

# AERO

**AEROTUBE WRG smart**  
**AEROTUBE AZ smart**

Wall-mounted ventilator with supply air and exhaust air function, temperature and humidity regulation, optionally with heat recovery and CO<sub>2</sub> control

Window systems

Door systems

Comfort systems



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## 1 Target group of this documentation

- This documentation is intended for use by specialists and end users.
- All instructions concerning assembly, installation and repairs described in this document are to be performed exclusively by experienced professionals with training and practice in the installation, commissioning, servicing and maintenance of decentralised ventilation units.
- All notes on operation and maintenance as well as the rectification of malfunctions described here are intended for specialists and end users.
- After the successful assembly and installation, the installation company is committed to handing over the original operating instructions to the end user.

## 2 Intended use

- Use the AEROTUBE exclusively for the ventilation of closed rooms (kitchen, bathroom, living rooms and bedrooms).
- The AEROTUBE is not suitable for dehumidification (e.g. for the drying of new buildings).
- The unit must always be installed by an experienced specialist, in accordance with the installation and planning documents of SIEGENIA. The installation information in these instructions must be complied with at all times.
- Be sure to insert the supplied protective SIEGENIA-AUBI weather grille from the outside.
- Do not install the unit in contaminated rooms and ensure that no hazardous substances can be drawn in.
- Do not use AEROTUBE in environments with corrosive or explosive atmospheres (dust, vapour or gas).
- The unit is not suitable for use in swimming baths and / or damp locations.
- AEROTUBE must be mounted in a vertical position. Mounting on inclines (e.g. walls and ceilings), is not permissible.
- If the unit is to be used in a room with a fireplace that draws air from the room, prior approval must be obtained from the proper authorities, such as the officially appointed district chimney sweep.
- Only operate and/or store AEROTUBE at temperatures between – 15 °C and +40 °C.
- Use the unit only with original accessories from SIEGENIA.
- Comply with the safety regulations for operating electrical equipment and, if necessary, for ladders, steps and work overhead or at certain heights.
- Use the unit only when it is in a technically sound condition.
- Do not modify the unit's components in any way.
- Please do not put any objects on top of the unit.
- Do not use the device as a seat.
- Make sure that air can flow in and out at the two outer sides without impedance. Do not hang any textiles or paper or similar items over the air inlet and outlet ports and do not place any objects directly in front of or beside the unit. Do not insert any objects into the openings of the unit.
- Do not remove any covers or unit components that are not defined in the "Maintenance" chapter. Do not remove the cover of the connecting clamps inside the unit.
- The unit must be checked by a specialist in the event of a fault.
- There is a risk of injury from wasp or bee stings:
  - Insects could nest themselves in closed ventilation slots. The insects could fly out and sting you when you open the unit for maintenance purposes.
  - To prevent insects from nesting themselves in the device, do not close the ventilation slots for several days in succession.
  - Wear protective clothing to open the device if the ventilation slots have been closed for several days in succession.
- Any use or application of this product that is not in accordance with its intended use, or any adaptation or modification to the product and its associated components, for which the express consent of SIEGENIA has not been obtained, are strictly prohibited. SIEGENIA accepts no liability whatsoever for any material losses or injury to people caused by failure to comply with this stipulation.



### 3 Safety notes

- This unit can be used by children aged 8 and above as well as by people with physical, sensory or mental difficulties or with a lack of experience and knowledge as long as they are supervised or have been instructed in how to use the unit safely and understand the resulting risks. Children must not play with the unit. Cleaning and user maintenance may not be carried out by unsupervised children.
- Electrically operated unit. Risk of fatal injury from electric shock or fire.  
To prevent personal injury or damage to property, always comply with the following instructions:
  - If the mains connection cable for the unit is damaged, it must be replaced by SIEGENIA, the company's customer service department, or similarly qualified personnel in order to prevent the development of hazards.
  - If any work is required for the connection of the device to the 230 V AC mains power supply, this may only be carried out by an electrician.
  - All-pole safety isolation is required if the customer is routing the mains cable.
  - The current VDE directives must be observed.
- Relevant country-specific regulations with regard to installation, functional testing, repair and maintenance of electrical products must be strictly followed for all work carried out on the voltage supply system or house wiring system.
- Should a solid object or any liquid get inside the unit, stop operation immediately and disconnect the device from the electricity grid.
- Danger due to third party attacks on SIEGENIA WIFI devices! Please observe the following notes to protect your system against attacks by third parties:
  - every SIEGENIA WIFI device is protected by two passwords (user and administrator). It is essential that you change these passwords after the initial setup. Do not leave in the default setting.
  - If the SIEGENIA WIFI devices are integrated in your home WIFI, this must be encrypted for operation.
  - Please choose secure passwords consisting of lower case and capital letters, numbers and special symbols.
- Slipping hazard – In order to prevent personal injury, it is essential to ensure that condensate does not flow onto pavements and freeze during outdoor temperatures below 0 °C.

### 4 General notes

All the dimensions in this documentation are specified in millimetres (mm).

### 5 Equipment

name	AEROTUBE AZ smart	AEROTUBE WRG smart
Operation via button on the device	●	●
Operation via SIEGENIA Comfort app	●	●
Heat recovery	–	●
Temperature and humidity sensor	●	●
Air quality sensor with CO <sub>2</sub> regulation	○	○

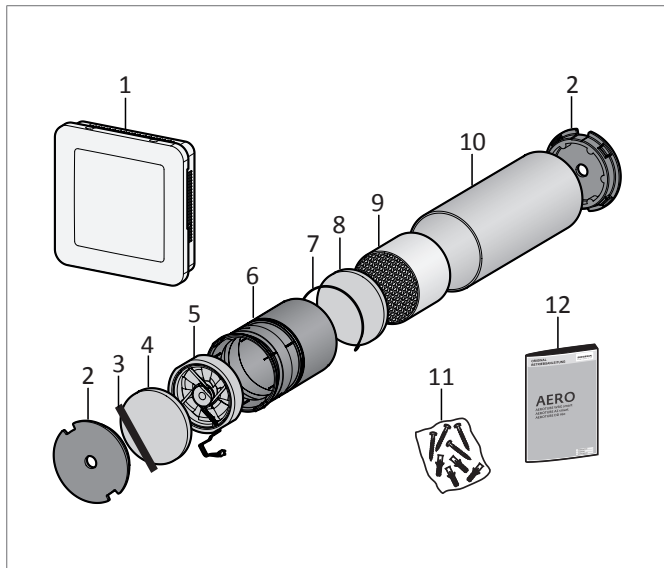
- Standard equipment    ○ Optional equipment

## 6 Scope of delivery and accessories



The scope of delivery can vary depending on the device equipment.

### 6.1 AEROTUBE

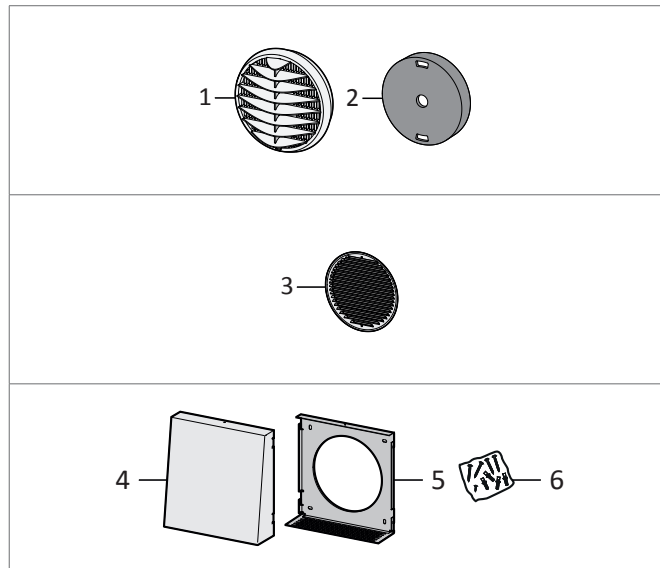


Item	name
1	Inner panel E28
2	Mounting cover
3	Filter holder AZ (AEROTUBE AZ smart)
4	Filter ISO coarse 45 % (AEROTUBE AZ smart)
5	Axial ventilator
6	Pipe inset (2-part)
7	Filter holder WRG (AEROTUBE WRG smart)
8	Filter ISO coarse 45 % (AEROTUBE WRG smart)
9	Ceramic heat accumulator (AEROTUBE WRG smart)
10	Ventilation pipe Ø 160
11	Bag of screws (4 screws and dowels)
12	Original operating instructions

#### Accessories

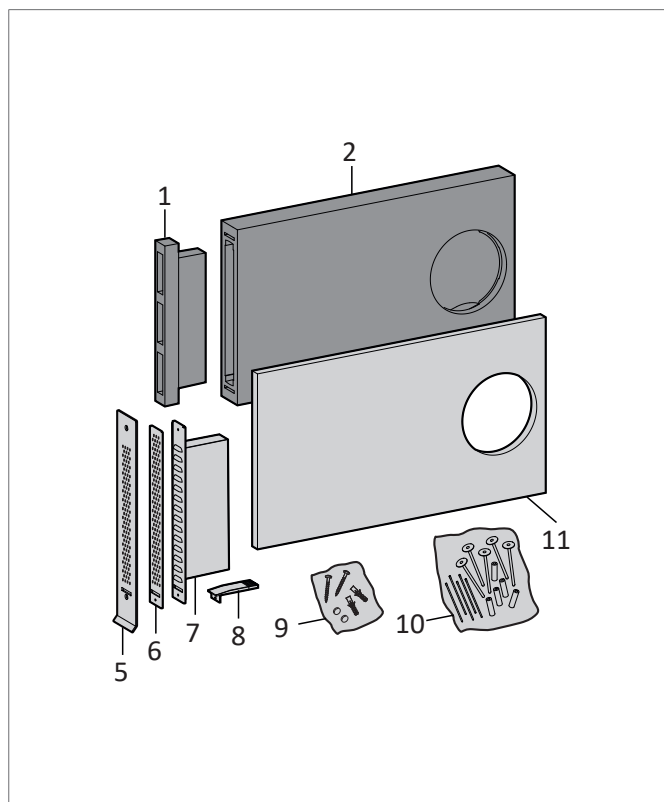
Item	name	Material number
3+8	Replacement filter (2 pieces)	vL3470140-093110

### 6.2 Weather grille



Item	name
1	PVC weather grille D 160
2	Mounting cover
3	Stainless steel / aluminium-zinc weather grille
4	Stainless steel weather grille hood
5	Wall fixing
6	Fixing set

### 6.3 Vent duct EPP

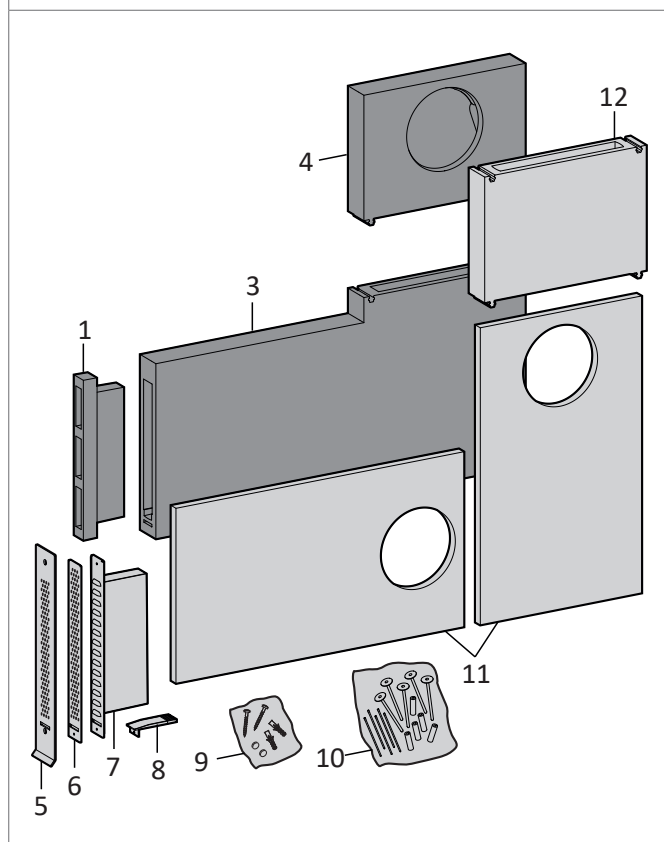


Item	name
1	Plastic cover
2	Vent duct EPP, type FL
3	Corner drive SFL
4	Transition piece SFL

#### Accessories

Item	name	Material number
5	Weather grille perforated brick aluminium	vL5474620-500010
6	Weather grille perforated grille aluminium	vL5474610-500010
7	Weather grille lamella	vL5474600-003010
8	Outlet duct*	–
9	Fixing set*	–
10	Spacer (set: 10 pieces)	vL5478700-000020
11	Insulation plate FL	vL5474510-099010
12	Extension (max. 5 pieces)	vL5474730-099010

\*Outlet duct and fixing set Included in scope of delivery "weather grille".



## 7 Assembly

### 7.1 Installation requirements

- The installation site of AEROTUBE should not be accessible to third parties.
- Suitable clamps must be selected according to the composition of the installation site and provided by the customer.
- AEROTUBE should be installed to be as free from interference as possible. The following interferences can have a negative influence on the WLAN signal:
  - water pipes
  - stone and concrete walls
  - metal objects
  - air conditioning units
  - wireless devices (e. g. radio telephones, baby monitors, Bluetooth loudspeakers, etc.)
  - WIFI networks on the same wireless channels (e. g. the neighbour's WIFI router)
- If energy-carrying cables are routed in parallel to data cables (ISDN, DSL, etc.), this could lead to interference e.g. in the speed of the data transmission.

### 7.2 Installation of ventilation pipe and PVC weather grille D 160

#### 7.2.1 Drilling the core hole (room side) and installation of ventilation pipe

##### NOTICE

##### Material damage due to holes in the wall

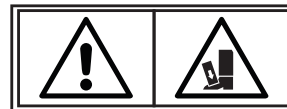
You can damage cables or lines while drilling into the wall.

- Prior to installation, check with a test unit that there are no lines or cables routed in the wall at the installation position.

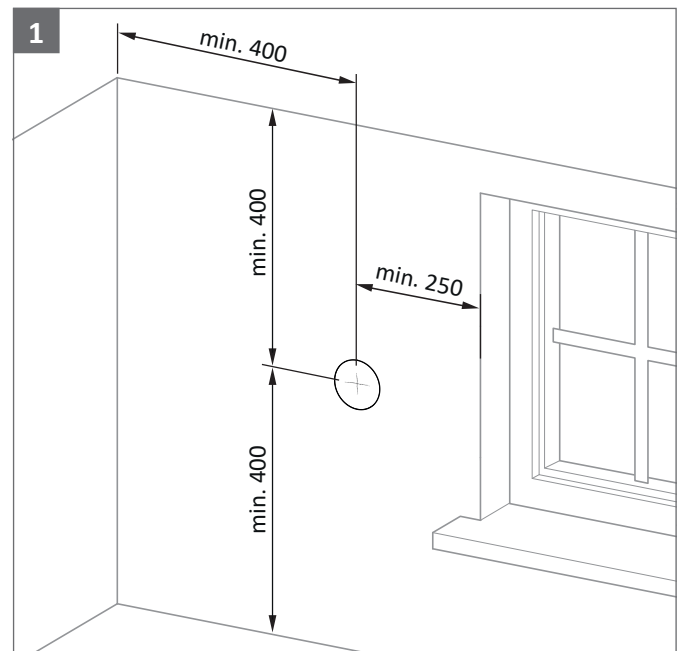
##### WARNING

##### High weight of the ceramic heat accumulator in the pipe inset

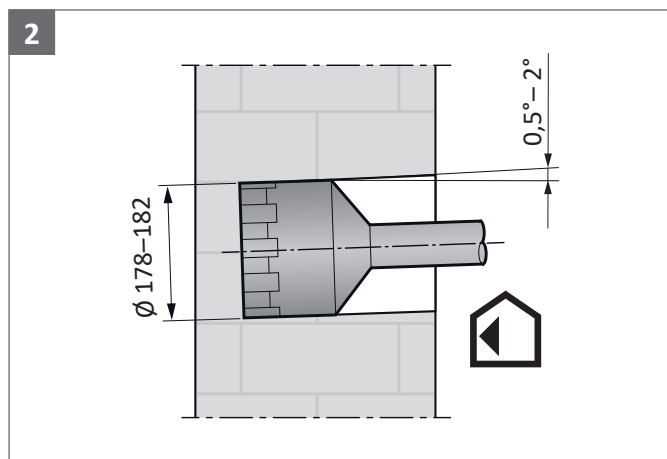
Risk of injury due to pipe inset falling out



- Ensure that the pipe inset does not fall down.
- Proceed with caution.



