

Installation manual

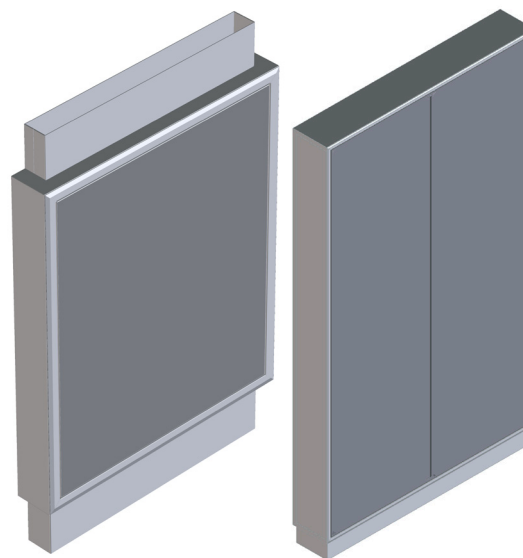
Displacement flow diffusers

QL-WF-EO

QL-WF-EU

With plinth

Without plinth



TROX[®] TECHNIK



The art of handling air

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Installation manual

Displacement flow diffuser QL-WF-E

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1. General information

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This installation manual describes the following type of displacement flow diffuser:

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QL-WF-EO

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QL-WF-EU

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To ensure correct functioning of the displacement flow diffuser, it is essential to read the provided installation manual before starting any work, and to comply with it.

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The manufacturer does not accept any liability for any malfunction or damage resulting from non-compliance with these instructions or non-compliance with relevant statutory regulations.

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This installation manual is intended for specialist consultants, developers, and owners of the ventilation systems in which the displacement flow diffuser is to be installed. This installation manual is also intended for people conducting the following work:

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- Transport and storage

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- Installation

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- Commissioning

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- Maintenance

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- Cleaning

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Details on QL-WF-E:

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- Brochure L-08-1-04d

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The installation manual and the brochure can be downloaded from

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www.troxhesco.ch.

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2. Safety and correct use

General safety notes



VORSICHT!

Verletzungsgefahr an scharfen Kanten, Graten, spitzen Ecken und dünnwandigen Blechteilen!

- Bei allen Arbeiten vorsichtig vorgehen.
- Schutzhandschuhe, Sicherheitsschuhe und Schutzhelm tragen.



WARNUNG!

Verletzungsgefahr bei unzureichender Qualifikation!

- Unsachgemässer Umgang kann zu erheblichen Personen- und Sachschäden führen.
- Alle Tätigkeiten nur durch dafür qualifiziertes Personal in der Gebäudetechnik-Branche durchführen lassen.



WARNUNG!

Gefahr durch Fehlgebrauch! Fehlgebrauch des Produktes kann zu gefährlichen Situationen führen.

Das Produkt darf nicht eingesetzt werden:

- in Ex-Bereichen.
- im Freien ohne ausreichenden Schutz gegen Witterungseinflüsse.
- in Atmosphären, die planmässig oder ausserplanmässig aufgrund chemischer Reaktionen eine schädigende und/oder Korrosion verursachende Wirkung auf das Produkt ausüben.



VORSICHT!

Beschädigung des Produktes durch unsachgemässe Behandlung! Gerät vor Inbetriebnahme auf Schäden und Verunreinigung prüfen und beheben!

- Unsachgemässer Umgang kann zu erheblichen Sachschäden am Produkt führen.
- Keine säurehaltigen oder scheuernden Reinigungsmittel verwenden.
 - Klebstoffe von Klebebändern können Farbschäden verursachen.
 - Unverhältnismässige Feuchtigkeit kann zu Farbschäden und Korrosion führen.
 - Nur ausdrücklich spezifizierte Reinigungsmittel, Fette und Öle benutzen.

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Standards and guidelines

For all work on the displacement flow diffuser, the following provisions and guidelines among others must be observed

- Product Safety Laws (PrSG)
- EKAS provisions

The local regulations for health and safety at work and general safety regulations also apply.

Repair and replacement parts

To maintain the function, use only original TROX HESCO Schweiz AG replacement parts.

Environmental protection / disposal

To protect the environment keep the following in mind:

- The packaging of the displacement flow diffuser is to be disposed of environmentally compatible.
- After being decommissioned the displacement flow diffuser is to be properly disposed of at an authorized disposal facility.

