



Intelligent solutions for every roof

SHAFT VENTILATION





## Controlled shaft ventilation providing an exemplary eco-balance for your building

An opening in the lift shaft is required for safe smoke discharge and ventilation. However, if this remains permanently open, considerable heat and power spent on heating and cooling the building are lost. BlueKit's needs-optimised shaft ventilation combines energy efficiency and safety in one intelligent system. As well as reducing your energy costs and improving the eco-balance, you also comply with the Energy Saving Regulation (EnEV) and ensure controlled ventilation in your building.



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# COMPLETE SOLUTIONS THAT SET THE BENCHMARK

Safety in case of fire. Optimum air quality in the car.  
Stops heat loss. Saves costs.

Many buildings have excessively high heating costs, often due to heat loss caused by inadequate ventilation technology in the lift shaft. In the case of lift shafts within thermal building envelopes, warm indoor air often flows into the shaft through the gaps in the lift doors. This is intensified by the chimney effect, which means that the air escapes uncontrolled into the atmosphere.

Controlled ventilation of the lift shaft not only supplies the shaft with fresh air but also allows toxic gases to be discharged in the event of fire. In this situation, the blind mounted at the top of the shaft in front of the smoke exhaust vent opens so that the smoke can escape unhindered.

Our new shaft ventilation system is a state-of-the-art product with an extremely short payback period. The shaft ventilation can be used in a new lift system as well as for modernisation works or a retrofit. The intelligent smoke extraction controller in the lift shaft sets a completely new benchmark, with the added benefits of ease of use, the smallest possible dimensions and a discreet design.

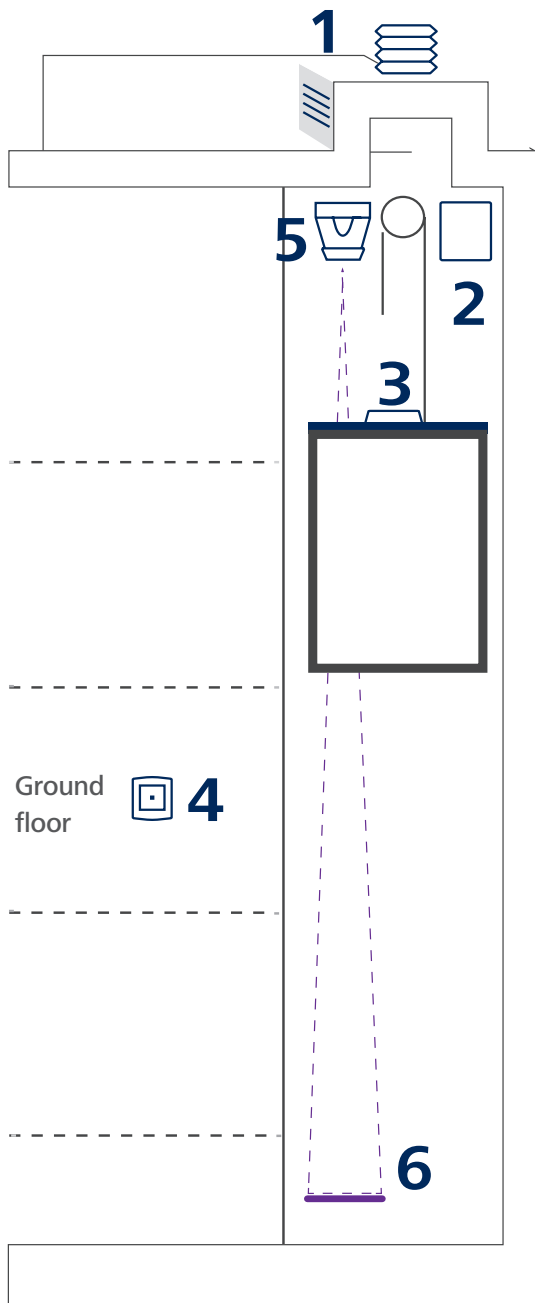
Innovations include the linear detector for active early fire detection and the optional lift status transmitter, which optimises air quality in the shaft and car. Our shaft ventilation components as always comply with the legal requirements for fire protection and also save an enormous amount in terms of costs and energy.

We aim to deliver complete customer satisfaction. Our experienced service team is always at your side, providing reliable system support and maintenance.

## The benefits of BlueKit

- ✓ Reduced energy costs
- ✓ Reliable smoke detection and demand-controlled ventilation
- ✓ Reduction of lift maintenance cycles
- ✓ Reduction of moisture and cold draughts
- ✓ Improved air quality
- ✓ Sustainability due to lower CO<sub>2</sub> emissions





- 1** Ventilation flap with weather protection grille  
Prevents energy losses due to uncontrolled escape of heated air.



- 2** Controller **Neu**  
Together with the transmitter, regulates the air quality in the lift shaft and car.



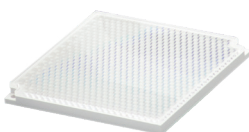
- 3** CO<sub>2</sub> lift status transmitter **Neu**  
Measures CO<sub>2</sub> concentration, humidity and temperature, mounted on the lift car.



- 4** Smoke vent button  
Triggers the alarm in the main evacuation level in case of emergency.



- 5** Linear detector **Neu**  
For active fire detection.



- 6** Reflector plate  
Reflects the infrared beam from the linear detector.

# THE RIGHT SYSTEM FOR EVERY SHAFT

## Comparison of All-In-One (AIO) and All-In-One Basic systems

Different system functionalities of the shaft ventilation system		
	AIO Basic system	AIO system
<b>Shaft properties</b>		
Shaft height (m)		up to 200
Shaft type		Single and group shafts
System type		With or without machine room
<b>System components</b>		
Smoke detectors		Optical beam smoke detectors RAS Linear detector
LST-CO <sub>2</sub> -V3	✓	✓
Connection of manual buttons		up to 8
System status display on the button		Ventilation Fire alarm Fault
Manual triggering of ventilation	✓	✓
Max. number of NSHEV	up to 2 (spring return)	up to 6 (spring return) up to 2 (direct current)
NSHEV ventilation area (m <sup>2</sup> )		0.1 to 1.2
NSHEV drive	Spring return motor	Spring return or DC motor
Safety in case of a power cut (opening of the ventilation component)	Spring return	Spring return or emergency power battery
Safety in case of cable or component fault		Fail-safe
<b>Connection options</b>		
Connection to lift controller and fire alarm system	✓	✓
Connection to a smoke pressure system	-	✓
Connection to thermostat, siren, flashing light, etc.	✓	✓
<b>Conformity</b>		
CE-compliant components	✓	✓
Proof of function	✓	✓
Type of certification	VdS certification according to DIN EN 12101-10, ISO 21927-9	abZ (German national technical approval)

\* Special configuration available on request.



# SYSTEM COMPONENTS

**New**  
Improved technology

## AIO basic controller

The intelligent controller for lift shaft ventilation and smoke extraction is easy to use, inconspicuous and compact. It is suitable for lifts with and without a machine room and also as a group system. The systems are primarily installed in the top of the shaft. In relation to the complete D+H BlueKit lift

shaft smoke extraction system, this is a complete package with a short payback period. It is not only a functional but also a cost-effective solution.



### Notice/information

230 volt infeed line for the controller in the machine room or at the top of the shaft must be provided by the customer.

### Perfection in detail

- » Fail-Safe system
- » Control for only one flap with spring return motor
- » Control of two flaps possible via additional function module
- » Integrated power supply unit without emergency power supply
- » Integrated thermostat for ventilation when the temperature threshold is exceeded
- » Easy commissioning by connecting the 230V plug
- » Programming of a 10-minute ventilation cycle every 10 hours
- » Radio link LST-CO<sub>2</sub>-V3
- » Input and output for connection to a fire alarm control unit (FAS) or a central controller (BMS)
- » Status display via LEDs at RJ45 connections and on the circuit board
- » VdS approval in accordance with ISO 21927-9 and EN 12101-10



Smoke detector



Linear detector SD-L-F1



RAS (smoke extraction system)

# SYSTEM COMPONENTS

## AIO Controller

The AIO central unit is characterised by a compact, ergonomically-shaped housing with a high degree of modularity. The AIO has been designed to be installed quickly and easily and

is ready for operation straight after initial connection, without the need for prior programming.



### Perfection in detail

- » DIP switches enable customisation to the specific configuration of the building
- » Integrated thermostat for ventilation when the temperature threshold is exceeded
- » Easy commissioning by connecting the 230V plug
- » Programming of a 10-minute ventilation cycle every 10 hours
- » Easy connection to other components via 8 RJ45 plugs with LEDs indicating the status of the cables: fault and alarm
- » Input and output for connection to a fire alarm control unit (FAS) or a central controller (BMS)
- » Integrated cycle counter for monitoring the drive
- » Certified in accordance with: EN 12101-10

### Note

The AIO central unit is suitable for lifts with or without a machine room. It is installed at the top of the lift shaft or in the machine room. To make the commissioning of the AIO as simple as possible, it is configured by D+H before shipping.



Smoke detector



Linear detector SD-L-F1



RAS (smoke extraction system)



## Linear detector SD-L-F1

The SD-L-F1 smoke detection system with optical infrared beam is based on the familiar and proven Lift Beam technology. It has been improved for use in lift shafts. It consists of two components: an linear detector, which is installed in the top of the shaft, and a reflector. The linear detector is connected to the central unit of the ventilation

system and transmits an infrared beam which the reflector in the shaft pit reflects back to the linear detector. The SD-L-F1 evaluates the intensity of the beam and thus detects the presence of smoke in the lift shaft. The SD-L-F1 is certified in accordance with EN 54-12.



