

# Installation and operation manual

Drying cabinet



Thank you for choosing this drying cabinet. We hope that it will be of great use for you and ask you kindly to read the instructions carefully.

## **IMPORTANT!**

FOR YOUR SAFETY, the information in this manual must be followed to prevent property damage and personal injury.

NOTE: The paragraphs marked "WARNING" and "CAUTION" appearing in this manual are not meant to cover all possible conditions and situations that may occur. It is very important that water and electricity are handled with great care and respect, by both installation technicians and end users.

# Contents

<b>Safety regulations</b>	<b>5</b>
Important safety instructions	6
<b>Specification</b>	<b>7</b>
Dimensions	7
Technical information	8
<b>Assembly instructions</b>	<b>9</b>
<b>Installation of the cabinet</b>	<b>21</b>
Step 1: Put the cabinet in place	21
Step 2: Fasten the cabinet to the wall	22
Step 3: Connect the cabinet to the ventilation channel	22
Step 4: Connect the drying cabinet to the main switch	23
Step 5: Control that the heating relay is working	23
<b>Turn the hanging frame</b>	<b>24</b>
Adjust the rotary inertia of the hanging frame	24
<b>Requirements for ventilation</b>	<b>26</b>
Ventilation channel – choice of material	26
Requirements for incoming air	26
Ventilation channel – design	26
Evacuated amount of air and pressure fall	27
<b>User manual</b>	<b>28</b>
Automatic programs	28
Select drying time manually	28
Gentle drying	28
<b>Maintenance</b>	<b>29</b>
Take good care of the cabinet	29
Ventilation system	29
Keep your cabinet efficient and economical	29
<b>Notes</b>	<b>30</b>

## Safety regulations

Throughout this manual you will find text warnings in text boxes: “WARNING” and “CAUTION”. In these boxes you’ll find the safety measurements you’ll have to take; end user, service staff or installation staff.

### CAUTION

Indicates hazardous situation that, if not avoided, could cause minor personal injury or property damage.

### WARNING

Indicates hazardous situation that, if not avoided, could cause severe personal injury.

You will also find precautions marked: IMPORTANT and NOTE. These are followed by information of what should be considered.

**IMPORTANT:** to inform the reader of special steps that must be taken in order to prevent injuries on the cabinet.

**NOTE:** to inform what is important to know, but it cannot cause personal injuries or injury on the cabinet.

## Important safety instructions

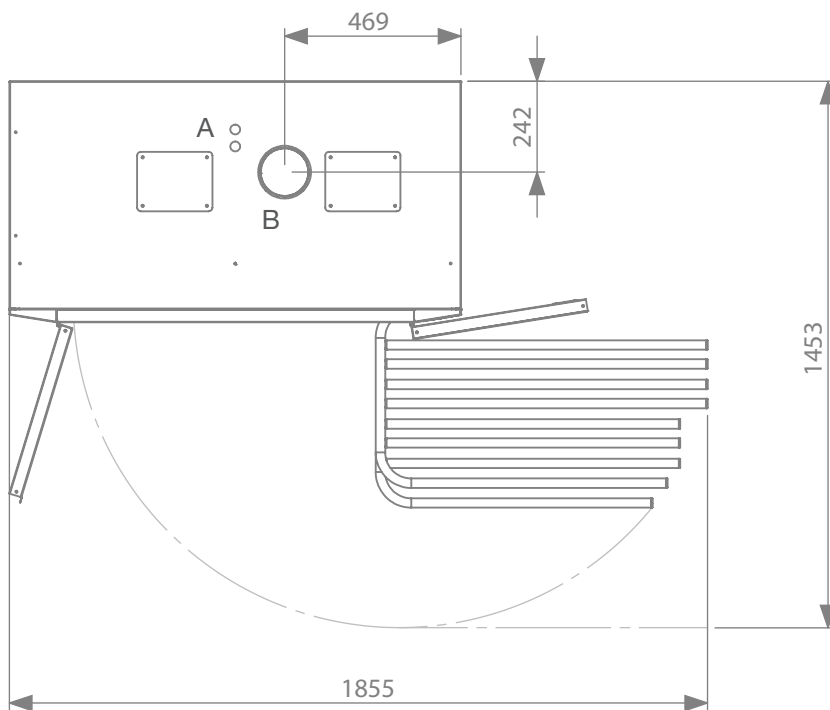
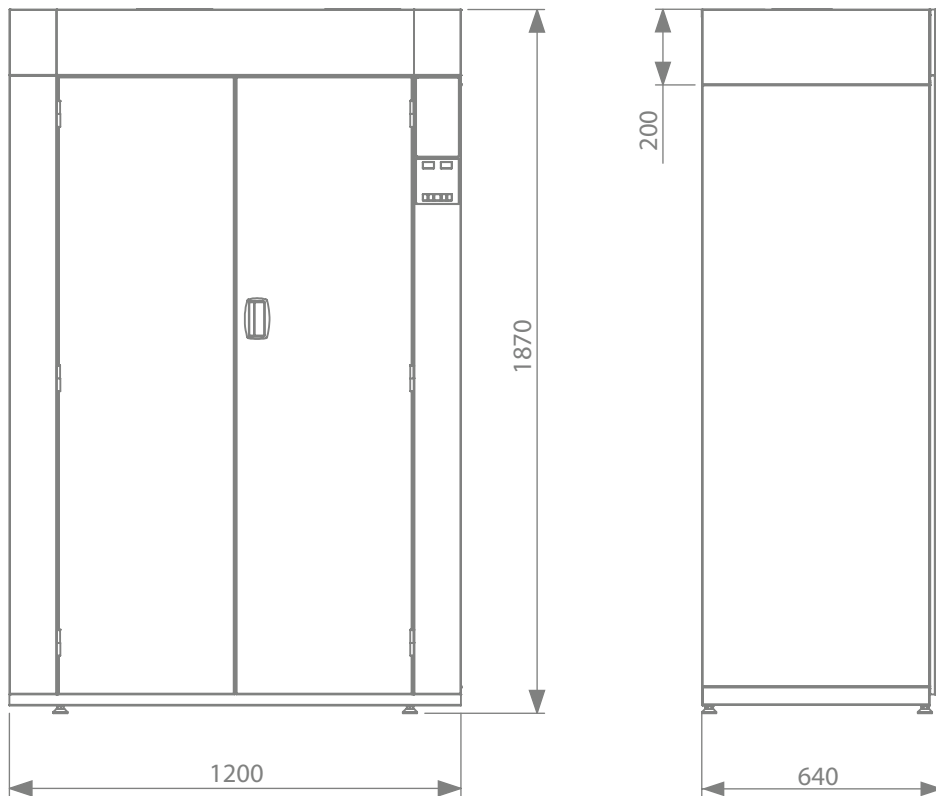
### WARNING

To minimize the risk of fire, electrical shock, personal injuries or death when the cabinet is in use the following precautions must be followed:

1. Read the instruction before using the drying cabinet.
2. Follow the installation instructions for proper grounding.
3. Never dry textiles that have been washed, dipped or exposed to fire dangerous substances or fluids.
4. Never add fire dangerous or explosives substances in the cabinet.
5. The cabinet is not a toy. Look after the children who are around the cabinet.
6. Never connect the cabinet with an extension cable.
7. Only use the cabinet for what it is designed for: drying clothes.
8. Always turn off the main switch before performing any service on the cabinet. Only authorized service technicians should perform service.
9. Always follow the installation manual. The electrical connections must be done by authorized personnel.
10. Keep after the cabinet. If it is exposed for violence there is a risk that certain security functions will stop working. Please contact your nearest service partner if you are unsure of the cabinet's status.
11. If the electrical cable is damaged, it must immediately be changed by a person with electrical authorization.
12. The doors shall always be shut when the cabinet is in use. Don't try to manipulate the lock of the doors. It can lead to personal injuries. If the cabinet doesn't stop when the doors are opened during the drying phase, call for service. The cabinet shall not be used if the drying program is active when the doors are open!
13. Look after the area around the evacuating pipe so it is clean from dust and dirt.
14. To get the best drying result, follow the garments washing & drying advice.
15. Never use the cabinet if any panel is broken or removed.
16. Never use the cabinet if any parts are broken or if the inside is broken.
17. Never try to manipulate or connect past any safety functions.
18. If the cabinet isn't assembled after the manufacturer's instructions, there is a risk that the cabinet can cause personal injuries or injuries on property.

# Specification

## Dimensions



A = Electrical connection

B = Exhaust

## Technical information

Loading capacity, kg (lb)	8 (17,6)
Drying capacity, g/min (oz/min)*	62 (2,2)
Hanging length, m (ft)	16
Drying time, min*	42
Evacuated air, max, m <sup>3</sup> /h (ft <sup>3</sup> /h)	340
Exhaust Ø, mm (in)	125
Electrical connection	3~N, 400 V, 50 Hz
Heating effect, kW	6,0
Total effect, kW	6,3
Energy consumption, kWh/kg (kWh/lb)*	0,50 (0,23)
Fuse, A	10
Part No	131032
*Drying of 6 kg (13,2 lb) cotton (dry weight), washed and high-spinned to 43% residual moisture. Dried to 0% residual moisture.	

