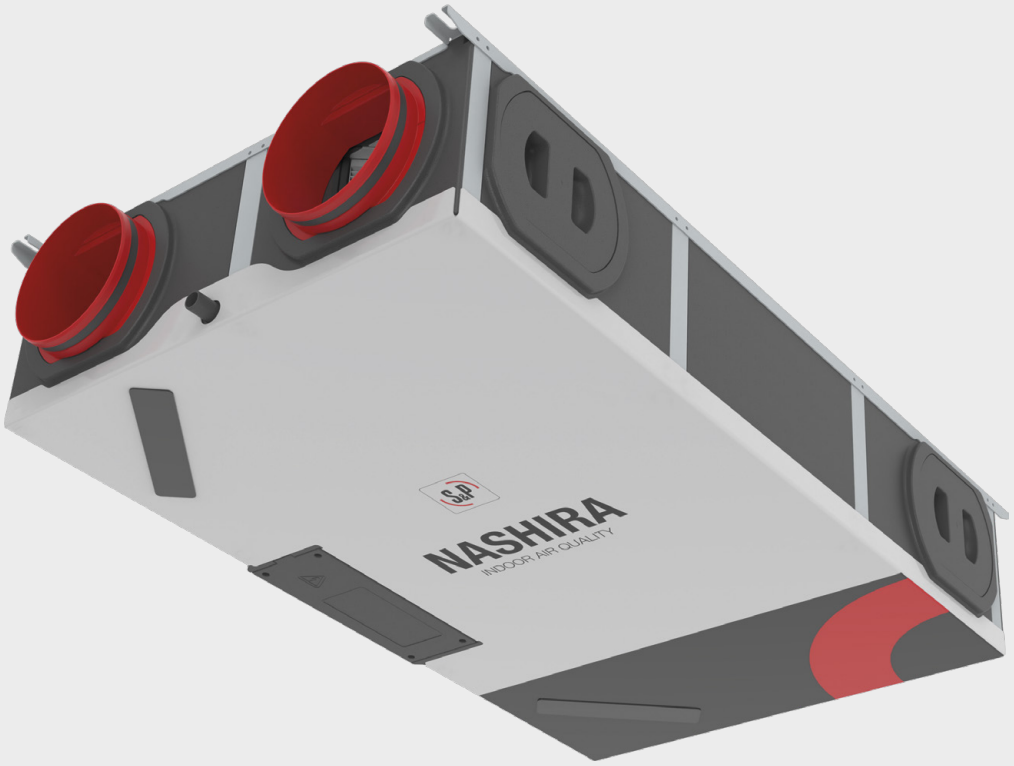
NASHIRA S

User manual



EN

FOREWORD

Carefully read this document before using the product.

With this document, you will be able to operate and carry out basic maintenance on the NASHIRA S heat recovery unit in a safe and optimal way. In this document, the NASHIRA S equipment will be referred to as "the unit". The unit is subject to continuous improvement, therefore the unit may be slightly different from the descriptions given. We reserve the right to make technical changes in this manual.

PRECAUTION

Precautions must be taken to prevent the return to the inside of the room of gas from the exhaust flue of gas or other appliances that burn fuel.

The unit can be used by children from 8 years old, people with reduced physical, sensory or mental capacities or persons with lack of experience or knowledge provided that they are supervised or are instructed in the safe use of the unit and understand the hazards involved. Children should not play with the unit. Cleaning and maintenance must not be carried out by unsupervised children.

- The unit must only be used if it has been correctly installed in accordance with the guidelines given in the installation manual.
- Before carrying out any maintenance, carefully read this document.
- Installation, repair and electrical work must only be carried out by qualified personnel.
- While the ventilation unit is in operation, all the covers must remain closed.
- No liability will be accepted for damage that arises from improper use, poor installation or repair or insufficient maintenance.

INTENDED USE

The unit is designed for controlled mechanical ventilation of single-family dwellings. The unit is supplied as standard with supply and extraction filters for cleaning the incoming air and protecting the heat exchanger.

