical or horizontal flow of pre-treated wastewater across successive layers of filtering materials present in the soil purification system, thus ensuring oxidation by either,

- by infiltration
- by the effluent outlet pipe, by ejection into the surface water system (drainage ditch, river, pond, lake…)
- or exceptionally, by a compact aerobic treatment unit (see document A64 and A24)

Non-mains sewage disposal system (A. N. C.) known as 'independent' Plastepur® Sotralentz.

omestic sewage and wastewater, having passed through an (optional) Grease Extractor (SLSG) go into a septic tank (SL-FS) or a EPURBLOC® (compulsory CE marked since 1st April 2006) to undergo anaerobic pre-treatment, is then piped to final aerobic purification before ejection or infiltration (ground or air).

During the placement of the PLASTEPUR® non-mains grouped sewage disposal system, the succession of a settling tank, an all water septic tank, EPURBLOC®, or a clarification tank (SL-CLARIF) with a standard or a 'Performance' pre-filter (SL-FD) is authorized (overflow volume is always ≥ than that of a EPURBLOC®, or a clarification tank placed downstream). At all times, the Principal Pre-treatment Units as well as a standard or 'Performance' pre-filter (SL-FD) and/or Grease Extractor (SL-SG) must be connected to a Higher ventilation with a minimum 100mm diameter, with outleting at the roof apex.

Plastepur® Conditions of use

The PLASTEPUR® non-mains sewage disposal systems are destined for:

- anaerobic pre-treatment
- aerobic treatment

of household wastewater and sewage, but not rainwater.

SOTRALENTZ-HABITAT equally offers a range of cisterns and water tanks, and their accessories, to capture and store rainwater and storm downpours (see documents EP64 and EP24).

The good working order of a Principal Pre-treatment Unit requires a minimum input in the order of 50 litres per day, per person.

To improve the efficiency of PLASTEPUR® SOTRALENTZ's independent sewage disposal systems

1 - it is recommended to avoid

- using an automatic toilet cleaner
- connecting the back wash of a water softener
- To use a garbage grinder or a pumped grinder upstream of Principal Pre-treatment Units (Grease Extractors (SL-SG) or septic tank (SL-FS) or settling tanks (SL-FSDC) or Epurbloc® or clarification units.

2 - It is strongly advised to NOT dispose of the following products into the water system:

- Oils, grease (engine, frying…)
- Waxes and resins
- Paints and solvents
- Petroleum products
- All toxic products
- All objects that decay slowly (cigarettes ends, sanitary pads, tampons, condoms, cinders, household dirt, cloths, plastic gloves, tissues)
- Condensation originating from gas heater outlet pipes, of low and medium temperatures
- Condensation arising from air conditioning units, dehumidifiers

3 - It is forbidden to:

- Cover or bury the caps of Pre-treatment Units, in accordance with current regulation laws
- To plant trees or large plantations within 3 meters from Principal Pre-treatment Units or the zone of aerobic treatment (irrigation/distribution, drainfields …),
- To link the drainage pipe of river water or roof guttering to your independent sewage disposal system
- To connect any soil siphon

*Suspended Organic Matter,
**Biochemical Oxygen Demand in 5 days

SOTRALENTZ HABITAT

Plastepur®, a complete range

in anaerobic pre-treatment and aerobic purification

SOTRALENTZ-HABITAT has designed, developed and tested the PLASTEPUR® range, Principal Pre-treatment Units, marks, Secondary Treatment Units and Accessories destined for

- Anaerobic pre-treatment
- Aerobic purification of domestic wastewater and sewage.

The PLASTEPUR® range of SOTRALENTZ-HABITAT:

- Renews the concept of non-mains sewage and wastewater disposal, known as individual, 'independent' and grouped)
- Gives you more options of Principal Pre-treatment Units, Secondary Treatment Units and traditional Accessories for your distributors, client installers as well as for the end users

SOTRALENTZ-HABITAT, with its range of anaerobic PLASTEPUR® Principal Pre-treatment Units, offers you clear advantages:

1. Significant innovations in independent sewage disposal

- **Compact shapes and structures:**
  Meeting to installation restrictions, security and guaranteeing optimal resistance to compression:
- **Complete range:**
  Homogeneity of your Plastepur® sewage disposal system, having obtained the rights to use the CE mark.
  Principal Pre-treatment Units 'Performances' with integrated, detachable and non- decomposable filtering 'Performance' meshes. Principal Pre-treatment Units, Secondary Treatment Units and Accessories delivered with the bar-code EAN13.
- **Optimized water channelling and water efficiency:**
  Shapes specially studied to allowing water channelling and optimal water efficiency, results from trails run by the Concrete Industry Centre of Studies and Research.
- **Threaded risers (*)(**)(***)(sold separately):**
  Immediate localization of the installation and total accessibility for servicing and maintenance, conforming to current regulatory needs.

(*) Threaded riser SL-REHC 400/200, height 200mm, sold separately for septic tank manholes (diameter 400mm), settling units, clarification units, Double Skin holding tanks, grease extractors (SLSG200, 500, 800 and 1000) and pre-filters (SL-FD 200, 500, 800,1000 and 1600) and for dosing tanks (SL-CHAS 200, 500 and 800).

(**) Threaded riser SL-REHC 600 CR at 1 adjustable height from 750 to 600mm with reinforced caps for septic tank (SL-FS SP SZ and SL-FS DP RKT), overflow units (SL-DC SP SZ and DC DP RKT), clarification units (SL-CLARIF SP SZ and SL-CLARIF DP-RKT), and Double Skin holding tanks (SL-FAV DP-RKT).

(***) Threaded riser SL-REHC 600/250, article 32 244 + green reinforced cap, article 30 880, originally for pre-filters (SL-FD 2500 and 3500) and compact filters for optional use (SL-FCOMPACT 2500 and 3500), but now adaptable to all manholes equipped with a screw thread (600mm diameter) on septic tanks (SL-FS SP SZ and SL-FS DP RKT), overflow units (SL-DC SP SZ and DC DP RKT), clarification units (SL-CLARIF SP SZ and SL-CLARIF DP-RKT) and Double Skin holding units (SL-FAV DP-RKT)

(****) Threaded riser SL-REHR 100, 250, 430, 500 or 750 mm adjustable, sold separately for all inspection chambers.

2.1 Clear advantages to using extrusion blow-moulding High Density Polyethylene (PEHD) of Very High Molecular Weight (VHMW)

- **Lightness**: for example, 3000 l of lightweight concrete weighs 1.3 tonnes, whereas 3000 1 of PEHD weighs 120kg, 10 times less than the lightweight concrete

2.2 Economize on the following procedures

- **Handling**
  loading, unloading and storage on site
- **Transport**
  easier placement
- **Installation in areas inaccessible:**
  to heavy service vehicles
- **Manual operations**
  fork lift on site or JCB digger on worksite available for other operations.
- **Reduced excavations = less backfilling:**
  due to their shape, placement is simple and rapid.
- **Functional shapes:**
  handles for movement and positioning and/or lifting ring
- **Wide ranging, excellent profitability**

2.3 Safety and durability of extrusion blow-moulding High Density Polyethylene (PEHD) of Very High Molecular Weight (VHMW)

- **Absolutely watertight,**
  no risk of leaks
- **Exceptional resistance to impacts and temperature variations**
- **Highly reduced risk of accidents,**
  personal safety
- **Entire monobloc is automatically extrusion blow-moulded as one single piece with an unreactive and homogeneous material.**
  no mixed materials used in the assemblage
  no change over time
- **Non- decomposable polyethylene:**
  Excellent lasting power against
  aggressive agents in wastewater (sulphur anhydrides degrading concrete) corrosion from surrounding environment (acid soils)

Quality Assurance ISO 9001: 2008

All Plastepur® SOTRALENTZ-HABITAT Principal and Secondary Treatment Units and Accessories are designed and produced under the assurance of quality ISO 9001: 2008

Certification by TÜV-Saarland

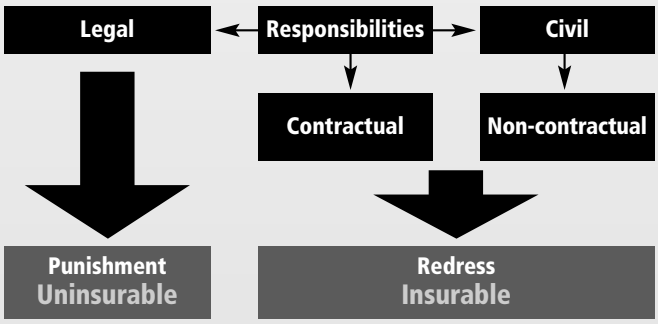
Guarantees, 10-year liability insurance and EPERS

Guarantees and liability insurance for sewage treatment units

(underwritten by Assurances MMA – October 2008)

1. Additional civil responsibilities
2. 10-year civil responsibilities
3. 10-year public liability insurance
4. Sewage treatment unit insurance

1. Additional civil responsibilities



Legal Responsibilities:
Acts or events punishable by the rule of law

Non-contractual:
Article 1382 CC « All man-made misadventures require the culpable party to redress the damages »
Art 1383 CC « Everyone is responsible for damages which occur, not only by their own actions, but also by their own negligence or recklessness »

Contract-related civil responsibilities:
Non-execution, poor execution or delayed execution of a contract (article 1147 CC)
1. The victim demonstrates non-execution of a contract.
2. The non-execution is the responsibility of the installer,
3. Non-execution results in damages to the client,
4. There is a valid contract between the client and the installer.

2. 10-year civil responsibilities

Time-scales for the guarantees:
- 10 years – 10-year guarantee – durability and fitness for purpose
- 2 years – Functional guarantee – Guaranteeing those parts « detachable » from the core of the (carpet, tiling, boiler…)
- 1 year - Guarantee of perfect operation – Repairs due to malfunctions occurring in the 12 months following delivery

The Spinetta Law, articles 1792 CC et those which follow (1978)
The responsibility of the constructer of PLEIN DROIT (ultimate responsibility) towards the owner or buyer of the installation for damages:
- due to the durability of the installation
- concerning one of it's:
  - parts
  - or assemblies thus rendering it unfit for purpose
- concerning a non-detachable parts

Exemption? : Proof that the cause was a foreign body

3. 10-year civil liability insurance

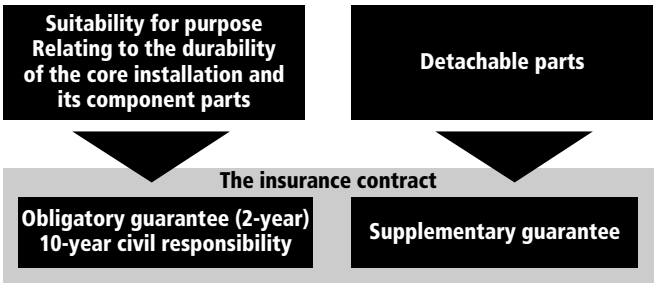
Obligatory insurance ? : Article. L 241-1 of the C.A.

All persons, physical or moral, to whom the 10-year responsibility can be attributed on the basis of presumption established by the articles 1792 and thereafter of the civil code. At the start of all works, there must be available the means to prove the existence of an insurance contract covering this responsibility.

For constructers in the sense of the Spinetta Law, obligatory 10-year civil responsibility

Obligatory 10-year insurance L 243-1-1 code of insurances
Not included among the insurance obligations : works at sea, in lakes, in rivers, infrastructure works associated with roads, ports, airports, helicopter landing pads, ferry docks, works for the treatment of urban or industrial waste as well as any sub-works associated with any of these types of works.

The notion of accessory works L 243-1-1 code of insurance
«roads, pavements, parking areas, other networks, canals, electricity lines, cables and their supports, infrastructure associated with the transport, production, storing and distribution of energy, telecommunications infrastructure, uncovered sports facilities as well as their facilities, are also excluded from the insurance obligations mentioned in the first line of the paragraph, except if the works or an element of the works is accessory to an installation subject to these insurance obligations.



Éléments Pouvant Entraîner une Responsabilité Solidaire (parts able to give rise to a collective responsibility) (EPERS 1792- 4 cm³)

Concerning the manufacturers of products
The 4 criteria which could give rise to the manufacturer having a collective responsibility are :
- Displacement of a part of the installation
- Planning such that **end product adapted to its specific use**
- The operating conditions satisfy the **exact requirements specified in advance**
- **Installation without any modifications** by the installer

4. Sewage treatment unit insurance (ANC insurance)

Which installations are subject to obligatory 10-year insurance?
- **Before the order of 25 June 2005**

Decision of the BCT 18 May 2001
« includes building works, construction works and revision of autonomous sewage installations and other networks, notably spreader systems »
- **After the order of 25 June 2005**

accessory works also subject

SOTRALENTZ HABITAT

Guarantees

Conformity

SOTRALENTZ-HABITAT, F-67 320 DRULINGEN (FRANCE), certify that the sewage treatment units plus their associated parts, for use by single or multiple household, PLASTEPUR® described in this booklet and our commercial litreature:

- to the current regulations in the country where they are distributed
- to the inter-ministerial decrees of the 6 may 1996 detailing the technical standard applicable to sewage treatment units and their ancillary installations as well as the requirements of municipal technical inspections of sewage treatment units.
- to the bill of the 22 may 1997 relating to non-mains sewage treatment.
- to the installation Standard NF DTU 64-1, march 2007, for sewage treatment units.
- to the operation Standard NF, relating to the purification of domestic wastewater, those lines pertaining to fault diagnosis, enabling sewage treatment units to be correctly maintained.
- to the Standard NF EN-1085, treatment of wastewater - vocabulary,
- to the Standard NF EN 12566 - A1, **obligatory CE marking of all prefabricated septic tanks since the 1st April 2006.**

10-year responsibility = 10-year Guarantee

In the context of the law 78/12 of the 04.01.1978 Professional responsibility for manufacturers of construction materials from the successive insurance polices, depending on the year of manufacture:

- IARD Act after 2005,
- MMA from 2001 to 2004,
- AXA/UAP before 2001.

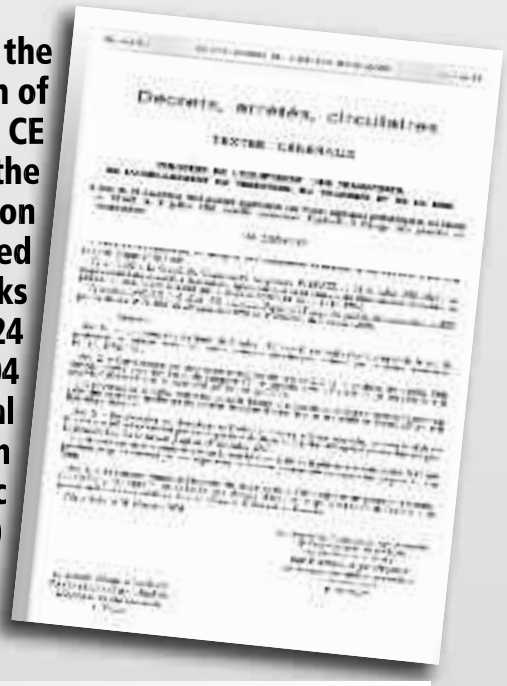
Treatment units and their accessories

The primary treatment units, secondary treatment units and their accessories must be transported, stocked and manhandled such that they are protected from damage, notably physical damage likely to cause premature failure.
We guarantee that primary treatment units, secondary treatment units and accessories we supply conform to the current regulations and are free of manufacturing faults.
In the case where a fault is identified by our technical staff, we will replace defective parts (which must be returned to us) or missing parts (to be detailed as missing on the delivery note and by registered post to the delivery firm within 72 hours, 3 working days including Saturdays), but will not be held accountable for any other associated costs.

Inspection chambers, chambers for distribution, looping collecting, etc.

Chambers must be transported, stocked and manhandled such that they are protected from damage, notably physical damage likely to cause premature failure.
We guarantee, using adhesive marking strips, the supply of chambers complete, conforming to current regulations and free of all manufacturing faults.
In the case where a fault is identified by our technical staff, or chambers which are incomplete, In the case where a fault is identified by our technical staff, we will replace defective parts (which must be returned to us) or missing parts (to be detailed as missing on the delivery note and by registered post to the delivery firm within 72 hours, 3 working days including Saturdays), but will not be held accountable for any other associated costs.

Decree for the authorization of mandatory CE marking the 1st April 2006 on all prefabricated septic tanks from the 24 December 2004 (official journal of the French republic 26. 01. 2005)



Recourse to the guarantee on primary treatment units, secondary treatment units and their accessories can not be invoked in cases where:

- **failure by the installer, the owner and/or the user to respect the code for installation, use and maintenance detailed by SOTRALENTZ-HABITAT in this manual A24 and the booklet with each primary treatment unit, secondary treatment unit and their accessory**
- **Failure by the installer, the owner and/or the user to respect**
- **The Standard NF DTU 64-1,**
- **The Standard NF P15 -910,**
- **Modification of the primary treatment units, secondary treatment units and/or their accessories or usage other that that which was intended by SOTRALENTZ-HABITAT,**
- **Natural catastrophes (climatic, geological, explosions or dynamiting…) not under our control,**
- **Primary treatment units, secondary treatment units and their accessories of inappropriate capacities,**
- **Inappropriate choice or installation of a whole or a part of the sewage treatment facility**
- **Upstream connection of the primary treatment units, secondary treatment units and their accessories which is ill-suited or incompatible with the Plastepur® sewage treatment facility.**

Signed at DRULINGEN, date
(see the series number and manufacturing date marked below)

The installer | The owner | The user | The manufacturer

A. Jung

SOTRALENTZ HABITAT

CE Marking Test Report for EPURBLOC Rectangular septic tank from CERIB

The septic tank, settling tanks, clarification units and EPURBLOC® products distributed by SOTRALENTZ-HABITAT all carry the following mark

CE XX*

SOTRALENTZ F-67320 DRULINGEN

* = year the CE mark is fixed

Our septic tanks are fabricated by extrusion blow-moulding of High Density Polyethylene (PEHD) and conform to the French Standard NF EN 12566-1.
They also conform to the essential demands defined in the annex ZA of the Standard and validated by the CERIB (Concrete Industry Centre of Studies and Research) laboratory notified N° 1164 in accordance with the table below:

Model	Nominal capacity	Watertight (trails with water)	Material's Structural Integrity (empty)	Water efficiency
Rectangular septic tank – version Epurbloc®				
Epurbloc® 2000	2 m³	Conforms	Pit test (replica of standard running conditions) in wet soil conforms with 0.60m above the water level	≤**1,2 g** of polybeads tested on version 2000 l
Epurbloc® 3 000	3 m³			
Cylindrical ribbed septic tank – version Epurbloc®				Exceptional Epurbloc performances
Epurbloc® 4000	4 m³	Conforms	Crush trial: **24 kN/m²**	≤**0,5 g** of polybeads tested on version 3 000 l.
Septic tank Single Skin – version Clarification				
5 000 SP-SZ	5 m³	Conforms	Pit test in wet soil	≤1,5 g of polybeads tested on version 5 000 l.
7 500 SP-SZ	7 m³			
10000 SP-SZ	10 m³			
Septic tank Double Skin® – version Clarification unit without upstream settling tank				
3500 DP-RKT	3 m³	Conforms	Pit test in wet soil conforms with 1.10m above the water level	≤8,9 g of polybeads tested on version 5 000 l.
5 000 DP-RKT	4 m³			
6000 DP-RKT	5 m³			
7000 DP-RKT	6 m³	Conforms	Pit test in wet soil conforms with 1.10m above the water level	≤8,9 g of polybeads tested on version 5 000 l.
9000 DP-RKT	8 m³			
11000 DP-RKT	10 m³			
12000 DP-RKT	11 m³	Conforms	Pit test in wet soil conforms with 1.10m above the water level	≤8,9 g of polybeads tested on version 5 000 l.
14000 DP-RKT	13 m³			
15000 DP-RKT	14 m³			
16000 DP-RKT	15 m³	Conforms	Pit test in wet soil conforms with 1.10m above the water level	≤8,9 g of polybeads tested on version 5 000 l.
18000 DP-RKT	17 m³			
19000 DP-RKT	18 m³			
22000 DP-RKT	22 m³	Conforms	Pit test in wet soil conforms with 1.10m above the water level	≤8,9 g of polybeads tested on version 5 000 l.
25000 DP-RKT	24 m³			
27000 DP-RKT	26 m³			
30000 DP-RKT	28 m³	Conforms	Pit test in wet soil conforms with 1.10m above the water level	≤8,9 g of polybeads tested on version 5 000 l.
35000 DP-RKT	33 m³			
40000 DP-RKT	39 m³			
50000 DP-RKT	48 m³			

Extract of trial statements available on demand

SOTRALENTZ HABITAT

Serial number – date of fabrication

CE Marking Test Report for EPURBLOC Rectangular septic tank from CERIB

CERIB
Centre d'Études et
de Recherches
de l'Industrie du Béton

BP 30059
28231 ÉPERNON CEDEX
FRANCE
Division Qualité Industrielle
(Télécopie : 02.37.32.63.46 - e-mail : inspections&essais@cerib.com)

Organisme notifié n°1164.

Contrat n°32 C 06 DQI/SOTRALENTZ/67320DRULINGEN

Date des essais : 17/07/06 au 31/08/06
Le Responsable : S. POUDEVIGNE
Exécutés par : LM - JCT - CTy

Nature des essais :

Essais de type initiaux sur une gamme de fosses septiques selon la norme NF EN 12566-1 (mars 2000) et son amendement A1 (juin 2004) *"Petites installations de traitement des eaux usées jusqu'à 50 PTE – Partie 1 : Fosses septiques préfabriquées"* :

- Capacité de traitement (essai de capacité nominale),
- Etanchéité à l'eau (essai à l'eau),
- Efficacité du traitement (essai d'efficacité hydraulique),
- Comportement structurel (essai dit "Pit Test").

Nature des échantillons :

Une gamme de fosses septiques en polyéthylène d'appellation commerciale ***SL RECTANGULAIRE***, comprenant :

- 2 fosses de capacité nominale 2 et 3 m^3,
- équipement : filtre indicateur de colmatage.

Réception des échantillons :

13/07/06 sur la plateforme d'essai du CERIB à Epernon.

Observations :

Les fosses septiques ont été fabriquées et livrées par les soins du demandeur.
Le prélèvement et le regroupement des produits dans une même gamme ont été réalisés sous la responsabilité du demandeur.

Dans le cadre du marquage CE des fosses septiques, ce document constitue le rapport des essais de type initiaux (ETI) des produits de la gamme dont l'appellation commerciale est mentionnée ci-dessus.

RAPPORT D'ESSAI

Fait à Epernon, le : 07/09/06

A la demande de : **SOTRALENTZ PACKAGING S.A.S.**
3, rue de Bettwiller

67320 DRULINGEN

Référence du rapport d'essai : 06 DQI 608

Pour tous renseignements complémentaires, s'adresser à S.POUDEVIGNE - Tél : 02.37.18.48.27

La reproduction de ce rapport d'essai n'est autorisée que sous sa forme intégrale. Il comporte 11 pages et 2 annexes.
"L'accréditation du COFRAC atteste de la compétence des laboratoires pour les seuls essais couverts par l'accréditation".
08/04

cofrac
ESSAIS
ACCREDITATION
n° 1-0001

SOTRALENTZ HABITAT

CE Marking Test Report for EPURBLOC Rectangular septic tank from CERIB

CERIB

3/11

28231 EPERNON

06 DQI 608

2 SYNTHESE DES RESULTATS D'ESSAIS ET AVIS

La conformité (le cas échéant) des résultats d'essais est établie au regard des exigences de la norme NF EN 12566-1 et de son amendement A1 (cf. annexe A).

Les indications mentionnées en caractère gras sont celles pouvant figurer sur les documents commerciaux relatifs aux produits marqués CE.

Référence fosse	Date de fabrication déclarée	Date d'essais	Lieu d'essai(s)	Capacité nominale annoncée (CN)	ESSAI DE CAPACITE Quantité d'eau introduite dans la fosse jusqu'aux raccordements	ESSAI D'ETANCHEITE A L'EAU Examen visuel	ESSAI DE COMPORTEMENT STRUCTUREL (PIT TEST) Examen visuel Etanchéité Déformations	ESSAI D'EFFICACITE HYDRAULIQUE* Masse de micro-billes recueillies en sortie sur les 1 000 g injectées en entrée de la fosse (5 essais)	
SL 2000 RECT	22/06/2006	du 16/08/06 au 31/08/06	Au CERIB	**2 m³**	(2 085 ± 21) litres	Pas de perte d'étanchéité		Essai filtre indicateur de colmatage	
								Essai n°1	0,7 g
								Essai n°2	0,9 g
								Essai n°3	1,2 g
								Essai n°4	1,5 g
								Essai n°5	1,1 g
								Moyenne	**1,1 g de billes**
					conforme	**conforme**			
SL 3000 RECT	21/06/2006	du 17/07/06 au 29/08/06	Au CERIB	**3 m³**	(3 036 ± 30) litres	Pas de perte d'étanchéité	Essai en conditions de sol sec. Hauteur maximale de remblai autorisée : 50 cm. Variation de capacité sur 3 semaines : - 37 litres (soit -1,2 % par rapport au volume initial après 24 heures). Pas de déformation au niveau des raccordements. Essai en conditions de sol humide. Hauteur maximale de remblai autorisée : 50 cm. Variation de capacité sur 3 semaines : - 214 litres (soit -7,0 % par rapport au volume initial après 24 heures). Aucune perte d'étanchéité. Pas de déformation au niveau des raccordements.		
					conforme	**conforme**	**conforme**		

* Efficacité hydraulique : voir également l'annexe A page VIII du présent rapport.

SOTRALENTZ HABITAT

CE Marking Test Report for EPURBLOC Rectangular septic tank from CERIB

CERIB 2/11

28231 EPERNON 06 DQI 608

1 ECHANTILLON

Le présent rapport identifie les performances physiques et mécaniques des fosses septiques de la gamme *SL RECTANGULAIRE*, fabriquées par le site de *DRULINGEN (67)*, selon la norme NF EN 12566-1 (mars 2000) et son amendement A1 (juin 2004) *"Petites installations de traitement des eaux usées jusqu'à 50 PTE – Partie 1 : Fosses septiques préfabriquées"*.

Rappel de définition de la gamme selon la norme NF EN 12566-1 et son amendement A1 : *«groupe de produits dans lequel, pour les besoins d'évaluation, la ou les propriétés sélectionnées sont identiques pour l'ensemble des produits faisant partie du groupe. La définition de gamme prend en considération au moins une forme, un équipement, des matériaux et des conditions d'utilisation finale identiques et garantit l'efficacité hydraulique et le comportement structural minimal pour tous les produits faisant partie de la gamme. Le niveau minimal de performance (efficacité hydraulique et comportement structurel) est obtenu par l'essai réalisé sur un modèle de la gamme »*.

Caractéristiques déclarées par le fabricant pour la gamme de fosses septiques *SL RECTANGULAIRE* :

- ***forme*** : semi-circulaire à axe horizontal,
- ***équipement*** : filtre indicateur de colmatage,
- ***matériau*** : polyéthylène,
- ***conditions d'utilisation finale*** :
  - sans et en présence d'une nappe phréatique (conditions de sol sec et humide),
  - hauteur maximale de remblai autorisée : 50 cm.

Référence fosse	Capacité nominale (CN)	Dimensions hors tout (cm)	Masse (kg)	Diamètre Nominal des raccordements (DN) (mm)
SL 2000 RECT	2 m³	Hauteur : 140 Longueur : 190 Largeur : 119	90	DN entrée : 110 DN sortie : 110
SL 3000 RECT	3 m³	Hauteur : 140 Longueur : 269 Largeur : 119	115	DN entrée : 110 DN sortie : 110

CERIB 4/11

28231 EPERNON 06 DQI 608

3 DETAILS DES MODES OPERATOIRES ET DES RESULTATS D'ESSAIS

3.1 Essai de capacité

L'essai est réalisé sur chacune des fosses septiques de la gamme conformément à l'annexe A de la norme NF EN 12566-1 et de son amendement A1.

3.1.1 Mode opératoire

La fosse est disposée de manière à permettre une inspection de sa base. Elle est remplie d'eau claire jusqu'au niveau de la sortie (figure 1). Un compteur à eau permet la lecture directe de la quantité d'eau introduite.

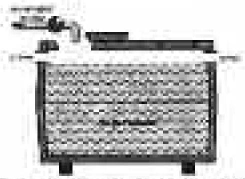


Figure 1 : détermination de la capacité

3.1.2 Expression des résultats

La quantité d'eau est mesurée en litres (l) avec une exactitude de 1%.

Le tableau 1 indique la quantité d'eau introduite dans la fosse et la capacité nominale correspondante annoncée par le fabricant *(CN)*.

3.1.3 Matériel utilisé

Débitmètre à eau : - plage de lecture : 1,4 m³/h à 35 m³/h,
- critère d'acceptation : ± 1% sur la lecture.

3.1.4 Résultats

Référence fosse	Date de fabrication déclarée	Capacité nominale annoncée par le fabricant (CN)	Quantité d'eau introduite (l)
SL 2000 RECT	22/06/2006	2 m³	2 065 ± 21
SL 3000 RECT	21/06/2006	3 m³	3 036 ± 30

Tableau 1 : résultats de l'essai de capacité

SOTRALENTZ HABITAT

3.2 Essai d'étanchéité à l'eau

L'essai est réalisé sur chacune des fosses septiques de la gamme, conformément à l'annexe A de la norme NF EN 12566-1 et de son amendement A1. Il est réalisé à la suite de l'essai de capacité (cf. § 3.1).

3.2.1 Mode opératoire

Les raccordements entrée (E) et sortie (S) de la fosse sont préalablement obturés hermétiquement.

Figure 2 : essai d'étanchéité à l'eau

Dans le cas des fosses en polyéthylène, la fosse est remplie d'eau jusqu'au sommet (figure 2). Après une demi-heure, il est constaté la présence ou non de fuite.

3.2.2 Expression des résultats

Dans le cas des fosses en polyéthylène, il est relevé la présence de fuites éventuelles ou toute autre observation liée à la mise en eau de la fosse.

Le tableau 2 indique, pour chacune des fosses de la gamme, la quantité d'eau rajoutée et l'examen visuel résultant de l'essai.

3.2.3 Matériel utilisé

Débitmètre à eau : - plage de lecture : 1,4 m^3/h à 28 m^3/h,
- critère d'acceptation : ± 1% sur la lecture.

3.2.4 Résultats

Référence fosse	Date de fabrication pièces	Quantité d'eau rajoutée après une période de ½ heure (l)	Examen visuel
SL 3000 RECT	22/02/2006	0.0	Pas de perte d'étanchéité
SL 3000 RECT	21/02/2006	0.0	Pas de perte d'étanchéité

Tableau 2 : résultats de l'essai d'étanchéité à l'eau

3.3 Essai d'efficacité hydraulique

L'essai est réalisé sur une des fosses septiques de la gamme, conformément à l'annexe B de la norme NF EN 12566-1 et de son amendement A1.

L'essai d'efficacité hydraulique a pour but de caractériser la capacité de la fosse septique à retenir les boues de décantation et les boues surnageantes.

Des billes en polystyrène simulent les matières en décantation.

3.3.1 Définition des matières de simulation

- Les granulés (P_A) simulent les boues décantées : ce sont des granulés de polystyrène, de densité 1,04 et de granulométrie 2 à 6 mm.

Avant l'essai, le corps d'épreuve est préalablement rempli de ces granulés à hauteur de 50% de la capacité nominale de la fosse.

- Les micro-billes (P_B) simulent les matières de décantation : ce sont des micro-billes de polystyrène, de densité 1,04 et de granulométrie 0,2 à 0,4 mm / 0,4 à 0,6 mm.

Afin de simuler le phénomène de chasse, 1 kilogramme de ces micro-billes est mélangé dans un réservoir avec 10 litres d'eau, puis déversé précipitamment à l'entrée du corps d'épreuve.

Du détergent est ajouté, afin de réduire la tension de surface et de séparer les billes.

3.3.2 Mode opératoire

Les essais sont réalisés avec un débit d'eau q (l/s), fonction de la capacité nominale de la fosse.

Pour la fosse de 2 m^3 testée, le débit d'eau q est égal à 0,5 l/s.

Etape 1

Après avoir rincé la fosse à l'eau claire, on injecte par pompage des granulés (P_A) avec un débit (eau + granulés) compris entre q et 2q, jusqu'à remplir 50% du volume de la fosse septique en granulés (figure 3).

Une fois les granulés (P_A) injectées, le débit q est maintenu constant pendant 30 minutes.

Les essais proprement dits débutent après une période de repos de 45 minutes minimum.

Figure 3 : préparation de l'essai d'efficacité hydraulique

Etape 2

La fosse septique est ensuite alimentée en eau propre au débit d'essai q (l/s).

L'essai consiste à déverser les micro-billes (P_B) durant les 30 premières secondes dans l'alimentation d'eau de la fosse (figure 4).

Une fois les micro-billes (P_B) injectées, le débit q est maintenu constant pendant 10 minutes.

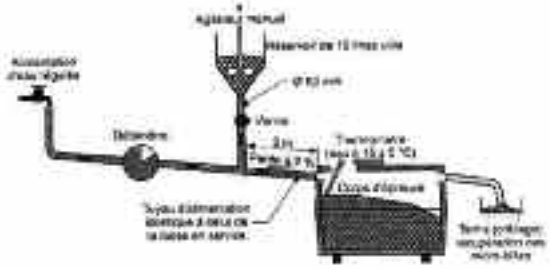


Figure 4 : essai d'efficacité hydraulique

L'essai est réalisé 5 fois au cours d'une journée, avec une période de repos de 45 minutes minimum entre les essais.

Etape 3

Les micro-billes (P_s) sont récupérées sur des tamis d'ouverture 80 µm à la sortie de la fosse, puis séchées en étuve à 60°C.

3.3.3 Expression des résultats

Il est reporté dans le tableau 3 les 5 résultats et la moyenne de masse sèche de micro-billes recueillies en sortie à 0,1 gramme près sur les 1 000 grammes injectées en entrée*

3.3.4 Résultats

Référence fosse		SI 2000 REC1
Date de fabrication déclarée		22/06/2009
Equipement		Filtre indicateur de colmatage
Masse sèche de micro-billes P_s recueillies en sortie (sur 1 000 g injectées en entrée)	Essai n°1	0,7 g
	Essai n°2	0,9 g
	Essai n°3	1,2 g
	Essai n°4	1,5 g
	Essai n°5	1,1 g
	Moyenne	1,1 g

Tableau 3 : résultats de l'essai d'efficacité hydraulique

* Se reporter à l'annexe A

3.4 Essai de comportement structurel (Pit Test)

L'essai est réalisé sur une des fosses septiques de la gamme, conformément à l'annexe DB de l'amendement A1 de la norme NF EN 12566-1.

Le Pit Test est un essai structurel. Il évalue les propriétés mécaniques d'une fosse soumise aux poussées des terres sur ses parois latérales, aux charges de remblai et pédonnières sur la partie supérieure, ainsi qu'à l'éventuelle poussée de la nappe phréatique.

Pour ce faire, la fosse est positionnée dans le bassin d'essai, puis enfouie dans du gravillon pour simuler les charges de remblai sur la fosse. Le bassin est ensuite éventuellement rempli d'eau pour simuler la présence d'une nappe phréatique (conditions de sol humide).

