



PARTNER  
IN VENTILATION  
2VV.CZ

EN

# Whisper Air

INSTALLATION, COMMISSIONING AND OPERATION



4-118-0311

ver. 1 29.05.20

EAC

CE

# 1. BEFORE STARTING

Please familiarize yourself with the following symbols below to assist in the set up of the unit.

Symbol	Meaning
	Warning or Caution
<b>ATTENTION!</b>	
<b>PLEASE NOTE!</b>	Important instructions
<b>YOU WILL NEED</b>	Practical tips and information
<b>TECHNICAL INFORMATION</b>	Detailed technical information
	Reference to a different part of the manual



Before installing the unit, **read carefully the section on the safe operation of the heat recovery unit.** You will find instructions on the safe an proper use of the product.

This manual includes important instructions for safe connection of the ventilation unit. Before connecting the unit, please read carefully and follow all instructions below! The manufacturer reserves the right to make changes including technical documentation without previous notification. Please keep this manual for further references. Consider this manual an integral part of the product.

## EC DECLARATION OF COMPLIANCE

The product was designed, and manufactured to comply with all relevant provisions and is in compliance with the requirements of the European Parliament and Council of the EU, including the amendment, which it was classified under. It is considered safe when installed in the specified conditions and operated according to the instructions of the operations manual. It was assessed according to harmonized European standards listed in the relevant EC declaration of conformity.

For the current and full version of the EC declaration of conformity visit [www.2vv.cz](http://www.2vv.cz)

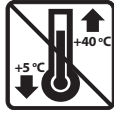
## 2. UNPACKING

### PLEASE CHECK THE DELIVERED PRODUCT



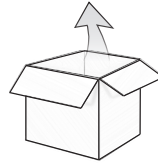
#### PLEASE NOTE!

- Unpack the product upon delivery and inspect for damages. In case of damage, inform and file a report with the carrier.
- Any claims that have not been filed in due time, will be disregarded later.
- Check that you have received the model ordered. Should the delivered model differ from the one ordered, do not unpack the unit and contact the supplier immediately.
- After unpacking, check that the unit and accessories are in good order. Contact the supplier in case of any doubt.
- Do not attempt to commission a damaged ventilation unit.
- If unit is not intended for immediate installation, it must be stored in a dry room with a temperature range of **+5 °C to +40 °C**.
- This product must not be used by persons (incl. minors) with mental or physical disabilities, or insufficient experience or knowledge in the safe use thereof, unless they are supervised or instructed on how to use the product by a person responsible for their safety.
- Do not let children play with the unit.

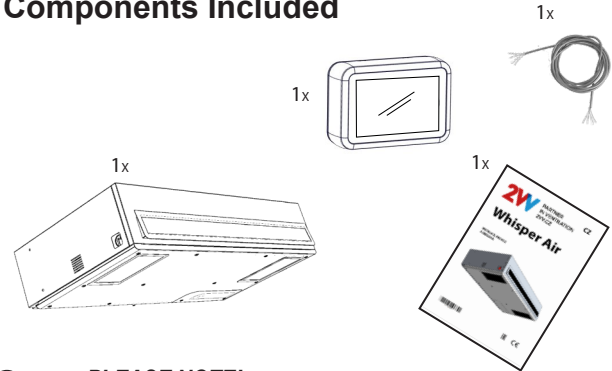


	<p>All the packing material is environmentally friendly and can be reused or recycled. Please, contribute actively to the protection of the environment and procure the regular disposal or recycling of packing materials.</p>	
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### UNPACKING THE UNIT



#### Components Included

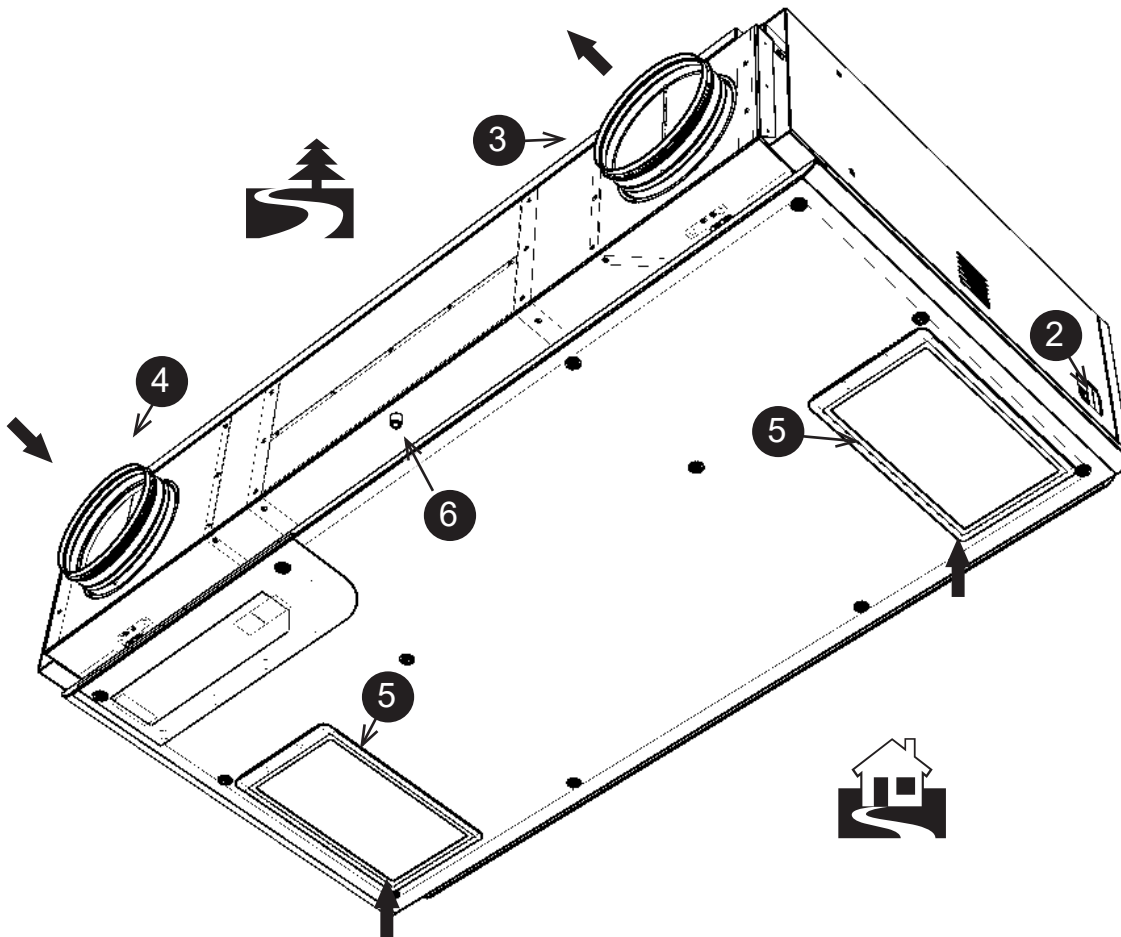
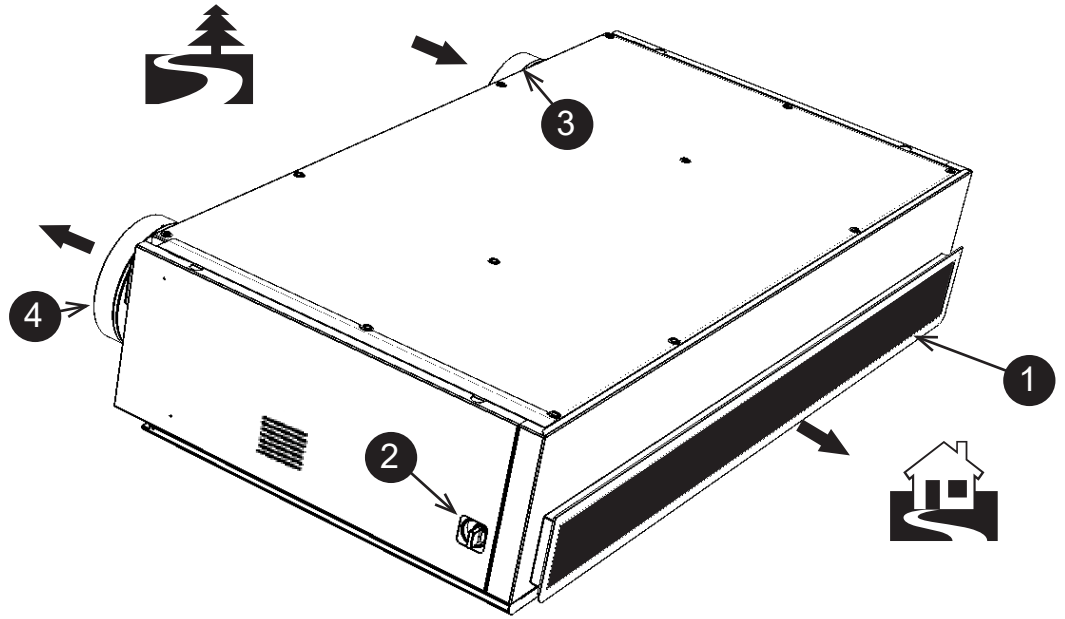


#### PLEASE NOTE!

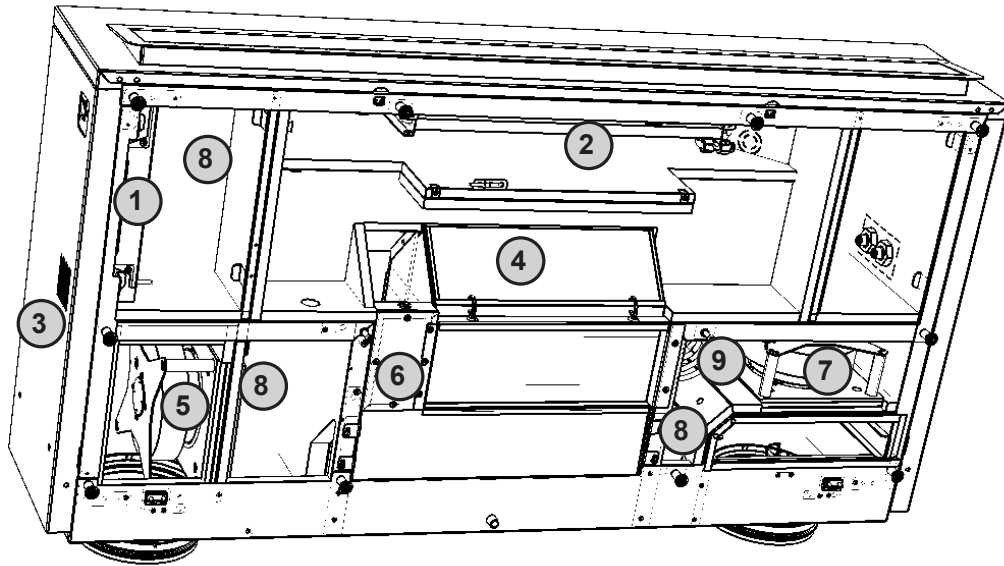
- If the ventilation unit was exposed to temperatures lower than 0 °C during transport, please unpack unit and let it sit at room temperature for at least 2 hours before connecting the unit in order to balance temperature inside unit.

### 3. MAIN COMPONENTS

1	Outlet grill with Straw system
2	Main power switch
3	Outside fresh air duct with spring loaded damper
4	Outside exhaust air duct with spring loaded damper
5	Inlet grill with Straw system
6	Condensate drain



## 4. SPARE PARTS

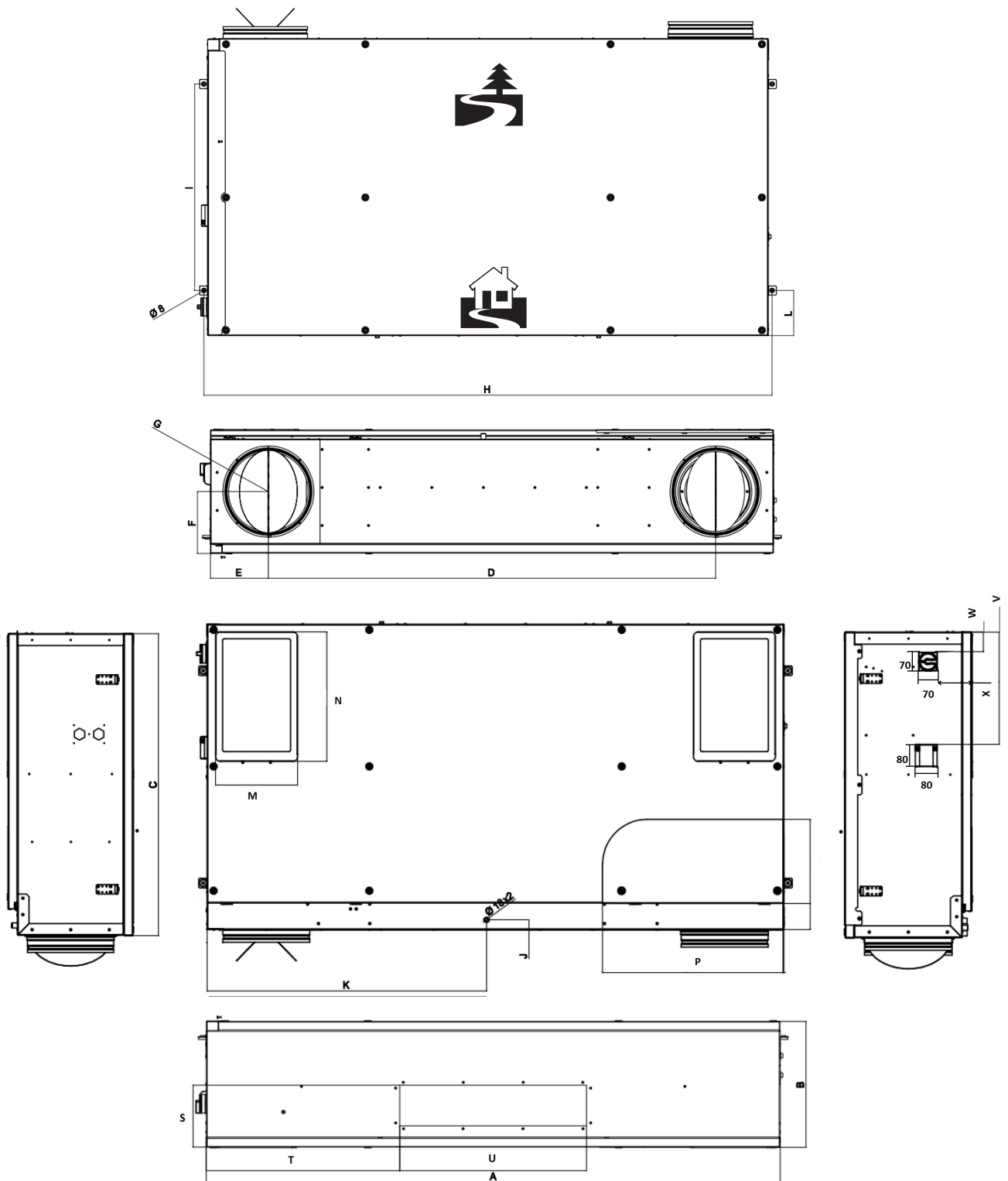


Number	Description
①	Controls
②	Water coil
	Electric heater
③	CO <sub>2</sub> sensor
④	Heat exchanger
⑤	Fan motor (exhaust air)
⑥	Actuator for the bypass
⑦	Fan motor (fresh air)
⑧	Pressure sensor
⑨	Preheater