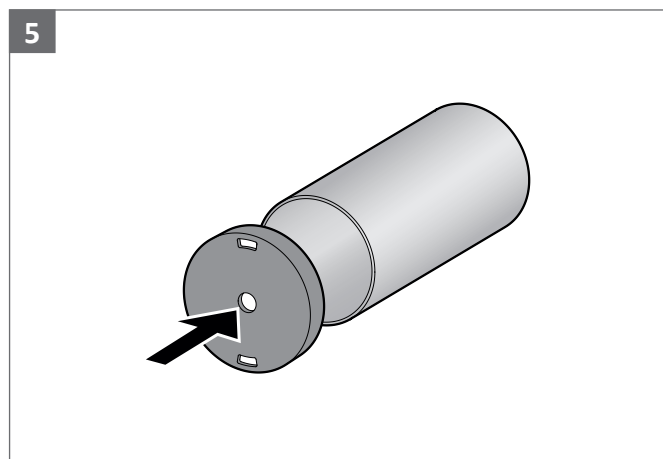
Mark drill holes (room side)



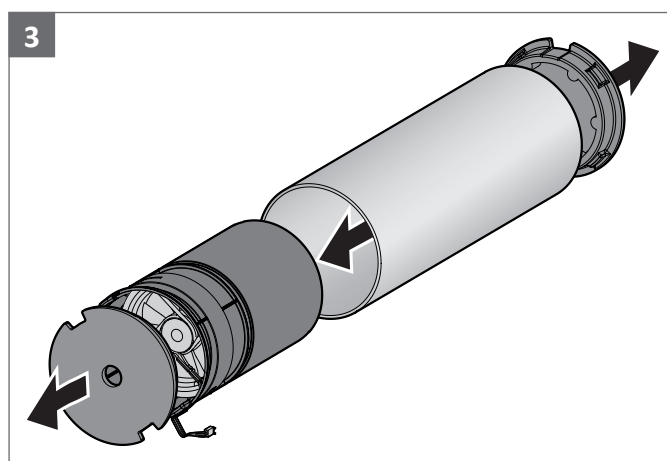
Drill the core hole



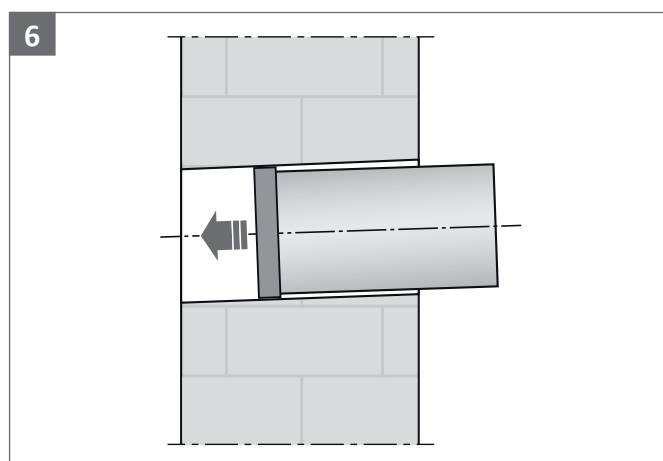
In order for condensate to drain outwards, the hole must have an incline of 0.5–2°. However, the slope must not exceed 3° as this would make it impossible to remove the pipe inset from the ventilation pipe for maintenance purposes.



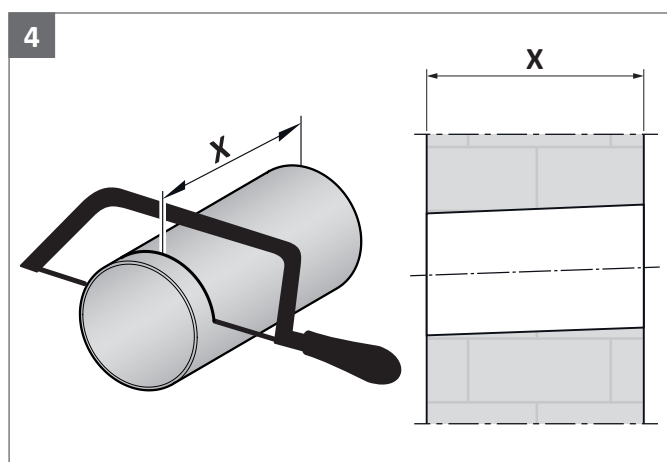
Slide mounting cover for weather grille onto the pipe



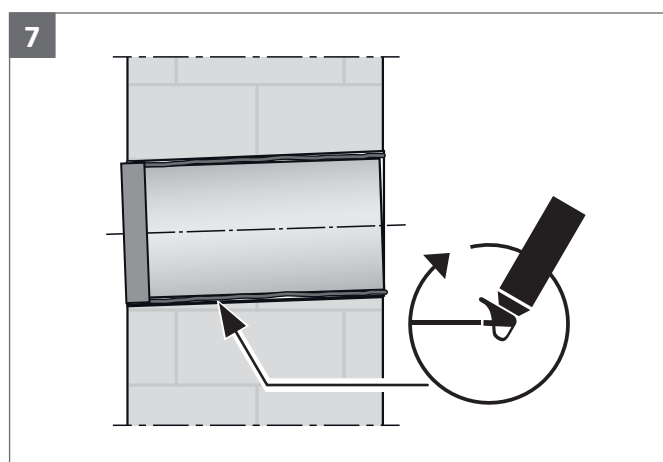
Remove mounting cover and complete pipe inset



Insert pipe with mounting cover into the wall

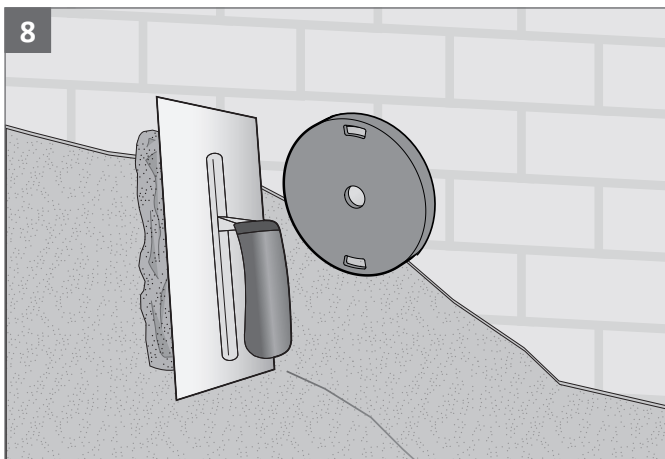


Shorten pipe (minimum length for pipe = 270 mm)



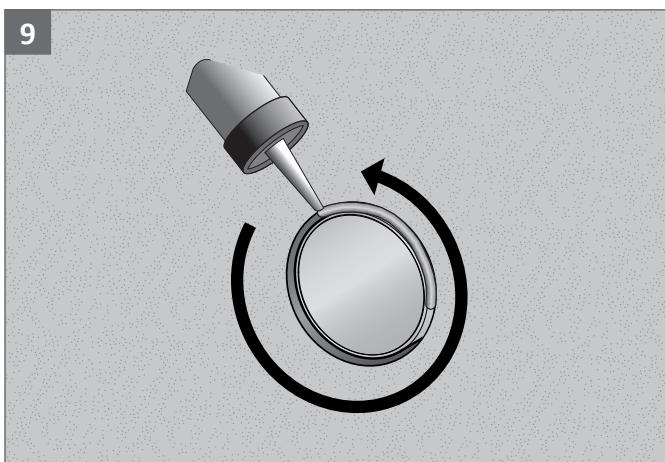
Insulate pipe up to the mounting cover (according to requirement)

8



Plaster the outside wall

9



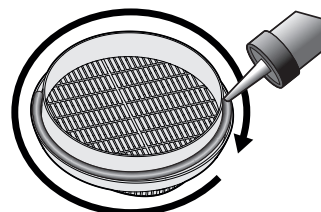
Remove mounting cover and seal pipe



inside = airtight seal  
outside = free-air seal

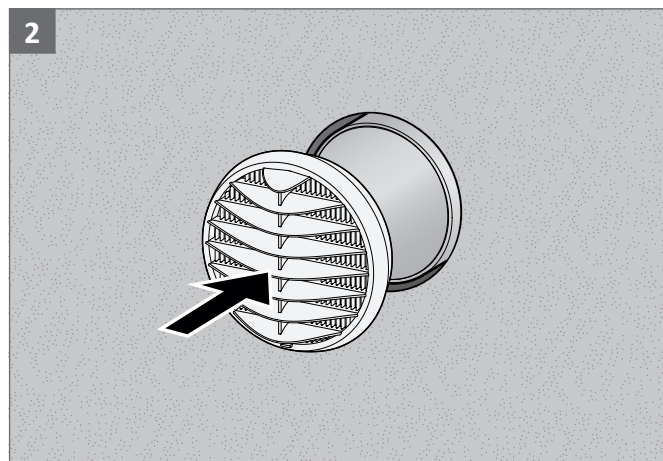
## 7.2.2 Installation of PVC weather grille D 1600

1



Seal weather grille

2



Position weather grille and press firmly against the wall



The lamellae of the weather grille must point downwards.

## 7.3 Installation of ventilation pipe and stainless steel weather grille cover or stainless steel / aluminium-zinc weather grille

### 7.3.1 Drilling the core hole (room side) and installation of ventilation pipe

#### NOTICE

##### Material damage due to holes in the wall

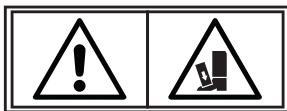
You can damage cables or lines while drilling into the wall.

- Prior to installation, check with a test unit that there are no lines or cables routed in the wall at the installation position.

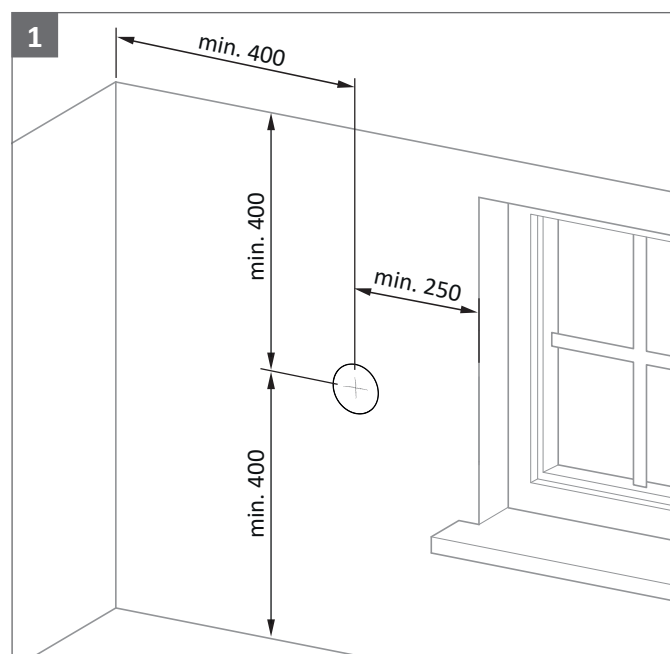
#### WARNING

##### High weight of the ceramic heat accumulator in the pipe inset

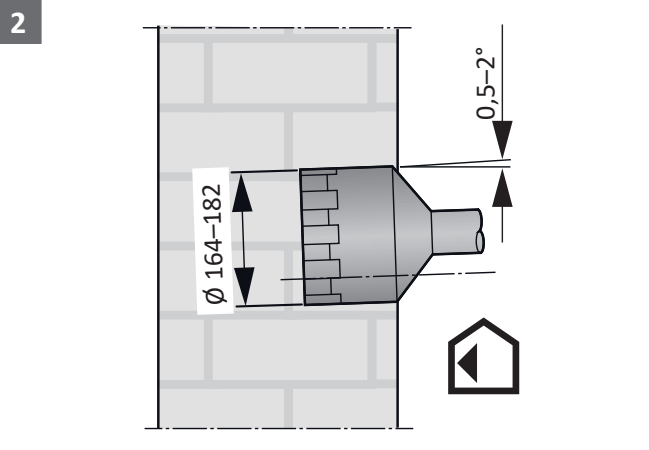
Risk of injury due to pipe inset falling out



- Ensure that the pipe inset does not fall down.
- Proceed with caution.



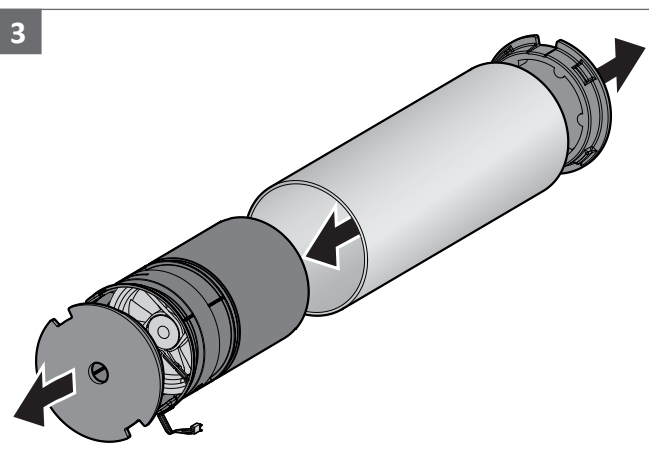
Mark drill holes (room side)



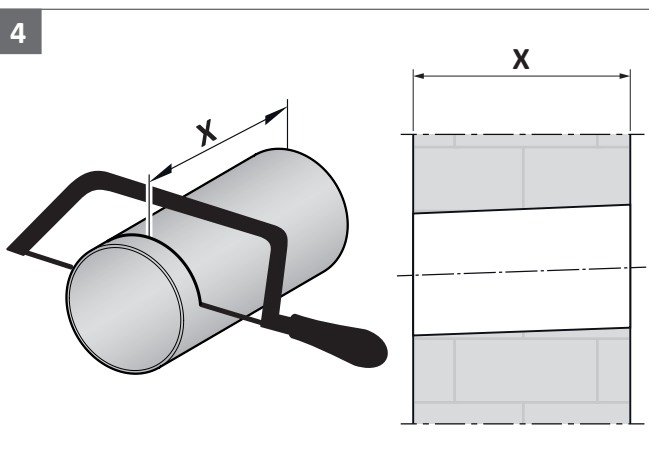
Drill the core hole



In order for condensate to drain outwards, the hole must have an incline of 0.5–2°. However, the slope must not exceed 3° as this would make it impossible to remove the pipe inset from the ventilation pipe for maintenance purposes.

