FLUX GO FLAT

INSTALLATION & MAINTENANCE MANUAL

RENSON®

Table of Contents

GENERAL 5

1 • General 6
- 1.1 • Purpose of this manual 6
- 1.2. Training 6
- 1.3 • Version control 6
- 1.4 • Language version 6
- 1.5 • Using the manual 6
- 1.6 • Used symbols 7
- 1.7 • Abbreviations 7
- 1.8 • Definitions 8

INSTALLER 9

2 • Set up and installation (Safety) 10
- 2.1 • General regulations and safety regulations 10
- 2.2 • Safety regulations 11
- 2.3 • System in operation 12
- 2.4 • Specific measures 12
- 2.5 • Electrical 13
- 2.6 • Moving parts 13
- 2.7 • Personal Protective Equipment (PPE) 14
- 2.8 • Privacy Statement 14

3 • General description of the Renson Flux Go Flat Unit 15
- 3.1 • Professional product 15
- 3.2 • Operating principle 15
- 3.3 • Symmetrical system 17
- 3.4 • Installation properties 17
- 3.5 • Service properties 18
- 3.6 • Maintaining air quality 18
- 3.7 • Identification 19
  - 3.7.1 • Identification label 19
  - 3.7.2 • Information to be provided when contacting RENSON® 19
- 3.8 • Guarantee terms and conditions 19

4 • Material, packaging and transport 20
- 4.1 • Transport 20
- 4.2 • Material, packaging and environment 20
- 4.3 • Disposing of the apparatus 20

5 • Ventilation unit description 21
5.1 • Checking the delivery 21
5.2 • Components of the Flux Flat unit 22
5.3 • Technical specifications 23
5.3.1 • Technical specifications 23
5.3.2 • Control 24
5.3.3 • Room sensors 24
5.3.4 • Pressure-Air flow rate curves 24
5.3.5 • Frost protection 25
5.4 • Dimensions and weight 26
5.5 • General installation conditions 27
6 • Installation 28
6.1 • Choice of installation orientation 28
6.1.1 • Vertical wall installation 28
6.1.2 • Ceiling installation 29
6.2 • Conversion from left-hand version to right-hand version 30
6.3 • Prepare the unit for installation 30
6.3.1 • Parts 30
6.3.2 • Tools 30
6.4 • Installing the suspension brackets on the unit 31
6.5 • Marking the suspension brackets 32
6.6 • Condensation drainage point 34
6.7 • Installation dimensions 37
6.8 • Connection to air ducts 41
6.9 • Vertical wall installation 42
6.9.1 • Parts 42
6.9.2 • Hanging up the unit 42
6.10 • Ceiling installation with QuickFix 46
6.10.1 • Parts 46
6.10.2 • Hanging up the unit 47
7 • Connection diagram Flux Go Flat 51
7.1 • Print Flux Go Flat 51
7.2 • Connecting to the network 51
7.3 • Connect to the mains voltage 52

8 • Starting up the Flux Go Flat 53
8.1 • Before starting the regulation 53
8.2 • Start up 53
8.2.1 • Calibration via the installation webpage 53
8.2.2 • Error codes at start up 54
8.3 • Operating functionalities 55
8.4 • Status LED module 56
8.5 • Connect to network (Smart Connect) 57
8.5.1 • Wi-Fi dongle 57
8.5.2 • LAN connection 57
8.6 • USB Smart Connect LED 58
8.7 • Connecting the Flux Go Flat with electronic peripherals 58
8.8 • Link via main circuit board inputs and outputs 59
8.9 • 3-Position Switch (XVK3) 59
8.10 • Circuit diagrams for home automation 60
8.10.1 • Digital inputs 60
8.10.2 • Analogue input 61
8.10.3 • Functional logic 61
8.10.4 • Digital output 61
9 • Maintenance 62
9.1 • Periodicities 62
9.2 • Cleaning and replacing filters 62
9.3 • Cleaning the heat exchanger 64
9.4 • Cleaning the sensors 67

GENERAL

1 • General

The RENSON® Flux Go Flat 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 Go Flat is a professional product and must only be installed by a qualified installer.
There are 3 manuals for the Flux Go Flat: two for the installer and one for the user.

- The **installation manual** has all the necessary information for installation, troubleshooting and maintenance.
- The **quickguide** provides a clear step-by-step plan for the installer to assemble the device.
- The **user manual** has all the necessary information for the use of the unit, simple maintenance and troubleshooting.

1.1 • Purpose of this manual

This manual contains instructions and recommendations for correctly sizing the Renson Flux Go Flat Unit and then safely installing, commissioning and maintaining it.
Please read this manual carefully before connecting or maintaining the unit.

1.2. Training

- Only a certified installer may install, operate and maintain the unit unless otherwise stated. The proper functioning of the Renson Flux Go Flat largely depends on correct installation and start up. Our experienced trainers are ready to provide you, the installer, with all the training and associated tips & tricks.

More info: www.renson.eu/opleidingen

1.3 • Version control

This manual is only available electronically as a PDF file.
RENSON® reserves the right to make technical changes to the products described. The most recent manual is available for download at www.renson.eu.

1.4 • Language version

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

1.5 • Using the manual

This manual starts with a general description of the Renson Flux Go Flat Unit. Read these chapters first to familiarise yourself with the function and location of the most important parts.
This is followed by Renson Flux Go Flat Unit procedures:

- to install.
- to calibrate.
- to commission.
- to maintain.

1.6 • Used symbols

Tip: non-essential, useful information.

Warning: Failure to perform the procedure correctly may result in undesirable results or damage to the Renson Flux Go Flat Unit.

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

1.7 • Abbreviations

The following abbreviations are used in this manual:

Abbreviation	Meaning
	CERTIFICATION
Belgian General Regulations for Electrical Installations (AREI)	Algemeen Reglement op Elektrische Installaties [General Regulations for Electrical Installations]
EMC	Electro-Magnetic Compatibility
	AIRFLOW WTW SYSTEM
EHA	Exhaust air, polluted extraction air that is blown outside
ETA	Extracted air, polluted extraction air from the interior
ODA	Outdoor air, fresh air that enters the home
SUP	Supply air, fresh air that is blown into the interior
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

1.8 • 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 Flat
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 air flows 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.
Installation on the ceiling	The supplied Smart Fixation can be used to mount the Renson Flux Go Flat to the ceiling in a user-friendly manner for easy maintenance after installation.
Installation on the wall	The Renson Flux Go Flat can be hung on the wall in 2 different ways. The unit can be hung in the vertical method, again depending on how you want pulsion and extraction, you can then rotate the unit another 180 degrees. Another option is to hang the unit in horizontal mode in order to use as much free space as possible above or below the unit.
Vertical wall installation	When the unit hangs on the wall with 1 of the short sides at the top. Which side is chosen depends on which side one wants to place the pulsion or extraction. HA (⌂) always sits at the top, BA (⌂) at the bottom.
Constant Flow	Regardless of the variation in pressure due to indoor conditions or contamination of filters, the unit will always ensure the desired air flow rates are used. This also ensures the thermal efficiency is optimal at all times.

INSTALLER

2 • Set up and installation (Safety)

2.1 • General regulations and safety regulations

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

Flux Go Flat complies with the legal requirements imposed upon electrical equipment.

Belgian General Regulations for Electrical Installations (AREI)
The socket to which you connect the unit to the mains voltage must comply with the provisions of the AREI.

2.2 • Safety regulations

NOTE

- 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 guarantee.

- This unit is intended for indoor use in a household environment. 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 Go Flat other than described in the user manual.
- The Flux Go Flat may NOT be placed in areas where the following are present or may occur:
  - Excessively greasy atmosphere
  - Corrosive or flammable gases, liquids or vapours
  - Room air temperatures above 40°C or lower than 0°C (the Flux Go Flat must be installed in a frost-free place.)
  - Relative humidity higher than 90% or outdoor installation
- The unit and associated parts and controls must not be used in places where they may be subject to water jets.
- All cabling must be installed by a qualified person.
- When installing, 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-tight and that the pressure drop is kept to a minimum.
- Only appropriate RENSON® accessories can be used with the unit.
- Changes to the Flux Go Flat are not authorised.
- 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 Go Flat must be installed in accordance with the construction, safety, and installation provisions generally and locally applicable in the municipality/city and all other bodies.
- If the power cord 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 Go Flat 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-proof. This means, among other things, that under normal operating conditions no one can reach moving or live parts of the fan unit without taking a conscious action, such as:
  - Dismantling the cover plate.
  - Disconnecting an air duct and/or cover plate on the supply or discharge points during normal use.

NOTE

- The ventilation system must function permanently, which means the Flux Go Flat 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 • System in operation

- It is the installer's job to inform the user how the unit works and how it can be maintained.
- 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.

2.4 • Specific measures

NOTE

Ensure Renson Flux Go Flat remains easily accessible at all times so maintenance and servicing can be carried out easily.

- The Renson Flux Go Flat complies with the legal requirements imposed upon electrical equipment.
- Flux Go Flat must not be installed at altitudes > 2000m.
- Only appropriate RENSON® accessories and controls can be used with the fan unit.
- Use RENSON® Easyflex air ducts to guarantee air transport according to the best air tightness class D.
- Provide RENSON® extraction and pulsion valves. This results in lower energy consumption and lower noise production from the fans.
- Provide RENSON® Aludec air flexibles or Acoudec air flexibles if you require acoustic damping. Provide Isodec as air flexibles with thermal insulating properties.
- Provide RENSON® roof and/or wall duct to minimise pressure drop. This results in lower energy consumption and lower noise production from the fans.
- The installer must ensure that the air exhaust of the fan unit is placed at a sufficient distance from the exhaust and supply of the heating boiler and sanitary air vent in accordance with the applicable regional regulations.
- It must not be possible to touch the fan with your hand. Therefore, an air duct network must always be connected to Renson Flux Go Flat before putting it into operation. The minimum duct length is 0.5 m.
- When Renson Flux Go Flat is combined with compartmentalisation products to reduce the risk of fire spreading: Ensure the fire damper/butterfly valve/cuff/... has sufficient free air passage to limit pressure loss. The incorrect choice of type can lead to poor functioning of the Renson Flux Go Flat.

Consult our website www.renson.net (products → mechanical ventilation) for more information about our products.

2.5 • Electrical

NOTE

- Connect the unit to a 230 VAC 50/60 Hz power supply. 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 by removing the power cord from the wall socket or by switching off the fuse. If there is any doubt, check whether this has actually happened.
- If no permanent cabling is provided and the power cord is damaged, it can only be replaced with a power cord provided by Renson. If this is not respected and different cabling is used, all guarantee and/or liability for the poor functioning of the product will be void.

Electronic components
Static electricity can cause damage to electronics.

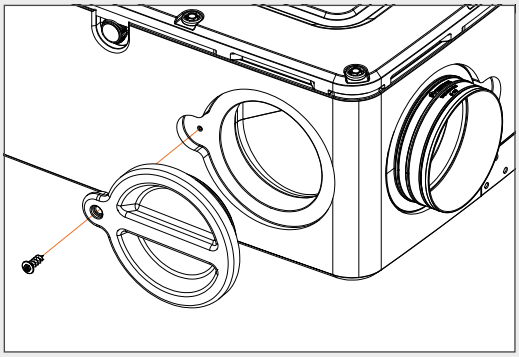
NOTE

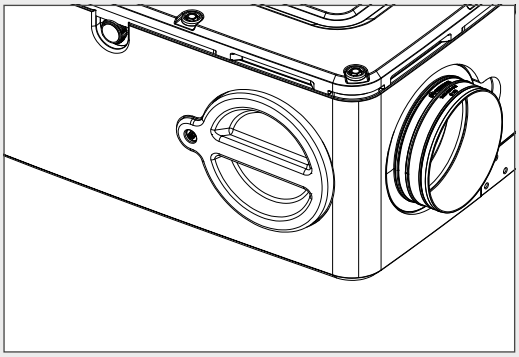
When working with electronics, always take protective measures such as wearing a grounded wrist strap.

2.6 • Moving parts

NOTE

- Always connect air ducts of at least 500 mm to the unit before connecting the power supply. This means no one can touch the motor when the unit is in operation.
- Each intake and extraction has 2 potential connections. A connection that is not in use must be sealed with a cap in combination with a screw. After completion of the installation, the installer must have closed all the openings with either a tube or a cap in combination with a screw.





After installation, all components that could cause personal injury are safely contained within the housing. You can only open the housing with tools.

2.7 • Personal Protective Equipment (PPE)

- Wear a helmet and safety shoes when certain parts are lifted or hoisted during installation. It is important that you wear a helmet, even when the unit is placed on the ceiling.
- Always wear gloves when handling metal parts such as the mounting plate as they may have sharp edges.
- Wear an anti-static wrist strap when working on a circuit board.

2.8 • Privacy Statement

- When the unit is connected to the internet, the unit automatically sends unit data to Renson.
- For more information about this data processing, see www.renson.eu/privacy or contact us at privacy@renson.be.
- If a customer's Renson Flux Go Flat is connected to your account via the user app, you have access to the personal data of that customer and you are a data processor within the context of GDPR. In this case, you must comply with the responsibilities of a data processor imposed by privacy legislation. We initially recommend that you disconnect your customer's unit from your account (via user app or user web portal) before the customer starts using the home. If you do not do this, you are responsible for complying with the requirements of privacy legislation.

TIP

The air quality sensor data is used to display (history) graphs to the user. You, the installer, are not automatically entitled to inspect the sensor data from a Flux Go Flat you have installed, see General Data Protection Regulation (GDPR).

3 • General description of the Renson Flux Go Flat Unit

3.1 • Professional product

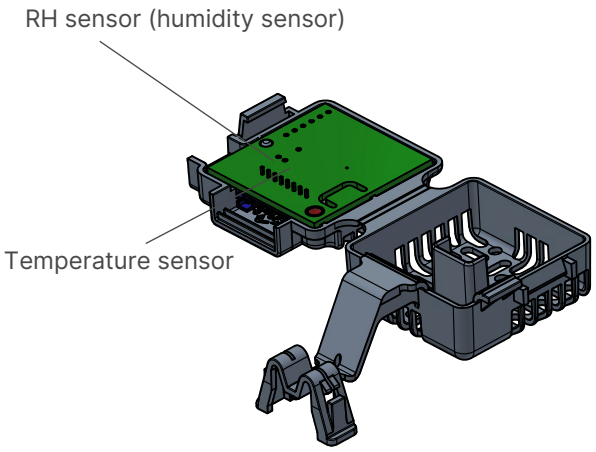
The Renson Flux Go Flat is a balanced ventilation system with integrated heat recovery with counterflow heat exchanger. The unit brings fresh air into the home mechanically and removes polluted air from the home mechanically using 2 integrated fans. To guarantee optimal efficiency, the system must run in balance as much as possible (supply = extraction). The Renson Flux Go Flat is a professional product and must only be installed by a qualified installer.

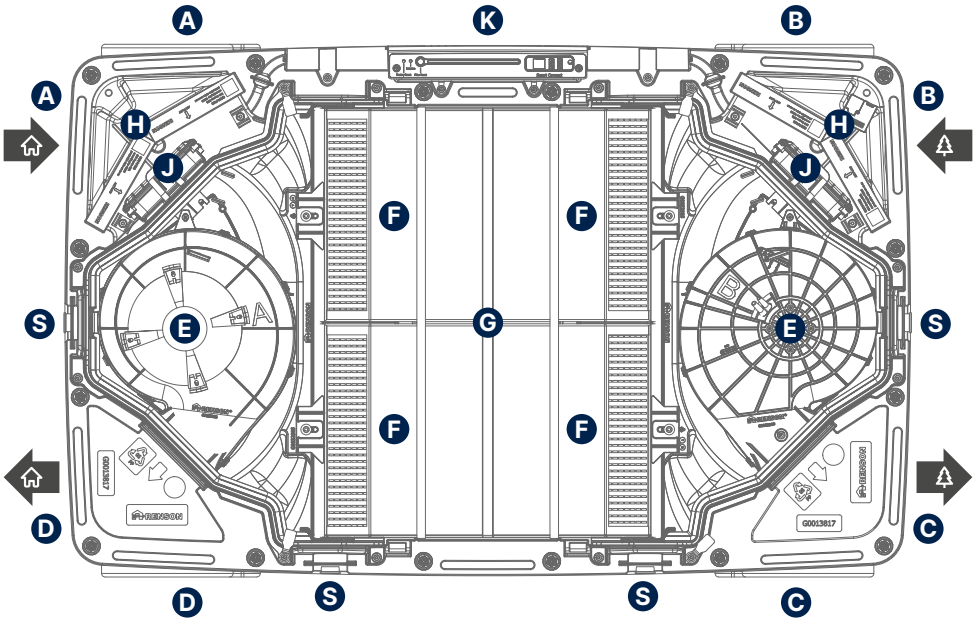
The proper functioning of the Renson Flux Go Flat can only be guaranteed if sufficient and correctly dimensioned passage openings are provided in the interior doors of the home. A door grille or a gap can be placed under the door with a minimum airflow of 25 m³/h at 2 Pa.

3.2 • Operating principle

The Renson Flux Go Flat is equipped with 2 sensor PCBs to take humidity and temperature measurements:

- 1 PCB is placed in ODA, to do the measurements on the air drawn in from outside.
- 1 PCB is placed in ETA, to do the measurements on the air extracted from inside.

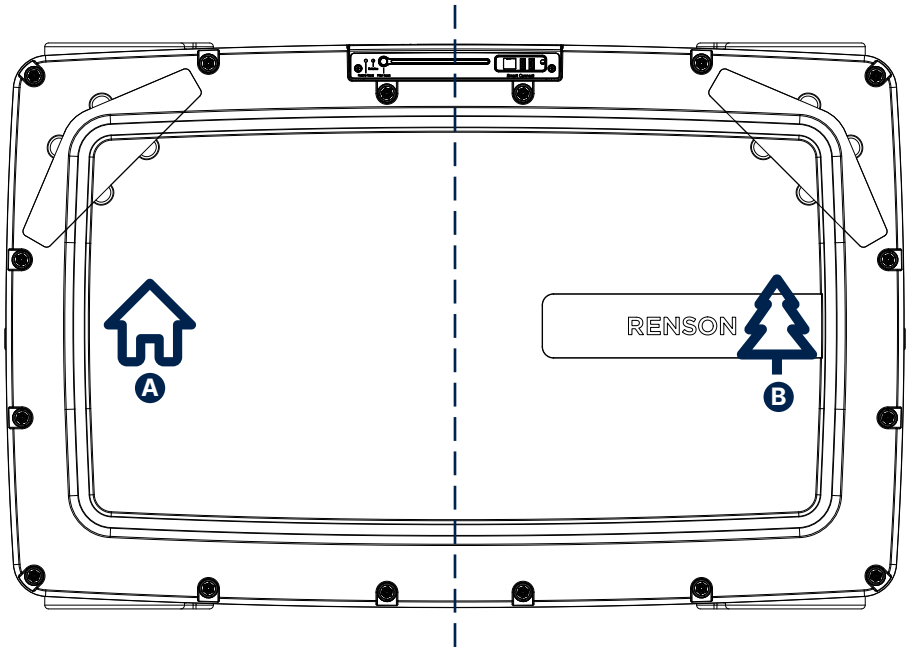




Pos.	Name	Job title
A	ETA	Extraction of polluted air from the interior.
B	ODA	Fresh air flow from outside
C	EHA	Contaminated extraction air blown outside
D	SUP	Provide fresh air in the home
E	Fan (2x)	These ensure the supply and extraction of air.
F	By-pass valve (2x)	This switches off the heat exchange during hot summer days.
G	Heat exchanger	This recovers the heat from the polluted air to heat the fresh outside air.
H	Filter	Stopping polluting particles to protect the unit and to guarantee a healthy indoor climate.
J	Sensorprint with 2 sensors (grey housing)	• RH-sensor • Temperature sensor
S	Condensation drainage point	Extraction of condensation water.
K	Main circuit board	Controlling the unit and communicating with external elements that connect the unit to the Internet.

3.3 • Symmetrical system

The Renson Flux Go Flat Unit is completely symmetrical. The two parts are labelled A and B. Part A is the left part if you view the unit with the RENSON logo on the lid upright.