# 4. DIMENSIONS

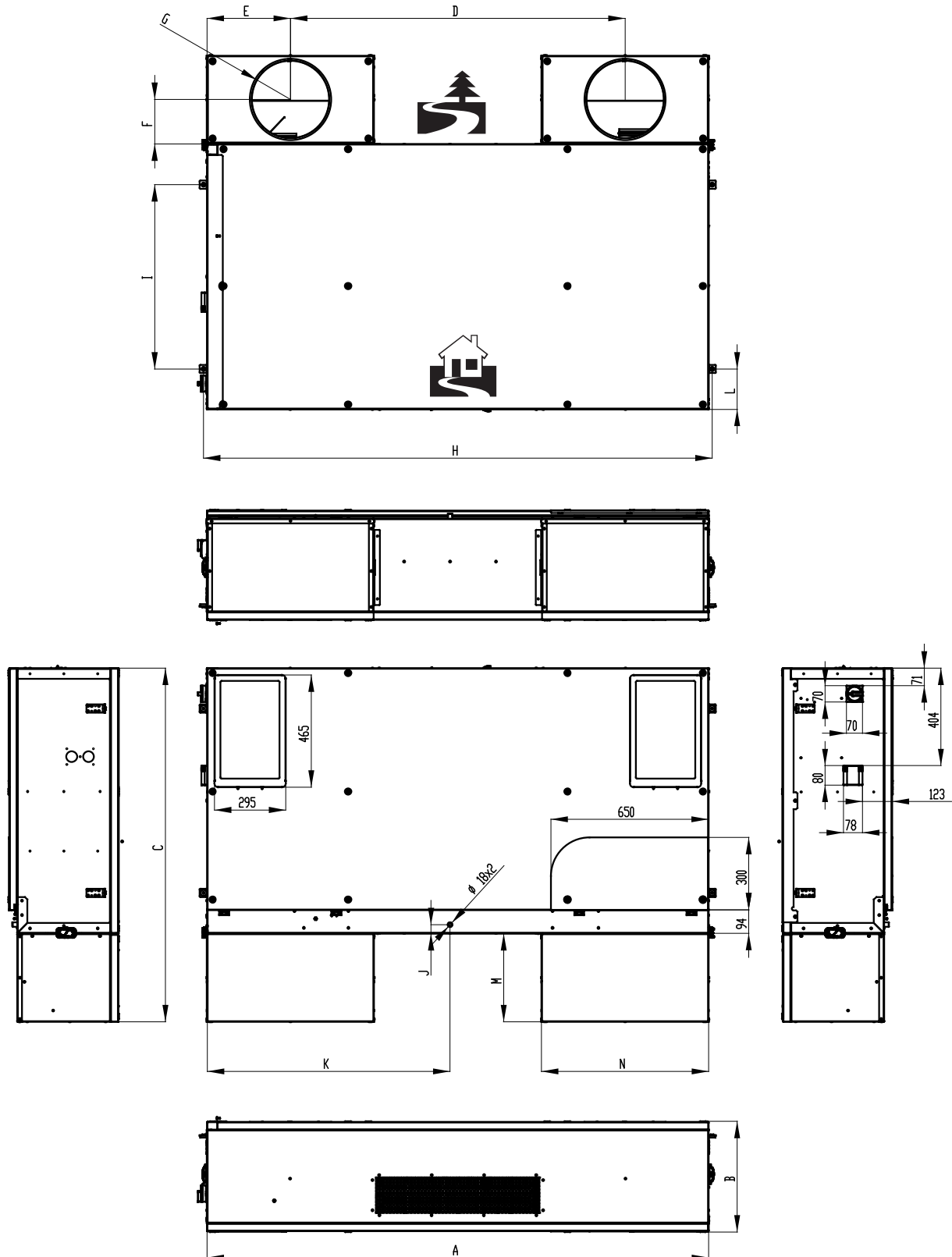
## STANDARD



	[mm]																							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
HRWA2-040	1806	398	940	1408	182	198	250	1835	689	32	875	143	265	446	875	600	212	90	145	558	686	384	53	70
HRWA2-070	2078	455	1098	1649	213	228	315	2105	763	37	1006	167	295	465	1006	650	302	94	223	701	676	404	71	123
HRWA2-100	2406	573	1262	1920	243	288	315	2435	962	31	1203	150	420	550	1203	625	303	104	243	642	1122	500	169	243

# 4. DIMENSIONS

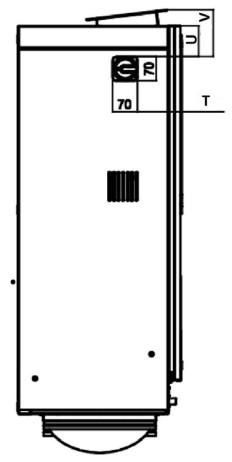
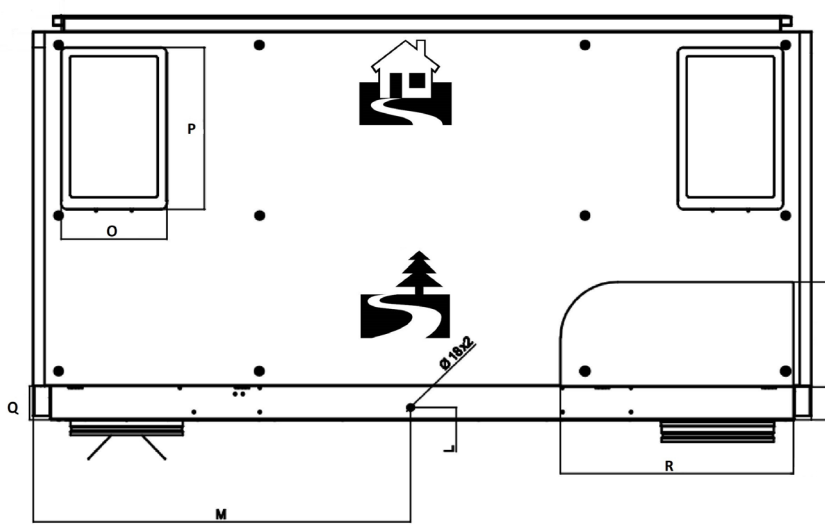
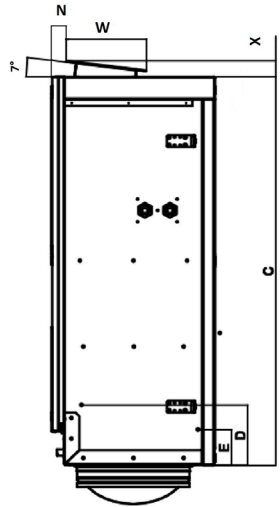
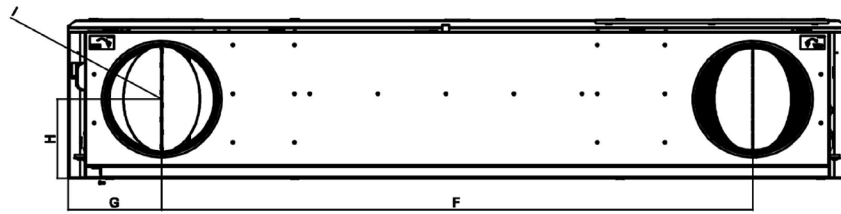
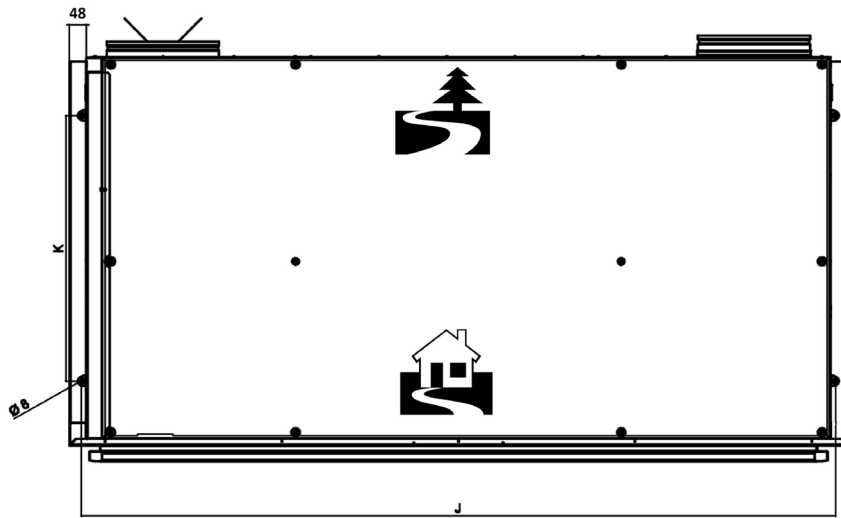
## STANDARD UPPER



	[mm]													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
HRWA2-040	1806	398	1242	1206	300	154	250	1835	689	32	875	143	302	600
HRWA2-070	2078	455	1465	1385	393	185	315	2105	763	37	1006	167	365	695
HRWA2-100	2406	573	1630	1605	400	186	315	2435	962	31	1203	150	367	802

# 4. DIMENSIONS

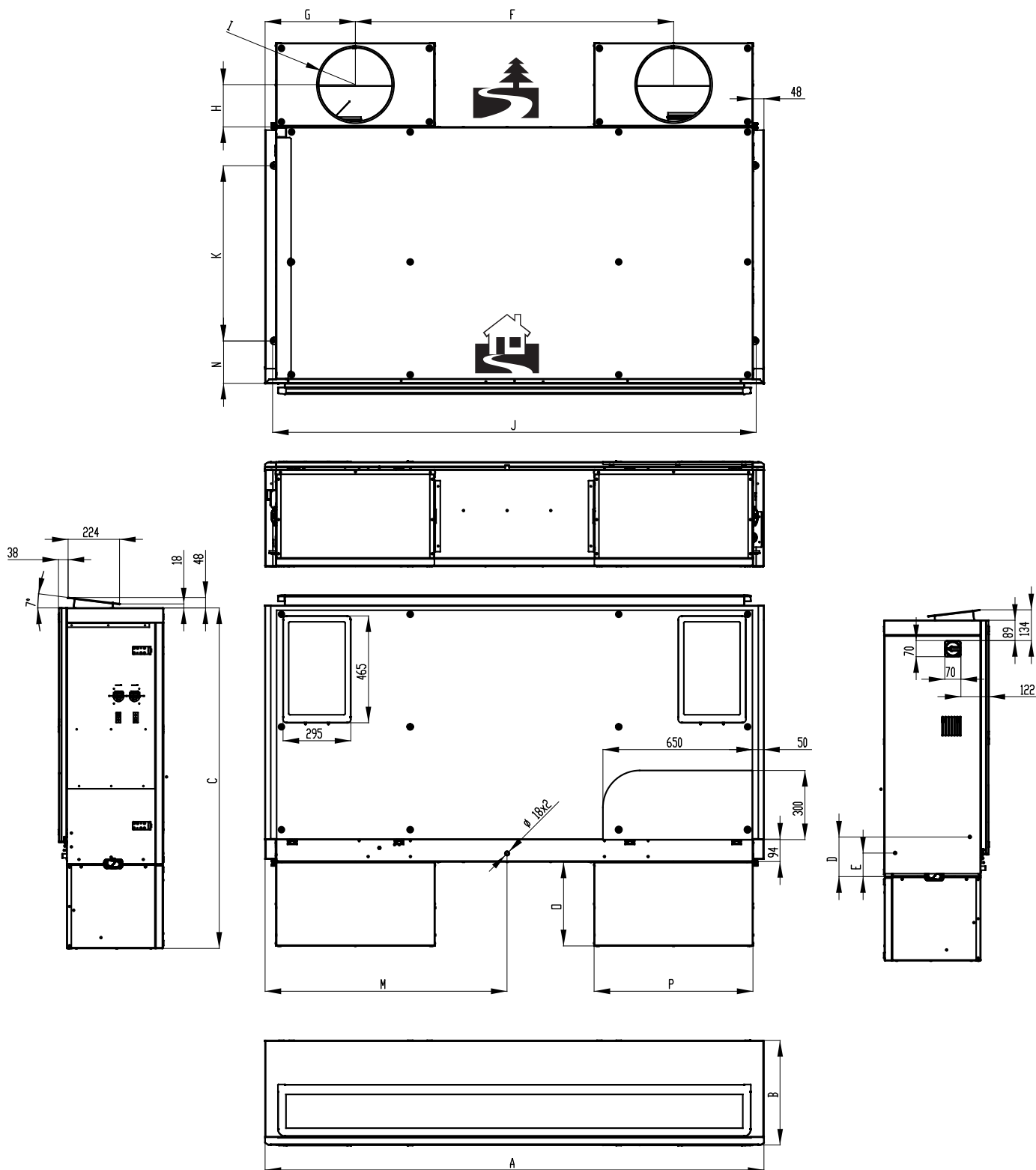
# DESIGN



	[mm]																							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
HRWA2-040	1901	397	963	195	165	1408	228	198	250	1835	689	32	922	45	265	446	88	600	212	70	74	120	179	46
HRWA2-070	2171	455	1116	172	102	1649	261	228	315	2105	763	37	1054	38	295	465	96	650	302	123	89	134	224	46
HRWA2-100	2501	575	1280	167	97	1920	291	288	315	2435	962	31	1251	64	420	550	104	625	303	244	184	230	224	46

# 4. DIMENSIONS

## DESIGN UPPER



[mm]

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
HRWA2-040	1901	397	1265	195	165	1206	338	154	250	1835	689	32	922	165.5	302	600
HRWA2-070	2171	455	1485	172	102	1385	393	188	315	2105	763	37	1054	185	365	695
HRWA2-100	2501	575	1647	167	97	1605	449	186	315	962	962	31	1251	169	367	802

## 5. TECHNICAL PARAMETERS

Type	Maximum air flow [m³/h]	Intake filter class	Exhaust filter class	Frequency [Hz]	Voltage, current and power consumption for different heat recovery units [number of phases / V / A / W]			Weight* [kg]
					HRWA1-...-S0...	HRWA1-...-E1...	HRWA1-...-V1...	
HRWA1-040-E...	400	EPM 1 55% (F7)	Coarse 60% (G4)	50	1 / 230 / 9,2 / 1840	1 / 230 / 15,8 / 3340	1 / 230 / 9,2 / 1840	94
HRWA1-040-X...	400	EPM 1 55% (F7)	Coarse 60% (G4)	50	1 / 230 / 2,7 / 340	1 / 230 / 9,2 / 1840	1 / 230 / 2,7 / 340	93
HRWA1-070-E...	700	EPM 1 55% (F7)	Coarse 60% (G4)	50	1 / 230 / 11,4 / 2340	3 / 400 / 9,8 / 4590	1 / 230 / 11,4 / 2340	128
HRWA1-070-X...	700	EPM 1 55% (F7)	Coarse 60% (G4)	50	1 / 230 / 2,7 / 340	1 / 230 / 12,5 / 2590	1 / 230 / 2,7 / 340	127
HRWA1-100-E...	1000	EPM 1 55% (F7)	Coarse 60% (G4)	50	3 / 400 / 7,5 / 3770	3 / 400 / 11,8 / 6770	3 / 400 / 7,5 / 3770	151
HRWA1-100-X...	1000	EPM 1 55% (F7)	Coarse 60% (G4)	50	1 / 230 / 5 / 770	3 / 400 / 9,3 / 3770	1 / 230 / 5 / 770	150



The listed weight is valid for the heaviest unit in a given class  
The rest of technical data can be found in the technical catalogue

## 6. INSTALLATION

### Select unit location

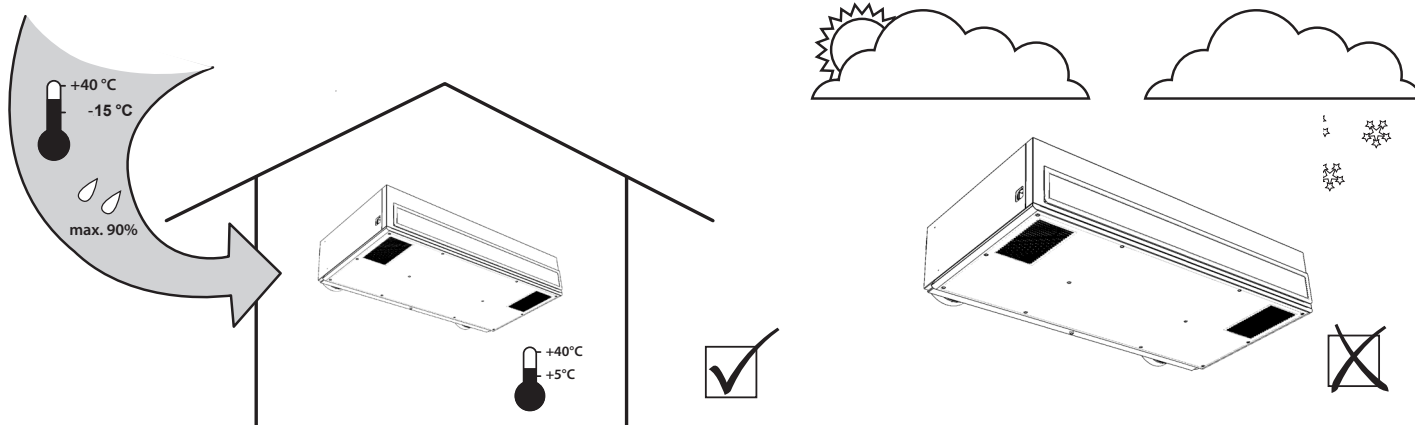


It is recommended that a ventilation system should always be designed by a licensed HVAC designer or Engineer.



