

**TROX**  
**CD10075 Air**  
**Diffusers**



# TROX CD10075 Air Diffusers Installation Guide

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**TROX**

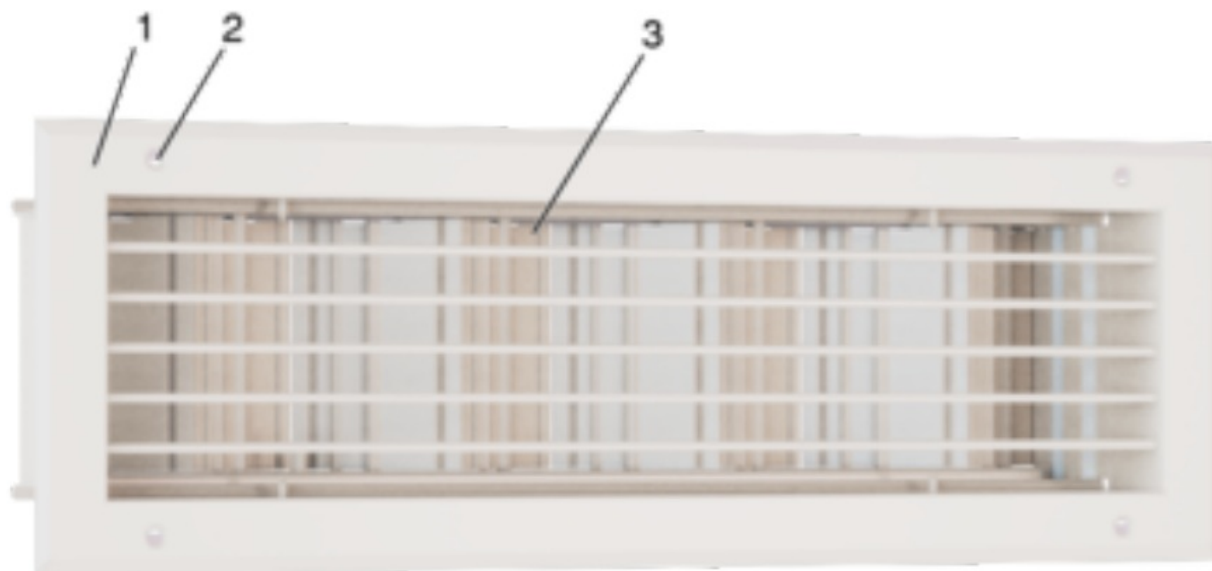
## TROX CD10075 Air Diffusers



## Specifications

- **Product:** Air Diffusers – Ventilation Grille TR2
- **Model:** TR2
- **Country:** GB/en

## Product overview



### **Schematic illustration TR2**

1. Front border
2. Countersunk holes
3. Attachment (AG)

### **Important notes**

#### **Information on the installation manual**

- This manual enables operating or service personnel to correctly install the product described below and to use it safely and efficiently.
- It is essential that these individuals read and fully understand this manual before starting any work. The basic prerequisite for safe working is to comply with the safety notes and all instructions in this manual.
- The local regulations for health and safety at work and general safety regulations also apply.

#### **Other applicable documentation**

In addition to these instructions, the following documents must be observed:

- Product data sheets

#### **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 with this manual
- Incorrect use
- Operation or handling by untrained individuals
- Unauthorised modifications

### **Safety**

The actual scope of delivery may differ from the explanations and illustrations provided in this manual for special versions, the use of additional order options or as a result of recent technical changes.

### **Correct use**

- Air terminal devices are used for the ventilation of internal spaces in industrial and comfort areas. The air terminal devices are connected to a supply air or extract air system (by others), which is typically connected to an air handling unit.
- Air terminal devices supply cold or warm air to rooms (within the stated supply air to room air temperature differences).
- Installation, operation and maintenance may have to meet increased hygiene requirements for certain areas of application.
- Installation in humid rooms, areas with potentially explosive atmospheres or rooms with dust-laden or aggressive air has to be assessed beforehand because it depends on the actual conditions on site.

### **Staff**

#### **Qualification**

#### **Trained personnel**

- Trained 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.
- 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 safety helmets protect the head from falling objects, suspended loads, and the effects of striking the head against stationary objects. Protective gloves



- Protective gloves protect hands from friction, abrasions, punctures, deep cuts, and direct contact with hot surfaces. Safety shoes



- Safety shoes protect the feet against crushing, falling parts, and slipping on slippery ground.

### **Repair and replacement parts**

- Only qualified personnel must repair the products, and they have to use genuine replacement parts.

### **Transport and storage**

#### **Delivery check**

- After delivery, carefully remove the packaging and check the device for any transport damage and completeness. In case of transport damage or incomplete delivery, inform the forwarding agent and the supplier immediately. After inspection of the goods, put the product back into its packaging to protect it from dust and contamination.

#### **Fixing and installation material**

- Fixing and installation material is not part of the supply package (unless stated otherwise), but has to be provided by others; it has to be suitable for the installation situation.

#### **Transport on site**

#### **CAUTION!**

Danger of injury from sharp edges, sharp corners and thin sheet metal parts! Sharp edges, sharp corners and thin sheet metal parts may cause cuts or grazes.

- Be careful when carrying out any work.
- Wear protective gloves, safety shoes and a hard hat.

Observe the following points during transport:

- Be careful when unloading or moving the product on site, and pay attention to the symbols and information on the packaging.
- If possible, take the product in its transport packaging up to the installation location.
- For fastening to the building structure, use only lifting and transport gear designed for the required load.
- During transport, always secure the load against tipping and falling.
- Bulky equipment should be transported by at least two people to prevent injury and damage.

