

SINGLE-LEAF FIRE PROTECTION SLIDING DOORS/ SMOKE PROTECTION DOORS

Installation and maintenance instructions





DESIGN I SAFETY I SERVICE

Table of contents

1	Table of contents 2						
2	Symbol legend						
3	Overview of the screws						
4	Gen 4.1	eral information 5 Target group 5					
	4.2	Warranty					
	4.3	General safety instructions					
	4.4	Protection classes 7					
	4.6	Locks and fittings					
	4.7	Locking devices					
	4.8	Package contents					
	4.9	Surface treatment					
	4.10	General information					
	4.11	Control measurements					
5	Inst	allation					
•	5.1	Installing the lintel seal					
	5.2	Installing the inlet to counterbalance box					
	5.3	Installing the wall sealing					
	5.4	Installing the guide rails					
	5.5	Installing the sealing gasket for smoke protection					
	5.6	Installing the door leaves					
	5.7	Installing the door guides and dampers23					
	5.8	Installing the push handle					
	5.9	Installing the closing weight onto the door feed side					
	5.10	Installing the closing regulator					
	5.11	Installing the hook lock (optional)					
	5.12	Installing the raised seal and the smoke protection seal					
	5.13	Checking the door					
	5.14	Installing the casings and covers					
6	Maintenance instructions						
	6.1	General information					
	6.2	Maintenance work					
7	Арр	endix					
	7.1	Installation of artificial buffers					
	7.2	Installing on the ceiling					
	7.3	Installing wicket doors					
	7.4	Weight deflection					
	7.5	Free-running function					

2 Symbol legend

Warning! Danger of injury!

Attention! Danger of damage to property!







Note



Function check

Reference



This work step must be carried out on the opposite side or it must be carried out several times.



Information on the fire protection door



Information on the smoke protection door

3 Overview of the screws





Warning!

To ensure that the system is installed safely and that it works properly, all the instructions in this guide and in the following information must be followed. Physical injury and damage to property may result if the warnings are not heeded.

4.1 Target group

Installation may only be carried out by skilled personnel.

Qualified and trained personnel who are able to install the door have the following characteristics:

- They are aware of the general and special safety and accident prevention regulations
- They are trained to use safety equipment
- They are trained to use hand and electrical tools
- They have regularly participated in training sessions organised by the manufacturer

Qualified and trained people who can install the wiring for the drives, the control and for the safety systems have the following characteristics:

- They are aware of the general and special safety and accident prevention regulations
- They are trained to use safety equipment
- They can recognise the dangers that arise due to electricity
- They have received sufficient instruction from electrical specialists
- They have regularly participated in training sessions organised by the manufacturer

4.2 Warranty

Warranty relating to terms of function and safety can only be provided if

- the safety and warning instructions are adhered to,
- the installation has been carried out properly and the steps were carried out in the order indicated in the instructions,
- genuine Teckentrup accessories have been used,
- no additional objects have been attached to the door,
- the components supplied have not be modified or altered in any way,
- the door has been regularly serviced,
- the operator is aware of all the relevant operating instructions (door, drive systems and safety equipment).

4.3 General safety instructions



Warning!

- The danger area is to be generously cordoned off before the installation takes place.
- People who are not involved in installing the door
- must not be permitted to enter the danger area.
- The installation must be carried out by at least two people.
- The installation must take place from a safe place (e. g. scaffolding).
- The drawings included have priority.

4.4 General requirements

Installation company

The operator or client is entitled to receive a declaration of conformity signed by the installation company (see also the last page of the approval).

Place of installation/use

- The door can only be installed on foundations that statically permit installation to take place.
- The door needs to be installed inside a building.
- The finished floor must be level and horizontal.
 - The walls on the open side must be in alignment with one another.



Attention!

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The sliding door must be joined to the adjoining components in such a manner that the dynamic forces that are generated when the door is closed and the forces that are generated when the door warps as a result of fire can be consistently absorbed by the anchoring equipment. These forces must not endanger the stability of the adjoining walls.



Reference:

See the approval for information on the requirements for the condition of the floor.

b

Note:

The fastenings must always be installed in the manner described in the manufacturer's specifications. The indicated edge distances must be adhered to (in some cases, holes that are required for components may need to be repositioned).

Wall types

Table 1: Wall types/approved fastening types

	Width [mm]			Fastening material					
Wall type	(According to	Installation	Fixing type						
	approval)								
Concrete and masonry									
		Lintel (guide rail)	Stud bolt	FAZ 12/30 or Atrion ASZ-W 12/08-010-080 S					
Completely concrete	>140	Inlet	Plastic wall plug	FUR/SXRL 10/100 or Atrion ARV-W 10-050-100SW13					
		Vertical wall sealing	r lastic waii piag						
Concrete soffit	≥140	Lintel (guide rail)	Stud bolt	FAZ 12/30 or Atrion ASZ-W 12/08-010-080 S					
		Inlet	Plastic wall plug	FUR/SXRL 10/100 or Atrion ARV-W 10-050-100SW13					
		Vertical wall sealing	Stud bolt	Stud bolt					
(Masonry storage area)	(≥175)	Consoles guide rail	Through-bolt mounting	Threaded rod M10					
Lintel concrete	≥140	Lintel (guide rail)	Stud bolt	FAZ 12/30 or Atrion ASZ-W 12/08-010-080 S					
		Inlet	Through holt mounting	Throaded red M10 + Anaber plate					
Side masonry	≥175	Vertical wall sealing		mieaded fou wro + Anchor piate					
Т90	Masonry ≥ 240	Inlet and vertical wall sealing	Plastic wall plug	FUR/SXRL 10, FUR/SXRL 14					
Т30	Masonry ≥ 175	Inlet and vertical wall sealing	Plastic wall plug	FUR/SXRL 10, FUR/SXRL 14					
Autoclaved aerated concrete wall									
Concrete lintel also in the storage area	≥140	Lintel (guide rails)	Stud bolt	FAZ 12/30 or Atrion ASZ-W 12/08-010-080 S					
Autoclaved aerated concrete	≥200	Inlet /	Through bolt mounting	Threaded rod M10 + Anchor plate					
Reinforced autoclaved aerated concrete	≥175	Vertical wall sealing	Through boit mounting						
Panelled steel beam			•	•					
		Lintel (guide rails)		M12 machine screws (at min. 10.9)					
T90 (El 90)	requirements	Inlet		M10 machino scrows (at min 9.9)					
		Vertical wall sealing	Vertical wall sealing						
		Lintel (guide rails)		M12 machine screws (at min. 10.9)					
T30/T60 (El 30/60)	National requirements	Inlet		M10 machine screws (at min. 8.8)					
		Vertical wall sealing]						

