

# Geniox Core Air handling unit as knock down ready version – disassembly and reassembly

Installation instructions

GB

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Order number output



Only the English version is valid in case of a dispute. Translated versions are not valid in case of disputes.

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## **A Manufacturer**

This User Manual covers all air handling units delivered by Systemair A/S.

### **Manufacturer and supplier data:**

Systemair A/S

Ved Milepælen 7

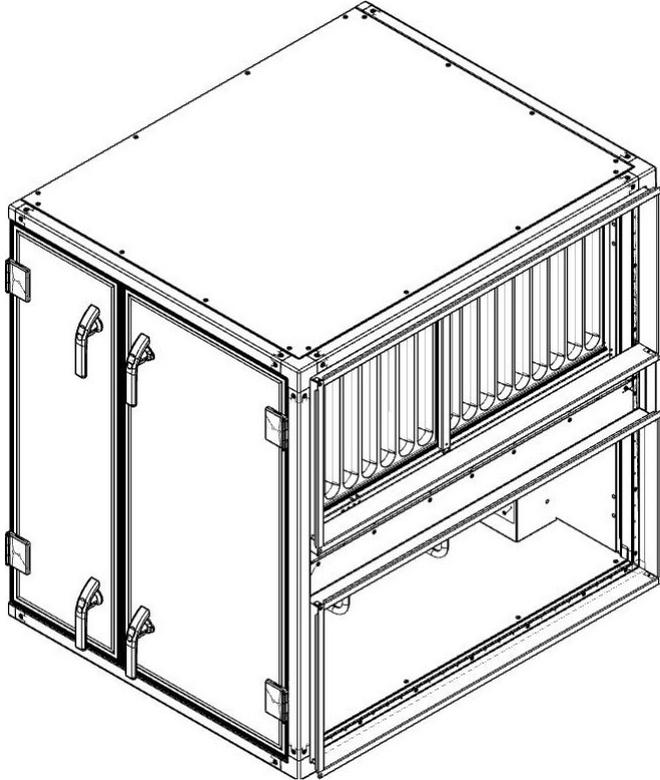
DK-8361 Hasselager

Responsible for documentation: Elisabeth Rahbek

## **B Name of machines**

This manual is about Systemair air handling units called Geniox Core 10, Geniox Core 11, Geniox Core 12, Geniox Core 14, Geniox Core 16, Geniox Core 18, Geniox Core 20.

## C Section with rotary heat exchanger



Scan the QR code to watch a video showing the disassembling and reassembling process.

The unit is built without the use of rivets and without mastic between casing parts for easy and quick removal of panels from profiles and internal walls.

Remove doors, panels and profiles to offer good access for the demounting and removal of internal parts.

Internal parts to be removed are walls with fans, walls with filters, cables, control components, cabinet with controller and rotary heat exchanger.

**Reassemble the parts of the casing and reinstall the components in the opposite sequence of the separation.**



**Note:**

During reassembly of the unit, application of the delivered mastic and placing of the delivered self-adhesive flexible lists according to the below guidelines is important in order to achieve the air-tightness that corresponds to Eurovent certified values.

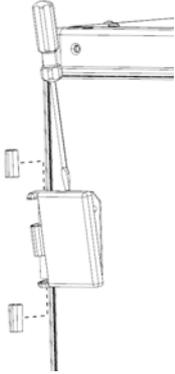


**Note:**

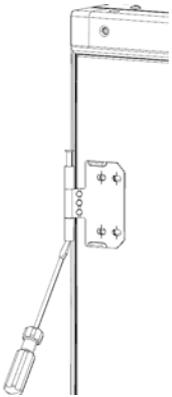
Do not separate the section with only fan and filter if doors in the building are sufficiently wide – 800 mm wide, because the width of this section does not exceed 800 mm. The width of the section with fan, filter, rotary heat exchanger and cabinet with control system exceeds 800 mm, and separation, as well as reassembly is described below.

## C.1 Removing the doors and panels

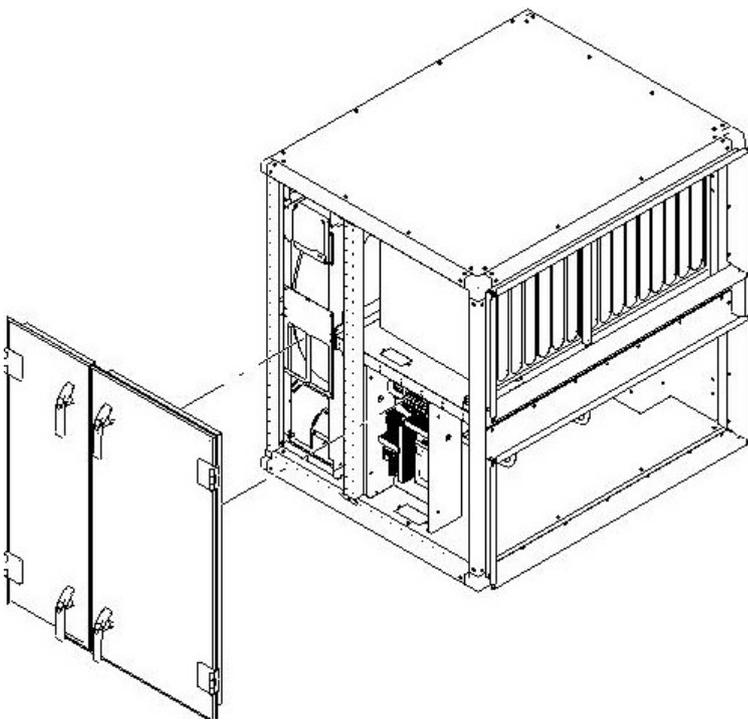
Remove the 3 caps for free access to removal of the steel shaft.



Remove the steel shaft in each hinge.

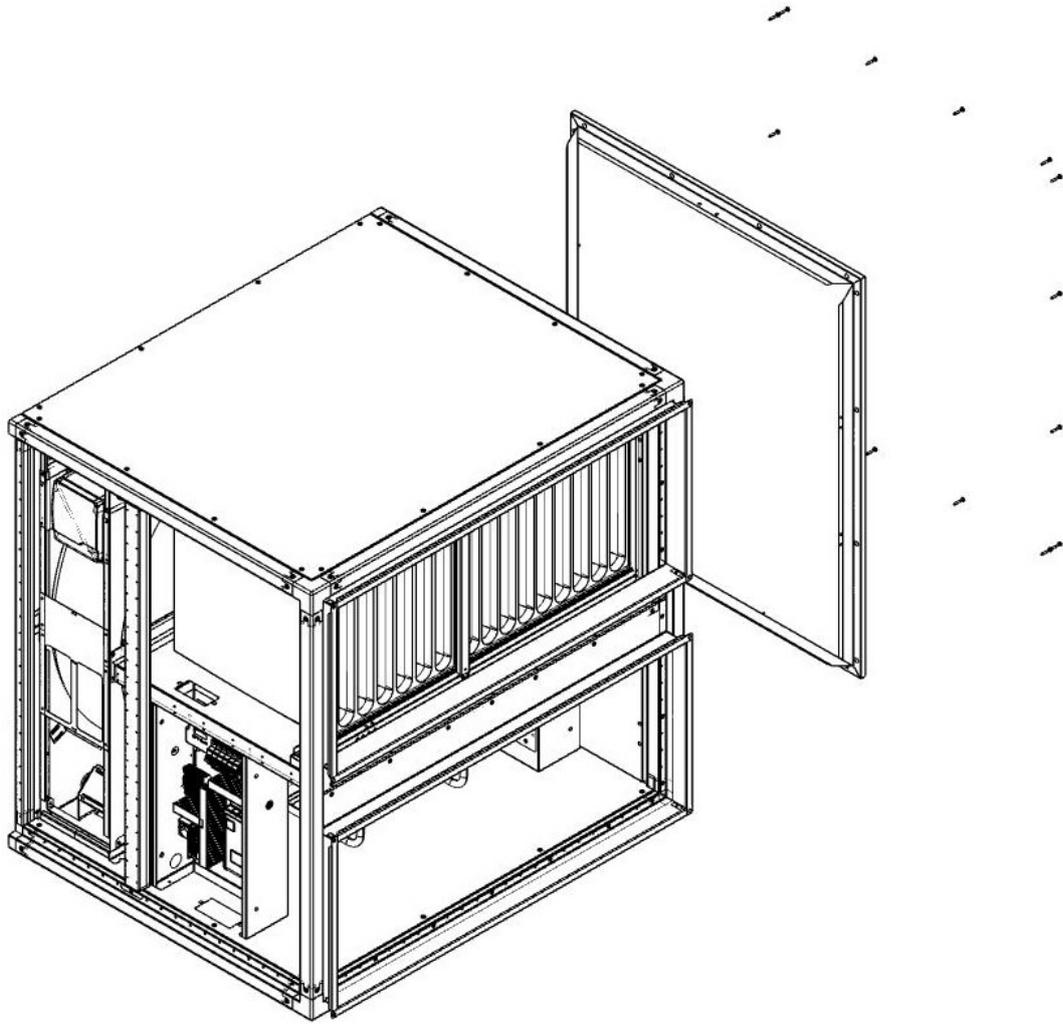


Remove the doors.



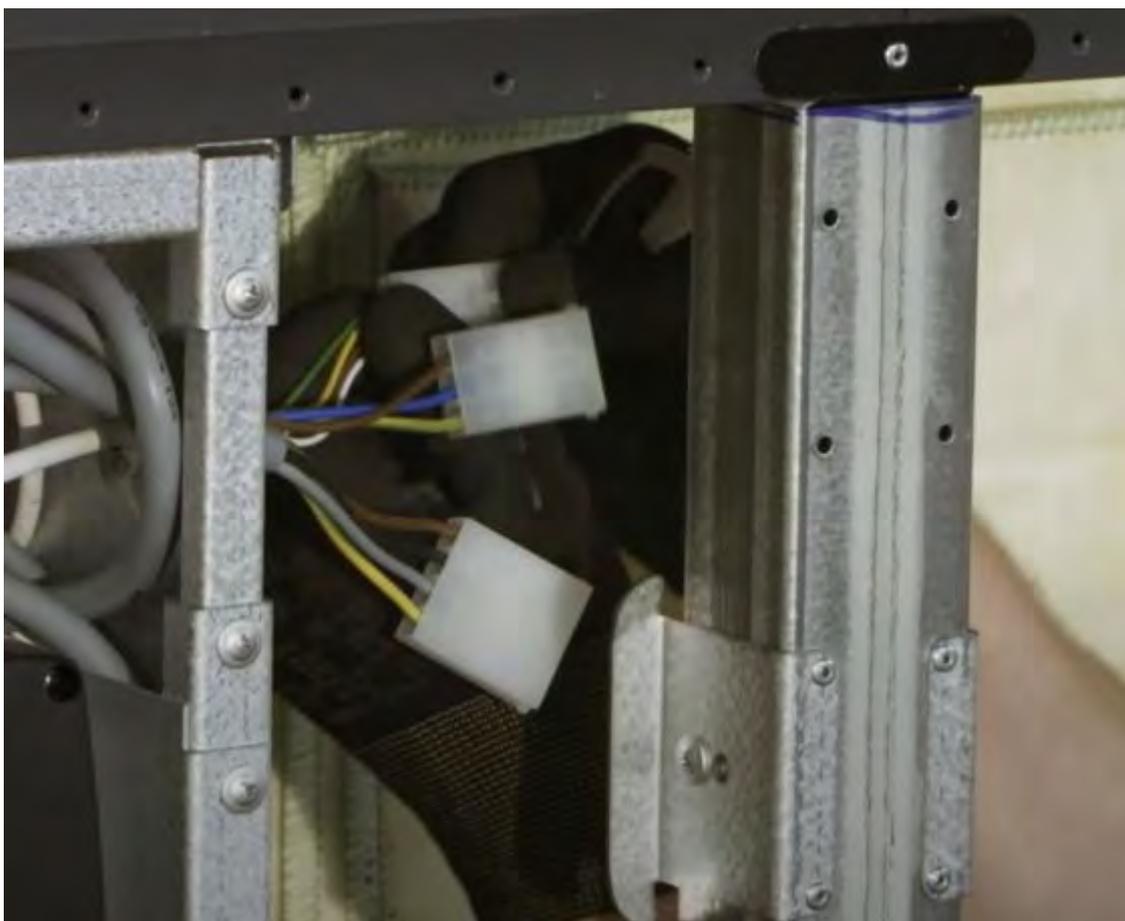
4 | Section with rotary heat exchanger

Remove the panels.



