

SYSTEM 42

PRIOAIR SD-RDA-V

Smoke damper

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.

PRIOAIR 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 m² at pressure stage 2 in the largest dimension.

Function

- Performance level according to MVV TB 2023/1: EI90(v_{edw} i↔o)S1000C₁₀₀₀₀
- 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

Quality

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



- One-piece frame cover without joints



- Many surfaces possible, see page 44



- High-quality stainless steel hinges on the back, mounting frame

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 coefficient ζ 1.47 (external damper dimensions 1,194 x 794 mm, opening angle 75°)

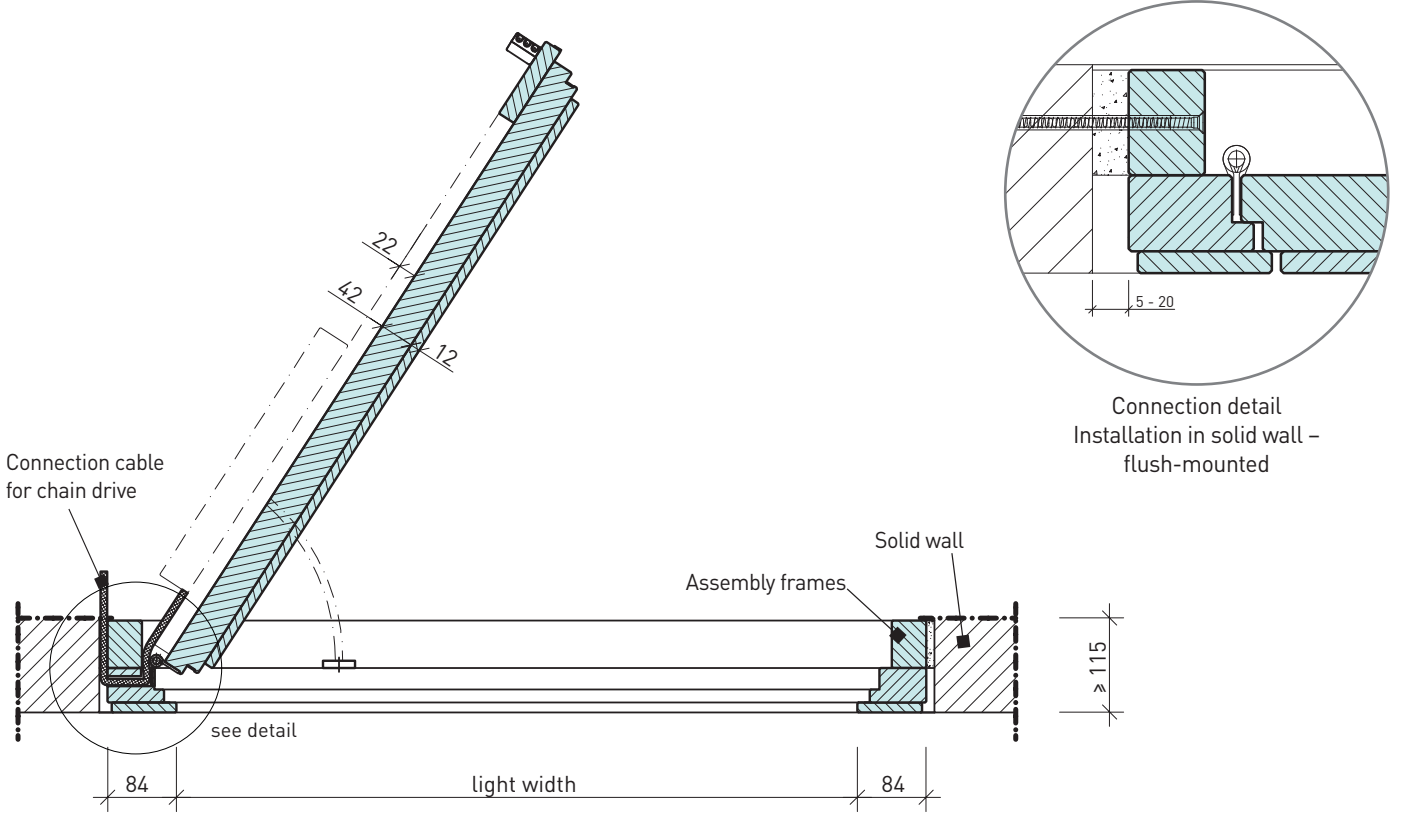
Drive

- 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)

