

FLUX+ WALL

USER MANUAL



Table of Contents

GENERAL	4
1 • General	5
1.1 • Version control	5
1.2 • Language version	5
1.3 • Using this manual	5
1.4 • Electronic version	5
1.5 • Symbols used	6
1.6 • Abbreviations	6
1.7 • Definitions	7
USER	8
2 • Set-up and installation (Safety)	9
2.1 • General instructions and safety instructions	9
2.2 • Safety instructions	10
2.3 • Unit operation	11
2.4 • Specific measures	11
2.5 • Electrical	12
2.6 • Moving parts	12
2.7 • Privacy statement	12
3 • Flux+ Wall Operation	13
3.1 • Demand-driven ventilation and heat recovery	13
3.2 • Operating principle	13
3.3 • Fan control	13
3.4 • Breeze function	14
3.5 • Bypass function	14
3.6 • Identification label	14
4 • Material and packaging	15
4.1 • Material, packaging and environment	15
4.2 • Disposing of the device	15
5 • Bringing the Flux+ Wall online	16
5.1 • Connecting the Flux+ Wall to the home network	16
5.1.1 • Possible ways of connecting the Flux+ Wall to the home network	16
5.2 • End-user web portal	17
5.3 • The Flux+ Wall in Smarthome	17
6 • Controls	18
6.1 • Operating functionalities	18
6.2 • Status LED module	19

7 • Glossary	20
8 • Maintenance	21
8.1 • Periodicities	21
8.2 • Cleaning and replacing filters.....	22
8.3 • Operation of the unit	23
8.3.1 • Checking error messages	23
8.3.2 • Control LED display	23
8.3.3 • Monitoring air quality/ventilation flow rate.....	24
9 • Technical documentation.....	25
9.1 • Technical specifications	25
9.2 • Controls	26
9.3 • Room sensors	26
9.4 • Frost protection	26
10 • Service.....	27
10.1 • Service request.....	27
10.2 • User guarantee terms and conditions	27
11 • Privacy Statement.....	27
11.1 • Data from the Flux+ Wall	27
11.2 • Data access.....	27
11.2.1 • Situation 1: occupant = owner.....	28
11.2.2 • Situation 2: occupant ≠ owner (rental/lease situation)	28

GENERAL

1 • General

The RENSON® Flux+ Wall is a balanced ventilation system with heat recovery. The unit brings fresh air into the home mechanically and removes polluted air from the home mechanically, using 2 integrated fans.

The Flux+ Wall is a professional product and should, therefore, be placed by an installer trained at Renson.

There are two manuals for the Flux+ Wall: one for the installer and one for the user.

- The **installation & maintenance manual** has all the necessary information on installation, troubleshooting and maintenance. Please read this manual carefully before connecting or servicing the unit.
- The **user manual** contains all the necessary information on how to use the unit, simple maintenance and troubleshooting.

1.1 • Version control

RENSON® reserves the right to make technical changes to the products described. The most recent manual is available for download at www.renson.eu.

1.2 • Language version

The Dutch version is the original version. Any other language versions are translations. In case of incompatibility, the Dutch version is the standard version.

1.3 • Using this manual

This manual starts with a general description of the Renson Flux+ Wall Unit. Please read these chapters first to familiarise yourself with the function and location of the most important parts.

Then follow the procedures for the Renson Flux+ Wall Unit:

- commissioning.
- maintenance.

1.4 • Electronic version

This manual is only available electronically as a PDF file.

The PDF file contains bookmarks in the left margin that allow you to quickly click through to the desired information.

Each time the cursor changes to the  symbol, you can click on the link to go to the desired information. You can click the  symbol at the top right of the page to return to the Table of Contents.

 Keep the manual's "quick start guide" near the unit.



1.5 • Symbols used



Read the manual.



Tip: non-essential, useful information.



Warning: failure to perform the procedure correctly may cause undesirable results or damage to the Renson Flux+ Wall unit.



Danger: failure to perform the procedure correctly may result in personal injury.



The **CE mark** indicates that, according to the manufacturer, a product meets all EU requirements in terms of safety, health and environmental protection.



UKCA mark: the product complies with the regulations of the relevant laws in England, Wales and Scotland.



Warning for dangerous electrical voltage. The product operates at high voltages.



Device to be used indoors.



This electrical appliance must be returned separately from residual waste by the owner.

1.6 • Abbreviations

The following abbreviations are used in this manual:

Abbreviation	Meaning
CERTIFICATION	
AREI	Belgian General Regulations for Electrical Installations
UKCA	UK Conformity Assessed
EAC	Eurasian Conformity Certificate
EMC	Electromagnetic Compatibility
AIRFLOW WTW SYSTEM	
EHA	Exhaust air, polluted extraction air that is blown outside
ETA	Extracted air, polluted extraction air from the home
ODA	Outdoor air, fresh air that enters the home
SUP	Supply air, fresh air that is blown into the home
HA 	House connection (ETA & SUP) – is indicated by a house
BA 	Outdoor connection (EHA & ODA) – is indicated by a tree
MATERIALS WTW SYSTEM	
EPP	Expanded and thermally insulating Polypropylene
SI UNITS AND GENERAL CONCEPTS	
Pa	Pascal, unit for pressure (1 Newton on 1 m ²)
ppm	Parts per million, a measure of concentration
CO ₂	Carbon dioxide, a measure of human presence
VOC	Volatile Organic Components, a measure of pollutants in the home
WTW	Heat recovery, a method for reusing heat

1.7 • Definitions

The following terms are used in this manual:

Term	Meaning
System D+	Ventilation system with mechanical supply + mechanical extraction of air
Unit	Renson Flux+ Wall - 34594 – Flux+ Wall 475 - 34595 – Flux+ Wall 650 - 34596 – Flux+ Wall 475 ERV - 34597 – Flux+ Wall 650 ERV
Ventilation system	The unit with associated pipes and control elements
Pipe pressure	Every pipe system in a home has a characteristic pressure drop (pipe characteristic).
Plenum box	Distribution box to achieve both the supply and extraction air in the different rooms.
Valves	Adjustable openings that facilitate both supply air and extraction air in the different rooms.
Pulsion/Supply/SUP	Supplying air into the home
Extraction/ETA	Extracting air from the home
Bypass	A classic bypass provides an option to bypass the heat exchanger if no cold or heat exchange is necessary.
Thermal efficiency	The efficiency of the transfer of the heat or cold will result in thermal efficiency
Condensation drainage point	Depending on the temperature and humidity, the exchange of airflows and heat transfer results in the production of condensation, and the moisture must be removed via a condensation drainage point.
Filters	To protect the valuable unit (heat exchanger, fans, sensors), it is necessary to replace the 2 filters in the unit at regular intervals (see maintenance chapter).
Frost protection	If necessary, the unit will operate with imbalance at critical temperatures to prevent the heat exchanger from freezing.
Wall installation	The unit can be installed on the wall. Thanks to the head box with top and side connections, the unit can be installed against the ceiling. It can also be placed on the ground using the installation base (35672).
Constant Flow	Regardless of the variation in pressure due to indoor conditions or contamination of filters, the unit will always ensure the desired airflow rates are used. This also ensures the thermal efficiency is optimal at all times.