Qualified staff

Specialist personnel

Specialist personnel are individuals who have sufficient professional or technical training, knowledge and actual experience to enable them to carry out their assigned duties, understand any potential hazards related to the work under consideration, and recognise and avoid any risks involved.

Limitation of liability

The information in this manual has been compiled with reference to the applicable standards and guidelines, the state of the art, and our expertise and experience of many years.

The manufacturer does not accept any liability for damages resulting from:

- Non-compliance of these instructions
- Improper use
- Operation or handling by untrained individuals
- Unauthorised modifications

The actual supply package may differ from the information in this manual for special versions, additional order options or as a result of recent technical changes.

Personal protective equipment

Personal protective equipment must be worn for any work in

order to reduce health or safety hazards to the minimum.

The appropriate protective equipment for a job must be worn for as long as the job takes.

Industrial safety helmet



Industrial protective suspended loads a stationary objects.

l from falling objects,

Protective gloves



Protective gloves p tures, deep cuts, ar

, abrasions, punc- surfaces.

Safety shoes



Safety shoes prote from slipping on sli

g, falling parts, and

Correct use

TROX HESCO displacement flow diffusers are used for applications where ventilation efficiency is critical, i.e. as few contaminants as possible yet at the same time maximum thermal comfort in the occupied zone.

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3. Transport, storage and packaging

Delivery check

Upon delivery, carefully remove the packaging and check the unit for transport damage and completeness. In case of any damage and an incomplete shipment, contact the shipping company and your supplier immediately. Put the product back into its packaging after the delivery check to protect it from dust and contamination.



Befestigungs- und Montagematerial

Befestigungs- und Montagematerialien sind, soweit nicht anders angegeben, kein Bestandteil der Lieferung und müssen bauseits, abgestimmt auf die jeweilige Einbausituation beigelegt werden.

Transport on site

Please note:

- When unloading the delivery and transporting on-site, proceed with care and observe the symbols and notices on the packaging.
- Devices should preferably be transported to the installation location in their packaging.
- Lifting and handling equipment with sufficient load capacity must be used for the transport.
- Always secure the load against tipping and falling.
- Cumbersome equipment should be transported with at least two people to prevent injury and damage.

Storage

Please note:

- Store the product only in its original packaging.
- Protect the product from the effects of weather.
- Protect the product from humidity, dust and contamination.
- Storage temperature: -10 °C to +30 °C.
- Relative humidity: 95% max., no condensation.

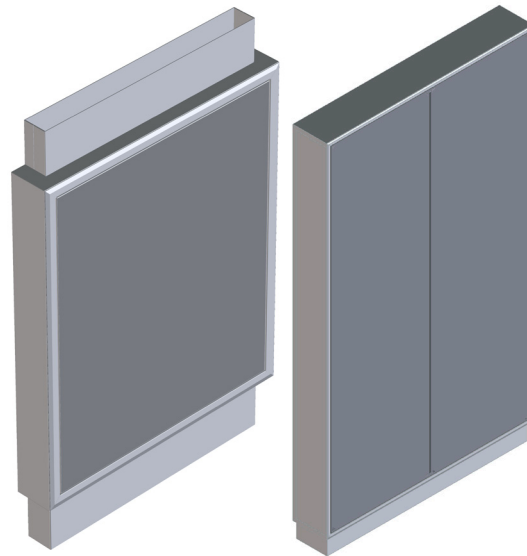
Packaging

Properly dispose of packaging material.

4. Product description

Brief description

The TROX HESCO displacement flow diffuser was developed especially for the optimum injection of air into displacement ventilation systems. The QL-WF-EO/EU is suitable for installation on a ceiling. It is available with or without plinth.