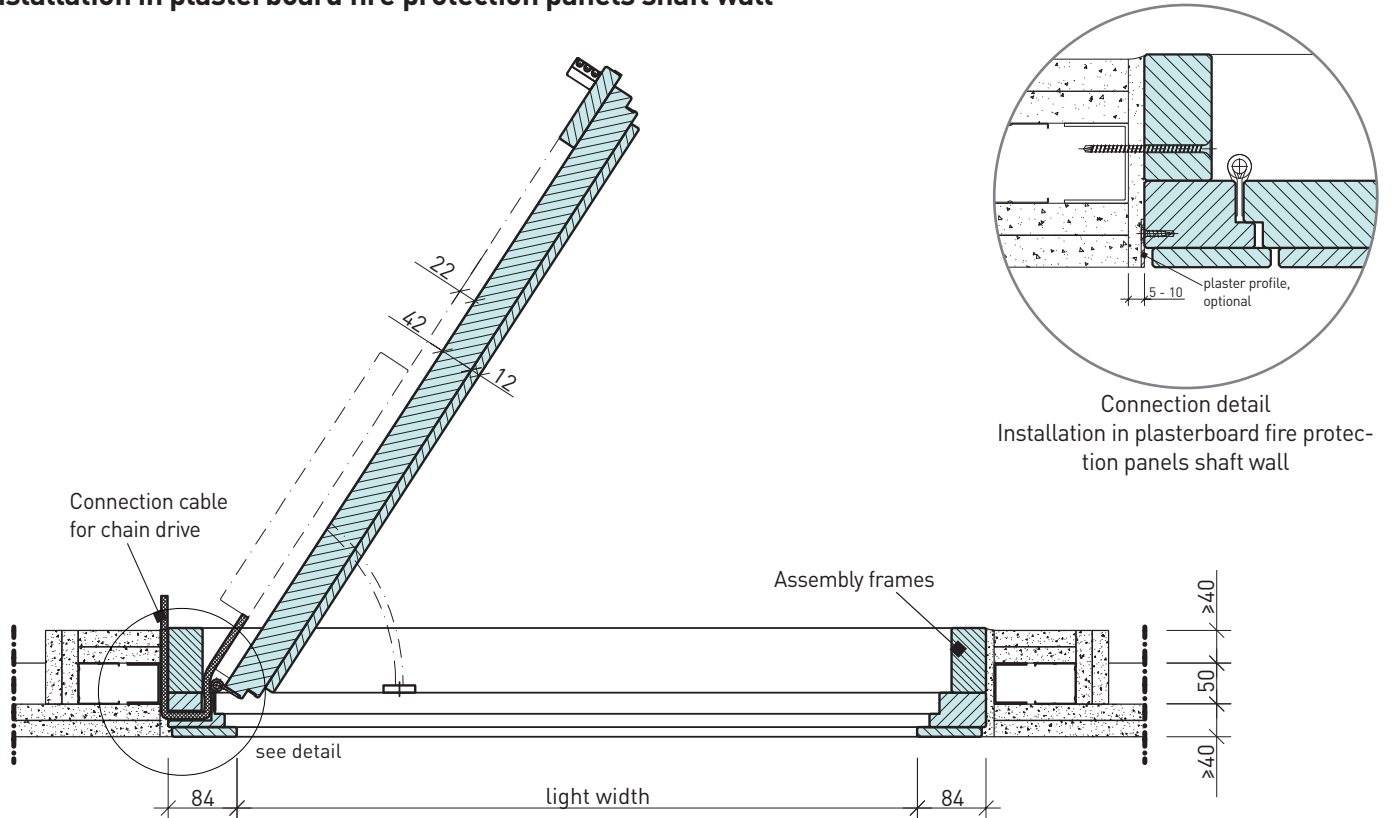
Sizes

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

