

## NORDcanopy

HV Installation, use and maintenance manual

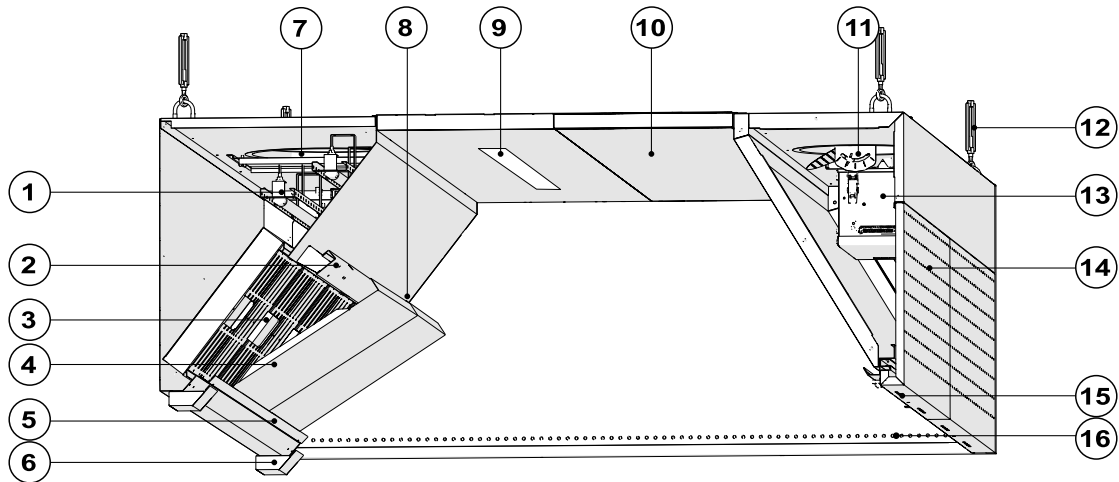
## Installation, use and maintenance manual

1. In the kit	3
2. The lighting panel	5
3. Hanging the kitchen canopy	5
4. Leveling the canopy	6
5. Opening the front panel	6
6. Fastening kitchen canopy sections together	6
7. Installing and removing grease collection containers	8
8. Installing HFK grease filters and UV protection shields	8
9. Installing the UV Control Unit	9
10. Lighting connection	10
11. Measuring and adjusting airflow	10
12. Accessories	11
13. Replacing the luminaires	13
14. Kitchen canopy maintenance	14

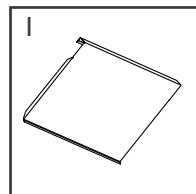
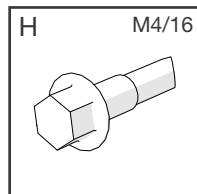
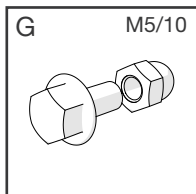
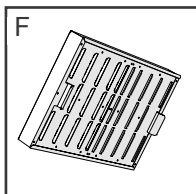
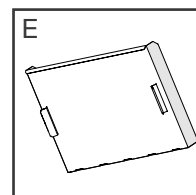
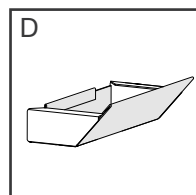
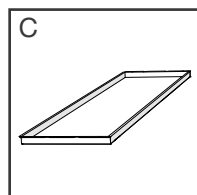
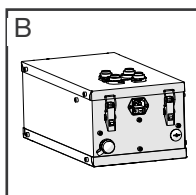
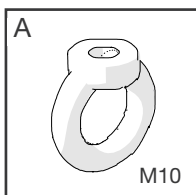


Use protective glasses and gloves during installation and maintenance!

## 1. In the kit



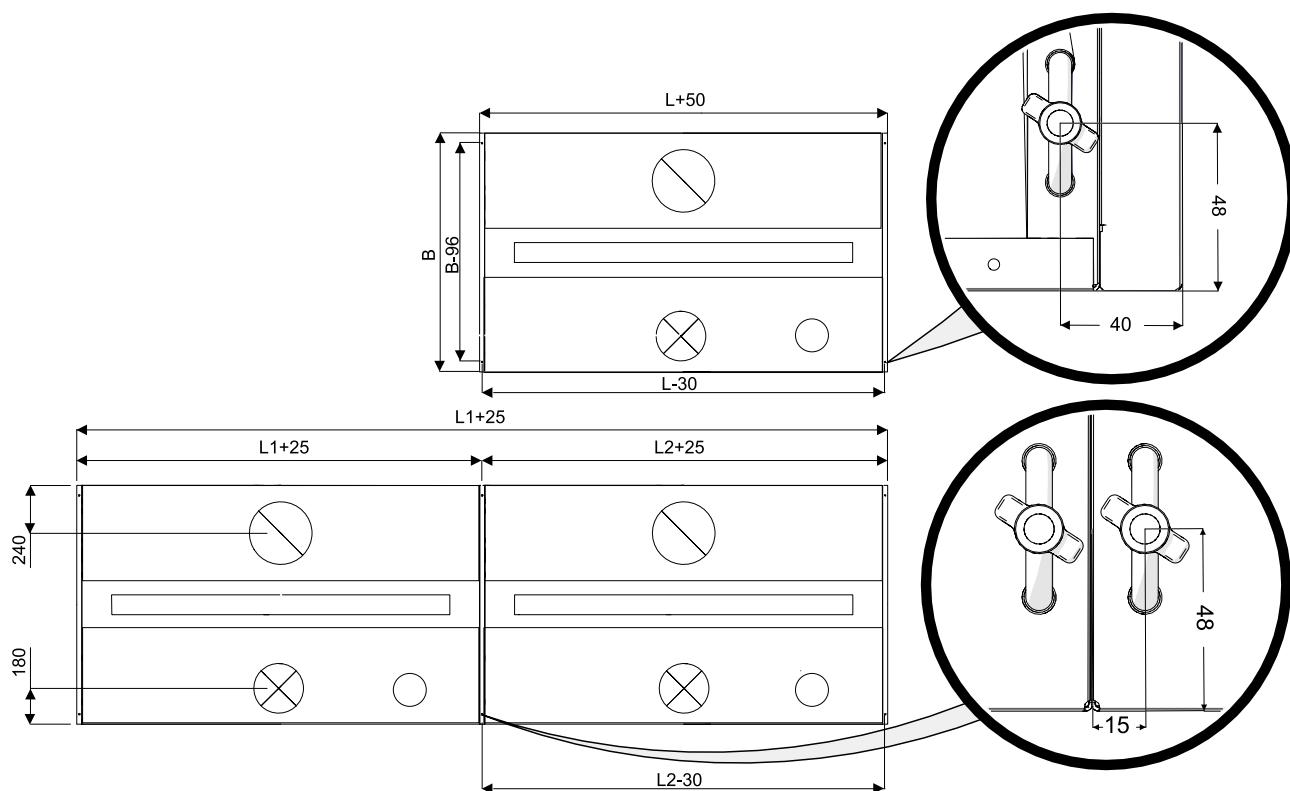
- |   |                                  |
|---|----------------------------------|
| 1 – UV lamps  | 9 – LED Light                    |
| 2 – UV safety switches and protection shield holder | 10 – Ceiling panel               |
| 3 – HFK grease filter                               | 11 – Supply air adjusting plate  |
| 4 – UV Protection shield                            | 12 – Suspension points           |
| 5 – Grease gathering rail                           | 13 – UV Control Unit             |
| 6 – Grease cups                                     | 14 – Front panel                 |
| 7 – Air extraction guillotine damper                | 15 – Auxilliary air supply       |
| 8 – Airflow measuring nozzle                        | 16 – “Airgrip” air nozzle system |