### Perfection in detail

- » Compact housing
- » Installed and operational in no time at all
- » Easy alignment with just a few button presses
- » Low acquisition and operating costs
- » Equipped with RJ45 connection for AIO Basic and AIO
- » Light cancellation technology  
(less interference by sunlight and artificial light sources)
- » Ideally suited to glass lift shafts
- » Less visual distraction from moving parts in the lift
- » Extendible up to a detection range of 120 m

## Further components

### Smoke extraction system or Lift Beam

In addition to the linear detector, the familiar smoke extraction system is of course also available: the alternative fire detection option with tried-and-tested detector module. The smoke extraction system is complemented by the matching intake pipe set.

The Lift Beam is primarily used for monitoring complex shaft situations, such as two shafts arranged side-by-side.



RAS (smoke extraction system)

# SYSTEM COMPONENTS

**New**  
Improved technology

## Lift status transmitter

The lift status transmitter is an indispensable car monitoring device for the safety and comfort of lift users. In addition to information on lift operation, maintenance or breakdown, it provides the control panel of the BlueKit system with data on the CO<sub>2</sub> quality in the lift car.



By monitoring lift usage, the CO<sub>2</sub>-V3 lift status transmitter (LST-CO<sub>2</sub>-V3) automatically detects changes in air quality and independently sends a ventilation signal to the control panel. It is a closed unit that communicates with the central unit or remote radio receiver via a wireless radio transmitter.

The CO<sub>2</sub> sensor is integrated in the LST-CO<sub>2</sub>-V3 and evaluates the CO<sub>2</sub> concentration in the air. If the limit value is exceeded, ventilation is activated. In addition, the LST-CO<sub>2</sub>-V3 can be linked to the emergency call button in the lift car to ensure ventilation of the shaft when it is pressed.

### Perfection in detail

- » Installation and data evaluation directly in the lift car
- » Radio link
- » Integrated acceleration sensor
- » Air quality: Instead of a VOC sensor (which measures of CO<sub>2</sub> equivalents), a CO<sub>2</sub> sensor is active
- » Temperature sensor on the car – now even more accurate
- » Ventilation controller adapts to the use of the lift
- » Service button for maintenance work
- » Air humidity sensor ensures even greater protection against mould in the lift shaft



## Smoke vent button

As an addition to the continuous monitoring of the lift shaft by the shaft ventilation system, it must be possible to trigger an alarm and initiate smoke extraction on the main evacuation level by pressing a smoke vent button.

The current Model Building Code (MBO-2013) requires that lift shaft smoke extraction can be initiated from at least one suitable location.



### Perfection in detail

- » Manual triggering of a fire alarm
- » Manual triggering of ventilation (optional)
- » LED system status indicator
- » Ideal for visualisation on the main evacuation level next to the lift doors
- » Resetting a fire alarm

## Supplementary components

### Flashing lights, alarm sirens and fire bells

Whether acoustic or visual signals, there is an extensive range of different signal emitters.

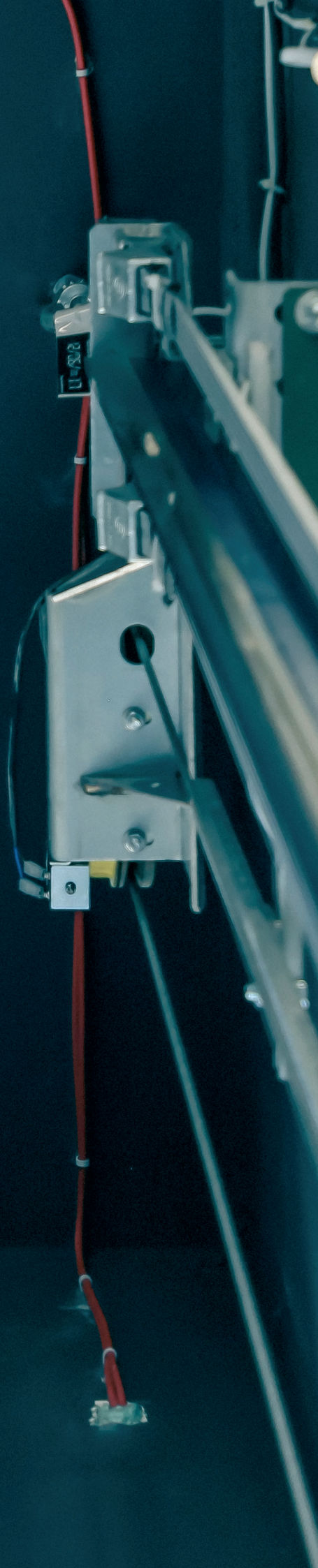


### Key switches, control buttons and timers

In addition, there is a large selection of different buttons, key switches and timers for manual ventilation requirements.









# VENTILATION COMPONENTS

## Ventilation components

### Stop heat loss and save on heating costs

Although the permanent opening usually installed at the top of a shaft ensures direct smoke evacuation in case of fire, it also means warm air can escape uncontrolled from the building envelope.

### Choosing the right ventilation components is a core element in the optimisation and regulation of ventilation.

They play a significant role in achieving an effective energy concept and thus contribute to reducing the operating costs of the property.

Ventilation components such as ventilation flaps prevent the uncontrolled escape of heat and energy through permanent openings. The flaps ensure effective regulation of ventilation as well as safe smoke extraction. This is also the case in the event of a system fault or power cut – when the flaps open automatically. This requires that continued system functionality is ensured even in inclement weather conditions, such as storms, rain, snow or extreme temperatures.

The sizes of the smoke exhaust vents are regulated by the individual state building codes. DIN EN 12101-2 for natural smoke and heat exhaust ventilators (NSHEV)

is available as a basis for testing. The location of the smoke exhaust vents must be selected such that the egress of smoke is not affected by the influence of wind (German Model Building Code/state building codes).

All opening elements meet the requirements of the German Building Energy Act (GEG).

Thanks to the smart ventilation controller, all requirements for ventilation specified in Directive 2014/33/EU as well as the requirements of EN 81-20 are met. Most importantly, the guarantee of ventilation in the car required in section 4.7 of this directive is ensured by the opening of the ventilation flap to the outside.

The thermal uplift in the lift shaft ensures continuous air exchange in the car when the flap is open. In buildings that have been specially sealed for energy efficiency it is recommended to include an intake air opening in the shaft pit to ensure fresh air can flow back into the building.



Roof hoods



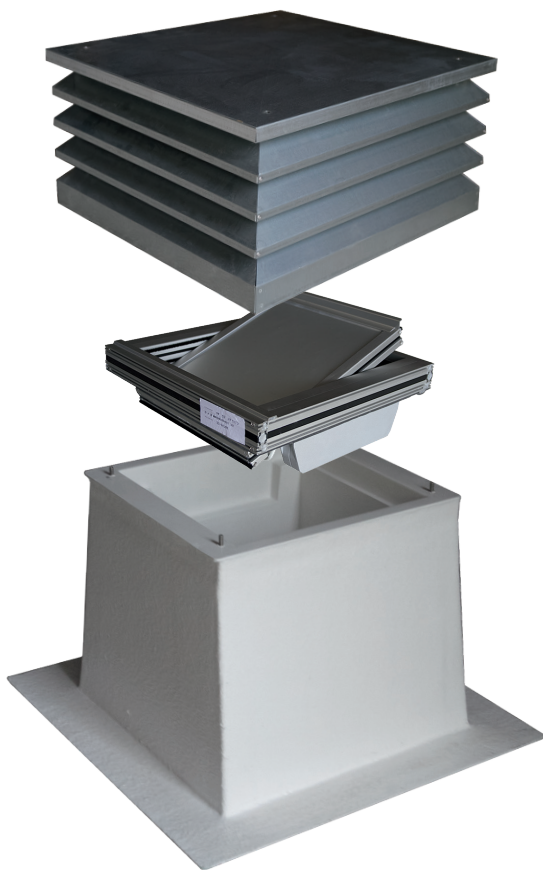
Ventilation flap

# VENTILATION COMPONENTS

## Thermally insulated roof hood TF (Thermo Flap)

Natural, thermally high-quality smoke and heat exhaust ventilator (NSHEV) for horizontal installation on flat roofs (up to max. roof pitch of 10°). Ventilation and smoke extraction hood with 24 V electric motor drive for the discharge of combustion gases and for ventilation purposes.

The ready-to-install solution consists of a curb and an integrated motor-driven closing element with weather-protection louvre cover.



Note: Installation must be carried out by a specialist roofing company.