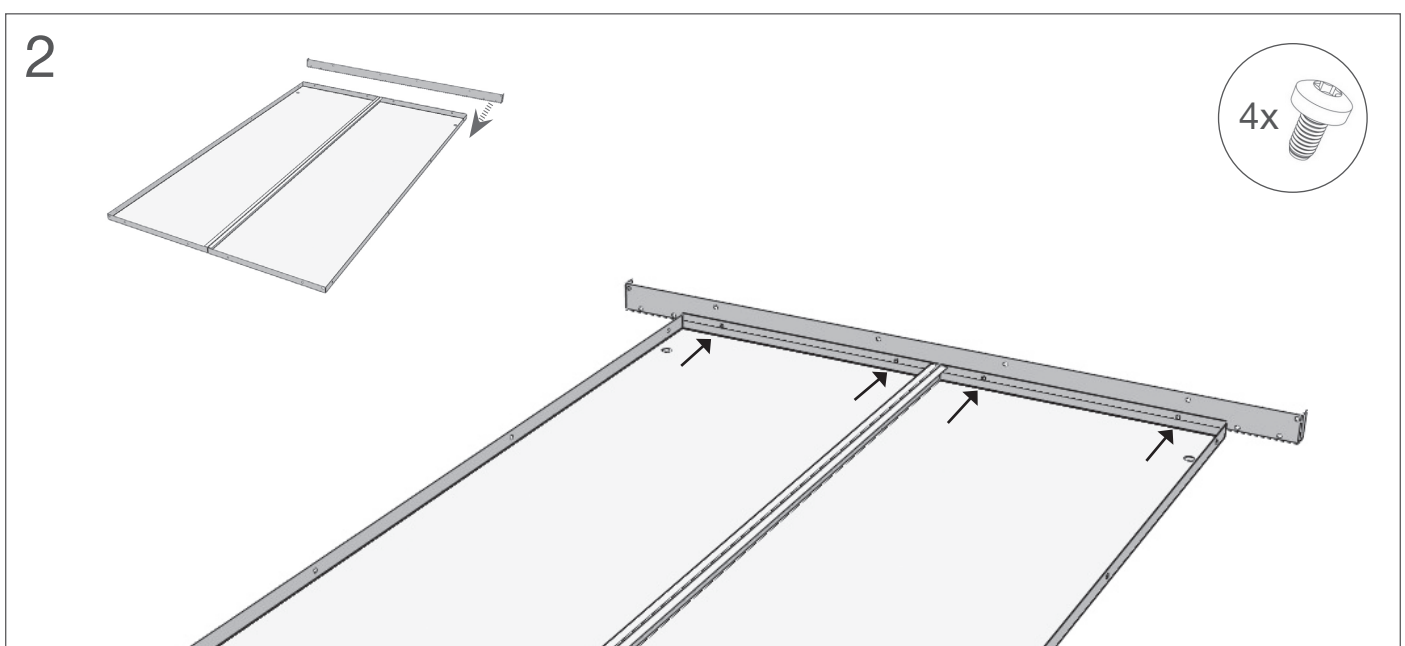
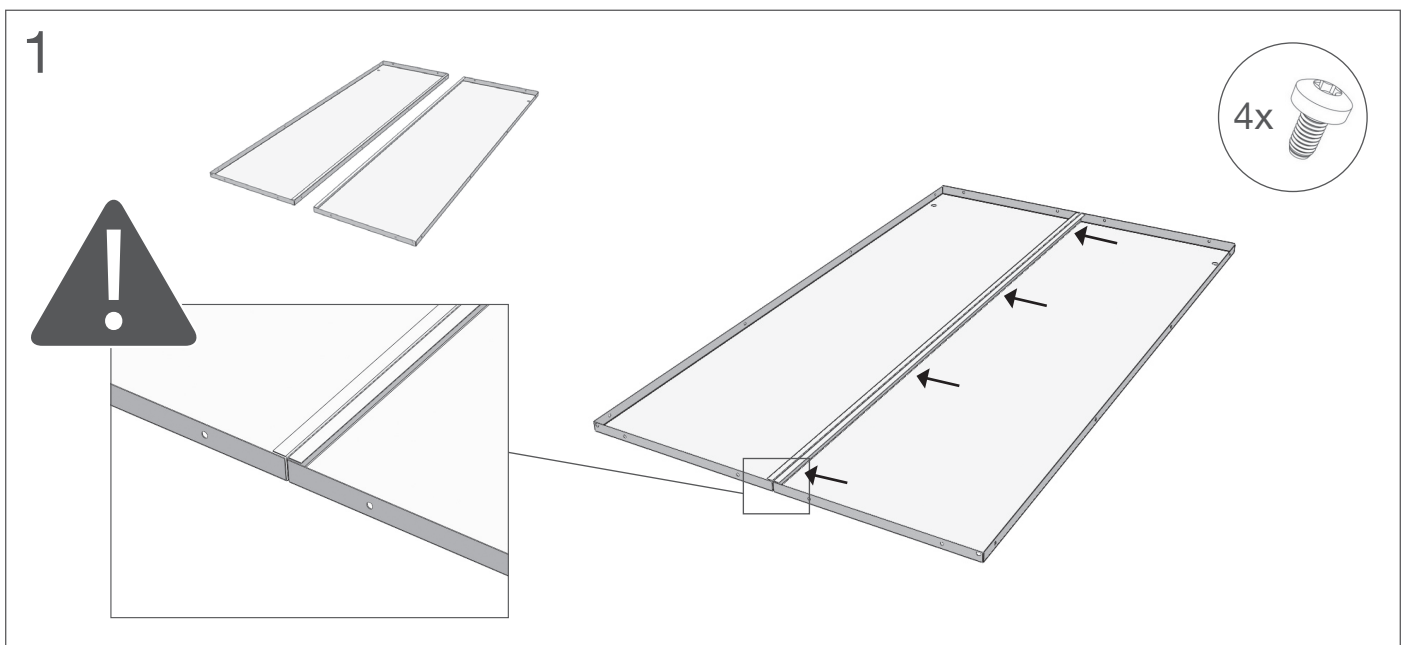


# Assembly instructions

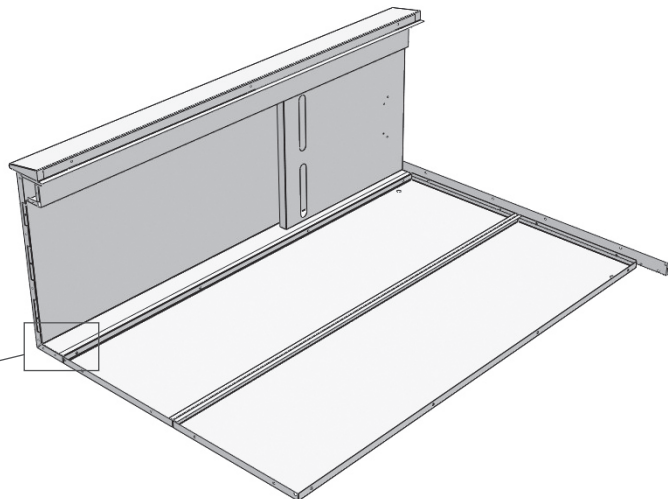
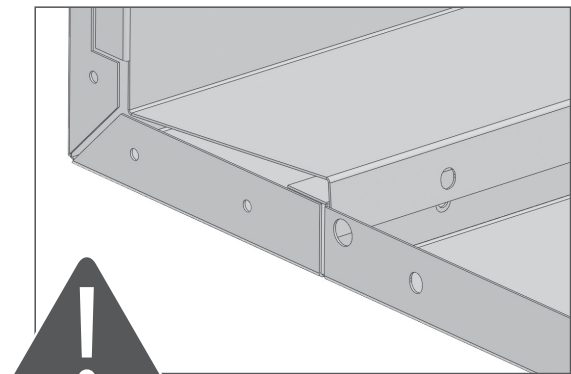
## Tools

You need the following tools to easily install the drying cabinet:  
(If the cabinet is already assembled please go to page 21)

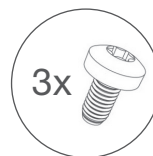
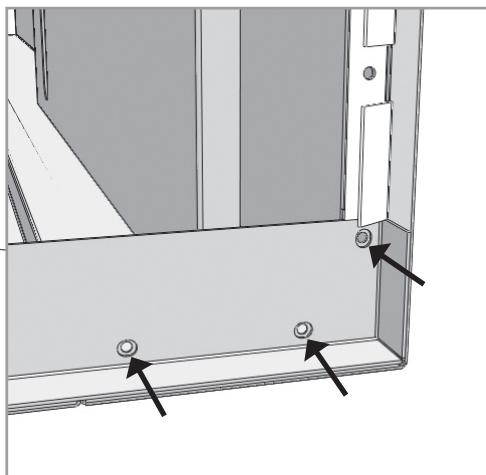
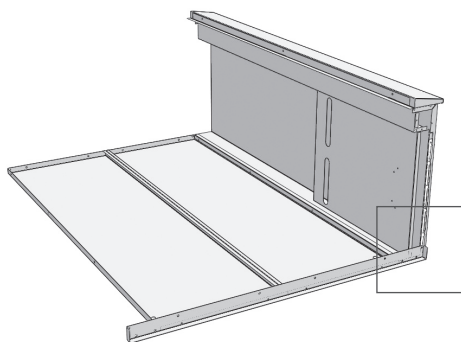
- Cordless screwdriver
- Wrench
- Hex key 3 and 5 mm
- Level
- Torx screwdriver bit no. 25