- The installation, start-up and maintenance must be carried out by qualified personnel.
- Do not modify the unit or the specifications given in this document. A modification can cause personal injury or adversely affect the operation of the unit.
- Do not disconnect the unit. This can lead to a significant increase in humidity and problems with mould.
- Replace the filters (at least) every 12 months to ensure a healthy indoor space and good air quality.
- Do not open the unit's enclosure.

IMPROPER USE

Any use other than that described under "intended use" is prohibited. The unit must not be installed in a room under +12°C. The unit must not operate without filters. The unit must only be switched off for maintenance or repairs.
Centralised ventilation systems are designed for continuous operation. Stopping the ventilation system can cause the appearance of condensate in the ducts. For this reason, in the case of stopping the unit for a long period of time, the outdoor air inlet and air exhaust ducts must be sealed.
The unit is not suitable for drying constructions.

WARRANTY

The unit has a component-only 36 month warranty, from the date of purchase.
S&P agree to replace those parts of the unit whose operation has been acknowledged as defective by our departments. Economic damages such as commercial losses or consequential damages are excepted.
The following are not covered by the warranty: defects resulting from use that is not in compliance with the recommendations of our manuals; faults that arise from envisaged wear; incidents caused by negligence, lack of supervision; faults due to incorrect installation or poor storage conditions.

1. INTRODUCTION

Congratulations for purchasing a NASHIRA S ventilation system, the most efficient compact system on the market. The unit consists of a centralised heat recovery unit that ensures efficient air renewal.

What is a heat recovery unit?

A heat recovery unit extracts contaminated air from a building at the same time as introducing filtered air from outside. Thanks to this ***air renewal*** *and* ***filtration****, a healthy environment is achieved inside the dwelling.*
Furthermore, a heat recovery unit is capable of transferring heat from the extracted air to the supplied air. As a result, the air is introduced into the building at a comfort temperature and energy losses are minimised.
In the following example, a heat recovery unit increases the outdoor air temperature from 0°C to +20°C, with the consequent ***energy saving*** *that this involves:*

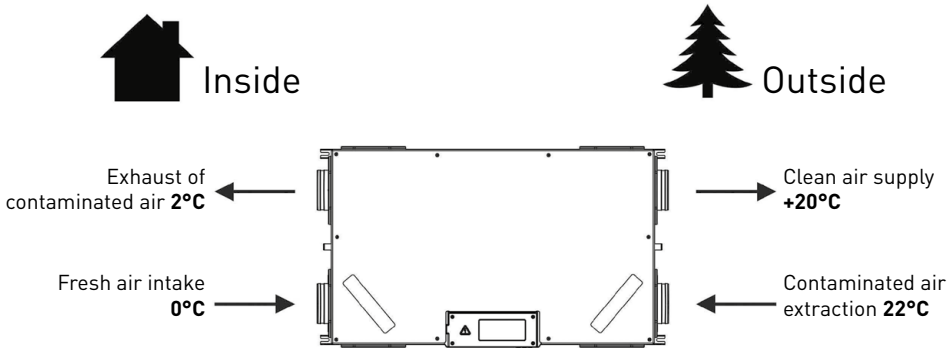


Illustration 1. Operation of the heat recovery unit. Example in winter

The contaminated air is extracted in the wet areas (kitchen, bathrooms, etc.) at the same time that the clean air is introduced into the living room, dining room and bedrooms. It is essential to make cuts under the doors to ensure good air circulation between different rooms.
The ventilation systems for dwellings are designed for continuous operation with the aim of preventing humidity problems and ensuring a healthy indoor environment. It is not recommended to switch off the ventilation except for maintenance work.