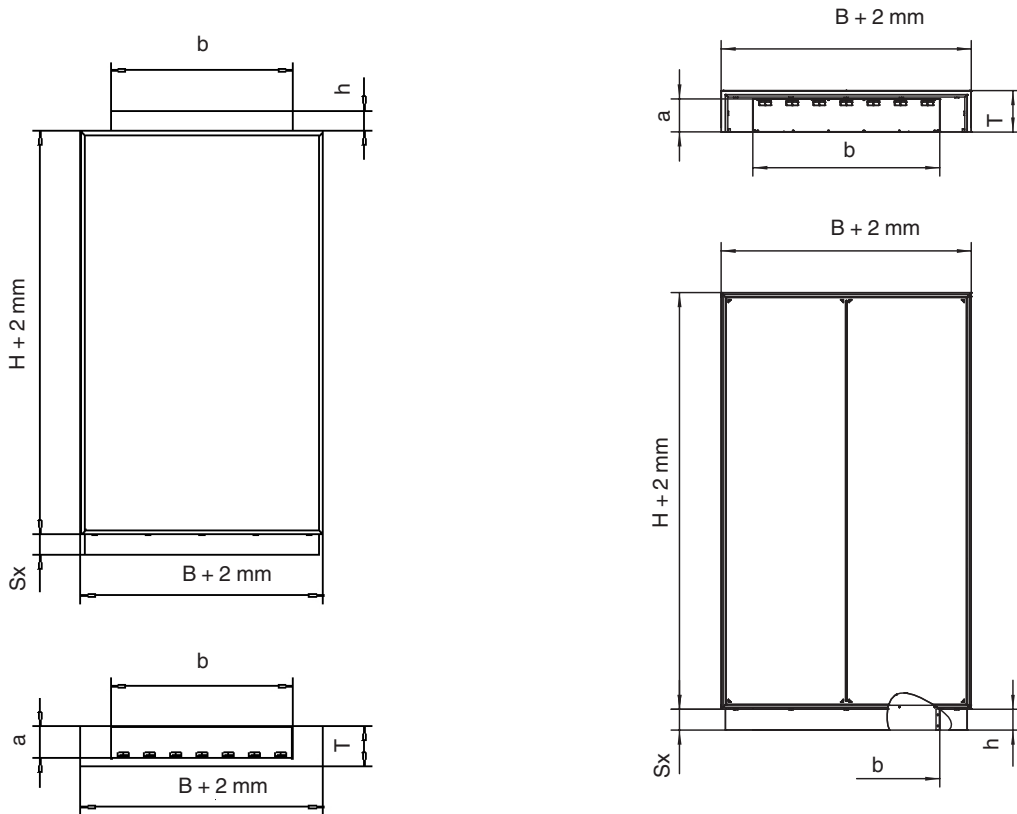


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Displacement flow diffuser QL-WF-E

Dimensions

B... x H... x T...
QL-WF-EO



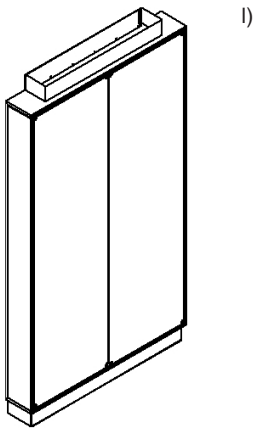
5. Technical data

Technical data in Brochure L-08-1-04d.

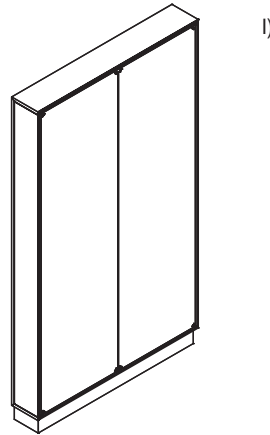
Installation manual Displacement flow diffuser QL-WF-E

