

RECAIR

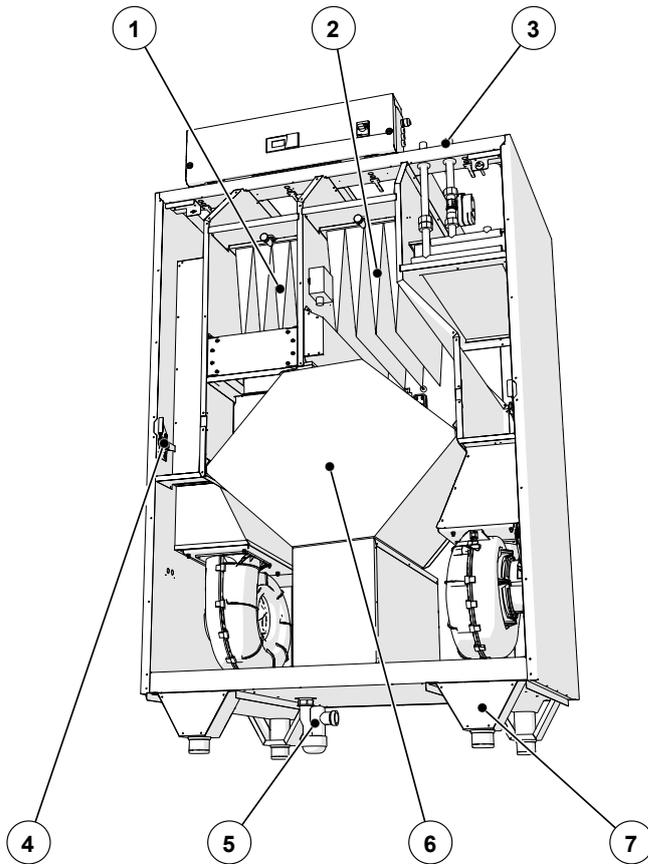
Compact R300

Installation and maintenance manual

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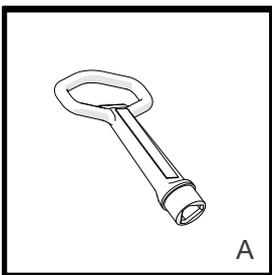
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Overview

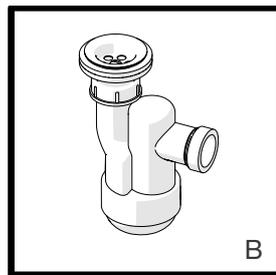


- 1 – Intake air filter
- 2 – Extract air filter
- 3 – Heater water connections
- 4 – Bottom door lock
- 5 – Drainage water trap
- 6 – Heat exchanger
- 7 – Adjustable leg

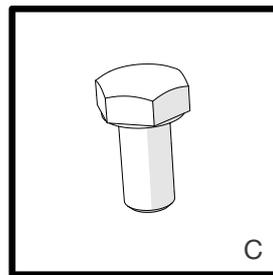
Included in the kit:



A



B



C

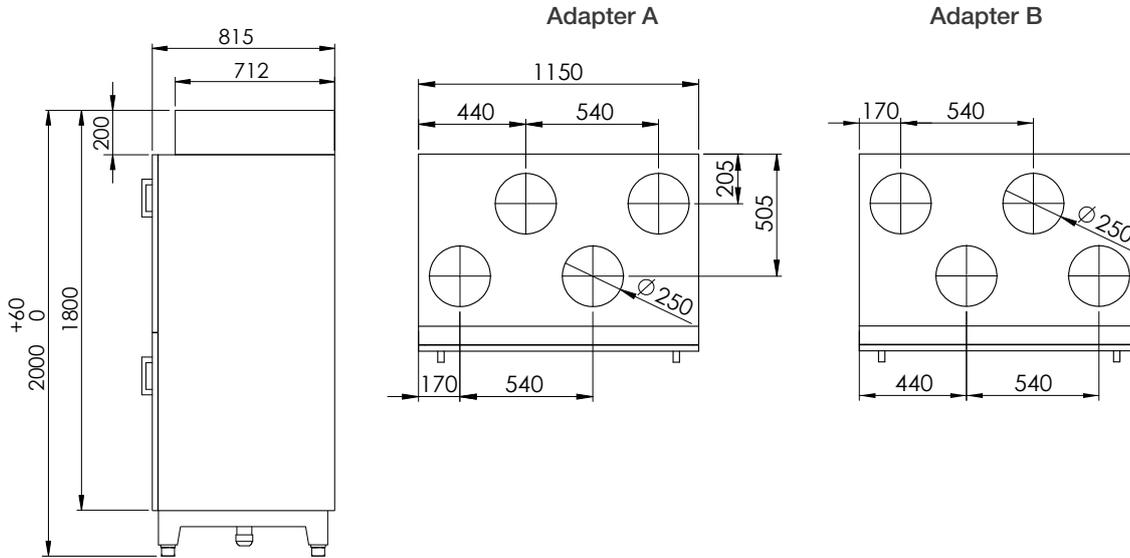
A – Door opening key

B – Water trap

C – 4 x bolt for adapter/silencer M8x30

Dimensions

Dimensions and duct connections with adapter:

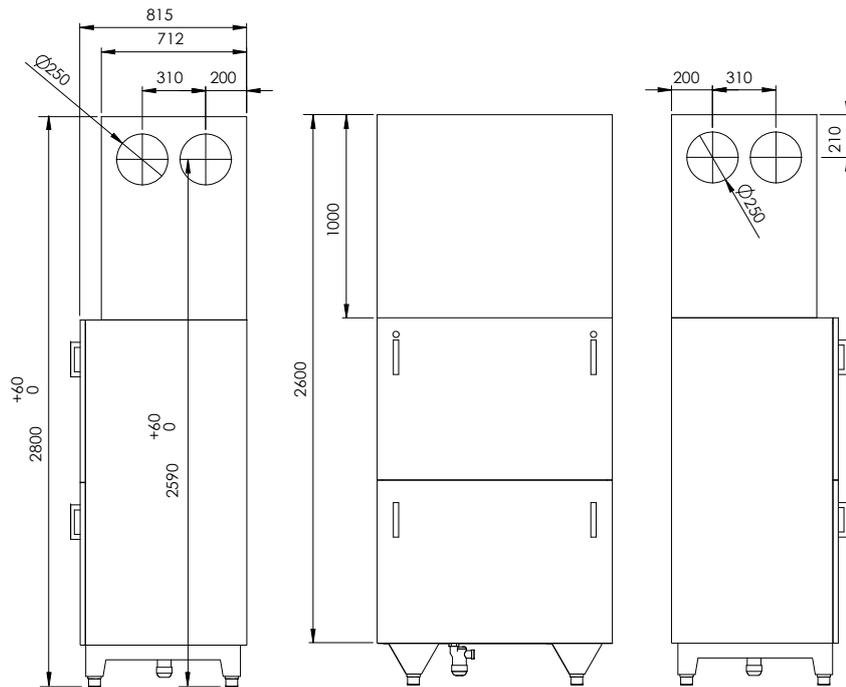


Connections with adapters:

