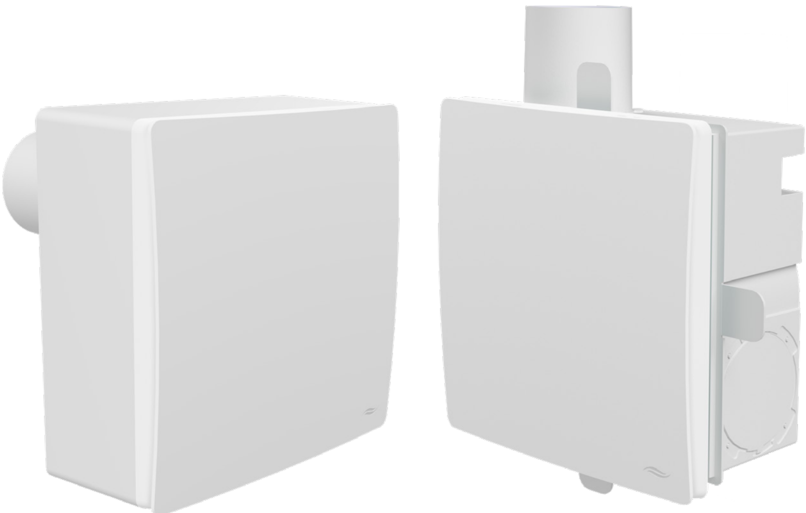
Installation and operating instructions
Taris extractor fan



Read carefully and refer to the illustrations before handling the product.
Keep these instructions for future reference.

Original Installation and operating instructions

Disclaimer

This documentation represents a translation of the original German installation and operating instructions. The contents of this documentation have been checked for conformity with the components described. Nevertheless, deviations cannot be ruled out, so no guarantee can be given for complete conformity.
This documentation describes the functionality of the standard range. For reasons of clarity, the documentation does not contain all detailed information on all types of the product and cannot take into account every conceivable case of installation and assembly.
The illustrations in this documentation may differ slightly from the design of the product you have purchased. The function remains the same despite the difference in detail.
This documentation is updated regularly. Necessary corrections and appropriate supplements are always included in the following releases. You can also find the latest version at www.inventer.eu/downloads.

Company information

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Table of Contents

1 About this document

These Installation and operating instructions contain all the information required for installing and operating the product. Observe the following:

- The Installation and operating instructions are part of the product.
- They must always be available to the user and be stored for the entire product service life.

Gender-neutral language

In these Installation and operating instructions, the personal pronoun “they” is used to present the information in a short, concise way. This is intended to include personnel of any gender.

1.1 Target groups

These Installation and operating instructions are intended for anyone installing and operating the product. They contain all the basic information about product installation, commissioning, operation, inspection, maintenance, cleaning, and disposal. Note the requirements for the operating personnel; see Section 2.3 “Operating personnel requirements” on page 12.

1.2 Warnings and other notices

When using these Installation and operating instructions, note the warnings. The following symbols and signal words are used:

Table 1: Symbols and signal words

Symbol/signal word	Definition
	General warning symbol: Indicates a risk of injury.
	General requirement symbol: Indicates a risk of property damage.
Danger	Immediate danger: Death or very serious injuries will result.
Warning	Possibly dangerous situation: Death or serious injuries may result.
Caution	Possibly dangerous situation: Minor or moderate injuries may result.
Notice	Information that must be heeded to ensure safe product handling and to avoid property damage.

1.2.1 Structure of warnings

The warnings in these Installation and operating instructions are structured as follows:

- **Signal word**
  Indicates the severity of the hazard.
- **Type and origin of the hazard**
  Describes the hazard and where it may occur.
- **Consequence**
  Describes the effects that may occur if the notice is not complied with.
- **Avoidance**
  Describes how to prevent the hazard from occurring, or provides instructions for safety measures if the hazard occurs.

1.2.2 Example of a warning

The warnings have the following format:

CAUTION

Risk of injury due to improper use.

Improper use of the product may lead to hazards to personnel and property.

→ Use the product only as intended.

1.2.3 Instructions

Instructions are numbered to indicate the sequence of the individual steps. Results of the actions (if applicable) are directly below.

Example:

1. This is the first step.
2. This is the second step.

   ► This is the result of the second step.

Operating and display elements

Operating and display elements, such as buttons, switches, and control knobs, are written in **bold**. Example: The **on/off switch** is located on the controller.

1.2.4 Other symbols

In addition to the safety instructions and warnings, the following symbols are used:

Table 2: Other symbols

Symbol	Definition
	A TIP symbol indicates practical and useful tips for handing your product or refers to additional information.
	Any additional tools and aids required for the activities are listed before the instructions.
	Red bar over a graphic: Illustration shows the inner wall.
	Blue bar over a graphic: Illustration shows the outer wall.
	Action focus: To be taken into account in the relevant assembly step.

2 Safety

This section contains all the safety-relevant information. Read all safety information thoroughly before handling the product and observe it during use. The safety information highlights risks of injury and property or environmental damage and contains information about avoiding and preventing hazards.

2.1 Intended use

The Taris extractor fan serves to ventilate moist, windowless rooms. It fulfils the requirements of DIN 18017-3. The extract air system works without heat recovery and uses alternating current. Any other product use constitutes improper use.

Comply with other regulations

In addition to the information in these Installation and operating instructions, always comply with the legal accident prevention and environmental protection regulations and the general accident prevention regulations.

2.2 Improper use

Use of the product for a purpose other than that described in section 2.1 is considered improper use. Examples of improper use include:

- Using the product with components or accessories not approved by inVENTer GmbH,
- Modifying or altering the product in a manner not described in Section 7 “Installation and assembly” on page 43,
- Failure to comply with the product’s operating/use conditions (see Section 3 “Conditions for use” on page 14).

2.3 Operating personnel requirements

The Taris extractor fan is a building product with electrical components. Only qualified specialists can assemble, install, and configure it. Only those who meet the following requirements may handle the product:

- They have completely read and understood these Installation and operating instructions.
- They are at least 18 years old.
- They are in good health and at full physical and mental strength.
- Qualified electrician able to understand construction drawings and wiring diagrams and to implement corresponding instructions.
- They are regularly trained on difficulties, hazards, and specific rules of behaviour.
- They keep the workplace clean and orderly.
- They wear the required personal protective equipment to ensure occupational safety.
- They always comply with the applicable safety and accident prevention regulations.

2.4 Personal protective equipment

During work, always wear the prescribed protective equipment and comply with the requirements of the construction site. The standard protective equipment on construction sites is sufficient for assembling and installing the product. The following basic protective equipment must be worn:

- Form-fitting protective work clothing,
- Protective work shoes with a solid toecap and anti-slip sole,
- Safety glasses and helmet as necessary (for sawing, sanding, overhead drilling, etc.).

2.5 Hazard sources

This section identifies any residual risks for personnel and property damage hazards for the individual product life cycle stages. When handling the product, observe the safety information to prevent injury and property damage.

Assembly, installation, maintenance, and operation

When installing, assembling, maintaining, and operating the product, observe the following safety information to prevent injury and property damage.

Electrical hazards

The product is powered by electricity. Improper installation and maintenance or damaged electrical components may lead to extremely serious injury from electric shock:

→ Work on electrical components may be performed only by a qualified electrician in accordance with electrical regulations.
→ Electrical components must be installed according to local laws and regulations.
→ Prior to work on electrical equipment, disconnect all components from mains and secure them against being switched back on.

Hazards due to smoke and combustion gases

The device can cause return of smoke or exhaust if ovens, fireplaces, or other gas-burning or fuel-burning devices are operated at the same time. This may harm the respiratory system and lead to carbon monoxide poisoning.

→ After installation, properly qualified personnel must ensure that no smoke or combustion gas backflow is possible.

Damage to components

Dirty components (from residual plaster, for example) lead to damage.

→ As necessary, clean the Taris extractor fan housing before inserting the fan assembly.

Damage from foreign bodies

If objects, small animals, dead leaves, etc. find their way into the outer wall duct, function may be impaired and the device and other components may be damaged.

→ Ensure that wall openings are not left open and unprotected at any time.

3 Conditions for use

Install and use the product only if it is undamaged and in good condition, and use it only with the compatible, approved ventilation ducting while taking into account operating personnel requirements; see Section 2.3 “Operating personnel requirements” on page 12.

Always ensure that the following ambient conditions are met:

- No environment with high oil or grease content,
- No flammable, aggressive, or corrosive gases, liquids, or vapours,
- No extreme dust exposure,
- No environment that allows direct water ingress,
- No environment that allows smoke or combustion gas backflow,
- Only masonry that conforms to the dimensions indicated,
- Ambient temperatures: -20 – +40 °C.

4 System overview

The following sections describe the product's function, structure, and scope of delivery.

4.1 Functions

The Taris extractor fan serves to ventilate residential and sanitary rooms (utility rooms, baths/restrooms) and eat-in kitchens. It uses alternating current and can be controlled automatically or switched on and off manually.
The product's exact range of functions is determined by installation position, performance characteristics, product variant, and electrical installation. See Section 4.4 "Product variants" on page 25, Section 4.5 "Product characteristics" on page 27, and Section 7.10 "Electrical installation" on page 79.
For configuration of the described functions, see Section 8 "Setting functions" on page 82.

4.1.1 Automatic extract air cycles

An automatic extract air cycle involves independent device switching (on/off and into basic and full load levels) according to prescribed time parameters. Depending on setting configuration, the Taris extractor fan can use the following automatic extract air cycles:

- A-2: Automatic extract air cycles 2 h base load/15 min full load,
- A-4: Automatic extract air cycles 4 h base load/30 min full load.

In the basic settings upon delivery, automatic extract air cycles are switched off. For setting automatic extract air cycles, see Section 8.3 "Setting automatic extract air cycles" on page 83.

4.1.2 Comfort mode

Comfort mode switches the device based on the length of presence of people in the room in question. If the switch is coupled directly to the light switch, the fan runs for as long as someone is in the room. Comfort mode is configured as follows:

- If the switch is active for less than five minutes, the fan does not run when the light switch is turned off or the fan remains at the base load level (30/60 for a two-level device).
- If the switch is active for between 5 and 20 minutes, the fan runs when the switch is turned off for a period equal to the activation time (as long as the switch was previously turned on) at the full load level (plus a specified run-on time).
- If the power-on time is more than 20 minutes, the device remains at the full load level for as long as the light is switched on (regardless of switch position). It continues to run for 20 minutes after the light is switched off (plus a preset run-on time).

For setting comfort mode, see Section 8.4 “Switching the comfort mode on and off” on page 84.

4.1.3 Switch-on delay

The Taris extractor fan has a switch-on delay function. This means that when the switch is actuated (the room lighting is switched on, for instance), the ventilation function switches on after a predefined period of one to five minutes. The device then runs at maximum airflow until the switch is actuated again or until the end of a predefined run-on time (see Section 4.1.4 “Run-on function” on page 16).
In the basic settings upon delivery, switch-on delay is switched off. For setting the switch-on delay, see Section 8.5 “Setting switch-on delay” on page 84.

4.1.4 Run-on function

The Taris extractor fan has a run-on function. Actuating the switch (turning off room lighting, for instance) activates the run-on time. When the run-on function is turned on, the device runs until the end of the configured run-on time (3-30 minutes), then switches off automatically.
In the basic settings upon delivery, the run-on function is set to 15 minutes.
In conjunction with an integrated humidity sensor, the run-on time is preset to 15 minutes at the factory. When the run-on function is switched on/off, this always applies to both switch-triggered activation and sensor-triggered activation.
For setting the run-on function, see Section 8.6 “Setting the run-on function” on page 85.

4.1.5 Humidity sensor

The integrated humidity sensor is an optional component and serves to control humidity.
The humidity sensor continuously measures the relative humidity in the room. During humidity peaks, the sensor reacts, switching the device on. Run-on time is then activated (if it is switched on). The humidity sensor has the following configurable sub-functions and connections to other functions:

- Sensor-triggered run-on time (can be set to 15 or 30 minutes, with 15 minutes as the standard setting),
- Quick humidity rise,
- Humidity exceeds limit value.

For setting the humidity sensor, see Section 8.7 “Setting the humidity sensor” on page 86.

4.1.6 Air quality sensor

The air quality sensor is an optional component and serves to measure volatile organic substances in the air. The device distinguishes among five air quality levels (based on German Environment Agency guidelines) numbered 1 to 5.
When the specified air quality level is exceeded, the device switches on and continues to ventilate until the level falls below the switching threshold again. The specified run-on time is then run, after which the device switches off again. You can specify a switching threshold of Air Quality Level 3, 4, or 5 (3 is preset).
For setting the air quality sensor, see Section 8.8 “Setting the air quality sensor” on page 87.

4.2 Structure and scope of delivery

The following figures show examples of the components that are included in the product's scope of delivery. All standard components are also available as spare parts. Optional product components are marked with *.

Information about the fan assembly's operating and display elements can be found in Section 8.1 "Operating and display elements" on page 82.

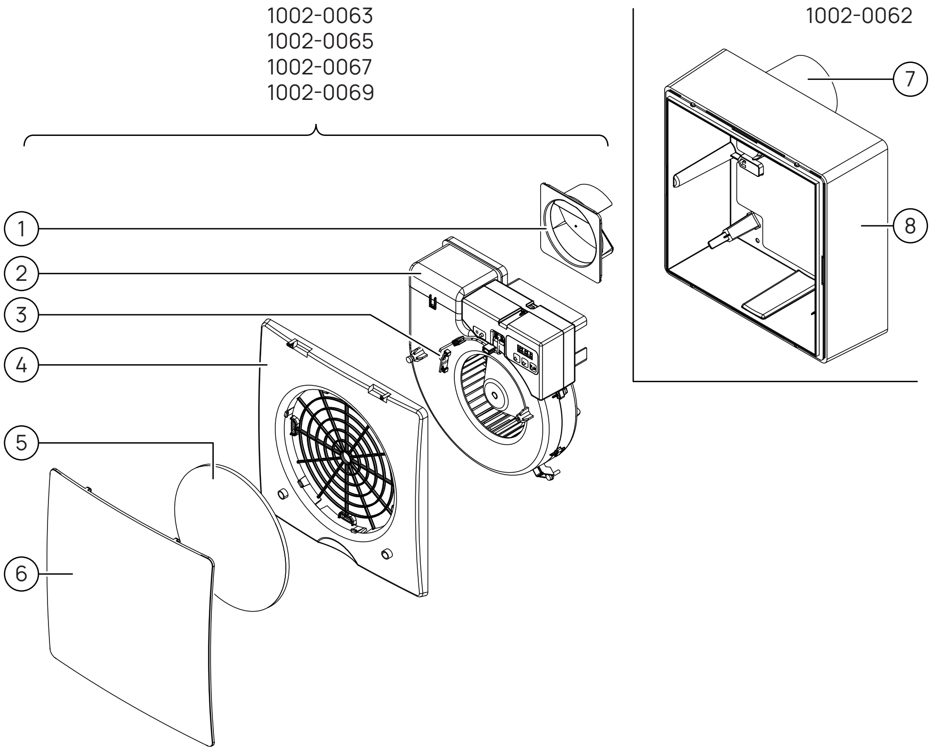


Fig. 1: Structure and scope of delivery: Surface-mounted variant

1 Non-return damper
2 Fan assembly
3 Humidity sensor*
4 Inner panel ventilation grille
5 Filter
6 Inner panel cover
7 Exhaust opening room connector
8 Surface-mounted housing

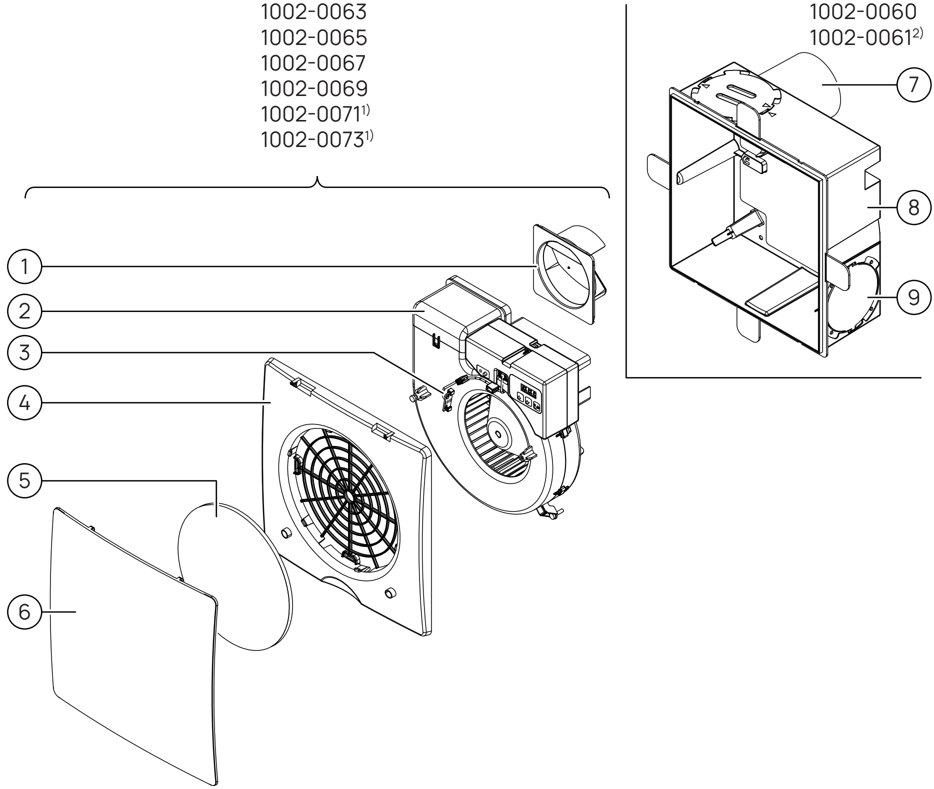


Fig. 2: Structure and scope of delivery: Axial flush-mounted variant

1 Non-return damper
2 Fan assembly[1)]
3 Humidity sensor*
4 Inner panel ventilation grille
5 Filter
6 Inner panel cover
7 Exhaust opening room connector[2)]
8 Flush-mounted housing
9 Optional second-room connection

1 Fan inserts with item numbers from 1002-0071 to 1002-0074 are for housings with two-room extraction (item number 1002-0061) only.