6. Installation

1 QL-WF-EO
Duct connection top



or QL-WF-EU
Duct connection bottom

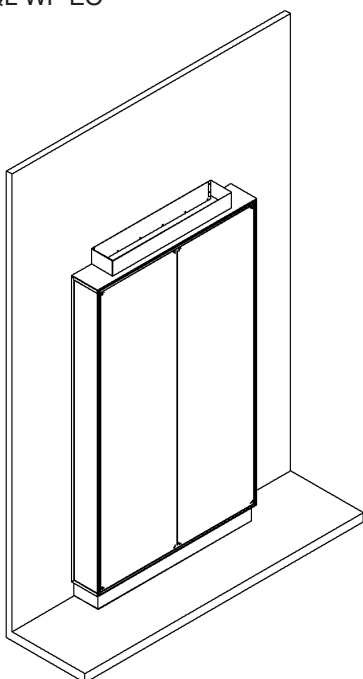


Tool for loosening the
perforated face plate from the

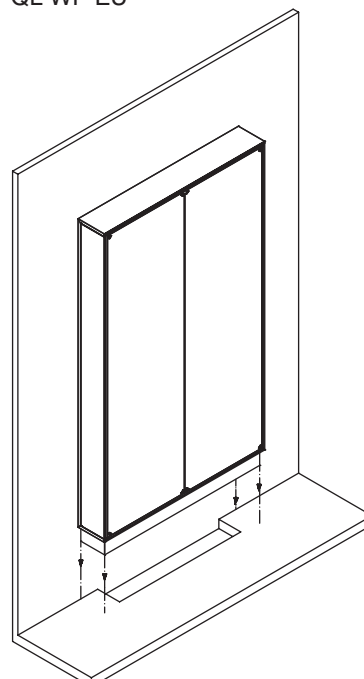
nozzle plate

2 On-site positioning of the displacement flow diffuser

QL-WF-EO



QL-WF-EU

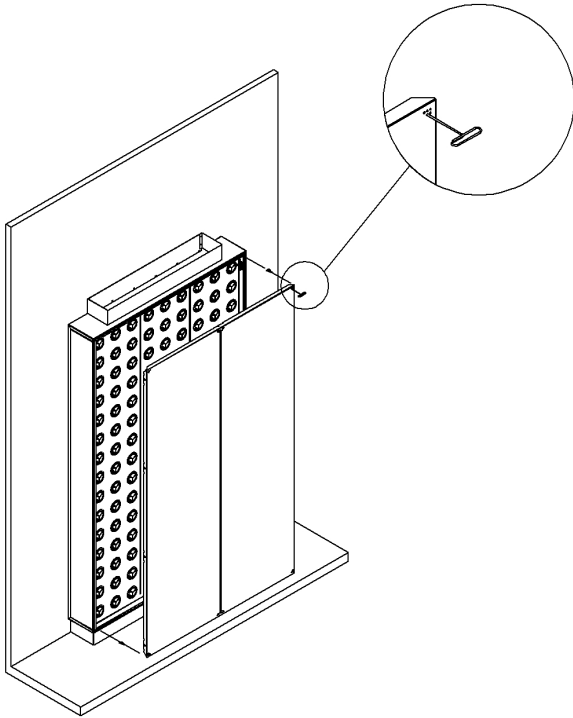


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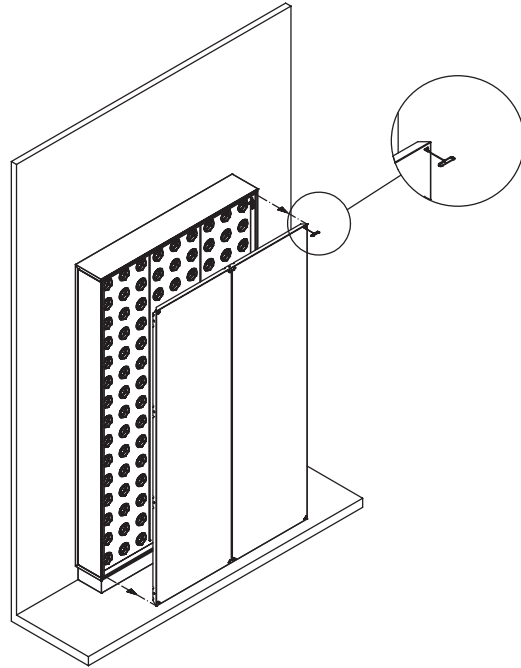
Displacement flow diffuser QL-WF-E