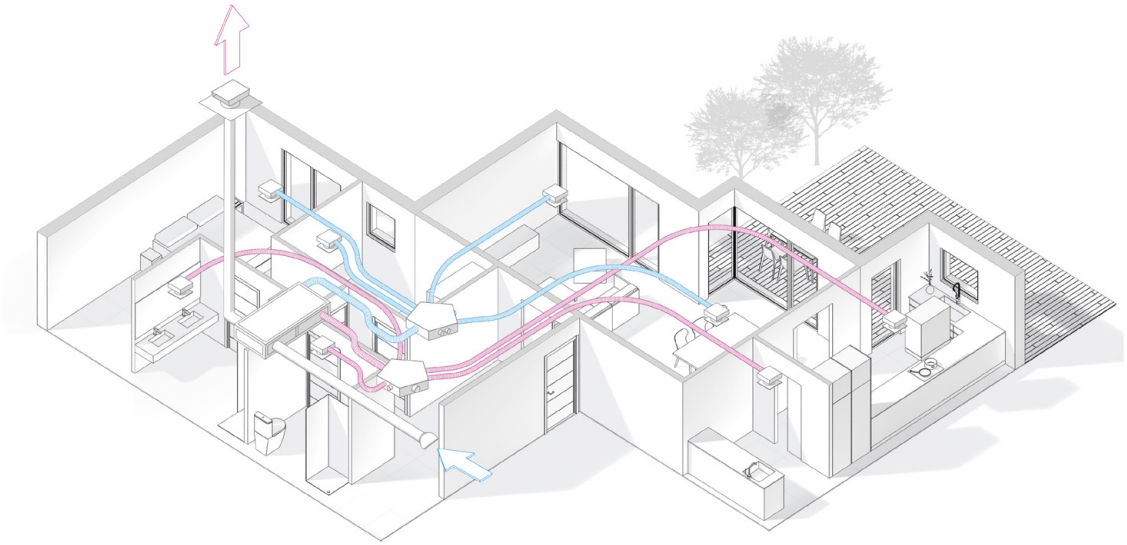


Illustration 2. Ventilation system in a one-family dwelling. The red ducts correspond to the contaminant extraction ducts. The blue ducts represent the fresh, filtered and heat-treated air inlet.

1.1. GENERAL DESCRIPTION OF THE UNIT

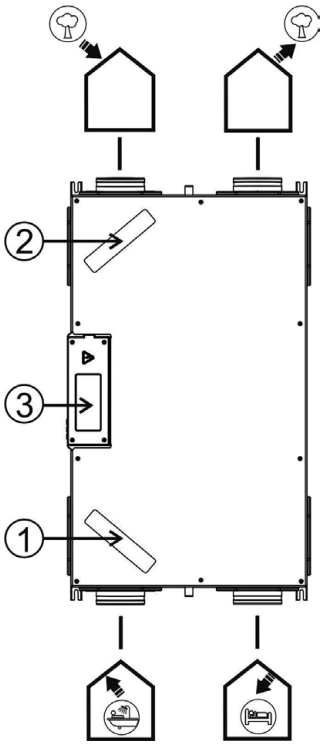
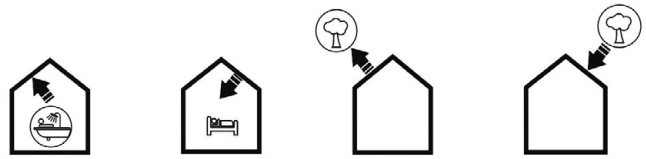
Description of the unit – View from below


