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RAINWATER SYSTEM ECODEPUR[®], SAAP

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INTRODUCTION

The rainwater systems ECODEPUR[®] **AQUAPLUVIA**, allows to treat and storage the rainwater, for reuse, with all sanitary and hydraulic safety.

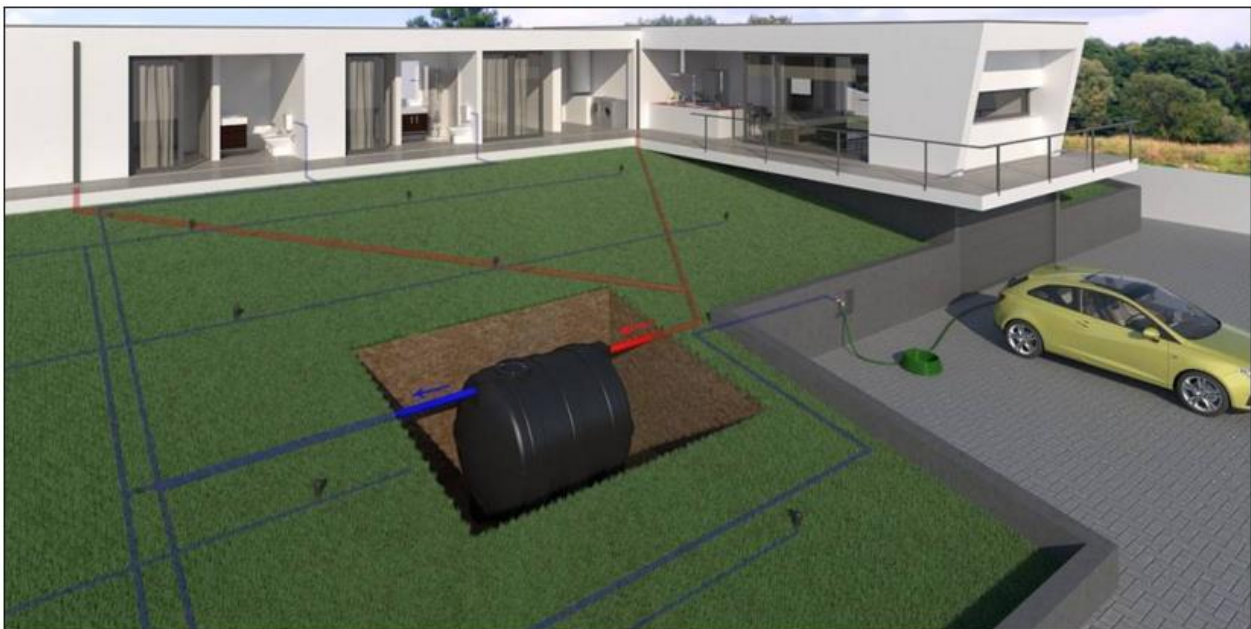
Different equipment's and options on **AQUAPLUVIA** are included on a full range of AQUAPLUVIA systems denominated (SAAP).

In general, Conception, instalation and operation of SAAP, must respect local legislation, applied to this kind of installations.

There are high water consumption in WC flush, irrigation, and several washing. On this operations there's not necessary the use of potable water, so the reuse of rainwater presents as a strategical solution.

This way, ECODEPUR, develop a full range of equipment's for reducing the domestic potable water, resulting in effective contribution to the preservation of the resource "water", as well as, an advantageous economic return on investment in the short term, since it leads to a reduction in cost associated with the consumption of water

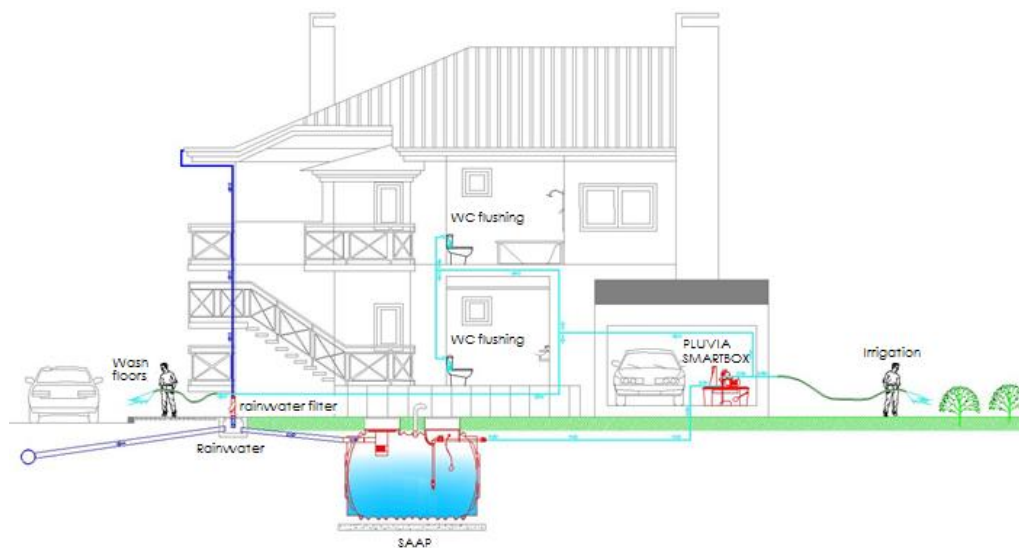
Currently the reuse of rainwater is considered as a valuation factor and differentiated from new construction (**Water Efficiency Facility**).