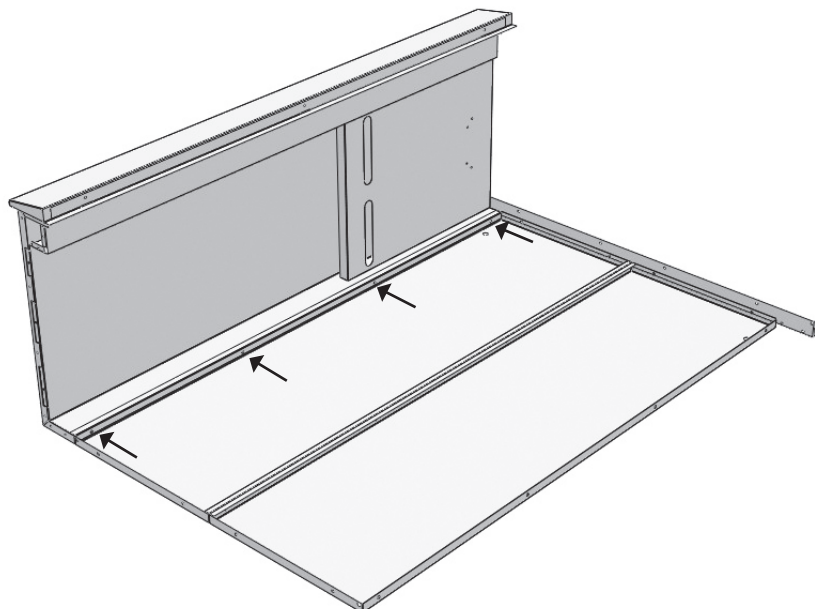
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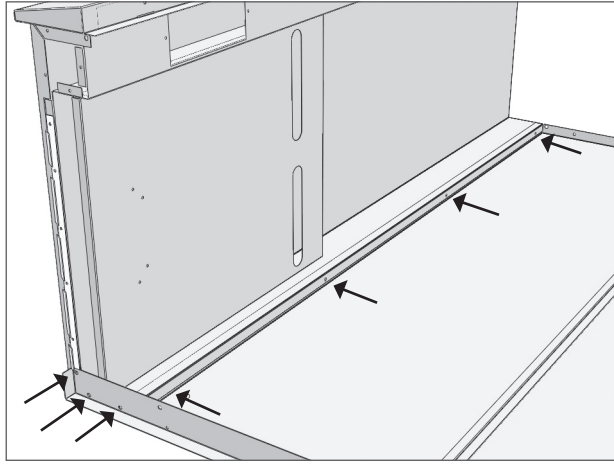
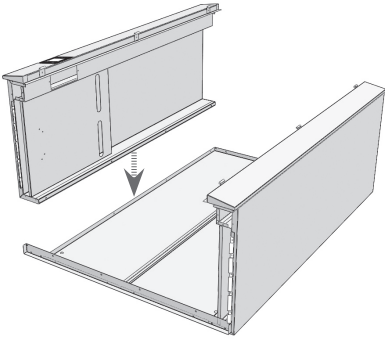
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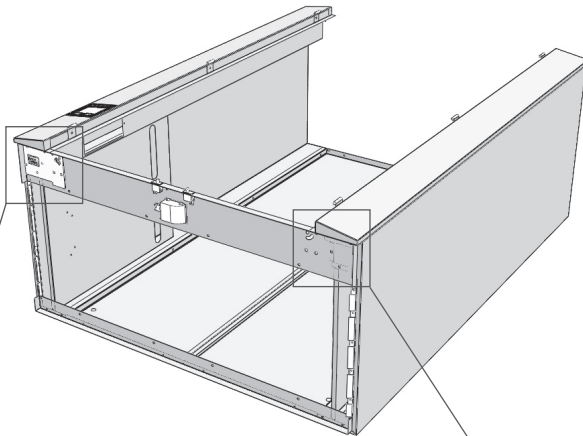
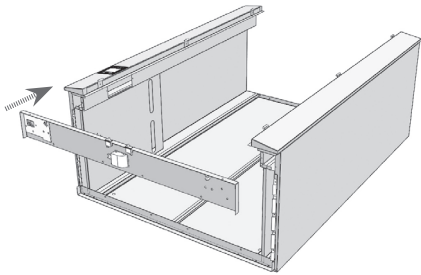
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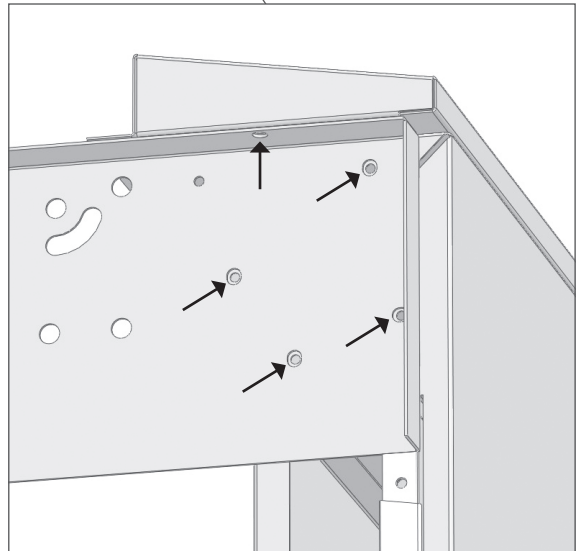
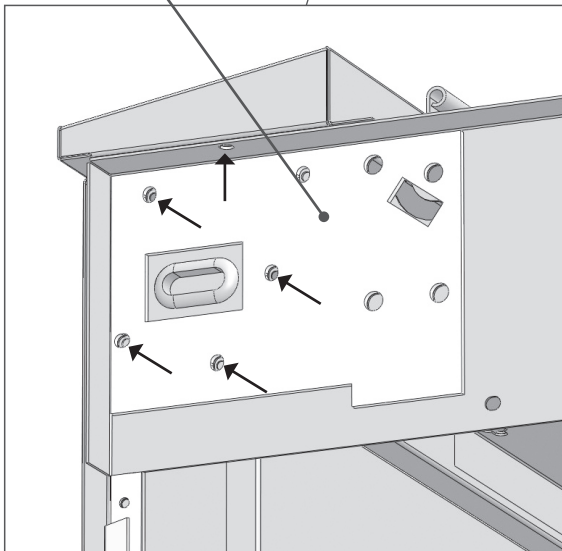
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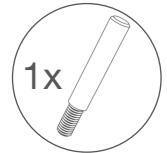
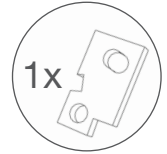
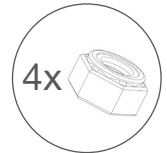
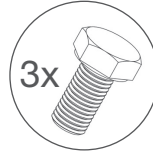
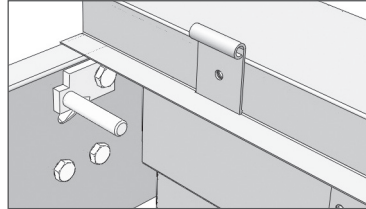
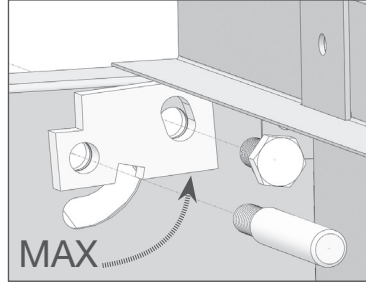
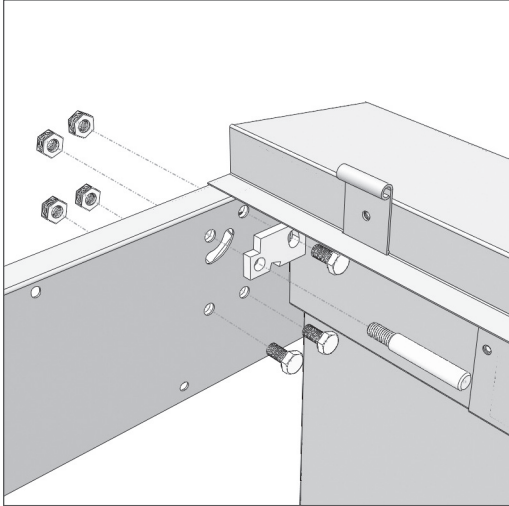
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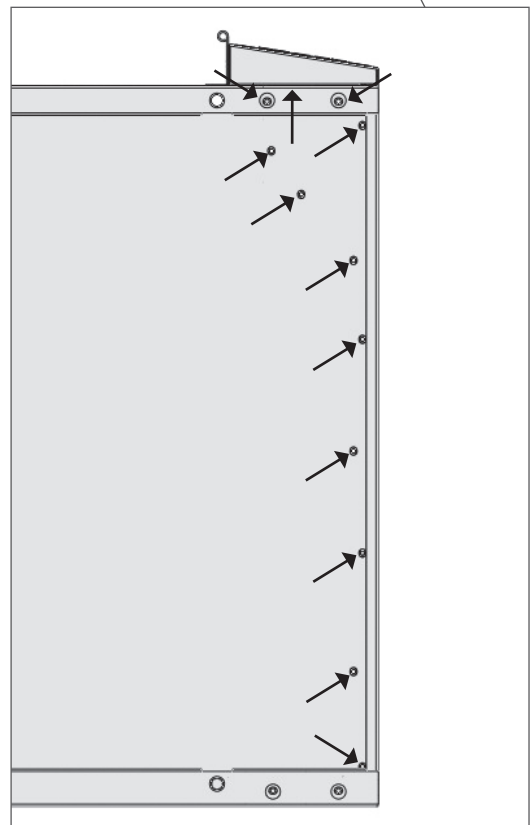
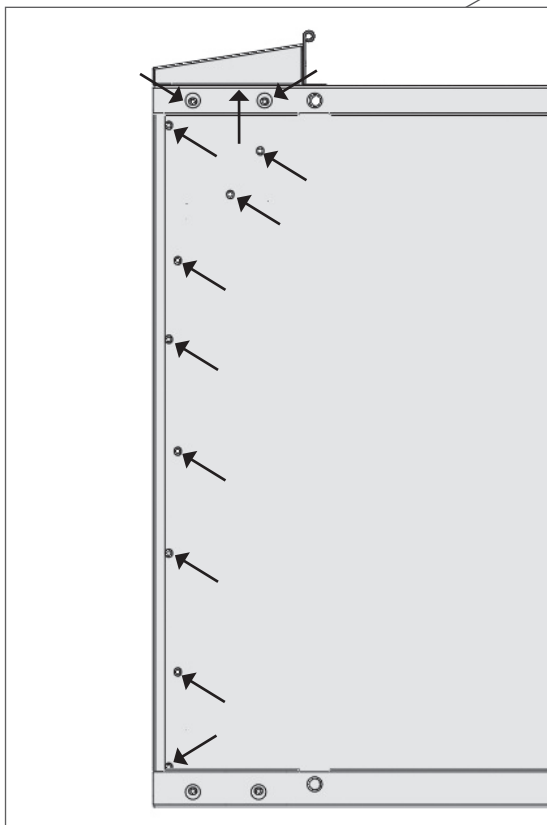
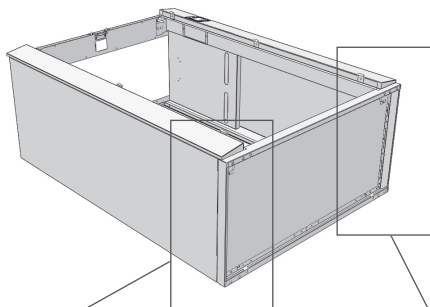
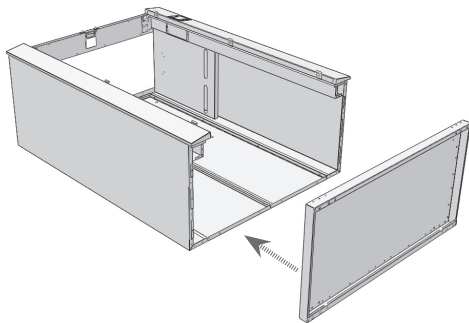
Note!  
Only for cabinets with hanging frame.