### In the kit:

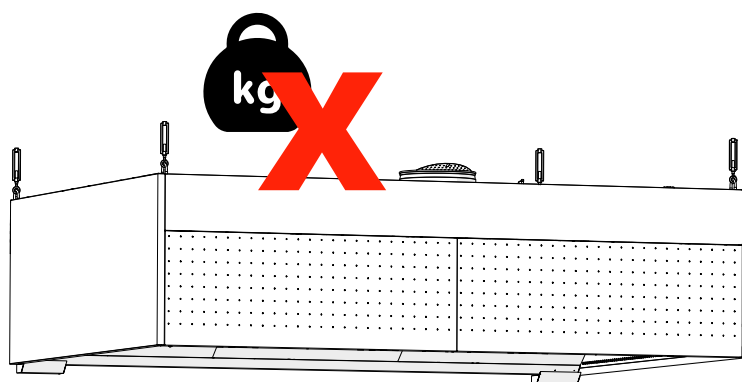
- |   |                          |
|---|--------------------------|
| A – Loop nut                                | F – HFK Grease filter    |
| B – UV Control Unit                         | G – Bolts and cap nuts   |
| C – Ceiling panel for sequential connection | H – Screws               |
| D – Grease collection container             | I – UV protection shield |
| E – Blind plate for grease filter rail      |                          |

## 1.1 Measurements



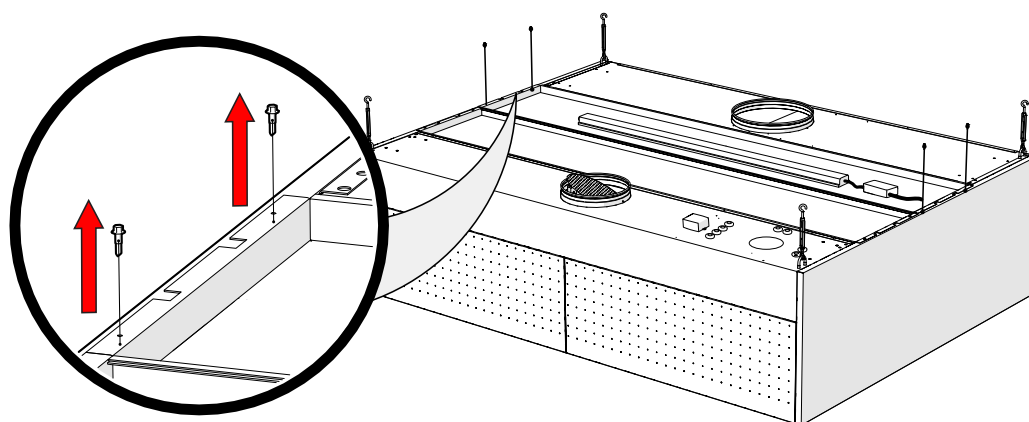
## Safety

**It is prohibited to hold or add additional weight on the top of the canopy.**



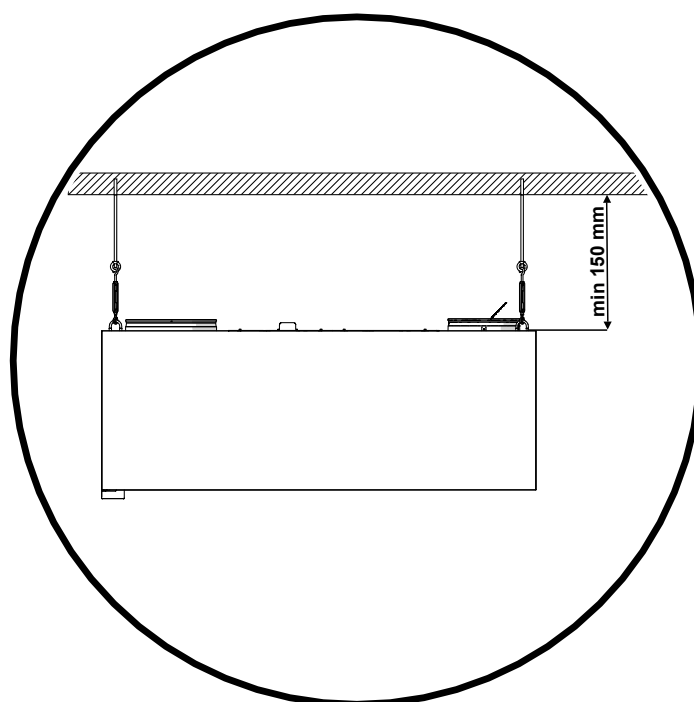
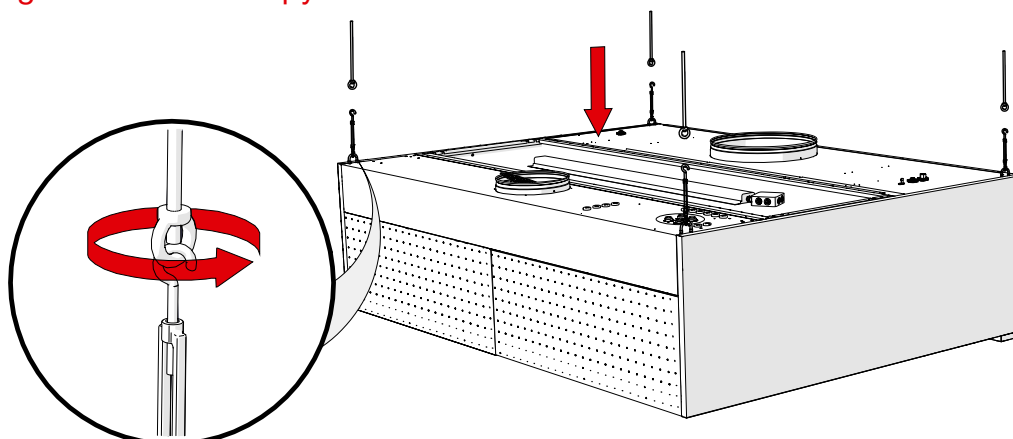
## 2. The lighting panel

