

FSW EASY Safe and FSW EASY Safe-C/-C-Plus Folding sliding wall

Operating instructions

WN 059291 45532 - 2017-07





Contents

1	About this manual	3
1.1	Information about the manual	3
1.2	Symbols in the manual	3
2	Overview and product description	5
2.1	Overview	5
2.2	Type plate	6
2.3	Tools	6
3	Safety	7
3.1	Intended Use	7
3.2	Remaining residual risks during operation	7
3.3	The operator's responsibility	7
3.4	Personnel qualification	8
3.5	Personal protective equipment	9
3.6	Environmental protection	9
3.7	Replacement parts	9
4	Unlocking/locking the panels	10
4.1	Locking principle	10
4.2	Unlocking the panels	10
4.3	Locking the panels	11
5	Opening and closing the panels	12
5.1	Opening the panels	12
5.2	Closing the panels	13
6	Cleaning and servicing the folding sliding wall	14
6.1	Safety when cleaning and servicing	14
6.2	Cleaning and servicing plan	14
6.3	Cleaning the metal parts of the folding sliding	
	wall	15
6.4	Cleaning the floor strikes for installing the	
	face-mounted slide bolts	15
6.5	Checking the hinges	15
6.6	Checking the slide bolts for ease of operation	16
6.7	Checking the face-mounted slide bolts for ease	Э
	of operation	16
6.8	Replacing the brush seals	18
7	Troubleshooting the folding sliding wall	20
7.1	Safety during troubleshooting	20
7.2	Fault table	20
7.3	Cleaning the track rail	20
8	Disassembling and disposing of the folding	
	sliding wall	21
8.1	Safety during disassembly	21
8.2	Uninstalling the folding sliding wall	21
8.3	Disposal of the folding sliding wall	23

1 About this manual

1.1 Information about the manual

Manual

This manual allows for safe and efficient installation of the FSW EASY Safe and FSW EASY Safe-C/-C-Plus folding sliding wall (hereinafter called "folding sliding wall") as well. This manual is part of the product and must be stored accessibly within direct vicinity of the product for personnel at any time. Personnel must have carefully read and understood these instructions before beginning any work. The basic requirement for safe working is complying with all specified safety instructions and instructions in this manual. Furthermore, the local accident prevention regulations and general safety provisions for the use area of a sliding wall apply.



TIPS AND RECOMMENDATIONS

Figures

Figures are used for basic understanding and may differ from the delivered folding sliding wall version.

Target audience

The contents of this manual are protected by copyright.

Customer service

Address	DORMA-Glas GmbH Max-Planck-Straße 33 – 45 32107 BAD SAI ZUFI FN
	Germany
Internet	www.dormakaba.com

Copyright

Transferring these instructions to third parties or making copies – even partial ones – in any type and form along with using and/or disclosing the content without dormakaba Deutschland GmbH's written permission is prohibited, except for internal purposes. Any breach or infringement will result in liability for damages. dormakaba Deutschland GmbH reserves the right to assert additional claims.

Applicable documents

In addition to this installation manual, please note the following documents:

- FSW EASY Safe and FSW EASY Safe-C/-C-Plus mounting instructions
- If necessary, the installation instructions for the TS92/93 door closer
- System drawing of the delivered folding sliding wall
- Glass manufacturer's vitrification regulations
- Safety data sheet from the adhesive manufacturer

1.2 Symbols in the manual

Safety information

Safety information is marked in this manual with symbols. This safety information is introduced by signal words that express the hazard level.



DANGER

This combination of symbol and signal word indicates an imminently hazardous situation that leads to death or serious injuries if the situation is not prevented.



WARNING

This combination of symbol and signal word indicates a possibly hazardous situation that can lead to death or serious injuries if the situation is not prevented.



CAUTION

This combination of symbol and signal word indicates a possibly hazardous situation that can lead to slight or marginal injuries if the situation is not prevented.



ATTENTION

This combination of symbol and signal word indicates a possibly hazardous situation that can lead to material damage if the situation is not prevented..

ENVIRONMENTAL PROTECTION

This combination of symbol and signal word indicates possible hazards for the environment.



TIPS AND RECOMMENDATIONS

This symbol highlights useful tips, recommendations, and information for efficient and error-free use.

