

# Installation manual

## Displacement flow diffusers QL-WE-O



**TROX<sup>®</sup> TECHNIK**



The art of handling air

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# Installation manual

## Displacement flow diffuser QL-WE-O

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		QL-WE-O	
		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.	
		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.	
		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:	
		- Transport and storage	
		- Installation	
		- Commissioning	
		- Maintenance	
		- Cleaning	
		Details on QL-WE-O:	
		- Brochure L-08-1-04d	
		The installation manual and the brochure can be downloaded from	
		<a href="http://www.troxhesco.ch">www.troxhesco.ch</a> .	

# Installation manual

## Displacement flow diffuser QL-WE-O

### 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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## Displacement flow diffuser QL-WE-O

### 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.

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 equipment, suspended loads, stationary objects.

and from falling objects.

### Protective gloves



Protective gloves protect against cuts, abrasions, punctures, deep cuts, and

rough, abrasive, puncture surfaces.

### Safety shoes



Safety shoes protect against slipping and from slipping

and from falling parts,

### 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.

### Personal protective equipment

Personal protective equipment must be worn for any work in

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## Displacement flow diffuser QL-WE-O

### 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.

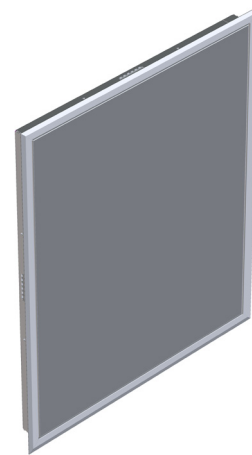
#### Packaging

Properly dispose of packaging material.

### 4. Product description

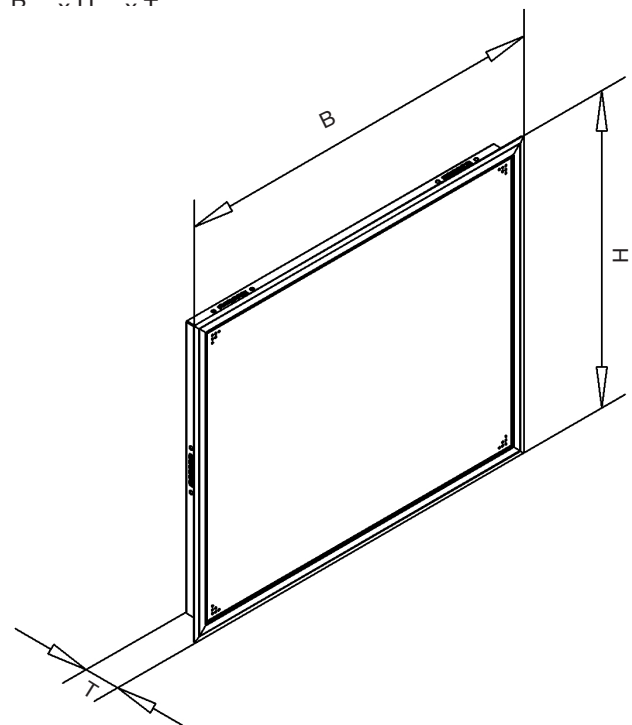
#### Brief description

The TROX HESCO displacement flow diffuser was developed especially for the optimum injection of air into displacement ventilation systems. The QL-WE-O is suitable for wall installation, one way air discharge.



#### Dimensions

Dimensions



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## Displacement flow diffuser QL-WE-O

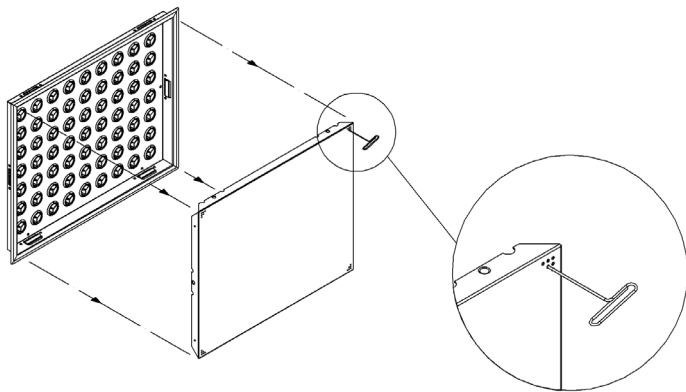
### 5. Technical data

Dimensions	
B max = 1200 mm	H max = 2000 mm
B max = 2000 mm	H max = 1200 mm
T	37 mm

Additional technical data in Brochure L-08-1-04d.

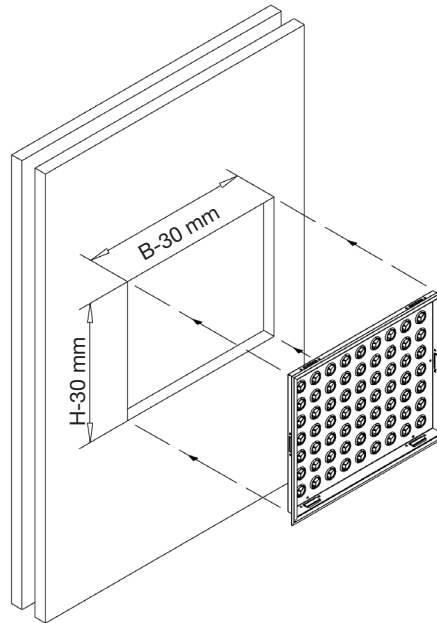
### 6. Installation

1 Loosening the perforated face plate from the nozzle plate with the aid of the supplied tool

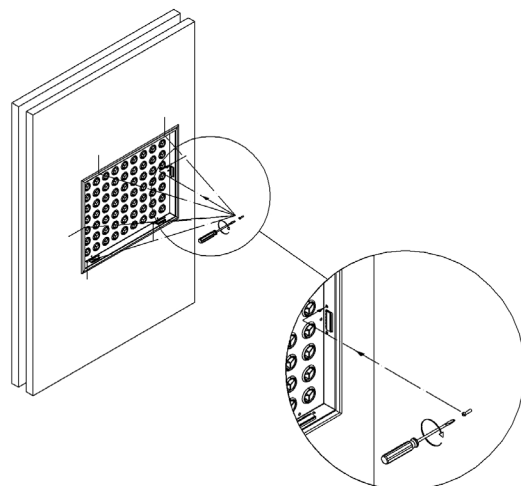


Tool for loosening the perforated face plate from the nozzle plate

2 Inserting the nozzle plate into the on-site recess. Recess = B-30 mm H-30 mm



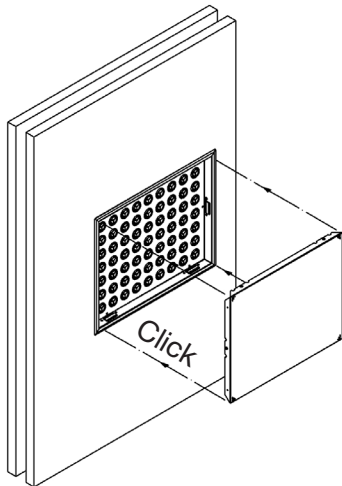
3 Fixing the nozzle plate with the mounting screws. The mounting screws are not included in the supply package. The available screw holes have a  $\varnothing$  of 6 mm.



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### 4 Mounting the front outlet



### 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.



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.

#### 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.