L'évaluation des caractéristiques mécaniques de la fosse septique repose sur une variation de son volume, de son étanchéité à l'eau, ainsi que des éventuelles dégradations subies durant l'essai.

3.4.1 Définition des charges

Les charges appliquées sur la fosse sont des charges uniformément réparties sur les parois, exercées par du gravillon 3/8 roulé sec (en conditions de sol sec), ou par du gravillon 3/8 roulé immergé dans de l'eau (en conditions de sol humide).

1) Charges latérales

Le Pit Test simule la pression horizontale exercée sur les parois latérales de la fosse, en combinant les efforts suivants (figure 5) :

- ceux résultant de la pression du gravillon 3/8 roulé, qui simule la poussée des terres,
- ceux résultant de la pression de l'eau (en conditions de sol humide uniquement), qui représente la pression de la nappe phréatique.

L'angle α définit la zone d'influence dans laquelle le matériau participe à l'action d'une force latérale exercée sur la paroi de la fosse. Il est fonction de l'angle de cohésion du matériau ϕ.

Pour le gravillon 3/8, ϕ est pris égal à 36°. Alors $\alpha = \frac{\pi}{4} + \frac{\phi}{2} = 63°$.

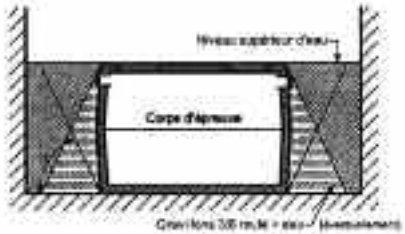


Figure 5 : action des charges horizontales exercées par le gravillon sur la fosse

2) Charges pesantes verticales

Le Pit Test prend en compte la pression verticale en rajoutant une épaisseur de gravillon 3/8 roulé uniformément répartie sur le dessus de la fosse (figure 6). L'épaisseur de gravillon combine :

- La hauteur maximale de remblai autorisée préconisée par le fabricant.
- Les charges pédonnières de la fosse en service. La charge appliquée est de 2,5 kN/m². La hauteur de remplissage due aux charges pédonnières seules est de 17 cm.

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Rectangular septic tank from CERIB

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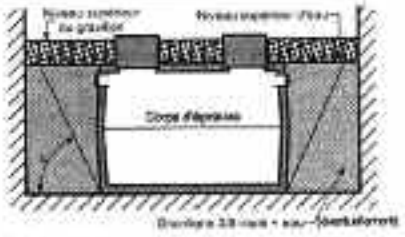

Figure 6 : action des charges verticales exercées par le gravillon sur la fosse

3.4.2 Mode opératoire

Etape 1

Mesurage des dimensions internes de la fosse.

Etape 2

- Mise en place de la fosse dans le bassin.
La fosse est lestée selon les instructions du fabricant.
- Occultation des raccordements entrée et sortie.

Etape 3

- Remplissage du bassin en gravillon jusqu'au niveau des raccordements hydrauliques de la fosse.
- Simultanément, remplissage de la fosse en eau jusqu'à son sommet (figure 7).
- Dans le cas des fosses en polyéthylène, mélange de la fosse.

Le volume d'eau initial V_1 (l) introduit dans la fosse est déterminé après 24 heures d'enfoncement.

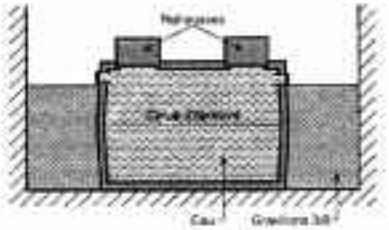

Figure 7 : étape 3 de l'essai du Pit Test

Etape 4

- Vérification de la position des raccordements hydrauliques en entrée et en sortie de fosse.
- Disposition de rehausses au-dessus des ouvertures de la fosse, permettant un accès des appareils de contrôle et de mesure à l'intérieur de la fosse.

Etape 5

- Remplissage en gravillon jusqu'au sommet de la fosse. Il est calculé la hauteur du gravillon nécessaire pour prendre en compte le remblai autorisé par le fabricant, ainsi que les charges prépondérantes.
- Remplissage éventuel en eau du bassin jusqu'au niveau supérieur de la fosse, dans le cas où la fosse est testée en conditions de sol humide (figure 8).

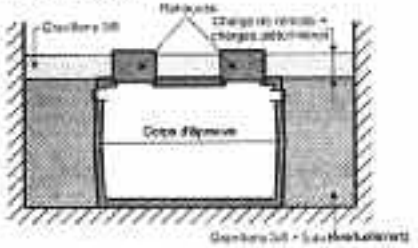

Figure 8 : étape 5 de l'essai du Pit Test

Etape 6

- Dans le cas des fosses en polyéthylène, après 24 heures d'enfoncement, remplissage de la fosse en eau jusqu'au sommet de la fosse.

Il est déterminé le volume d'eau initial V_1 (l) introduit dans la fosse.

- Vidange de la fosse.

Maintien des conditions d'essai durant une période de 3 semaines pour les fosses en polyéthylène.

Etape 7

- Examen visuel de l'intérieur de la fosse.
- S'il n'y pas de problème d'étanchéité visible, remplissage de la fosse en eau jusqu'à son sommet.

Soit V_2 (l) le volume d'eau introduit dans la fosse après essai.

3.4.3 Expression des résultats

Il est observé la présence éventuelle de fissurations ou de déformations.

En conditions de sol humide, il est relevé la présence éventuelle d'une perte d'étanchéité.

La déformation est donnée par la variation du volume de la fosse avant et après essai : $V = V_2 - V_1$ (l).

Le tableau 4 indique les observations réalisées pour la fosse de la gamme testée.

3.4.4 Matériels et matériau utilisés

- Débitmètre à eau :
  - plage de lecture : 1,4 m³/h à 36 m³/h,
  - critère d'acceptation : ± 1% sur la lecture.
- Bassin d'essai.
- Gravillon :
  - de granulométrie 3/8,
  - d'absorption roulée,
  - de masse volumique apparente sèche 1,55 kg/l.

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CERIB — 1/8

28231 EPERNON — Annexe du rapport **05 DQI 608**

ANNEXE A

Extrait des spécifications de la norme NF EN 12566-1 et de son amendement A1 *"Petites installations de traitement des eaux usées jusqu'à 50 PTE – Partie 1 : Fosses septiques préfabriquées"*

Capacité nominale (Art. 3.3 et 5.4 de la norme)

Capacité nominale (CN) = désignation numérique du volume d'une fosse, exprimé en mètres cubes, par un nombre entier (CN).

Le volume d'eau jusqu'au niveau de sortie doit être au moins égal à la capacité nominale déclarée par le fabricant, à une température de (15 ± 5) °C.

La capacité mesurée sur la fosse, exprimée en litres, est assortie de l'incertitude de mesure de ± 1 % (art. A.1.2 et A.1.3 de la norme).

- *Interprétation du résultat par l'organisme notifié CERIB (N°1164) :*

  Pour qu'un résultat soit conforme, il faut que la capacité mesurée à ± 1 % soit au moins égale à la capacité nominale déclarée.

Étanchéité à l'eau (Art. 5.3 de la norme)

Une fosse septique doit être étanche à l'eau jusqu'au sommet. Le niveau du sommet dépend des conditions d'utilisation.

Essai à l'eau

Cas des fosses en béton :

Au terme des essais réalisés conformément à l'annexe A (normative), la perte d'eau des fosses septiques en béton mesurée au bout de 30 minutes doit être inférieure ou égale à 0,1 litre par mètre carré de surface interne mouillée des parois extérieures.

Cas des fosses en polyéthylène, en acier ou en plastique renforcé de fibres de verre (PRV) :

Au terme des essais réalisés conformément à l'annexe A (normative), aucune fuite n'est tolérée.

Essai de perméabilité à l'air sous vide

Cas des fosses en plastique renforcé de fibres de verre (PRV) ou en acier :

L'essai de perméabilité à l'air sous vide, défini en annexe A (normative), peut être utilisé pour vérifier les prescriptions d'étanchéité à l'eau des produits. La fosse septique doit être réputée étanche à l'eau si la pression à la fin de l'essai ne s'écarte pas de plus de 10% de la valeur obtenue en début de l'essai.

Efficacité hydraulique (Art. 5.5 de la norme)

La capacité de rétention des boues de décantation et des boues surnageantes de la fosse septique est déterminée par son efficacité hydraulique. Dès que les exigences en matière d'efficacité hydraulique sont spécifiées, elles doivent être vérifiées à l'aide des méthodes d'essai décrites dans l'annexe B (normative).

- *Interprétation du résultat par l'organisme notifié CERIB (n°1164) :*

  Compte tenu du fait qu'il n'y pas actuellement en France de seuil de performance réglementaire ou normatif, le résultat exprimé est la moyenne des 5 mesures d'efficacité hydraulique.
  Toutefois, une enquête est en cours au sein des Organismes Notifiés (Sectoral Group n°11 : [illegible] d'assainissement et produits d'[illegible]) pour établir un mode d'expression identique en Europe avant la fin de l'année.
  L'expression du résultat d'efficacité hydraulique pourrait alors être la plus grande quantité de micro-billes recueillie sur 4 résultats, le 5ème (correspondant à la plus forte valeur) ne serait pas pris en compte.

CERIB — 11/11

28231 EPERNON — **06 DQI 608**

3.4.5 Résultats

Référence fosse	SL 3000 RECT						
Date de fabrication déclarée	21/06/2006						
Hauteur maximale de remblai autorisé	90 cm						
Condition d'utilisation	Hors nappe phréatique (conditions de sol sec)			En présence d'une nappe phréatique (conditions de sol humide)			
Caractéristique observée	Constat visuel	Volume	Déformation	Constat visuel	Étanchéité	Volume	Déformation
Avant essai	/	V_0 = 3 200 litres	/	/	/	V'_0 = 3 090 litres	/
Après 24 heures d'enfouissement	/	V_1 = 3 117 litres	/	/	/	V'_1 = 3 044 litres	/
À la fin de l'essai	Aucune rupture observée Pas de déformation au niveau des raccordements	V_2 = 3 080 litres	$V = V_2 - V_1$ = – 37 litres soit – 1,2% du volume initial (après 24 heures)	Aucune rupture observée Pas de déformation au niveau des raccordements	Aucune perte d'étanchéité observée	V'_2 = 2 830 litres	$V' = V'_2 - V'_1$ = – 214 litres soit – 7,0% du volume initial (après 24 heures)

Tableau 4 : résultats de l'essai de comportement structurel (Pit Test)

Ce rapport d'essais atteste uniquement des caractéristiques de l'échantillon soumis aux essais et ne préjuge pas des caractéristiques de produits similaires. Il ne constitue donc pas une certification de produits au sens de l'article L 115-27 du code de la consommation et de la loi du 3 juin 1994. Les spécifications de la norme de référence sont données à titre de rappel.

Le Chargé de l'essai — L. MORCET LAMARCHE

Le Responsable des essais — S. POUDEVIGNE

SOTRALENTZ HABITAT

CE Marking Test Report for EPURBLOC Rectangular septic tank from CERIB

Comportement structurel (Art. 5.2 et annexe D de la norme)

Les fosses septiques doivent résister aux charges et contraintes raisonnées exercées pendant leur manutention, leur installation et leur utilisation, et notamment résister à la vidange des boues, tout au long de leur durée de vie.

Les coefficients de sécurité définis à l'échelon national doivent être utilisés pour calculer les charges pour lesquelles elles sont prévues. Les charges suivantes doivent être prises en considération :

- la charge du remblai ;
- les charges hydrostatiques ;
- les charges dynamiques.

Le comportement structurel de la fosse septique doit être déterminé par la résistance à l'écrasement/déformation à charge maximale, en utilisant la méthode de calcul en vigueur dans le pays ou les méthodes d'essais décrites en annexe D.

Essai de Pit Test

Cas des fosses en béton ou en plastique renforcé de fibres de verre (PRV) :

Aucune rupture ne doit se produire pendant l'essai. De plus, aucune fuite au niveau de l'étanchéité ne doit être relevée.

Cas des fosses en polyéthylène ou en acier :

- La variation de volume de la fosse septique (exprimée en litres) doit être inférieure à 20% du volume interne de la fosse septique.
- Le mouvement des tuyaux d'entrée, de sortie et d'interconnexion ne doit pas générer de fuites au niveau de l'étanchéité.

Essai d'écrasement

Cas des fosses en béton :

- Essais de type A et S : la charge de rupture F doit être notée et exprimée en kN/m² de surface soumise au chargement.
- Essais de type C : la charge de rupture F doit être notée et exprimée en kN.

Cas des fosses en polyéthylène :

La méthode d'essai est utilisable uniquement pour des conditions sèches.
La charge surfacique correspondant à la rupture doit être relevée et exprimée en kN/m².

Essai sous vide

Cas des fosses en plastique renforcé de fibres de verre (PRV) ou en acier :

Aucune déformation permanente ne doit se produire après application d'une dépression P pendant 1 minute.

ANNEXE II

Essais sur la gamme *SL RECTANGULAIRE*

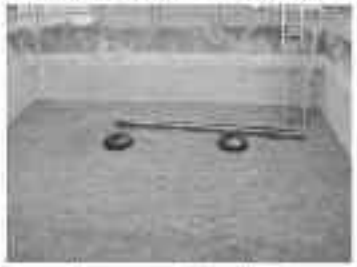
ESSAI D'EFFICACITE HYDRAULIQUE SUR FOSSE SL 2000 RECT

Injection des micro-billes

ESSAI DE PIT TEST SUR FOSSE SL 2000 RECT

Fixation de la fosse dans le bassin d'essai

Enfouissement de la fosse dans le gravillon



Fosse en conditions d'essai

Constat visuel après essai

Maintenance of Principal and Secondary Treatment Units

The primary performance indicators of a septic tank, a settling tank, an EPURBLOC® or a clarification tank.

- Saturation or clogging of a Principal Pre-Treatment Unit,
- Non-liquefaction of solid matter,
- Bad smells,
- Abnormally high water level,
- Presence of non-degraded matter outside a Principal Pre-Treatment Unit

These factors impede verification of the following, in cases of:

1. Saturation or clogging or non- liquefaction of solid matter or clogging of pipes bringing household wastewater

1.1 of a rectangular or cylindrical Principal Pre-Treatment Unit

- Insufficient influx rate of wastewater (e.g.: insufficient rate, less than 50 litres per jour, per person over too long a period);
- Size of material (e.g.: Principal Pre-Treatment Unit undersized, overcharged …);
- Non-liquefaction of solid matter (e.g. : abnormal, excessive or constant ejection of noxious or non-biodegradable products such as bleach, antibiotics, drain cleaners, de-blocking products, dehumidifiers etc.).

1.2. of a holding tank F.A.V.

- Undersized Principal Pre-Treatment Unit or pipes
- Emptying not completed.

1.3. of a grease extractor, dosing tank

- Volume and depth of solid matter and grease too great (insufficient maintenance) in the grease extractor, dosing tank, and downstream irrigation system
- irrigation system undersized,
- irrigation system saturated, with matter in evidence (insufficient maintenance)..

1.4. of a pre-filter "Performance"

- Air inlets (at inlet IN and outlet OUT) must be checked
- Clogging, (clean the filtrate mass with a jet of water or change if this fails).
- Abnormally high water level in the pre-filter (verify the working order of all Pre-Treatment Units upstream, the septic tank, settling tank, Epurbloc®, Grease Extractor, etc.)

2. Presence of non-degraded matter outside of a rectangular or cylindrical Principal Pre-Treatment Units or a holding tank F.A.V.

- Size of the Principal Pre-Treatment Unit (e.g. Principal Pre-Treatment Units undersized for regular use);
- Date of the last emptying (e.g. : saturated Principal Pre-Treatment Units, emptying not frequent enough, complete emptying without refilling with water) ;
- Distinct rainwater collection (e.g. : rainwater directed through the Principal Pre-Treatment Unit).

3. Emanation of odours from rectangular or cylindrical Principal Pre-Treatment Units, holding tank F.A.V., Grease Extractors, Dosing tank or pre-filters

- Water-tightness of the joints on the in pipe (IN) bringing domestic wastewater, and the access caps (poor sticking without preliminary degreasing or sandpapering, insufficient quantity of glue, insufficient interlocking, use in preference the jointed connections;
- Efficacy of siphons (e.g. : insufficient removal of liquid, clogging);
- Cross-section (e.g. : diameter less than 100mm),
- General state of obligatory Higher ventilation pipe (VH) (e.g. : ventilation beneath the eaves) ;
- Enough air movement above the 'hat' layer inside the Principal Pre-Treatment Unit (layer of grease and floating matter too thick…) following a wave of domestic wastewater (climb of wastewater level in Principal Pre-Treatment Unit at the arrival of domestic wastewater having a density less than the wastewater already in the unit).

4. Pressurization of the dosing tank, holding tank FAV or lift pump

- Anti-pressure (VH) not connected, or with a diameter less than 100mm.

5. Drainage/emptying of Principal and Secondary Treatment Units

5.1. Rectangular or cylindrical Principal Pre-Treatment Unit

- Regulatory drainage every four (4) years min. (see the French Standard, service activity in sewage and wastewater disposal, guidelines for a checkup with a view to maintenance of independent sewage disposal systems).
- Servicing rate adapted (increased or reduced), if necessary, in particular circumstances linked to the peculiarities of the works or the occupancy of the building, to be duly justified by the constructor or the occupant

5.2. Holding tank F.A.V.

Emptying must be done as often as necessary in relation to the stocked volume.

- Emptying as soon as the maximum filling level is reached (see the French Standard, service activity in sewage and wastewater disposal, guidelines for a checkup with a view to maintenance of independent sewage disposal systems).
- **Important**: Access to tank bottom for cleaning is strictly forbidden because it contains lethal fermentation fumes (methane, sulphurous anhydride …).
- **Monitoring of level at a distance, with a pneumatic gauge, in order to better control cycles of tank emptying (option deliverable on separate command).**
- 1 drainage pipe Ø 110mm,
  - positioned and fixed into the manhole at the inlet (IN), to suck out a maximum of accumulated sludge.
  - equipped with a fast pump-action joint made of the alloy DN 100.
  - stopping about 20mm from the bottom to suck out a maximum of domestic wastewater and products and avoid the accumulation of sludge that causes clogging

5.3. Grease Extractor

- Verify good working order at least once a month.
- Empty accumulated grease in the upper part, then the solid matter and sludge retained at the bottom at least once every six (6) months, and when necessary, without forgetting to clean the inlet (IN) and outlet (OUT) baffles with a water jet
- Afterwards, refill with water before putting back into service

Maintenance of Principal and Secondary Treatment Units

6. Integrated, removable pre-filter clogging indicator
Annual servicing of the pre-filter clogging indicator is necessary to ensure the good working order of the EPURBLOC® or clarification tank.
Emptying is to be done every four (4) years, but in particular circumstances linked to the peculiarities of the works or the occupancy of the building, to be duly justified by the constructor or the occupant, the frequency can be changed
In case of clogging or saturation, the mesh or filtering material must be cleaned following the guidelines below:

Cleaning the filtering meshes made from "performances" material

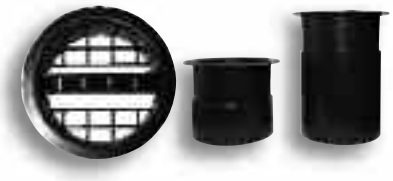
1 - Unscrew the Ø400mm outlet-side cap

2 - Insert your hand into the detachable sleeve so as to grasp the handle

3 - Remove the detachable sleeve by puling on the handle

4 - Take out the detachable connection sleeve of the pre-filter

5 - Hold the pre-filter still by wedging the base on the outlet sleeve. Wash the mesh with a pressure washer pre-filter allowing cleaning water to flow into the cistern
6 - Repeat the operation with the pre-filter reversed



Regularity of control and maintenance

❑ Verification of good working order

✣ Emptying, maintaining a constant level, of hat and sludge (grease and floating matter).
- After drainage it is essential to refill the unit with clean water
- Advised to add a dose of bacterial activator

■ Cleaning or replacement of any material or filtering elements or parts.

Remember to ensure operations detailed opposite are completed on your installation

Type	1 month	3 months	6 months	1 year	4 years	if blocked
Grease Extractor	❑		✣			✣
Septic Tank				❑	✣	
Settling Unit				❑	✣	
Epurbloc®				❑	✣	✣/■
Clarification unit				❑	✣	✣/■
Pre-filter			❑	✣	■	
Inspection chambers			❑			■
Dosing Tank			❑	■		
Compact Filter exceptional	❑				■	

Maintenance of Principal and Secondary Treatment Units

7. Dosing tank
- **Verify** good working order at least once every three (3) months.
- **Empty the S.O.M.** and solids that have accumulated at the base of the irrigation network from the drainage of the septic tank and sieve, without forgetting to clean the inlet (IN) and outlet (OUT) with a water jet
- **Test the fixings** and wear on the flexible tubes of the doser.
- **Test, clean with a water jet and grease** the covers and cables of the sequential dosers
- At the same time as draining the Principal Pre-Treatment Unit, **empty and clean** the dosing tank

8. Inspection chambers – initial chamber
- **Monitor** regularly the good flow of pre-treated wastewater (tap water and household wastewater) towards the pre-treatment unit

9. Inspection chambers – distribution chamber
- **Monitor regularly** the good flow of pre-treated wastewater moving to the irrigation pipes.

10. Inspection chambers – looping chamber
- **Verify regularly** the good working order of the purification system and the unblocked state of the irrigation pipes or of the purification system (irrigation, non-drained filter beds, etc...).

11. Inspection chambers – collect chamber, vertical and horizontal
- **Verify regularly** the good working order of the vertically or horizontally draining sand filter and check for clogging in the collect chamber's drains or the sand filter or the outlet pipe.

12. For all the above inspection chambers:
- In case of clogging, **clean** the chamber, the outlet pipe and the collect chamber's drains with a pressure water jet

Maintenance of Sewage treatment units installed at road-side rest-areas and motorway service stations

The maintenance of sewage facilities is of overriding importance to the correct operation of said installations. In effect, an inadequate pre-treatment of wastewaters, may compromise the functioning of the downstream purification system.

In all cases of upkeep and maintenance, there is the need to refer back to maintenance recommendations of the manufacturer.
In the absence of such recommendations, the table below gives some general guidelines.

Product	Objective of the intervention	Action	periodicity*
Sealed tank	Control the level	Draining	As soon as necessary
Septic tank	Avoid sludge flowing towards the treatment unit	visual inspection (check the level of the sludge) and/or constant-level emptying of the cap and sludge (grease and floating material) Watch to see if the water in the septic tank reverts to being clear	annual inspection Empty the tank 4 years after installing it or if the level of sludge is more than50% of the depth of the water (depending on the layout of the Septic tank)**
Settling tank- Digester	Avoid sludge flowing to the treatment unit	visual inspection and/or emptying	monthly inspection
Pre-filter, integral or non-integral to the septic tank	Avoid blockage	inspect and clean as necessary	biannual inspection
Aerobic assemblies	Following the instructions for use and maintenance as supplied by the SPANC or the manufacturer		
Bacterial bed	Following the instructions for use and maintenance as supplied by the SPANC or the manufacturer		
Natural filter bed	Following the instructions for use and maintenance as supplied by the SPANC or the manufacturer		
Reed filter bed	Following the instructions for use and maintenance as supplied by the SPANC or the manufacturer		
Grease extractor	Avoid the build-up of grease	inspection and if necessary emulsify or clean	biannual inspection
Looping and collection chambers	Avoid all blockages or deposits	inspection and cleaning if necessary	biannual inspection

*The frequency of maintenance must be adapted to the particular usage and environmental conditions of the installation.

**A minor depth of residual sludge (a few centimetres) is desirable

SOTRALENTZ HABITAT

PLASTEPUR ® Maintenance manual

To be completed without fail as prescribed by the current regulations

Date	Unit(s) monitored	Operation completed	Observations	Accountable person Name-Sign Signature	Permission of mayor or SPANC*
	Installation complete	Put into service			
Date of installation:					

*SPANC: Public service for non-mains sewage and wastewater disposal.

SOTRALENTZ HABITAT

Serial number – date of fabrication

Emptying, maintaining a constant level

I. Principles

Periodic draining of a septic tank, settling unit or clarification unit, a Epurbloc® or a Grease Extractor consists of the removal:

- first, of the near entirety of all floating matter (grease and other),
- then, of a large quantity of sludge accumulated at the bottom of the Principal Pre-Treatment Units

If new sludge reaches 50 % of the nominal capacity of one of the Principal Pre-Treatment Unit above, not including the Grease Extractor, a large portion of the sludge can be removed (of the order of 80 %). The level of sludge can be estimated with the help of devices that detect the sludge level
Emptying must occur whilst maintaining a 'constant level'
Keep a small quantity of sludge at the bottom of the Principal Pre-Treatment Units (not including the Grease Extractor) as this is essential to restart the anaerobic purification process in this sort of pre-treatment device.
The fall in the level occurring during the emptying operation must be compensated by the regular and complementary influx of clean water, whether from the building, or from a waste hauler.
Removal of floating material, followed by the sludge, must be carried out in a manner to not disturb the settlement phases (hat, liquid and bed of sludge) and at the same time, remove as little of the liquid phase as is possible
It would be preferable for the waste hauler to be equipped with a system to reduce the extracted matter and to store the floating matter separately from the sludge to maximize its use

II. Instructions to respect chronologically

1 **UNSCREW THE CAPS SLOWLY** to allow the slow venting of fermentation gases (methane,…) bacterial anaerobic conditions and to avoid a sudden pressure difference in the Pre-Treatment Units, which could lead to the breaking of the polyethylene envelope or to illness of the person emptying the unit (methane is a heavy gas, lethal and explosive)

2 **DO NOT SMOKE** during the procedure.

3 **BRING WATER WITH A HOSE PIPE OR A WASTE HAULER** to installation sites and insert into the unit to empty (inlet side of domestic wastewater).

4 **OPEN THE WATER TAP (UP TO MAXIMUM) OR THE WATER GATE ON** waste hauler to feed into the unit to be emptied

5 **INTRODUCE THE PUMP HEAD** (outlet side of domestic wastewater) until the water (surface of wastewater).

6 **SUCK UP THE HAT** (crust on surface formed of grease floating matter) and store in one of the waste hauler compartments

7 **PLUNGE THE PUMP HEAD** to 3/4 of the depth of to avoid sucking up or damaging the bottom of the unit.

8 **SUCK UP THE SLUDGE** into the second compartment of the vehicle, ensuring a suitable pump flow and avoiding mixing the sludge (the hose pipe water flow is less than that of the pump).

9 **CLEAN WITH A WATER JET** the filter material, the filter mesh "Performance" of the pre-filter clogging indicator, or replace them.

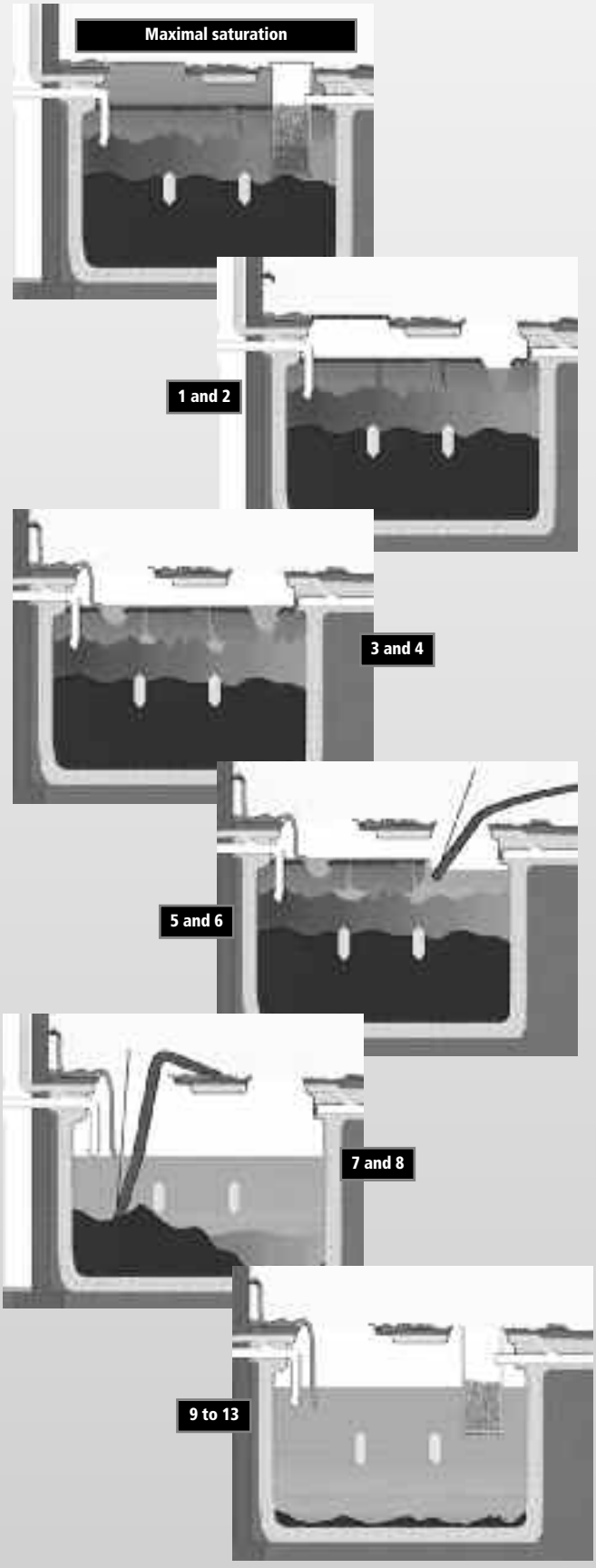
10 **REFILL WITH CLEAN WATER** after having first removed the pump head.

11 **ADD A DOSE OF BATERIAL ACTIVATOR.**

12 **RECONNECT REMOVABLE OUTLET** cylindrical cover, THE anti-discharge stopper.

13 **REPLACE THE CAPS** with care, monitoring the water-tightness.

14 **SAFETY**, make sure that no one (children above all) can easily open the caps (risk of drowning or intoxication).



SOTRALENTZ HABITAT

Working principle of Principal Pre-treatment Units

1. Septic tank « Sewage Only», optional

- « SEPERATE TREATMENT » is forbidden in new installations, and rehabilitation of separate treatment units is authorized only exceptionally.
- Most cases of rehabilitation, installation must be of the sort « ALL WATER » with the installation of septic tanks, settling tanks, or 'All Water' EPURBLOC®.
- SEWAGE ONLY (WC) allows sewage-only into the inlet baffle (IN) of the septic tank, which slows the flow of waste, avoiding to a maximum the re-suspension of sludge or floating organic matter. Raw sewage wastewater first settles and then ferments under the action of bacterial anaerobes leading to partial liquefaction of the sludge
- Outlet baffle (OUT), designed to collect this pre-treated and less concentrated domestic wastewater and direct the flow towards a pre-filter (SL-FD) before trapping the Suspended Organic Matter (S.O.M.)
- Anaerobic fermentation gases are vented by slotting in the obligatory Higher ventilation (VH Ø 100mm) integrated into the rectangular riser inlet side (IN). Sotralentz suggests slotting the Higher ventilation (VH) into the inlet (IN) of the septic tank (upstream) and not the outlet (OUT) of the septic tank (downstream).
- To help kick start the septic tank, settling tank or the Epurbloc® a bacterial activator can be added.
- Septic tank is filled with clean water before use and after drainage

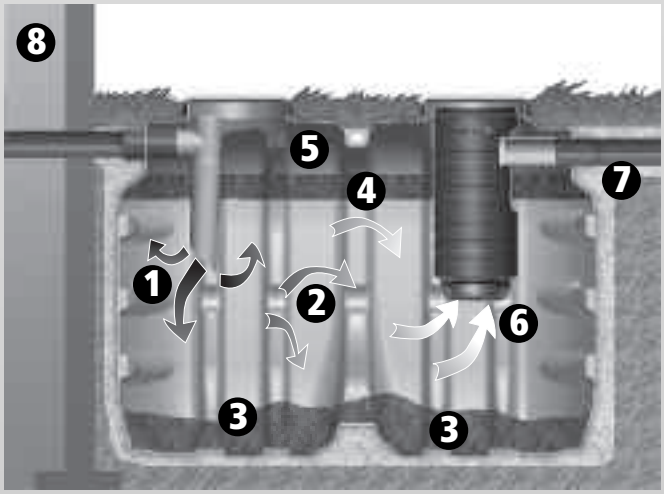
2. - Septic tank, settling tank or the rectangular or cylindrical, ribbed Epurbloc® « All Water »
- septic tank, settling tank or the Epurbloc® and clarification unit Single Skin (SP-SZ 5000, 7 500 and 10 000 l.), CE mark counting from 1st April 2006

- DOMESTIC waster water (kitchen, bathroom) and SEWAGE (WC) enters into the septic tank fosse, settling tank or the Epurbloc® "All Water" by the inlet baffle (IN) slowly their arrival, avoiding to a maximum the re-suspension of sludge or floating organic matter. Domestic wastewater first settles then ferments under the action of bacterial anaerobes leading to partial liquefaction of the sludge
- Outlet baffle (OUT) of the septic tank or settling tank, designed to collect this pre-treated domestic wastewater, now less concentrated in Suspended Organic Matter (S.O.M.), and direct the flow towards a purification element or another solution depending on the soil type, type of effluent outlet, by the regulation laws, and by the French Standard NF DTU 64-1).
- Detachable pre-filter clogging indicator with the integrated filtering mesh "Performance" is found at the outlet point (OUT) of the EPURBLOC® or settling tank, trapping Suspended Organic Matter (S.O.M.) and directing flow of less-concentrated pre-treated domestic wastewater towards a purification element or another solution depending on the soil type, type of effluent outlet, by the regulation laws, and by the French Standard NF DTU 64-1).
- Anaerobic fermentation gases are vented by slotting in the obligatory Higher ventilation (VH Ø 100mm) integrated into the rectangular riser inlet side (IN). Sotralentz suggests slotting the Higher ventilation (VH) into the inlet (IN) of the septic tank (upstream) and not the outlet (OUT) of the septic tank (downstream).
- To help kick start the septic tank, settling tank or the Epurbloc® a bacterial activator can be added.
- In an independent grouped sewage and wastewater treatment system, the first Pre-treatment unit « SETTLING UNIT » slows the arrival flow of wastewater and thus allowing the separation and then settling of heavy matter and formation of a "hat" (floating material)
- septic tank is filled with clean water before use and after drainage

3. Holding tanks

- Stainless steel grill Ø 100mm, must be placed upstream of every holding tank to reduce risk of clogging.
- All domestic wastewater and sewage, having firstly passed the stainless steel grill, and possibly followed by a solids trap (settlement device to retain large lumps), then enters the holding tanks via an inlet baffle (IN) which slows arrival flow.
- Fermentation gases are vented by the obligatory Higher ventilation (VH Ø100 mm) which is integrated in the inlet side (IN) of the holding tank. Sotralentz suggests slotting in the Higher ventilation (VH) at the inlet (IN) of the holding tank (upstream) and not the downstream side of the FAV holding tank.
- A static extractor facilitates the venting of fermentation gases
- Joints with angles greater than 45° are forbidden on Higher ventilation instalments, as they reduce the upward flow of gas.
- Holding tanks can be started immediately, no water fill required, except in special pre-stated cases.
- Holding tanks must be completely drained when the maximum capacity level is reached
- The maximum level can be detected with a pneumatic gauge enabling measurement from a distance (option).
- Emptied waste and sewage water will be disposed of by waste haulers on agreed sites
- Empty FAV holding tank replaced

Cross-sectional view of Epurbloc® and the 8 pre-treatment stages



❶ Arrival (IN) of raw household wastewater via an inlet baffle, with access for de-clogging and decompression.
❷ Zone separating heavy and light household wastewater.
❸ Bed of sludge in process of settlement and anaerobic fermentation.
❹ Hat of grease and floating matter
❺ Accumulation of gases and aggressive agents.
❻ Zone of clear water and a trap of Suspended Organic Matter (S.O.M.) by the integrated, detachable pre-filter clogging indicator and double deflector, equipped with an integrated "Performance" filtering mesh, detachable and non-decomposable.
❼ Ejection of pre-treated household wastewater into the final aerobic purification stage (distribution, drainfield …).
❽ Slotting of obligatory Higher ventilation (VH) Ø 100 min., allowing venting of fermentation gases above the roof apex, into the ventilation at the inlet of the unit. Sotralentz suggests slotting the Higher ventilation (VH) into the inlet (IN) of the septic tank (upstream) and not the outlet (OUT) of the septic tank (downstream).