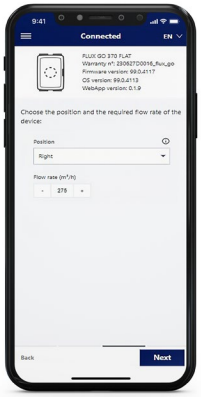
3.4 • Installation properties

- Ceiling
- Wall: vertical placement only(!)
- HA connection (⌂) or BA connection (🌲) (Left/Right version) to be exchanged via software (no physical adaptation necessary).
- If pulsation/extraction of HA (⌂) or BA (🌲) need to be exchanged, this can be done by physically turning the unit 180 degrees for vertical or ceiling installation.
- Connection of the air ducts: 2 connections per connection point.
- Quickly adjustable thanks to the installation webpage that guides you during installation.
- The weight of the device has been chosen so that it can be installed by 1 person (in accordance with European legislation).

3.5 • Service properties

Start up via installation webpage:

The installation webpage guides the installer through the start up.



Connect your smartphone (or PC) to the Wi-Fi network of the Flux Go Flat device. Then use this IP address in your web browser: 192.168.99.1 to start the installation web page. Preferably deactivate mobile data (4G/5G) before connecting.

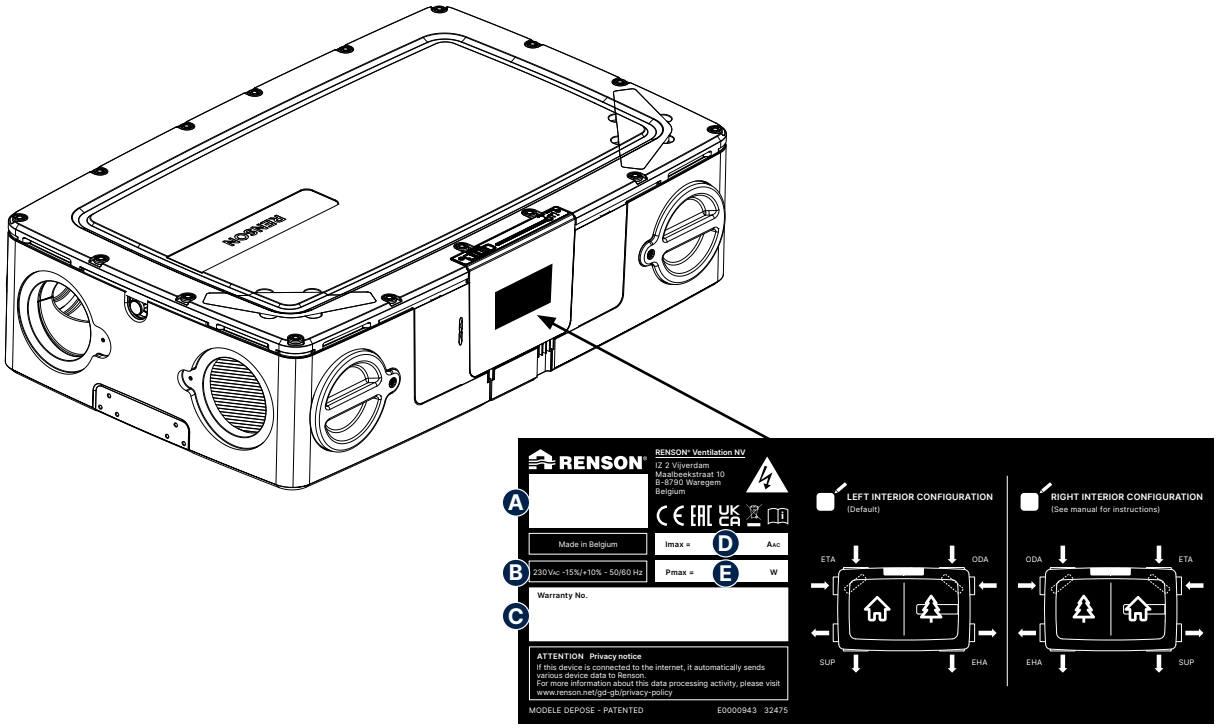
https://renson.net/gd-gb/qrcode/fluxgoflat

3.6 • Maintaining air quality

- Excessive moisture levels can lead to moisture build-up or mold and health issues such as eye, nose and respiratory problems. The ventilation system aims to maintain acceptable moisture levels.
- The Renson Flux Go Flat Unit is moisture-controlled. The sensor measures moisture levels 24/7 and uses intelligent demand control. The great advantage of this is that the noise level within the home is always as low as possible, as is energy consumption.

3.7 • Identification

3.7.1 • Identification label



Pos.	Info	Pos.	Info
A	Type, version number and serial number	D	Max. amperage
B	Grid voltage	E	Maximum power used
C	Warranty number		

NOTE

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

3.7.2 • Information to be provided when contacting RENSON®

Always provide the warranty number when you contact RENSON®, or when requesting service for your unit.

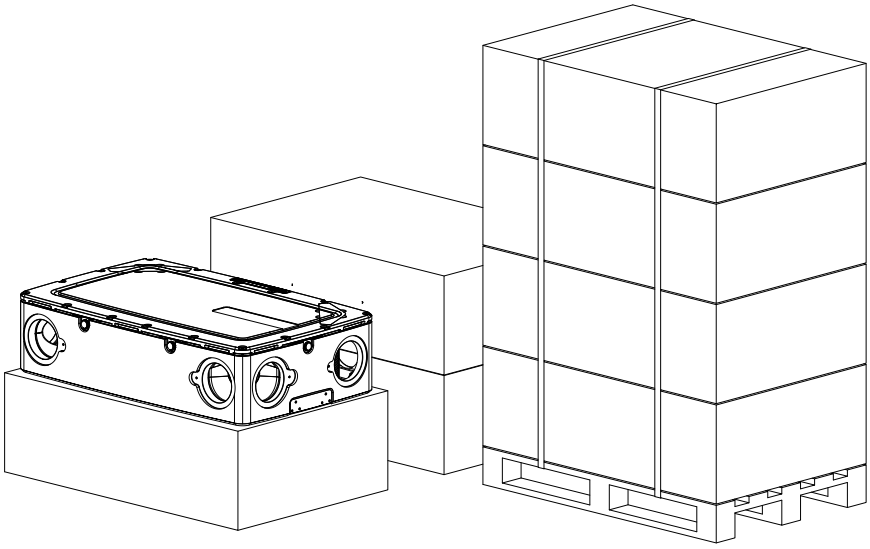
3.8 • Guarantee terms and conditions

- The customer guarantee period is 2 years.
- All pipes must be supported and mounted according to best practise. If any actions other than those mentioned are carried out, RENSON® is not responsible and the guarantee will be void.
- Only an installer who has completed a Renson FLUX training course may install, connect, commission and carry out maintenance on the Flux Go Flat other than described in the user manual.
- Only appropriate RENSON® accessories and controls can be used with the unit.
- Adjustments to the Renson Flux Go Flat Unit are not permitted.

4 • Material, packaging and transport

4.1 • Transport

Please observe the necessary caution when transporting and unpacking the device. No more than 5 units may be stacked on top of each other when stacking the units on a pallet for transport. 1 unit weighs 24 kg. As standard, 4 units per pallet are supplied from Renson. Avoid strong shocks during transport and handling. When transporting with a forklift, the units must remain attached to the pallet. The units are attached to the pallet by means of 2 straps. The packaging has been adjusted so that the unit can be transported without damage under normal circumstances. Preferably transport and store the unit with the pallet.



4.2 • Material, packaging and environment

After unpacking the device, make sure that the packaging material is disposed of in an environmentally-friendly manner. By returning the packaging back into the cycle, raw materials are saved and the waste mountain is reduced. The packaging consists entirely of EB corrugated cardboard and paper. No plastics or plastic foams are used to package and protect the unit.

4.3 • Disposing of the apparatus

Old electrical and electronic units 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 normal waste.

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

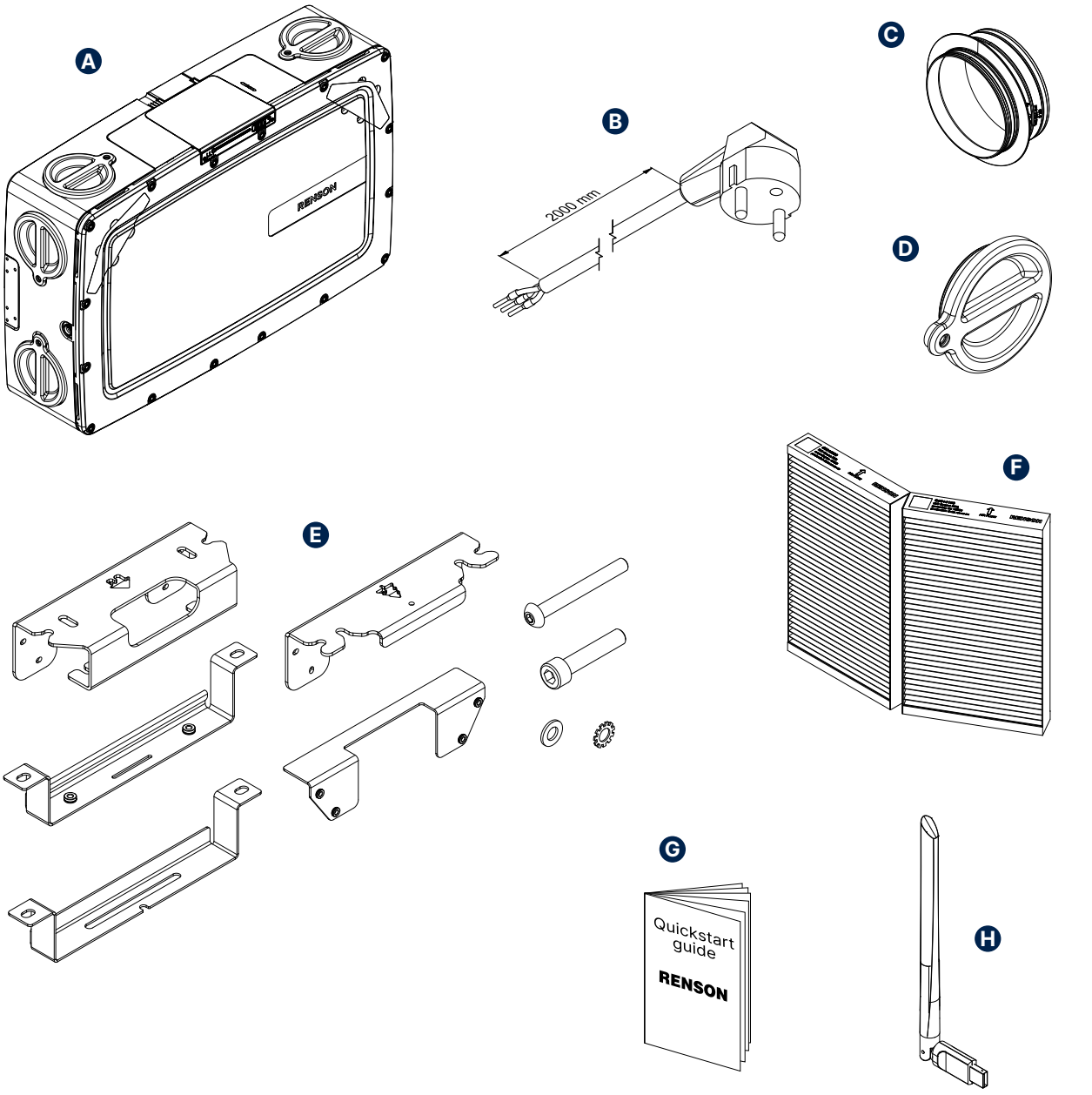
5 • Ventilation unit description

5.1 • Checking the delivery

Contact the supplier immediately if damage is found when opening the packaging or if it appears that the delivery is incomplete.

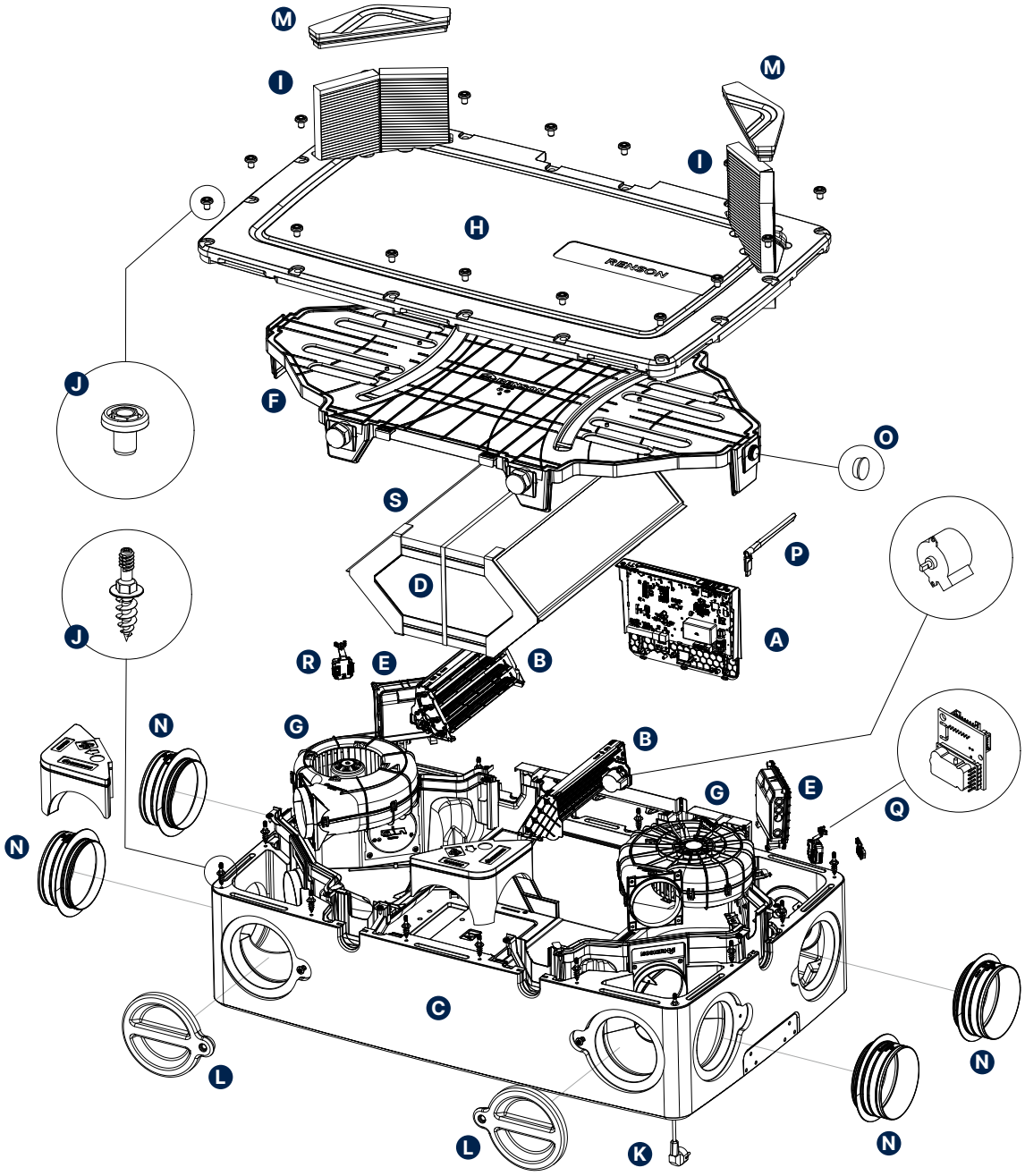
All packaging contains the following parts:

A	1 x Flux Go Flat ventilation unit	E	QuickFix brackets with screws
B	Power cord length 2 m with Euro plug	F	2 x Classic G4 Filter
C	4 x duct connector	G	Quick start guide
D	4 x cap 160 mm	H	Wi-Fi dongle



5.2 • Components of the Flux Flat unit

Exploded view of the Flux Go Flat Unit:



A list of available parts can be found at:
https://dam.renson.net/m/7435923d99529669/original/Flux_Flat_Spare_parts.pdf

5.3 • Technical specifications

5.3.1 • Technical specifications

	Flux Go 225 Flat	Flux Go 275 Flat	Flux Go 370 Flat
Type of ventilation	Mechanical demand-driven balanced ventilation with heat recovery		
(Max.) ventilation air flow	225 m³/h (at 200 Pa)	275 m³/h (at 200 Pa)	370 m³/h (at 200 Pa)
Thermal efficiency	**Belgium** - conform to Annex G of Annex V of the Energy Decree (conform to EN13141-7)		
	91% at 75 m³/h 89% at 124 m³/h 87% at 175 m³/h 85% at 225 m³/h	91% at 75 m³/h 87% at 175 m³/h 85% at 225 m³/h 83% at 275 m³/h	83% at 290 m³/h 82% at 322 m³/h 81% at 352 m³/h 80% at 370 m³/h
	Netherlands - conform to Section 11 of NTA 8800 in the context of the Building Regulations (conform to EN13141-7)		
	91% at 157 m³/h	89% at 191 m³/h	88% at 259 m³/h
Sound level *Conforms to the EcoDesign directive*	43,5 dB(A)	46,0 dB(A)	50,5 dB(A)
Sound level Lw(A)	At 225 m³/h - 100 Pa – Box: 50,5 dB(A) – Supply: 59,5 dB(A) – Extraction: 47,0 dB(A)	At 275 m³/h - 100 Pa – Box: 53,0 dB(A) – Supply: 62,5 dB(A) – Extraction: 49,5 dB(A)	At 370 m³/h - 100 Pa – Box: 57,5 dB(A) – Supply: 67,5 dB(A) – Extraction: 56,0 dB(A)
Maximum power used fan unit	2 × 42 W	2 × 53 W	2 × 83 W
Connection voltage	230 VAC -15%/+10% (50 Hz, 60 Hz) *Power cord included (1.5 m length)*		
Dimensions	1188 × 745 × 300 mm (LxWxH)		
Weight	25 kg		
Ø connection per supply duct	Ø 160 (external diameter)		
Ø connection per extraction duct	Ø 160 (external diameter)		
Bypass	Modulated		
Fan	Extremely quiet & energy-efficient EC motor with Ø180 fan blade. Constant flow control: air flow rate is kept constant.		
Maximum fan operating pressure	300 Pa Recommended working pressure at design air flow: ≤ 200 Pa Guidance value for very good working pressure at design air flow rate (see TV n° 258): ≤ 100 Pa		
Connections – SMARTCONNECT	– 1x Ethernet connection – 2x USB connections (USB dongle for Wi-Fi connection included) – Inputs: 3x DIGITAL, 1x ANALOGUE (0-10 V)		
Breeze function	Temporary nominal ventilation (= deactivation of demand-driven control) at times when a certain level of cooling is required (⇒ optimal reduction factors)		

The complete technical datasheet can be found at this link:

https://dam.renson.net/m/eab3d98c004e4ec/original/EN_Techn_data_sheet_Flux_Go_Flat.pdf

5.3.2 • Control

Resident's app:
- Read the air quality in the home
- Personalisation and (temporary) manual adjustment of the ventilation air flow rate possible