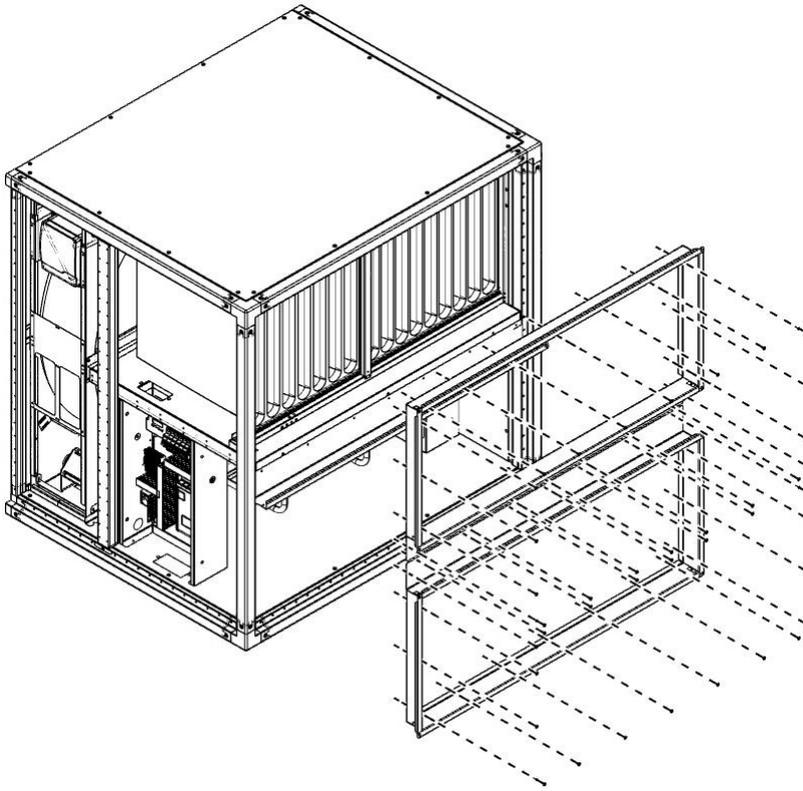
## C.2 Disconnecting cables

Unplug cables for the rotary heat exchanger section.

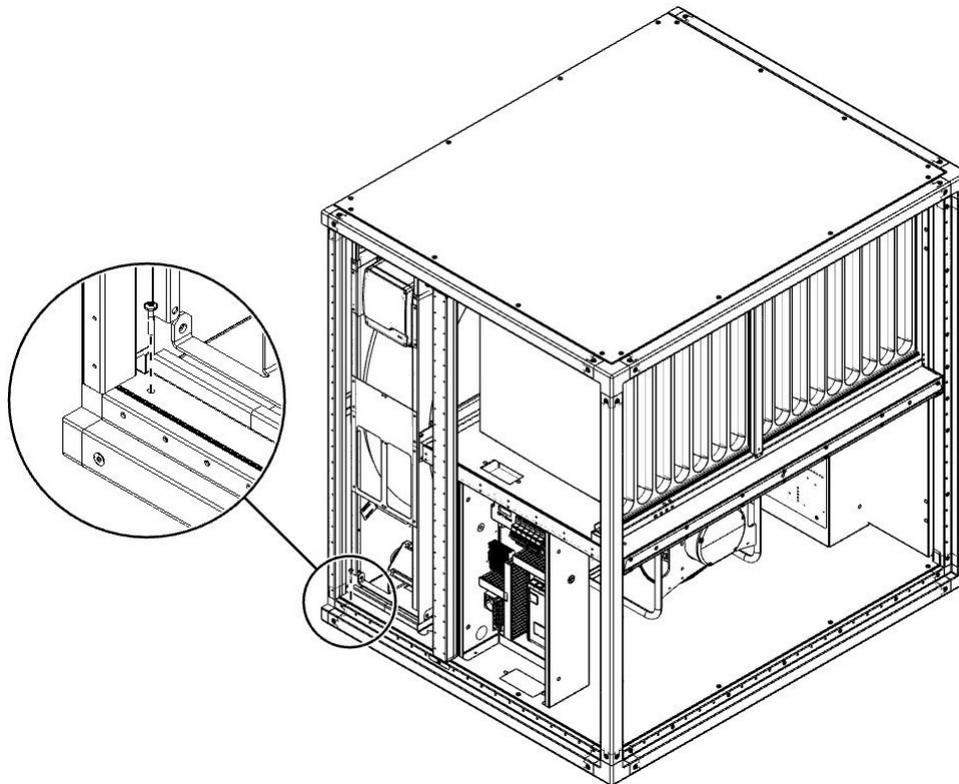


### C.3 Removing profiles and components

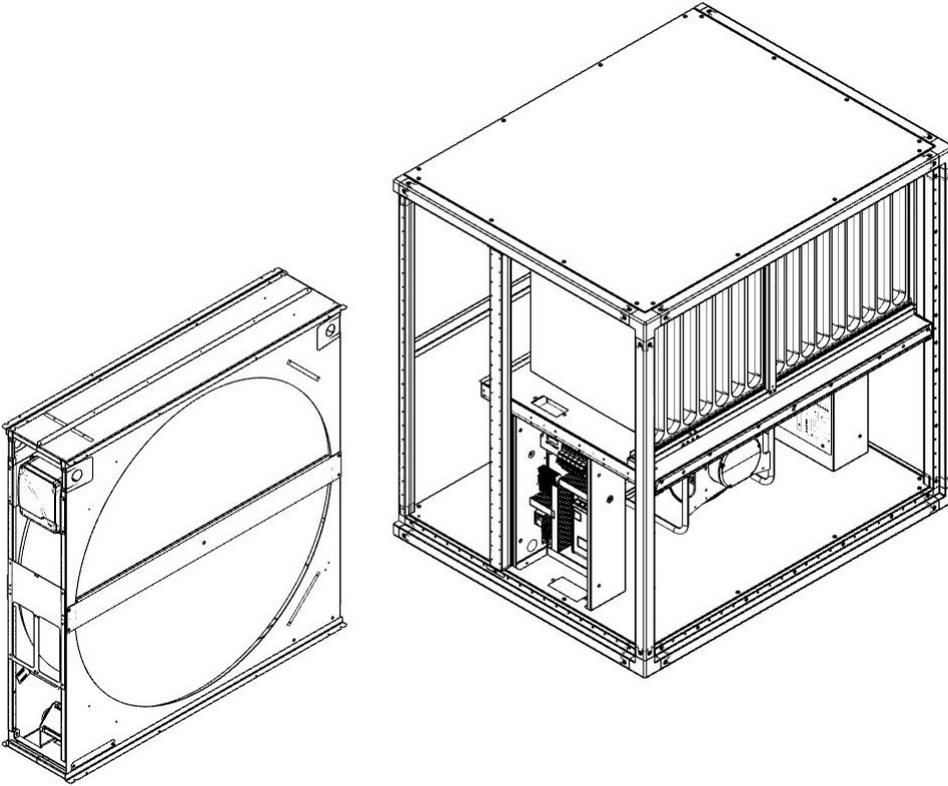
Remove the duct connections.



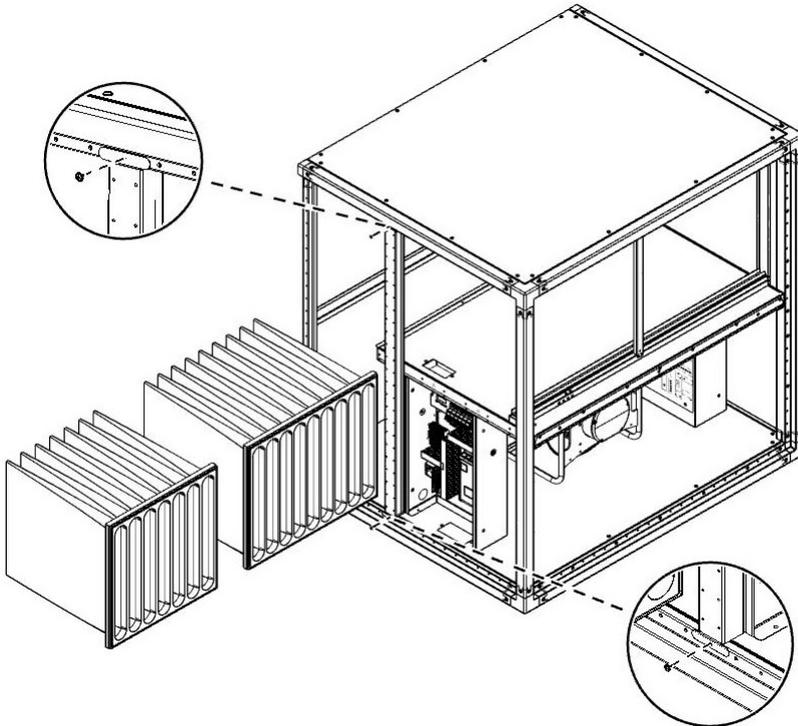
Remove screw before removing rotary heat exchanger.



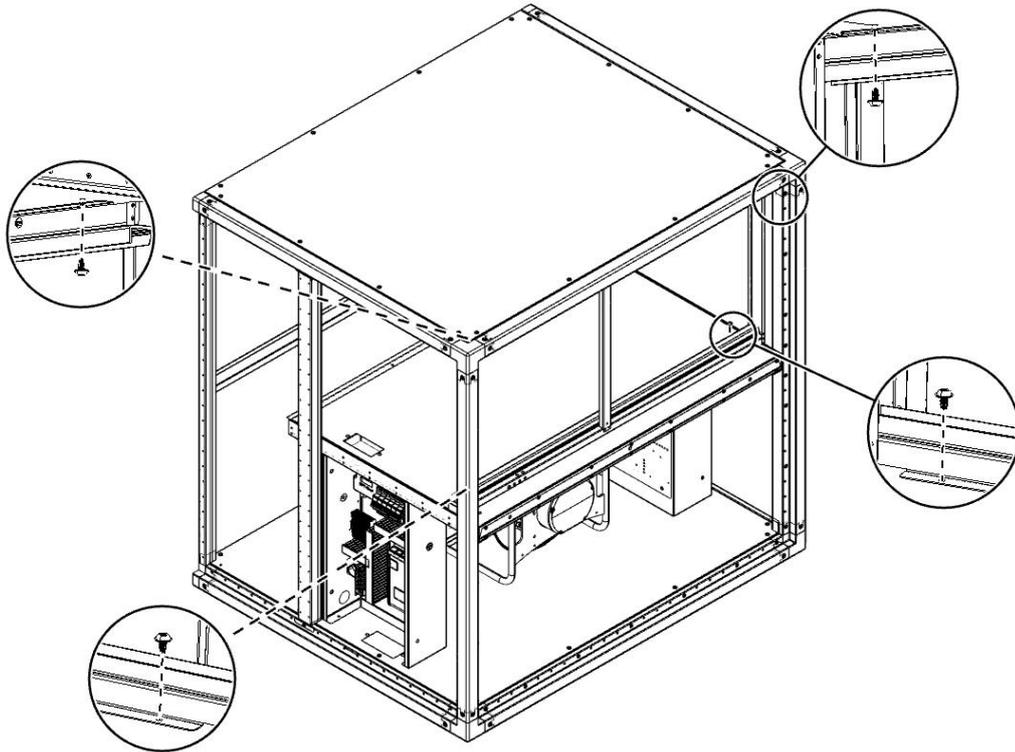
Carefully slide out the rotary heat exchanger.



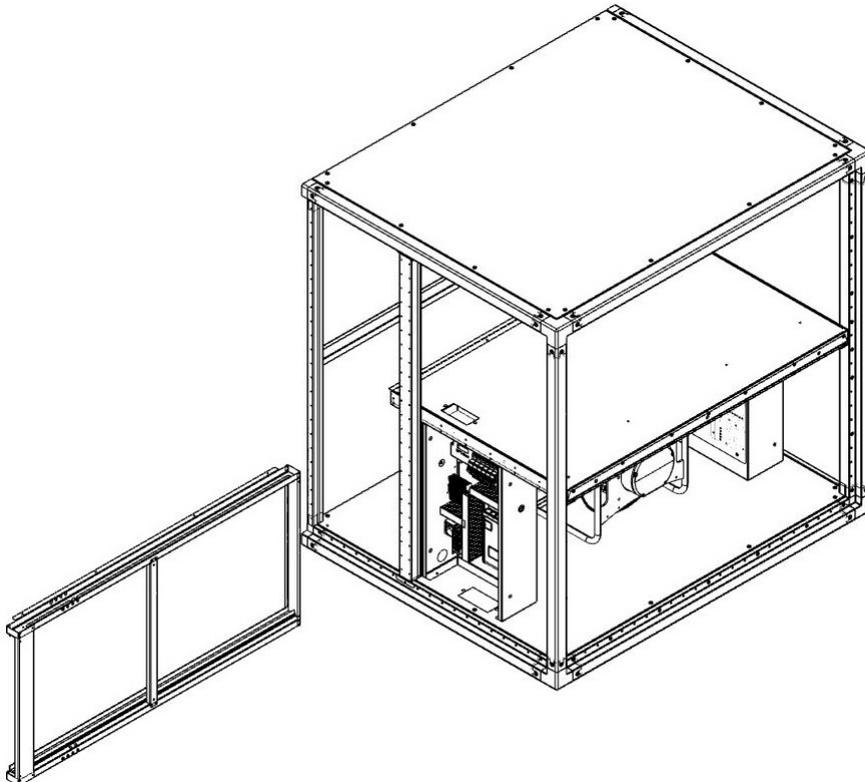
Remove screws and filters.