## **Storage**

Observe the following points for storage:

- 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 90 °C relative humidity: 80 % maximum, no condensation

## **Packaging**

- Properly dispose of packaging material.

## **Assembly**

### **General installation information**

#### **Personnel:**

- Trained personnel

#### **Protective equipment:**

- Industrial safety helmet
- Protective gloves
- Safety shoes

#### **Observe during installation:**

- Fix the product only to load-bearing structural elements.
- Only load suspension with the device's own weight. Adjacent components and connecting air ducts must be supported separately.
- Use only approved and adequately sized fixing material (fixing material is not included in the supply package).
- After installation, the air diffusers must be easily accessible for cleaning purposes.
- Installation and sealing material provided by the manufacturer are usually enclosed in a bag in the package.

### **Protect the device from dust and contamination**

- Before installation, ensure that the air-ducting components cannot be contaminated by construction activities

(VDI, SWKI, O-norm). If this is not possible, at least cover the device or take other precautions to protect it from contamination.

- In this case, make sure the device is not in operation. Ensure that all components are clean before you install them. Clean thoroughly if necessary. When interrupting the installation procedure, protect all device openings from the ingress of dust or humidity.

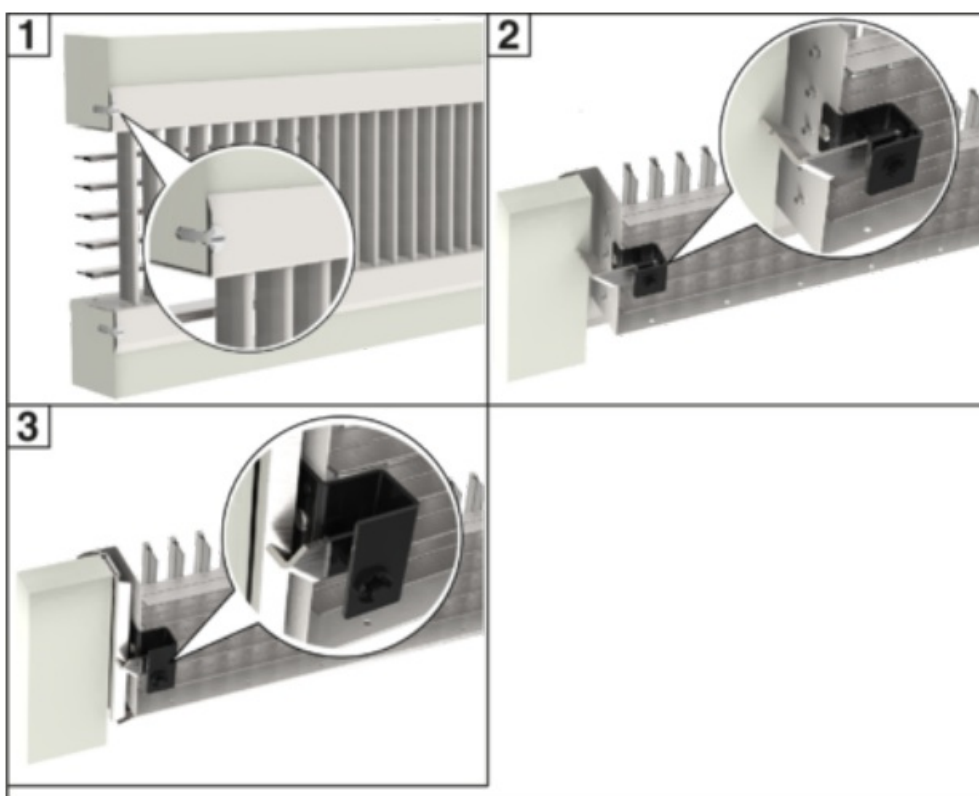
## Safety instructions for installation

### CAUTION!

Risk of injury due to incorrect installation!

- Ventilation grilles can weigh up to 25 kg, depending on size and attachments. If they fall, there is a high risk of personal injury or damage to property.
- Depending on the installation situation, it must be ensured that suitable measures are taken to prevent falling.
- In the case of ceiling installation or installation at great heights, additional safety measures may be required in addition to a suitable type of fastening (screw connection) to prevent the device from falling down.

## Fixing types



## Fixing types

1. Fastening -0: Fastening Standard countersunk hole.
2. Mounting -SP: Screwless mounting (rear view).
3. Fastening -VS: Concealed screw fixing (rear view).

## Quantity countersunk holes

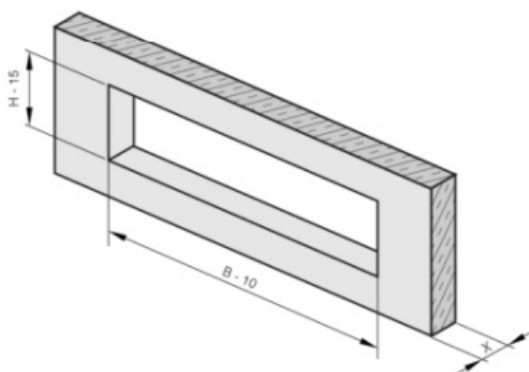
Height H [mm]	Length B [mm]											
	225	325	425	525	625	825	1025	1225	1425	1625	1825	2025
75	4	4	4	4	6	6	6	6	6	6	6	6
125	4	4	4	4	6	6	6	6	6	6	6	6
225	4	4	4	4	6	6	6	6	6	6	6	6
325	—	4	4	4	6	6	6	6	6	6	6	6
425	—	—	—	—	—	6	6	6	6	6	6	6
525	—	—	—	—	—	—	6	6	6	6	6	6