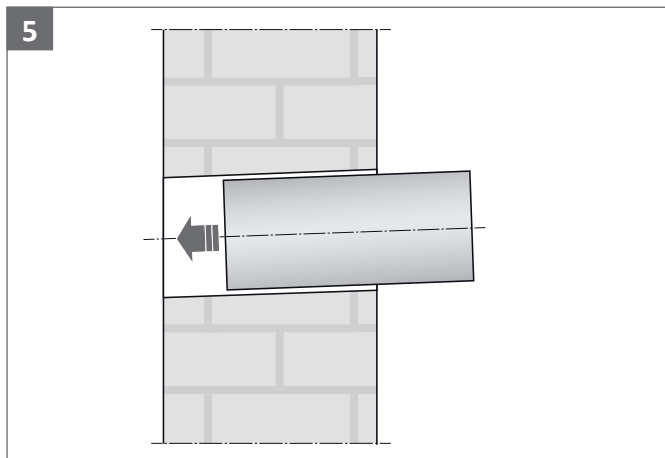


Remove mounting cover and complete pipe inset

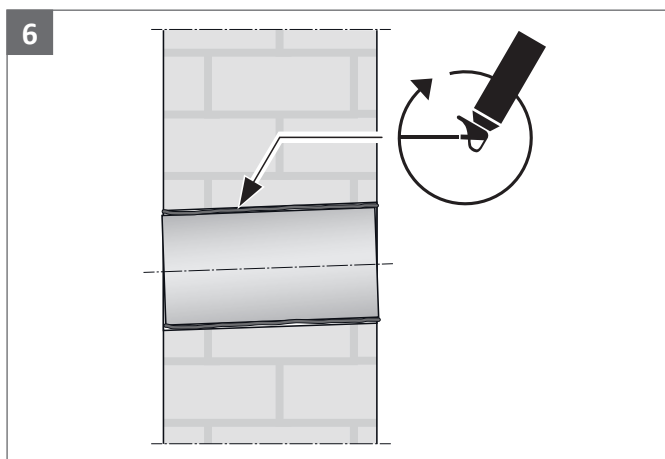


Shorten pipe (minimum length for pipe = 270 mm)

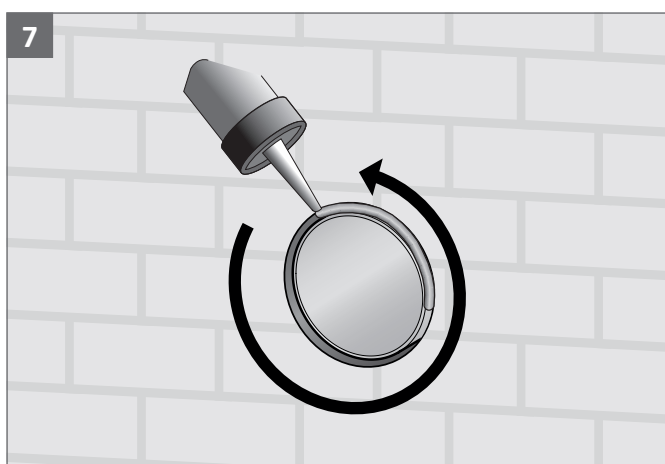
### 7.3.2 Mounting the stainless steel / aluminium-zinc weather grille



insert pipe in the wall



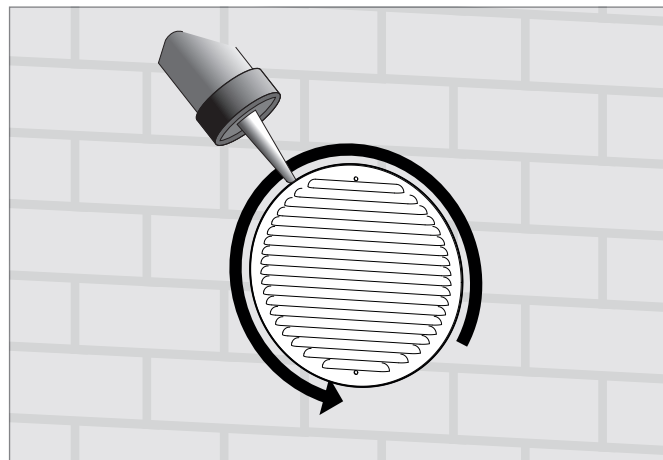
insulate pipe (according to requirement)



seal pipe



inside = airtight seal  
outside = free-air seal



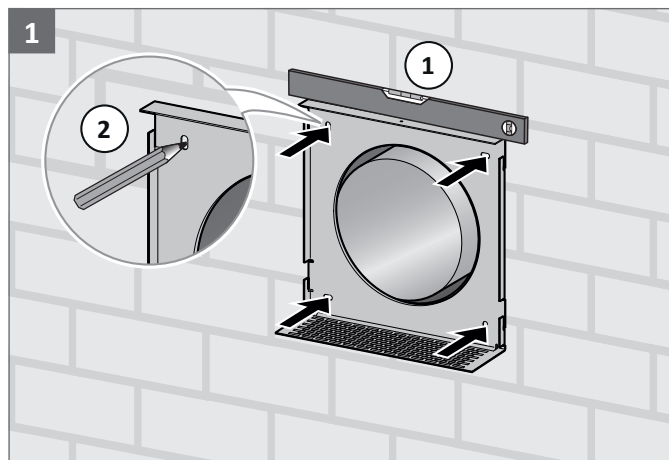
Position weather grille and glue into place



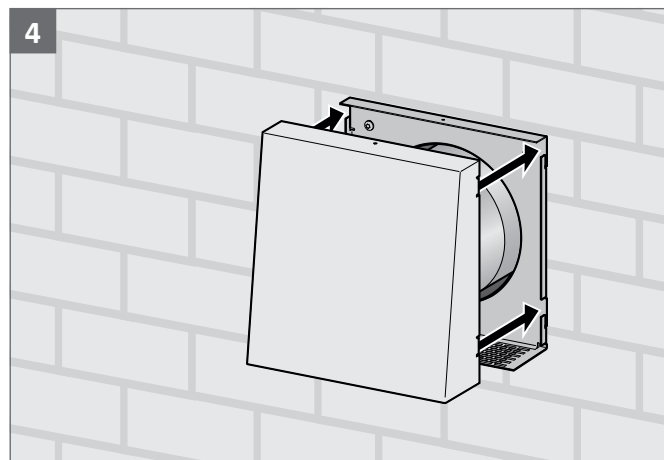
The lamellae of the weather grille must point downwards.



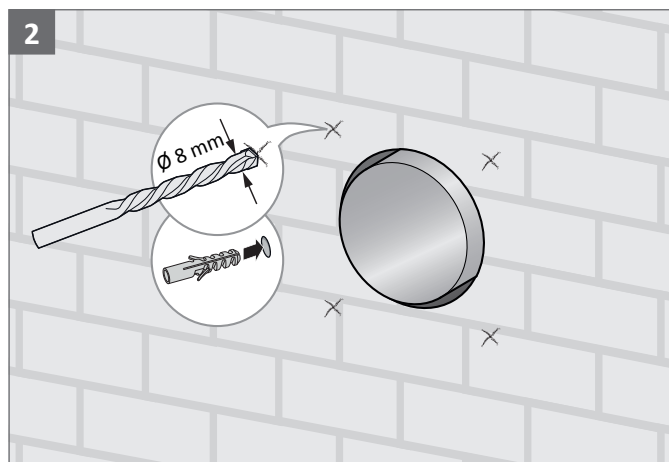
### 7.3.3 Installation of stainless steel weather grille cover



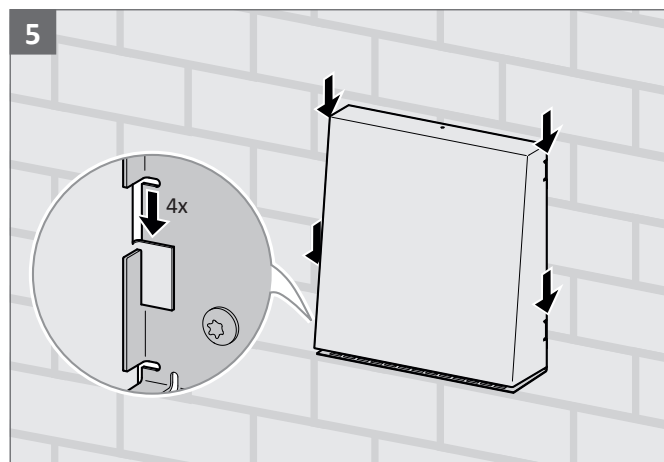
Adjust wall fixing ① and mark fixing holes ②



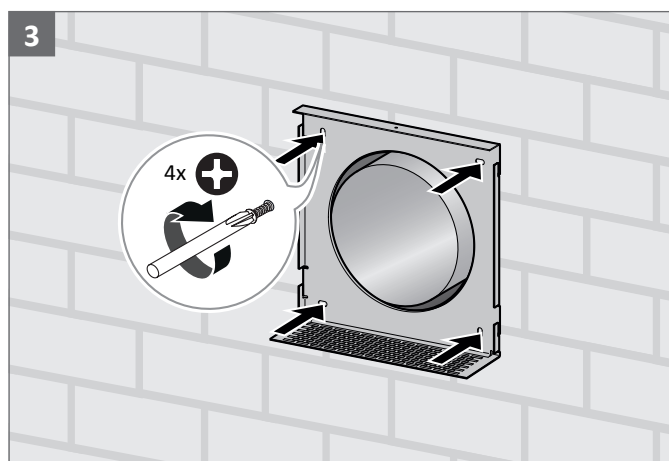
Adjust weather grille cover to the cable outlets of the wall fixing



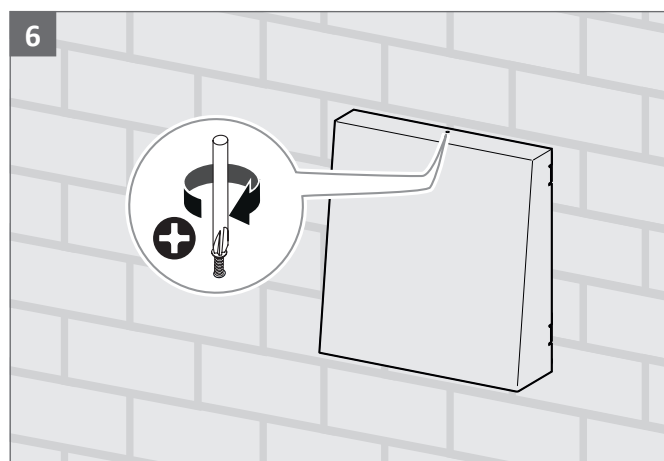
Drill fixing holes and insert dowels



Hook weather grille cover into the wall fixing



Fix wall fixing with screws



Fix weather grille cover with screw

## 7.4 Installation of ventilation pipe and vent duct EPP

### 7.4.1 Drilling the core hole (room side) and installation of ventilation pipe

#### NOTICE

##### Material damage due to holes in the wall

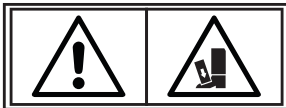
You can damage cables or lines while drilling into the wall.

- Prior to installation, check with a test unit that there are no lines or cables routed in the wall at the installation position.

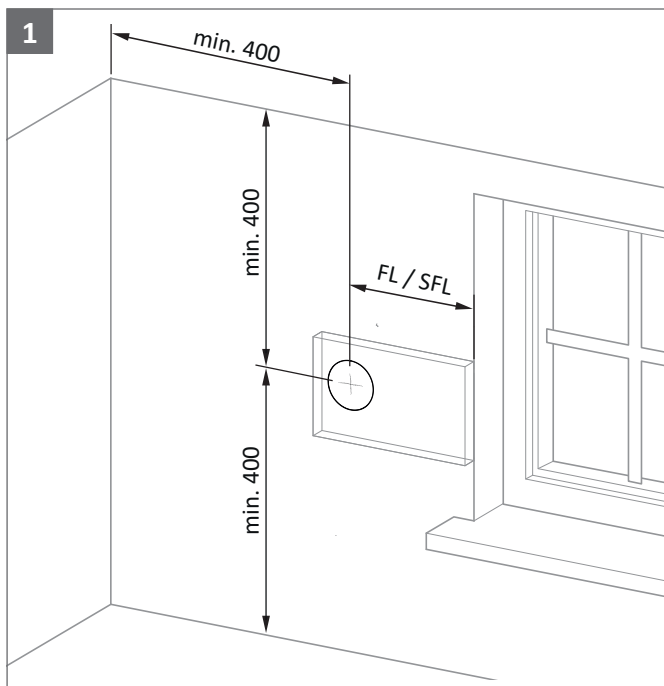
#### WARNING

##### High weight of the ceramic heat accumulator in the pipe inset

Risk of injury due to pipe inset falling out



- Ensure that the pipe inset does not fall down.
- Proceed with caution.

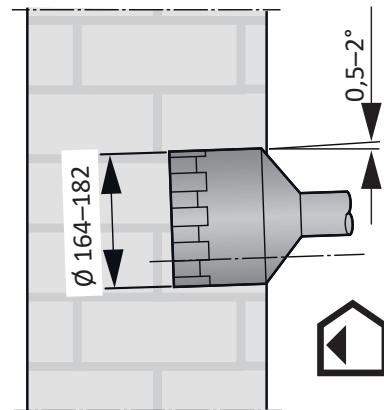


Mark core hole

FL: min. 250; max. 500

SFL: min. 350; max. 600

2

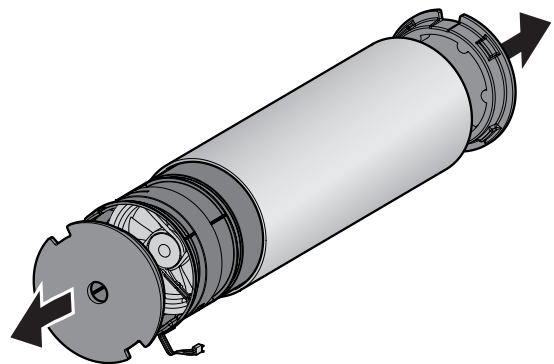


Drill the core hole



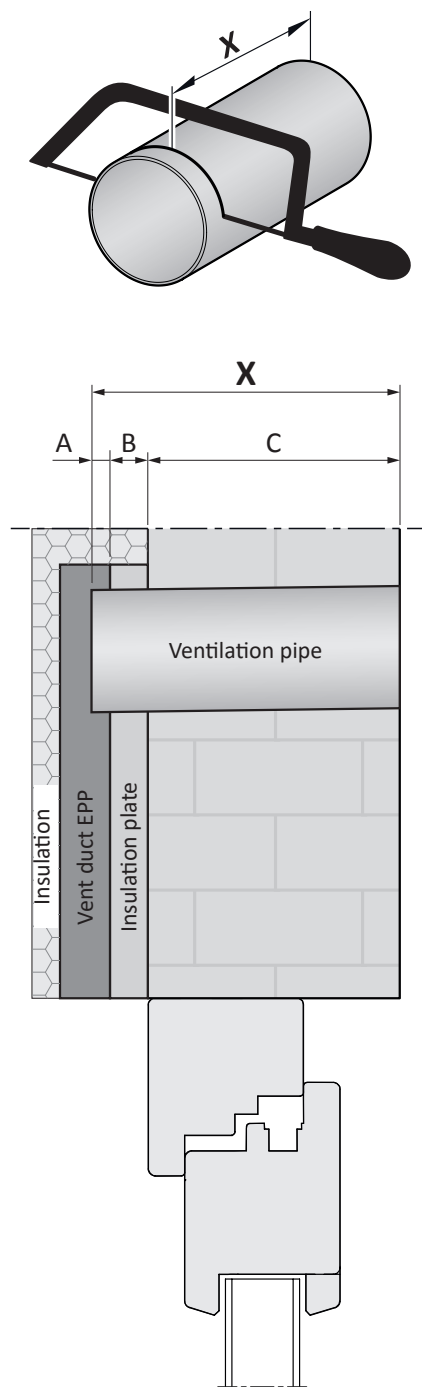
In order for condensate to drain outwards, the hole must have an incline of 0.5–2°. However, the slope must not exceed 3° as this would make it impossible to remove the pipe inset from the ventilation pipe for maintenance purposes.

3



Remove mounting cover and complete pipe inset

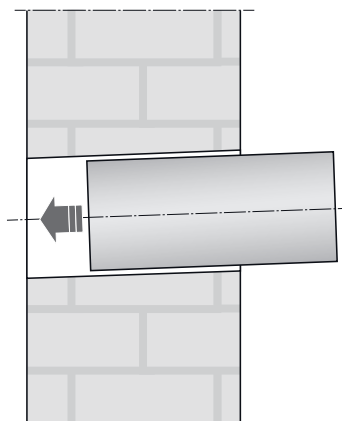
4



Shorten pipe:

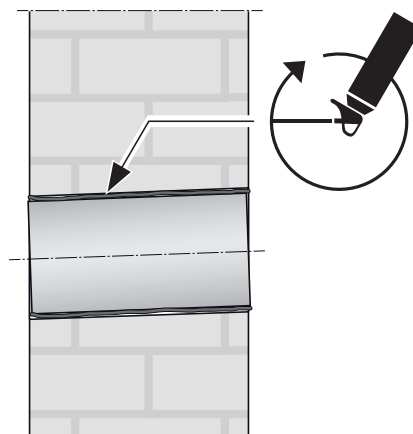
- A insertion depth of ventilation pipe in vent duct EPP (min. 8 mm; max. 15 mm)
  - + B back-up insulation of vent duct (combine insulation plates according to required wall insulation)
  - + C wall thickness incl. plaster
- 
- X** pipe length (min. 270 mm)

5



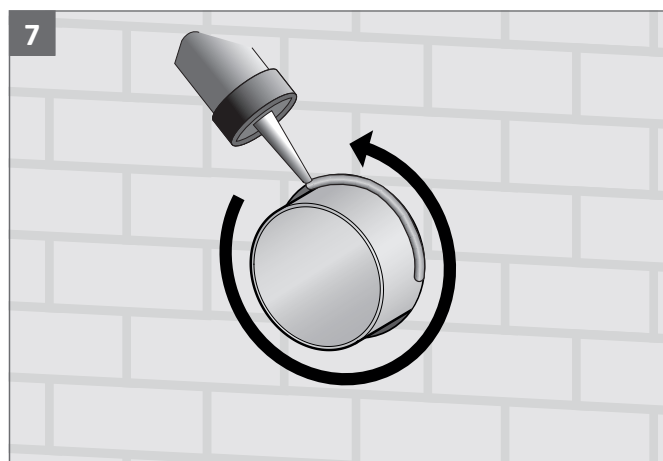
insert pipe in the wall

6



insulate pipe (according to requirement)

7



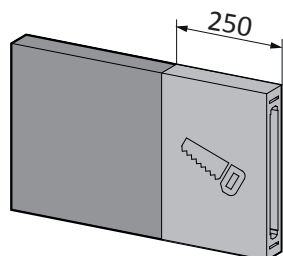
seal pipe



inside = airtight seal  
outside = free-air seal

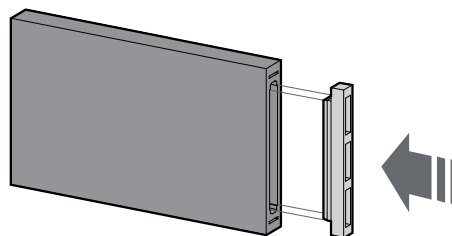
## 7.4.2 Installation of vent duct type FL

1

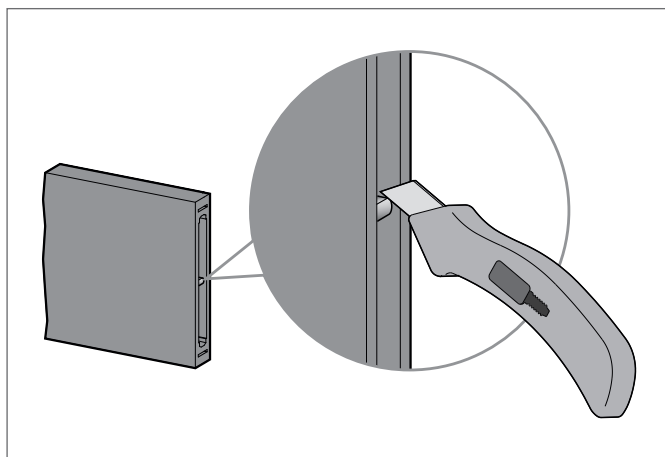


Shorten duct using a saw or cutter knife within the marked area if required.