Safety information in instructions

Safety information may relate to certain, individual instructions. This safety information is embedded in the instructions so that the information does not interrupt the reading flow during execution. The aforementioned signal words are used. Example:

1. Loosen screw.



Caution!

Risk of entrapment on the cover!

- 2. Carefully close cover.
- 3. Tighten screw.

Additional markings

The following markings are used in this manual to highlight instructions, results, lists, references and other elements:

Marking	Explanation
1., 2., 3.,	Step-by-step instructions
\rightarrow	Results of instructions
•	Lists without a specified order

WN 059291 45532

2 Overview and product description

2.1 Overview

The FSW EASY Safe folding sliding wall is essentially composed of the following main components:

- Base panel (Fig. 1/1)
- Folding panel (Fig. 1/2 4)

The FSW EASY Safe-C/-C-Plus folding sliding wall is essentially composed of the following main components:

- Base panel (Fig. 1/1)
- Folding panel (Fig. 1/2)
- Final folding base panel (Fig. 1/3)
- Final folding panel (Fig. 1/4)

Additional components of the folding sliding wall:

- Upper pivot bearing (Fig. 1/A)
- Folding hinge (Fig. 1/B)
- Track roller (Fig. 1/C)
- Upper slide bolt (Fig. 1/D)
- Face-mounted slide bolt (Fig. 1/E)
- Floor pivot (Fig. 1/F)
- Door rail (Fig. 1/G)
- Track rail (Fig. 1/H)

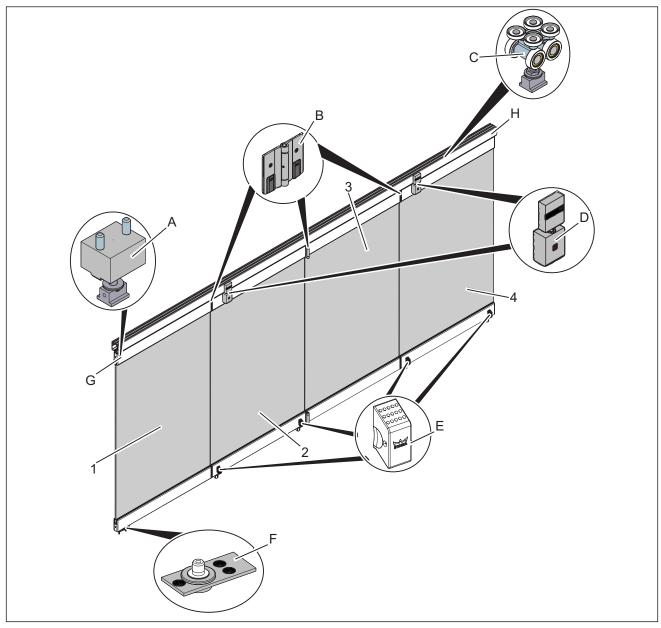


Fig. 1 Folding sliding wall overview (sample model)

Brief description

The FSW EASY Safe and FSW EASY Safe-C/-C-Plus folding sliding walls (Fig. 1) are suitable for indoor use. The FSW EASY Safe consists of a base panel and folding panels. A separate swing panel can optionally be installed on the opposite of stacked panels. The FSW EASY Safe-C/-C-Plus consists of a base panel, folding panels, and a folding unit (a folding unit = a final folding base panel + a final folding panel). The flap unit can optionally be replaced by a separate swing panel.

The panels (Fig. 1/1 – 4) are mounted in the track rail (Fig. 1/H). Folding panels are opened in pairs. Depending on the system type, the folding sliding wall can be opened in one or both directions. The base panel (Fig. 1/1) is the first panel in the system and is fixed. It cannot be moved. In the FSW EASY Safe-C/-C-Plus variant, it is half as wide (half panel width + 65 mm pivot) as the other panels. The opened folding panels are furthermore coupled with magnets in the FSW EASY Safe-C/-C-Plus variant. The optionally available swing panel is not connected to the folding panels. The swing panel is firmly fixed and cannot be moved.

On the FSW EASY Safe model, the panel's track rollers are positioned outside on the panel edge. On the FSW EASY Safe-C/-C-Plus model, they are positioned in the middle of the panel.