### TECHNICAL INFORMATION

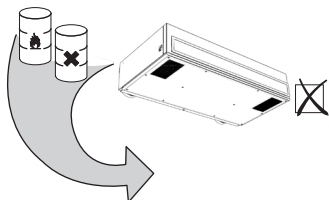
Unit is designed for indoor installation only, with an interior temperature between **+5C and 40C** .



The incoming air must have a temperature ranging from -15°C to +40°C and a relative humidity of up to 90%. If exterior air coming into the unit is lower than -15C then unit may initiate anti-frost protection mode to prevent the damage of interior components due to freezing.

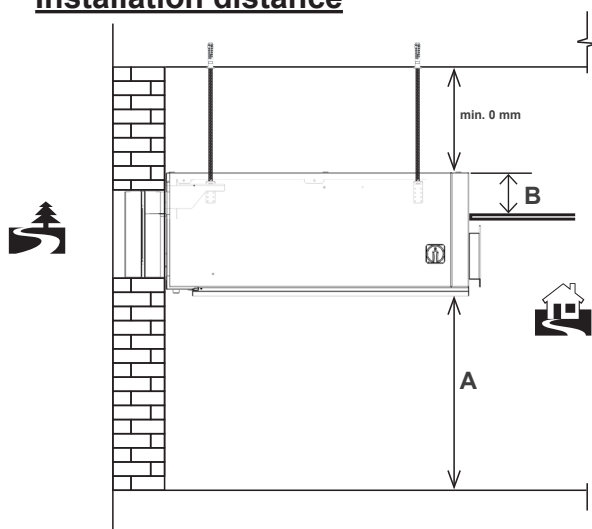
## 6. INSTALLATION

The unit is not designed to filter air containing combustible or flammable particles, chemical fumes, coarse dust, carbon, grease, poisons, bacteria, etc.



The IP protection level of the unit in the ducts is IP 20 (protection against objects bigger than 12.5 mm, does not protect against water).

### Installation distance

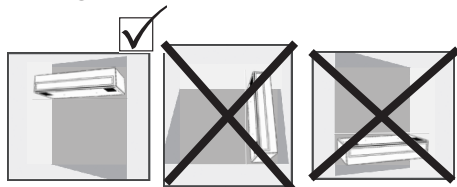


<b>A</b>	HRWA1-040	min. 1500mm
	HRWA1-070	
	HRWA1-100	
<b>B</b>	HRWA1-040	170 mm
	HRWA1-070	190 mm
	HRWA1-100	280 mm



### TECHNICAL INFORMATION

• All models of this heat recovery unit can be installed in the following position:



- Any other position is forbidden.
- The unit must be installed so that the direction of the air circulation will correspond with the air circulation in the distribution system.
- The installation must allow access for maintenance, service or disassembling. Access to unit is via bottom access panel door.

### Required distance

**CAUTION!**

The intake and exhaust vents must not be blocked by non-combustible material.

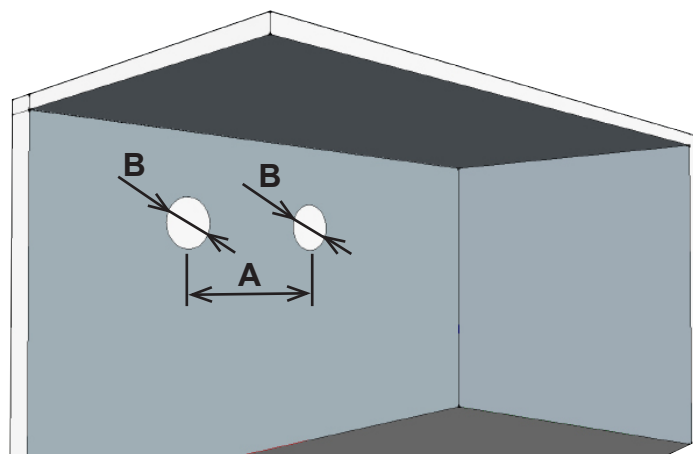
- The safe distance between combustible materials and the intake is 250 mm.

### Installing the unit

- The unit is attached to the ceiling with built-in brackets, and threaded rods, and the duct connections facing the wall.

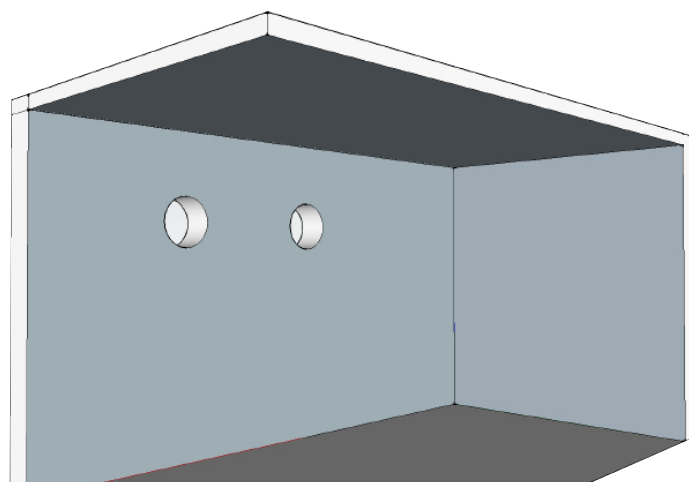
#### A) Preparing the holes for the duct connections

- 1) Measure carefully the position of the holes in the wall where the ducts are to be connected.



<b>A</b>	HRWA1-040	1408 mm
	HRWA1-070	1648 mm
	HRWA1-100	1920 mm
<b>B</b>	HRWA1-040	250 mm
	HRWA1-070	315 mm
	HRWA1-100	315 mm


- 2) Drill the holes

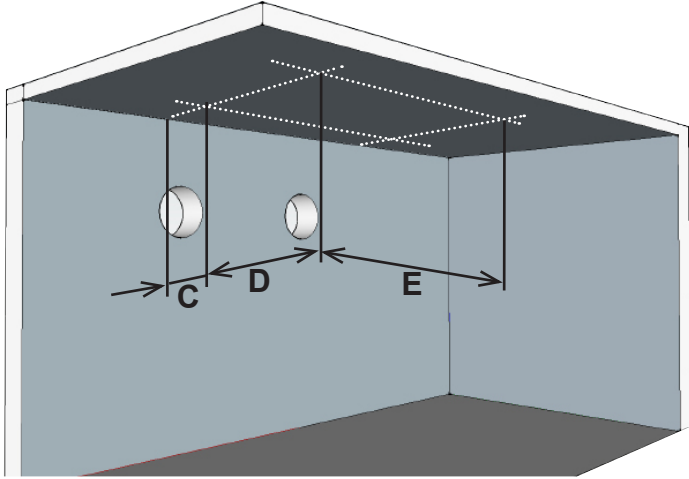


# 6. INSTALLATION

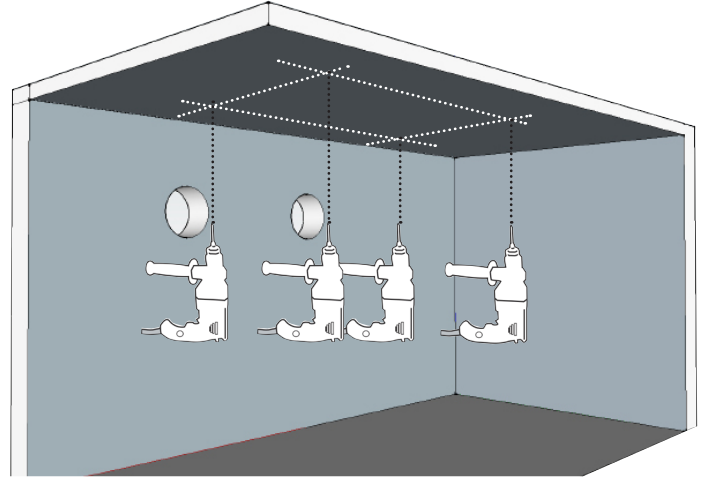
## B) Preparing mounting area on the ceiling

1) Measure carefully the position of the holes for the threaded rods

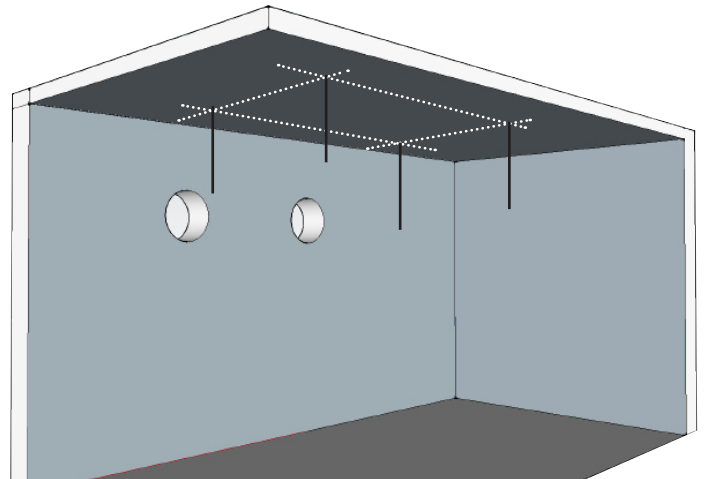
 (not included)



2) Drill the holes



3) Install threaded rods of the appropriate length

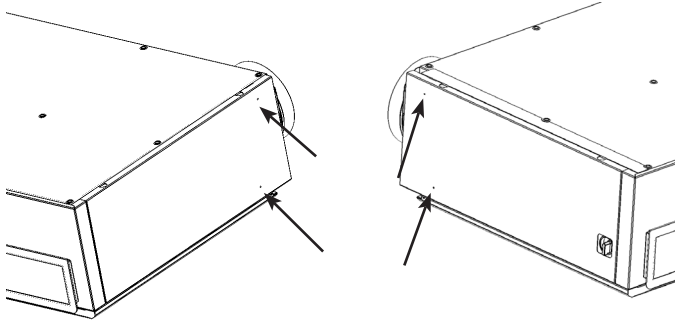


<b>C</b>	HRWA1-040	110 mm
	HRWA1-070	168 mm
	HRWA1-100	150 mm
<b>D</b>	HRWA1-040	689 mm
	HRWA1-070	763 mm
	HRWA1-100	962 mm
<b>E</b>	HRWA1-040	1835 mm
	HRWA1-070	2105 mm
	HRWA1-100	2435 mm

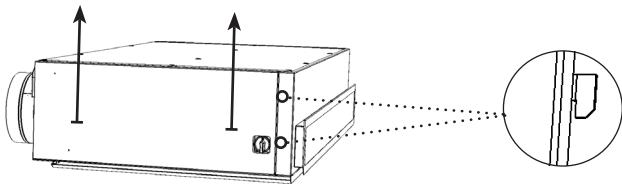
## 6. INSTALLATION

### C) Preparing the unit

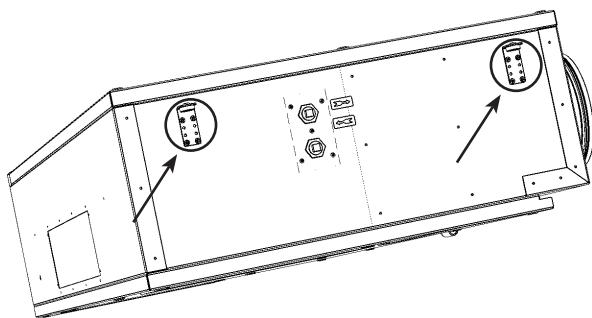
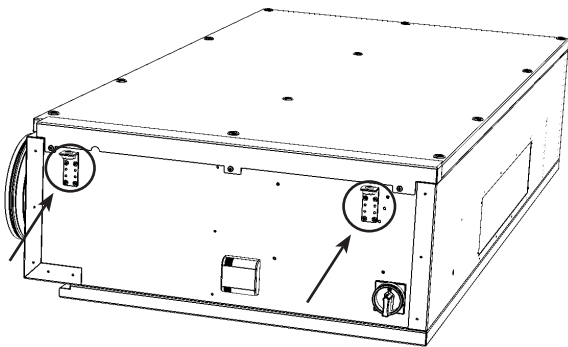
The design version may require to remove the side covers. You will need a no. 3 Allen wrench.



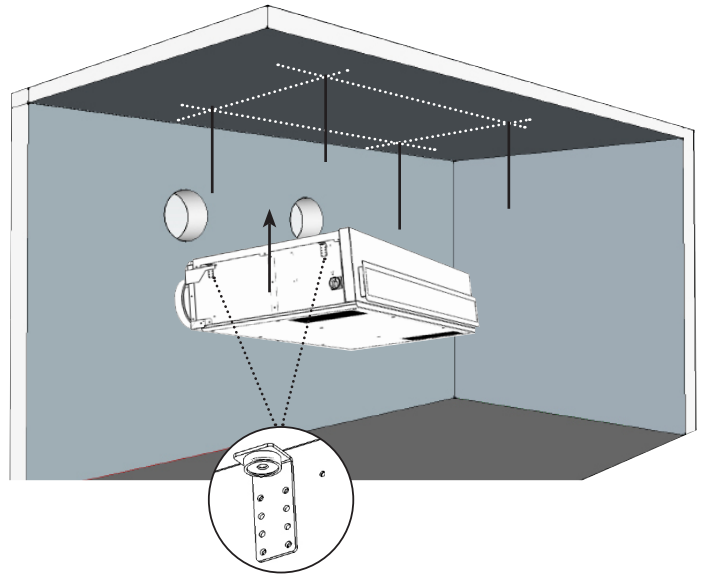
Move the cover upwards to remove it. It is secured by auxiliary brackets (see following picture).