2 The housing with item number 1002-0061 includes a second room connector (not shown in the figure) to achieve two-room extraction; otherwise its design is identical to that of item number 1002-0060.

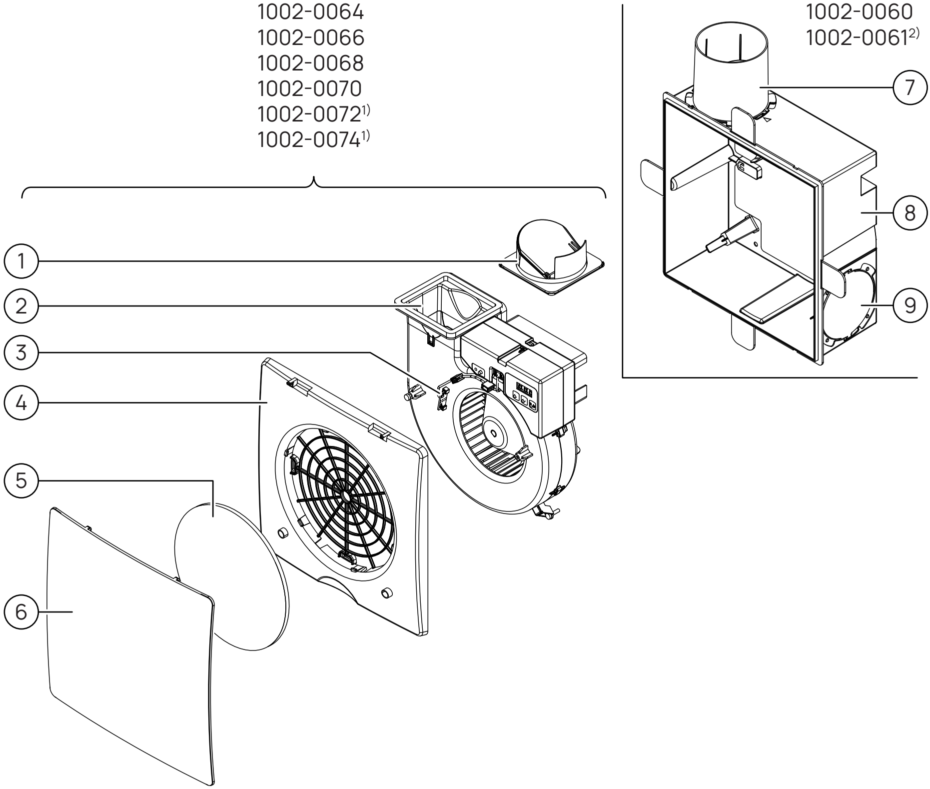


Fig. 3: Structure and scope of delivery: Radial flush-mounted variant

1 Non-return damper
2 Fan assembly[1)]
3 Humidity sensor*
4 Inner panel ventilation grille
5 Filter
6 Inner panel cover
7 Exhaust opening room connector[2)]
8 Flush-mounted housing
9 Optional second-room connection

1 Fan inserts with item numbers from 1002-0071 to 1002-0074 are for housings with two-room extraction (item number 1002-0061) only.

2 The housing with item number 1002-0061 includes a second room connector (not shown in the figure) to achieve two-room extraction; otherwise its design is identical to that of item number 1002-0060.

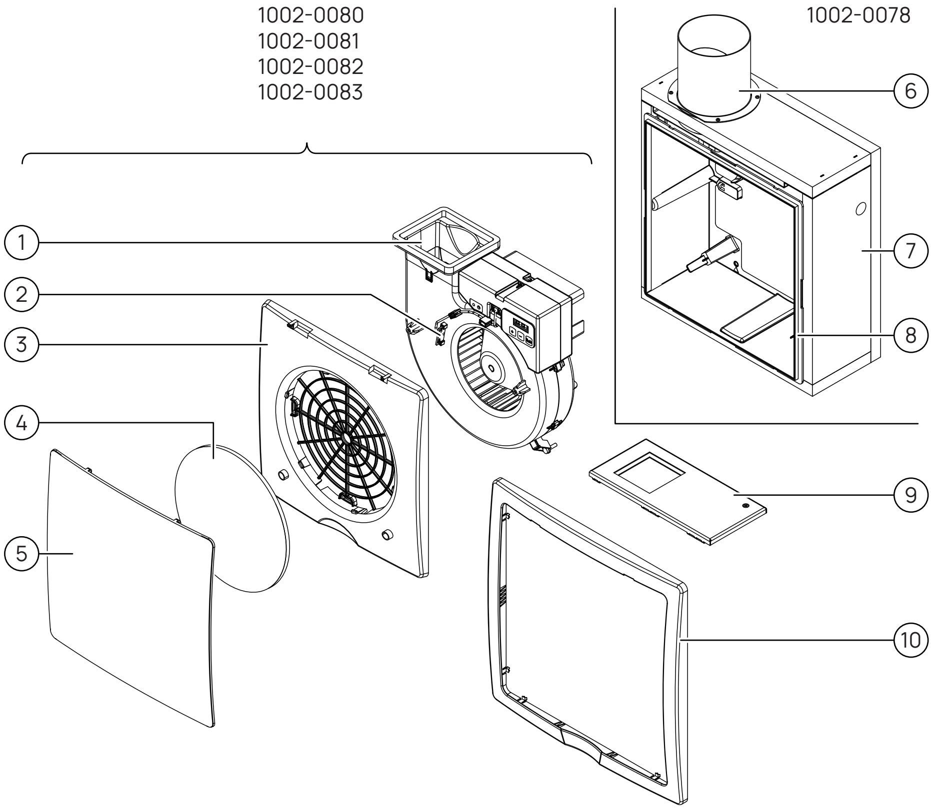


Fig. 4: Structure and scope of delivery: Radial fire protection variant with barrier (BS)

1 Fan assembly
2 Humidity sensor*
3 Inner panel ventilation grille
4 Filter
5 Inner panel cover
6 Exhaust opening room connector with non-return damper
7 Fire protection housing made of calcium silicate
8 Inner housing made of plastic
9 Barrier
10 Panel frame

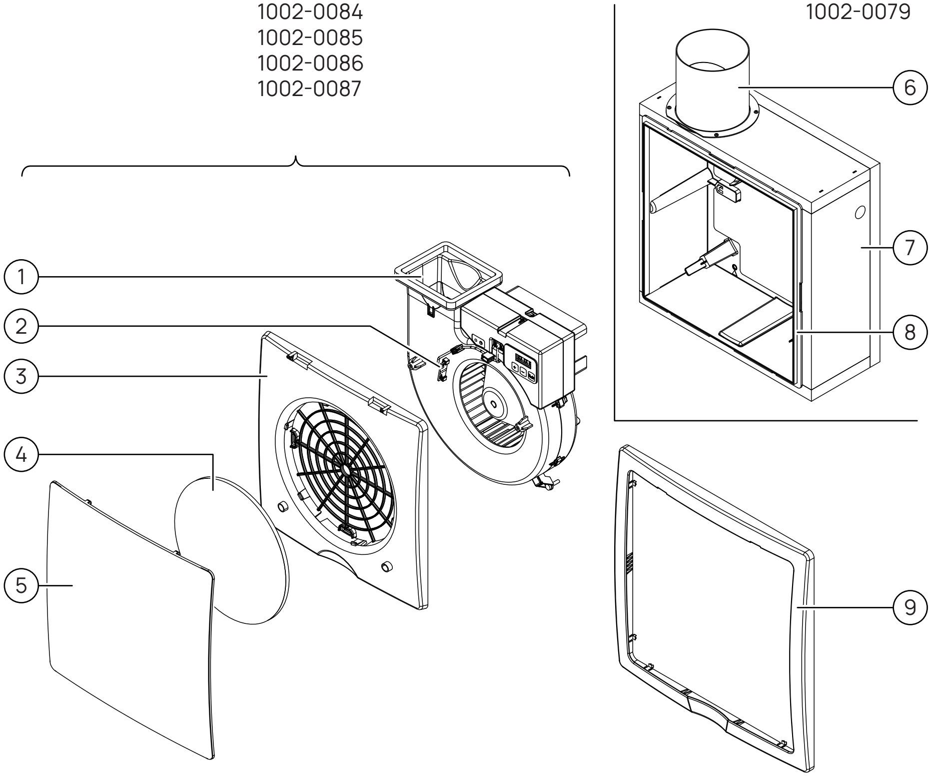


Fig. 5: Structure and scope of delivery: Radial fire protection variant without barrier (BSS)

1 Fan assembly
2 Humidity sensor*
3 Inner panel ventilation grille
4 Filter
5 Inner panel cover
6 Exhaust opening room connector with non-return damper
7 Fire protection housing made of calcium silicate
8 Inner housing made of plastic
9 Panel frame

4.3 Optional accessories

The following components are optional accessories and, depending on your specific installation situation, can be installed in conjunction with the Taris extractor fan.

For installation of optional accessories, consult the installation instructions of the accessory in question.

4.3.1 Taris wall installation set

The Taris wall installation set is an optional accessory for axial Taris extractor fan variants and facilitates creation of the wall duct and external finish.

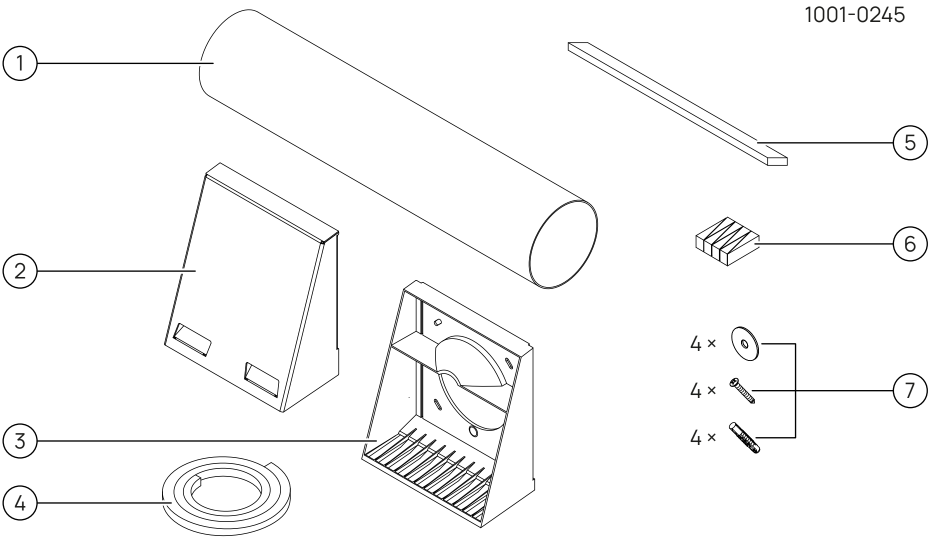


Fig. 6: Taris wall installation set

1 Wall mounting sleeve
2 Weather protection hood cover
3 Weather protection hood base plate
4 10-mm sealing tape
5 Wall mounting sleeve sealing tape
6 Mounting wedges
7 Outer wall fastening elements

4.3.2 Panel frame

The panel frame is an optional accessory for flush-mounted Taris extractor fan variants and covers wall openings that are larger than the outer dimensions of the inner panel.

1002-0076

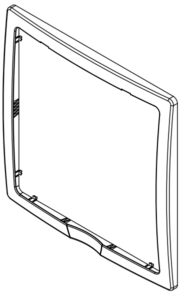


Fig. 7: Flush-mounted panel frame

4.3.3 Second-room inner panel

The second-room inner panel is an optional accessory for the flush-mounted Taris extractor fan variants (Taris housing item no. 1002-0061) and facilitates creation of a two-room connection.

1505-0069

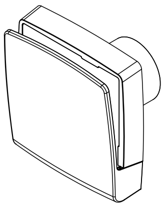


Fig. 8: Second-room inner panel

4.3.4 Mounting bracket

The mounting bracket is an optional accessory for the flush-mounted Taris extractor fan variants and facilitates fixing the housing in place on a shaft wall in the masonry.

1002-0075

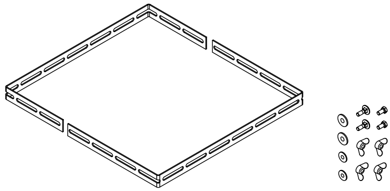


Fig. 9: Flush-mounted mounting bracket

4.4 Product variants

The individual product variants differ fundamentally in the following characteristics:

- Installation situation: Surface-mounted or flush-mounted housing variants,
- Number of rooms to be ventilated: One-room or two-room exhaust discharge,
- Air volume flow output levels: 0/60 m³/h, 30/60 m³/h, 0/100 m³/h,
- Fan insert type: axial or radial,
- Humidity sensor: Basic variant (without humidity sensor), standard variant (with humidity sensor).

The Taris extractor fan can be used in ventilation systems according to DIN 18017-3 with fan inserts 1002-0063 to 1002-0070 and 1002-0080 to 1002-0087. They have been tested at full load for air volume flows of up to 60 m³/h and approved by the Deutsches Institut für Bautechnik (DIBt).

The following table provides information about the product variants described in these Installation and operating instructions and the fan insert and housing variant combination options. See Section 4.2 “Structure and scope of delivery” on page 18.

Table 3: Product variants

Taris housing item no.	Number of rooms to be ventilated: 1		2	Taris fan insert item no.	Discharge direction		Power (air volume flow)			Humidity sensor
	Flush-mounted	Surface-mounted	Flush-mounted		Radial	Axial	30/60 m³/h	0/60 m³/h	0/100 m³/h	
1002-0060	✓					✓	✓			
					✓		✓			
						✓	✓			✓
					✓		✓			✓
						✓		✓		
					✓			✓		
						✓		✓		✓
					✓			✓		✓
1002-0061			✓			✓			✓	
					✓				✓	
						✓			✓	✓
					✓				✓	✓
1002-0062		✓				✓	✓			
						✓	✓			✓
						✓		✓		
						✓		✓		✓

Table 4: Fire protection product variants (BS and BSS)

Taris housing item no.	Installation variants: Flush-mounted	Barrier (fire protection cartridge)	Taris fan insert item no.	Discharge direction: radial	Power (air volume flow)		Humidity sensor
					30/60 m³/h	0/60 m³/h	
1002-0078	✓	✓		✓	✓		
		✓		✓	✓		✓
		✓		✓		✓	
		✓		✓		✓	✓
1002-0079	✓			✓	✓		
				✓	✓		✓
				✓		✓	
				✓		✓	✓

4.5 Product characteristics

The following subsections describe possible product subfunctions and utilization properties.

4.5.1 One-room and two-room design

A Taris extractor fan can discharge the extract air from one or two rooms. The two-room design is available in the flush-mounted variant only. Here, a second pipe for a second room is connected to the optional second-room housing connection (see Fig. 2 on page 19 and Fig. 3 on page 20).

4.5.2 Fan power (air volume flow)

The fan power depends on its purpose and the volume of air to be discharged. For instance, the fan assembly with a maximum air volume flow of 100 m³/h at full load is intended for two-room designs only[1)]. For possible output levels, see Section 4.4 “Product variants” on page 25.

4.5.3 Housing/fan insert type

Axial or radial type affects the orientation of the housing’s exhaust opening and the fan assembly (see the figures in Section 4.2 “Structure and scope of delivery” on page 18). The surface-mounted variant can have only the axial type with extract air discharged at the back of the Taris. The flush-mounted variant can be used of an axial or radial type. The flush-mounted variant is designed so that an additional pipe for extracting exhaust from a second room can be installed if necessary.

1 The standard maximum air volume flow at full load is 60 m³/h. In the 0/100 product variant, you can set the maximum air volume flow manually to 100 m³/h. See Section 8.9 “Setting device performance” on page 87.

4.5.4 Surface-mounted housing

The surface-mounted variant is easy to install and remove and is intended for ventilating a single room only. The device is installed on an opening in the wall. The following figure shows the Taris extractor fan with a surface-mounted housing. Optional accessories are marked with "*".

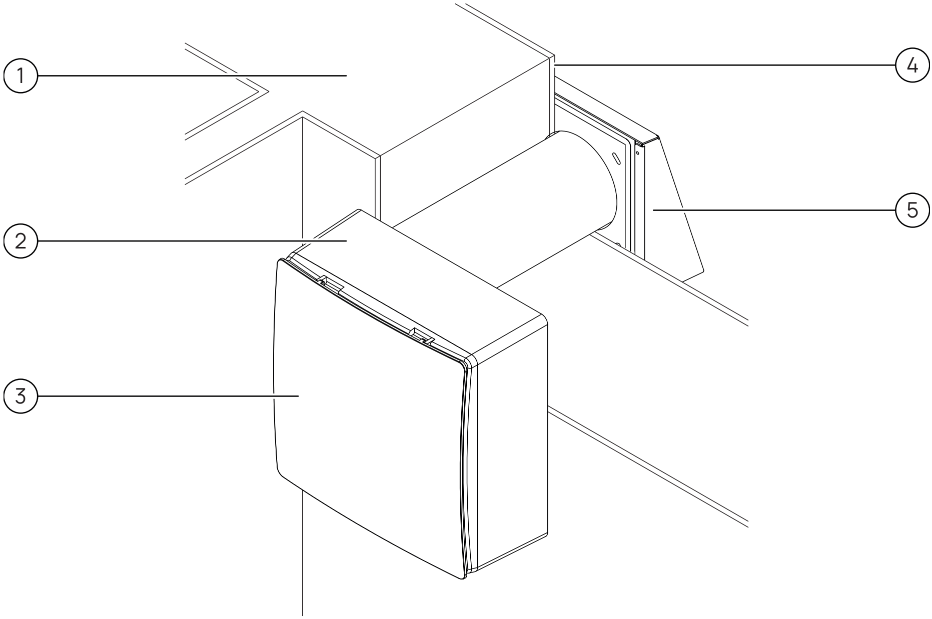


Fig. 10: Surface-mounted variant – masonry installation

1 Masonry
2 Surface-mounted housing
3 Inner panel
4 Exterior plaster
5 Taris wall installation set*

4.5.5 Flush-mounted housing

Flush-mounted variants are integrated into the wall structure so that, when installation is finished, only the inner panel is visible. This design allows extract air discharge from one or two rooms. The following figure shows the Taris extractor fan with a flush-mounted housing in drywall installation with a mounting bracket. Optional accessories are marked with "*".