USER

2 • Set up and installation (Safety)

2.1 • General instructions and safety instructions

The unit in this packaging complies with the prescribed CE safety regulations and UK Conformity Assessment.



The Flux+ Wall meets the legal requirements for electrical appliances.

AREI

The socket used to connect the unit to the mains voltage must comply with the provisions of the AREI.

UKCA (UK Conformity Assessed)

The unit in the packaging complies with the prescribed UKCA safety regulations.

2.2 • Safety regulations

DANGER

- Ignoring the warnings below may result in malfunction or loss of performance as well as fire, electric shock or injury.
 - A unit that has not been installed in accordance with the installation instructions is not covered by the warranty.
-
- This unit is intended for indoor domestic use. If you have a different situation, please contact RENSON®.
 - Only an installer who has completed a Renson FLUX training course may install, connect, commission and carry out maintenance on the Flux in deviation from the user manual.
 - The Flux must NOT be placed in areas where the following are present or may occur:
 - Excessively greasy atmosphere
 - Corrosive or flammable gases, liquids or vapours
 - Ambient temperatures above 40°C or lower than 0°C (the Flux must be installed in a frost-free place!)
 - Relative humidity higher than 90% or outdoor installation (condensing environment)
 - The unit and associated parts and controls must not be used in places where they may be subject to water jets.
 - All wiring must be installed by a qualified person.
 - When mounting, take into account the conformity of noise requirements according to the applicable standard (Belgium: NBN S01-400-1, Section 8).
 - For the supply of fresh air and extraction of polluted air, the supply and extraction of the outside air must be provided via the roof (roof ducts) or via the wall (wall ducts). You must ensure the roof penetrations are sufficiently water-repellant and that the pressure drop is kept to a minimum.
 - Only appropriate RENSON® accessories can be used with the unit.
 - Changes to the Flux are not permitted.
 - The unit cannot be opened without tools. Opening the unit may result in damage to the unit and/or personal injury.
 - Observe national/regional/company regulations when working in confined spaces.
 - The Renson Flux must be installed in accordance with the construction, safety and installation provisions generally and locally applicable in the municipality/city and/or all other bodies.
 - If the power cable is damaged, it must be replaced by the manufacturer, its service representative or similarly qualified persons in order to avoid a hazard.
 - The Renson Flux is constructed in such a way that it is impossible to come into contact with moving or live components during normal usage and without performing specific actions.
 - The device must be installed so that it is touch-safe. This means, among other things, that under normal conditions no one can reach moving or live parts of the fan unit without taking a conscious action, such as:
 - Disassembling the cover plate.
 - Disconnecting an air duct and/or cover plate on the supply or discharge points during normal use.

WARNING

- The ventilation system must function permanently, which means the Flux must never be switched off (legal obligation according to NBN D50-001 Chapter 4.2 System D).
- The unit is only suitable for use in domestic homes. The unit is not suitable for industrial use, such as in swimming pools or saunas. Installation in an industrial environment may damage the unit.

2.3 • Unit operation

- It is the installer's job to inform the user how the unit works and how it can be maintained (see user manual Chapter 'Maintenance'.)
- Only use the product for the applications for which it is designed as stated in the manual.
- Maintenance instructions must be followed precisely to prevent damage and/or wear.
- It is recommended to conclude a maintenance contract.

2.4 • Specific measures



NOTE

Ensure the Renson Flux+ Wall remains easily accessible at all times so maintenance and servicing can be carried out smoothly.

- The Renson Flux+ Wall meets the legal requirements for electrical appliances.
- This unit can only be used with the appropriate RENSON® accessories.
- Use RENSON® Easyflex air ducts to guarantee air transport according to the best airtightness class D.
- Provide RENSON® Aero valves for both extraction and supply. This results in lower energy consumption and lower noise production from the fans.
- Provide RENSON® Aludec air flexibles.
- Provide RENSON® Aludec air flexibles if you require acoustic damping.
- Provide RENSON® IsoDec air flexibles if you require thermal insulation.
- Provide RENSON® roof and/or wall duct to minimise pressure drop. This results in lower energy consumption and lower noise production from the fans.
- When the Renson Flux+ Wall is combined with compartmentation products to reduce fire spread risk: Ensure the fire damper/butterfly valve/cuff/etc. has sufficient free air passage to limit pressure loss. An incorrect choice of type can lead to malfunction of the Renson Flux+ Wall.

2.5 • Electrical

NOTE

- Connect the unit to a 230 VAC 50/60 Hz power supply via the supplied power cable or directly to the fuse box. Any other power connection will cause damage to the unit.
- The unit must function continuously, i.e. based on the applicable legislation (NBN D50.001), and permanent ventilation must be provided. In order to ensure proper functioning of this sensor-controlled system, the unit must never be switched off.
- Always switch off the power supply to the unit before you start working on the ventilation system. Leaving the unit open while it is operating could result in personal injury. Make sure the unit cannot be switched on accidentally. The unit can be disconnected from the power supply network by removing the power cable from the wall socket or by switching off the fuse. If there is any doubt, check whether this has actually happened. In doing so, wait at least 30 seconds when reconnecting the power supply.
- If the power cable is damaged, contact your installer. If this is not respected and different wiring is used, any warranty and/or liability for the poor functioning of the product will be void.

2.6 • Moving parts

NOTE

Always connect air ducts of at least 500 mm to the unit first and seal the remaining openings with a sealing cap before connecting the power supply. This means no one can touch the motor when the unit is in operation.

After installation, all components that could cause personal injury are safely contained within the housing. You can only open the housing with tools. Sealing caps must not be removed when the unit is in operation.