### Benefits

- » Thermally insulated profile (optimised heat insulation)
- » Uvalue 0.41 (W/m<sup>2</sup>K) with 450 hood, 0.46 (W/m<sup>2</sup>K) with 600 hood, 0.55 (W/m<sup>2</sup>K) with 800 hood calculated according to EN ISO 12567-2
- » Horizontal ventilation opening in passive or low-energy buildings
- » System-tested in compliance with DIN EN 12101-2
- » In accordance with VdS data sheet 2895
- » Virtually noiseless, therefore ideal for use in sound-sensitive areas

### Performance profile

- » Smoke extraction and ventilation regardless of wind direction
- » Ready-to-install solution
- » Condensate formation prevented by GRP base
- » Complies with requirements of German state building codes

### Technical specifications

- » GRP base including an integrated louvre window
- » Louvre hood with ventilation openings on 4 sides to protect against precipitation
- » Space-saving where space is limited: dimensions of louvre hood correspond to GRP base
- » Includes integrated insect screen

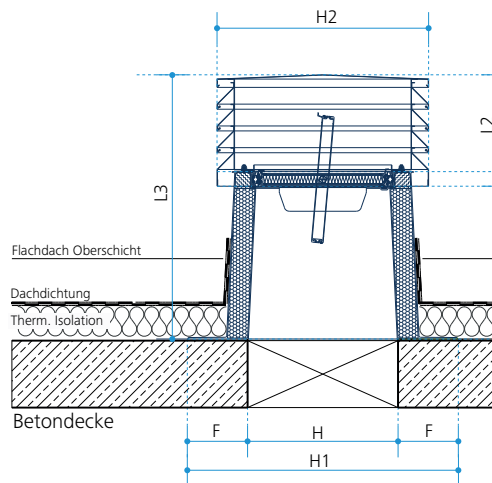
### Installation

- » The GRP base is integrated directly into the building insulation during the roof works

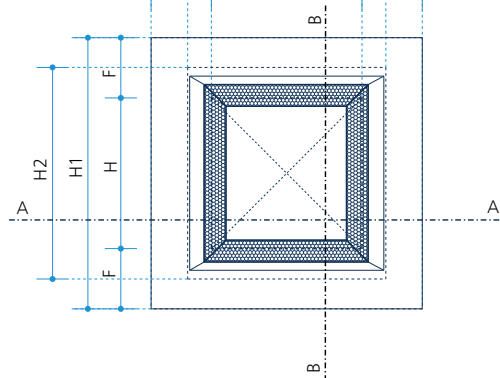
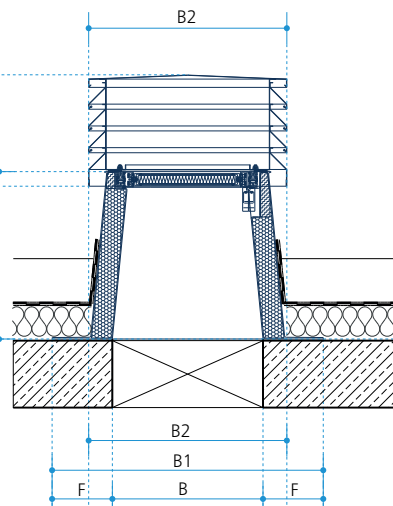
## Thermally insulated roof hood TF (Thermo Flap)

### Designs and dimensions

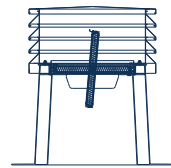
Schnitt B-B



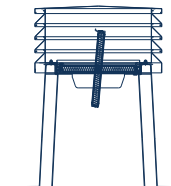
Schnitt A-A



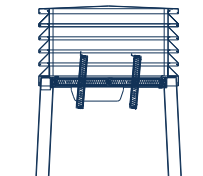
450 x 450 - 1 louvre



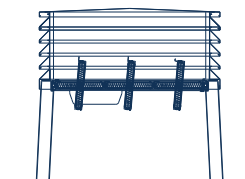
450 x 450 - 1 louvre



600 x 600 - 2 louveres



800 x 800 - 3 louveres



#### TF (Thermo Flap)

Article name according to unfinished opening (mm) W x H	450 x 450	450 x 450	600 x 600	800 x 800
Net ventilation area (m <sup>2</sup> )	0.10	0.10	0.20	0.39
Base width (mm) W1 x H1	810 x 810	810 x 810	960 x 960	1160 x 1160
Ventilation hood dimensions (mm) W2 x H2	595 x 630	595 x 630	745 x 780	950 x 985
Flange width (mm) F	180	170	180	180
Ventilation base height (mm) L1	500	750	500	500
Ventilation hood louvre cover height (mm) L2	332	332	332	385
Total height (mm) L3	789	1039	789	842
U-value (W/m <sup>2</sup> K)	0.41	0.41	0.46	0.55
Number of louveres	1	1	2	3
Weight (kg)	39	42	54	69



# VENTILATION COMPONENTS

## Space-saving slide flap

The closing element for horizontal or vertical surface-mounted installation contains a movable sliding panel in its frame, which is operated by a motor. This patented system has reduced the panel thickness to a minimum.

The slide flap is therefore ideal for use in existing buildings, as it does not protrude too deeply into the shaft, nor further reduce the free cross section of the existing opening.

### Benefits

- » U-value 1.82 W(m<sup>2</sup>\*K) calculated according to EN ISO 12567-2
- » Surface-mounted installation for existing openings
- » The minimal frame height of 40 mm enables installation at the top of the shaft when there is little space
- » Airtight in accordance with GEG requirements
- » Low-noise drive

### Performance profile

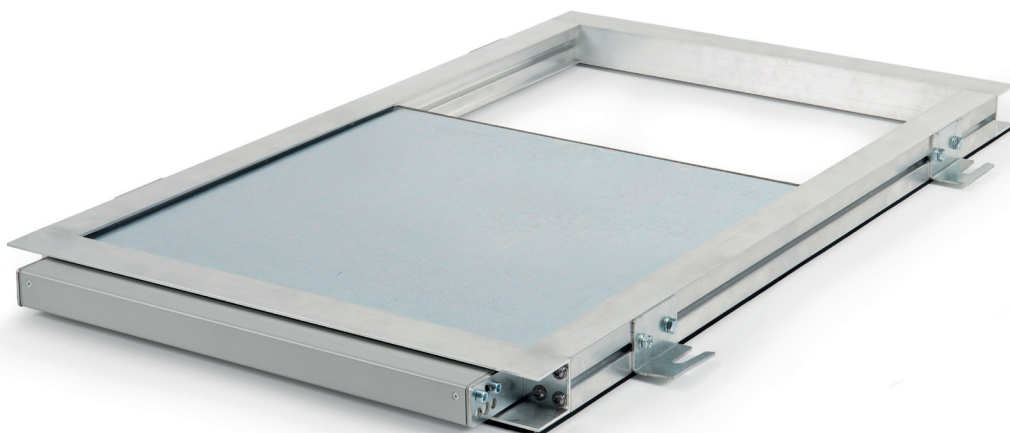
- » Use: If the existing opening is not larger than the required smoke extraction cross-section
- » Can be adapted to many ventilation openings
- » Installation hooks for simple and flexible installation

### Technical specifications

- » Pre-installed and cabled chain drive for opening the sliding panel
- » Aluminium frame and galvanised sheet steel panel

### Installation

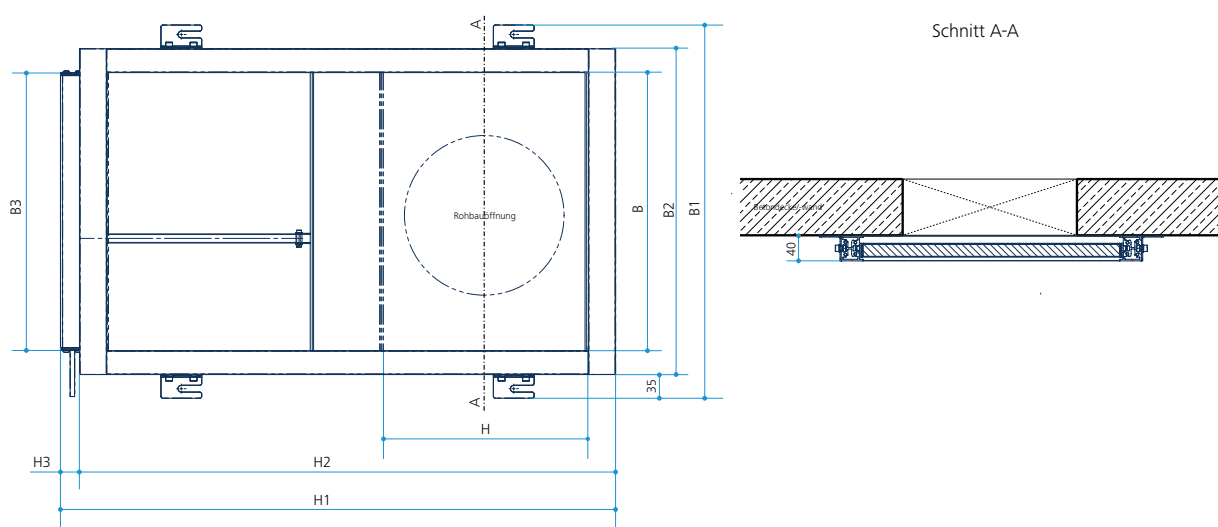
- » The space-saving slide flap is fastened into the shaft wall or cover with the aid of the installation frame
- » Corner installation possible thanks to the supplied installation hooks



Thermally insulated

## Space-saving slide flap with U-value

Designs and dimensions



### Slide flap\*

Article name	Slide flap 410	Slide flap 760	Slide flap 1160
Ventilation opening (mm) WxH	410x300	760x350	1160x350
Net ventilation area (m <sup>2</sup> )	0.12	0.26	0.40
Recommended installation area incl. installation hooks (mm) W1xH1	550x817.5	900x1077.5	1300x1458
Frame dimensions (mm) W2xH2	480x790	830x790	1230x1430
Motor dimension (mm) W3xH3	409x27.5	409x27.5	504x27.5
Number of installation hooks	4	6	10
Weight (kg)	7.11	13.90	27.68
U-value (W(m <sup>2</sup> *K))	1.82	1.82	1.82

\*Other sizes available on request

# VENTILATION COMPONENTS

## Louvre window S9-iVt-05 LF-MR and Tairmo-LF-MR

Louvre window including motor and installation frame for vertical installation in façades. The louvre window ensures flush surface closure of the permanent opening in the lift shaft wall and guarantees optimum insulation due to excellent heat transfer coefficients.