Unit \ Adapter	Adapter A	Adapter B
Type - R		
Type - L		

- Exhaust air
- Outdoor air
- Extract air
- Supply air

Unit dimensions with silencer:



Connections with silencer:

Silencer Unit	Silencer A	Silencer B
Type - R		
Type - L		

- Exhaust air
- Outdoor air
- Extract air
- Supply air

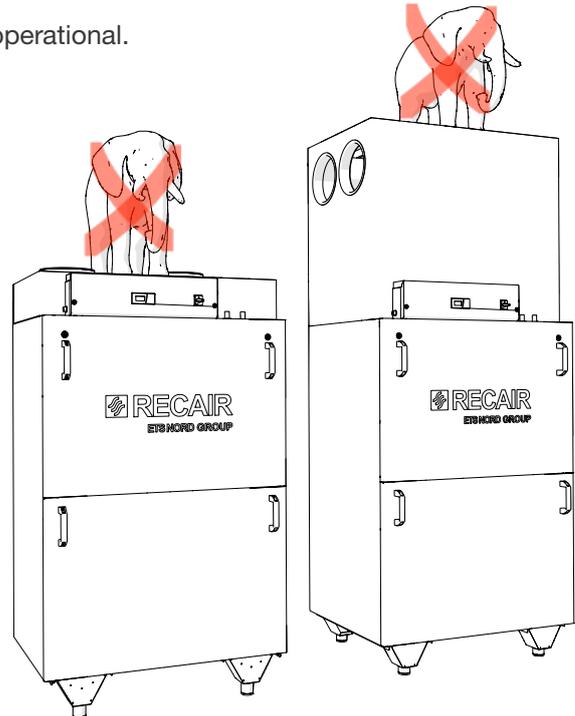
Safety



Installation may be carried out only by qualified personnel.

- To avoid injury, read all documentation before using the unit.
- The unit is designed for home and commercial building ventilation. The unit must not be used to ventilate flammable and combustible gases.
- All electrical connections must be carried out by a qualified electrician.
- It is the installer's responsibility to carry out a full safety assessment of the installed ventilation unit.
- All electrical and mechanical safety devices must be installed before turning on the ventilation unit.
- The electrical power of the unit must be disconnected before service and maintenance.
- Do not open the unit door when the ventilation unit is operational.

It is prohibited to place any additional items of weight on the top of the unit.



Disclaimer

The manufacturer may not be held liable for any damage made to property or people caused by improper installation, start-up, use of the unit or failure to implement the procedures and instructions included in this manual.

Warranty

Warranty conditions:

- General warranty conditions can be found on manufacturers homepage
- The new device is covered by a 2-year warranty against defects and manufacturing defects, if:
 - the installation and commissioning of the device has been performed by authorized personnel
 - maintenance is carried out accordingly to the maintenance manual.
 - specified components (eg filters) have been replaced as required
- The warranty for a new device covers the repair or replacement of a defective part
- The warranty for replacement parts for manufacturing defects is valid for ninety (90) days from the installation of the replacement part
- The warranty is valid from the date of commissioning.
- Warranty will be disregarded if any modifications are implemented without manufacturer's authorization.

Recycling and disposal of the product

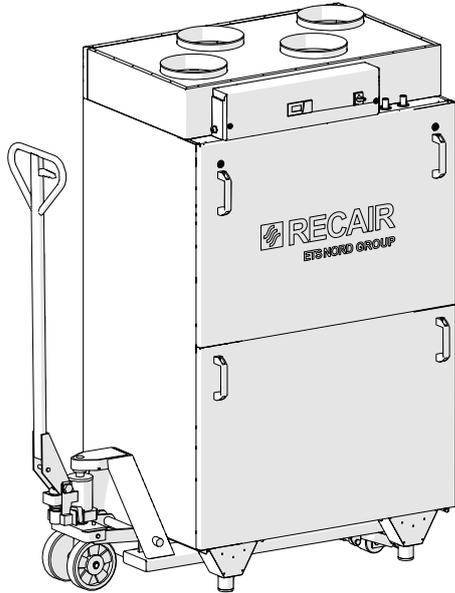
ETS NORD Recair air handling units are not to be disposed of with household waste. Local laws and regulations on safe and ecological disposal of the product are to be followed. Please ensure that the components are separated and sorted based on the material types.

Installation

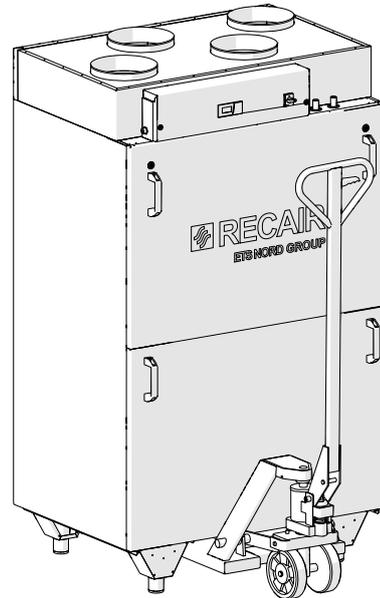
Check the shipping list to make sure all equipment has been shipped before installation. Notify any deviation from the ordered equipment to supplier.