3 Removing the perforated face plate with the supplied tool.

QL-WF-EO

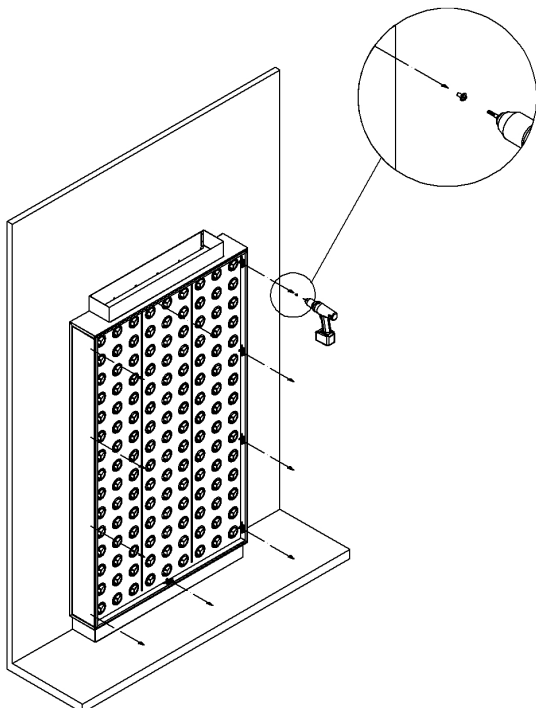


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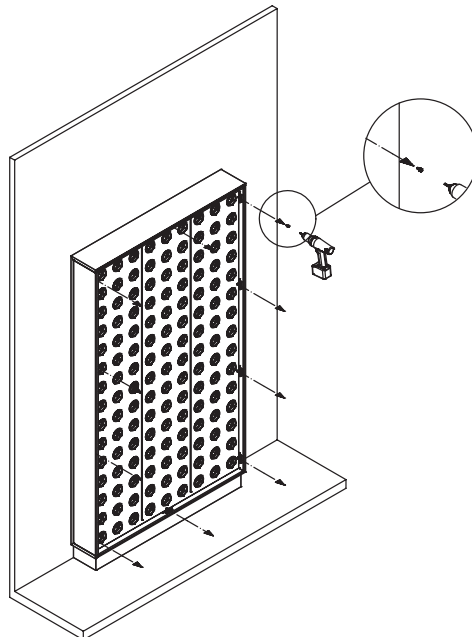


4 Loosening the fixing screw of the nozzle plate.

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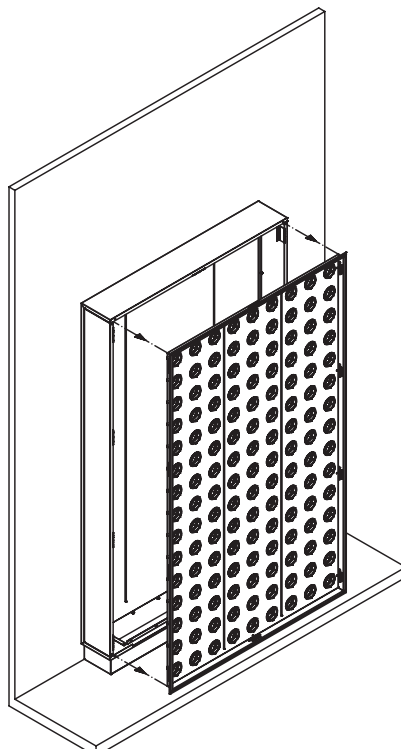
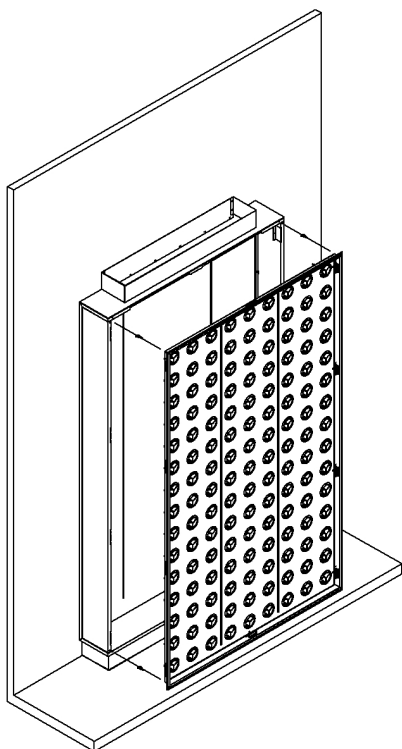
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5 Carefully lifting the nozzle plate out.

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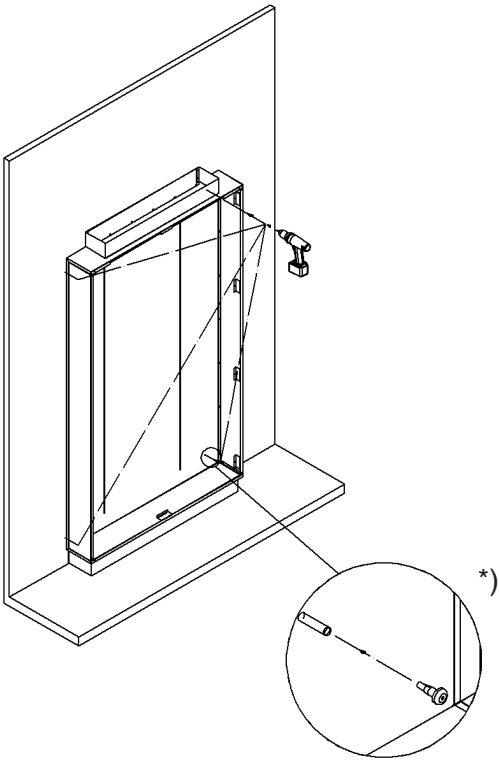