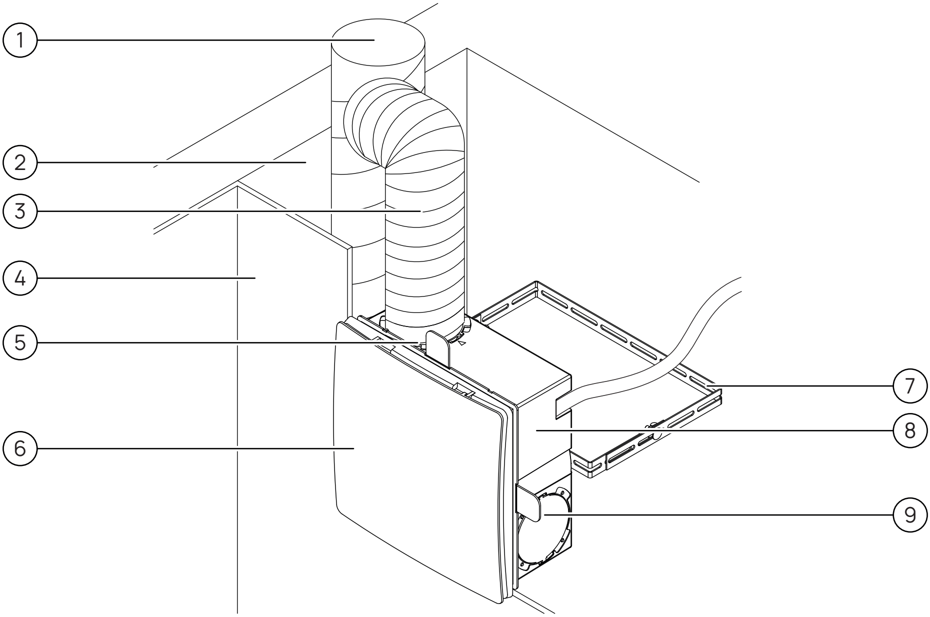


Fig. 11: Flush-mounted variant – drywall installation with mounting bracket

1 Riser pipe
2 Shaft wall
3 DN80 flexible aluminium pipe
4 Drywall
5 Exhaust opening
6 Inner panel
7 Mounting bracket*
8 Flush-mounted housing
9 Optional second-room connection

4.5.6 Fire protection designs (BS/BSS)

The Taris extractor fan fire protection designs (BS and BSS) can be only of the radial type and can be installed as a flush-mounted variant. The external housing cover consists of calcium silicate panels, and the exhaust opening has a metal plate connector. The pre-installed non-return damper is in the metal plate connector. The difference between the BS and BSS variants is the barrier.
If the difference in height between the Taris and the inlet into the riser (X) is less than 300 mm, the BS variant (which includes the barrier) must be installed to ensure protection from fire.
The following figure shows a schematic cutaway drawing of the wall structure with the BS and BSS fire protection designs:

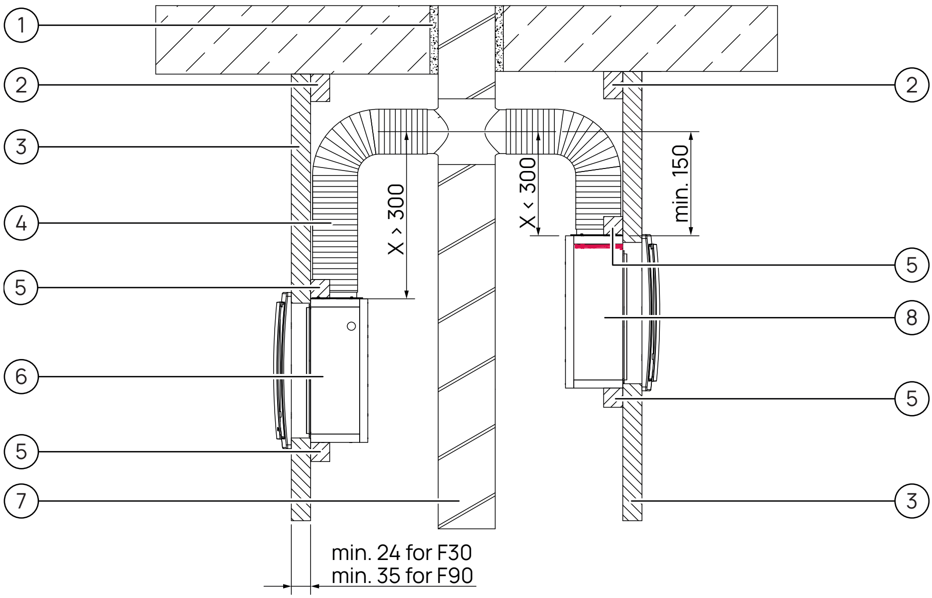


Fig. 12: Cutaway drawing – wall structure with BS and BSS fire protection designs

1 Ceiling grouting
2 Flanged collar (required for shaft walls that are flush with the storey ceiling)
3 Shaft wall (fire protection wall, Promatect LS35)
4 DN80 flexible aluminium pipe
5 Circumferential fixing strips (Promatect LS35)
6 Taris ventilation device with fire protection housing (BSS)
7 Ventilation riser
8 Taris ventilation device with fire protection housing and barrier (BS)

Fire protection function with surface-mounted housing

The fire protection function can be achieved by means of a Taris extractor fan with surface-mounted housing if the product is integrated into a fire protection wall structure. The prerequisite is that the height difference between the Taris and the inlet into the riser (X) is more than 300 mm.
The following figure shows a schematic cutaway drawing of the wall structure with the fire protection wall and Taris extractor fan with the surface-mounted housing:

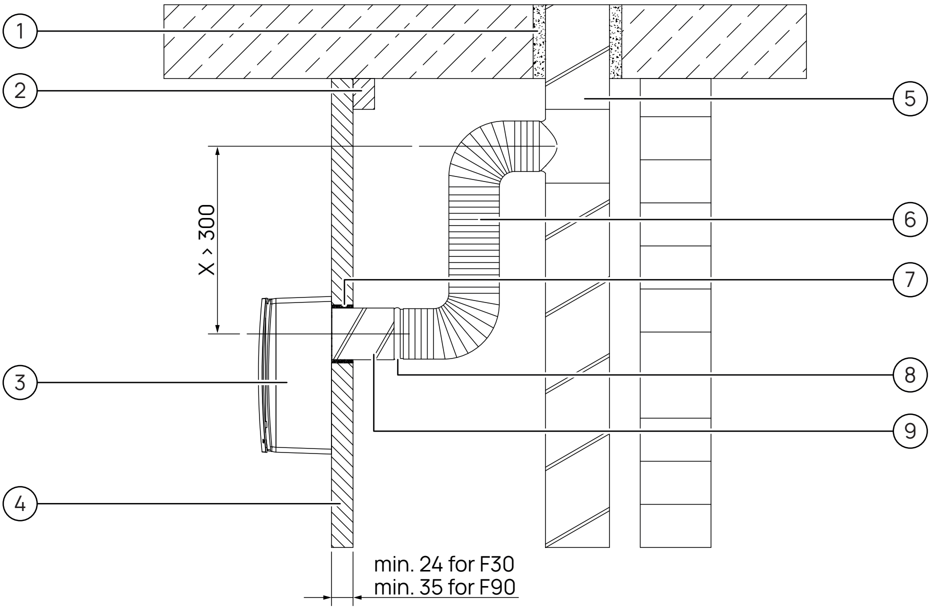


Fig. 13: Cutaway drawing – fire protection wall structure with surface-mounted housing

1 Ceiling grouting
2 Flanged collar (required for shaft walls that are flush with the storey ceiling)
3 Taris ventilation device with surface-mounted housing
4 Shaft wall (fire protection wall, Promatect LS35)
5 Ventilation riser
6 DN80 flexible aluminium pipe
7 Sealant
8 Connector
9 DN80 folded spiral-seam duct

5 Technical specifications

Your product's technical data can be derived from the individual product components. See Section 4.4 "Product variants" on page 25.

Table 5: Technical specifications

Size	Value
Ingress protection	IPX5
Protection class	II
Input voltage	230 V, 50 Hz
Control voltage	24 V DC
Power consumption	19.5 W (rated power)/0.8 W (standby)
Air volume flow	30/60/100 m^3/h
Noise emission	Varies; see planning manual
Operating temperature	-20 – 40 °C
Protection range according to VDE 0100	Outside Protection Area 0
Weight	1520 g

5.1 Dimensions

The following figures show the dimensions of the Taris extractor fan's individual housing variants and inner panel and the cable passage.

5.1.1 Surface-mounted housing

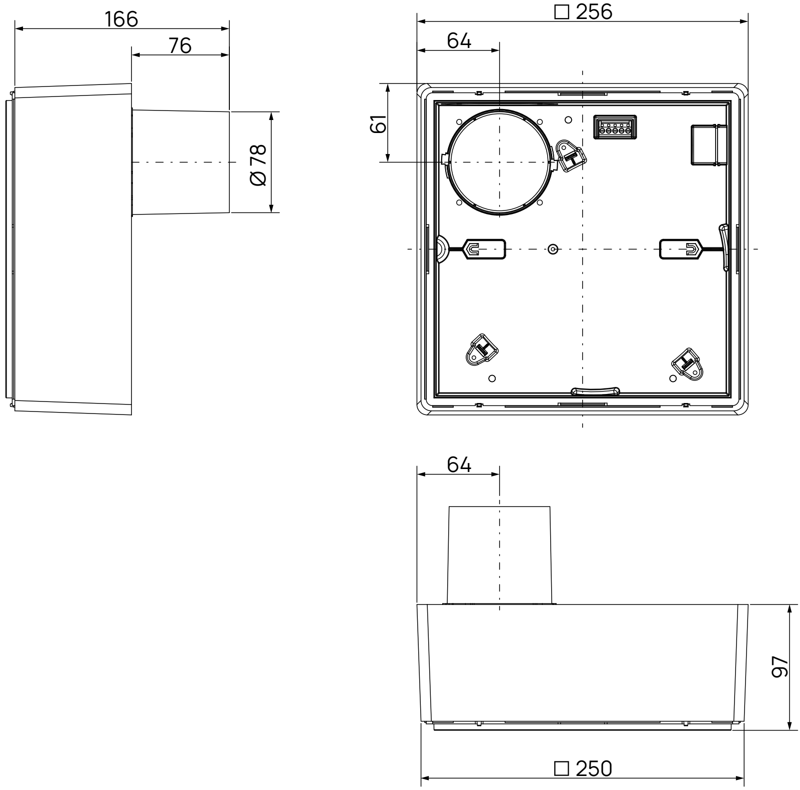


Fig. 14: Dimensioned drawing – surface-mounted Taris extractor fan housing

5.1.2 Surface-mounted wall openings

Observe the following dimensions for creating the wall openings for the cable passage and exhaust shaft:

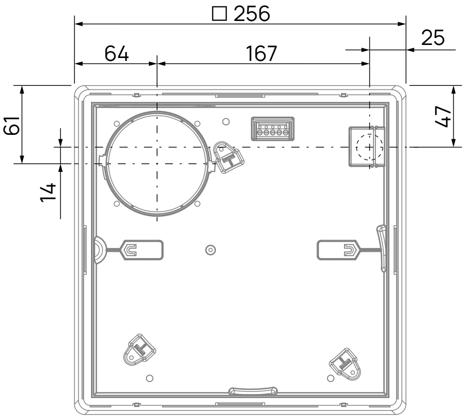


Fig. 15: Dimensioned drawing – surface-mounted Taris extractor fan cable passage

5.1.3 Wall opening, flush-mounted (radial/axial)

Observe the following dimensions for creating the wall opening for the flush-mounted variant:

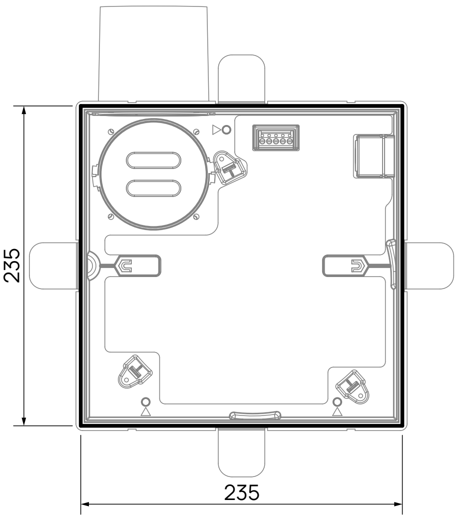


Fig. 16: Dimensioned drawing – wall opening for flush-mounted Taris extractor fan

5.1.4 Wall openings for BS/BSS fire protection variants

Observe the following dimensions for creating the exhaust shaft wall openings for the fire protection variants:

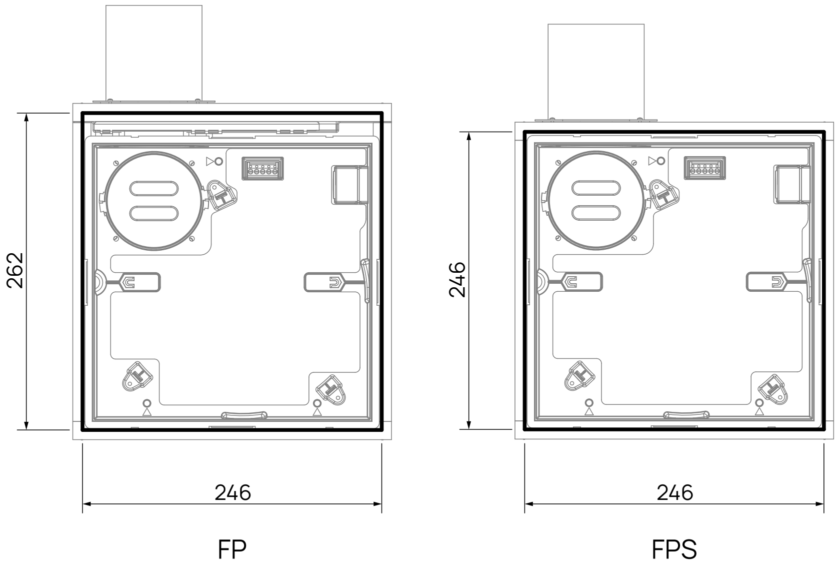


Fig. 17: Dimensioned drawing – wall opening for Taris extractor fan BS/BSS

5.1.5 Flush-mounted housing, axial

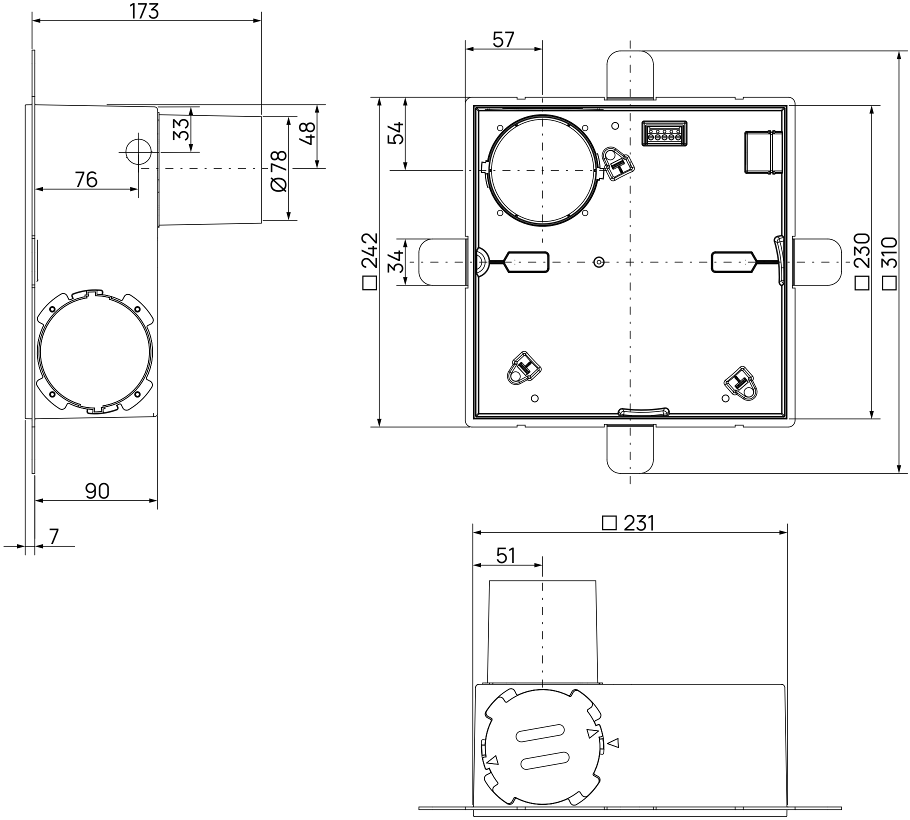


Fig. 18: Dimensioned drawing – axial flush-mounted Taris extractor fan housing

5.1.6 Flush-mounted housing, radial

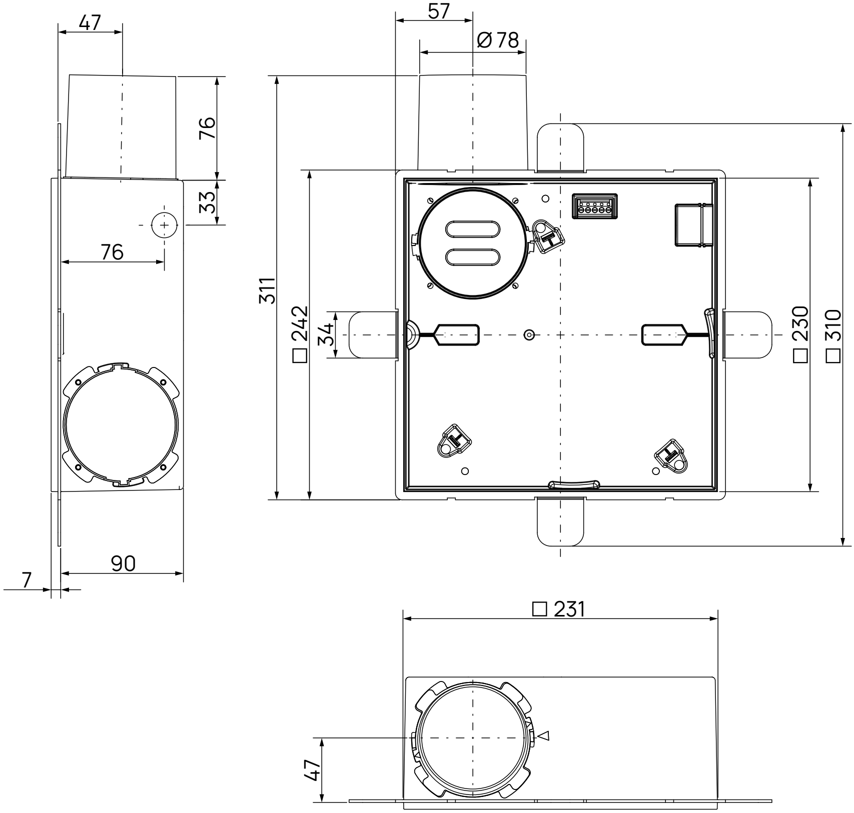


Fig. 19: Dimensioned drawing – radial flush-mounted Taris extractor fan housing

5.1.7 Fire protection housing (BS)

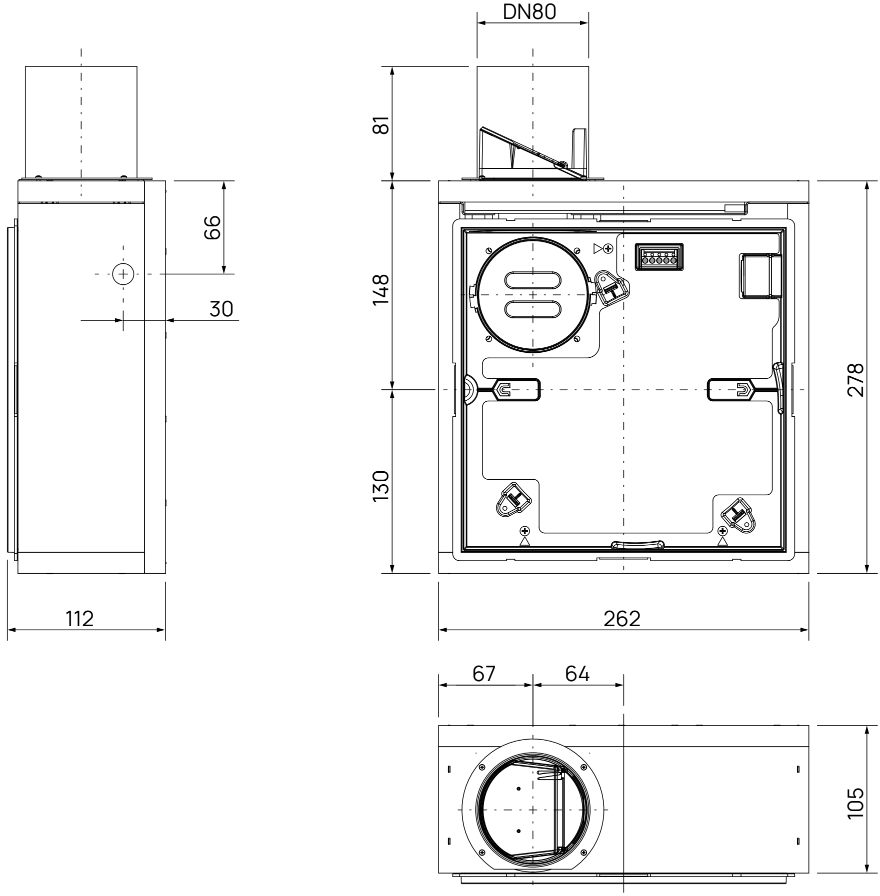


Fig. 20: Dimensioned drawing – Taris extractor fan fire protection housing (BS)

5.1.8 Fire protection housing (BSS)

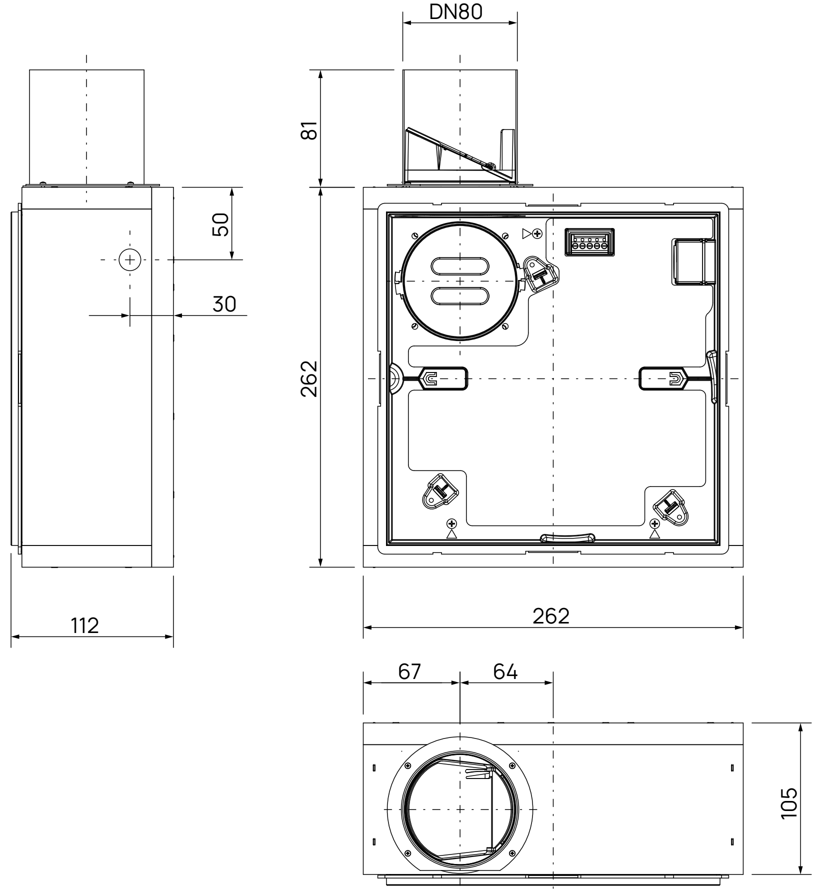


Fig. 21: Dimensioned drawing – Taris extractor fan fire protection housing (BSS)

5.1.9 Inner panel

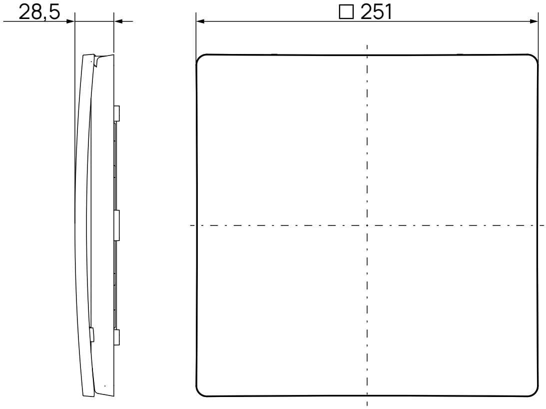


Fig. 22: Dimensioned drawing – Taris extractor fan inner panel

5.1.10 Optional accessories

Taris wall installation set

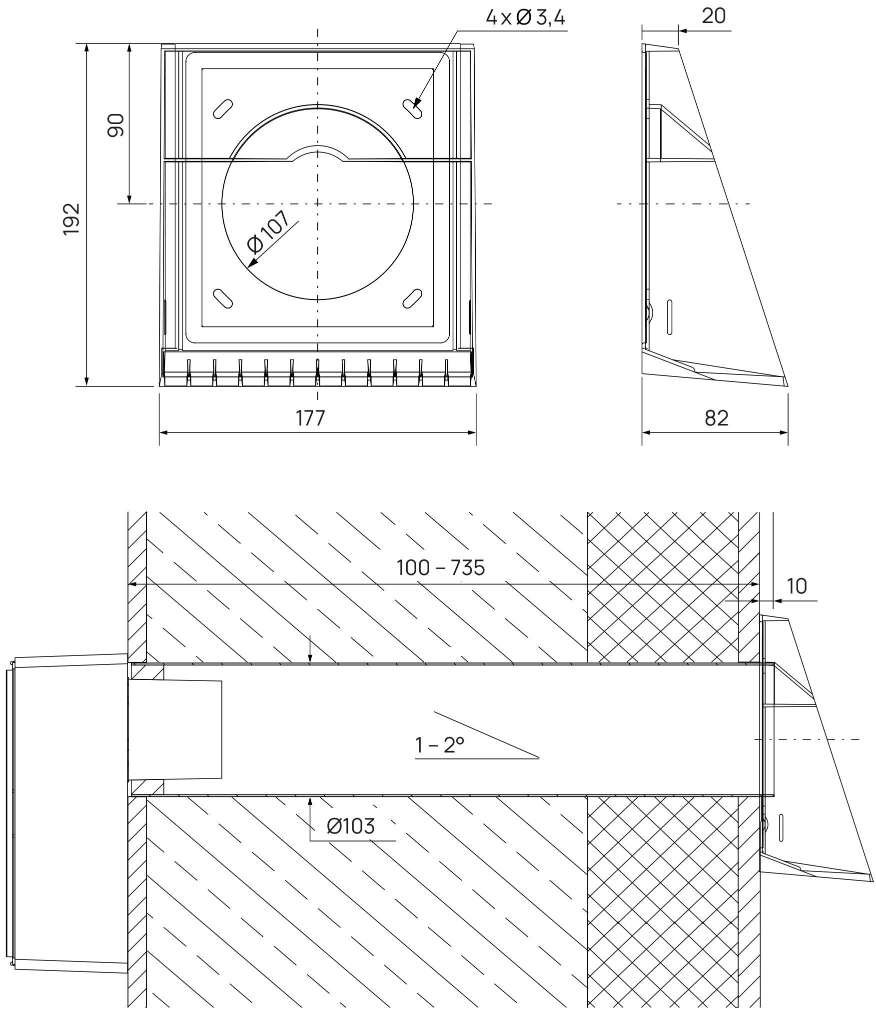


Fig. 23: Dimensioned drawing – Taris wall installation set

Second-room inner panel

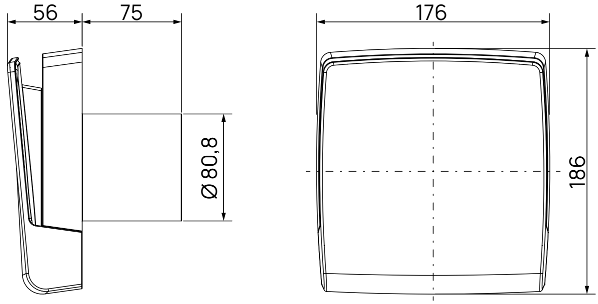


Fig. 24: Dimensioned drawing – second-room inner panel

Panel frame

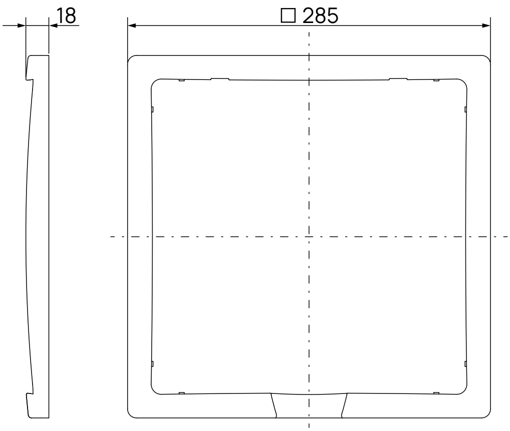


Fig. 25: Dimensioned drawing – panel frame

6 Storage and transport

The same conditions apply to storing and transporting the product as for using it (see Section 3 “Conditions for use” on page 14).

7 Installation and assembly

This section contains all information concerning proper product installation and assembly.

Observing operating personnel requirements

To prevent accidents and property damage, comply with personnel qualification requirements and have installation and assembly work performed by specialists as necessary. See Section 2.3 “Operating personnel requirements” on page 12.

7.1 Prerequisites for installation

Before installation begins, the following conditions must be met:

- The wall structure wall is completed and even.[1)]
- The recess for your ventilation device has been made in the wall structure.
- Electrical line(s) have been laid and are ready to be connected:
  - Only cables with solid leads can be used for the mains connection.
  - The device’s mains connection must have a fuse in the fuse box.
  - For surface-mounted variants, see the dimensioned drawing for the cable passage in Section 5.1.2 “Surface-mounted wall openings” on page 34.
- Exhaust duct(s) have been laid and are ready to be connected:
  - If the planned structure involves the Taris wall installation set, equip the wall mounting sleeve and weather protection hood as described in the relevant installation instructions. See Section 7.9.1 “Installing the Taris wall installation set” on page 69.
  - If multiple devices are to share a single supply shaft, also observe the information in Section 7.2 “Requirements for the supply shaft system” on page 44.

The following sections describe the conditions that must be met before the product is assembled and installed. Install the product only when all prerequisites for your specific installation situation are fulfilled.

1 If the fire protection design is to be installed, the wall structure must also conform to fire protection criteria if fire protection is to be effective.

7.2 Requirements for the supply shaft system

If multiple exhaust air units are to be connected to a single supply shaft (string), observe the following prerequisites:

- Ensure that the main line is large enough to allow all ventilation devices to be operated at full capacity simultaneously.
- Dimension the riser/connecting pipes, including diameter and the necessary branch pieces, according to the number of floors and devices using the string diagrams (see Section “String diagrams for dimensioning the riser pipes” on page 45). Distortions, narrowed cross-sections, or a discharge tube of more than 1.5 m above the top unit lead to increased pressure losses. Compensate for this with a larger riser pipe diameter.
- Exhaust air ducts must be tight according to DIN 18017-3, stable, and made of fire-resistant material (DIN 4102:A) for more than two full storeys. They must be thermally insulated or designed to prevent damage caused by condensate. The discharge tube must be routed over the roof.
- Use noise-damping pipe clamps to fix the main line (supply shaft) in place in order to avoid transmission of structure-borne noise. The design and installation of the ventilation systems must comply with the building acoustics requirements.
- In the exhaust air ducts (connecting hose), create cleaning apertures with tight closures so that the exhaust air ducts can be cleaned easily. A sufficient number of cleaning apertures must be guaranteed. Screw-in cleaning caps are not permitted.
- Connect a maximum of two ventilation devices per floor to a common supply shaft.
- No other rooms in a dwelling may be connected to a ventilation device which vents the bathroom and restroom.
- When connecting to the ducting, the bending radius (R) must not be less than the pipe diameter (DN).

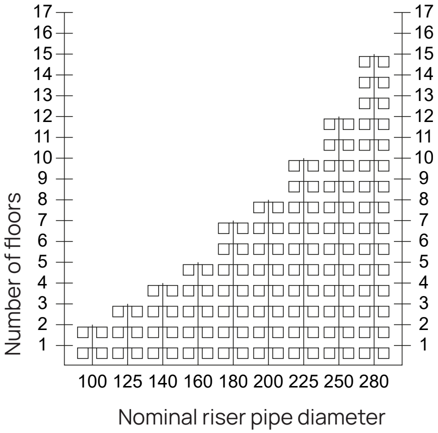
String diagrams for dimensioning the riser pipes

The following tables show the correct riser pipe nominal diameters by number of floors and number and power of the devices used.

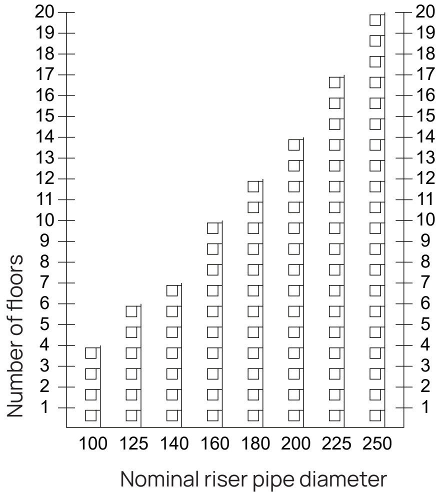
Table 6: String diagrams for dimensioning the riser pipes

Air volume flow 60 m³/h

Two exhaust air units per floor

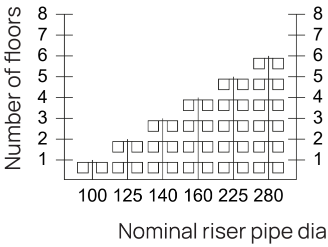


One exhaust air unit per floor

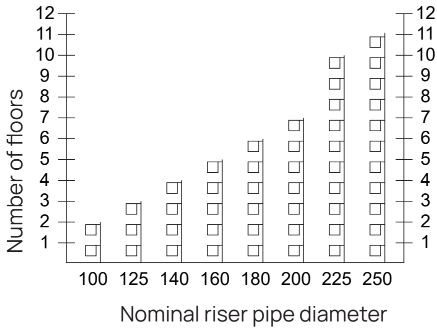


Air volume flow 100 m³/h

Two exhaust air units per floor



One exhaust air unit per floor



7.3 Checking the scope of delivery

Upon receipt, use the delivery note to check the delivery for completeness and transport damage. Report missing items immediately. The scope of delivery for the product described in these Installation and operating instructions can be found in Section 4.2 “Structure and scope of delivery” on page 18.