2

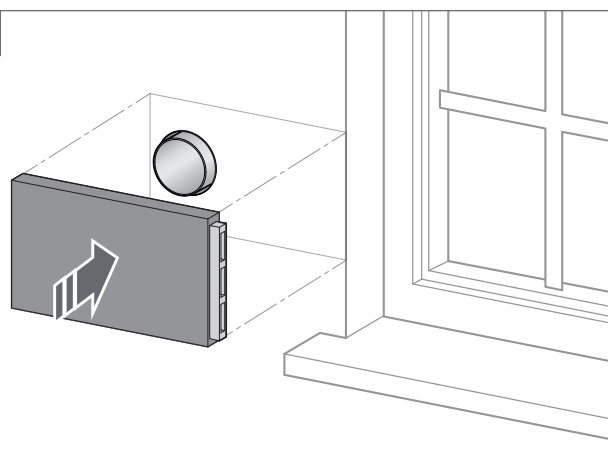


Insert plastic cover

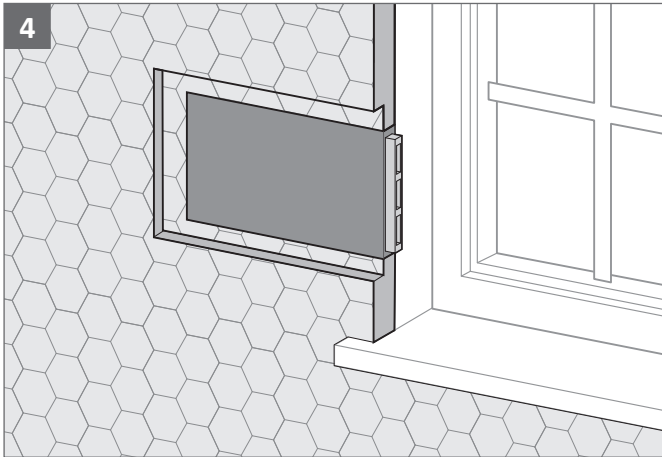


There is a separating bar inside the duct. If the duct is shortened by more than 200 mm, the separating bar must be cut using the cutter knife.

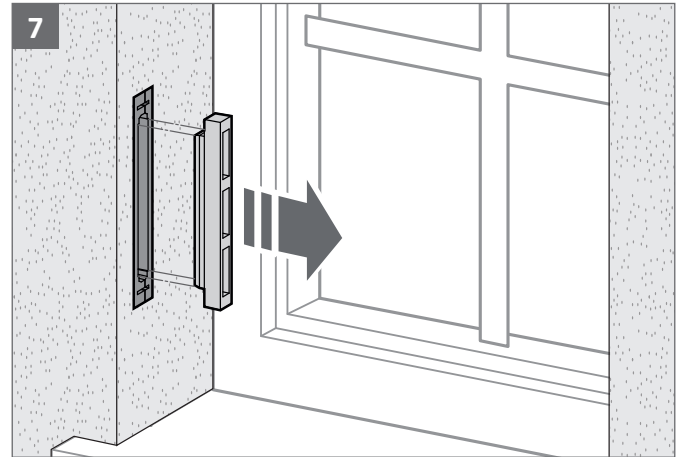
3



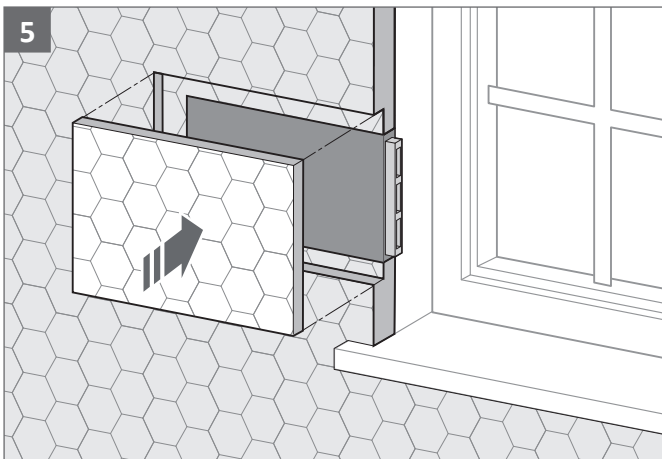
Position duct on pipe and fix to outside wall (screw or glue)



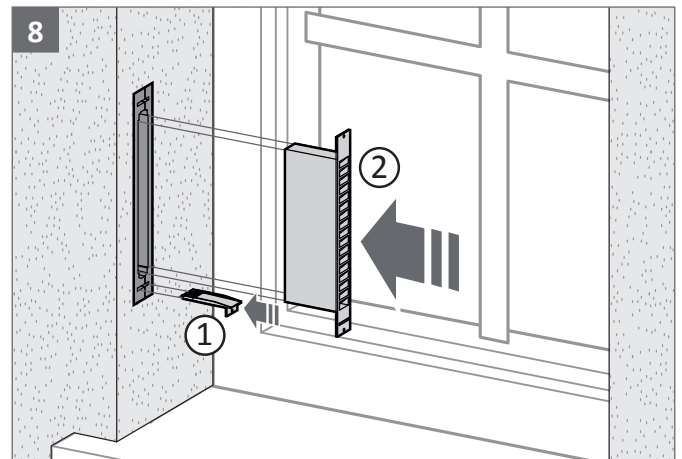
Attach thermal insulation



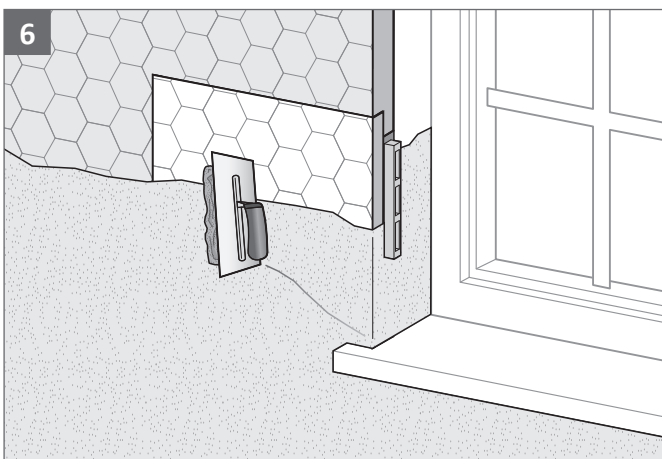
Remove plastic cover



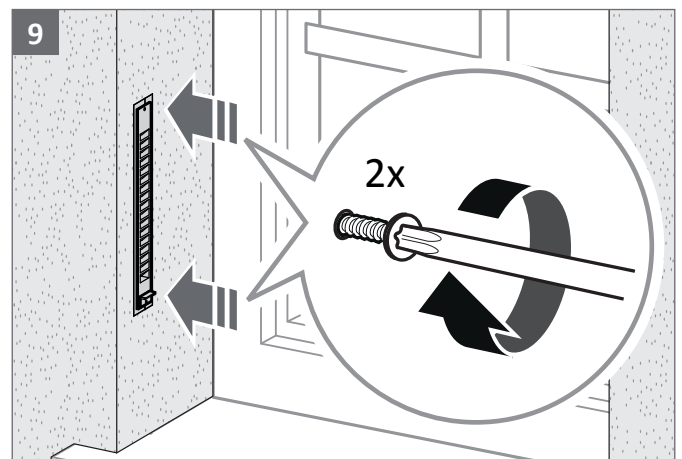
Attach thermal insulation



Position outlet duct and weather grille in the vent duct



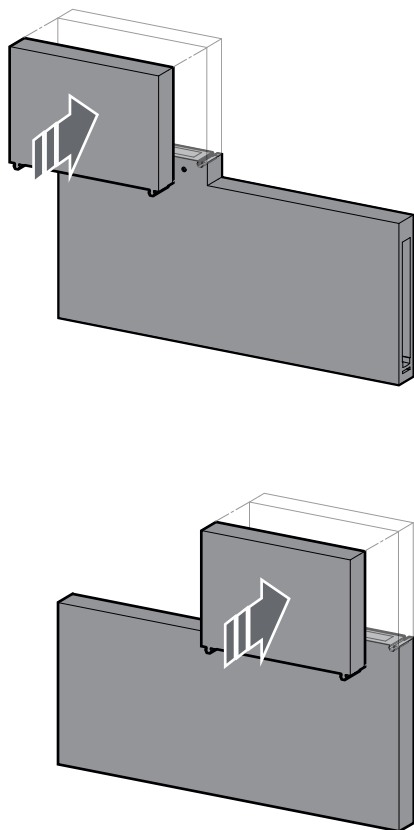
Plaster the wall and duct



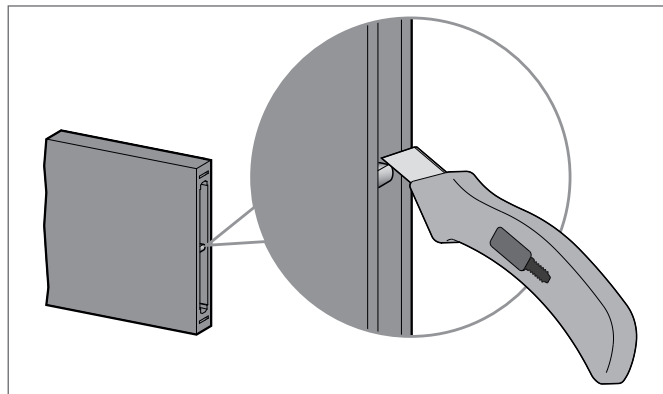
Fix the weather grille with dowels/screws

## 7.4.3 Installation of vent duct type SFL

1

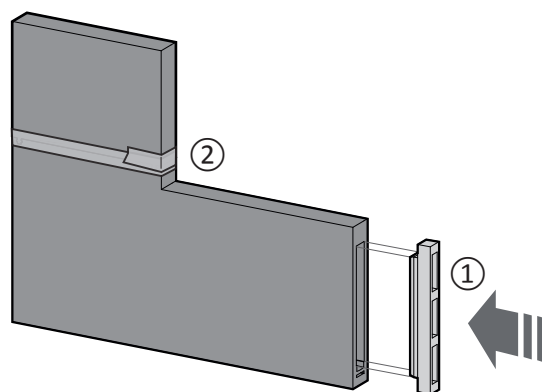


Slide transition piece onto corner drive. The corner drive can point to the left or right according to the installation location.



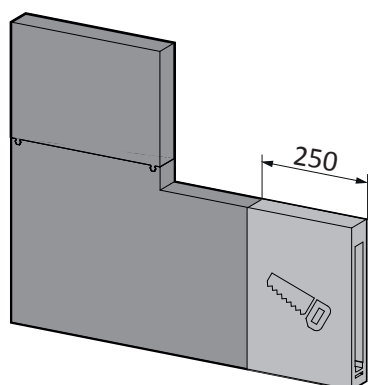
There is a separating bar inside the duct. If the duct is shortened by more than 200 mm, the separating bar must be cut using the cutter knife.

3



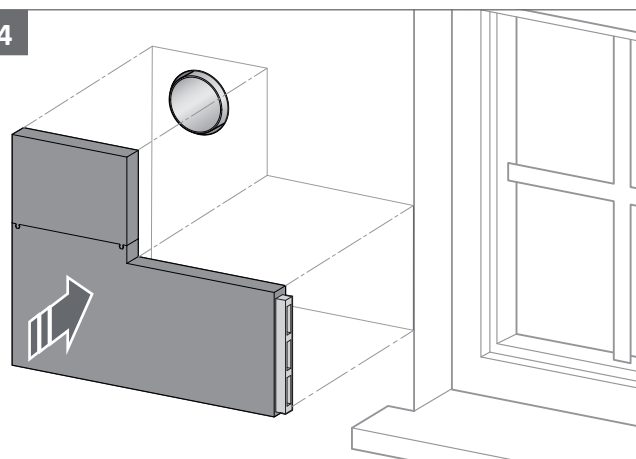
Insert plastic cover ①, ② fix transition piece to corner drive with adhesive tape

2

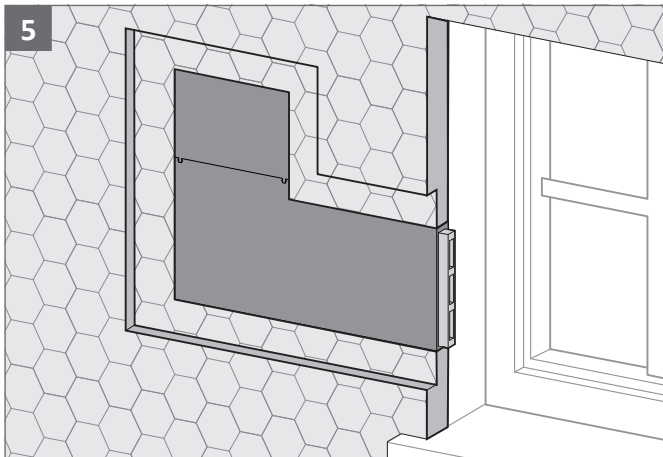


Shorten duct using a saw or cutter knife within the marked area if required.