#### Number of fixings for SP and VS

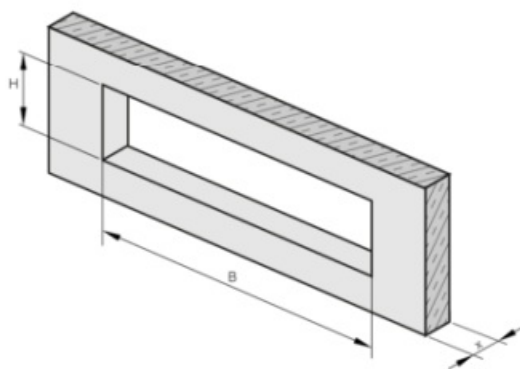
Height H [mm]	Length B [mm]											
	225	325	425	525	625	825	1025	1225	1425	1625	1825	2025
75	2	2	2	2	2	2	4	4	4	4	4	4
125	2	2	2	2	2	2	4	4	4	4	4	4
225	2	2	2	2	2	2	4	4	4	4	4	4
325	—	4	4	4	4	4	6	6	6	6	6	6
425	—	—	—	—	—	4	6	6	6	6	6	6
525	—	—	—	—	—	—	6	6	6	6	6	6

#### Technical data Dimensions

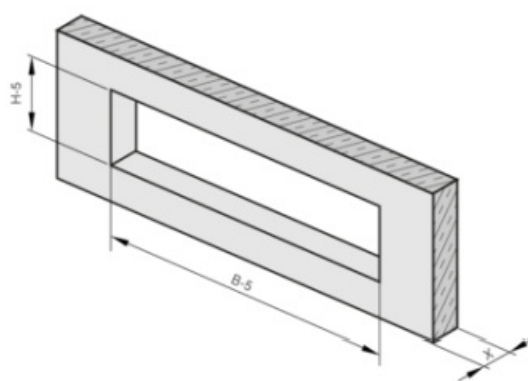
- Installation opening no entry



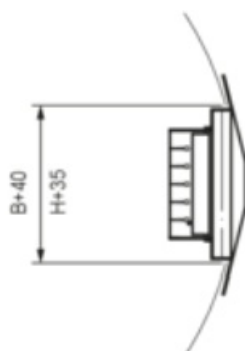
- Installation opening SP X must be at least 4 mm for SP fixing



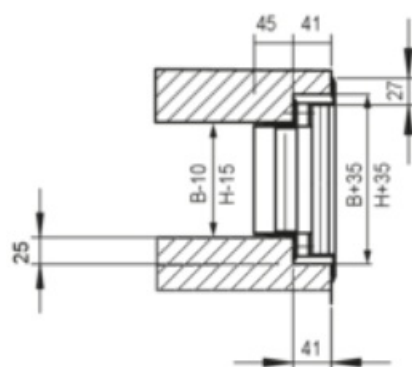
- Installation opening VS
- B = Order length ventilation grille B
- H = Order height ventilation grille H
- x = Wall thickness x