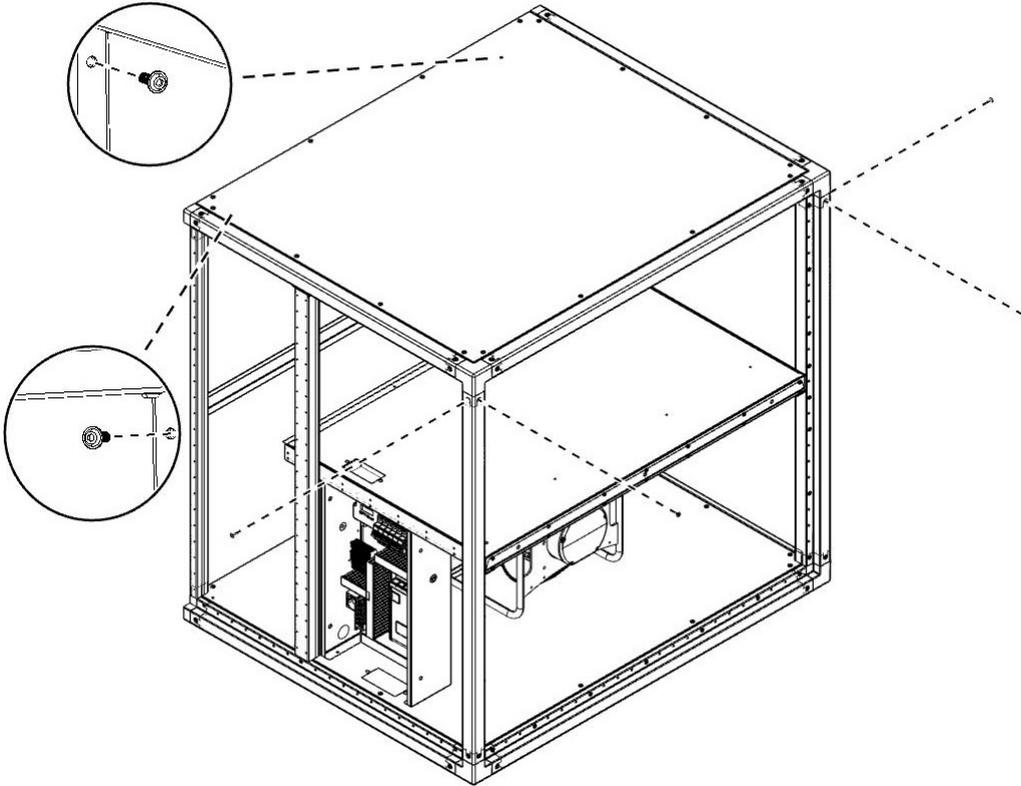
Remove screws for filter frame.



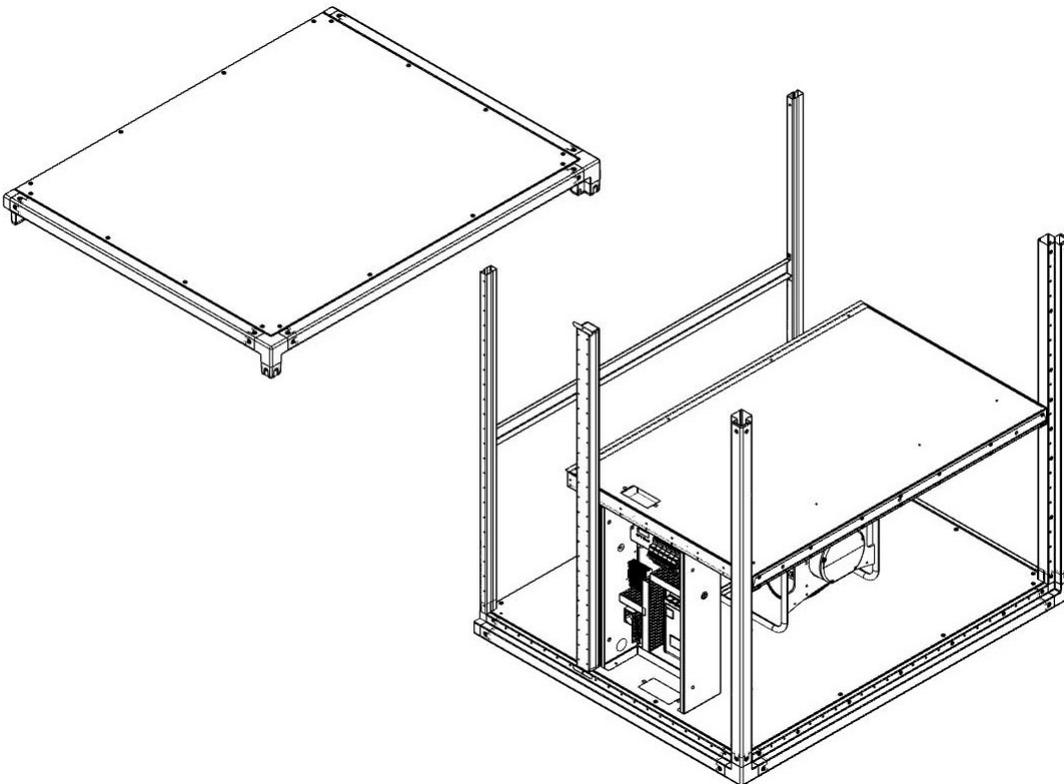
Remove filter frame.



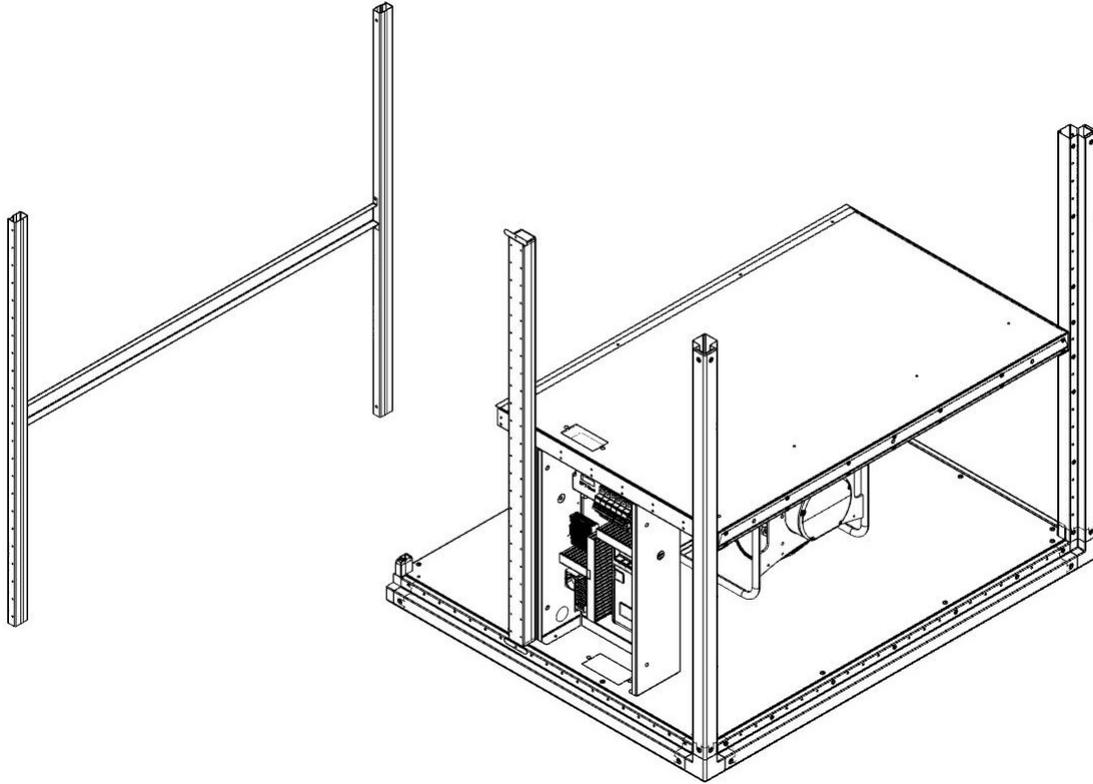
Remove screws for upper panel.



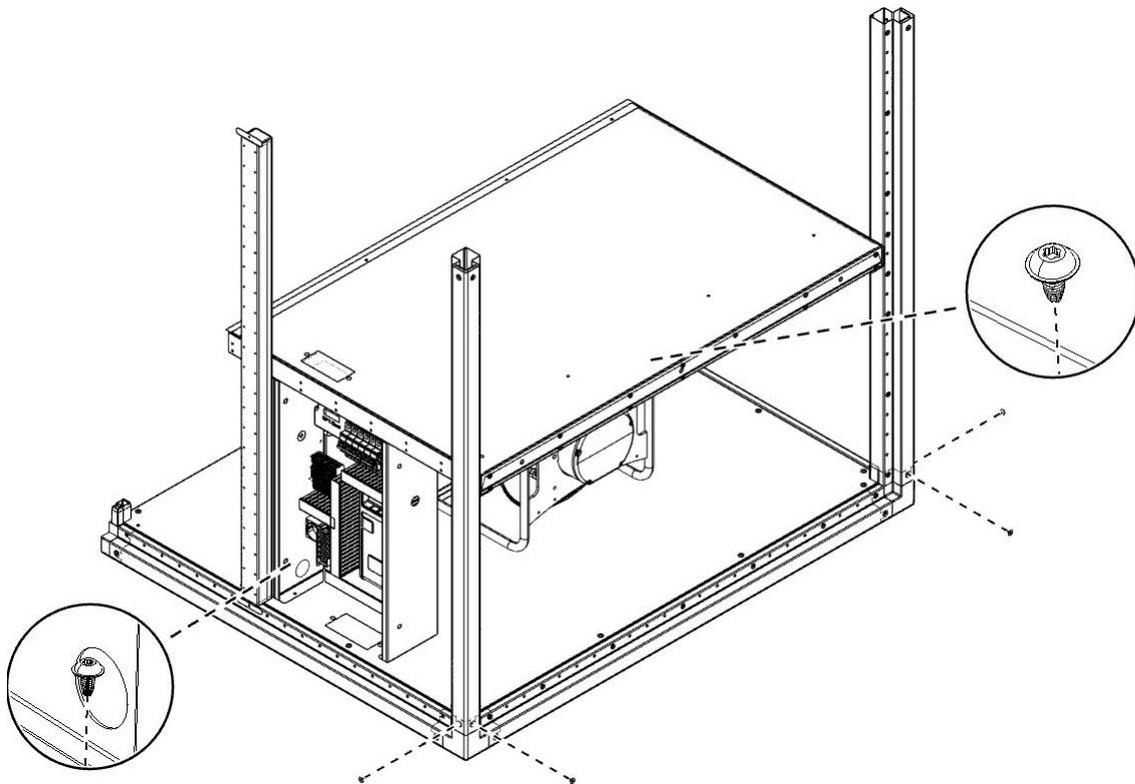
Remove upper panel.



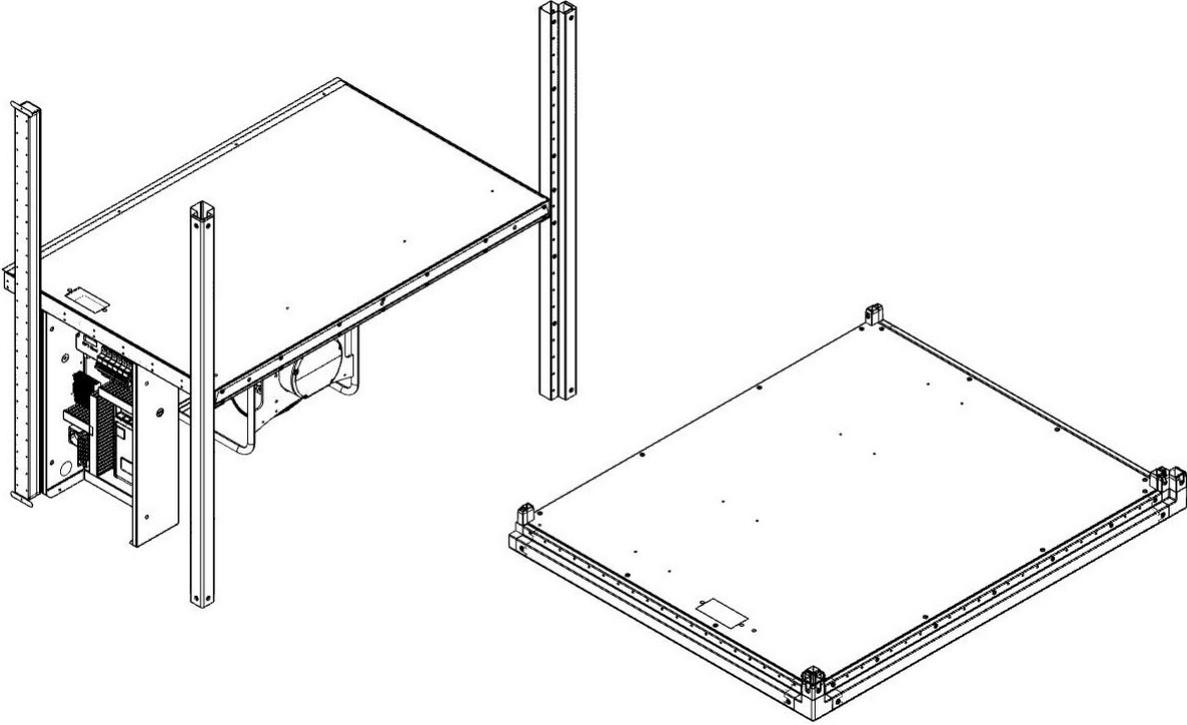
Remove the two corner profiles and the horizontal profile without separating them.



Remove screws for fan section, control cabinet and corner profiles.



Carefully remove fan section, with control cabinet and vertical profiles without separating them.



Separation is completed and all parts can be carried into the building.

### C.4 Reassembling the section with rotary heat exchanger

Reassemble the parts of the casing and reinstall the components in the opposite sequence of separation described above.



**Note:**

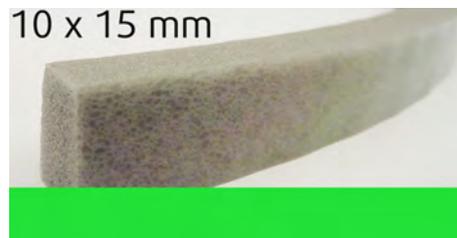
Application of the delivered mastic and placing of 2 different types of self-adhesive flexible sealing lists are important in order to achieve the air-tightness that corresponds to Eurovent certified values for this air handling unit.

