

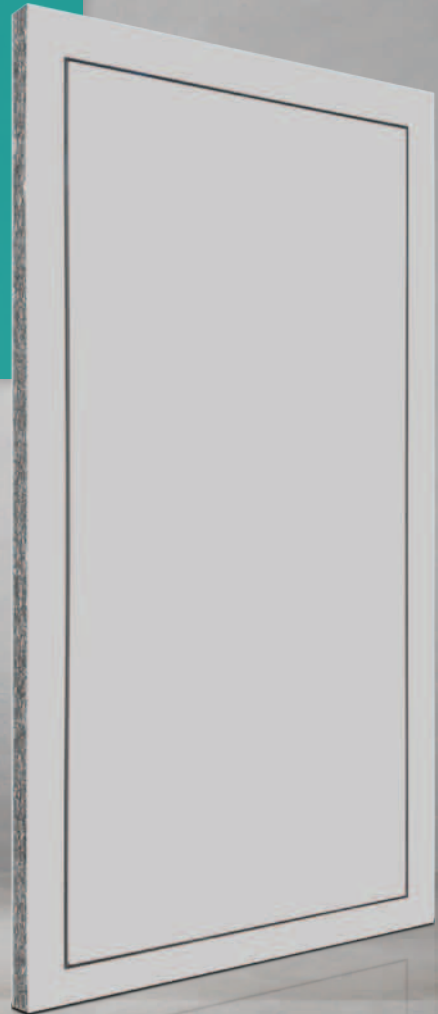
## Smoke extraction damper PRIOAIR SD-RDA-V

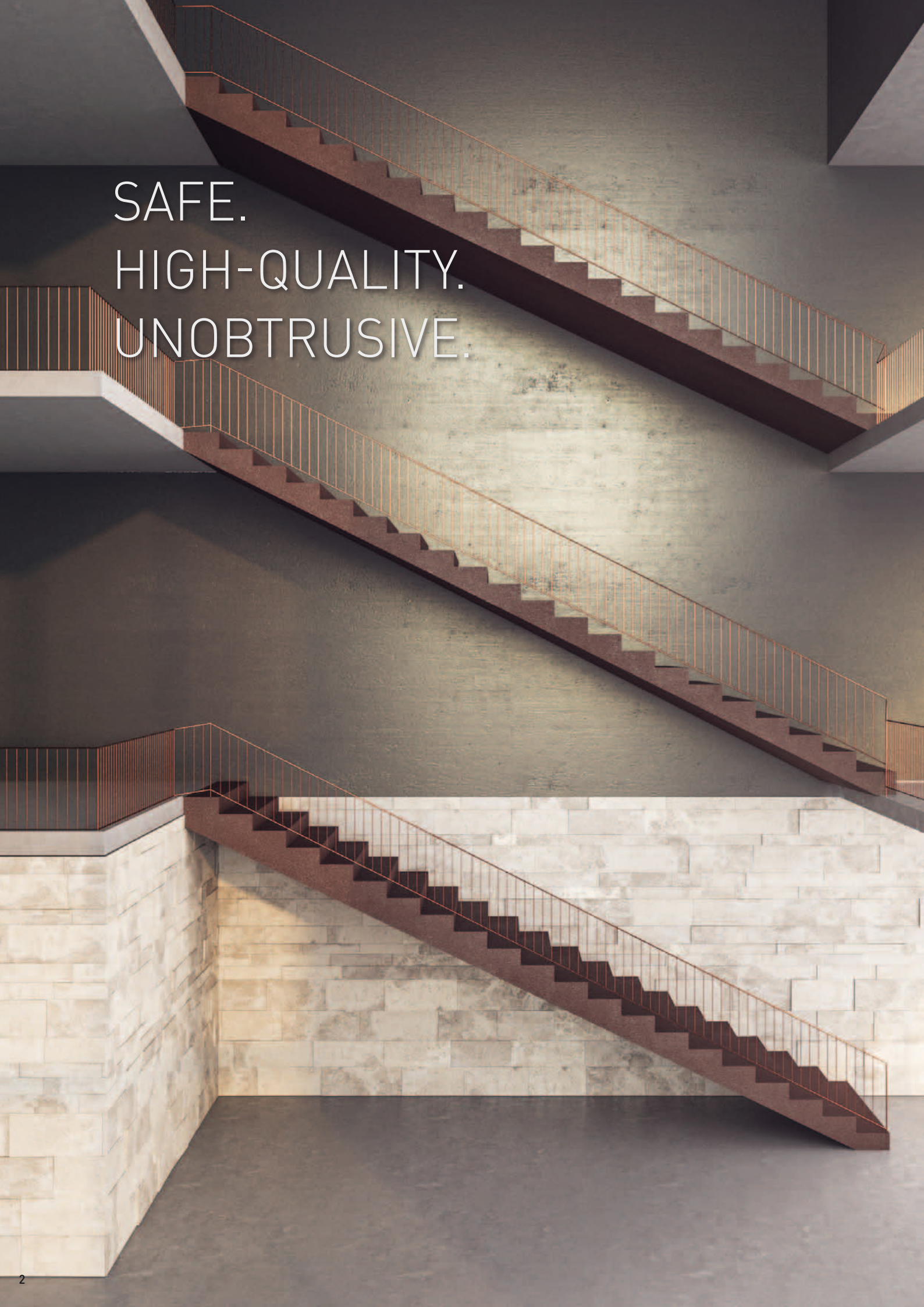
For use in smoke protection pressure systems according to EN 12101-8

