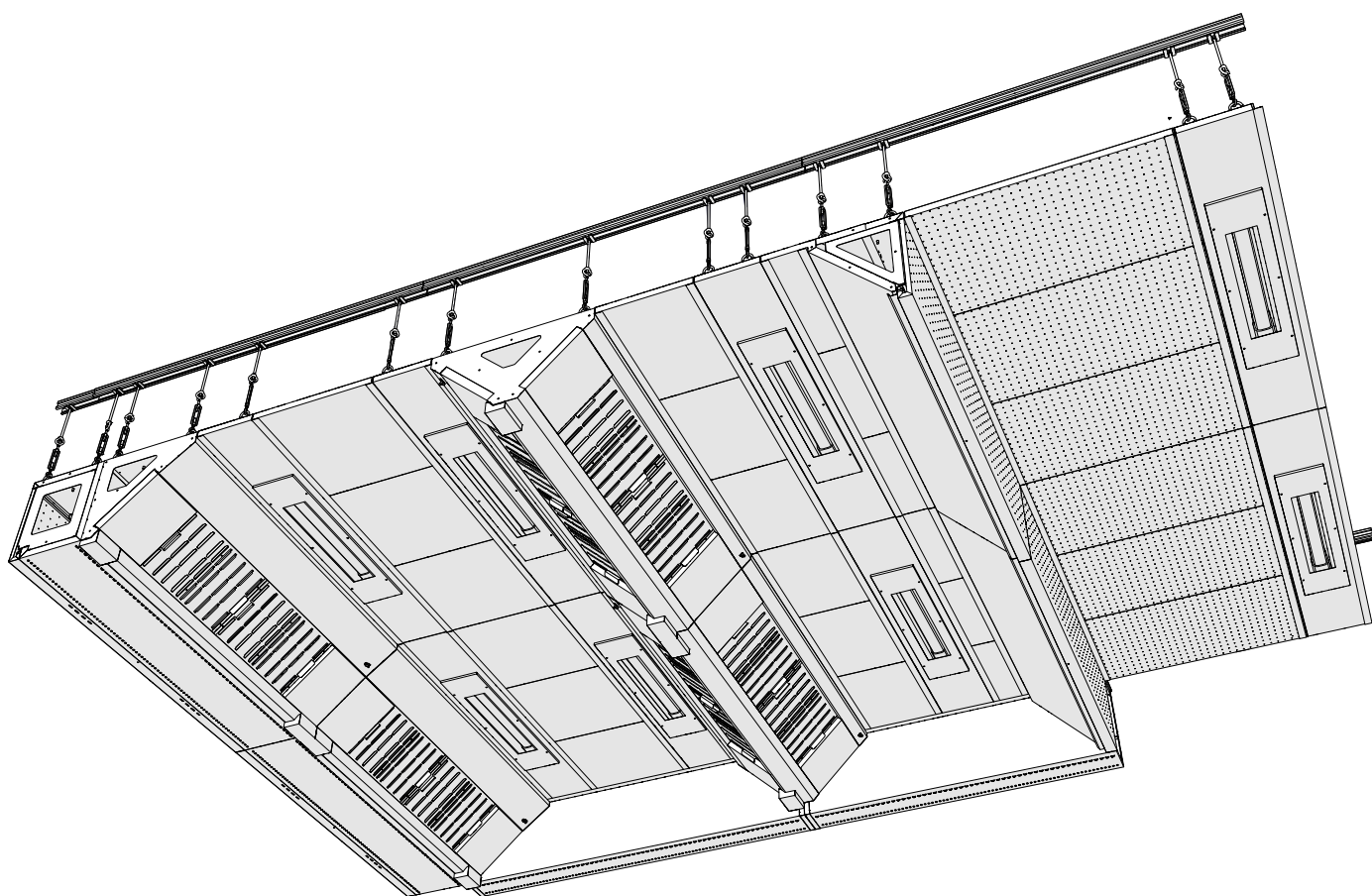




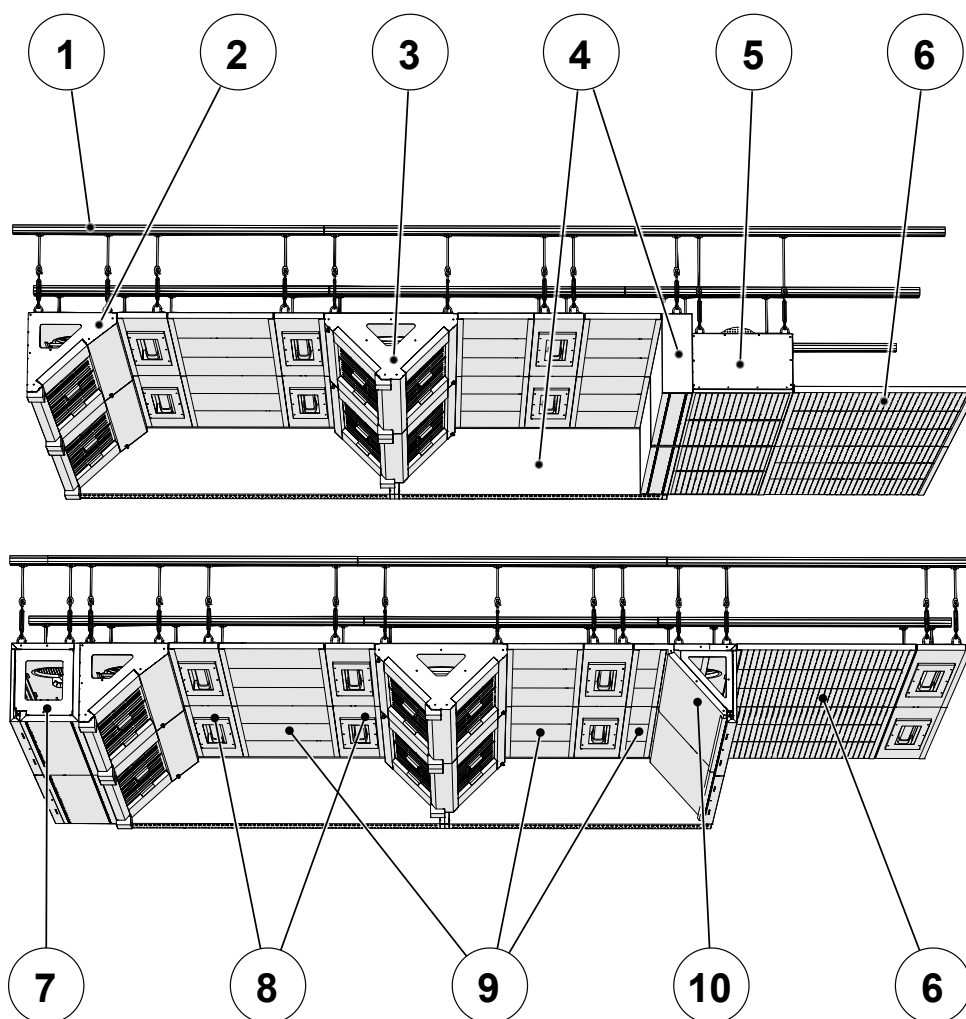
NORDcanopy

HC Ventilation Ceiling installation, use and
maintenance manual

www.nordcooking.com

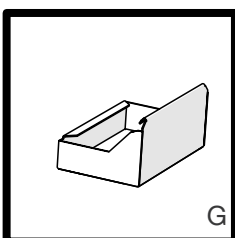
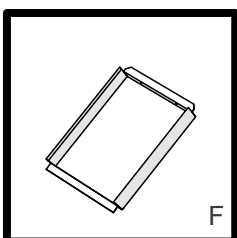
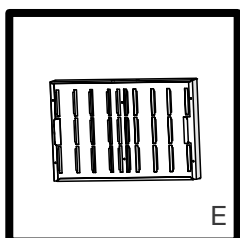
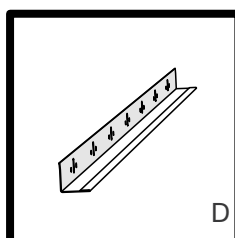
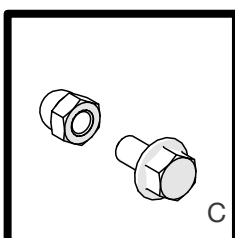
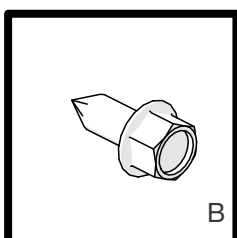
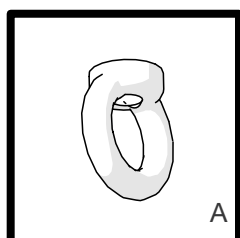
Table of Contents

1. HCE Exhaust Wall Module	4
2. HCI Exhaust V-Module	5
3. HCG AirGrip Module	7
4. HCV Vertical Supply Air Module	9
5. HCH Horizontal Supply Air Module	11
6. HCAH Horizontal Supply Air Module	13
7. Installing L-profiles	15
8. HCL Led Light Module	16
9. HCF Ceiling Panel	18
10. HCM Noise Absorbing Ceiling Panel	18
11. Installing the Ozonator	19
12. Corner Details	21
13. Additional Components	23
14. Measuring and adjusting airflow	24
15. Replacing the luminaires	26
16. Kitchen canopy maintenance	26



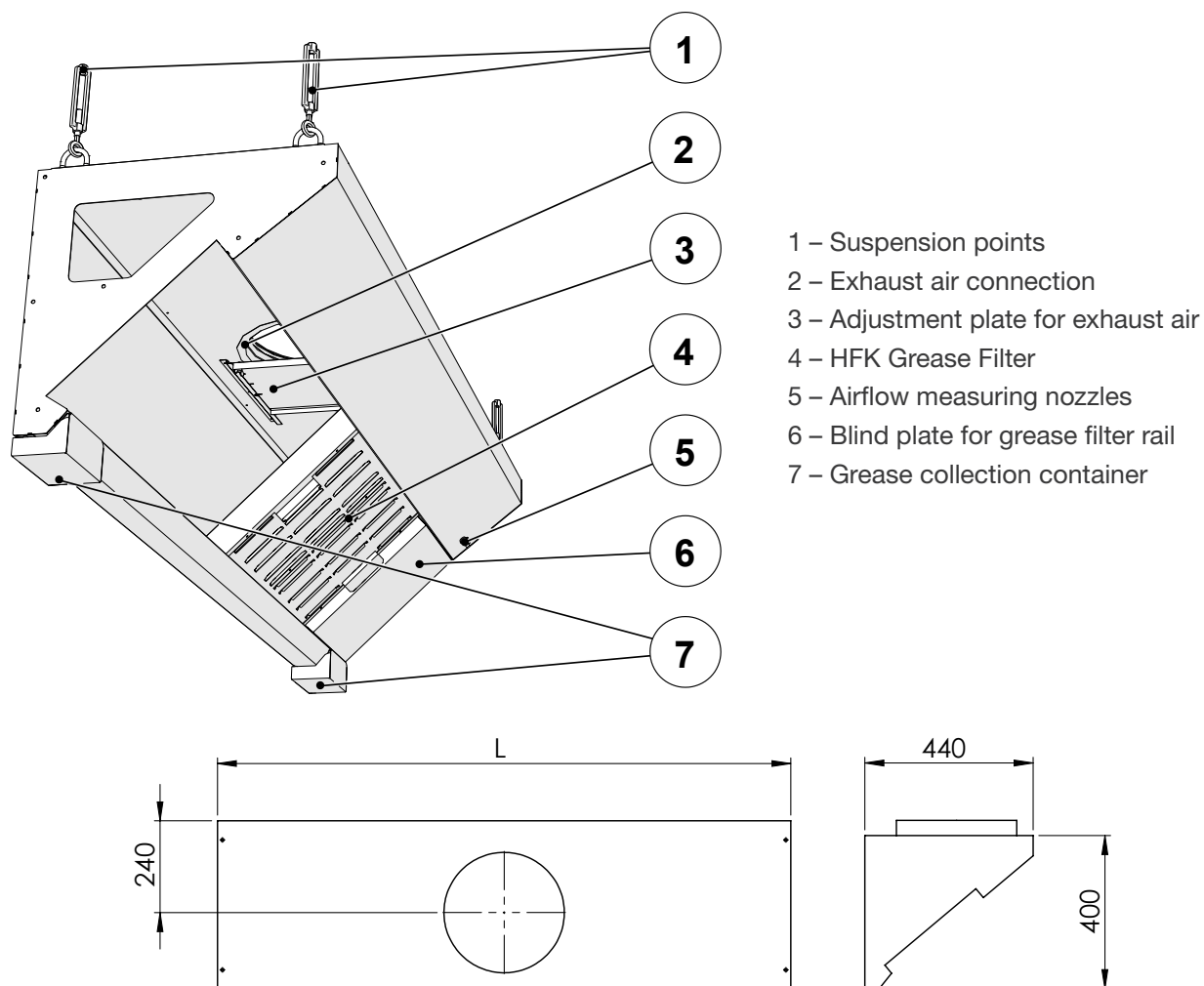
- | | |
|------------------------------------|---------------------------------------|
| 1 – MEFA fastening system | 6 – HCM Noise Absorbing Ceiling Panel |
| 2 – HCE Exhaust Wall Module | 7 – HCAH Horizontal Supply Air Module |
| 3 – HCI Exhaust V-module | 8 – HCL LED Light Module |
| 4 – HCG AirGrip Module | 9 – HCF Ceiling Panel |
| 5 – HCV Vertical Supply Air Module | 10 – HCH Horizontal Supply Air Module |

In the kit:

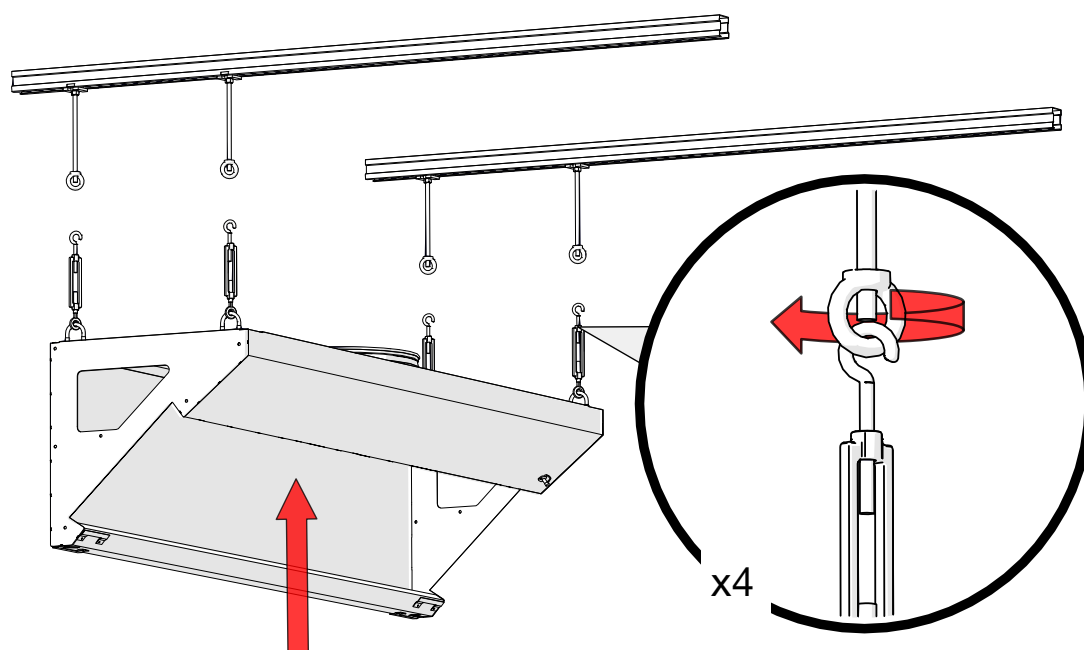


- A – Loop nut
 B – Self-tapping screws
 C – M5 bolts and capped nuts
 D – L-profile
 E – HFK grease filter
 F – Blind panel for grease filter rail
 G – Grease collection container