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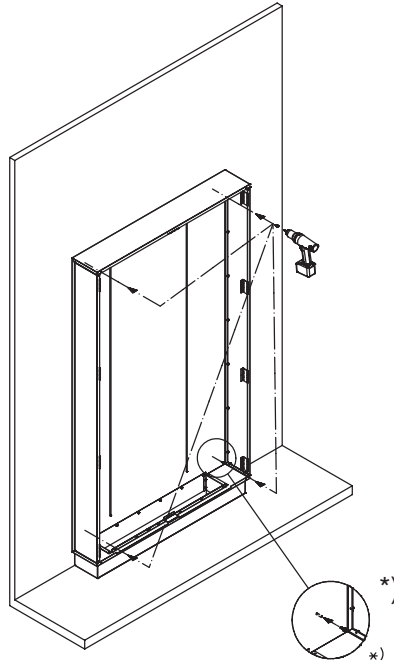
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6 Fixing the plenum box
The mounting screws are not included in the supply package,
screw hole \varnothing 6 mm.

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QL-WF-EU

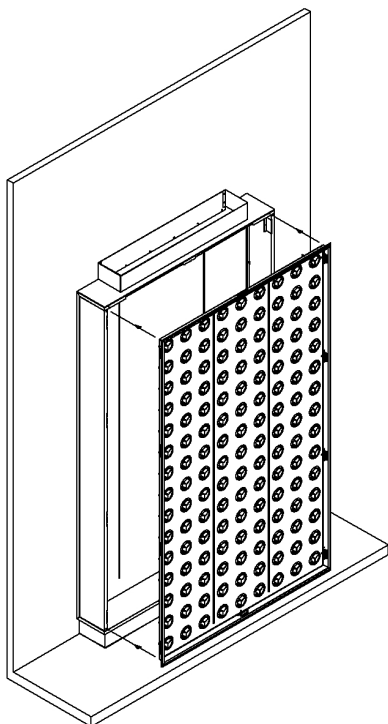


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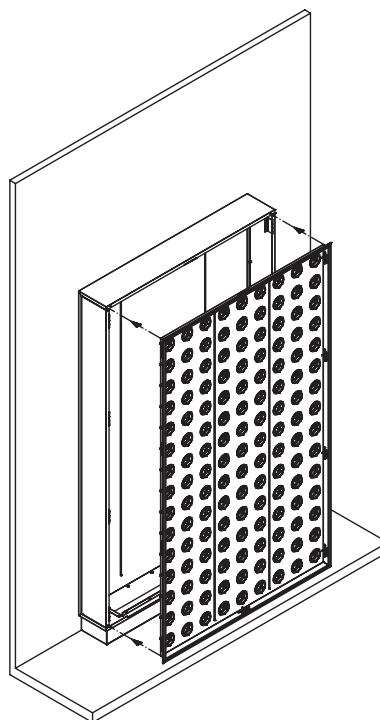
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7 Carefully reattaching the nozzle plate.