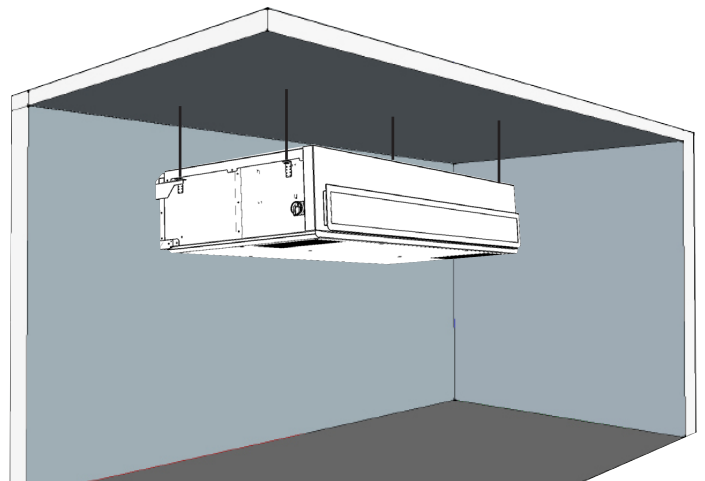
Removed cover with brackets



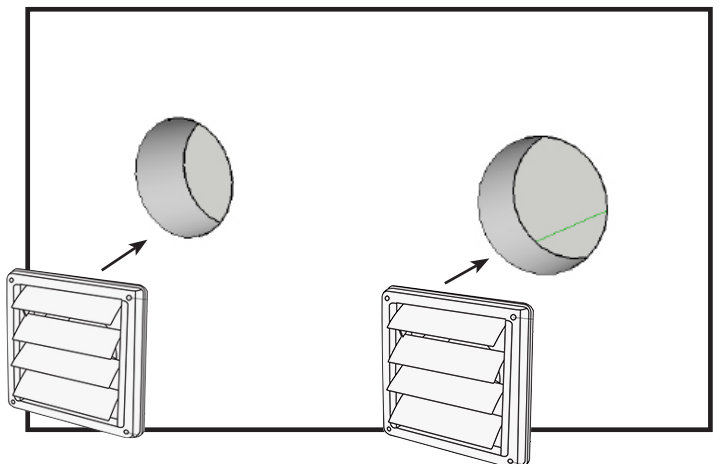
- Hang the unit from the rods and secure the holes in the wall appropriately.



- Inspect all mounting brackets and screws

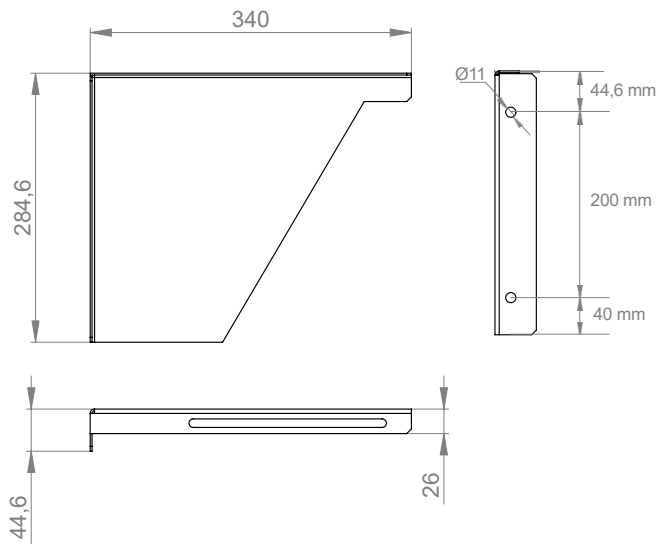


- Install protection grilles on the outside of the wall to prevent the ingress of water and larger objects. *(not included)*

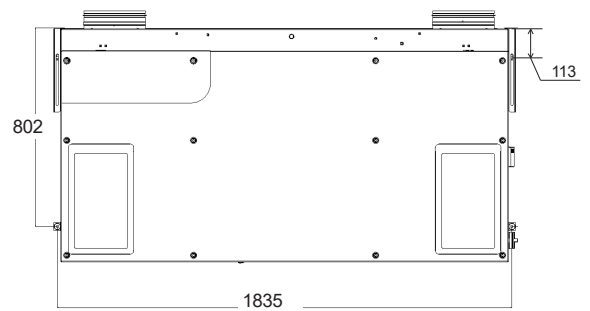
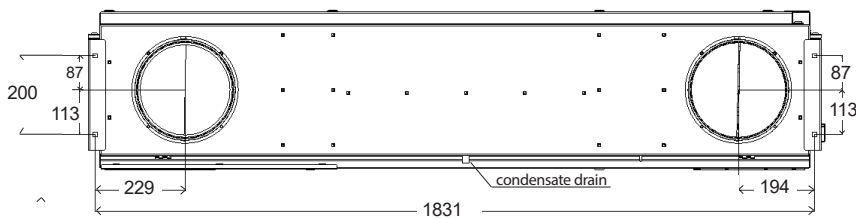


## 6. INSTALLATION

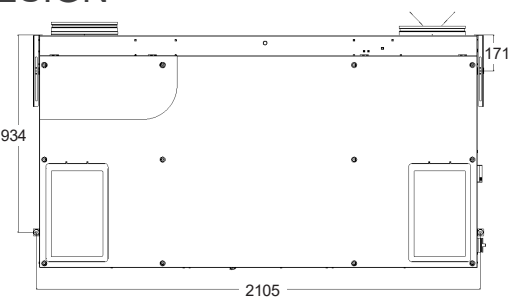
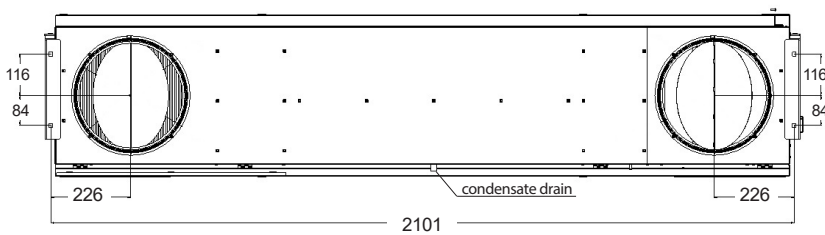
### DIMENSIONS WALL HOLDER



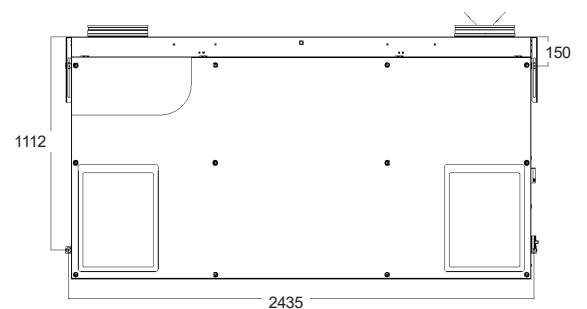
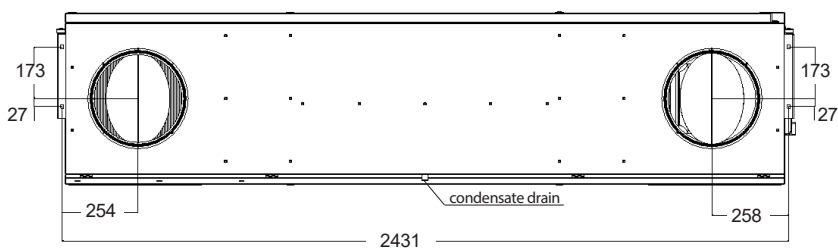
### HRWA2-040 STANDARD/DESIGN



### HRWA2-070 STANDARD/DESIGN



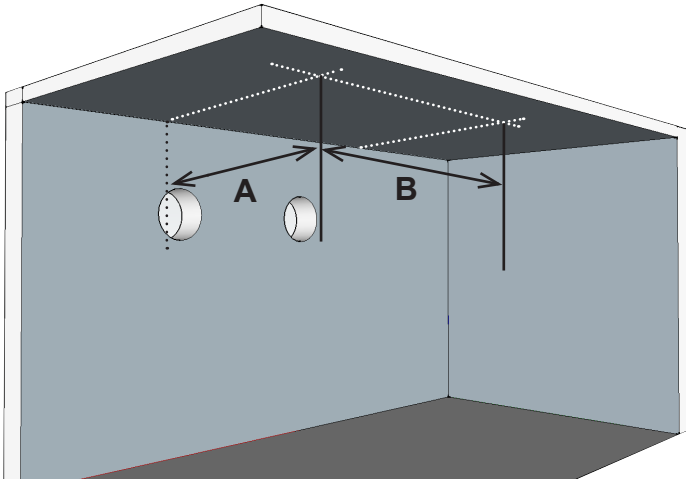
### HRWA2-100 STANDARD/DESIGN



# 6. INSTALLATION

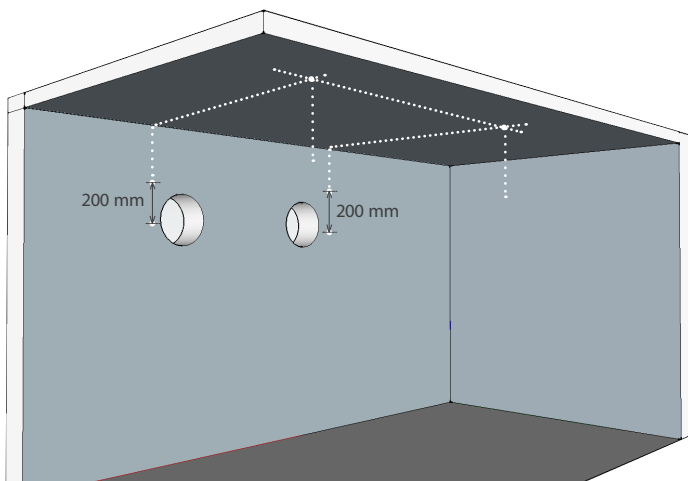
## Preparing mounting area on the wall

- 1) Measure carefully the position of the holes for the threaded rods  
(threaded rods and anchors are not included)

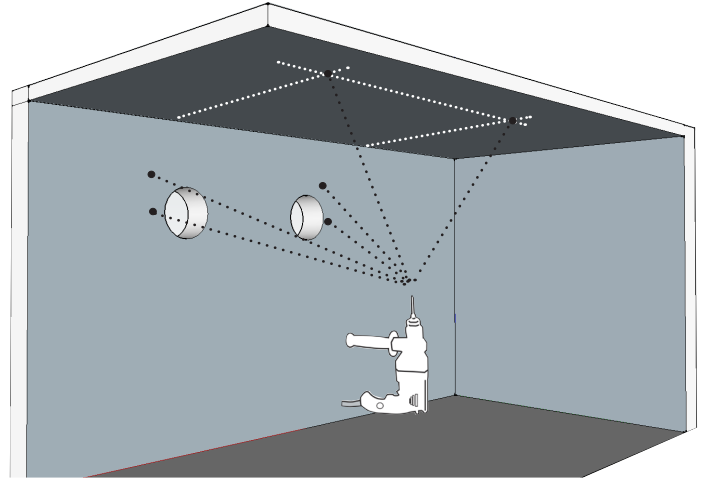


<b>A</b>	HRWA2-040	802 mm
	HRWA2-070	934 mm
	HRWA2-100	1112 mm
<b>B</b>	HRWA2-040	1835 mm
	HRWA2-070	2105 mm
	HRWA2-100	2435 mm

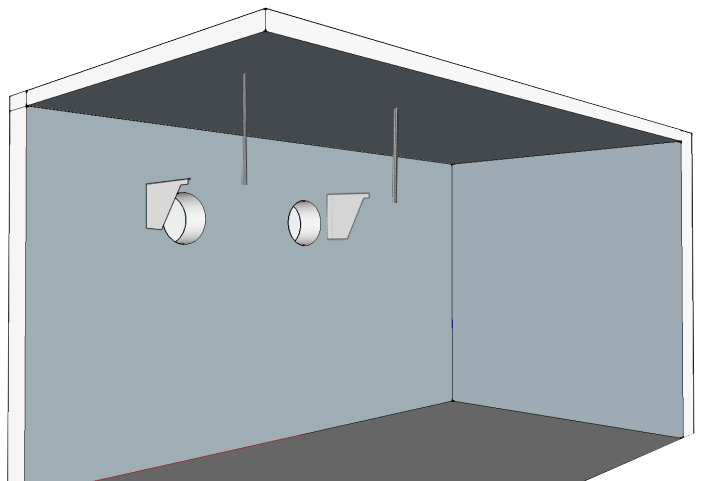
- 2) Measure carefully the position of the anchoring holes on the wall  
(threaded rods and anchors are not included)



- 3) Drill the holes



- 4) Install the anchor and threaded rods of the required length

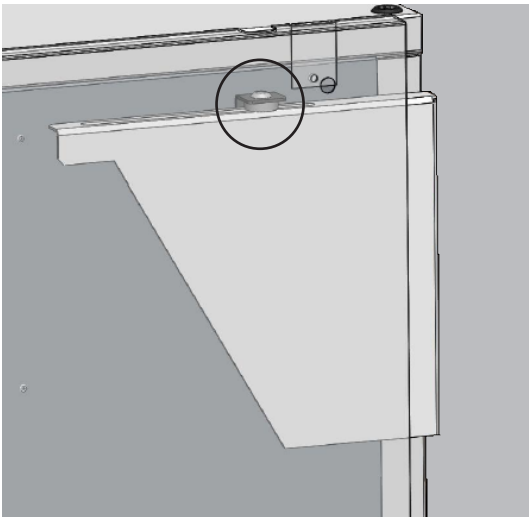
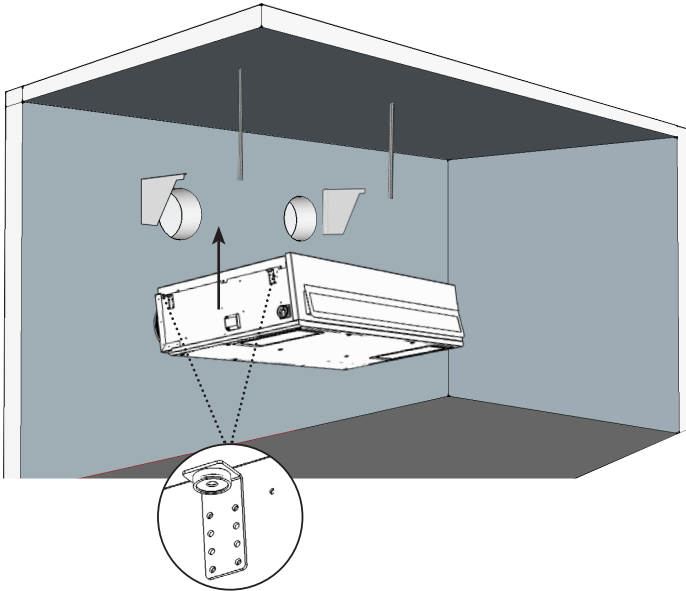


## 6. INSTALLATION

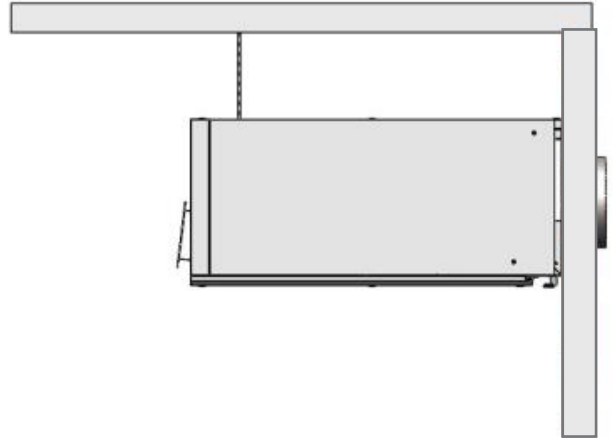
### Preparation units

Design the version according to the above steps (see C)

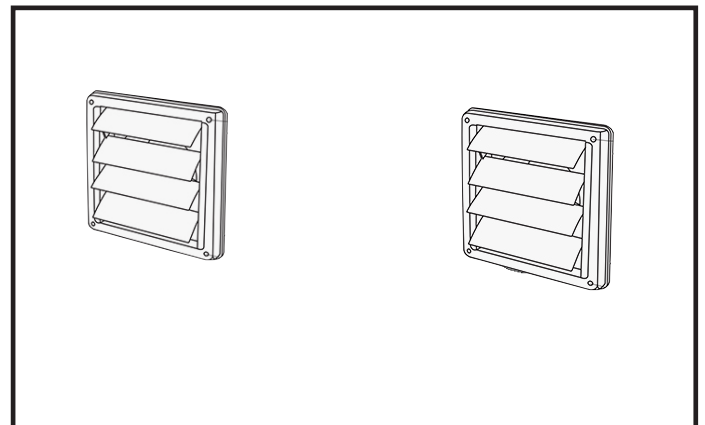
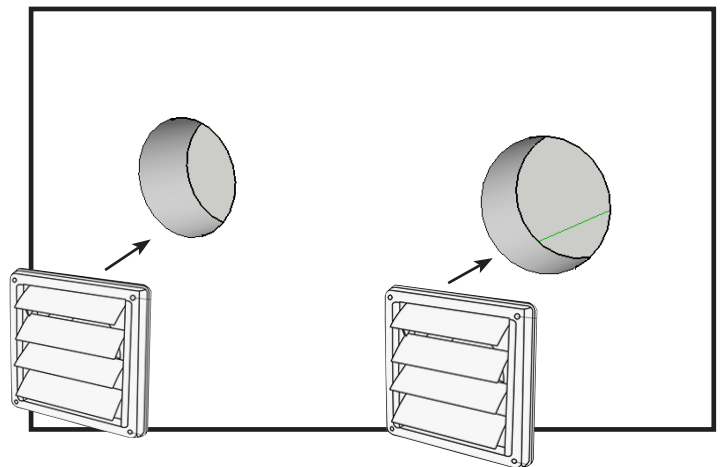
4) Deploy unit on the prepared anchoring and insert the threaded rods into the hinges on the unit. Connect the hinges with anchors with M8 screws.