**NB!**  
Fastening screws must be removed during the installation.



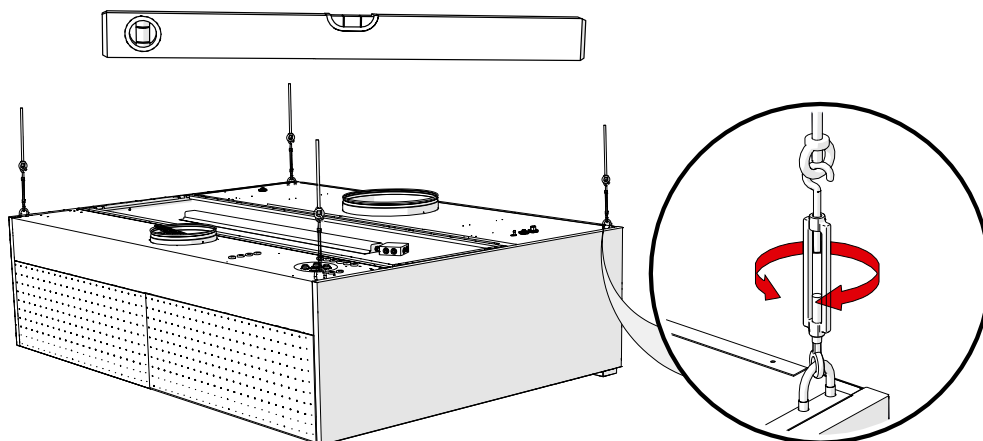
Removing the lighting panel provides access for exhaust duct, insulation installation and electrical connections or changing the lighting.

## 3. Hanging the kitchen canopy

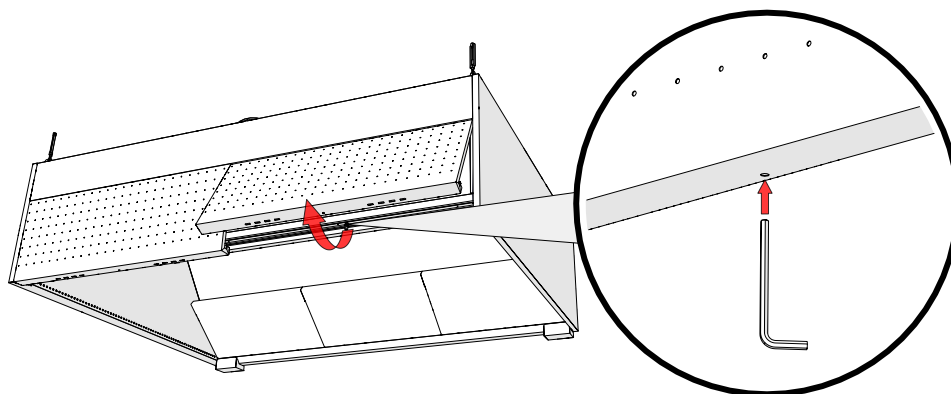


#### 4. Leveling the canopy

Leveling is performed for each section.



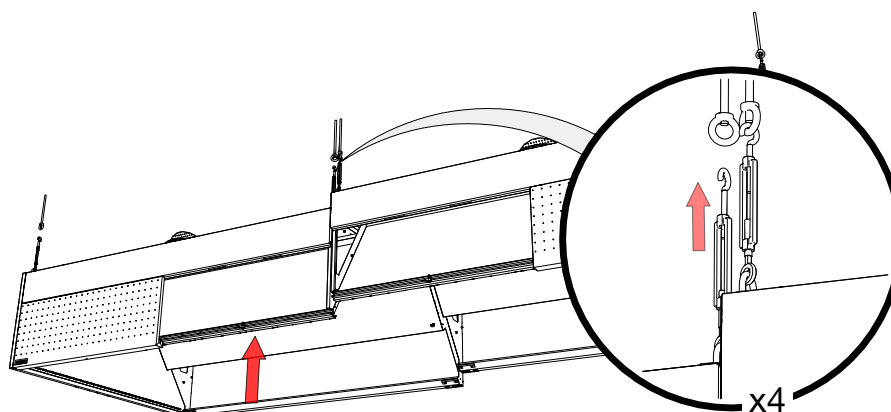
#### 5. Opening the front panel



The panel locks automatically.  
NB! At the end of the installation, make sure that the panels are correctly fixed.

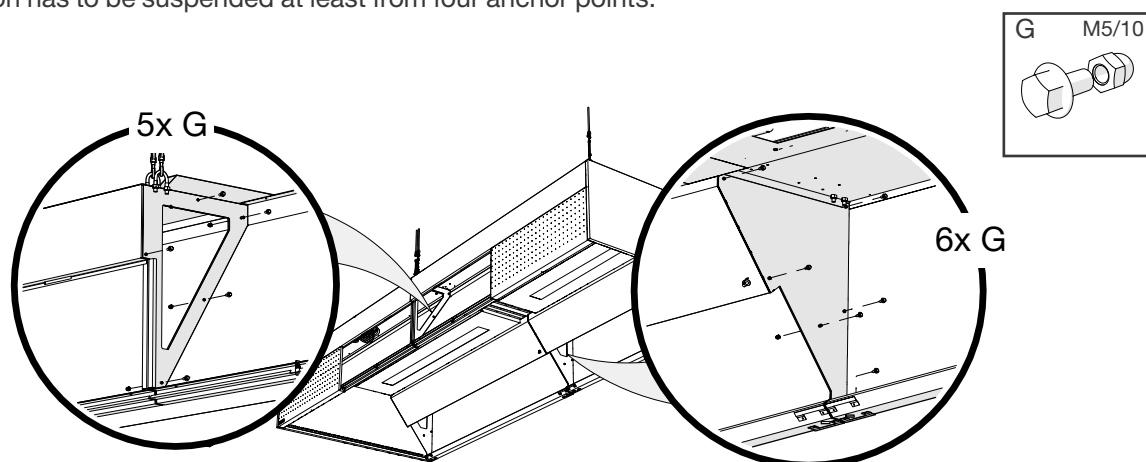
#### 6. Fastening kitchen canopy sections together

##### 6.1 Hanging the canopy sections

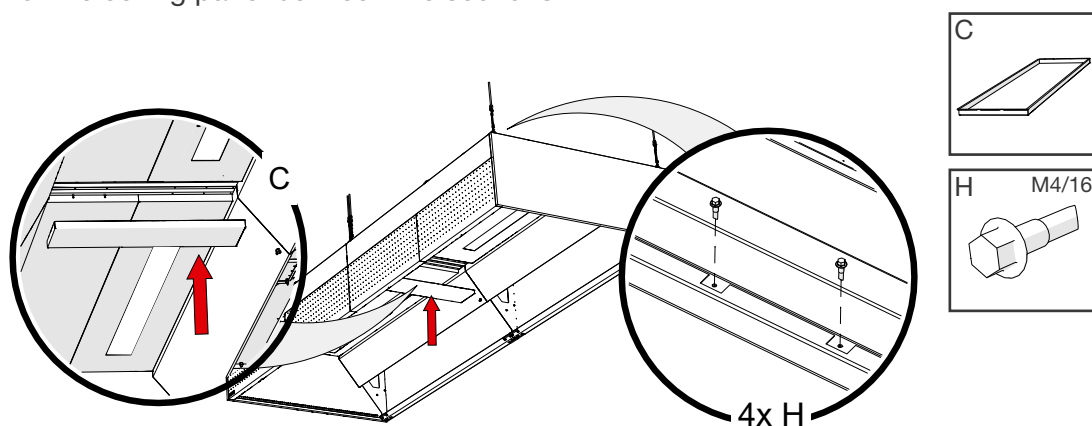


## 6.2 Sequential connection

Each section has to be suspended at least from four anchor points.