Louvre window with sandwich panel S9-iVt-05 LF-MR.  
Also available in glass on request.



Tairmo-LF-MR triple-glazed louvre window.

### Benefits

- » Can be fitted in the façade from the outside
- » Thermally insulated profile (optimised heat insulation)
- » Recommended for ventilation opening in passive or low-energy buildings
- » System-tested in compliance with DIN EN 12101-2
- » In accordance with VdS data sheet 2895
- » Virtually noiseless, therefore ideal for use in sound-sensitive areas

### Performance profile

- » Integrated flush surface installation
- » Integration in thermal insulation
- » High energy efficiency: very low heat transmission coefficient (Ug/Uw-value)
- » Burglar-proof

### Technical specifications

- » Thermally isolated aluminium profiles: composite panels of 2 x 1.5 mm aluminium sheet in EV-1 with a 21 mm insulation core
- » Louvres made of glass (Tairmo-LF-MR) or sandwich panel\* (S9-iVt-05 LF-MR)
- » Ventilation, leak-tightness and thermal insulation
- » Burglary-resistant (WK2), ball-impact resistant and soundproof-tested (S9-iVt-05 LF-MR)
- » Surface optionally anodised or powder-coated
- » Double- (S9) or triple- (Tairmo) insulated glazing
- » Opening angle: max. 90° (Tairmo-LF-MR), max. 84° (S9-iVt-05 LF-MR)

### Notice/information

- » For horizontal installation, weather protection must be installed by the customer.

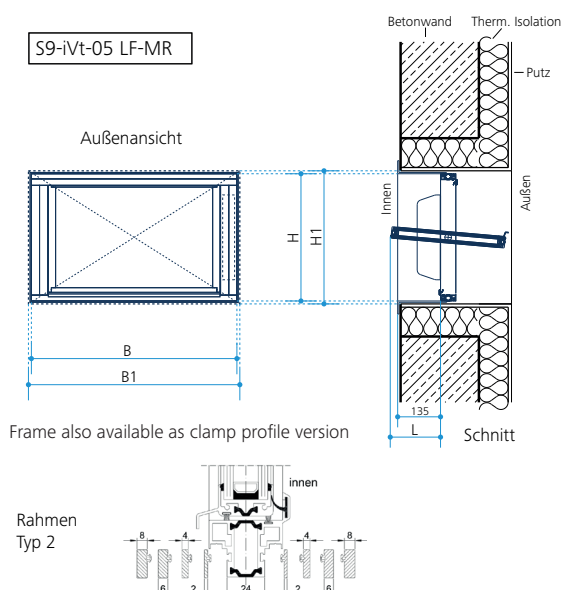
\* S9-iVt-05 LF-MR louvre window also available in glass on request



## Thermally insulated

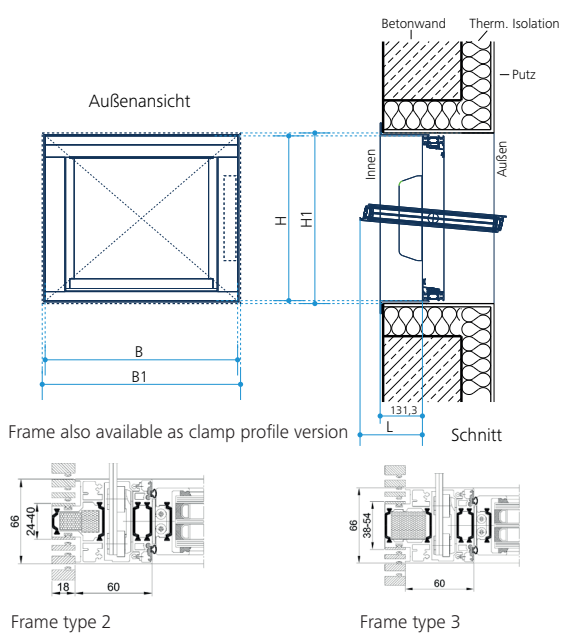
### Louvre window S9-iVt-05 LF-MR and Tairmo-LF-MR

#### Designs and dimensions



#### S9-iVt-05 LF-MR

Article name according to element dimensions W x H	420x420	570x570	775x775
Net ventilation area (m <sup>2</sup> )	0.10	0.20	0.39
Unfinished opening (mm) W1xH1	450x450	600x600	805x805
Window length (mm) L	169.1	111.2	101.1
Panel U <sub>p</sub> -value (W/m <sup>2</sup> K)	1.0	1.0	1.0
U <sub>w</sub> -value (W/m <sup>2</sup> K)	2.5	2.3	2.1
Number of louvres	1	2	3



#### Tairmo-LF-MR

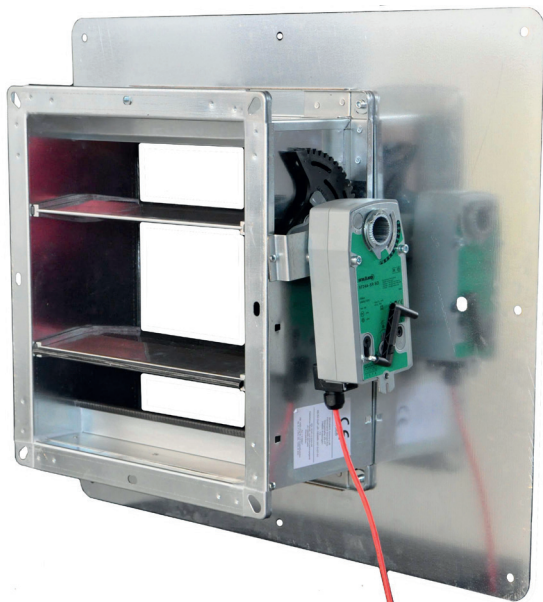
Article name according to element dimensions W x H	800x350	590x505	740x505	815x815
Net ventilation area (m <sup>2</sup> )	0.11	0.15	0.20	0.40
Unfinished opening (mm) W1xH1	830x380	620x535	770x535	845x845
Window length (mm) L	114.2	191.4	191.4	162.4
Panel U <sub>p</sub> -value (W/m <sup>2</sup> K)	0.7	0.7	0.7	0.7
U <sub>w</sub> -value (W/m <sup>2</sup> K)	1.9	1.8	1.7	1.6
Number of louvres	1	1	1	2

Angle profile: 50 x 150 x 5 mm  
50 x 50 x 5 mm and 50 x 100 x 5 mm dimensions  
available on request.

# VENTILATION COMPONENTS

## Blind JK-180

Natural smoke and heat exhaust ventilator (NSHEV) for flush surface closure of the permanent opening at the top of the shaft, designed for horizontal and vertical installation in the shaft cover. The blind is equipped with a spring return motor and so opens automatically in the event of a power cut.



Alternatively, the blind is available with a low-noise DC motor (ref. JK-180-dB – this version requires additional emergency power batteries for the AIO central unit).

### Benefits

- » Flush surface installation possible
- » Airtight in accordance with GEG requirements
- » Spring return motor, battery-free operation possible
- » Can be combined with weather protection grille or roof hood
- » System-tested in compliance with DIN EN 12101-2
- » In accordance with VdS data sheet 2895

### Performance profile

- » Ideal interface for connection to the building envelope ventilation duct
- » Spring return or DC motor