Transport

Forklift side

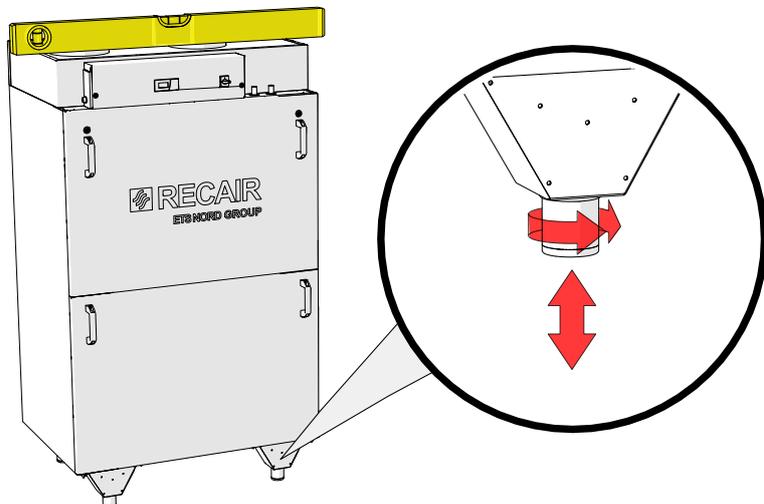
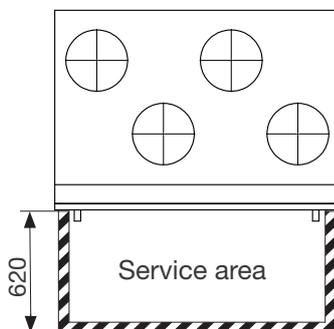


Forklift front



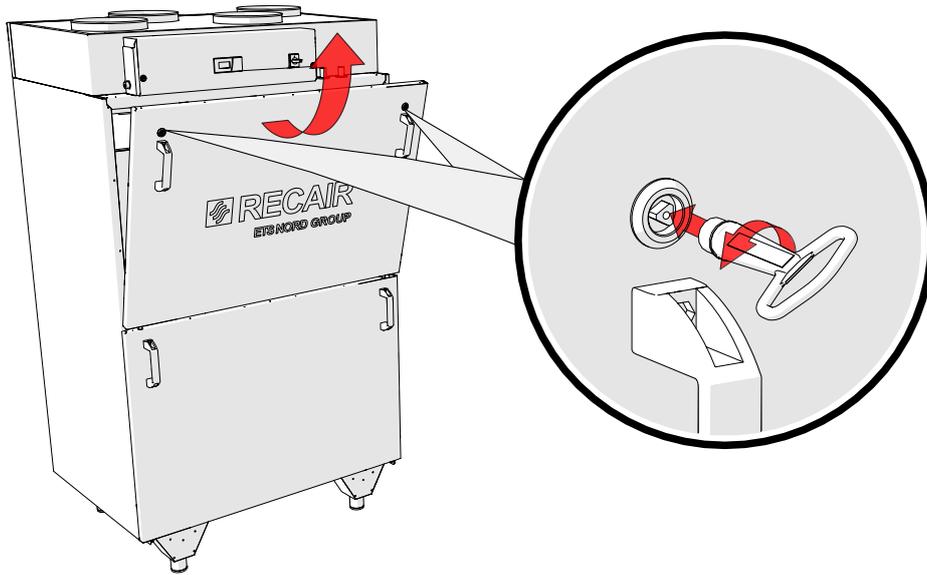
Placement

- The unit must be placed in a dry location protected from the weather. Operation temperature for the unit is +5...40 °C
- Make sure the doors are accessible for maintenance.
- Avoid placing the unit right against wall.
- Install the unit on level floor. Make sure the unit is levelled before operation.