USE AND WATER QUALITY

The rainwater can be reuse in:

- WC flushing;
- Washing clothes;
- Wash floors, automobiles, etc.
- Irrigation of green areas;
- Industrial uses (cooling towers, fire networks, HVAC, etc.)



The reuse of rainwater for irrigation and floors washing does not need any complementary treatment (physical or chemical or bacteriological). But when rainwater is used for flushing, it's necessary to verify, as minimum, the quality standards of bathing water, in accordance with specific legislation. If this quality is not accomplish its necessary use disinfection (chlorine, UV or other). If disinfection use chlorine we recommend a concentration of free residual chlorine between 0,2 and 0,6 mg/l.

The washing clothes using rainwater reuse does not need any special treatment, must be consider when the washing water temperature reach at least 55°C.

In industrial reuse, the necessity of treatment must be analyse case by case.

The rainwater systems ECODEPUR[®] **AQUAPLUVIA**, allows definition of the best solution for each project, by the user:

- Above ground system with Particulate Filter incorporated;
- Underground system with Particulate Filter incorporated;
- Underground system with external Particulate Filter;

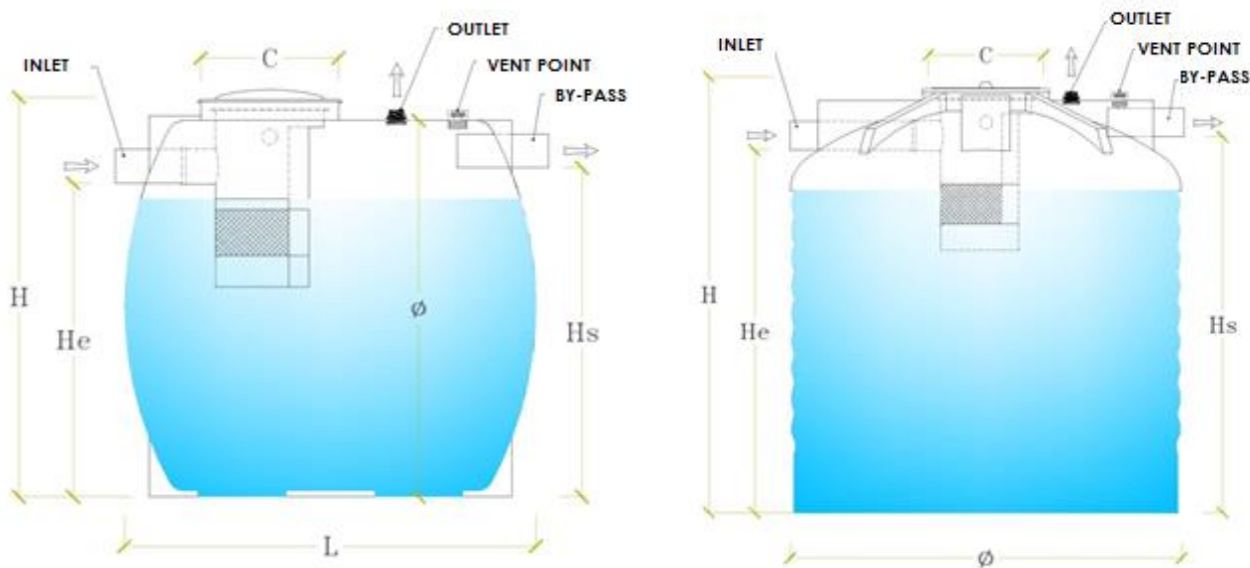
This systems may be complemented by a set of accessories to optimize the reuse process for each case, taking into account the specific constraints of the installation.

ECODEPUR present an intelligent control and management system for rainwater reuse.

AQUAPLÚVIA ABOVEGROUND SYSTEM WITH INTERNAL FILTER INCLUDED– RAC/SAAP

MAIN CHARACTERÍSTIQUES

- ☞ Manufactured with anti-UV additive, by rotomoulding system, which gives a high mechanical resistance and corrosion protection to the equipment;
- ☞ Black colour;
- ☞ Polyethylene Cover Ø 400 mm;
- ☞ Internal filter incorporated removable and easy to clean (particle retention > 1.2 mm);
- ☞ Inlet/ By-pass Ø 110 mm;
- ☞ Outlet MF 2" x 1"1/2;
- ☞ Vent point Ø 2" x 1"1/2;