- Installation opening TR2-R/RA-BL

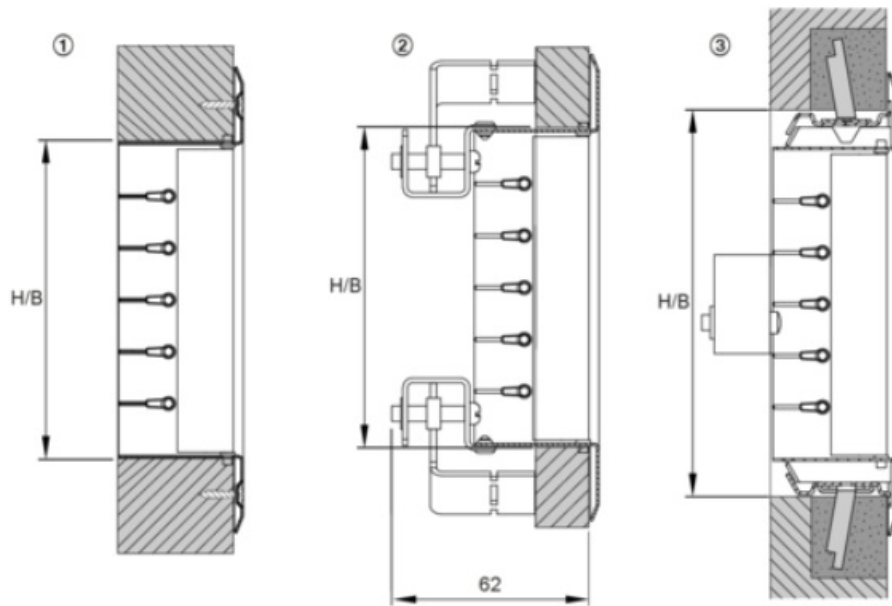


## Technical data





- Installation opening TR2-BS/BL



## Fixings

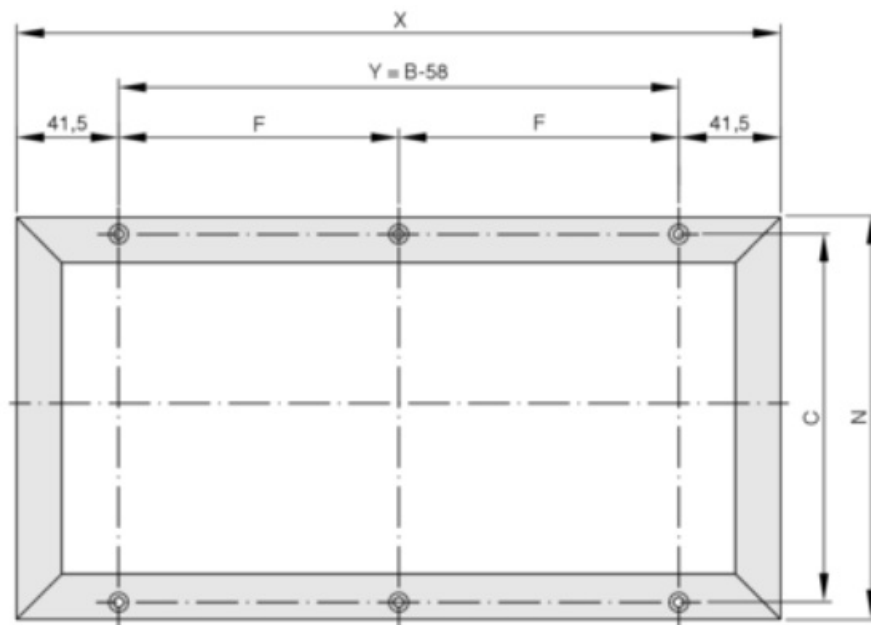
1. Fixing countersunk hole
2. Concealed screw fixing SP without installation subframe
3. Installation subframe, mortared in, used with fixing VS, see available installation subframes (B1)

## TR2

Fixings	Installation opening [mm]	min. clamping range [mm]
Countersunk hole	(B-10) x (H-15)	—
SP	(B-5) x (H-5)	4
VS	B x H	0
NO	(B-10) x (H-15)	—

## TR2-R/RA

Fixing	Installation opening [mm]	min. clamping range [mm]
Countersunk hole	(B-10) x (H-15)	—
NO	(B-10) x (H-15)	—



- Screw hole pitch

#### Screw hole pitch TR2

Length B [mm]	X	Y	nxF
225	250	167	—
325	350	267	—
425	450	367	—
525	550	467	—
625	650	567	2×283.5

Length B [mm]	X	Y	nxF
825	850	767	2×383.5
1025	1050	967	2×483.5
1225	1250	1167	2×583.5
1425	1450	1367	2×683.5
1625	1650	1567	2×783.5
1825	1850	1767	2×883.5
2025	2050	1967	2×983.5

#### Screw hole pitch TR2

Height H [mm]	N	C
75	100	75
125	150	125
225	250	225
325	350	325
425	450	425
525	550	525

#### TR2 max. grille weights [kg]

H/B	225	325	425	525	625	825	1025	1225	1425	1625	1825	2025
75	0.6	0.7	0.9	1.2	1.3	1.8	2.2	2.6	2.9	3.3	4.0	4.4
125	0.9	1.1	1.3	1.7	1.9	2.5	3.2	3.8	4.2	4.8	5.7	6.3
225	1.2	1.5	1.8	2.4	2.7	3.7	4.6	5.5	6.1	6.9	8.2	9.1
325	–	1.9	2.2	3.0	3.3	4.3	5.6	6.7	7.4	8.4	10.0	11.1
425	–	–	–	–	–	4.9	6.6	7.9	8.7	9.9	11.9	13.1
525	–	–	–	–	–	–	8.1	9.6	10.7	12.1	14.5	16.0

#### TR2 Weight of ball impact protection without grille [kg]

H/B	625	825
125	1.1	1.2
225	1.1	1.2

#### TR2 weights attachment AG without grille [kg]

H/B	225	325	425	525	625	825	1025	1225	1425	1625	1825	2025
75	0.4	0.6	0.7	0.8	1.1	1.2	1.6	1.8	2.3	2.5	2.7	3.4
125	0.6	0.9	1.0	1.1	1.5	1.7	2.3	2.6	3.3	3.6	3.8	4.8
225	0.8	1.2	1.4	1.6	2.1	2.4	3.2	3.6	4.6	5.0	5.4	6.9
325	–	1.5	1.7	2.0	2.6	2.9	3.9	4.4	5.6	6.1	6.6	8.3
425	–	–	–	–	–	3.4	4.6	5.2	6.6	7.2	7.7	9.7
525	–	–	–	–	–	–	5.5	6.2	8.0	8.7	9.4	11.8

#### TR2 weights attachment AS without grille [kg]

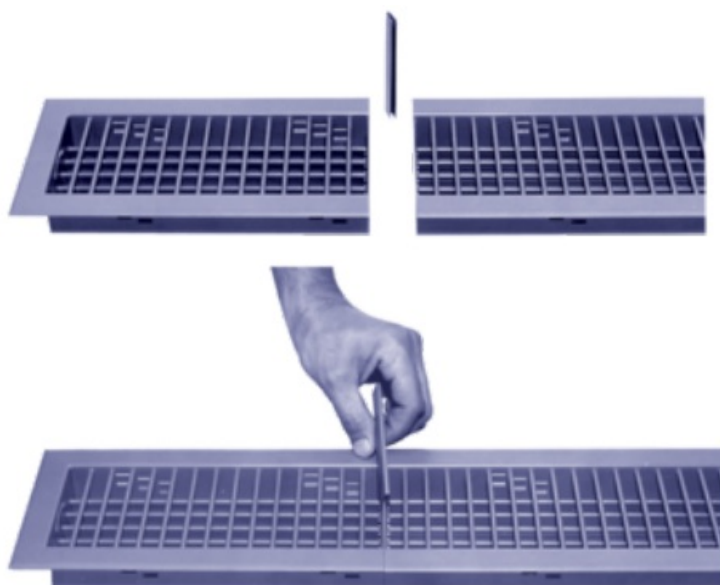
H/B	225	325	425	525	625	825	1025	1225	1425	1625	1825	2025
75	0.3	0.4	0.5	0.5	0.6	0.8	1.0	1.1	1.5	1.6	1.7	2.2
125	0.5	0.5	0.7	0.8	0.9	1.2	1.6	1.7	2.3	2.5	2.6	3.4
225	0.7	0.8	1.1	1.2	1.4	1.8	2.4	2.6	3.6	3.8	4.1	5.3
325	–	1.1	1.4	1.5	1.8	2.3	3.1	3.4	4.6	4.9	5.2	6.7
425	–	–	–	–	–	2.9	3.6	4.0	5.4	5.8	6.1	7.9
525	–	–	–	–	–	–	4.1	4.5	6.1	6.6	7.0	9.0