### Technical specifications

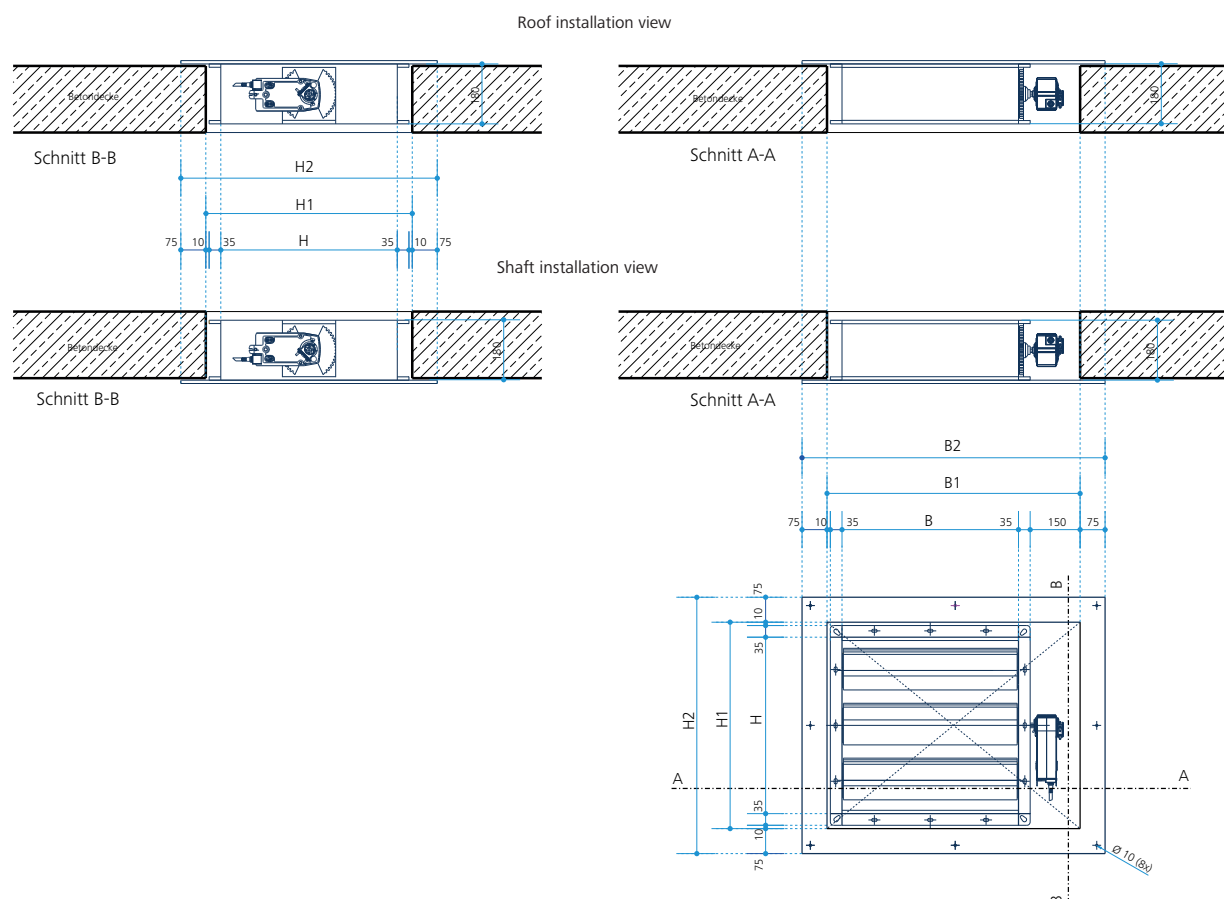
- » Aerodynamic and torsion-resistant aluminium louvres
- » Seals made of special rubber
- » Profiled, galvanised mounting plate, 1.5 mm thick, dimensionally stable
- » Fail-safe function by means of a spring return in the motor in case of a power cut

### Notice/information

- » Weather protection to be provided by the customer

# Blind JK-180

## Designs and dimensions



### JK-180 / JK-180-db (with db motor)

Article name according to unfinished opening (mm) W1 x H1	590x450	700 x 450	760x620	930x790	1090x950	1260 x 1120	1430 x 1290
Net ventilation area (m²)	0.10	0.13	0.23	0.41	0.62	0.90	1.22
Ventilation opening (mm) W x H	360x360	470 x 360	530x530	700x700	860x860	1030x1030 ***	1200x1200 ***
JK-180: Minimum unfinished opening (mm) W1 x H1**	530x450	640 x 450	700x620	870x790	1030x950	1200x1120	1370x1290
JK-180-db: Minimum unfinished opening (mm) W1 x H1**	500x450	610 x 450	670x620	840x790	1000x950	-	-
Mounting plate (mm) W2 x H2	740x600	850 x 600	910x770	1080x940	1240x1100	1410x1270	1580x1440
Installation depth (mm) of the blind	180	180	180	180	180	180	180

Other sizes available on request

\*Depending on the angle of installation, it may be necessary to carry out maintenance on the opening device from the roof.  
As a precaution, we point out that the relevant accident prevention regulations must be observed for accessibility and maintenance.

\*\*For the minimum unfinished dimensions, it is necessary to remove the flap for maintenance or replacement of the motor.

\*\*\*These sizes are not available with the db motor version.



# VENTILATION COMPONENTS

## Blind NK-SL

Natural smoke and heat exhaust ventilator (NSHEV) for flush surface closure of the permanent opening at the top of the shaft, designed for horizontal and vertical installation in the

shaft cover. The blind is equipped with a spring return motor and so opens automatically in the event of a power cut.



### Benefits

- » Flush surface installation possible
- » Airtight in accordance with GEG requirements
- » Spring return motor, battery-free operation possible
- » Can be combined with weather protection grille or roof hood

### Performance profile

- » Ideal interface for connection to the building envelope ventilation duct
- » Spring return

### Technical specifications

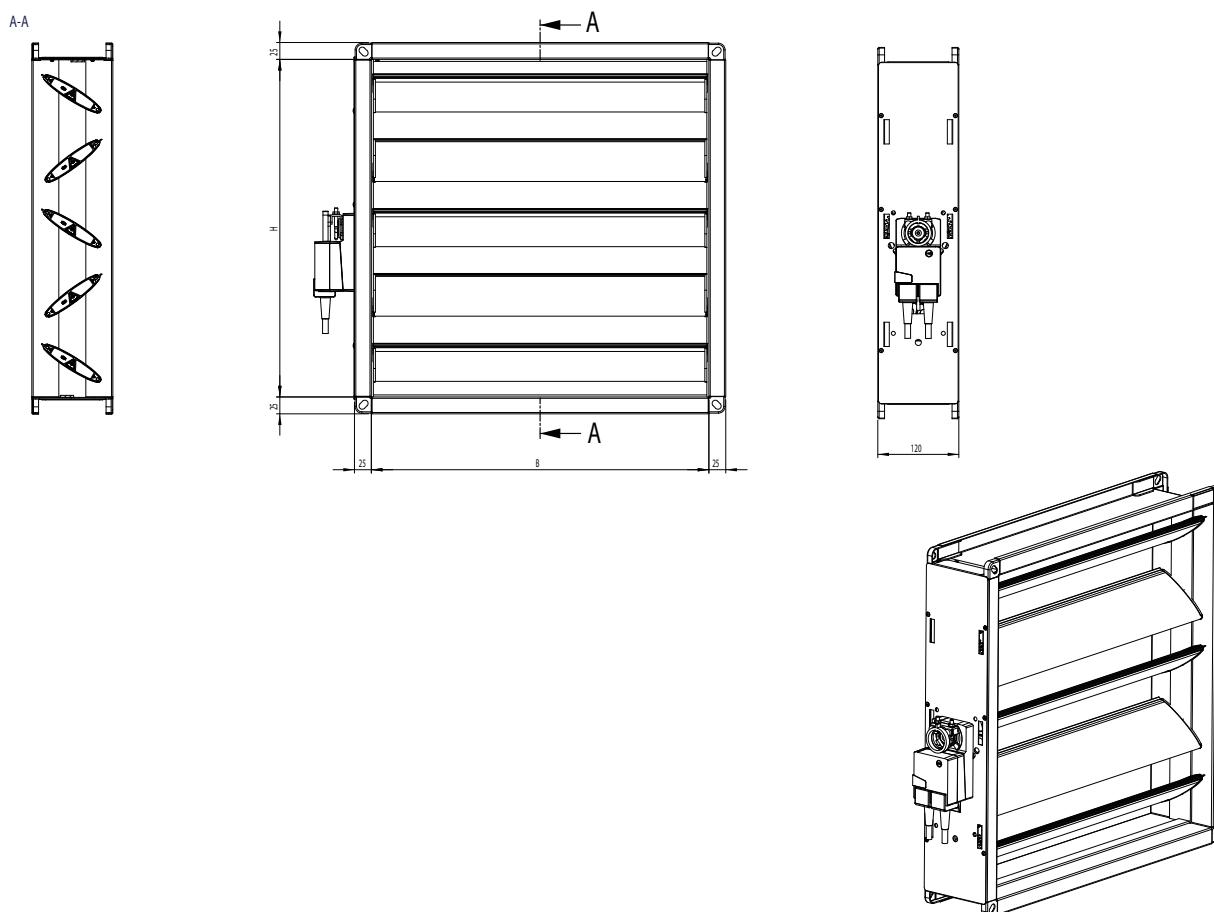
- » Aerodynamic and torsion-resistant aluminium louvres
- » Seals made of special rubber
- » Profiled, galvanised mounting plate, 1.0 mm thick, dimensionally stable
- » Fail-safe function by means of a spring return in the motor in case of a power cut

### Notice/information

- » Weather protection to be provided by the customer

## Blind NK-SL

### Designs and dimensions



NK-SL = Multileaf damper with spring return motor

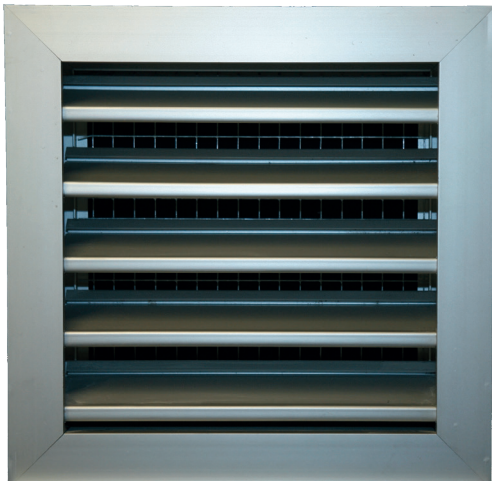
Ventilation opening [m²]*		200	300	400	500	600	700	800	900	1000
H [mm]	100	0,016	0,025	0,033	0,041	0,049	0,057	0,066	0,074	0,082
	200	0,033	0,049	0,066	0,082	0,10	0,11	0,13	0,15	0,16
	300	0,049	0,074	0,10	0,12	0,15	0,17	0,20	0,22	0,25
	400	0,066	0,10	<b>0,13</b>	0,16	0,20	0,23	0,26	0,30	0,33
	500	0,082	0,12	0,16	<b>0,21</b>	0,25	0,29	0,33	0,37	0,41
	600	0,10	0,15	0,20	0,25	<b>0,30</b>	0,34	0,39	0,44	0,49
	700	0,11	0,17	0,23	0,29	0,34	0,40	0,46	0,52	0,57
	800	0,13	0,20	0,26	0,33	0,39	0,46	<b>0,52</b>	0,59	0,66
	900	0,15	0,22	0,30	0,37	0,44	0,52	0,59	0,66	0,74
	1000	0,16	0,25	0,33	0,41	0,49	0,57	0,66	0,74	0,82

\*Common standard dimensions marked in dark blue.