4.5 **Protection classes**

General

- The relevant approval/testing certificate can be viewed at
- www.teckentrup.biz/download/technische-informationen.html.
 Fire protection and smoke protection doors are equipped with identification plates.
- The protection and smoke protection doors are equipped with identification
 The operator is responsible for ensuring that the doors work properly.

Note:

The appropriate protection class can only be reached if the proper conditions are fulfilled during installation. If a door fulfils several protection classes, all the valid conditions must be fulfilled for the installation.



Fire protection doors (BS)

- Sliding doors can only stay open as long as is needed as per the requirements of the business.
- Outside of this working time, these doors must remain closed under normal circumstances.
- After opening, the sliding door must close by itself via the closing force associated with the door leaf.
- Sliding doors may be equipped with a locking device. Only locking devices with a general technical approval can be used.

Sliding doors with locking devices (locking devices and tripping devices) may only be used in openings that need to remain open for business reasons. They may only be used if appropriate devices are in place to shut the door automatically if a fire starts or if smoke builds up.

- Aside from the self-activating tripping device, there must be an emergency tripping function that can be activated manually.
- When the sliding door is open, visible notices must be attached to it that make it clear that placing objects within the door's opening area is forbidden. The sign should also make it clear that persons should also not stay in the door's opening area. The stickers supplied should be used to label the door.
- Additional requirements due to other regulations, in particular health and safety regulations, accident prevention regulations, must be adhered to as well.
- Wall sealing joints < 6 mm must be sealed with permanently elastic sealing compound (e.g. B1 sealant).
- Wall sealing joints < 6 mm must be back-filled or solidified by mineral wool (A1) until they are pressureresistant.
- Wall connection gaps \geq 10 mm must be grouted or padded with fire safety panels (A1) .

Smoke protection doors (RS)

- The installation specifications must be adhered to to ensure smoke protection.
- DIN 18095 / EN 1634 must be taken into account during installation.
- The doors must close automatically.
- If a door that has a retractable bottom seal is being installed, the floor should be even, level, smooth and firm: Ground waves < 3 mm/1000 mm.
 - Perfect functionality must be guaranteed on site.
- Carpet is not permissible.
- Alternatively, a floor threshold onto which the bottom seal is lowered can be used in the opening area.
- Wall sealing joints must be sealed with permanently elastic sealing compound (e.g. B1 sealant).
- Wall sealing joints < 6 mm must be back-filled or solidified by mineral wool (A1) until they are pressureresistant.
- Wall connection gaps \geq 10 mm must be grouted or padded with fire safety panels (A1) .
- All element joints and transitions on the door leaf must be sealed with permanently elastic material.





Reference:

The installation instructions in the accessories packages must be observed!

Locks

Locks must comply with DIN 18250-1 / EN 12209.

The locks can be replaced with locks with an anti-panic function in accordance with EN 179 or EN 1125.

Glass

Glass elements can only be exchanged by people who are qualified and who have the appropriate experience.

4.7 Locking devices

Only locking devices with a general technical approval can be used.

The DIBt guidelines for locking devices, the approval and the installation instructions of the manufacturer are the basis for the installation, commissioning and maintenance of the devices.

After a locking device has been fully installed and is ready to use, an acceptance test must be carried out (by an authorised specialist) to ensure that it function correctly and that it has been installed according to the regulations. This test must be commissioned by the operator.

The operator must continuously maintain the locking device in an operational condition and it must be serviced at least every month.

Furthermore, the operator must commission a system test at least once a year; this test must be carried out by a specialist or a person with sufficient training.

The results of the annual test must be documented in a testing book.

The operator must keep this documentation.

4.8 Package contents

- Door leaf package
- Accessories package
- Installation drawing

Please see the package list supplied for specific details



Note:

The door number on the installation drawing must correspond to the number on the packages and to the number on the last door element.

4.9 Surface treatment

Galvanised doors

Galvanised doors may only be treated with coating materials that are suitable for galvanised substructures.

Primed doors

The door leaf is coated with a 2K epoxy primer and can be painted over using all normal top-coat lacquers. Recommendation: 2K acrylic or 2K polyester paint



Attention!

A final coat must be carried out within the first 3 months; if this does not take place we will not accept any liability for corrosion damage. If alkyd resin-based top-coat lacquers are used on galvanised substructures located in areas with particularly high weathering influences, this may lead to the total coating not being covered by the warranty in the future.

4.10 General information

The instructions describe a fire protection sliding door with a weight box located on the inlet side. The diagrams show the door installed so that it opens towards the right. If the door is to be installed so that the door opens to the left, the instructions must be followed in an inverse manner.

Alongside the standard installation, the following installation variants are described in chapter 5. Installation:

- Smoke protection
- Door with opening aid
- Hook lock

For the following variants, consult the appendix before commencing installation:

- Installing artificial lintel / artificial buffer
- Installing on the ceiling
- Installing wicket doors
- Weight deflection
- Free-running function

All dimensions in millimetres (mm). We reserve the right to make technical changes.

4.11 Control measurements

Reference:

See the order confirmation or the installation drawing for information on the ordering dimensions of the door.