2.7 • Privacy Statement

- When the unit is connected to the internet, the unit automatically sends various unit data to Renson.
- For more information about this data processing, see www.renson.eu/privacy or contact us at privacy@renson.be.
- The air quality sensor data is used to display graphs (history) charts for the user.

3 • Flux+ Wall Operation

3.1 • Demand-driven ventilation and heat recovery

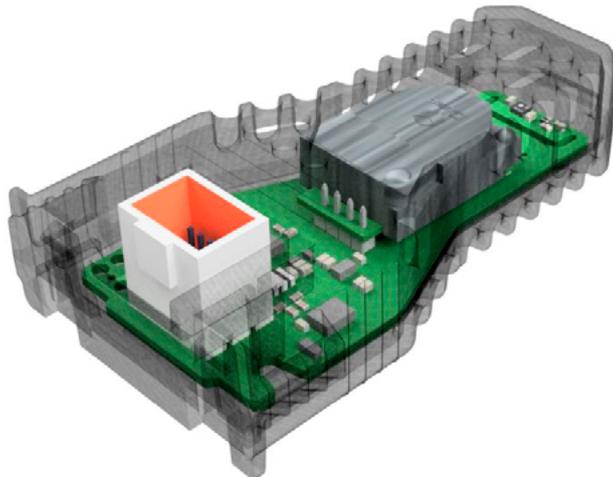
The Renson Flux+ Wall is a balanced ventilation system with integrated heat recovery with counterflow heat exchanger. The unit brings fresh air into the home mechanically and removes polluted air from the home mechanically using 2 integrated fans. To guarantee optimum efficiency, the system should run in balance as much as possible (supply = extraction). A door grille or a gap can be placed under the door with a minimum airflow of 25 m³/h at 2 Pa. The Renson Flux+ Wall is a professional product and must only be placed by a qualified installer.

3.2 • Operating principle

Based on intelligent demand control, the Flux+ Wall operates automatically, providing 24-hour air quality. The product has integrated sensors for this purpose.

The Renson Flux+ Wall is equipped with 2 sensor circuit boards:

- two sensors (ODA: RH + TEMP + VOC + CO₂) that measure the air drawn in from outside.
- four sensors (ETA: RH + TEMP + VOC + CO₂) that measure the air drawn in from the interior.



3.3 • Fan control

Constant flow technology

Using constant flow technology, the Flux+ Wall ensures that the necessary flow rate is monitored even when the filters become dirty over time. Or when the pressures in the homes change due to doors being opened or closed, for example.

3.4 • Breeze function

The Flux+ Wall comes equipped with a Breeze function as standard. The Breeze function supports natural cooling of the home during summer.

What does the breeze function entail?

When outdoor temperatures are soaring in the summer, the Flux+ Wall helps by introducing fresh air during the night; all connected rooms are ventilated at a higher flow rate (nominal flow rate).

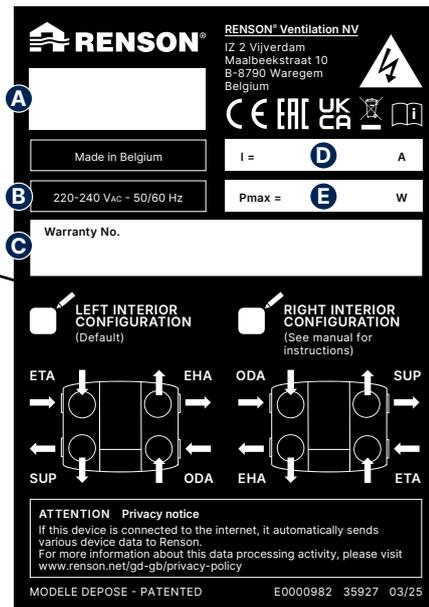
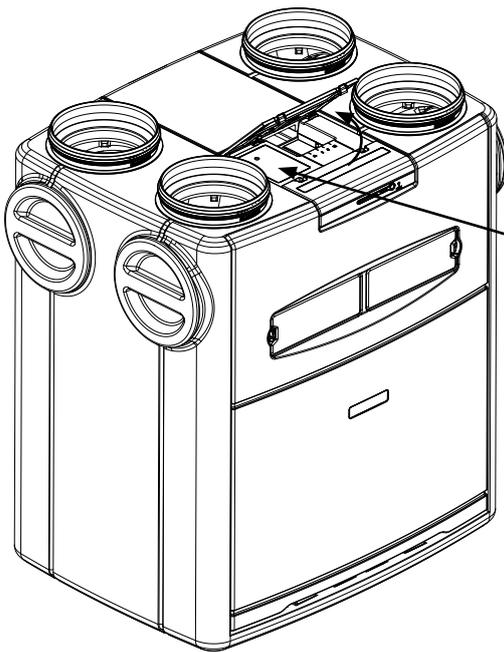
Activating the Breeze function

Breeze control occurs automatically if the indoor temperature (measured by the internal sensors) is greater than the minimum temperature (e.g. 24°C) and greater than the outdoor temperature (also measured by the internal sensors). The minimum temperature can be set as desired in the app. When the Breeze function is active, this takes at least 1 hour.

3.5 • Bypass function

A bypass ensures that, during hot summer periods, relatively cool outside air (often at night) is routed directly indoors, without using the heat exchanger. The Flux+ Wall has 2 flap batteries for this purpose, allowing the unit to separate air flows.

3.6 • Identification label



Pos.	Info	Pos.	Info
A	Model / Type	D	Max. amperage
B	Mains voltage	E	Maximum power consumption
C	Warranty number		

! NOTE

- Never remove the identification plate of the unit.
- Make sure the identification plate is always accessible.

4 • Material and packaging

4.1 • Material, packaging and environment

After unpacking the device, make sure that the packaging material is disposed of in an environmentally friendly manner. By recycling the packaging, raw materials are conserved and the amount of waste is reduced. The packaging consists entirely of EB corrugated cardboard and paper. No UPVC or plastic foams are used to package and protect the unit.



4.2 • Disposing of the unit

Old electrical and electronic devices often contain valuable materials. However, they also contain harmful substances that are necessary for the functioning and safety of the unit. Never dispose of the discarded unit with regular waste.

Dispose of the unit in an environmentally friendly manner by taking it to the appropriate collection point.



5 • Bringing the Flux+ Wall online

The SmartConnect connection allows the Flux+ Wall to be connected to the home network*. This offers the resident the following advantages:

- The app can be used to visualise data on the measured air quality from the unit and, if necessary, temporarily manually adjust the ventilation level where necessary.
- Automatic software updates
- The end-user web portal is viewable (section 5.2).
- The Flux+ Wall can be incorporated into a smart home to communicate with other smart devices in a home management system.