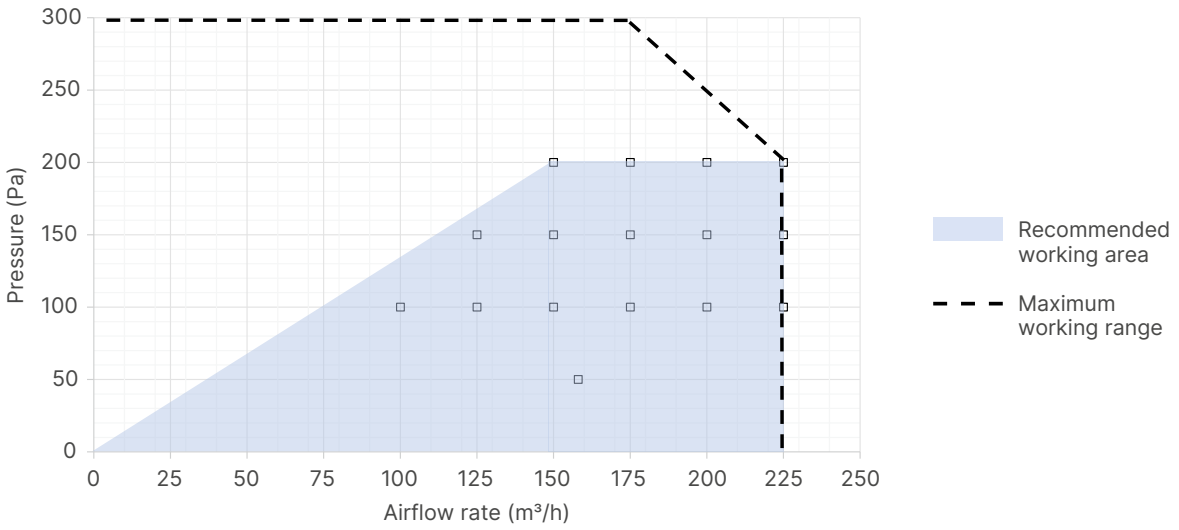
Optional:
- Potential-free wired 3-position switch for manual adjustment of the ventilation extraction air flow rate (see Chapter 8.9)
- 4-position switch, included in the room sensors

5.3.3 • Room sensors

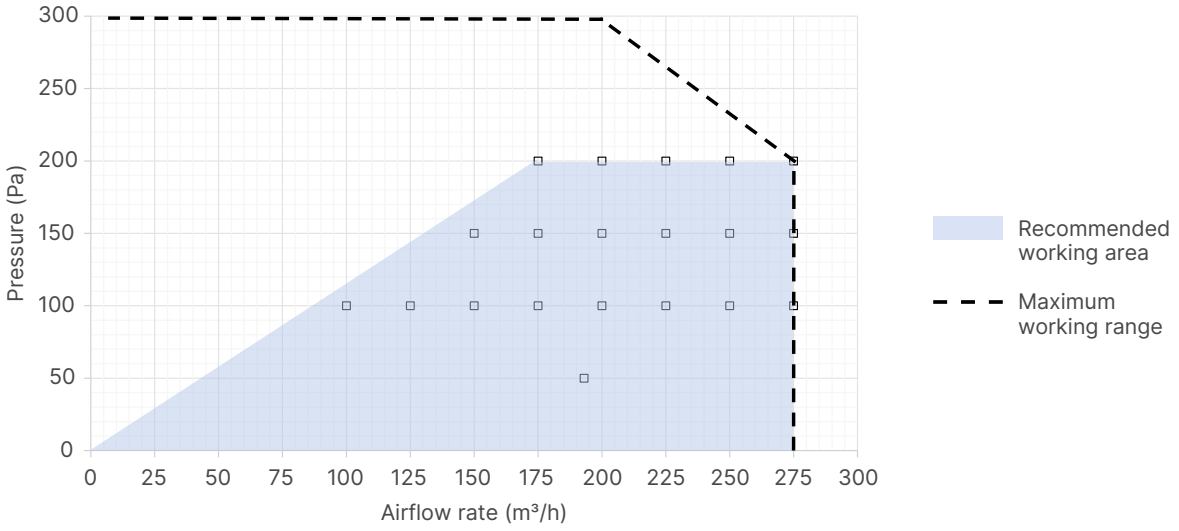
The Renson Sense room sensors can be combined with the Flux Go Flat to regulate the local air quality via ventilation air flow rate. These 230 V powered sensors wirelessly communicate robustly with the ventilation unit. This provides a further increase in air quality and a reduction in the E level.

5.3.4 • Pressure-Air flow rate curves

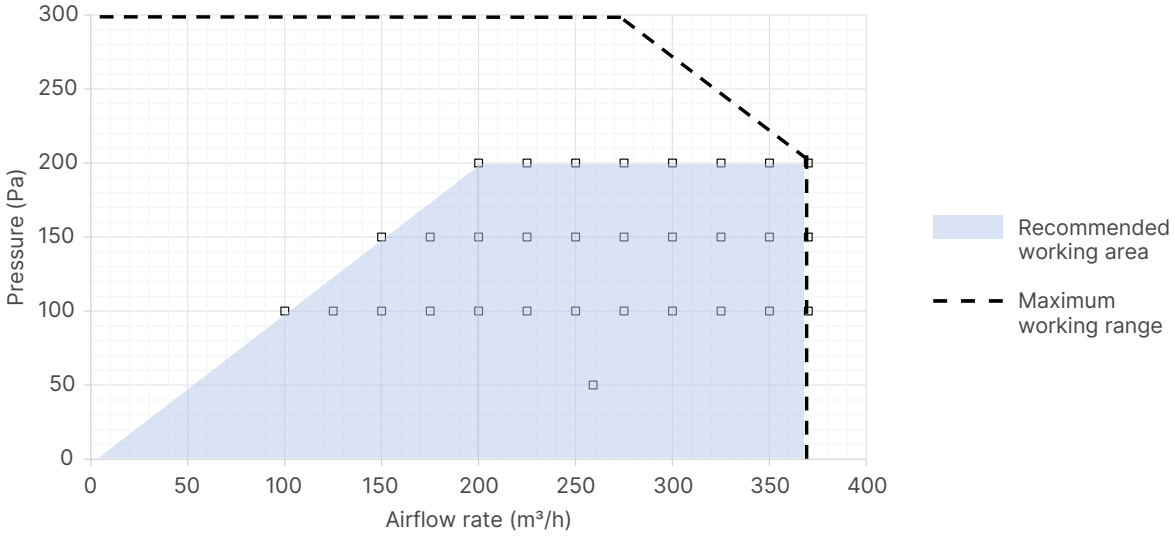
Flux Go 225 Flat



Flux Go 275 Flat



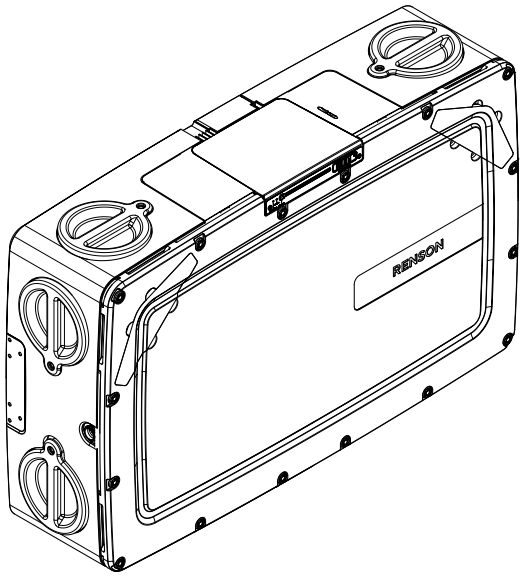
Flux Go 370 Flat

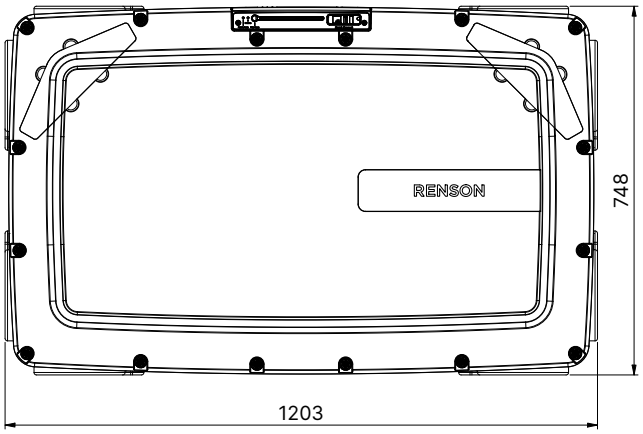


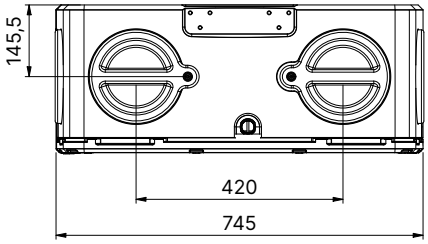
5.3.5 • Frost protection

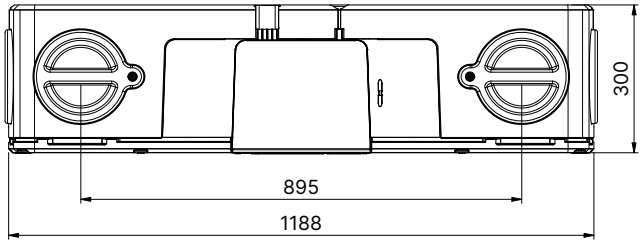
The Flux Go Flat is equipped as standard with a frost protection mechanism to prevent ice formation in the heat exchanger. Ice formation reduces the efficiency of your ventilation system and can damage the heat exchanger. Each Flux Go Flat unit is equipped with basic frost protection through an unbalance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

5.4 • Dimensions and weight









5.5 • General installation conditions

Read the safety and installation conditions carefully.

- Choose the installation space in the technical room or elsewhere (near the roof or wall penetrations). Position the unit centrally in relation to the rooms to be ventilated so the duct lengths are distributed as homogeneously as possible and resistance across the duct network is limited.
  To limit possible noise transmission, do not place the unit above or in a bedroom.
- Make sure there is sufficient space around the unit to connect the ventilation ducts without problems and to carry out inspection and maintenance. Avoid obstacles that prevent access or removal of the unit.
- The unit must be placed in a frost-free room.
- The condensation drainage point must be connected to the home drainage point network.
- The Flux Go Flat may not be connected to an extractor hood or dryer.
- The supply and extraction of the unit must always take place outside
- The dimensions of the required supply ducts are highly dependent on the intended extraction air flow rate and the total lengths. Follow good practise and the guidelines included with the materials used
- Avoid sharp bends in the pipes just before the fan unit.
- Insulated pipes should be used to prevent condensation in the ducts:
  – for the connections of the supply and extraction pipes from outside to the ventilation unit
  – if pipes are placed outside the insulated volume of the home
- Minimum density for wall/ceiling of 100 kg/m², because of firmness for fastening & sufficient mass for further vibration damping.

NOTE

The placement of the Flux Go Flat and the associated air ducts must be arranged in such a way that the air ducts can be connected with as few bends as possible. The resistance across the air ducts is thus limited and capacity and noise problems are avoided.

TIP

Renson recommends always providing 1 m of acoustic damping material Acoudec in the impulse & extraction side. Together with respecting the correct ducting rules to obtain an acceptable pressure drop, this ensures quiet operation of the ventilation system. Always place the silencer as close as possible to the fan unit.

In addition to choosing high-quality components, correct installation is also essential for a well-functioning ventilation system. Correctly dimensioning the piping system plays an important role in this. Correct sizing of the pipe system significantly reduces fan consumption and improves acoustic comfort. The mechanical supply lines in ventilation systems D to the living areas in particular deserve extra attention. After all, mechanical supply is sensitive to acoustic discomfort. The table below provides an overview of the maximum recommended air flow rates through the Renson pipe components. Please note that this table does not address pressure drops. To limit the pressure drop across the channels, the length and especially the number of bends per channel must also be limited. If in doubt, contact your contact person.

https://www.renson.eu/Renson/media/Renson-documents/BENG/renson_leidingsysteem/Tabel1_Dimensioneringstabel_Renson_leidingsysteem_NL.pdf

6 • Installation

6.1 • Choice of installation orientation

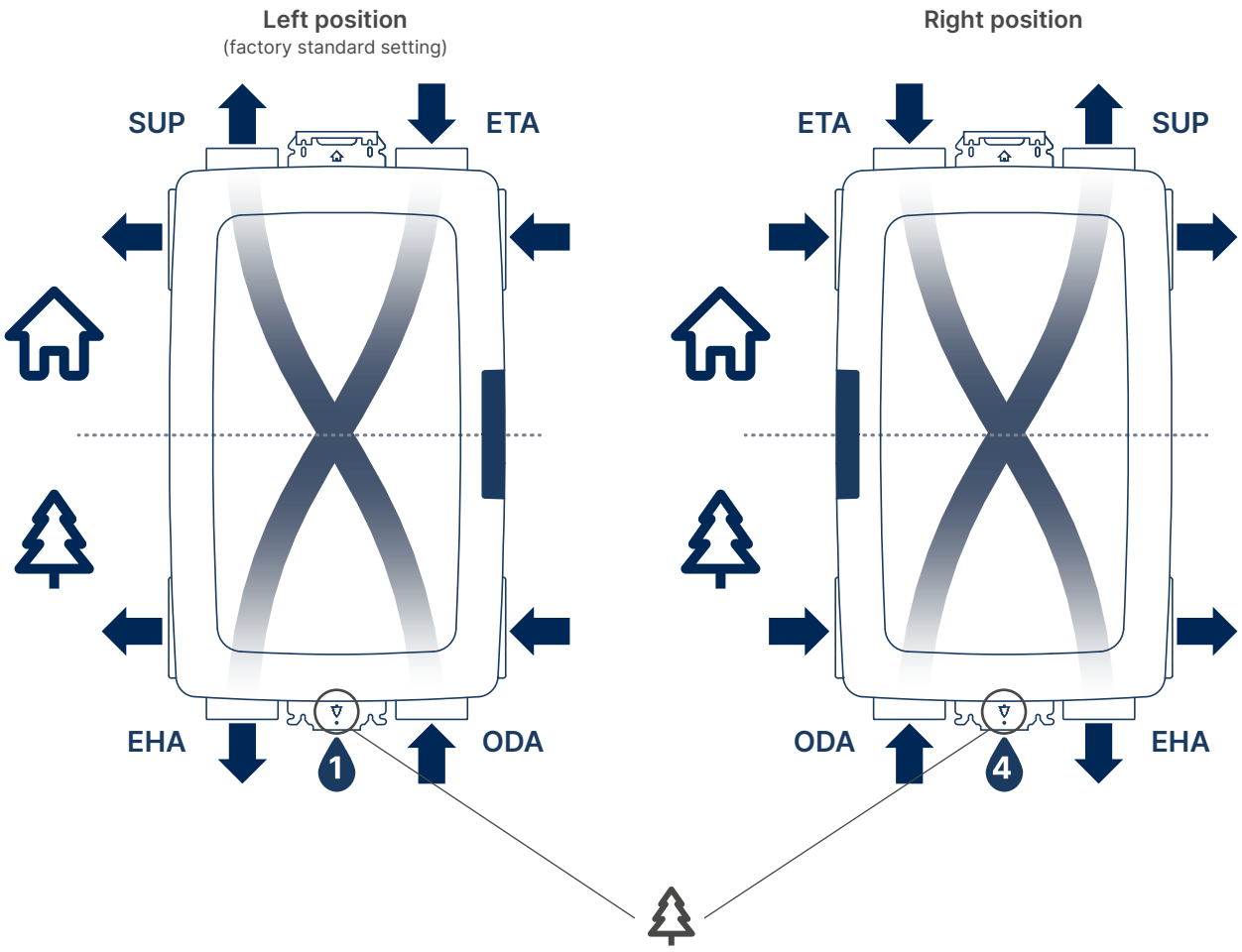
NOTE

The orientation and location where the Flux Go Flat is installed determines which brackets should hang on which side of the unit and where the condensation drainage point and duct connections will be located.

The Flux Go Flat is a flexible unit and can be installed in both ceiling and wall configurations. Moreover, each installation option is possible in both left (default) and right version:

6.1.1 • Vertical wall installation

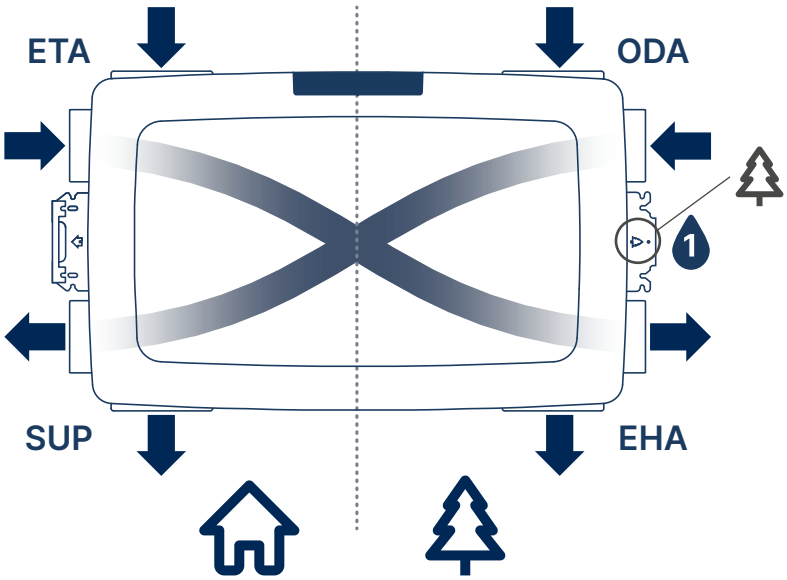
Bracket BA (⛛) is placed at the bottom so that installation against the wall can proceed as smoothly as possible. Condensation drainage point is provided on the side where EHA is connected. Choose condensation drainage point number 1 for the left version, condensation drainage point number 4 for the right version, which in this installation will essentially always be the condensation drainage point at the bottom of the unit.



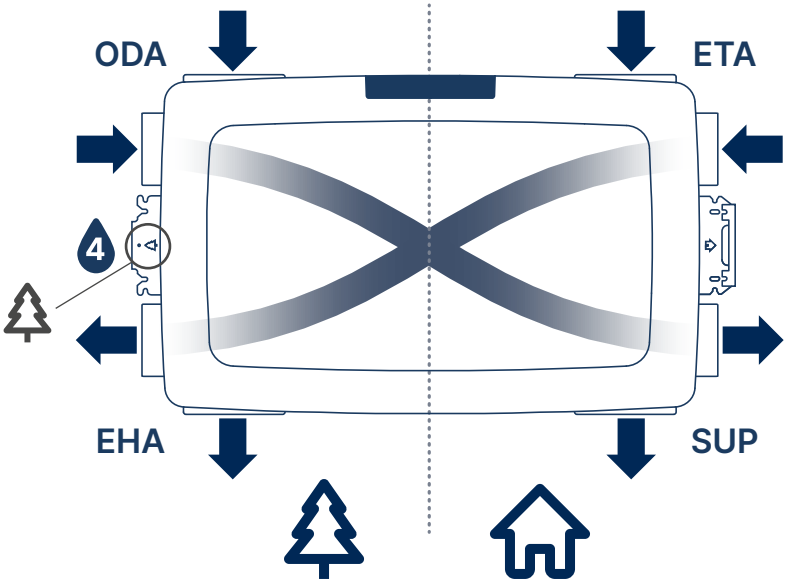
6.1.2 • Ceiling installation

Condensation drainage point is provided on the side where EHA is connected. It is important to determine where the condensation drainage point will be located. Bracket BA (⚠) ALWAYS ends up on the side where the condensation drainage point is to be provided. Choose condensation drainage point number 1 for the left version; choose condensation drainage point number 4 for the right version.

Left position
(factory standard setting)



Right position



6.2 • Conversion from left-hand version to right-hand version

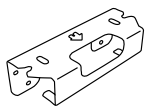
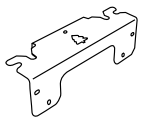
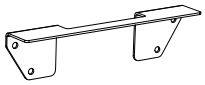
The unit can be completely “converted” from a left to a right version, without physical change.
The conversion is done using the installation web page.

6.3 • Prepare the unit for installation

6.3.1 • Parts

What do you need?

The necessary parts for this installation are included in the standard packaging of the unit.