7.4 Installation location and installation positions

For safe, flawless Taris extractor fan function, observe the following installation location conditions and possible device installation positions.

7.4.1 Installation location

For safe operation of the device, observe the electrical protection areas according to VDE 0100:

- Install the Taris extractor fan outside Protection Area 0.
- Install the switch/light switch outside Protection Areas 0 to 2.

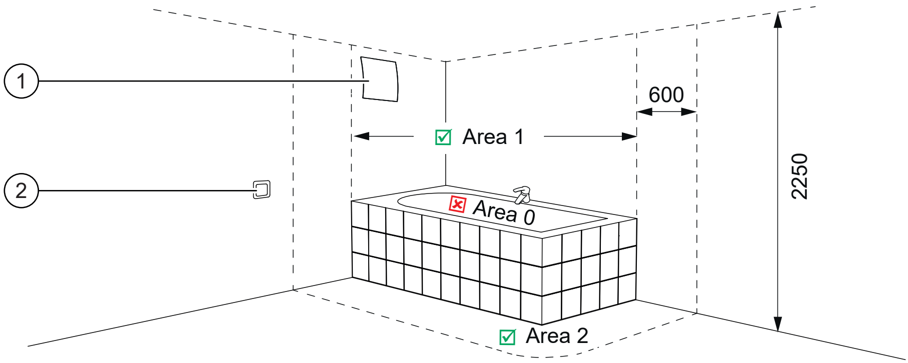


Fig. 26: Installation location in humid room according to VDE 0100

1 Taris extractor fan
2 Switch/light switch

7.4.2 Air volume flows

For optimum functioning of the exhaust air unit and to avoid negative pressure in the room, it must be ensured that the extracted air volume can flow into the supply air. Observe the following information according to DIN 18017-3 to create an optimal flow relationship between supply air and extract air.

Supply air

Observe the following points when setting up the air supply:

- For each internal room to be ventilated, provide an unclosable air vent with a free cross-section of at least 150 cm^2 in order to ensure an adequate supply of air.
- We recommend placing an external air supply such as the inVENTer aV100 ALD positioned in the upper wall area, ideally above a radiator, in the room to be ventilated (this pre-warms the outdoor air flowing in).

Exhaust air

Observe the following points when setting up exhaust air discharge:

- Route the extract air as close as possible to the ceiling into the riser pipe or directly to the outside.
- In bathrooms, place the extract air and supply air units so that no draughts (air volume flows above 0.2 m/s) occur in the zone occupied by the user.
- For optimum humidity extraction and reliable humidity sensor information, place the extractor fan in the room's air volume flow. Systems for the ventilation of sanitary rooms such as bathrooms and restrooms must be designed according to good engineering practice and according to the requirements of DIN 18017-3 (depending on the type of design and mode of operation).
- Deviating designs and unfavourable installation and operating conditions can result in reduced air volume flow. According to DIN 18017-3, air volume flow can be up to 15% below the planned flow rate for several ventilation devices operated simultaneously in the supply shaft, taking into account external influences.

7.4.3 Installation positions

Possible installation positions depend on the housing variant. The fan assembly has a non-return damper that is closed by gravity. The following figures show the possible installation positions and the orientation of the device and the non-return damper.

Surface-mounted housing installation position

Install the surface-mounted variant in this orientation only:

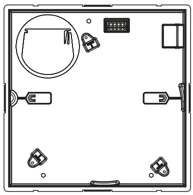


Fig. 27: Surface-mounted Taris extractor fan installation position

Flush-mounted housing installation position

Install the flush-mounted variant in one of the following orientations:

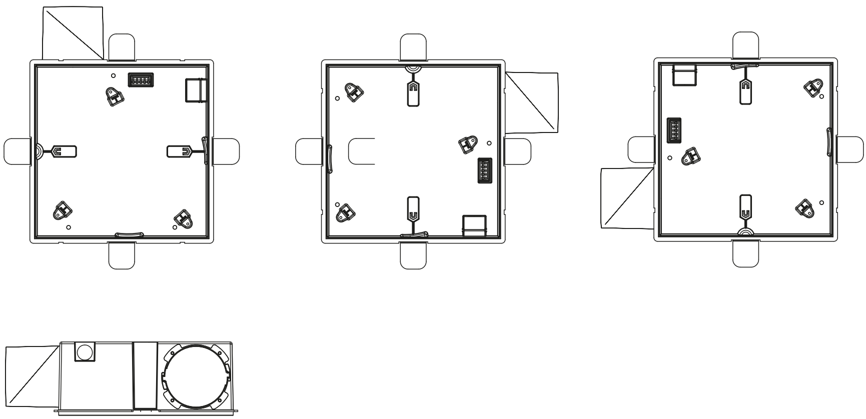


Fig. 28: Flush-mounted Taris extractor fan installation positions, radial

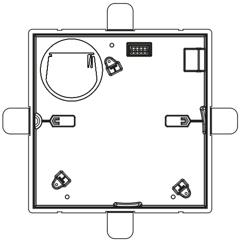


Fig. 29: Flush-mounted Taris extractor fan installation positions, axial

Flush-mounted fire protection housing (BS/BSS) installation positions

Install the fire protection housing as a flush-mounted variant in one of the following orientations:

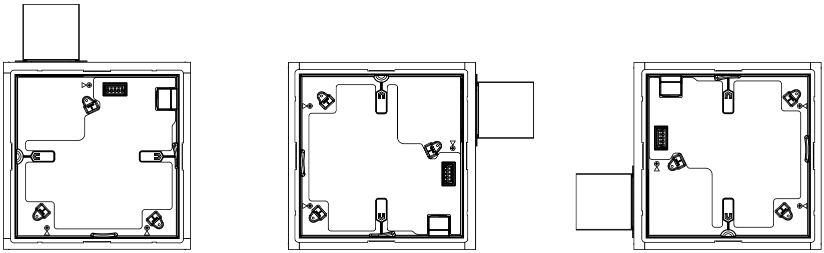


Fig. 30: BS/BSS flush-mounted radial Taris extractor fan installation positions

7.4.4 Housing installation position

Observe the following minimum distances for the wall opening:

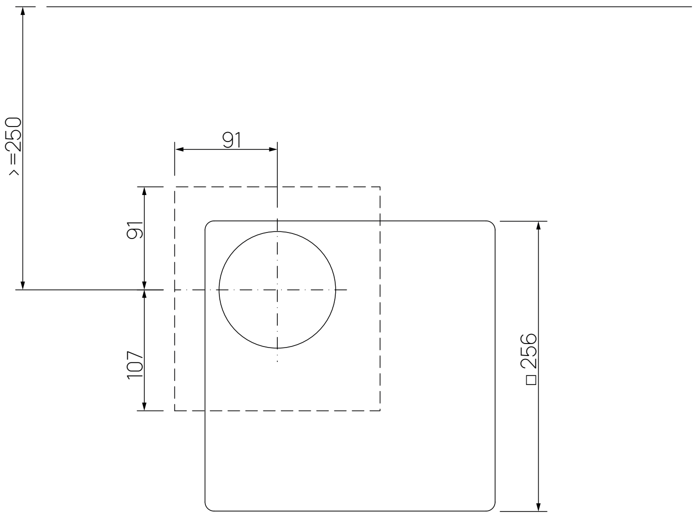
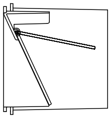


Fig. 31: Installation position dimensioned drawing – flush-mounted/surface-mounted axial housing with wall duct and weather protection hood

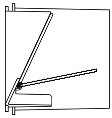
7.4.5 Non-return damper installation position

Be sure to install the non-return damper in such a way that it can be closed by gravity. The following figures show the correct installation direction. If needed, rotate the non-return damper.

Correct:



Incorrect:



Surface-mounted/flush-mounted housing

The non-return damper is located in front of the exhaust opening:

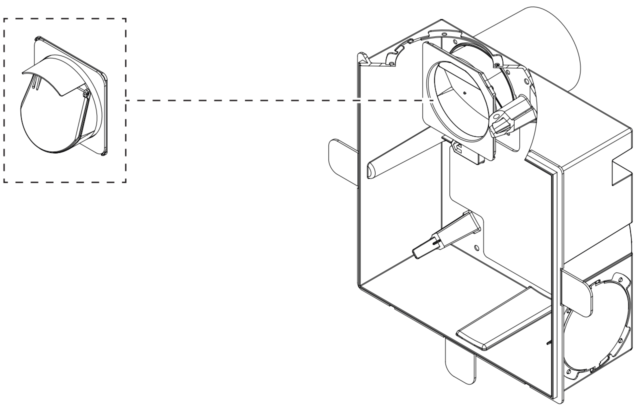


Fig. 32: Installation position – non-return damper, surface-mounted/flush-mounted housing

In the fire protection variant of the Taris, the non-return damper is in the room connector. If the damper needs to be rotated (to the right for installation with room connector), unscrew the room connector screws and rotate the connector completely.

7.5 Mounting the Taris extractor fan with surface-mounted housing

Cordless screwdriver, drill, folding ruler, screwdriver, pencil, spirit level

DANGER

Electrical hazards

Failure to properly install electrical components results in mortal danger.

→ Only trained electrotechnical specialists may work on the electrical system and only according to electrical engineering regulations.

→ Prior to work on electrical equipment, disconnect all components from mains and secure them against being switched back on.

NOTICE

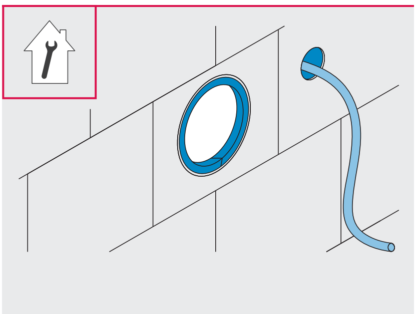
Observing the prerequisites for installation

If installation prerequisites are not met, the device cannot function properly, and device damage can result.

→ Observe the information in Section 7.1 “Prerequisites for installation” on page 43.

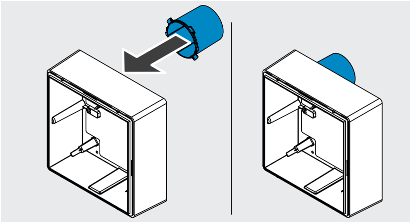
Preparing connection pipes and electrical connections

Prepare the connection pipe(s) and/or the Taris wall installation set so that the housing’s exhaust opening and, as necessary, intake opening can be easily adapted. Lay the cables so that they can be routed into the housing from behind. The example shows installation of the axial housing with the Taris wall installation set.



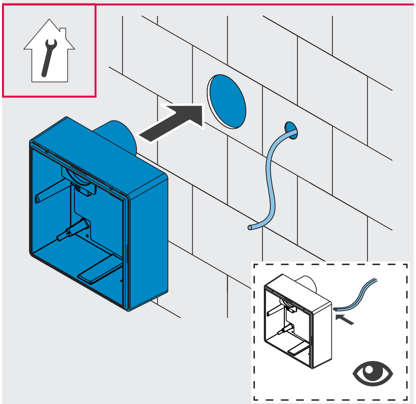
1. Prepare the Taris wall installation set and the electrical connections.

Observe the correct installation position and wall opening dimensions. See Section 7.4.3 “Installation positions” on page 48 and Section 5.1.2 “Surface-mounted wall openings” on page 34.



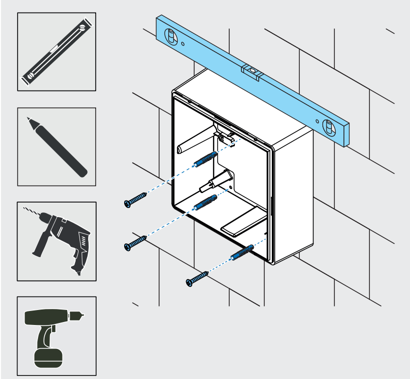
2. Prepare the housing and adapt the room connector.

> See Section 7.8 “Removing blind covers and adapting the room connector” on page 67.



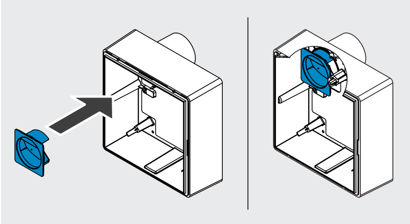
3. Position the housing with the exhaust opening exactly over the pre-installed Taris wall installation set or the pre-mounted flexible aluminium pipe on the riser pipe.

> Guide the mains cable (230 V, 50 Hz) into the housing. See Section 7.10 “Electrical installation” on page 79.



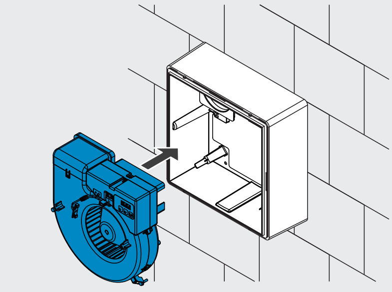
4. Orient the housing horizontally.
5. Mark the three boreholes in the inner wall.
6. Drill the boreholes.
7. Insert anchors into the boreholes.
8. Screw the housing to the inner wall.
9. Connect the mains cable leads.

> See Section 7.10 “Electrical installation” on page 79.

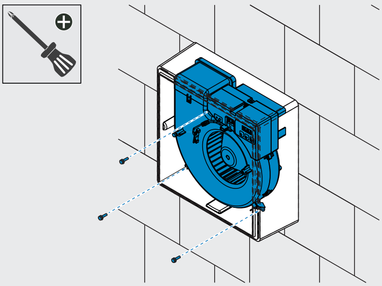


10. Insert the non-return damper into the housing’s exhaust opening.

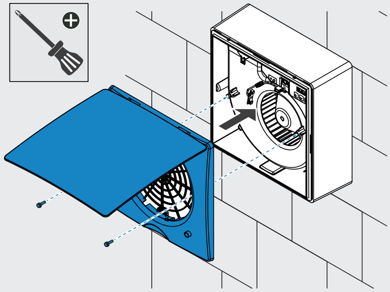
> Observe the correct non-return damper installation position. See Section 7.4.5 “Non-return damper installation position” on page 51.



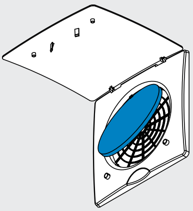
11. Push the fan assembly into the housing until all three housing sockets engage.



12. Use the three screws provided (3.5 x 14 mm) to fix the fan assembly to the housing sockets.



13. Position the ventilation grille and the inner panel cover on the housing and use the two screws provided (3.5 x 14 mm) to screw it firmly to the sockets on the fan assembly.



14. Insert the filter element and close the inner panel cover.

    ▶ The Taris extractor fan with surface-mounted housing has been installed.

7.6 Installing the Taris extractor fan with flush-mounted housing

Various product installation types and positions are possible for the flush-mounted housing product variant (see Section 7.4.3 "Installation positions" on page 48). Below, installation in the outer wall and the shaft wall will be explained as examples.

7.6.1 Installation in the outer wall

Cordless screwdriver, folding ruler, screwdriver, pencil, spirit level, drywall screws

DANGER

Electrical hazards

Failure to properly install electrical components results in mortal danger.

→ Only trained electrotechnical specialists may work on the electrical system and only according to electrical engineering regulations.
→ Prior to work on electrical equipment, disconnect all components from mains and secure them against being switched back on.

NOTICE

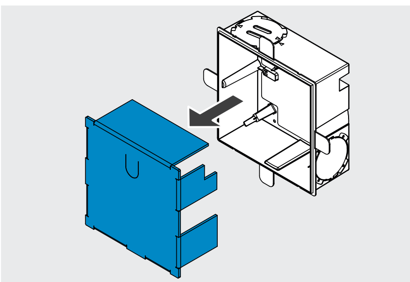
Observing the prerequisites for installation

If installation prerequisites are not met, the device cannot function properly, and device damage can result.

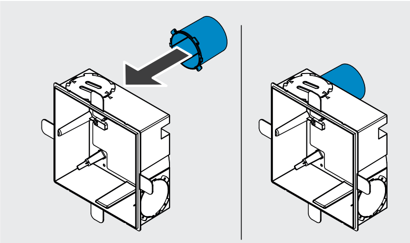
→ Observe the information in Section 7.1 "Prerequisites for installation" on page 43.

Preparing connection pipes and electrical connections

Prepare the connection pipe(s) and/or the Taris wall installation set so that the housing's exhaust opening and, as necessary, intake opening can be easily adapted. Lay the cables so that they can be routed into the housing from behind. The example shows installation of the axial housing with the Taris wall installation set.

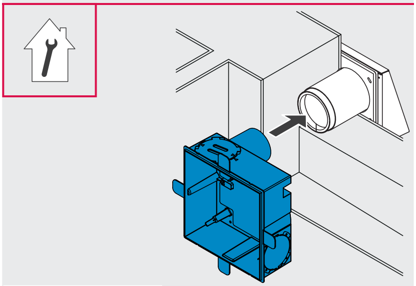


1. Remove the plastering cover from the housing.



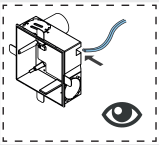
2. Prepare the housing and adapt the room connector.

See Section 7.8 “Removing blind covers and adapting the room connector” on page 67.

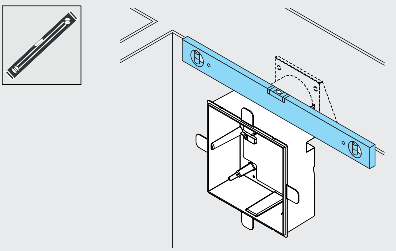


Observe the correct installation position. See Section 7.4.3 “Installation positions” on page 48.

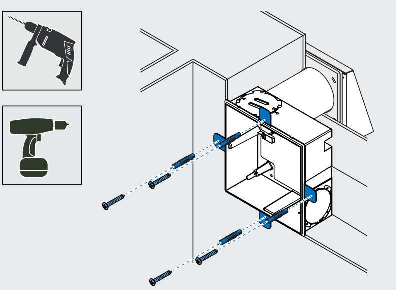
3. On the outer wall structure, create a horizontal support for the housing.
4. Position the housing with the exhaust opening exactly over the pre-installed Taris wall installation set.