Working order of Secondary treatment Units and Accessories

All pre-treatment units, and their installation guides, must be equipped with Higher ventilation (VH) Ø 100mm minimum, obligatorily, in accordance with regulation laws, in order to extract anaerobic fermentation gases.
Sotralentz suggests slotting Higher ventilation (VH) into the inlet (IN) of the Secondary Treatment Units (upstream) and not the outlet (OUT) of the Secondary Treatment Units (downstream).

1. Grease Extractor
- Only household wastewater (kitchen bathroom, washroom …) should enter the Grease Extractor by the inlet baffle (IN), detachable and removable via the threaded riser REHC 400/200, which slows arrival flow rate thus avoiding the re-suspension of floating organic matter heavy solid matter. The less turbulent household wastewater passes into the grease extractor where the separation of grease and floating matter is carried out. This matter floats to the surface, solidifies and forms the hat (crust on the surface). Sludge and solid matter collect on the bottom of the grease extractor
- Tank re-filled with clean water before being put into service and after drainage
- Outlet baffle (OUT), by design, ensures the collection of pre-treated household wastewater and directed the flow to the septic tank, the settling tank or the clarification tank, the EPURBLOC® or, exceptionally, with the rehabilitation of an existing separate sewage treatment system, directly to the pre-filter (SL-FD).
- Fermentation gas is vented by decompression holes (inlet and outlet) the by the obligatory Higher ventilation (VH) (VH Ø 100mm).Sotralentz suggests slotting Higher ventilation (VH) into the inlet (IN) of the Grease Extractor (upstream) and not the outlet (OUT) of the Grease Extractor (downstream).

2. Non-integrated septic tank pre-filter
- Pre-treated and clarified effluent, coming out of the septic tank or an individual, independent non-mains system (e.g. : FS Decanter tank + EPURBLOC® + SLFD), pours via the inlet baffle (IN) onto filtering materials (filtering mesh "Performance") with the intention of withholding suspended matter.
- Evacuation is caused by the siphoning effect (high inlet/high outlet) of the anaerobic system, thus ensuring the correct flow of less concentrated (in SOM) pre-treated wastewater to a purification element or another solution determined by the nature of the soil, type of effluent outlet, by regulation laws and by the French Standard NF DTU 64-1.
- Venting of fermentation gases with decompression holes (inlet and outlet) and Higher ventilation (VH). Sotralentz suggests slotting the Higher ventilation (VH) into the inlet (IN) of the pre-filter (upstream) and not the outlet (OUT) of the pre-filter (downstream).
- Pre-filter to be filled with clear water before use.

Detachable pre-filter clogging indicator integrated into the Epurbloc® or the Clarification tank, is designed to:
- Trap Suspended Organic Matter (SOM) in the clear water zone and redirect the fermentation gas bubbles, also containing SOM, from floating to the hat.
- Collection and release of pre-treated, less concentrated (in SOM) domestic wastewater towards a purification element or other solution determined by the nature of the soil, type of effluent outlet, by regulation laws and by the French Standard NF DTU 64-1.
- Clogging indicator, equipped with a S.O.M deflector on the lower half and air vents on the top half, allowing decompression and venting of gas

3. Dosing tanks
- Only pre-treated and strained wastewaters are allowed into the Dosing tank via the inlet baffle (IN) slowing their arrival and avoiding the re-suspension of floating matter and heavy solid matter
- Pre-treated and strained wastewaters, now slowed down, are stored beforehand in dosing tank. S.O.M deposit on the bottom of the unit (to empty periodically)
- During the auto-flushing of the distribution doser, a high flow-rate dosing feeds into the aerobic treatment device
- Outlet baffle (OUT), by design, ensures a distribution of pre-treated wastewater across the whole of the drainfield or filter bed
- Gas pressure within the Secondary Pre-treatment Unit is regulated by the pressure release value to avoid pressurization of the Secondary Pre-treatment Unit

All Secondary Treatment Units, and their installation guides, must be equipped with Higher ventilation (VH) Ø 100mm minimum, obligatorily, in accordance with regulation laws, in order to extract anaerobic fermentation gases.
Sotralentz suggests slotting Higher ventilation (VH) into the inlet (IN) of the Secondary Treatment Units (upstream) and not the outlet (OUT) of the Secondary Treatment Units (downstream).

4. Inspection chamber, adjustable to 5 heights, 3 inlets/1 outlet
- Raw domestic wastewater (toilet and cleaning water) from the building and/or the Grease Extractor channelled towards the pre-treatment unit.

Inspection chamber allows:
- introduction of a dredging pipe,
- periodic servicing to check the pipe work is not blocked

5. Distribution Inspection Chamber, adjustable 5 heights, 1 inlet/6 outlets
- Pre-treated wastewater issuing from a septic tank system (septic tank "All Water" or septic tank sewage only + pre-filter), the EPURBLOC® or the dosing tank goes through this chamber, which spreads it evenly though different distribution branches for purification. It is possible to rest a portion of the distribution network by covering one or more of the outlets with supplied covers

Inspection chamber allows:
- introduction of a dredging pipe,
- periodic servicing to check the good working order of the purification and pre-treatment systems

6. Looping Chamber adjustable 5 heights, 6 inlets/outlets
Inspection Chamber allows:
- periodic servicing to check the good working order of the purification systems (distribution, etc.),
- checking in case of clogging in the distribution pipes,
- looping at the extremity of the trenches and drainfields,
- introduction of a dredging pipe into the distribution pipes,
- fresh oxygen and air to enter, aiding oxidation of pre-treated domestic wastewater during the purification phase.

7. Collect Inspection Chamber, vertical, adjustable 5 inlets/outlets
- after slow seepage across successive layers of gravel 20/40, washed sand, non calcareous, and gravel 20/40, the domestic wastewater thus purified, by percolation and oxidation, is collected by a series of collect drains linked to the chamber SL - RCOLV 1 190.

Inspection Chamber allows:
- drainage of purified water to the effluent outlet: be that to the surface water surface system, or to infiltration wells (exceptionally).
- periodic servicing to check the good working order of the purification systems (drained vertical flow sand filter)
- the introduction of a dredging pipe into the collect drains and the effluent outlet pipe.
- fresh oxygen and air to enter, aiding oxidation of pre-treated domestic wastewater during the purification phase.

8. Detachable threaded riser, adaptable (option) to the majority of Principal and Secondary Treatment Units
Riser allows:
- the easy sighting and access of Principal and Secondary treatment Unit caps in accordance with the current regulation laws and the French Standard NF DTU 64.1.
- periodic servicing to check the good working order of the of Principal and Secondary Treatment Units
- backfilling the Principal and Secondary Treatment Units above the unit's water level to a maximum height of 40cm soil over the caps or 60cm above the water line of Principal and Secondary Treatment Units.

SOTRALENTZ HABITAT

Plastepur® Non-mains Sewage and Wastewater Disposal Systems
Vertically drained sand filter bed with discharge into the surface water network in impermeable soil
(See French Standard NF DTU 64-1)

1. DECOMPRESSION obligatory Higher ventilation to roof apex Ø 100 with static exhaust (see booklet A24).
2. Main ventilation of the chute column with ventilation hat Ø 100 mm at 1 m minimum from the Higher ventilation.
3. Grease extractor SL-SG (optional)
4. Inspection chambers SL-RVISIT adjustable to 5 heights, 3 inlets, 1 outlet
5. EPURBLOC® or settling tank "Performance" 3 stamped CE with detachable integrated clogging indicator equipped with "Performance" filtering mesh detachable and decay-resistant.
6. 1.Distribution Box 6 outlets SL-RR adjustable to 5 heights
7. AIR INLET lower ventilation of the irrigation system. Looping chamber 6 inlets/outlets SL-RBOU adjustable to 5 heights
8. AIR INLET (LV) Lower Ventilation of the collection drains. Vertical collection box SL-RCOLV 1190
9. Effluent outlet pipe joined to the ground water system and orientated to spouting direction
10. Large plants (trees) at minimum 3m
11. Party fence (property limit) at 3m minimum

The aerobic purification installation above can be realized thanks to our kits for Non Drained Filters Kit FND and for drained filters Kit FD . Find our Kit FND and Kit FD

Important:

* Minimal distance between the distribution system (irrigation) and property limit (aerobic purification system):

on flat terrain: distance 3m min • on slope > to 5 %: distance 10m min

Distance between distribution system and habitation: 5m min.

Distance between the distribution system (irrigation) and bore holes, wells, sources or harvesters of water for human consumption at a minimum of 35m from the treatment facility according to the current local regulations.

Rainwater should never be directed through an independent wastewater disposal system but stored in a recuperation cistern (see doc. EP64 and EP24).

Consult the User's Booklet A24 before any installation of our Principal and Secondary Treatment Units or Accessories

For other systems, consult documents A64

SOTRALENTZ HABITAT

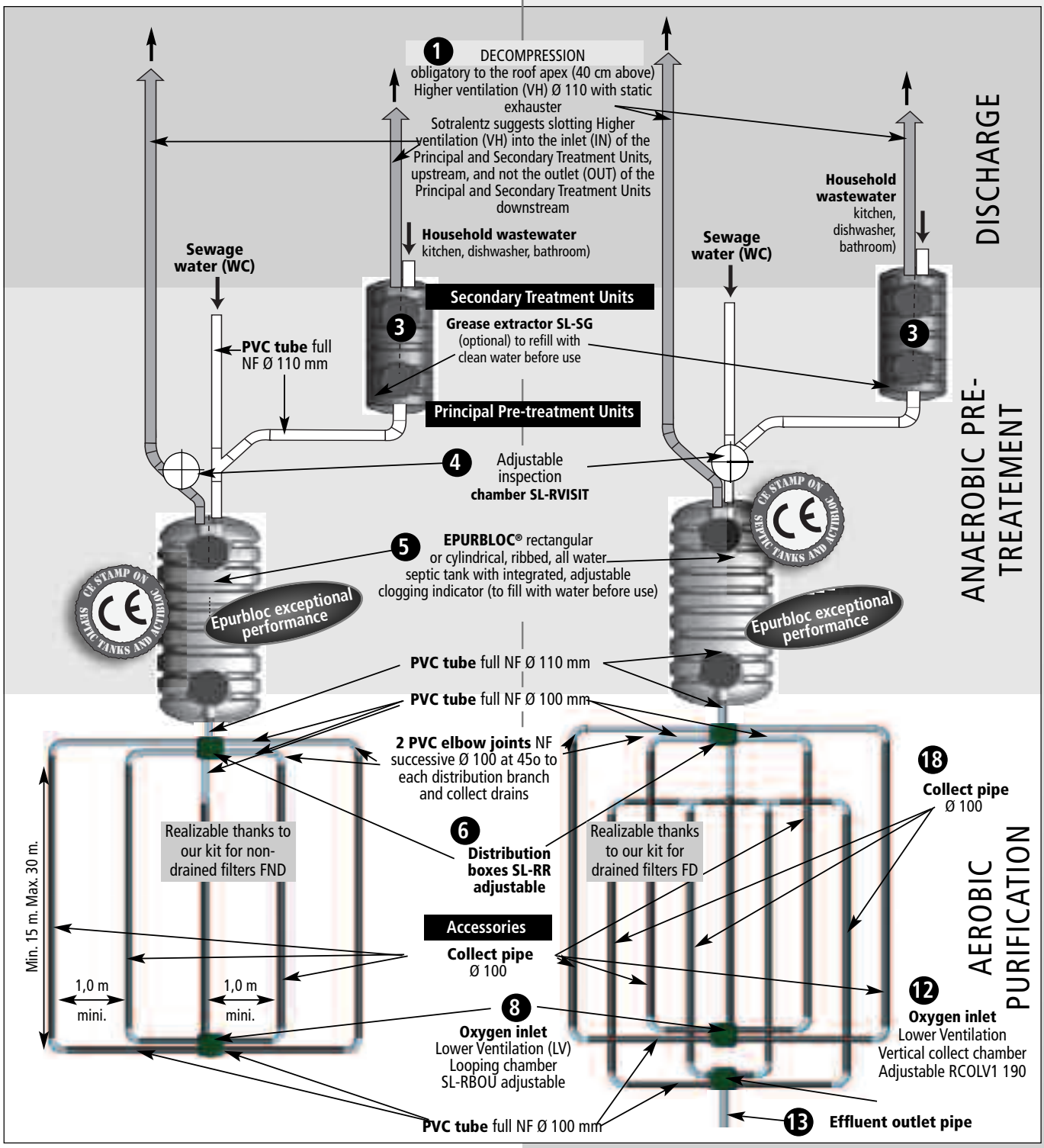
Plastepur® Sotralentz Systems

General view of 2 systems

(see French Standard NF DTU 64-1)

Underground broad irrigation at a low or greater depth, in permeable terrain

Vertical flow sand filter with ejection into the surface water system, in impermeable terrain



Aerobic purification systems above are now possible with our kits for Drained Filters (**Kit FD**) and non-drained Filters (**Kit FND**)
Find out **Kit FND** and **Kit FD** in document A64.

Non-drained Aerobic Purification Systems

The choice of device and system of non-mains waste waster disposal is the determined by analyzing the results of soil and terrain test characteristics:

- topology and water seepage capability of the ground
- possible effluent outlets
- usage of the reception site

Remember to complete the 2 "Diagnostic" pages of our Instruction Folder A2 that will help you make your choice

To install non-drained mounds of infiltration and non-drained filter beds, use out non-drained filter kits FND
Kit FND

Key

LAND TOPOLOGY AND WATER SEEPAGE CAPACITY

- Grass, herbs
- Vegetation, embankment
- Relatively deep permeable soil
- Relatively thick, highly permeable soil on fissured limestone subsoil
- Hardly permeable soil
- Water on surface or not deep

ANAEROBIC PRE-TREATMENT

- Concrete, stabilized sand
- Gaseous accumulation (methane) and aggressive agents (sulfurous anhydride)
- Hat (grease, floating matter)
- Sludge bed settling and undergoing anaerobic fermentation
- Waste domestic water (separation and settling zone)
- Filtering mesh "Performance" (anaerobic pre-filtration)
- Pumping station (clean water)
- Higher ventilation (VH) obligatory (Ø 100mm)
- Looping Higher ventilation VH (Ø 100mm) optional is slotting upstream of Pre-treatment Unit
- Eurobloc and clarification unit "Performance"
- Lift pump SL-REL

AEROBIC PURIFICATION

- Stabilized sand (dry mix 1m³ sand + 200k cement)
- Sand
- Sandy-loamy soil
- Fine gravel Ø20/40mm
- Distribution (irrigation) or collect pipes (Ø 100)
- Non return valve on the effluent outlet
- Geotextile felt (63 µm ≤ OF ≤ 100 µm) (NF EN 10319, 11058 and 12956)
- Separating geogrill (400 µm ≤ OF ≤ 600 µm) (NF EN 10319, 11058 and 12956)
- Polyethylene impermeable film 400 µm

Finally, there can sometimes be no satisfying solution to independent sewage disposal, and, in the absence of connection to the mains sewer system, it is necessary to abandon the construction or renovation project, as the terrain is unsuitable.
Always consult our User Manual A24 for:

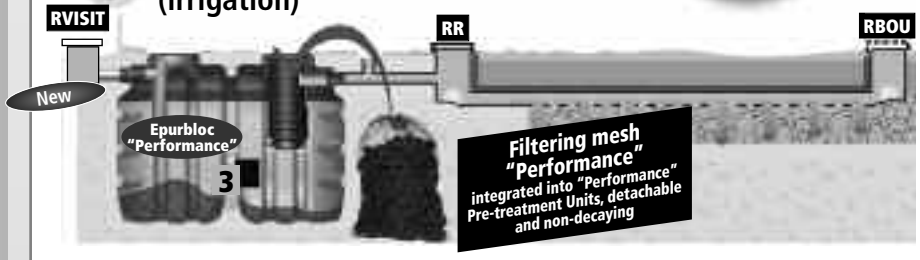
- Determination of user number, volume
- All installation instruction of Principal and Secondary Treatment Units and Accessories
- Service and maintenance frequency
- Guarantee information

For description, placement, working, maintenance and guarantees of Principal and Secondary Treatment Units and Accessories, see summary of this User's manual A24 on page 1.

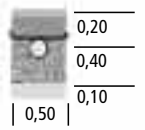
Systems conform to the French Standard NF DTU 64-1

CE STAMP ON SEPTIC TANKS AND ACTIBLOC

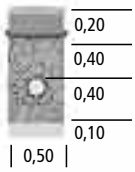
Underground distribution (irrigation) Kit FND



Shallow irrigation

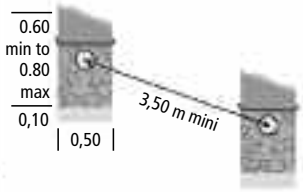


Deep irrigation

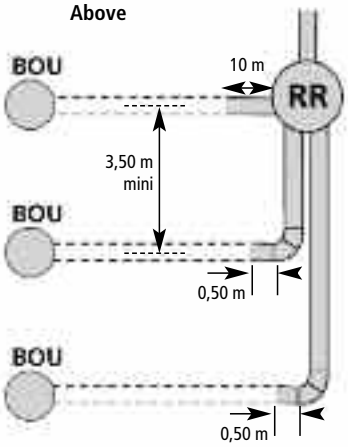


Irrigation on slopes >= 5 % and <= 10%

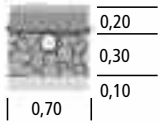
Cross-section



Above



Shallow, broad irrigation



Mounds of infiltration Kit FND

above ground Kit FND, underground lakes or in flood zones, with concreted Pre-treatment Units

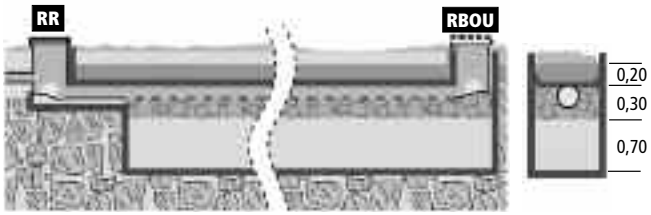
SOTRALENTZ HABITAT

Serial number – date of fabrication

Non-drained Aerobic Purification Systems

3 Non-drained filter bed made of restored soil
(loam-sand layer) **Kit FND**

4 Non-drained filter bed made of restored soil (sand layer) **Kit FND**



Accessories: Non-drained Filter Kit **Kit FND**
(sold separately)

For the installation of your irrigation systems, your mounds of infiltration, and non-drained filter beds made of restored soil, use our non-drained filter kits FND Kit FND of 5 x 4, 5 x 5, 5 x 6, 5 x 7, 5 x 8, 5 x 9, 5 x 10, 5 x 11 and 5m x 12m

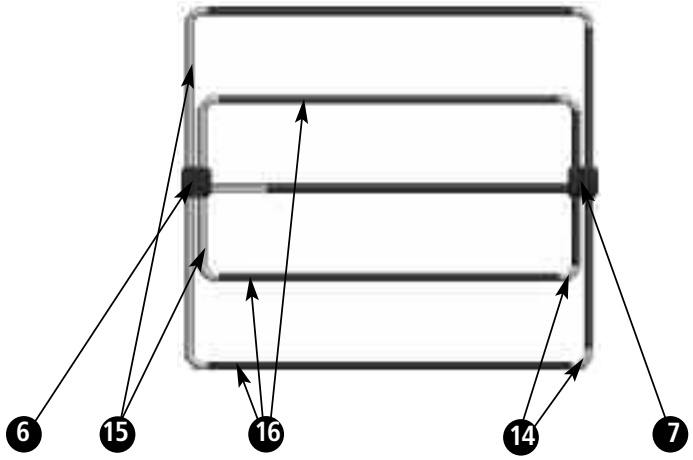
Including:

- **A** 1 Filtroplus geotextile felt
- **B** 1 Filtrogrill geogrill
- **C** 1 adjustable RR + 8 integrated elbow joints in the 2 chambers
- **D** 1 adjustable RBOU + 8 integrated elbow joints in the 2 chambers

Follow our plans Kit FND.

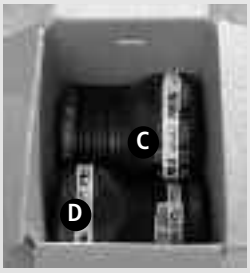
Elevation view of distribution network (irrigation) or filter bed

Kit FND



NON-DRAINED AEROBIC PURIFICATION

Kit FND



Systems conform to the French Standard NF DTU 64-1

Key

- **6** Distribution box RR adjustable to 5 heights with 6 outlets **RR**
- **7** Air Inlet Lower Ventilation (LV) of irrigation Looping chamber RBOU adjustable to 5 heights with 6 inlets/outlets **RBOU**
- **14** 2 successive PVC elbow joints 45° Ø 110
- **15** PVC tube, full Ø 100
- **16** Rigid distribution pipe Ø 100mm

Pipes and piping sold separately.

SOTRALENTZ HABITAT

Drained Aerobic Purification Systems

Key

LAND TOPOLOGY AND WATER SEEPAGE CAPACITY

- Grass, herbs
- Vegetation, embankment
- Impermeable soil
- Highly impermeable

ANAEROBIC PRE-TREATMENT

- Concrete, stabilized sand
- Gaseous accumulation (methane) and aggressive agents (sulfurous anhydride)
- Hat (grease, floating matter)
- Sludge bed settling and undergoing anaerobic fermentation
- Waste domestic water (separation and settling zone)
- Filtering mesh "Performance" (anaerobic pre-filtration)
- Higher ventilation (VH) obligatory (Ø 100mm)
- Looping Higher ventilation VH (Ø 100mm), optional if upstream slotting of Pre-treatment Unit
- 3 Eurobloc and clarification unit "Performance"
- 4 Pre-filter SL-FD "Performance"
- 7 Lift pump SL-REL
- 9 Compact filter (exceptional cases)

AEROBIC PURIFICATION

- Stabilized sand (dry mix 1m³ sand + 200k cement)
- Sand
- Sandy-loamy soil
- Fine gravel Ø20/40mm
- Distribution (irrigation) or collect pipes (Ø 100)
- Non return valve on the effluent outlet
- Geotextile felt (63 µm ≤ OF ≤ 100 µm) (NF EN 10319, 11058 and 12956)
- Separating geogrill (400 µm ≤ OF ≤ 600 µm) (NF EN 10319, 11058 and 12956)

The choice of device and system of independent waste waster disposal is the determined by analyzing the results of soil and terrain test characteristics:

- topology and water seepage capability of the ground
- possible effluent outlets
- usage of the reception site

Remember to complete the 2 "Diagnostic" pages of our Instruction Folder A2 that will help you make your choice

Finally, there can sometimes be no satisfying solution to independent sewage disposal, and, in the absence of connection to the mains sewer system, it is necessary to abandon the construction or renovation project, as the terrain is unsuitable.

Consult our User Manual A24 for:

- Determination of user number, volume
- All installation instruction of Principal and Secondary Treatment Units and Accessories
- Service and maintenance frequency
- Guarantee information

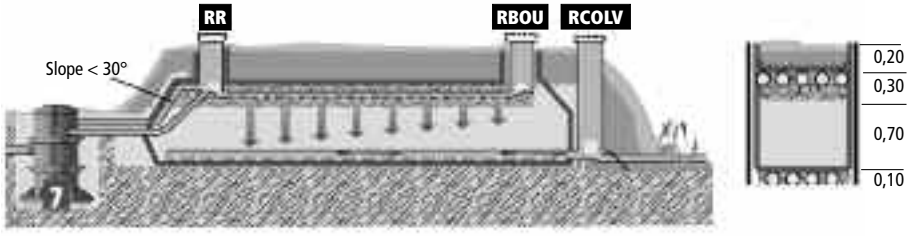
For description, placement, working, maintenance and guarantees of Principal and Secondary Treatment Units and Accessories, see summary of this User's manual on page 1.

For the installation of mounds of infiltration and drained filter beds, use our drained filter kit FD Kit FD

CE STAMP ON SEPTIC TANKS AND ACTIBIO

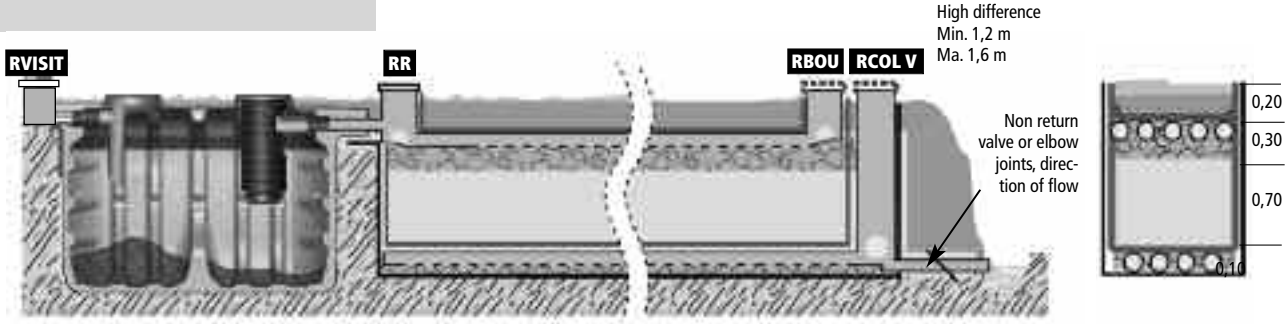
Above ground mounds of irritation Kit FD

On impermeable soil



Systems conform to the French Standard NF DTU 64-1

Sand filters with vertical flow Kit FD on impermeable ground with ejection into the surface water system. Kit FD



SOTRALENTZ HABITAT

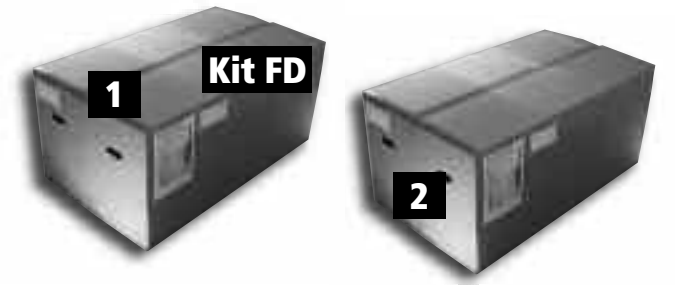
Serial number – date of fabrication

Accessories : Drained Filter Kit **Kit FD**
(sold separately)

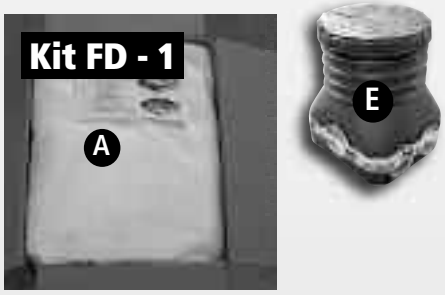
To install your mounds of infiltration and drained filter beds in impermeable soil, use our Drained Filter Kit Kit FD of 5 x 4.5, 5 x 5.5, 5 x 6.5, 5 x 7.5, 5 x 8.5, 5 x 9.5, 5 x 10.5, 5 x 11.5 and 5m x 12m, including:

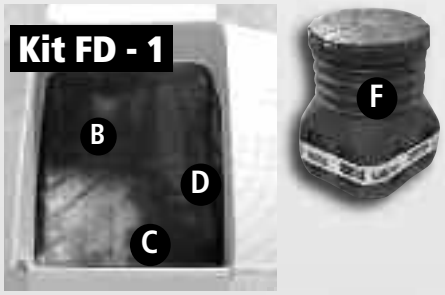
- A 1 Filtroplus geotextile
- B 1 Impermeable membrane 400µ
- C 1 waterproofing collar
- D 1 Filtrogrill geogrill
- E 1 adjustable RR + 8 integrated elbow joints in the chamber
- F 1 adjustable RBOU + 8 integrated elbow joints in the chamber
- G 1 RCOLV 1190. + 12 elbow joints and 2 T-joints in the chamber

Follow our plans Kit FD.
Kit FD composed of 2 conditions boxes on 1 pallet
Kit FD-1 (Geosynthetics) and Kit FD-2 (chambers and joints)



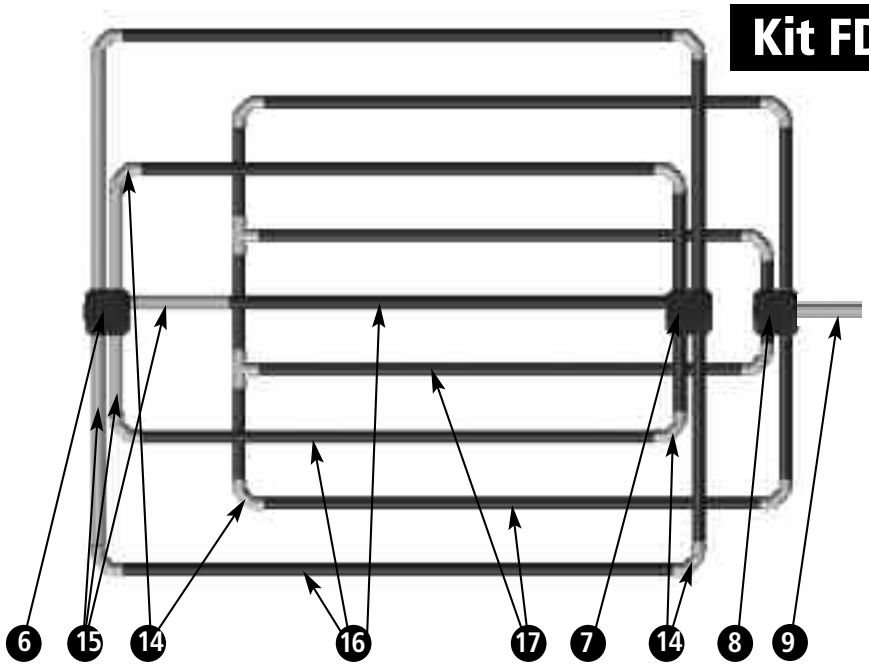
Puncture-resistant Geotextile sold separately in accordance with the size of Kit chosen
5 x 4, 5 x 5, 5 x 6, 5 x 7,
5 x 8, 5 x 9, 5 x 10,
5 x 11 and 5 m x 12 m





Systems conform to the French Standard NF DTU 64-1

Elevation view of sand filter with vertical flow



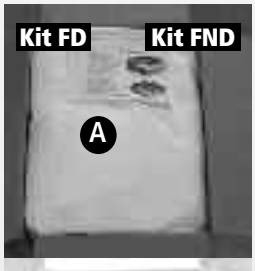
AEROBIC PURIFICATION WITH VERTICAL FLOW

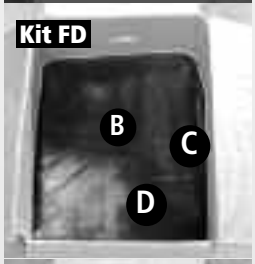
Key

- 6 Distribution box RR adjustable 5 heights with 6 outlets **RR**
- 7 Air Inlet Lower Ventilation of irrigation system. 5 heights with 6 inlets/outlets **RBOU**
- 8 Air Inlet Lower Ventilation of vertical collect drains and the vertical collect SL- **RCOL V** 1190 RCOL V
- 9 Effluent outlet pipe, pointing in direction of water flow
- 14 PVC elbow joints 45o, full NF Ø 110
- 15 PVC tube, full NF Ø 110
- 16 Rigid irrigation pipes Ø 100mm
- 17 Collect pipes

Pipes and piping sold separately

SOTRALENTZ HABITAT





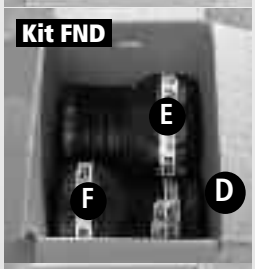


Table for Filter Kits FD and FND

For the installation of mounds of infiltration and drained filter beds

(sold separately)

Product (meters)	Product Code	Géotextile Filtroplus	Anti-puncture geotextile	Géogrille Filtrogrille	Impermeable membrane	Waterproofing collar	Chamber RR	Chamber RBOU	Chamber RCOLV	Elbow joints Ø 100/45o	T-joints Ø 100/90°
FND 5 x 4	30593	YES	NO	YES	NO	NO	YES	YES	NO	16	NO
FND 5 x 5	30594	YES	NO	YES	NO	NO	YES	YES	NO	16	NO
FND 5 x 6	30595	YES	NO	YES	NO	NO	YES	YES	NO	16	NO
FND 5 x 7	30596	YES	NO	YES	NO	NO	YES	YES	NO	16	NO
FND 5 x 8	32042	YES	NO	YES	NO	NO	YES	YES	NO	16	NO
FND 5 x 9	32043	YES	NO	YES	NO	NO	YES	YES	NO	16	NO
FND 5 x 10	32044	YES	NO	YES	NO	NO	YES	YES	NO	16	NO
FND 5 x 11	32045	YES	NO	YES	NO	NO	YES	YES	NO	16	NO
FND 5 x 12	32046	YES	NO	YES	NO	NO	YES	YES	NO	16	NO
FD 5 x 4	30597	YES	**option***	YES	YES	YES	YES	YES	YES	28	2
FD 5 x 5	30598	YES	**option***	YES	YES	YES	YES	YES	YES	28	2
FD 5 x 6	30599	YES	**option***	YES	YES	YES	YES	YES	YES	28	2
FD 5 x 7	30600	YES	**option***	YES	YES	YES	YES	YES	YES	28	2
FD 5 x 8	32047	YES	**option***	YES	YES	YES	YES	YES	YES	28	2
FD 5 x 9	32048	YES	**option***	YES	YES	YES	YES	YES	YES	28	2
FD 5 x 10	32049	YES	**option***	YES	YES	YES	YES	YES	YES	28	2
FD 5 x 11	32050	YES	**option***	YES	YES	YES	YES	YES	YES	28	2
FD 5 x 12	32051	YES	**option***	YES	YES	YES	YES	YES	YES	28	2

Kit FD composed of 2 conditioned boxes on 1 pallet
*options: anti-puncture geotextile sold separately in accordance with size of kit chosen

For installation of mounds of infiltration and drained filter beds on impermeable soil, use:

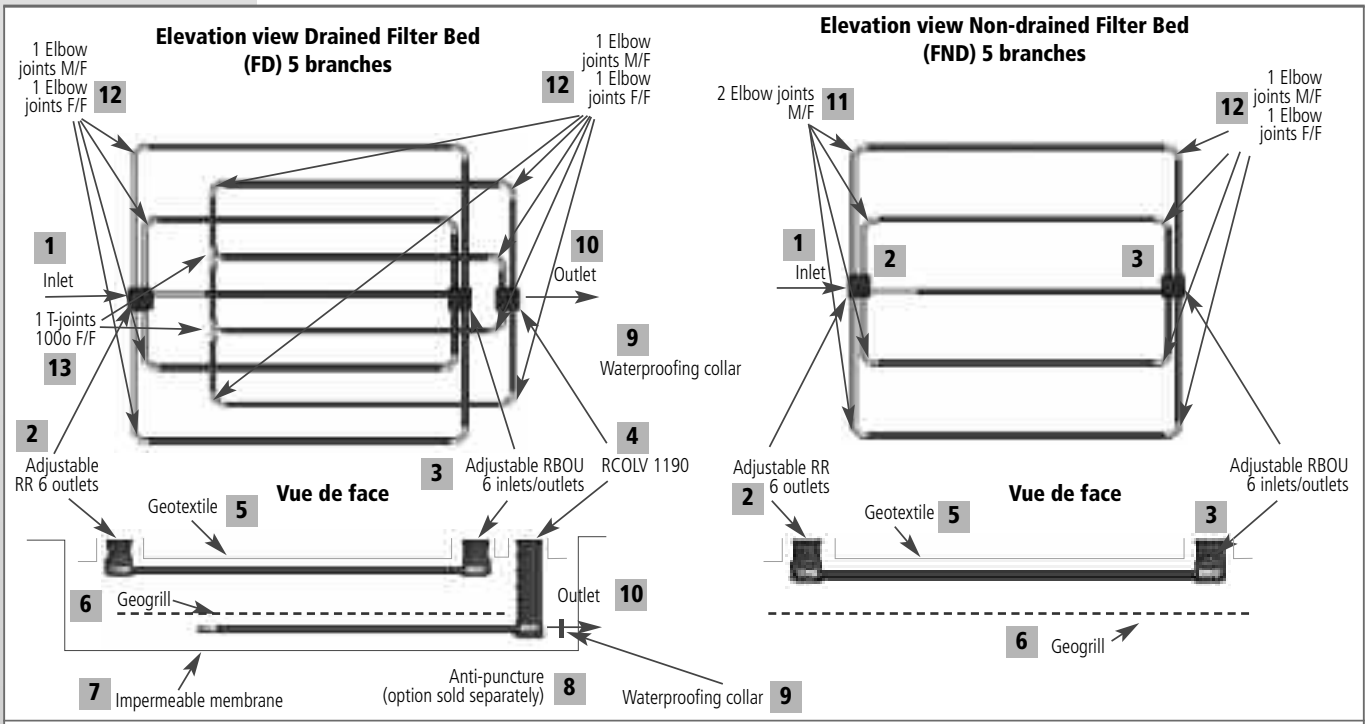
Our drained filter kits FD Kit FD and our non-drained filter kits FND Kit FND of 5 x 4, 5 x 5, 5 x 6, 5 x 7, 5 x 8, 5 x 9, 5 x 10, 5 x 11, 5 m x 12 m, including:

- A 1 Filtroplus geotextile felt
- B 1 Impermeable membrane 400µ
- C 1 waterproofing collar
- D 1 Filtrogrille geogrill

= KIT FD-1 Geosynthetic

- E 1 adjustable RR + 8 integrated elbow joints in the chamber
- F 1 adjustable RBOU + 8 integrated elbow joints in the chamber
- G 1 RCOLV 1190 + 12 elbow joints and 2 T-joints in the chamber

= KIT FD-2 Chambers and Joints



1. Inlet of pre-treated wastewater
2. Adjustable RR distribution box
3. Adjustable RBOU looping chamber
4. RCOLV 1190 vertical collect chamber
5. Geotextile filtroplus
6. Grill filtrogrille
7. Impermeable membrane
8. Geotextile anti-puncture (option sold separately)
9. Waterproof collar for drained filter (FD)
10. Outlet of treated wastewater
11. 2 elbow joints 45o Ø 100 M/F to glue
12. 1 elbow joint 45o Ø 100 M/F + 1 elbow joint 45o Ø 100 F/F to glue
13. 1 T 90o Ø 100 F/F

Plastepur® Sotralentz Calculation Parameters

Parameters to calculate the volume of all water septic tanks, settling tanks, of EPURBLOC® and of clarifications tanks with the CE mark.