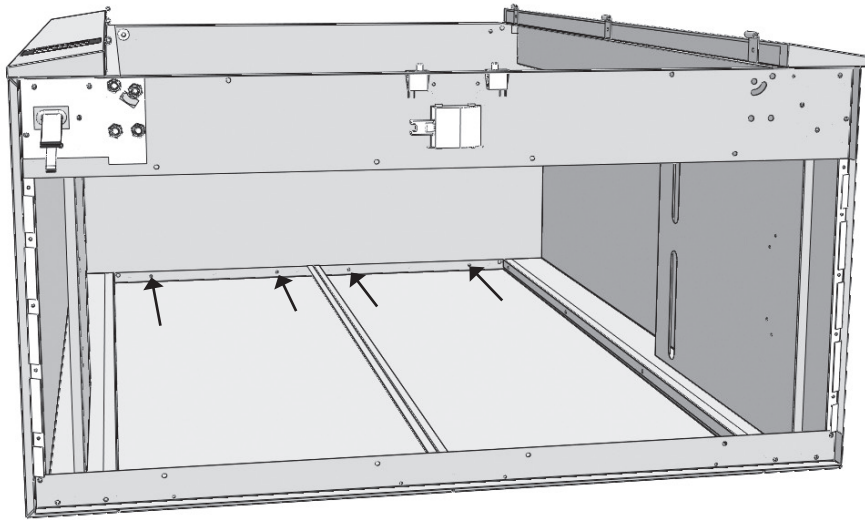
# 8 Note! Only for cabinets with hanging frame



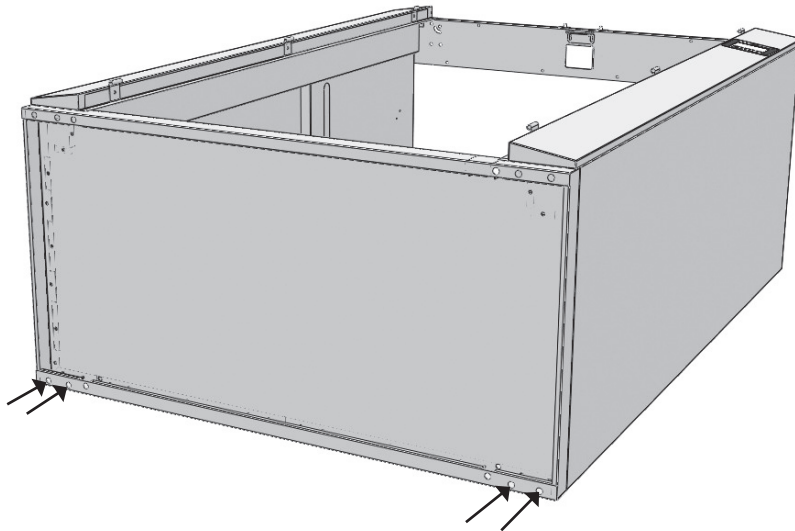
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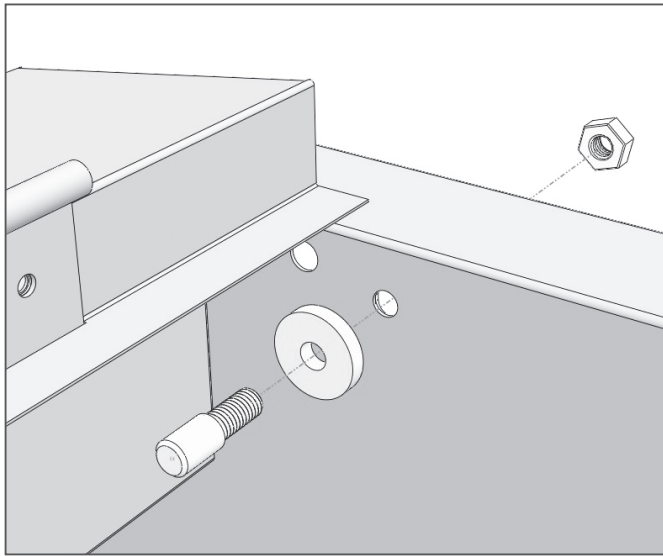
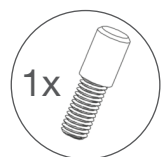
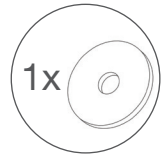
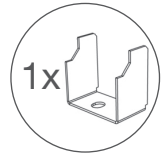
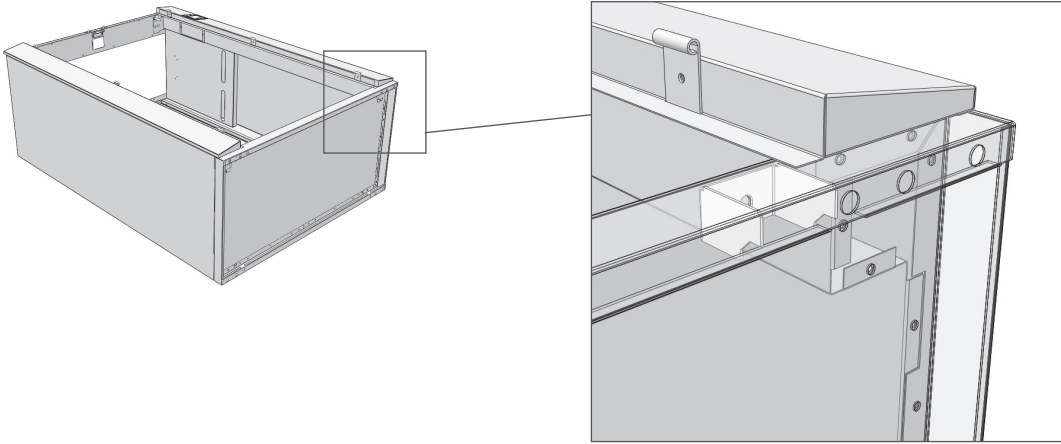
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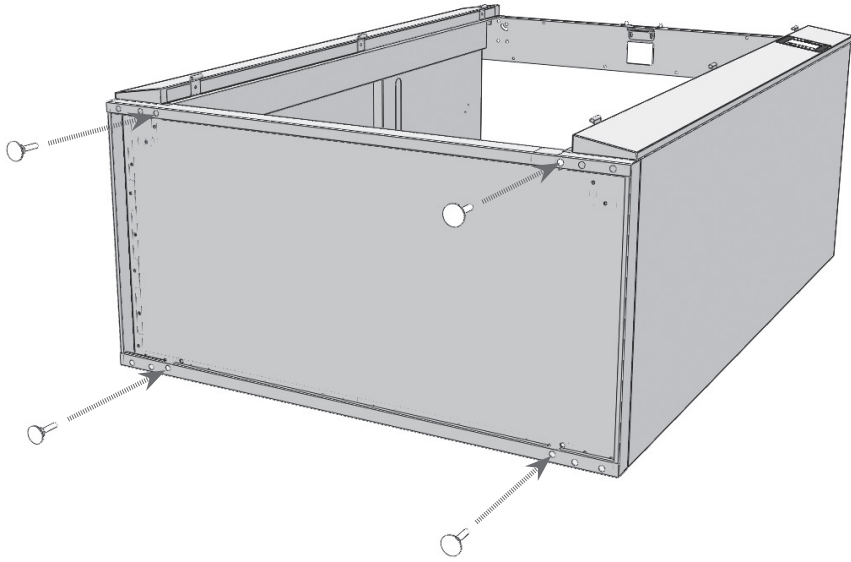
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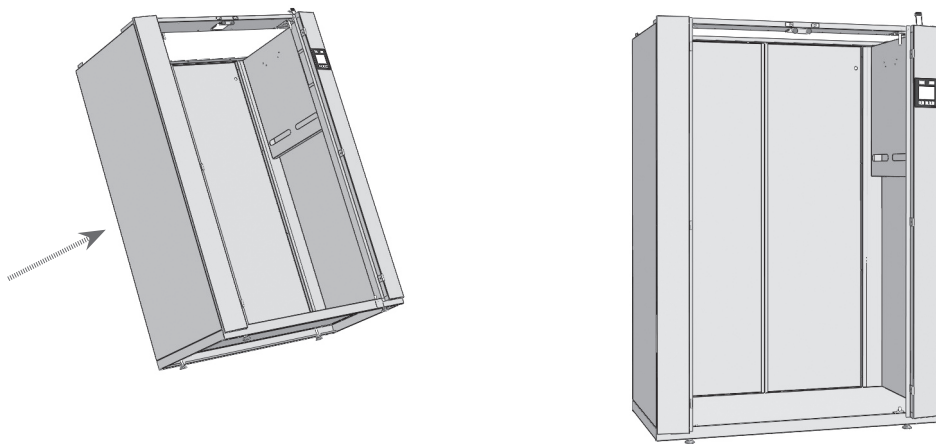
# 12 Note! Only for cabinets with hanging frame