Number	Description	Quantity	Illustration
①	Suspension bracket for house connection	1	
②	Suspension bracket for outdoor connection	1	
③	Bracket support	2	
④	DIN 7380 – M5 × 45 – galvanised	8	
⑤	DIN 125 A – M5 – galvanised	8	
⑥	DIN 6798 A – M5 – galvanised	8	

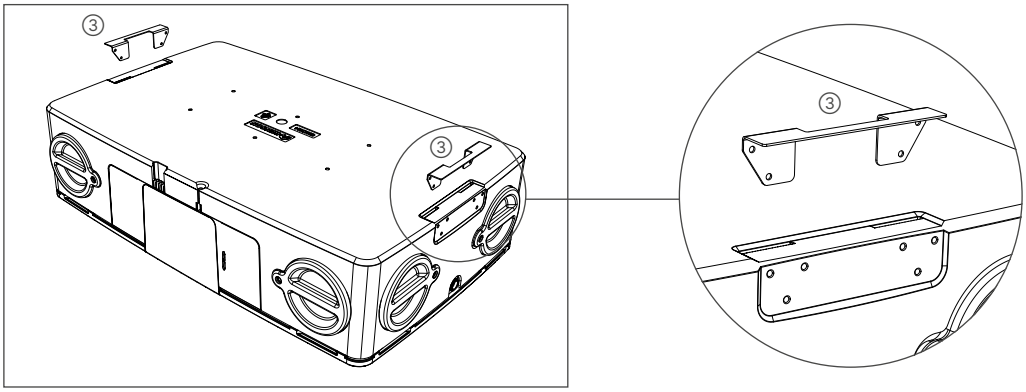
6.3.2 • Tools

- Drill
- Screwdriver machine with bits
- Pencil, marker for markings

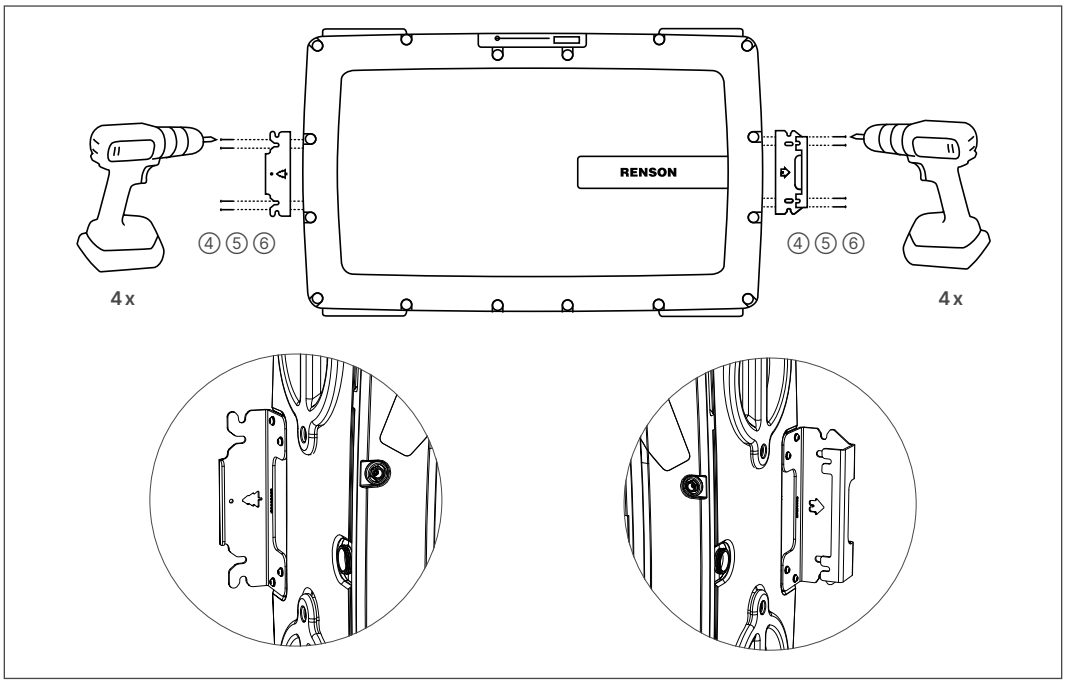
6.4 • Installing the suspension brackets on the unit

1. Place a blanket or plastic sheet under the unit to prevent damage.
   Place the unit on the floor with the lid downwards.

2. There are 2 recesses on the underside of the unit. Bracket support ③ must be placed in this recess.



3. Install the 2 suspension brackets on both ends according to the hole pattern against the side.
   The suspension brackets are marked with a tree and a house, which refer to the outdoor connection BA (🌲) and the house connection HA (🏠) respectively.
   – Place the QuickFix bracket against the side of the unit according to the hole pattern so that you can place the M5 bolts ④ with spring washer ⑥ and flat washer ⑤ through the suspension brackets into the recesses.
   – Then screw on the M5 bolts and attach the other QuickFix bracket to the other end face in the same manner.



TIP

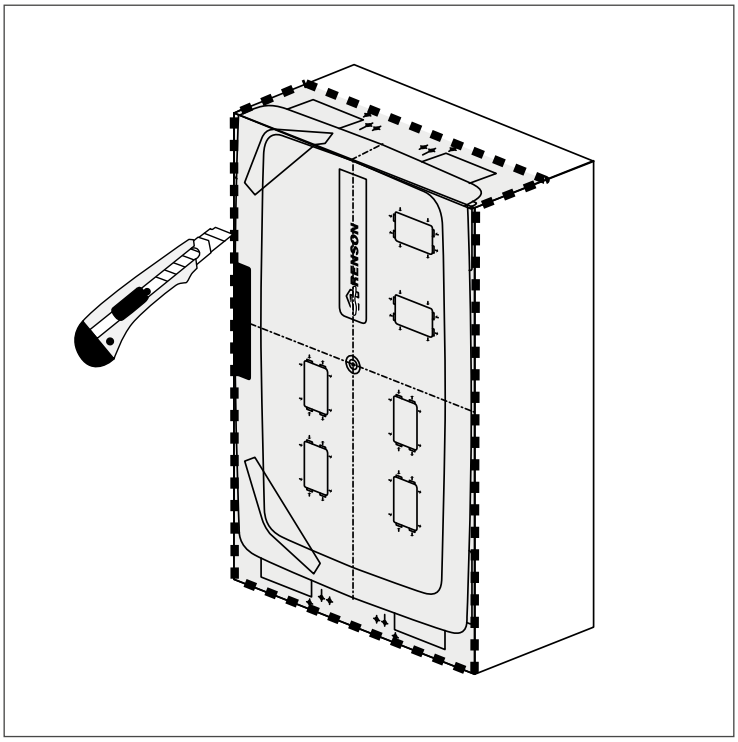
- The bracket support contains press-in nuts. When tightening the M5 bolts, they tighten in the press-in nuts and thus secure the suspension bracket to the side of the housing of the unit.
- Use a screwdriver for this.

6.5 • Marking the suspension brackets

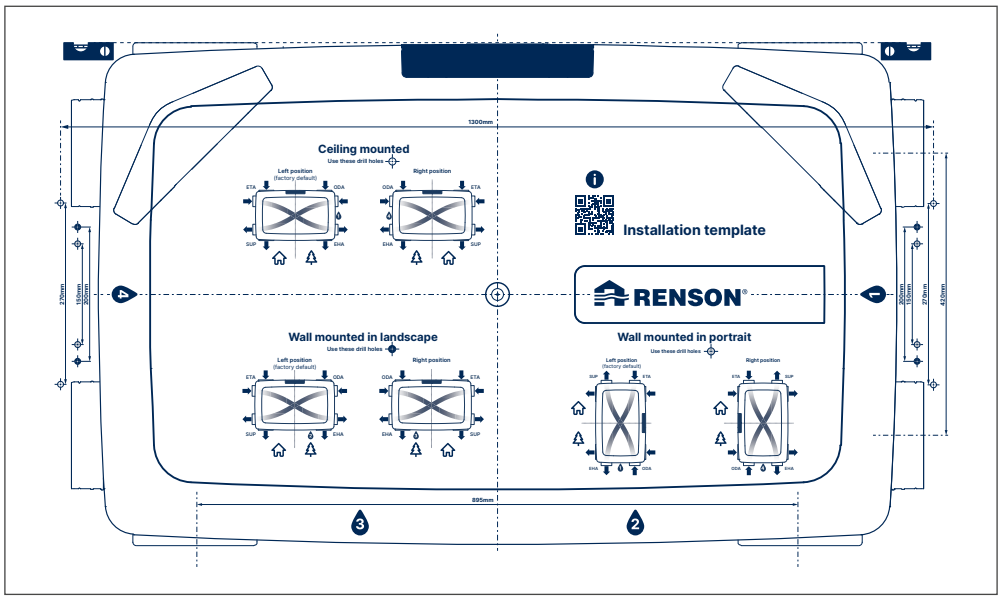
When marking the Flux Go Flat, a minimum distance of 350 mm between the wall and the unit must be taken into account to provide sufficient space for connecting the ducts.

After a choice has been made about the location of the ventilation unit, the location of the suspension brackets can be determined with:

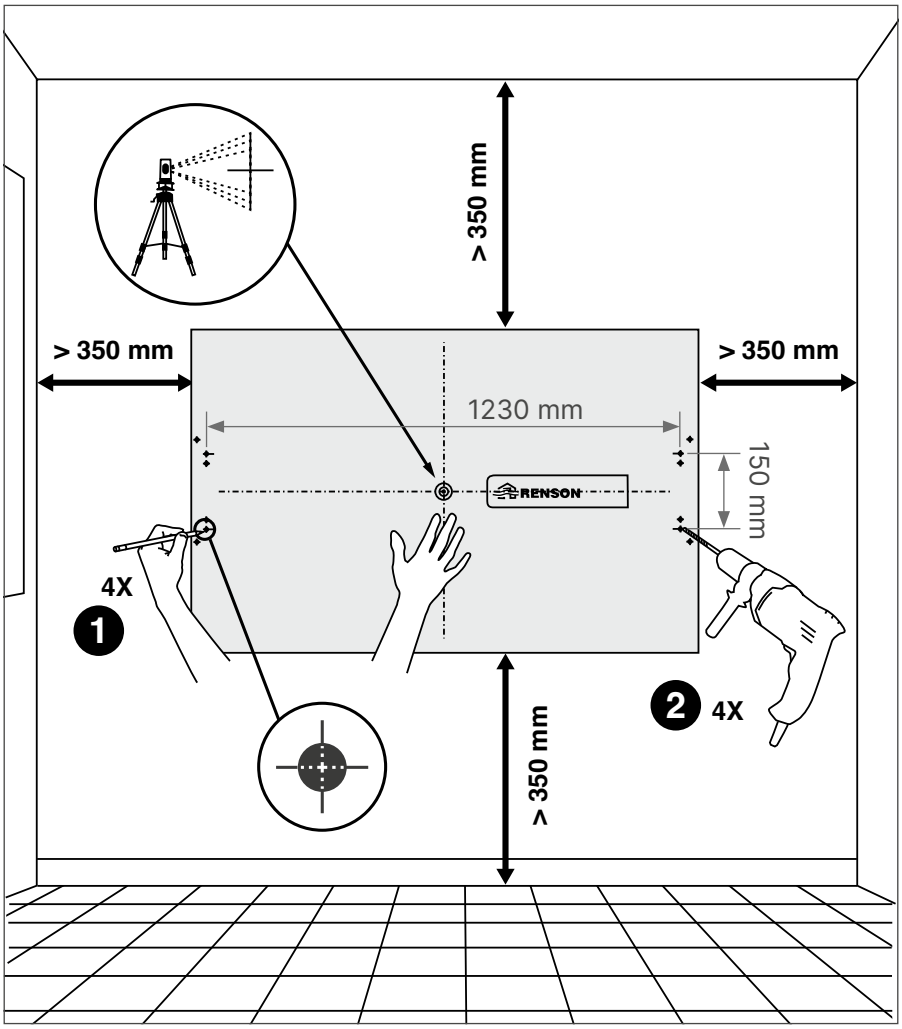
1. The template (which is cut from the box)



2. The optional reusable robust/moisture-resistant template (available from the distributor).



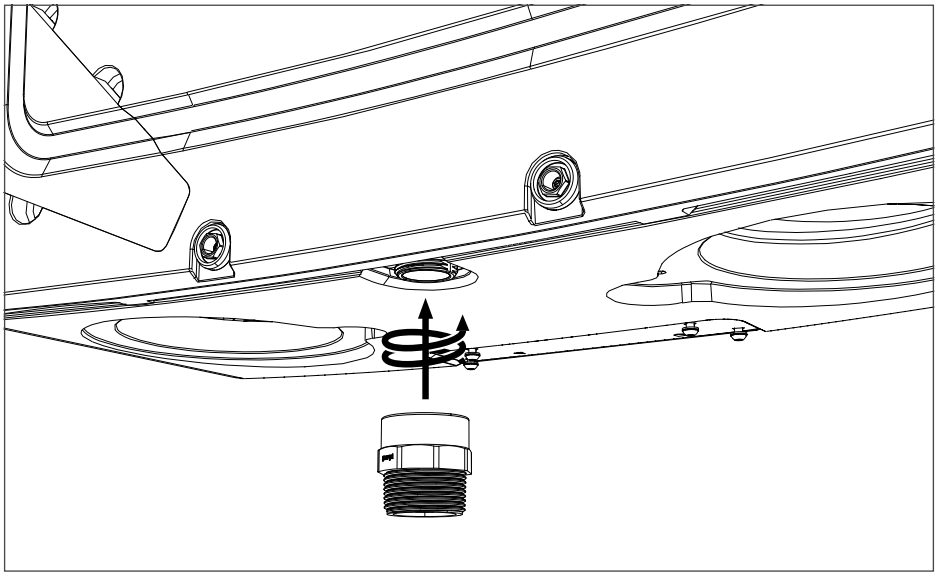
3. By measuring directly on the bracket with the dimensions indicated here. Renson recommends using method 1 or 2, unless one is used to working without these tools. In this case you can use the bracket & drawing with dimensions in this manual.

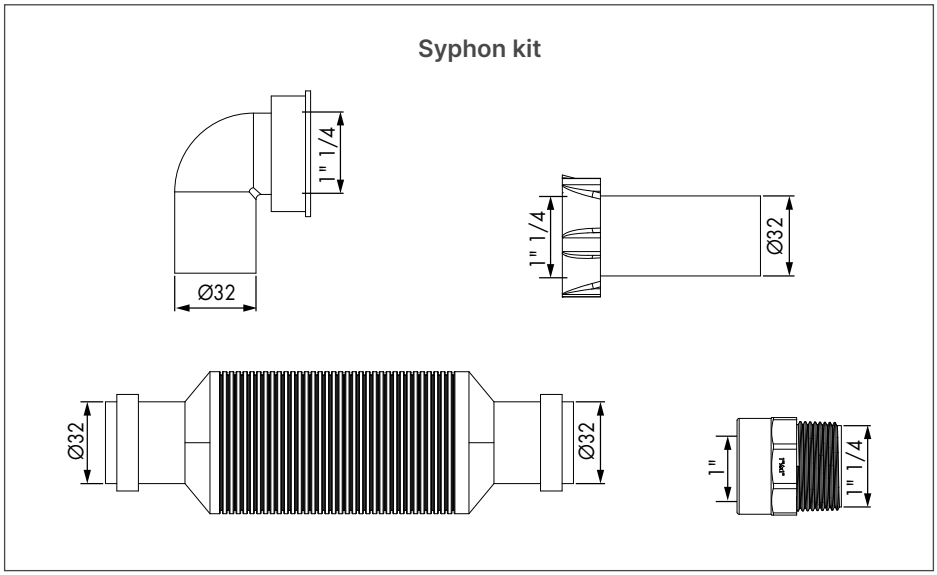


6.6 • Condensation drainage point

The Renson Flux Go Flat has 4 numbered condensation drainage points. The exact point used to drain the water depends on the installation orientation and was described in Chapter 6.1. The unused drainage points are closed off using the pre-assembled plastic caps. Be careful not to damage the plastic caps when removing them in order to prevent creating a leak when replacing them.

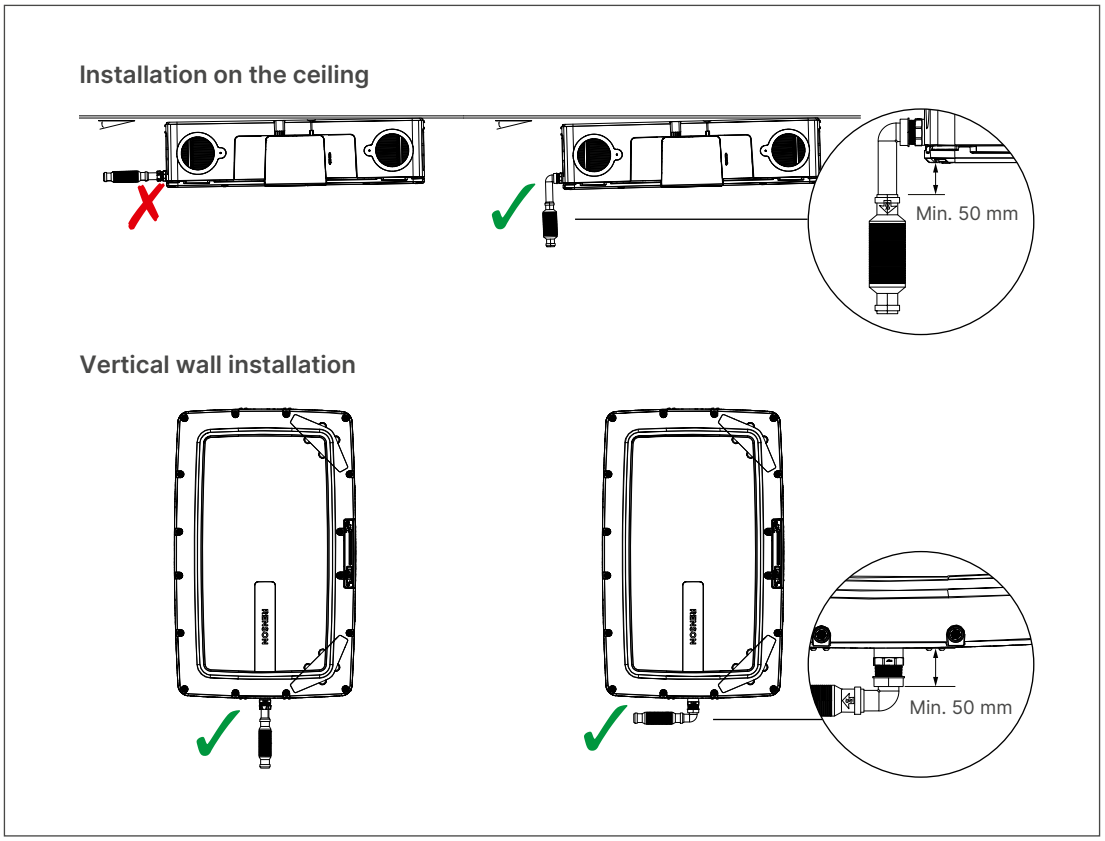
Each condensation point consists of a 1 inch (25.4 mm) external thread. A drainage point with siphon or odour trap must be installed on this. In the image you see a transition piece that is already supplied with the condensation kit.





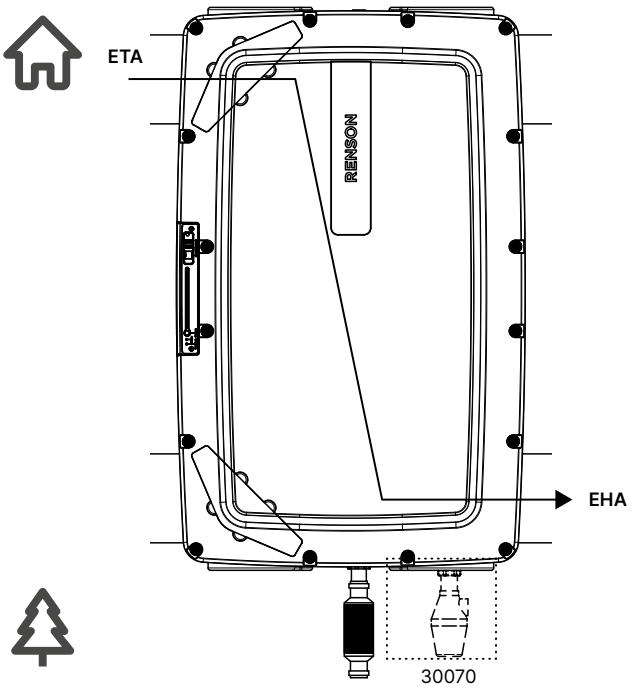
To ensure you have a correct water drainage point without odour nuisance, it is strongly recommended to use the Renson siphon kit for Flux Go Flat. Follow the instructions on the supplied sheet carefully to ensure proper functioning of the unit.