 Check that the ordering dimensions of the door are compatible with the structural conditions.





Attention!

For smoke protection doors, no longitudinal or transverse joints may be present on the sealing level in the walls or on the floor.



Note:

In order too install the door, the following conditions must apply:

- The finished floor must be level and horizontal.
- The walls on the connecting side must be in alignment with one another; they must also be level and perpendicular to one another.

Any permissible deviations must be clarified with the manufacturer prior to the door being installed. Uneven areas must be dealt with so that they

- are pressure-resistant and
- comply with the fire safety regulations.
- Check the ground beneath where the door is to be installed.





5.1 Installing the lintel seal

Reference:

The approved fixing types and fastening materials are described in table 1.

See the installation drawing for information on the necessary measurements (Y/Z).

- Specify the position for the lintel seal (A). When doing so, take the following into account:
 - the door size ordered and
 - the 1 m crack over OFF.







Note:

To ensure that the door functions properly, all consoles must be positioned on a horizontal line between the beginning and the end console.

• Draw a horizontal continuous line on the wall for fastening the consoles.



Note:

If the distance between the holes at the end of the lintel seal (A) is smaller than 750 mm, then the lintel seal (A) must be attached to position (B) without an additional console (C).

Reference:

See the installation drawing for information on the necessary measurement (X1).

- Screw the lintel seal (A) with the consoles (C) to the wall; they must be screwed in hand-tight.
- Screw the other consoles into the wall; they should be screwed in until they are hand-tight.
- Align the lintel seal (A) horizontally.
- Align the consoles (C) horizontally and level to the lintel seal (A).
- Tighten the screws.

5.2 Installing the inlet to counterbalance box

Reference:

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Type 12

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Type 14

T

Type 15

Type 17

0.6.0.30

Type 11

T

Type 16

0

The approved fixing types and fastening materials are described in table 1.

See the installation drawing (Y2) for information on the necessary measurement.

The inlet to counterbalance box (B) has to be against the lintel seal (A).

- Position the inlet to counterbalance box (B) against the wall.
- Align the inlet to counterbalance box (B) vertically.
- Align the inlet to counterbalance box towards the opening at the wall side (Y2).
- Screw the inlet to counterbalance box (B) into the wall; all the holes (C), should be filled with screws.





5.3 Installing the wall sealing

Note:

The vertical wall sealing (B) must be installed in such a manner that

- it is positioned against the lintel seal (A) at the top,it is positioned vertically and
- the measurement X3 is adhered to.
- Screw the wall sealing (B) into the wall; all the holes should be filled with screws.





Type 18

Reference:

The approved fixing types and fastening materials are described in table 1.

12

5.4 Installing the guide rails

The necessary number of sockets (A) corresponds to the number of consoles used (B).

• Slide the sockets (A) onto the guide rail (C).

Note:

The guiding rail is supplied with an excess length of 50 mm. If necessary, cut the guiding rail by 50 mm (do not cut with shortened end stop).



Note:

If the rail is divided, the guide pieces must be screwed together using a connecting socket.





- Place all the sockets (A) onto the consoles (B).
- Position the guide rail (C) parallel to the wall (distance between the middle of the guide rail to the wall: 83 ± 1 mm).



Note:

Ensure that the guide rail is positioned straight and that it is not twisted.

- Position the guide rail (C) in such a manner that the extension (Y3) of the guide rails (C) connects to the inlet to counterbalance box (D).
- Tighten the screws (E) on all the sockets (A).
- The threaded pins (F) should only be screwed in until they are hand-tight.







Note:

A casing holder with an attached plaster (I) must be installed onto the last socket (B).

Reference:

At lintel heights of less than 230 mm, the lintel covers must be applied before the casing holder is installed as is described in point 5.13.



Opening area:

• Place the casing holders (G) onto each socket (A).

Storage area:

- Place the casing holders (G) onto each second socket (A).
- Screw the casing holders (G) in tight using the nuts (H).
- Place the casing holder with the plaster (I) onto the socket (B).
- Screw the casing holder with the plaster (I) tightly with the nut (H).



<u>b</u>

5.5 Installing the sealing gasket for smoke protection

Note:

All the wall sealing joints and profile joints must be permanently elastically sealed using B1 sealant before installation. The Elastozell band and the smoke protection sealing gaskets (B) must be installed so they the reach into the corners.

- Apply Elastozell tape 30 x 3 (A) to the whole length of the lintel seal (C).
- Apply Elastozell tape 30 x 3 (A) to the whole length of the wall seal (D).
- Screw the smoke protection sealing gasket (B) in the middle under the lintel seal (C).

The smoke protection sealing gasket (B) must be installed onto the wall seal (D) in such a manner that a distance of 2 ± 1 mm is maintained between the wall and smoke protection sealing gasket (B).

• Screw the smoke protection sealing gasket (B) to the wall seal (D) through the elongated holes.





• Apply Elastozell tape 30 x 3 (A) to the whole length of the inlet to counterbalance box (E).

The smoke protection sealing gasket (B) must be installed onto the inlet to counterbalance box in such a manner that a distance of 2 mm is maintained between the wall and smoke protection sealing gasket (B).

• Screw the smoke protection sealing gasket (B) onto the inlet to counterbalance box (E).





EN











Attention!

Ballistol).

5.6

Warning!

Attention!

The following points must be observed to prevent damage to the door elements from occurring:

Installing the door leaves

The door leaves must be prevented from coming out of the guide rails.

To prevent personal injuries occurring, the door elements may only be moved if they are sufficiently secured.

In order to prevent property damage and ensure fault-free function, the running surfaces of the guide rails must be lubricated with non-resinous oil or grease before hanging the door elements (recommended:

- The installation aid must be attached before the door elements are set up.
- The door elements must not be turned on their corners.
- The door elements must not be laid on their corners.
- X = 400 mm for door elements up to 3999 mm X = 2000 mm for door elements up to 4000 mm

Reference:

When a wicket door is being installed, the corresponding installation information under point 7.3 must be observed.