① Extraction filter ② Supply filter ③ Electronics box

Table 1. Description of the unit

1.2. MODEL IDENTIFICATION

Information on the model is on the **main plate.**

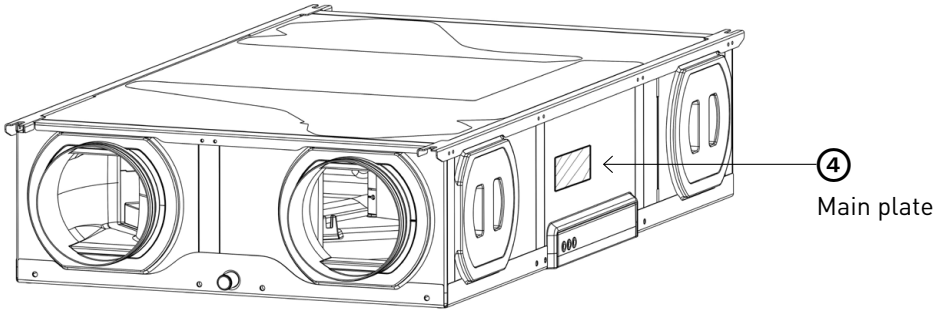


Illustration 3. Main plate location

Parameter	Description	Meaning
Range	NASHIRA S	Name of the range.
Size	150	Maximum flow rate of 150 m³/h @ 300 Pa
	200	Maximum flow rate of 200 m³/h @ 300 Pa
Type	(-)	Sensible heat exchanger
	E	Enthalpy exchanger

Table 2 Product descriptions

2. UNIT CONTROL

The unit is supplied with a controller that, by means of a cable, allows you to switch between 3 speed levels, activate the bypass*, activate automatic mode, stop the unit and reset the filter alarm.

** Bypass: By passes the heat exchanger. The user activates this function when filtered outdoor air is required, but at an outdoor temperature (example: summer nights when we want cool air from outside).*

Do not activate the bypass if the outdoor temperature is below +13°C, otherwise it may cause condensation inside the dwelling.

The unit has automatic bypass activation that depends on outdoor and indoor conditions (moisture and temperature). Although this function has been programmed to ensure thermal comfort, the user can activate it manually when considered appropriate.

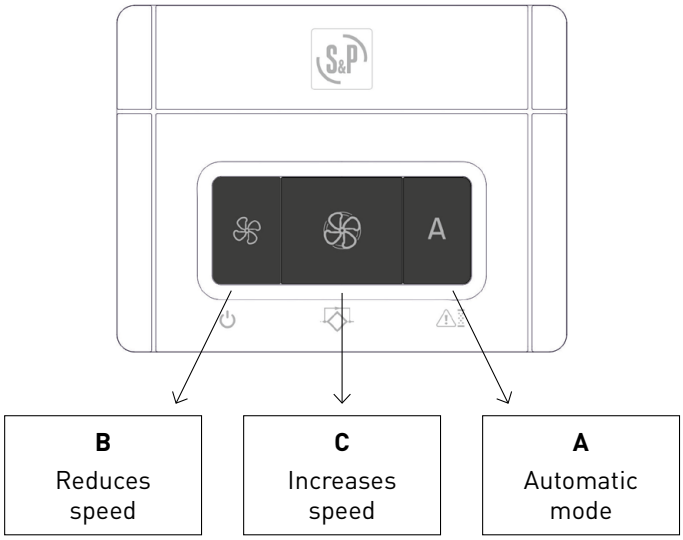


Illustration 4. NASHIRA S controller and button functions

Key	Short press	Long press (3 sec.)	Lighting
A	Activating/deactivating automatic mode*	Resetting filter alarm	ON (green) when automatic mode is active
			FLASHING (red) if there is an alarm
B	Reduce speed	Stops the unit	ON (green) at low speed
			FLASHING (red) when unit OFF
C	Increase speed	Activate the bypass manually	ON (green) at medium/high speed
			FLASHING (green) bypass active

Table 3. NASHIRA S controller button functions

* When automatic mode is active, the unit will vary its speed depending on the indoor humidity with the aim of achieving the best indoor air quality possible.

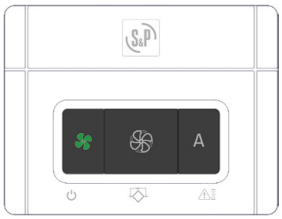
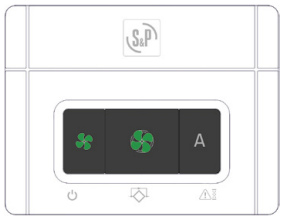
SPEED LEVELS			
			