To guarantee a good water drainage point, you must ensure that the unit is always placed at least 100 mm from the wall so the condensation drainage point can always be realised correctly. The water drainage point must slope at least 1 cm/m to ensure a good drainage point.



TIP

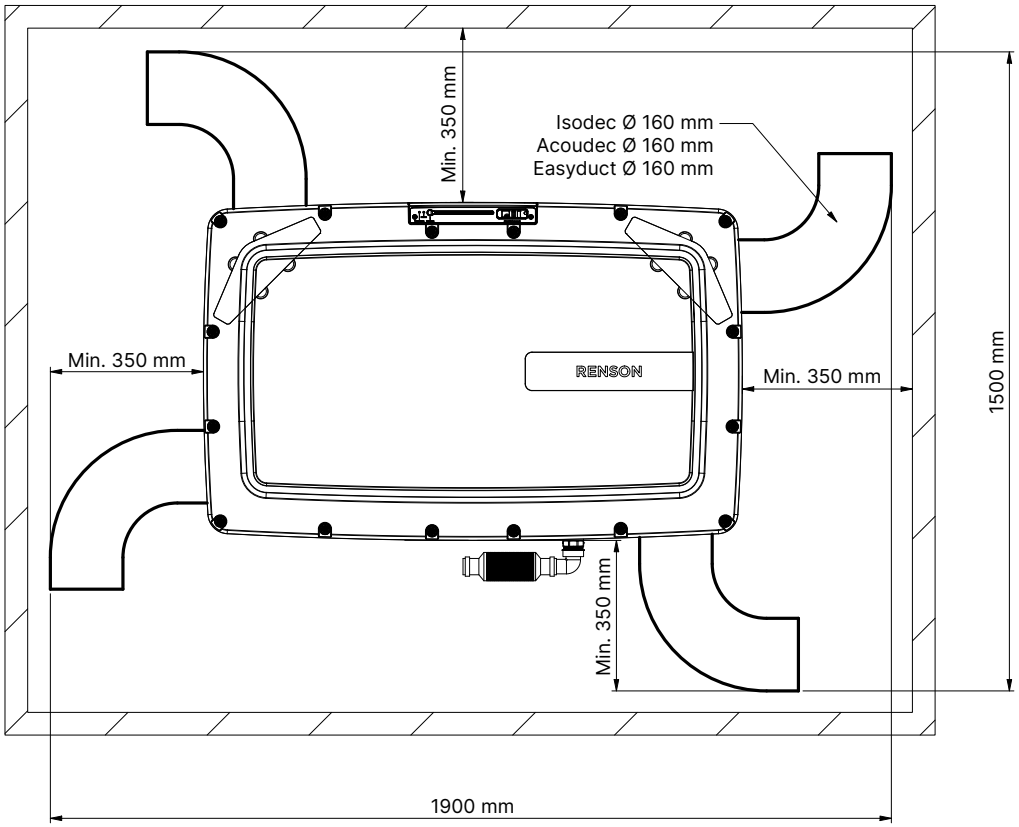
Application of additional dry siphon in wall installation
If the unit is placed in wall installation where EHA is connected to the side opening, it may be necessary in certain cases to install an additional siphon. After all, the indoor air extraction (ETA) is moist, and if condensation accumulates over a long period of time, this must be able to be drain away. This will certainly not always be necessary, because in normal circumstances the little moisture that is produced also evaporates in the discharged EHA air. Order 30070 Kit cap with condensation drainage point to make this extra plug and play facility.



6.7 • Installation dimensions

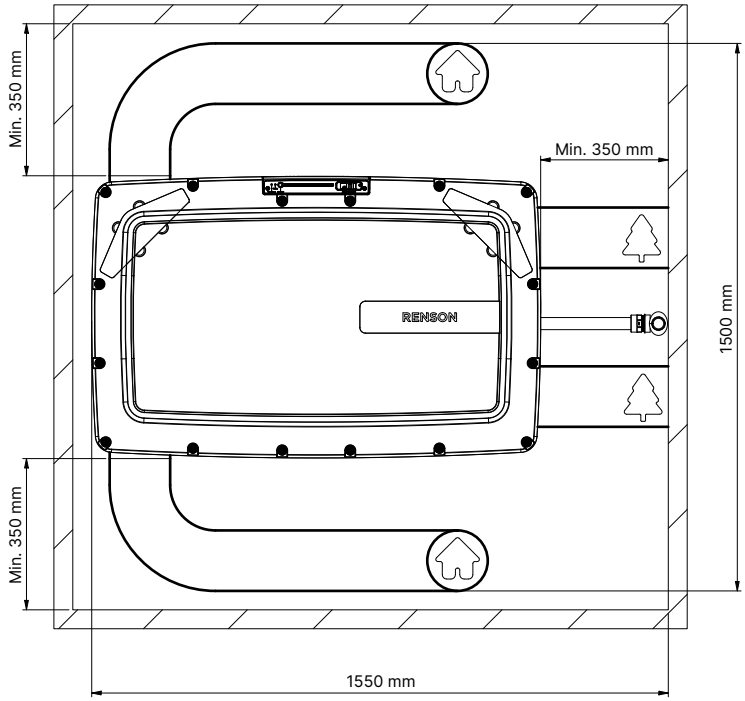
Both ceiling and wall installation require a **minimum 350 mm** distance between the unit and the wall on each side where a **duct connection** is present. If this duct connection consists of a Renson Isodec, Acoudec or Easyduct in Ø 160 mm, respecting this minimum distance ensures a small pressure drop and easy installation and disassembly for possible service.

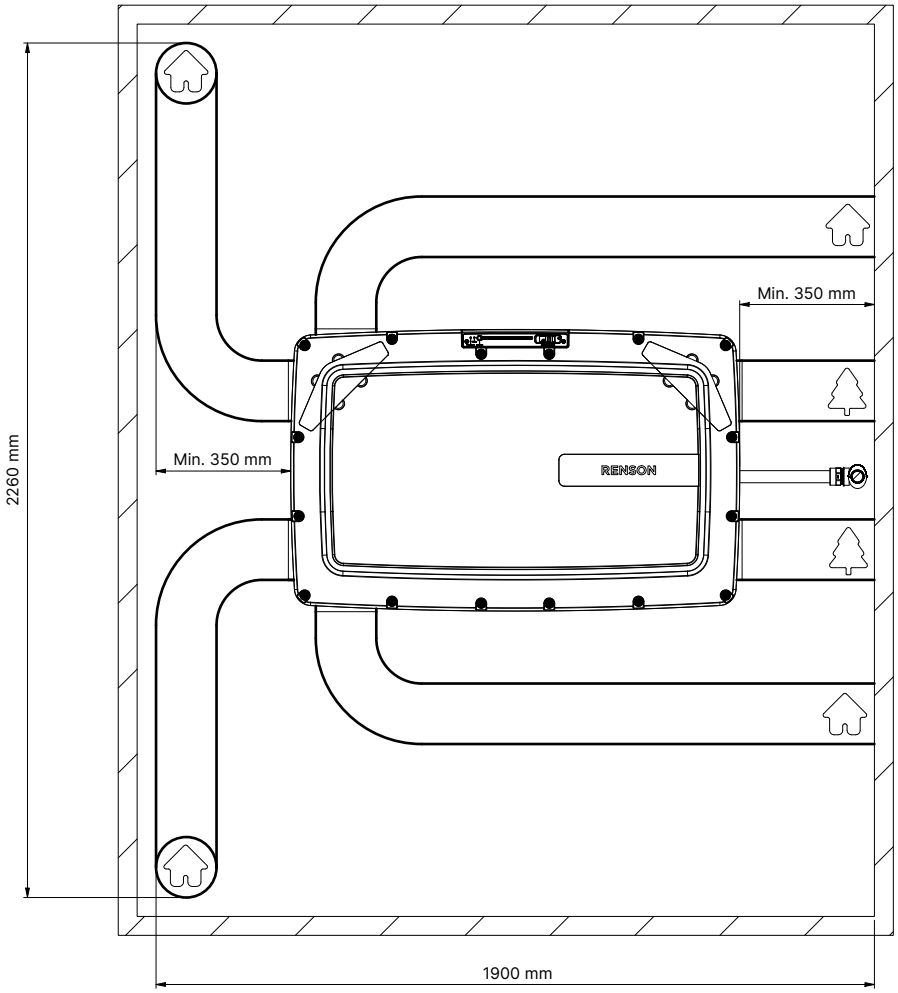
In addition, a **minimum 100 mm** must be provided at the height of the **condensation connection**.

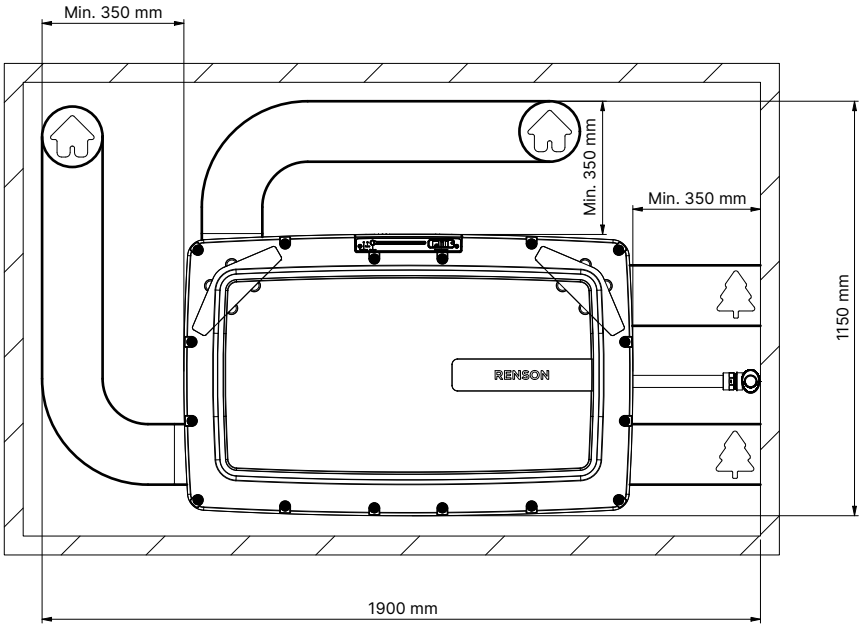


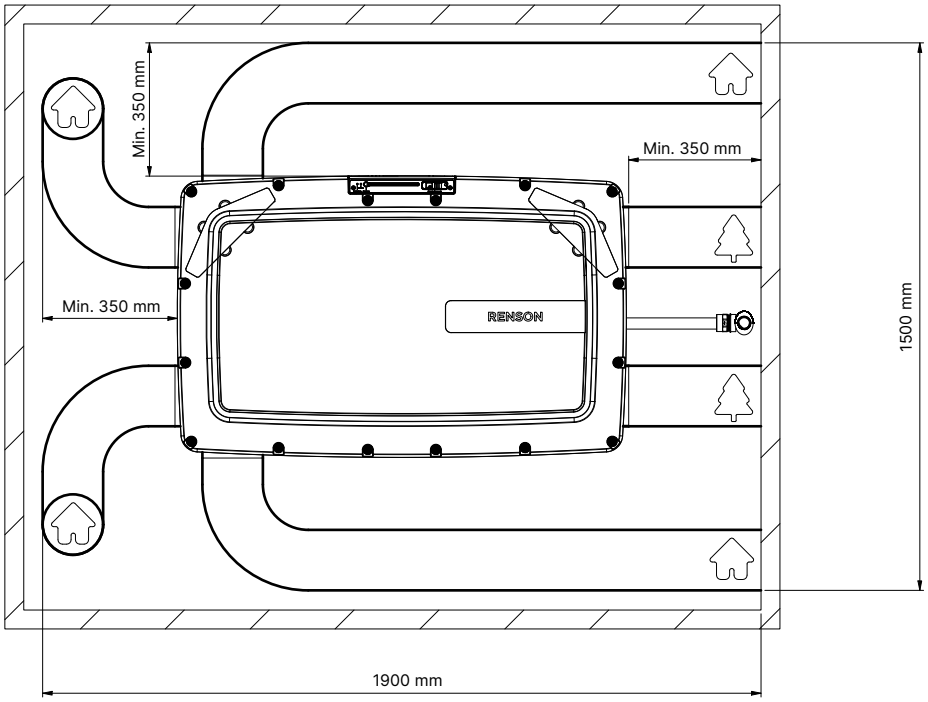
Some examples of set-ups in practice can be seen below, taking into account the above minimum distances and the Renson recommendation to always provide 1 m Acoudec Ø 160 mm on the supply and extraction sides. This will give you a whisper quiet installation.

Example of a ceiling installation:

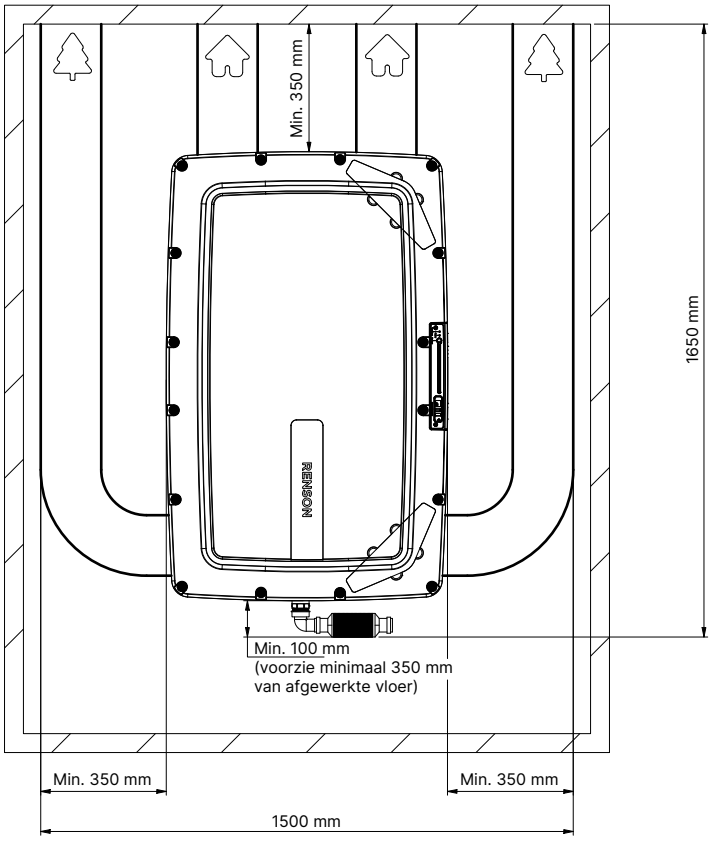





Min. 350 mm
Min. 350 mm
Min. 350 mm
1150 mm
RENSON
1900 mm


Min. 350 mm
Min. 350 mm
Min. 350 mm
1500 mm
RENSON
1900 mm

Example of a wall installation:



6.8 • Connection to air ducts

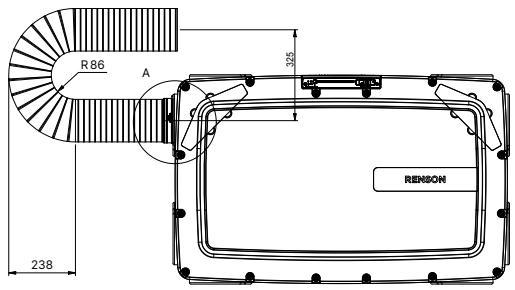
The Flux Go Flat has a total of 4x internal plenums, each with 2x Ø 160 mm connections. The unit is supplied with 4 installation flanges and 4x EPP caps as standard. Optionally, additional installation flanges can be used.

The following items can be bonded to the installation flanges:
- Renson Aludec Ø 160 mm
- Renson Isodec Ø 160 mm
- Renson Acoudec Ø 160 mm
- Renson Easyduct Ø 160 mm
- Galva channel Ø 160 mm

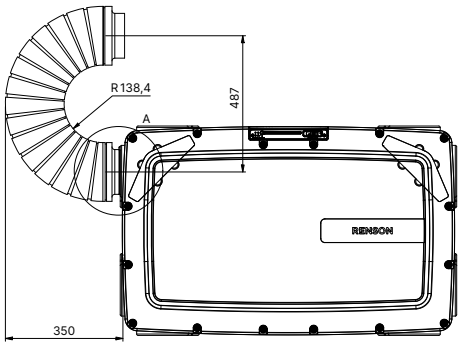
The connection must always be finished airtight, by using ALU tape for example.

4 different possible air duct applications and the minimum radii that are possible can be seen below. We display this so you can correctly dimension the installation of the Flux Go Flat in the room.

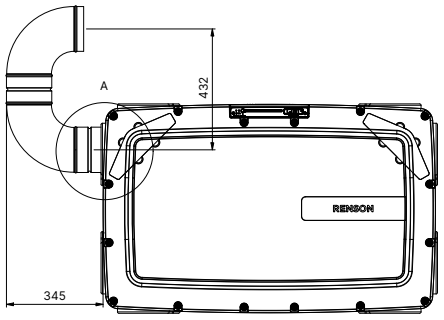
Connect Flux Go Flat with Aludec



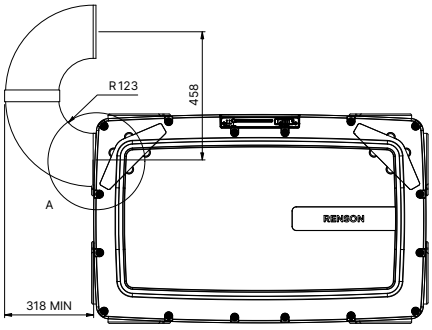
Connect Flux Go Flat with Isodec or Acoudec



Connect Flux Go Flat with galva



Connect Flux Go Flat with Easyduct



6.9 • Vertical wall installation

6.9.1 • Parts

What do you need?

Article no.	Description	Quantity	Illustration
–	The drill template that forms a part of the handy box	1	

NOTE

Mounting material to hang the unit on the wall is not supplied because this depends on the type of wall. It must be provided by the installer.

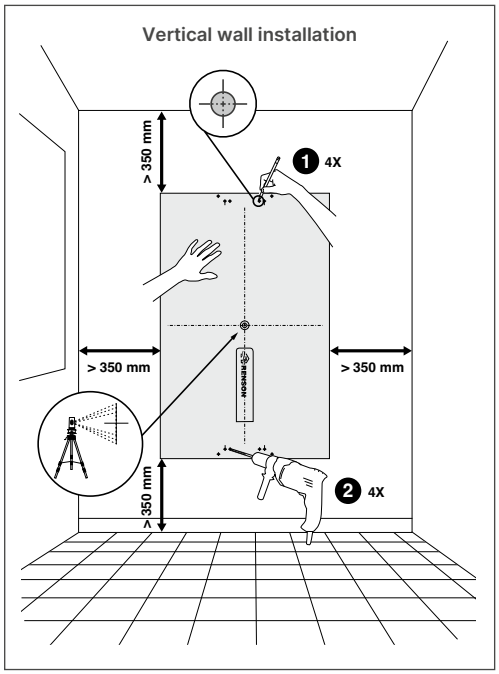
6.9.2 • Hanging up the unit

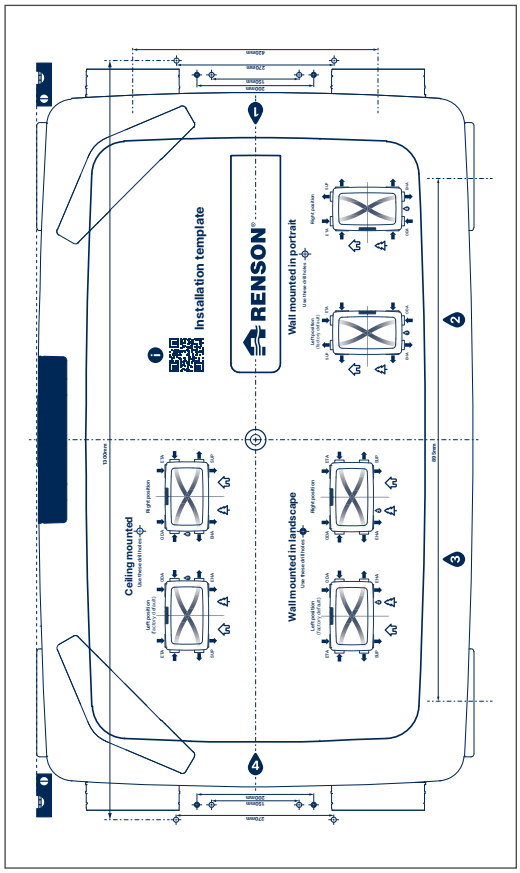
1. In preparation, the suspension brackets must be placed correctly on the unit, see Chapter 6.4.