# VENTILATION COMPONENTS

## ALAS weather protection grille

The ALAS weather protection grille and bird screen, which can be installed from the shaft, provides the necessary weather protection on the façade side.

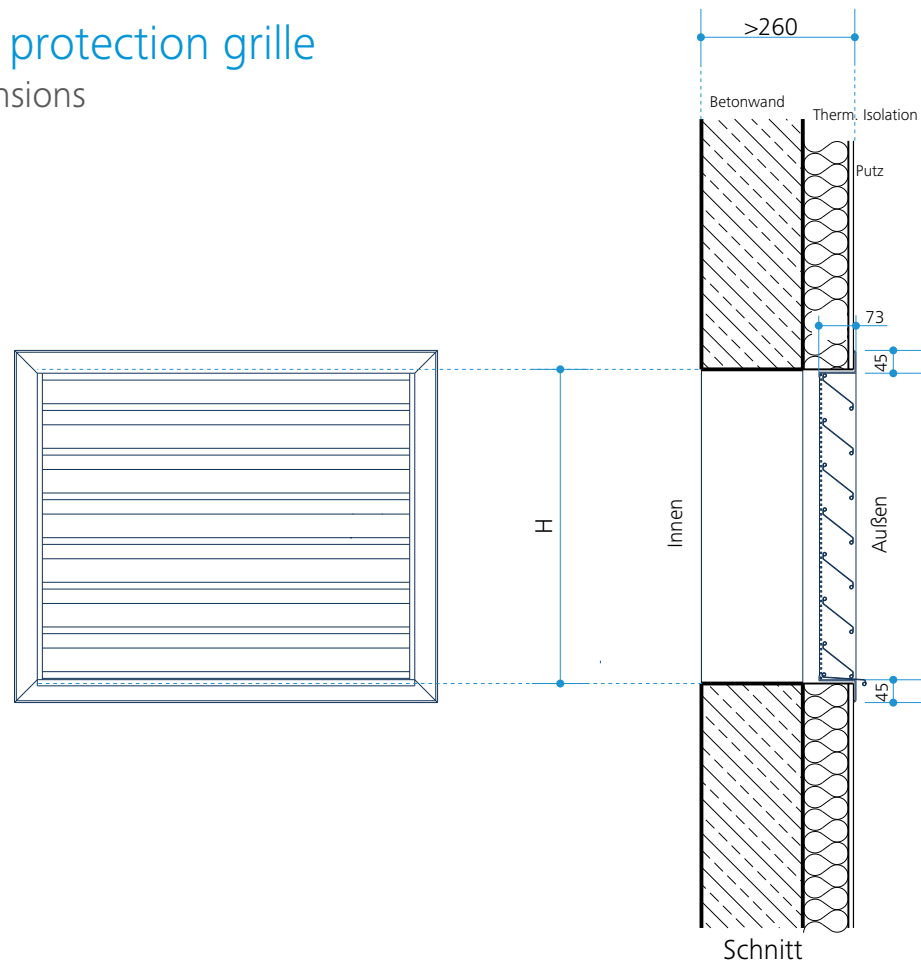


### Technical specifications: Weather protection grille

- » Exhaust air grille with fixed, rain-repellent louvers
- » Integrated bird screen
- » Louvres: galvanised sheet steel
- » Wire mesh grille: galvanised steel

## ALAS weather protection grille

### Designs and dimensions



ALAS*							
Article name according to ventilation opening (mm) W x H	360x360	470 x 360	530x530	700x700	860x860	1030 x 1030	1200x 1200
Net ventilation area (m <sup>2</sup> )	0.10	0.13	0.23	0.38	0.56	0.77	1.03
Unfinished opening (mm) W1xH1	590x450	700 x 450	760x620	930x790	1090x950	1260x1120	1430x1290
Weather protection grille installation depth (mm)	73	73	73	73	73	73	73
Minimum wall thickness (mm)	260	260	260	260	260	260	260

Other sizes available on request

\*Optional window frame on request

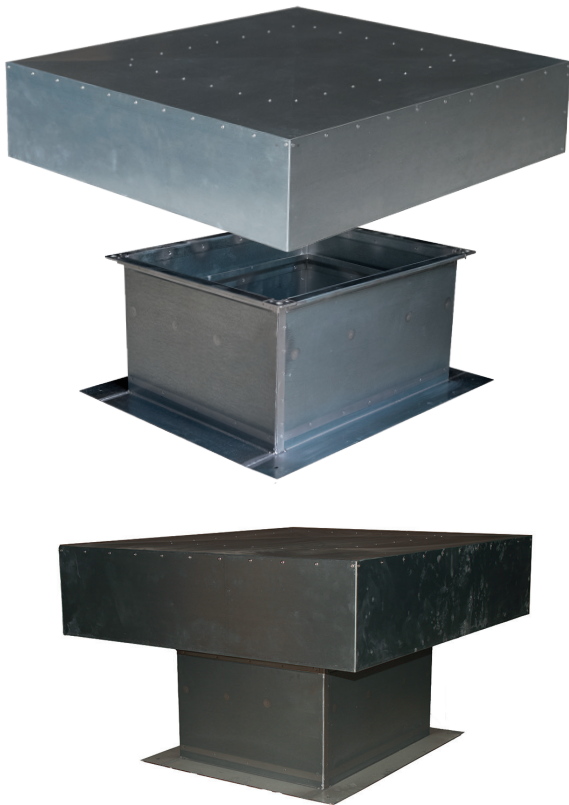


# VENTILATION COMPONENTS

## Roof hood HVC

The hood consists of a base and a removable cover. The base is adapted to the blind. The hood ensures absolute weather-tightness, even when the blind is in the open position.

Ventilation and smoke extraction from the lift shaft are ensured even at high wind speeds, regardless of the wind direction or weather conditions.



### Performance profile

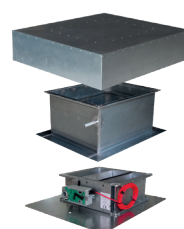
- » Integration in thermal insulation
- » Solution for the entire ventilation duct (if shaft cover = roof)
- » Smoke extraction and ventilation regardless of wind direction

### Technical specifications: Roof hood

- » Flat roof base with connection interface to blind
- » Roof hood for protection against precipitation
- » Drain connection for discharge of condensation
- » Material: 1.2 mm galvanised sheet steel (ref. HVC-S) or aluminium (ref. HVC-A)
- » Base: spot-welded
- » Hood: spot-welded or riveted
- » Puncture-resistant
- » Bird protection grille



**ADVANTAGE:**  
Can be used in combination with blind

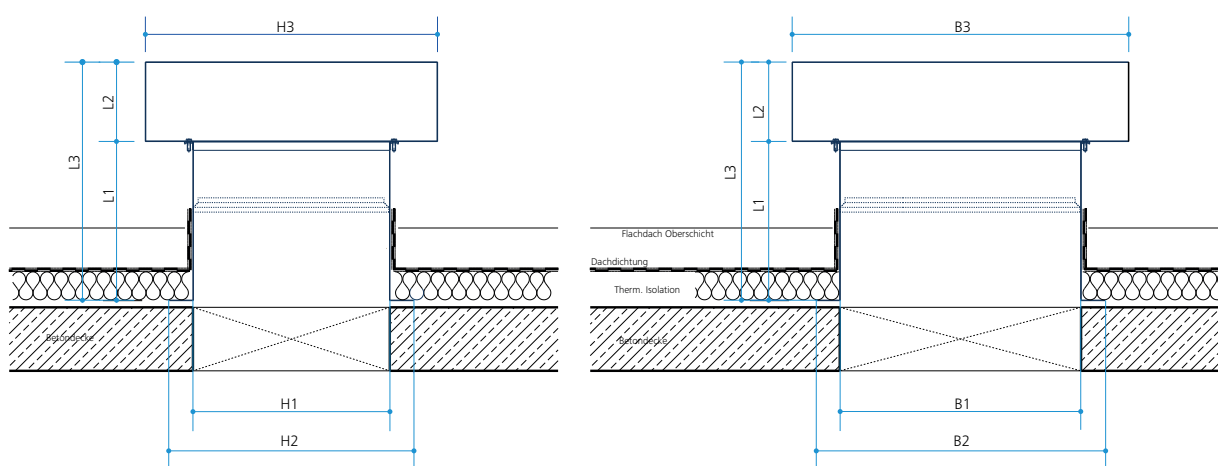


Installation situation  
with blind on shaft / roof side

Notice/information: Installation must be carried out by a specialist roofing company.