Establishment	Usage par person	Rate (l/d)	Volume (2) to treat, per user (l)	Grease separation	Solids separation
Building site or factory, 3 crews per day	3u x 1	340-450	1020-1350	Yes if kitchen	Yes if kitchen
Building site or factory, 2 crews per jour	2u x 1	225- 300	675- 900	Yes if kitchen	Yes if kitchen
Hall (1), meeting room, disco, without kitchen (sanitation only)	0.1	15	45	NO	NO
Hall (1) with kitchen Occasional usage	0.3	45	135	YES	YES
Occasional user (public places)	0.05	7.5	22.5	NO	NO
Seasonal camping site (1 emplacement = 3 users)	0.7	105	315	Yes if kitchen	Yes if kitchen
Permanent camping site (1 emplacement = 3 users)	1	150	450	Yes if kitchen	Yes if kitchen
Hotel without restaurant (per room)	1	150	450	NO	NO
Hotel — Restaurant (per room)	2	300	900	YES	YES
Hospital, clinic (per bed)	3	340 - 450	1020 - 1350	YES	YES
School (without restaurant), office, shop	0.2	30	90	NO	NO
School (semi-boarding), restaurant, canteen	0.5	75	225	YES	YES
Boarding, barracks, Rest home	1	150	450	Yes if kitchen	Yes if kitchen
Permanent user	1	150	450	NO	NO

To determine dimensions of aerobic purifying elements, conforming to current regulation laws and to the Standard XPDTU 64-1, P 1.1 and P 1.2, March 2007

(1) Specify on the construction permission application the system of wastewater disposal that will be considered, in case of the addition of another kitchen, cooking areas or supplementary rooms

(2) volume to pre-treat per user, to know the septic tank capacity necessary for three (3) days. Example : 8 permanent users x 150 l x 3 days = 3 600 litres, or 1 septic tank or EPURBLOC® of 4 000 litres CE mar to install. The minimum allowed volume for an all water septic tank is 3 000 litres.

When placing an independent grouped wastewater disposal system, the succession of a settling tank (SL-FS DC), of a EPURBLOC® or of a clarification tank (SL-CLARIF)

CE mark, by a Pre-filter (SL-FD) is authorized. In this case, the settling tank volume must always by above or equal to the EPURBLOC® or a clarification tank placed immediately downstream

Remember to not connect certain sorts of Principal Pre-treatment Units to an independent wastewater disposal system.

Determining user number

The general number of users, per septic tank with large capacity, is determined by the criteria below:

1. **Hotels-restaurants, barracks, retirement homes, boarding schools, hospitals, camping sites (users x2 if separate sewage treatment)**
2. **Hotels, school with canteen**
3. **Offices, factories and shops, restaurants, schools, halls (covered), sport halls.**
4. **Public spaces, cafes, car parks, public W.C.'s., discos.**

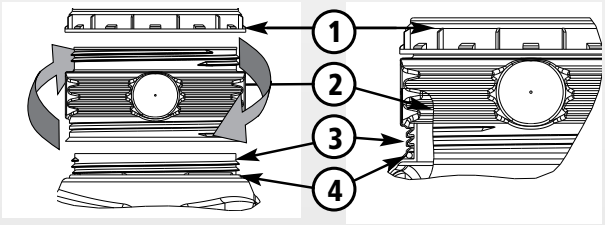
Type	1	2	3	4
SL EPURBLOC® 4000 CYL	10	22	44	-
SL EPURBLOC® 5 000 SP-SZ	15	30	60	-
Clarification tank 7 500 SP-SZ	25	50	100	300
Clarification tank 9000 DP-RKT	35	70	140	700

SOTRALENTZ HABITAT

Threaded riser SL-REHC 400/200 and SL-REHC 600

Sold separately

New Assembly of threaded riser SL-REHC 400/200



A· Place supplied watertight joint into the screw thread of the device.
B· Screw the threaded riser to the device.
C· Screw the cap onto the riser..

1· Screwing caps.
2· Threaded riser.
3· Screw thread of the device.
4· Watertight joint.
5· Compartment containing integrated pre-filter clogging indicator removable through the manhole and the riser REHC 400/200.

Assembly of threaded riser SL-REHC 400/200 and removal of integrated pre-filter clogging indicator through the manhole and the riser

REHC 400/200

New

Option: Child safety device in stainless steel (sold separately) adaptable to all screwing PEHD caps.

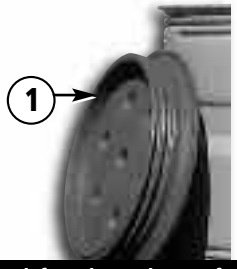
REHC 600 CR

Riser REHC 600 CR for the models SPRKT and Double Skin® RKT adjustable to 1 height, from 750 to 600 mm. Delivered with reinforced cap for use in public areas.

REHC 600/250

Delivered without cap (option)

Reinforced cap



Green reinforced screwing cap for use in public areas delivered with riser REHC 600 CR adaptable to the risers REHC 600/150 and 600/300 to screw on the REHC 600 CR

REHC 600/150 New

Delivered without cap (option)

REHC 600/300 New

Delivered without cap (option)

REHC 600/150 and REHC 600/300 are adaptable, by screwing, to REHC 600 CR and REHC 600/250 by carefully respecting special installations.

Placement

See Standard NF DTU 64-1 and assembly diagram

Type	Article	Exterior diameter (mm)	Height (mm)	Cap
New **REHC D400H200**	34312	400	200	NO
New **REHC D600H150**	31369	600	150	NO
REHC D600H250	32233	600	250	NO
New **REHC D600H300**	31370	600	300	NO
REHC D600H800 RKT + TAMPON	30881	600	adjustable to 1 height from 750 to 600	YES
Reinforced screwing cap (sold separately)	30880	600		Adaptable to the risers REHC 600/150, 250 and 300

NB: threaded riser REHC 400/200 • available individually or by the pallet of 20
• Adaptable to the majority of Plastepur® Principal and Secondary Treatment Units.

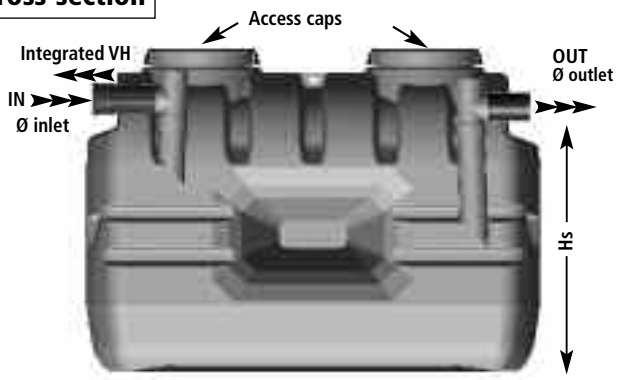
Rectangular, ribbed Plastepur® septic tanks

1 000 l., 1 500 l. and 2 000 l.

Sewage-only septic tanks are uniquely authorized by exception during the rehabilitation of an existing separate treatment system

Workings of a sewage-only septic tank 1000l

Cross-section



Sewage-only septic tank 1500l

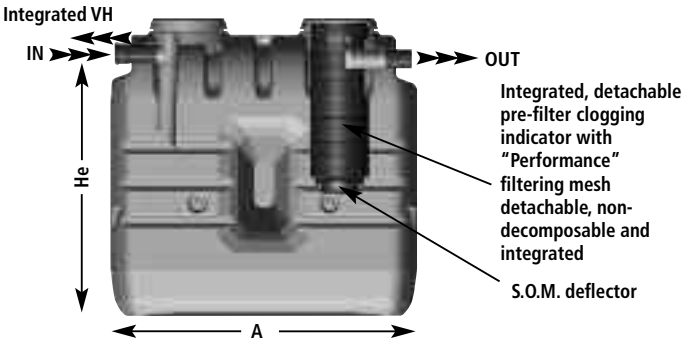
New **REHC 400/200**

REHC 400/200 threaded riser adaptable to all manholes Ø 400mm, sold separately

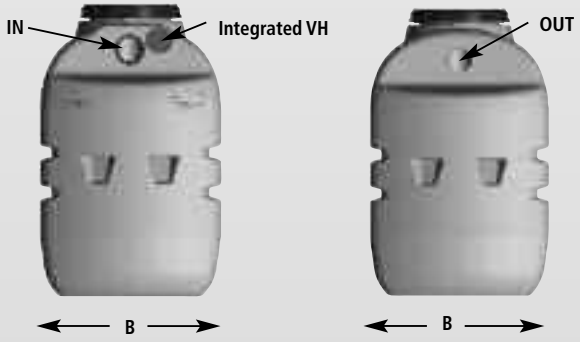
Below

Workings of EPURBLOC® 1500 l

(all water version for 3 users or equivalent, maximum)



Inlet Side (IN) **Outlet Side (OUT)**



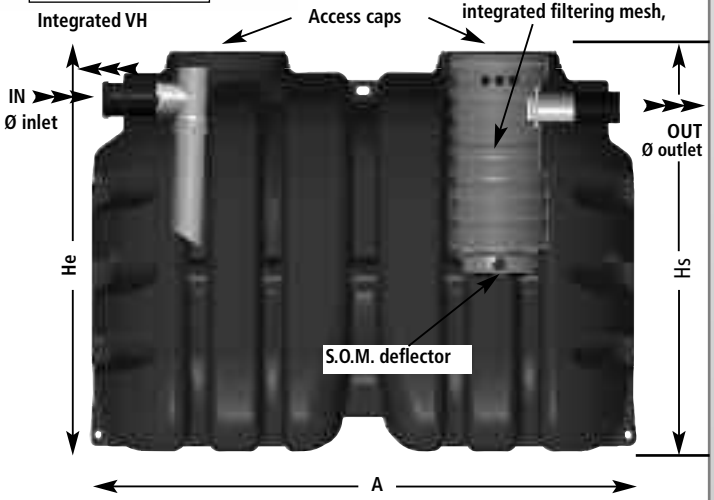
Workings of EPURBLOC® 2000 l.

(all water version for 4 users or equivalent)

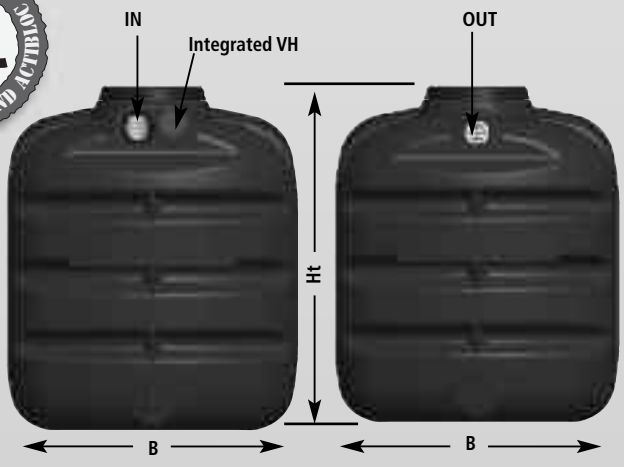
rectangular, ribbed EPURBLOC® 2000 one of the highest performers on the market: pit tests in wet soil with 0.60m above the water table in the version Perfwater with "Plantco" fixation.

CE STAMP ON SEPTIC TANKS AND ACTIBLOC

Cross-section



Inlet Side (IN) **Outlet Side (OUT)**



Below

SOTRALENTZ HABITAT

Plastepur® ribbed rectangular septic tanks 3000l

(patented model. Septic tank, settling units, Epurbloc® All Water)

Workings principle of Epurbloc® 3000l ribbed, rectangular

New

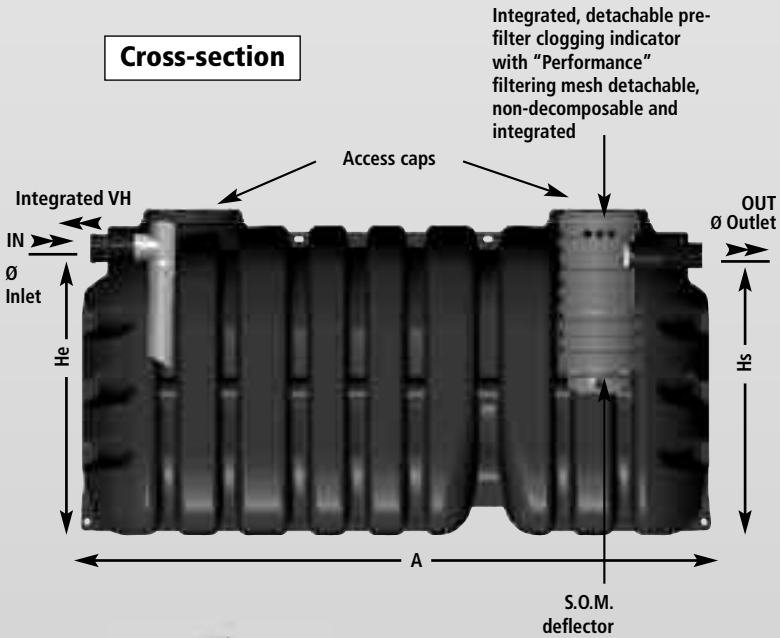
REHC 400/200

REHC 400/200 threaded riser adaptable to all manholes Ø 400mm, sold separately

Ribbed rectangular Epurbloc® 3000 one of the highest performers on the market: pit tests in wet soil with 0.60m above the water table in the version "Perfwater" with "Plantco" fixation

Lifting rings

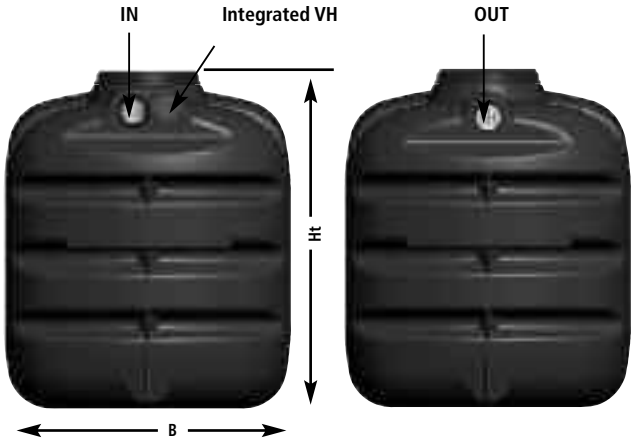
Cross-section



Fixing ring

Inlet Side (IN)

Outlet Side (OUT)



Below

SOTRALENTZ HABITAT

Cylindrical ribbed septic tanks 4000l
(patented model. Septic tank, settling units, Epurbloc® All Water)

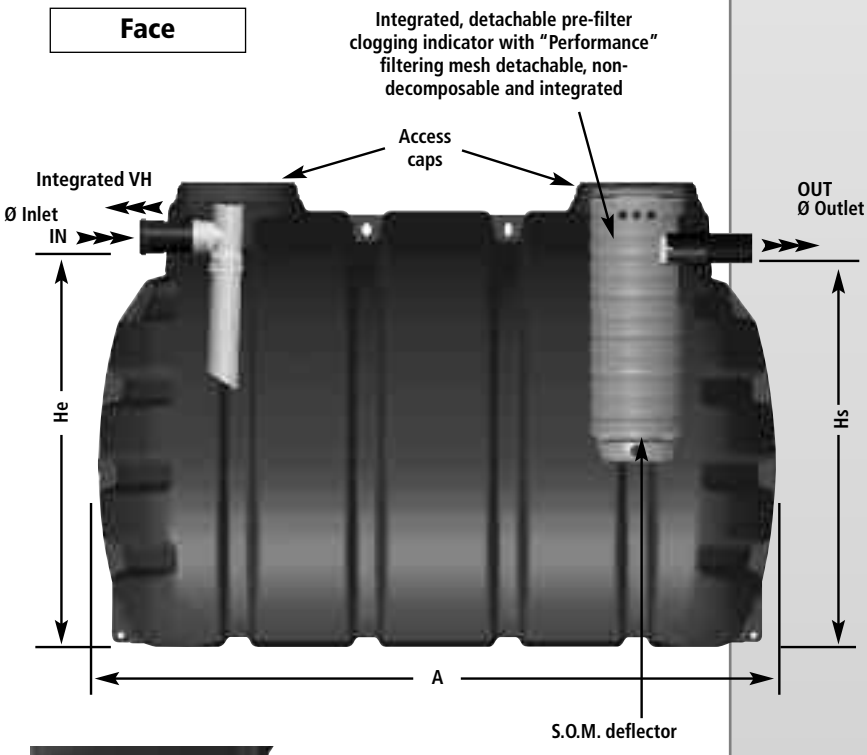
Workings of Epurbloc® 4000l
Cylindrical, ribbed

New

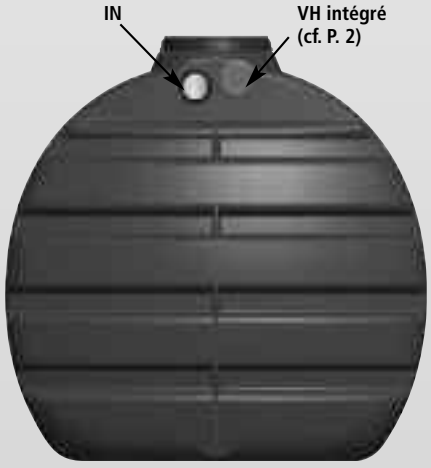
REHC 400/200

REHC 400/200 threaded riser adaptable to all manholes Ø 400mm, sold separately

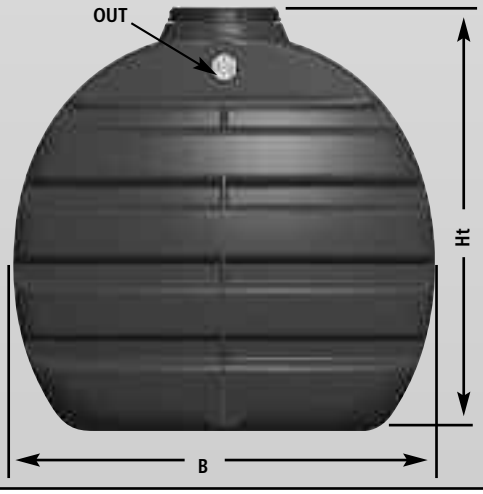
Face



Inlet Side (IN)



Côté Sortie (OUT)



Fixing ring

CE STAMP ON SEPTIC TANKS AND ACTIBLOC

SOTRALENTZ HABITAT

Septic tanks, settling tanks and Epurbloc® descriptions

Rectangular, ribbed Plastepur®

		Article	Monobloc cistern	Rectangular	extrusion blowmoulding High Density Polyethylene (PEHD)	New inlet baffle (IN) to de-clog and decompress	Outlet baffle (OUT)	New detachable, integrated pre-filter (OUT) clogging indicator	Boss(es)	Integrated Carrying handles	Slotting to Upper Ventilation (VH Ø 100)
Sewage only	DECANTEUR 1000 SP D110 RECT	11634	YES	YES	YES	NO	YES	NO	1	YES	YES
Sewage only	DECANTEUR 1500 SP D110 RECT	11636	YES	YES	YES	NO	YES	NO	1	YES	YES
All-water	EPUR. 1500R. D110 PERF	31988	YES	YES	YES	YES	NO	YES	1	YES	YES
All-water	EPUR. 2000R. D110 PERF	24371	YES	YES	YES	YES	NO	YES	2	YES	YES
All-water	EPUR. 3000R. D110 PERF	24372	YES	YES	YES	YES	NO	YES	2	YES	YES

Approximate values

	Article	Main parts	User number	Weight (kg)	Diameter Ø (mm) of inlet and outlet	Length A (cm)	Width B (cm)	Height total Ht (cm)	Height inlet He (cm)	Height outlet Hs (cm)	Visit caps (mm)	Placement above ground: Height retaining wall (cm)	Placement above ground: Height sand (cm)	Detachable, integrated pre-filter clogging indicator (OUT)	"Performance" filtrating mesh
Sewage only	DECANTEUR 1000 SP D110 RECT	11634	1 à 4	8	42	110	170	77	123	100	97	2 x Ø 400	60	50	NO	NO
Sewage only	DECANTEUR 1500 SP D110 RECT	11636	5 à 6	12	64	110	170	77	166	143	140	2 x Ø 400	60	50	NO	NO
All-Water	EPUR. 1500R. D110 PERF	31988	1 à 2	3	64	110	170	77	166	143	140	2 x Ø 400	60	50	YES	YES
All-Water	EPUR. 2000R. D110 PERF	24371	1 à 4	4	92	110	190	119	144	118	115	2 x Ø 400	60	50	YES	YES
All-Water	EPUR. 3000R. D110 PERF	24372	5	6	119	110	270	119	144	118	115	2 x Ø 400	60	50	YES	YES

Approximate values

Option: threaded riser REHC 400/200 adaptable to inlet and outlets on all Principal Pre-treatment Units.

Cylindrical ribbed Plastepur®

		Article	Monobloc cistern	Cylindrical ribbed	extrusion blowmoulding High Density Polyethylene (PEHD)	New inlet baffle (IN) to de-clog and decompress	New detachable, integrated pre-filter (OUT) clogging indicator	Lifting ring)	Integrated Carrying handles	Slotting to Upper Ventilation (VH Ø 100)
All-Water	EPUR. 4000C. D110 PERF	24374	YES	YES	YES	YES	2	2	YES	YES

Approximate values

	Article	Principal parts	User (equivalent)	Weight (kg)	Diameter Ø (mm) Inlet and Outlet	Length A (cm)	Breadth B (cm)	Total height Ht (cm)	Inlet height He (cm)	Outlet height Hs (cm)	Aeration height (cm)	Access caps (mm)	Placement above ground: Height retaining wall H (m)	Placement above ground: Height sand h (m)	Detachable, integrated pre-filter clogging indicator "Performance"	filtrating mesh
All-Water																
EPUR. 4000C. D110 PERF	24374	6	8	140	110	239	165	165	140	136	144	2 x Ø 400	80	70	AVEC	OUI

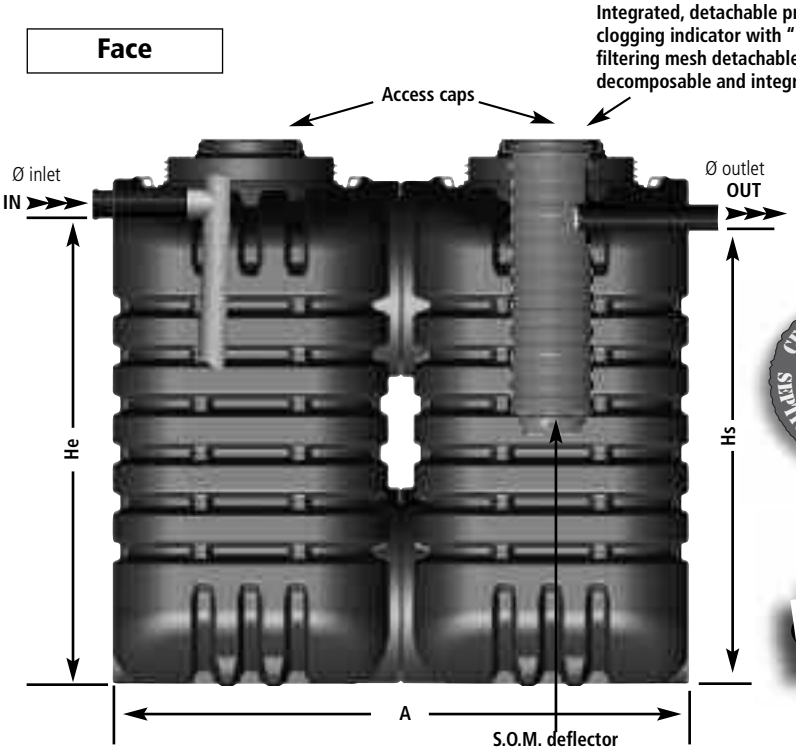
Approximate values

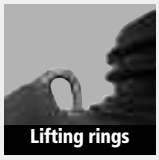
Option: threaded riser REHC 400/200 adaptable to inlet and outlets on all Principal Pre-treatment Units.

Septic tanks, settling tanks, Epurbloc® and clarification tanks Single Skin (SP-SZ 5000, 7500 and 10000 l.)

Workings of Epurbloc® All Water SP-SZ 5000l

Face




Lifting rings


Integrated Higher ventilation

Single Skin Cistern
Pit test in wet soil with 0.95m above water level in version "Perfwater"


New

REHC 400/200

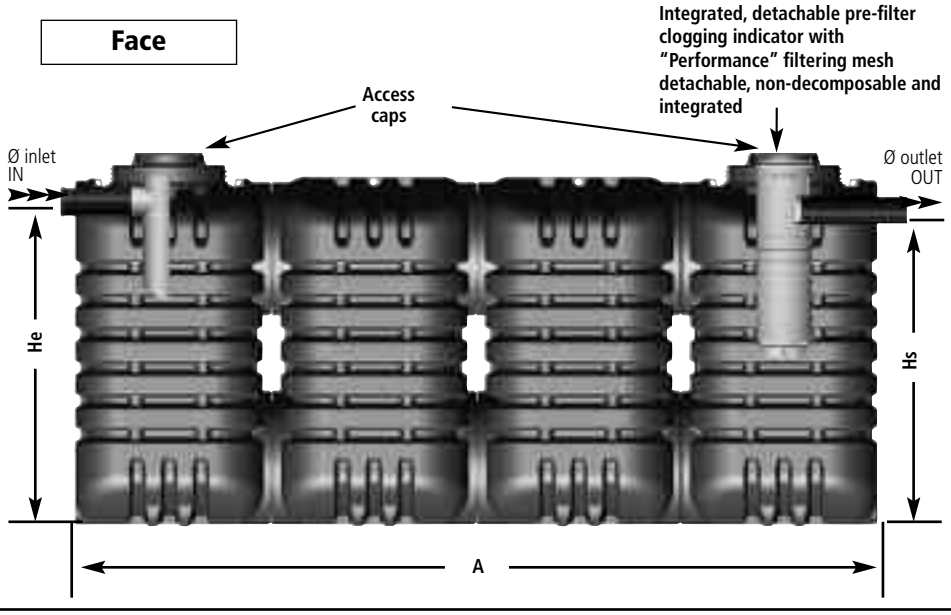
REHC 400/200 threaded riser adaptable to all manholes Ø 400mm, sold separately

Threaded riser REHC 600/250

Threaded riser + reinforced cap adaptable to all manholes Ø 600mm, sold separately

EXECUTION EPURBLOC SP-SZ 10 000 l.