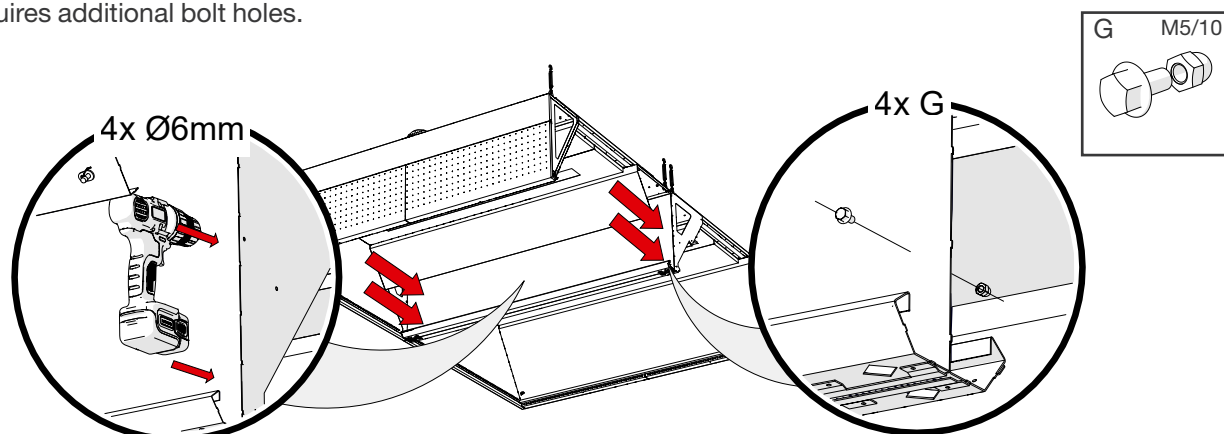


## 6.3 Installation of the ceiling panel between the sections

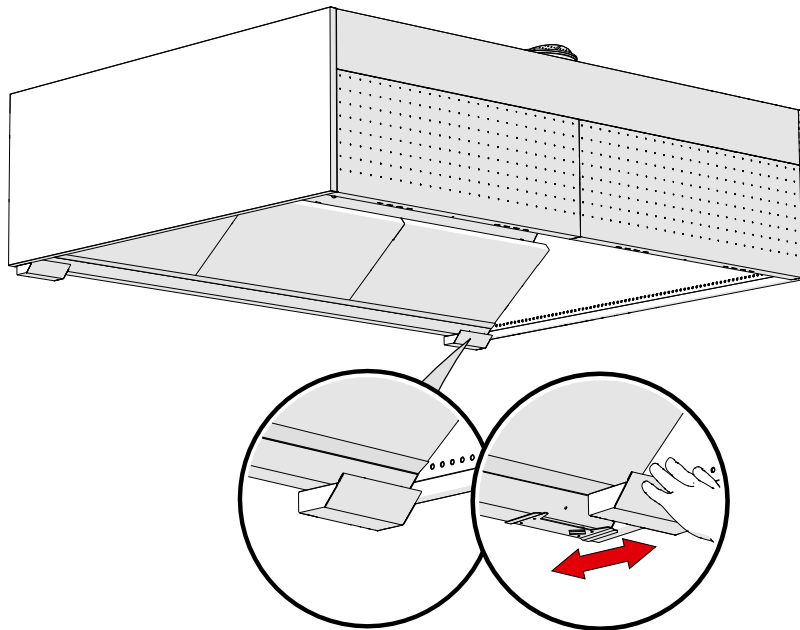


## 6.4 Fastening sides back-to-back

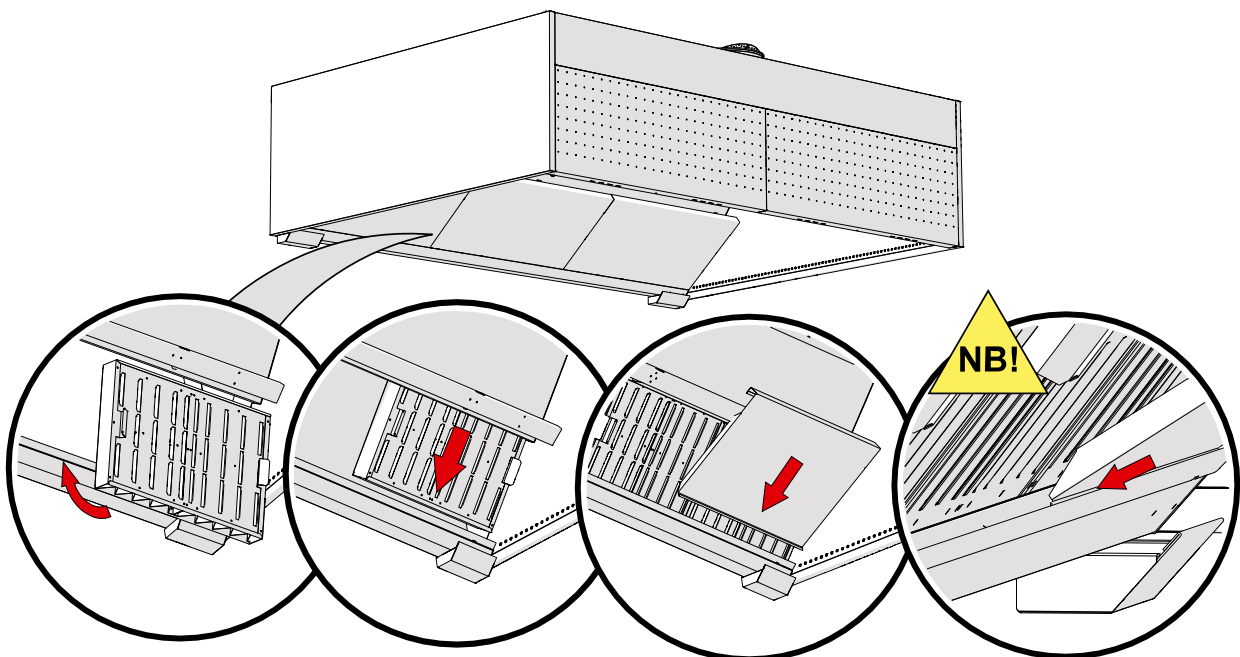
Requires additional bolt holes.