#### TR2 weights attachment SAS without grille [kg]

H/B	225	325	425	525	625	825	1025	1225
75	0.4	0.4	0.5	0.6	0.7	0.9	1.2	1.3
125	0.6	0.7	0.8	0.9	1.1	1.4	1.9	2.0
225	0.9	1.0	1.3	1.4	1.7	2.2	2.9	3.2
325	–	1.3	1.7	1.8	2.2	2.8	3.7	4.0

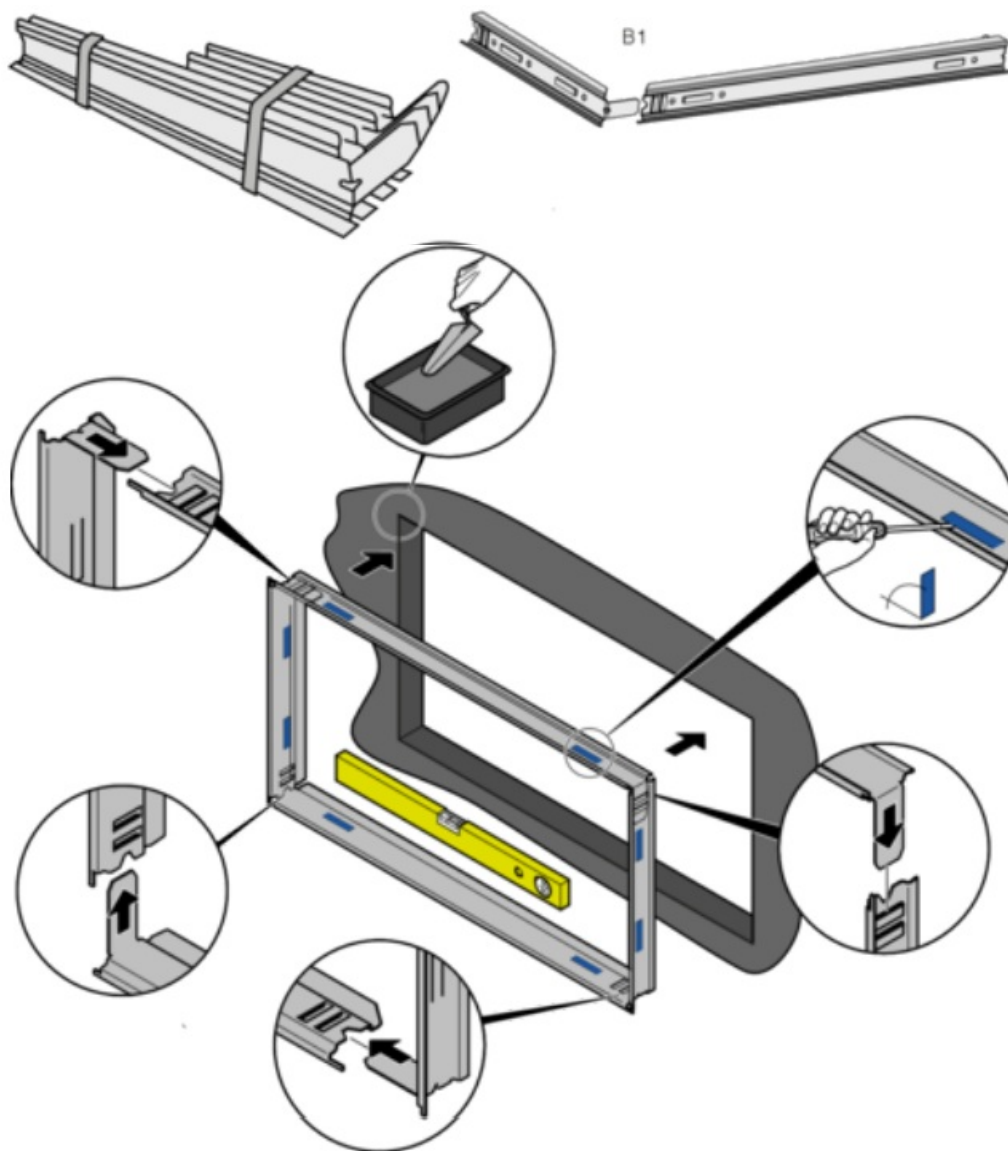
#### Installation linear run section

- The end and centre sections are assembled using a coupling plate. The seams are invisible after assembly.