The folding panels are connected to hinges (Fig. 1/B). Brush seals (Fig. 2/1) close the gap between the door rail and the track rail mounted above it.

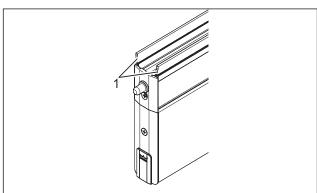


Fig. 2 Brush seals

2.2 Type plate



TIPS AND RECOMMENDATIONS

If there is no type plate, the system number is located on the inside of the track rail in the panel's stacking track area.

The folding sliding wall's type plate is located on the inside of the track rail in the panel's stacking track area and contains the following information:

- · Manufacturer name and address
- Type of folding sliding wall
- · Identification number
- · Fabrication date



Fig. 3 Type plate

2.3 Tools

Required tools

- Crank handle
- Glass suction cup

For lifting and transporting large, smooth-surfaced parts with a load capacity of up to 100 kg.

1 glass suction cup can be used per person.

- · Wooden or plastic wedge
- · Allen wrench, 3 mm
- · Allen wrench, 5 mm
- Allen wrench, 6 mm
- · Glazing shovel
- Phillips and flat-head screw driver
- Plastic hammer
- Setting blocks

Setting blocks with sufficient stability and carrying capacity for the glass panes. 2 units are required to support a glass panel.

- Ladder
 Safety ladder that stands firmly.
- · Open-end wrench, 17 mm
- · Open-end wrench, 8 mm

3 Safety

3.1 Intended Use

Use

The FSW EASY Safe and FSW EASY Safe-C/-C-Plus folding sliding walls are solely intended to be a separating folding sliding wall and are suitable for indoor use. The operator may only use the folding sliding wall after the handover certificate is approved by dormakaba or by an installation company commissioned by dormakaba.

Proper use also includes complying with all the information in this manual and in the applicable documents.

Any use that goes beyond intended use or any other form of use is deemed misuse.

Misuse

Misuse of the folding sliding wall may lead to hazardous situations.

- Do not use the folding sliding wall as an exit door.
- The folding sliding wall is not fully sealed and therefore may not be used in refrigerated warehouses.
- Do not use the folding sliding wall in rooms where chemicals (e.g. chlorine) are used.
- Do not use the folding sliding wall in swimming pools, saunas and salt spas.
- Do not make any alterations or modifications to the folding sliding wall.
- Never install or hang objects on the folding sliding wall
- Do not block or slow down the folding sliding wall with an object.
- Do not use the folding sliding wall without proper training.
- Do not use the folding sliding wall in areas with insufficient illumination.
- Do not use the folding sliding wall when damaged (e.g. glass breakage).
- Cordon off the area and have the glass replaced.
- Only use replacement parts that are approved by the manufacturer.

3.2 Remaining residual risks during operation

Crushing hazard



CAUTION

Crushing hazard when moving the panels!

There is a crushing hazard for limbs when opening and closing the panel.

Always open and close the panels carefully.

Material damage



ATTENTION

Glass breakage and damage to doors and panels!

If the panels are moved too quickly, there is a risk of glass breakage.

- Do not allow the panels to collide.
- Always slide the panels slowly (walking pace).
- · Always move panels individually.

3.3 The operator's responsibility

Operator

The operator is the person who uses the folding sliding wall himself/herself for professional or commercial persons or grants it to a third party for use/utilization and bears the legal responsibility for protecting the user, personnel or third party during use.

Operator obligations

The folding sliding wall is used in the commercial sector. Therefore, the operator of the folding sliding wall is subject to legal obligations on occupational safety.

In addition to the safety information in this manual, the applicable safety, occupational safety, and environmental guidelines for the folding sliding wall's area of use must be observed.

The following is particularly applicable:

- The operator must inform himself/herself about applicable occupational safety guidelines and, in a separate hazard assessment, detect additional hazards that surface due to the special work conditions at the folding sliding wall's place of use. To avoid these hazards, the operator must create operating instructions for using the folding sliding wall.
- During the entire time of use, the operator must inspect the folding sliding wall to determine whether the operating instructions he/she has created conform to the guidelines and make amendments to the operating instructions, if necessary.