NOTE:

The Flux+ Wall always operates completely autonomously, as standard, even if there is no connection to the home network.

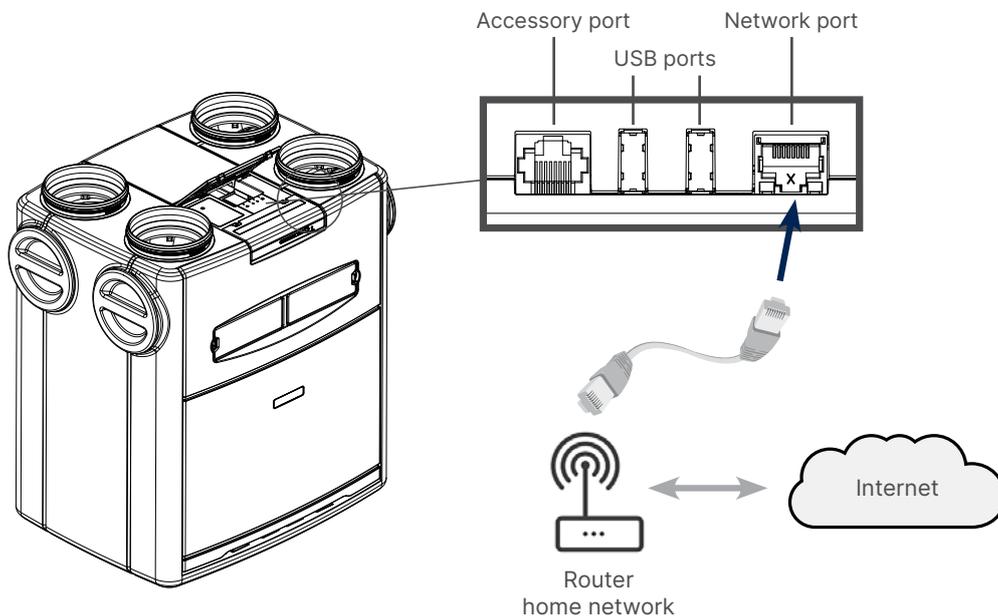
* private and secure network

5.1 • Connecting the Flux+ Wall to the home network

5.1.1 • Possible ways to connect the Flux+ Wall to the home network

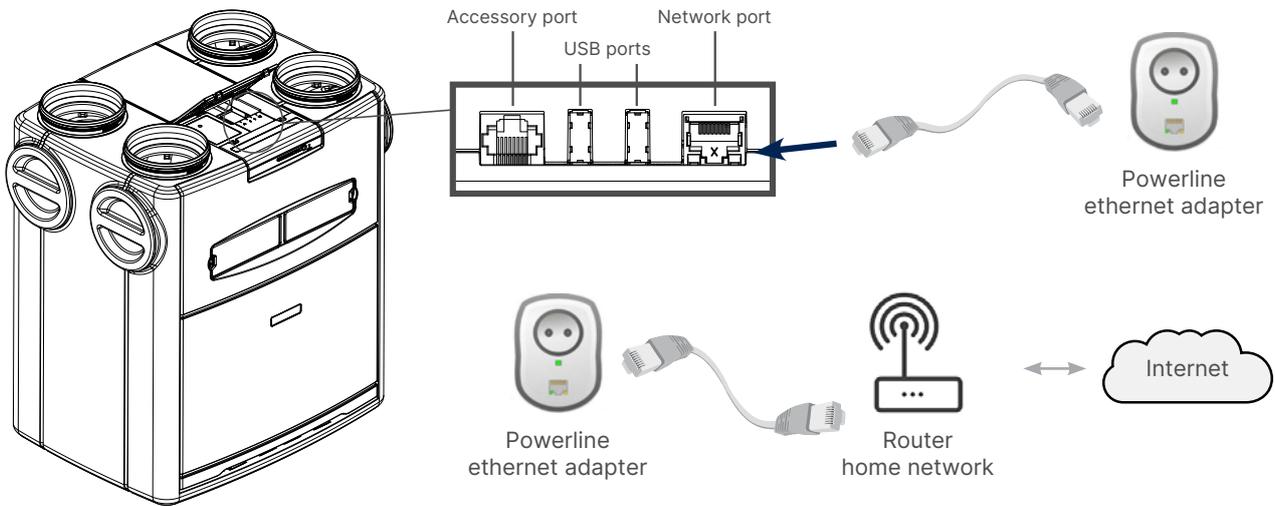
5.1.1.1 • Network cable

Instructions: connect the Flux+ Wall via network cable directly to the router.



5.1.1.2 • Ethernet-over-Power (EoP)

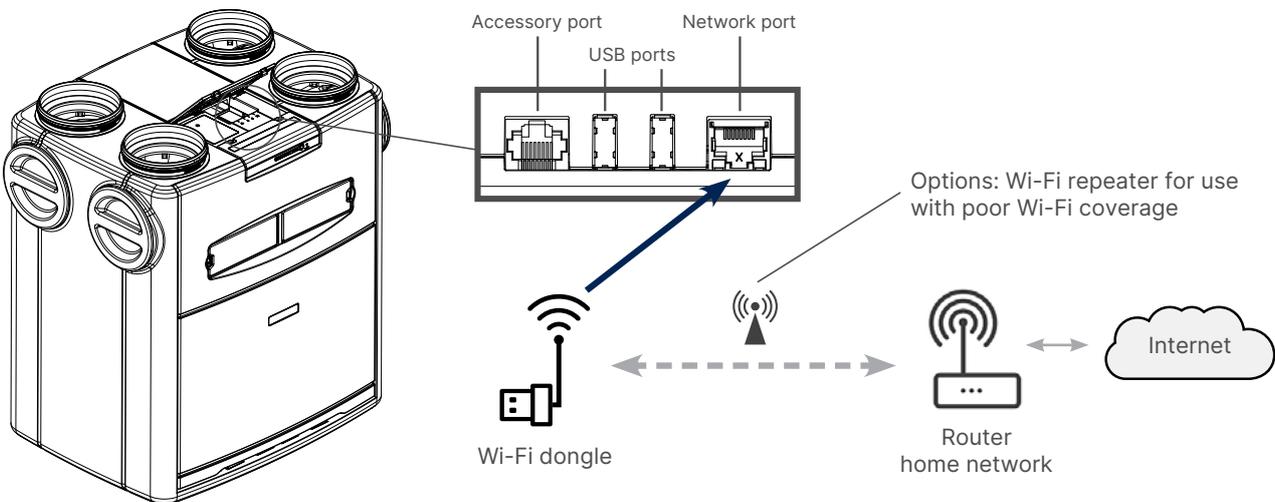
Instructions: connect both the Flux+ Wall and the router via network cable with a powerline ethernet adapter.