Note:

If the door element needs to be fed into the guide rail by hand, the installation aid can be placed against the door element at the bottom and can then be moved by a lever to support the procedure.





Note:

To mount the rolling apparatus (A) along with the door elements (B) (simple installation), the existing installation area must be checked before the installation takes place.

Space requirement V = Half the width of the door element + 120 mm

• Measure the installation area present.

If the installation area is smaller than the space requirement V, the rolling apparatuses must be inserted into the guide rail (C) without door elements. The door elements are screwed in once they have been set up.



• Slide the plaster element (D) into the first door element (B) at the top.



• Screw the rolling apparatus (A) into the door element (B).



- Insert the connection profile (E) half-way into the door element (B).
- Adjust the leading ramp (A). (The lower edge of the roller apparatus should be positioned 39 mm along the upper edge of the door leaf element)



- Slide the rolling apparatus (A) into the guide rails (C).
- Slide the plaster element (D) into the door element (B) at the top.



• Slide the door element (B) towards the inlet to counterbalance box (F).





Function check:

The distance between the door element and the lintel seal must be checked and altered if necessary.



- Insert the element connector (G) into the groove on the door element (B).
- Align the element connector (G) to the lower edge of the connection profile (E).





• Secure the element connector (G) to the top of the door element (B) with a screw.





Type 2

Further door elements must be prepared as shown in diagrams (5.6 / 4 - 5.6 / 7) before they are inserted

Reference:

diagrams (5.6 / 4 – 5.6 / 7) before they are inserted into the guide rails.



Smoke protection:

For smoke protection doors: two strips of Elastozell band 15×5 must be stuck to the entire height of the door element on one side (between the door elements).

- Prepare the second door element.
- Position the door element against the the door element that was previously installed.



Reference:

The door element that has already been inserted must be prepared as shown in diagrams (5.6 / 8 + 5.6 / 9) before a further door element can be inserted.

• Insert all further door elements (B) into the guide rails (C).







- Position the door leaves (B) vertically.
- Use an adjusting screw to help you to place the door leaves (B) onto the rolling apparatuses (H) so that all the leaves are positioned at the same height.
- Ensure that there is a distance of 3 mm between the door leaves (B).
- If necessary, secure the set-up using tension belts (I).



Note:

If you are installing the door with a free-running function, the fastening is not necessary.

• Clamp the cable for the closing weights to the first rolling apparatus.





Type 2

Μ

→ → → → ^{4,8} Type 2

Note:

With a sliding door featuring wicket door and an upper casing height \leq 500 mm it is necessary to secure the elements adjacent to and above the wicket door using C-profiles (see from page 46) prior to installing the moving trim (J).

- Place the casing that moves in parallel (J) onto the multi-purpose plate (K) on the last door element (B).
- Roughly drill in to a depth of ø 4 mm.
- Screw the casing that moves in parallel (J) to the element joints and 50 mm from the ends of the door elements (B)
- Screw the casing that moves in parallel (J) firmly to the joints of the door elements (B).

• Screw the casing that moves in parallel (J) firmly 50 mm from the end of the casing.

• Screw the casing that moves in parallel (J) 50 mm per element to the right of the middle of the element.















Note:

The door elements (B) must be screwed onto the inner side of the door and onto the outside of the door.

- First screw the door elements (B) in on the installation side, then from the wall side in all the places that have been pre-drilled.
- Remove the tensioning belts (I).





5.7 Installing the door guides and dampers

Reference:

The bottom guide on smoke protection doors with wicket doors must be installed as described in chapter 7.3.

Attention!

The door must not be allowed to open from the guide rails; this prevents damage to the door (A) from occurring.

- Push up the door leaf (A).
- Place the guide profile (B) into the door's moving path.
- Slide the door leaf over the guide profile (B) when the door closes.



Type 2

Note:

The following distance must be maintained between the lower edge of the guide profile (B) and the floor: Fire protection = 15 (+5/-10) mm

Smoke protection = 12 (+3/-7) mm

Uneven parts of the floor must be taken into account. The guide profile (B) must be positioned flush to the front edge of the door leaf.

The height of guide profile can be adjusted using the elongated holes.

- Drill the necessary holes for the screws in the middle through the elongated holes.
- Screw the entire length of the lower guide profile (B) to the door (A).



Type 11

Note:

The guide shoe (C) must be installed in such a manner that the the door leaf (A) runs over the guide shoe (C) parallel to the wall. The guide shoe and the guide roller must not intrude

into the opening area.

• Install the guide shoe (C) into the inlet to counterbalance box (D).







- Push the door leaf (A) back completely.
- Place the guide roller (E) so far into the lower guide rail (B) so that the drilled holes are still accessible.
- Screw the track roller (E) to the floor.
- Screw the sliding cover (F) on the door opening side to the door element (A).







• Screw the sliding cover (G) on the door feed side to the door element (A).

• Screw the damper (H) into the starter element (I).

A damper with magnetic head may also be inserted

depending on the version.







24



• Screw the damper (K) into the end element (J).



SE 4.8 Typ 2

Free-running doors

• Screw the damper (K) (70 mm stroke) into the end element (J).



Type 22

Type 23

5.8 Installing the push handle

• Screw the shell handle (A) and the push handle (B) to the door element.



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5.9 Installing the closing weight onto the door feed side

Reference:

holes in the wall.

are described in table 1.

Reference:

The installation of the weight deflection is described in chapter 7.4.

Type 20







Note:

The path must be drilled in such a manner that the cable runs horizontally. The steel cable must be untwisted before installation.

The approved fixing types and fastening materials



• Feed the cable through the drilled holes in the weight box and the inlet to counterbalance box.

Bore: ø 15 mm



The diagram shows the installation type 2-leg closing weight.