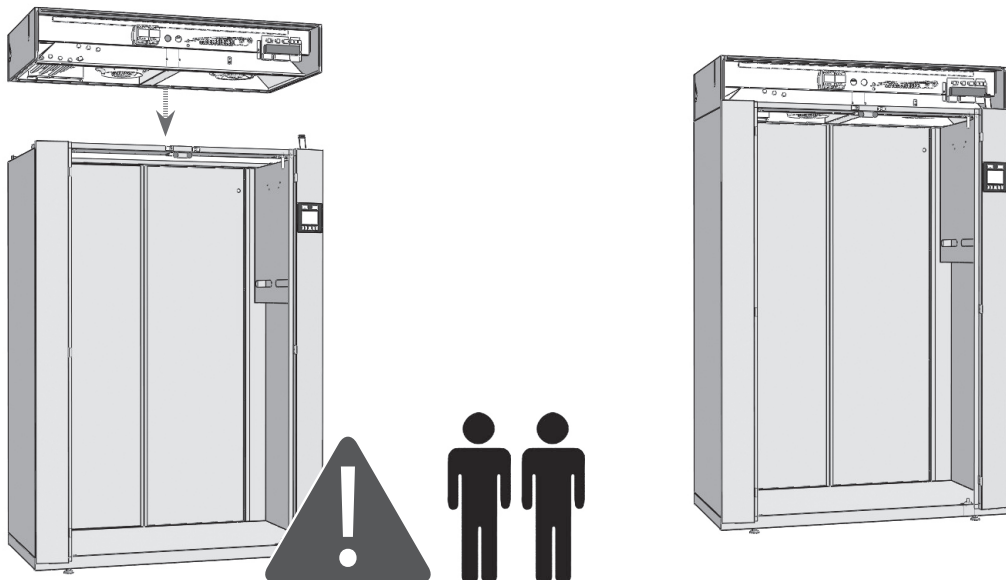
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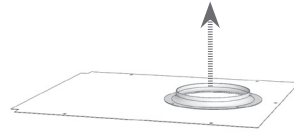
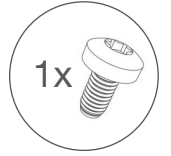
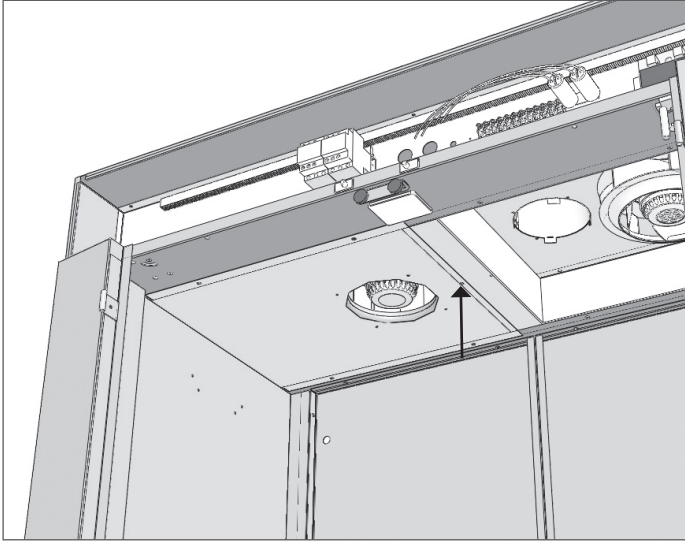
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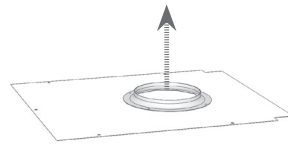
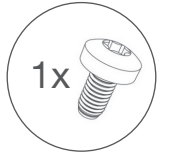
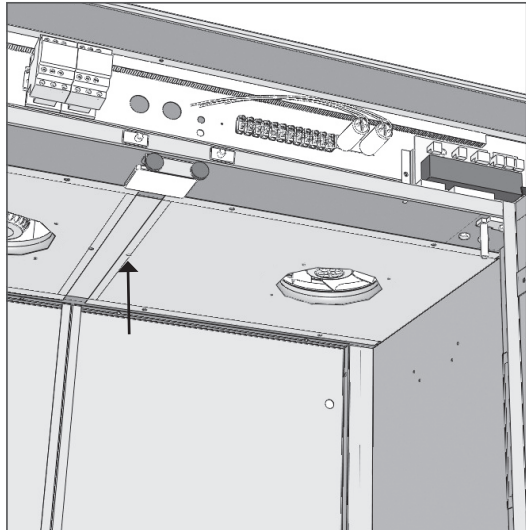
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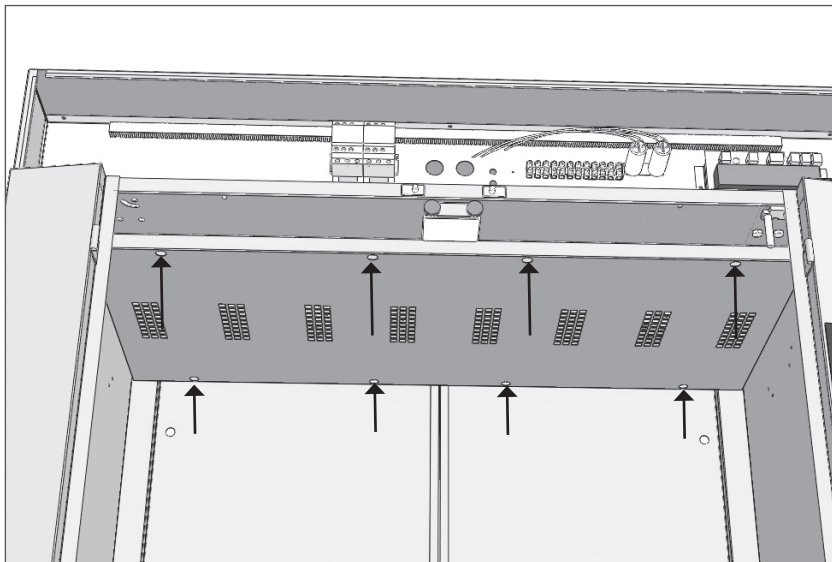
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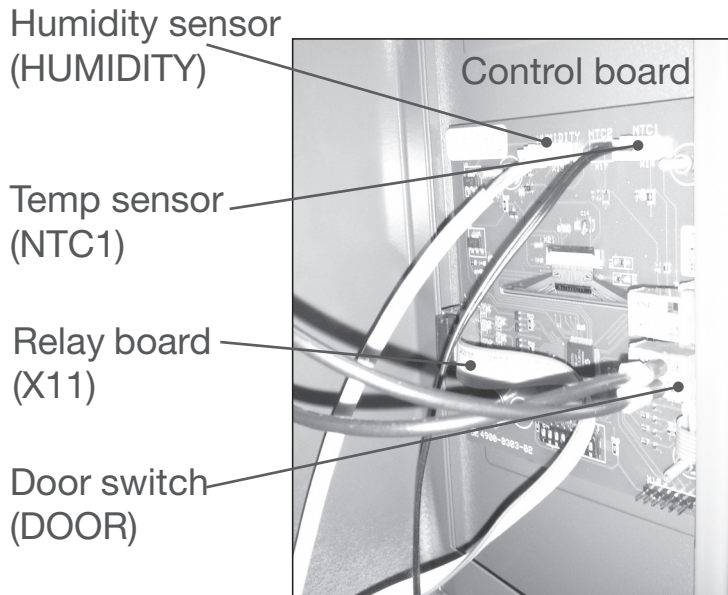
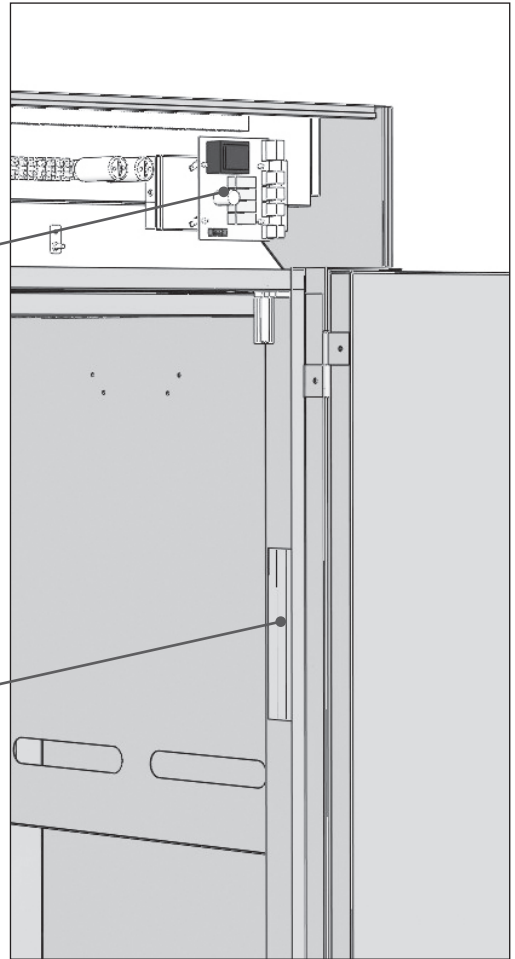
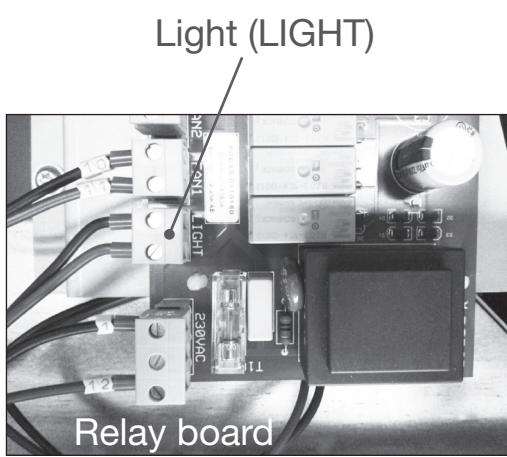


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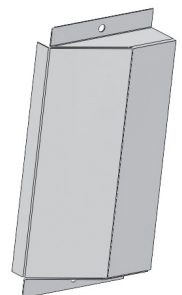
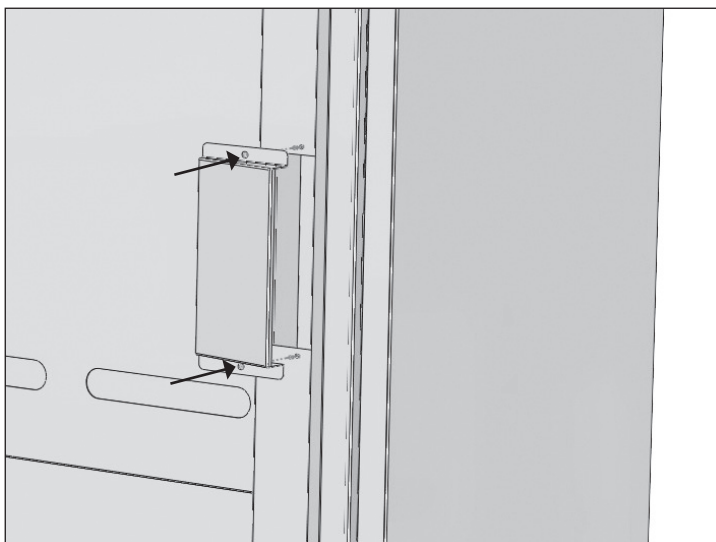




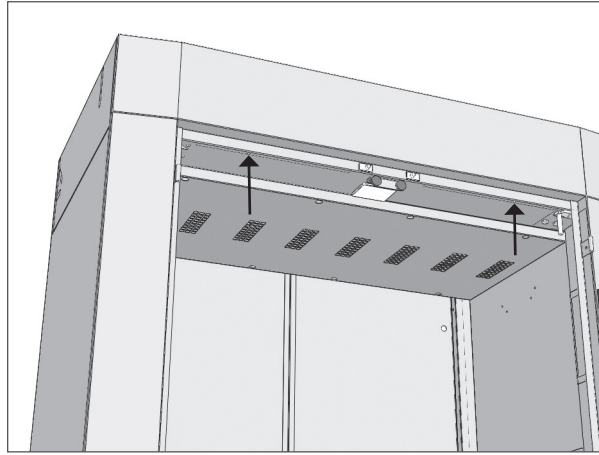
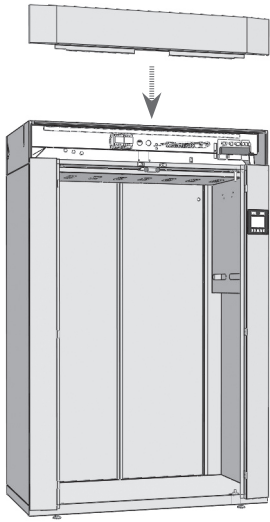
# 19 Connect the cables