Face



Side of Principal Pre-treatment Units 5000, 7500 and 10000l

SOTRALENTZ HABITAT

Descriptions of Principal Pre-treatment Units Single and Double Skin

All-Water

	Settling tank article	Principal parts	User (equivalent)	Weight (kg)	Diameter Ø (mm) Inlet and Outlet	Length A (cm)	Breadth B (cm)	Height without riser Ht (cm)	Height max. adjustable with riser SL-REHC 600 Ht (cm)	Inlet height He (cm)	Outlet height Hs (cm)	Access caps (mm)	Height of surrounding wall H (m)	Detachable, integrated pre-filter clogging indicator (OUT)	"Performances" filtering meshes in EPURBLOC and CLARIFICATION tanks
EPUR. 5000SP D110 PERF SLZ 2TH	30327	7	10	180	110	235	135	225	285	190	185	2 x Ø 400	Forbidden	With or Without	Of origin
EPUR. 5000SP D160 PERF SLZ 2TH	30328	7	10	180	160	235	135	225	285	185	180	2 x Ø 400	Forbidden	With or Without	Of origin
EPUR. 7500SP D160 PERF SLZ 2TH	30329	10	16	260	160	358	135	225	285	185	180	2 x Ø 400	Forbidden	With or Without	Of origin
EPUR. 10000SP D160 PERF SLZ 2TH	30330	14	20	360	160	481	135	225	285	185	180	2 x Ø 400	Forbidden	With or Without	Of origin
DECANTEUR 5000SP D160 SLZ 2TH	30323	7	10	180	110	235	135	225	285	190	185	2 x Ø 400	Forbidden	With or Without	Of origin
DECANTEUR 5000SP D160 SLZ 2TH	30324	7	10	180	160	235	135	225	285	185	180	2 x Ø 400	Forbidden	With or Without	Of origin
DECANTEUR 7500SP D160 SLZ 2TH	30325	10	16	260	160	358	135	225	285	185	180	2 x Ø 400	Forbidden	With or Without	Of origin
DECANTEUR 10000SP D160 SLZ 2TH	30326	14	20	360	160	481	135	225	285	185	180	2 x Ø 400	Forbidden	With or Without	Of origin

Approximate values

All-Water

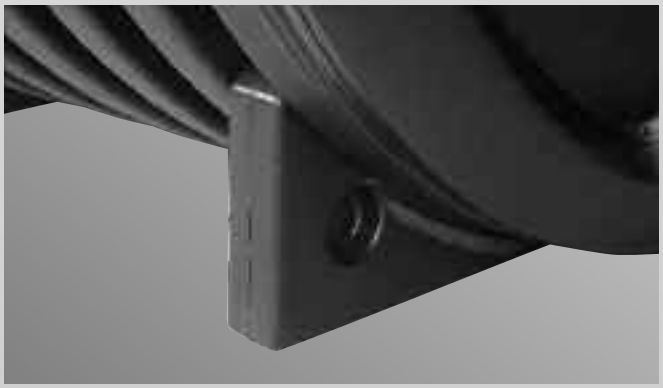
	Article	Modules of 2500 litres assembled by welding	Elements assembled by double welding	Rectangular	Cylindrical	Extrusion blowmoulding Polyethylene (PEHD)	New inlet device (IN) to allow unblocking and decompression	Outlet device (OUT)	New detachable, integrated pre-filter clogging indicator (OUT)	Reinforced areas	Handling straps	Number of welded feet for anchorage in ground water (option)
EPUR. 5000SP D110 PERF SLZ 2TH	30327	2	-	YES	-	YES	YES	YES	YES	1	YES	8
EPUR. 5000SP D160 PERF SLZ 2TH	30328	2	-	YES	-	YES	YES	YES	YES	1	YES	8
EPUR. 7500SP D160 PERF SLZ 2TH	30329	3	-	YES	-	YES	YES	YES	YES	2	YES	12
EPUR. 10000SP D160 PERF SLZ 2TH	30330	4	-	YES	-	YES	YES	YES	YES	3	YES	16
DECANTEUR 5000SP D160 SLZ 2TH	30323	2	-	YES	-	YES	YES	YES	NO	1	YES	8
DECANTEUR 5000SP D160 SLZ 2TH	30324	2	-	YES	-	YES	YES	YES	NO	1	YES	8
DECANTEUR 7500SP D160 SLZ 2TH	30325	3	-	YES	-	YES	YES	YES	NO	2	YES	12
DECANTEUR 10000SP D160 SLZ 2TH	30326	4	-	YES	-	YES	YES	YES	NO	3	YES	16
DP-RKT CLARIFICATEUR	p.37	-	YES	-	YES	YES	YES	YES	YES	0	NO	Kit Planco
DP-RKT DÉCANTEUR	p.37	-	YES	-	YES	YES	YES	YES	NO	0	NO	Kit Planco
DP-RKT cuves à vidanger FAV	p.30	-	YES	-	YES	YES	YES	NO	NO	0	NO	Kit Planco

Approximate values

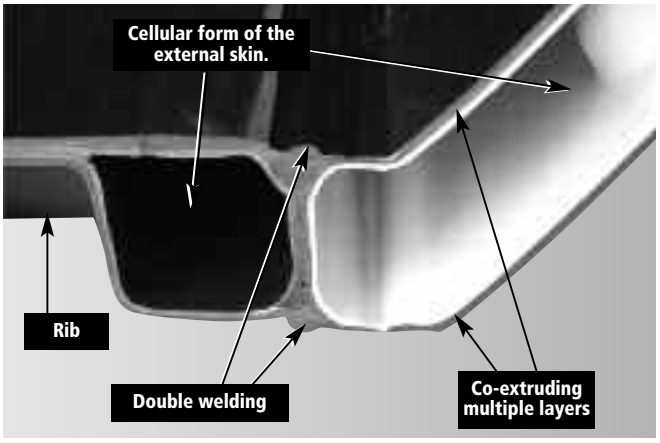
Option: Threaded riser REHC 400/200 adaptable to inlet and outlet of 5 000, 7 500 and 10 000 SP-SZ.
Option: Threaded riser REHC 600 CR, adjustable to 1 height with reinforced cap adaptable to inlet and outlet.
Option: Threaded riser REHC 600/250 + reinforced cap Ø 600 mm adaptable to inlet and outlet

Integrated, welded stabilization feet

- **Integrated stabilization feet welded to the cavity bases, keeping the unit level**



Non deformable and double weld



Septic tanks, settling tanks, clarification tanks
Double Skin

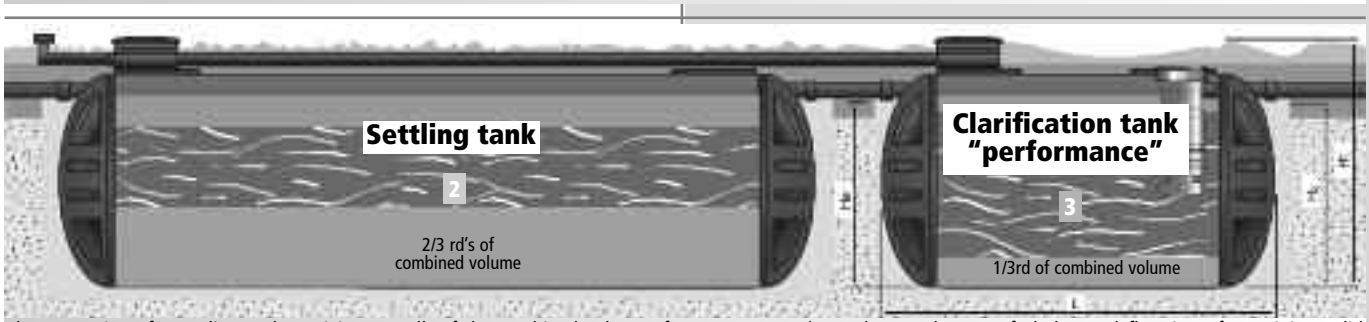
Face | **Inlet side (IN)**

CE STAMP ON SEPTIC TANKS AND ACTIFLOC

Type	Article Clarification unit (CLARIF)	Article Settling tank (DC)	Weight (kg)	Length (cm)	Width (cm)	Height (cm) of FAV without riser	Height (cm) max. adjustable with riser* SL-REHC 600 CR	Inlet height He (cm) for DC and CLARIF	Outlet height Hs (cm) for DC and CLARIF	Ø Inlet/Outlet (mm)	No. of manholes	No. of feet	New pre-filter (OUT) in the clarification unit "Performance" with filtrating mesh
3000	30378	30372	285	182	203	220	285	182	179	110	1	4	YES
5000	24942	24935	365	235	203	220	285	182	179	110	1	4	YES
5000	24943	24936	365	235	203	220	285	177	174	160	1	4	YES
6000	30379	30373	400	264	203	220	285	177	174	160	2	4	YES
7000	24944	24937	480	316	203	220	285	177	174	160	2	4	YES
9000	24945	24938	560	370	203	220	285	177	174	160	2	4	YES
11000	31871	31870	670	452	203	220	285	177	174	160	2	4	YES
12000	24946	24939	755	505	203	220	285	177	174	160	2	6	YES
14000	30380	30374	870	587	203	220	285	177	174	160	2	6	YES
15000	30381	30375	890	619	203	220	285	177	174	160	2	6	YES
16000	24947	24940	955	640	203	220	285	177	174	160	2	6	YES
18000	30382	30376	1065	726	203	220	285	177	174	160	3	8	YES
19000	24948	24941	1145	780	203	220	285	177	174	160	3	8	YES
22000	30383	30377	1340	916	203	220	285	177	174	160	3	8	YES
25000	30052	30051	1460	998	203	220	285	177	174	160	4	10	YES
27000	30893	30892	1515	1080	203	220	285	177	174	160	4	10	YES
30000	30751	30750	1680	1162	203	220	285	177	174	160	4	12	YES
35000	33413	33412	1985	1340	203	220	285	177	174	160	4	12	YES
40000	31511	31510	2350	1585	203	220	285	177	174	160	4	12	YES
50000	33887	33888	2910	1950	203	220	285	177	174	160	4	16	YES

Approximate values

*** Option: Riser REHC 600 CR adjustable to 1 height with reinforced cap, so max adjusted height of the device is 275 cm or 290 cm**
Option: Riser REHC 600/250 + green reinforced cap Ø 600 mm, screws onto inlet (IN) and outlet (OUT).



The succession of a settling tank receiving 2/3 rd's of the combined volume of household wastewater (sludge settlement and flotation of solid matter) followed by a clarification tank, receiving 1/3rd of the combined volume of household wastewater (secondary settlement of sludge and flotation of remaining solid matter) improving the performance of non-mains, grouped, wastewater disposal systems.

It is essential to check the DP tanks and those adjacent with our technical staff before starting the excavation or the foundation slab

REHC 400/200

REHC 400/200 threaded riser adaptable to all manholes Ø 400mm, sold separately

Threaded riser REHC 600/250

Threaded riser + reinforced cap adaptable to all manholes Ø 600mm, sold separately

SOTRALENTZ HABITAT

Double Skin® Holding tanks
F.A.V. to empty
with integrated emptying rod

Holding tanks FAV destined to temporarily store waste domestic water (construction sites un-connectable to mains sewerage, salons, demonstration…) or residual water (washing water in wine houses…) or other residues (contact us)

Holding tank F.A.V equipped with:

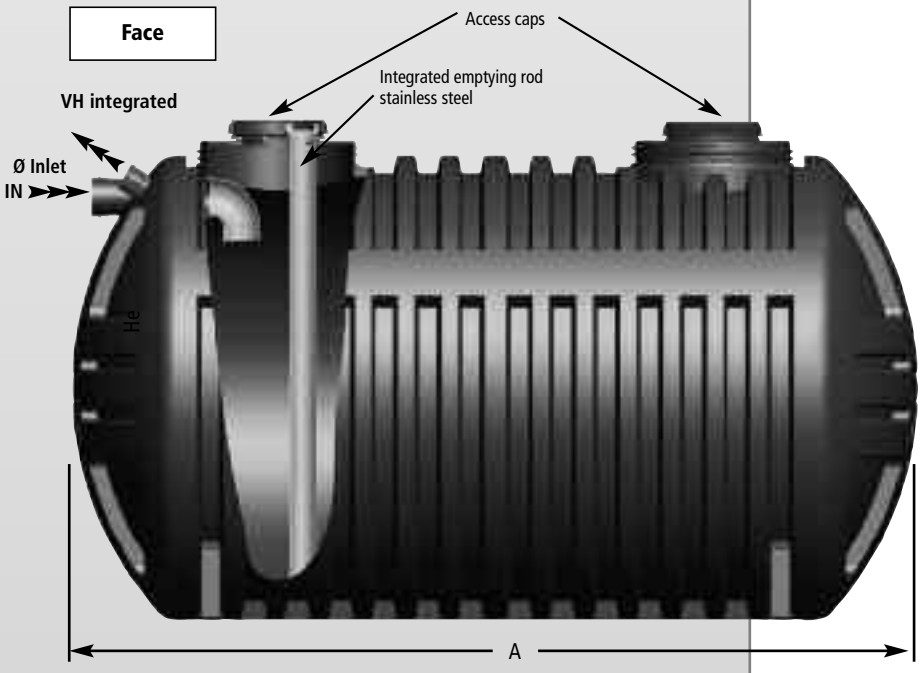
- 1 female PE inlet tube, integrated join Ø 160 mm, fixed with a PE welding cord.
- if arrival pipe is Ø 110 mm, reduction of 160/100 mm is put into place and supplied by the user
- Inlet baffle (IN) of Ø 160 mm composed of a 90° joint
- No cover sleeve followed by a tubular opening with deflector is integrated in the inlet baffle (IN).
- 1 male outlet for higher ventilation (VH), made of PE, of Ø 110 mm, welded with PE solder. Sotralentz suggests slotting Higher ventilation (VH) in the inlet (IN) of FAV (upstream) and not the downstream side of FAV.
- Outlet of Higher ventilation (VH) Ø 110 mm:
  - serves as a decompression opening at drainage times
  - never to be closed.

Threaded riser REHC 600/250

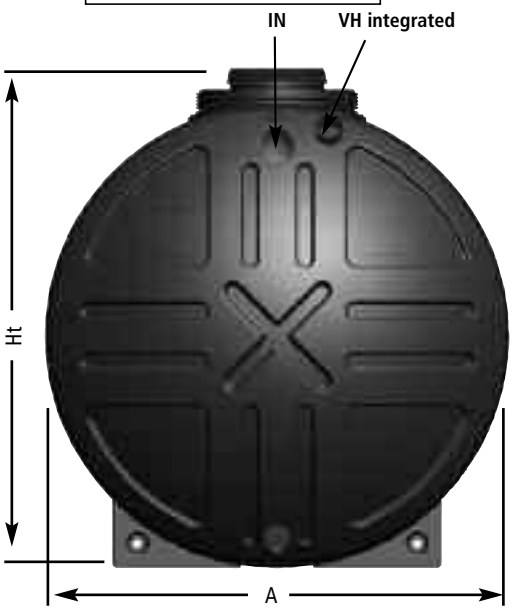
Threaded riser + reinforced cap adaptable to all manholes Ø 600mm, sold separately

Threaded riser REHC 600/250 Threaded riser + reinforced cap adaptable to all manholes Ø 600mm, sold separately
  - placed 40 cm above the roof apex
  - equipped with a static exhauster.
- Holding tanks F.A.V. of 3 500 and of 5 000 litres available with 1 manhole.
- Each manhole equipped with 1 screw-on cap in P.E., Ø 400 mm.
- 2 to 4 PE manholes, Ø 400 mm, at each extremity of the holding tank F.A.V. and at the centre of tanks 6000 litres and greater.
- Risers REHC 400/200, REHC 600/250 and REHC 600CR sold optionally.
- Integrated emptying rod in stainless steel with rapid pump connection

Face



Coté entrée (IN)



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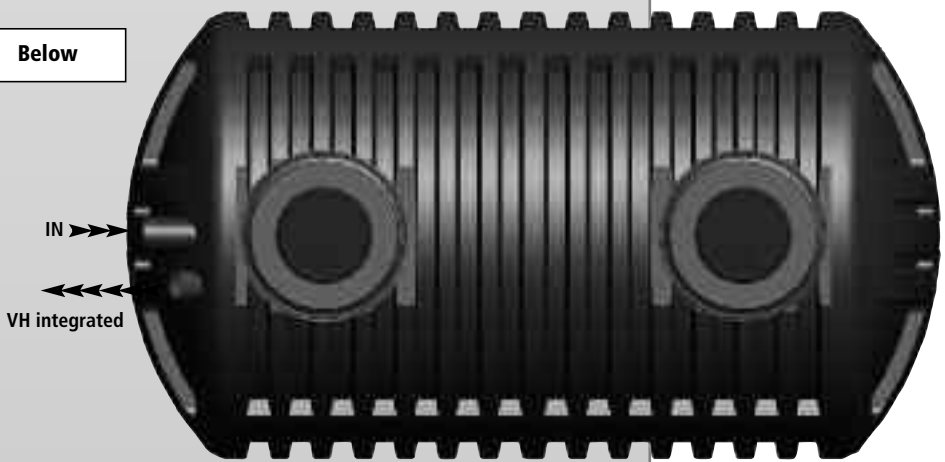


For the storage of other residues, contact us with the type of residue and its UN number in order to determine the compatibility with the tank

After cleaning with a pressure water jet and pumping of residues after use at the end of the work site, demonstration…our tanks can be disposed and reused.

SOTRALENTZ HABITAT

Serial number – date of fabrication

Double Skin® Holding tanks
F.A.V. to empty
with integrated emptying rod

Désignation	Article	Weight (kg)	Length (cm)	Breadth (cm)	Height (cm) Without riser	Height inlet (IN) Hent (cm)	Diameter Ø inlet (mm)	Diameter Ø outlet Higher ventilation (VH) integrated	No. of manholes	No. of feet
FAV 3500DP D110 RKT 1TH	30384	285	182	203	220	182	110	110	1	4
FAV 5000DP D110 RKT 1TH	30385	365	235	203	220	182	110	110	1	4
FAV 5000DP D160 RKT 1TH	23300	365	235	203	220	177	160	110	1	4
FAV 6000DP D160 RKT 1TH	30386	400	264	203	220	177	160	110	2	4
FAV 7000DP D160 RKT 2TH	24296	480	316	203	220	177	160	110	2	4
FAV 9000DP D160 RKT 2TH	24839	560	370	203	220	177	160	110	2	4
FAV 12000DP D160 RKT 2TH	24306	755	505	203	220	177	160	110	2	6
FAV 14000DP D160 RKT 2TH	30387	870	587	203	220	177	160	110	2	6
FAV 15000DP D160 RKT 2TH	30388	890	619	203	220	177	160	110	2	6
FAV 16000DP D160 RKT 3TH	23694	955	640	203	220	177	160	110	2	6
FAV 18000DP D160 RKT 3TH	30389	1065	726	203	220	177	160	110	3	8
FAV 19000DP D160 RKT 3TH	23695	1145	780	203	220	177	160	110	3	8
FAV 22000DP D160 RKT 4TH	30390	1340	916	203	220	177	160	110	3	8
FAV 25000DP D160 RKT 4TH	24307	1460	998	203	220	177	160	110	4	10
FAV 27000DP D160 RKT 4TH	30894	1515	1080	203	220	177	160	110	4	10
FAV 30000DP D160 RKT 4TH	30752	1680	1162	203	220	177	160	110	4	12
FAV 35000DP D160 RKT 4TH	33547	1985	1340	203	220	177	160	110	4	12
FAV 40000DP D160 RKT 4TH	31512	2350	1585	203	220	177	160	110	4	12
FAV 50000DP D160 RKT 4TH	33883	2910	1950	203	220	177	160	110	4	16

Approximate values

Imperative to check the DP cisterns and those before and after with our technical staff before starting the excavation or foundation slab

Cistern Double Skin

One of the best performers on the market: pit test in wet soil avec 1.10m above water level

Holding tanks to empty FAV 16000l

Cleaning with a pressure water jet and pumping of residues after use at the end of the work site, demonstration… means you can depose and reuse our tanks.

For the storage of other residues, contact us with the residue type and its UN number in order to determine the compatibility with the tank

Threaded riser REHC 600/250

Threaded riser + reinforced cap adaptable to all manholes Ø 600mm, sold separately

SOTRALENTZ HABITAT

Detachable, integrated pre-filter clogging indicator in the Epurbloc® or in the clarification tank with SOM* deflector

The integrated, detachable pre-filter clogging indicator with S.O.M.* deflector is:

- located in the outlet side (OUT) of the EPURBLOC® or the clarification tank to trap a maximum of Suspended Organic Matter (S.O.M.*) and reduce the BOD5**.
- made of a cylindrical monobloc in extrusion blowmoulding High Density Polyethylene, includes the elements described below:
  - Cap Ø 400 mm with watertight joint.
  - Detachable connection sleeve Ø 110 or Ø 160 (according the type of device).
  - Positioning handle on the connection sleeve
  - Non return valve Ø 110 or Ø 160 (according the type of device).

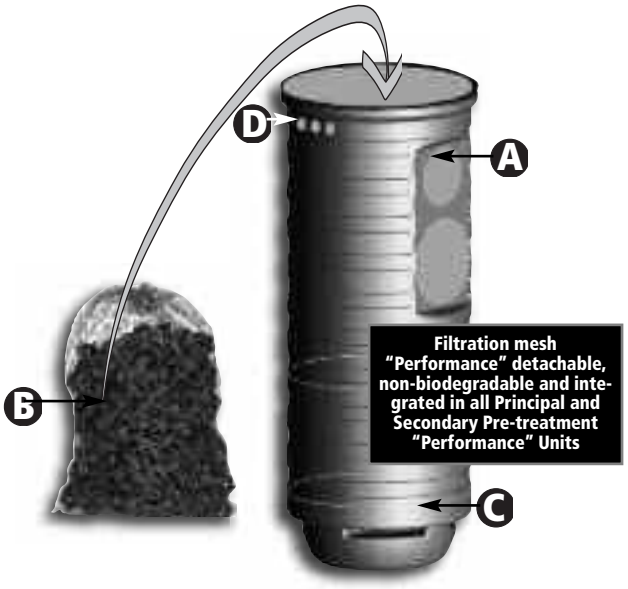
Ⓐ Removal handle on the pre-filter

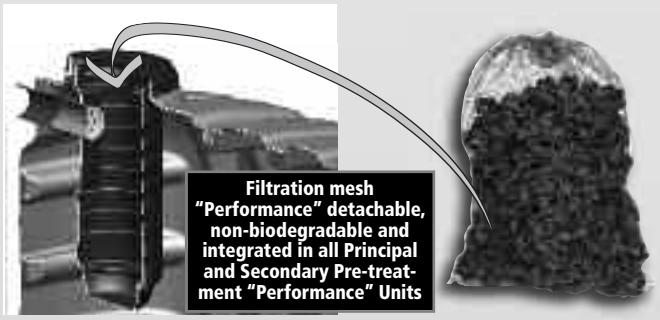
Ⓑ Filtration mesh "Performance".

Ⓒ Integrated deflector of Suspended Organic Matter (S.O.M.).

Ⓓ 2 x 3 decompression openings of Ø 35 mm each one.

***S.O.M. : Suspended Organic Matter**
****BOD5 Biological oxygen demand over 5 days**





	standard	réhabilitation*
Integrated pre-filter	**Ø 110 mm**	**Ø 110 mm**
EPUR. 2000R. PERF	Art. 31755	Art. 31641
EPUR. 3000R. PERF	Art. 31755	Art. 31641
EPUR. 4000C. PERF	Art. 31638	Art. 31641

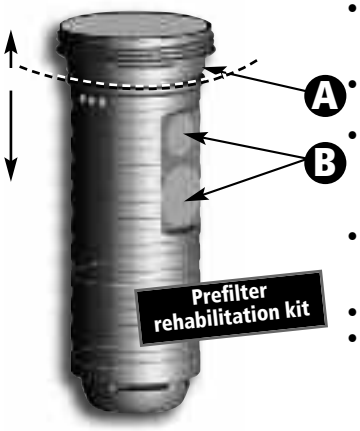
Integrated pre-filter	Ø 110 mm	Ø 160 mm
EPUR. 3000 & 5000DP D110 PERF RKT2TH	Art. 31637	-
EPUR. 5000 à 50000DP D160 PERF RKT2à4TH	-	Art. 31637
EPUR. 5000 à 10000SP D110 PERF SLZ 2TH	Art. 31637	-
EPUR. 5000 à 10000SP D160 PERF SLZ 2TH	-	Art. 31637

Kit for rehabilitation of integrated pre-filter in old EPURBLOC® composed of:

- Cut top off pre-filter body in order to collect the screw thread,
- Filtrating Mesh "Performance",
- Watertight Joint
- Connection sleeve, detachable,
- Non-return valve,
- Screw cap,
- User Manual A24.

Assembly of Rehabilitation Kit

Ⓐ Break away the screw thread of the pre-filter body with the help of a saw or a cutting tool,
- Remove the old pre-filter,
- Position the screw thread in place and set the old pre-filter taking care to put the watertight joint level between the device and the PEHD screw thread
- Fix the PEHD screw thread using stainless steel screws at 4 points,
- Unscrew the mounted cap on the screw thread,
- Insert the pre-filter body across the screw thread,
- Position pre-filter body across the screw thread,



Ⓑ Mark the place where waste domestic water outlets on the pre-filter body,
- Pull out the pre-filter body,
- Cut the mark where waste domestic water outlets to the appropriate level,
- Encase the detachable connection sleeve, with the aid of positioning handle,
- Position the connection sleeve handle horizontally,
- Ensure the decompression opening is directed upwards to avoid pushback of floating material towards the effluent outlet,
- Fit the non return value on the connection sleeve to aid with removal
- Fill with clear water before use;
- Carefully re-close the cap Ø 400Ø 400 mm.

Light, unalterable, easy to install: simple and economic solution

Advantages of filtering meshes made from "performances" material

• Lightness of Filtration Mesh (less than 2kg)

• Water efficiency, ejections minimal

• Beads PP allowing optimal diffusion of pre-treated wastewater through the vertical filter.

• Organic matter contained in the domestic wastewater captured by fins on the beads where they stick on contact. Organic matter forms a biomass due to the development of aerobic bacteria.

• Advised working temperature between 5 and 35°C allowing an optimal degradation of matter and reduction in BOD (Biochemical Oxygen Demand) as contact time allows for optimal oxidation of matter

• Biomass film does not exceed a thickness of 1 mm and weight oscillates between 6 and 22 kg/m³.

• Filtration mesh integrated into all Principal and Secondary Pre-treatment "Performance" Units, no risk of forgetting it at the installation stage

• Servicing easier for the public services (non-mains public service sewage disposal SPANC)

• Riser and clogging indicator stay in place during maintenance as pre-filter and filtration mesh are detachable

• Direct assembly of threaded riser on the Epurbloc® or the clarification tanks

• Easy extraction of the integrated pre-filter for cleaning of the filtered material crossing the threaded riser REHC 400/200

• Mesh and filtration element non-biodegradable, unlimited usage

• Watertight pre-filter with running water

Performing polypropylene beads used in the Epurbloc Performance, Pre-filter Performance

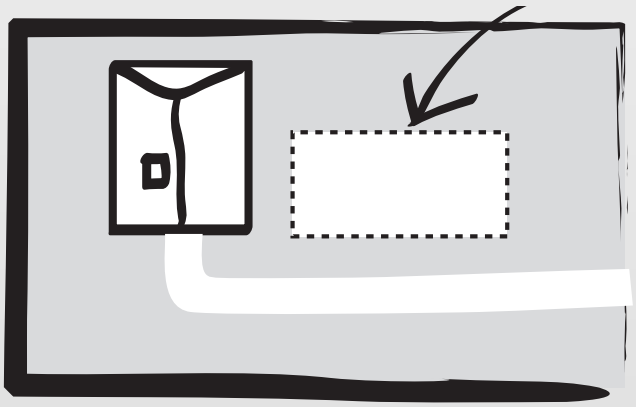
- Beads PP allowing optimal diffusion of pre-treated wastewater through the vertical filter.
- Organic matter contained in the domestic wastewater captured by fins on the beads where they stick on contact. Organic matter forms a biomass due to the development of aerobic bacteria.
- dvised working temperature between 5 and 35°C allowing an optimal degradation of matter and reduction in BOD (Biochemical Oxygen Demand) as contact time allows for optimal oxidation of matter
- Biomass film does not exceed a thickness of 1 mm and weight oscillates between 6 and 22 kg/m³.

Surface area:	> 160 m2/m³
Useful volume:	4 % material - 96 % air
Weight to the m³:	37 kg/m³
Weight of the bead:	2.5 g
Colour:	charcoal grey
Principal material:	polypropylene
Resistance to compression:	250 kg - 1 m
Softening temperature:	+ 72°C
Max. Working temperature:	+ 65 °C
Resistance to hydrocarbons:	good resistance on average
Resistance to acids:	good to very good
Resistance to cold:	very good

1.1 Guidelines for the layout of an underground installation

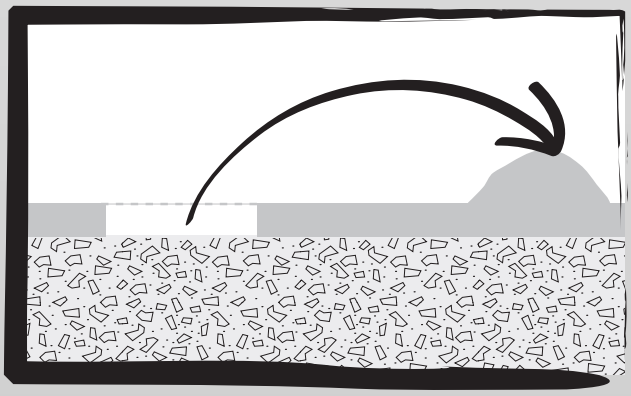
The pipe bringing wastewater towards the underground unit must have a slope between 1% and 3%
The treatment units:

- must be installed as close as is possible to the building either
  fully buried for units of all types and capacities
  half-buried for units up to 4000 l
  above ground in a block-built enclosure for units up to 4000 l
- Must be positioned away from all loads mobile or immobile unless extra precautions are taken during the installation and access for checks maintenance is still possible
- Must without fail, in accordance with the regulations and irrespective of type of installation, include a higher ventilation point of minimum Ø 100 mm, to allow the outlet of anaerobic fermentation gases



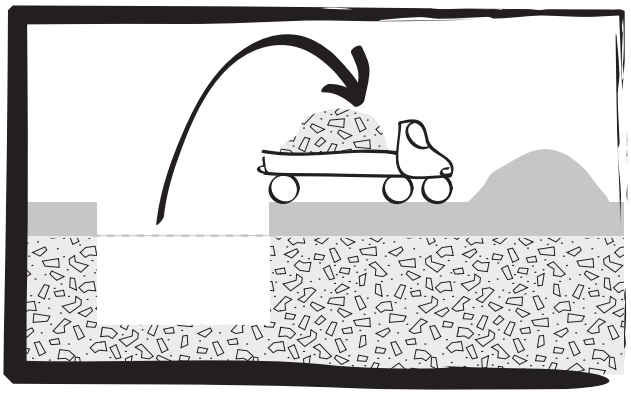
1.2 Performing the excavation for an underground installation

The excavation works allowing the burial of the unit must conform to the details of standard NF p98-331 and NF P98-332.



1.2.1 The size and execution of excavations for the unit to be buried

The size of the excavation must allow the unit to be buried to be placed such that none of it touches the sidewalls of the hole prior to back filling.
After sizing the excavation, the area for the installation must be laid out as close to the building as is possible, in addition to avoiding all surface loads mobile or immobile.
The topsoil in the are must be removed and stored elsewhere, so as to allow its re-use at the finish of the works
After removal of all the other soil, once the excavation is finished, the bottom of the hole must e at least 20cm below the level chosen for the lowest part of the unit to be buried, thereby allowing 20cm bed of stabilized sand. (stabilized sand = 1m³ of sand mixed dry with 200kg of cement)
The depth of the bottom of the hole, including the seat for the unit, must allow a slope of between 1% and 3% for the arrival pipe containing the wastewater, as measured from inspection chamber, distribution chamber or non-integrated underground filter and the inlet point of the unit to be buried.

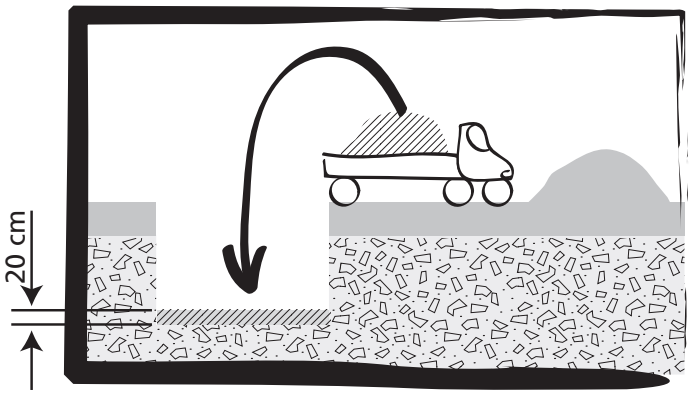


1.2.2 Achieving the foundation bed

In cases with difficult soil types, or where there is underground water, it is essential to position the Kit PLANTCO anchorage points such that they are above a 30cm foundation bed
The foundation bed is made-up of stabilized sand. The thickness of the bed is 20cm. The surface of the bed is raked and consolidated such that the unit will not rest on any sharp objects or weak areas. The flatness and horizontalness of the bed must be assured.
In the case of difficult soils (for example, impermeable, clays, etc.) or underground water, the foundation bed should be 30cm deep, and made with reinforced stabilized sand. In cases of twin cisterns, it is essential to install a bed of reinforced stabilized sand 30cm deep to support the tubes and joints connecting the two cisterns.

Guide de pose enterrée

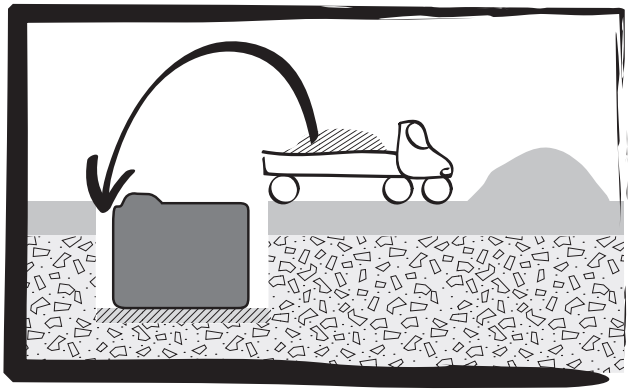
Voir Norme NF DTU 64-1



1.3 Posing the unit to be buried

1.3.1 General guidelines

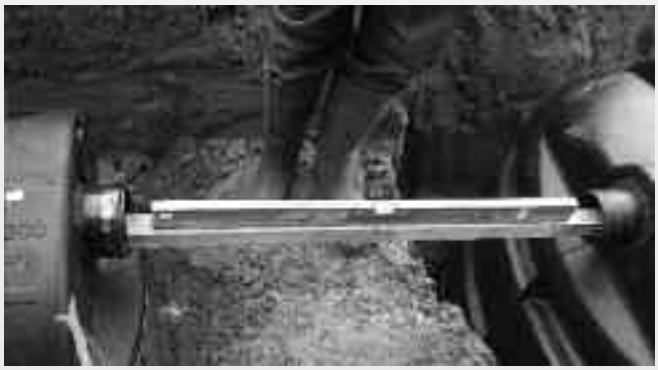
The unit to be buried should be positioned on the bed of stabilized sand such that it is perfectly horizontal. The level of the inlet point to the unit must take into account:
Whether it is an inlet or an outlet
The level of the finished soil
The access caps should be visible and accessible to allow maintenance and emptying



1.3.2 Back-filling around the sides of the unit

When using a Kit PLANTCO, be certain not to forget to put the correct straps into place maximum load 5 tonnes delivered with the Kt PLANTCO
The lateral backfilling around the unit to be buried is performed methodically, in successive layers, using stabilized sand. The back filling must be done using stabilized sand free of all sharp objects (stabilized sand = 1m³ of sand mixed dry with 200kg of cement) making up a width of at least 20cm all around the unit.

Important:
when backfilling all SP-SZ tanks use stabilized sand:
dry mix of 1m³ of sand to 200kg of cement.



1.3.3 Connections

The joints for the arrival pipe, the overflow and the emptying pipe, as well as the service tube, the pump, the management module and all other connecting parts of the installation must be water-tight.
To take into account the natural level of the soil after the final back filling, these joints should be flexible, and made of elastomer or rubber.

1.3.4 Final back-filling

The final backfilling around the buried unit is done after attaching the risers, with stabilized sand to a level just below the pipe connections on the risers, and around the risers, so as to prevent pipes and risers separating or the risers being squashed during the final back-fill.
The surface finish is done with the previously store top soil, which should be sized to remove all stones or sharp objects. The final back-fill is done in successive layers to the point where it reaches the natural level of the surrounding terrain, whilst also leaving the access points visible and accessible, and taking into account subsequent consolidation.

IMPORTANT: Certain specific cases need more care during installation, these include:
All additional building works, be they in weak-mix concrete, stabilized sand, or in concrete blocks, be they retaining walls or load bearing slabs, in the cases described below, they must be designed on a case-by-case basis in liaison with the builder.