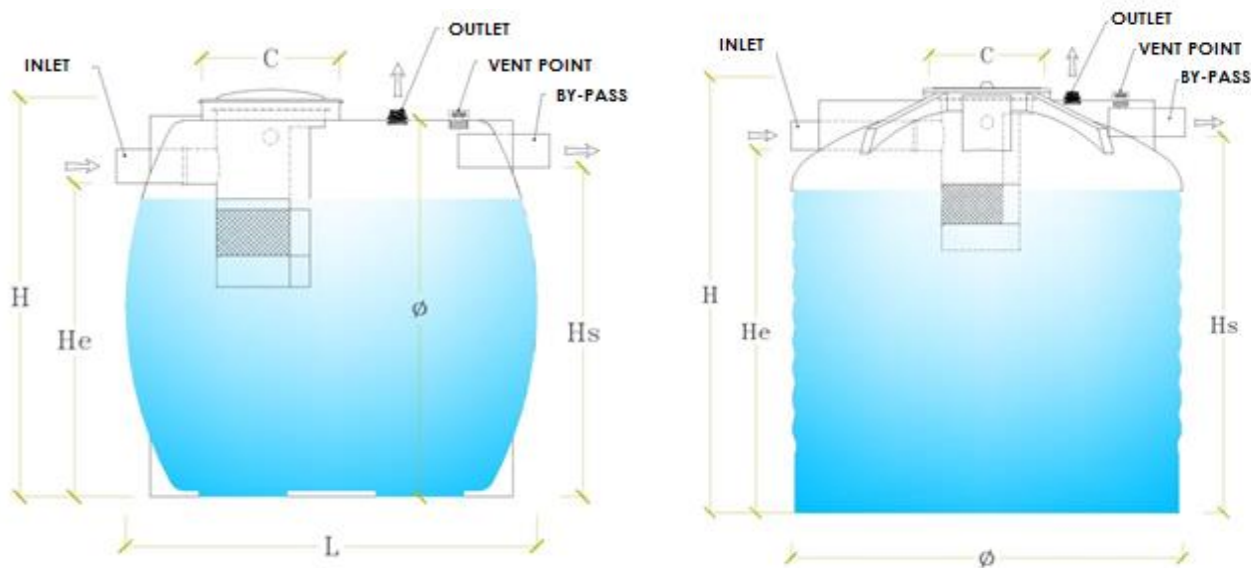


MODEL	TOTAL VOLUME (L)	Ø (MM)	L (MM)	H (MM)	HE (MM)	HS (MM)	C (MM)	Ø PIPE (MM)
RAHC/SAAP -1.500	1.500	1.210	1.350	1.250	1.025	1.075	400	110
RAVC/SAAP -2.000	2.000	1.530	-	1.620	1.390	1.440	400	110
RAHC/SAAP -3.000	3.000	1.500	1.910	1.540	1.260	1.310	400	110
RAVC/SAAP -4.000	4.000	1.890	-	1.910	1.670	1.720	400	110
RAHC/SAAP -5.000	5.000	1.800	2.360	1.870	1.560	1.610	400	110

AQUAPLÚVIA UNDERGROUND SYSTEM WITH INTERNAL FILTER INCLUDED – RSC/SAAP

MAIN CARACTERÍSTIQUES

- ☞ Manufactured with anti-UV additive, by rotomoulding system, which gives a high mechanical resistance and corrosion protection to the equipment;
- ☞ Black colour;
- ☞ Polyethylene Cover Ø 400 mm;
- ☞ Internal filter incorporated removable and easy to clean (particle retention > 1.2 mm);
- ☞ Inlet/ By-pass Ø 110 mm;
- ☞ Outlet MF 2" x 1"1/2;
- ☞ Vent point Ø 2"x 1"1/2;

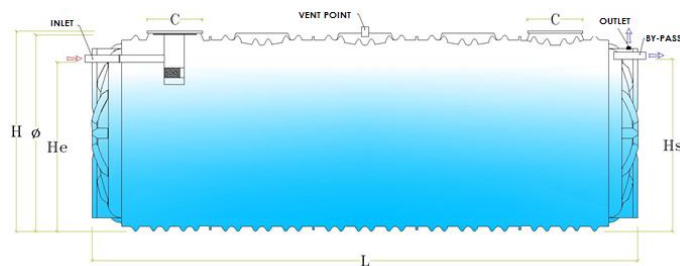
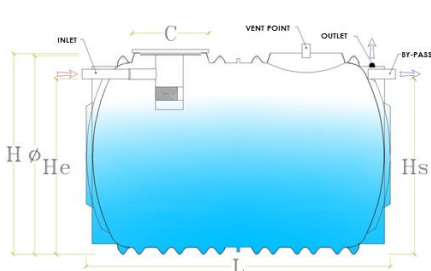


MODEL	TOTAL VOLUME (L)	Ø (MM)	L (MM)	H (MM)	HE (MM)	HS (MM)	C (MM)	Ø PIPE (MM)
RSHC/SAAP -1.500	1.500	1.210	1.350	1.250	1.025	1.075	400	110
RSVC/SAAP -2.000	2.000	1.530	-	1.620	1.390	1.440	400	110
RSHC/SAAP -3.000	3.000	1.500	1.910	1.540	1.260	1.310	400	110
RSVC/SAAP -4.000	4.000	1.890	-	1.910	1.670	1.720	400	110
RSHC/SAAP -5.000	5.000	1.800	2.360	1.870	1.560	1.610	400	110