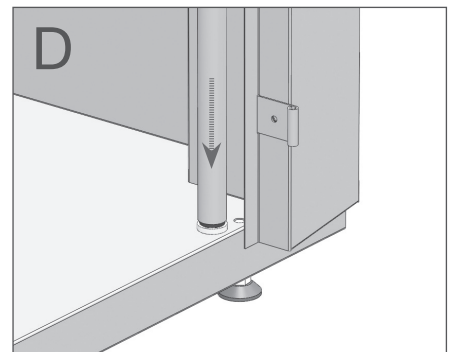
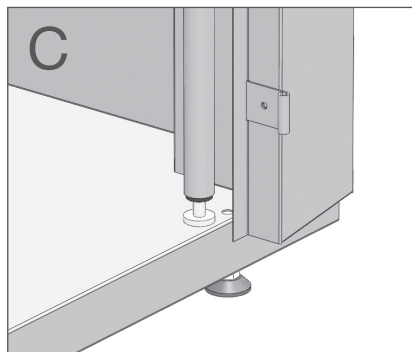
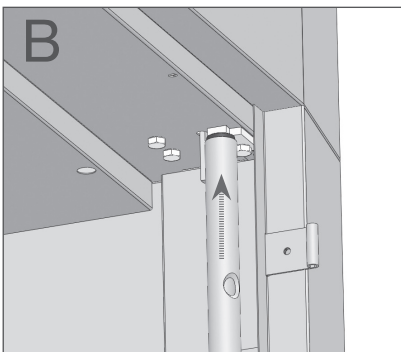
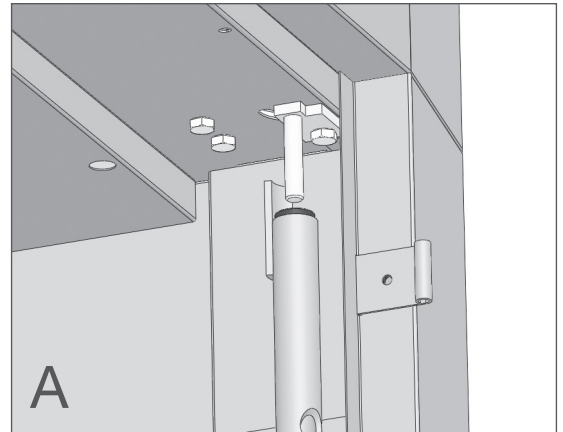
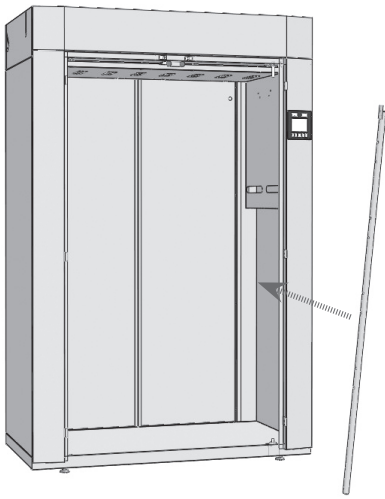
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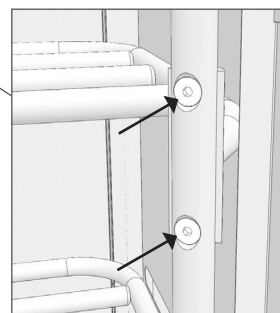
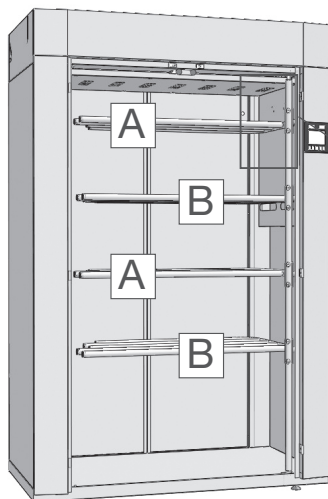
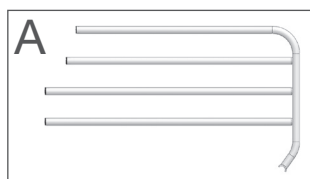
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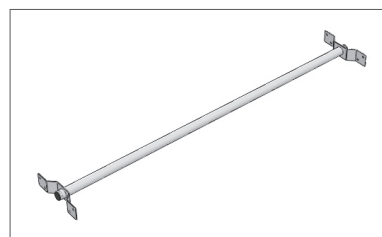
22 Note! Only for cabinets with hanging frame



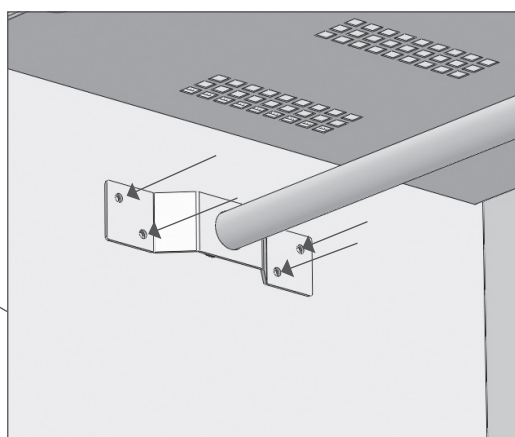
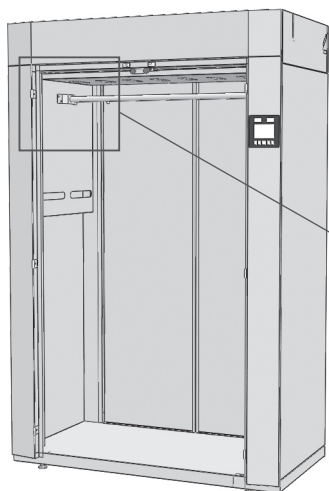
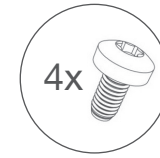
## 23 Note! Only for cabinets with hanging frame



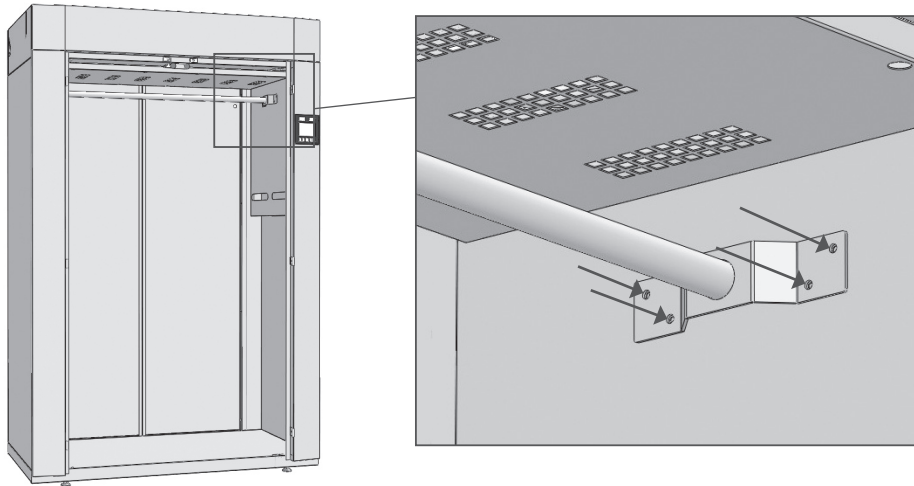
## 24 Note! Only for cabinets with single rack bar



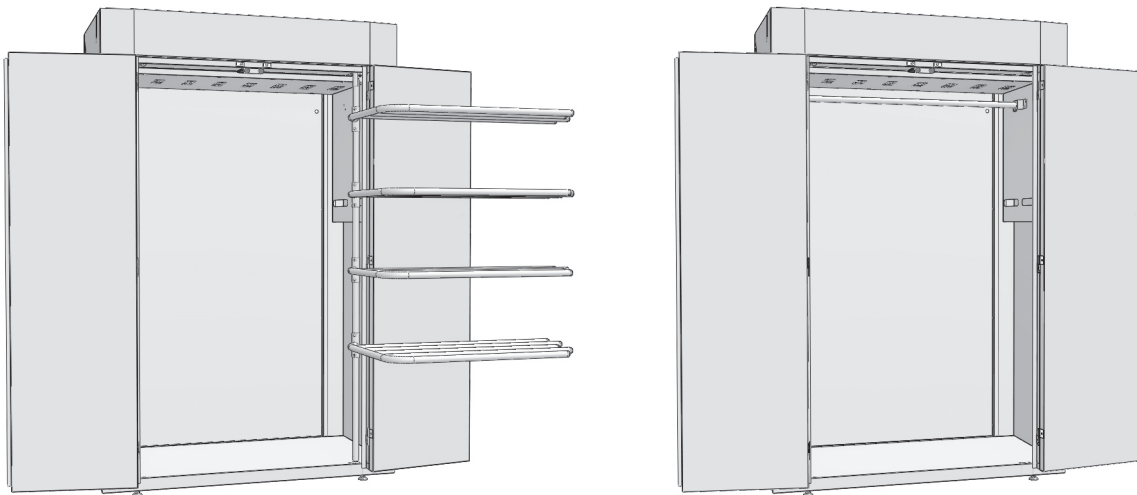
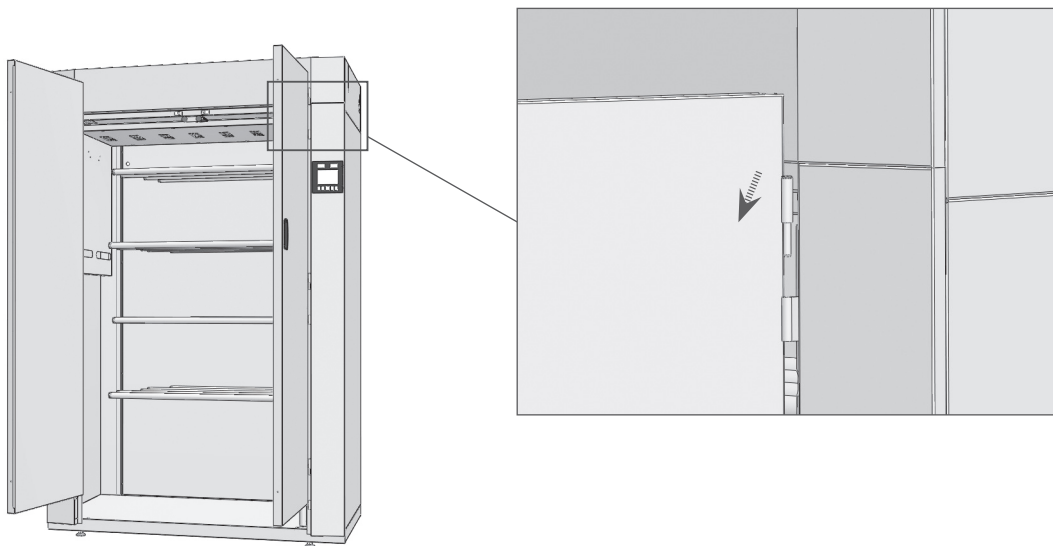
## 25 Note! Only for cabinets with single rack bar



# 26 Note! Only for cabinets with single rack bar



# 27



# Installation of the cabinet

## Step 1: Put the cabinet in place

Place the cabinet with enough space in front of the cabinet and on the sides to be able to open the doors.

The feet of the cabinet can be adjusted from the inside with the help of a Hex key. The feet must stand free on the floor and have an even weight distribution. Use a leveler and control that the cabinet is leveled; horizontally and vertically.

**NOTE: We recommend that the cabinet is installed on a firm and leveled floor.**

Please observe that the front panel (on the top) must have at least 175 mm free space above, in order to take off the top to perform service.