## 7. Installing and removing grease collection containers



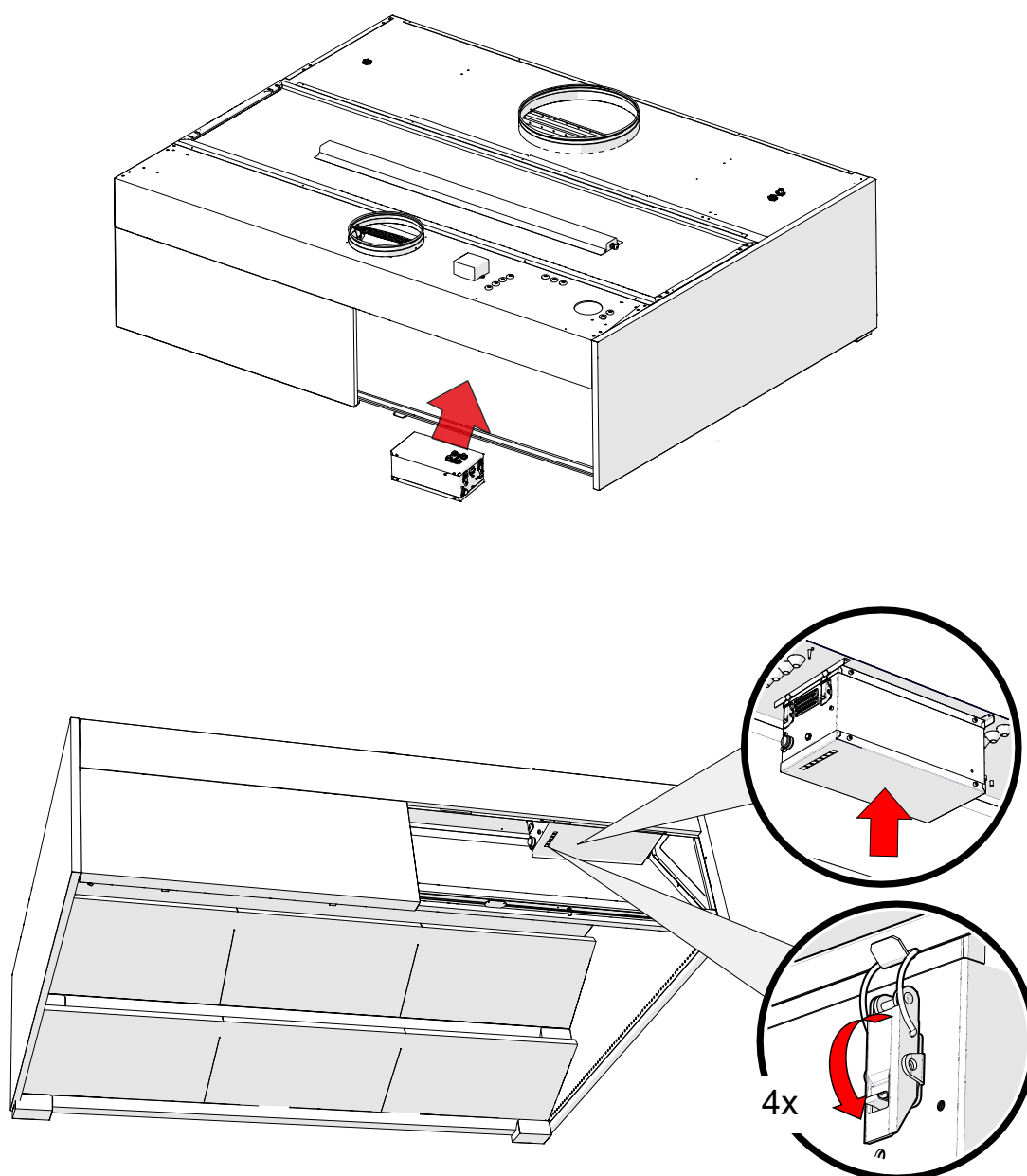
## 8. Installing HFK grease filters and UV protection shields





## 9. Installing the UV Control Unit

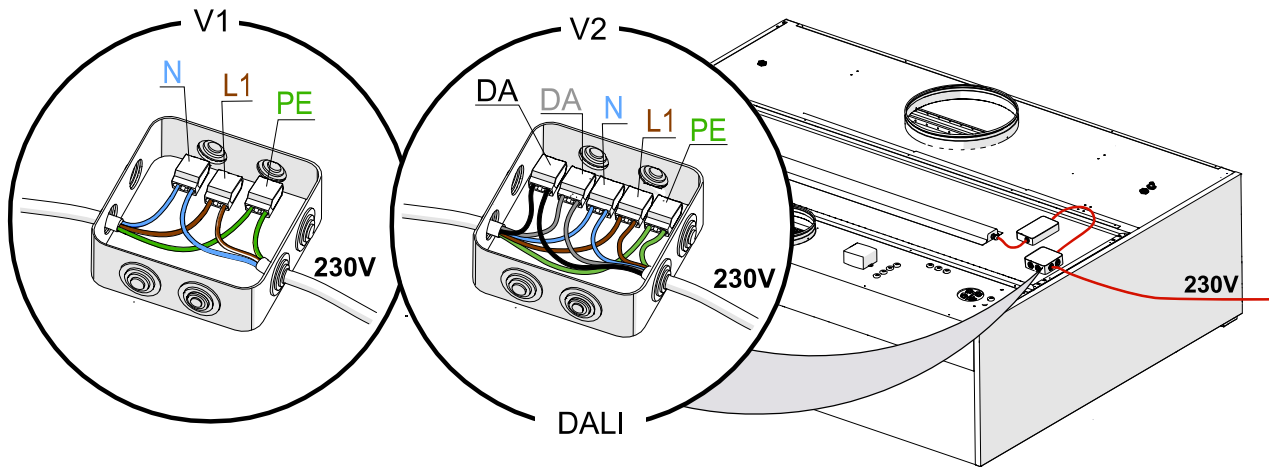
Connecting and starting the UV system is described in the “UV Cleaning System Installation Guide”.