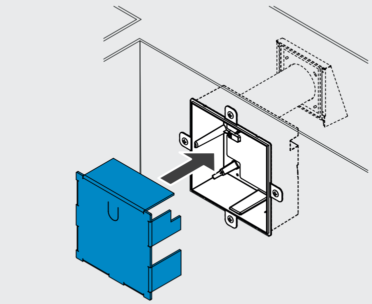
Guide the mains cable (230 V, 50 Hz) into the housing. See Section 7.10 “Electrical installation” on page 79.



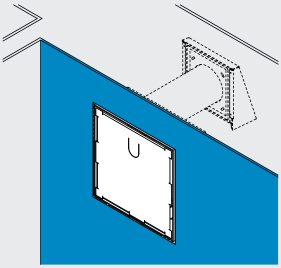
5. Orient the housing horizontally.



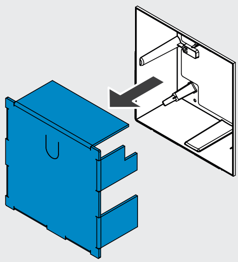
6. Drill four boreholes in the inner wall.
7. Insert anchors into the boreholes.
8. At the tabs, screw the housing to the inner wall.



9. Replace the plastering cover in the housing to protect the housing from dirt caused during subsequent work.

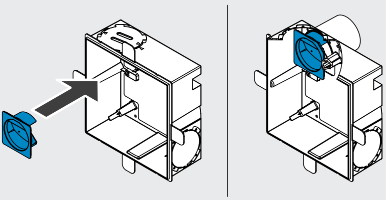


10. Plaster in the housing.



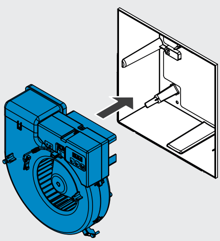
11. Remove the plastering cover from the housing.
12. Connect the mains cable leads.

See Section 7.10 “Electrical installation” on page 79.

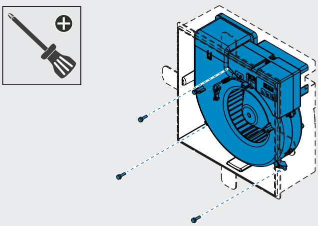


13. Insert the non-return damper into the housing’s exhaust opening.

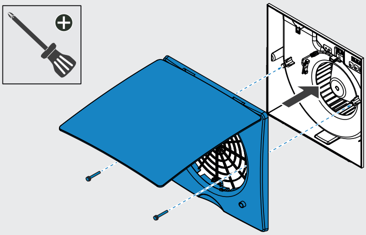
Observe the correct non-return damper installation position. See Section 7.4.5 “Non-return damper installation position” on page 51.



14. Push the fan assembly into the housing until all three housing sockets engage.

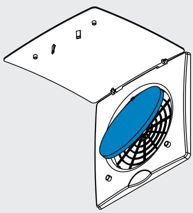


15. Use the three screws provided (3.5 x 14 mm) to fix the fan assembly to the housing sockets.



> If your structural situation so requires, attach the optional panel frame to the inner panel. See Section 7.9.3 “Installing the second-room inner panel” on page 77.

16. Position the ventilation grille and the inner panel cover on the housing and use the two screws provided (3.5 x 14 mm) to screw it firmly to the sockets on the fan assembly.



17. Insert the filter element and close the inner panel cover.

   ► The Taris extractor fan with flush-mounted housing has now been mounted in the outer wall.

7.6.2 Installation in the shaft wall

Cordless screwdriver, folding ruler, screwdriver, pencil, spirit level, 4 x drywall screws

DANGER

Electrical hazards

Failure to properly install electrical components results in mortal danger.

→ Only trained electrotechnical specialists may work on the electrical system and only according to electrical engineering regulations.

→ Prior to work on electrical equipment, disconnect all components from mains and secure them against being switched back on.

NOTICE

Observing the prerequisites for installation

If installation prerequisites are not met, the device cannot function properly, and device damage can result.

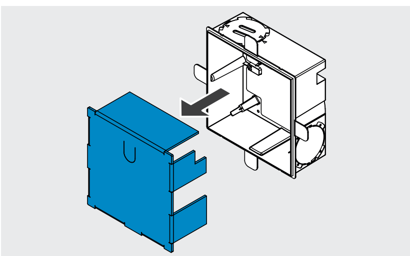
→ Observe the information in Section 7.1 “Prerequisites for installation” on page 43.

Preparing connection pipes and electrical connections

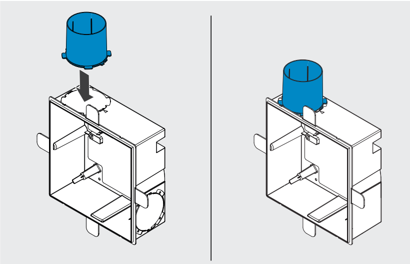
Prepare the connection pipe(s) so that the housing’s exhaust opening and, as necessary, intake opening can be easily adapted. Lay the cables so that they can be routed into the housing from behind. The example shows installation of the radial housing.

Sound decoupling

When connecting the ventilation device to the main supply line, ensure sufficient sound decoupling. For housing installation in high-resonance facing panels, use suitable elastic inserts (such as foam rubber) to avoid transmission of structure-borne noise.

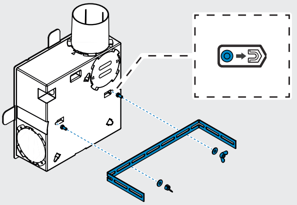


1. Remove the plastering cover from the housing.

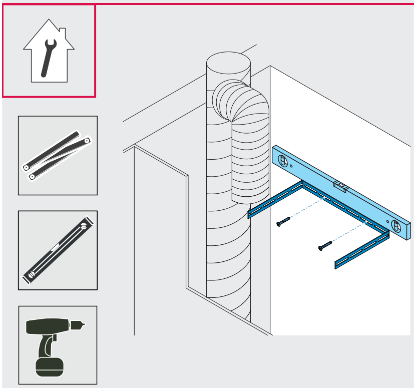


2. Prepare the housing and adapt the room connector.

See Section 7.8 “Removing blind covers and adapting the room connector” on page 67.

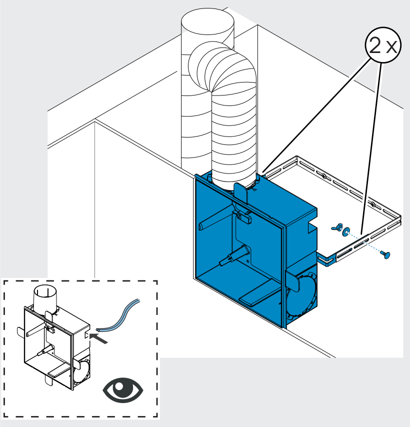


3. Use the screws, washers, and wing nuts provided to screw the small part of mounting bracket to the housing.



4. Measure the installation height and screw the large part of the mounting bracket to the inner wall structure.

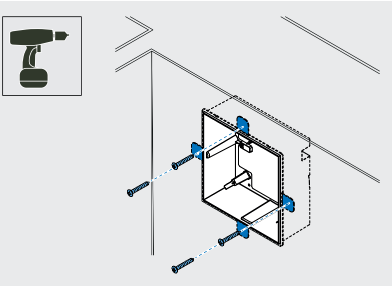
It may be necessary to use a hacksaw to shorten the inner-wall mounting bracket if the flush-mounted housing would otherwise protrude from the wall structure.



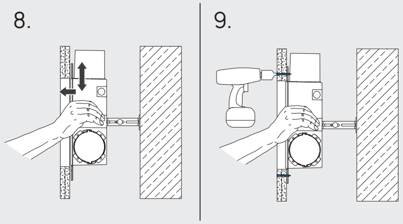
5. Position the housing with the exhaust opening exactly over the pre-installed exhaust shaft.

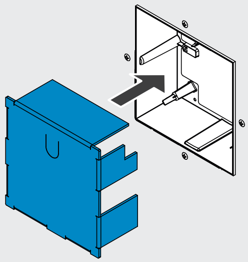
Guide the mains cable (230 V, 50 Hz) into the housing. See Section 7.10 “Electrical installation” on page 79.

6. Use the screws, washers, and wing nuts provided to screw the two parts of the mounting bracket together so that the front of the housing with its tabs fits to the back side of the subsequent drywall.

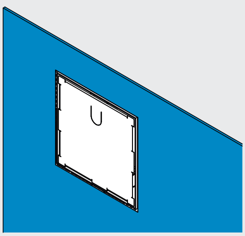


7. Position the housing in the drywall cutout.
8. At the tabs, screw the housing to the drywall.

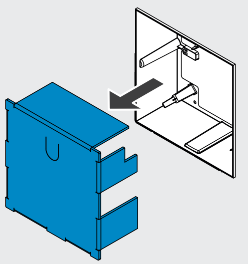




9. Replace the plastering cover in the housing to protect the housing from dirt caused during subsequent work.

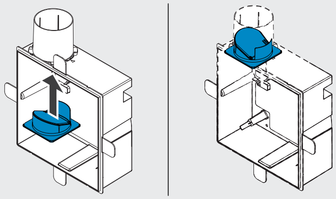


10. Plaster in the housing.



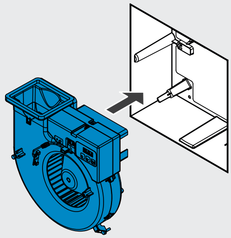
11. Remove the plastering cover from the housing.
12. Connect the mains cable leads.

See Section 7.10 “Electrical installation” on page 79.

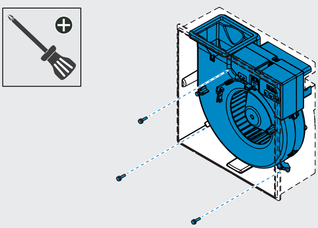


13. Insert the non-return damper into the housing's exhaust opening.

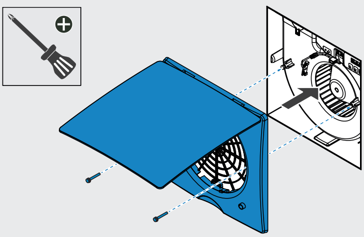
Observe the correct non-return damper installation position. See Section 7.4.5 “Non-return damper installation position” on page 51.



14. Push the fan assembly into the housing until all three housing sockets engage.



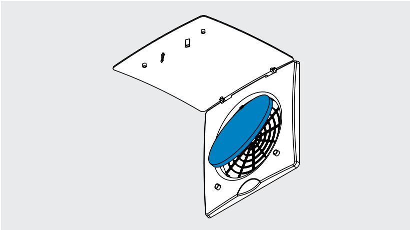
15. Use the three screws provided (3.5 x 14 mm) to fix the fan assembly to the housing sockets.



If your structural situation so requires, attach the optional panel frame to the inner panel. See Section 7.9.3 “Installing the second-room inner panel” on page 77.

16. Position the ventilation grille and the inner panel cover on the housing and use the two screws provided (3.5 x 38 mm) to screw it firmly to the sockets on the fan assembly.

The 38-mm screws are designed for a front wall thickness of 25 mm. This corresponds to double-covering with 12.5-mm gypsum boards. If your structural conditions deviate, use screws with lengths adjusted accordingly.



17. Insert the filter element and close the inner panel cover.

    ▶ The Taris extractor fan with flush-mounted housing has now been mounted on the shaft wall.

7.7 Installing the Taris extractor fan with fire protection housing

Various installation types and positions are possible for the fire protection housing (BS/BSS) product variants (see Section 7.4.3 “Installation positions” on page 48). Below is an explanation of a sample installation in a shaft wall with barrier (fire protection cartridge).
For the BS and BSS variants, see Section 4.5.6 “Fire protection designs (BS/BSS)” on page 30.

Cordless screwdriver, folding ruler, screwdriver, pencil, spirit level, drywall screws

DANGER

Electrical hazards

Failure to properly install electrical components results in mortal danger.

→ Only trained electrotechnical specialists may work on the electrical system and only according to electrical engineering regulations.
→ Prior to work on electrical equipment, disconnect all components from mains and secure them against being switched back on.

NOTICE

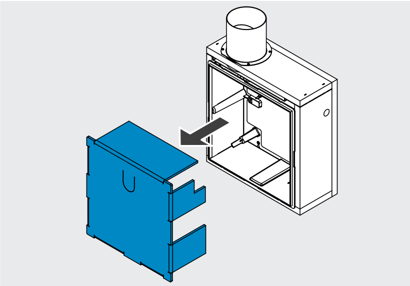
Observing the prerequisites for installation

If installation prerequisites are not met, the device cannot function properly, and device damage can result.

→ Observe the information in Section 7.1 “Prerequisites for installation” on page 43.

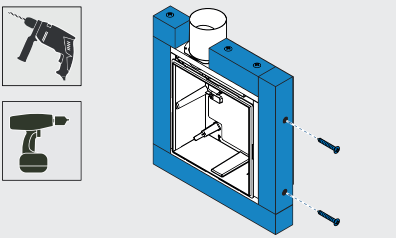
Preparing connection pipes and electrical connections

Prepare the connection pipe(s) so that the housing’s exhaust opening and, as necessary, intake opening can be easily adapted. Lay the cables so that they can be routed into the housing from behind.

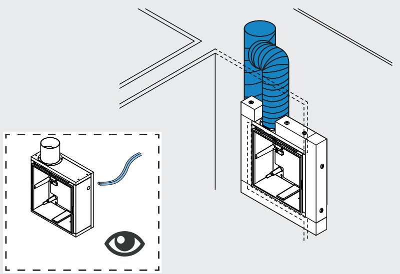


1. Remove the plastering cover from the housing.

2. Create a recess in the fire protection wall or leave the fire protection wall open enough to install the housing.

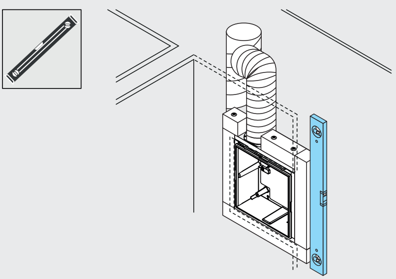


3. Prepare the housing and install circumferential strips made of fire protection material (calcium silicate).

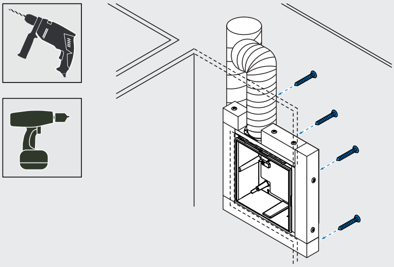


4. Position the housing with the exhaust opening exactly over the pre-installed exhaust shaft.

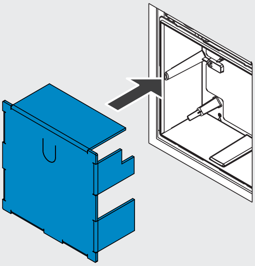
Guide the mains cable (230 V, 50 Hz) into the housing. See Section 7.10 “Electrical installation” on page 79.



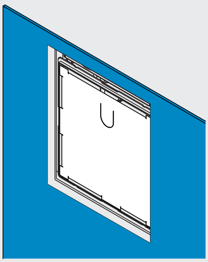
5. Orient the housing horizontally.



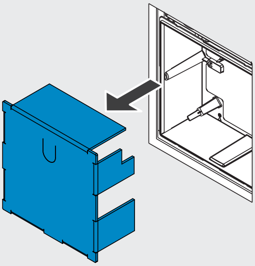
6. Use the strips to fix the housing to the fire protection wall from the rear.



7. Replace the plastering cover in the housing to protect the housing from dirt caused during subsequent work.

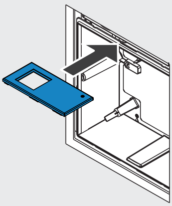


8. Plaster in the housing.

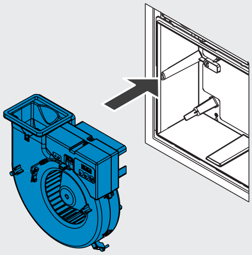


9. Remove the plastering cover from the housing.
10. Connect the mains cable leads.

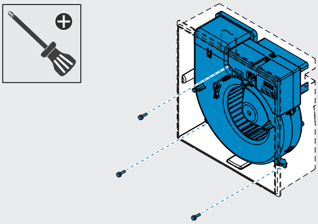
See Section 7.10 “Electrical installation” on page 79.



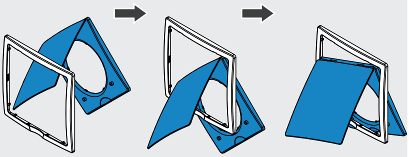
11. Push the barrier into the mount provided for the purpose in the upper part of the housing.



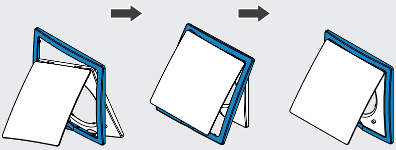
12. Push the fan assembly into the housing until all three housing sockets engage.



13. Use the three screws provided (3.5 x 14 mm) to fix the fan assembly to the housing sockets.

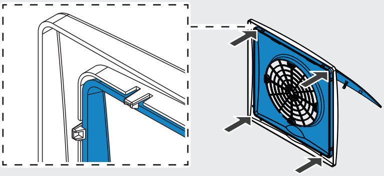


14. As shown, insert the inner panel, rotated slightly with cover open, into the panel frame.



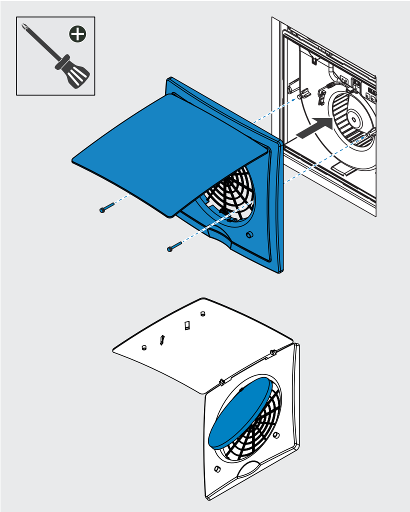
15. Orient the panel frame as shown so that it is parallel with the inner panel.