- Push the door leaf back completely.
- Lay the door cable.
- Clamp the cable using 2 cable clamps.
- Place the closing weight (C).
- Adjust the height of the closing weight (C).



The diagram shows the installation type multi-leg closing weight.



Reference:

The installation for the redirection by weight is described in Chapter 7.4.





5.10 Installing the closing regulator

Depending on the design, the door leaf can be opened by hand or by a drive.

5.10.1 Installing hand opener

Standard end buffer



Function check:

The turning direction must be checked before the damper (D) is installed.

To change the turning direction of the damper (D), the snap ring must be removed, the cable roller must be turned and the snap ring must then be replaced.

- Push the door (A) back until it lines up with the reveal (B).
- Install the magnetic clamp (C) and the radial damper approx. 60 mm behind the door.
- To adjust the closing speed, turn the screw as far as it will go (lowest damping).



Shortened end buffer

Function check:

Check the turning direction before installing the damper (D).

To change the turning direction of the damper (D), the snap ring must be removed, the cable roller the cable roller must be turned and the snap ring must then be replaced.

- Push the door (A) back until it lines up with the reveal (B).
- Install the magnetic clamp (C) and the radial damper approx. 60 mm behind the door.
- To adjust the closing speed, turn the screw as far as it will go (lowest damping).
- Screw the anchor plate and the magnetic clamp onto the base plate of the door element on the door feed side.





• Screw the cable retainer (A) to the retainer plate (B).









Note:

The cable tensioner (E) must be installed on the last socket (F) over the door opening (G). If the distance to the opening is smaller than 400 mm, then the cable tensioner (E) must be installed on the penultimate socket.



• Screw the cable tensioner in the opening direction (E) onto the last socket (F) within the last opening at the wall side.







Note:

The cable must be laid around the cable tensioner (F) and the speed regulator (C).

The steel cable must be untwisted before installation.





- Feed both of the ends of the cable into the cable retainer (A).
- Place the cable under a small amount of tension.
- •Clamp both ends of the cable securely.

Note:

The cable must be tensioned with the cable tensioner (F) in such a manner that the cable does not sag and slip over the end of the guide roller.



Note:

Only use as many closing weights as are necessary to ensure that the door closes properly.

- OPEN and CLOSE the door.
- Use the speed regulator (C) to determine the automatic closing speed and the number of closing weights.

Top speed:0.2 m/sMinimum speed:0.08 m/s

• Adapt the power of the end dampers to the closing force and opening force.











5.10.2 Installing the opening aid

Reference:

The instructions included with the drive must be taken into account when installing the automatic opening assistance.





• Screw the deflection roller (A) to the socket (B).



Door opening towards the right

• Screw the door catch (D) to the bottom drilled holes of the retaining plate (E).



Door opening towards the left

• Screw the door catch (D) to the top drilled holes of the retaining plate (E).



• Screw the clamp plate (F) to the drive (G).



- Place the drive (J) into the guide rail (I) as far as it will go.
- Tighten the screws of the clamping device drive (F).
- Screw the end buffer (K) to the clamping device (F).





Reference:

The image shows the attachment of a door opening towards the right. Follow the enclosed instructions by Schnetz for doors opening towards the left.

Note:

- The cog belt (L) must be laid in such a manner that - the side without the textile fabric is laid into the clamping device (M) and
- the side with the textile fabric is laid into the holding fixture in the tension lock (N).
- Lay the cog belt (L) around the deflection roller (A) and the driver roller (O).





EN



Reference:

Take note of the details in the instructions for the drive when tensioning the cog belt (L).

• Clamp the cog belt (L) onto the clamping device (M).



Note:

The cog belt (L) must be tensioned in such a manner that

- it does not sag and
- the shaft on the drive is not subjected to too much stress.
- Tension the cog belt with the tension lock (N).





Reference:

Take note of the instructions for the drive and the control unit when connecting the drive and determining the closing speed.

Note:

Only use as many closing weights as are necessary to ensure that the door closes properly. The closing speed should be determined based on the position of the **highest** damping.

- OPEN and CLOSE the door.
- Turn the speed regulator on the drive (J) as far as it will go.
- Use the speed regulator on the drive (J) to determine the automatic closing speed and the number of closing weights.

Top speed: 0.2 m/s Minimum speed: 0.08 m/s



• Adapt the power of the end dampers to the closing force and opening force.



5.11 Installing the hook lock (optional)

A used hook lock is pre-installed in the first element in the factory.

- Screw the sealing tube (A) to the riveting nuts in the inlet to counterbalance box (B) until they are hand tight.
- Position the the sealing tube (A) so that it is in line with with the hook lock (C).
- Tighten the screws on the sealing tube (A).





Type 10

Note: If a bolt

If a bolt switch contact is being used, this should be installed into the sealing tube (A). The connecting cable should be fed through an empty pipe.



Reference:

The instructions for the bolt switch contact should be observed during connection.



5.12 Installing the raised seal and the smoke protection seal



Note:

The raised seals must be installed on the reveal side. They help to ensure that the smoke protection seal remains tight.

The entire length of the raised seals (A) must be sealed with B1 sealing material.



Reference:

See the installation drawing for the necessary RA, RS and RE measurements.

Installation inlet side



Note:

The raised seal (A) may not overlap with the lower guide (B).

- Place the raised seal (A) onto the upper edge of the lower guide (B).
- Position the raised seal (A) so that is in line with the door leaf.





Note:

Due to the increased amount of ground clearance (supplied with 12 mm), the raised seal (A) must be adapted to the RS measurement.

• Firmly screw the raised seal (A) into all the drilled holes.





Type 8

Installation lintel side

- Position the raised seal (C) so that is in line with the door leaf.
- Firmly screw the raised seal (C) into all the drilled holes.