- **The passage or parking of vehicles** (load-spreading slab of defined strength, stabilized sand…)
- **Washing area** (load-spreading slab of defined strength, stabilized sand…)
- **Unstable ground** (stabilized sand, retaining wall…)
  presence of under-ground water or a stream (reinforced stabilized sand 0.30m, anchorage band in reinforced stabilized sand 0.30m with anchorage Kit PLANTCO, culvert…)
- **Occasional rising of the water table** (stabilized sand…)
- In the case of a **permanently high water table**, it is essential to position the anchorage points of the Kit PLANTCO such that they are 30cm above the foundation bed.
- **Where there is a permanently high water-table, the buried unit must be suited to these conditions and placed on a 30cm thick band of reinforced stabilized sand using quick-drying cement, anchored with a Kit PLANTCO, then filled with water without fail, to equalize the back-pressure, up to the level of the water-table.**
  The successive layers of lateral back-fill should be stabilized sand made with 200kg cement per m³ of cement (2/3 normal cement + 1/3 quick drying cement). The SP units cannot be strapped down.
- **Impermeable soil preventing water infiltration** (stabilized sand avoids the leaching of the backfill…)
- **Sloped ground > to 5 %** (support wall, stabilized sand, semi-buried placement…)
- **Presence of hard rock below ground** (stabilized sand…)
- **Drainage of river water:** necessary upstream of the installation when the ground slope is > to 5 %, avoids the leaching of the backfill.
- **If impossible to join with the effluent outlet** : necessary to put a decompression well and backfill sides with stabilized sand (dry mix of 200 kg of cement with 1m³ of sand)

SOTRALENTZ HABITAT

Guide to underground placement

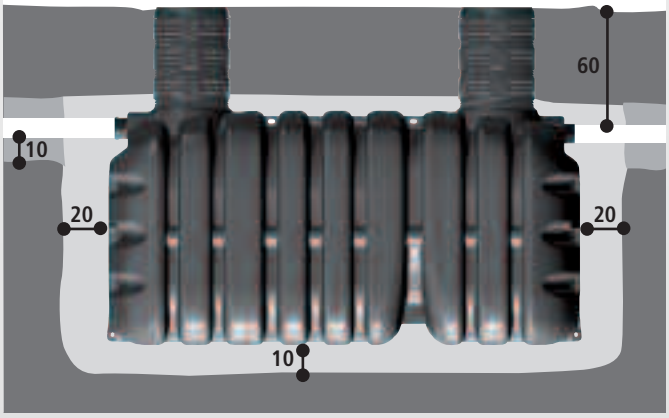
(see French Standard NF DTU 64-1)

Underground placement to a shallow depth, with three (3 maximum) threaded risers REHC 400/200, of rectangular and cylindrical ribbed units

Finishing topsoil

Coarse neutral sand 0/5 according to the Standard NF P 11-300 (GTR 92), compacted by watering

Stabilized sand* relative to the nature of the soil or the presence of ground water (see special cases)



Underground placement to a shallow depth, with three (3 maximum) threaded risers REHC 400/200, of rectangular and cylindrical ribbed units

Finishing topsoil

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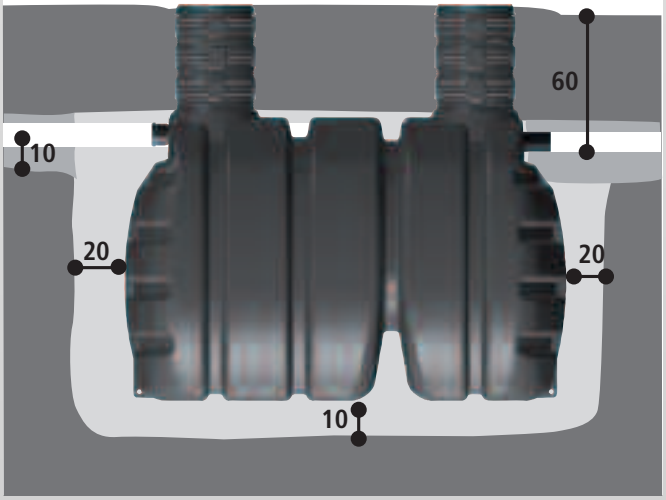


1. Grease Extractor, Pre-filter, Septic tank, Settling tank and Underground Epurbloc® up to 4000 litres:

- In every case, before excavating the site, it is imperative to store topsoil in a reserved zone to allow for a good finish at the end of works (see NF DTU 64-1).
- Cover bottom of dig with 10 cm of stabilized sand* in accordance with the nature of the soil (see particular cases).
- Unit placed perfectly horizontal taking into account the direction of connections (inlet/outlet)
- Backfilling with 20cm of coarse neutral sand 0/5 in accordance with Standard NF P 11-300 (GTR 90) consolidate with water or stabilized sand depending on the soil type or presence of a ground-sheet (see particular cases), free from any sharp or pointed object, is done as the unit fills with water to equal out pressure.
- Unit installed to the ground level, access caps must be accessible and apparent as is demanded by current regulation laws
- Pipe work linking habitation and the unit having a slope between 2 % and 4 %.
- Connection of pipe work (inlet IN and outlet OUT) and the Higher ventilation (VH) only to be done after the banking up..
- All plantations above the underground works are forbidden
- All rainwater directed through the units is forbidden.

2. Underground dosing tank:

For all dosing tanks, and all cases of placement, they must obligatorily be equipped, in accordance with regulation laws, with an Higher ventilation (VH) to extract anaerobic fermentation gases and to avoid any pressure build-up in the Secondary unit during flushing.

- Can be installed underground or semi- buried
- Must be situated away from the passage/parking of all loaded vehicles unless particular precaution has been taken in the placement
- Must be installed to finished ground level, access caps accessible and apparent, as current regulation laws demand, for maintenance and servicing.
- In all cases, before any excavation on site, it is imperative to store topsoil in a reserved zone to allow good finishing at the end of works
- Bottom of dig filled with 10 cm of compacted sand or stabilized sand in accordance with the nature of the soil (see particular cases)
- **Unit placed perfectly horizontal** taking into account the direction of connections (inlet/outlet), in order to neither upset nor block the auto-flush doser
- **Backfilling with 20cm of coarse neutral sand 0/5** in accordance with Standard NF P 11-300 (GTR 90) consolidate with water or stabilized sand depending on the soil type or presence of a ground-sheet (see particular cases), free from any sharp or pointed object, is done as the unit fills with water to equal out pressure.
- **Unit installed to ground level** with the access cap accessible.
- **Connection of pipe work** (inlet IN and outlet OUT) and the Higher ventilation (VH) only to be done after the banking up.
- **All plantations above the underground works are forbidden**
- **All rainwater directed through the units is forbidden.**

Guide to underground placement

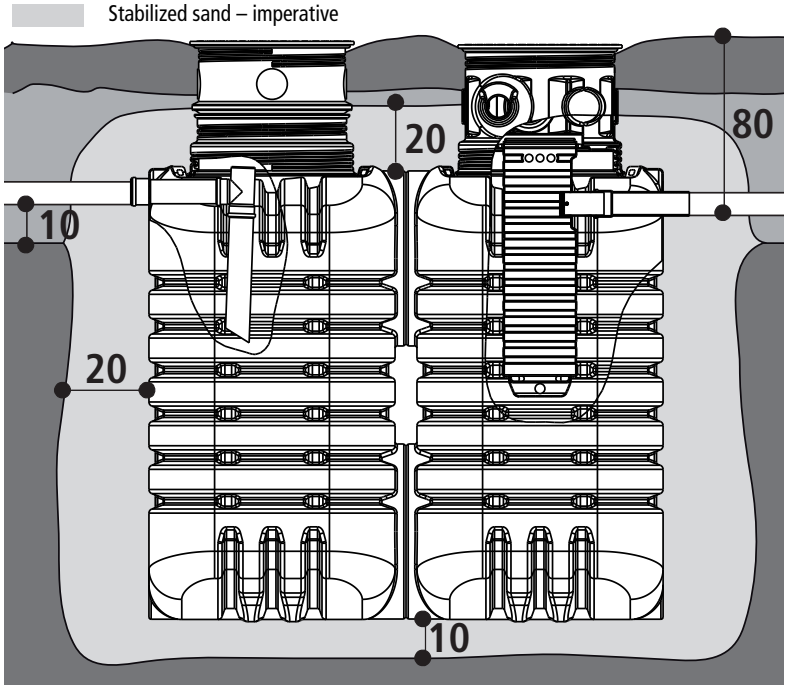
(see French Standard NF DTU 64-1)

Underground placement of units SP-SZ with one threaded riser REHC 400/200 at the inlet (IN) or two (2) threaded risers REHC 600/250 + two (2) threaded risers REHC 600/300 + 2 reinforced caps.

Finishing topsoil

Coarse neutral sand 0/5 in accordance with Standard NF P 11-300 (GTR 92) compacted by watering

Stabilized sand – imperative

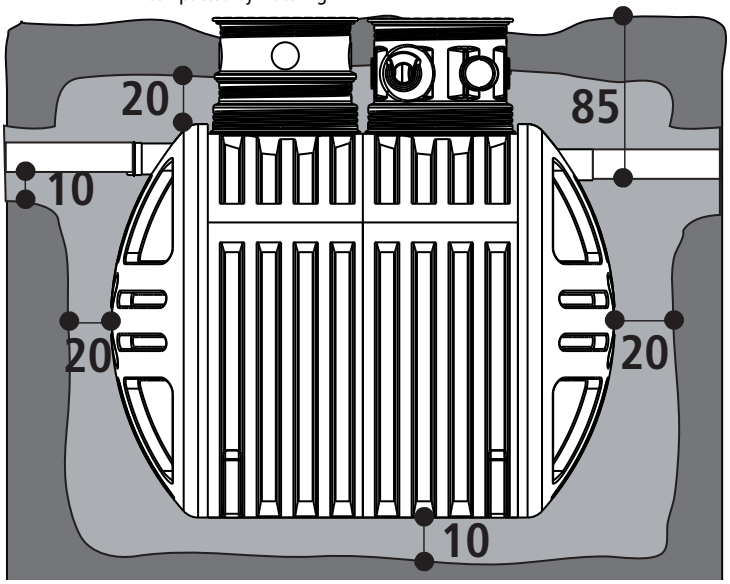


N.B.: in the two cases of this figure, with three (3) or with four (4) risers REHC 400/200, if the terrain is not sloped, it is imperative to place a lift pump downstream of the septic tank and upstream of the aerobic treatment systems (drainfield, filter bed etc…)

Underground placement of units DP-RKT with a threaded riser REHC 600/580 at the inlet (IN) and outlet (OUT) or two (2) threaded risers REHC 600/250 + two (2) threaded risers REHC 600/300 + 2 reinforced caps.

Finishing topsoil

Coarse neutral sand 0/5 in accordance with Standard NF P 11-300 (GTR 92) compacted by watering



Specific cases in underground placement

IMPORTANT: Certain specific cases need more care during installation, these include:
All additional building works, be they in weak-mix concrete, stabilized sand, or in concrete blocks, be they retaining walls or load bearing slabs, in the cases described below, they must be designed on a case-by-case basis in liaison with the builder.

- **The passage or parking of vehicles** (load-spreading slab of defined strength, stabilized sand…)
- **Washing area** (load-spreading slab of defined strength, stabilized sand…)
- **Unstable ground** (stabilized sand, retaining wall…) presence of under-ground water or a stream (reinforced stabilized sand 0.30m, anchorage band in reinforced stabilized sand 0.30m with anchorage Kit PLANTCO, culvert…)
- **Occasional rising of the water table** (stabilized sand…)
- **In the case of a permanently high water table, it is essential to position the anchorage points of the Kit PLANTCO** such that they are 30cm above the foundation bed.
- **Where there is a permanently high water-table, the buried unit must be suited to these conditions and placed on a 30cm thick band of reinforced stabilized sand using quick-drying cement, anchored with a Kit PLANTCO, then filled with water without fail, to equalize the back-pressure, up to the level of the water-table.** The successive layers of lateral back-fill should be stabilized sand made with 200kg cement per m³ of cement (2/3 normal cement + 1/3 quick-drying cement). The SP units cannot be strapped down.
- **Impermeable soil preventing water infiltration** (stabilized sand avoids the leaching of the backfill…)
- **Sloped ground > to 5 %** (support wall, stabilized sand, semi-buried placement…)
- **Presence of hard rock below ground** (stabilized sand…)
- **Drainage of river water:** necessary upstream of the installation when the ground slope is > to 5 %, avoids the leaching of the backfill.
- **If impossible to join with the effluent outlet : necessary to put a decompression well and backfill sides with stabilized sand (dry mix of 200 kg of cement with 1m³ of sand)**

Do not add threaded risers REHC 600/150 or 600/300 to REHC 600 CR or 600/580

Imperative:
For backfilling around all cisterns SP-SZ use stabilized sand:
mixed dry at 1 m³ of sand
to 200 kg of cement

SOTRALENTZ HABITAT

Guide to Double Skin Underground storage

- All plantations above buried works forbidden
- All rainwater transit forbidden

Mark out the implantation zone of the system
Carefully scrape off the topsoil
Dig the excavation and remove the earth

CE STAMP ON SEPTIC TANKS AND ACTIBLOC

Prepare the bottom of the excavation with 30cm of stabilised sand*, free from any sharp or cutting object.

Lowering of the Double Skin so that it is perfectly horizontal on the bottom of the excavation and in the correct orientation (relative to inlet/outlet). If necessary, connect the constituent cisterns of the system.

Special cases of placement in groundwater and in circulation zones, with PLANTCO anchorage.

SOTRALENTZ HABITAT

N° de série - Date de fabrication

Guide to Double Skin Underground storage

- All plantations above buried works forbidden
- All rainwater transit forbidden

Backfill laterally and symmetrically to a 30cm width using stabilised sand*, free from all sharp and cutting objects. (*) dry mix of 1m3 of sand to 200kg of cement.

Filling the Double Skin with water should be done at the same time as the lateral backfilling to balance out pressures before the system is set working. For systems with several cisterns, water filling should be done simultaneously in the two cisterns.

Connect channelling between habitation and the system (inlet, outlet and higher ventilation) using a slope between 2% and 4%. The connection of channelling should only be done after lateral backfilling has been completed.

Final backfill with topsoil. The inspection caps should be left clear and visible for maintenance.

CE STAMP ON SEPTIC TANKS AND ACTIBLOC

Special case.

Vehicle passage and parking: load bearing slab with a defined load, stabilised sand etc.

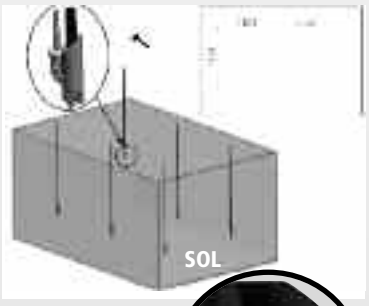
Final surface finish, cast iron cap EN124

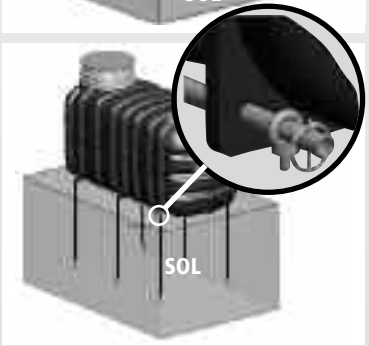
Road markings completed.

SOTRALENTZ HABITAT

Guide to placement in high water table
SP Single Skin Tank

Placement in high water table, of a unit SP Single Skin Tank and "PERFWATER Tank", with integrated stabilization feet (option to be paid for and obligatory), embedded with a bar on each side piercing the feet into the reinforced concrete sill and the "Plantco" fixation system.

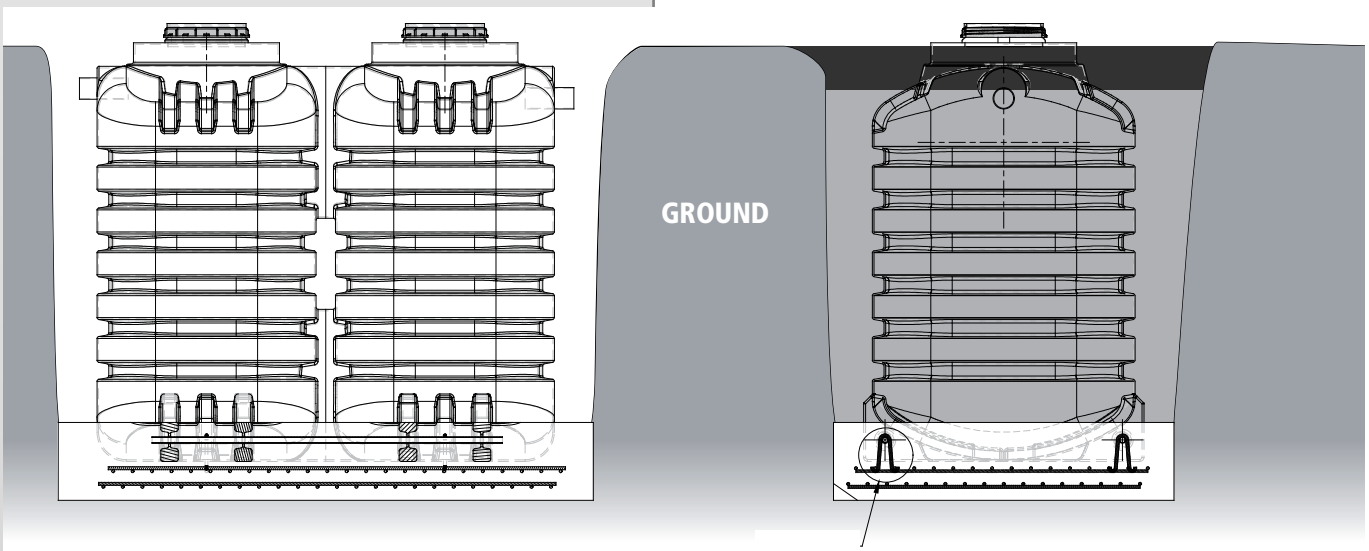


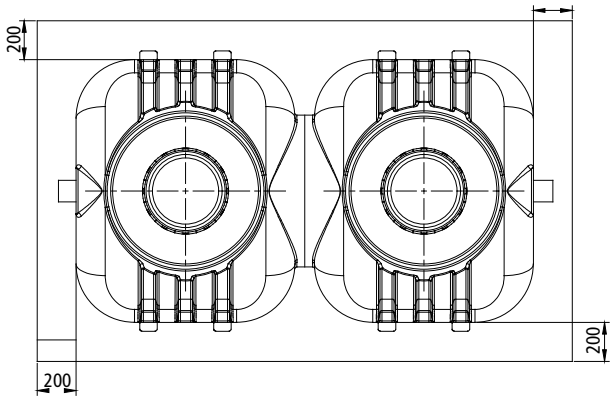


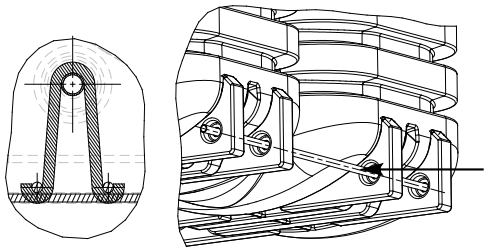
*Articles Single Skin (SP) Perfwater, dedicated, integral welded feet, embedded bars and "Plantco" fitments for placement on a concrete slab.

Code	Désignation	
32056	Epurbloc 3 000 RECT	PERFWATER
32057	Epurbloc 5 000 SP	PERFWATER
32058	Epurbloc 7 500 SP	PERFWATER
32059	Epurbloc 10 000 SP	PERFWATER

during installation of the sill, in presence of a lake or upwelling river water, it is forbidden to pump water but essential to empty the water with the digger's bucket in order to not provoke a water surge







Embedded bar crossing soldered feet and fixed with the "Plantco" system.

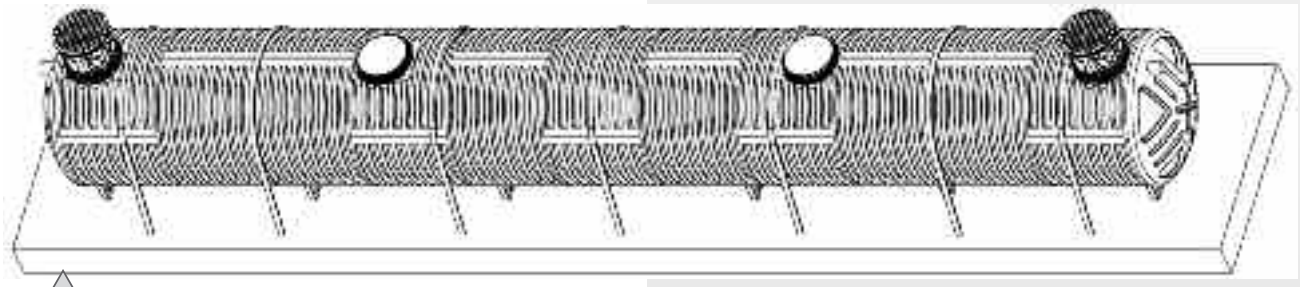
Anchorage on reinforced concrete weight-spreading base

1. **Placement of strops or embedded steel hooks attached to the sill**

Units on command with special pricing and delivery in 15 working days starting from the reception date of the command

Guide to placement in high water table
DP Double Skin Tank

Placement in high water table, of a DP Double Skin Tank with anchorage points to a reinforced stabilized sand slab



40m³ cistern with straps maximum load 5 tonnes, width 50mm, anchored with the kit Plantco
1 base kit EB PLANTCO + 6 supplementary kits EC PLANTCO

STOCKAGE EP & ANC DP	EB PLANTCO Art. 33827	EC PLANTCO Art. 33828
SL - 3 500 DP RKT	1	1
SL - 5 000 DP RKT	1	1
SL - 6 000 DP RKT	1	2
SL - 7 500 DP RKT	1	2
SL - 9 000 DP RKT	1	2
SL - 11 000 DP RKT	1	3
SL - 12 500 DP RKT	1	3
SL - 13 500 DP RKT	1	3
SL - 15 000 DP RKT	1	3
SL - 16 000 DP RKT	1	3
SL - 18 000 DP RKT	1	3
SL - 19 000 DP RKT	1	3
SL - 22 000 DP RKT	1	4
SL - 25 000 DP RKT	1	4
SL - 27 000 DP RKT	1	5
SL - 30 000 DP RKT	1	5
SL - 35 000 DP RKT	1	6
SL - 40 000 DP RKT	1	7
SL - 50 000 DP RKT	1	9

During installation of the sill, in presence of a lake or upwelling river water, it is forbidden to pump water but essential to empty the water with the digger's bucket in order to not provoke a water surge

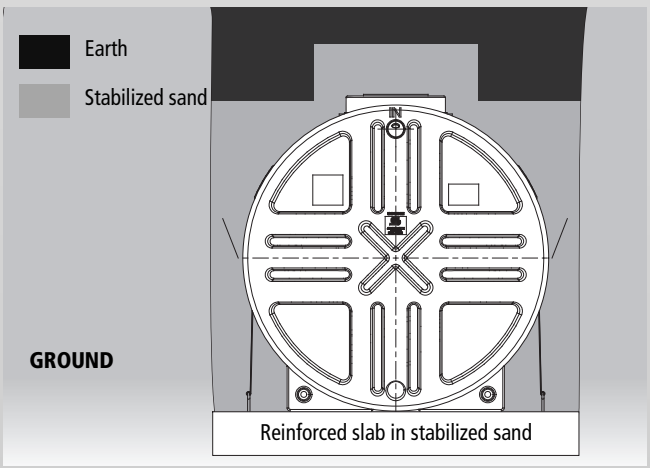
It is essential to position the anchorage points of the Kit PLANTCO such that they are 30cm above the 30cm thick foundation bed. For all buried twin-cistern installations, it is essential to place the cisterns on a bed of reinforced stabilized sand, which is 30cm thick, flat and horizontal. The joints (elbows, T's, etc.) and the linking tubes must rest on a support of stabilized sand, to avoid either the linking tubes or the joints coming apart, the cracking of the welds or the crushing of the water-tight seal.

IMPORTANT: Certain specific cases need more care during installation, these include:
All additional building works, be they in weak-mix concrete, stabilized sand, or in concrete blocks, be they retaining walls or load bearing slabs, in the cases described below, they must be designed on a case-by-case basis in liaison with the builder.

- **Unstable ground** (stabilized sand, retaining wall…)
- **presence of under-ground water** or a stream (reinforced stabilized sand 0.30m, anchorage band in reinforced stabilized sand 0.30m with anchorage Kit PLANTCO, culvert…)
- **Occasional rising of the water table** (stabilized sand…)
- In the case of a permanently high water table, it is essential to position the anchorage points of the Kit PLANTCO such that they are 30cm above the foundation bed.
- Where there is a permanently high water-table, the buried unit must be suited to these conditions and placed on a 30cm thick band of reinforced stabilized sand using quick-drying cement, anchored with a Kit PLANTCO, then filled with water without fail, to equalize the back-pressure, up to the level of the water-table. The successive layers of lateral back-fill should be stabilized sand made with 200kg cement per m³ of cement (2/3 normal cement + 1/3 quick drying cement). The SP units cannot be strapped down.
- **Impermeable soil preventing water infiltration** (stabilized sand avoids the leaching of the backfill…)
- **Sloped ground > to 5 %** (support wall, stabilized sand, semi-buried placement…)
- **Drainage of river water: necessary upstream of the installation when the ground slope is > to 5 %**, avoids the leaching of the backfill.

Installation below the water table of a double-skin cistern using 5 tonne straps, width 50mm attached to a reinforced stabilized sand slab with the Kit PLANTCO

Options sold separately:
- Kit "Plantco" base kit Art. 338277 up to 9000l with 2 straps
- Kit "Plantco" supplementary kit Art. 33828 upwards of 11000l for each additional strap
- Straps with 5 tonnes maximum load Art.33829, width 50mm, supplied with each kit EB and EC PLANTCO



SOTRALENTZ HABITAT

Guide to semi-buried placement

(see French Standard NF DTU 64-1)

In the framework of the rehabilitation of an old installation (upward repositioning of the outlet pipe inset into the building), presence of an high water table (permanent or seasonal), in a flood zone, mound of infiltration, etc., it is imperative to install Principal and Secondary Treatment Units semi-buried with stabilized sand (dry mix of 200 kg of cement with 1m³ of sand) to ensure the best protection or to avoid the placement of a lift pump (e.g. mound of infiltration)

1. Grease extractor, Pre-filter, Septic tank, Settling tank and Epurbloc® semi-buried up to 4000 litres :

- **upward repositioning of the outlet pipe** too low on the building
- **presence of high water table** (permanent or seasonal),
- in a flood zone, mound of infiltration, etc.
- **Bottom of dig is situated at mid-depth** (about 50 % of the unit's height) and covered with 20 cm of stabilized sand (dry mix of 200 kg of cement with 1m³ of sand)
- **Unit is placed perfectly horizontally** taking into account the direction of pipe work (inlet/outlet)
- **Backfilling with stabilized sand* free from any sharp or pointy object**, (thickness 25 cm) in accordance with the nature of the soil (see particular cases), all around the unit, is done as the unit fills with water to equal out pressure
- **Side backfilling completed with site landscaping** using the excavation debris.
- **Unit installed to ground level**, access caps accessible and apparent, as current regulation laws demand
- **Connection of pipe work** (inlet IN and outlet OUT) and of the Higher ventilation (VH) done only after backfilling is complete.

All plantations above underground works are forbidden
All passage of rainwater into F.A.V. cisterns is forbidden

2. Dosing tank, semi-buried:

- **Bottom of excavation at mid-depth** (about 50 % unit's height) and covered with 10 cm of stabilized sand (dry mix of 200 kg of cement with 1m³ of sand)
- **Dosing tank is placed perfectly horizontally** taking into account the direction of pipe work (inlet IN/outlet OUT) as to neither perturb nor block the auto-flushing doser.
- **Backfilling with stabilized sand* free from any sharp or pointy object**, (thickness 20 cm), all around the unit, is done as the unit fills with water to equal out pressure
- **Side backfilling completed with site landscaping** using the excavation debris
- **Unit installed to ground level**, access caps accessible and apparent, as current regulation laws demand
- **Connection of pipe work** (inlet IN and outlet OUT) and of the Higher ventilation (VH) done only after backfilling is complete.

All plantations above underground works are forbidden
All passage of rainwater into F.A.V. cisterns is forbidden

Arnsbourg at Baerenthal (F-57).
Semi-buried placement, finished with topsoil and reseeded with grass

Guide to placement of underground and semi-buried F.A.V. DP cisterns

(see French Standard NF DTU 64-1)

1. Underground

Underground placement under normal soil and sub-soil conditions

- B**efore starting works, it is imperative to read and understand the instructions below and to respect current French standard during installation :**
  - Standard XP D.T.U. 64-1, P 1.1 and P 1.2, March 2007.

- **F.A.V. DP cisterns.**
- up to 40 000 litres maximum unitary capacity, can be installed underground or semi-buried as close as possible to installations and collectors
- a volume above 40 000 litres must be installed individually, without being connected, during a unitary installation.
- must be situated away from moving or parked loads non-defined and non-validated except if special placement precautions are taken.
- must remain accessible for maintenance and servicing during emptying operations

- **In all cases, before excavation starts, it is imperative to store topsoil for final appearance at the end of works**

- **Bottom of dig covered with 10 cm of sand**.

- **Cistern placed perfectly horizontal**, on a bed of sand, described above

- **Cistern placed a finished ground level,** access caps or risers, SL-REHC 400/200, SL-REHC 600/250 + green reinforced caps or SL-REHC 600 CR must be accessible and apparent as current regulation laws demand

- In case of the detection of **non-signalled river or underground lake**, look at special placement conditions described next.

- **Side backfilling with sand free from any pointy or cutting object**, to a thickness of about 20 cm, completed by successive backfilling thicknesses of 40 cm and then hydraulic compaction (watering)

- **Connection pipe work between the installation and the unit** needs a slope between 2 % and 4 %, to avoid clogging by concentrated waste domestic water

- **All plantations** (bushes, trees, vegetable garden…) **above underground works are forbidden**

- **All passage of rainwater into F.A.V. cisterns is forbidden**

2. Semi-buried

Semi-buried placement in particular soil and sub-soil conditions

During an installation, in presence of a:

- Flood zone with risk of water seepage into the cistern
- Permanent shallow underground lake, requires an intense water removal operation during installation, (pumping is forbidden as it exacerbates the excavation) ;
- Very hard rocky sub-soil requiring dynamiting during excavation,
- strongly sloping terrain…

Imperative in the above cases to:

- move outlet pipe(s) upward(s) that are too low on an existing installation, to avoid using a lift pump
- Semi-bury cisterns to ensure the best protection.

- **In all cases, before excavation works, it is imperative to skim off the topsoil and store it in a reserve zone to finish and landscape at the end of works**

- **Cover the bottom of the dig with 10 cm of stabilized sand** (dry mix 1 m^3 of sand with 200 kg of cement).

- **Bottom of the dig is at half-depth** (about 50 % of the unit's height) and covered with 20 cm stabilized sand (dry mix 1 m^3 of sand with 200 kg of cement).

- **The cistern is placed perfectly horizontally.**

- **Backfilling with stabilized sand free from any sharp or pointy object**, to a thickness of about 25 cm, all around the unit, is done as the unit fills with water to equal out pressure

- **Backfilling is completed with site landscaping** using the excavation debris

- **Cistern is installed to the finished ground level,** access caps remaining accessible and apparent as current regulation laws demand

- **Connection pipe work between the installation and unit** need a slope of between 2 % and 4 %, to avoid clogging by concentrate wastewater

- **All plantations** (bushes, trees, vegetable garden…) **above underground works are forbidden**

- **All passage of rainwater into F.A.V. cisterns is forbidden**

Guide to above ground placement

(see French Standard NF DTU 64-1)

1. Septic tank, Settling tank, Epurbloc®, uniquely up to 4000 litres:

- Installation of units in an area not directly connected to living rooms, kitchens, regular work sites and sites destined for the sale, handling or the conservation of foodstuffs and of drinks.

The area must be adequately aired top and bottom to allow influx of fresh air and connect directly to the outside, to allow for emptying (whilst maintaining a constant level) of Principal and Secondary Treatment Units.

- Connection of pipe work to inlet (IN) and outlet (OUT) and to obligatory Higher ventilation haute (VH) to be done only after simultaneously filling with water and backfilling
- Ceiling height at least equal to the height of the Principal or Secondary Pre-treatment Unit + 1 meter.

• Imperatively install unit in a masonry enclosure, with perpends, to a height of 60 cm and place on a perfectly horizontal cemented plaque correctly orientating the inlet/outlet.

- **Side backfilling of 25 cm to a height of 50 cm** done immediately with sand at the same time as water is filled into the unit, to equalize pressures

2. Grease extractor, pre-filter, dosing tank

- ceiling height will be at least equal to the pre-filter height + 1 m to allow drainage or easy replacement of filtering materials (filtering mesh "performance").

Installation above ground, fix metallic bands in the housing destined for the pre-filter, designed to increase resistance

of the cistern to the combined effect of water and filtrate material pressures (800 l :1 series ref. 11 793, 1 000 l : 1 series ref. 11 794, 1 600 l : 1 series ref. 11 795). Reference to the bands must be made on command of the pre-filter or grease extractor

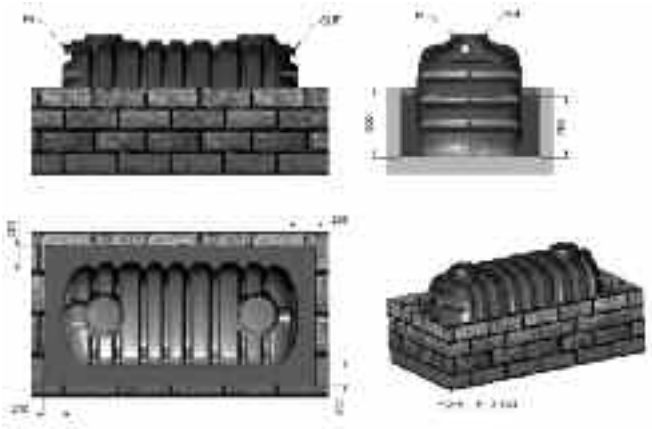
Imperatively, the grease extractor and pre-filter must be installed

- within a masonry enclosure with perpends
- to a height of 45 cm for the SG 340 and 500, the FD 200 and 500
- to a height of 60 cm for the SG 800 and 1000, the FD 800 and 1 600.
- onto a cement surface plane, perfectly horizontal, taking into account the directions of inlet/outlet.