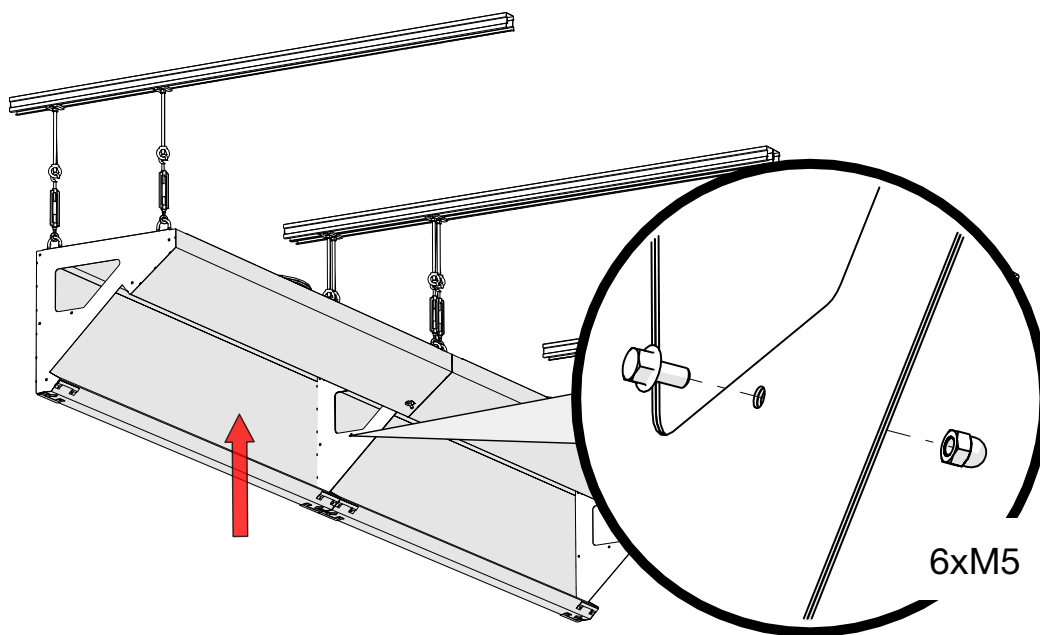
1. HCE Exhaust Wall Module



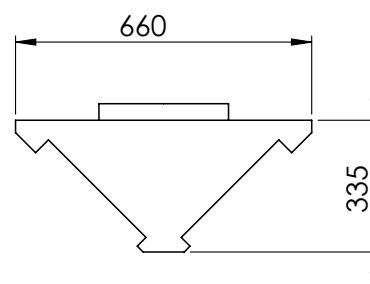
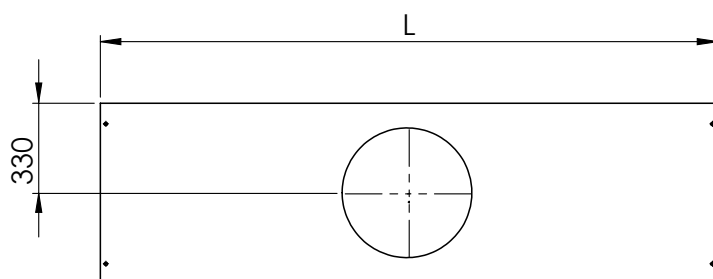
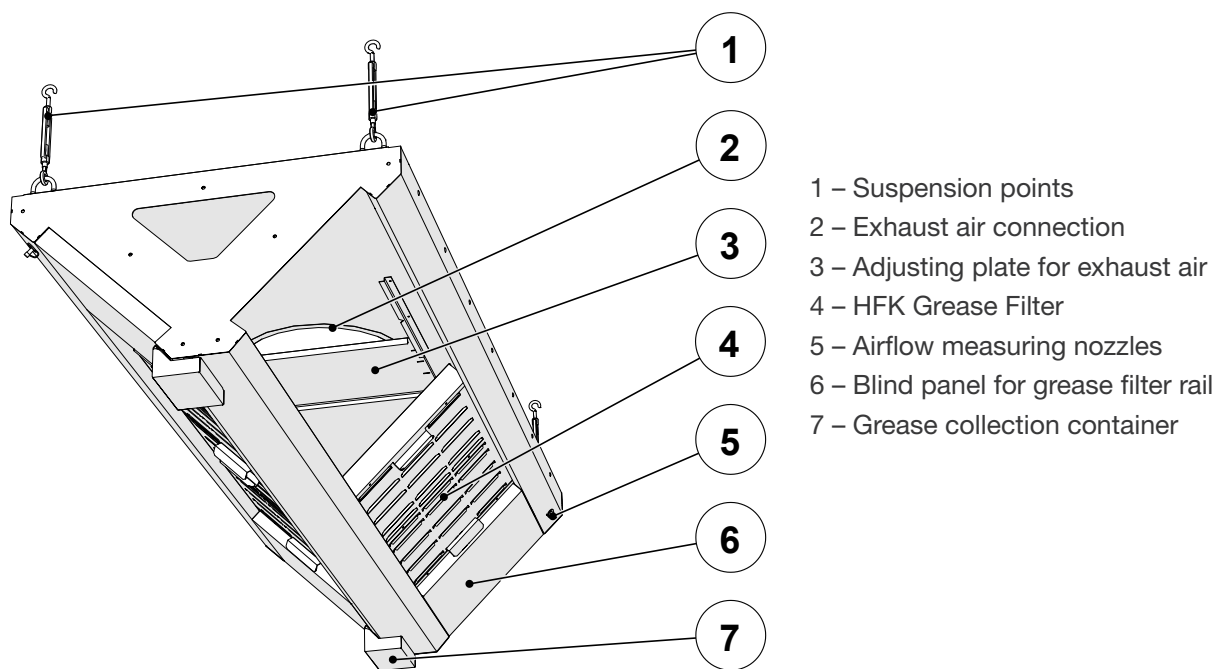
1.1 Hanging the HCE Exhaust Wall Module



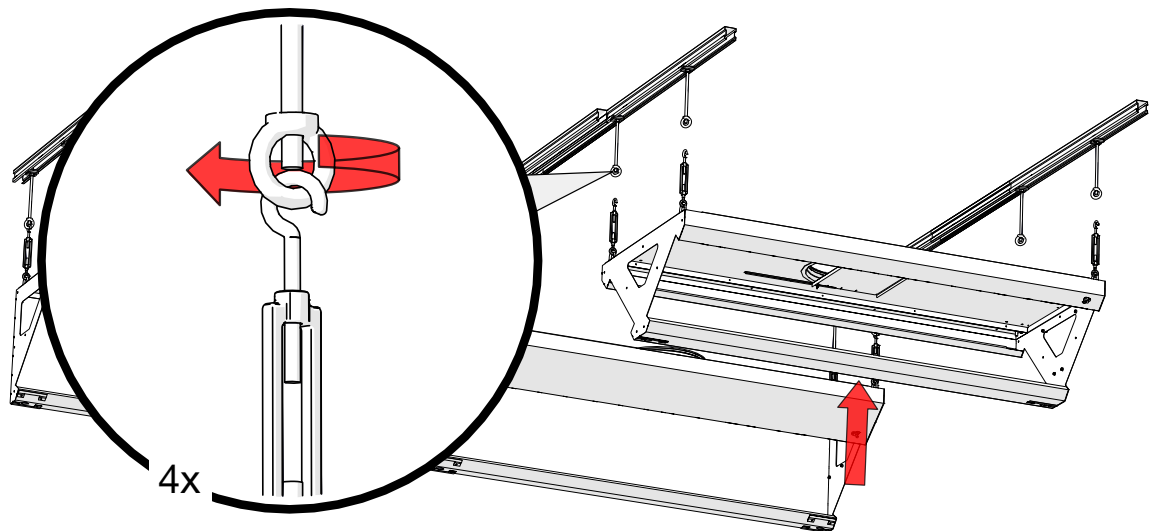
1.2 Sequential connection of the HCE Exhaust Wall Modules



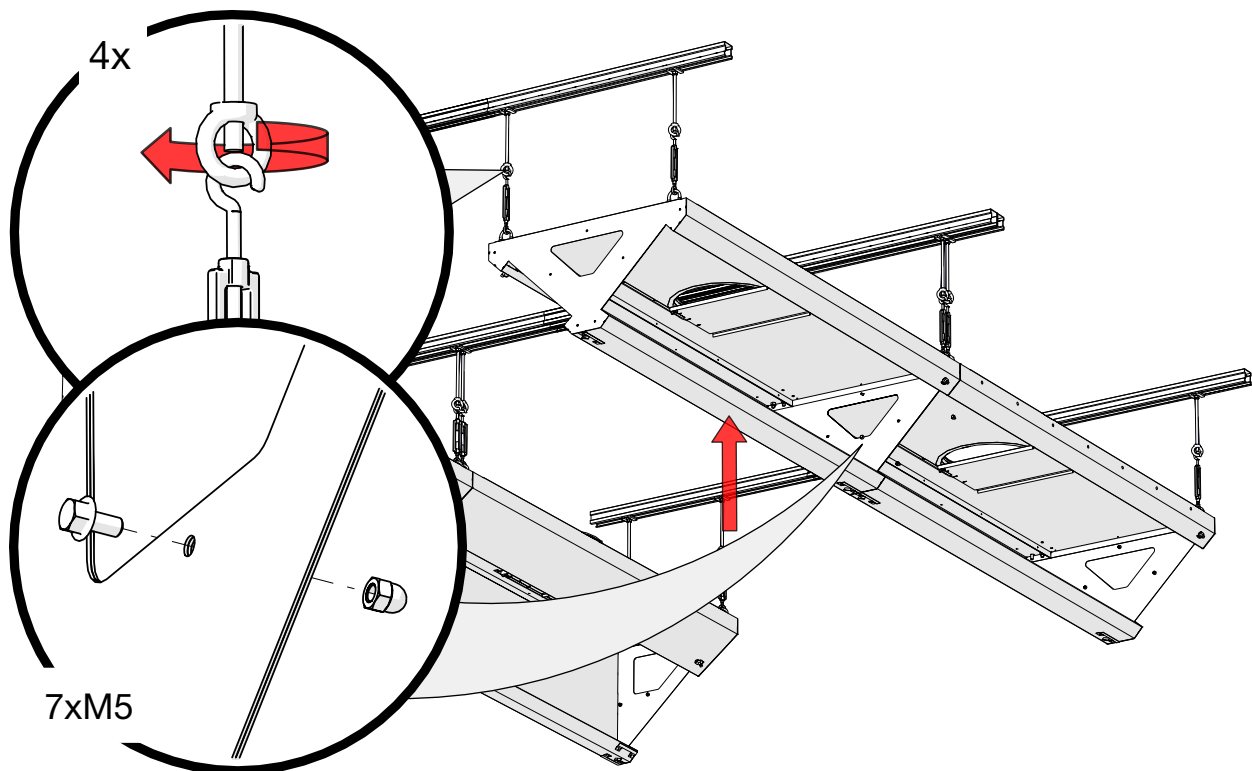
2. HCI Exhaust V-Module



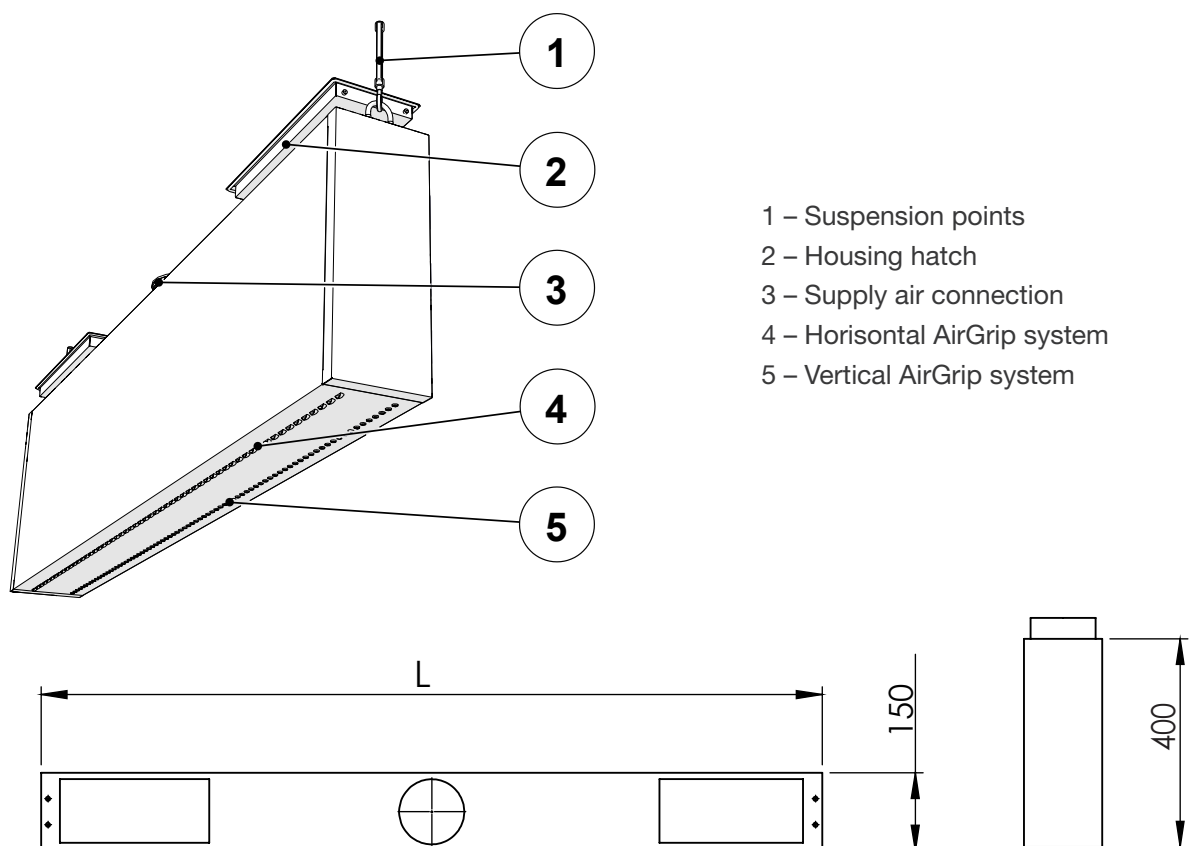
2.1 Hanging the HCI Exhaust V-Module



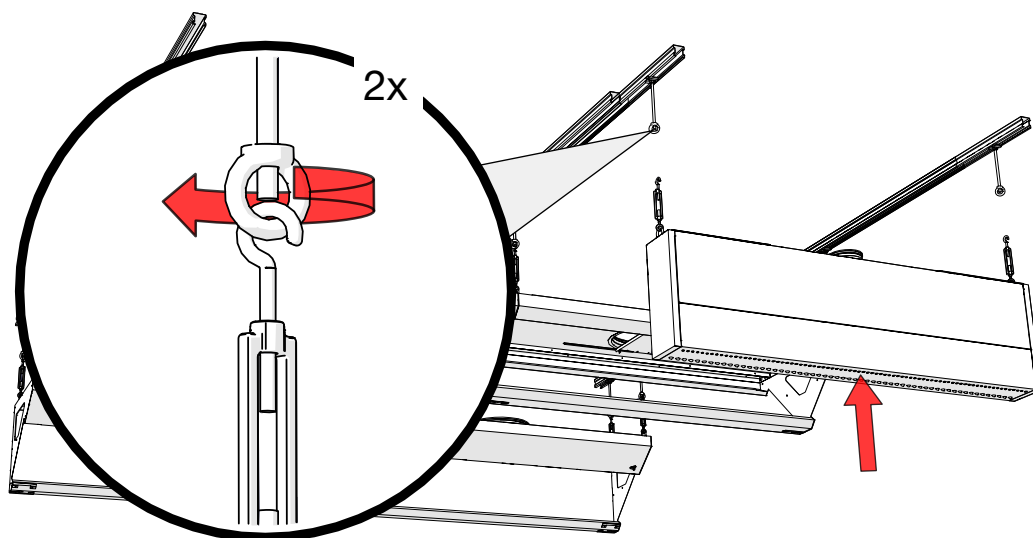
2.2 Sequential connection of HCI Exhaust V-Modules