Installation in solid wall – flush-mounted

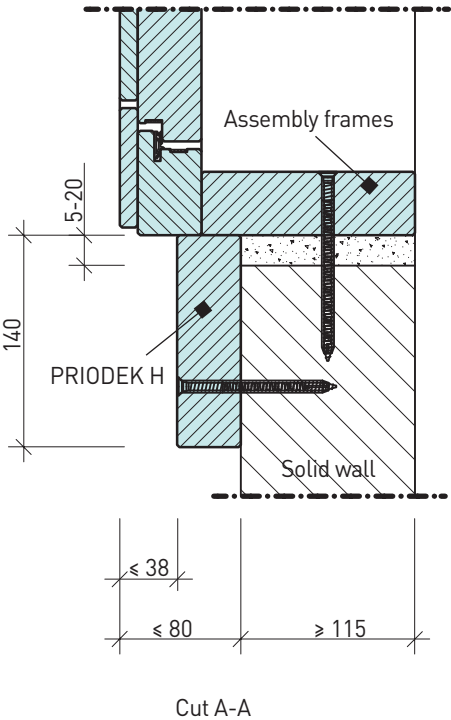
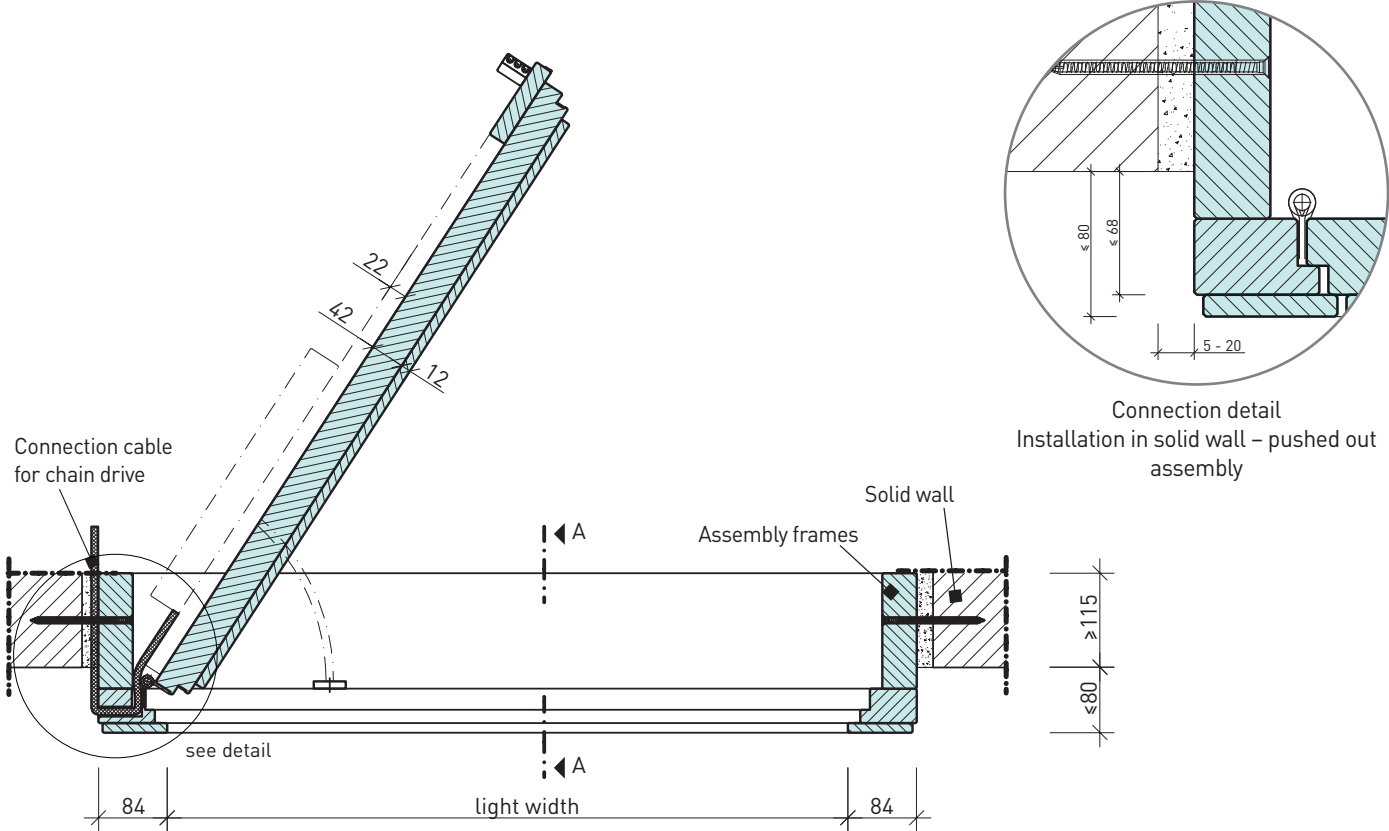