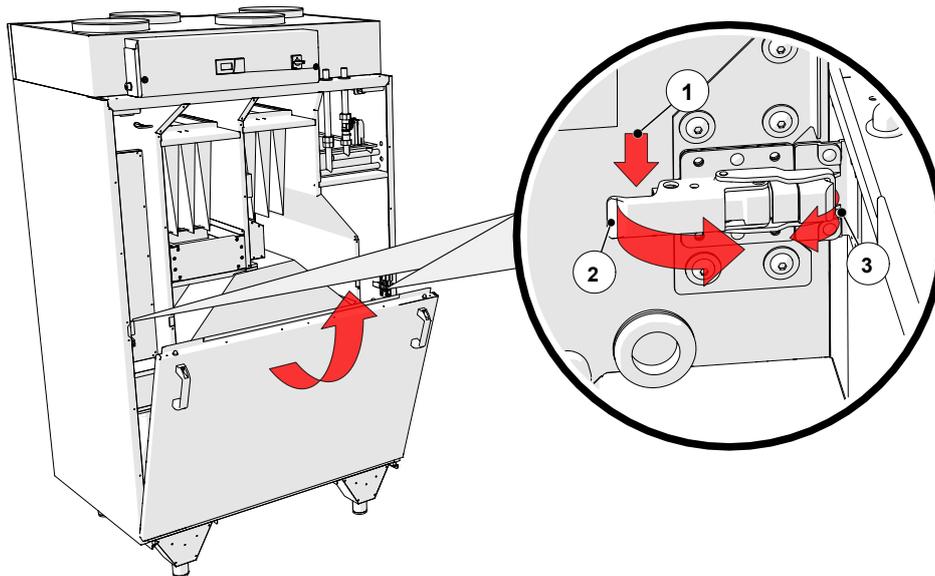


Removing doors

1. Removing top door

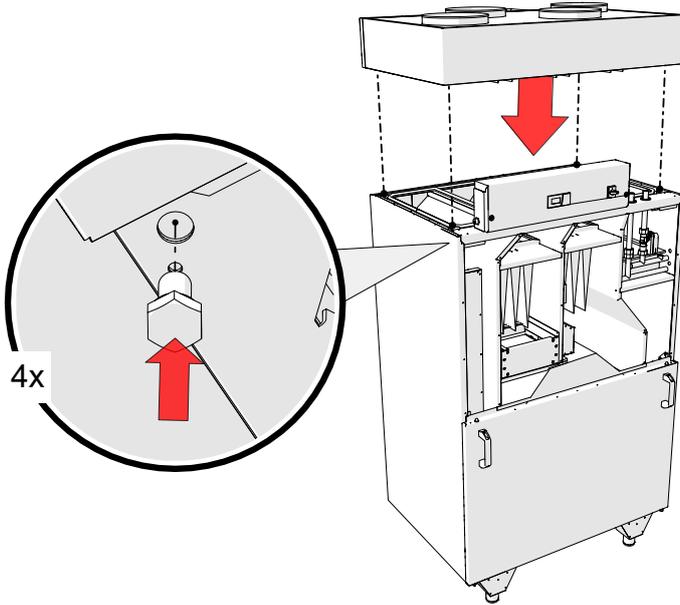


2. Removing bottom door

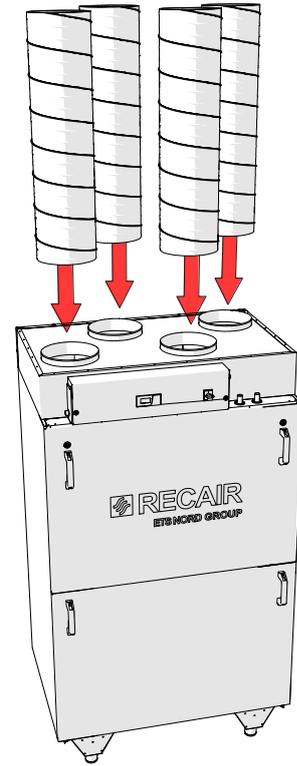


Adapter installation

Installing adapter

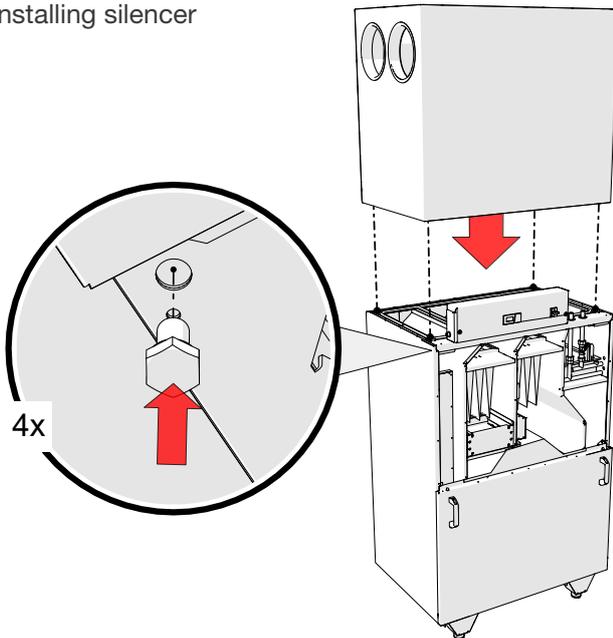


Installing adapter ducts

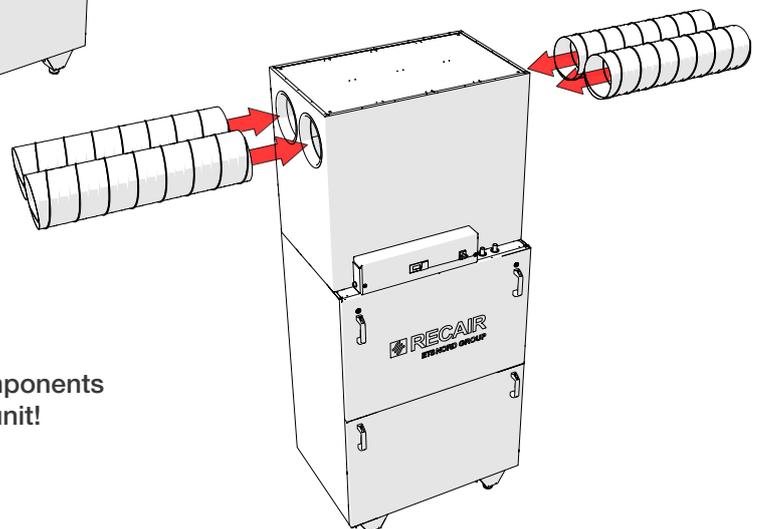


Silencer installation

Installing silencer



Installing silencer ducts

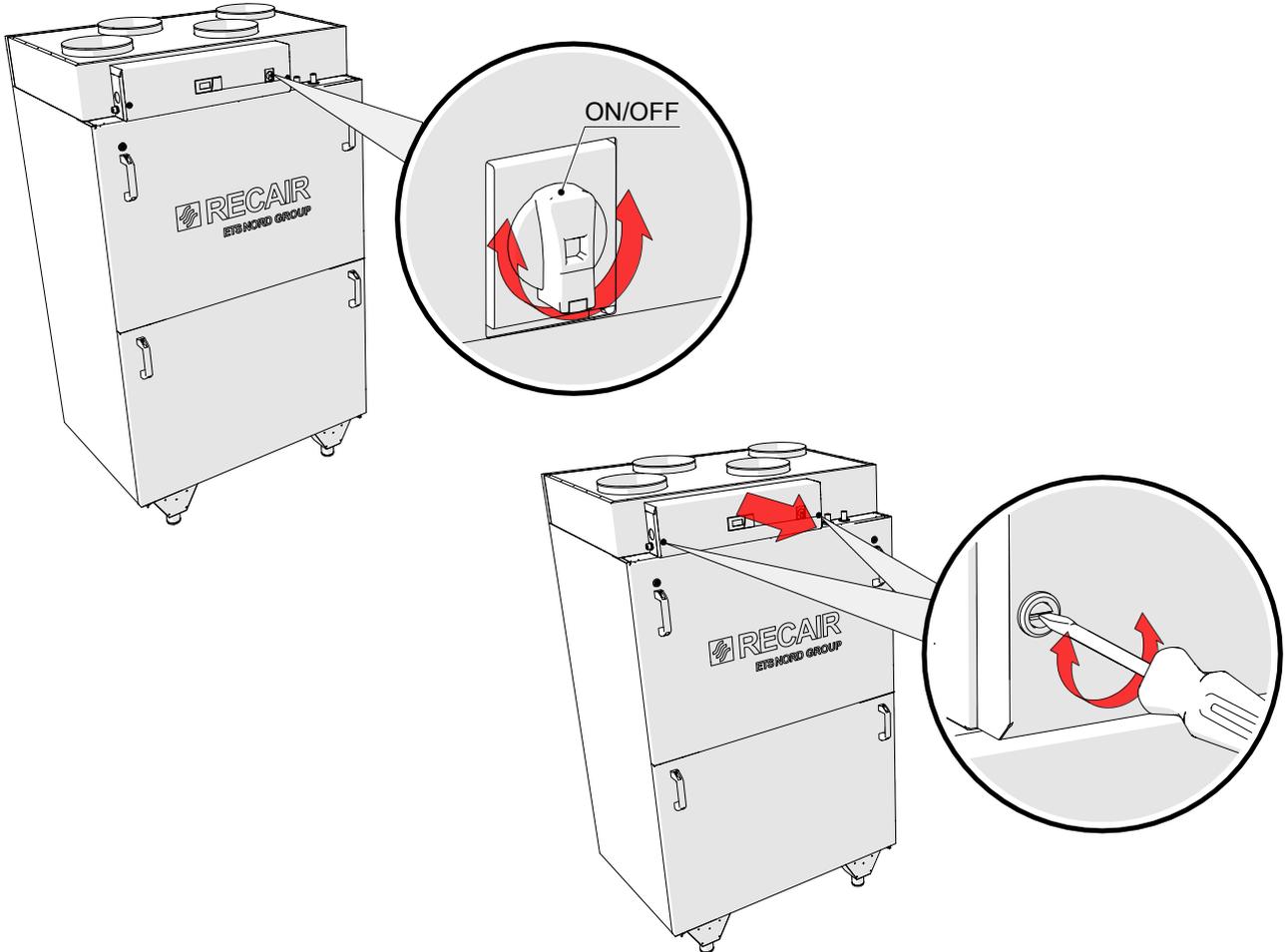


The weight of the ducts and components must not lay weight to the unit!