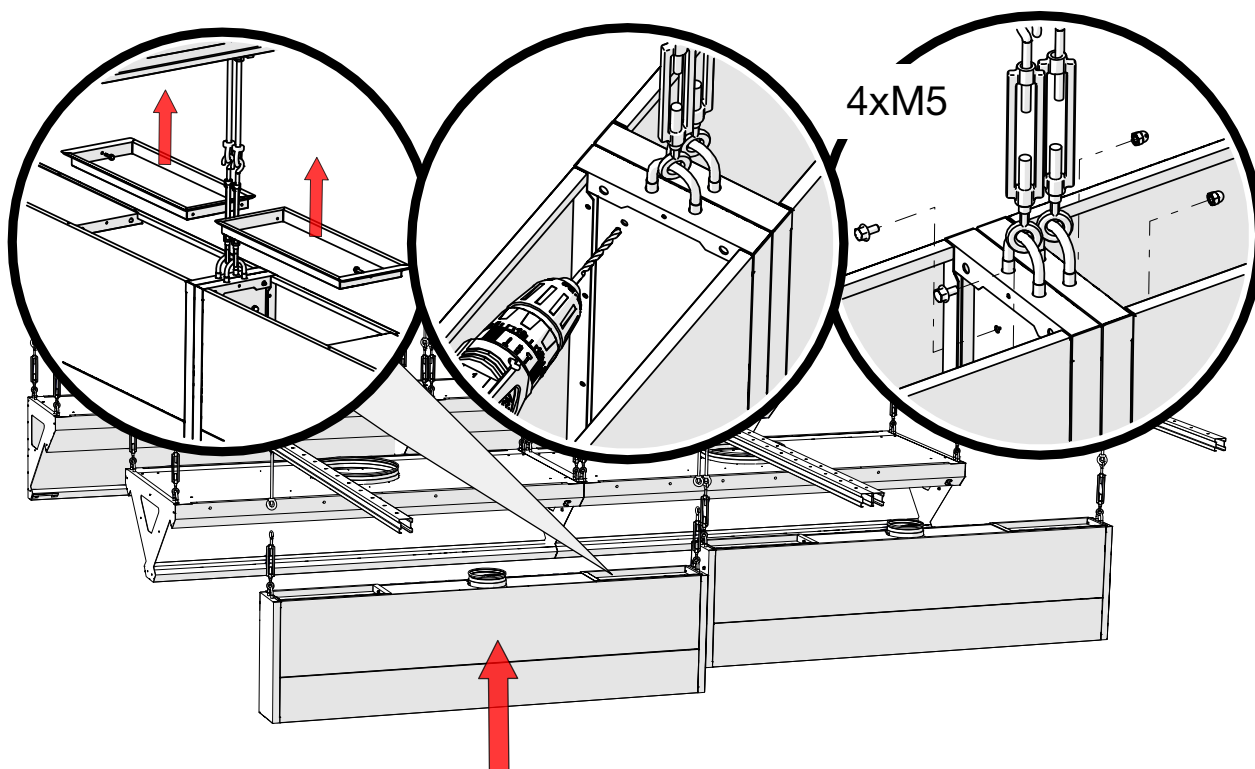
3. HCG AirGrip Module



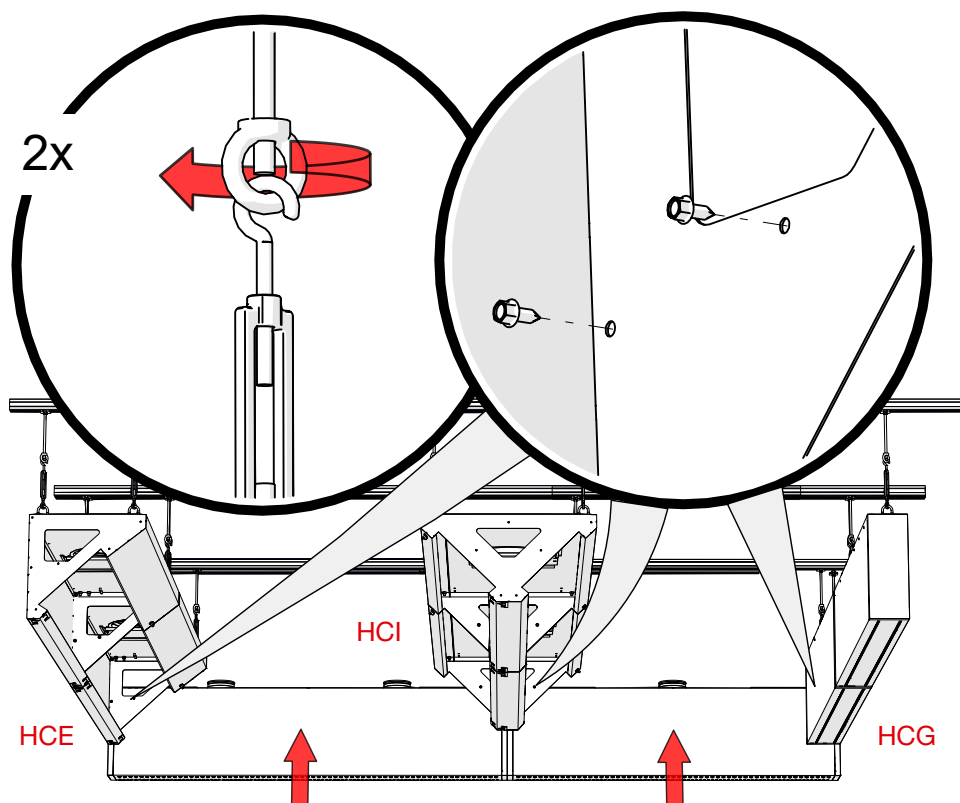
3.1 Hanging the HCG AirGrip Module



3.2 Sequential connection of HCG AirGrip Modules



3.3 Connecting the HCG AirGrip Module to the ventilation ceiling modules



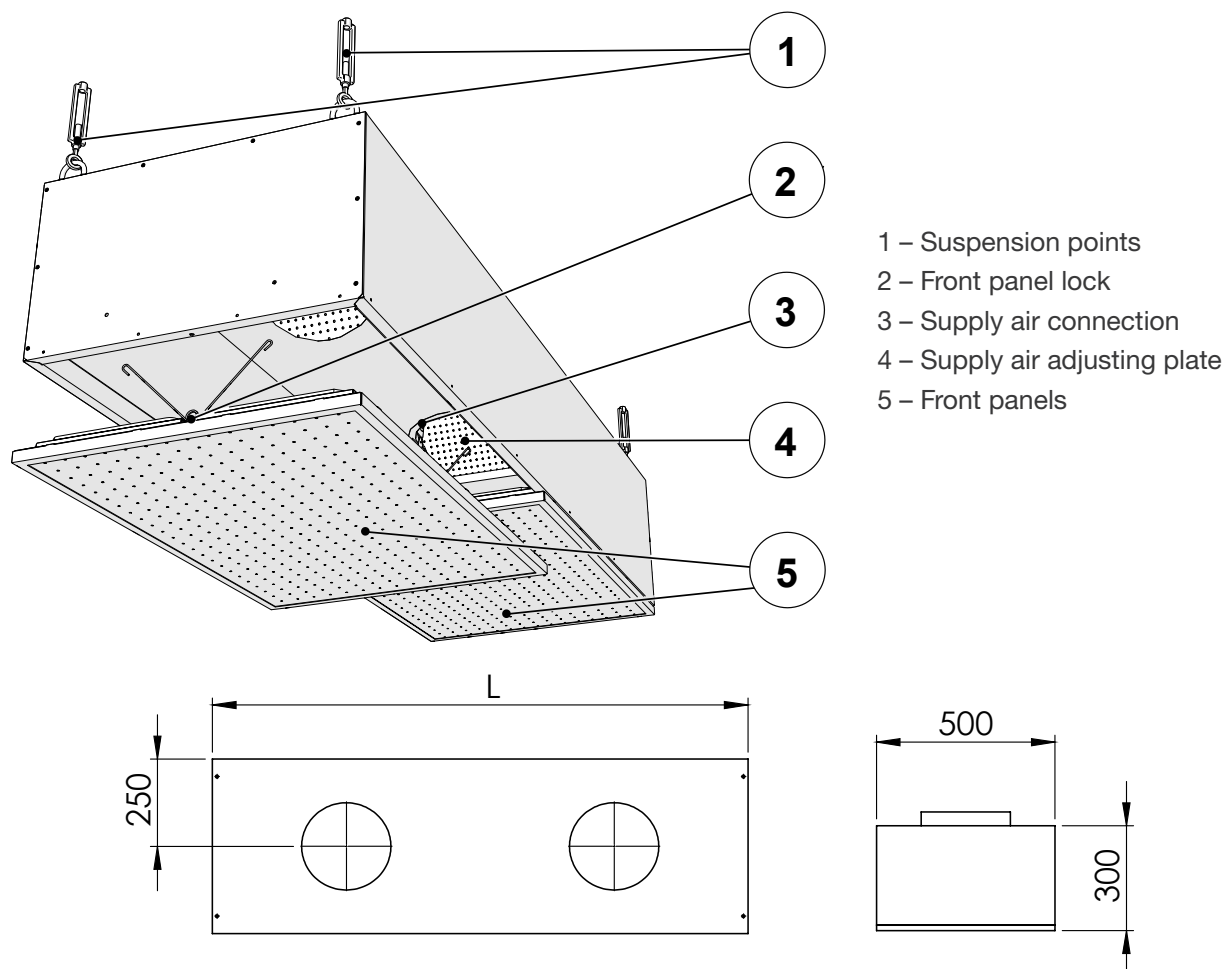
Number of screws:

HCE - 6 pcs

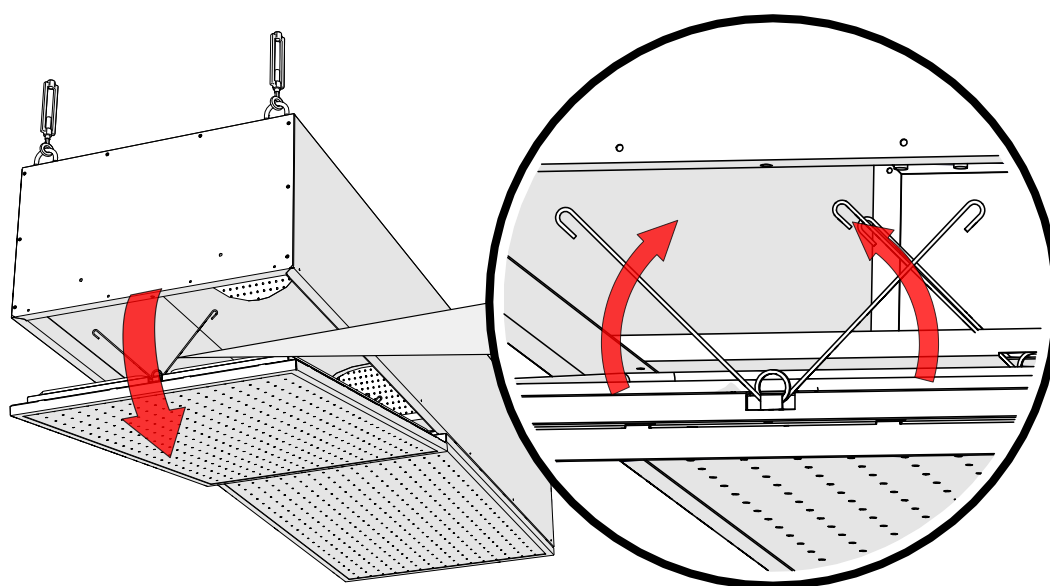
HCI - 7 pcs

HCG - the holes must be drilled, the recommended amount is 4 pcs

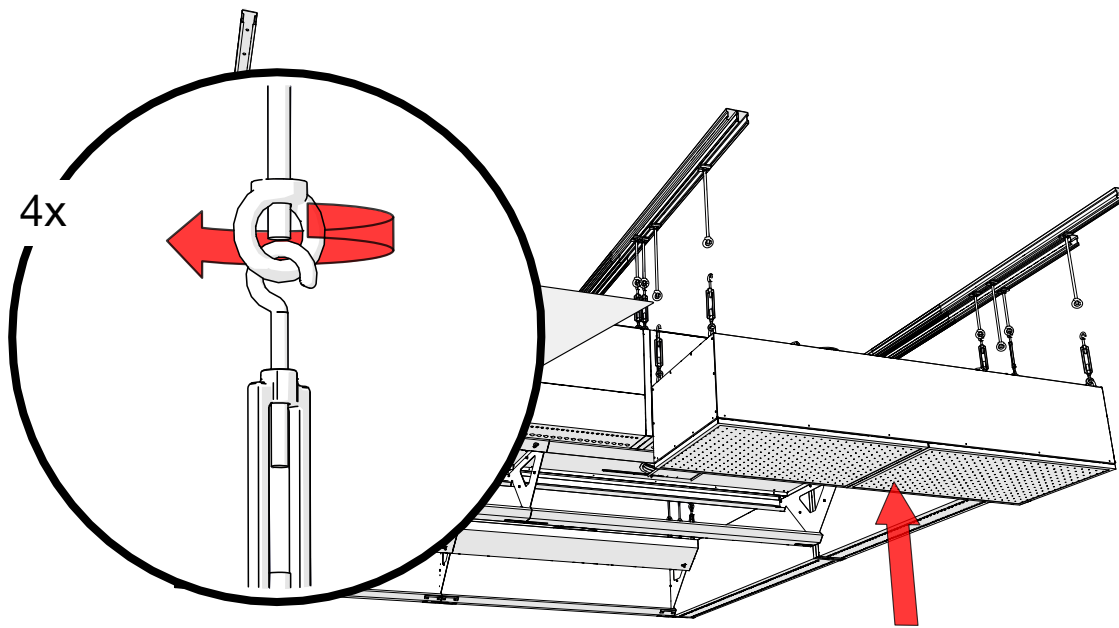
4. HCV Vertical Supply Air Module



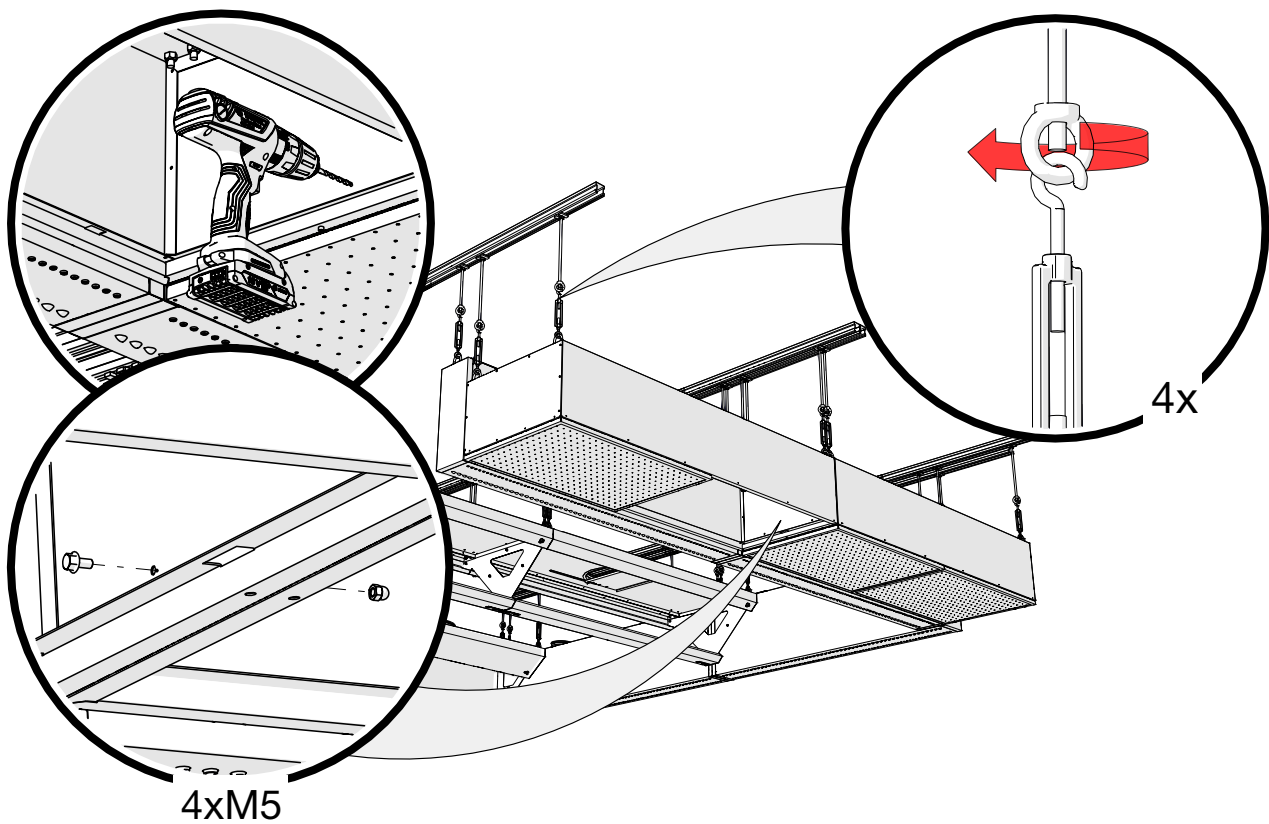
4.1 Opening the HCV Vertical Supply Air Module front panel



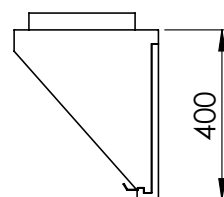
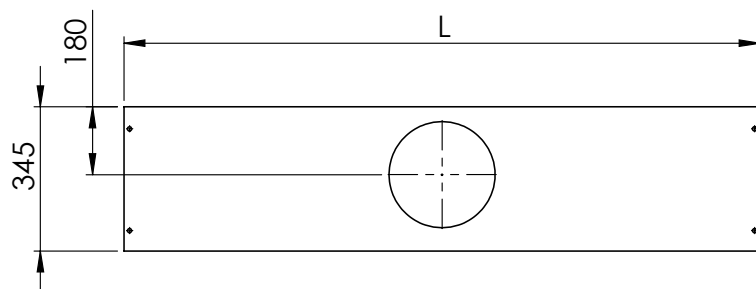
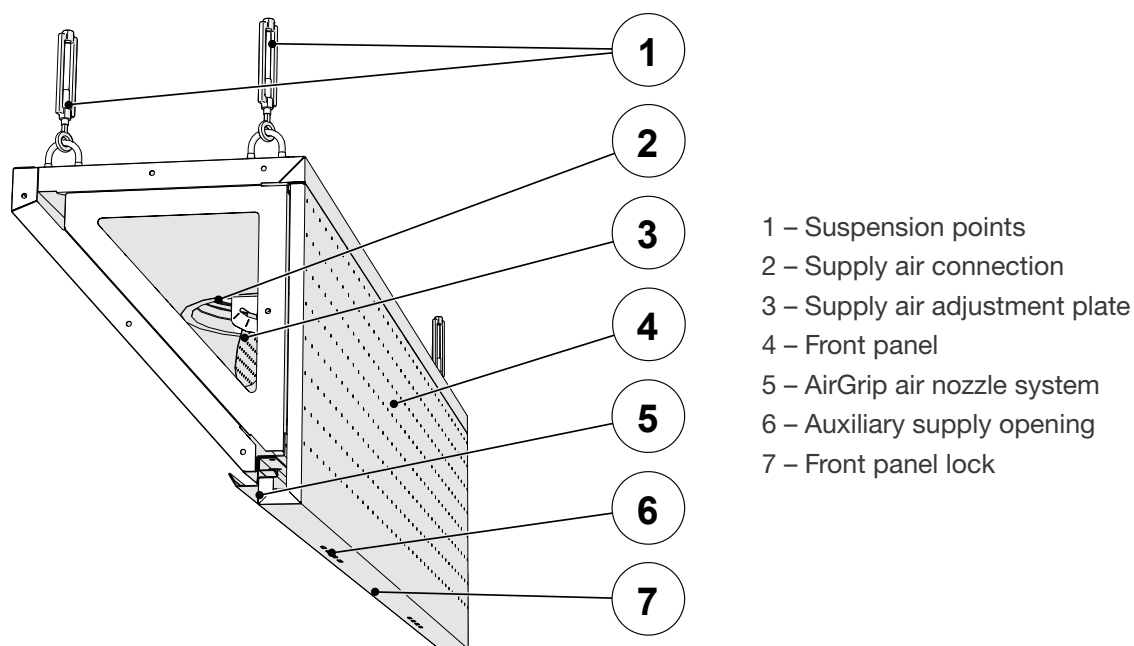
4.2 Hanging the HCV Vertical Supply Air Module