- Installation linear run section

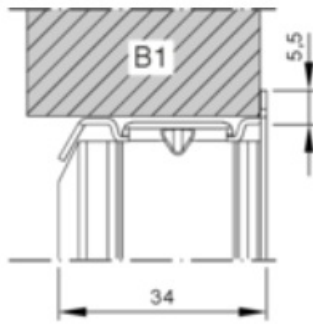
#### Installation subframe



### Installation subframe B1

- The installation subframe consists of four frame sections
- Push the sections together
- For wall installation: spread the wall fixing tabs, then mortar them in
- Alternative: Fixing to different building structures with screws or rivets
- Installation in plasterboard wall with ER – use of installation subframe, provide the installation opening with a circumferential bevelled edge of approx. 5 mm
- Install the grille in the centre of the installation opening

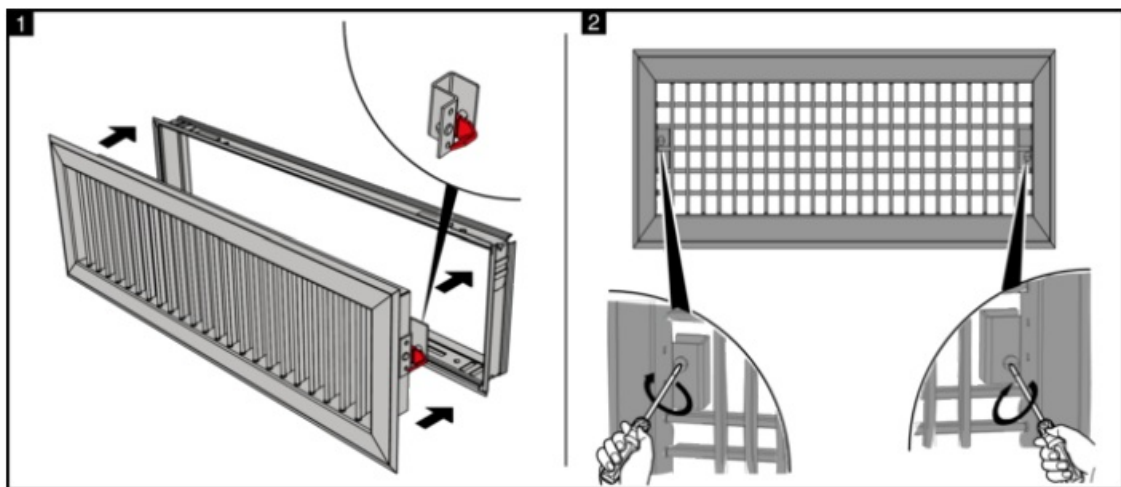
### Details installation subframe B1



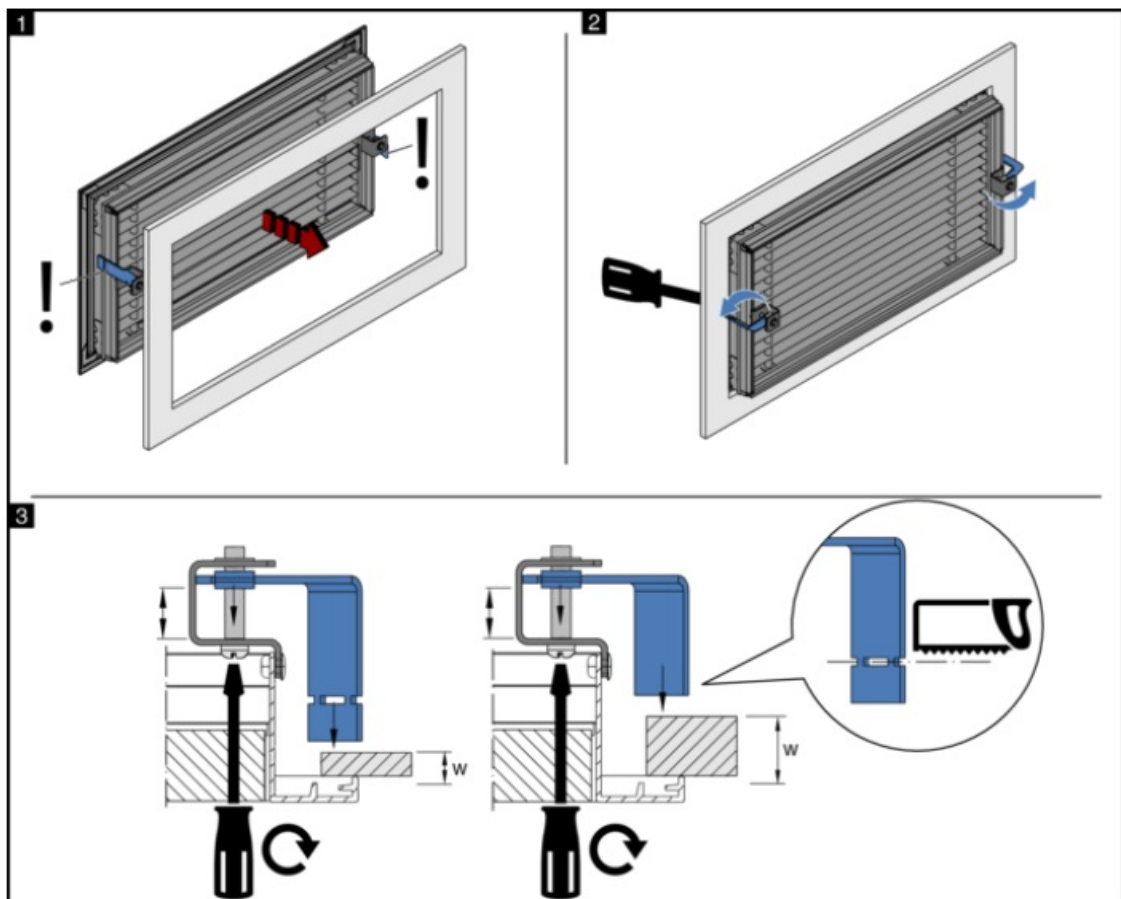
- Dimensions installation subframe

## Installation details

- Concealed screw fixing -VS (with installation subframe)