Low speed	Medium speed	High speed	Automatic mode

Table 4. NASHIRA S speed levels

3. OPTIONAL ACCESSORIES

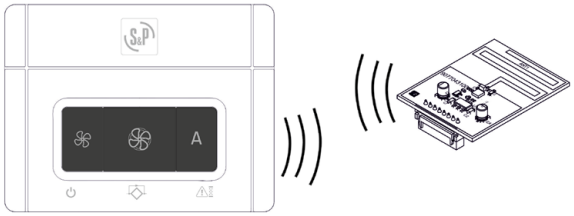
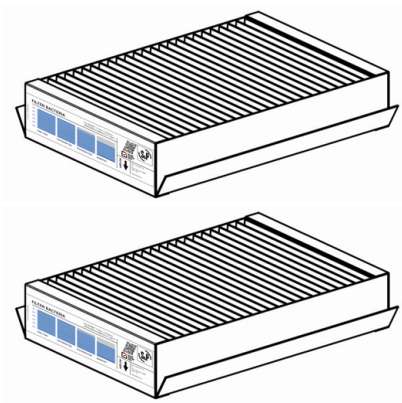
Image	Reference	Description
	NASHIRA-RF-KIT	Radio frequency kit. Ideal for wireless installations. Includes a new remote control.
	SPCM Lite	WiFi communication module. Controls the ventilation unit via Internet, from any part of the world.
	NASHIRA-F-G4G4	Filter KIT: 2 x G4 filters Recommended for pollen filtration.
	NASHIRA-F-G4M5	Filter kit: 1 x G4 filter and 1 x M5 filter. Recommended for filtering fine particles.
	NASHIRA-F-G4F7	Filter kit: 1 x G4 filter and 1 x F7 filter. Recommended for filtering bacteria.
	NASHIRA-F-G4F9	Filter kit: 1 x G4 filter and 1 x F9 filter. Recommended for filtering viruses.
	NASHIRA-F-G4CA	Filter kit: 1 x G4 filter and 1 x CA filter. Recommended for removing odours.

Table 5. NASHIRA S Accessories

For more detailed information on the types of filters and their benefits, click on the following link:
https://info.solerpalau.com/breathing-clean-air-healthy-future

4. ALARM LIST

If there is any type of alarm in the unit, button (A) on the remote control will flash red:

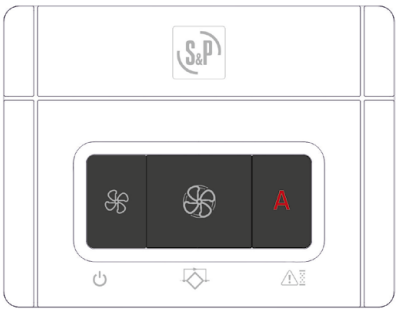


Illustration 5. Alarm signal on NASHIRA S controller

Each alarm is indicated with a different flashing code:

Type of alarm	Number of flashes	Action
Motor 1 error	1	Stop unit.
Motor 2 error	2	Stop unit.
Bypass error	3	Stop unit.
Low supply temperature (<5°C)	4	Stop unit. Every 2 hours, the motors will be activated to check that the temperature returns to comfort levels.
Extraction sensor error.	5	The unit continues operating.
Exhaust sensor error.	6	The unit continues operating.
Outdoor air sensor error	7	The unit continues operating.
Supply sensor error.	8	The unit continues operating.
Clogged filter	Red LED steadily on (not flashing)	The unit continues operating.
Automatic mode active	Green LED steadily on (not flashing)	Automatic mode has been activated.
Defrost mode active	Intermittent green LED	The unit has activated the defrost function as the outdoor temperature is too low.

Table 6. NASHIRA S Alarms list

4.1. RESETTING ALARMS

4.1.1. Filter alarm

Once the filters have been replaced, delete the error message by pressing the "A" button for at least 3 seconds.

4.1.2. Other alarms

As regards the other alarms, the error message will disappear automatically after switching the device on and off, provided that the incident that caused the alarm has been resolved (for example: One of the motors was defective and has now been replaced).