QL-WF-EO

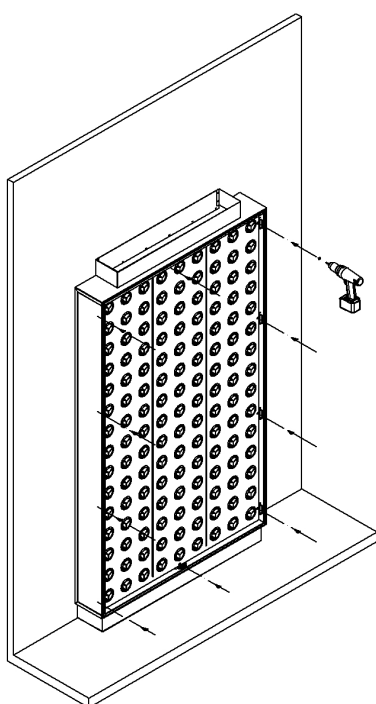


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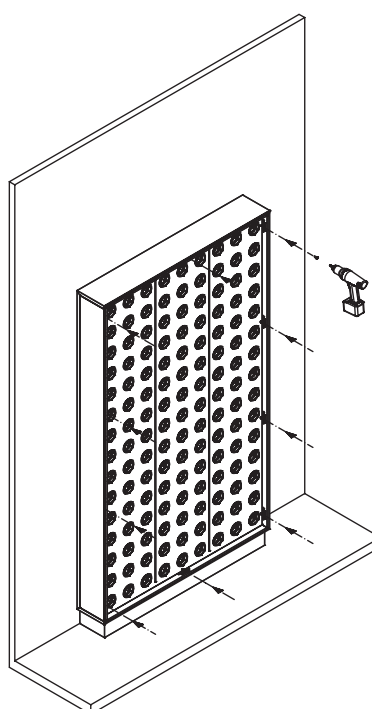


8 Fixing the nozzle plate with the fixing screws.

QL-WF-EO



QL-WF-EU

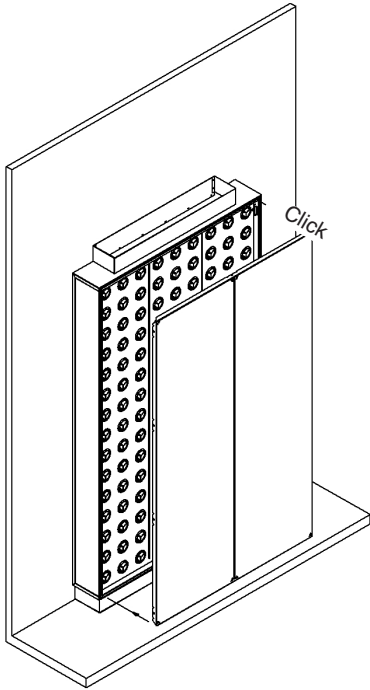


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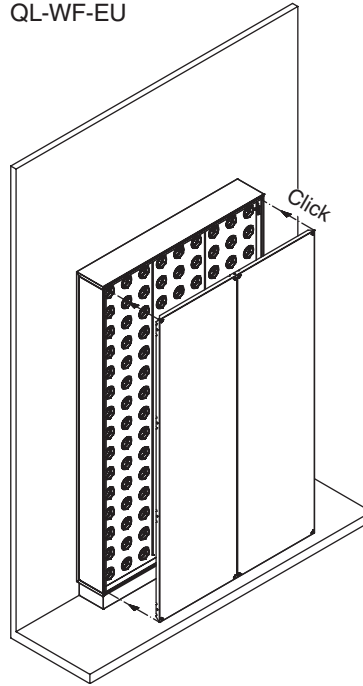
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9 Installing the perforated face plate.

QL-WF-EO



QL-WF-EU




Duct connection

The plenum box has a spigot for duct connection. Variants with a double lip seal allow for a sufficiently tight connection; additional sealing is not required.



Den Frontdurchlass möglichst erst nach Abschluss aller Bautätigkeiten auspacken und montieren um Beschädigungen der Oberfläche zu verhindern.

Bei längeren Zeiträumen zwischen Montage und Inbetriebnahme alle Gehäuseöffnungen verschliessen, z.B. mit Folie abkleben, um aufwendige Reinigungsarbeiten zur Inbetriebnahme des Gerätes zu vermeiden.



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Initial commissioning

Before you start commissioning:

- Check that the air terminal devices are seated correctly.
- Remove protective film.
- Ensure that all air terminal devices are clean and free from residues and foreign matter.
- Check that electrical connections have been correctly assembled.
- Check that the fixing and connection with the air duct is correct.

Volume flow rate balancing

When several diffusers are connected to just one volume flow controller, it may be necessary to balance the volume flow rates.

7. Maintenance

Maintenance and cleaning

Please note:

- Clean surfaces with a damp cloth.
- Only use commercially available, non-corrosive cleaning agents for cleaning.
- Do not use cleaning agents that contain chlorine.
- The use of cleaning tools for removing persistent contamination, e.g. abrasive sponges and liquid abrasive cleaner, can damage the surface and is not permitted.
- All technical components can be replaced if defective.