TIP

The suspension brackets are marked with a tree and a house, which refer to the outdoor connection BA (🌲) and the house connection HA (🏠) respectively. The condensation drainage point is on the side of the outdoor connection BA (🌲). Determine this position in advance as this has a major influence on how the pipes and drainage points will run.

2. Mark the wall for the mounting holes. Use a spirit level or laser to ensure the unit is hung horizontally and level on the wall (maximum deviation <1.5°). Use the drilling template, which is a part of the packaging, to mark the holes.





Vertical wall installation (with screws and plugs) – hole pattern on the drilling template.

The bottom two holes must be at least 35 cm away from the finished floor to ensure there is still enough space to install the condensation drainage point.
The horizontal distance between the holes is 150 mm.
The vertical distance between the holes is 1250 mm.

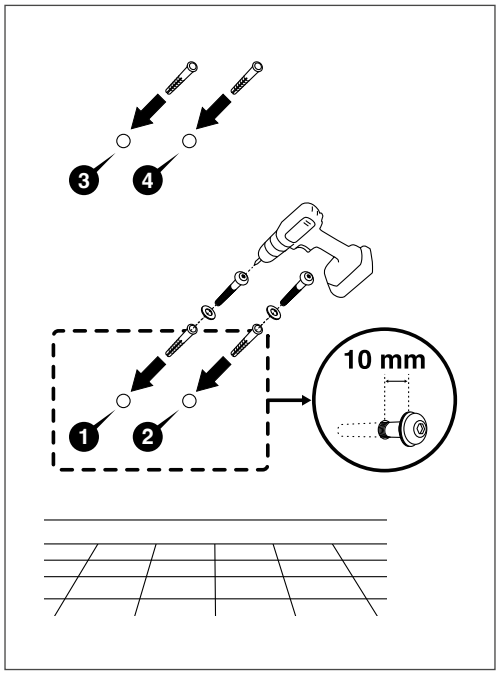
For more information about working with the drill template, see Chapter 6.5.

3. Drill the 4 holes and use suspension materials of your choice (for example plug and screw or threaded rod and nut); make sure it is suitable for the surface in question and sturdy enough to support the 25 kg unit.

TIP

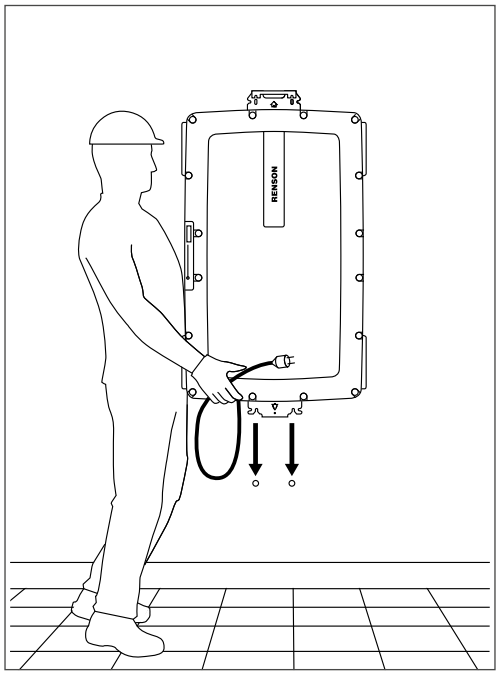
The recesses in the brackets are provided up to M8, it is always recommended that a flat washer be used.

4. Only screw the screws into the bottom 2 holes and let them protrude about one centimetre from the wall as shown in the figure.
   If a threaded rod is used, make sure there is a nut on the end.

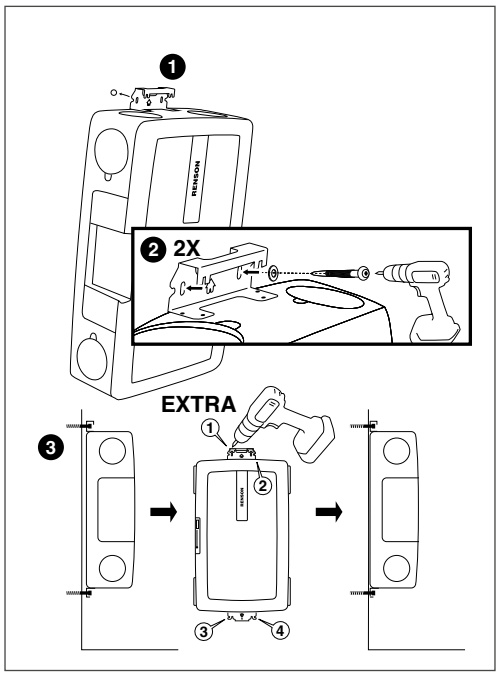


Vertical wall installation (with screws and plugs) – min. 1 cm distance between wall and head bolt for hooking in the unit.

5. Place the unit over the bottom 2 screws/rods. Let the unit rest for a while.



6. Align the 2 other brackets over the top installation points.



Vertical wall installation (with screws and plugs) – The unit aligned over the pre-drilled holes.

7. Tighten the top installation points.

8. Tighten all the screws so the brackets are pulled against the wall. Start with the top screws.

TIP

The brackets offer a distance of 13 mm between the unit and the wall to allow the power cord to run behind the unit if necessary. The power cord is best placed in position just before fixing the unit.

9. Check the stability of the screws during installation. Then check the unit is installed vertically level, with a deviation <1.5°.

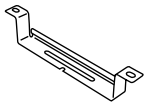
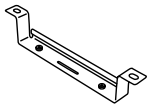
10. The condensation drainage point can then be put in place, see Chapter 6.6.

11. Once the unit has been mounted safely and the condensation drainage point is connected, you can proceed to connecting the Flux Go Flat in Chapter 7.

6.10 • Ceiling installation with QuickFix

What do you need?

6.10.1 • Parts

Article no.	Description	Quantity	Illustration
①	QuickFix bracket ceiling outdoor connection	1	
②	QuickFix bracket ceiling house connection	1	
③	DIN 912 – M6 × 30 – galvanised	3	
④	DIN 125 A – M6 – galvanised	3	
⑤	DIN 6798 A – M6 – galvanised	3	
–	The drill template that forms a part of the handy box	1	

The necessary parts for this installation are included in the standard packaging of the unit.

INSTALLER

6.10.2 • Hanging up the unit

NOTE

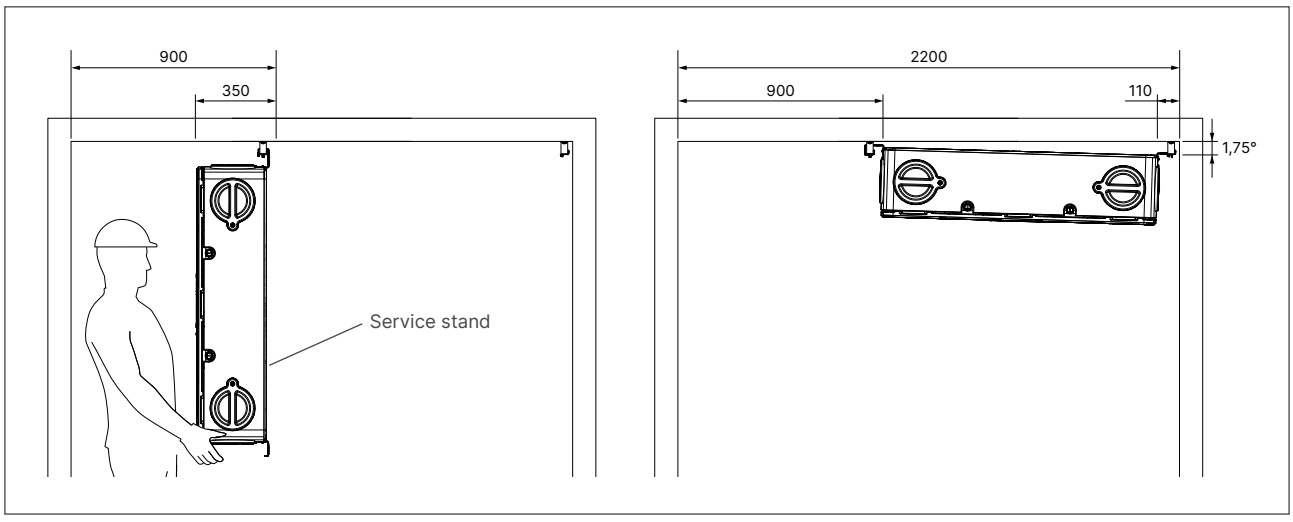
- The QuickFix may only be placed on a solid and flat ceiling. If the QuickFix is installed on a sloping ceiling, the unit may fall and cause physical and material damage. For installation on a sloping ceiling, the same method as for vertical wall installation is recommended.
- There are arrows on the ceiling brackets. The brackets must be installed so the arrows point towards the unit.

For additional information about ceiling installation, see:
https://www.youtube.com/watch?v=e3tlMHzHbmQ

1. In preparation, the suspension brackets must be placed correctly on the unit, see Chapter 6.4.

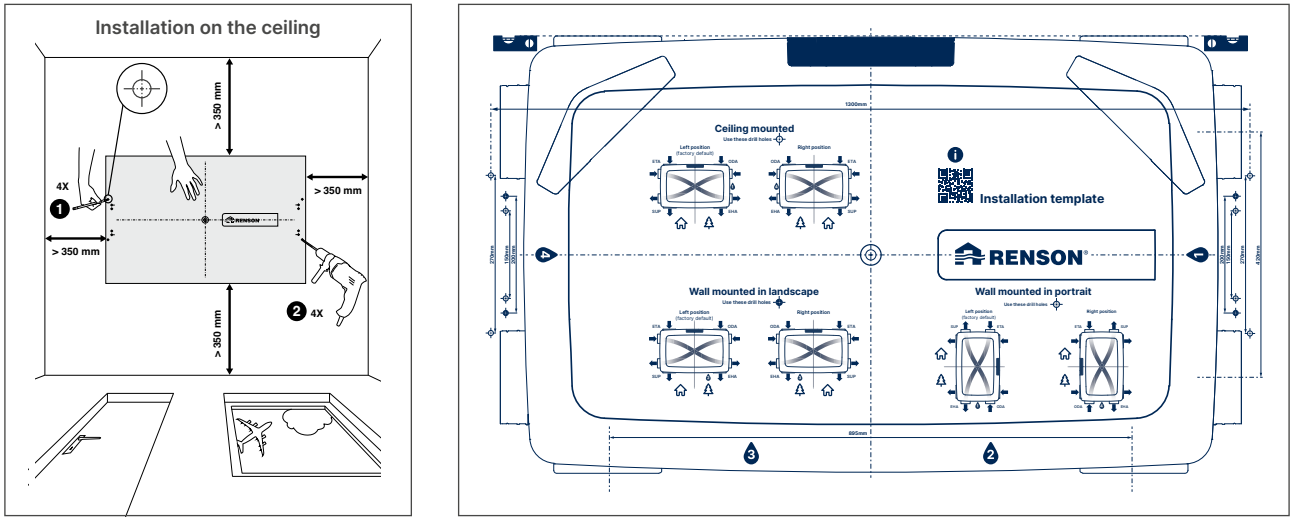
TIP

- The QuickFix brackets are marked with a tree and a house, which respectively refer to the outdoor connection BA (🌲) and the house connection HA (🏠). The condensation drainage point is on the side of the outdoor connection BA (🌲). Determine this position in advance as this has a major influence on how the pipes and drainage points will run.
- To utilise the full functionality of the QuickFix, at least 90 cm of free space is required at the house connection HA (🏠) of the unit and at least 11 cm from the outdoor connection BA (🌲). In exceptional cases, a minimum free space of 35 cm is also sufficient, in which case the “service” position cannot be fully used (see figure). Depending on the placement and type of air ducts, more space may be required.



Ceiling installation with QuickFix – Min. 900 mm clearance required for optimal reach during maintenance (unit in mm).

2. Mark the holes for the mountings on the ceiling. Use the drilling template, included in the packaging, to mark the holes.



Ceiling installation with QuickFix – Position in room (unit in mm) – Hole pattern of the QuickFix.

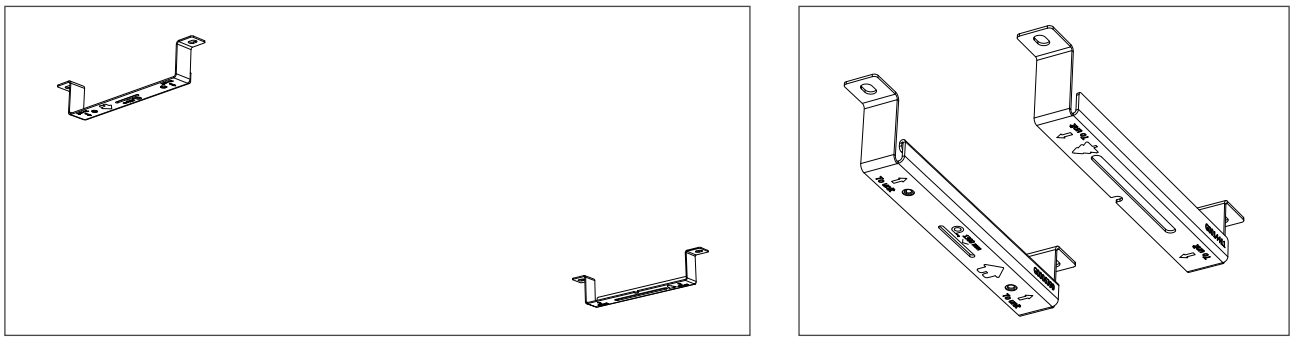
3. Drill the 4 holes and use suspension materials of your choice (for example plug and screw or threaded rod and nut); make sure it is suitable for the surface in question and sturdy enough to support the 25 kg unit.

TIP

The recesses in the brackets are provided up to M8, it is always recommended that a flat washer be used.

4. Hold the QuickFix bracket with the tree (outside connection) against the ceiling, with the inscription “To unit” facing the place where the unit will be located, and mount them with the screws or to the threaded rods. Tighten the screws or nuts so the bracket is pulled against the wall.

5. Repeat this for the QuickFix bracket with the housing. Tighten the screws or nuts so the bracket is pulled against the wall. Check the brackets are tight.



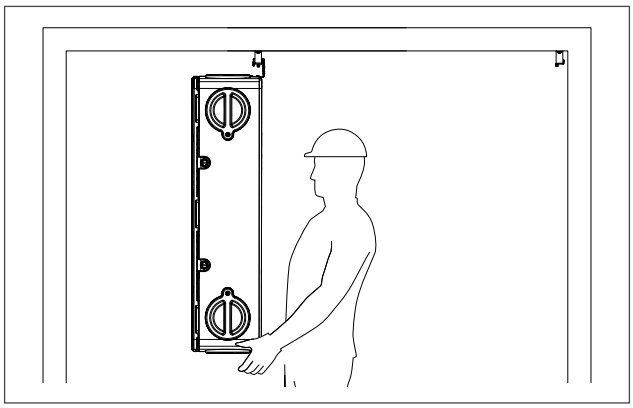
Ceiling installation with QuickFix – Position of the “outdoor” QuickFix.

TIP

The QuickFix with the house is also the rotation point for the service stand. So the surface on which this bracket is mounted must be able to support at least +25 kg.

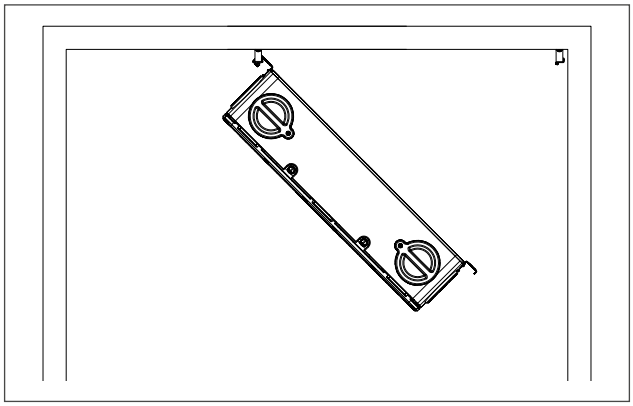
6. Move the unit to the installation location.
   Hold the power cord off the ground while moving the unit. If the cord comes loose, it could easily cause you to slip, trip or fall.

7. Hook the unit into the bracket with the housing.

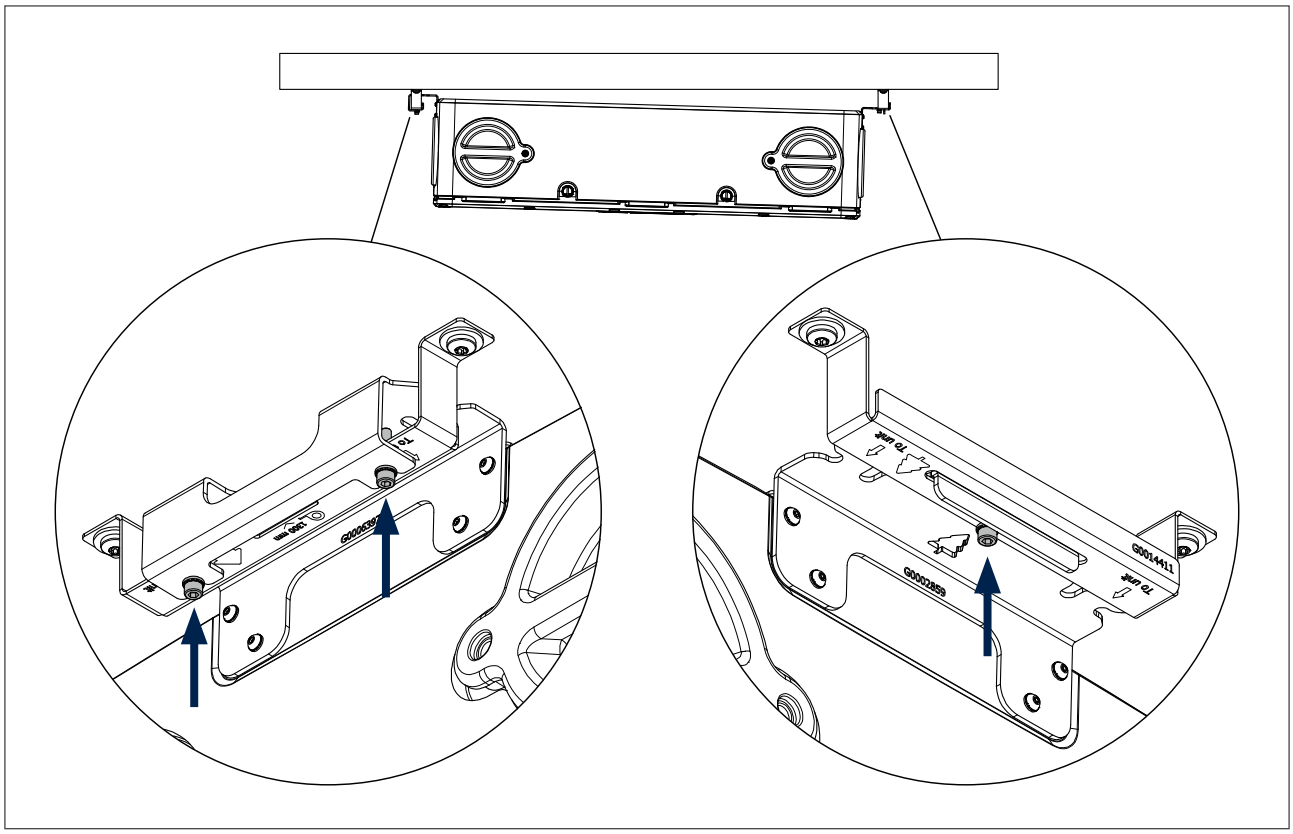


Ceiling installation with QuickFix – Hook the unit into the house connection side.