This mastic must be applied to all connections between vertical profiles and plastic corners and between the walls with filters and the casing, between the walls with fans and the casing, and around dampers. All places are marked with blue colour on the unit. The number of metres that must be applied appears from the table below.

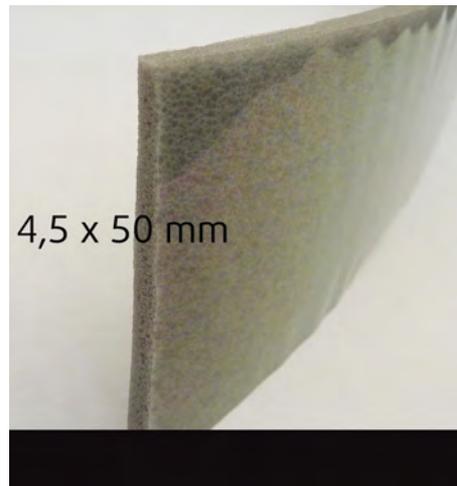
This is to some extent illustrated with blue colour in the drawing below.



Place this self-adhesive sealing list on vertical edges that are marked with green colour on the unit. This is illustrated with green colour in the drawing below.



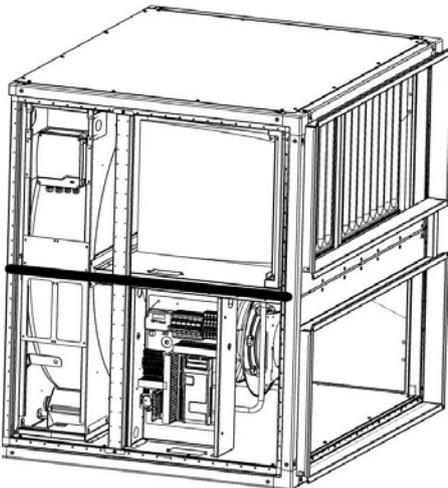
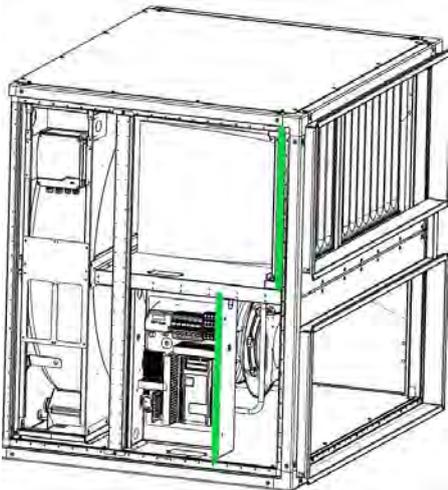
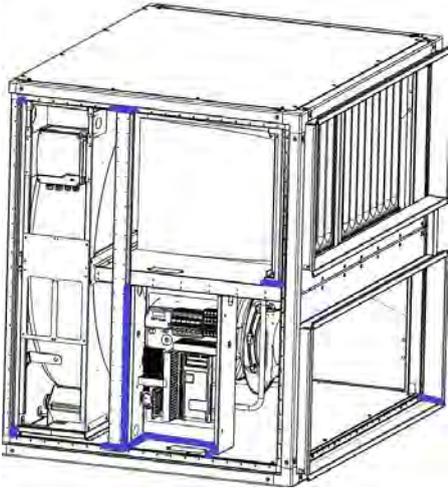
Place this self-adhesive sealing list on horizontal edges that are marked with black colour on the unit. This is illustrated with black colour in the drawing below.



The number of metres to which mastic must be applied.

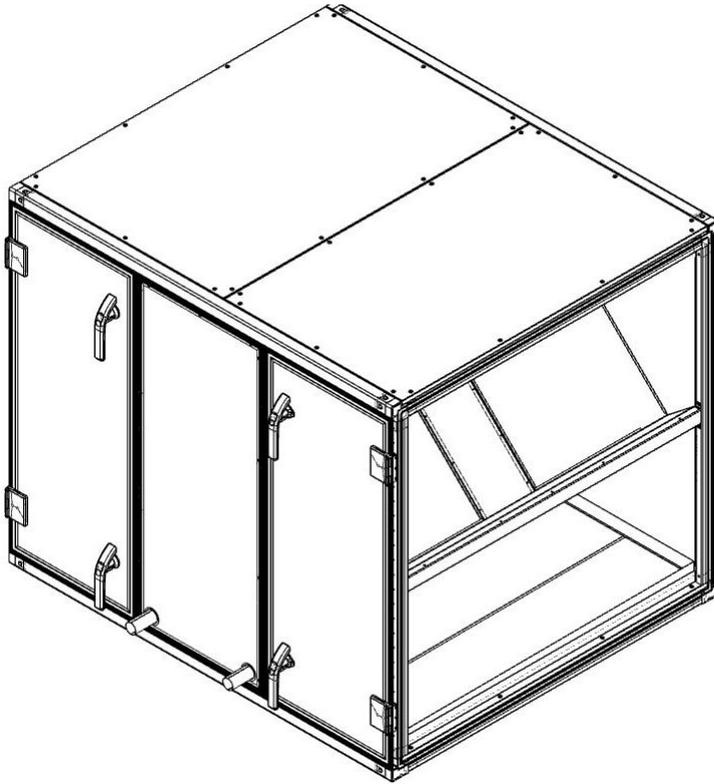
Size of unit	Unit with rotary heat exchanger
10	7,2 m
11	7,7 m
12	8,2 m
14	9,2 m

Illustration of where to apply mastic and where to place the above-mentioned sealing lists in the air handling unit



Finish by remounting panels and doors.

## D Section with counterflow heat exchanger



Scan the QR code to watch a video showing the disassembling and reassembling process.

The unit is built without the use of rivets and without mastic between casing parts for easy and quick removal of panels from profiles and internal walls.

Remove doors, panels and profiles to offer good access for the demounting and removal of components.

**Reassemble the parts of the casing and reinstall the components in the opposite sequence of the separation.**



**Note:**

During reassembly of the unit, application of the delivered mastic and placing of the delivered self-adhesive flexible lists according to the below guidelines is important in order to achieve the air-tightness that corresponds to Eurovent certified values.

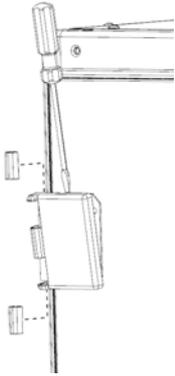


**Note:**

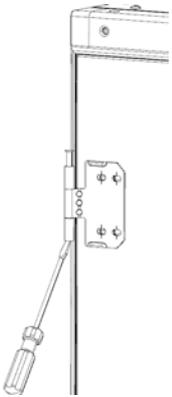
Do not separate the sections with fans, filters and cabinet with control system if doors in the building are sufficiently wide – 800 mm wide, because the width of this section does not exceed 800 mm. The width of the section with the counterflow heat exchanger exceeds 800 mm, and separation, as well as reassembly is described below.

## D.1 Removing the doors and panels

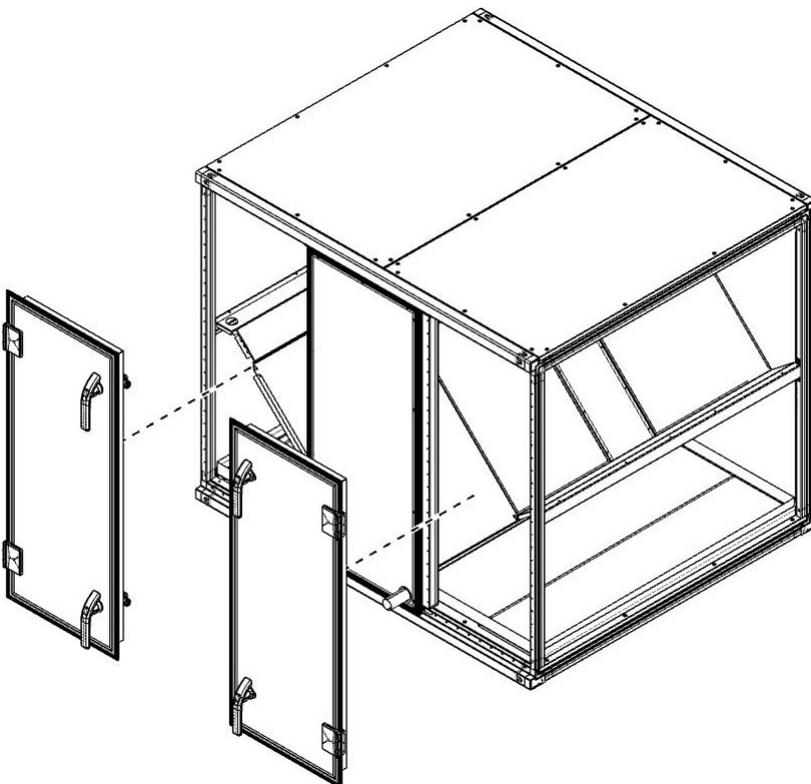
Remove the 3 caps for free access to removal of the steel shaft.



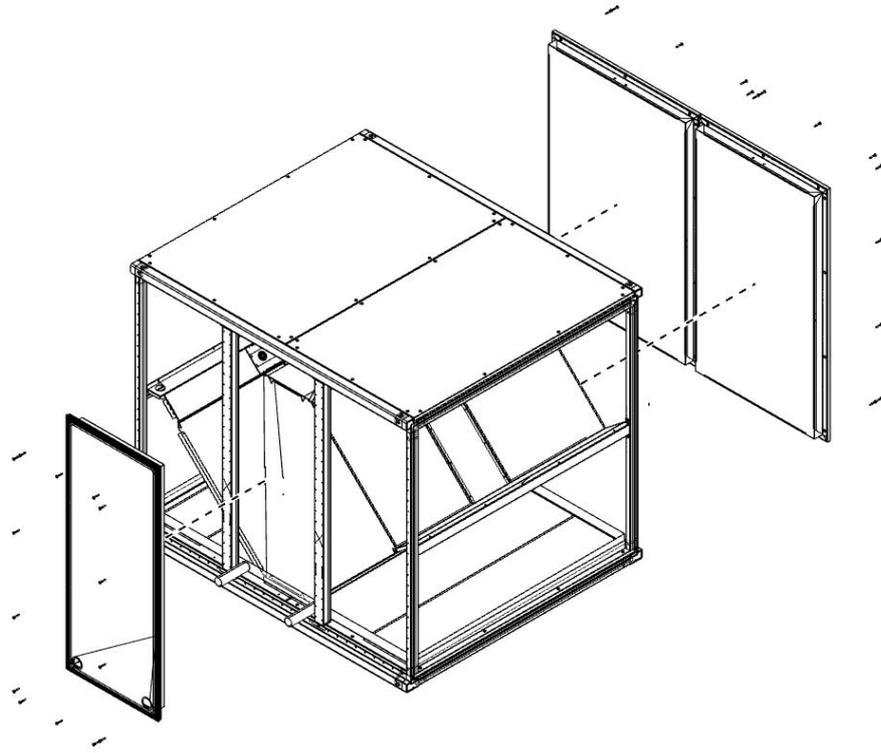
Remove the steel shaft in each hinge.



Remove the doors.



Remove the panels.



## D.2 Disconnecting and loosening cables

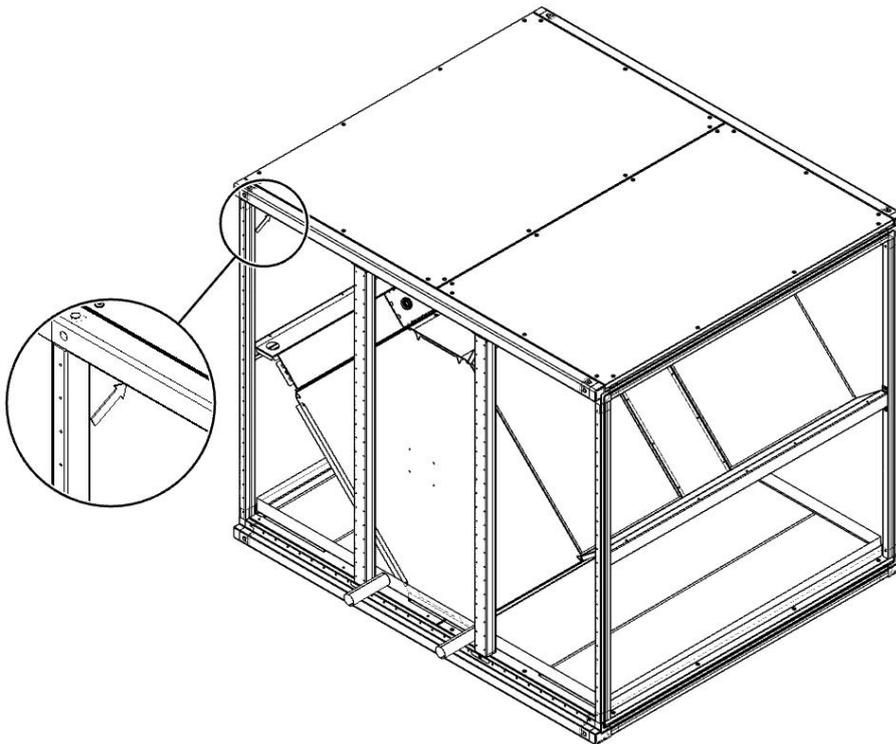
Disconnect the air hose from the differential pressure transmitter.