Proceed with care and be sure not to damage the inner panel’s hinges.



16. Clip the inner panel into all panel frame clipping points.

   ► The panel frame has been installed.



17. Position the ventilation grille with the panel frame cover on the housing and use the two screws provided (3.5 x 38 mm) to screw it firmly to the sockets on the fan assembly.

18. Insert the filter element and close the inner panel cover.

    ► The Taris extractor fan with fire protection housing (BS) has now been mounted on the shaft wall.

7.8 Removing blind covers and adapting the room connector

The standard housing has two possible outlets for extract air and three possible inlets (for two-room connection only), each of which can be used to adapt a room connector. Depending on your installation situation, you may need to insert and remove the blind covers.

Cutting knife

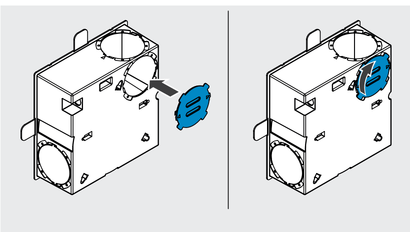
NOTICE

Observing the specific installation situation

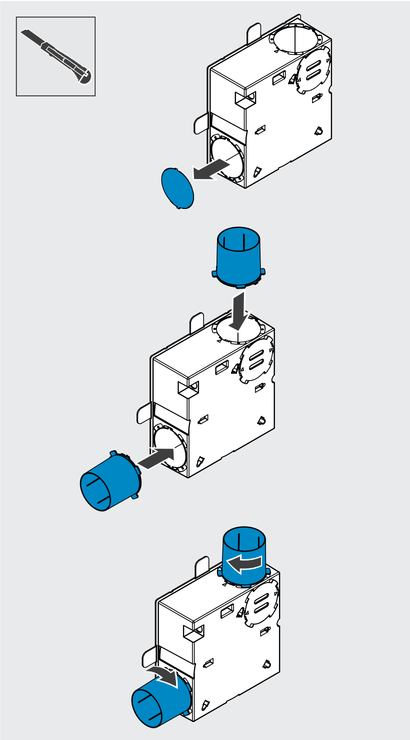
If more blind covers than necessary are removed, the device may not function as desired, and this may lead to damage.

→ Remove blind covers only from those points that are to serve as air inlets and outlets in your specific installation situation.

The example shows preparation of a flush-mounted housing for two-room extraction with radial outlet. Proceed as follows:



1. Insert the blind cover provided on the housing's rear opening.
2. Fix the blind cover in place by rotating it clockwise on the housing.



3. Press the fixed blind cover out at the defined breaking point. As necessary, carefully use a cutting knife.

4. Position the room connectors on the housing openings.

5. Fix the room connectors in place with a clockwise rotation on the housing.

   ► The flush-mounted housing with two-room exhaust discharge and radial exhaust opening has been prepared.

7.9 Installing optional accessories

The following sections describe installation of optional accessories.

7.9.1 Installing the Taris wall installation set

Creating a wall opening

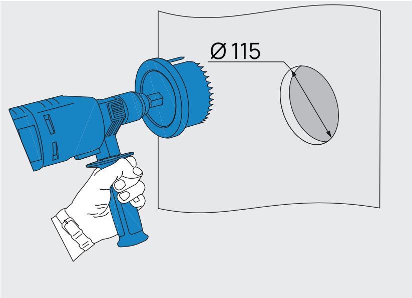
Drill with Ø 115 mm core drilling or milling drill attachment.

NOTICE

Observing the prerequisites for installation

If installation prerequisites are not met, the device cannot function properly, and device damage can result. Observe the following preconditions:

→ The masonry must be dry and in a load-bearing condition.
→ There are no load-bearing elements in the borehole position.
→ Requirements at the installation location: For minimum distances to frames, walls, and ceilings, see Section 7.4 “Installation location and installation positions” on page 46.



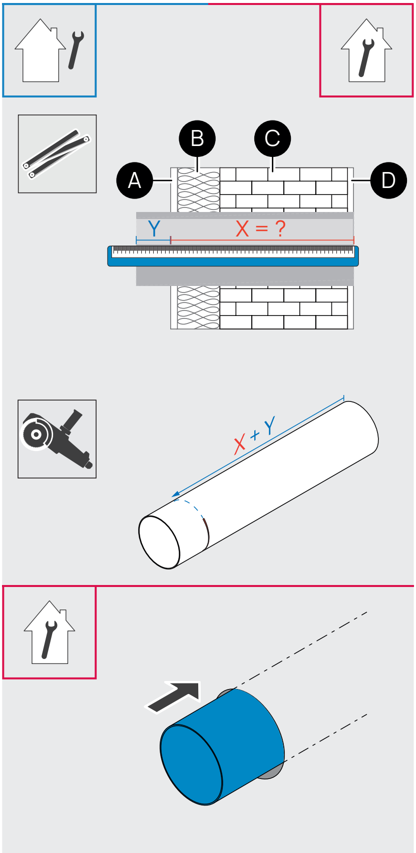
1. Create a wall opening, Ø 115 mm, at the installation location of the ventilation device.

The wall mounting sleeve for the ventilation device must have a slope of 1-2° to the exterior wall side. Alternatively the hole can be drilled with a slope.

► The wall opening for the ventilation device has been created.

Installing the wall mounting sleeve

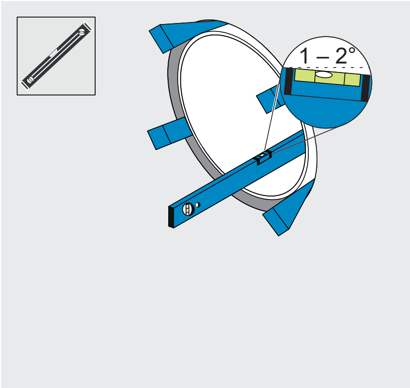
Tape measure, angle grinder, spirit level, non-pressing two-component assembly foam, cutter, wall mounting sleeve sealing tape, mounting wedges, and Styrofoam sheets



Prerequisite:
The wall opening Ø 115 mm is finished.

1. Determine the exact wall thickness X:
   A = exterior plaster, including any attachments
   B = insulation, including any gap
   C = masonry, including any shimming
   D = interior plaster
   X = A + B + C + D - 5 mm
   Y = exterior wall mounting sleeve protrusion: 10 mm
2. Cut the wall mounting sleeve to the determined length X + protrusion Y on the outer wall.
3. File the edges.
4. Remove the plastering covers from the wall mounting sleeve.
5. Insert the wall mounting sleeve into the wall opening.

The wall mounting sleeve is not flush with the plaster on the inner side and is installed in the wall with a spacing of 5 mm. Take into account the interior plaster thickness.



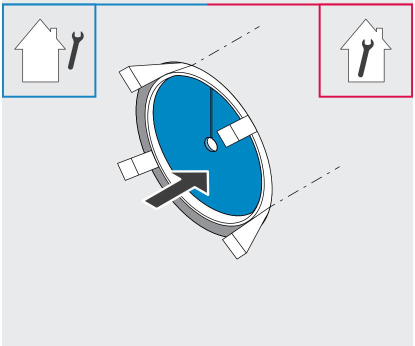
NOTICE

Condensation water collection

Condensation water can damage the structure.

→ Fix the wall mounting sleeve in place with a slope of 1-2° to the outer wall.

6. Use mounting wedges to fix the wall mounting sleeve on the inside and outside with a slope of 1-2° to the outer wall.
7. Use a spirit level to check the angle of the wall mounting sleeve.



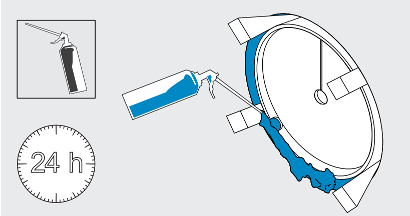
NOTICE

Dirt on the wall mounting sleeve

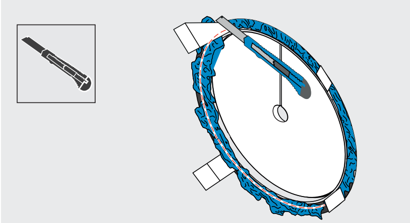
Dirt on the wall mounting sleeve (from residual plaster, for example) leads to component damage.

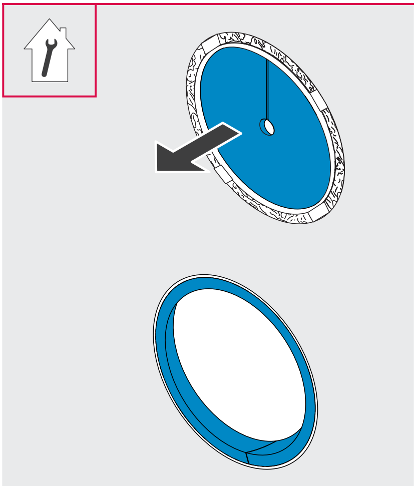
→ Insert the plastering covers before foam-sealing the space between wall mounting sleeve and masonry.

8. Insert the plastering covers in the wall mounting sleeves inside and outside.
9. Foam-seal the gap between the wall mounting sleeve and masonry all the way around with non-pressing two-component assembly foam.



10. Cut the excess hardened assembly foam and the protruding mounting wedges flush with the inner and outer walls.



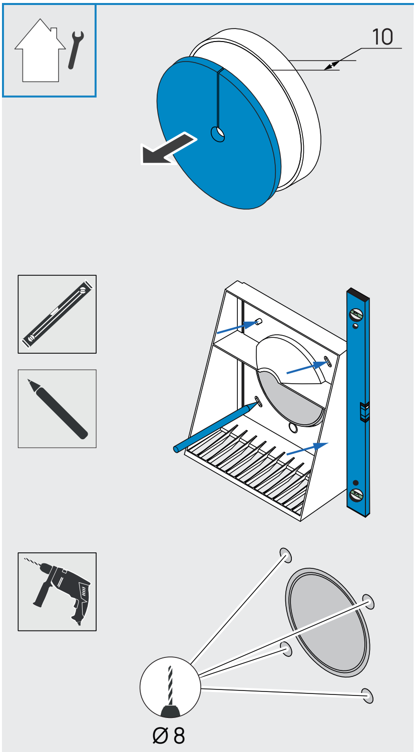


11. Remove the plastering cover from the wall mounting sleeve on the inner wall side.

12. Tape sealing tape in the wall mounting sleeve.

Mounting the weather protection hood

Spirit level, pencil, cordless screwdriver, anchors, 10-mm sealing tape, screws, drill, permanently elastic exterior sealant



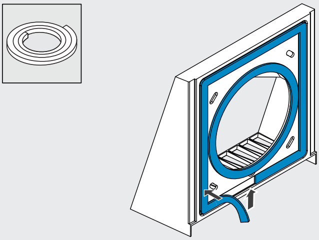
1. Remove the plastering cover from the wall mounting sleeve on the outer wall side.

Ensure that the wall mounting sleeve's outer wall protrusion is 10 mm; otherwise the weather protection hood's base plate cannot be positioned.

2. Slide the base plate onto the projecting wall mounting sleeve.

The protective grille is directed towards the floor.

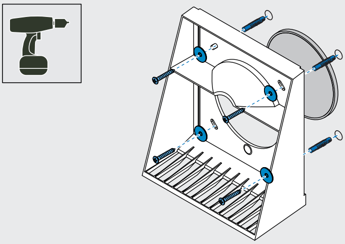
3. Use a spirit level to align the base plate horizontally.
4. Mark the four boreholes.
5. Drill four boreholes (Ø 8 mm, at least 50 mm deep).



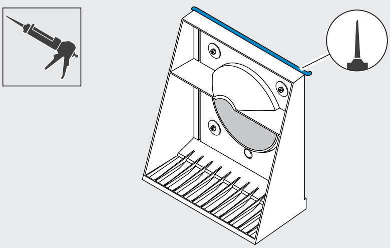
Do not apply the sealing tape until immediately before installing the base plate. This prevents excessive sealing tape swelling and facilitates installation.

6. Attach the sealing tape (10 mm) on the outer wall side and all around the base plate:
   - flush with the opening for the wall mounting sleeve
   - along the guide on the outer edge

Do not seal the mounting holes. The sealing tape must protrude over the inner edge of the opening for the wall mounting sleeve.



7. Insert the wall anchors into the boreholes.
8. Use four screws and washers to screw the weather protection hood base plate onto the outer wall.



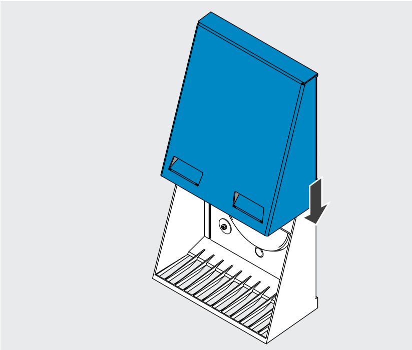
NOTICE

Ensure proper sealing

If the joint sealing between the base plate and outer wall is incorrect, the cover cannot be placed.

→ Seal only the upper joint between the base plate and the outer wall.

9. Seal the upper joint between the base plate and the outer wall with permanently elastic exterior sealant.



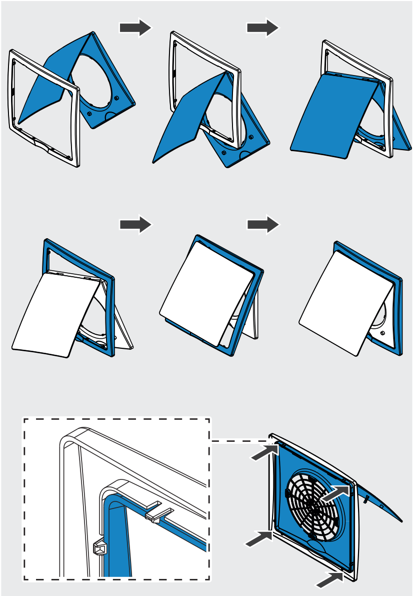
10. Place the cover on the base plate from above.
11. Pull the cover down as far as it will go.

The guides on the cover hook behind the base plate.

► You have installed the Taris wall installation set.

7.9.2 Installing the panel frame

Panel frame installation is optional and an intermediate step during installation of the Taris extractor fan with flush-mounted housing. Proceed as follows:



1. As shown, insert the inner panel, rotated slightly with cover open, into the panel frame.
2. Orient the panel frame as shown so that it is parallel with the inner panel.

Proceed with care and be sure not to damage the inner panel's hinges.

3. Clip the inner panel into all panel frame clipping points.

► The panel frame has been installed.

7.9.3 Installing the second-room inner panel

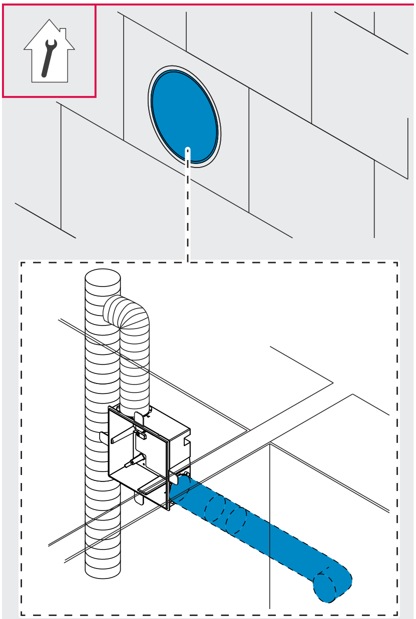
Cordless screwdriver, drill, folding ruler, screwdriver, pencil, spirit level

NOTICE

Observing the prerequisites for installation

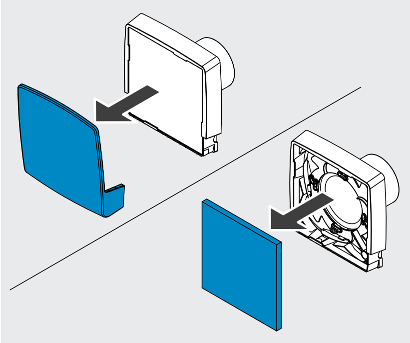
If installation prerequisites are not met, the device cannot function properly, and device damage can result.

→ Observe the information in Section 7.1 “Prerequisites for installation” on page 43.

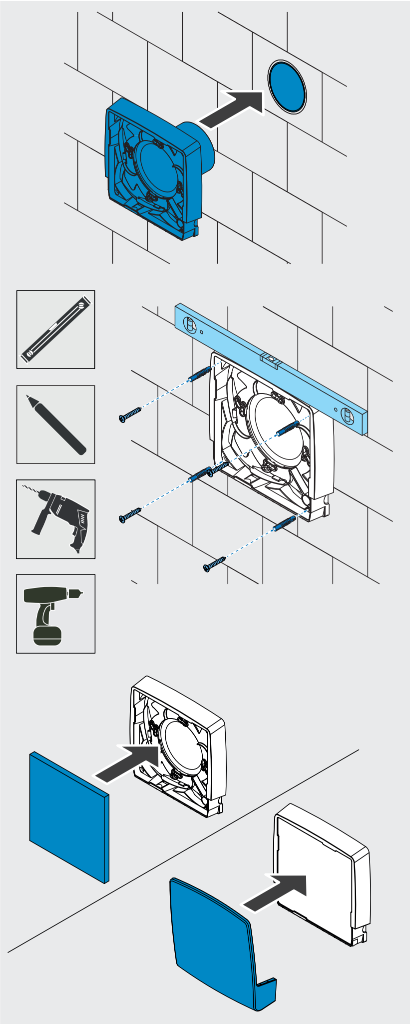


1. Prepare the wall opening with flexible pipe (Ø 80 mm) so that the inner panel's second-room pipe connection can be easily adapted.

It must be possible to pull enough of the flexible pipe (at least 20 cm) out of the wall to mount it on the second-room inner panel.