Smoke-free escape routes

Minimal look - maximum safety

Implementation  
of MVV TB 2023/1





SAFE.  
HIGH-QUALITY.  
UNOBTRUSIVE.





# Smoke extraction and smoke prevention

Necessary corridors and stairwells must be usable for a sufficiently long time according to building law. The use must not be endangered by smoke. For this reason, smoke outlets play an important role in fire protection concepts.

Smoke extraction dampers are a component of smoke protection pressure systems (RDA) and ensure reliable smoke extraction in the event of a fire.

In the event of a fire, smoke protection pressure systems (RDA) serve to keep escape routes free of smoke in vertical and horizontal directions, such as interior stairwells or safety stairwells.

Safety stairwells are required by building regulations depending on the building class.

They must be kept smoke-free in case of fire – this can only be achieved by controlled overpressure of the stairwell, in combination with sufficient flow through the fire area.

In addition, smoke protection pressure systems are used in special buildings in which many people are present or in buildings in which people cannot save themselves under their own power but are dependent on external rescue, such as hospitals or nursing homes.

# Minimal look

In addition, smoke protection pressure systems are used in special buildings in which many people are present or in buildings in which people cannot save themselves under their own power but are dependent on external rescue, such as hospitals or nursing homes.



The one-piece frame cover without joints in combination with a flush-fitting installation creates a finish that meets high visual demands. No visible fittings interfere with the straight-lined look.

Almost invisible or elegant and high-quality - a variety of surface designs are available to match the furnishings and use. This means that the PRIOAIR SD-RDA-V smoke control damper can be discreetly and almost perfectly adapted to the spatial and structural conditions.

### Surface

- Standard surface light grey, similar to RAL 7035, edges and chamfers dark
- Different surface designs - from décor to primer film, paint
- Surface can be plastered over/coated according to manufacturer's instructions

### Look

- No visible bands from the corridor side
- No visible drive from the corridor side
- One-piece frame cover without joints
- Optionally with suspended frame cover (without visible screw connection)

### Quality

- Declaration according to DGNB, LEED and BNB
- Production exclusively "Made in Germany"
- All tests by renowned test institutes within Germany

Fig.: Special version with suspended frame cover

# Maximum safety

Large-format, single-leaf, fire-resistant smoke damper, specially designed to seal off outflow shafts as part of a smoke pressure system. The goal of using these is to keep safety stairwells free from smoke. In case of a fire, the controller of the on-site smoke pressure system opens the smoke damper automatically. Large cross-sections offer a free, unimpeded outflow area for flue gases. The closure is smoke proof and offers a fire resistance rating of over 90 minutes.

PRI0AIR SD-RDA-V is classified for vertical installation in walls and ducts and thus has the classification  $v_{edw}$  (d = duct smoke extraction duct, w = wall, wall - part of the smoke extraction duct) required for installation in shaft walls and offers an outflow area of up to 1.74 m<sup>2</sup> at pressure stage 2 in the largest dimension.



## Function

- Performance level according to MW TB 2023/1:  
EI90( $v_{edw}$  i↔o)S1000C<sub>10000</sub>
- Smoke extraction damper according to EN12101-8
- Fire resistance 90 minutes EI90
- Fire from inside, fire from outside
- Pressure suction – pressure stage 2 1000 Pa
- Automatic motorised release AA
- Smoke protection – circumferential fire and smoke protection seals
- Tight seal

## Installation and assembly

- Vertical, flush installation in solid walls for smoke extraction, also in connection with smoke extraction ducts according to EN 12101-7, tested according to EN 1366-8 or EN 1366-9
- Flush installation in PRIOWALL and GKF shaft wall
- Installation in duct / vertical line
- Raised installation
- Mounting frame included

