

DOMESTIC WATER NETWORK



Experimental capabilities

- Design of a drainage system EU, EV
- Role of the various components
- Primary and secondary ventilations of a network - water-seal of a siphon
- Calculations of basal flow rates and probable flow rates
- Calculation of pipe diameters
- -Study of the booster

Operating principle

The test bench consists of different types of devices (WC, washbasin, bidet, shower, water heater), they are fixed to the frame consisting of aluminum profiles

The water circulates, either in a closed circuit by means of a booster, or in open circuit with the network water

The supply of hot water and cold water of the devices results from manifolds. The connection of the manifolds to each apparatus is achieved using interchangeable sleeves made of different materials (Cu, PER) of different diameters

A copper sleeves set is equipped with a flowmeter

The drainage system (straight portions) is made of transparent PVC tube in order to view the flow of the water. The drainage system (EU, EV) can be achieved by separate, unitary drop, or in unitary network with secondary ventilation (simply remove a piping member)

The robust design of this device makes it suitable for use in schools.

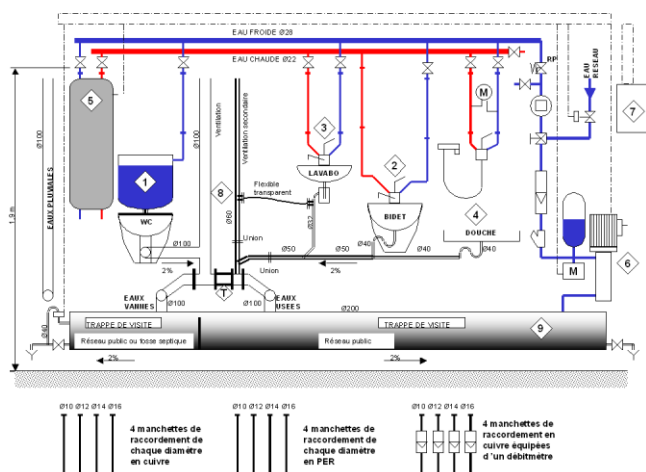
The equipment is set up on an Anodized aluminium frame on casters wheels. This gives it great strength and a flexibility of integration into your premises.

The manufacture of this equipment complies with the European standard for machinery manufacturing.

This equipment can be used alone or with other compatible equipment from our range (see last section of this document).

Illustrations

Technical details



8 - Evacuation - Ventilation

The diameters are indicated on the diagram. A piece of pipe (T) removable enables going from a separate network to a single network (with secondary ventilation). The conduct between the secondary ventilation and siphon of the sink is removable (transparent flexible hose). Possibility to insert a diaphragm on the common evacuation (diameter 50) (flat sealing union). Secondary ventilation pipe (diameter 60) removable.

9 - Water recycling bin

Made in PVC tube diameter 200, it is separated into two by a partition. It has two inspection hatches for maintenance. a high level of safety device cuts the booster and the network water valve. Removable labels allow to define, according to the connectivity, the function of the collector (public network or septic tank).

1 - Suspended WC (above the WC protected by a transparent plate).

2 - Bidet
It is equipped with a manual mixer and a diameter siphon 40.

3 - Sink
It is equipped with a manual mixer tap and a transparent siphon which we can easily change the water seal (30 to 100mm). Evacuation in diameter 32.

4 - Shower
It is equipped with a thermostatic mixer tap and a diameter siphon 40.

5 - Electrical water heater with accumulation of 75 liters (230V mono - 1500W)
It feeds the hot water manifold.

6 - Booster - filter - counter - flowmeter
The pressure in the network is regulated by a manometer which subjugates the operation of the booster. The booster is dimensioned to ensure a flow rate of 36 l / min max in the installation (hot and cold water). Pressure reducer manual 0-5b on cold water supply.

7 - Electrical cabinet
Used to control the water heater and the running of the booster.

IHS100



Services required

- Electrical supply : 220Vac – 50 Hz
- Water supply : mains water
- Water drain : on the floor
- Dimensions: (LxWxH mm): 3700 x 800 x 2000
- weight (Kg): 300

Note : if the equipment installation is operated by our staff, all supplies and exhaust connections required must stand at less than 2m from the machine

Documentation

- User's manual
- Pedagogical manual
- Technical documentation of the components
- Certificate of conformity CE