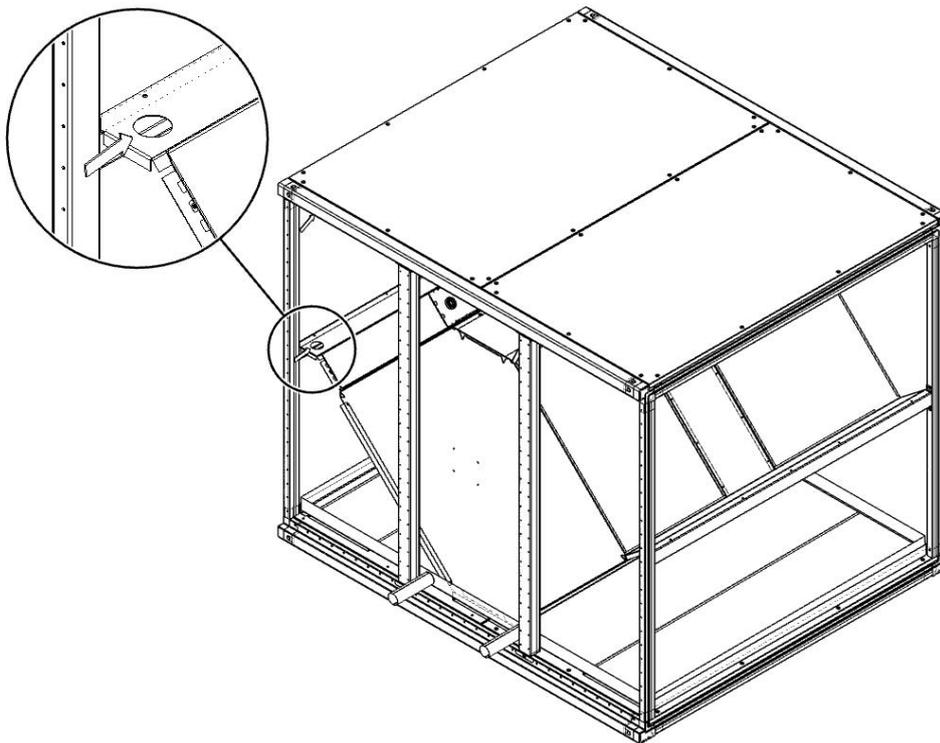
Cut the cable ties.



Unplug cable.

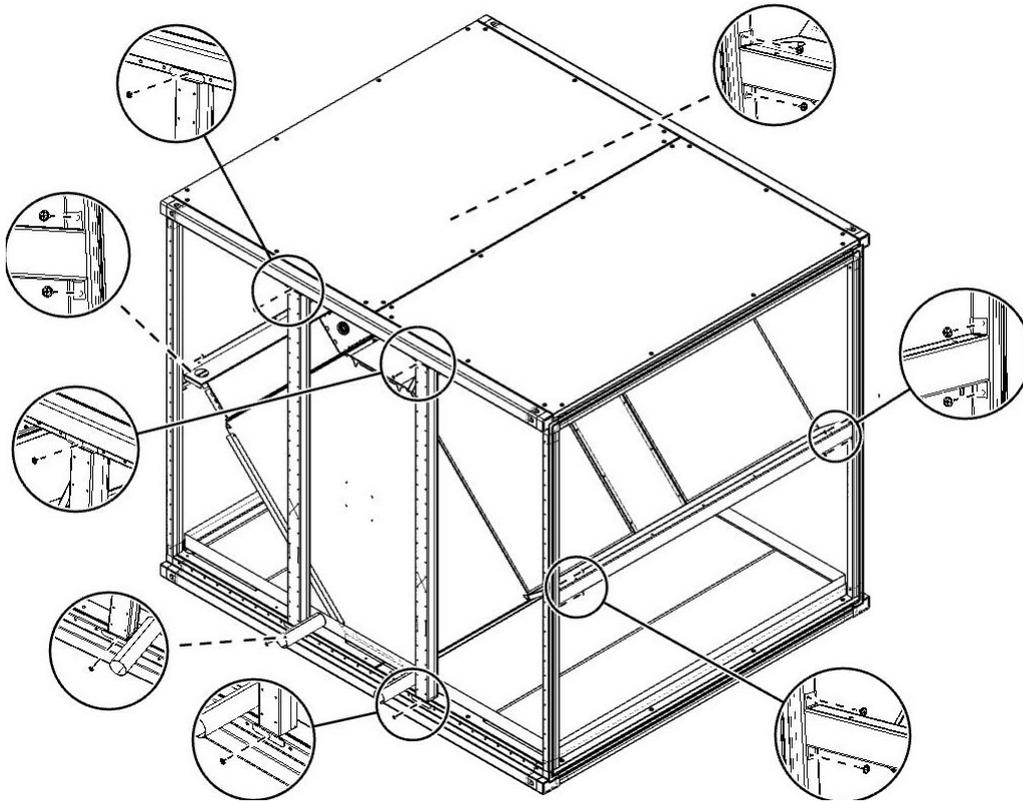


Pull the air hose out through the horizontal profile.

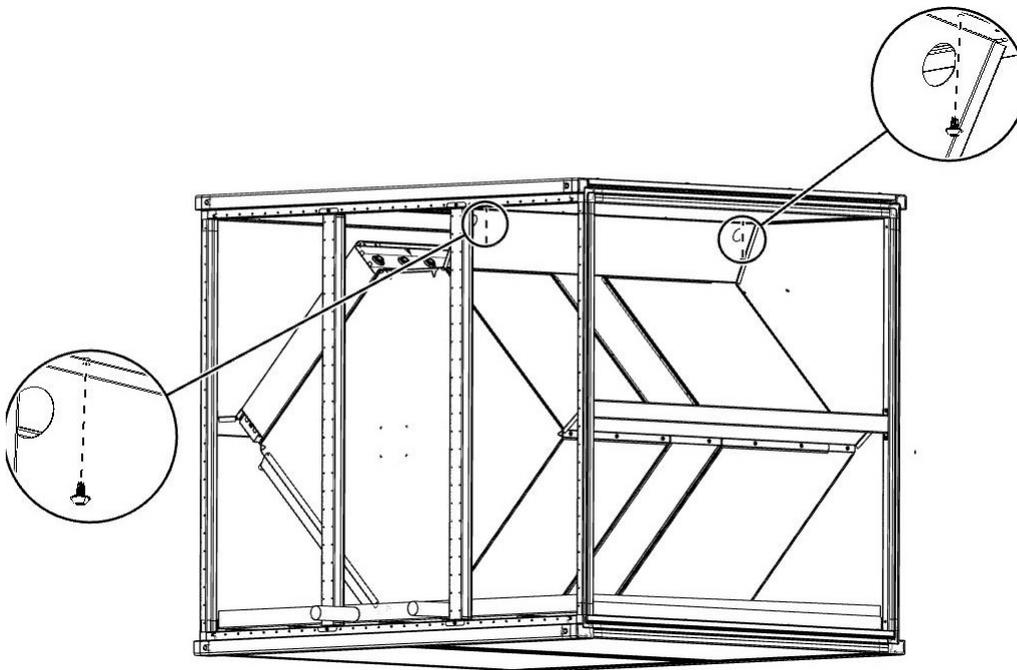


### D.3 Separating the section and removing the counter flow heat exchanger

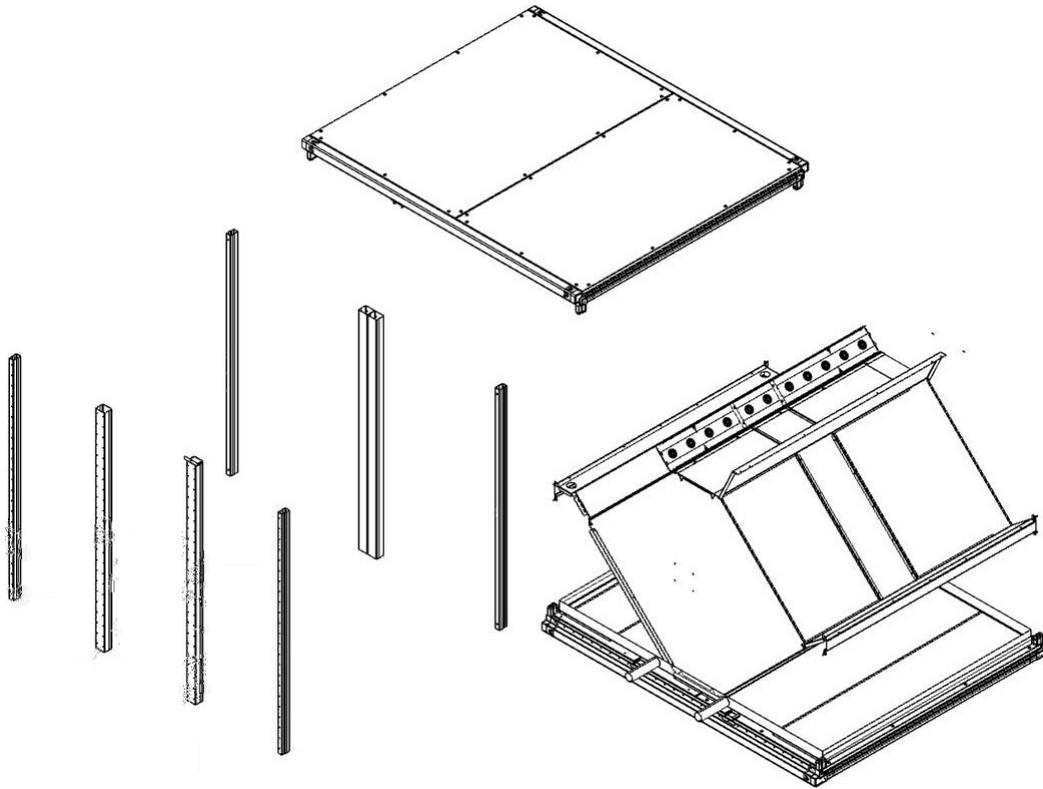
Remove screws for vertical profiles.



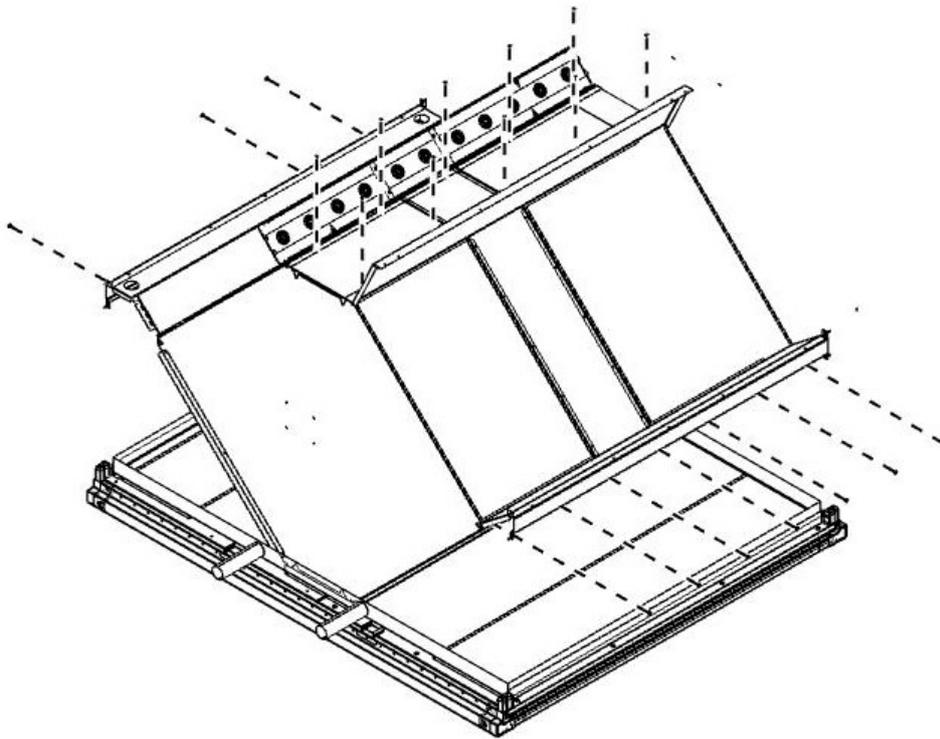
Remove screws for upper panel.



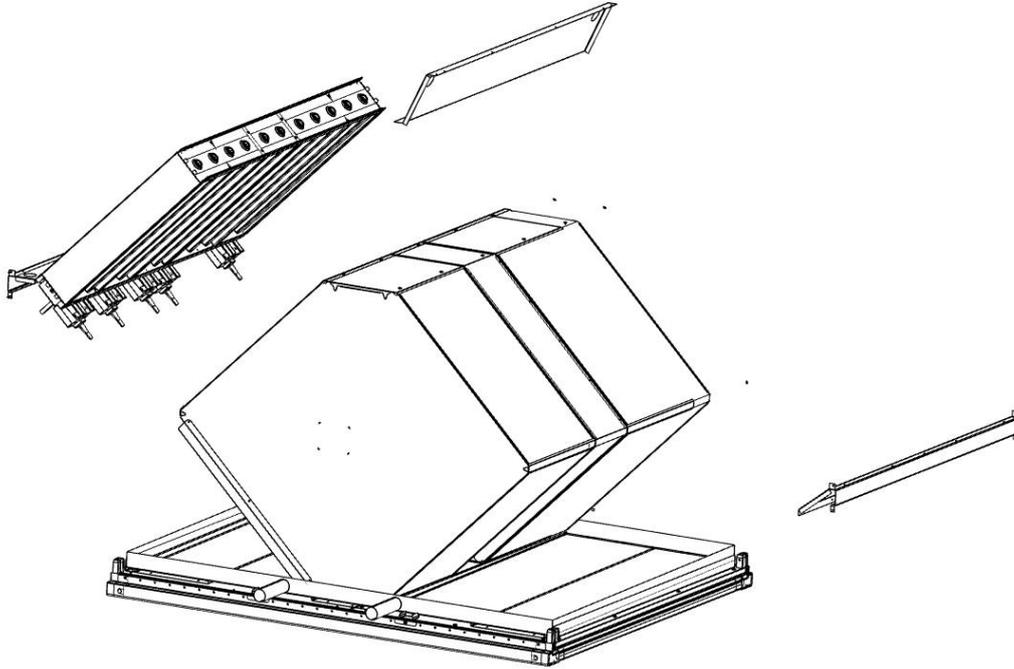
Remove upper panel and all vertical profiles.