Installation opening side

- Place the raised seal (D) onto the upper edge of the lower guide (B).
- Position the raised seal (C) on the door leaf in accordance with the measurements RS and RE.
- Screw the raised seal (D) firmly to all drilled holes.









Installation of smoke protection seal

Note:

The seal must be drawn in such a manner that - it is in contact with the top edge of the finished floor,

it is not subject to tension in its entire length andit consists entirely of one strand.

Installing the smoke protection seal

• Press the smoke protection seal (E) into the slot (F).



Adjust the retractable bottom seal



Note:

The retractable bottom seal must be adjusted in such a manner that the seal is resting completely on the surface.

• Adjust the retractable bottom seal.





Note:

All element joints and transitions on the door leaf must be sealed with permanently elastic material on both sides where they join with the wall.

• Seal all the joints and transition in a permanently flexible fashion.





5.13 Checking the door

Function check:

The functional test is successful if

- the door does not make any grinding noises when it opens and closes,
- the specified distances between the components are adhered to,
- the door can be opened and closed completely,
- the smoke protection seals are sealed tightly (only for doors with smoke protection).
- Check the door.

5.14 Installing the casings and covers

- Slide the weight box cover (A) on a single edge over the front inlet edge (B).
- Press the weight box cover (A) over the weight box.
- Fix the weight box (A) using two self-tapping screws.











Note:

The casing (D) with the panel cut out must first be installed onto the side of the inlet to counterbalance box. The cover with the piece of plaster is the last thing that must be installed on the reverse side.

- Slide one side of the casing splice cover over the casing.
- Place the casings (D) onto the casing holders (C).
- Position the casings (D) flush with the weight box.
- Slide half of the casing splice cover over the next casing.
- Secure the casing in place with the safety wedges.



• Place the covers (E) on the consoles (F) in the area of the door opening.

EN

6.1 General information

- In accordance with §3 of the NW Building Code, the owner of the property is responsible for maintenance. The property owner can carry out the required maintenance tasks or employ a specialist company to do it.
- To ensure correct functioning of the fire protection, smoke protection, security, sound insulated and multipurpose doors, professional maintenance should be carried out at least every 12 months (more often for frequently used doors).

6.2 Maintenance work

Attention!

Detected faults must be eliminated immediately to guarantee safe operation.

Only suitable cleaning agents should be used for cleaning. The following are not suitable:

- Cleaning agents with contents that cause corrosion or are otherwise harmful
- Scouring agents, abrasive cleaning agents, wire wool or similar products
- Petrol, benzene, turpentine or similar products

Use acid-free graphite, grease or resin-free oil for lubrication purposes.

Do not clean the door with running water (e.g. high-pressure cleaner or water hose).

• Clean seal profiles with a clean cloth, warm water and a rinsing agent.

After cleaning, talcum must be applied to all the slide seals and the raised seals.

Cycle for all the maintenance and cleaning work:

- after 1,000 actuations
- at least every 12 months

We recommend setting up a counter to monitor the cycle.



6 Maintenance instructions

Door components	Required maintenance tasks								
	Function check T≤ 12 months/ 1,000 actuations	Glean as needed T≤ 12 months/ 1,000 actuations	Lubricate / Oil	Re-tighten fastening screws T ≤ 12 months/ 1,000 actuations	Reworking	Remark			
Door assembly	•	•							
Door leaf	Х	Х				In the case of impaired function (e.g. stiffness) a specialist company must be informed			
Element joints				Х					
Inlet				Х					
Vertical wall seal					Х	Inspection of the foamers			
Lintel seal				Х					
Casing									
Guide rail		Х	Х	Х		Reapply oil that is free from resin (we recommend Balistol) to the running surface each time after cleaning			
Rolling apparatuses	х	Х							
Wall mounting				Х		Repair defects (loose masonry, cracks)			
Closing mechanism									
Cable clamps				Х					
Cable	Х					Replacement of defective cables			
Deflection rollers	Х								
Weights	Х			Х					
Speed regulator (Radial damper)	Х					Test of the closing speed (>0.08 m/s and <0.2 m/s) Replacement of defective dampers			
Cable	х					Replacement of defective cables			
Cable fastening	х			Х					
Cable tension spring	х			Х		The cable tension spring is to be tested			
Locking device	х					Test the smoke detector in accordance with the maintenance instructions "Testing book for the locking device"			
End damper	х								
Smoke protection									
Retractable bottom seal	х					Replace brittle or damaged seals			
Vertical / horizontal threshold seal	х	Х			Х	Replacement of brittle or damaged seals and raised seals; apply talcum to the raised seals and seals where necessary			
Permanently elastic seal	х				Х	Replacement of brittle or damaged seals			
Drive	Х					Test the drive in accordance with the maintenance instructions			
Wicket door									
Door leaf	Х	Х							
Frame				Х					
Hinges	Х			Х					
Lock	Х								
Upper door closer (UDC)	Х		Х						
Optional equipment									
Reed contact Wicket door	Х								
Bolt contact Wicket door / hook lock	Х								

7.1 Installation of artificial buffers

Artificial lintel

- Check the opening width and the length of the artificial lintel.
- Drill into the ceiling through the holes in the tubular profile.
- Screw the tubular profile to the ceiling.

• Slide the panel over the installed profile.

into the side of the cover.

•Screw the profile to the roof.

• Screw the countersunk screws (A) M5 x 40













Reference:

Further information on installing the door is described under point 7.2 "Installing on the ceiling".

• Drill through the holes of the profile into the ceiling.

Artificial side buffer

 Position the panelled tube profile vertically and ensure that it is flush with the lintel. (Warning: Check the opening direction of the door;

the drilled holes at the side must point away from the installation side.)

- Drill through the pre-bored holes of the profile in the wall.
- Screwed the panelled tube profile into the wall.



- Slide the sheet cover over the profile and screw it in using countersunk screws M50 x 40.
- Drill through the holes in the side plate and secure these with plastic wall plugs.
- Slide the inlet cover over the inlet crack.
- Position the inlet level with the artificial buffer and then position it vertically (observe measurement Z1 in the lintel seal).
- Drill through the front bore holes into the wall and screw the inlet in tightly.