- Inspect all mounting brackets and screws



- Install protection grilles on the outside of the wall to prevent the ingress of water and larger objects. *(not included)*



## 6. INSTALLATION

### Required distances - connection from the top

To connect the unit's air duct

#### ATTENTION!

Non-combustible materials must not obstruct the intake and exhaust openings.

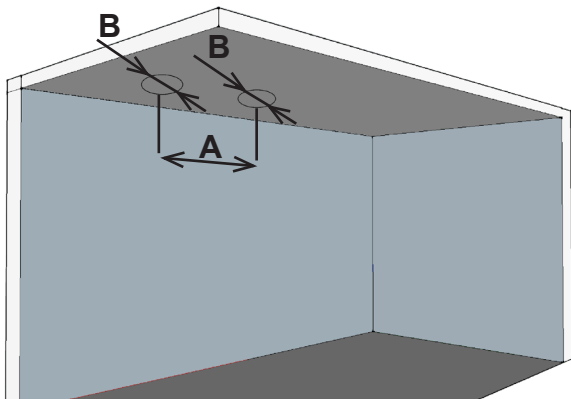
The safe distance of combustible materials from the inlet of the unit is 250 mm.

### Mounting the unit

- The unit is installed using integrated brackets on the ceiling, using threaded rods so that the throat of the unit faces the wall.

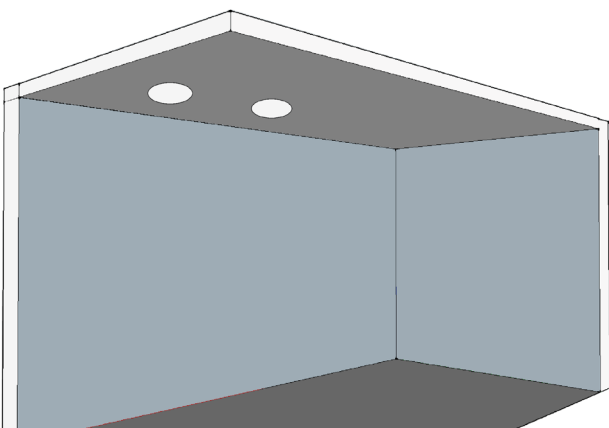
### Preparation of holes for pipes

- Carefully measure the position of the holes on the ceiling, where the unit's ductwork will be connected



A	HRWA2-040	1408 mm
	HRWA2-070	1648 mm
	HRWA2-100	1920 mm
B	HRWA2-040	250 mm
	HRWA2-070	315 mm
	HRWA2-100	315 mm

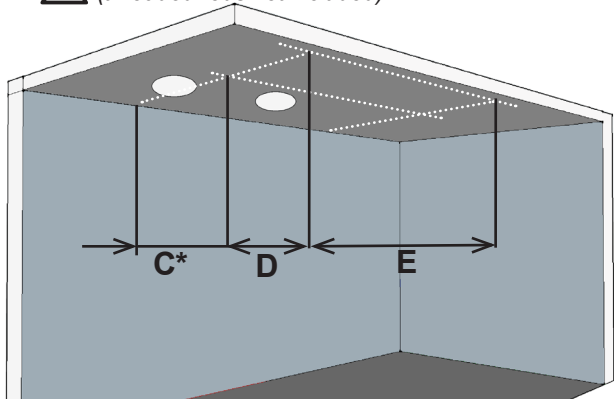
- Create openings for the air ducts



### Preparation of fixing to the ceiling

- Carefully measure the position of the holes in the ceiling for the threaded rods

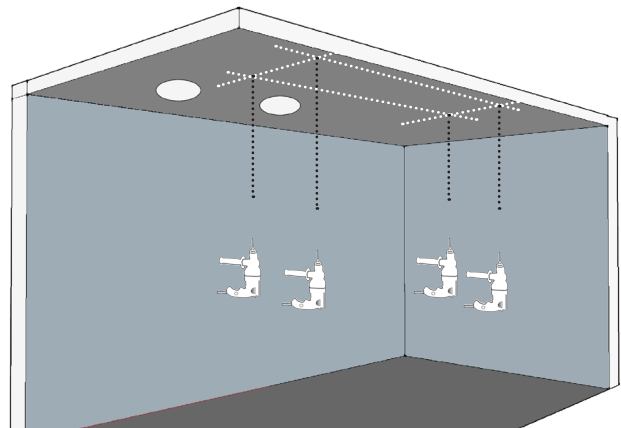
(threaded rods not included)



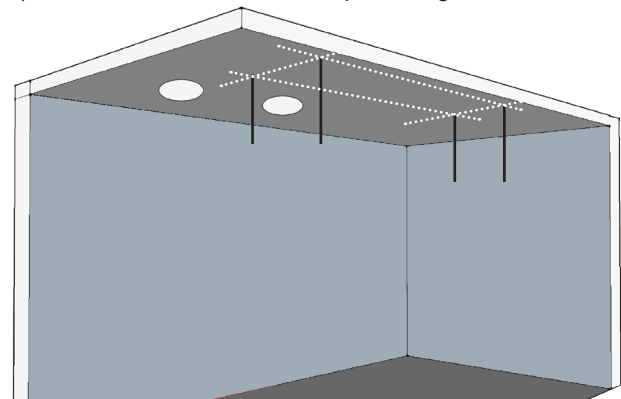
C*	HRWA2-040	445 mm
	HRWA2-070	532 mm
	HRWA2-100	517 mm
D	HRWA2-040	689 mm
	HRWA2-070	763 mm
	HRWA2-100	962 mm
E	HRWA2-040	1835 mm
	HRWA2-070	2105 mm
	HRWA2-100	2435 mm

\* minimum possible distance between the unit and the wall

- Make holes

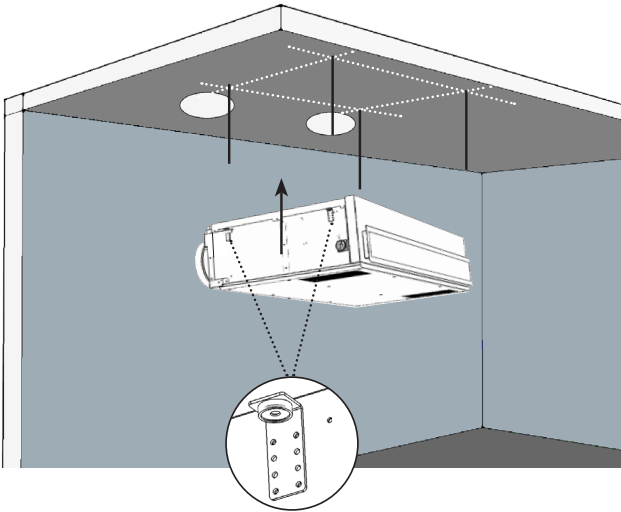


- install threaded rods of the required length

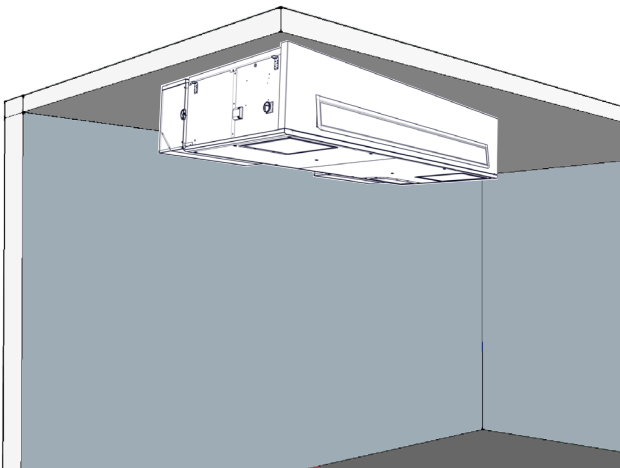


## 6. INSTALLATION

- Hang the unit on the prepared threaded rods and holes in the wall and properly secure



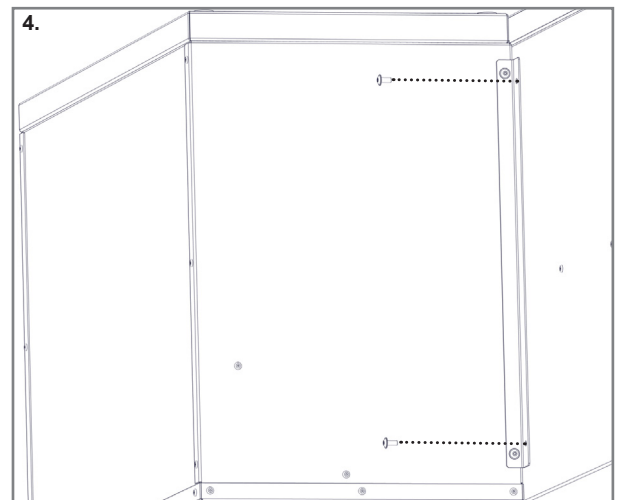
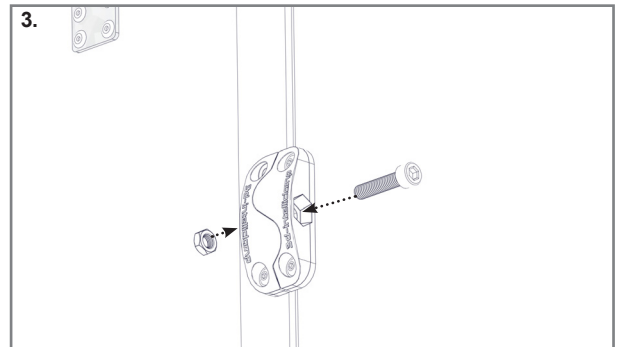
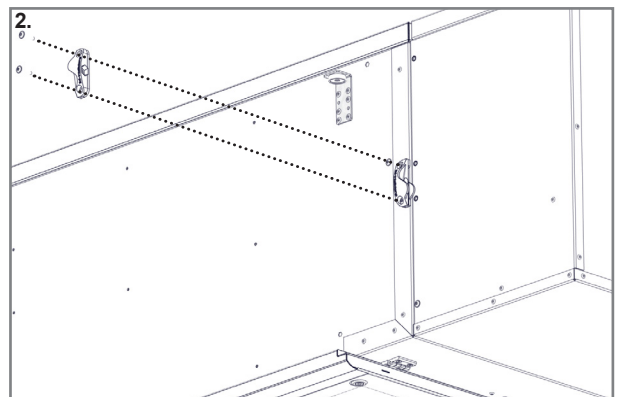
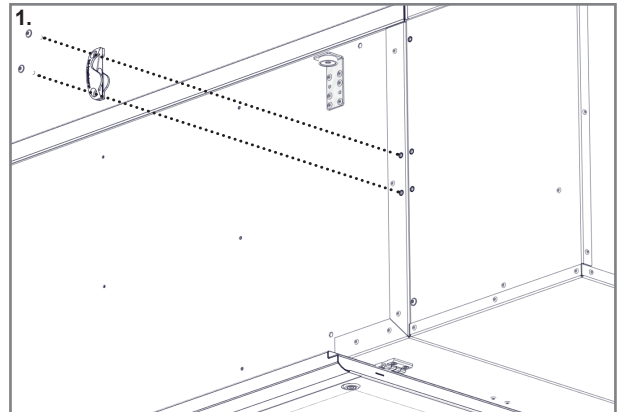
- Check securing



### **⚠ ATTENTION!**

For ductwork connected to the unit from the top, the use of a condensate header is recommended due to the potential for condensed water to run into the unit

- Connect and secure the modules for connection from the top



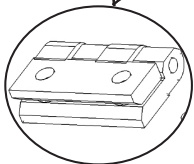
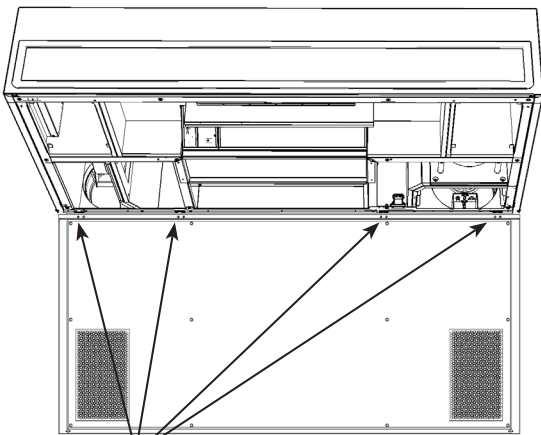
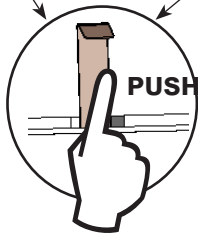
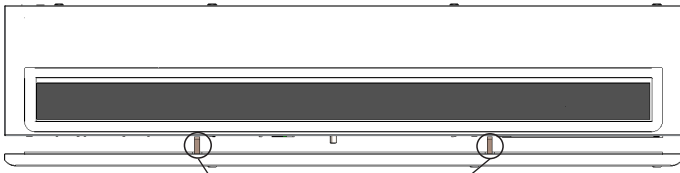
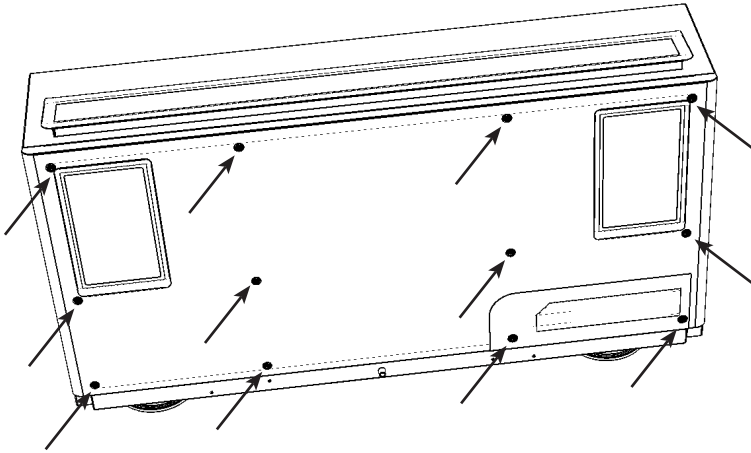
## 6. INSTALLATION

### How to open the bottom access door panel

Disconnect the unit with the main switch before opening the door. Please be careful when opening the access door panel.