## Concealed screw fixing -SP

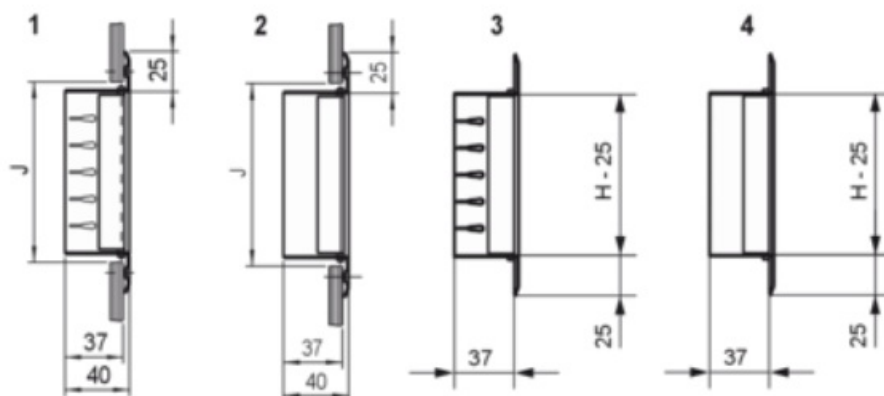
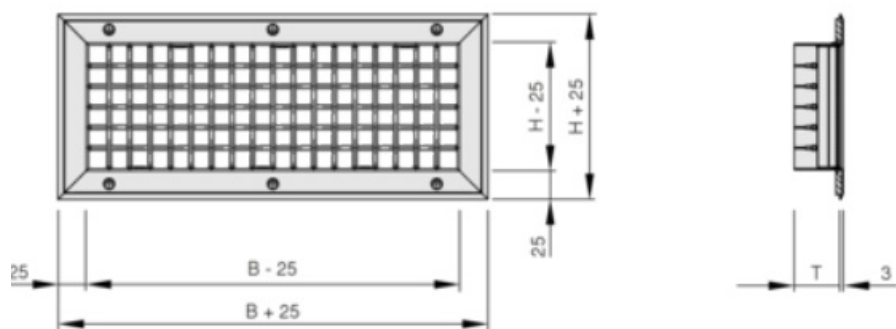


- Installation concealed screw fixing -SP
- The dimension w must be at least 4 mm

### Air connection

- Ventilation grilles do not have an air connection, they are installed directly into air ducts or similar.

### Dimensions



## TR2-V/VH

1. TR2-VH
2. TR2-V
3. TR2-VH
4. TR2-V

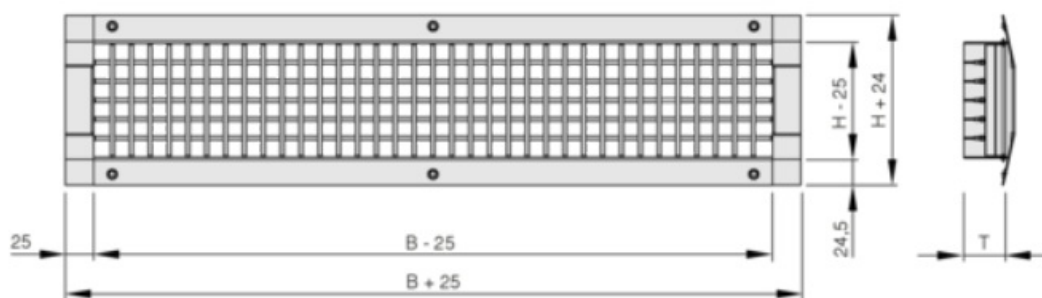
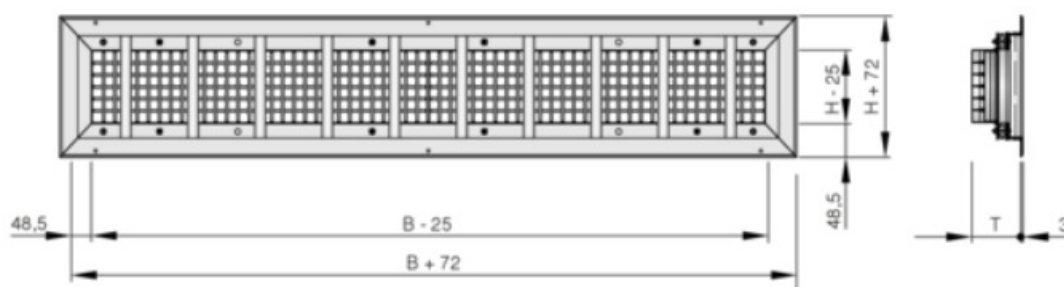
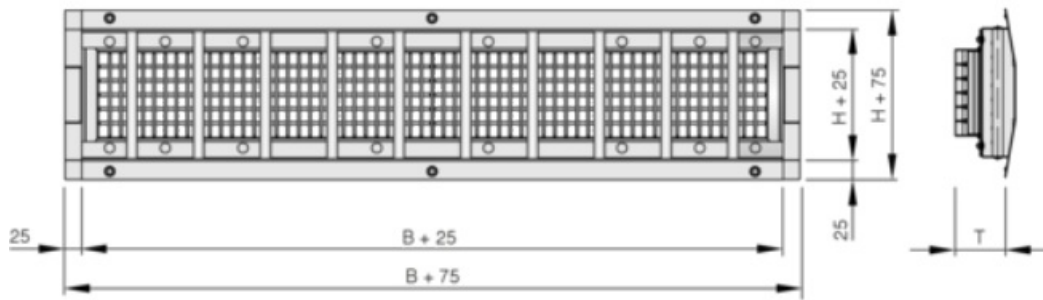