MAIN CHARACTERISTICS

- ☞ Manufactured with anti-UV additive, by rotomoulding system, which gives a high mechanical resistance and corrosion protection to the equipment;
- ☞ Black colour;
- ☞ Polyethylene Cover Ø 790 mm;
- ☞ Internal filter incorporated removable and easy to clean (particle retention > 1.2 mm);
- ☞ Inlet/ By-pass Ø 110 mm;
- ☞ Outlet MF 2" x 1"1/2;
- ☞ Vent point tanks Ø 2.190 - Ø 90mm; tanks Ø 2.980 - Ø 110 mm.

MODEL	VOLUME (L)	Ø (MM)	L (MM)	H (MM)	HE (MM)	HS (MM)	C (MM)	Ø PIPE (MM)
RSCC/SAAP-10.000	10.000	2.190	3.440	2.265	1840	1890	790	110
RSCC/SAAP-15.000	15.000	2.190	4.980	2.265	1840	1890	790	110
RSCC/SAAP-20.000	20.000	2.190	6.520	2.265	1840	1890	790	110
RSCC/SAAP-25.000	25.000	2.190	8.060	2.265	1840	1890	790	110
RSCC/SAAP-30.000	30.000	2.190	9.600	2.265	1840	1890	790	110
RSCC/SAAP-35.000	35.000	2.190	11.140	2.265	1840	1890	790	110
RSCC/SAAP-40.000	40.000	2.190	12.680	2.265	1840	1890	790	110
RSCC/SAAP-45.000	45.000	2.190	14.220	2.265	1840	1890	790	110
RSCC/SAAP-50.000	50.000	2.980	8.300	3.050	2565	2615	790	110
RSCC/SAAP-60.000	60.000	2.980	9.870	3.050	2565	2615	790	110
RSCC/SAAP-70.000	70.000	2.980	11.440	3.050	2565	2615	790	110
RSCC/SAAP-80.000	80.000	2.980	13.010	3.050	2565	2615	790	110
RSCC/SAAP-90.000	90.000	2.980	14.580	3.050	2565	2615	790	110
RSCC/SAAP-100.000	100.000	2.980	16.150	3.050	2565	2615	790	110
RSCC/SAAP-110.000	110.000	2.980	17.720	3.050	2565	2615	790	110
RSCC/SAAP-120.000	120.000	2.980	19.290	3.050	2565	2615	790	110



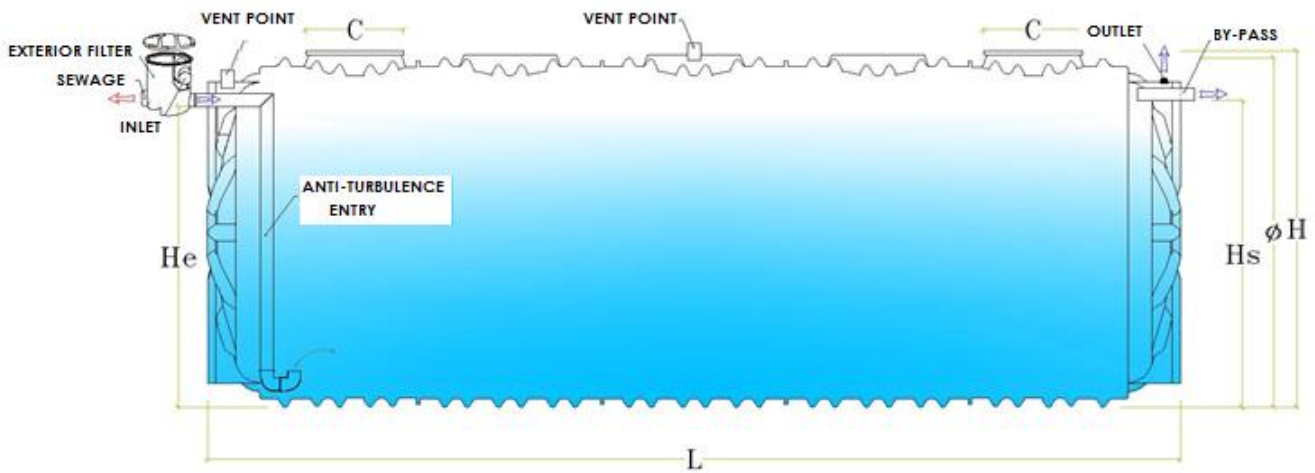
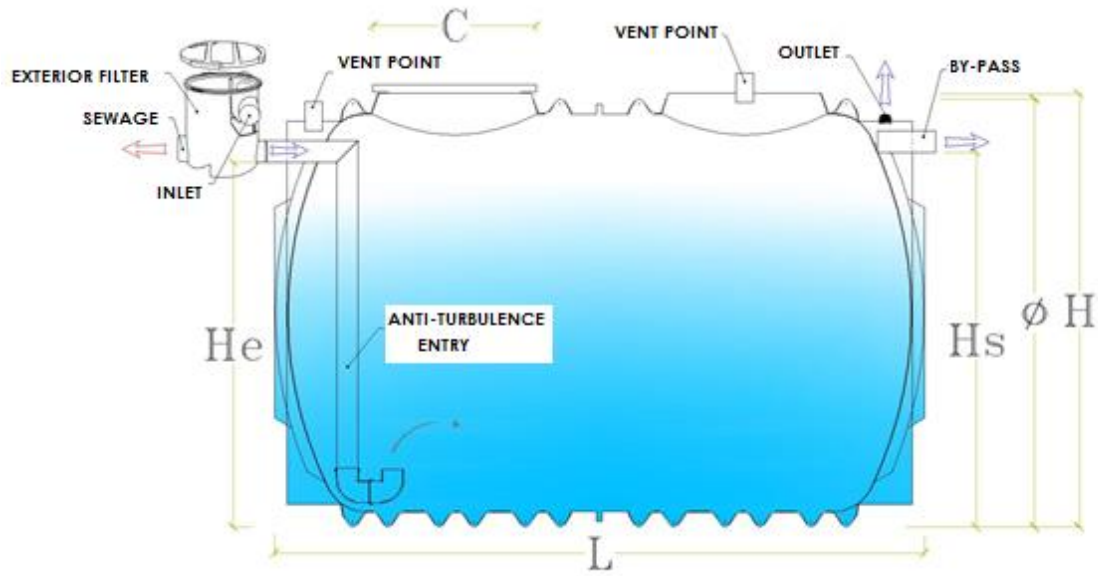
AQUAPLÚVIA UNDERGROUND SYSTEM WITH EXTERNAL FILTER – RSFC/SAAP