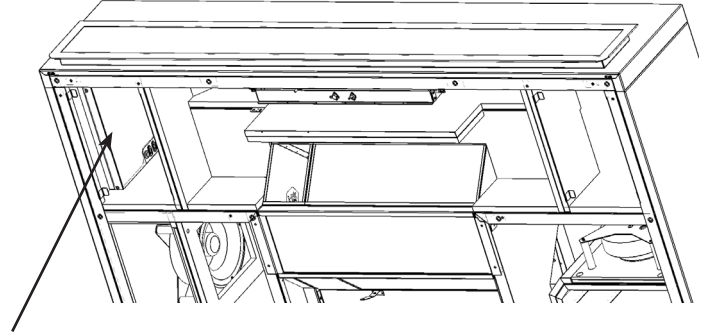
#### 1) Remove 12 screws on the lower side

CAUTION: Door is held closed by 2 safety latches to prevent door from swinging down quickly. Once the 12 screws are removed from the unit,

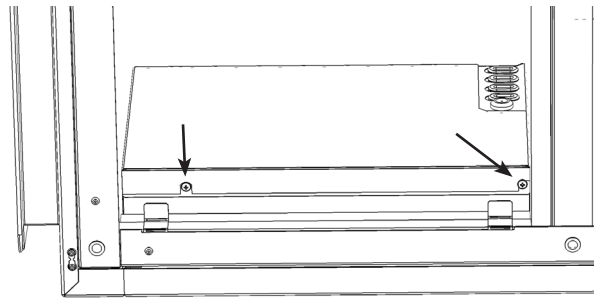


### Access to controls box

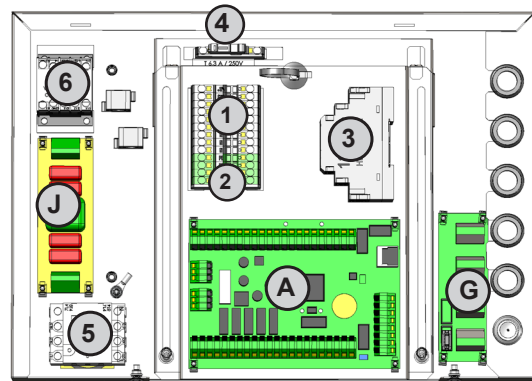
Controls box is located inside the unit, on the left side, below the intake filter.



To access the electronics, remove the following screws



Electronic parts:



<b>A</b>	Electronic board - Module A
<b>G</b>	Electronic board - Module G
<b>1</b>	Terminals for the power supply (L) and the output of the auxiliary power supply (12V, 24V)
<b>2</b>	Terminals to connect N and PE cables
<b>3</b>	Auxiliary power supply (12V, 24V)
<b>4</b>	Engine fuse
<b>5</b>	Main power switch
<b>6</b>	Safety Contactor (units with electric heater)

## 6. INSTALLATION

### CONNECTING THE CONDENSATE DRAIN



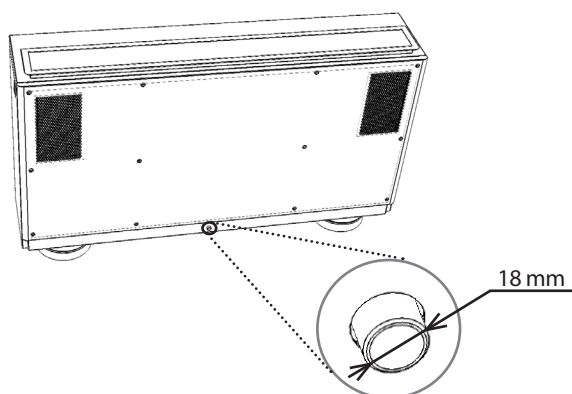
#### PLEASE NOTE!

- The siphon must be well connected to the unit and sealed.
- We recommend to submerge the sink in water check its integrity.



#### ATTENTION!

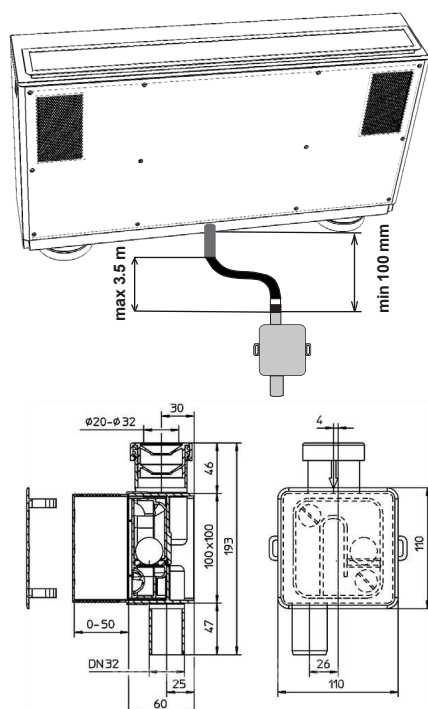
If siphon is not properly connected, the unit may be flooded and damaged.



#### RECOMMENDED SIPHON TYPES:

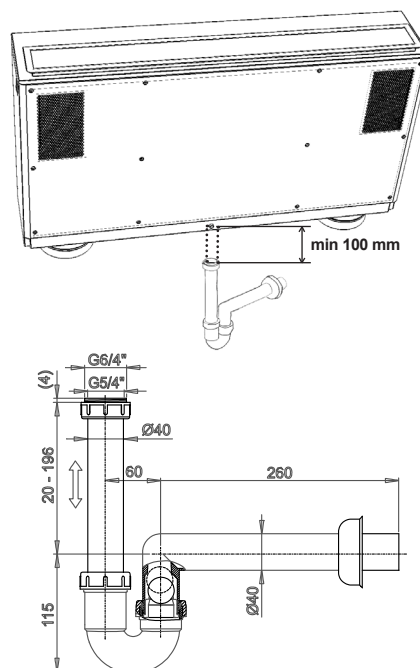
##### Siphon (SK-HL138)

Wall mounted or embedded in wall type.  
(not included)



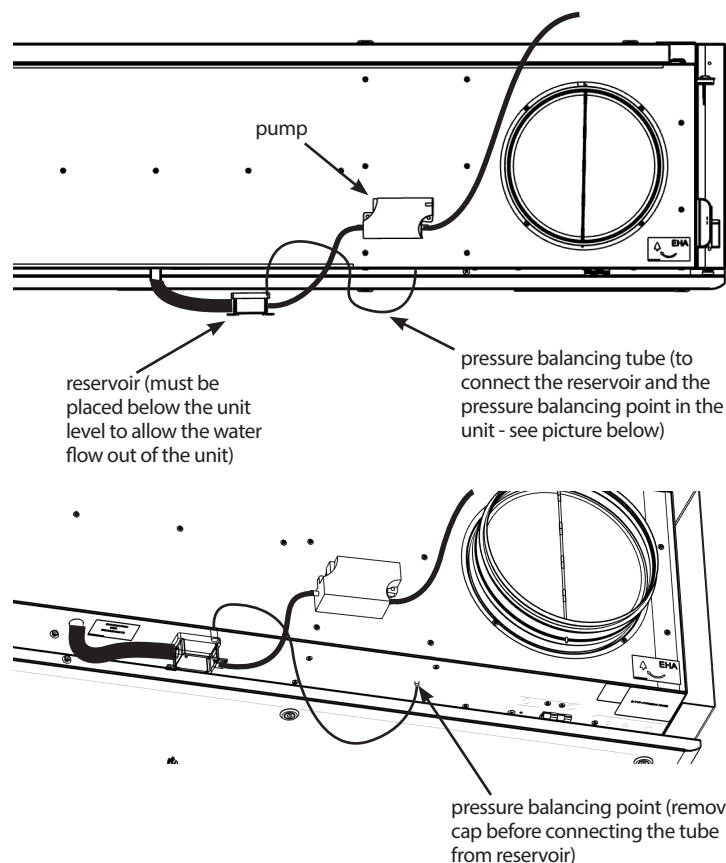
##### Siphon (SK-AKS3)

(not included)



##### Condensate pump (CERP-MAXI-ORANGE)

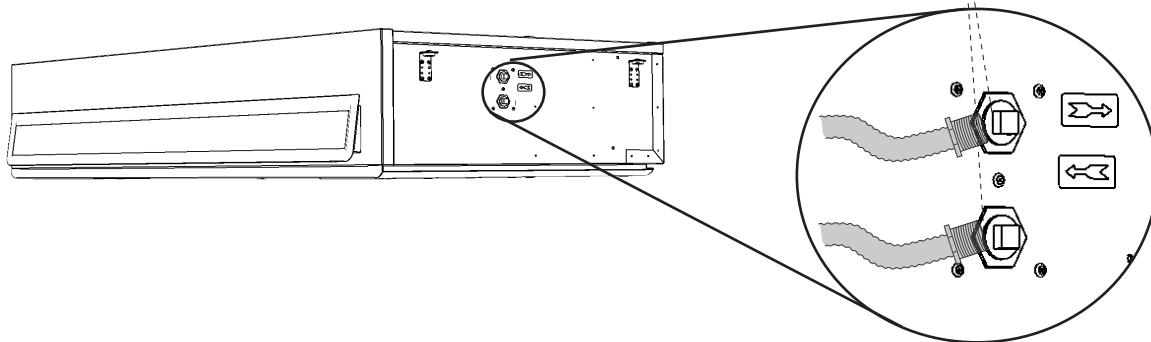
Please read condensate pump manual for more information.  
(not included)



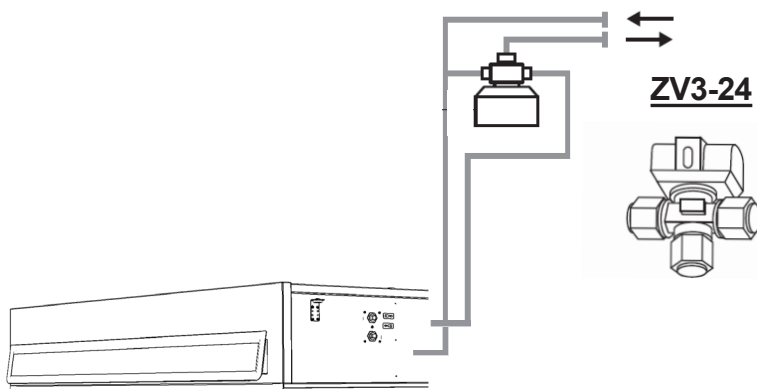
# 6. INSTALLATION

## CONNECTION OF THE WATER COIL / C/O.

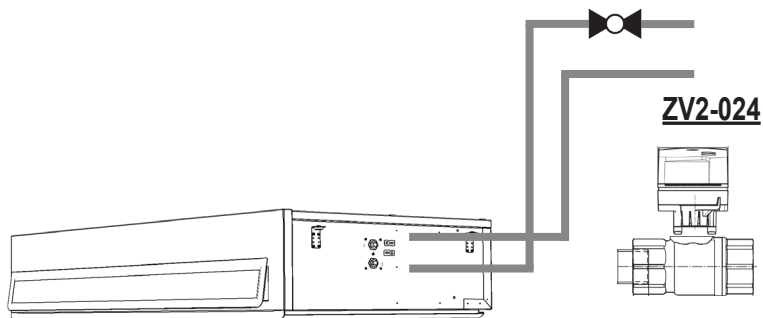
HRWA2-xxx-V1 - 2x G 1/2"  
 HRWA2-xxx-C3 - 2x G 3/4"



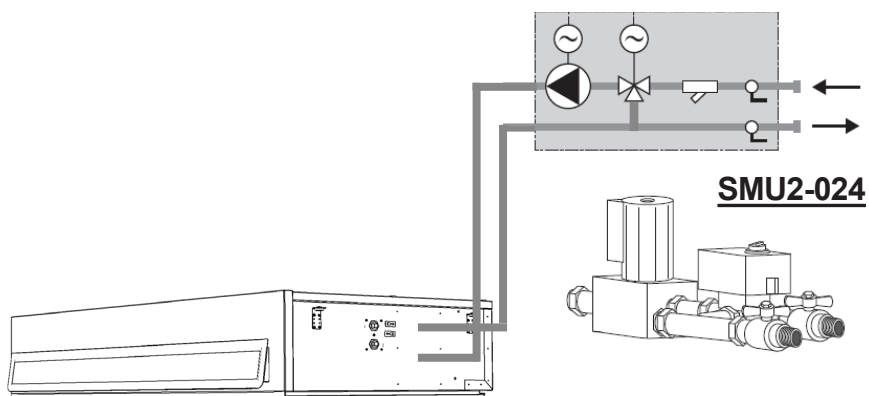
**1.**



**2.**



**3.**



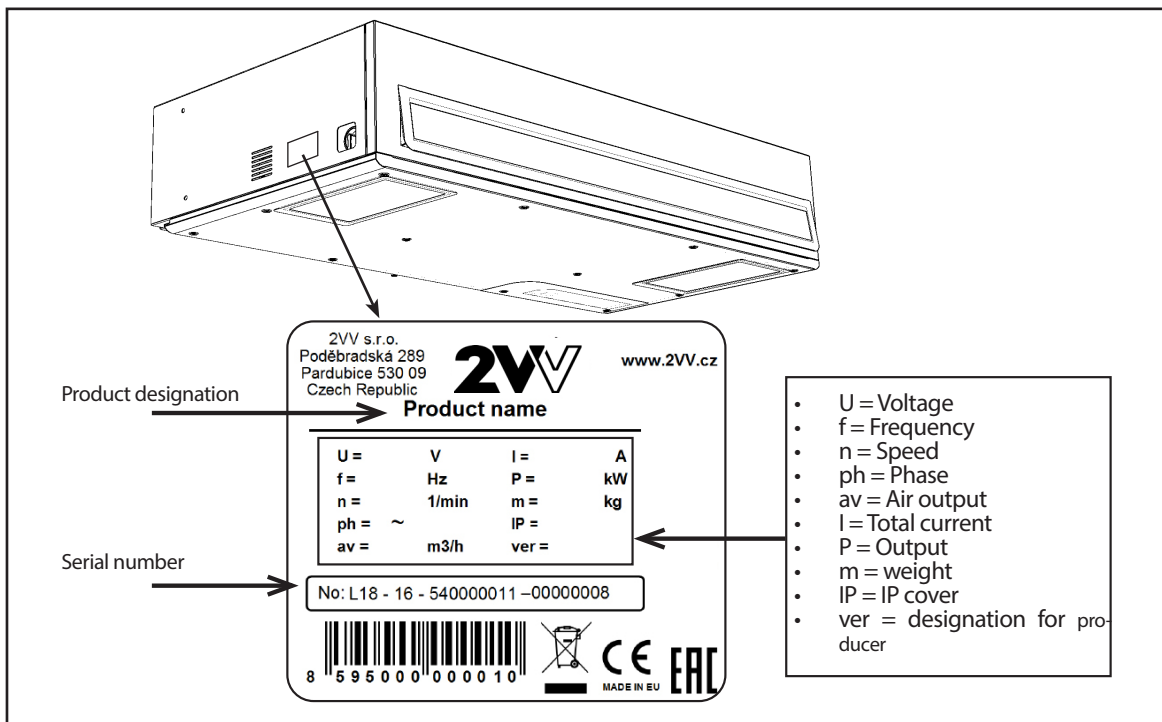
## 6. INSTALLATION

### ELECTRIC INSTALLATION AND WIRING

**CAUTION!**

- The main power supply must be turned off before working on the internal parts of the unit.
- The electrical installation must be done pursuant to the technical documentation and by a certified electrician. The unit installation should be done by a qualified technician with experience in electrical applications. The manual must be observed, together with the laws and regulations applicable in the country.
- The wiring diagrams located on the product have a higher priority than those in manual. Before the installation, check that the indication of the terminals corresponds to the wiring connection diagram. In case of doubt, contact the supplier and do not connect the unit under any circumstances.
- The unit must be connected to the main power source via isolated cable with a heat resistance in compliance with the diameter and the applicable laws and regulations of the country where the unit is installed.
- Any altering or changes to the internal connections of the unit are forbidden and may result in the loss of warranty.
- Only the use of original components guarantees the correct function of the unit.