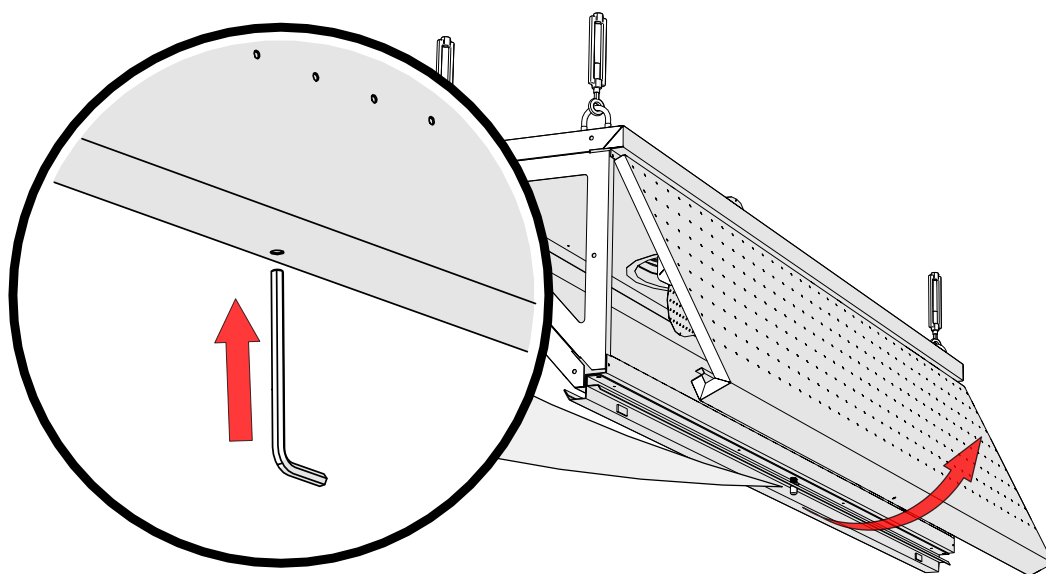
4.3 Sequential connection of HCV Vertical Supply Air Modules



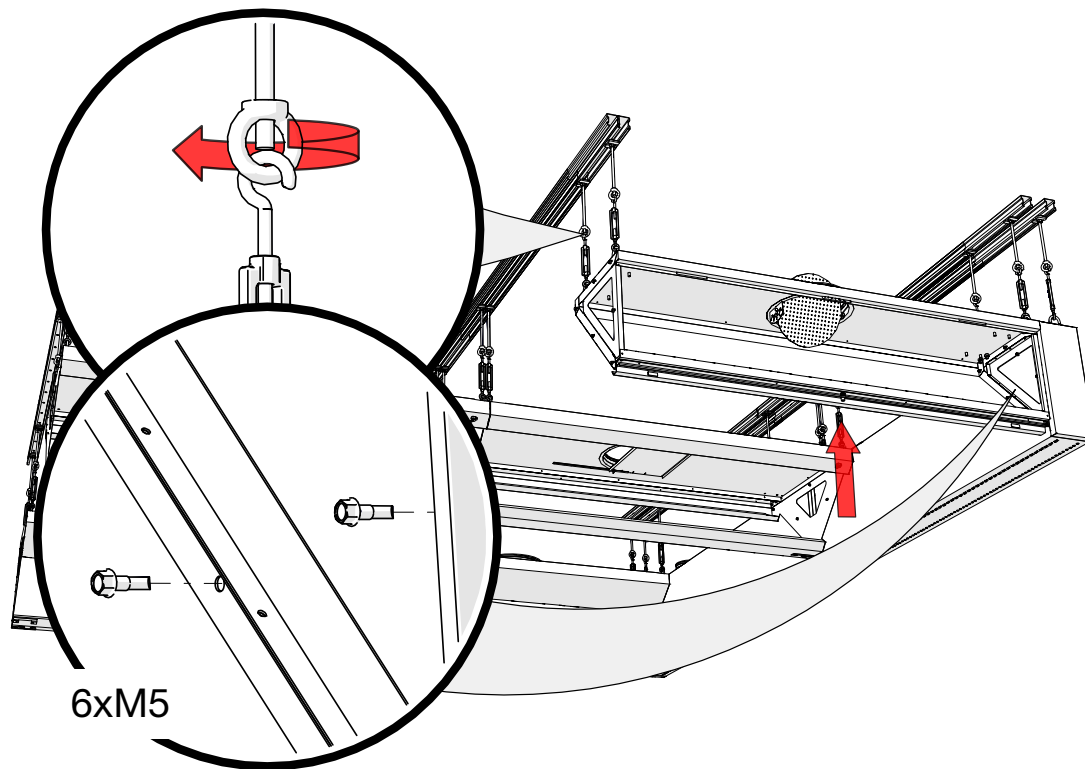
5. HCH Horizontal Supply Air Module



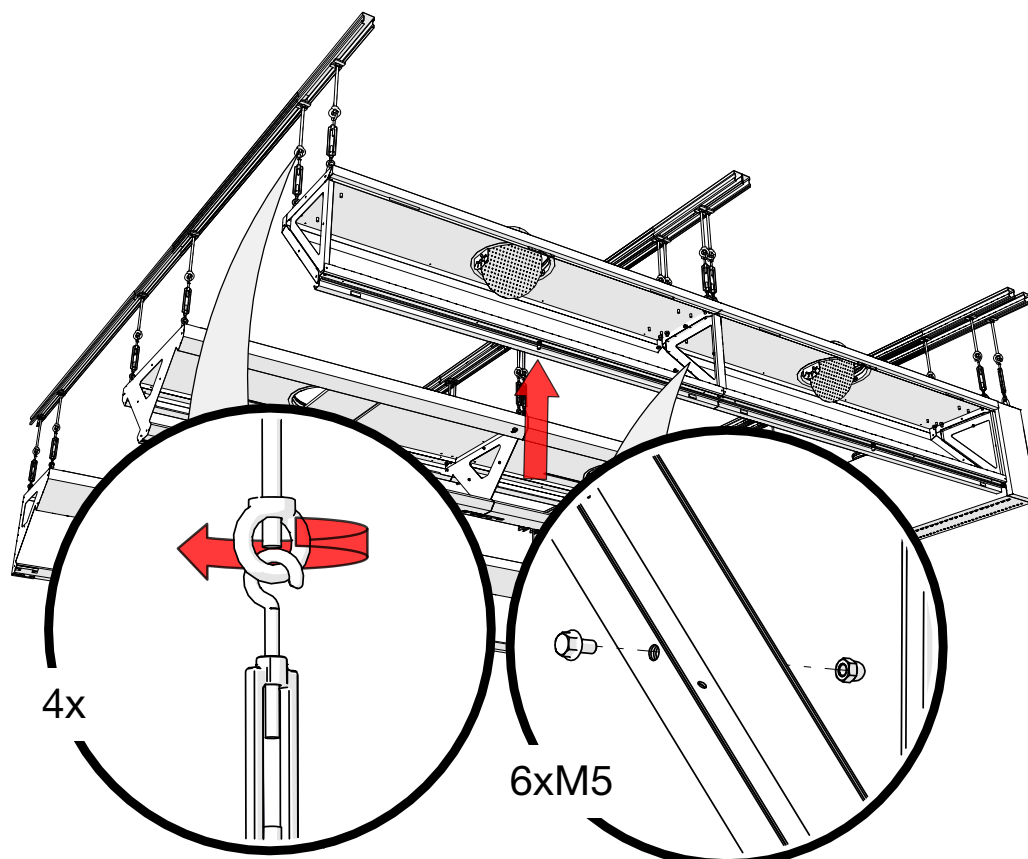
5.1 Opening the HCH Horizontal Supply Air Module front panel



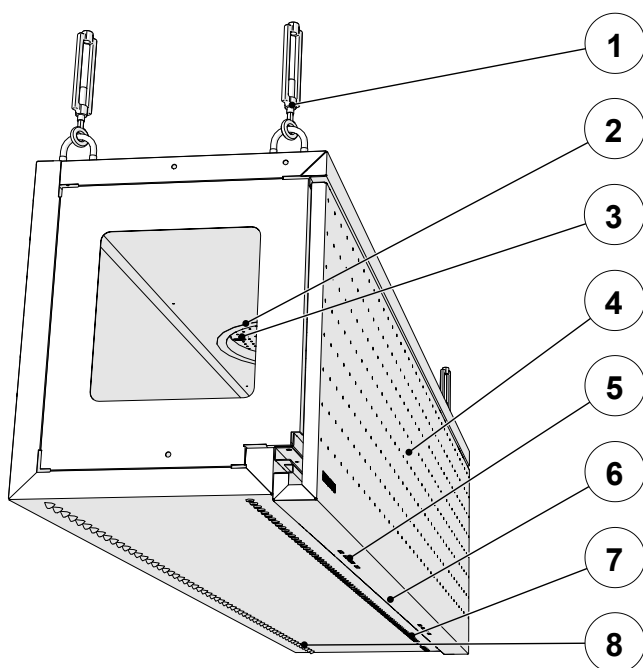
5.2 Hanging the HCH Horizontal Supply Air Module



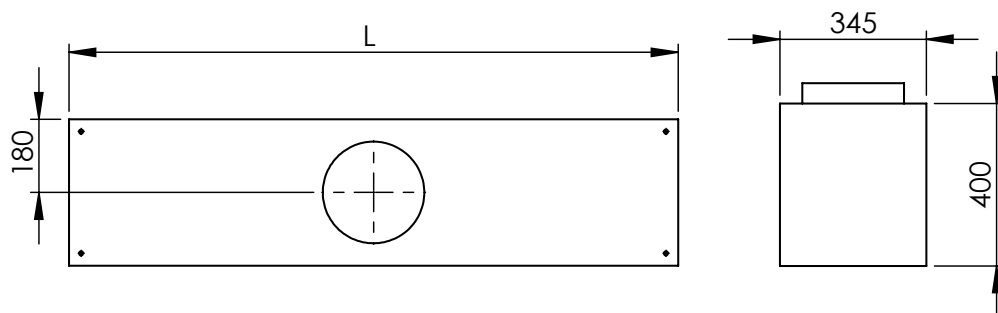
5.3 Sequential connection of HCH Horizontal Supply Air Modules



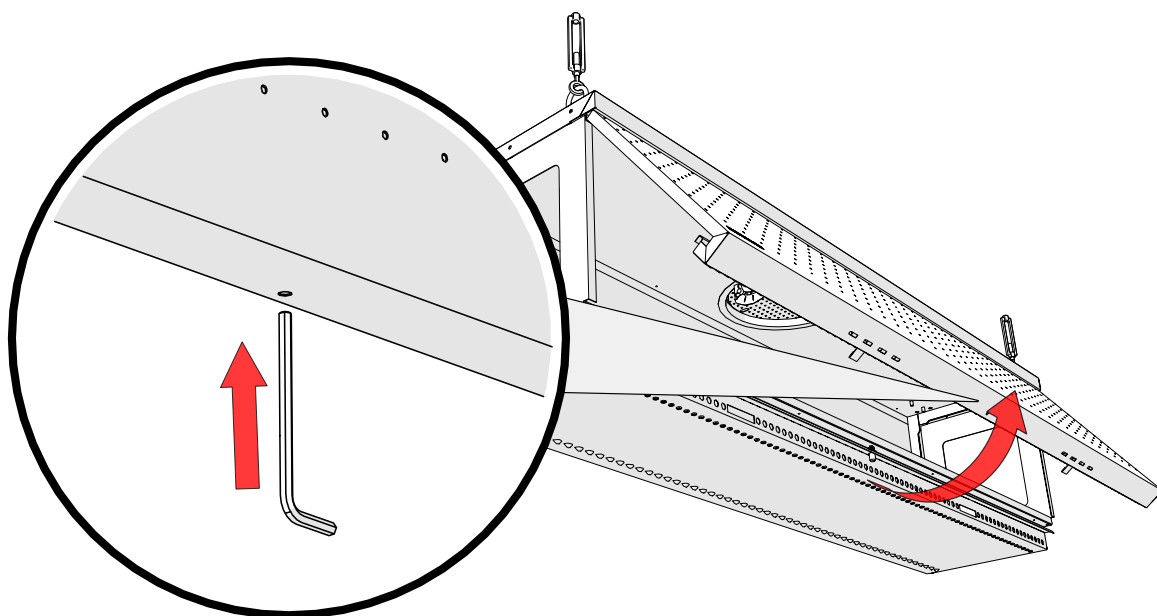
6. HCAH Horizontal Supply Air Module



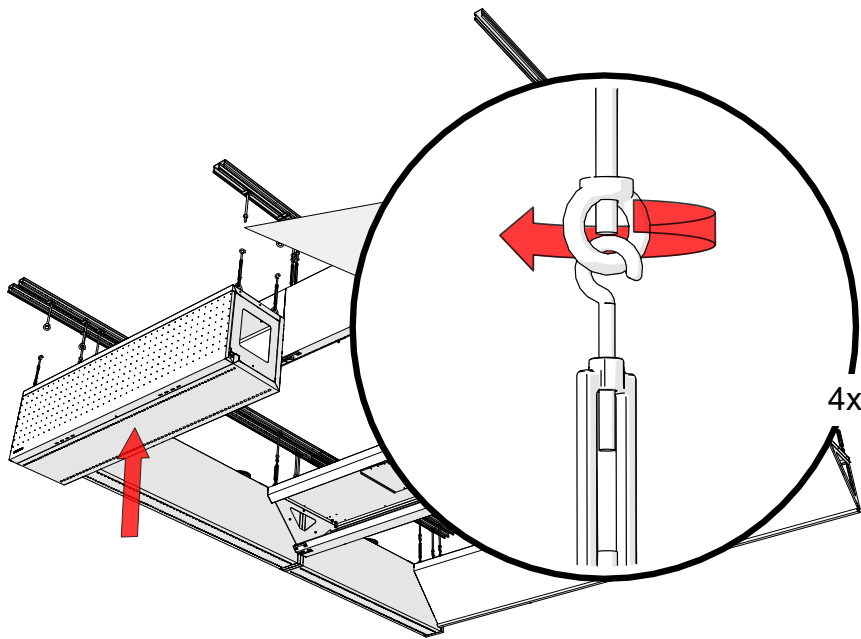
- 1 – Suspension points
- 2 – Supply air connection
- 3 – Supply air adjustment plate
- 4 – Front panel
- 5 – Auxiliary supply openings
- 6 – Front panel lock
- 7 – Vertical AirGrip system
- 8 – Horizontal AirGrip system