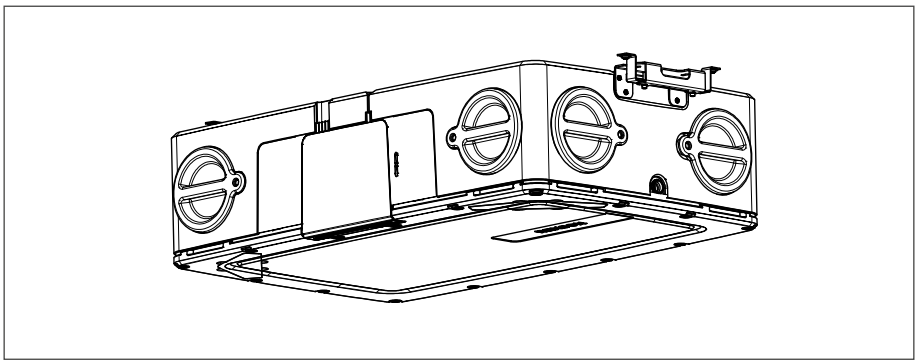
8. Swivel the unit upwards, in the direction of the QuickFix with the tree. And then hook it into the bracket.



9. Ensure the unit is securely attached by tightening the supplied 3xM6 bolts in combination with the knurled spring washer and flat washer at the indicated locations (see figure).



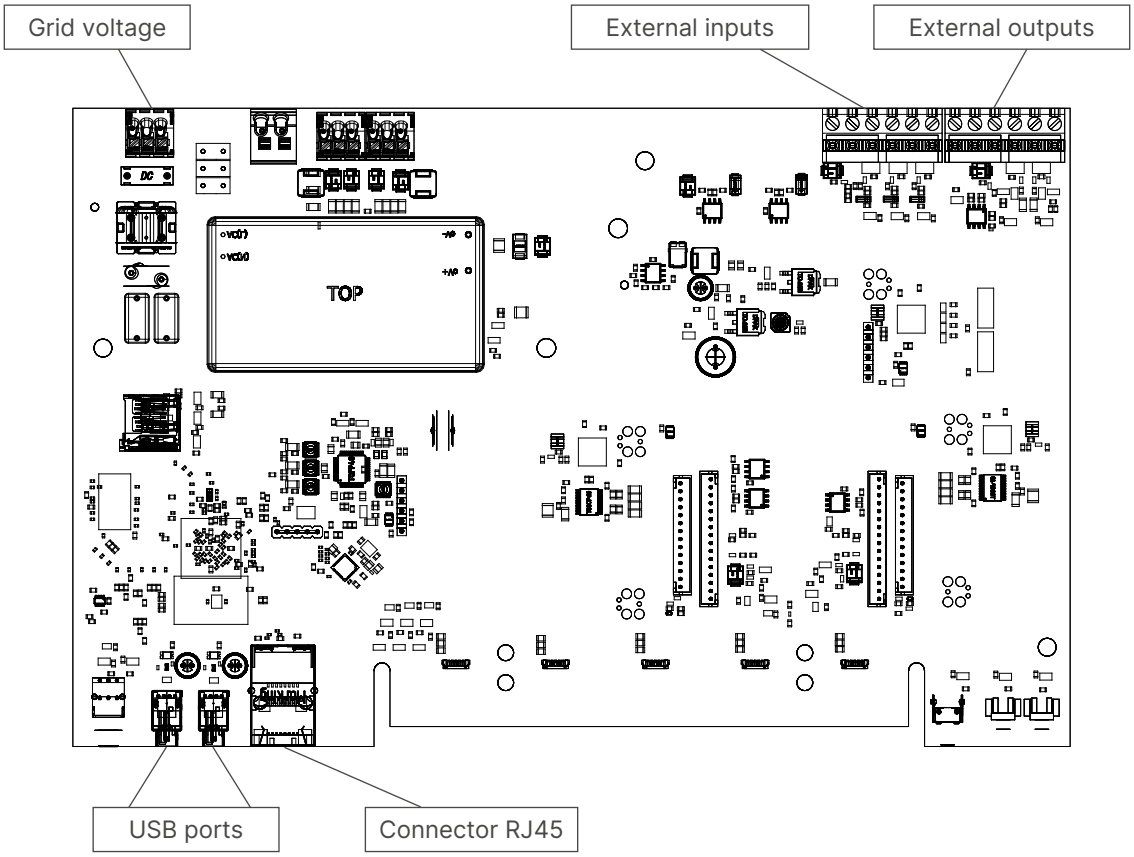
Ceiling installation with QuickFix – Fix the unit to the QuickFix “indoor”.



Ceiling installation with QuickFix – The unit is mounted on the QuickFix.

7 • Connection diagram Flux Go Flat

7.1 • Print Flux Go Flat



- **Mains voltage:** connect to the wall socket or directly to the fuse box.
- **USB ports:** the USB port can be used to:
  - allow Flux Go Flat to use Wi-Fi to communicate with the home network and/or directly with the app installer. Use the supplied Renson USB Wi-Fi dongle for this.
  - allow Flux Go Flat to use RF communication with the Sense room sensor(s). Use the Sense RF dongle for this.
- **RJ45 connector network cable:** this connection can be used to connect Flux Go Flat to the home network via a network cable.
- **External output:** Flux Go Flat can control external devices (a detailed description can be found in Chapter 8.8).
- **External input:** Flux Go Flat can be controlled by external devices via the digital and/or analogue input(s) (a detailed description can be found in Chapter 8.8).

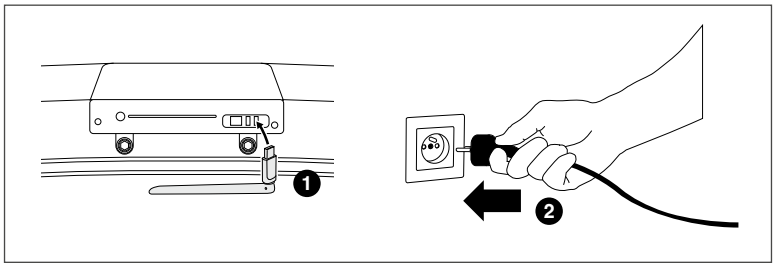
7.2 • Connecting to the network

Please refer to the instructions in Chapter 8.5.

7.3 • Connect to the mains voltage

Flux Go Flat can be fitted in 2 ways:

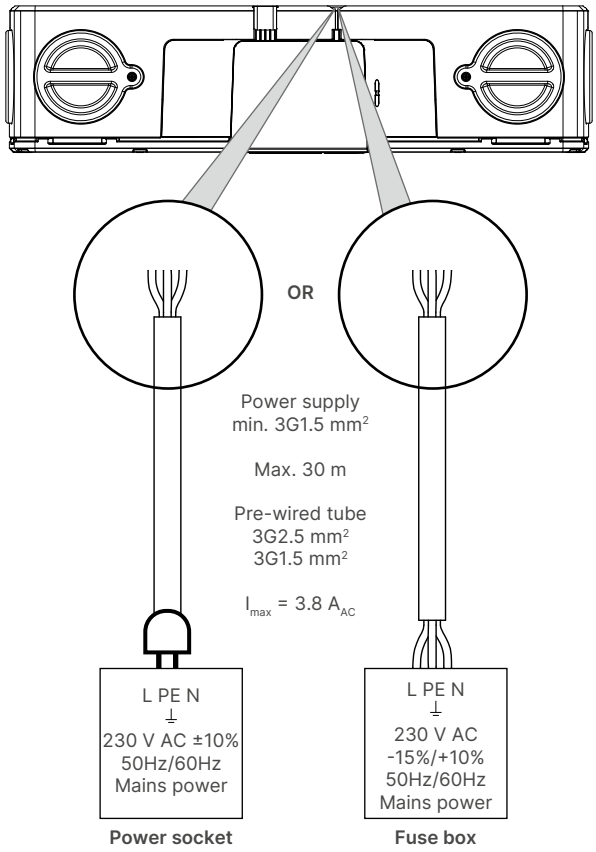
1. By plugging the supplied power cable into the socket (the socket should be in an easily accessible place). The socket must be within 400 mm of the unit.



2. By connecting directly to the fuse box. The wires of the cable must be stripped 6 mm before they are connected to the connection connector.

NOTE

If the Flux Go Flat is connected directly to the fuse box, an automatic circuit breaker must be provided in the latter that can disconnect the Flux Go Flat from the power supply network.
This unit must be of the double-pole type, must be directly connected to the Flux Go Flat, and must be able to withstand category III overvoltages.



The installation and electrical connection of the various components may only be carried out by authorised personnel in accordance with the applicable safety measures.

8 • Starting up the Flux Go Flat

In this chapter we take you, the installer, through the installation flow of the unit.

The start up and calibration of the unit can only be carried out with the installation webpage.

TIP

An internet or (WiFi) network is not required to calibrate the unit. A dongle is sufficient for calibration.

8.1 • Before starting the regulation

Extreme weather conditions, strong winds for example, can affect the operation of the system. Avoid adjusting the Flux Go Flat in these circumstances.

Before starting the automatic calibration it is important to:

1. Close all the windows and doors
2. Preferably close interior doors
3. Stop all other installations that bring outside air in or send indoor air out.

8.2 • Start up

The constant flow feature ensures that setting the desired design flow rates can be done in a traditional way.

1. Power up the unit and ensure the Wi-Fi dongle is installed.
   - Start up check: the operating system of the unit has started up (this takes about a minute).
   - The configuration check then takes place: the fans first speed up briefly and then continue to run at the minimum speed. The bypass valves are also adjusted.
2. Feedback (LED) during the start up phase
   - A complete overview of how the unit's LEDs behave during start up can be found in Section 8.4.

8.2.1 • Calibration via the installation webpage

- Guide through the installation process
- Desired nominal air flow rates can be set/adjusted in a simple manner
- Configuration (L/R) can be easily adjusted

After calibration, the following actions can be taken:
- Reading data from the device
- Connecting the device to a home network, if already present

8.2.2 • Error codes at start up

Two types of faults are defined:
- **Error:** the unit is experiencing a serious malfunction and will shut itself down.
- **Warning:**The unit has a fault, but can/will continue to operate.

The faults can be resolved in many ways:

- **Installation webpage**
  - If an error occurs during calibration, it is displayed in the error overview (menu).

    How to continue the installation process?

Error	Requires corrective action to continue the installation process.
Warning	Taking corrective action is advised. However, the installation process can continue without corrective action.

- **Fan unit**

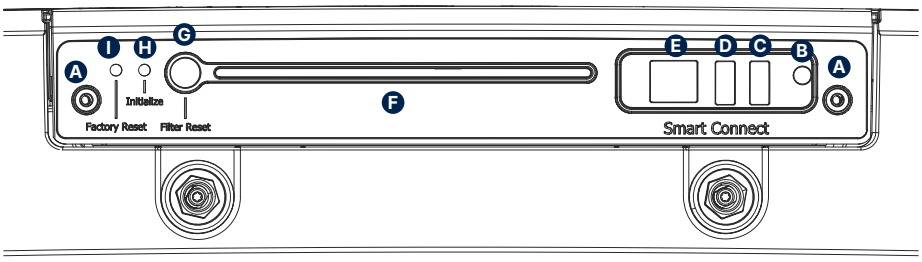
  The LED bar always shows the status of the unit, see Section 8.4.

REMARK

If the unit is without power for a short time, all error messages will be deleted.

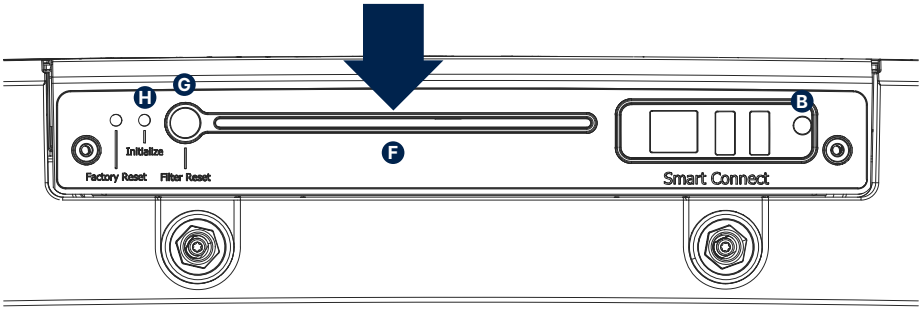
8.3 • Operating functionalities

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 indication LED.



Pos.	Name	Job title
A	Mounting screws	These should only be removed by an installer who has completed the training to replace the main circuit board.
B	Smart Connect button/LED	• If this button is pressed briefly, the unit will be in “Access Point mode” for 4 hours via the Wi-Fi dongle. You can connect the installer app to the unit. • If this button is pressed for 5 to 15 seconds, the link between your Wi-Fi dongle and your linked network will be broken. Use a pen to push the knob in.
C	USB port 2	A Wi-Fi dongle or RF dongle can be plugged in here. The choice is free in which USB slot this is placed. The USB port can be used to: - Wifi dongle: communication with the home network and/or directly with the installation app. - RF dongle: communication with the Sense room sensor(s)
D	USB port 1	
E	Ethernet connection	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:** Connecting the device via cable has the most stable solution.
F	Status LED module	Changes colour depending on the status of the unit (see below for more explanation about the different colour codes).
G	Filter reset/Authorisation button (large button)	After cleaning the filters, you must reset the filter message. Do this by pressing it for 5 to 15 seconds. This large button is also used to complete authentication via the application.
H	Initialisation button	Operating the unit in nominal mode (= C mode with the nominal flow rates). This mode can only be activated when your unit has been successfully calibrated. Take a fine object to press the button.
I	Reset button	Reset to factory settings by pressing the button for more than 15 seconds. Use a pen to push the knob in.

8.4 • Status LED module



White

The status LED (F) lights up continuously white. The unit starts up. This is what you will see when the unit is switched on.
The LED will go out briefly after a short time. This is the time when the configuration is checked.
Please note: during the start up phase, a connection cannot be made with your unit via the installation webpage.

LIGHT BLUE

The status LED (F) flashes to indicate that you need to complete the authentication. To do this, press the Filter Reset/Authorisation button (G), the LED will then light up continuously for a short time. This indicates the authentication was completed successfully.

GREEN

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

BLUE

The status LED (F) lights up continuously blue. This means c-mode has been activated and your unit is now running at its set nominal mode. In this mode you can also measure the air flow rates at the various ventilation openings to check the air flow rates are correct.

RED

The status LED (F) flashes red slowly. This indicates that a critical problem has occurred with the unit. We recommend using the installation webpage to obtain more information about the error that has occurred (see Warning Section 8.2.2).

YELLOW CONTINUOUS

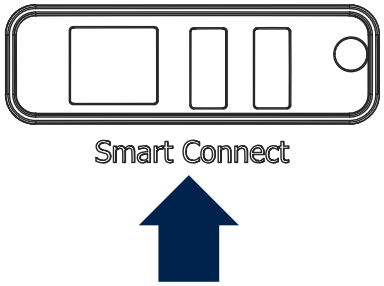
The status LED (F) lights up continuously yellow. This indicates that a critical problem has occurred with the unit. You can easily investigate what the problem is via the installation webpage (see Error Section 8.2.2).

YELLOW FLASHING

The status LED (F) flashes yellow quickly. This is an indication that the filters need to be cleaned. Cleaning/ replacing filters is described in Section 9.2. After doing this, press the “Filter Reset (G)” button for 5 seconds to state that the filter has been cleaned correctly, the filter message will be reset automatically.

8.5 • Connect to network (Smart Connect)

8.5.1 • Wi-Fi dongle



The Wi-Fi dongle must be plugged into one of the USB ports of the Renson Flux Go Flat Smart Connect zone. The Wi-Fi dongle can then be used to connect Renson Flux Go Flat with:

1. Installation webpage
   Scan the QR code on the Flux Go device for the step-by-step plan (Renson Flux Go Flat works in “Access Point mode”).

2. Home network (Wi-Fi)
   The connection to the Wi-Fi home network can be done with both the app for the user and the installation webpage (Renson Flux Go Flat works in “Client mode”). Flux Go Flat is only compatible with a 2.4GHz Wi-Fi network.

TIP

- If Renson Flux Go Flat is connected to a network via the “user app”, the connection between the installation webpage and Renson Flux Go Flat is also possible via the Wi-Fi dongle.
- If a Wi-Fi dongle is unplugged and then plugged in again:
  - In Access Point mode: the connection must be made again
  - In Client Mode: the connection to the network will be reconnected automatically (even if the Wi-Fi dongle is plugged into the other USB port).
- If the Status LED module lights up white, the Renson Flux Go Flat cannot connect to the network.

- **Wi-Fi dongle activation**
  - Plug Wi-Fi dongle in Smart Connect
  - Power up the unit and wait approximately 1 minute
  - Renson Flux Go Flat automatically opens up for 4 hours to connect to the installation webpage. Pressing the button ends the open process for connection.

After the 4 hours have elapsed, Renson Flux Go Flat can be reactivated for 4 hours by inserting a thin object in the corresponding hole (button B page 65).

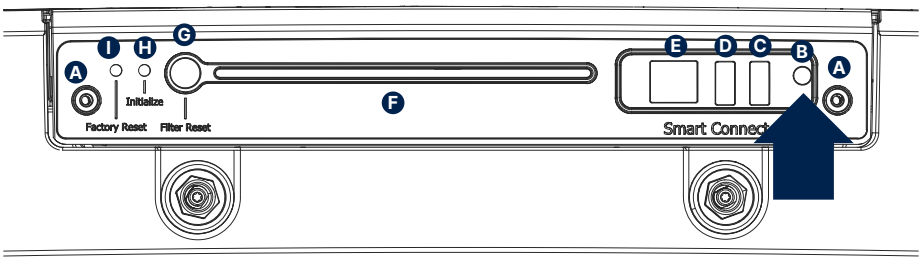
- **Reset Wi-Fi dongle**
  Long press (between 5 and 10 seconds) on the button in the hole.
  → Disconnect the link with the home network (Wi-Fi) and/or the installation webpage. Activation can then reconnect to a (different) Wi-Fi home network or the installation webpage.

  Resetting may be necessary in the following circumstances:
  - To connect Renson Flux Go Flat to another network.
  - Renson Flux Go Flat can no longer connect to the installation webpage or the home network.

8.5.2 • LAN connection

Plug a network cable in to the LAN connection for a fixed cabling alternative to the Wi-Fi dongle. The connection can be used to connect Flux Go Flat to the home network via a network cable.