5.1.1.3 • Wireless connection via dongle

The Flux+ Wall is compatible to be connected to secure Wi-Fi networks (WEP/WPA/WPA2). Instructions: insert the Renson Wi-Fi dongle into a USB connector of your choice. The Renson Ventilation app further guides you to connect the Flux+ Wall to the home network (only possible with 2.4 GHz network).

In the Renson Ventilation app, navigate to 'Settings–Network configuration–Reconfigure Wi-Fi'.



5.2 • End-user web portal

The web portal can be accessed via the web link <https://user.renson.eu>. Use the account you use for the app, or register to create an account. The web portal displays some details for the installation. It can also be indicated whether the Flux+ Wall is in a rental property. This ensures it is possible to specify the data to which the tenant and landlord have insight (see section 11).

5.3 • The Flux+ Wall in Smarthome

When connected to the home network, the Flux+ Wall offers the possibility to communicate with smart devices in home management systems (home automation). Linking the Flux+ Wall in home management systems allows you to read current sensor values and experience higher overall comfort in the home.

6 • Controls

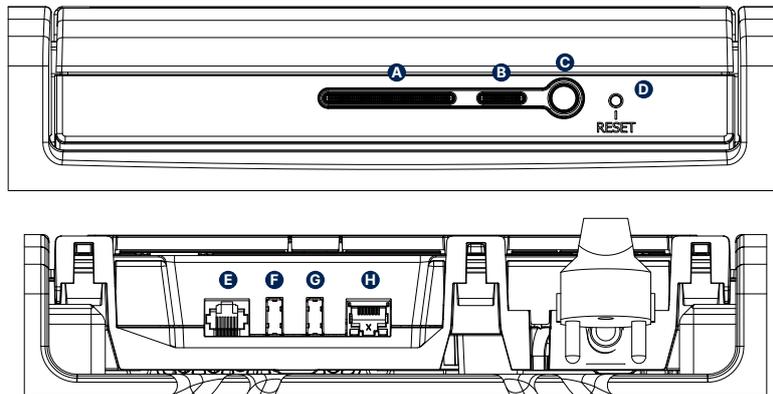
The Flux+ Wall is a self-contained unit, but the resident can manually adjust the ventilation level as required. Manual mode will be active for up to 12 hours after the command, after which the unit will automatically switch back to demand control. This can be done in several ways:

- Free Renson ventilation app
- External switch
- Room sensor

If multiple controls are connected to the Flux+ Wall, the Flux+ Wall will each time adopt the ventilation level/ mode of the control that was last 'operated'.

6.1 • Operating functionalities

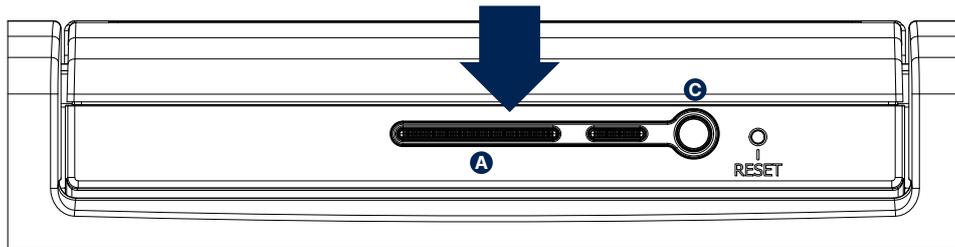
If the unit is connected to the internet, the control panel allows you to communicate with the unit via the push buttons. We recommend this given the extensive functionality associated with it. The unit can be accessed perfectly via the app, which can be found in the Play store or via the Apple store. In this chapter, we will discuss the physical control and the colour codes of the indicator LED.



Pos.	Name	Function
A	Status LED	Changes colour depending on the status of the unit (see below for more explanation about the different colour codes).
B	Connectivity LED	<ul style="list-style-type: none"> • Green continuous LED: the unit is connected to a network, either via the Wi-Fi dongle or the ethernet cable. • flashing blue LED: AP is active • Alternating green-blue flashing LED: unit is connected and AP is active • LED does not light up: AP is not active and the unit is not connected to Wi-Fi
C	Large user push button	<ul style="list-style-type: none"> • When pressed briefly, this button is used to complete authentication of the unit. • After cleaning and replacing the filters, you must reset the filter message by pressing this button for 5 to 15 seconds • If this button is pressed for a long time (>15 secs), the access point (AP) is activated for 4 hours. The AP can also be activated by reinserting the plug of the unit into the power socket
D	Reset button	<ul style="list-style-type: none"> • If this button is pressed briefly, the c-mode will be activated and the unit will operate at its nominal flow rate for 2 hours. • If this button is pressed for 5 to 15 seconds, the Wi-Fi settings are reset. The unit will forget the connection to the home network as a result. • If this button is pressed for a long time (>15 secs), the unit is returned to factory settings. Use a pen or another small object to push the button.
E	Accessory port	Connection point to connect Renson accessories. E.g. preheating element or two-zone valve. No ethernet cable should be connected to the accessory port; it should be connected to the network port (H).

Pos.	Name	Function
F	USB port 1	This is where the Wi-Fi dongle or RF dongle can be plugged in. It can be placed in any of the USB ports. The USB port can be used to: - Wi-Fi dongle: communication with the home network and/or directly with the installation app. - RF dongle: communication with the Sense room sensor(s)
G	USB port 2	
H	Network port	To connect the unit to the LAN network via a cable. If a Wi-Fi dongle is used via USB port 1 or 2, it is not necessary to connect the unit with a fixed cable. Tip: the most stable solution is to connect the unit with a cable.

6.2 • Status LED module



WHITE



The status LED (A) is continuously lit white. The unit starts up. This is what you will see when the unit has just been plugged into the socket.

The LED will go out briefly afterwards. This is when the configuration is checked.

Please note: during the start-up phase, a connection cannot be made with your unit via the application.