(Fig. 1) Location of unit label and explanation of abbreviations .



## 6. INSTALLATION

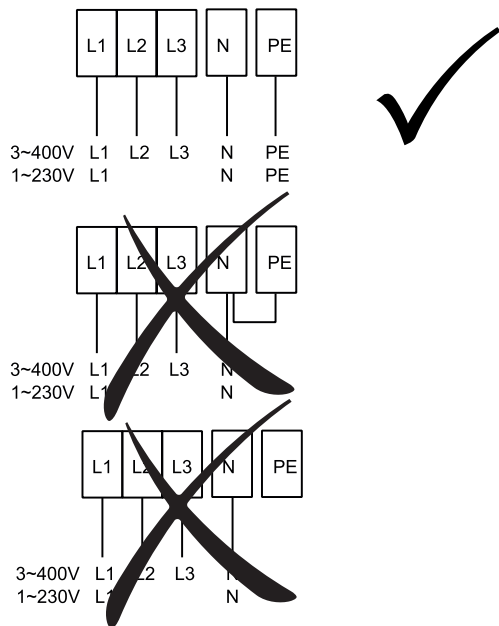
### Electric power cable

- The power cable is not included. It has to be procured before the installation. Choose the type and thickness of the cable according to the unit's maximum power consumption and the specific requirements of the place of installation.

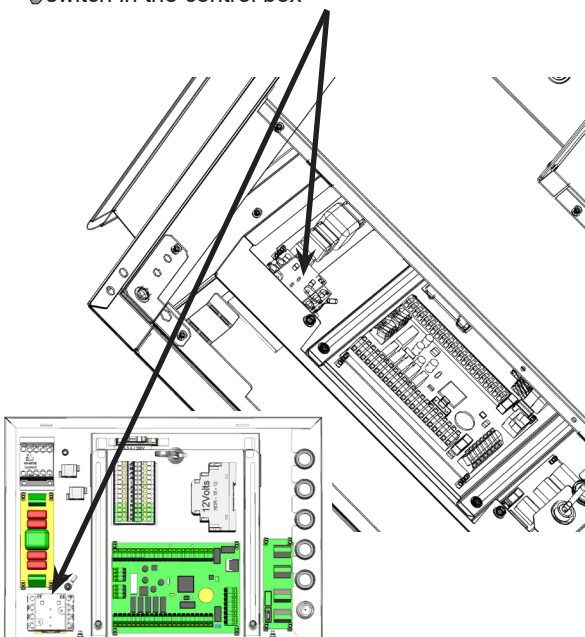


#### TECHNICAL INFORMATION

- The electrical parameters can be found on the manufacturer's labels inside and on the side of the unit



- The power cord connects directly to the unit's main switch in the control box



All the unit's electrical circuits must be connected through an earth leakage breaker according to the current model. The unit must be connected in a way that it can be disconnected from the power supply with one breaker.

Table of minimum breaker sizes according to heat recovery unit model.

#### Recommended minimum circuit breaker values:

	-XS0...	-ES0...	-EE1...	-EV1...	-XE1...	-XV1...
HRWA1-040-...	4A (1F)	10A (1F)	16A (1F)	10A (1F)	10A (1F)	4A (1F)
HRWA1-070-...	4A (1F)	13A (1F)	10A (3F)	13A (1F)	13A (1F)	4A (1F)
HRWA1-100-...	6A (1F)	10A (3F)	13A (3F)	10A (3F)	10A (3F)	6A (1F)

### Accessories

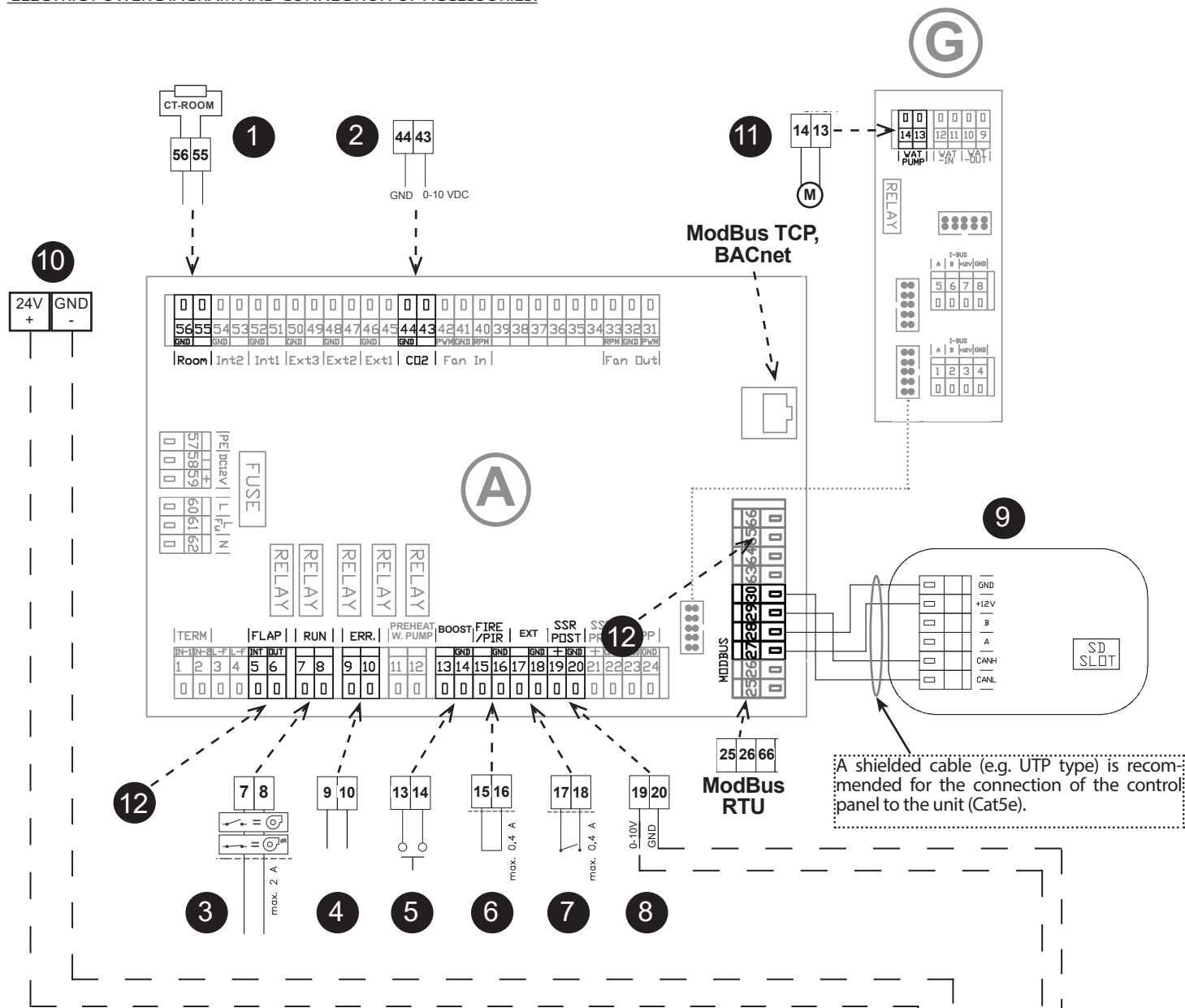
Connect electrical accessories for the unit to the electronic terminals as shown in the wiring diagrams located on the unit.

# 6. INSTALLATION

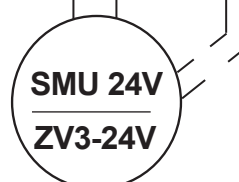
## UNIT WITH COMFORT REGULATION:

The control board is located inside control box, inside unit is located inside the unit.

### ELECTRIC POWER DIAGRAM AND CONNECTION OF ACCESSORIES:



<b>A</b>	Electronic board - Module A
<b>G</b>	Electronic board - Module G
<b>1</b>	Room temperature sensor (CT-ROOM, input)
<b>2</b>	CO <sub>2</sub> sensor, data input (0-10V, input)
<b>3</b>	RUN contact (relay, adjustable, max. 2A)
<b>4</b>	ERROR contact (relay, error = ON, OK = switched off, max. 2A)
<b>5</b>	BOOST button (input button)
<b>6</b>	PIR input sensor or FIRE alarm (input, adjustable)
<b>7</b>	External control input (input, connected = ON, disconnected = OFF)
<b>8</b>	Output for SMU actuator (output, 0-10V), only in version HRWA1-...-V1...
<b>9</b>	Control panel (must be connected – cable not included)
<b>10</b>	24V power supply for the mixing junction or specific components (output)
<b>11</b>	Circulation pump (relay max. 2A)
<b>12</b>	230V output for air dampers (Flap IN, Flap Out)





Check the following before switching on the unit for the first time:

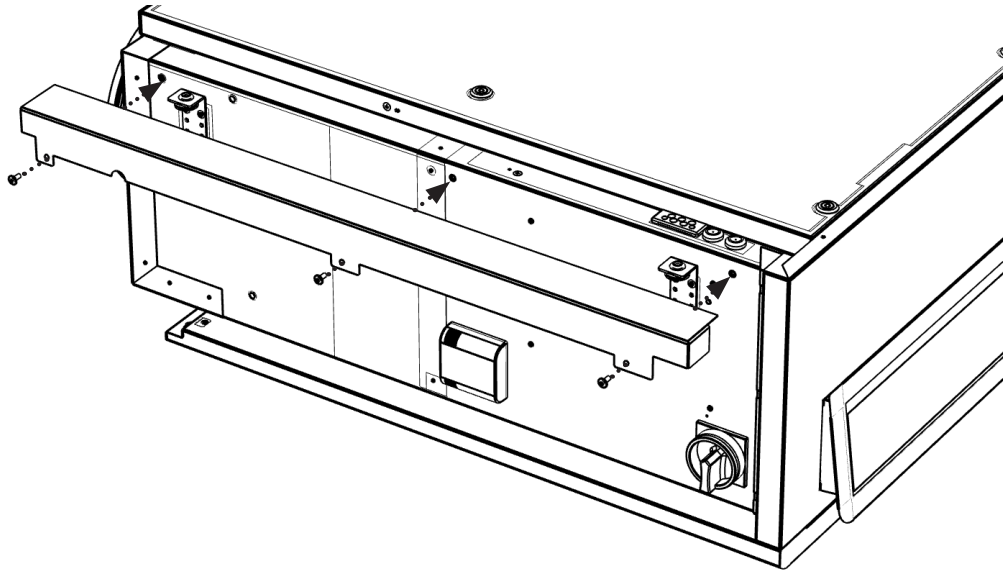
- That the unit is properly closed and all the outlets are connected to the ductwork.
- That the electric connection matches the diagram, including earthing and protection of external circuits.
- That all the electric components are properly connected.
- That the condensate drain is properly connected
- That the installation corresponds to the instructions in the manual.
- That no tools or objects have been left inside unit.
- That the filters are clean

**CAUTION!**

- Alterations and changes to the internal connections of the unit are forbidden and may result in the loss of warranty.
- We recommend the use of accessories and components provided by our company. Contact your supplier in case of doubts when using non-original components and accessories.

## **MOUNTING THE CABLE COVER**

The cable cover is part of delivery and can be optionally mounted on the unit to cover the cables connected to the unit.



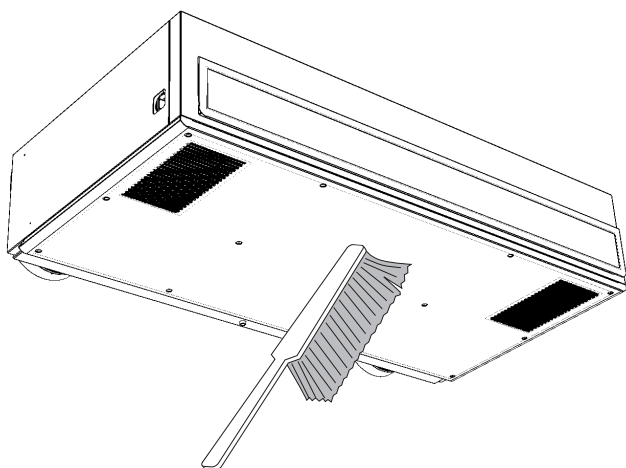
# 7. MAINTENANCE

## REGULAR CLEANING OF THE UNIT

- We advise the unit be inspected at regular intervals or according to the demands of the operating environment.
- If the unit is out of service for a long period, it is advisable to turn it on for one hour at least every six months.

### CAUTION!

The service of internal components and cleaning of the unit must be done only by a professional. It is forbidden to operate the unit without filters. It may damage the unit.

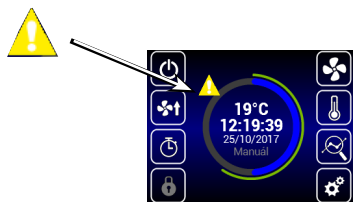


Clean the heat recovery unit with a vacuum cleaner, a small brush, cloth and soapy water, especially the heat exchanger. Do not clean the unit with the following agents: Sharp objects, aggressive chemicals, solvents, harsh cleaning agents, pressurized water, pressurized air or steam.