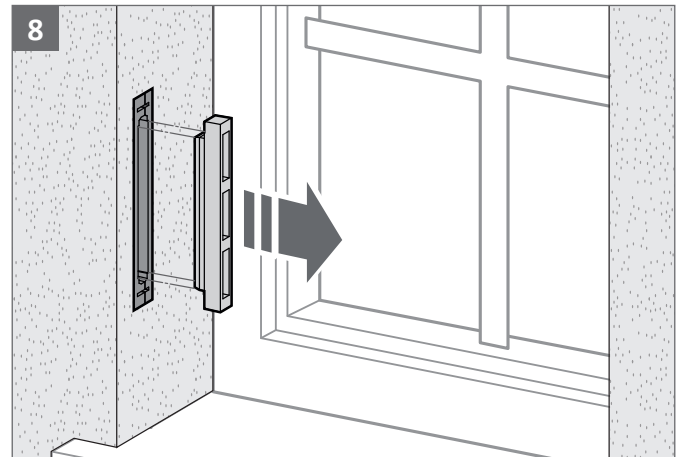
4



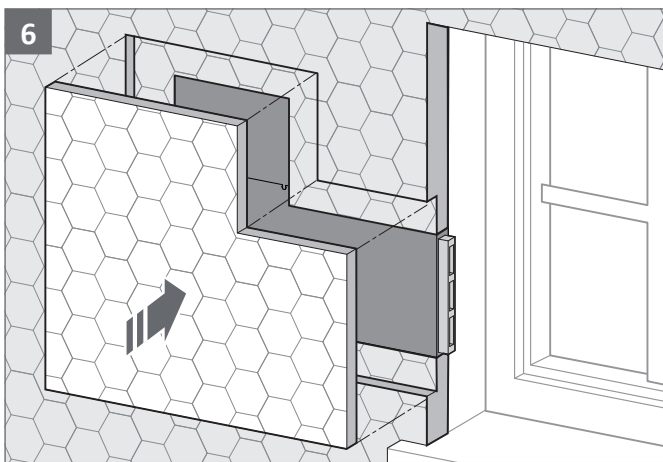
Position duct on pipe and fix to outside wall (screw or glue)



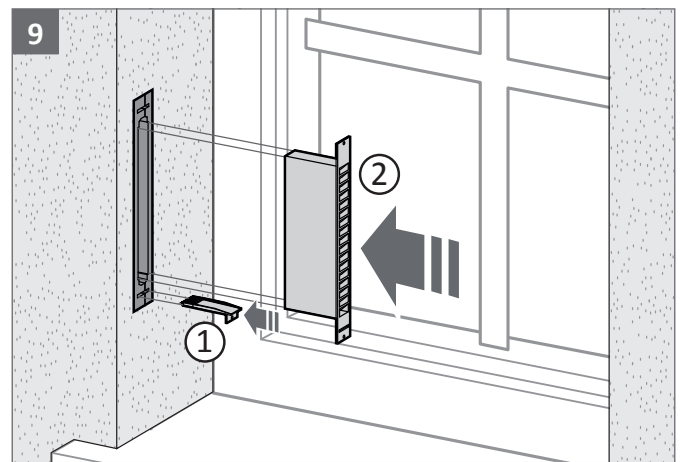
Attach thermal insulation



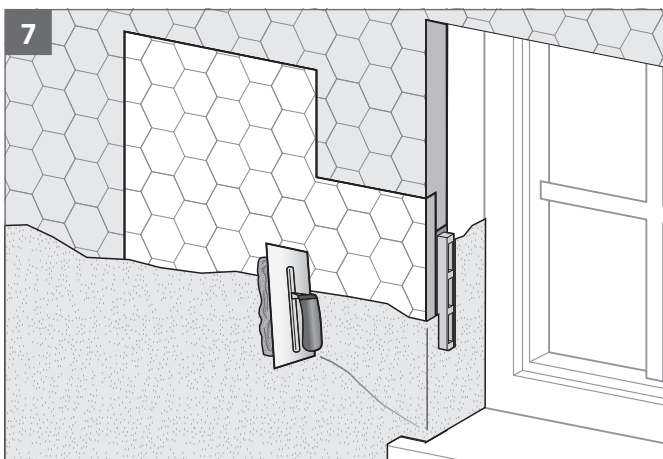
Remove plastic cover



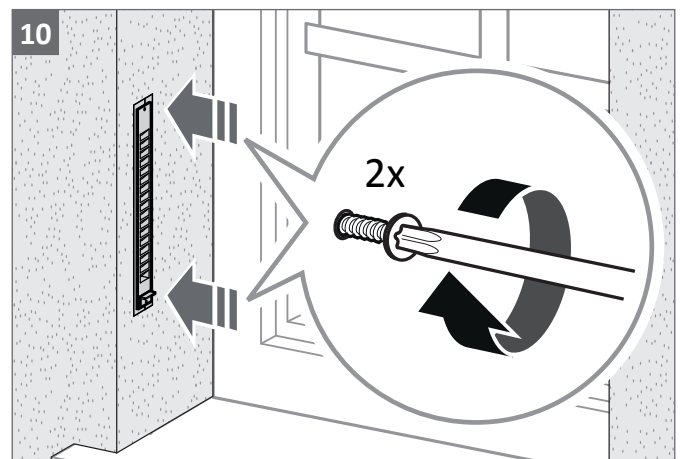
Attach thermal insulation



Position outlet duct ① and weather grille ② in the vent duct

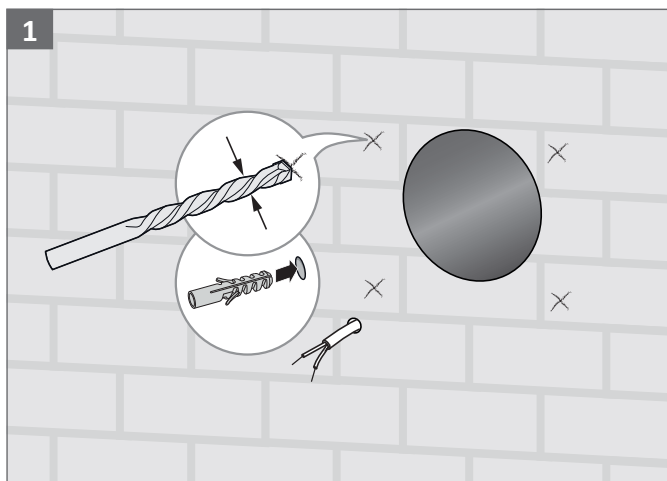


Plaster the wall and duct

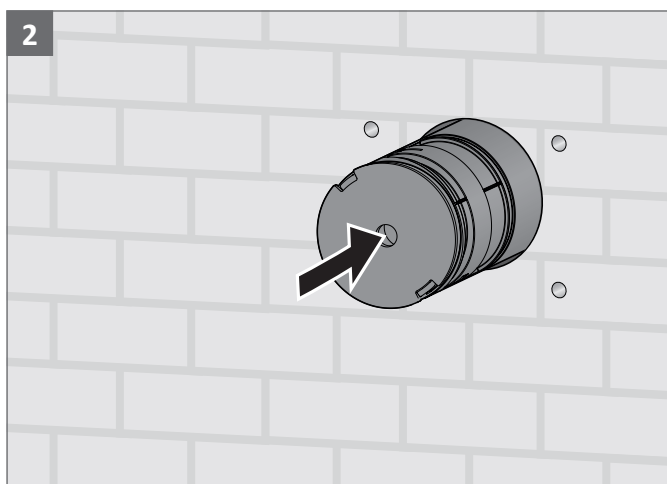


Fix the weather grille with dowels/screws

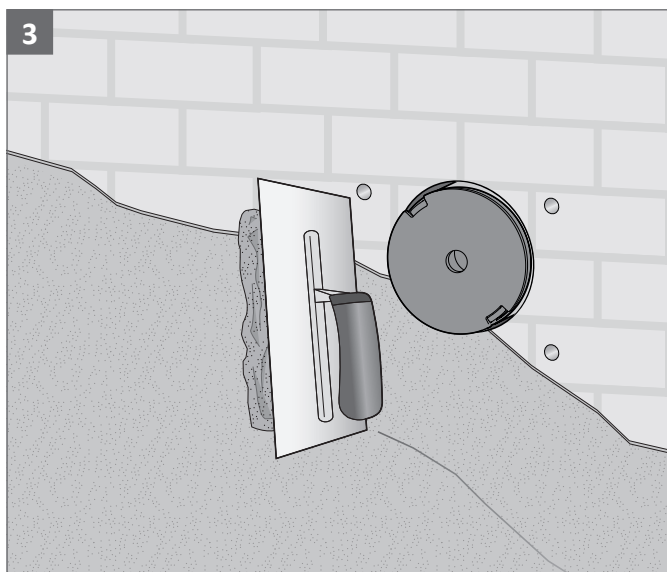
## 7.5 Installation of the inner panel E28



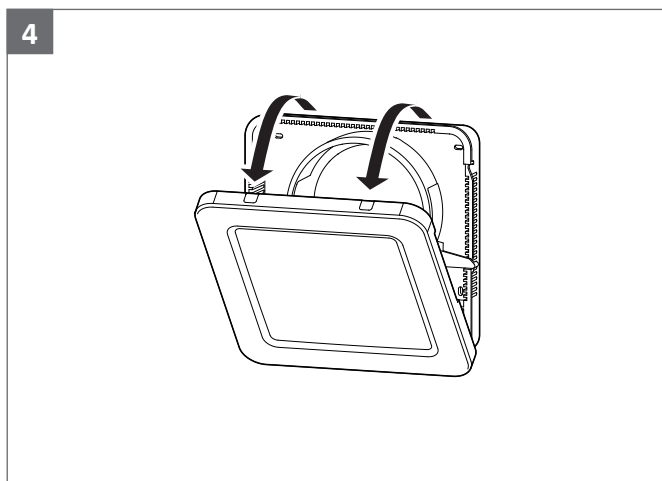
Drill fixing holes and route cable



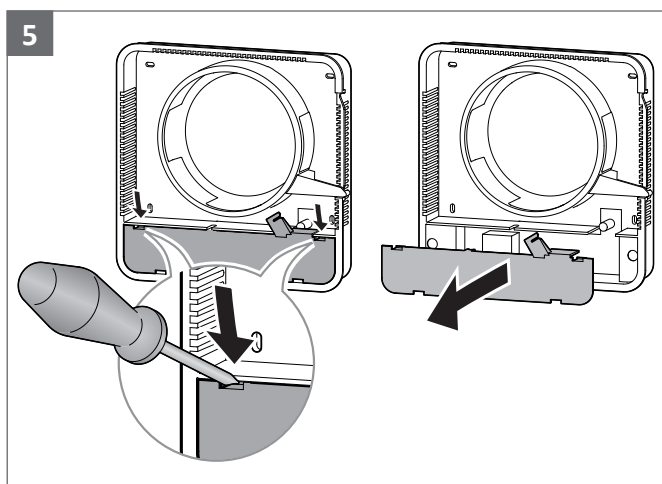
Push complete pipe inset with mounting cover into the pipe



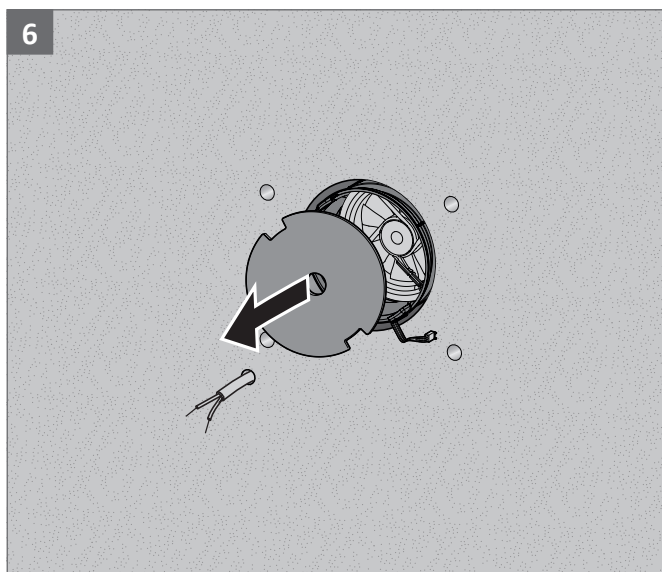
Plaster the wall



Remove inner panel

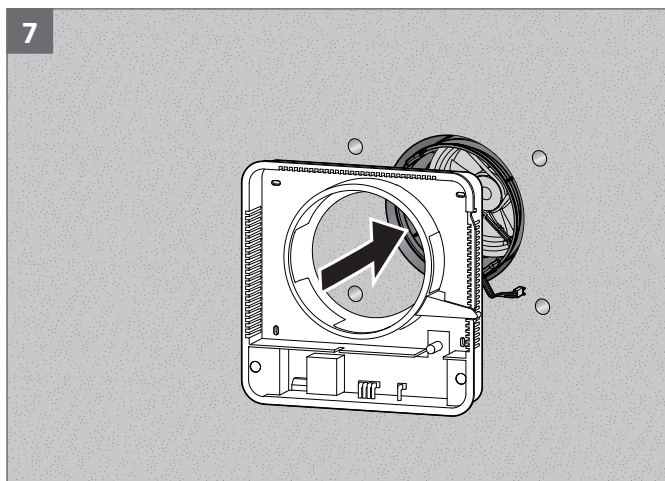


Remove electronics cover

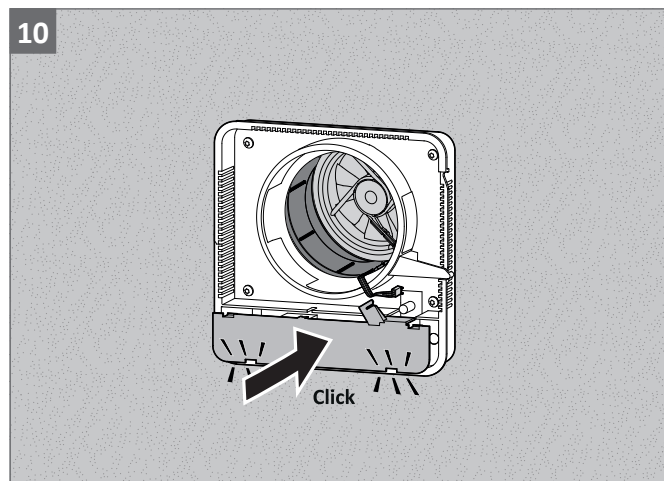


Remove mounting cover

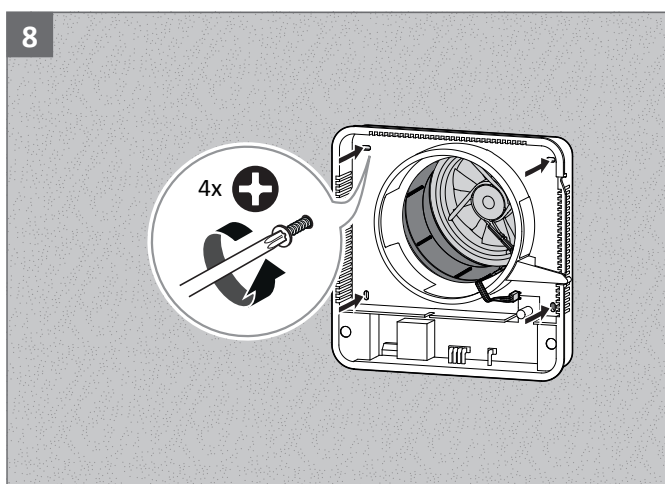




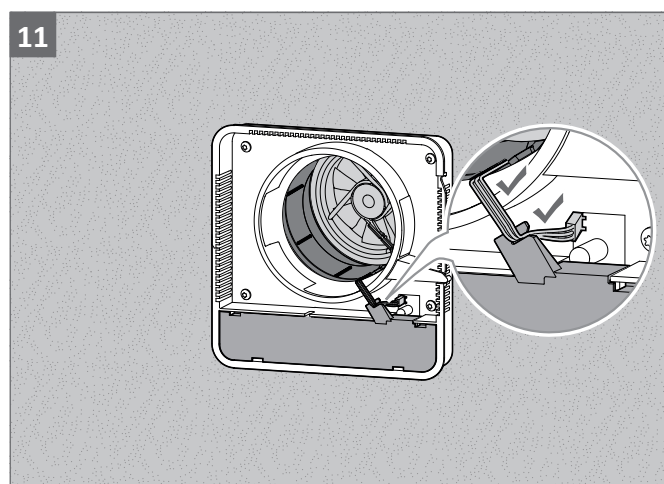
Position the casing



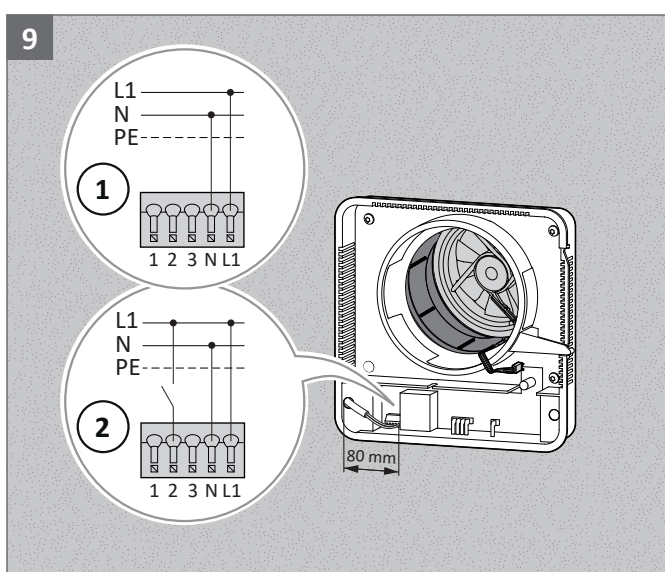
Clip electronic cover into place



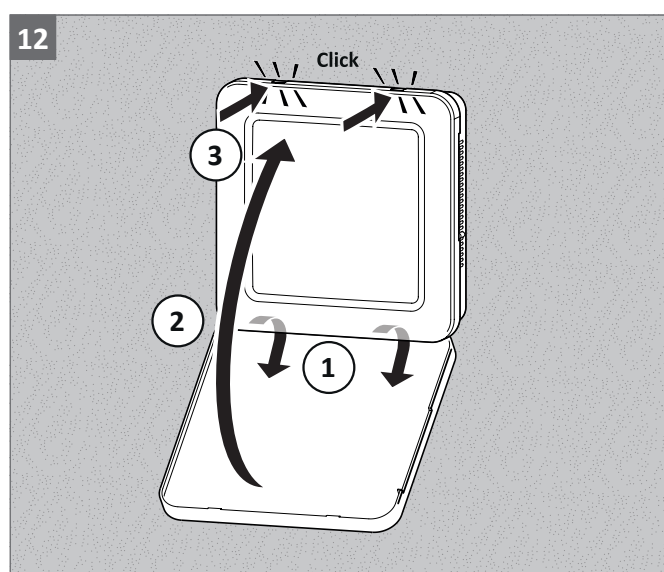
Fix the casing



Connect axial ventilator



Connect cable: ① = standard; ② = bathroom control



Clip on inner panel



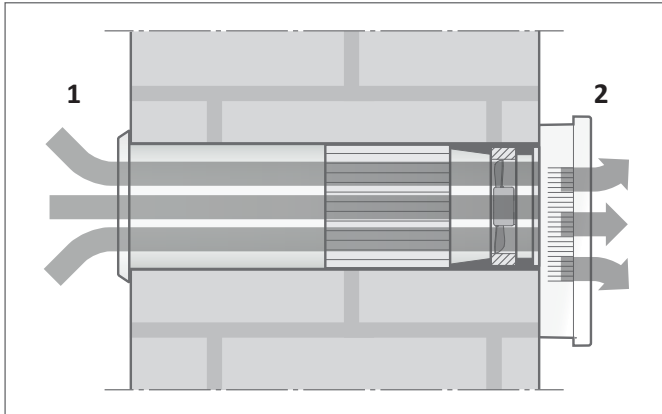
The cable outlet in the inner panel must be on the slider side.