LIGHT BLUE



The status LED (A) flashes to indicate that you must complete the authentication. To do this, press the large user push button (C). The LED will now briefly light up continuously. This indicates the authentication was completed successfully.

GREEN



The status LED (A) flashes slowly to indicate that the unit was not yet calibrated with the application. This means the air flow rates have not yet been set for the various rooms in the home. When the unit is calibrating, you will see the status LED (A) flashing rapidly. Once the calibration has been completed successfully, you will see the LED light up continuously.

BLUE



The status LED (A) is flashing. This means c-mode has been activated (the mode where the unit provides nominal airflow for 2 hours) and your unit is now running at its set nominal mode. In this mode you can also measure the airflow rates at the various ventilation openings to check whether the airflow rates are as intended.

RED



The status LED (A) is slowly flashing red. This indicates that a critical problem has occurred with the unit. We recommend using the app to get more information about the error that occurred.

CONTINUOUS YELLOW



The status LED (A) is continuously lit in yellow. This indicates that a problem has occurred with the unit. You can easily investigate exactly what the problem is via the app on your smartphone.

FLASHING YELLOW



The status LED (A) is rapidly flashing in yellow. This is an indication that the filters need to be cleaned. Cleaning/replacing filters is described in Paragraph 8.2. Next, press and hold the large user button (C) for 5 seconds to indicate that the filter has been properly cleaned; the filter alert will be reset automatically.

7 • Glossary

- **Demand control:** the Flux+ Wall monitors air quality 24 hours a day for CO₂, humidity, VOCs (odour). Here, the ventilation level is intelligently and fully automatically adjusted according to the chosen ventilation profile and according to the measured air quality. This is done on the basis of sensors.
- **Manual Mode:** the resident can set a specific ventilation level (Boost/Relax) and duration (up to 12 hours). Manual Mode is given priority over sensor operation and all other settings.
- **Breeze function:** when outdoor temperatures soar during the day in summer, the Flux+ Wall provides support to let in fresh air at night. The Breeze function becomes active to extract the warm indoor air faster in all rooms with increased flow rates, thus bringing in fresher outdoor air. This ensures the Flux+ Wall contributes to the natural cooling of the home.
- **Clock programme:** with the clock programme, ventilation is not demand-driven. The resident sets when, where and at what ventilation level they want to ventilate according to pre-settable times. The clock programme can be set via the Renson Ventilation app after switching off the demand control.
- **Silent setting:** the resident can switch on the Silent setting between certain hours (e.g. at night) via the Ventilation app. This involves applying a reduction factor, e.g. -50%, to the selected ventilation profile (i.e. to the value of the nominal flow rate).
- **Nominal mode** (= C-mode or design mode): operation without demand control, at nominal ventilation level (= nominal system pressure and all valves at nominal position). This mode can be used by the installer and/or ventilation reporter to take flow measurements at each extraction vent.
- **Minimum level:** determines the minimum ventilation flow rate. This minimum ventilation flow rate is required for optimal sensor operation.

8 • Maintenance

The instructions to maintain the unit, described in this section, should be carried out by a professional. The exception to this rule is filter maintenance (see section 8.2). This can be perfectly executed by the user. However, to avoid all damage and/or wear and tear to the unit, it is recommended to have the complete operation of the appliance checked periodically (2-yearly) by an authorised professional. Defects and damage that pose a safety risk must be rectified immediately by a recognised professional.

After installation, all components that could cause personal injury are safely contained within the housing. The housing can only be opened with tools and only a recognised professional should open this housing.

8.1 • Periodicities

Regularly replacing the filters forms the foundation for proper maintenance of any D system. This ensures no unnecessary contamination will occur in the relatively sensitive heat exchanger. The fan is fitted with maintenance-free bearings and can function trouble-free for a long time. It also maintains efficiency and energy consumption. In addition, there is other work to be done, as shown in the table below:

Part	Action	Frequency				
		M	3M	Y	3Y	9Y
UNIT-SPECIFIC						
Filters	Visual inspection	•				
	Vacuum		•			
	Replace			•		
Condensate drain	Check			•		
Fans	Visual inspection			•		
	Clean (PROFESSIONAL)				•	
Heat exchanger	Visual inspection			•		
	Clean				•	
NOT UNIT-SPECIFIC						
Valves	Inspection		•			
	Clean			•		
Supply and extraction louvres	Inspection		•			
	Clean			•		
Ventilation ducts	Inspection (PROFESSIONAL)				•	
	Clean (bacteriological) (PROFESSIONAL)					•

8.2 • Cleaning and replacing filters

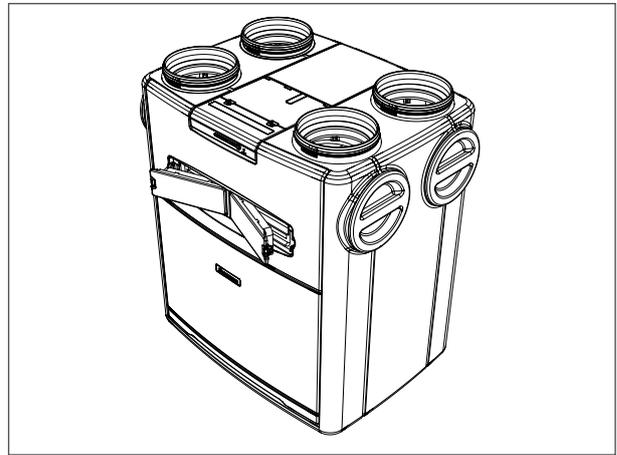
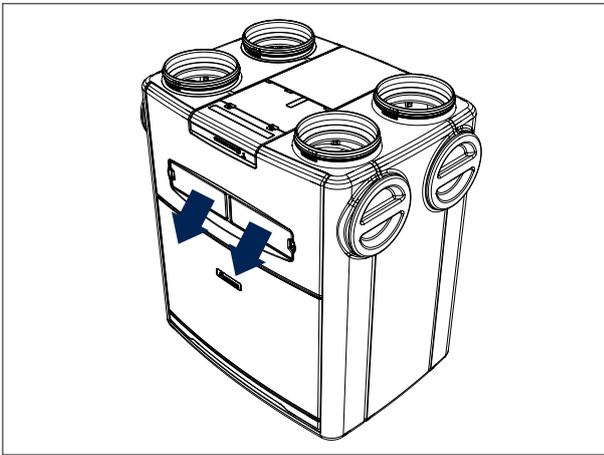
Do not use sprays, abrasives, detergents, solvents or chlorine-containing cleaning agents. They can cause damage to the unit. Clean the Flux+ Wall with a damp cloth and a little solvent-free soap.