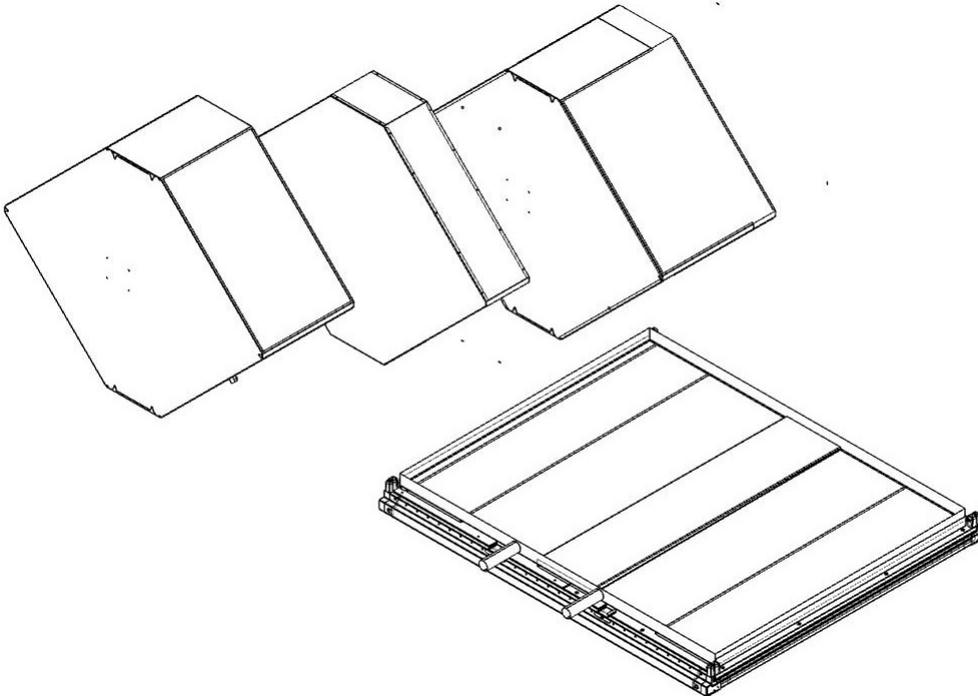
Remove screws from bypass dampers and plates.



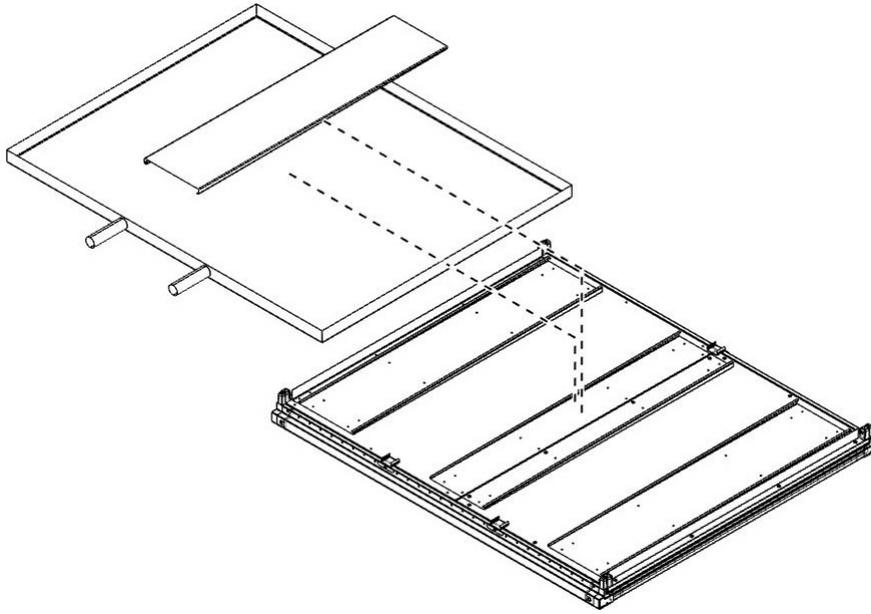
Remove bypass dampers and plates.



Remove counterflow heat exchangers.



Remove the drip tray.



Separation is completed and all parts can be carried into the building.

## D.4 Reassembling the section with counterflow heat exchanger

Reassemble the parts of the casing and reinstall the components in the opposite sequence of separation described above.



### Note:

Application of the delivered mastic and placing of the self-adhesive flexible sealing list is important in order to achieve the air-tightness that corresponds to Eurovent certified values for this air handling unit.

This mastic must be applied to all connections between vertical profiles and plastic corners and where parts of the counter flow heat exchanger are assembled. All places are marked with blue colour on the unit. The number of metres that must be applied appears from the table below.

This is to some extent illustrated with blue colour in the drawing below.



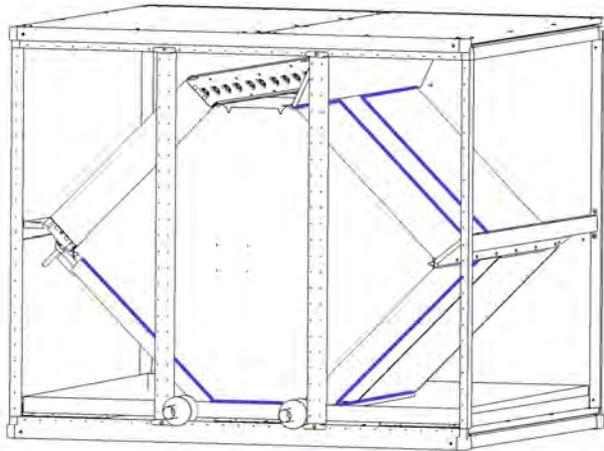
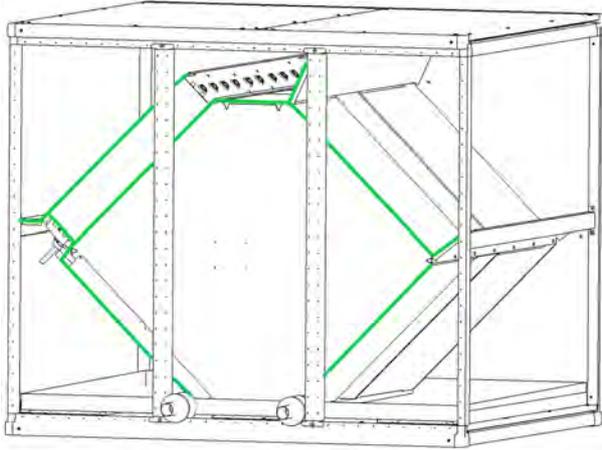
With green colour on the unit is illustrated where this self-adhesive sealing list must be placed. This is to some extent illustrated with green colour in the drawing below.



**The number of metres to which mastic must be applied.**

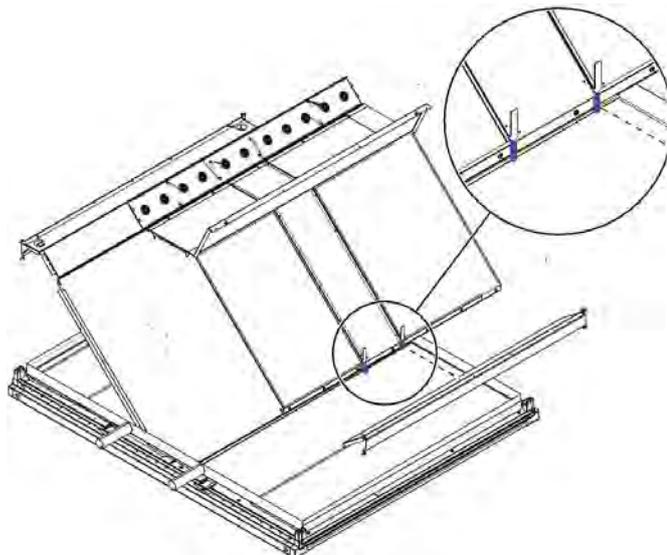
Size of unit	Unit with counter flow heat exchanger.
10	14,3 m
11	15,7 m
12	16,3 m
14	18,3 m
16	21,1 m
18	22,3 m
20	25,1 m

Illustration of where to place the above mentioned sealing list (green) and mastic (blue)



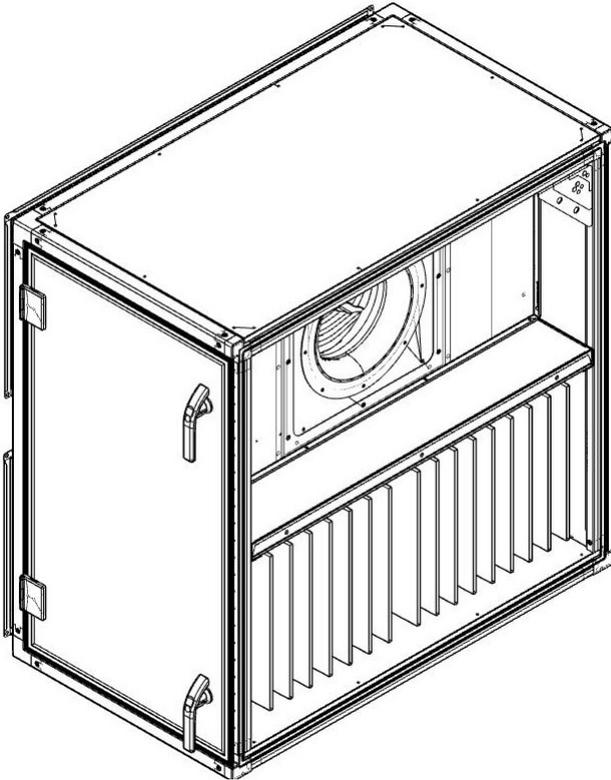
**Note:**

Apply mastic on the inside before mounting the cover plate. Mount the cover plate, then continue applying mastic.



Finish by remounting panels and doors.

## E Additional sections (only for sizes 16, 18 and 20)



The unit is built without the use of rivets and without mastic between casing parts for easy and quick removal of panels from profiles and internal walls.

Remove doors, panels and profiles to offer good access for the demounting and removal of components.

Internal parts to be removed are walls with fans, walls with filters, cables and control components.

**Reassemble the parts of the casing and reinstall the components in the opposite sequence of the separation.**

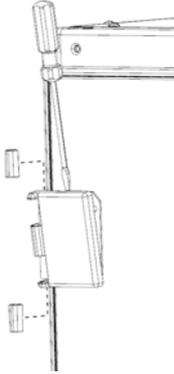


### Note:

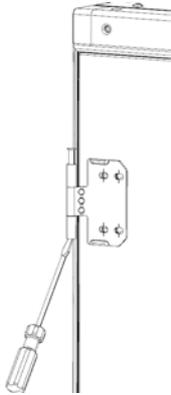
During reassembly of the unit, application of the delivered mastic and placing of the delivered self-adhesive flexible lists according to the below guidelines is important in order to achieve the air-tightness that corresponds to Eurovent certified values.

## E.1 Removing the doors and panels

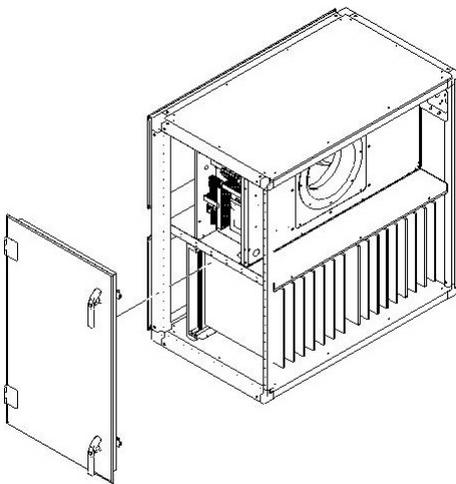
Remove the 3 caps for free access to removal of the steel shaft.