Installation in plasterboard fire protection panels shaft wall



Schematic diagrams, without scale, dimensions in mm

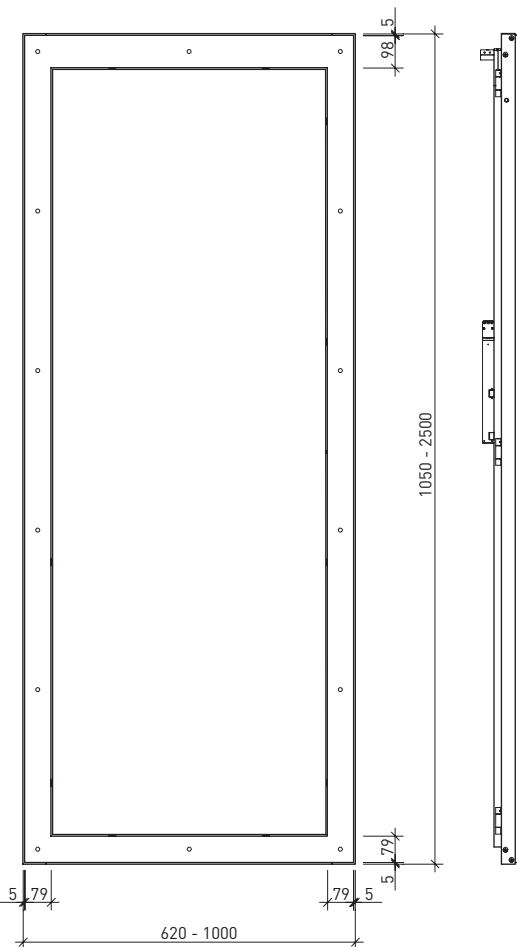
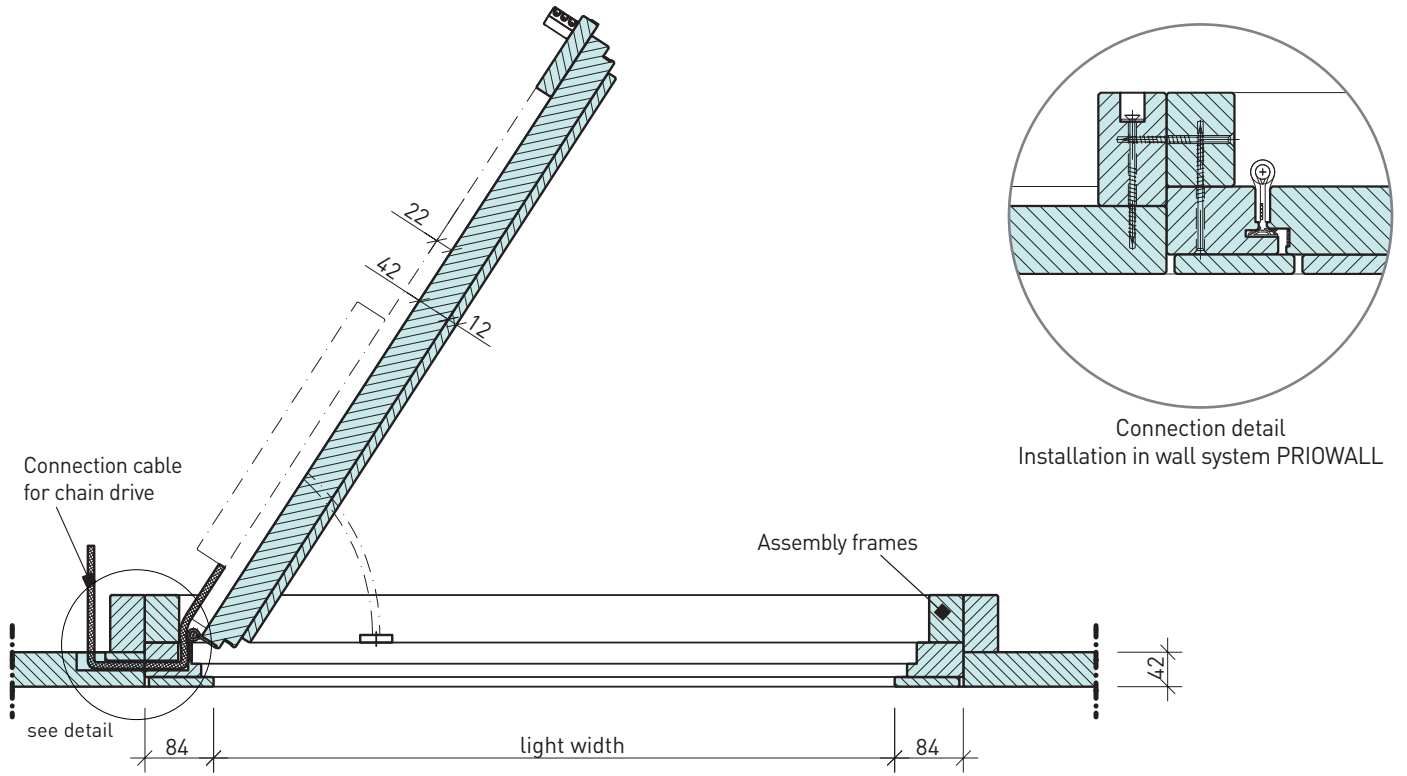
Installation in solid wall – pushed out assembly



Subject to technical changes. | Status: 02.09.2024

Schematic diagrams, without scale, dimensions in mm

Installation in wall system PRIOWALL







[mm]

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 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)

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.



Basic dimensions



Door stop

Further sizes are available in our design tool at www.priorit.de

Options

- Special version without visible screws
- Surface in PRIODEK H paint
- Signal module - visual and acoustic signal during the closing process

Accessories

- Commissioning set (see fig.)
For functional testing and adjustment of the driving on site; consisting of: connection box with 24V power supply, programming set
- Plaster profiles in various lengths for installation in plasterboard fire protection panels shaft walls



Art.	Options
SD-INV-FIX	Cover frame for invisible screw fitting
PA-RDA-SIGNAL	Signal module - visual and acoustic signal during the closing process

Art.	Accessories
ETX-RDA-SET	Commissioning set – For functional testing and adjustment of the driving on site; consisting of: connection box with 24V power supply, programming set
PA.RDA.PP.1950	Plaster profile for installation in plasterboard fire protection panels shaft walls, length: 1950 mm
PA.RDA.PP.2500	Plaster profile for installation in plasterboard fire protection panels shaft walls, length: 2500 mm