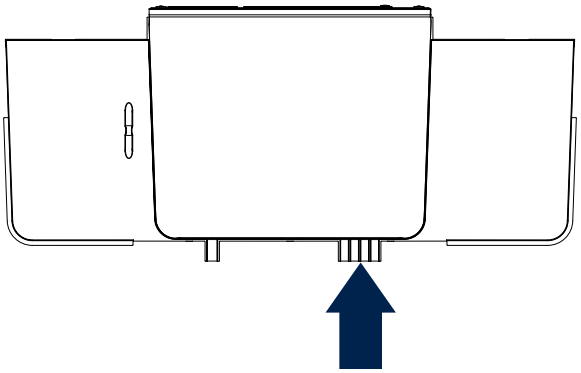
8.6 • USB Smart Connect LED



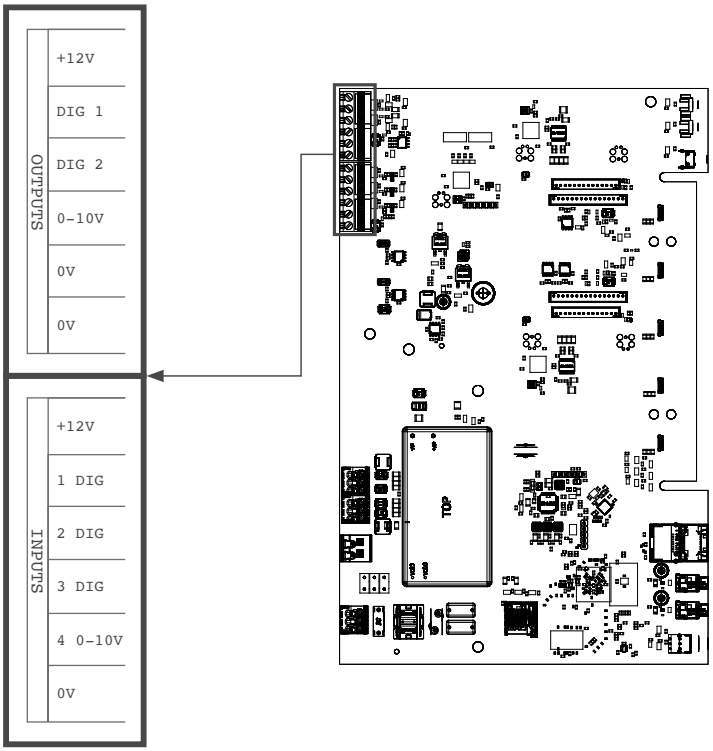
Access point active (connection between smartphone and unit) via (C) or (D)	Client active (connection of unit to home network)	LED code (B)
NO	NO	LED off
NO	YES	Lights up (the LED flashes quickly during connection)
YES	NO	Flashes slowly
YES	YES	Lights up (blinks briefly when Access point is activated)

8.7 • Connecting the Flux Go Flat with electronic peripherals

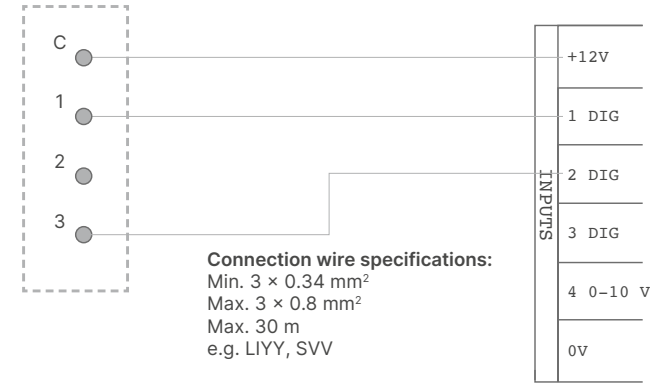
The Flux Go Flat can be connected to electronic peripherals. The provided recess can be used to route the cables outside the Flux Go Flat.
You must route the cables this way:



8.8 • Link via main circuit board inputs and outputs



8.9 • 3-Position Switch (XVK3)



Connection wire specifications:
Min. 3 × 0.34 mm²
Max. 3 × 0.8 mm²
Max. 30 m
e.g. LIYY, SVV

1. Position: Min. level = 30%
2. Position: Demand management
3. Position: Boost level = 100%

External switch

Main circuit board Flux Go Flat

REMARK

This means contact 2 does not need to be connected, contact 3 is connected to “2 DIG”.

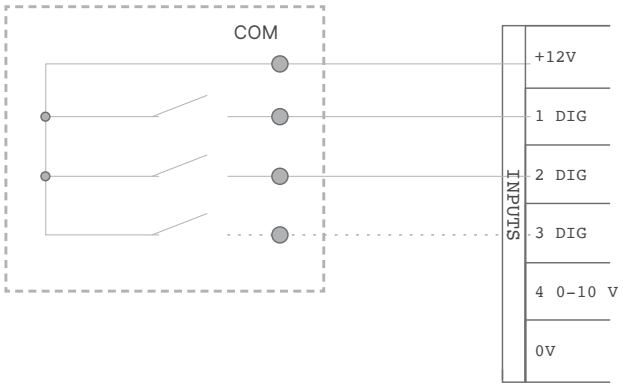
8.10 • Circuit diagrams for home automation

8.10.1 • Digital inputs

The digital inputs can be controlled in 2 different ways:

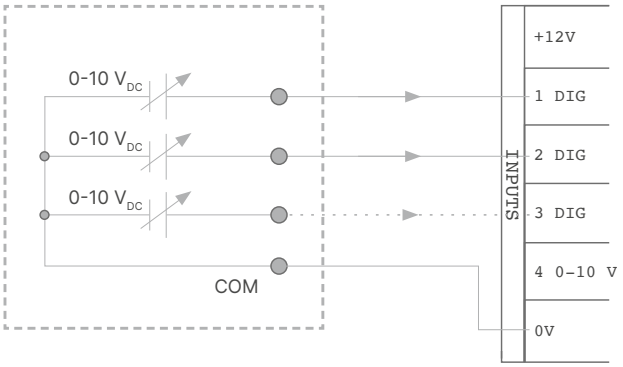
1. **Potential-free contact:** via a continuously closed contact

Principle sketch:



External switch Main circuit board Flux Go Flat

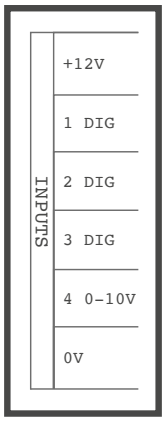
2. **Voltage control:** via a continuous signal; → [0-1.5 VDC] sends a logic LOW, —> [5-10 VDC] a logic HIGH



External control Main circuit board Flux Go Flat

8.10.2 • Analogue input

No function is associated with the analog input (0-10V).



8.10.3 • Functional logic

The functionality of the inputs is firmly defined:

8.10.3.1 • Digital input

Closed contact or logic HIGH on the input	Operating status Flux Go Flat
1 DIG	Minimum position (1) - Demand control inactive
2 DIG	Boost position (1) - Demand control inactive

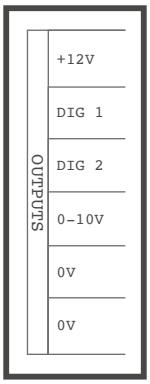
(1) After a period of 12 hours, the demand response of the Flux Go Flat is reactivated.

If there is no control at the input, the Flux Go Flat works in demand control (automatic mode).

8.10.3.2 • Analogue input

Currently no function assigned.

8.10.4 • Digital output



Functional logic:
- Contact DIG 1: display if there is an error/warning on the device (incl. notification filter)
- Contact DIG 2: filter warning of the device

9 • Maintenance

9.1 • 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. This maintains efficiency and energy consumption. In addition, there are other inspections and cleanings that best take place on components such as valves, condensate drain, fans, air ducts, among others.

Through the link below you can find the frequency per component:
https://renson.net/gd-gb/blog/ventilation-system-maintenance-vital-but-often-forgotten#d-system

9.2 • Cleaning and replacing filters

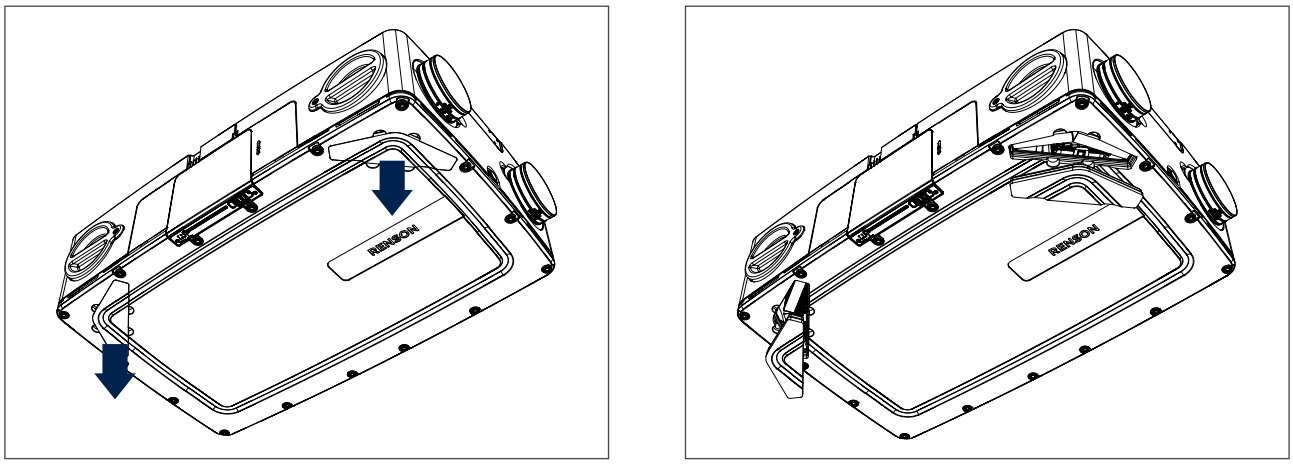
Do not use sprays, abrasives, detergents, solvents or chlorine-containing cleaning agents. They can cause damage to the unit. Clean Flux Go Flat with a damp cloth and a little solvent-free soap.

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. As a result, the unit displays that the filter needs to be replaced (see Section 8.4 for more information about the filter message).

NOTE

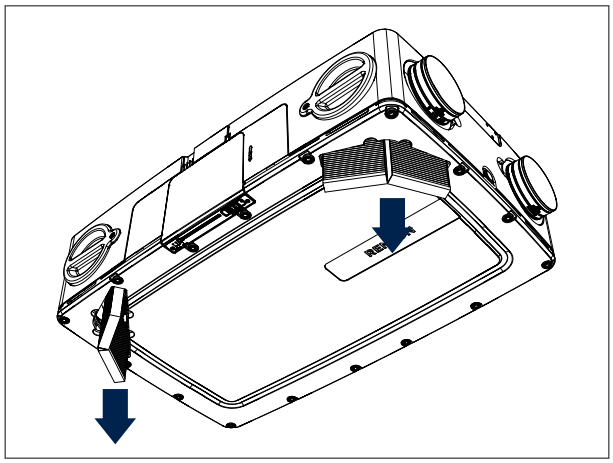
First ensure there is no power applied to the unit. To do this, remove the plug from the wall socket or switch off the machine.

1. Remove the filter covers.



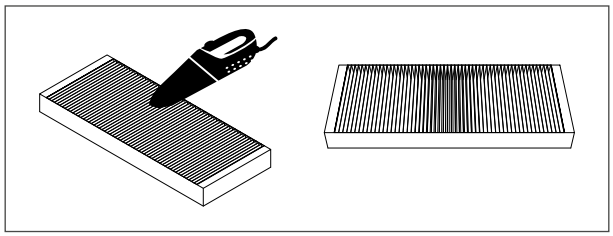
Removing the filter covers.

2. Replace or clean the filters, according to the stated maintenance intervals (see Section 9.1 Periodicities)



Removing the filter to clean or replace the filter.

3. 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 patented hinged filter ensures the filters cannot be fitted in the wrong direction. An innovation from Renson.

5. Press the large button (see Section 8.4) to reset the filter message. This means you can enjoy the unit again without any worries.

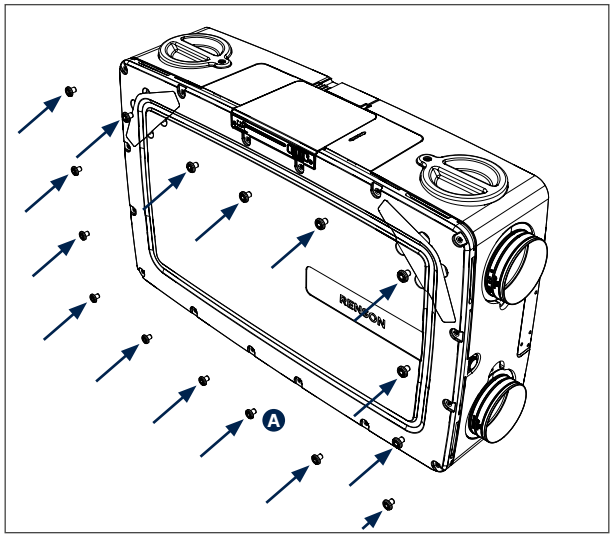
9.3 • Cleaning the heat exchanger

You can clean or replace the heat exchanger. In either case, you must follow the procedure below to remove the heat exchanger.

NOTE

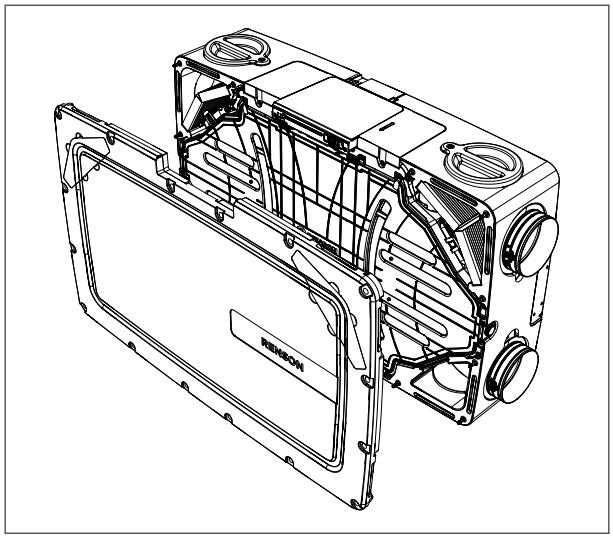
First ensure there is no power applied to the unit. To do this, remove the plug from the wall socket or switch off the machine.

1. Unscrew the cover (16 screws).

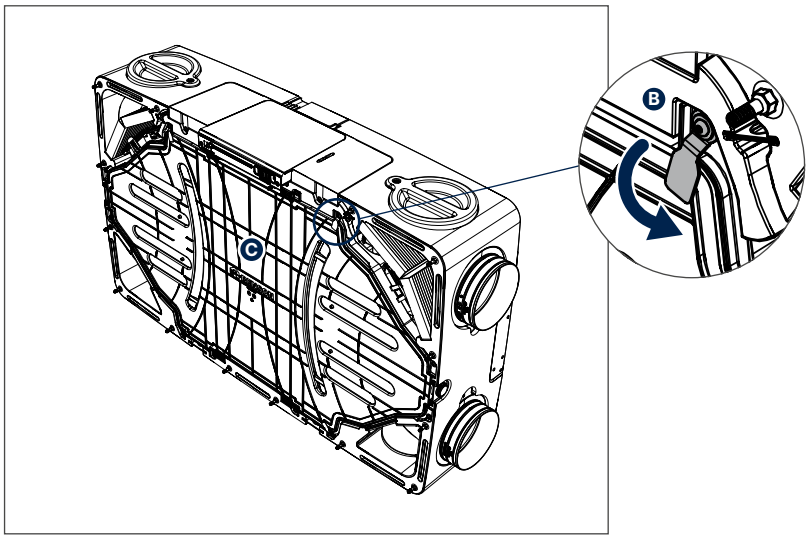


Loosen all 16 UPVC screws (A) before removing the cover.

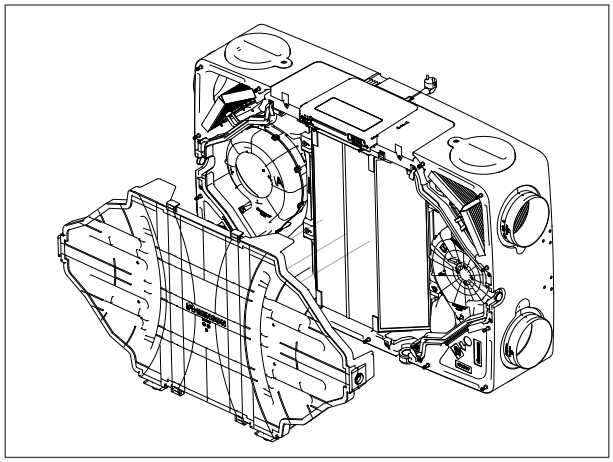
2. Remove the cover.



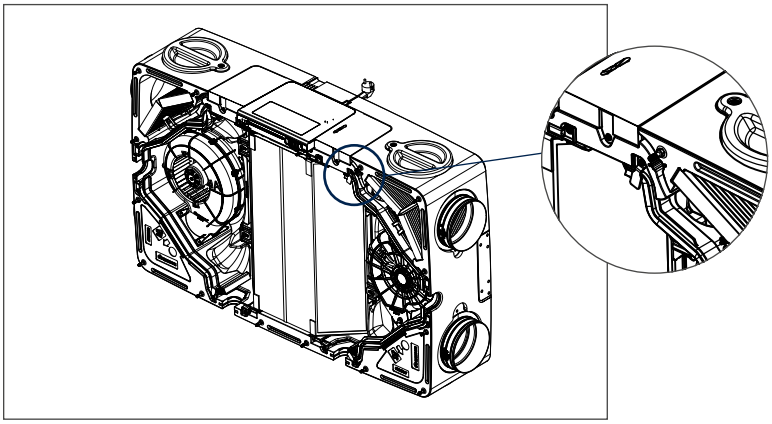
3. Unscrew the tabs (B) of the condensation collection tray (C) one turn and turn the tabs a quarter turn.



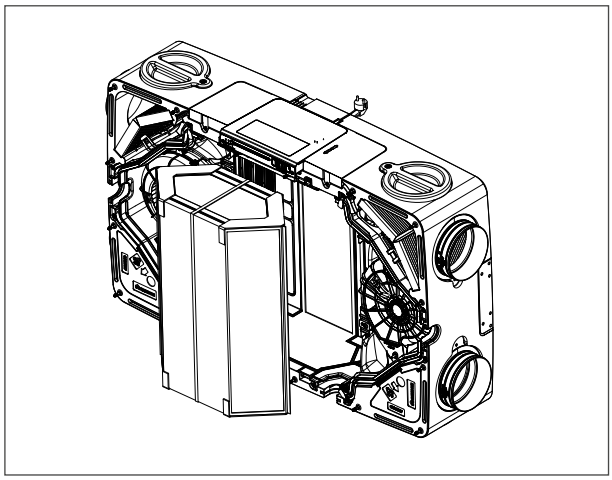
4. Remove the condensation collection tray.



5. Unscrew the heat exchanger retaining clamps (4 x) one turn and slide them out.

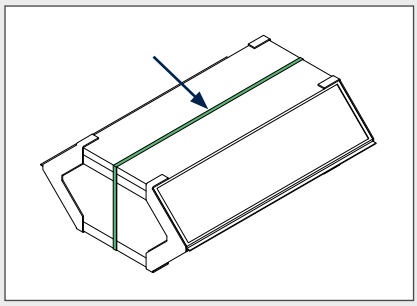


6. Remove the heat exchanger.



TIP

You can hold the heat exchanger by the green strap.



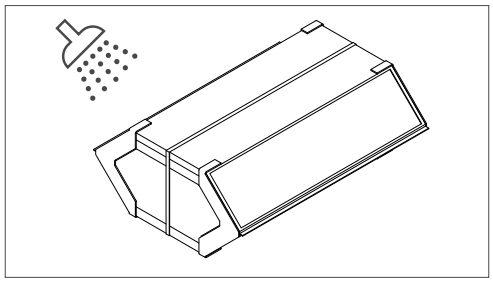
7. You can now clean the heat exchanger with clean warm water (max. 40°C) and washing up liquid. Under no circumstances should you use aggressive or dissolving cleaning agents.

– Rinse the heat exchanger sufficiently with clean warm (max 40°C) water.

NOTE

Shake the water out of the heat exchanger and let it dry before placing it back in the unit.

– Make sure you place the heat exchanger back in the same position



8. Replace all components in reverse order and close the unit.

TIP

The anti-compression screws are limited so they cannot be broken.

9.4 • Cleaning the sensors

This chapter describes how the sensors can be cleaned if they are dirty. Always replace your filters in good time; your filters protect the internal components in the unit and guarantee that everything will continue to work properly. This also allows you to avoid having to perform this time-consuming operation.

Step 1 • Remove filters: remove both filters so the sensors are accessible.

Step 2 • Clip the connection box out of its socket (if you can remove one of the side caps, you may have easier access to go directly to step 4).

Step 3 • Pull the connection box out a little so you have access to the sensor.

Step 4 • Clean the sensor housing with a dry cloth to clear all the openings.

Step 5 • If necessary, clip the sensor housing open so the inside can also be carefully cleaned with a dry cloth.

Step 6 • Reassemble the unit in the reverse order.

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 adjustments 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.net**

RENSON®

RENSON® NV • Maalbeekstraat 10 • IZ 2 Vijverdam • B-8790 Waregem
Tel. +32 56 30 30 00 • info@renson.be • www.renson.net

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