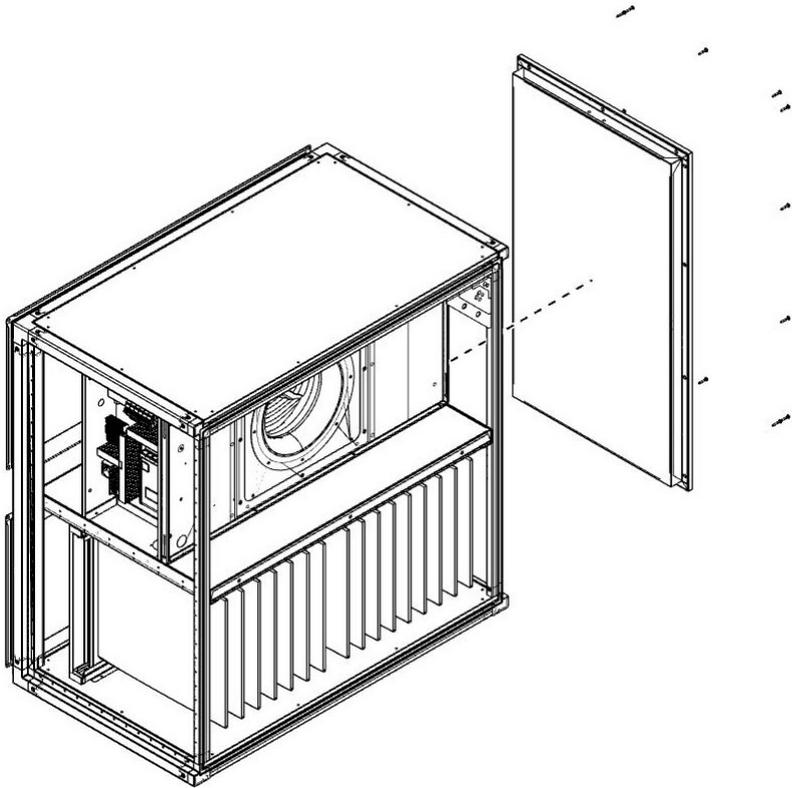
Remove the steel shaft in each hinge.



Remove the doors.

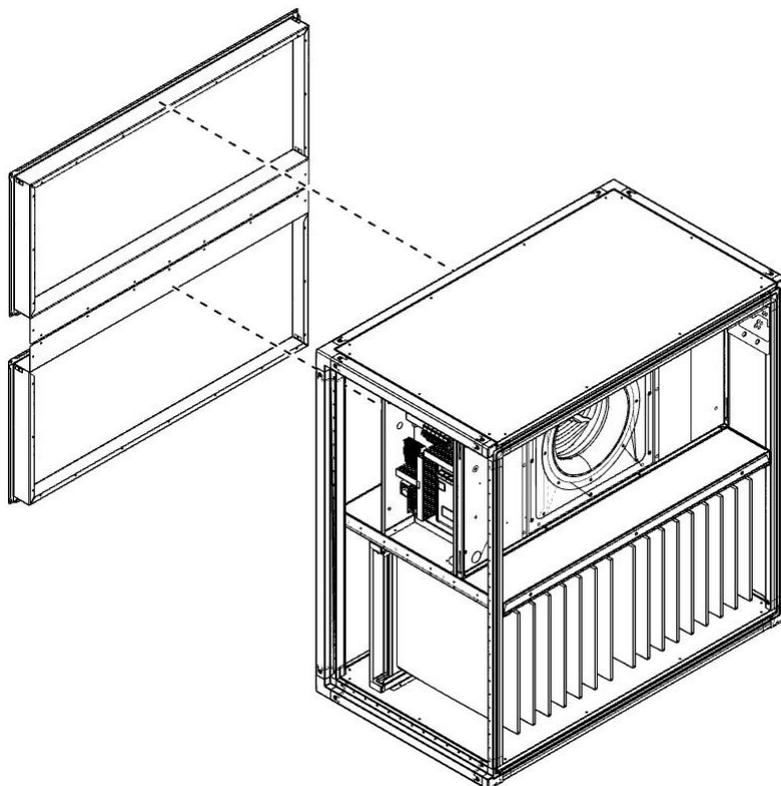


Remove the panels.

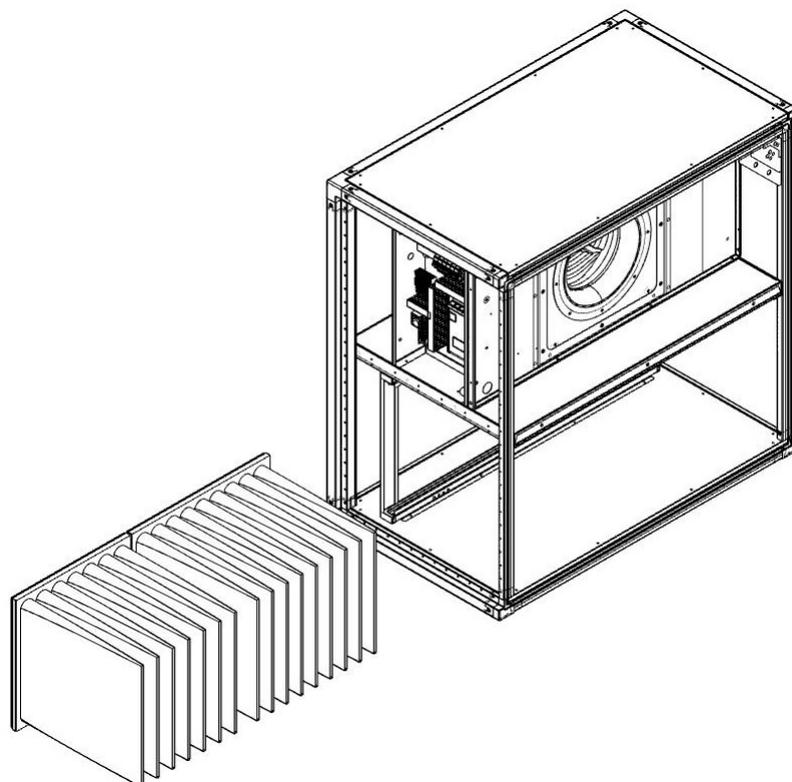


## E.2 Removing profiles and components

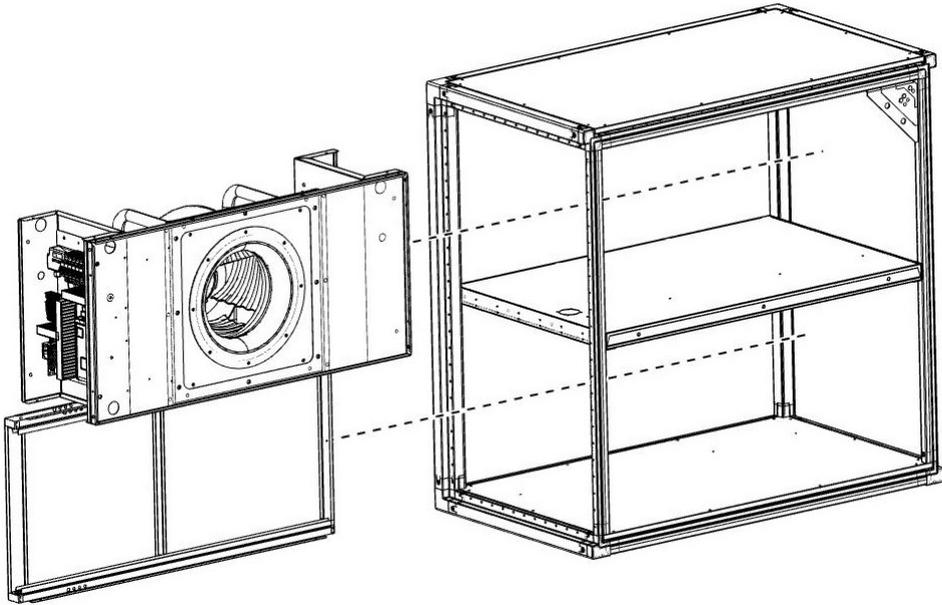
Remove the duct connections.



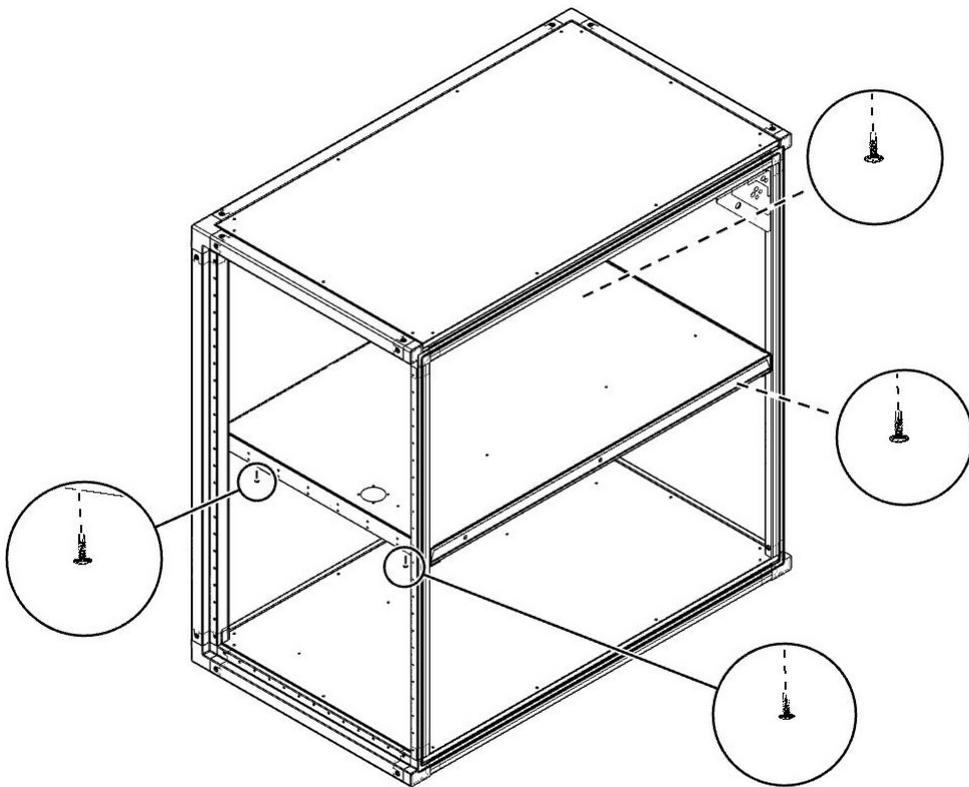
Remove the filters.



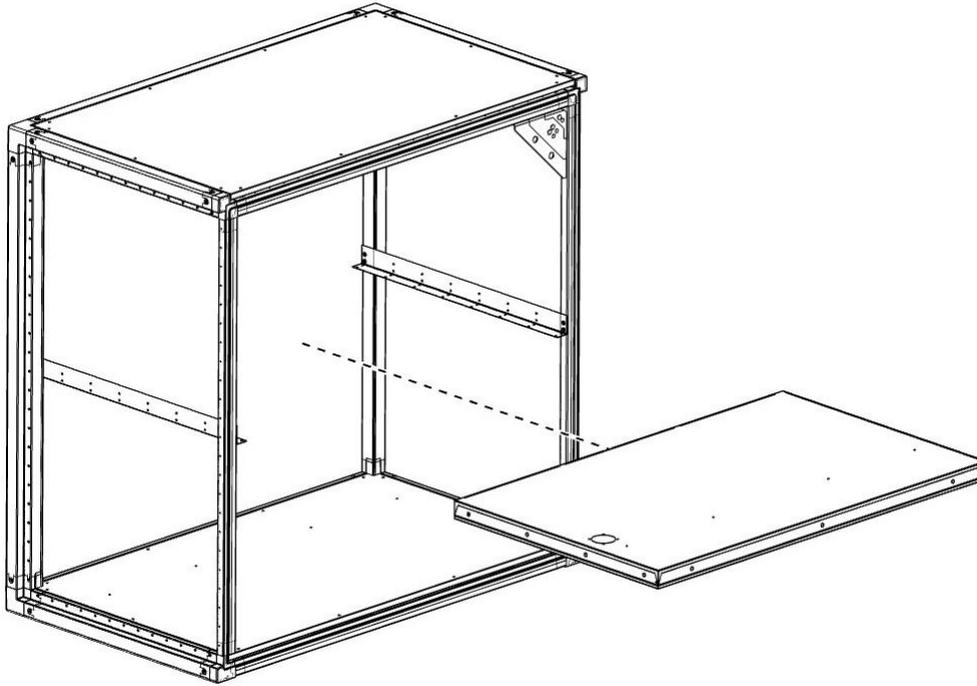
Remove the fan, fan wall and filter wall.



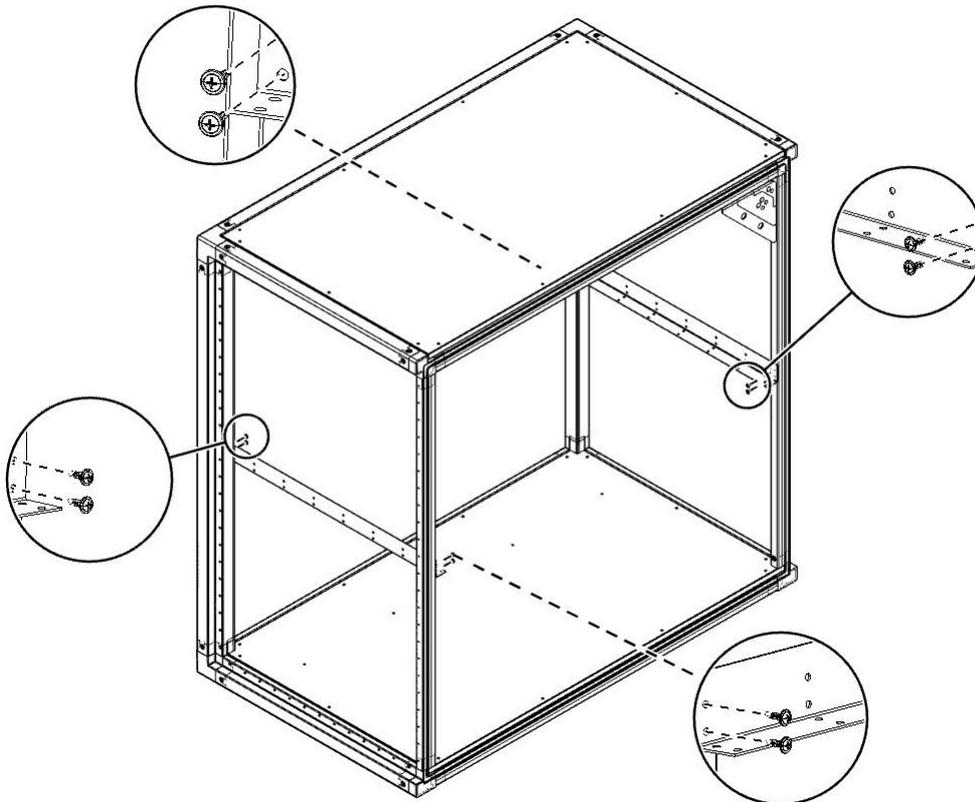
Remove the screws for the horizontal partition panels from below.