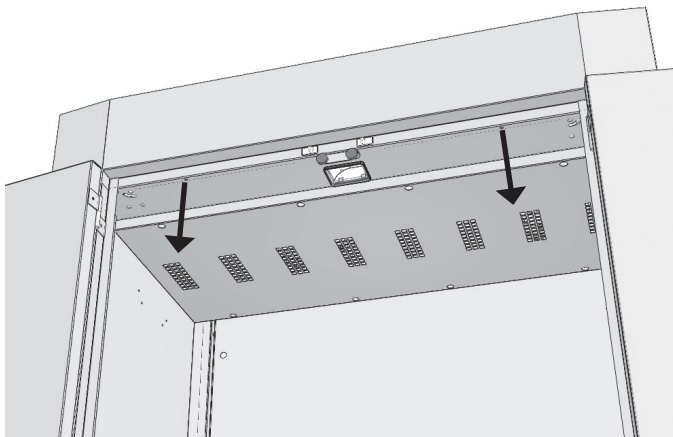
### Narrow spaces

If the cabinet must be transported through narrow spaces, we recommend that you take off the doors first. It will simplify the handling and reduces the risk for damages on the doors.

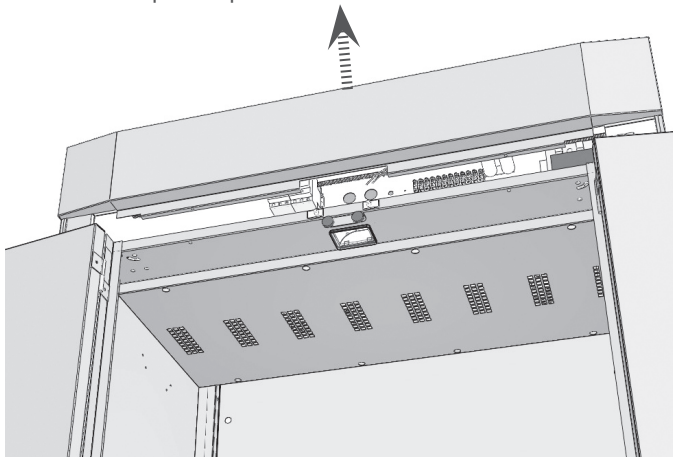
### Demounting of the top

To simplify the transport of the cabinet, the top can be demounted, see the instructions below.

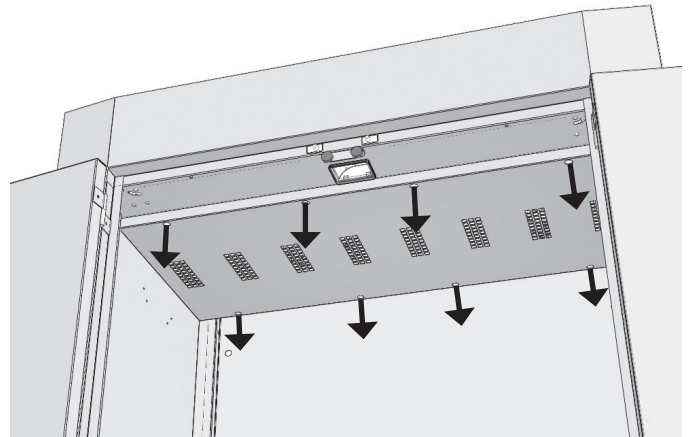
1. Loosen the two screws which hold the front panel of the top.



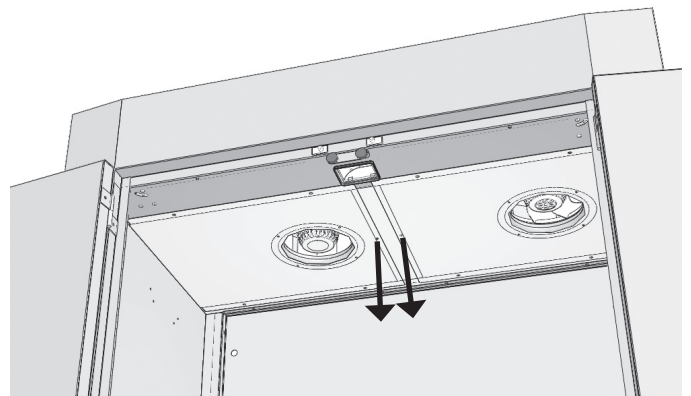
2. Push the panel upwards.



3. Disconnect the bulb's connection plinth marked "LIGHT" and the flat cable connected to "X11" from the relay board.
4. Open the service hatch to access the program board (side frame of the cabinet). Disconnect the temperature and humidity sensor cables and the door switch cables. Pull up the cables through the rubber grommet.
5. From the inside of the cabinet, loosen the protection plate (8 screws).



6. Loosen both service hatches which cover the fans. 1 screw on each service hatch.



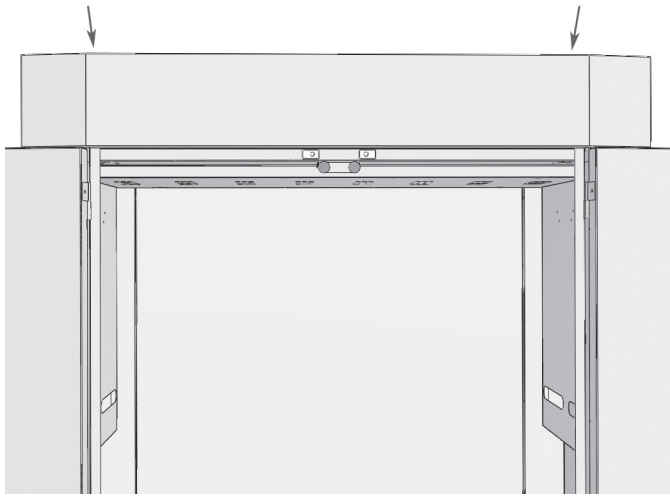
7. Lift the top off.

## CAUTION

There must be two persons to lift the top in a safe way. Don't try to do it on your own, the weight is 30 kg!

## Step 2: Fasten the cabinet to the wall

Use the angle irons to secure the cabinet to the wall. The mounting holes are placed at the top of the cabinet. The angle irons can be adjusted to fit the distance to the wall.



**NOTE:** Please control that the cabinet is leveled and cannot be tilted.

## Step 3: Connect the cabinet to the ventilation channel

For further instructions, see page 26: Requirements for ventilation.

- Do not use ventilation channels made of plastic or foil.
- Place the cabinet so that the ventilation channel is as short as possible.
- Make sure that the ventilation channel is cleaned when a new cabinet is installed.
- Use a 125 mm rigid or flexible metal duct to the evacuation connection.
- If you use rigid ducts, it is important that the male connector of the ventilation tube on each section follows the air direction.
- The construction shall be as straight as possible.
- Always isolate ducts that go through non-isolated areas. The condensation makes dust and dirt get stuck in the channel.

**NOTE:** If the cabinet is not connected according to these recommendations, the warranty is no longer valid.

## Step 4: Connect the drying cabinet to the main switch

To prevent that fire and electric shock appear, the cabinet MUST be connected according to the color codes on the cables. Only an authorized electrician is allowed to install the electrical connection. The cabinet is prepared for one of the following electrical connections depending on specification:

- 400 V, 3-N, 50 Hz (standard)
- 208-240 V, 3~N, 60 Hz
- 220 V, 3~N, 50 Hz

### WARNING

It is always the buyer that has the responsibility to check that an authorized electrician makes the electrical connections of the cabinet.

### WARNING

To prevent personal injuries, the cabinet shall always be connected permanently through an all pole main switch. Always ground the cabinet.

Also check that the connecting cable has a strain relief bushing. If not, there is a risk that the cabinet will be live.

## Step 5: Control that the heating relay is working

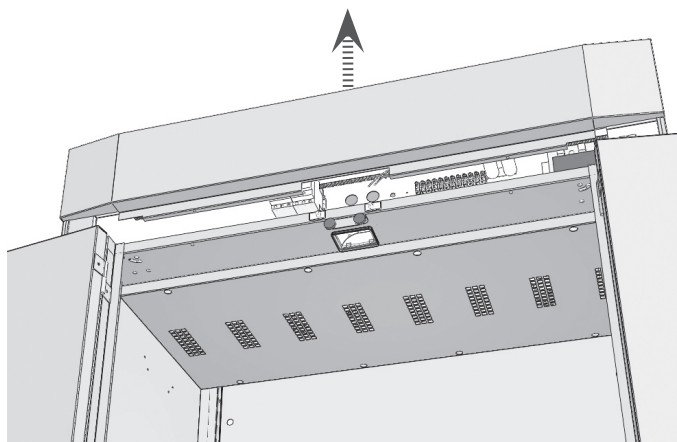
Shut the doors and start the cabinet, after about 3 seconds you can hear when the heat relays hit. Wait a couple of minutes and control that the outgoing air channel becomes warm.

If the outgoing air channel does not get warm, go back to step 4 and control that the electrical connection is installed correctly.

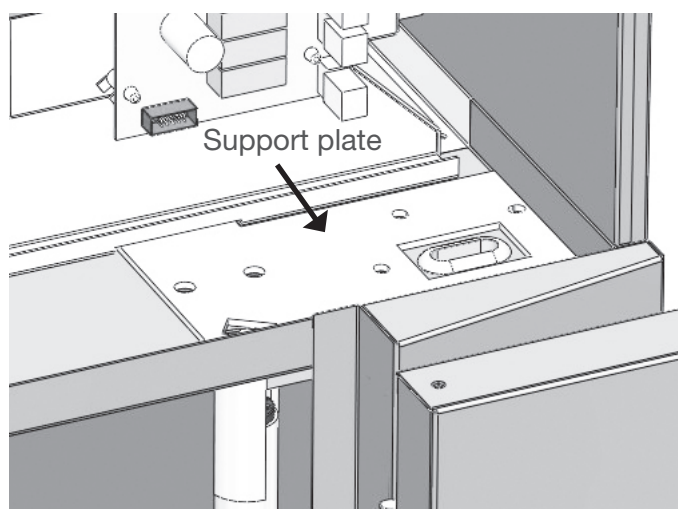
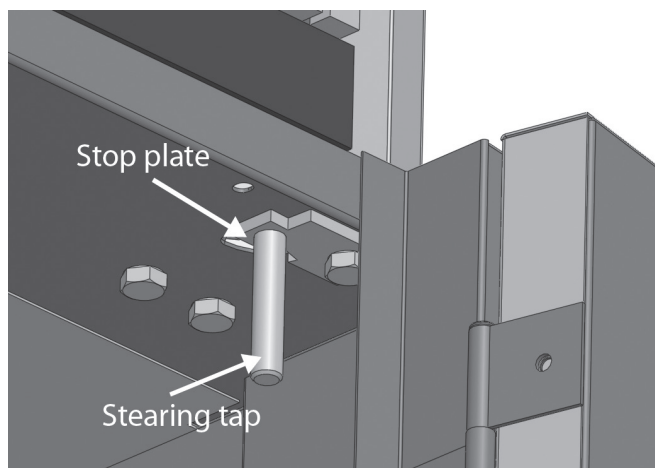
## Turn the hanging frame

The hanging frame can be turned. Follow the steps below.