Connections

Electrical connections

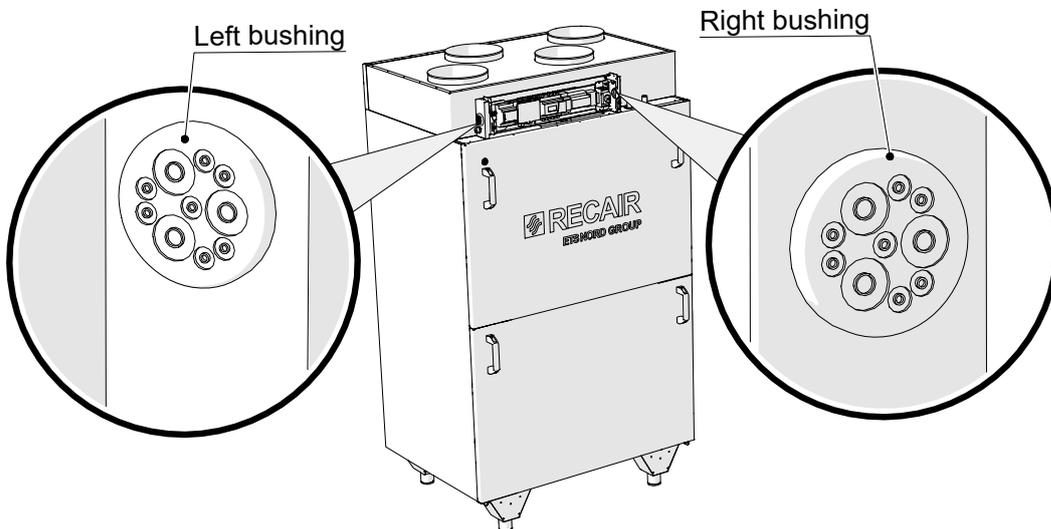
 Always turn off the unit before opening the electrical panel



For electrical connection, use the right bushing.

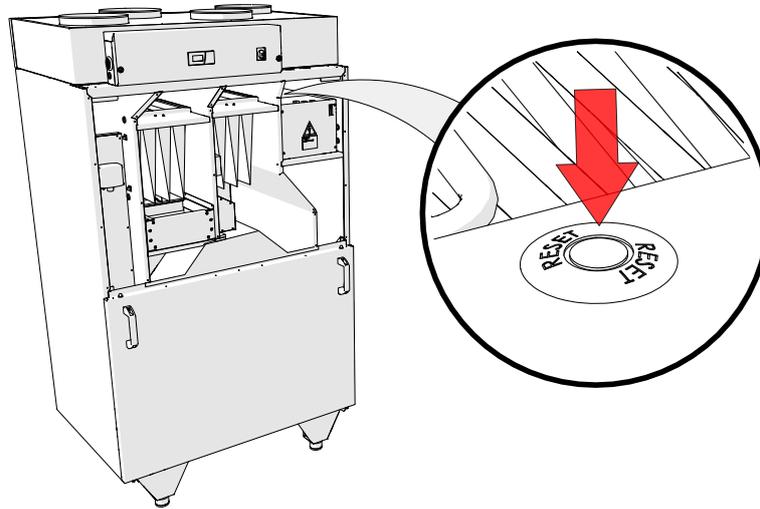
Use left and right bushings to run connection cables to the controller.

For electrical connections to the control box, see the electrical schematic drawing.



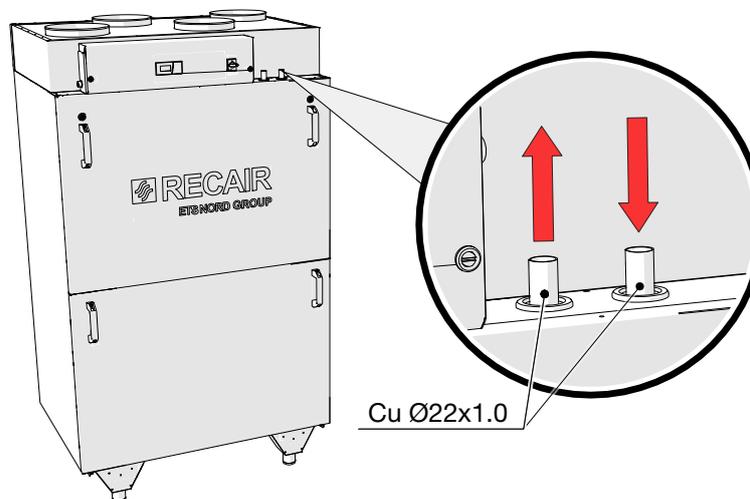
Electrical post heater

Manual reset thermostat. Thermostat, in case of overheating, completely disconnects the heating element power supply to protect the unit, stops the unit and creates overheat alarm. The unit runs the fans for a preset time after the heater is stopped in order to cool down the heaters. Press RESET button inside the unit to reset protection.



Heating water connection

For the correct operation of the ventilation unit, it is necessary to make hot water connections to the heating coil. To avoid freezing, the water temperature must be adjusted accordingly to the outdoor air temperature.



If the building is left unheated for longer period during cold conditions, the water must be drained from pipe and heating coil.