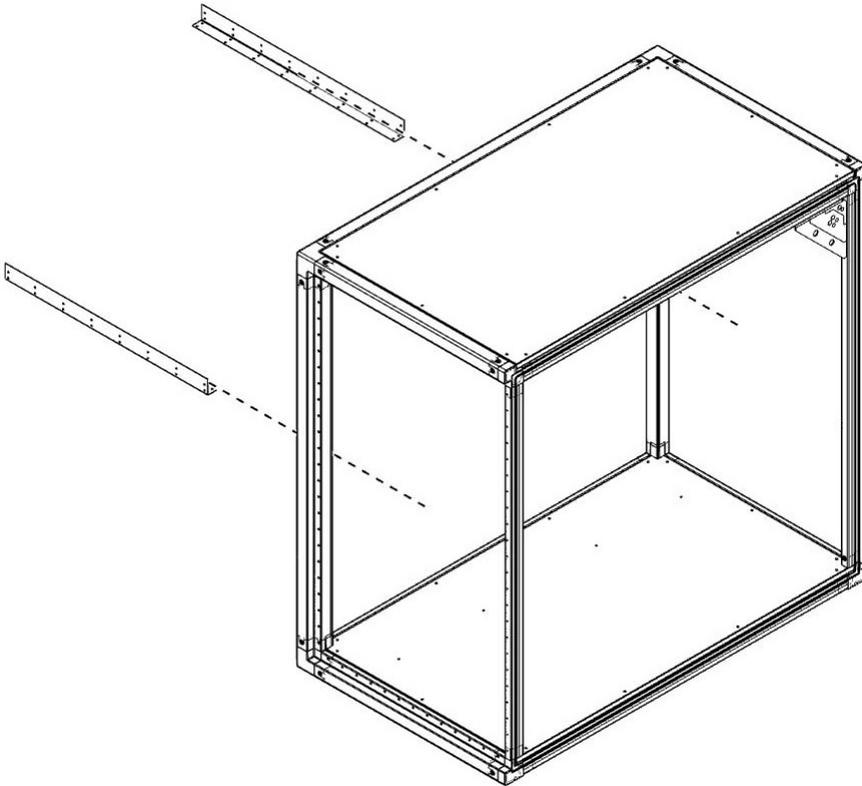
Remove the partition panel.



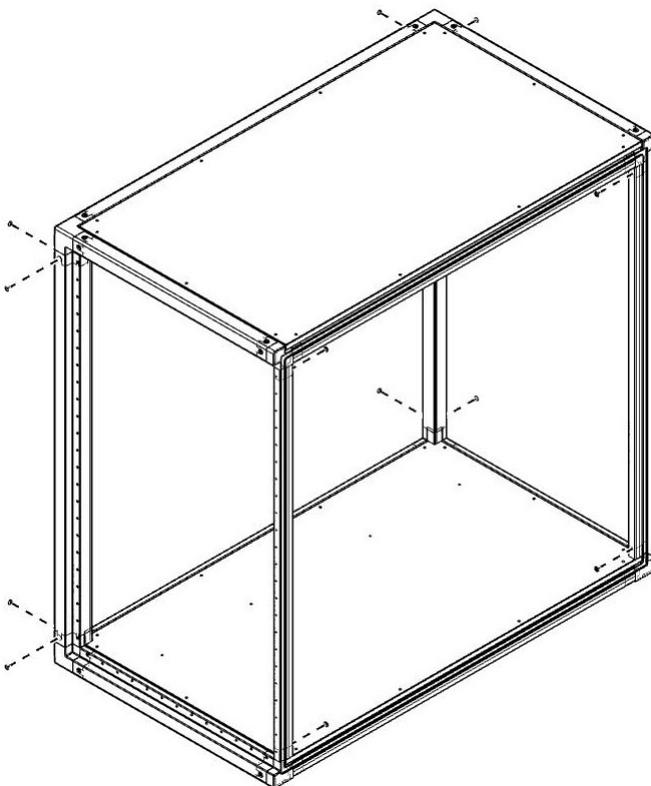
Remove the screws from the profiles that hold the partition panels.



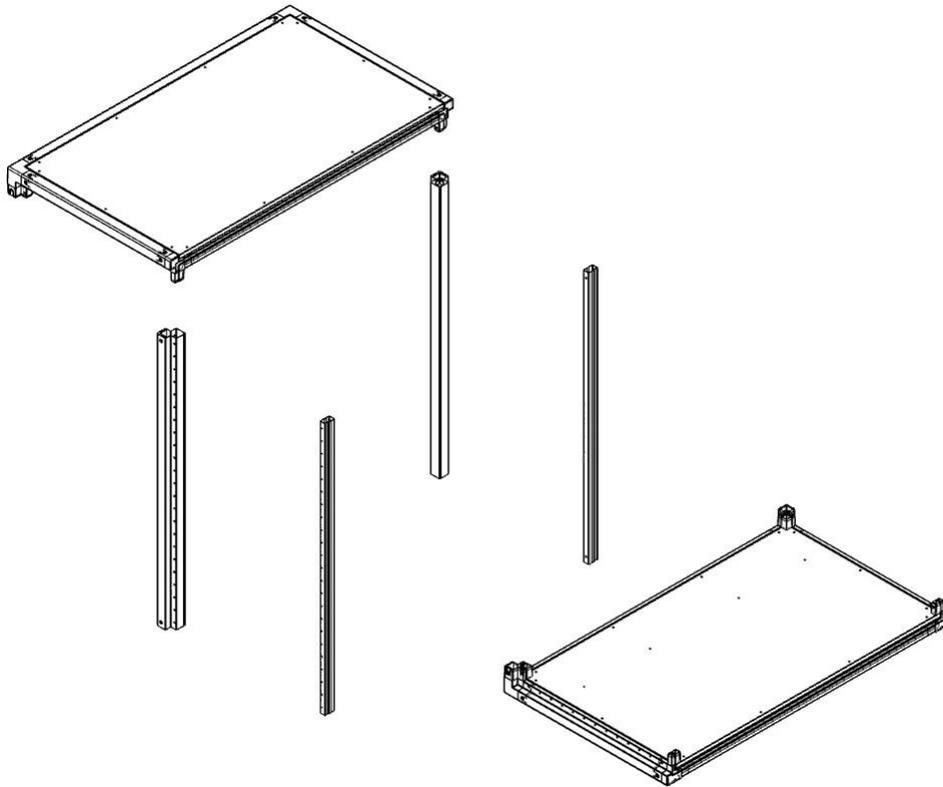
Remove the profiles that hold the partition panels.



Remove screws for vertical profiles and upper panel.



Remove the upper panel, as well as the profiles.



Separation is completed and all parts can be carried into the building.

### E.3 Reassembling the section

Reassemble the parts of the casing and reinstall the components in the opposite sequence of separation described above.



**Note:**

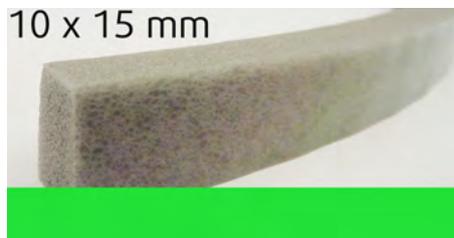
Application of the delivered mastic and placing of 3 different types of self-adhesive flexible sealing lists are important in order to achieve the air-tightness that corresponds to Eurovent certified values for this air handling unit.

This mastic must be applied to all connections between vertical profiles and plastic corners and between the walls with filters and the casing, between the walls with fans and the casing, and around dampers. All places are marked with blue colour on the unit. The number of metres that must be applied appears from the table below.

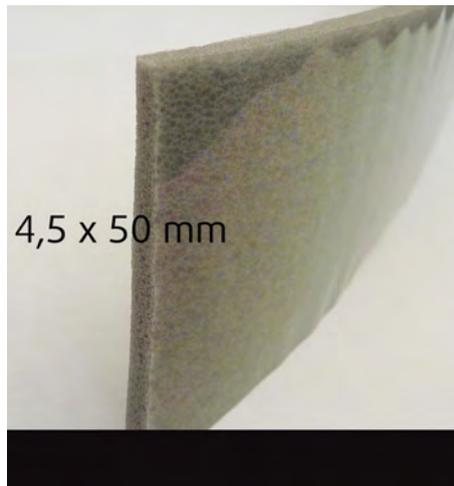
This is to some extent illustrated with blue colour in the drawing below.



Place this self-adhesive sealing list on vertical edges that are marked with green colour on the unit. This is illustrated with green colour in the drawing below.



Place this self-adhesive sealing list on horizontal edges that are marked with black colour on the unit. This is illustrated with black colour in the drawing below.



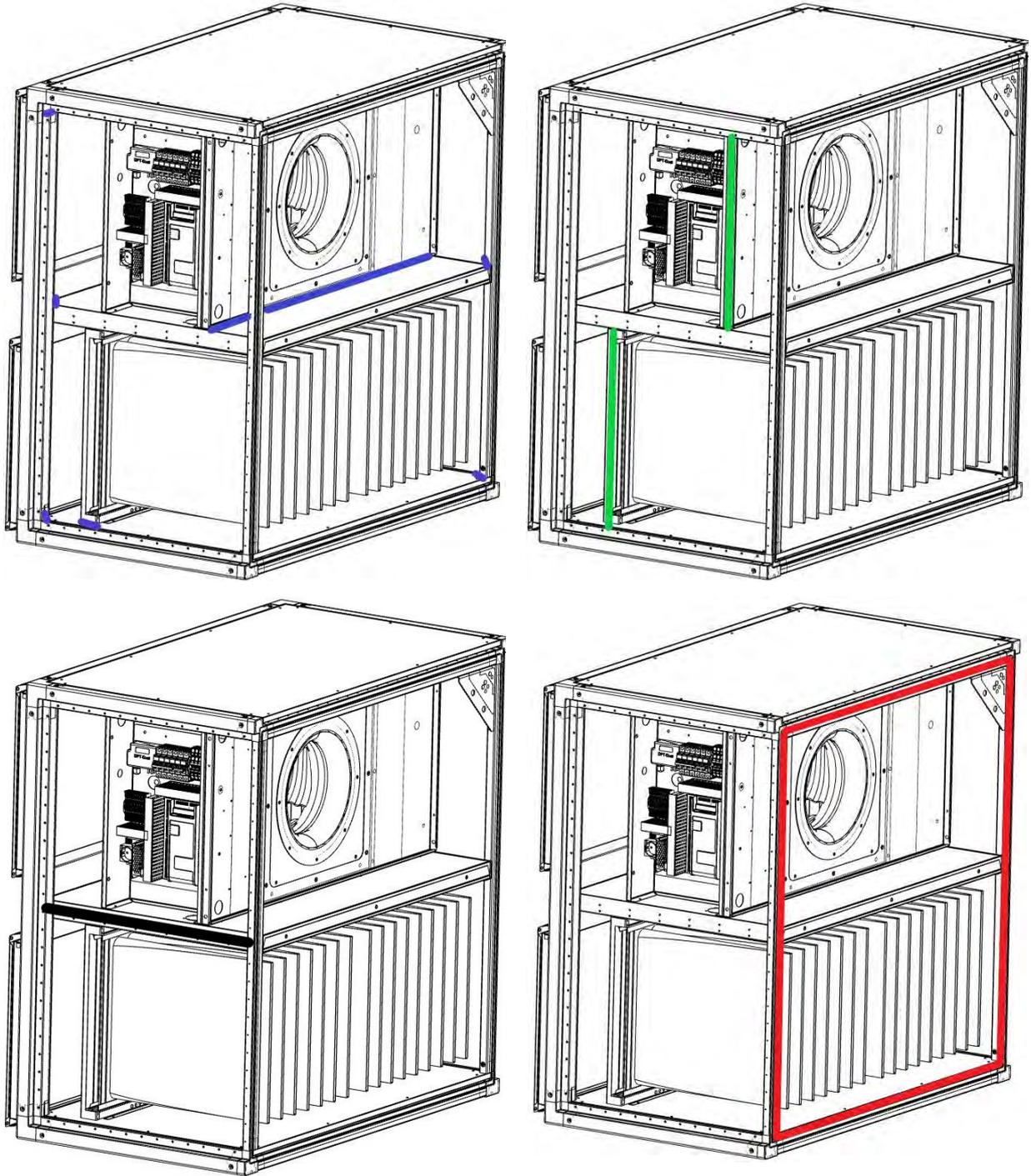
Place this self-adhesive sealing list on the profiles of one of the sections to achieve fully air-tight connection between two sections. The profiles of the section are marked with red colour. This is illustrated with red colour in the drawing below.



**The number of metres to which mastic must be applied.**

Size of unit	Unit with rotary heat exchanger
16	18 m
18	20 m
20	22 m

Illustration of where to apply mastic and where to place the above mentioned sealing lists in the air handling unit



Finish by remounting panels and doors.





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