**NB! The UV Control Unit needs supply air to work.  
The UV Control Unit must not be installed if there is no supply air duct connected to the canopy!**

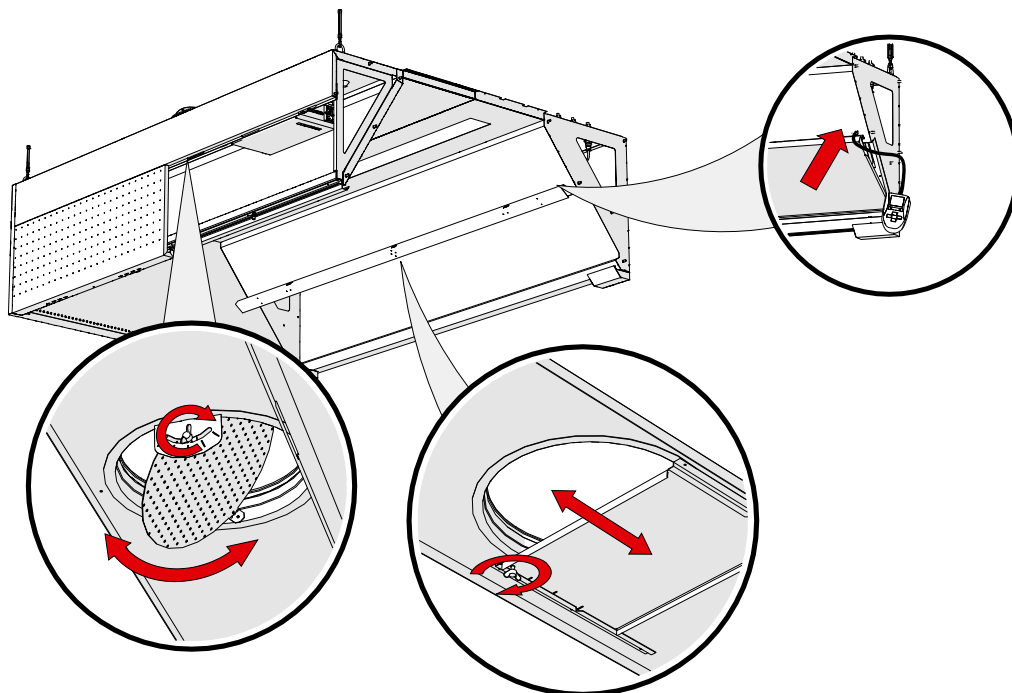
## 10. Lighting connection

**NB! Performed by electrician.**



## 11. Measuring and adjusting airflow

NORDcanopy canopies are fitted with measuring nozzles located inside the canopy.



**NB! During measurement, all HFK grease filters and protection shields must be in place and the front panel must be closed.**

In order to adjust supply airflow, the position of the adjusting plate located in the supply chamber is adjusted. The exhaust airflow adjustment plate is located behind the HFK grease filters. Lock the adjustment plate in place using the butterfly nuts!

## K-factor for measuring airflow

- Exhaust K-factor = 16,6 per filter

$$Q_v = k / \Delta p_m$$

Supply air	K-factor, per 1 m of front panel				
	SP×0	SP×1	SP×2	SP×3	SP×K
Front panel*	-	19,2	32,3	50,4	-
AirGrip	2,4	-	-	-	-
Side panel*	-	-	-	-	6,6

\* The supply panel k-factors above include the "AirGrip" air capture system K-factor.

\* If the side panel has perforation, add the side panel k-value to the front panel k-value.

### Calculation example:

Supply air canopy L=2 meter with SP×2 front panel.

#### Calculation of the supply air volume:

Pressure in the supply air chamber is 26 Pa

Front panel SP×2 k-factor is 32,3

$$Q_s = 2 \times 32,3 \times \sqrt{26} = 330 \text{ l/s}$$

#### Calculation of the exhaust air volume:

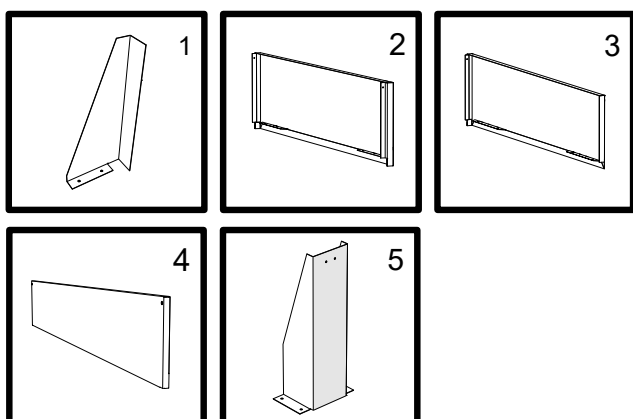
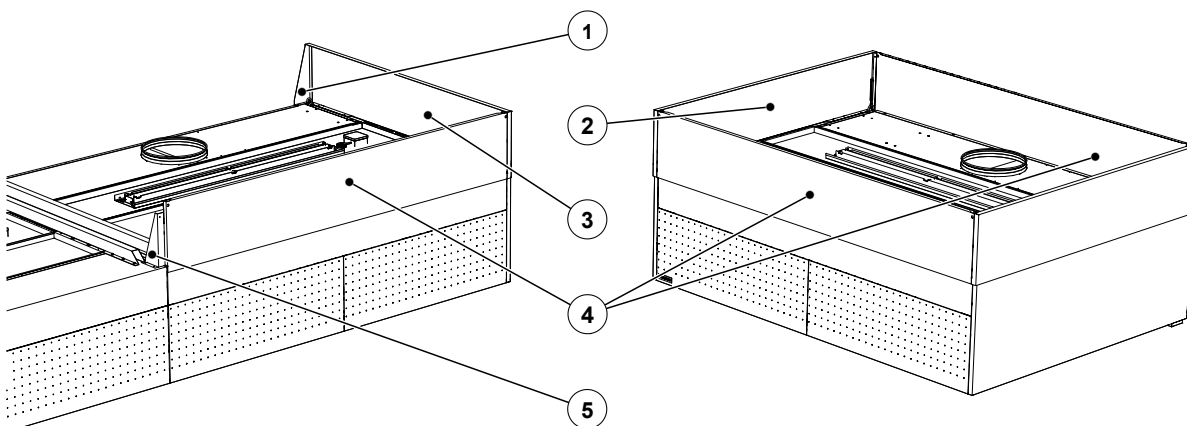
Pressure in the exhaust air chamber is 22 Pa