## 8 Unit function

### 8.1 Ventilation and air extraction with blowers

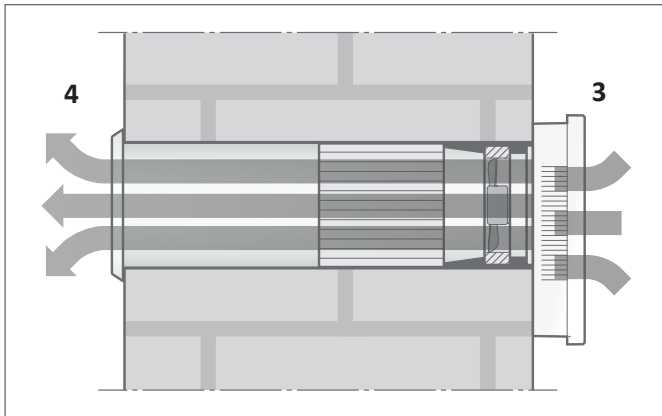
#### 8.1.1 Supply air operation

- The outside air (1) is drawn in and enters the room as filtered supply air (2).



#### 8.1.2 Exhaust air operation

- The exhaust air (3) is drawn in and is released into the atmosphere as exhaust air (4).



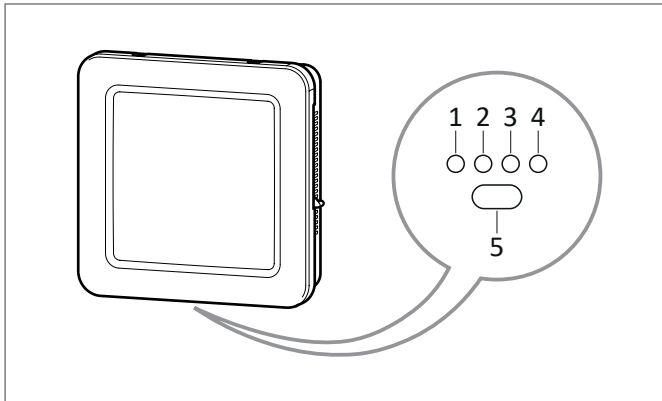
#### 8.1.3 Supply and exhaust air operation

- In one minute cycles, the AEROTUBE automatically changes the air flow direction between supply air operation and exhaust air operation.
- Heat recovery (only AEROTUBE WRG smart):
  - the warm exhaust air is absorbed and stored by the ceramic heat accumulator in exhaust air operation.
  - In supply air operation the stored heat is transferred to the supply air and thus proceeds into the room preheated.

#### 8.1.4 Ventilation in automatic mode

- The blower levels 1 to 3 are controlled in automatic mode. The necessary blower level is dependent on the temperature and air humidity as well as optionally on the CO<sub>2</sub> value. The least favourable value is the significant value.
- The blowers are not switched off, but continue to run at a minimum level.
- The temperature and humidity sensor measures the inside temperature as well as the inside humidity.
- On the basis of human expiration (hydrogen H<sub>2</sub>), the air quality determines a derived CO<sub>2</sub> value.

## 8.2 Button and LED indicator



Item	name	LED
1+2	Blower level 1	● ○ ○ ○ 1 light up green
	Blower level 2	○ ● ○ ○ 2 lights up green
	Blower level 3	● ● ○ ○ 1+2 light up green
3	Automatic mode	○ ○ ● ○ 3 lights up green
	Warm-up phase (calibration)	○ ○ ● ○ 3 flashes green
4	Supply and exhaust air operation <sup>1)</sup>	○ ○ ○ ● 4 lights up blue
	Filter replacement indicator	○ ○ ○ ● 4 flashes blue
5	Button	—

<sup>1)</sup> The "supply and exhaust air operation" mode of operation can only be changed or deactivated via the SIEGENIA Comfort app.

## 8.3 Slider

### ! WARNING

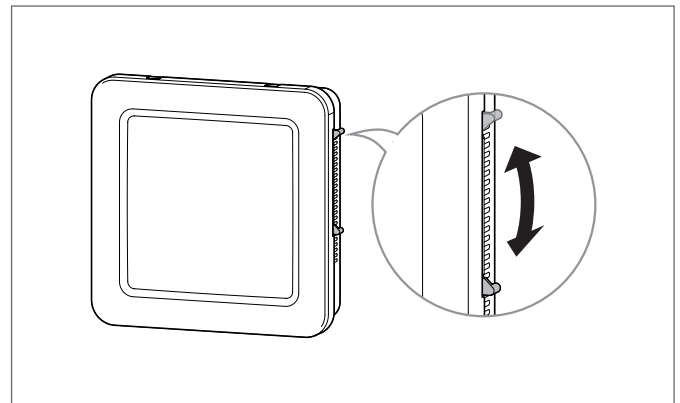
**There is a risk of injury from wasp or bee stings**

Insects could nest themselves in closed ventilation slots. The insects could fly out and sting you when you open the unit for maintenance purposes.

- To prevent insects from nesting themselves in the device, do not close the ventilation slots for several days in succession.
- Wear protective clothing to open the device if the ventilation slots have been closed for several days in succession.

### 8.3.1 Manual slider

- The manual slider must be moved downwards before the AEROTUBE is switched on. The slider must be moved downwards again to be closed.



### 8.3.2 Electrical slider (optional)

- The electrical slider opens automatically when the AEROTUBE is switched on and closes automatically when the AEROTUBE is switched off.

## 9 Commissioning

### 9.1 Notes on calibration

- For units with air quality sensors, a one-off calibration of the sensor is performed during the commissioning. The sensor adapts to the environment.
- The room temperature must be between 5 °C and 40 °C.
- The calibration lasts 24 hours.
- The automatic mode already functions during the calibration.
- The air quality is already displayed during the calibration in the SIEGENIA Comfort app.
- The accuracy of the sensor rises with the continuing duration of the calibration.

### 9.2 Performance of calibration

1. Air the room thoroughly for 10 min.
2. Switch AEROTUBE to the electricity grid.
3. The air quality sensor automatically starts a warming-up phase (duration approx. 5 min.). During the warming-up phase the AEROTUBE cannot be switched and runs at blower level 2.



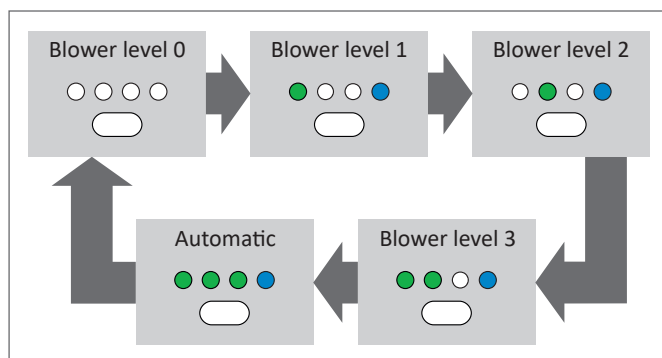
LED 3 flashes green

4. The calibration starts automatically.

## 10 Operation

### 10.1 Operation via button on the device

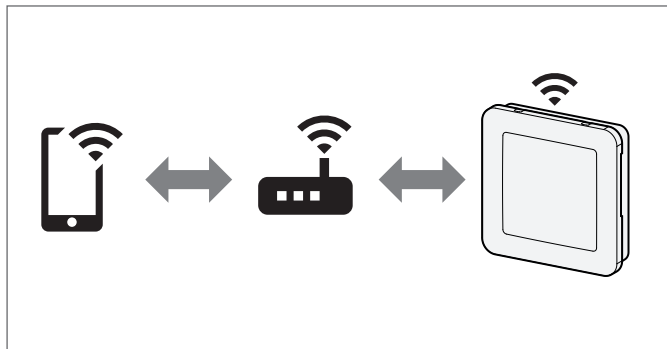
- By pressing the button several times, you can activate the required blower levels and automatic mode (relaying).
- After a power failure, the device switches to the last level to be used.



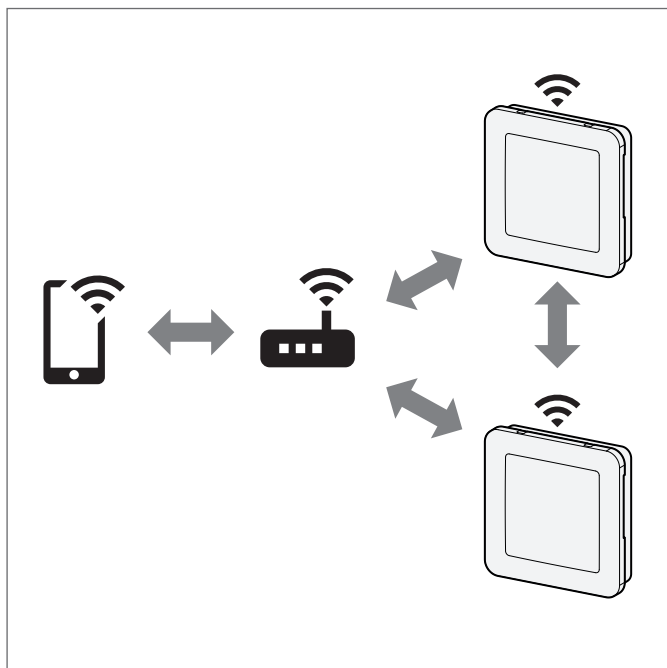
## 10.2 Operation via smartphone or tablet

### 10.2.1 Functional mode

The AEROTUBE smart can be controlled by smartphone or tablet and offers additional device functions via the SIEGENIA Comfort app.



Two AEROTUBE can also be wirelessly interconnected using the SIEGENIA Comfort app. This connection makes additional functions available.



### 10.2.2 Teaching devices

Teach-in devices according to quick start instructions.  
[siegenia.com/service/doc/H47.MOTS005](https://siegenia.com/service/doc/H47.MOTS005)



### 10.2.3 Control of the device functions

#### Blower performance

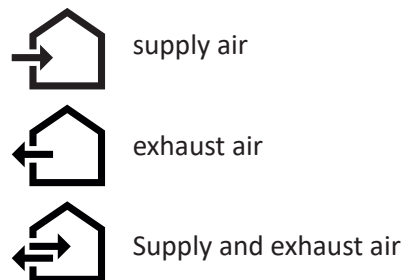
The blower performance can be set manually.

On application of bathroom control, automatic mode, silent mode or timer, the manually adjusted blower performance is overridden.

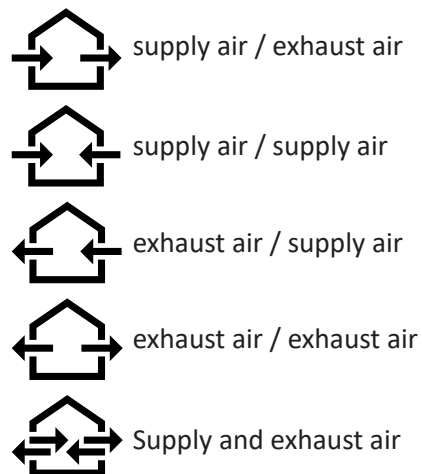
#### Mode of operation

The "mode of operation" function enables different ventilation scenarios.

- For 1 AEROTUBE:



- with 2 connected AEROTUBE:



**Bathroom control**

If a AEROTUBE is connected to an external bathroom light switch, the "bathroom control" function enables follow-up operation for an individually adjustable time after the light has been switched off.

For information concerning the connection of a bathroom light switch to a AEROTUBE, see page 21.

**Bathroom active:** the AEROTUBE, which is connected to the external bathroom switch.

**Bathroom passive:** the second AEROTUBE, which is not connected to the external bathroom switch (this function is only available with 2 connected AEROTUBE).

**Follow-up time:** the time that the AEROTUBE continues to run in bathroom mode after the external bathroom switch has been switched off.

**Automatic mode**

For information on the automatic mode, see page 22.

**Silent mode**

The silent mode restricts the blower performance, thus overriding all blower levels that are programmed in other functions (e. g. timer or bathroom control). The silent mode can therefore guarantee silent ventilation.

**Timer**

The timer function enables the adjustment of up to 5 different time programs. The starting and running time as well as weekdays, mode of operation and blower performance can be freely defined according to the programmed timer.

**Warning (replace filter)**

As soon as a filter replacement is required, this will be indicated as a warning.

**Room temperature and air humidity**

The room temperature is indicated in degrees Celsius (°C) (only in exhaust air operation).

The air humidity is indicated in percent (%).

**Air quality**

The air quality is indicated in the form of a traffic light:

- red = bad air quality
- yellow = mediocre air quality
- green = good air quality

## 11 Maintenance

### **⚠ DANGER**

Exposed electrical components when the inner panel is removed

Risk of fatal injury from electric shock or fire

- for all devices with a fixed connection to the 230 V AC mains power supply, switch off all poles of the feeder. The safety devices must be removed if necessary.

### **⚠ WARNING**

There is a risk of injury from wasp or bee stings

Insects could nest themselves in closed ventilation slots. The insects could fly out and sting you when you open the unit for maintenance purposes.

- To prevent insects from nesting themselves in the device, do not close the ventilation slots for several days in succession.
- Wear protective clothing to open the device if the ventilation slots have been closed for several days in succession.

### 11.1 Notes on cleaning and maintenance

- Do not allow liquids to get inside the unit when cleaning the AEROTUBE.
- Never use cleaning agents that are aggressive or contain solvents, or sharp-edged objects, as these may damage the surfaces of the casing.
- Never clean the unit with a high-pressure cleaner or steam-jet cleaner.
- Clean AEROTUBE with a cloth moistened with a mild soap solution or cleaning agent.
- The filter should be replaced as soon as the filter change LED flashes.



LED 4 flashes blue

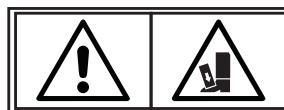
- The filter should be replaced every 12 months, at the latest.
- Only use the original filters from SIEGENIA. You can purchase replacement filters from SIEGENIA or from specialist retailers (see accessories page 6).