2. Prepare the second-room inner panel. Remove the housing cover and take out the filter.



3. Pull about 20 cm of flexible pipe out of the wall and mount it on the second-room inner panel housing connector.
4. Push the housing with the mounted flexible pipe back against the wall until it is flush.
5. Orient the second-room inner panel housing horizontally.
6. Mark the four boreholes on the inner wall.
7. Drill the boreholes.
8. Insert anchors into the boreholes.
9. Screw the housing to the inner wall.
10. Adjust the second-room inner panel to the desired opening width.

See Section 8.10 “Setting the second-room inner panel” on page 88.

11. Insert the filter.
12. Clip the cover back onto the housing.

► The second-room inner panel has been installed.

7.10 Electrical installation

The following sections explain electrical connection variants and contain instructions for connecting the power cable.

7.10.1 Connection variants

The following figures show typical examples of Taris extractor fan connection variants.

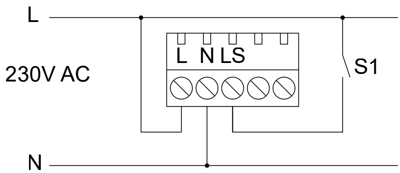


Fig. 33: Connection variants with switch, single-stage, dual-stage, with sensor, without sensor

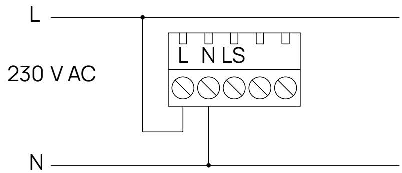


Fig. 34: Connection variant single-stage, dual-stage, with sensor

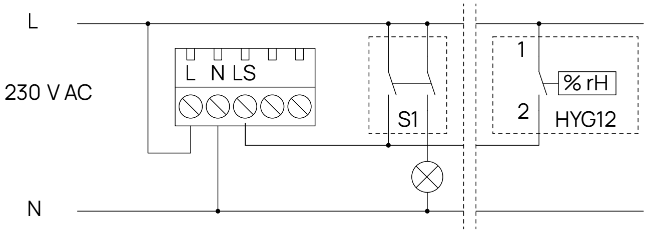


Fig. 35: Connection variants with room lighting and external hygrostat, single-stage, dual-stage, without sensor

7.10.2 Installing the power cable

Installation of the mains connection is described below using the example of the surface-mounted housing. The work steps for the flush-mounted variant are analogous.

Wire stripper, screwdriver, side cutter

DANGER

Electrical hazards

Failure to properly install electrical components results in mortal danger.

→ Only trained electrotechnical specialists may work on the electrical system and only according to electrical engineering regulations.

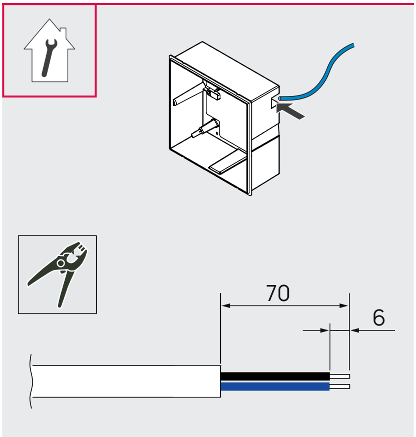
→ Prior to work on electrical equipment, disconnect all components from mains and secure them against being switched back on.

NOTICE

Checking the power supply

Operating the device with incorrect power supply can cause damage.

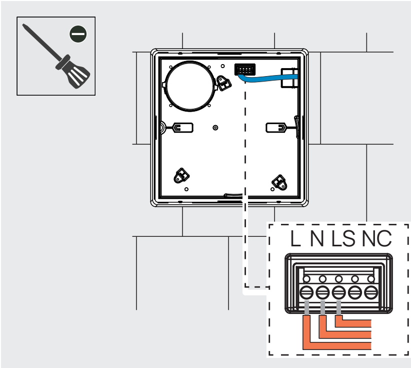
→ Connect the device only if the power supply matches the device's electrical connection data (voltage, frequency, phase).



For the mains connection, use only cables with solid leads.

1. Guide the mains cable (230 V, 50 Hz) and electrical supply cables for the switch into the housing.
2. Strip the cable to 70 mm.
3. Strip the cores to 6 mm.

Observe the cable length inside the housing. Shorten the cables so that they do not kink and are not in the way.



Observe the correct connection variant for your system. See Section 7.10.1 “Connection variants” on page 79.

4. Connect the mains cable leads to the terminal as shown in the figure.

► The mains cable is connected.

8 Setting functions

This section explains the steps for adjusting the Taris extractor fan functions. Some functions are optional and may not be present on your product. For descriptions of individual functions, see Section 4.1 “Functions” on page 15.

Observing operating personnel requirements

To prevent accidents and property damage, comply with personnel qualification requirements or have configuration work performed by specialists as necessary. See Section 2.3 “Operating personnel requirements” on page 12.

8.1 Operating and display elements

For operation (see the following section), the following operating and display elements are available:

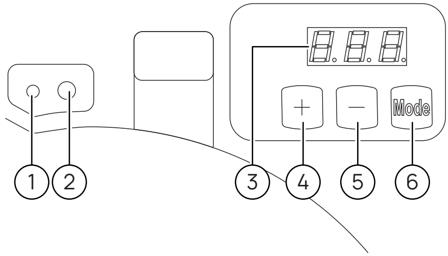


Fig. 36: Operating and display elements

No.	Designation	Functions
1	“Filter change” LED	Lights up when the filter must be changed. See Section 9.2 “Filter change” on page 91.
2	“Confirm filter change” button	Press to confirm that the filter change has been performed. See Section 9.2 “Filter change” on page 91.
3	Display	Shows the selected function and the associated value.
4	+ button	Press this button to increase the value for the selected function or switch to the next subfunction.
5	- button	Press this button to decrease the value for the selected function or switch to the previous subfunction.
6	“MODE” button	Press to select the next function.

8.2 Menu navigation and button use

The **display** (3) can be switched on and off and an automatic switch-off time specified. Menu navigation is structured so that you can switch through individual device functions with the **MODE** button (6).

8.2.1 Switching on the display

1. Press the **MODE** button (6).

   ► The display is switched on and shows the first setting point.

2. Press the **MODE** button (6) repeatedly until the **display** (3) shows the desired setting point.

8.2.2 Switching off the display

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows “End”.
2. Press the **+ button** (4) or **- button** (5).

   ► The **display** (3) is switched off.

8.2.3 Specifying the display’s automatic switch-off time

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows a value between “dt1” and “dt5”.
2. Use the **+ button** (4) and the **- button** (5) to select a switch-off time between 1 and 5 min. The preset value is 1 min.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.3 Setting automatic extract air cycles

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows an “A” in the first position.
2. Use the **+ button** (4) and the **- button** (5) to select between the following options:

   - A-0: Automatic extract air cycles off (preset),
   - A-2: Automatic extract air cycles on: 2 h base load/15 min full load,
   - A-4: Automatic exhaust air cycles on: 4 h base load/30 min full load.

3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.4 Switching the comfort mode on and off

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows a “c” in the first position.
2. Use the **+ button** (4) and the **- button** (5) to select between the following options:
   - c-n: Comfort mode disabled (preset),
   - c-y: Comfort mode enabled.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.5 Setting switch-on delay

You can turn switch-on delay on and off and specify delay duration.

8.5.1 Turning switch-on delay on and off

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows “d-n” or “d-y”.
2. Use the **+ button** (4) and the **- button** (5) to select between the following options:
   - d-n: Switch-on delay disabled (preset),
   - d-y: Switch-on delay enabled.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.5.2 Specifying switch-on delay duration

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows a value between “d 1” and “d 5”.
2. Use the **+ button** (4) and the **- button** (5) to select a switch-on delay between 1 and 5 min. The preset value is 3 min.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.6 Setting the run-on function

You can turn the run-on function on and off and specify function duration. For devices with a built-in humidity sensor, you can also select run-on function duration after the sensor activates the function.
When the run-on function is switched on/off, this always applies to both switch-triggered activation and sensor-triggered activation.

8.6.1 Switching the run-on function on and off

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows “o-n” or “o-y”.
2. Use the **+ button** (4) and the **- button** (5) to select between the following options:
   - o-y: Run-on function enabled (preset),
   - o-n: Run-on function disabled.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.6.2 Specifying run-on function duration

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows a value between “o 3” and “o30”.
2. Use the **+ button** (4) and the **- button** (5) to select a run-on duration between 3 and 30 min. The preset value is 15 min.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.6.3 Specifying run-on function duration for sensor triggering

To set run-on function duration after function activation by the humidity sensor, proceed as follows:

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows an “S” in the first position.
2. Use the **+ button** (4) and the **- button** (5) to select between the following options:
   - S15: Run-on duration when activated by sensor: 15 min (preset),
   - S30: Run-on duration when activated by sensor: 30 min.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.7 Setting the humidity sensor

You can switch the quick-rise function and the limit-exceeded function on and off and specify a limit value for the humidity sensor.

8.7.1 Switching the quick-rise function on and off

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows an “r” in the first position.
2. Use the **+ button** (4) and the **- button** (5) to select between the following options:
   - r-n: Quick-rise function disabled (preset),
   - r-y: Quick-rise function enabled.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.7.2 Switching the limit-exceeded function on and off

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows a “t” in the first position.
2. Use the **+ button** (4) and the **- button** (5) to select between the following options:
   - t-n: Limit-exceeded function disabled,
   - t-y: Limit-exceeded function enabled (preset).
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.7.3 Specifying the humidity limit value

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows an “h” in the first position.
2. Use the **+ button** (4) and the **- button** (5) to select a humidity limit value between 60% and 90%. The preset value is 70%.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.8 Setting the air quality sensor

You can switch the air quality function for the air quality sensor on and off and specify an air quality level as a switch-on threshold.

8.8.1 Switching the air quality function on and off

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows “u-n” or “u-y”.
2. Use the **+ button** (4) and the **- button** (5) to select between the following options:
   - u-n: Air quality function disabled (preset),
   - u-y: Air quality function enabled.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.8.2 Specifying the air quality sensor switch-on threshold

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows a value between “u 3” and “u 5”.
2. Use the **+ button** (4) and the **- button** (5) to select an air quality level between 3 and 5 as a switch-on threshold. The preset value is 3.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.9 Setting device performance

For devices with fan assemblies with a maximum air volume flow of 100 m^3/h (item no. 1002-0071 to 1002-0074), the full-load air volume flow can be set. Proceed as follows:

1. Press the **MODE** button (6) repeatedly until the **display** (3) shows a “P” in the first position.
2. Use the **+ button** (4) and the **- button** (5) to select between the following options:
   - P-n: Air volume flow at full load: 60 m^3/h (preset),
   - P-y: Air volume flow at full load: 100 m^3/h.
3. Press the **MODE** button (6) to confirm the selection and move to the next setting point.

8.10 Setting the second-room inner panel

The air volume flow to be discharged can be set for the second-room inner panel. For this, the following control elements are available:

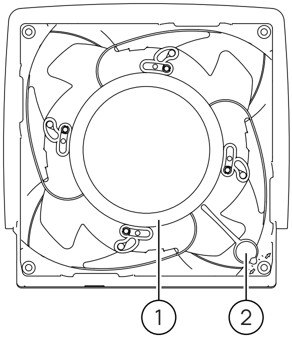
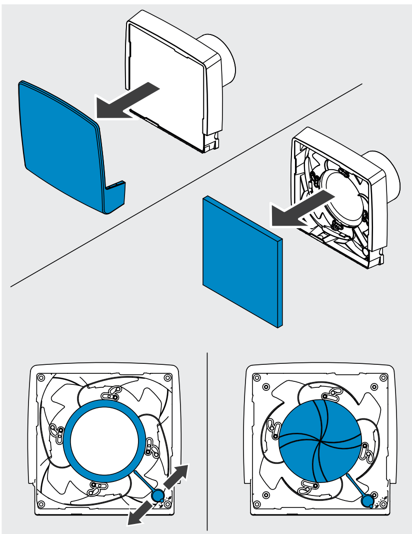


Fig. 37: Panel opening control elements

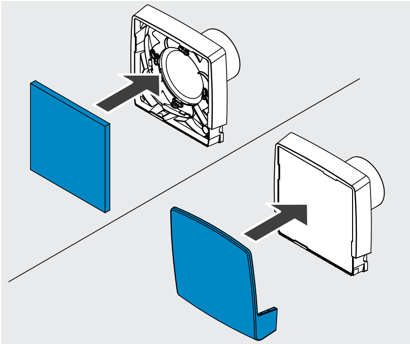
No.	Designation	Functions
1	Air volume flow panel	Adjustable panel that reduces air volume flow to be discharged when the opening is small and increases when the opening is large.
2	Panel opening controller	The panel can be opened and closed by shifting the controller left and right.

Proceed as follows:



1. Remove the housing cover and take out the filter.

2. Shift the **panel opening controller** (2) to the left to make the panel opening wider and to the right to make it narrower.



3. Insert the filter.
4. Clip the cover back onto the housing.

    ► The second-room inner panel has been installed.

9 Troubleshooting and filter change

Except for regular filter change, the Taris extractor fan is maintenance-free. The following sections describe the error codes that can occur on the device and the procedure to be followed for filter change.

9.1 Troubleshooting

The following table lists error codes that can occur on the device and describes the measures to be performed for each. Should an error prove impossible to correct, contact our technical customer service (see Section “Technical customer service” on page 93).

DANGER

Electrical hazards

Failure to properly maintain electrical components results in mortal danger.

→ Only trained electrotechnical specialists may work on the electrical system and only according to electrical engineering regulations.
→ Prior to work on electrical equipment, disconnect all components from mains and secure them against being switched back on.

Table 7: Error

Error code	Definition	Remedy
F01	Control unit functional test failed	Restart
F02	Motor fault	Check the motor for blockage
F03	No temperature/humidity sensor reaction	Check the sensor plug
F04	No VOC sensor reaction	Check the sensor plug
F05	Filter change due	Change the filter and confirm the filter change (see Section 9.2 “Filter change” on page 91)

9.2 Filter change

The only maintenance measure that the operator must regularly perform is the filter change.

NOTICE

Inserting the filter

Operating the device without a filter element can result in damage due to foreign body ingress.

→ Operate the device only when a filter has been inserted.

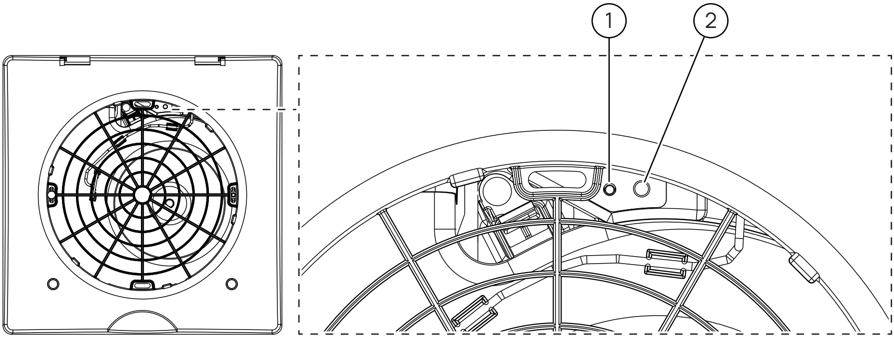
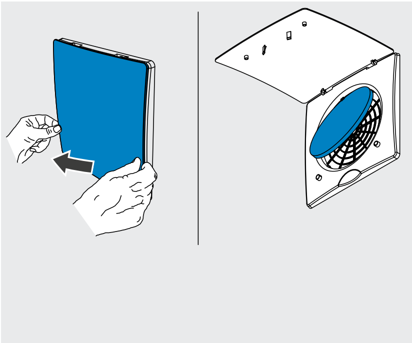


Fig. 38: Filter change

1 “Filter change” LED
2 “Confirm filter change” button

If the **“Filter change” LED** is lit, change or clean the filter insert:



1. Open the cover.
2. Remove the filter from the ventilation grille.
3. Clean the filter (for light contamination) or replace it.
4. Actuate the **“Confirm filter change” button**. Use an aid (pencil, etc.) if necessary.
5. Put the filter back in the ventilation grille and close the cover.

▶ The **“Filter change” LED** goes out. The filter change is complete.

10 Warranty and guarantee

In the event of a warranty or guarantee claim, contact the dealer or factory representative responsible for you. In any case, send the complete unit back to the manufacturer.

10.1 Warranty

Outside Germany, the national warranty regulations of the country in which the system is sold apply. Contact the dealer for your home country. The warranty covers all defects that were present at the time of purchase. Use the device as intended in order to maintain the warranty claim.

10.2 Manufacturer's guarantee

inVENTer GmbH grants a five-year guarantee on all electronic components. This covers premature product wear. The warranty claim is an additional offer by the manufacturer and does not affect applicable law in any way.

For information on the guarantee provisions, see www.inventer.eu/guarantee

11 Service

11.1 Complaints

Upon receipt, use the delivery note to check the delivery for completeness and transport damage. Report missing items immediately (within 14 days) to your supplier, dealer, or factory representative.

11.2 Accessories and spare parts

To order components for your product, contact your factory representative or our service team. All components are also available as spare parts.

Technical customer service

For technical advice, please contact our technical service staff:

Phone: +49 (0) 36427 211-0
Fax: +49 (0) 36427 211-113
E-mail: info@inventer.eu
Website: https://www.inventer.eu

12 Disposal

The products described in these Installation and operating instructions contain valuable materials that can be reclaimed and recycled. Separating waste materials of different types simplifies recycling of reusable materials. Contact your local disposal company for environmentally sound recycling and disposal of your old system. It will dispose of the product in accordance with applicable national regulations. Also dispose of product packaging correctly.

You will find disposal recommendations in the following table.

Table 8: Disposal recommendations

Component	Material	Disposal
Housing components	PS plastic	Recyclable waste
Fire protection housing	Calcium silicate panels	Landfill (construction waste)
Fan assembly	Various electrotechnical materials	Electronic waste

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