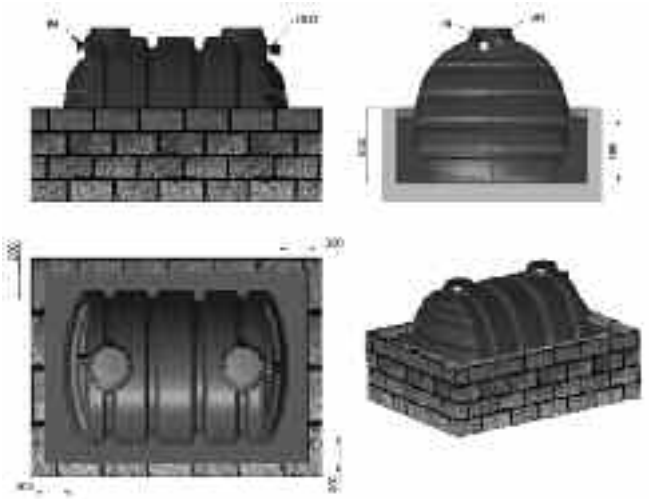
- **Side backfilling, of 25 cm**
  - to a height of 45 cm for the SG 340 and 500, the FD 200 and 500
  - to a height of 50 cm for the SG 800 and 1000, the FD 800 and 1 600.
  - done immediately with sand during the filling of filtrate material and clear water to equilibrate pressures

If freezing is a risk, plan to have appropriate thermo-protection for all Principal and Secondary Treatment Units

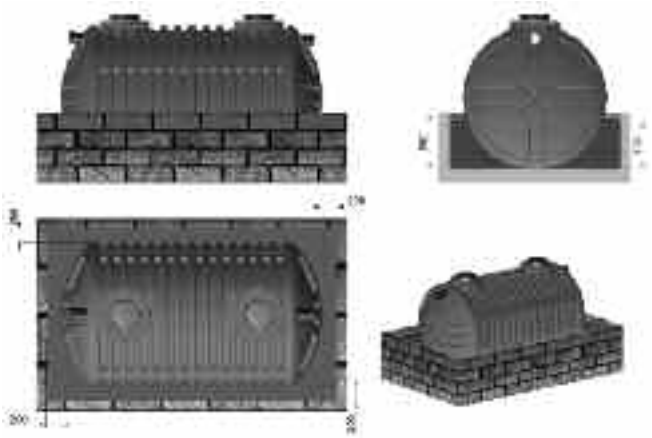
Above ground placement Epurbloc® 3000 rectangular



Above ground placement Epurbloc® 4000 cylindrical

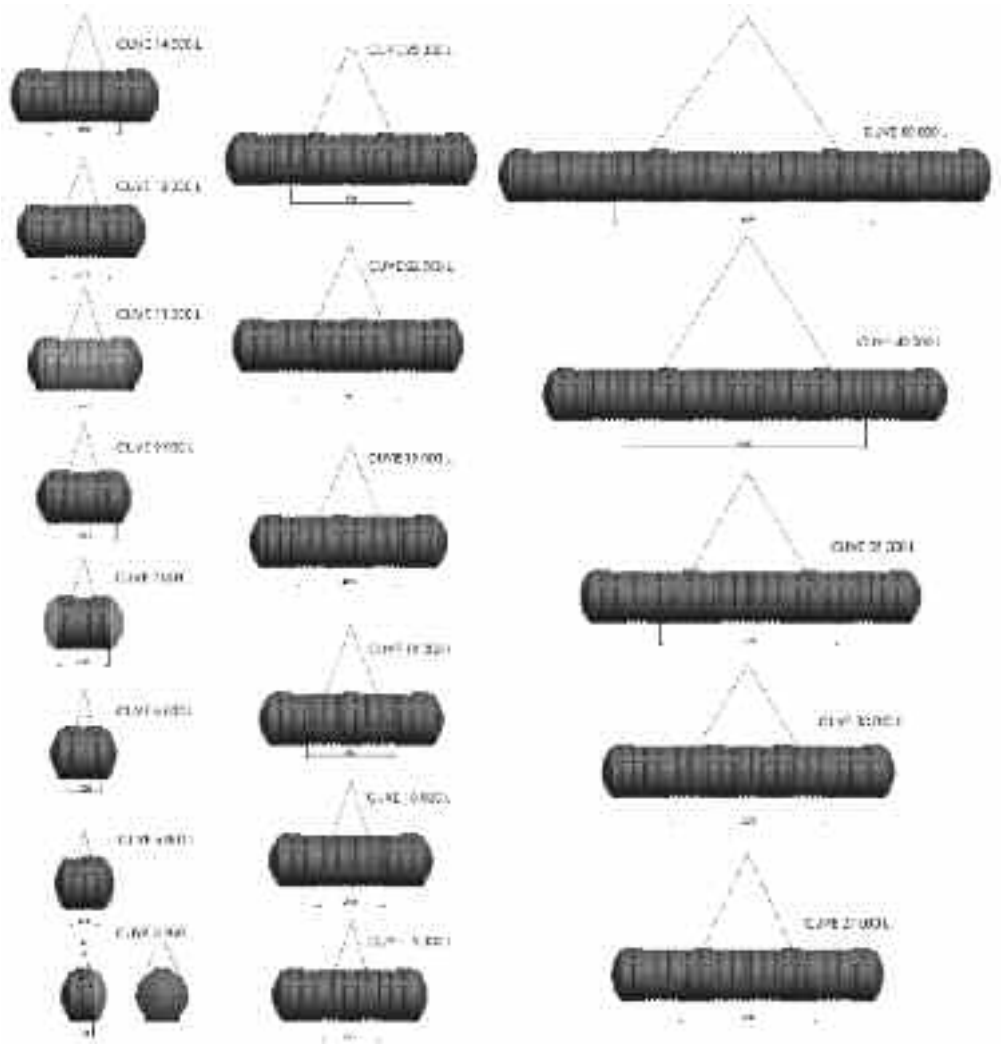


Above ground placement Double-Skin



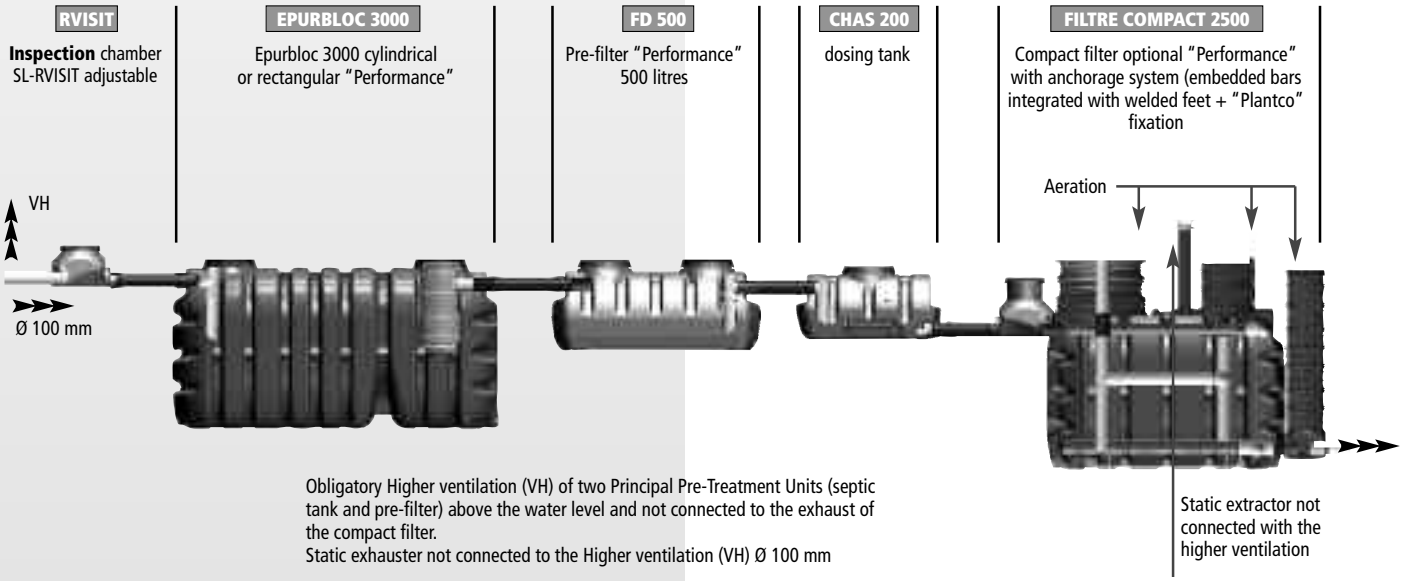
Sling Lifting Double Skin®

Sling lifting is essential to lift any DP unit. To be done with either a lifting crane or a hoist with the help of the following diagrams for a perfect, balanced hold.

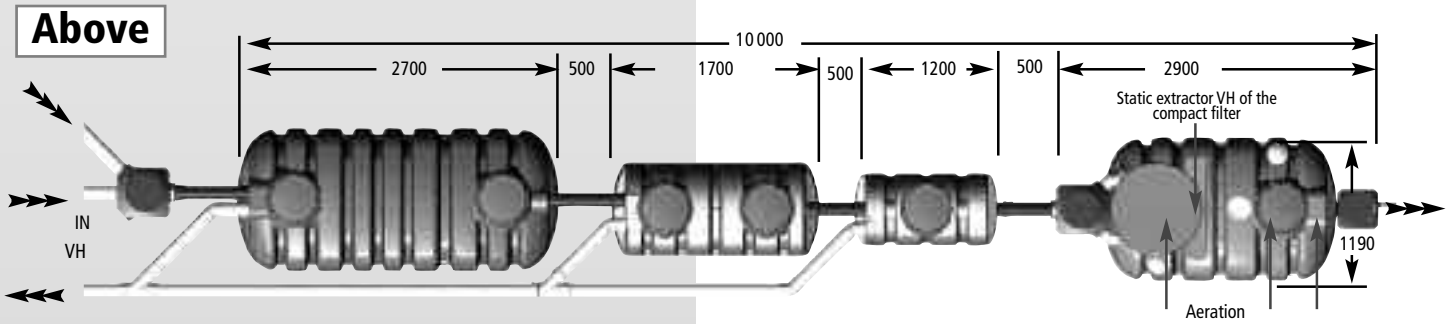


Guide to placement of compact filter system, optional

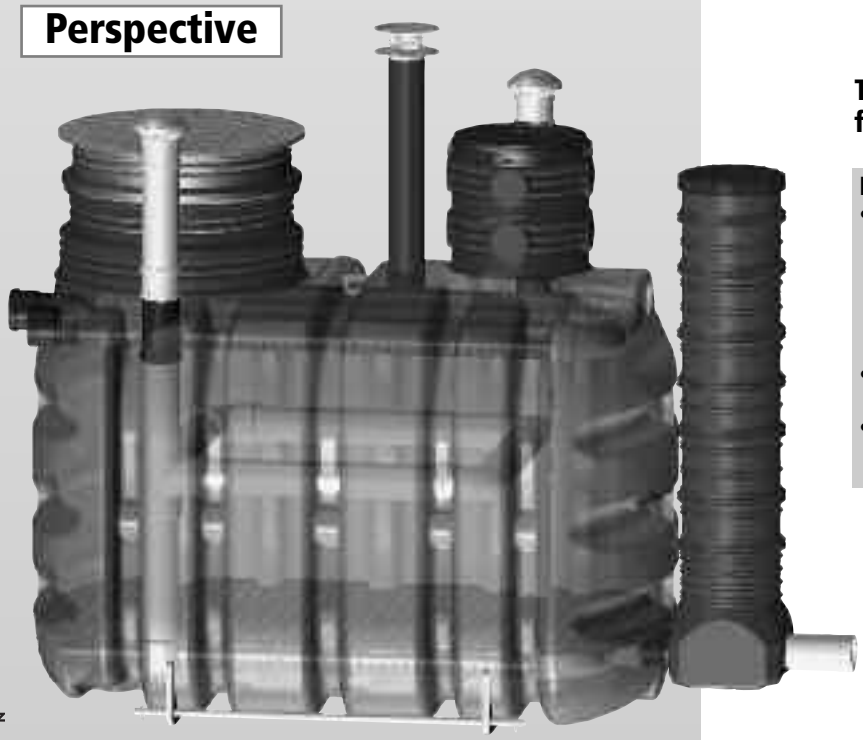
Profile



Above



Perspective



Total surface less then 10 m² for 4 User Equivalents

Installation

- Compact filter, Epurbloc "Performance" CE mark and Pre-filter FD "Performance" installed underground on a bed of stabilized sand (dry mix 1 m3 of sand with 200 kg of cement), anchored with the "Plantco" fixation and a fill in of stabilized sand. Expect to use concrete sill anchorage in the presence of high water table.
- **System 1 of 4UE** = Epurbloc 3000 + FD 500 + CHAS 200 + Compact 2500.
- **System 2 of 6UE** = Epurbloc 4000 + FD 800 + CHAS 200 + Compact 3500.

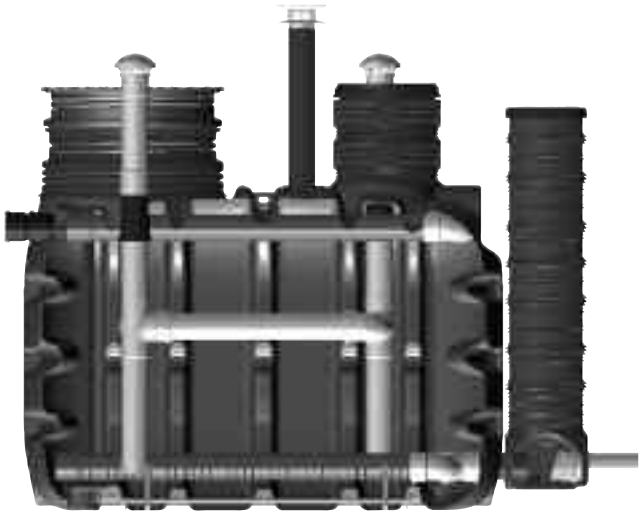
SOTRALENTZ HABITAT

Guide to placement of compact filter system, optional

Description

Comprising a single piece cistern with a control box and aeration. Made from high density polyethylene using extrusion-blowmoulding, providing:

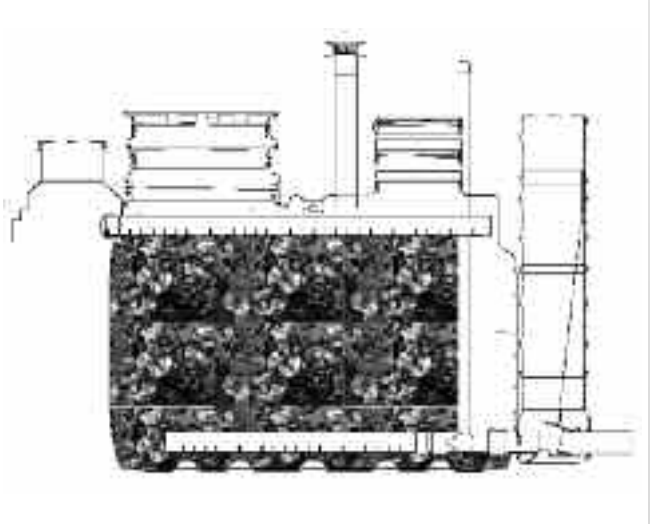
- On the top section a distribution pipe and a plate distributing the pre-treated wastewater over the full surface of the synthetic filtering materials (PP)
- On the centre section a body of synthetic filtering materials (PP) and collection drains to collect and outlet the treated wastewater
- On the bottom section an arm supporting the synthetic filtration material (PP) and the collect drains which collect and outlet the treated wastewater
- An upper inlet (IN)
- A static extractor
- Two columns for lower ventilation with hats
- An emptying column integrated with the cleaning done by the filtering material
- A collection chamber, aerated by a porous plug also for taking samples
- A lower outlet (OUT) with a shut-off valve allowing for de-sludging and cleaning
- Capped risers for inspection
- Tensioners
- Handling grips



Operation

The pre-treated domestic wastewater, flowing first to the Epurbloc "performance", then to the FD pre-filter are stocked in the dosing chamber, and then distributed in a consistent and sequential manner using the spreading pipe and spreading pipe over the complete surface of the synthetic filtering material. The pre-treated wastewaters flow by gravity over the filtering body, to which a layer of aerobic bacteria are stuck, achieving its oxidation and purification. This oxidation is possible thanks to:

- The inlet of fresh air through the aeration box and the two columns for lower ventilation penetrating upstream of the filter by atmospheric pressure
- An optimal circulation of air in the filter flowing over the synthetic filtering material (PP) due to the static extractor positioned at he centre of the unit which draws in air via the aeration chamber and expels the polluted air and gases



Polypropylene bead performances used in Compact filters, optional

- 3 types of PP Beads allow optimal diffusion of pre-treated wastewater in the framework of vertical filtration.
- Fins on the surface of the beads capture organic matter contained in domestic wastewater; they hook matter on surface contact. Organic matter forms a biomass due to the development of aerobic bacteria.
- Suggested working temperature between 5 and 35°C allowing an optimal degradation of matter and reduction of the BOD (Biochemical Oxygen Demand) as contact time allows for optimal oxidation of matter.
- Biomass film does not exceed a thickness of 1 mm and weight oscillates between 6 and 22 kg/m³.

Surface area:	> 125 or 160 m²/m³
Used volume:	10 or 4 % materials – 90 or 96 % air
Weight per m³:	40 or 37 kg/m³
Weight of bead:	100 or 2.5g
Color:	charcoal grey
Principal material:	polypropylene
Resistance to compression:	400 or 250 kg - 1 m
Softening Temperature:	+ 72°C
Max working temperature:	+ 65 °C
Resistance to hydrocarbons:	good on average
Resistance to acid:	good to very good
Resistance to cold:	very good

Approximate values

	Article	Weight (Kg)	Ø (mm) Inlet (IN)	Length A (m)	Width B (m)	Height total Ht (m)	Height Inlet (IN) He (m)	Height Outlet (OUT) Hs (m)	Visit caps (mm)
Filtre Compact 2500	31301	180	110	2,30	1,19	1,65	1,18	0,10	2 x Ø 400 2 x Ø 600
Filtre Compact 3500	31942	250	110	3,10	1,19	1,65	1,18	0,10	dito

SOTRALENTZ HABITAT

Secondary Pre-treatment Units

Plastepur® SL-SG Grease Extractors

(destined for private use and non-mains) placement optional, obligatory if septic tank is placed more than 10 meters from the building.

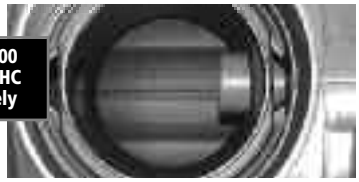
Grease extractor SL-SG 500

Grease extractor SG 200 with mounted riser REHC 400/200, sold separately

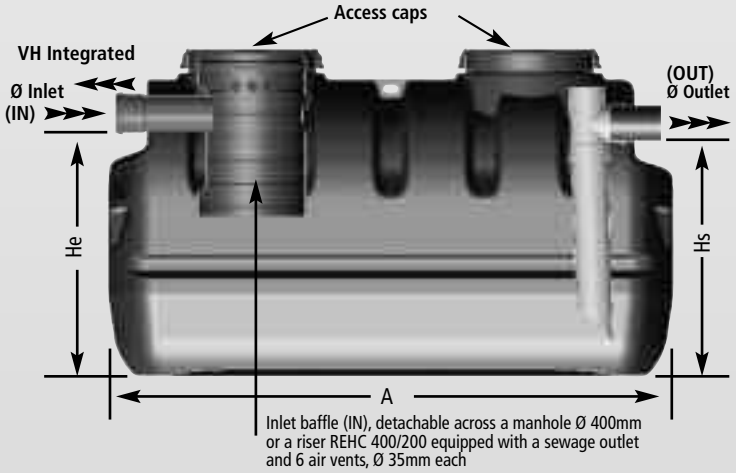
New

REHC 400/200

REHC 400/200 threaded riser adaptable to all manholes Ø 400mm, sold separately

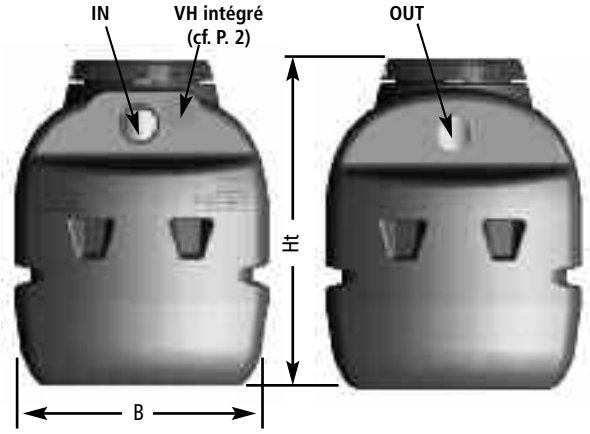


Workings of 500, 800 and 1000l



Inlet baffle (IN), detachable across a manhole Ø 400mm or a riser REHC 400/200 equipped with a sewage outlet and 6 air vents, Ø 35mm each

Entrée (IN) — Sortie (OUT)



	Article	Flow in itres/sec.	Capacity in litres	Use	Weight (kg)	Diameter Ø (mm)	Length A (cm)	Width B (cm)	Height total Ht (cm)	Height inlet (IN) He (cm)	Height outlet (OUT) Hs (cm)	Access caps (mm)	Above ground installation: Height when full H (cm)	Above ground installation: Height in sand h (cm)	Above ground installation: Metallic bands
DEGRAISSEUR 200 D110 1TH	32602	1	200	kitchen	13	110	120	60	65	40	35	1 x Ø 400	45	35	NO
DEGRAISSEUR 500 D110 2TH	11650	1,5	500	kitch. + bath.	27	110	170	77	73	49	46	2 x Ø 400	45	35	NO
DEGRAISSEUR 800 D110 2TH	11698	2	800	kitch. + bath.	37	110	170	77	98	75	72	2 x Ø 400	60	50	YES
DEGRAISSEUR 1000 D110 2TH	11699	3	1000	kitch. + bath.	41	110	170	77	23	100	97	2 x Ø 400	60	50	YES

Approximate values

Option: threaded riser REHC 400/200 adaptable to inlet and outlet of all Secondary Treatment Units except SL-SG 340.

	Monobloc cistern	Extrusion blowmoulding High Density Polyethylene (PEHD)	Inlet baffle (IN)	Horizontal sleeve (Ø 110 mm)	Outlet baffle (OUT) (conduit + evacuation joint, 90°)	tensioners	Higher ventilation slot (VH Ø 100 mm)
DEGRAISSEUR 200 D110 1TH	YES	YES	YES	YES	YES	YES	YES
DEGRAISSEURS 200à1000 D110 2TH	YES	YES	YES	YES	YES	YES	YES

Approximate values

SOTRALENTZ HABITAT

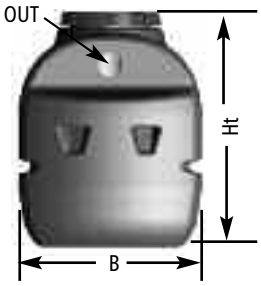
Serial number – date of fabrication

Plastepur® SL-FD and SL-FD "Performance" Pre-filters

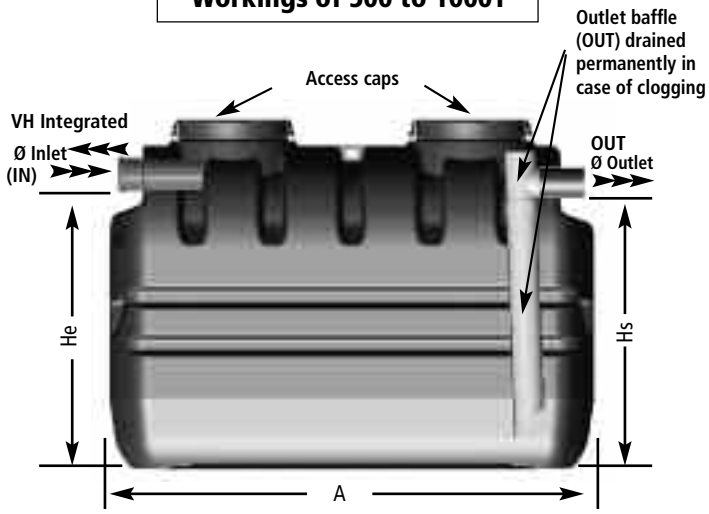
(Pre-filter Clogging Indicator placed downstream if septic tank)

Inlet (IN)

Outlet (OUT)



Workings of 500 to 1000 l



New

REHC 400/200

REHC 400/200 threaded riser adaptable to all manholes Ø 400mm, sold separately

Préfiltre SL-FD 200 l.

Préfiltre SL-FD 1600 l.

Préfiltre SL-FD 2500 l.

	Article FD	Article FD Performance	Volumes of filtering materials	No. Filtering meshes	Weight empty (kg)	Weight with filtering meshes (kg)	Diameter Ø (mm)	Length A (cm)	Width B (cm)	Height total Ht (cm)	Height inlet (IN) He (cm)	Height outlet (OUT) Hs (cm)	Access caps (mm)	Above ground installation		
														Height when full H (cm)	Height in sand h (cm)	Metallic bands
PREFILTRE 200 D110 PERFORMANCE	10525	31065	200	3	13	17	110	120	60	65	40	35	1 x Ø 400	45	35	NON
PREFILTRE 500 D110 PERFORMANCE	11649	23289	500	7	27	41	110	170	77	73	49	46	2 x Ø 400	45	35	NON
PREFILTRE 800 D110 PERFORMANCE	11694	23290	800	10	37	57	110	170	77	98	75	72	2 x Ø 400	60	50	OUI
PREFILTRE 1000 D110 PERFORMANCE	11680	23638	1000	15	42	72	110	170	77	123	100	97	2 x Ø 400	60	50	OUI
PREFILTRE 1600 D110 PERFORMANCE	22894	23150	1600	24	60	108	110	170	77	166	143	140	2 x Ø 400	60	50	OUI
PREFILTRE 2500 D160 PERFORMANCE	22896	23151	2500	35	90	165	160	190	119	165	113	110	Ø 600 & Ø 400	NON	NON	NON
PREFILTRE 3500 D160 PERFORMANCE	31052	31066	3500	52	130	225	160	270	119	165	113	110	Ø 600 & Ø 400	NON	NON	NON

Approximate values

Option : threaded riser REHC 400/200 adaptable to inlet and outlet of all Secondary Treatment Units SL-FD 500, 800, 1000 and 1600.

	Monobloc cistern	Extrusion blowmoulding High Density Polyethylene (PEHD)	Inlet baffle (IN)	Outlet baffle (OUT) (conduit + evacuation joint, 90°)	Siphon-like system	Higher ventilation slot (VH Ø 100 mm)
PREFILTRE 200 D110 PERFORMANCE	YES	YES	YES	YES	YES	YES
PREFILTRES 500à1600 D110 PERFORMANCE	YES	YES	YES	YES	YES	YES
PREFILTRES 2500&3500 D160 PERFORMANCE	YES	YES	YES	YES	YES	YES

Approximate values

SOTRALENTZ HABITAT

Dosing tank SL-CHAS
1 and 2 - way

1. Description

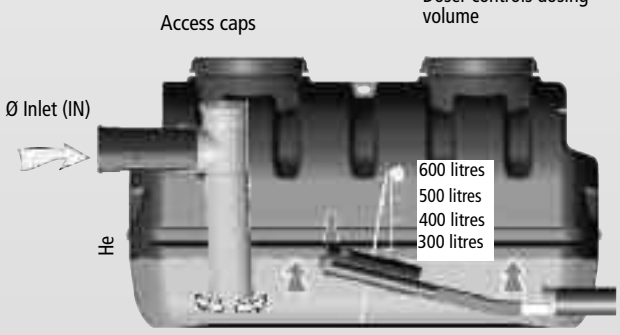
- Monobloc cistern made with extrusion blowmoulded PEHD with inlet (IN) to a flow reducer, outlet to Higher ventilation (VH) and 1, 2 or 3 low outlets (OUT) equipped with 1 auto-flushing siphon float to 1-, 2-, 3-way or 2-way sequentially.
- Dosing tank SL-CHAS 500 equipped with a fixed doser regulating auto-flushing of the cistern.
- Dosing tank SL-CHAS 800 equipped with an alterable auto-flushing doser to regulate volume of the cistern (300, 400, 500 or 600 litres).
- Dosing tanks SL-CHAS 200 & 500 equipped with a fixed doser regulating auto-flushing of the cistern.
- Dosing tanks SL-CHAS 2500 equipped with an alterable auto-flushing doser to regulate volume of the cistern, from 600 to 1000 litres and with 2-way outlet.

2. Working principles

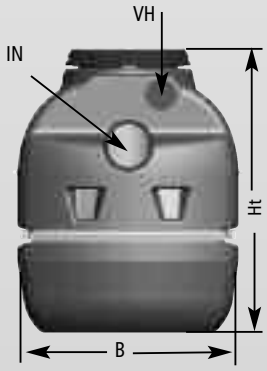
- Dosing tank destined to distribute, in a regular and even manner, pre-treated domestic water waste coming out of All Water Epurbloc®s, clarification tanks, pre-filters or grill units, across drainfields (distribution/irrigation fields) or filter beds.
- Only pre-treated and grilled water can enter the dosing tank, by the inlet baffle (IN) which reduces flow speed to avoid re-suspension of floating matter and heavy solids
- Stilled pre-treated and grilled water is stored in the cistern of the dosing tank. Suspended Organic Matter (S.O.M.) deposits on the bottom of the unit (to empty periodically).
- During cistern auto-flushing a high-flow, dosing feeds into the aerobic treatment device.
- Outlet baffle (OUT), by design, ensures the distribution of pre-treated water across the whole drainfield or filter bed
- Gas pressure and pressure in the distribution network are regulated by a pressure release value to avoid pressurization of the network
- Little maintenance, periodic servicing every 3 months and rinsing/draining of possible heavy matter.
- Improved performance of aerobic treatment and increased life span of the systems.
- Independent unit not needing electrical energy.

Dosing tank SL-CHAS 1 V 800

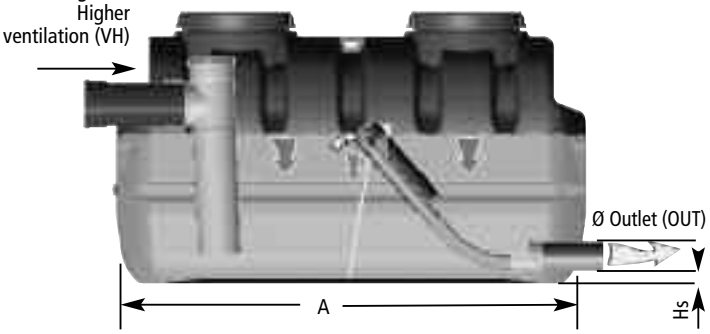
Float switch in bottom position



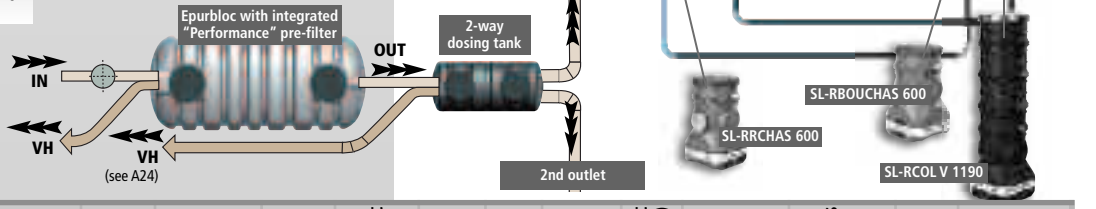
Face



Float switch in upper position



Above view of 2-way dosing tank implementation SL-CHAS 2-way



New

REHC 400/200

REHC 400/200 threaded riser adaptable to all manholes Ø 400mm, sold separately

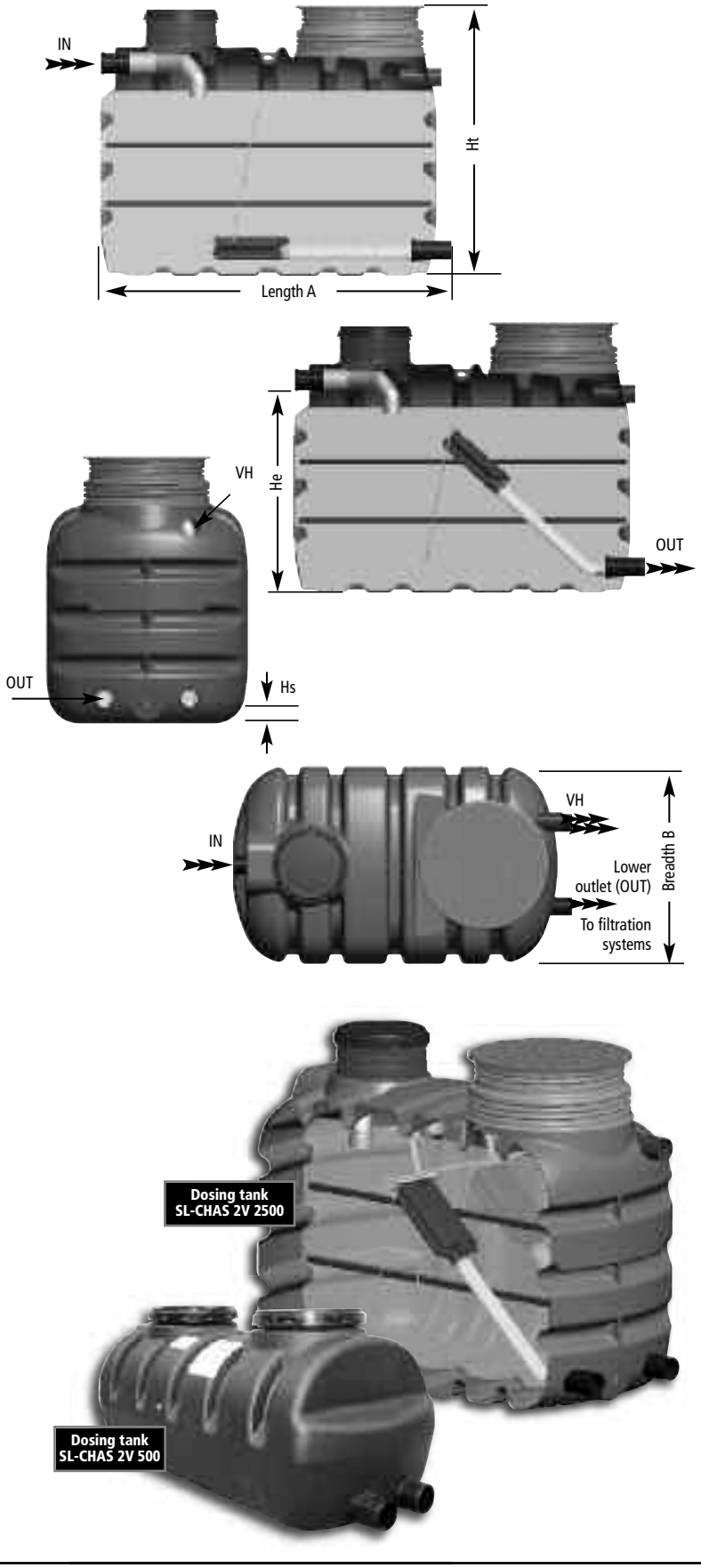
Article	Dosing volume in litres	Weight empty (kg)	Diameter Ø(mm) inlet (IN)	Length A (cm)	Width B (cm)	Height total Ht (cm)	Height inlet (IN) He (cm)	Height outlet (OUT) Hs (cm)	Access caps (mm)	Metallic bands	Higher ventilation Slot (VH Ø 100 mm)
CHASSE 200L 1VOIE D50	32520	100	24	110	120	60	65	40	4	1 x Ø 400	NO	YES
CHASSE 500L 1VOIE	30315	350	38	110	170	77	73	49	4	2 x Ø 400	NO	YES
CHASSE 500L 2VOIES	30316	350	38	110	170	77	73	49	4	2 x Ø 400	NO	YES
CHASSE 800L 1VOIE	30552	300 to 600	48	160	170	77	98	75	4	2 x Ø 400	YES	YES
CHASSE 800L 2VOIES	30553	300 to 600	48	160	170	77	98	75	4	2 x Ø 400	YES	YES
CHASSE 2000L 2VOIES SEQUENTIEL	31300	2 x 1000	200	110/160	190	119	165	118	10	1 x Ø 400 1 x Ø 600	NO	YES

Approximate values

Serial number – date of fabrication

Dosing tank SL-CHAS
SL-CHAS 2500 2-way

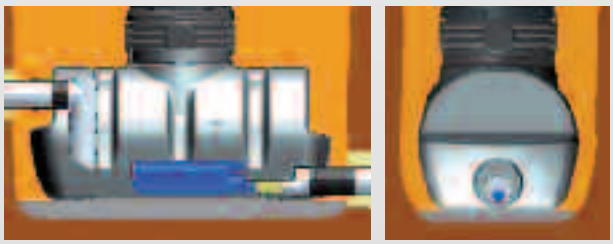
Working principle of 2000 litre double dosing to two or several twined filtration systems



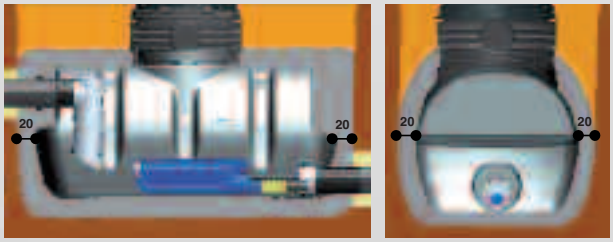
Placement of the dosing tank

Step 1: Completion of installation bed
Base of excavation covered with 10cm of coarse, neutral sand compacted hydrolycally1 or stabilised sand2 depending of the nature of the soil.
Dosing tank placed in a perfectly horizontal fashion (the installation bed should be flat and horizontal)

Step 2: Placement of unit to be buried
Connect the doing tank ensuring correct orientation (relative to inlet IN/outlet OUT) in order to avoid blocking the automatic flushing doser system.



Step 3: Lateral backfill
Backfill laterally to a thickness of 20cm with coarse neutral hydraulically compacted 1 or stabilised sand 2, depending of the nature of the soil or presence of groundwater, free from all sharp and cutting objects, at the same time as filling the unit with water in order to balance out pressures.