You can dry clean the filters with a vacuum cleaner or you can replace them. In either case, you will need to remove the filters, as shown below. The filter must be replaced in response to a filter message. In this way, the unit indicates that the filter needs to be changed (see section 8.3.2 for more information on the filter notification).

NOTE

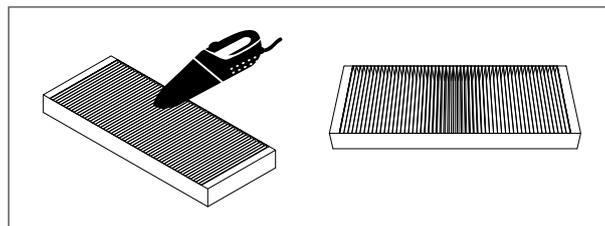
Ensure there is no voltage applied to the unit. To do this, remove the plug from the wall socket or switch off the machine.

1. Remove the filter covers using the handling clips on the side.

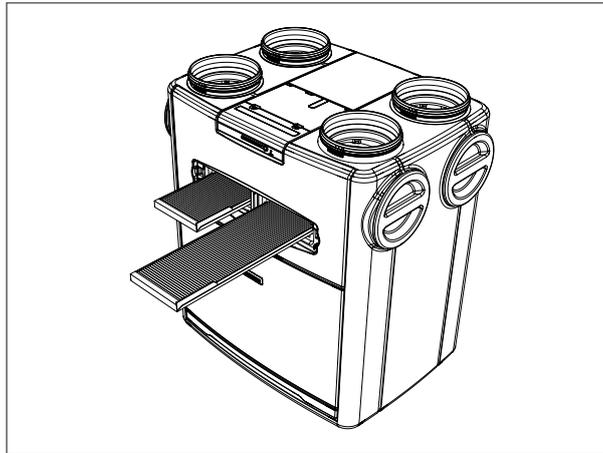


Removing the filter covers.

2. Replace or clean the filters, according to the stated maintenance intervals (see Paragraph 8.1 Periodicities)
Clean the filters using a vacuum cleaner. If you vacuum the filters regularly, the filter may show signs of wear. If so, replace the filter to continue to guarantee the correct functioning of the system.



4. Once you have ensured the filters are properly in place, replace the filter covers. The filters feature an innovative design that prevents them from being placed in the wrong direction. Make sure the filters are correctly installed, i.e. recessed below the level of the cover, before re-installing the filter covers. If the filter sticks out higher than the lid, you will push the filter apart when replacing the filter covers.



5. Press the large button (see section 8.3.2) for 5 seconds to reset the filter notification. This means you can enjoy the unit again without any worries.

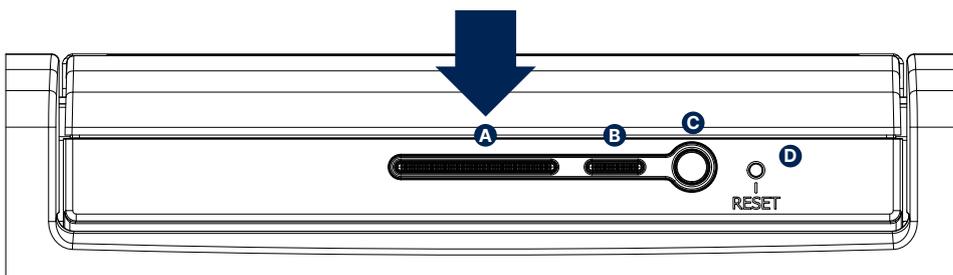
8.3 • Operation of the unit

8.3.1 • Checking error messages

Refer to 'System errors' in the Support tab of the Renson Ventilation app. The errors that occurred are displayed with the corresponding instruction.

8.3.2 • Control LED display

During normal operation, the Main LED on the main board of the Flux+ Wall should light (continuously) green.



Pos.	Name	Function
A	Status LED	Changes colour depending on the status of the unit (see below for more explanation about the different colour codes).
B	Connectivity LED	<ul style="list-style-type: none"> Green continuous LED: the unit is connected to a network, either via the Wi-Fi dongle or the ethernet cable. flashing blue LED: AP is active Alternating green-blue flashing LED: unit is connected and AP is active LED does not light up: AP is not active and the unit is not connected to Wi-Fi
C	Large user push button	<ul style="list-style-type: none"> When pressed briefly, this button is used to complete authentication of the unit. After cleaning and replacing the filters, you must reset the filter message by pressing this button for 5 to 15 seconds If this button is pressed for a long time (>15 secs), the access point (AP) is activated for 4 hours. The AP can also be activated by reinserting the plug of the unit into the power socket

Pos.	Name	Function
D	Reset button	<ul style="list-style-type: none">• If this button is pressed briefly, the c-mode will be activated and the unit will operate at its nominal flow rate for 2 hours.• If this button is pressed for 5 to 15 seconds, the Wi-Fi settings are reset. The unit will forget the connection to the home network as a result.• If this button is pressed for a long time (>15 secs), the unit is returned to factory settings. Use a pen or another small object to push the button.

8.3.3 • Control of air quality/ventilation flow rate

In the Flux+ Wall app, the air quality, both current status and history (day/week), can be consulted for all rooms/zones.