5. BASIC MAINTENANCE

Major maintenance and repair work (such as cleaning the heat exchanger or repairing a fan) must be carried out by qualified personnel. Nevertheless, other basic maintenance operations can be carried out by the end user as described in this section.

5.1. FILTER REPLACEMENT

Replacing the filters is essential to ensuring that the unit operates correctly and provides excellent air quality.

The remote control will indicate "filter alarm" every 12 months (factory value which can be changed on the controller) as notification for their replacement.

Note: The following depictions of the NASHIRA S unit are schematic diagrams. The unit is permanently mounted on the ceiling. The position shown in the following images is not possible.

5.1.1. Switch off the unit Disconnecting the electrical supply is recommended.

5.1.2. Prepare a sealable plastic bag. Filters will be placed in this bag.

5.1.3. Remove the filter covers (arrow 1)

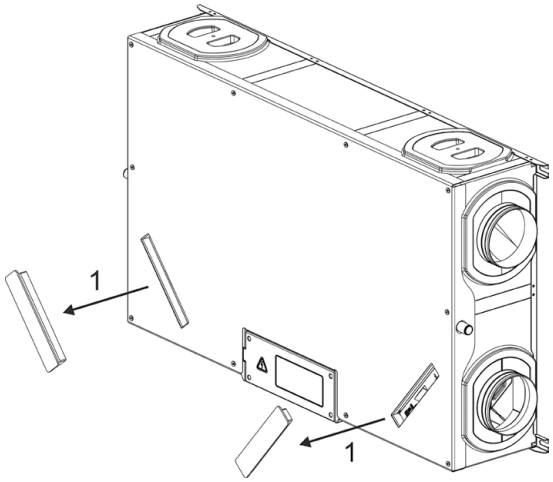


Illustration 6. Removing filter covers

5.1.4. Remove the filters (arrow 2)

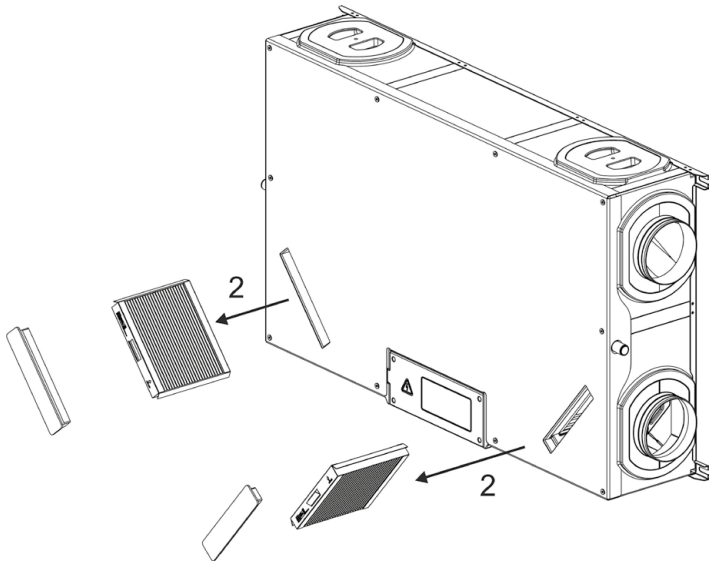


Illustration 7. Removing filters

5.1.5. Place the dirty filters in the plastic bag. The filters contain dust and fine particles among other contaminants. Do not shake the filters and carefully place them in the plastic bag to prevent the transmission of contaminants to the environment. Seal the bag and throw it in the general waste container.

5.1.6. Fit the new filters inside the unit. On the filter frame, you will find indications on the air direction. Fit the filters as shown below (arrow 3).