### 11.2 Filter replacement and cleaning of ceramic heat accumulator (AEROTUBE WRG smart)

#### **⚠ WARNING**

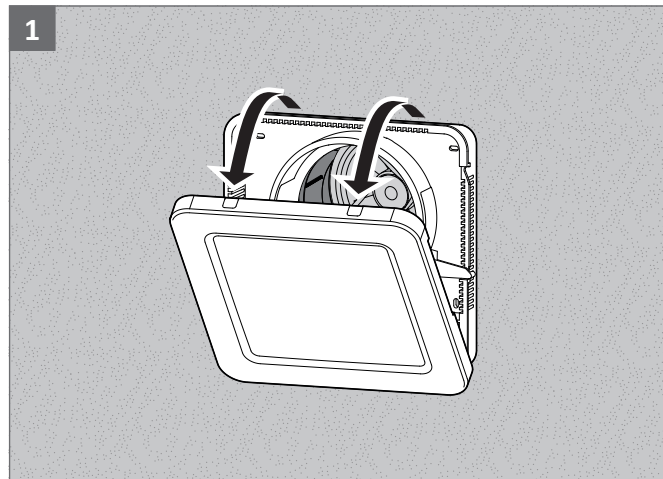
High weight of the ceramic heat accumulator in the pipe inset

Risk of injury due to pipe inset falling out



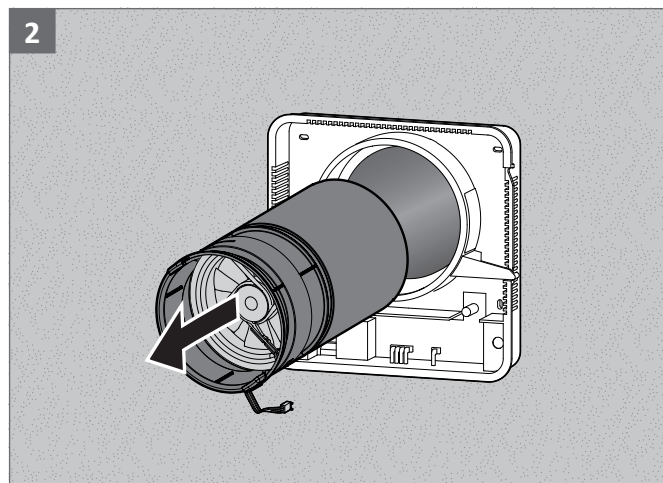
- Ensure that the pipe inset does not fall down.
- Proceed with caution.

1



Remove inner panel

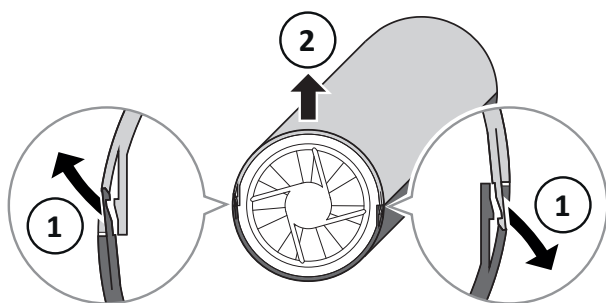
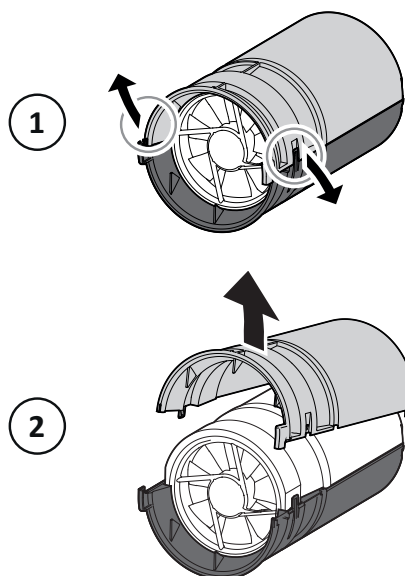
2



Remove complete pipe inset



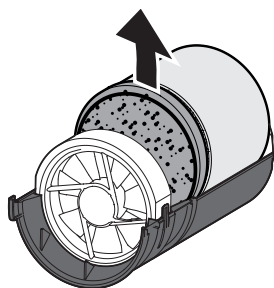
3



Do not bend the retaining clips to the side - this leads to damage!

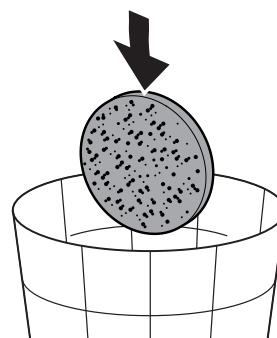
1. Carefully release the retaining clips of the pipe inset.
2. Carefully draw the top pipe inset upwards.

4



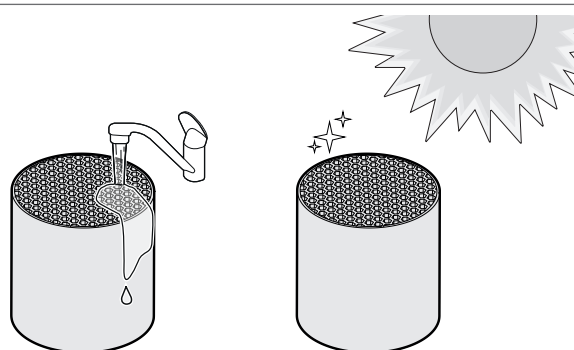
Remove filter and ceramic heat accumulator

5



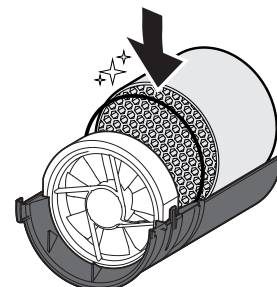
Dispose of the old filter

6



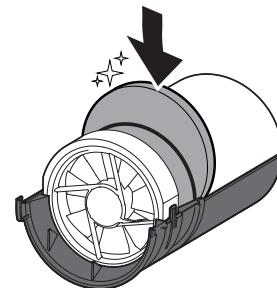
Clean ceramic heat accumulator and leave to dry

7



Position ceramic heat accumulator in pipe inset

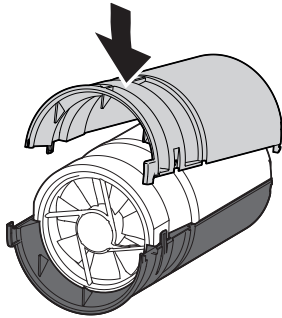
8



Clamp new filter behind filter holder

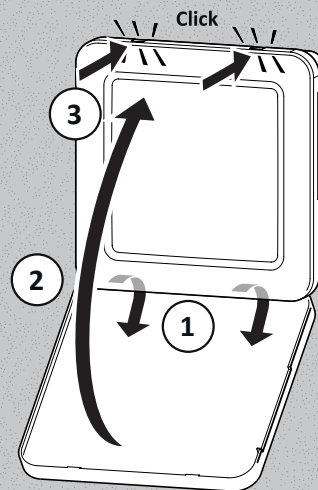


9



Clip on top pipe inset

12

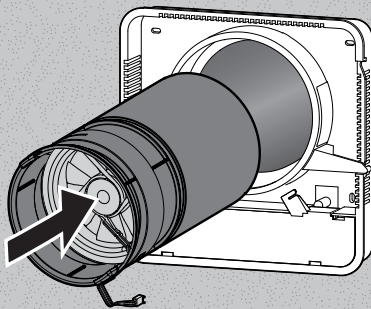


Clip on inner panel



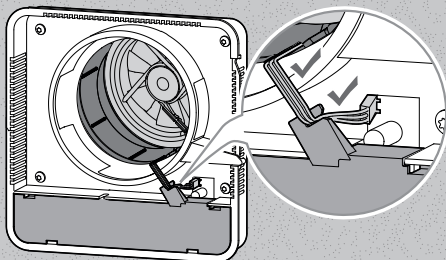
The cable outlet in the inner panel must be on the slider side.

10



Push complete pipe inset into pipe

11



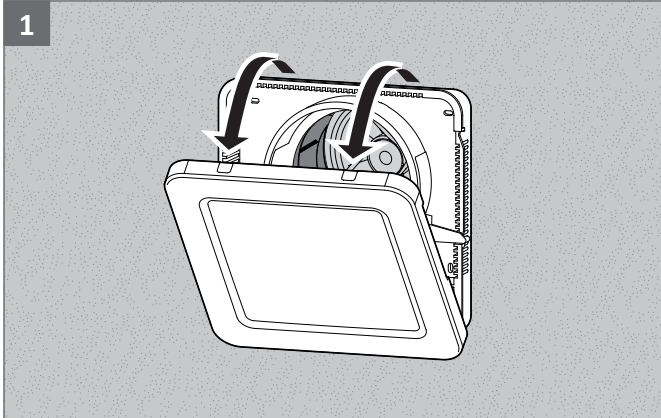
Connect axial ventilator

13

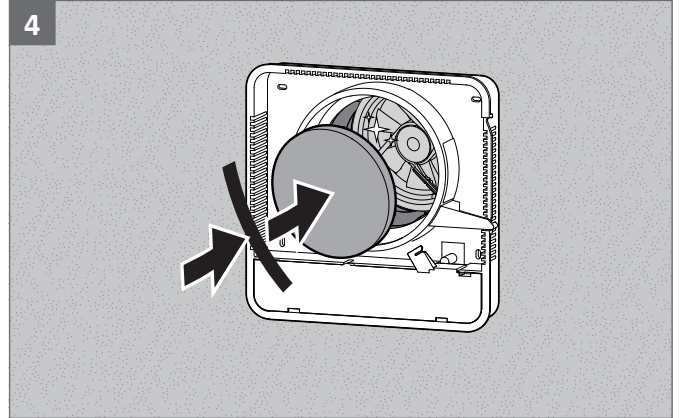


Reset filter replacement indicator via SIEGENIA Comfort app

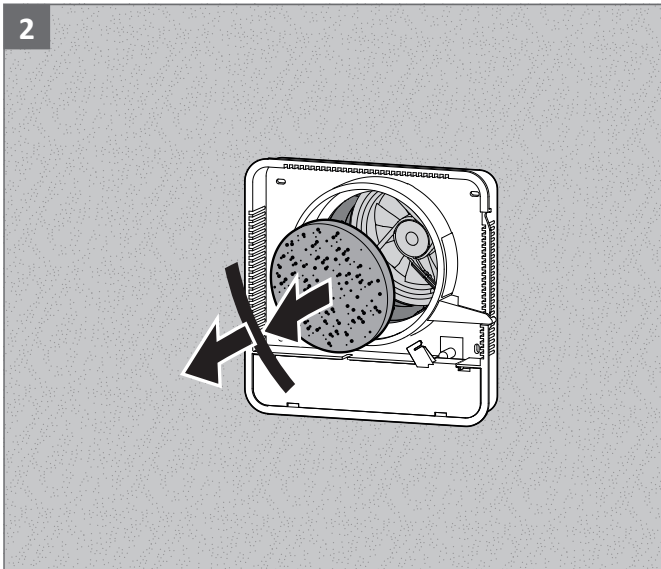
### 11.3 Filter replacement (AEROTUBE AZ smart)



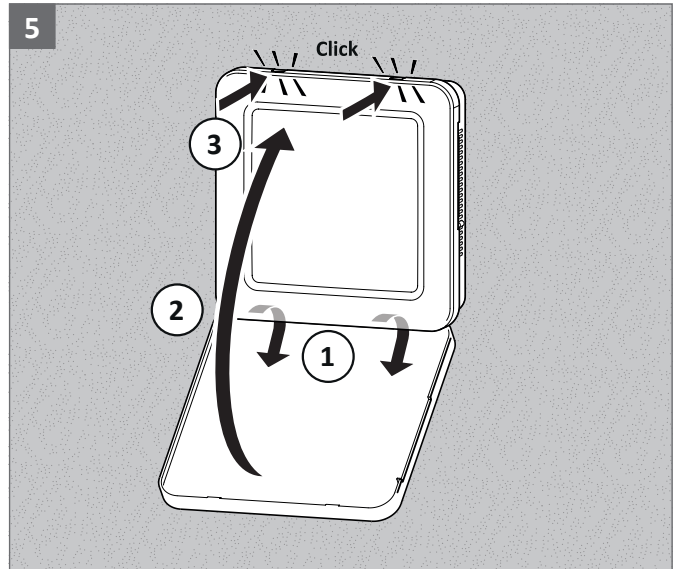
Remove inner panel



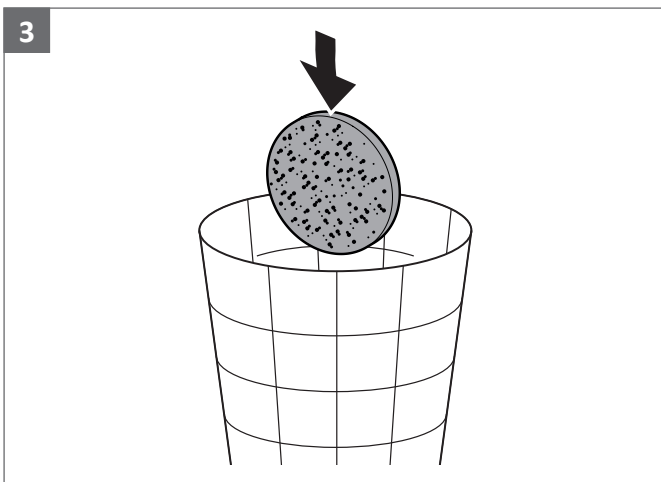
Insert the new filter and filter holder




Remove filter holder and filter



Clip on inner panel



Dispose of the old filter

 The cable outlet in the inner panel must be on the slider side.

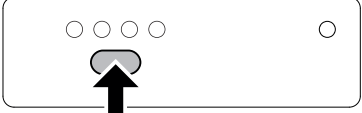


Reset filter replacement indicator via SIEGENIA Comfort app

## 12 Rectification of malfunctions

In case of a malfunction, do not open the unit or try to repair it under any circumstances.

If the problem is not described in the table below, please contact your installation firm or SIEGENIA directly, tel. +49 271 3931-0

Problem	Possible cause	Solution
AEROTUBE shows no reaction when button is pressed	No power supply	Check power supply
	Wiring wrong/defective or cable defective	Have the wiring checked by a qualified electrician
	Power supply defective	Have the supply voltage checked by a qualified electrician
Fan is not running	No power supply	Check power supply
	Wiring wrong/defective or cable defective	Have the wiring checked by a qualified electrician
	Power supply defective	Have the supply voltage checked by a qualified electrician
	Inner panel is not seated correctly on the casing. <b>Note:</b> when the inner panel is removed, a safety switch prevents the fan from inadvertently starting up.	Clip on inner panel, see page 17
AEROTUBE does not respond to smartphones/tablets	no WIFI connection to the router of the home network	restart WIFI router of the home network
	no WIFI connection to the smartphone/tablet	restart smartphone/tablet
	no WLAN connection to the AEROTUBE	<p>Reset on AEROTUBE:</p> <ol style="list-style-type: none"> <li>1. press button 3 times quickly in succession</li> <li>2. then immediately press and hold button 1x (for approx. 4 seconds)</li> </ol>  <p>AEROTUBE will then return to the default setting.</p>

### 12.1 SIEGENIA Comfort app

You will find detailed information on operation and the rectification of malfunctions in the SIEGENIA FAQ Portal: [siegenia.com/service/portal#/faq](https://siegenia.com/service/portal#/faq)



## 13 Technical specifications

### 13.1 Data table

	AEROTUBE WRG smart	AEROTUBE AZ smart
<b>Air throughput</b> at blower level 1 at blower level 2 at blower level 3	approx. 15 m <sup>3</sup> /h approx. 32 m <sup>3</sup> /h approx. 45 m <sup>3</sup> /h	approx. 24 m <sup>3</sup> /h approx. 43 m <sup>3</sup> /h approx. 58 m <sup>3</sup> /h
<b>Inherent noise</b> <sup>1)</sup> at blower level 1 at blower level 2 at blower level 3	L <sub>PA</sub> = 25 dB (A) L <sub>PA</sub> = 38 dB (A) L <sub>PA</sub> = 46 dB (A)	L <sub>PA</sub> = 26 dB (A) L <sub>PA</sub> = 39 dB (A) L <sub>PA</sub> = 46 dB (A)
<b>Sound absorption D<sub>n,e,w</sub></b> <sup>2)</sup>	35 dB	34 dB
<b>Degree of heat provision</b>	max. 90%	—
<b>Power consumption</b> at blower level 1 at blower level 2 at blower level 3	2.1 W 2.9 W 4.3 W	2.0 W 2.8 W 4.1 W
<b>Electrical connection</b>	230 V~ / 6 W	230 V~ / 6 W
<b>Protection class</b>	II	II
<b>Protection type</b>	IP22	IP22
<b>Weight</b>	4.5 kg	2.5 kg
<b>Fresh air filter</b>	ISO coarse 45 % (formerly G3)	ISO coarse 45 % (formerly G3)
<b>Admissible utilisation temperature</b>	–15°C - 40°C	–15°C - 40°C
<b>Technical approval</b>	Z-51.3-387	Z-51.5-395

<sup>1)</sup> Measured in accordance with DIN EN ISO 3741 with room insulation 8 dB