MAIN CHARACTERÍSTIQUES

- ☞ Manufactured with anti-UV additive, by rotomoulding system, which gives a high mechanical resistance and corrosion protection to the equipment;
- ☞ Black colour;
- ☞ Polyethylene Cover Ø 790 mm;
- ☞ External filter easy to clean (particle retention Ø > 55 mm);
- ☞ Anti-turbulence entry assembled inside tank Ø 110 mm;
- ☞ By-pass Ø 110 mm;
- ☞ Outlet MF 2" x 1"1/2;
- ☞ Vent point tanks Ø 2.190 - Ø 90mm; tanks Ø 2.980 - Ø 110 mm.



MODEL	VOLUME (L)	Ø (MM)	L (MM)	H (MM)	HE (MM)	HS (MM)	C (MM)	Ø PIPE (MM)
RSFC/SAAP-10.000	10.000	2.190	3.440	2.265	1840	1890	790	110
RSFC/SAAP -15.000	15.000	2.190	4.980	2.265	1840	1890	790	110
RSFC/SAAP-20.000	20.000	2.190	6.520	2.265	1840	1890	790	110
RSFC/SAAP-25.000	25.000	2.190	8.060	2.265	1840	1890	790	110
RSFC/SAAP-30.000	30.000	2.190	9.600	2.265	1840	1890	790	110
RSFC/SAAP-35.000	35.000	2.190	11.140	2.265	1840	1890	790	110
RSFC/SAAP-40.000	40.000	2.190	12.680	2.265	1840	1890	790	110
RSFC/SAAP-45.000	45.000	2.190	14.220	2.265	1840	1890	790	110
RSFC/SAAP-50.000	50.000	2.980	8.300	3.050	2565	2615	790	110
RSFC/SAAP-60.000	60.000	2.980	9.870	3.050	2565	2615	790	110
RSFC/SAAP-70.000	70.000	2.980	11.440	3.050	2565	2615	790	110
RSFC/SAAP-80.000	80.000	2.980	13.010	3.050	2565	2615	790	110
RSFC/SAAP-90.000	90.000	2.980	14.580	3.050	2565	2615	790	110
RSFC/SAAP-100.000	100.000	2.980	16.150	3.050	2565	2615	790	110
RSFC/SAAP-110.000	110.000	2.980	17.720	3.050	2565	2615	790	110
RSFC/SAAP-120.000	120.000	2.980	19.290	3.050	2565	2615	790	110

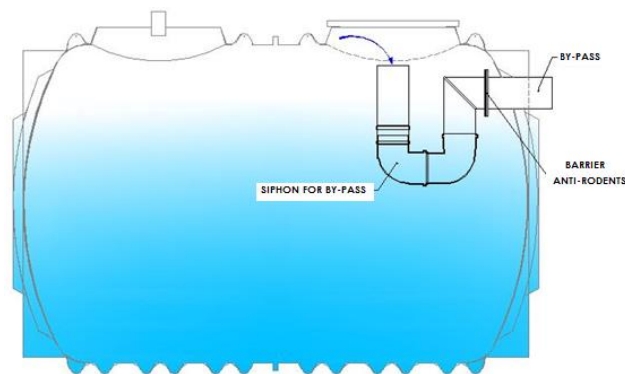


PACKS FOR AQUAPLÚVIA

PACK_1

Additional to the systems present before, it's also available a PACK 1 with the following constitution:

- Barrier anti-rodents;
- Siphon for By-pass.