- Secondary Pre-Treatment Unit installed to ground level with the inspection cap remaining accessible.
- Connection of pipework (inlet IN and outlet OUT) and of the Higher Ventilation (VH) to be done only after completion of backfilling.
- All plantations above buried works forbidden
- All rainwater transit forbidden

Soil not backfilled (earth in place)

Top soil stored separately at the start of the excavation

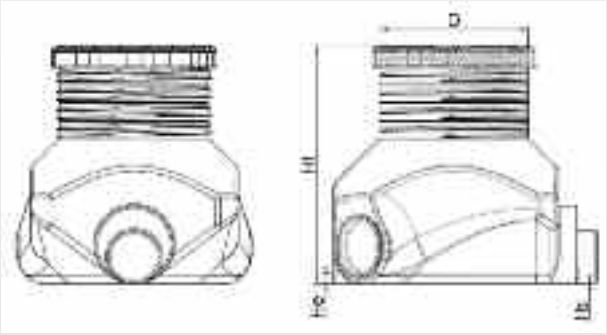
1. Coarse neutral sand 0/5 in accordance with the standard NF P11-300 (GTR 92) hydraulically compressed

2. Stabilised sand (dry mix of 1cm³ sand to 200 kg cement)

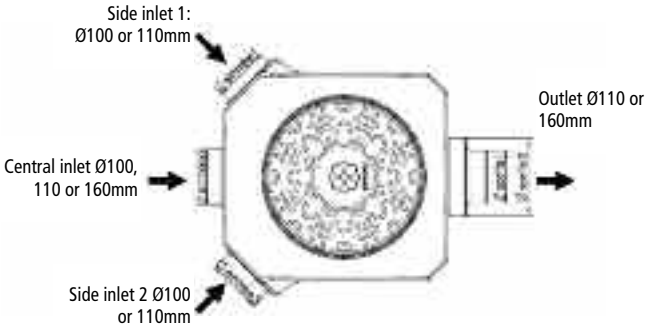
SOTRALENTZ HABITAT

Inspection chambers
SL-RVISIT 3 inlets + 1 outlet

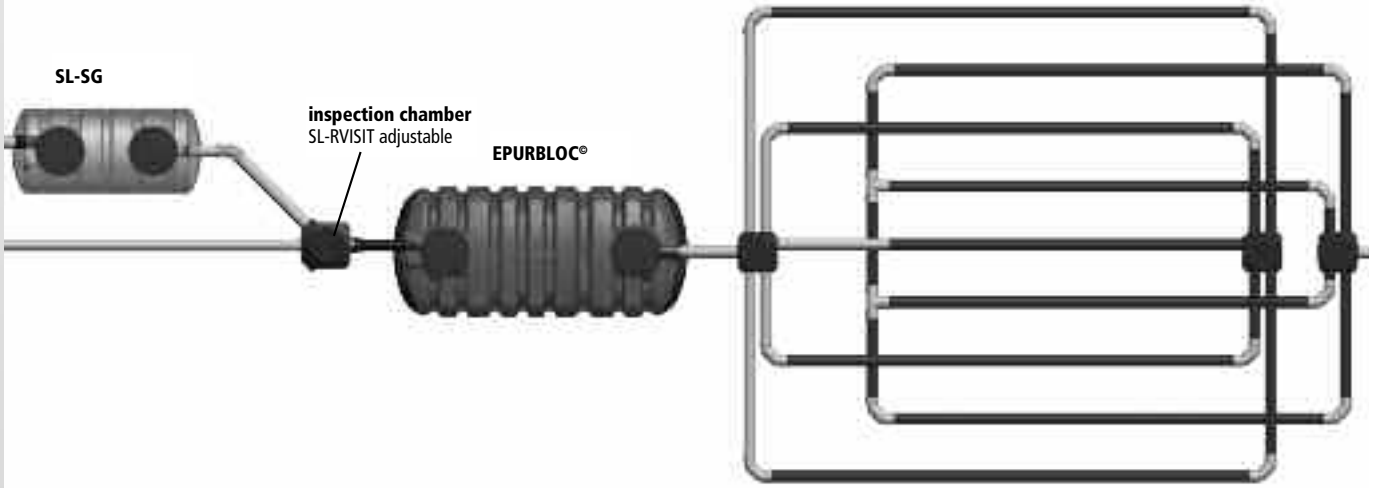
Profile



Above



Sewage treatment unit with vertically drained filter bed and a SL-RVISIT inspection chamber



Type	Article	Weight (Kg)	Diameter Ø Side Inlet (mm)	Diameter Ø central inlet (mm)	Diameter Ø Outlets (OUT) (mm)	Height total (mm)	Height Inlet (IN) (mm)	Height Outlets (OUT) (mm)	Diameter Ø total (mm)
BOITE VISIT 450 100-100-100	32237	4	100	100	110/160	480	20	0	300
BOITE VISIT 450 110-110-110	32133	4	110	110	110 /160	480	20	0	300
BOITE VISIT 450 100-160-100	33273	4	100	160	110/160	480	20	0	300
BOITE VISIT 450 110-160-110	32144	4	110	160	110/160	480	20	0	300

Approximate values

RVISIT available singly or in pallets of 12 units

Inspection chambers
SL-RVISIT 3 inlets + 1 outlet

I. I.DESCRIPTION

The chamber comprises a 1-piece cylinder (height 450mm) and a drain made of high-density polyethylene (PEHD), fabricated with extrusion-blowmoulding, and featuring:

- A threaded removable solid cap with watertight joint.
- 1 drain and 3 inlets directing the un-treated wastewater towards the pre-treatment unit
- 3 polyethylene flaps mounted with removable silicone port-lip joints, made of elastomer to ensure a water-tight seal (3 inlets).
- Flaps held by an adhesive signalling strip guaranteeing the conformity and the completeness of the chamber
- Adjustable to 5 heights between 270 and 450mm. Adjustment by cutting the coarse threads so as to obtain the desired final height
- 1 multi-diameter outlet sleeve, cut to size according to the desired volume

The polyethylene threaded risers of adjustable height (optional) SL-REHR 100, 250 or 430 (height 100, 250 or 450mm) are delivered separately, allowing for the required selection of different heights.

II. I.INSTALLATION

(see French Standard NF DTU 64-1)
The chamber is buried and situated downstream of a EPURBLOC® or upstream of a grease trap.

1. Realizing the foundation bed

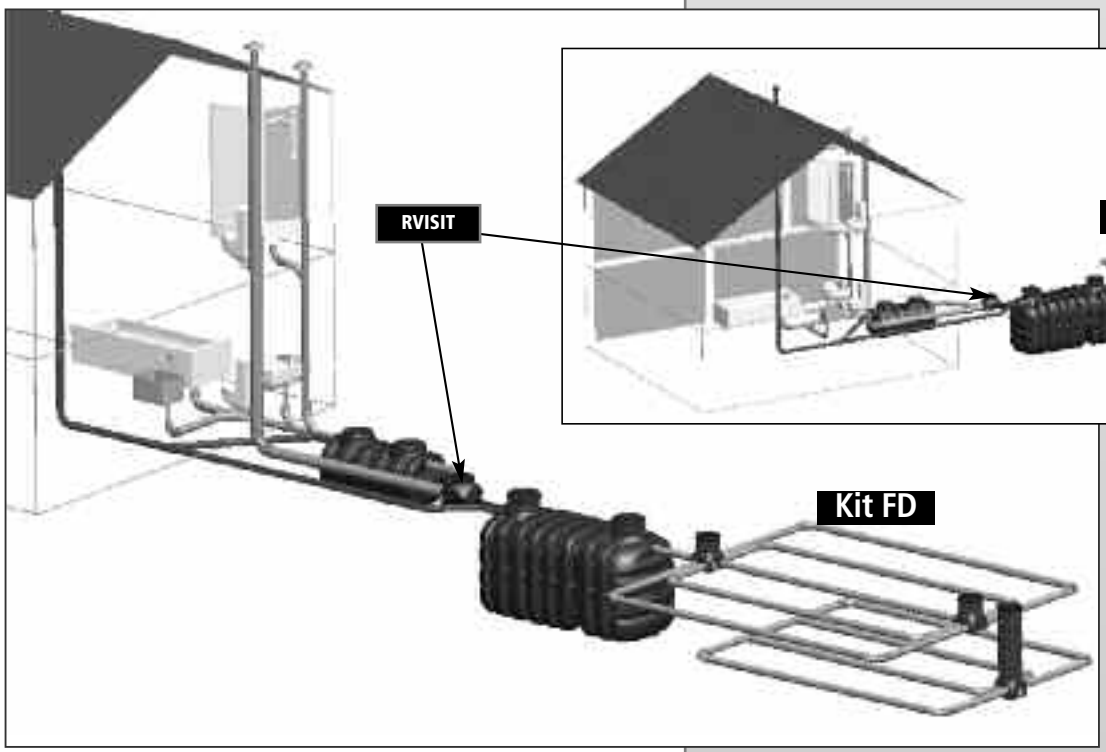
- The foundation bed for the chamber must ensure that it is horizontally-aligned with the non-perforated PVC tubes
- The bottom of the hole should be flat and free from large diameter stones or sharp objects. The bed of stabilized sand about 10cm thick.

2. Positioning the chamber

- The chamber must be placed on the sand bed such that it is horizontal and stable
- The chamber takes non-perforated PVC pipes, by simply slotting them into the watertight elastomer seals on the inlet side (without glue).
- Openings not used stay closed-up with one of the stops provided
- The cap must be visible and flush with the level of the soil, as is required by current regulations.
- The optional riser is simply threaded into place. It can be cut-down for perfect adaptation of the chamber to the terrain. It is designed so as to avoid all risks of the chamber being trampled, deformed or squashed
- The lateral backfill (with sand) should be free of all sharp or pointed objects and must take into account the settling of the ground.
- All planting is to be avoided within 3 meters of the purification system

III. USAGE CASES

Adjustable inspection chamber SL-RVISIT used to direct untreated domestic wastewater towards the pre-treatment unit.



Find our new drained filter kits **Kit FD** and non-drained filters **Kit FND**

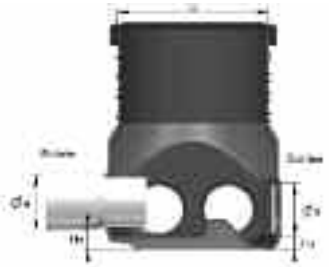
Distribution chambers
SL-RR adjustable and SL-RRCHAS 600
(Outlet on all aerobic treatment infiltration devices)

Profile

SL-RR adjustable

SL-RRCHAS 600

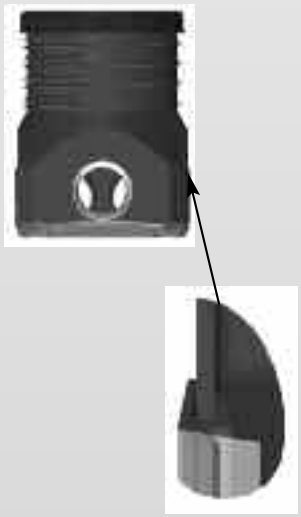
Cross-section



SL-RR ajustable

SL-RRCHAS 600

Detail of silicon lipped joint mounted on threaded risers



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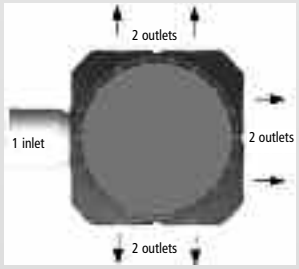


SL-RR adjustable and SL-RRCHAS 600

Perspective

SL-RR adjustable

SL-RRCHAS 600

Find our new drained filter kits **Kit FD**
and non-drained filters **Kit FND**

Type	Article	Weight (Kg)	Diameter Ø Side Inlet (mm)	Diameter Ø central inlet (mm)	Diameter Ø Outlets (OUT) (mm)	Height total (mm)	Height Inlet (IN) (mm)	Height Outlets (OUT) (mm)	DiameterØ total (mm)
BOITE REPART 450	30197	3,250	300	110	100	450	270	50	20
BOITE REPART CHAS 600	30489	4,400	300	110	100	600	-	270	20
REHR DE BOITE 100	30497	0,600	300	-	-	100	-	-	-
REHR DE BOITE 250	10275	1,250	300	-	-	250	-	-	-
REHR DE BOITE 450	30557	2,400	300	-	-	430	-	-	-

The adjustable RR and RBOU chambers are part of our non-drained filters kit KitFND, similarly the RCOLV 1190 chamber is in our kit for drained filters KitFD

Approximate values

*RR adjustable, available singly or by the pallet of 18 units.

Distribution chambers
SL-RR adjustable and SL-RRCHAS 600
(Outlet on all aerobic treatment infiltration devices)

I. DESCRIPTION

Box composed of a cylindrical monobloc (height 450 or 600 mm) made of extrusion blowmoulding High Density Polyethylene (PEHD), including:

- 1 full cap, detachable, with watertight join and screw fix
- 1 distribution plate directing domestic wastewater to irrigation pipes
- 7 PE covers with portholes mounted with silicone joins and made with elastomer to ensure water tightness (1 high inlet Ø 110, 6 low outlets Ø 100).
- Covers upheld by an adhesive description band guaranteeing conformity and complete equipping of the box
- Adjustable to five (5) heights of 450 mm max to 270 min, In order to obtain desired final height, adjust by cutting the coarse threaded cylinder

The polyethylene threaded risers, adjustable heights (optional) SL-REHR 100, 250 or 430 (height 100, 250 or 430 mm) are delivered separately and compensate any possible differences in levels.

Reminder: the depth of distribution pipes should not exceed - 0.60 m. to ensure good working order, good oxygen access and to conform.

II. POSITIONING the chamber

(see French Standard NF DTU 64-1)

Box is buried and placed downstream of a pre-filter (SL-FD), EPURBLOC® or doing tank (outlet to all drainfields, infiltration trenches or irrigation beds).

1. Before placement

- The box's placement bed at the head of the irrigation bed or infiltration trenches must be horizontal with the non-perforated PVC pipes M1/NF, Ø 100 mm.
- A layer of stabilized sand, thickness about 10cm, is spread on the flattened bottom of the excavation, having once removed all stony or angular objects of large Ø

2. Placement

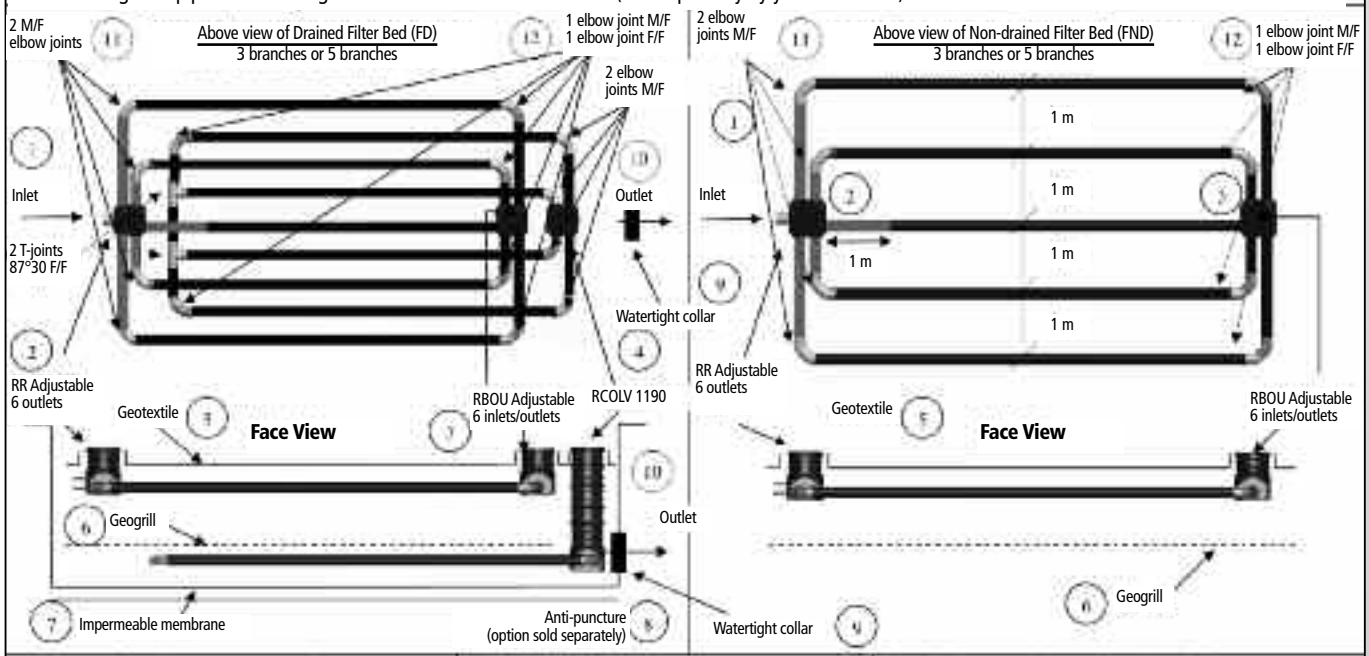
- Box must be placed horizontally and in a stable fashion onto the sand
- Box receives non-perforated PVC tubes M1/NF, Ø 100 mm, the junction between the irrigation pipes and the box is made watertight with a simple fitment of watertight elastomer (without glue).
- Unused opening stays closed by one of the supplied covers and must be mounted from inside the box.
- Cap must remain apparent and show from ground level, as current regulation laws demand.
- The optional riser is placed by simply screwing on. It can be cut to perfectly adapt the box to the terrain, It is designed to suppress all risk of puncturing, deformation or collapse of the boxes.
- Side backfilling (with sand) is free from all pointy or cutting objects and must take account of soil settling.
- All plantings above this purification system are forbidden and must be at least three meters away.

III. USAGE CASES

The adjustable distribution box SL-RR is used in the following cases:

1. Outlet of infiltration trenches of a shallow drainfield.
2. Outlet of infiltration bed of a vertical flow, non-drained sand filter, in reconstituted soil.
3. Outlet of infiltration bed of a vertical flow, drained sand filter.
4. Outlet of infiltration bed a mound of infiltration drained or non-drained.
5. Outlet of infiltration trenches with ground slope > to 5 %.

NOTE: the irrigation pipes and collect grains are not included in these Kits (sold separately by your distributor)

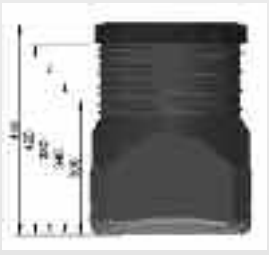


1. Inlet flow of pre-treated wastewater	5. Geotextile filtroplus	9. Watertight collar for drained filter (FD)
2. Distribution box, RR Adjustable	6. Grill filtrogrill	10. Outlet flow of pre-treated wastewater
3. Looping chamber, RBOU Adjustable	7. Impermeable membrane	11. 2 elbow joints 45o diam. 100 M/F, to glue
4. Vertical collect chamber RCOLV 1190	8. Anti-puncture geotextile (option sold separately)	12. 1 elbow joint 45o Ø 100 M/F + 1 elbow joint 45o Ø 100 F/F, to glue

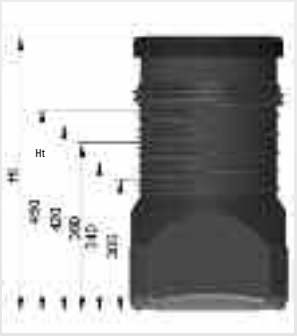
Looping Chamber with 6 inlets/outlets
SL-RBOU adjustable

Looping Chamber for shallow drainfields
Looping Chamber for infiltration trenches on flat and sloping ground
Looping Chamber for drainfields (filter beds, sand filters, mounds....)

Profile



SL-RBOU adjustable



SL-RBOUCHAS 600

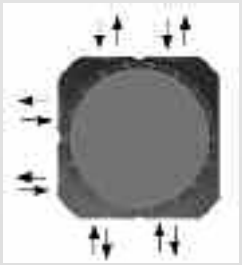
Cross-section

SL-RBOU adjustable

SL-RBOUCHAS 600

Detail of lipped joint mounted with silicone on a riser.

Above



SL-RBOU adjustable

Perspective

SL-RBOU adjustable

SL-RBOUCHAS 600

Find our new drained, **Kit FD**,
and non-drained filter Kits, **Kit FND**

Type	Article	Weight (Kg)	Ø total D (mm)	Ø Ø Inlet (IN) (mm)	Ø Ø Outlet (OUT) (mm)	Height total Ht (mm)	Height min. (mm)	Height Inlet IN/Outlet OUT He/Hs (mm)
BOITE BOU 450	30318	2,850	300	100	100	450	270	20
BOITE BOU CHAS 600	30491	3,500	300	100	100	600	-	20
REHR DE BOITE 100	30497	0,600	300	-	-	100	-	-
REHR DE BOITE 250	10275	1,250	300	-	-	250	-	-
REHR DE BOITE 430	30557	2,400	300	-	-	430	-	-

The adjustable chambers RBOU and RR are integrated in our non-drained filter kits, FND, and equally, the chamber RCOLV 1190 in our drained filter Kits, FND

Approximate values

SL-RBOU adjustable available by the unit or by pallet of 18 units

Looping Chamber with 6 inlets/outlets SL-RBOU adjustable

I. DESCRIPTION

Chambers composed of a cylindrical monobloc (height 450 or 600 mm) made of extrusion blowmoulding High Density Polyethylene (PEHD), including:

- 1 detachable perforated cap with screw fit.
- 1 bowl shaped base allowing good distribution of domestic wastewater in irrigation pipes.
- 6 PE covers of Ø 100 mm mounted with silicone joins, with portholes and made of elastomer to ensure water tightness (3 low inlets and 3 low side outlets possible).
- Covers upheld by an adhesive description band guaranteeing conformity and complete equipping of the chamber.
- Adjustable to five (5) heights from 450 mm max to 270 min.
- Adjustment made up cutting the screw thread with large grooves to obtain the desired final height.

Polyethylene risers to screw, with adjustable height (optional) SL-REHR 100, 250 or 430 (height 100, 250 or 430 mm) delivered singly and allows evening out of level differences

Reminder: irrigation pipe depth must not exceed 0.60 m to allow good working order, good source of oxygen and to conform

II. POSITIONING of the chamber

(see French Standard NF DTU 64-1)

- Looping chambers are buried shallowly underground and placed at the extremity of the drainfield (looping the drainfield). They must be placed stably and horizontally on the gravel bed distributing pre-treated domestic wastewater
- Looping of the irrigation pipes at the extremity of the infiltration trench or drainfield is done with the aid of an irrigation pipe of Ø 100 mm
  The junction between the looping chambers must be horizontal, stable and with irrigation pipe of Ø 100 mm to ensure a maximum stability for the chambers
- The chamber receives irrigation pipes, Ø 100 mm, by simple fitting into joints of watertight elastomer (without glue). An opening not used is closed with one of the supplied covers and must be mounted from the inside of the chamber
- The cap must remain accessible, apparent and visible on the surface level of the ground as current regulation laws demand
- **The optional riser attaches simply by screwing. It can be cut to adapt the chamber perfectly to the terrain**
  It is designed to eliminate all risk of puncturing, deformation or collapse of the chambers
- Side backfilling with sand free from any pointy or cutting object and taking into account settling of the ground,
- All plantations above and at least 3 meters from the purification system are forbidden

III. CASES OF USE

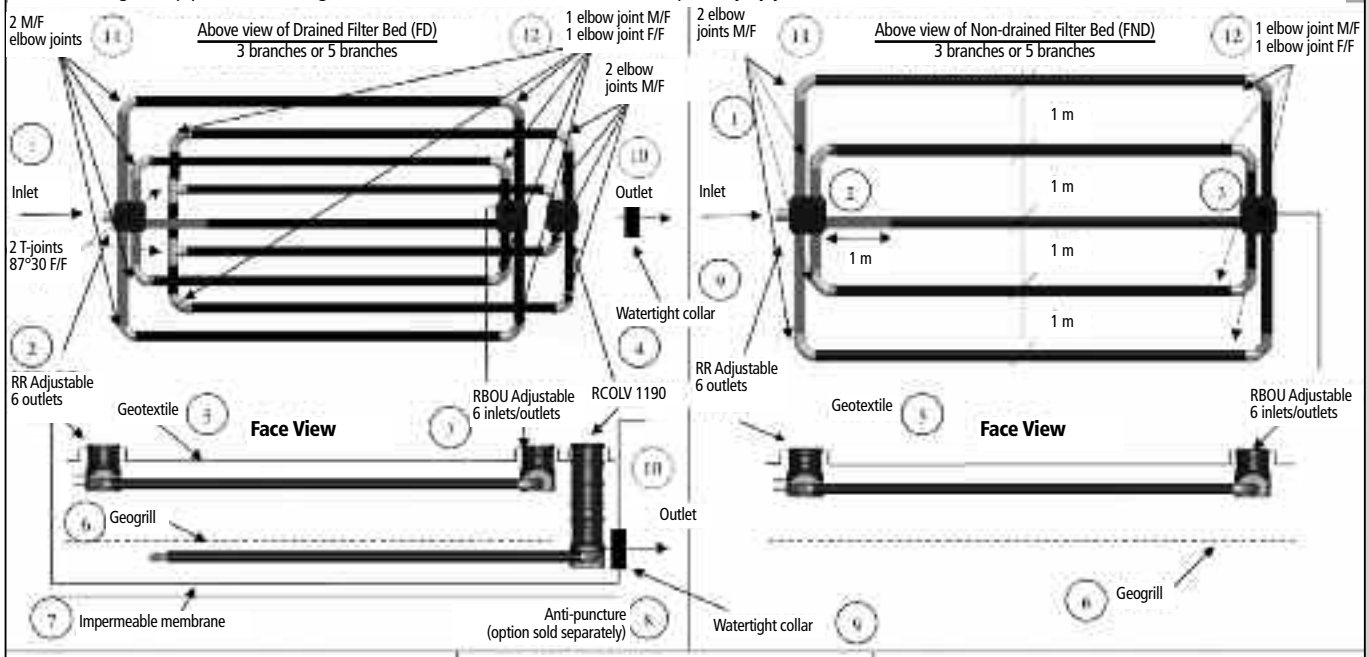
Looping chambers for drainfields SL-RBOU adjustable are used in the following cases:

1. At the extremity of infiltration trenches of shallow or deep drainfields, or of drained or non-drained mounds
2. At the extremity of infiltration beds of non-drained vertical sand filters, in reconstituted soil
3. At the extremity of infiltration beds of drained vertical sand filters,
4. At the extremity of infiltration trenches on sloping terrain > to 5 %,

RBOU CHAS 600

RBOU adjustable

NOTE: the irrigation pipes and collect grains are not included in these Kits (sold separately by your distributor)



1. Inlet flow of pre-treated wastewater
2. Distribution box, RR Adjustable
3. Looping chamber, RBOU Adjustable
4. Vertical collect chamber RCOLV 1190
5. Geotextile filtroplus
6. Grill filtrogrill
7. Impermeable membrane
8. Anti-puncture geotextile (option sold separately)
9. Watertight collar for drained filter (FD)
10. Outlet flow of pre-treated wastewater
11. 2 elbow joints 45o diam. 100 M/F, to glue
12. 1 elbow joint 45o Ø 100 M/F + 1 elbow joint 45o Ø 100 F/F, to glue

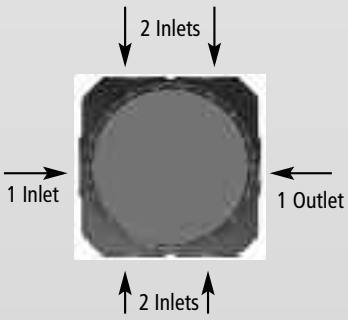
SOTRALENTZ HABITAT

Collect chamber
For the vertically drained sand filter SL-RCOL V 1190

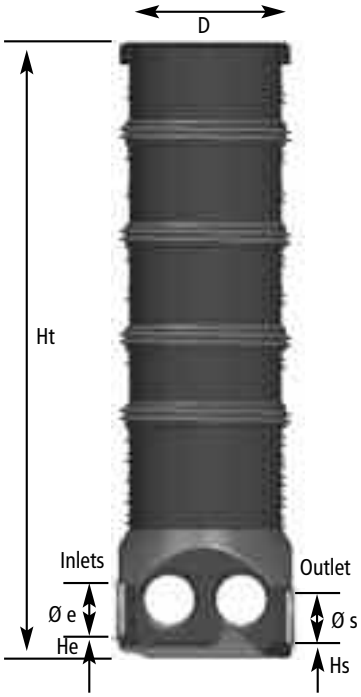
Detail of lipped joint mounted with silicone on a riser

Profile

Above



Cross-section



Perspective

New Find our new drained filter kits
Kit **Kit FD**

Type	Article	Weight (Kg)	Diameter Ø total D (mm)	Diameter Ø Inlets (IN) (mm)	Diameter Ø Outlets (OUT) (mm)	Height totale Ht (mm)	Height inlet (IN) He (mm)	Height outlets (OUT) Hs (mm)
BOITE COL VERTICAL 1190	23081	5,900	300	100	100	1130	50	20
REHR DE BOITE 250	10275	1,250	300	-	-	250	-	-
REHR DE BOITE 430	30557	2,400	300	-	-	430	-	-
REHR DE BOITE 500	10276	2,500	300	-	-	500	-	-
REHR DE BOITE 750	30498	2,850	300	-	-	750	-	-

The chambers RCOLV 1190, RR adjustable, are integrated in all our drained filter kits FD

Approximate values

*RCOLV available by the unit or by the pallet of 9 units

Collect chamber
For the vertically drained sand filter SL-RCOL V 1190

I. DESCRIPTION

Chamber composed of a cylindrical monobloc (height 1 120 mm) made of extrusion blowmoulding High Density Polyethylene (PEHD), including:

- 1 detachable perforated cap with screw fit.
- 1 bowl shaped base directing purified water to the effluent outlet
- 6 PE covers of Ø 100 mm mounted with silicone joins, with portholes and made of elastomer to ensure water tightness (5 low inlets and 1 low outlet).
- Covers upheld by an adhesive description band guaranteeing conformity and complete equipping of the chamber.

Polyethylene risers to screw, with adjustable height

Polyethylene screw-on risers with adjustable height SL-REHR 250, 430, 500 or 750 (heights 250, 430, 500 or 750 mm) are delivered singly and allows evening out of level differences (depth min 1 200 mm and max 1700 mm of vertical drained sand filter

II. POSITIONING of the chamber

(see French Standard NF DTU 64-1)

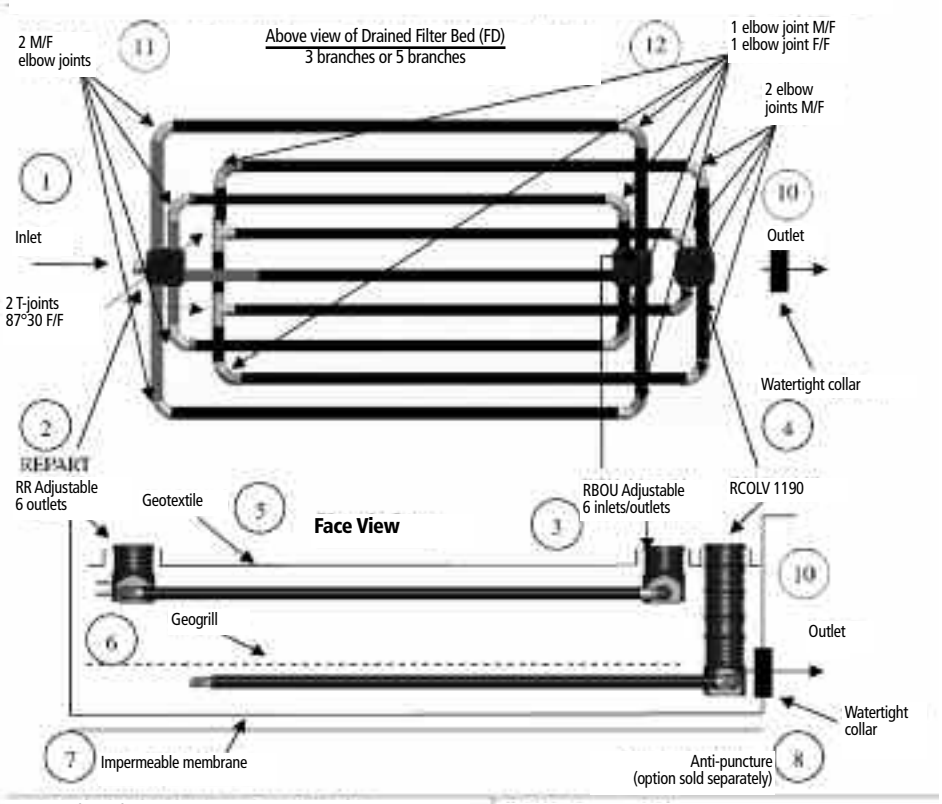
- The vertical collect chamber is buried first in the vertically drained sand filter. It must be placed stably and horizontally directly onto the base, at the downstream extremity of the vertical drained sand filter.
  The chamber is situated directly downstream of the looping chamber
- The chamber receives the collect drains of Ø 100 mm, by simple fitting into joints of watertight elastomer (without glue),
  An opening not used is closed with one of the supplied covers and must be mounted from the inside of the chamber
- The cap must remain accessible, apparent and visible on the surface level of the ground as current regulation laws demand.
- **The riser(s) is attached simply by screwing. It can be cut to adapt the chamber perfectly to the terrain. It is designed to eliminate all risk of puncturing, deformation or collapse of the chambers**
- Side backfilling with sand and gravel, according to the depth, free from any pointy or cutting object and taking into account settling of the ground,
- An elbow joint outlet in the same direction at the pouring of water must be installed onto the evacuation tube of the chamber to avoid system blockage during high water.
- All plantations above and at least 3 meters from the purification system are forbidden

III. CASES OF USE

Vertical collect chamber SL-RCOLV 1190 adjustable in used in the following cases:

- Impermeable ground with a difference in height (between 1.20 m min and 1.70 m max) towards the effluent outlet.
- Ejection into the surface water system (ditch, stream, river, pond, rainwater collector, etc.).
- to reduce the drainfield area.
- to allow monitoring of the quality of wastewater purification.

NOTE: the irrigation pipes and collect grains are not included in these Kits (sold separately by your distributor)



1. Inlet flow of pre-treated wastewater
2. Distribution box, RR Adjustable
3. Looping chamber, RBOU Adjustable
4. Vertical collect chamber RCOLV 1190
5. Geotextile filtroplus
6. Grill filtrogrill
7. Impermeable membrane
8. Anti-puncture geotextile (option sold separately)
9. Watertight collar for drained filter (FD)
10. Outlet flow of pre-treated wastewater
11. 2 elbow joints 45o diam. 100 M/F, to glue
12. 1 elbow joint 45o Ø 100 M/F
    + 1 elbow joint 45o Ø 100 F/F, to glue

Collect chamber SL-RCOLV 1190

Plastepur® non-mains sewage and wastewater disposal

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Superior and continual purification performances

One of the most compact systems of sewage and wastewater disposal

Double Skin® Principal Pre-treatment Units: no deformation and double weld, solid self-holding structure with cavities, capacity of 3 500 to 75 000 litres

Protection of the environment, the water table and watercourses

Large flexibility in landscape management

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Value added to any property

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All information contained in this guide should be taken only as suggestions. It gives general recommendations that are not necessarily applicable in every situation.
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Each installation case should be studied in depth by a specialist competent in the domain of independent sewage and wastewater disposal.

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* Except in the case of lift pump installation

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