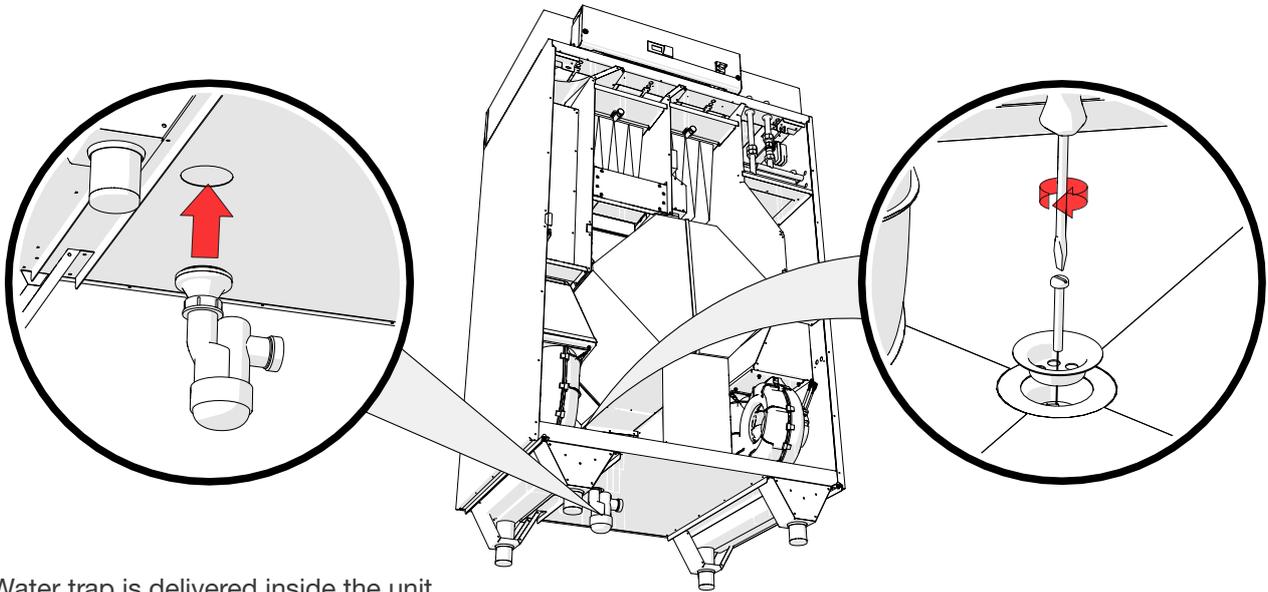
Pressure sensor

Pressure sensor is used to measure duct supply and exhaust static pressure. When units is used with duct pressure control, and VAV dampers, then duct pressure measurement should be located on ductwork.

For this, supply and extract pressure measuring pipes should be rerouted and connected on the duct. The sensors must not be positioned in, or in the vicinity of a duct bend.

Drainage connection

To avoid any water damage drainage connection must be done on the exhaust side of the unit. When drainage is installed in non-heated location then the pipe needs to be well insulated to prevent freezing.



Water trap is delivered inside the unit.

Accessory connections

Preheater connection

Electrical preheater is added to the outdoor air duct prior to the air handling unit.

When adding electrical preheating coil, it is required to add a prefilter before the heater to remove larger particles and to keep the heating element clean.

Electrical preheater and prefilter are sold as an accessory. Use product's own installation manual.

The electrical preheater must be connected to a separate fuse box. For automation connections look at wiring diagram.

Cooling coil connection

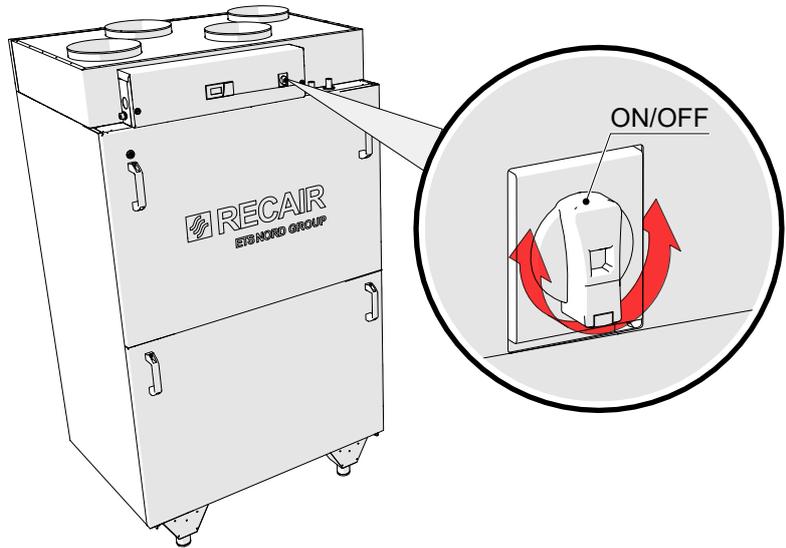
Cooling coil is sold as an accessory. The cooling coil is delivered with a 2-way valve, valve actuator and duct temperature sensor.

The cooling coil is installed on a supply duct close to the air handling unit. The temperature sensor is installed on the ductwork after the cooling coil. The distance between the cooling coil and the temperature sensor must be at least one meter.

The cooling coil is sold as an accessory, use product's own installation manual. For automation connections look at wiring diagram.

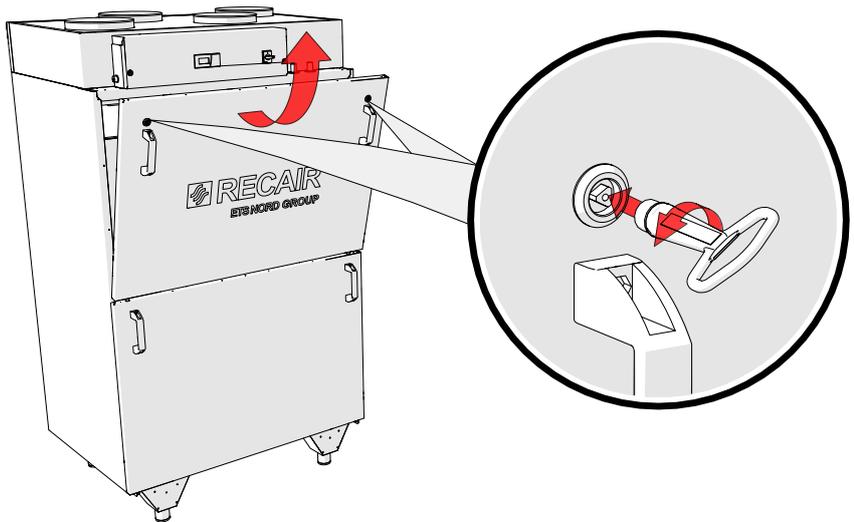
Maintenance

 The electrical power of the unit must be disconnected before service and maintenance.