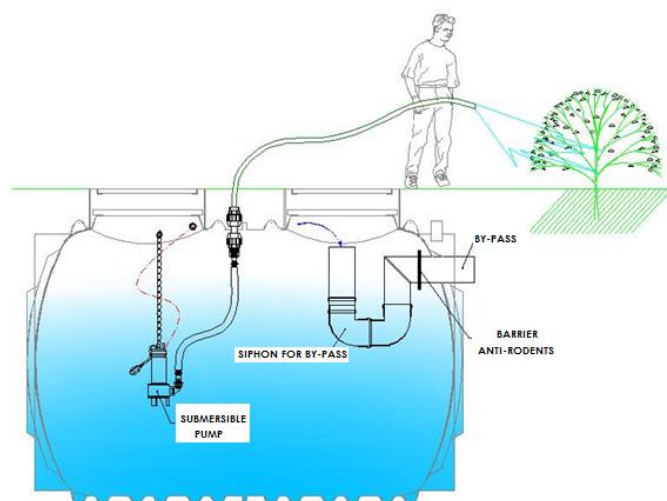


This accessories are completely assembled inside the tank and can be applied to all range of AQUAPLUVIA.

PACK_2

Additional to the systems present before, it's also available a PACK 2 with the following constitution:

- Barrier anti-rodents;
- Siphon for By-pass;
- Submersible pump with low level protection.

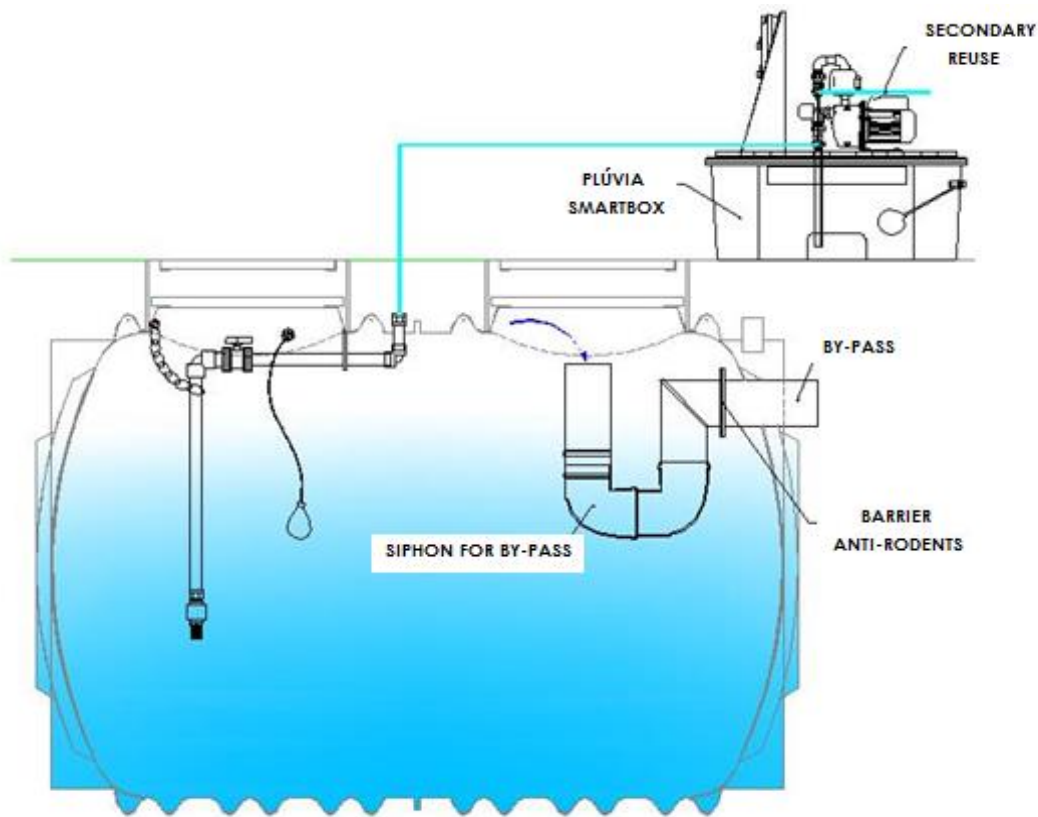


This accessories are completely assembled inside the tank and can be applied to all range of AQUAPLUVIA.

PACK_3

Additional to the systems present before, it's also available a PACK 2 with the following constitution:

- Barrier anti-rodents;
- Siphon for By-pass;
- Pluvia Smartbox.