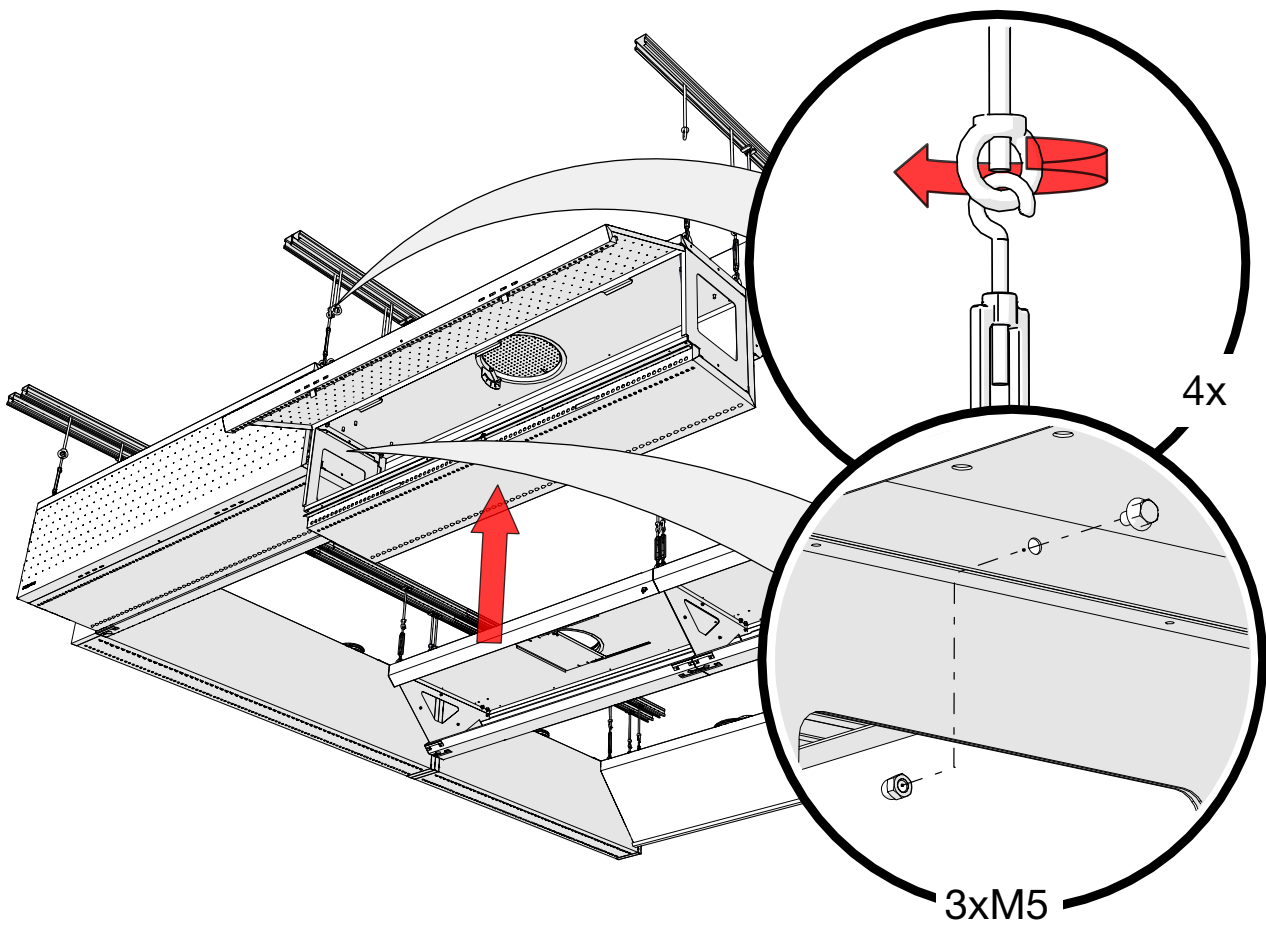
6.1 Opening the HCAH Horizontal Supply Module front panel



6.2 Hanging the HCAH Horizontal Supply Module

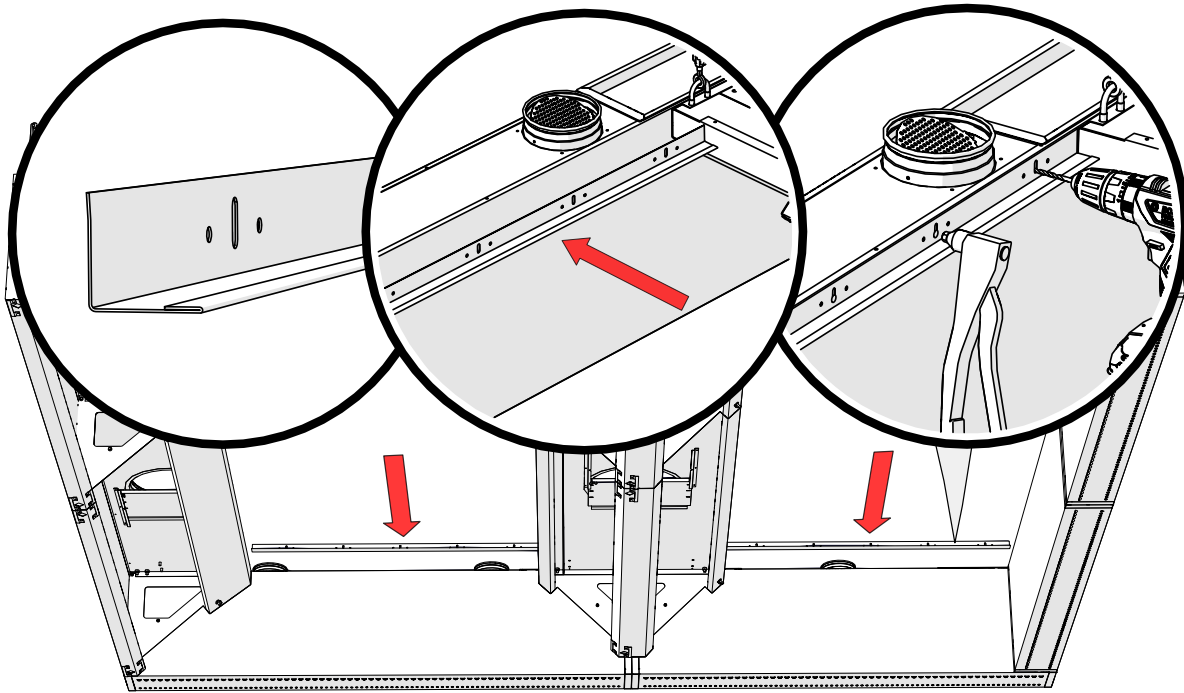


6.3 Sequential connection of HCAH Horizontal Supply Modules

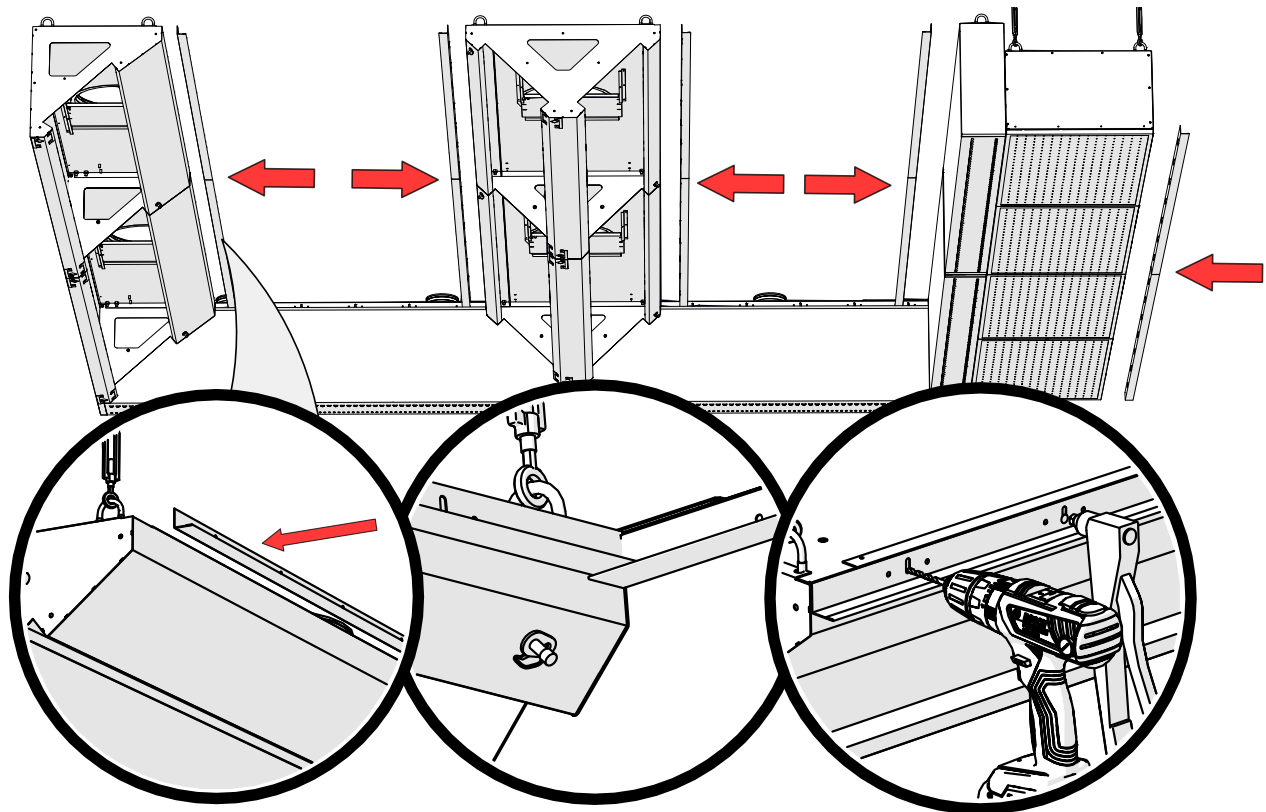


7. Installing L-profiles

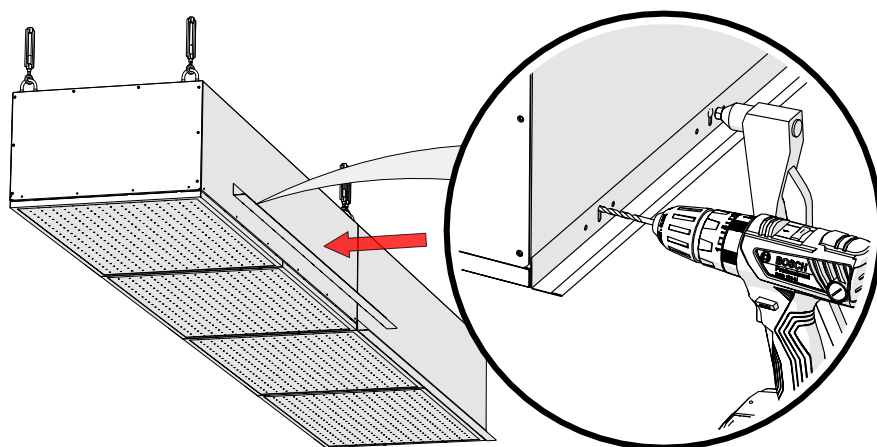
7.1 Installing L-profiles on end surfaces



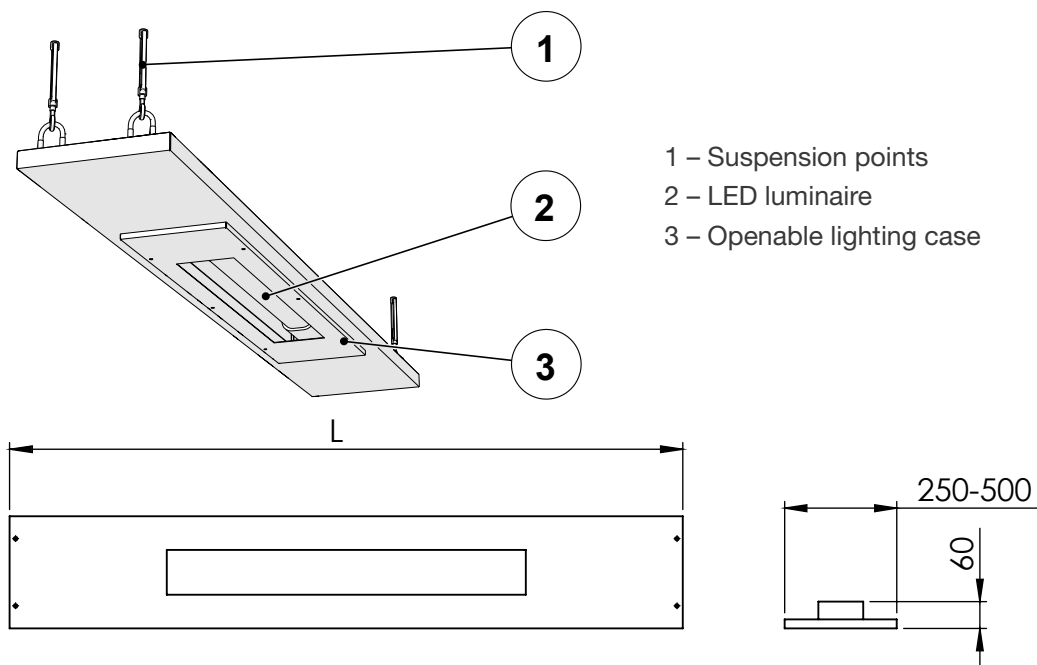
7.2 Installing L-profiles on the sides of the ventilated ceiling chambers



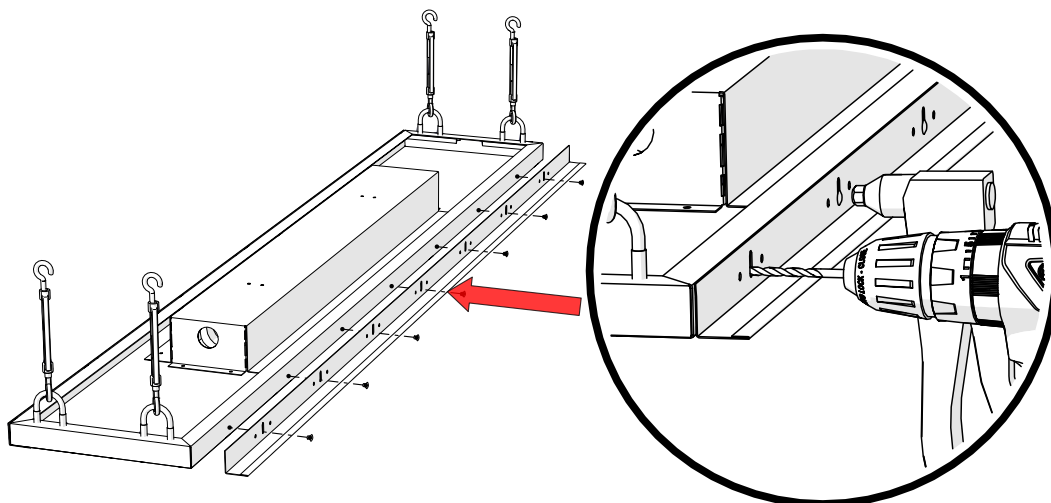
7.3 Connecting the L-profile to the HCV Supply Air Modul



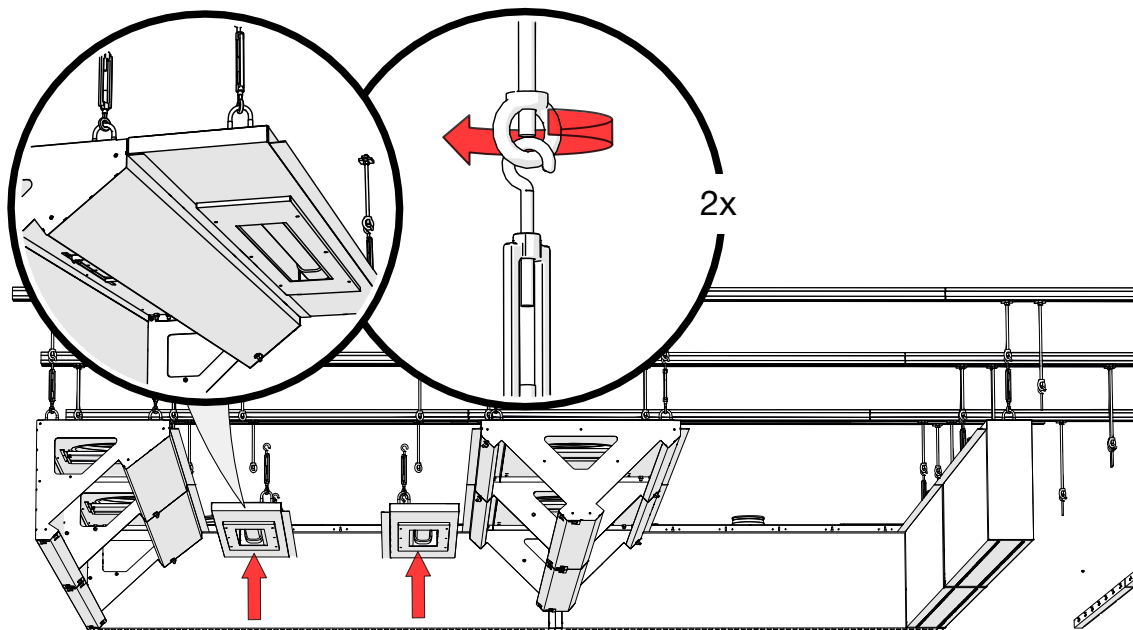
8. HCL LED Light Module



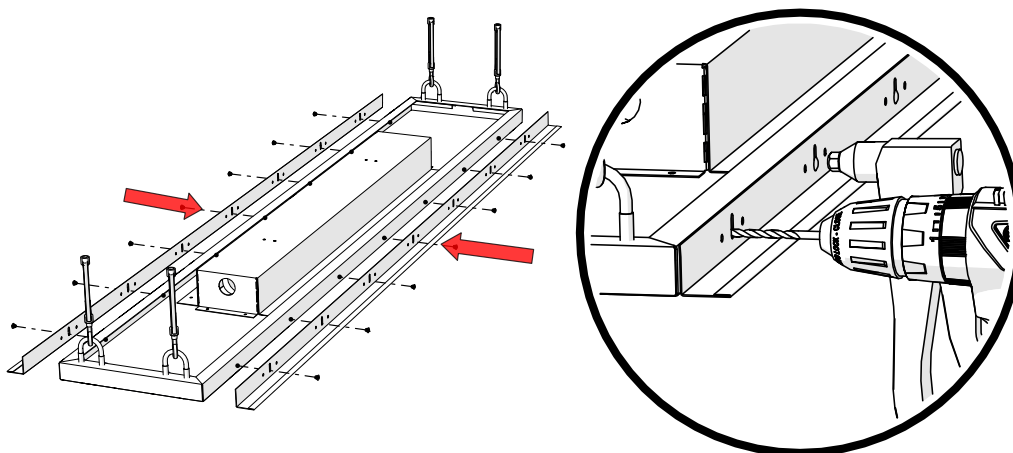
8.1 Connecting L-profiles to the HCL LED Light Module