## ERROR MESSAGES

### Clogged filter

- Checking for possible filter clogging is signaled on the unit controller



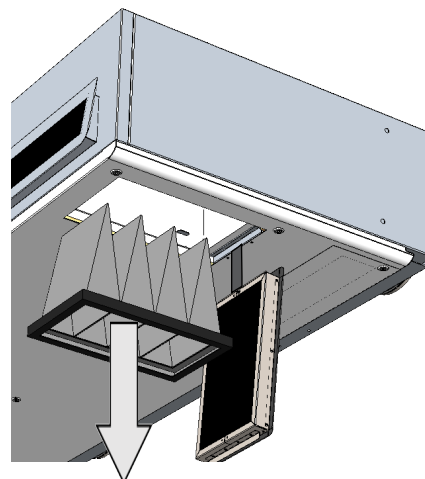
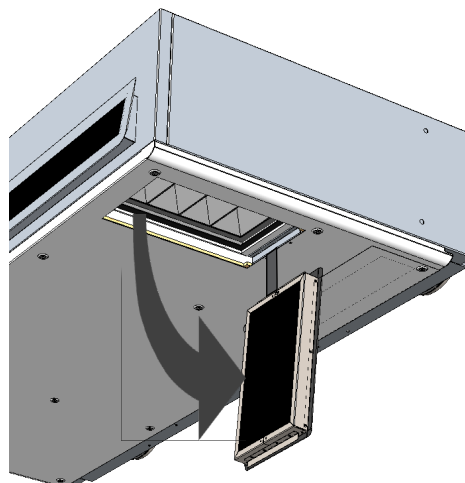
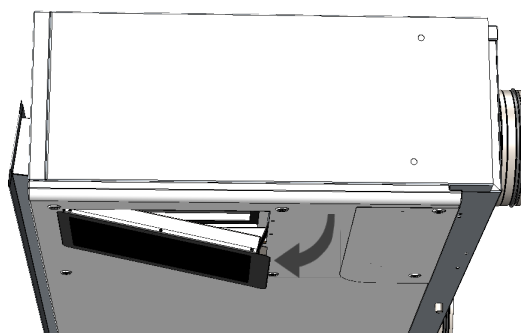
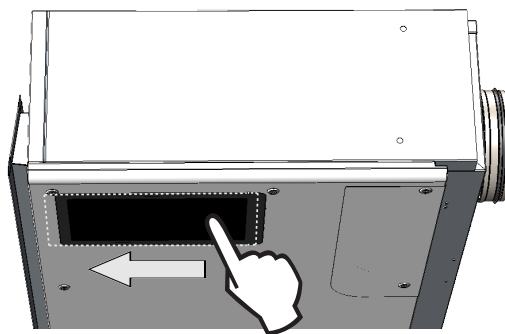
- The clogging of the filters is automatically assessed. The unit will automatically recognize that a new filter has been installed.

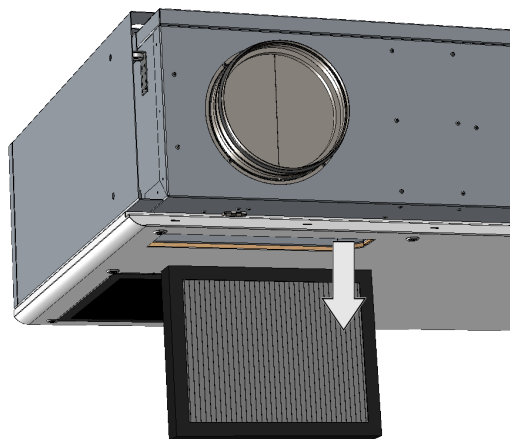
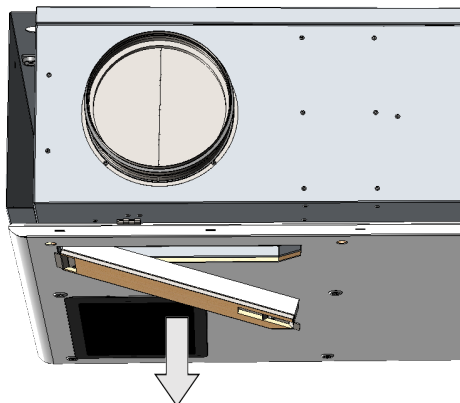
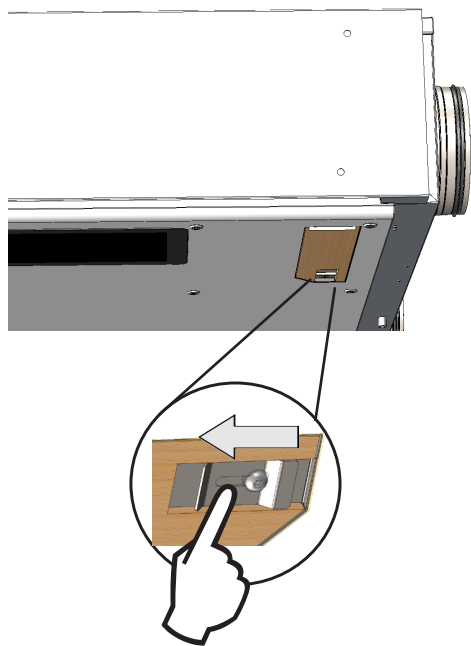
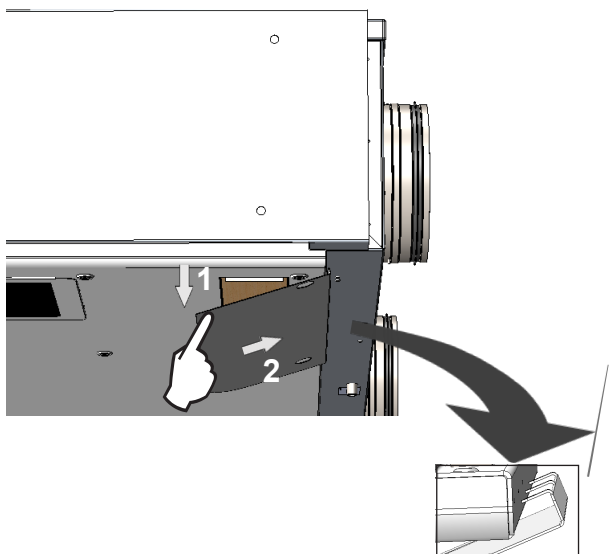
## CHANGE FILTERS

### CAUTION!

Failure to properly clean (change) the filters may reduce the performance of the unit and damage the fan.

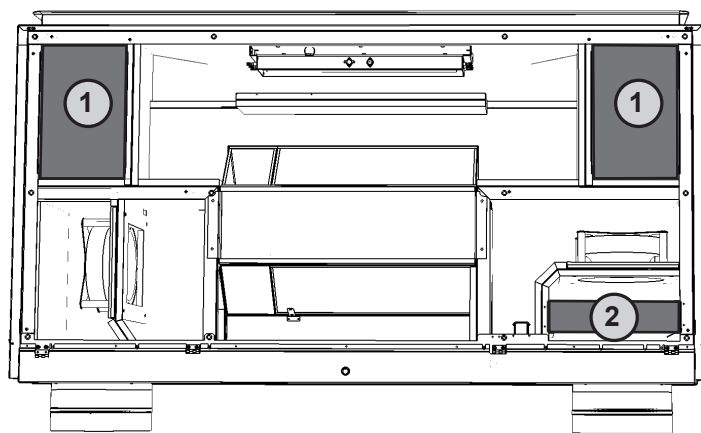
Disconnect the unit with the main switch before opening the lid. Be especially careful when manipulating it.





**2) Replacing filters.**

After replacing filters, check that the filters are properly secured and close the door. The following picture shows the location of the filters in the unit and the table lists the appropriate types of spare filters. Please note that there are 2 type 1 filters required for this unit.



		HRWA1-xxx	
		Number	Description
STANDARD	1	Filtr Coarse 60% (G4) (2 ps)	FILTR-HRWA1-xxx-G4
	2	Filtr ePM 1 60% (F7) (1ps)	FILTR-HRWA1-xxx-F7
OPTIONAL	1	Filtr ePM 10 60% (M5) (2 ps)	FILTR-HRWA1-xxx-M5

xxx = 040 / 070 / 100

## 9. TROUBLESHOOTING

The unit error is indicated with a red exclamation mark in the middle of the control display. Pressing the exclamation mark shows the information on the error, see table below.



Reports on the display	Unit's behavior	Likely problem	SOLUTION
1 – Exchanger 1 overheated	unit is ventilating	Preheated electric exchanger or damaged sensor	Check that the air is flowing freely through the unit, that the electric exchanger cools down sufficiently, or that the safety thermostat of the el. reheating isn't damaged.
3 – Overheated preheating	unit is ventilating	Preheated electric preheater or damaged sensor	Check that the air is flowing freely through the unit, that the electric exchanger cools down sufficiently, or that the safety thermostat of the el. reheating isn't damaged.
4 – Supply fan error	Unit is not working	Overheated fan or defect on thermal contact of inlet fan	Determine the cause of the overheating: defective bearing, short-circuit...
5 – Exhaust fan error	Unit is not working	Overheated fan or defect on thermal contact of inlet fan	Determine the cause of the overheating: defective bearing, short-circuit...
6 – Inlet filter clogged	unit is ventilating	Check clogged filter	If the filter has been replaced or if it does not need to be replaced, reset the filter clogging
7 – Exhaust filter clogged	unit is ventilating	Check clogged filter	If the filter has been replaced or if it does not need to be replaced, reset the filter clogging
12 – CO2 sensor failure	unit is ventilating	Defective air quality sensor	Control the air quality sensor and its connection to the unit
16 – Inlet – External temperature sensor failure (T-EXT1)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed (professional service)
17 – Inlet – Failure of the temperature sensor behind the exchanger (T-EXT2)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed (professional service)
18 – Inlet – Temperature sensor failure in the supply canal (T-EXT3)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed (professional service)
21 – Exhaust – Temperature sensor failure in the exhaust canal (T-INT1)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed (professional service)
22 – Exhaust – Failure of the temperature sensor of the exchanger's anti-freeze protection (T-INT2)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed (professional service)
25 – Room temperature sensor failure (T_Room)	unit is ventilating	Defective contact or sensor	Control the connection of the sensor and replace if needed
74 – Flow reduction, minimum temperature in the canal not reached	Limited operation of the unit	The minimum temperature in the canal was not reached	The temperature of the inlet and exhaust air is too low. Risk of undercooling of the building or condensation in the ventilation ductwork Possible failure of temperature sensor T-EXT3
Condensation fault	Unit is working	High level of condensate in the unit	Check if the sink is connected to the outlet of the condensate tank, the condition of the connection, and whether the sink is full of water. Check the flow of the pipes and whether the position of the unit allows runoff.
The unit ventilates insufficiently or is noisy	Unit is working	Clogged filter or ductwork.	Check the filters and whether the ductwork is not clogged

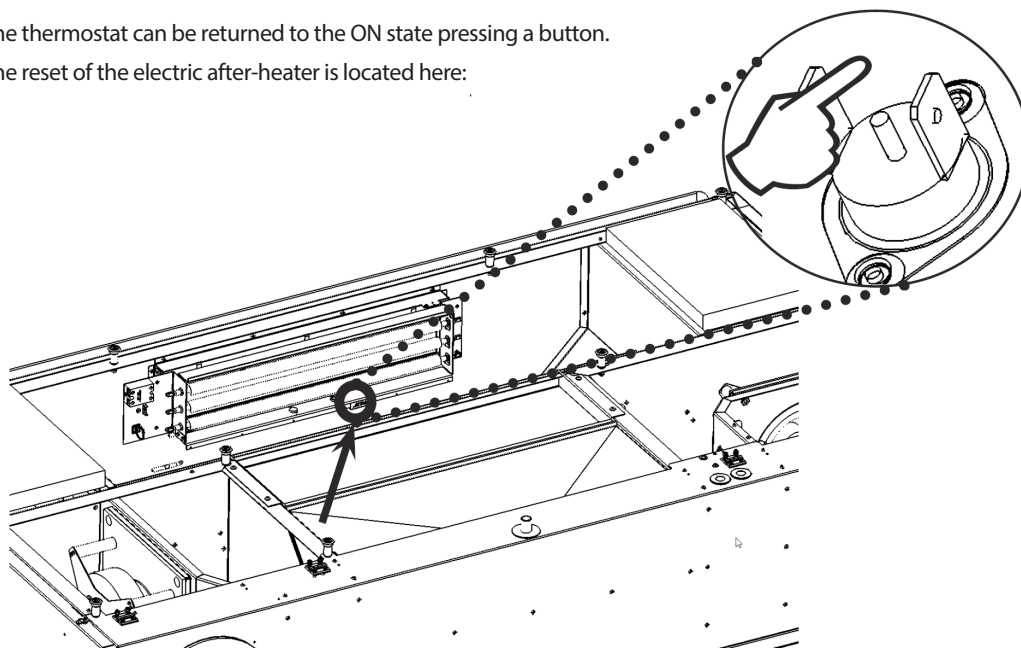
## 9. TROUBLESHOOTING

### REPAIRING OVERHEATED ELECTRIC PREHEATER AND AFTER-HEATER

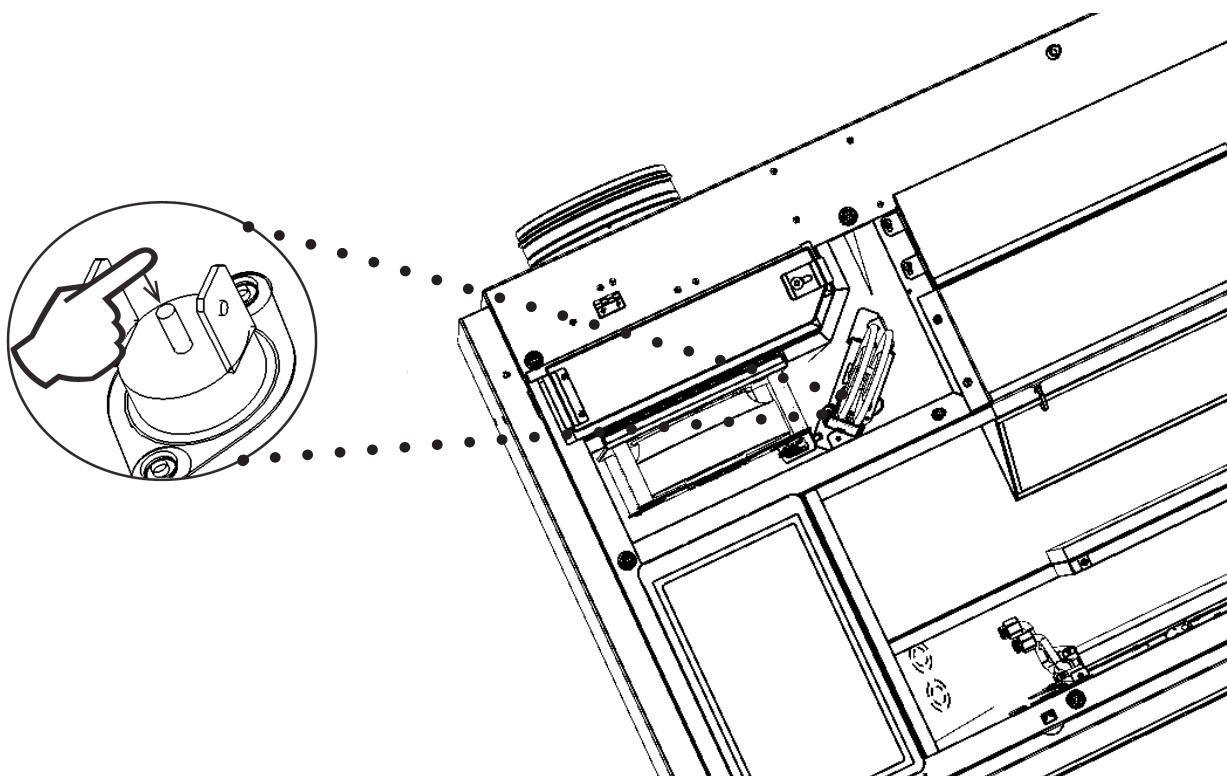
**⚠ CAUTION!**

The service of internal components must be done only by a professional.  
Always disconnect the unit before servicing.  
Firstly, remove the cause of the overheated electric preheater and after-heater.

- The thermostat can be returned to the ON state pressing a button.
- The reset of the electric after-heater is located here:



- The reset of the electric preheating is located here:



**Disassembling the fan motor**

Release the bracket from the set – square bit no. 2

Release the fan motor from the bracket – Allen bit no. 4

**Printed circuit**

Open board with a flat screwdriver

**Removing the boards from the plastic frame – pliers for precision mechanics**

Releasing the printed circuit – Philips screw no. 0

**Plastic parts**

Ceiling insulation of front panels – box cutter

## 10. CONCLUSION



Once it has been installed, read carefully the safe operation manual of the unit. That manual includes examples of possible problems and recommended solutions. In case of any requests or inquiries, contact our sales or technical department.



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