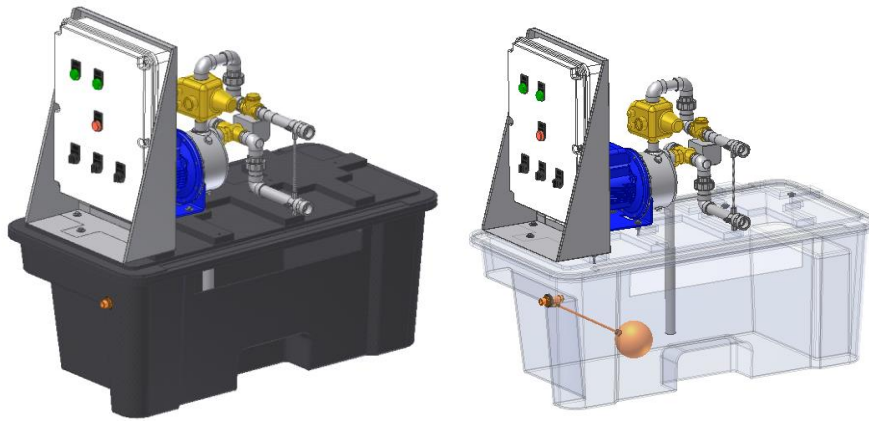


This accessories are completely assembled inside the tank and can be applied to all range of AQUAPLUVIA.

ACESSORIES

ECODEPUR PLUVIA SMARTBOX – INTELLIGENT MANAGEMENT WATER REUSE SYSTEM

The module ECODEPUR PLÚVIA SMARTBOX, is an intelligent management water reuse system, which allows the control and command for reutilization water pressure, including an automatic switch from the water supply. This system is optimized to reuse all the rainwater collects inside tank, if there are not rainwater to reuse, it switch the water supply for potable water automatically.



PLUVIA SMARTBOX Constitution:

Surface pump

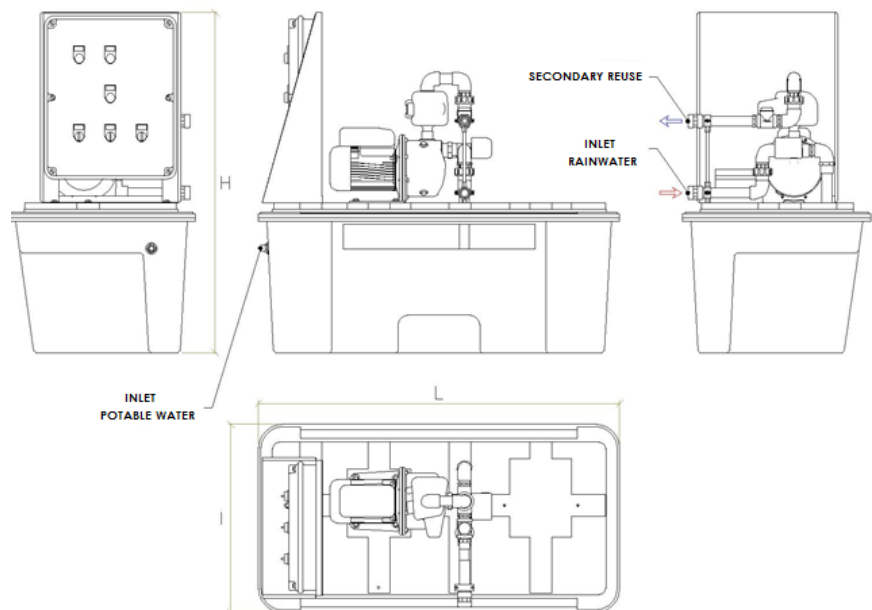
Flow: 56 L/min; Consumption: 0,90 kW; 230 VAC; 50 Hz

Electric board

Direct start with / electronic thermal protection

MODEL	L (LENGTH) (MM)	H (HIGH) (MM)	L (LARGE) (MM)	HE (INLET POTABLE WATER) (MM)	Ø PIPES (MM)	WEIGHT (KG)
PLUVIA SMARTBOX	1.150	1.030	600	365	1"	40

It's a simple, practical and easy to install system, once the tanks supplied, as already the aspiration accessories connected inside tank. To finalise the installation, it's just necessary the hydraulic connection between tank outlet and PLUVIA SMARTBOX inlet rainwater, and reutilization points.



RAINWATER FILTER FOR ROOF GUTTER

This rainwater filter for roof gutter is the ideal solution for rainwater reuse in buildings already built. Its just necessary to connect the inlet/outlet Ø110 and the materials separated are removed from the frontal opening. This model is recommended until a maxim surface roof 70 m².



EXTERIOR FILTER HIGH CAPACITY - FGC1

The rainwater exterior filter with high capacity is supplied with an extension, to install directly in soil, before the storage tank. This model as an maxim flow capacity 1,5 L/s = 5,4 m³ of rainwater per hour.



EXTERIOR FILTER HIGH CAPACITY – FGC2

This rainwater filter is recommended to install on big roof areas. It can be installed on a concrete structure at least 1.000 mm diameter. Or in brickwork constructed in situ. This model as an maxim flow capacity 3 L/s = 10,8 m³ of rainwater per hour.