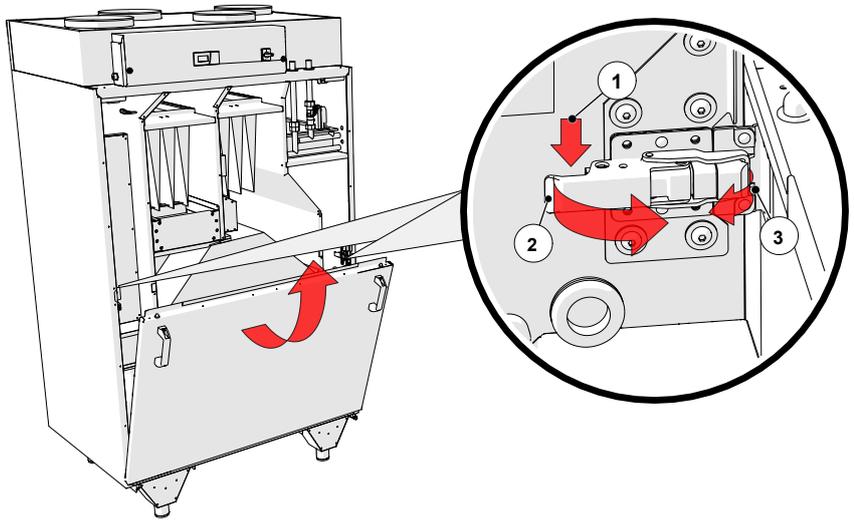


Removing doors

1. Removing top door



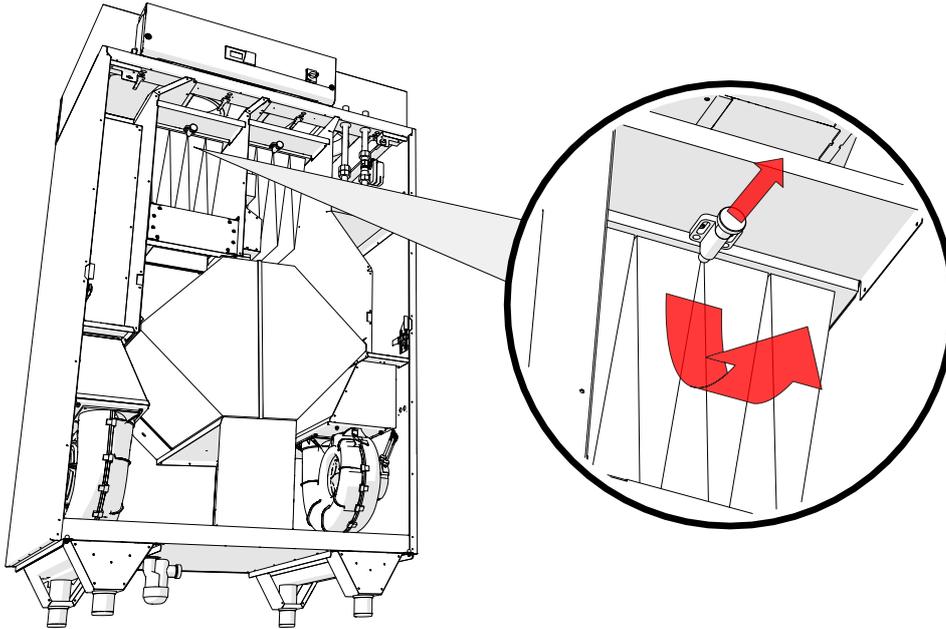
2. Removing bottom door



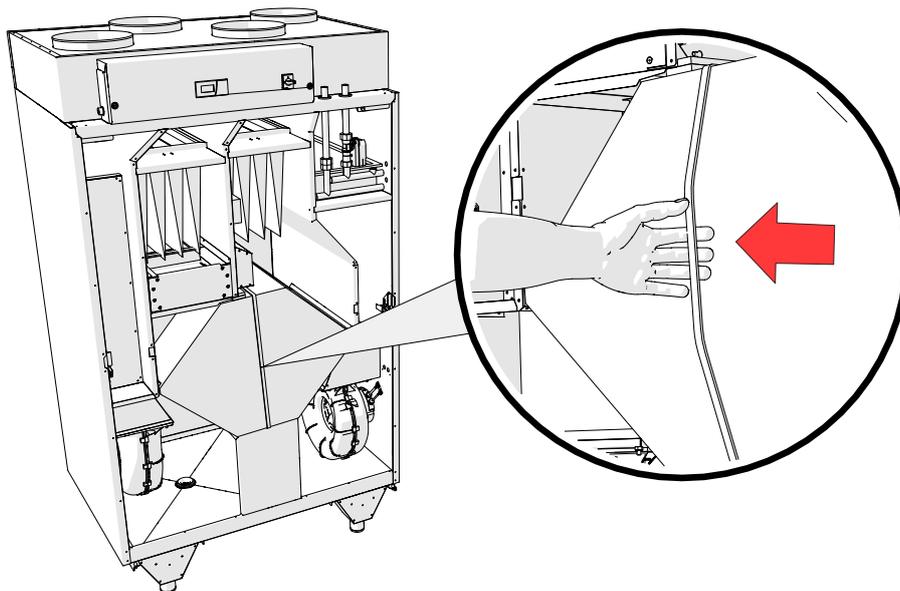
Removing filters

Particulate air filters are used to remove solid particles like dust from airflow throughout the air handling unit. Filters are used to clean the air and protect the air-handling unit. As particles are gradually collected in filter the flow resistance increases. This results the decrease in airflow through the filter. Therefore filters must be replaced with new ones at least every 6-12 months.

Filters	Bag filters
- supply	ePM1 60%(F7); 1 x 287/592/370 mm
- extract	ePM10 60% (M5); 1 x 287/592/370 mm