## Roof hood HVC

### Designs and dimensions



HVC							
Article name according to ventilation opening (mm) W x H	360x360	470 x 360	530x530	700x700	860x860	1030x 1030	1200x 1200
Net ventilation area (m²)	0.10	0.13	0.23	0.41	0.62	0.90	1.22
Recommended unfinished opening (mm) W1 x H1	590x450	700 x 450	760x 620	930x790	1090x950	1260x 1120	1430x1290
Base external dimension (mm) W2 x H2	740 x 600	850 x 600	910x770	1080x940	1240x1100	1410x1270	1580x1440
Ventilation hood dimensions W3 x H3	890x750	1000 x 750	1060x920	1230x1090	1490x1350	1660x1520	1930x1790
Ventilation base height (mm) L1**	500	500	500	500	500	500	500
Ventilation hood height (mm) L2	250	250	250	250	300	350	400
Roof hood total height (mm) L3	750	750	750	750	800	850	900

\* For the minimum unfinished dimensions, it is necessary to remove the flap for maintenance or replacement of the motor.

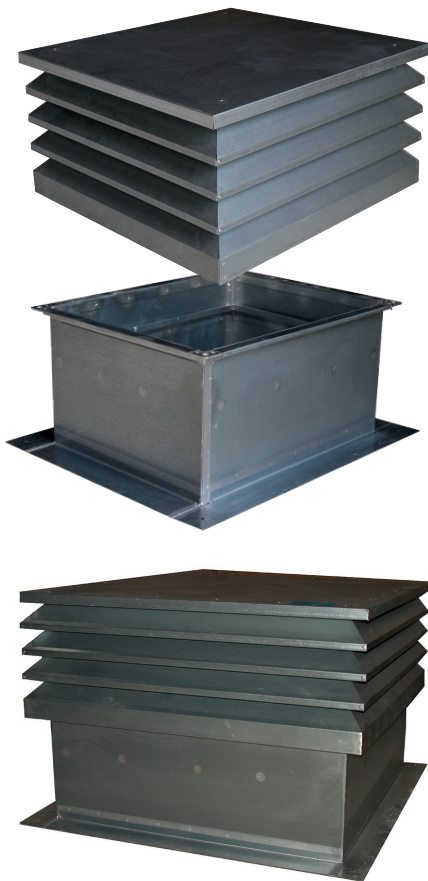
\*\* Our ventilation bases are available in other heights on request.

# VENTILATION COMPONENTS

## Louvre cover HVL

The hood consists of a base and a removable cover. The base is adapted to the blind. The hood ensures absolute weather-tightness, even when the blind is in the open position.

Ventilation and smoke extraction from the lift shaft are ensured even at high wind speeds, regardless of the wind direction or weather conditions.



### Performance profile

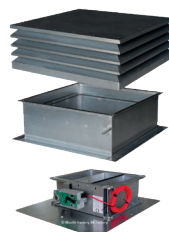
- » Integration in thermal insulation
- » Space-saving solution
- » Solution for the entire ventilation duct (if shaft cover = roof)
- » Smoke extraction and ventilation regardless of wind direction

### Technical specifications: Louvre hood

- » Flat roof base with connection interface to blind
- » Louvre hood with ventilation openings on 4 sides to protect against precipitation
- » Space-saving where space is limited: dimensions of louvre hood correspond to the flat roof base
- » Drain connection for discharge of condensation
- » Material: 1.2 mm galvanised sheet steel (ref. HVL-S) or aluminium (ref. HVL-A)
- » Base: spot-welded
- » Hood: spot-welded or riveted
- » Puncture-resistant
- » Bird protection grille



**ADVANTAGE:**  
Can be used in combination with blind

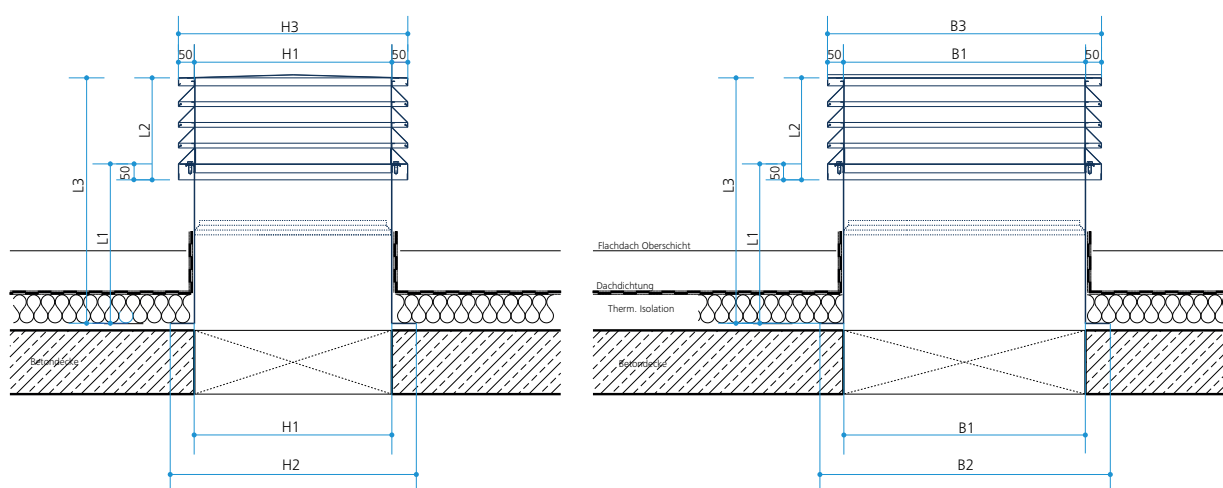


Installation situation with blind on shaft / roof side

Notice/information: Installation must be carried out by a specialist roofing company.

## Louvre cover HVL

### Designs and dimensions



HVL							
Article name according to ventilation opening (mm) W x H	360x360	470 x 360	530x530	700x700	860x860	1030x1030	1200x1200
Net ventilation area (m²)	0.10	0.13	0.23	0.41	0.62	0.90	1.22
Recommended unfinished opening (mm) W1 x H1	590 x 450	700 x 450	760 x 620	930 x 790	1090 x 950	1260 x 1120	1430 x 1290
Base external dimension (mm) W2 x H2	740 x 600	850 x 600	910 x 770	1080 x 940	1240 x 1100	1410 x 1270	1580 x 1440
Ventilation hood dimensions W3 x H3	690 x 550	800 x 550	860 x 720	1030 x 890	1190 x 1050	1360 x 1220	1530 x 1390
Ventilation base height (mm) L1**	500	500	500	500	500	500	500
Ventilation hood height (mm) L2	320	320	320	320	385	450	515
Roof hood total height (mm) L3	770	770	770	770	835	900	965

\* For the minimum unfinished dimensions, it is necessary to remove the flap for maintenance or replacement of the motor.  
 \*\* Our ventilation bases are available in other heights on request.



# VENTILATION COMPONENTS

## Blind JK-190 for existing openings

Natural smoke and heat exhaust ventilator (NSHEV) for closure of permanent openings at the top of the shaft in existing properties – horizontal or vertical surface mounting. The blind is equipped with a spring return motor and so opens automatically in the event of a power cut. Alter-

natively, the blind is available with a low-noise DC motor (ref. JK-190-dB – this version requires additional emergency power batteries for the AIO central unit).



### Benefits

- » Surface-mounted installation for existing openings
- » Airtight in accordance with GEG requirements
- » Spring return motor, battery-free operation possible
- » System-tested in compliance with DIN EN 12101-2
- » In accordance with VdS data sheet 2895

### Performance profile

- » Use: If the existing opening is not larger than the required smoke extraction cross-section
- » Can be adapted to many ventilation openings