Reference:

Further information on installing the casing is described under point 5.1.







7.2 Installing on the ceiling

Reference:

The approved fixing types and fastening materials are described in table 1.

See the installation drawing for information on the necessary measurements (X/Y/Z).

Installing the guide rails

- Placing the first guide rail (Distance from the wall to the middle of the socket 83 ±1 mm).
- Place the drilled hole at a 90° angle to the lintel.

The drilled holes must be flush to one another.

• Specify the position of the lintel seal.

- Side distance on the feed side = Y1

the lintel (see the table for the plugs).

· Secure the lintel seal through the drilled holes in

• Position the lintel seal horizontally and straight;

- Mark the other sockets with the specified distance of 750 mm.
- Insert the plugs.

- Height = Z1

then tighten the plugs.









Note:

For sliding doors with free-running function and weight deflection, the deflection roller (diagram 7.5 / 8), the guide rails must be attached before installation.



- Slide the sockets onto the guide rail.
- Set the appropriate distance.
- Screw the sockets to the guide rail under the ceiling until they are hand-tight.
- Position the guide rail so that it is straight and horizontal.
- Tighten the nuts on the anchor bolts.
- Tighten the threaded pins until they are hand-tight to secure the guide rails in their position.



Reference:

- For the installation of the inlet to counterbalance box (S), see point 5.2.
- See point 5.3 for information on how to install the vertical wall seal.
- See point 5.5 5.14 for information on how to install the door leaf.

Installing the casing

- Remove the M8 nuts and the threaded pins on the guide rail sockets.
- Place the casing holder onto the guide rail sockets.
- Screw in the threaded pins hand-tight to the sockets and position the casing holders level with one another.
- •Tighten the nuts.
- Install the closing mechanism.

Reference:

The installation of the door leaves is described in chapter 5.9.









- Slide the casing splice cover onto the beginning element of the casing.
- Place the casing onto the top side of the casing holder.
- Position the casing so that the side of it is flush to the weight box.
- Secure the casing in place with one self-tapping screw per console.



7.3 Installing wicket doors

Reference:

- The installation information for the installation of the door leaves must be observed (point 5.6).
- The installation drawings must be observed.

Installing the wicket door element

The wicket door element consists of a top casing (A), a connecting spring for the top casing, a frame (B), a connecting spring for the frame (lock side, hinge side and top casing, pre installed) and the wicket door (C).

The installation of the wicket door element is to be prepared for in the same manner as the installation for the other elements.

When installing the sliding door, the position of the wicket door (C) in the sliding door must be taken into account.

The wicket door element must be surrounded by at least one other element on both the left and right-hand sides.

You should start with the beginning element just as is the case for a standard installation.

Then continue with the elements up until the position of the wicket door element.

Installing the upper casing

The installation of the upper casing is to be prepared for in the same manner as the installation for the other elements.

• Take note of the opening direction (from the soffit - opening through the soffit) and the DIN direction of the door.

Choose the corresponding connecting springs for the frame (lock side, hinge side).



Attention!

The connecting spring including empty conduit (D) must be inserted from the lock side in wicket doors featuring electrical equipment.

Install the connecting springs of the upper casing.



Reference:

Note:

The assembly of the connecting springs is described in chapter 5.6 / 9.

• Screw in the connection spring of the upper casing.

L.







Reference:

Note the corresponding control unit installation instructions when connecting the electrical equipment.

• Mount the upper casing into the guide rail.

The installation and orientation must be carried out in exactly the same manner as the other elements.

Frame installation



Attention!

The direction in which the wicket door opens must be observed.

The cable must be routed through the empty conduit (D) in doors with electrical equipment.

- Slide the pre-installed frame onto both the upper casing and the element.
 The side door shaft must be flush to the lower element edge.
- Secure the frame with fastening clamps.







- Install the following element.
- Secure the connecting springs (as described above).
- Align the elements.
- Screw the elements above the frame.
- Align the frame.
- Screw the frame to the elements using the designated drilled holes.

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Installation of the bottom guides without smoke protection

Starter element to wicket door



Prevent the door (E) from moving beyond the guiding rail to avert damage to the door.

- Slide the door leaf (E) open.
- Position the guide profile (F) in the door track.
- Close the door and simultaneously move the door leaf over the guide profile (F) while closing it.
- Align the guide profile (F).
- Screw on the guide profile (F).

Wicket door to end element



Note:

Maintain a distance of 15 (+5/-10) mm between the lower edge of the guide profile (F) and the floor. The guide profile (F) must be flush with the rear edge of the door leaf. Adjust the height of the guide profile using the slots.

• Install the guide profile on the remaining elements.









<u>b</u>

Installation of the bottom guides with smoke protection

Note:

In this case, there is no need for the bottom guide.

Starter element to wicket door

• Remove the trigger button from the floor seal.



- Insert the bottom guide into the floor seal.
- Align the bottom guide.
- Twist the trigger button into the thread of the floor seal through the frame.





 $\overline{\Lambda}$

Typ 2

Note:

Maintain a distance of 12 (+3/-7) mm between the lower edge of the guide profile (F) and the floor. Take into account uneven floor surfaces. The guide profile (F) must be flush with the front edge of the door leaf. Adjust the height of the guide profile using the slots.

- Drill the required holes through the centre of the slots.
- Screw the bottom guide profile (F) to the door leaf (E).
- Screw the casing that moves in parallel (G) on the door feed side to the door element (E).













Μ

Typ 2

Note:

Maintain a distance of 12 (+3/-7) mm between the lower edge of the guide profile (F) and the floor. The guide profile (F) must be flush with the wicket door frame.

Wicket door to end element

• Install the guide profile on the remaining elements.

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Wicket door installation

Attention!