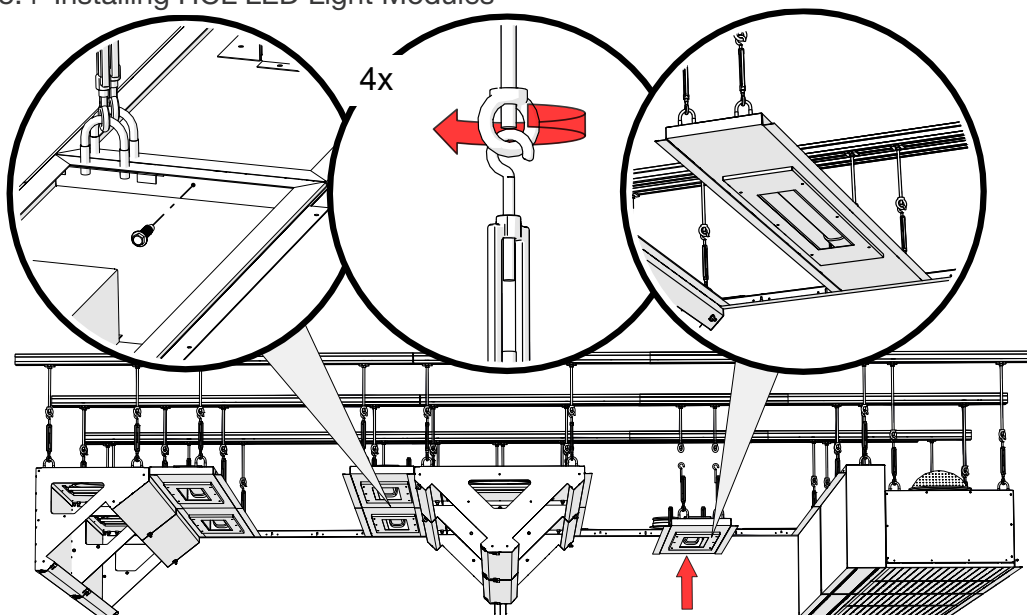
8.2 Exhaust side HCL LED Light Module installation



8.3 Installing L-profiles on the HCL LED Light Module

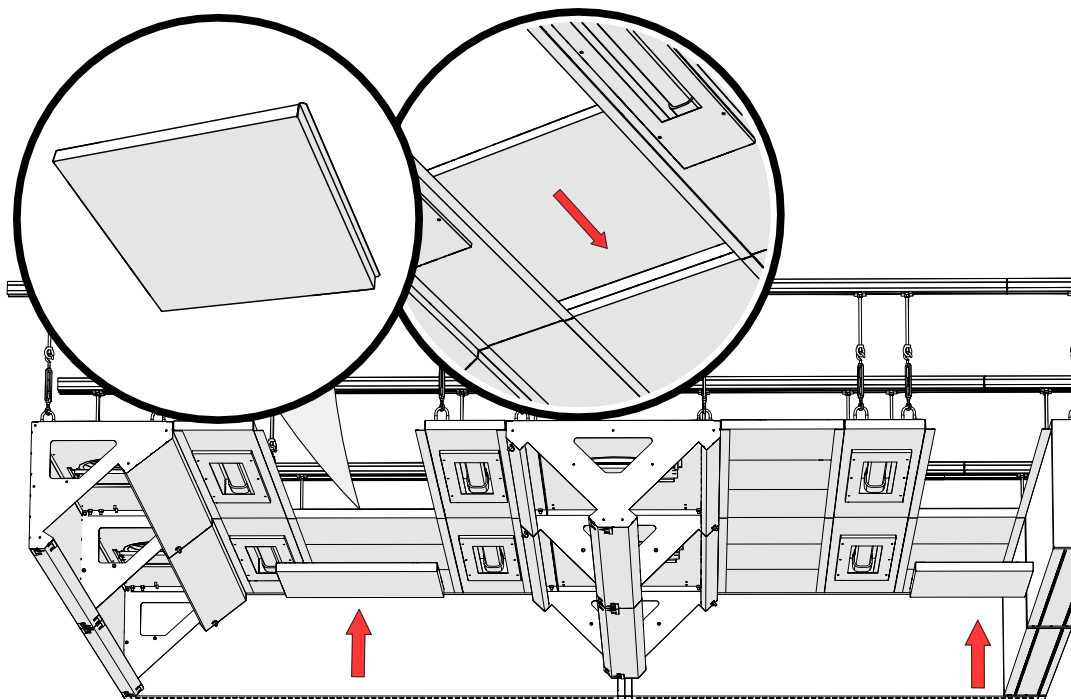


8.4 Installing HCL LED Light Modules

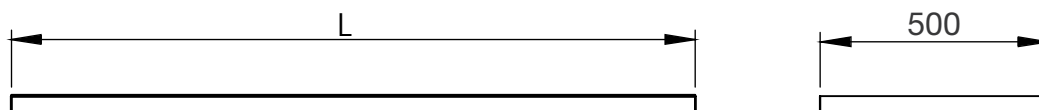


9. HCF Ceiling Panel

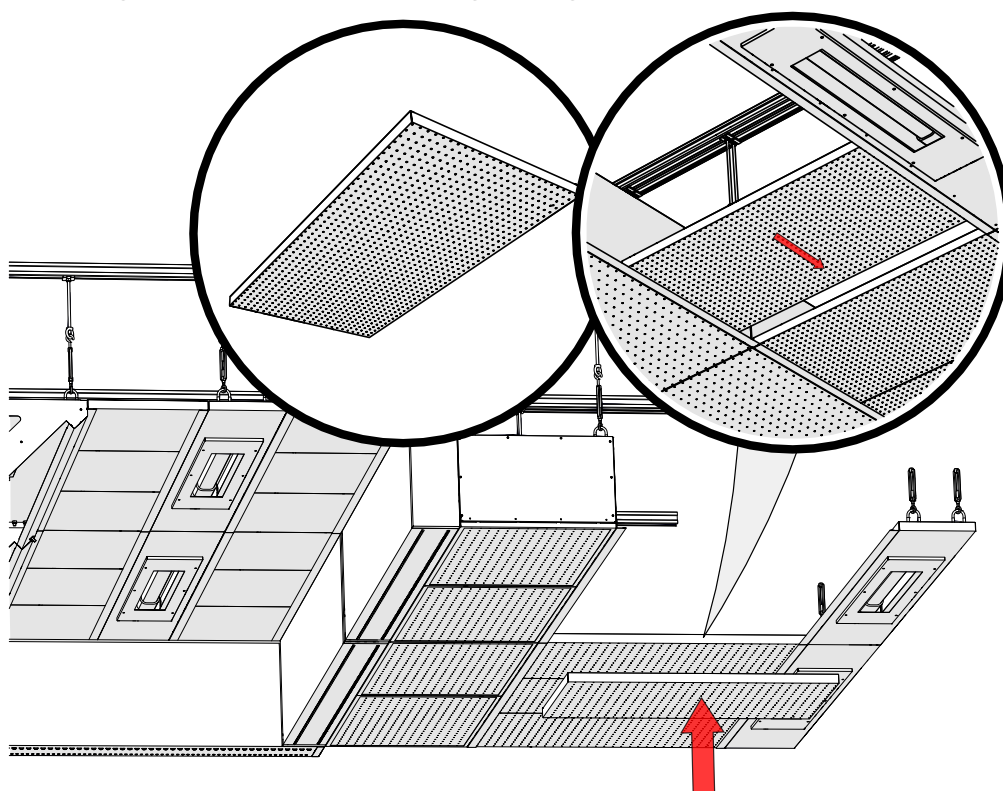
9.1 Installing the HCF Ceiling Panel



10. HCM Noise Absorbing Ceiling Panel

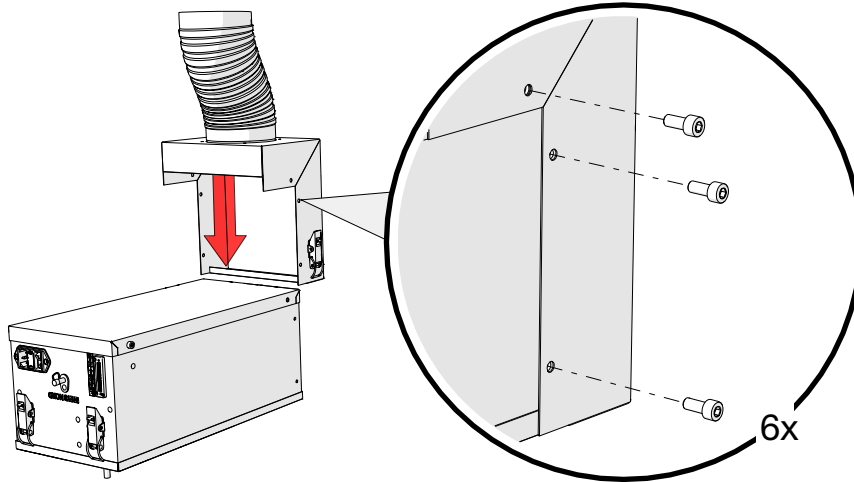


10.1 Installing the HCM Noise Absorbing Ceiling Panel

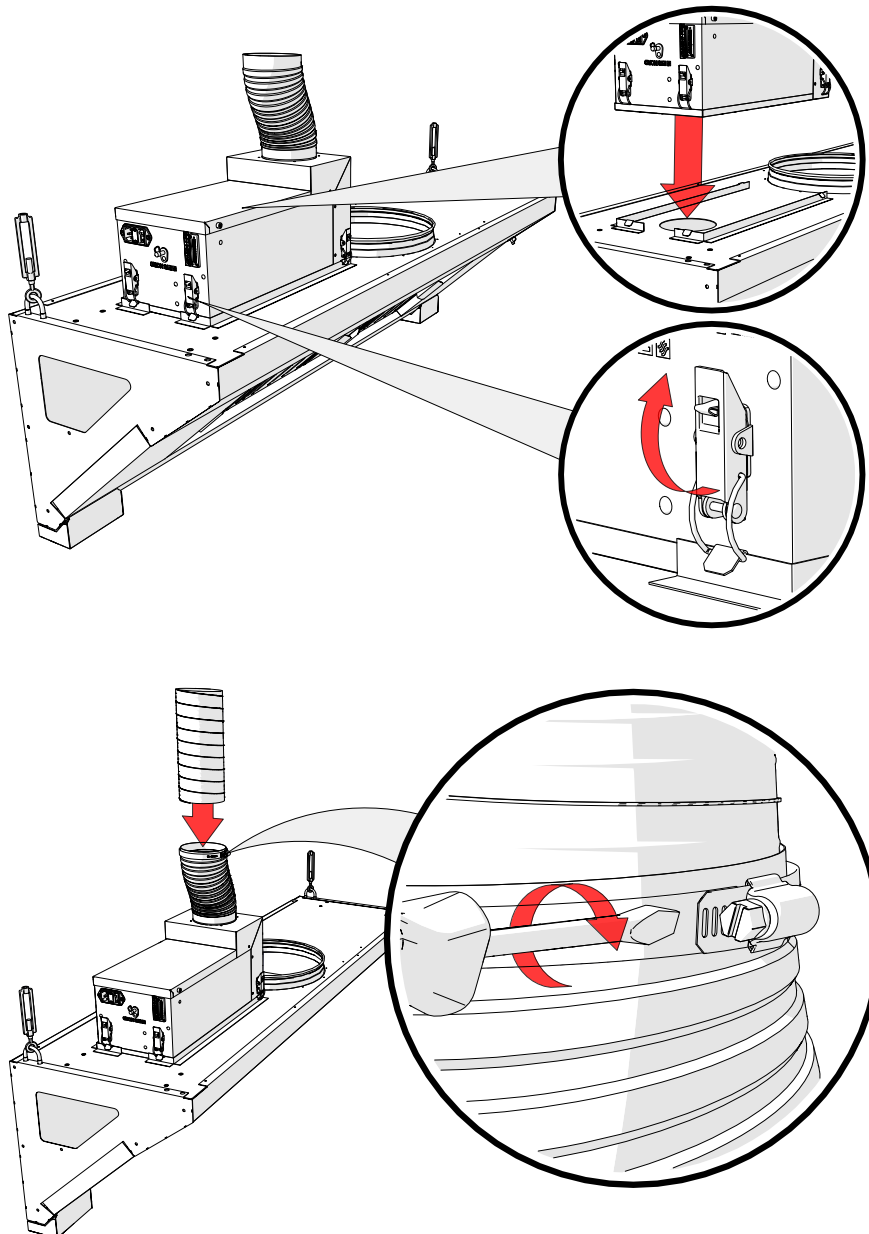


11. Installing the Ozone Generator

11.1 Attaching the OZ fitting



11.2 Installing the Ozone Generator on the Exhaust Module

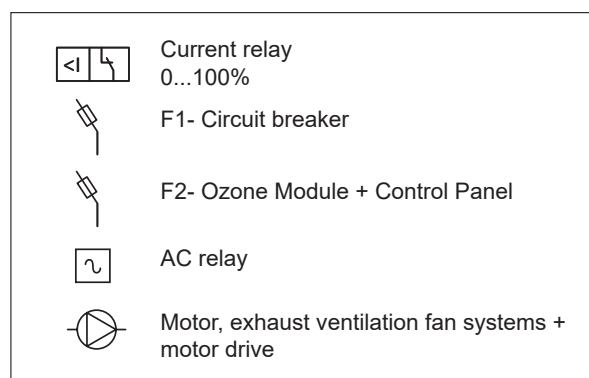
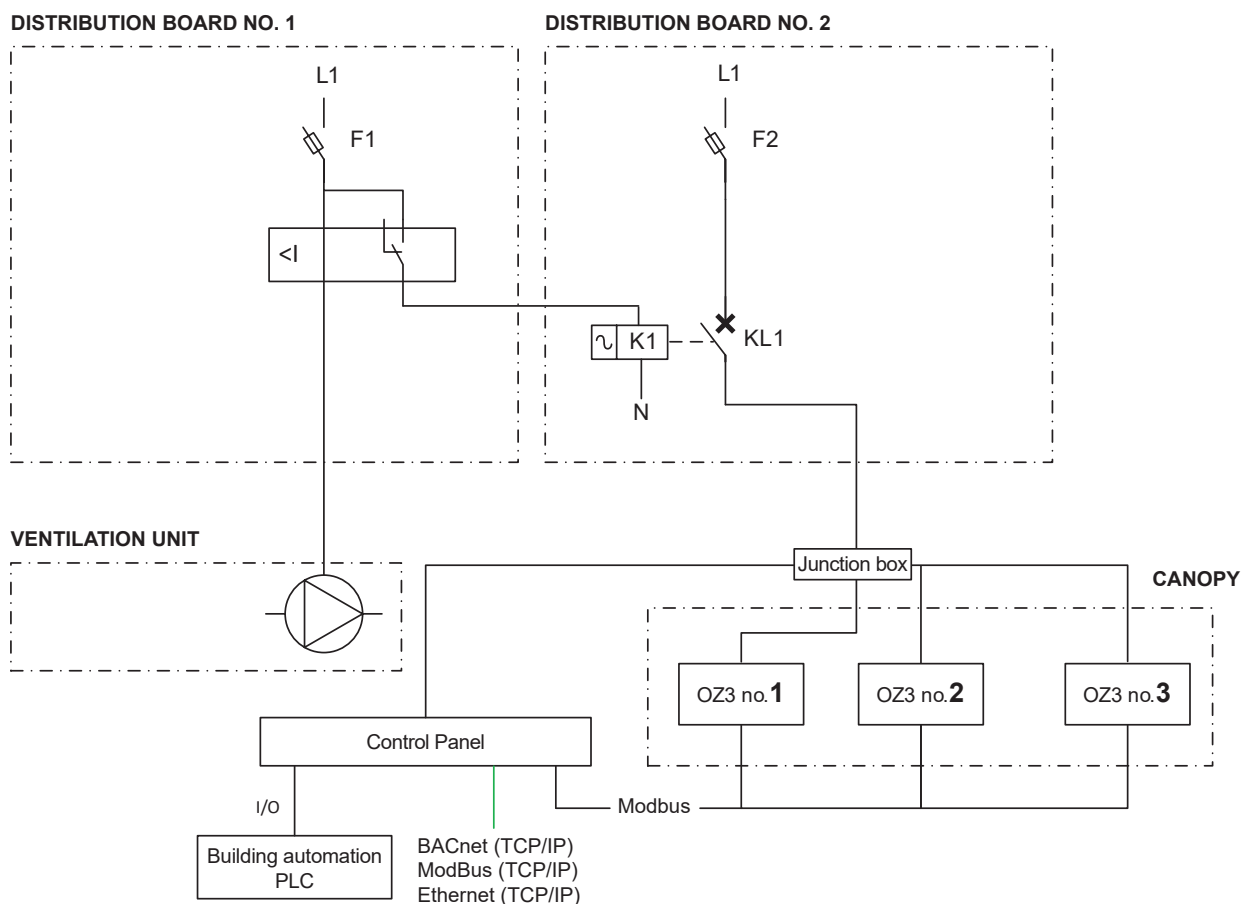


11.3 Installing the Ozone Generator electrical system (230V, 50Hz)

NOTE! Electrical installation must be performed by an authorized electrician and follow local, regional and national standards and regulations.