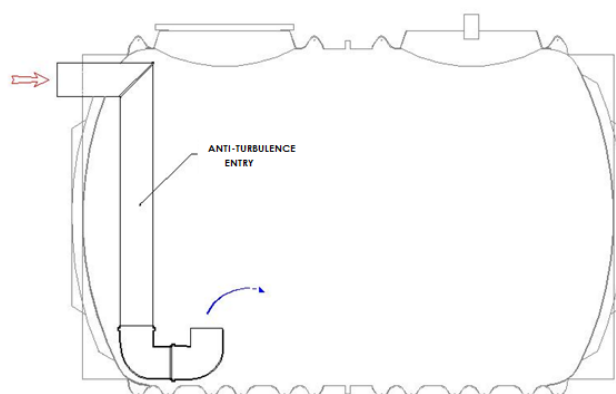
EXTERIOR FILTER HIGH CAPACITY – FGC4

This rainwater filter is recommended to install on big roof areas. It can be installed on a concrete structure at least 1.200 mm diameter. Or in brickwork constructed in situ. This model as an maxim flow capacity 9 L/s = 32,4 m³ of rainwater per hour.



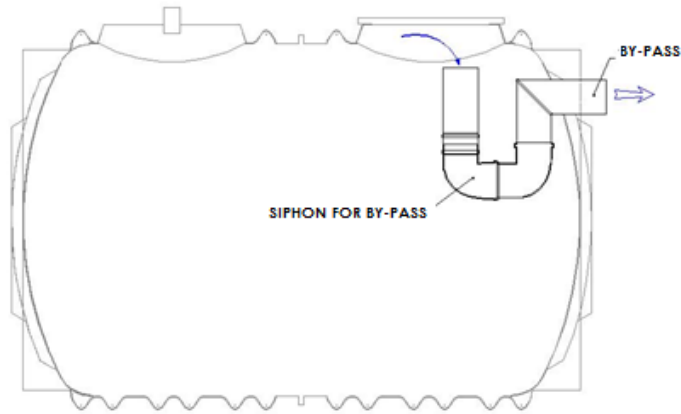
ANTI-TURBULENCE ENTRY

Allows a slow entrance inside tank, reducing the entrance velocity, preventing the mixing of solids that can be inside this tank. This entrance is completely assembled inside tank and can be the following diameter: 110 mm, 125 mm, 160 mm and 200 mm. This accessories can be applied inside tanks volume ≥ 10 m³, when there isn't inside filters provided.



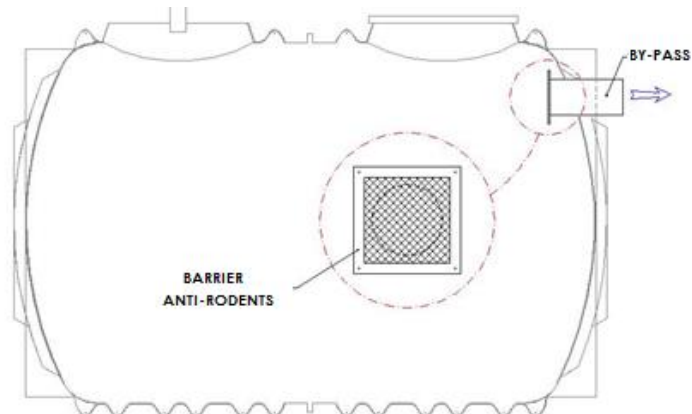
SIPHON FOR BY-PASS

The siphon prevents smells coming out of the tank. This siphon is completely assembled inside tank and can be the following diameter: 110 mm, 125 mm, 160 mm and 200 mm.



BARRIER ANTI-RODENTS

The barrier anti-rodents prevents the rodent's inlet inside tanks.



INSTALLATION

Air reservoirs must be installed on a solid and level base.

ECODEPUR® Underground Water Tank PE, Type RS installation should follow the recommendations of the document supplied "**Installation PE Reactors/Tanks (Ø 2.190 or Ø2.980)**".

In case of any doubt do not hesitate to contact our technical services.

MAINTENANCE

Due to the characteristics of this equipment's, the maintenance is simple, resume to the periodic solid removes from the bottom of the reservoirs or the retention valve.

It's recommended a visual operating inspection from the inlet and outlet devices, as well as the covers.

COMPONENT	MAINTENANCE FREQUENCY
Filters	Inspection and cleaning - semi-annual
Pipes discharge	Inspection and cleaning - semi-annual
Treatment equipment's (disinfection)	Inspection – monthly and maintenance - annual
Pumping systems	<i>According with supplier recommendations</i>
Control units Inspection – monthly and maintenance - annual	Inspection – semi-annual and maintenance - annual
Remain accessories	Inspection - annual

GUARANTEE

Two (2) years, covering any manufacturing defects.

ECODEPUR® will not be responsible if there are clear indications of poor installation, misuse.