The door leaf, bottom guide and the trim that moves in parallel must have been installed before installing the wicket door.

Insert the hinge tab (H) between the clamping plate (I) and the support plate (J).

- Push the pre-installed hinge tabs (H) through the recesses of the frame between the clamping plate (I) and the support plate (J).
- Tighten the cylinder screws until they are hand-tight.
- Position the wicket door with the assistance of adjusting screws in the hinge attachment (circumferential gap width 5 ± 2 mm).
- K Gap dimension adjusting screwsL Attachment screws
- Tighten the screws.
- Adjust the gap dimension.









EN

- Install the door handle.
- Adjust the door handle.
- Check the door's functionality.
- Attach the lower guide of the door.
- Position the bottom guide at the side, flush to the door box.

Wicket door with smoke protection

- Slide the bottom guide onto the wicket door.
- Screw the bottom guide into position.





Wicket door without smoke protection

- Slide the bottom guide onto the wicket door.
- Screw the bottom guide into position.





Reference:

The appropriate installation instructions are to be observed when installing and adjusting the top door closer.

Install the top door closer.

Standard top door closer installation (illustration), Opening direction of the wicket door towards the installation.

Top door closer transom mounting

Opening direction of the wicket door towards the soffit.





Attention!

The door must not be drilled through.

- Cut the seal at the M8 threaded pin so that the threaded pin can be easily inserted through the seal.
- Screw the threaded pin M8 into the frame.
- Highlight the position of the threaded pin in the door rebate and drill a hole.
- Drill a hole into the door into which the threaded pin can fit.





Reference:

Carry out the further steps as is described in point 5.7.

EN



<u>b</u>

Adjusting the retractable bottom seal (smoke protection)

Note:

The retractable bottom seal must be adjusted so that the seals are completely in contact with the corresponding surfaces.

• Adjust the retractable bottom seal at the starter element.



• Adjust the retractable bottom seal at the wicket door.



- Adjust the retractable bottom seals at the end element using the screws (M) and (N).
- M Rough adjustment
- N Fine adjustment
- Screw the casing (O) onto the door element.



7.4 Weight deflection

Installing the weight deflection

- Place the weight box vertically against the wall in accordance with the installation drawing (space requirement).
- Drill through the drill holes in an offset pattern and secure the weight box to the wall.
- Slide the pre-installed diagonal deflection roller that is in the inlet into the guide rails.
- Feed the pre-installed cable (point 5.6/15) around the deflection roller behind the sockets up to the weight box and through the deflection rollers so that the cable then fits into the weight box.
- Install the closing weights in accordance with the door's design (see 5.9/5).
- Adjust the closing speed (in accordance with diagrams 5.10.1/10 or 5.10.2/9).
- Press the weight box cover onto the weight box and secure it with self-tapping screws.









• Press the weight box cover onto the weight box and secure it with 4 self-tapping screws.



Inlet cover

Type 4

- Slide the inlet cover with the wide canting over the inlet.
- Slide one side of the rear cap onto the shorter canting and then into the cover.
- Press both profiles over the inlet to counterbalance box so that both sheets are positioned on the inlet.

Reference:

Further information on installing the casing is described under point 5.14 / 3 (Lintel installation) and point 7.2 / 7 in (Installing on the ceiling).



7.5 Free-running function

Free-running function with closing weights on the door feed side

• Place the rolling apparatus into the guide rail.





Function check: The turning direction is to be tested before the damper is installed.

To change the turning direction of the damper (A), the snap ring must be removed, the cable roller must be turned and the snap ring must then be replaced.

- Install the console at the end of the guide rail.
- To adjust the closing speed turn the screw as far as it will go (lowest damping).





Reference:

Install the closing regulator as is is described in 5.10.1 / 6 - 5.10.1 / 11.



• Lay the door cable up to the rolling apparatus.

• Secure the door cable to the rolling apparatus.





Reference:

Install the closing weight as is is described in 5.9 / 5 - 5.9 / 6.

Free-running function with weight deflection

• Place the rolling apparatus into the guide rail.





Function check:

Check the turning direction before installing the damper (A).

To change the turning direction of the damper (A), the snap ring must be removed, the cable roller must be turned and the snap ring must then be replaced.

- Install the console at the end of the guide rail.
- Turn the screw to adjust the closing speed, turn the screw as far as it will go (lowest damping).





Reference:

Install the closing weight as is is described in 5.10.1 / 6 - 5.10.1 / 11.



socket using the cable tensioner.

requirement).

Note:



Attention! To ensure that the rolling apparatuses can roll in the guide rail, the screws on the deflection roller must

The deflection roller must be installed behind the

Place the deflection roller onto the guide rail.

• Screw the deflection roller firmly to the guide rail.

• Place the weight box vertically against the wall in accordance with the installation drawing (space

• Drill through the drill holes in an offset pattern and

secure the weight box to the wall.





• Lay the door cable of the closing weights behind the guide rail.





• Feed the door cable up to the deflection roller.

- Feed the door cable around the deflection roller.
- Secure the door cable to the rolling apparatus.





Note:

The illustration merely shows the cable routing without the door.





Reference:

Install the closing weight as is is described in 5.9 / 5 and 5.9 / 6. Install the closing weight as is is described in 7.4 / 7 and 7.4 / 8.

- Adjust the speed of the free-running rolling apparatus so that the closing speed of the door is between 0.08 m/s and 0.2m/s.
- Start adjusting the closing speed at the highest damping level.







Attention!

The wicket door must only be opened when the door is closed.

Opening the wicket door when the door is open may lead to deformation of the door.



Any questions? We would be glad to help! Contact your Teckentrup consultant. Contact information: Teckentrup GmbH & Co. KG Industriestraße 50 • 33415 Verl T: +49 (0) 5246 504 - 0 • F: +49 (0) 5246 504 - 230 info@teckentrup.biz • www.teckentrup.biz