Fig. 14: TR2-R-VH



Initial commissioning





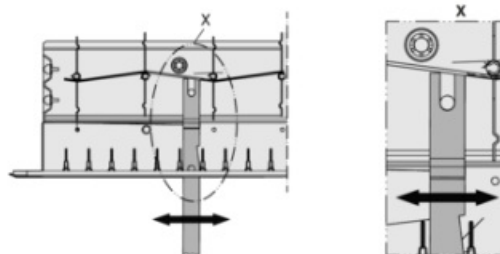
- TR2-R-BL

## Initial commissioning

### General information

Before you start commissioning, check the following points:

- Check that the air diffusers are fitted correctly.
- Remove protective foils, if any.
- Ensure that all air diffusers are clean and free from residues and foreign matter.
- Check electrical connections (if any) for correct installation.
- Check proper fastening and connection with air duct
- For commissioning, see also VDI 6022, Sheet 1 – Hygienic requirements for ventilation and air conditioning systems.
- For commissioning, see also VDI 6022, Sheet 1 – Hygienic requirements for ventilation and air conditioning systems.

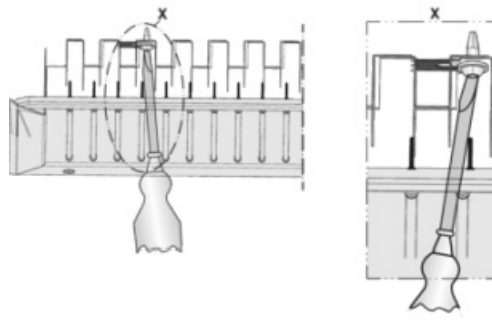


### Volume flow rate balancing

Carefully turn the screw in (clockwise) and out (anti-clockwise) to adjust or fasten the hit and miss damper. Tighten the screw with max. 1.0 Nm

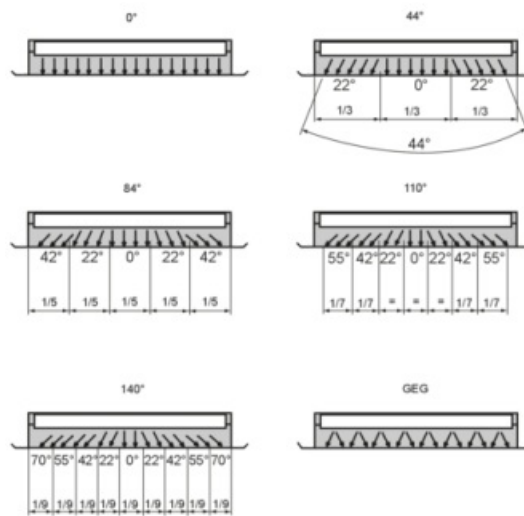
- AG: manual adjustment
- AS/SAS with screwdriver

Damper element with hit and miss damper, adjustable, secured with a locking screw



## Air pattern

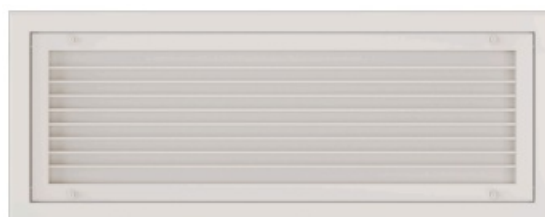
- Setting the air direction on site using the TR2 key.



- Setting the air direction

## Filter change

### Attachment EF – filter change



- TR2 with attachment EF
- Remove front grille
- Remove contaminated filter
- Clean the components
- Insert new filter
- Insert and fasten the grille

## Ordering replacement filters

**To ensure permanent protection against particle ingress and suspended particles, we recommend using only original TROX filters.**

- Filter medium TGM 315-10-3 coarse 45%
- To avoid downtime of the ventilation and air conditioning system, we recommend stocking the required filters.
- To order filters: [www.troxtechnik.com](http://www.troxtechnik.com)

## **Disposal**

### **ENVIRONMENT!**

Risk of harm to the environment due to incorrect disposal! Incorrect disposal may harm the environment.

- Be sure to comply with the relevant national guidelines and regulations.
- In case of doubt, contact your local authorities or a specialist disposal company.

### **Note:**

- The grille must be dismantled for disposal. If no disposal or return agreement with TROX GmbH is in place, we recommend disposing of the materials as follows:

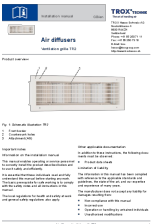
<b>Pos.</b>	<b>Component</b>	<b>Material/ waste code</b>	<b>Type of disposal</b>
1	Front grille, attachment	galvanised steel EWC 170 404	Scrap metal recycling
2	Filter element		according to EWC
3	Attachment AS/SAS	Aluminium	Scrap metal recycling
EWC European Waste Catalogue			

## **FAQ**

### **Q: What should I do if the actual scope of delivery differs from the manual?**

A: In case of differences due to special versions or technical changes, refer to additional documentation or contact customer support for clarification.

## **Documents / Resources**



## TROX CD10075 Air Diffusers [pdf] Installation Guide

### CD10075 Air Diffusers, CD10075, Air Diffusers, Diffusers

## References

- [User Manual](#)

**Manuals+, Privacy Policy**

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