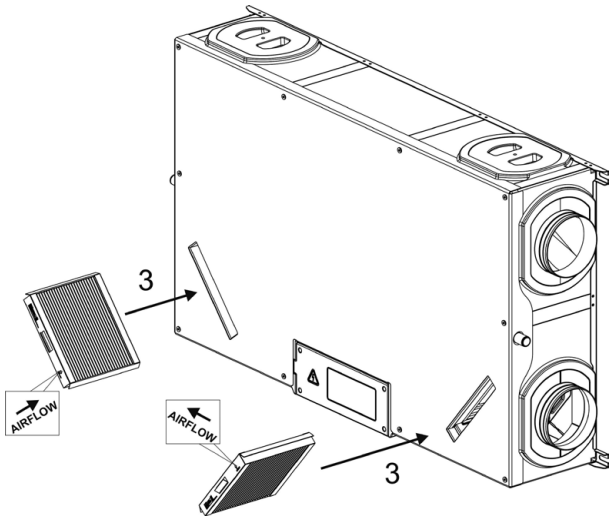


Illustration 8. Airflow in filters

5.1.7. Place the filter covers in their original position and switch on the unit.

5.1.8. Reset the filter alarm. See section 2. UNIT CONTROL.

5.2. CLEANING INLET/OUTLET VALVES AND GRILLES

It is recommended to clean all the openings/grilles inside and outside the dwelling at least once every six months. For this, a damp cloth with neutral soap can be used.

- The trim can be removed from some valves in order to access the inside, in this case it is highly recommended to clean the inside of the valve.
- Some valves have incorporated filters, in this case change/clean the filters in accordance with the manufacturer's instructions.
- If in doubt, contact your installer.

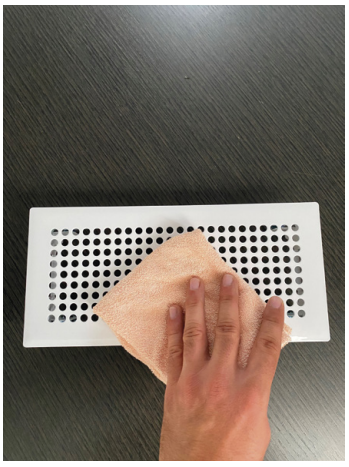
		
Cleaning an air inlet	Cleaning an air inlet (Internal part)	Cleaning an exterior grille

Table 7. Cleaning inlet/outlet valves and grilles

5.3. CLEANING THE REMOTE CONTROL

It is recommended to clean the remote control at least twice a year. For this, a damp cloth with neutral soap can be used.

Do not use excess water. The remote control is an electronic component that can be damaged if not cleaned carefully.

5.4. CHECK THE SIPHON (CONDENSATE DRAIN)

It is recommended to check that there is water in the drain siphon at least once every six months. If there is no water, fill up to the minimum level indicated below, otherwise it is possible that bad smells from the drain could come up into the dwelling.

The condensate siphon is usually located on the side of the unit. If in doubt, contact your installer.

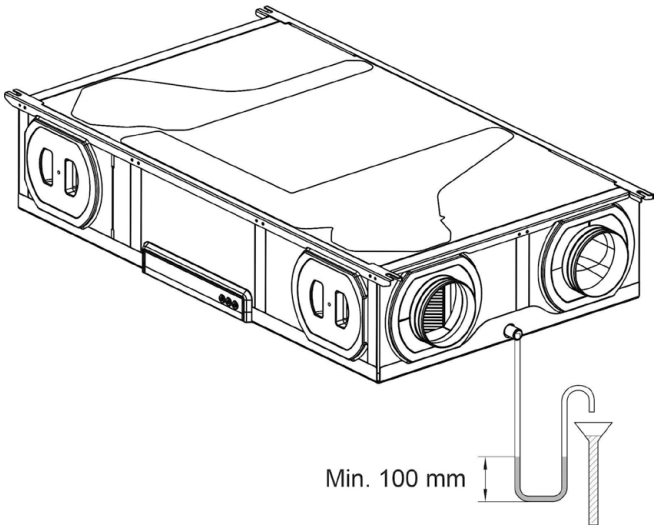


Illustration 9. Check the siphon (condensate drain)

If the installed siphon is a "dry siphon", this maintenance is not required. Soler&Palau offers a dry siphon in its catalogue as an accessory: 5800015700 DSI.

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