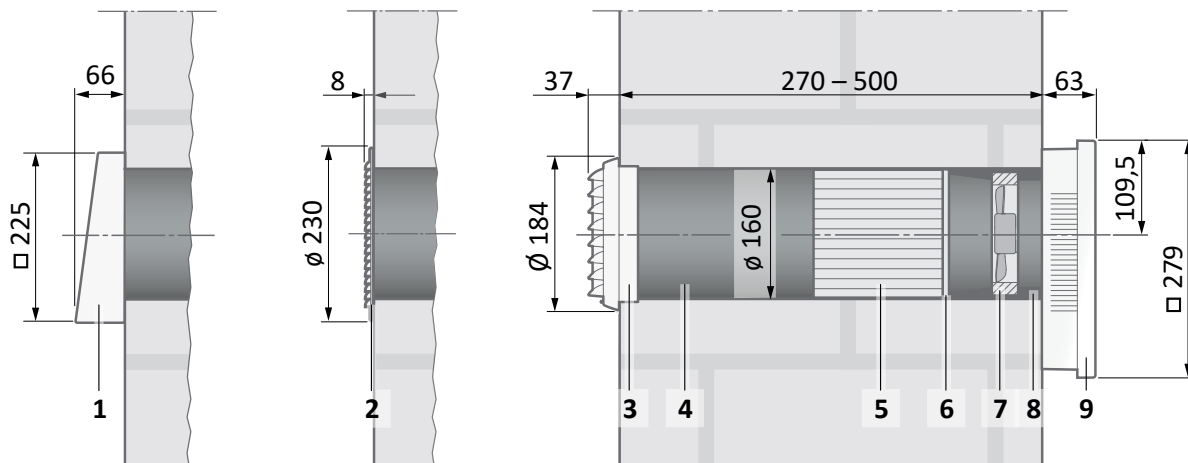
<sup>2)</sup> Measured in accordance with DIN EN 10140-2

## 13.2 Product fiche

according to EU Regulation	1254/2014	1253/2014
a Producer	SIEGENIA	SIEGENIA
b Model identifier	AEROTUBE WRG smart	AEROTUBE AZ smart
c Energy consumption (SEV); Energy efficiency class (SEC class) (according to climatic zone warm / average / cold)	–17.62 kWh/(m <sup>2</sup> · a); E –42.15 kWh/(m <sup>2</sup> · a); A+ –84.96 kWh/(m <sup>2</sup> · a); A+	–10.99 kWh/(m <sup>2</sup> · a); E –25.36 kWh/(m <sup>2</sup> · a); C –50.44 kWh/(m <sup>2</sup> · a); A+
d Type	WLA / ZLA	WLA / ELA
e Type of drive	Rotational speed control	Rotational speed control
f Heat recovery system	regenerative	—
g Thermal efficiency	81.4 %	—
h Maximum flow rate	45 m <sup>3</sup> /h	58 m <sup>3</sup> /h
i Electrical input power	8.6 W	4.1 W
j Noise level	46 dB (A)	47 dB (A)
k Relative air flow rate	32 m <sup>3</sup> /h	43 m <sup>3</sup> /h
l Relative pressure differential	—	—
m Specific input power	0.18 W/(m <sup>3</sup> /h)	0.06 W/(m <sup>3</sup> /h)
n Control factor / control typology	1.21 / 0.65	1.21 / 0.65
o Highest degree of inner and outer leakage rate (inner / outer leakage)	— / —	— / —
p Mix rate (inner area / outer area)	—	—
q Instructions for replacing filter	Replace filter see page 27	Replace filter see page 30
r Instructions for the mounting of outside air / exhaust air grilles (for one-directional ventilation units)	—	—
s Instructions for dismantling	—	—
t Pressure fluctuation sensitivity of the air flow (at +20 Pa and –20 Pa)	32 % / – 42 %	33 % / – 33 %
u Air tightness between inside and outside	2.7 m <sup>3</sup> /h / 1.2 m <sup>3</sup> /h	2.7 m <sup>3</sup> /h / 1.2 m <sup>3</sup> /h
v Annual power consumption	1.048 kWh/a	—
w Annual saving of heating energy (according to climatic zone warm / average / cold)	20.24 kWh/a 44.77 kWh/a 87.58 kWh/a	—

### 13.3 Dimensions AEROTUBE and weather grill variants

AEROTUBE AZ smart / AEROTUBE WRG smart

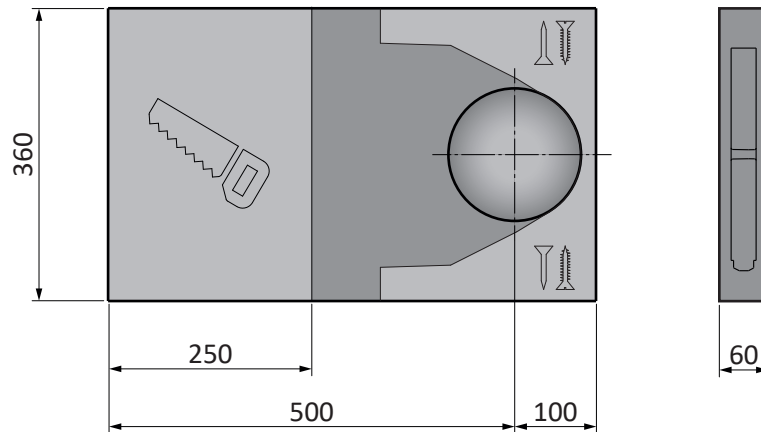


Examples of presentations

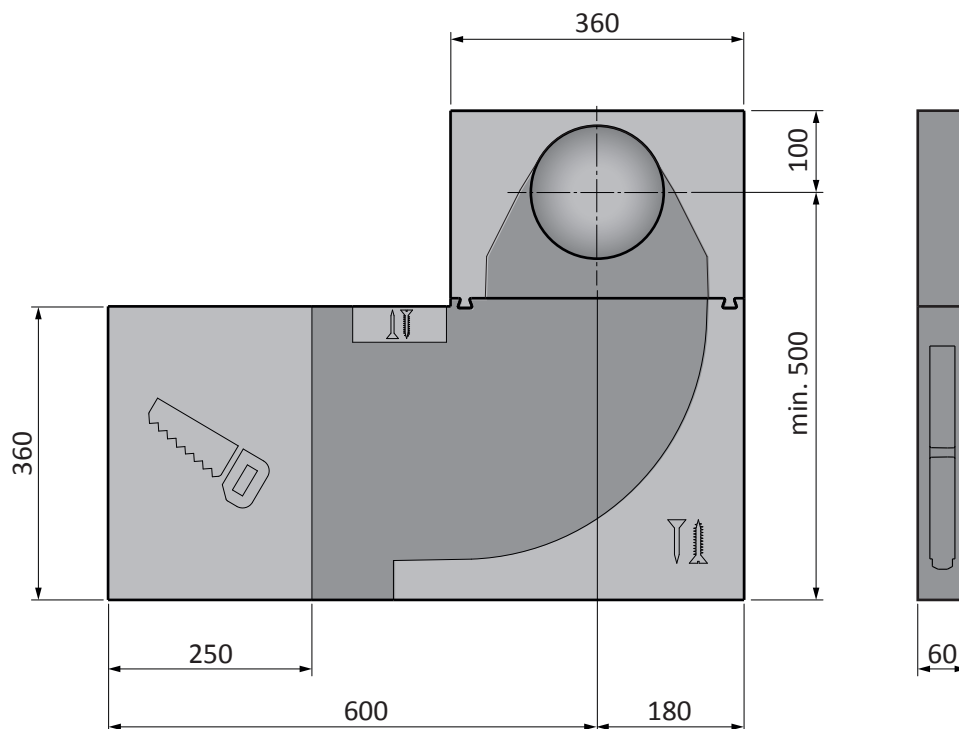
Item	name
1	Stainless steel weather grille hood
2	Stainless steel / aluminium-zinc weather grille
3	Weather grille PVC D 160 (AEROTUBE DD 160)
4	Ventilation pipe Ø 160
5	Ceramic heat accumulator (AEROTUBE WRG smart)
6	Filter ISO coarse 45 % (AEROTUBE WRG smart)
7	Axial ventilator
8	Pipe inset (2-part)
9	Inner panel E28

### 13.4 Dimensions of vent duct EPP

Vent duct EPP, type FL



Vent duct EPP, type SFL:

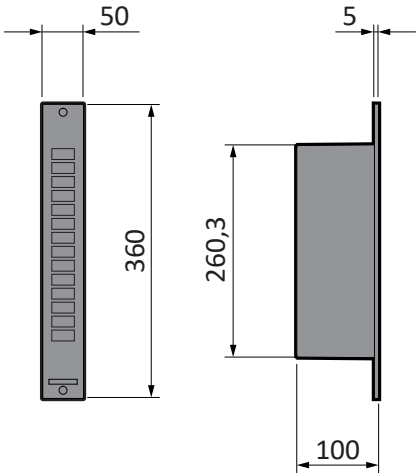
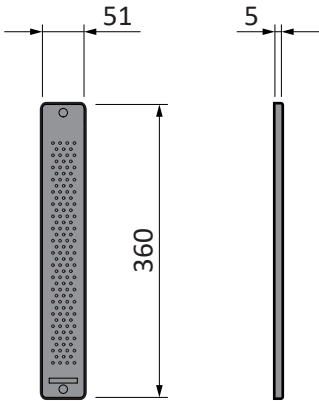
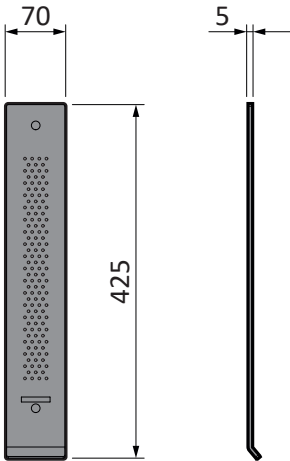


cropping area

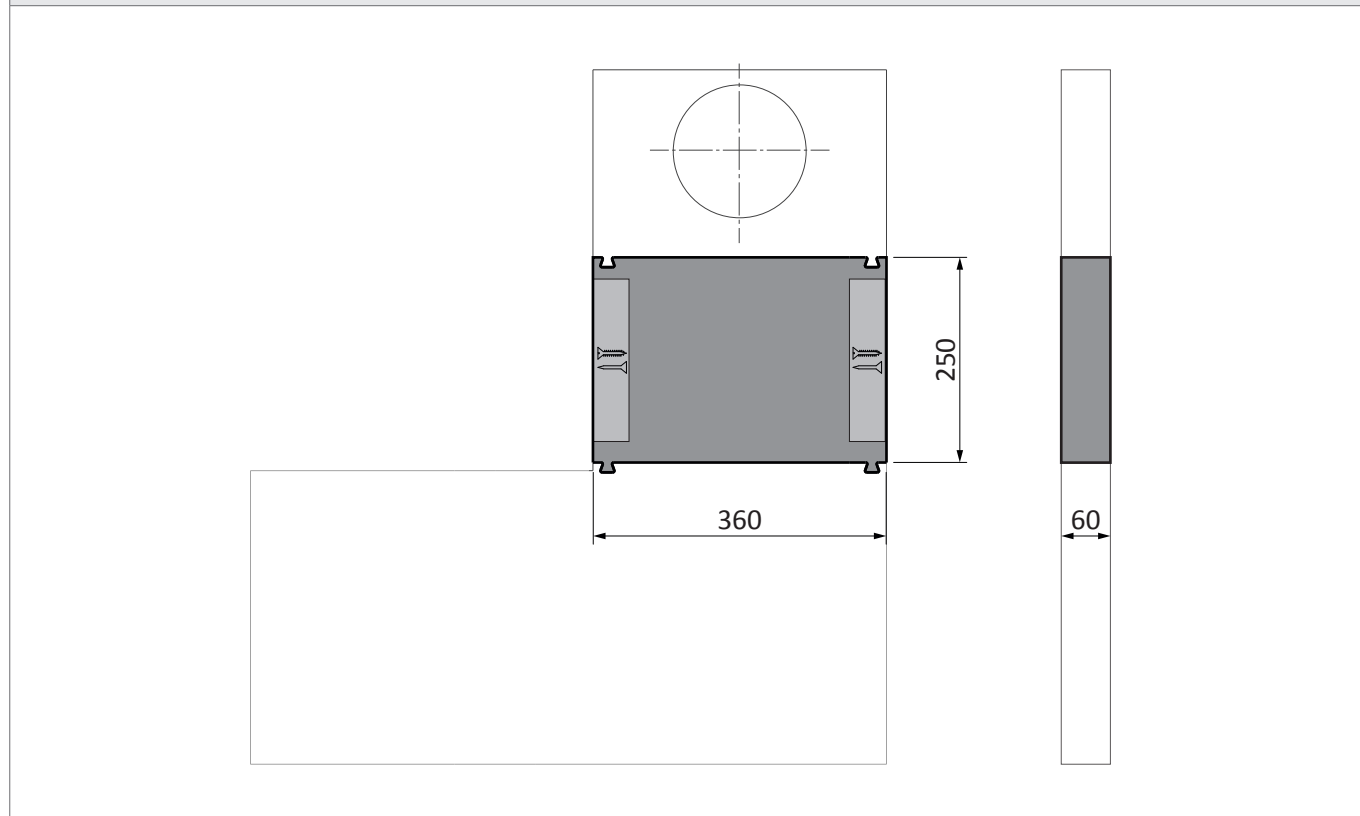


penetration area  
e.g. for screws or insulation material dowels

## 13.5 Dimensions of accessories for vent duct EPP

Weather grille, lamella	Weather grille perforated grille aluminium	Weather grille perforated brick aluminium
		

## extension for vent duct EPP, type SFL



cropping area

penetration area  
e.g. for screws or insulation material dowels



## 14 EU Declaration of Conformity with regard to CE marking

For our product **AEROTUBE**, we confirm that the general safety of the defined product, in accordance with Directive 2001/95/EC, is compliant with the relevant protection requirements which are laid down in the Council Directives about electrical and electronic products.

The following listed test standards, which are harmonised in the relevant directives, have been employed for the evaluation:

**a) 2014/30/EC EMC Directive**

EN 55014-1:2006+A1:2009+A2:2011  
EN 55014-2:1997+A1:2001+A2:2008  
EN 61000-3-2:2014  
EN 61000-3-3:2013

**b) 2014/35/EC Low voltage directive**

EN 60335-1:2012+A11:2014  
EN 60335-2-40:2014  
EN 62233:2008

**c) 2014/53/EC RED Directive**

**c1) Electromagnetic compatibility:**

EN 301489-1, V.1.9.2  
EN 301 489-17, V.2.2.1  
EN 61000-3-2:2014  
EN 61000-3-3:2013

**c2) Electrical safety - Establishment of information technology**

EN 60950-1:2006+A11:2009+A12:2011+A1:2010+A2:2013

**c3) Safety of persons in electromagnetic fields (10 MHz to 300 GHz)**

EN 62479:2010

**c4) Radio spectrum matters - data transmission devices in the 2.4 GHz ISM band**

EN 300 328 V1.9.1

**d) 2006/42/EC Machinery Directive**

EN 12100:2010 Risk assessment

**e) 2011/65/EU RoHs**

EN 50581:2012 Technical documentation on the evaluation of electrical and electronic devices with reference to the restriction of hazardous substances

This declaration is responsible for the producers / importers based in the European Union submitted by:

SIEGENIA-AUBI KG

Hardware and ventilation technology

Duisburger Straße 8

57234 Wilnsdorf, Germany

Siegen, 2017-01-17

  
G. Wanders  
(Geschäftsbereichsleitung)

## 15 EU Declaration of Conformity with regard to CE marking

For our product **AEROTUBE**, we confirm that the general safety of the defined product, in accordance with the General Product Safety Regulations, is compliant with the general product safety and relevant protection requirements which are laid down in the statutory instruments about electrical and electronic products.

The following listed test standards (designated standards) covered by the following statutory instruments have been employed for the evaluation:

**a) 2014/30/EC EMC Directive**

EN 55014-1:2006+A1:2009+A2:2011

EN 55014-2:1997+A1:2001+A2:2008

EN 61000-3-2:2014

EN 61000-3-3:2013

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EN 60335-1:2012+A11:2014

EN 60335-2-40:2014

EN 62233:2008

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**d) 2006/42/EC Machinery Directive**

EN 12100:2010 Risk assessment

**e) 2011/65/EU RoHs**

EN 50581:2012 Technical documentation on the evaluation of electrical and electronic devices with reference to the restriction of hazardous substances

For the manufacturer established in the European Union, this declaration is made in the UK under the responsibility of:

SIEGENIA-AUBI Ltd.  
Richardson Way • Cross Point  
Coventry CV2 2TA

Siegen, 2023-06-19

  
Ryan Thompson  
(Business and Sales Manager UK Ltd)



[www.siegenia.com](http://www.siegenia.com)



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