4 × HFK labyrinth filter k-factor is 16,6

$$Q_e = 4 \times 16,6 \times \sqrt{22} = 312 \text{ l/s}$$

## 12. Accessories

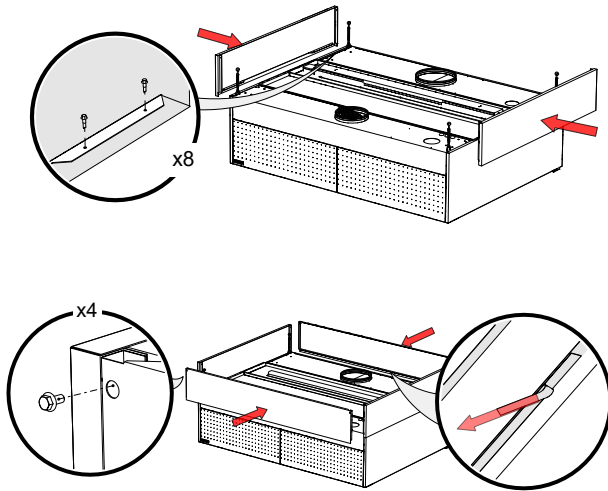
### 12.1 Cover plates



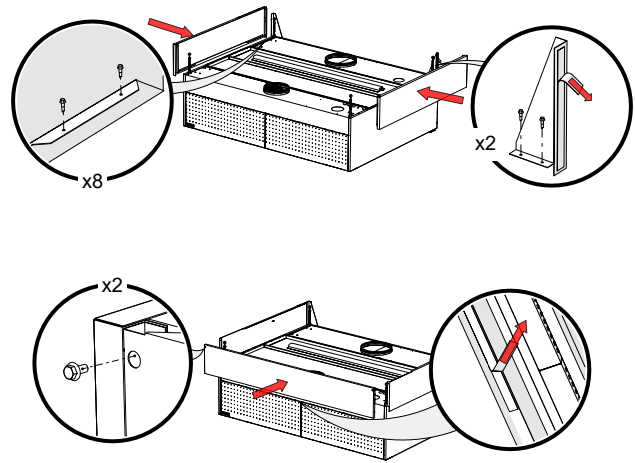
- 1 – Side panel support
- 2 – Island canopy side panel
- 3 – Wall installation canopy side panel L/R
- 4 – Front panel
- 5 – Section beam (sequential connection)

## 12.2 Installation of Cover Plates

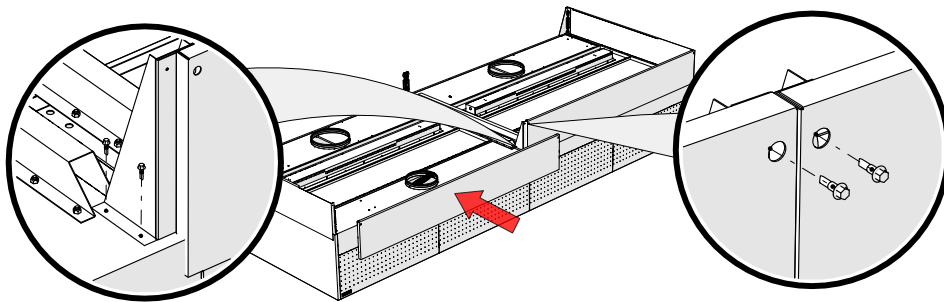
### A – Island canopy cover plates



### B – Wall installation canopy cover plates



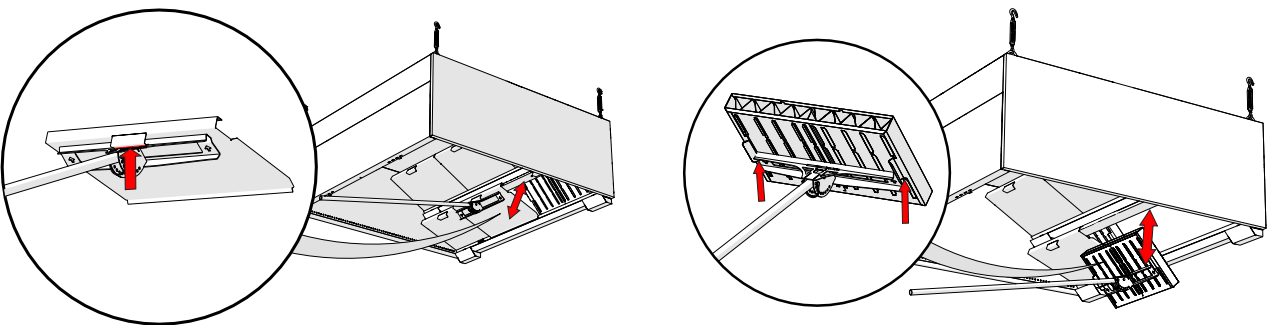
### C – Sectional canopy cover plates



## 12.3 Grease filter removal tool

When removing grease filters from a UV-canopy, ensure that the UV system is powered off at the main electrical closet or safety breaker!

Use the Helping Hand filter tool for easy UV cover plate and filter handling.

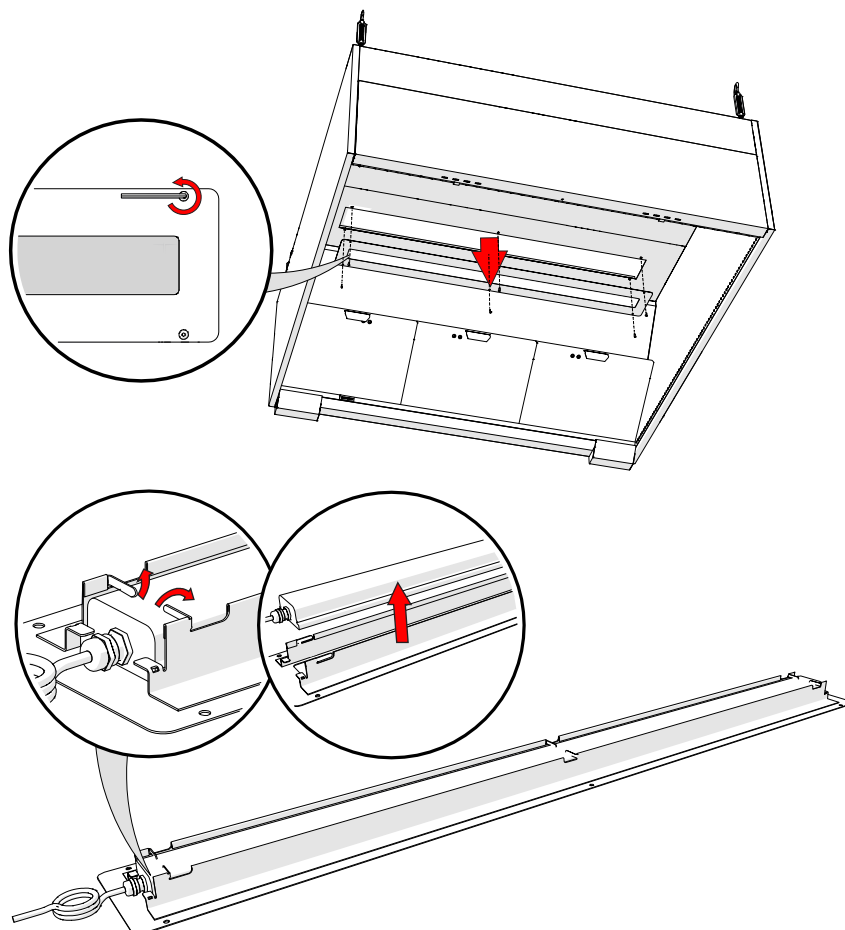


## 13. Replacing the luminaires

### 13.1 Luminaires

NORDcanopy kitchen canopies use integrated light fixtures with protection class IP66. All luminaires are fitted with a power cable (3x1.5 mm, length 1,5 m) and a junction box.