The ozone generator system must be interlocked with the exhaust system, so that when the exhaust ventilation is not running, no electrical power is supplied to the ozone system. See the sample diagram below as one possible option to accomplish this function.

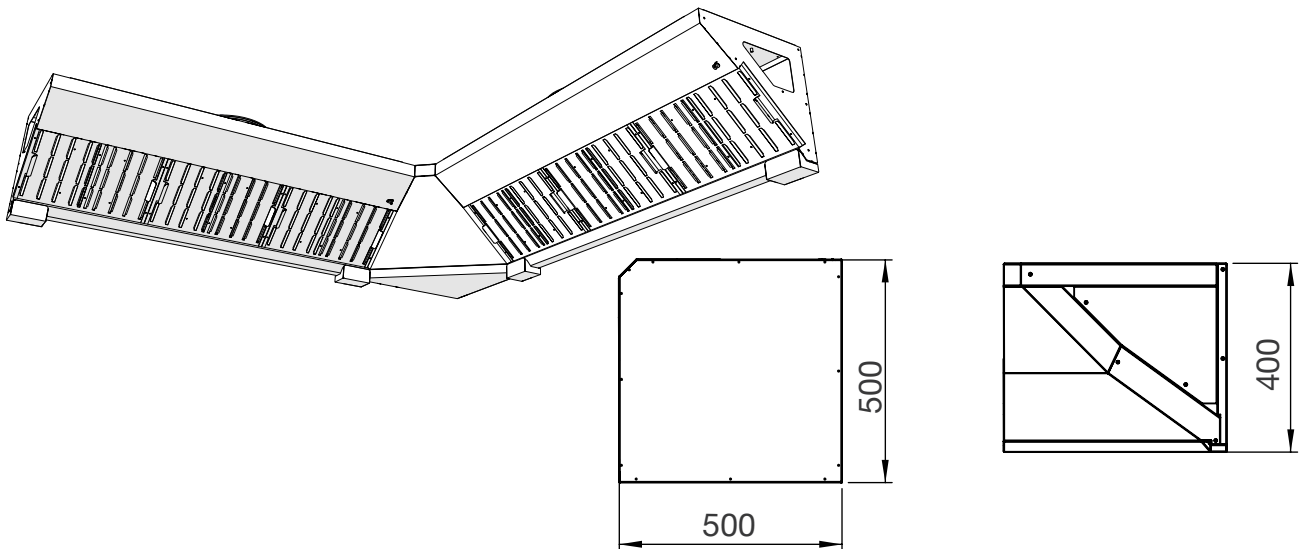
A maximum of 4 Ozone Modules and one alarm panel may be connected a single 10A C-type (slow) circuit breaker. Remember to label the circuit breakers used in the distribution board



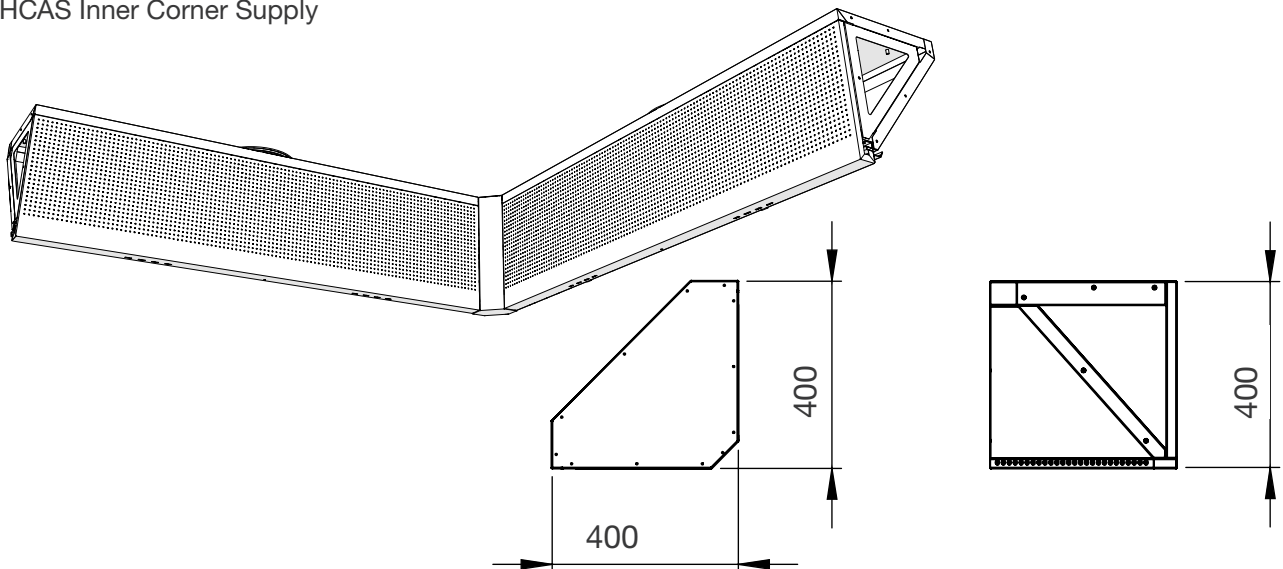
For further installation and technical information, please consult the product manuals provided with your shipment, or contact your ETS NORD representative to obtain all available documentation

12. Corner Details

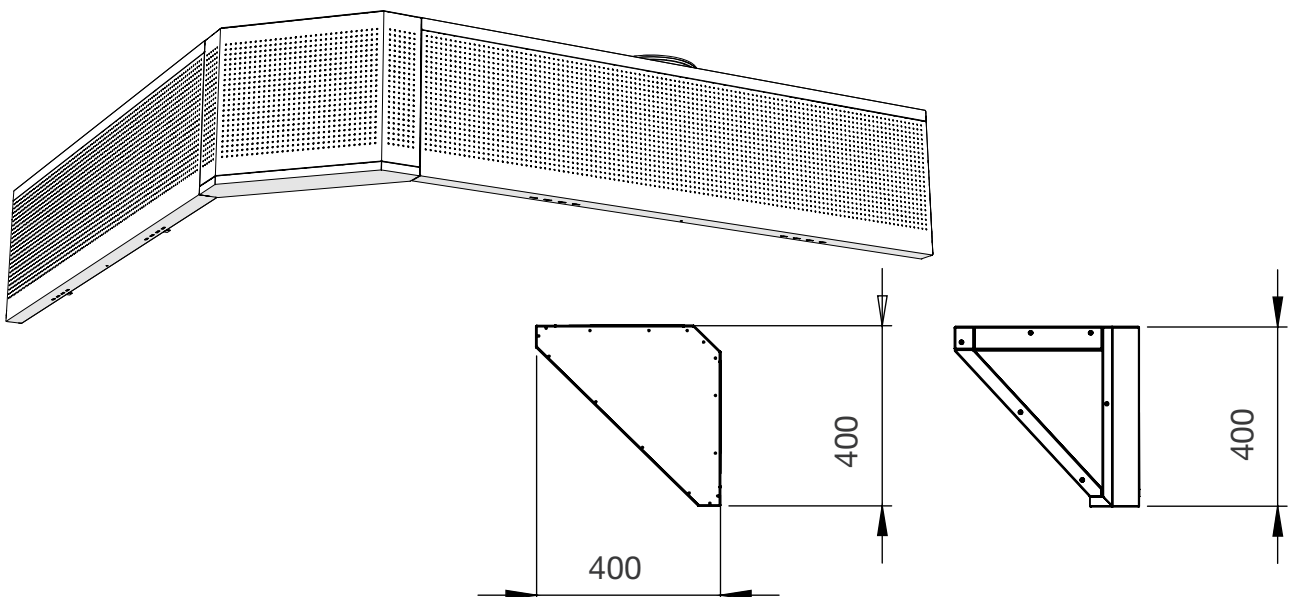
HCAE Inner Corner Exhaust



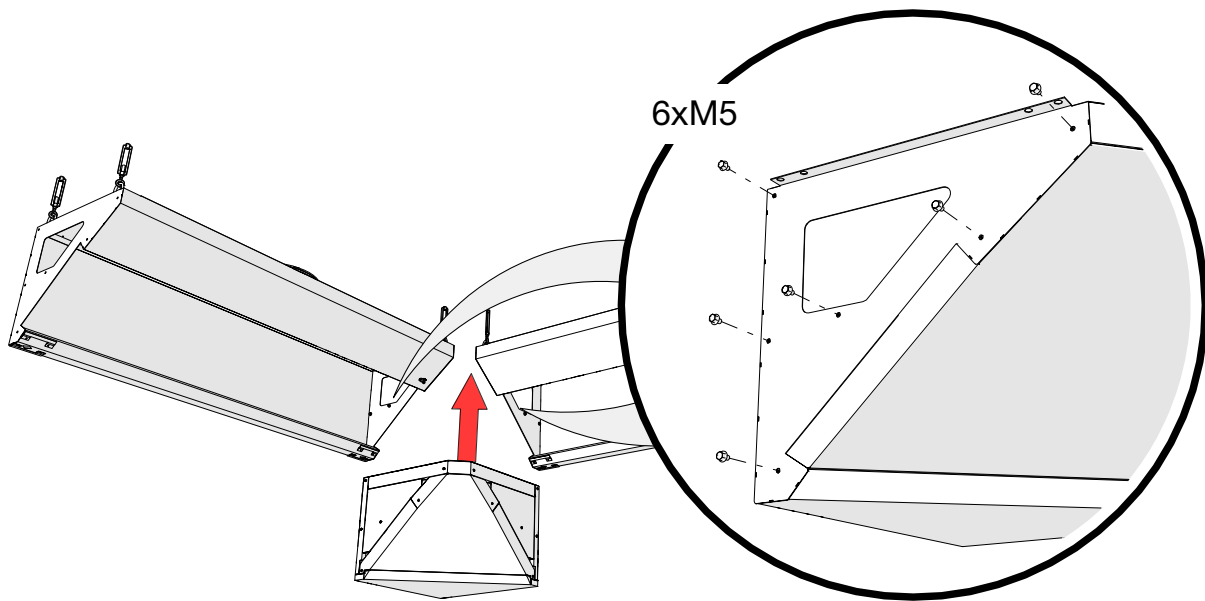
HCAS Inner Corner Supply



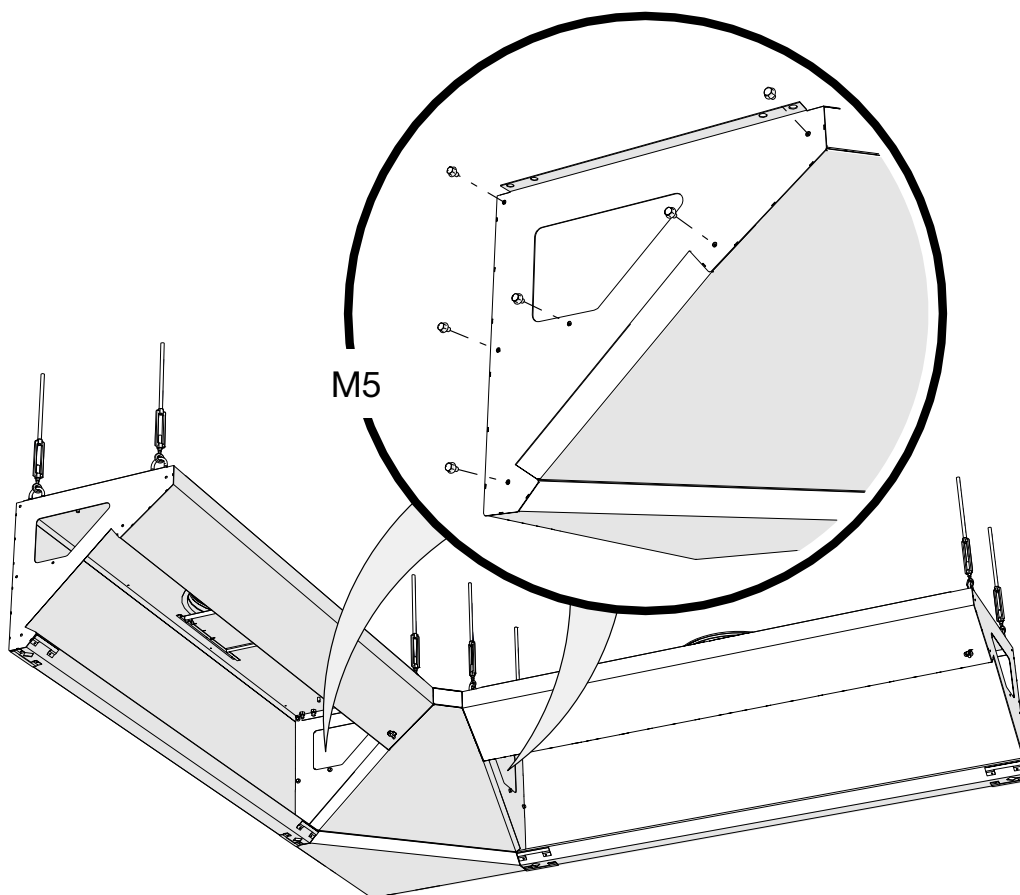
HCAV Outer Corner Supply



12.1 Installing Corner Modules

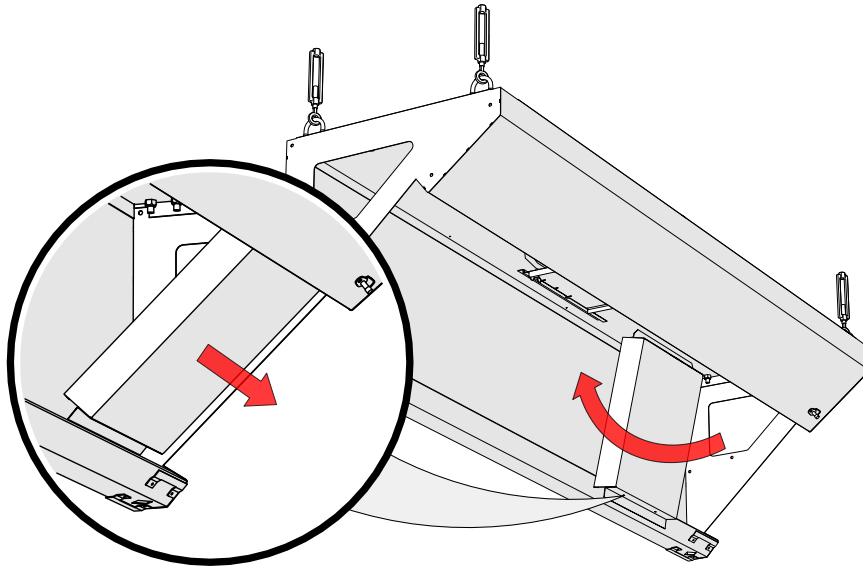


12.2 Connecting the Corner Module to the ventilation ceiling

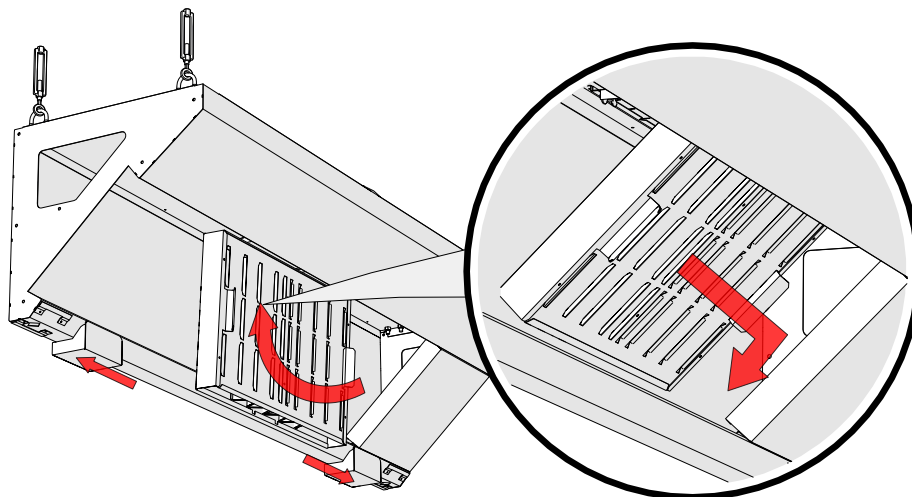


13. Additional Components

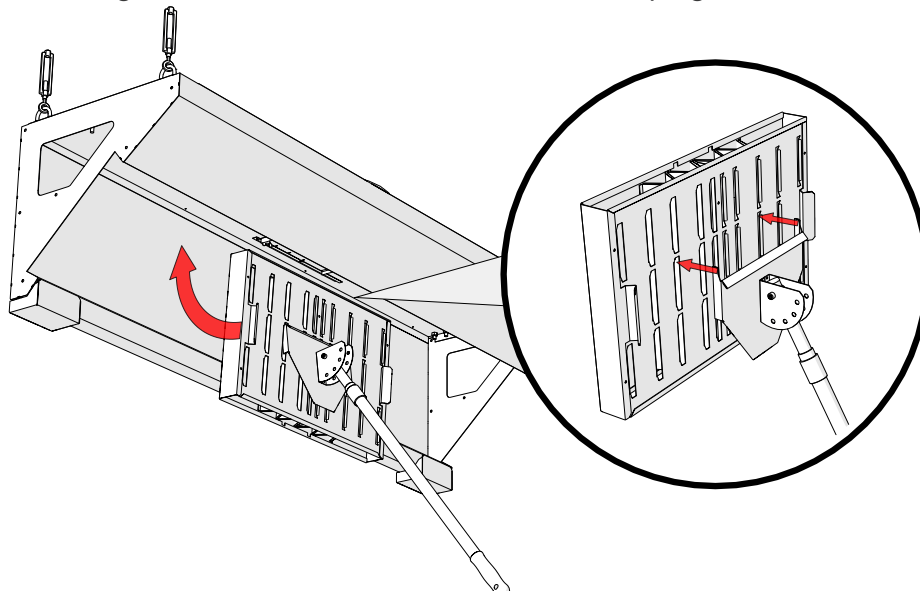
13.1 Installation of the blind plate for grease filter rail