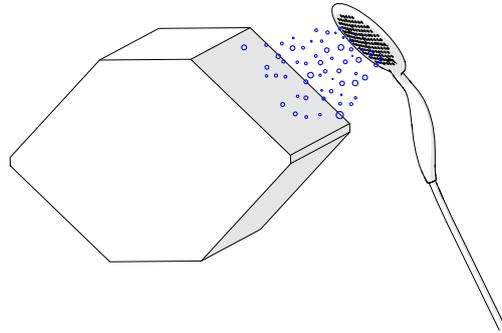


Removing heat exchanger

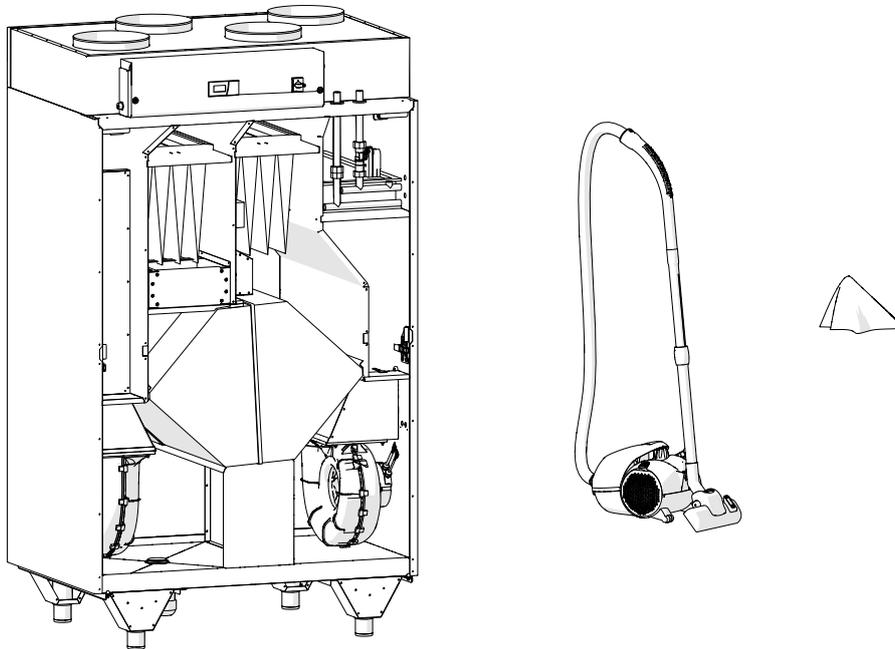


Cleaning the unit

Heat exchanger, when removed from the unit, can be washed under running water.

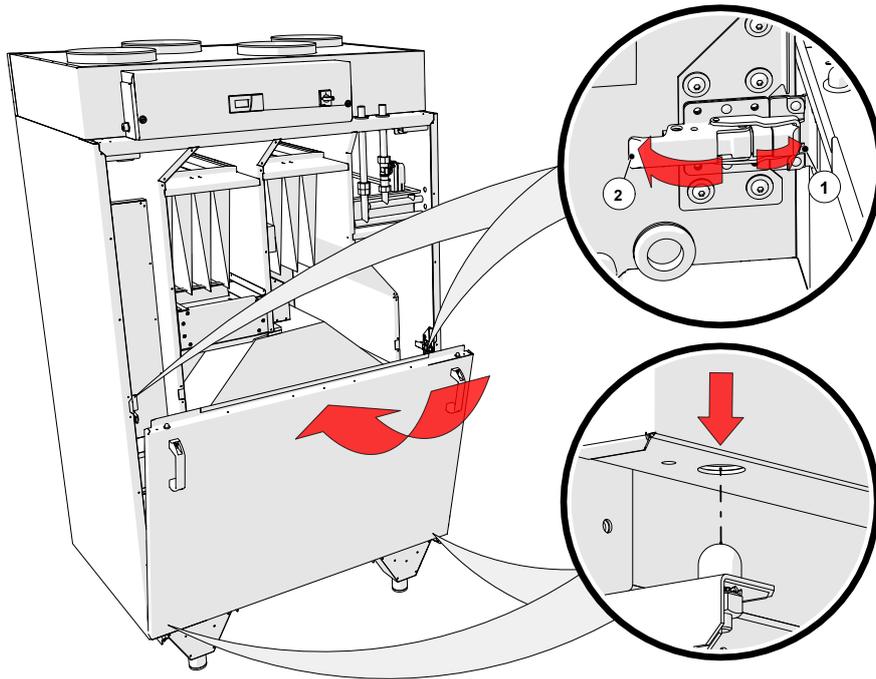


Clean the inside of the unit with vacuum or damp cloth.

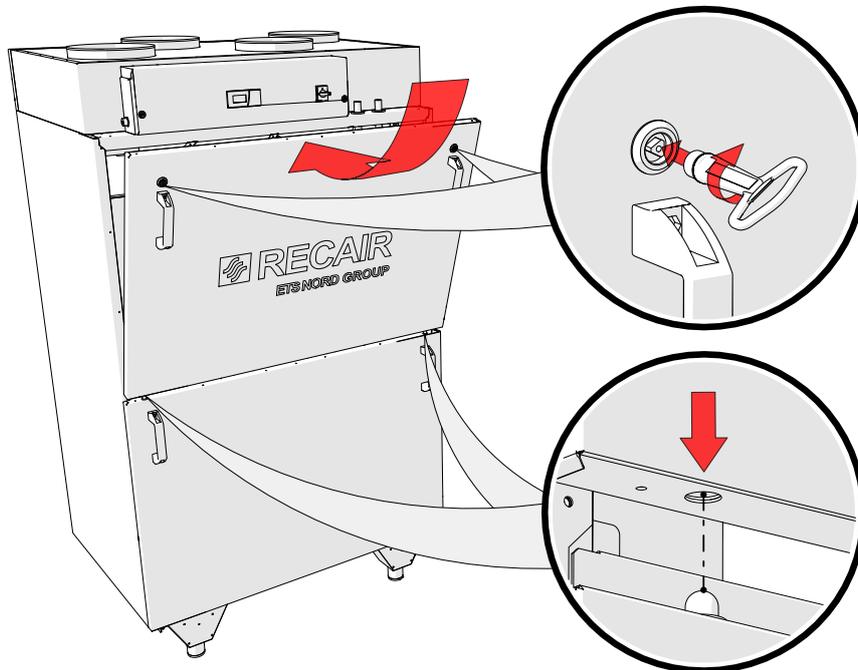


Putting door back

1. Putting back bottom door



2. Putting back top door





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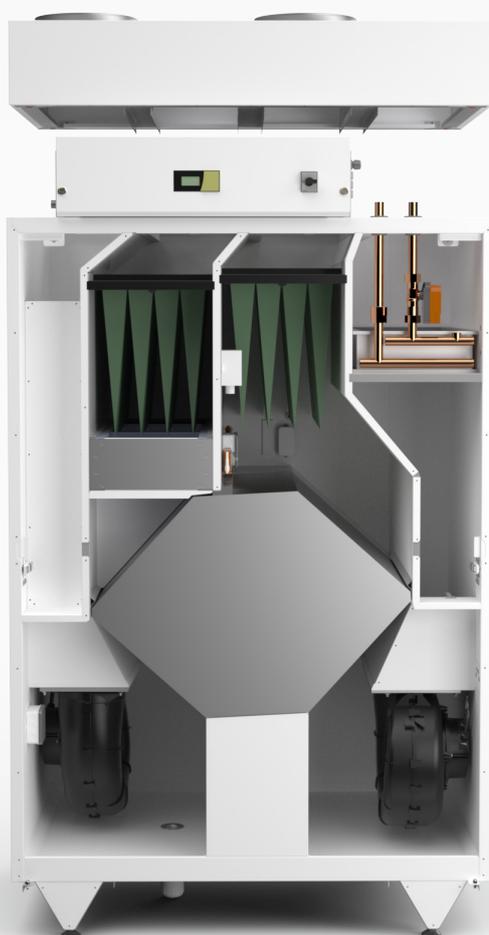
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Let's move the air together!