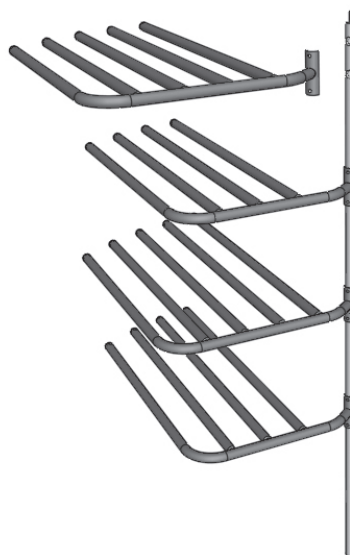
1. Lift up the hanging frame and hook it off the tap below. Put aside.
2. Loosen and push the panel on the top.



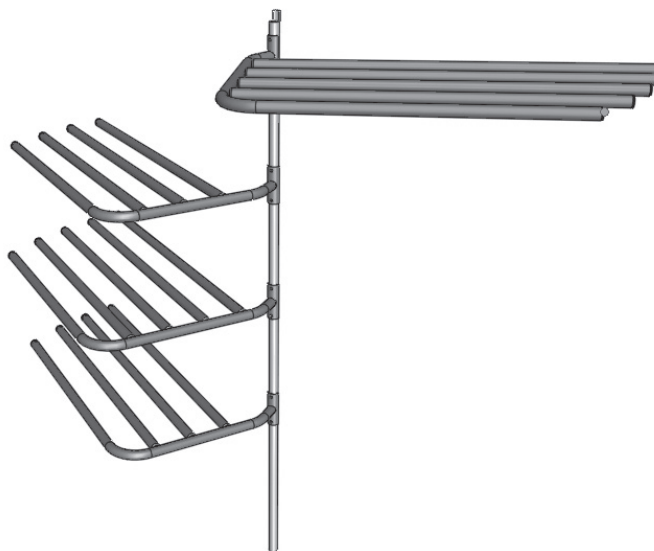
3. Loosen the three bolts, the upper steering tap and nut and the five torx screws which hold the plate and which support the stop plate. The drawings below shows where these parts are.



4. Disconnect the cables which are passing through the rubber grommet on the support plate, from the keypad and LCD to the main control board. Open the service hatch next to the program board to access the cable connections.
5. Lift up the plate and remove the cables. Connect the cables to the board again.
6. Before the support plate is assembled on the other side of the cabinet; loosen the five torx screws on the left hand side.
7. Put the support plate on the side to which the hanging frame will be moved.
8. Re-assemble the torx screws. Thereafter, fasten the bolts, upper steering tap and the stop plate.
9. Put the front panel back on again.
10. Loosen and move also the lower tap to the opposite side.
11. To get the arms on the frame on the same level, each hanging level must be turned "upside down". Loosen the upper hanging level from the frame.



12. Rotate the hanging level 180° and fasten it again.





13. Repeat the same procedure with the three remaining hanging levels.
14. Put the hanging frame back in and put the pole on the upper tap. Lower the pole so that it fits to the lower steering tap.
15. Control that the frame can be turned and that the stop function works properly also in the outer positions.

### Adjust the rotary inertia of the hanging frame

At the top of the hanging frame pole there is a bolt for adjusting the rotary inertia. If the hanging frame rotates with insufficient resistance the bolt can be tightened.



# Requirements for ventilation

## WARNING

A drying cabinet produces inflammable dust. To minimize the risk for fire, the evacuation of the cabinet must be connected to a ventilation channel that evacuates the air.

Never let the evacuated air into a room or a surrounding where there is a risk for ignition.

Do not use ventilation channels in plastic or fire dangerous material.

## Ventilation channel – choice of material

Ventilation channel, ducts, connections etc are not included.

The ventilation channels shall be at least 125 mm in diameter and should not have channels or similar on the inside.

We recommend that the ventilation system is built with rigid metal ducts for best result. Flexible evacuating ducts for drying cabinets can also be used.

**NOTE: Never use flexible ducts through walls or other covered areas.**

**NOTE: Do not screw or nit the ventilation channel, so that the screws will come through the inside of the pipe. This construction will gather dust and impair the cabinet's performance.**

The channel shall always be separated from the other ventilation in the house.

## Requirements for incoming air

In order to make the cabinet work properly, it is very important that there is enough incoming air in the room. If the cabinet is installed according to this manual the air flow from the exhaust will be about 230 m<sup>3</sup>/h. Incoming air must be at least equal to the outgoing flow. We recommend the incoming air flow to the room to be greater than the evacuated amount.

If the cabinet is placed in a room where the incoming air is not enough, we recommend that you install an air exchanger.

## Ventilation channel – design

**IMPORTANT: Always make the channels as short as possible.**

**NOTE: If a drying cabinet is installed in an old ventilation channel, please clean the channel properly.**

In order to make the cabinet work properly, the incoming air-flow must be enough. The amount of evacuated air per hour is depending on how high the pressure fall in the ventilation channel is.

Material, the design and the length of the channel have a large impact on the air flow. In order to get the best possible performance, the pressure fall shall be as low as possible.

When the air is transported through the channel, it is exposed to different kind of resistance. Factors that give a low pressure fall:

- Smooth inner walls on the pipe
- Large diameter on the pipe
- Short length on the pipe
- Few curves
- Few angles (90 degrees)

## Evacuated amount of air and pressure fall

In order to get the cabinet to work properly, the ventilation channel shall be designed to get an out coming air flow from the cabinet of about 230 m<sup>3</sup>/h. When the cabinet is installed to an existing channel system, the cabinet can be calibrated to optimize the air flow.

In order to gain this air flow, the pressure fall must not exceed 70 Pa. By an airflow of 230 m<sup>3</sup>/h and a diameter of the pipe of 125 mm, this corresponds to a straight, smooth ventilation channel of 23 m.




### Pressure fall estimation

The counter pressure in the ventilation channel can be measured with a pressure meter. The measuring point shall be placed by the cabinets evacuating outlet.

In order to estimate the pressure fall without meter equipment we recommend the following:

- Identify the ventilation channel's incoming components in the air flow direction.
- Check the part pressure fall for each component in the table.
- Calculate the total amount of pressure fall by adding each parts pressure fall.

The table shows the most common components in a ventilation system. The information shall be considered as approximate data. For more information, contact the manufacturer of the parts of the system. Please note that the data in the table is for an air flow of 230 m<sup>3</sup>/h.

Component			Pressure fall
	∅, mm		Pa/m
	125		3,1
	160		1,0
	∅, mm	r, mm	Pa/bend
	125	125	6,5
	160	160	2,5
	Transition, mm		Pa/reduction
	125 till 160		3,5
	160 till 125		5,5

Example: 10 m long 125 mm channel with 3 pipe curves which gives an estimated pressure fall of  $(10 \times 3,1) + (3 \times 6,5) = 50,5$  Pa.

**NOTE: If the highest allowed level of air pressure is exceeded an external fan could be needed. Otherwise the drying result is effected negatively. The drying cabinet is prepared for an external fan. Contact your local dealer for more information**

### Decrease the outgoing air flow

The cabinets function and automatic programmes are optimized for the recommended air flow of 230 m<sup>3</sup>/h. If the design of the ventilation is made so that evacuated air flow exceeds 230 m<sup>3</sup>/h, the evacuation can be throttled with help of a damper. Contact a ventilation expert in order to find a proper solution for your ventilation.

# User manual

## Fill the cabinet

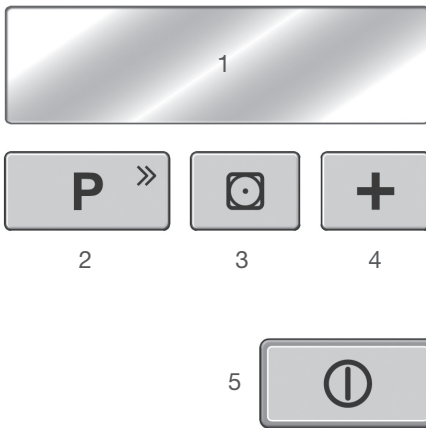
To get the best drying result: dry the same type of material at the same time. Never fill the cabinet with more than 8 kg laundry (dry weight).

## Close the doors

The cabinet will not start until the door is completely closed.

## Keypad

1. Display
2. Program select\*
3. Gentle drying ON/OFF
4. Increase time
5. Start/stop



\* Program fast forward during drying.

## Select program

Change program by pushing program select (button 2). The symbol of the chosen program gets highlighted and the program name is showed on the screen. Read more about the different programs below.

## Start program

Push start/stop button (button 5) in order to start the drying cabinet.

## Pause program

To pause a working programme, open the doors. Close the doors and push the start button to continue drying.

## Cancel program

To cancel a working program push the start-/stop button.

## CAUTION

If a program is interrupted before the cool down has finished, the inside of the drum could be very hot.

## Cool down

All programs have a cool down phase of 10 minutes. This cool down time is included in the chosen time for the timed drying program. During cool down the clothes are reconditioned and the drying cabinet is cooled down. A running program can be fast forward to cool down using the P-button.

## Standby





If no button has been pushed and the door hasn't been opened or closed within 4 minutes, the display is turned off. The diode and the lamp in the cabin is also turned off if the door is open.

## Automatic programs


The drying cabinet is equipped with the function HTS – Humidity Tracking System. This function is activated in the automatic program mode. The drying time adjusts to the laundry in the cabinet.

### To choose automatic program mode

Choose automatic program by pushing button 2. The cabinet has four different programs:

-  **IRON DRY**  
For laundry to be ironed.
-  **SLIGHTLY DRY**  
For laundry that will not be ironed or only lightly ironed.
-  **CABINET DRY**  
For laundry that will not be ironed.
-  **EXTRA DRY**  
For particularly thick fabrics.

## Select drying time manually

-  **TIMED DRYING**  
The cabinet has a timed drying program for the user who prefers to set the time manually.

### Set the time

The default drying time when entering Timed drying program is 0:15h. Increase the drying time with the plus button. The drying time can be increased to a maximum of 3:00h.

## Gentle drying

For delicate fabrics and synthetics gentle drying should be used. The temperature is reduced. Activate gentle drying mode by pushing button 3 during program select.

# Maintenance

## Take good care of the cabinet

Only use a damp cloth with a mild detergent when cleaning the cabinet.

Never use solvent to clean the display.

## Ventilation system

Loosen the ventilation pipe on the cabinet every year and clean if necessary around the evacuating channel.

**IMPORTANT: Always switch off the electricity before starting to work with the cabinet.**

Inspect with set intervals the complete ventilation channel; don't forget the outer wall. There can easily be leaves and other rubbish that chokes.

We recommend that you once a year, take down the service doors and vacuum clean around the fans and elements.

## Keep your cabinet efficient and economical

- The ventilation channels shall be as short as possible.
- If possible, dry the same type of textiles at the same time.