9 • Technical documentation

9.1 • Technical specifications

	Flux+ Wall 475	Flux+ Wall 650
Maximum ventilation flow rate	475 m ³ /h (at 200 Pa)	650 m ³ /h (at 200 Pa)
Thermal efficiency (in accordance with EN13141-7)	Belgium – in accordance with Annexe G of Annexe V of the Energy Decree (in accordance with EN13141-7)	
	89% at 300 m ³ /h 88% at 350 m ³ /h 86% at 400 m ³ /h 85% at 475 m ³ /h	86% at 400 m ³ /h 85% at 475 m ³ /h 84% at 500 m ³ /h 83% at 550 m ³ /h 82% at 600 m ³ /h 81% at 650 m ³ /h
	Netherlands – in accordance with Chapter 11 of NTA 8800 regarding construction regulations (in accordance with EN13141-7)	
	91.2% at 333 m ³ /h	88.7% at 455 m ³ /h
Maximum power consumption	2 × 82 W	2 × 130 W
Sound level In accordance with the EcoDesign directive	50.0 dB(A)	53.5 dB(A)
Energy rating (in accordance with directive 2010/30/EU)		
Connection voltage	220-240 Vac – 50/60 Hz Power cord 2 m included (EU plug)	
Dimensions	870 × 790 × 580 mm (H x B x D)	
Weight	29 kg	
Installation	Wall mounting Left or right set-up via software setting Floor installation using an accessory	
Connections	Ø180 mm inner dimension of the unit or Ø200 mm via supplied flanges Top and side connection possible per connection point Condensate connection Ø32 mm (1 1/4" external)	
Bypass	Yes, completely (100%)	
Breeze function	Automatic passive cooling by temporary nominal ventilation in case of cooling demand	
Frost protection	Standard due to imbalance Hybrid frost protection with optional accessory: internal electrical frost protection 1.6 kW	
Automatic control (constant flow)	Yes	
Fan	Latest generation of extremely quiet & energy-efficient EC motors with backward-curved fan blade	
Maximum fan operating pressure	Up to 300 Pa – Recommended operating pressure at design airflow: ≤ 200 Pa – Guidance value for very good operating pressure at design airflow rate (cf. TV no. 258): 100 Pa up to 150 Pa	
Reading out the calibration pressure	Via installation app & Renson installer web portal	
External connections	– 1x network port – 2x USB connections – 3x digital inputs & outputs for ventilation position control or feedback of error and filter notifications – Accessory port	

The full technical data sheet is available via this link:

https://dam.renson.net/m/4e5d78a7c2271c5e/original/TF_Flux_-_Wall_en.pdf



9.2 • Operation

User app:

- Read the air quality in the home
- Personalisation and (temporary) manual adjustment of the ventilation airflow rate

Optional:

- Potential-free 3-position switch for manual adjustment of the ventilation extraction rate
- 4-position switch, included in the room sensors

9.3 • Room sensors

The Renson Sense room sensors can be combined with the Flux+ Wall to regulate the local air quality via ventilation air flow rate. These 230 V-powered sensors communicate with the ventilation unit via a robust wireless connection. The RF Dongle serves as a bridge between the ventilation unit and the room sensors. Renson offers preconfigured kits in which the connection between the Sense and RF Dongle is already made. Adding room sensors further improves air quality and lowers the E-level.

More info regarding the Sense Room Sensor can be found via the following link:



9.4 • Frost protection

The Flux+ Wall is equipped with a frost protection mechanism, as standard, to prevent ice formation in the heat exchanger. Ice formation reduces the efficiency of your ventilation system and can damage the heat exchanger. Each Flux+ Wall unit is equipped with basic frost protection through unbalance operation.

Additional frost protection can be achieved by adding an internal electric frost guard. This accessory ensures the incoming air is actively heated, using an electrical resistance of 1600 W.

10 • Service

10.1 • Service request

Contact an installer trained by Renson and quote your unit's warranty number. The warranty number can be found on the sticker on the top of the unit and on the warranty form. The warranty number can also be accessed in the app (via Settings → Installation details).

10.2 • User guarantee terms and conditions

The warranty is valid for 2 years. Installation and maintenance should be done according to the instructions and best practices. For the detailed guarantee terms and conditions, go to our website at www.renson.eu.

Exclusions:

- Penetration of construction debris, injection of other than appropriate products, use of aggressive fluids or solvents, defects resulting from improper or abnormal use, minor imperfections in finishing that do not impair soundness, damage as a result of paint, damage as a result of puncturing, defects as a result of inexperienced repair by third parties, voltage peaks on the mains, lightning strikes, violence or war conditions.
- Package includes warranty certificate. The installer must fill this in for the occupant.

11 • Privacy Statement

11.1 • Data from the Flux+ Wall

When the Flux+ Wall is connected to the internet, the unit collects measurement data (via the sensors in the Flux+ Wall) that can be consulted by Renson. Renson undertakes to handle these data carefully and confidentially. The necessary legal documents on this can be found at www.renson.eu/privacy.

The method for storing measurement data depends on whether an account is created or not*:

- No account created: Flux+ Wall data is only stored for a limited time (see www.renson.eu/privacy).
- Account is created: data is kept for a longer period.

* Account created = account created that the Flux+ Wall is linked to (happens when the user app is launched).

11.2 • Data access

Here we want to explain, in a transparent way, using some concrete situations, how Renson handles the collected measurement data when the Flux+ Wall is connected to the internet;

- No account created: the data can only be consulted by Renson
- Account is created: in addition to Renson, up to 2 more relevant parties have data access:
 1. The owner of the property
 2. The occupant of the property.

11.2.1 • Situation 1: occupant = owner

Verify via the web portal (section 5.2) that no unwanted persons (other accounts) are linked to your unit to avoid anyone having unwanted access to your measurement data.

11.2.2 • Situation 2: occupant ≠ owner (rental/lease situation)

The measurement data collected by the Flux+ Wall is personal data of the occupant (tenant), not of the owner (landlord). Renson has provided different measurement data display levels for occupants and owners:

- The resident: can request all measurement data individually at a certain interval (about 5 minutes), i.e. detailed information.
- The owner: only receives an indication of the status per day, i.e. summarised information. The summarised information aims to give the owner insight into the correct use of the Flux+ Wall and structural health of the property.

To ensure that the occupant's privacy is protected, the owner must indicate via the web portal (section 5.2) that the Flux+ Wall is in a rental property.

- **Resident (= tenant) recommendation:**

The landlord does not have the right to demand access to the detailed information, not even via the rental contract, for example). However, a landlord does have the right to demand access to the summarised data (via the rental contract, for example). In this case, the tenant may not simply deny the landlord access to this summarised data of the Flux+ Wall in the rental property.

- **Owner (landlord) recommendation:**

The landlord must indicate the Flux+ Wall as a unit in a rental property via their account in the web portal, before the occupants (tenants) are added as users to the unit. This ensures the landlord gets the summarised information from the Flux+ Wall without infringing on the tenant's privacy. The landlord can possibly include in the lease that the tenants cannot deny him the summarised information. If the landlord has access to the detailed information of the Flux+ Wall active in a rental property, without the explicit consent of the tenant, the landlord is in breach of privacy laws (cf. European legislation GDPR).

 **REMARK**

Someone with physical access to the device can always disconnect all users (= accounts) from a specific unit.

All photos shown are for illustration purposes only and merely serve as an example of a practical situation. The actual product may vary due to modifications to the product.

Renson® reserves the right to make technical modifications to the products shown.
The most recent brochures are available for download at www.renson.eu