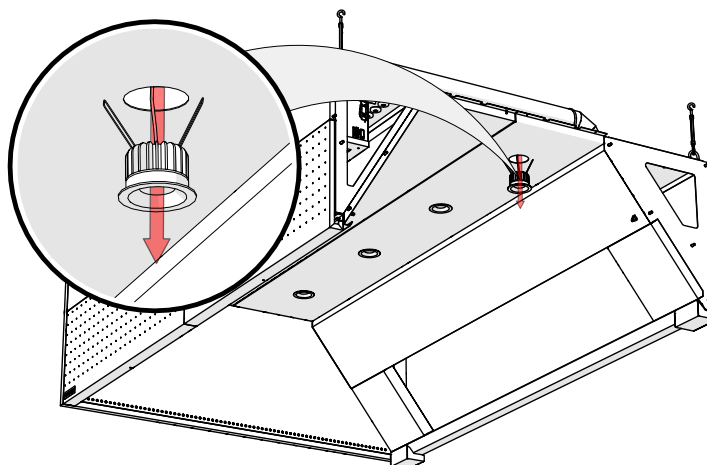
To remove luminaires, bend the frame points with pliers and lift the lamp out.



### 13.2 Spot LED lighting

Spot LED lighting is fastened with spring clips on the top surface of the canopy ceiling. For replacing the luminaire, it should be pulled downward from the canopy ceiling.

**NB! Performed by electrician.**



## 14. Kitchen canopy maintenance

### DEPENDING ON THE FREQUENCY OF KITCHEN USAGE

All internal and external surfaces of the kitchen canopy, including light fixtures, are cleaned using neutral cleaning agents. Carefully rinse the surfaces after cleaning, in order to avoid harmful interactions of cleaning agents and high temperatures. To clean the exhaust chamber, HFK filters, protection shields, UV lamps and grease collection containers are removed from the kitchen canopy. To clean the supply chamber, the front panel of the kitchen canopy is removed and the UV Control Unit must be removed.

NB! Do not use hard or abrasive detergents, chlorine or bleach when cleaning the canopy!

Never clean the kitchen canopy when any of its surfaces are hot.

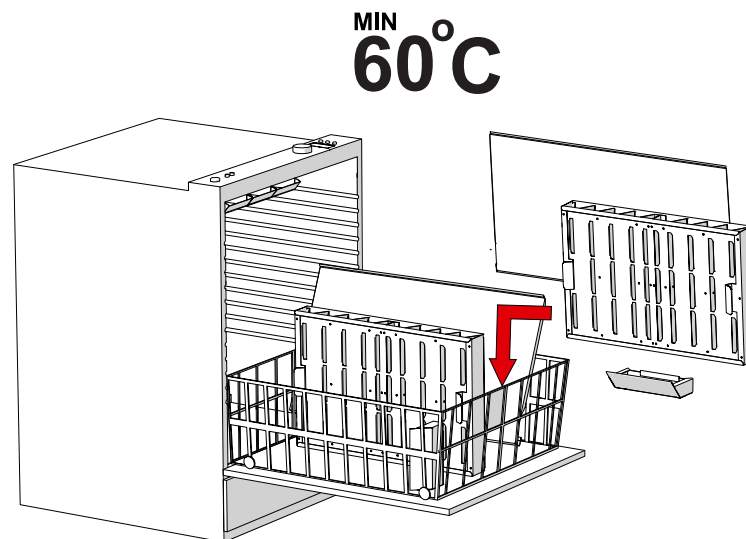
**The UV Control Unit must never have any exposure to moisture!**

### DAILY

To clean HFK grease filters, protection shields and grease collection containers, these must be removed from the kitchen canopy. Grease collection containers need to be emptied. All three items may be washed by hand, in a dishwasher, or steam-cleaned. The lamps must be checked once a week and, in case of visible dirt, clean the glass surface of the UV lamp with a damp cloth. For heavier dirt, use isopropyl alcohol between 90% and 100%.

Liquid grease must always be disposed of using methods approved according to local regulations.

NB! Grease collection containers must be inspected regularly and emptied if necessary.





### ETS NORD AS

Address: Peterburi tee 53  
11415 Tallinn  
Estonia  
Phone: +372 680 7360  
info@etsnord.ee  
www.etsnord.ee

### ETS NORD Finland

Address: Pakkasraitti 4  
04360 Tuusula  
Finland  
Phone: +358 401 842 842  
info@etsnord.fi  
www.etsnord.fi

### ETS NORD Sweden

Address: Järsjögatan 7  
69235 Kumla  
Sweden  
Phone: +46 19 554 20 50

Address: Pinjegatan 5  
21363 Malmö  
Sweden  
Phone: +46 40-94 68 70

Address: Förrådsvägen 5  
151 58 Södertälje  
Sweden  
Phone: +46 8 550 301 40

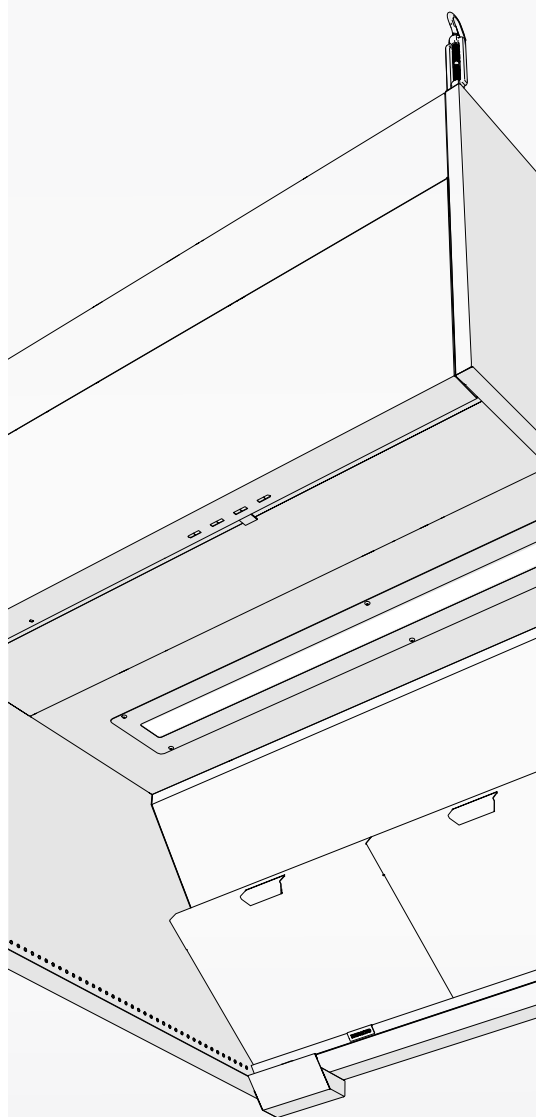
info@etsnord.se  
www.etsnord.se

### ETS NORD International

info@etsnord.com  
www.etsnord.com

### ETS NORD Ventilation Manufacturing LLC UAE

Sepin Rayo  
sepin.rayo@etsnord.com  
+971 5257 02916



*Let's move the air **together!***