13.2 HFK Grease Filter and grease collection container installation



13.3 Using the Grease Filter removal tool FET "Helping Hand"



14. Measuring and adjusting airflow

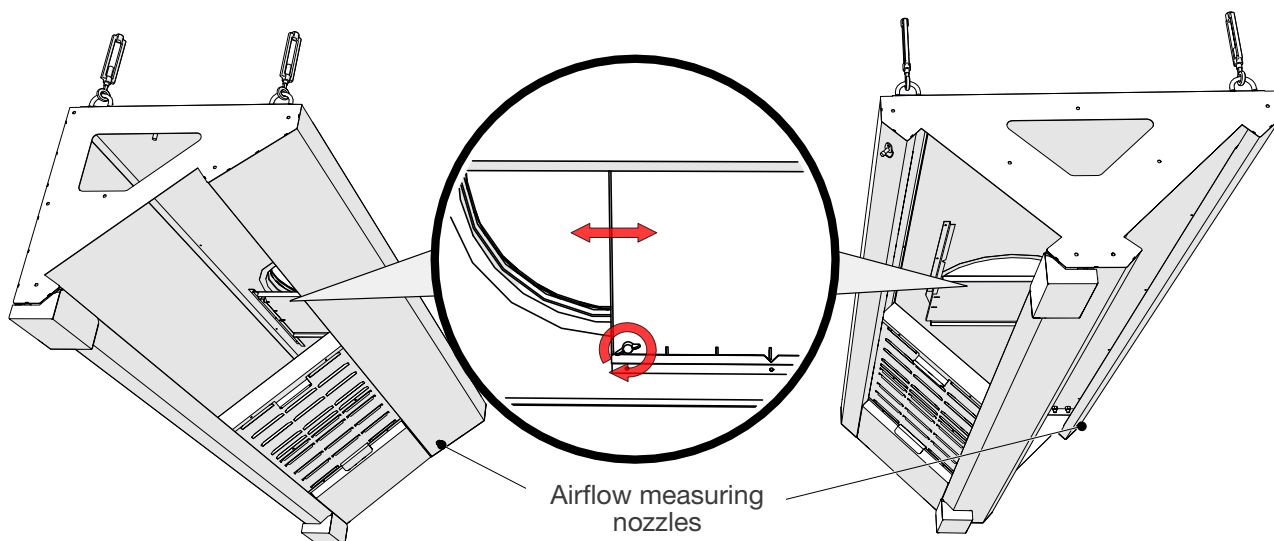
ATTN! During measurement, HFK all Grease Filters and blind plates must be in place and the front panel must be closed. In order to adjust airflow, the position of the adjusting plate is adjusted.
Lock the adjustment plate in place using the butterfly nuts!

14.1 Adjusting the HCE and HCI Exhaust Modules

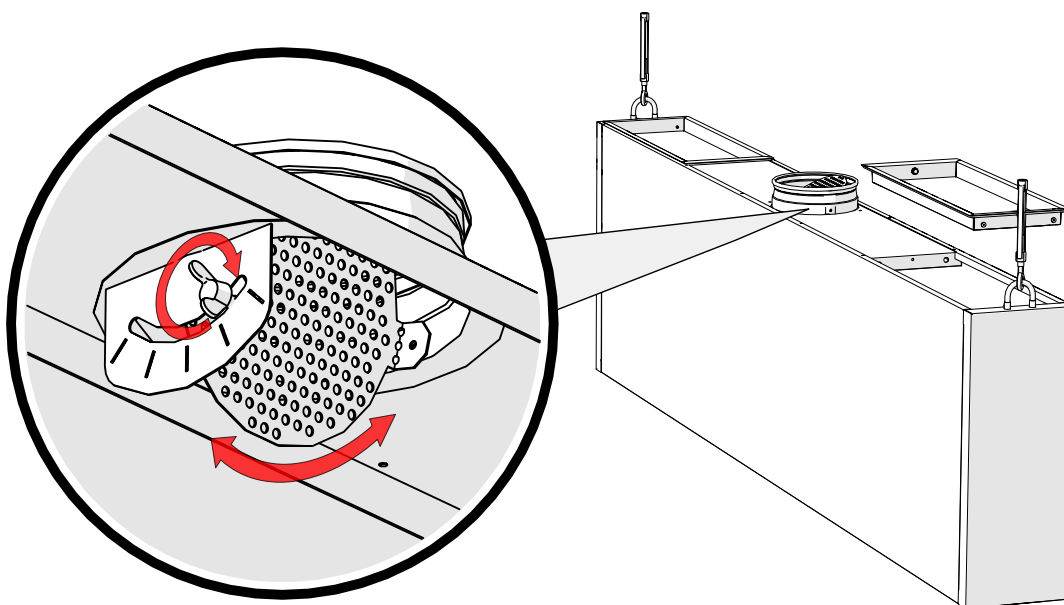
K-factor for measuring airflow

Exhaust K-factor = 16,6 (per 1 filter)

$$Q_v = k \sqrt{\Delta_{pm}}$$



14.2 Adjusting the HCG AirGrip Module



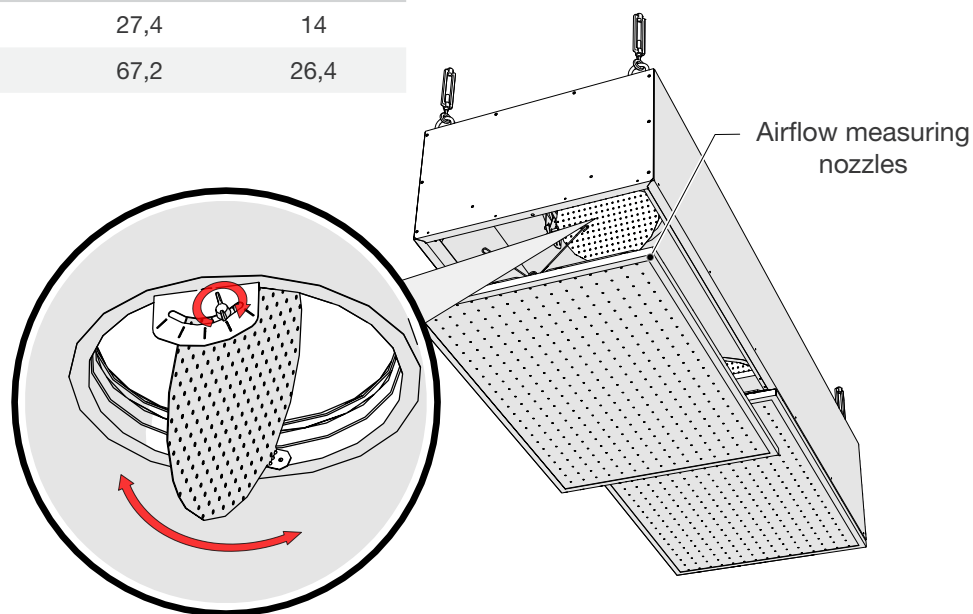
14.3 Adjusting the HCV Supply Air Module

K-factor (supply air)

Dimensions	Open	50% open	Closed
1000 x 500	46,6	33,8	14,9
1500 x 500	90,9	63,9	29,5

K-factor (exhaust air)

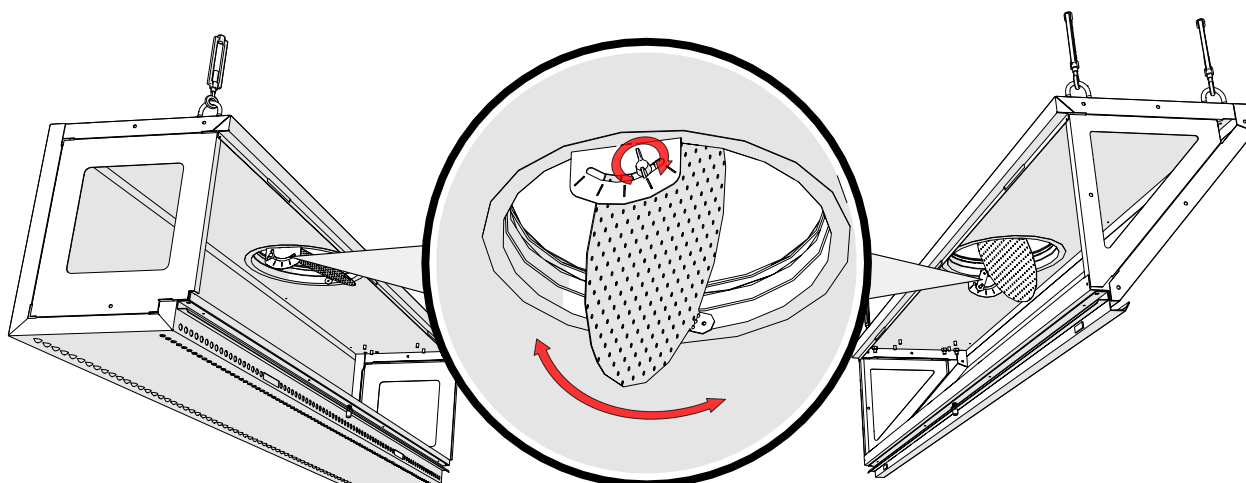
Dimensions	Open	50% open	Closed
1000 x 500	36,7	27,4	14
1500 x 500	71,1	67,2	26,4



14.4 Adjusting the HCAH and HCH Supply Air Modules

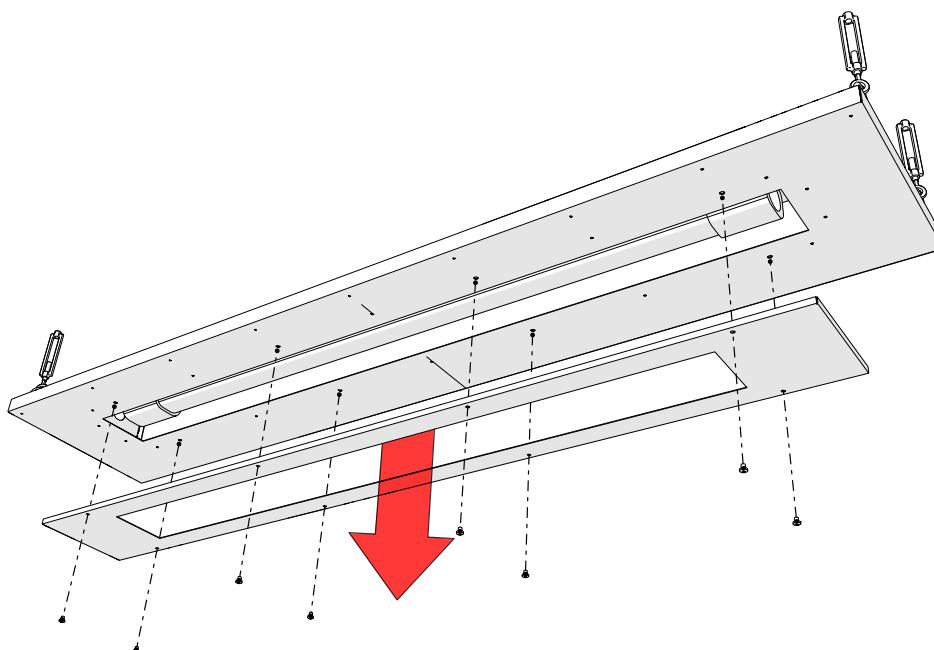
Supply air	K-factor, per 1 m of front panel			
	SPx0	SPx1	SPx2	SPx3
Front panel*	-	19,2	32,3	50,4
AirGrip	2,4	-	-	-

* Front panel k-factors above include the “AirGrip” air capture system K-factor.



15. Replacing the luminaires

NORDcanopy Ventilation Ceiling has integrated light fixtures. All luminaires are fitted with a power cable (3x1.5 mm, length 1,5 m) and a junction box. To remove luminaires, fastening screws of the protective glass are unfastened and the glass is removed.



16. Ventilation Ceiling maintenance

DAILY

To clean HFK grease filters they must be removed from the Ventilation Ceiling. Grease collection containers are removed and emptied. Both items may be washed by hand, in a dishwasher, or steam-cleaned. Liquid grease must always be disposed of using methods approved according to local regulations.

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

DEPENDING ON THE FREQUENCY OF KITCHEN MAINTENANCE

All internal and external surfaces of the Ventilation Ceiling, 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 and grease collection containers are removed from the Ventilation Ceiling. Remove the front panel to clean the supply chamber.

ATTN! Do not use hard or abrasive detergents, chlorine or bleach when cleaning the Ventilation Ceiling!
Never clean the Ventilation Ceiling when any of its surfaces are hot.
The ozonator must never have any exposure to moisture!



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

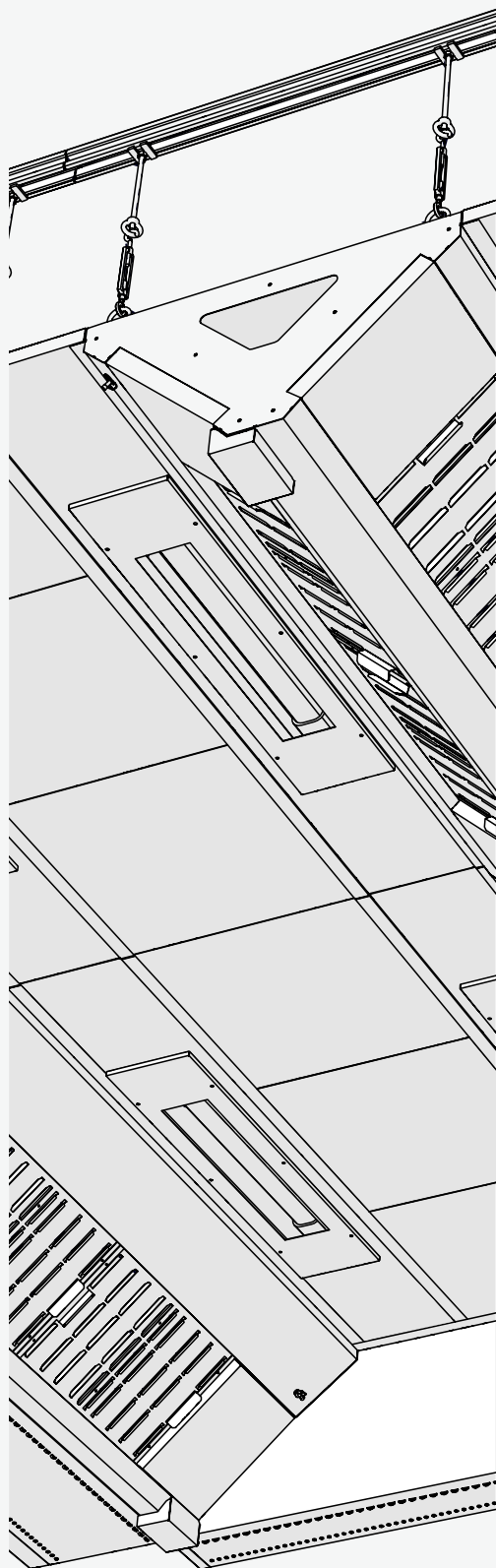
ETS NORD Sweden

Address: Järsjögatan 7
69235 Kumla
Sweden

Phone: +46 19 554 20 50

Address: Pinjegatan 5
21363 Malmö
Sweden

Phone: +46 40 94 68 70
info@etsnord.se
www.etsnord.se



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