## Opening and closing

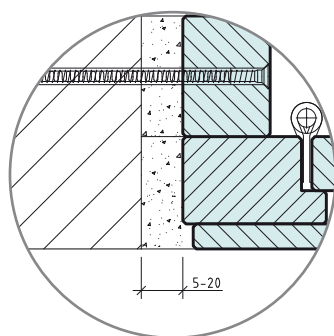
- Large free outflow area in relation to the installation opening
- Opening and closing via high-quality chain drive
- Emergency release
- Easy unlocking of the cover frame (standard version with screw connection)
- Large opening angle (75°)
- Quick opening and closing of the smoke control damper,
- Speed approx. 10 mm/sec.
- Opening after approx. 35 seconds
- Pressure loss coefficients  $\zeta$  determined by the Institute for Industrial Aerodynamics (I.F.I.) and available on request

## Drive

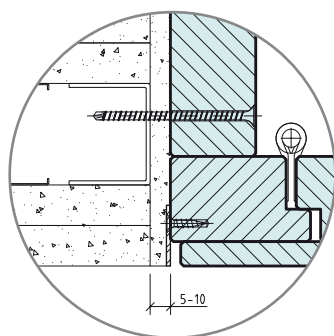
- Bolt drive for additional locking (multi-point locking)
- Opening and closing by chain drive
- Connection cable chain drive 6-pole, (2 wire pairs each for drive, end positions and programming)
- System voltage 24 V DC
- Adjustment of the chain drive via software
- Automatic reversing in case of overload (reversal of the direction of movement when an obstacle is detected)

## Options

- Special version without visible screws



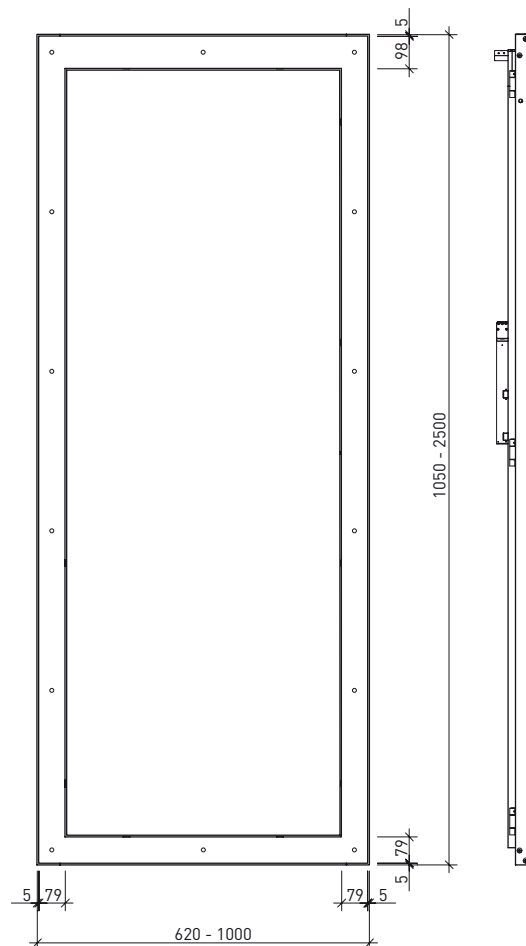
\*Installation in solid wall








\*Installation in GKF shaft wall

## Sizes

- Single-leaf manhole cover
- Nominal sizes from 620 x 1050 mm to 1000 x 2500 mm (W x H)



[mm]

Art.	 H x W mm	 H x W mm	 mind. H x W mm	 kg	 DIN
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SD-RDA-V-SAF

Individual made-to-measure: External height 1050 - 2500 mm and external width 620 - 1000 mm

### Fire-resistance rating 90 minutes

SD-RDA-V - 1-leaf, flush-mounted

SD-RDA-V-105-062	1050 x 620	863 x 452	1070 x 640*	80	R
SD-RDA-V-150-080	1500 x 800	1313 x 632	1520 x 820*	136	R
SD-RDA-V-210-100	2100 x 1000	1913 x 832	2120 x 1020*	226	R
SD-RDA-V-250-100	2500 x 1000	2313 x 832	2520 x 1020*	268	R

Note: The outflow area depends on the door leaf size and opening angle.

\*See installation details of the wall types



Basic dimensions



Door stop



**Fire-resistant**  
to achieve a fire resistance of 90 minutes



**Smoke protection**  
Components have an elastic smoke protection seal



**Non-flammable**  
Components including surface are tested and classified according to EN 13501-1



**Insensitive surface**  
To all common household cleaning agents



**CE marking**  
According to the Construction Products Regulation



**European standard**  
Tested according to harmonised European standard



**DGNB**  
Component declared for the Green Building sector in accordance with DGNB



**LEED**  
Component declared for the Green Building sector in accordance with LEED

## Manufactory and Safety

Our ISO 9001 certification provides safety and peace of mind. All development and production processes of PRIORIT fire protection products comply with internationally recognized regulations. You can be assured of that! That is a certainty!

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