### Technical specifications

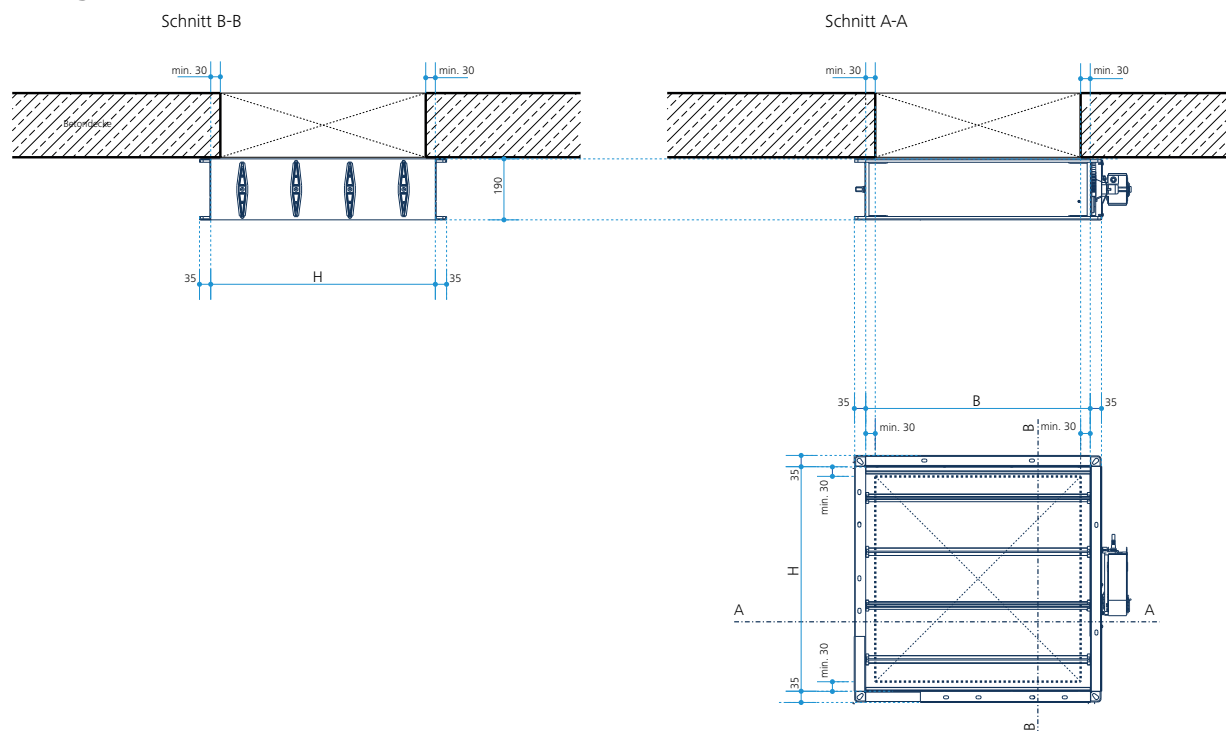
- » Aerodynamic and torsion-resistant aluminium louvres
- » Seals made of special rubber
- » Profiled, galvanised mounting plate, 1.5 mm thick, dimensionally stable
- » Fail-safe function by means of a spring return in the motor in case of a power cut
- » Deeper housing allows larger ventilation area (free movement of the louvres and increased air flow between them)

### Installation

- » For secure mounting, ensure that the ventilation opening (WxH) of the blind is at least 30 mm larger than the existing unfinished opening
- » The blind is fastened into the shaft wall or cover with the aid of the installation frame
- » Corner installation possible using special installation brackets (available as accessories – see p. 28)

# Blind JK-190 for existing openings

## Designs and dimensions



### JK-190\* | free cross section (m²)

Ventilation opening (mm) HxW	360	470	530	700	860	1030**	1200**
360	0.10	0.13	0.15	0.20	0.25	0.30	0.35
530	0.16	-	0.23	0.30	0.37	0.45	0.52
700	0.21	-	0.31	0.41	0.50	0.60	0.70
860	0.26	-	0.38	0.51	0.62	0.75	0.87
1030**	0.31	-	0.46	0.61	0.75	0.90	1.04
1200**	0.37	-	0.54	0.71	0.87	1.05	1.22
Installation depth (mm) of the blind	190	190	190	190	190	190	190

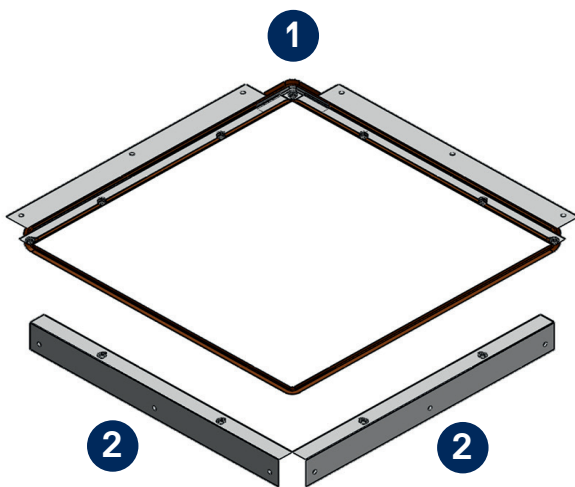
\* Common standard dimensions marked in grey

\*\*Dimensions over 1000 mm not available with db motor version

# VENTILATION COMPONENTS

## Installation bracket for the blind JK-190

Accessories for horizontal installation of blind JK-190 in a corner



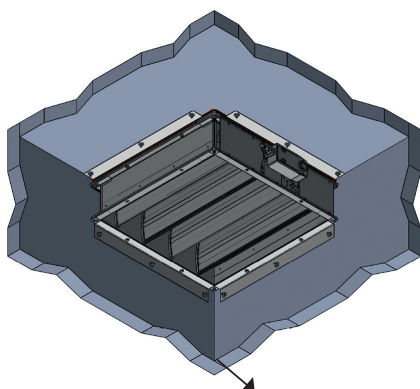
### Performance profile

- » Blind JK-190 including installation bracket
- » Solution for corner installation in the shaft cover, if the opening is in the corner and there is not enough space for a conventional drill hole
- » Flexible installation depending on accessibility of the unfinished opening

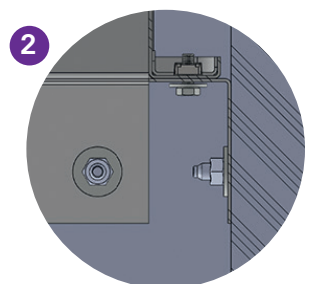
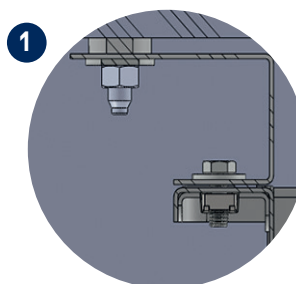
### Installation

- » The angle bracket 1 is fastened to the blind using the nuts provided
- » The blind including angle bracket 1 is placed in front of the opening and bolted into the shaft cover
- » The angle supports 2 are attached by firmly pushing and bolting them into the shaft walls between the louvres

## Corner view of top of shaft

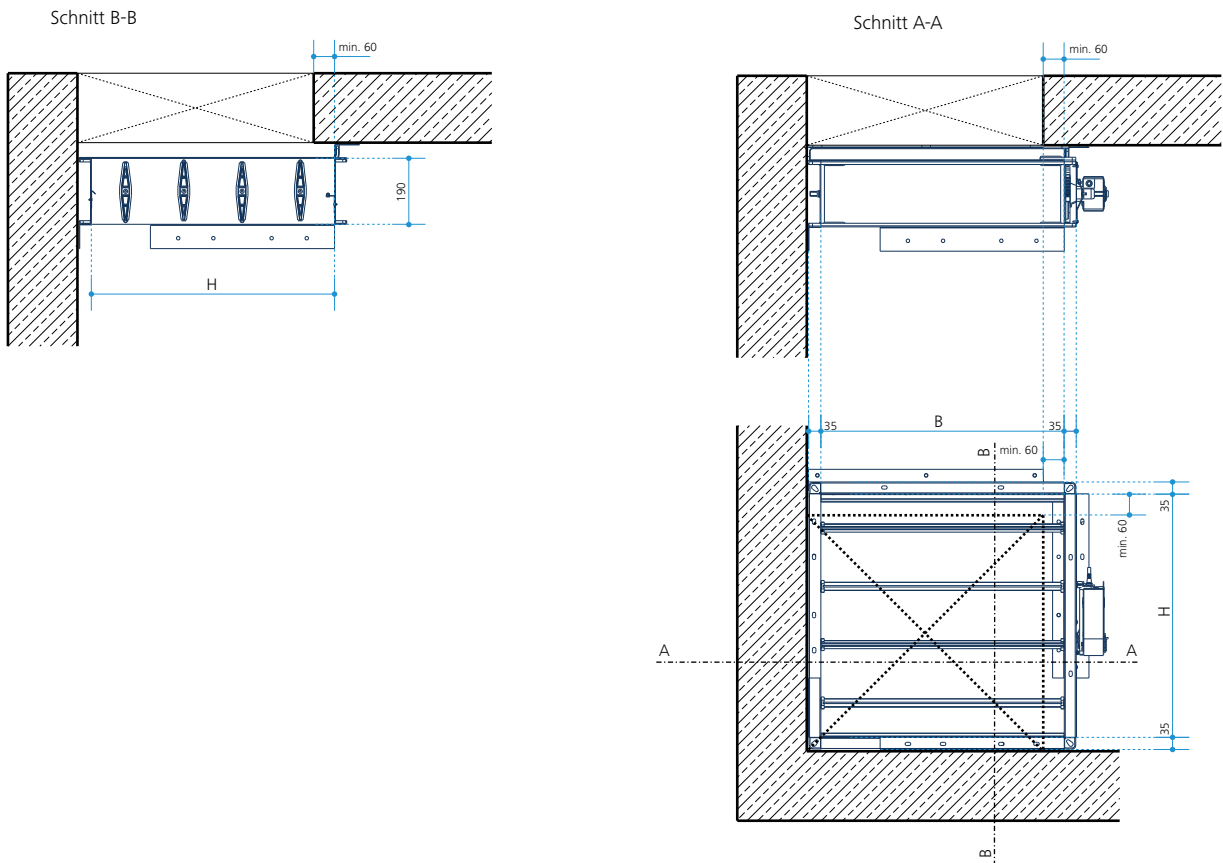


Corner view of top of shaft



# Installation bracket for the blind JK-190

Designs and dimensions with installation brackets





**Manufacturer**

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