- The operator must clearly regulate and specify responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- The operator must ensure that anyone who operates the folding sliding wall has read and fully understood the manual. Furthermore, he/she must regularly train the personnel and inform them about hazards.
- The operator must ensure safe accessibility of the folding sliding wall. This includes keeping the folding sliding wall, along with the entrance and exit, free from contaminants.

Furthermore, the operator is responsible for consistently maintaining the folding sliding wall in perfect operating condition.

Thus, the following applies:

- The operator must ensure that the cleaning and maintenance plan for the folding sliding wall is observed.
- After the installation was finished, the operator was trained in operating and on the function of the folding sliding wall by dormakaba or an installation company commissioned by dormakaba.
 Furthermore, the operator must demonstrably obtain a handover protocol and confirm with his/ her signature.

3.4 Personnel qualification

Inadequate qualification



WARNING

Risk of injury if personnel are insufficiently qualified! Unqualified personnel are unable to assess

hazards when handling the folding sliding wall. These people expose themselves and others to severe or deadly injuries.
Whenever unqualified personnel work on the folding sliding wall or are in the folding sliding wall's danger area, hazards surface that can cause severe injuries and

- Have the operator perform all the work in this manual.
- Any work that goes beyond what is described in this manual must be performed by dormakaba.

significant material damage.

 Keep unqualified personnel from performing any work described in this manual, including work that goes beyond this scope.

Please contact dormakaba if you have any questions Customer service, p. 3).

Requirements for personnel

Only people who are expected to reliably carry out this work are permitted to perform this work.Persons whose responsiveness is affected—e.g. by substances such as drugs, alcohol or medication—, are not allowed.



TIPS AND RECOMMENDATIONS

Follow age-related and occupational guidelines at the place of use.

Operating personnel

Operating personnel use and utilize the folding sliding wall within the scope of proper use.

Maintenance personnel

Due to their professional training, knowledge and experience, maintenance personnel are able to perform maintenance on the folding sliding wall and independently detect and prevent possible hazards.

Qualified installer

Due to his/her professional training, knowledge and experience along with knowledge of applicable norms and provisions, a qualified installer is able to perform installation work on the FSW EASY Safe and FSW EASY Safe-C/-C-Plus as well as independently detect and prevent possible hazards. A qualified installer has knowledge and experience in the following areas:

- Occupational safety, operational safety and accident prevention guidelines
- · Dealing with ladders and scaffolding
- Handling and transporting long, heavy components
- Installing glass panels
- · Handling tools and machines
- Inserting fasteners
- Assessing the structure

Cleaning personnel

Cleaning personnel were trained in cleaning the components of the folding sliding wall by the operator.

3.5 Personal protective equipment

Personal protective equipment is used to protect personnel from hazards that may affect the safety or health of personnel while they are working.

Personnel must wear personal protective equipment when carrying out different works on and with the folding sliding wall. The individual chapters of this manual go separately into detail about this personal protective equipment. Explanation:

Protective clothes



Protective clothes are close-fitting work clothes with low tensile strength, narrow sleeves and no protruding parts.

Safety shoes



Safety shoes protect the feet from bruises, falling parts and slipping on slippery floors.

3.6 Environmental protection

Detergents

Detergents are irritating and contain poisonous substances. They may not be leaked to the environment.

To ensure proper disposal, follow all local laws, previsions and technical rules, etc. along with safety data sheets or manufacturer information about the respective substance must be followed and complied with. Wear protective clothing if necessary.

Adhesives

Adhesives contain poisonous substances. They may not be leaked to the environment. They must be disposed of via a waste management facility.

3.7 Replacement parts

Wrong replacement parts



WARNING

Risk of injury if the wrong replacement parts are used!

Using the incorrect or defective replacement parts may pose a hazard for personnel and cause damage, malfunctions or a complete breakdown.

- Only use original replacement parts from dormakaba or replacement parts authorized by dormakaba.
- Always contact dormakaba if you have any questions.

Ordering replacement parts



TIPS AND RECOMMENDATIONS

Loss of warranty

The manufacturer's warranty will expire if unauthorized replacement parts are used.

Complaints can be made at dormakaba's customer service department for misdelivered, damaged or missing parts and materials (Customer service, p. 3).

4 Unlocking/locking the panels

4.1 Locking principle

Upper slide bolt

The upper slide bolt on the folding sliding wall functions according to the following principle:

- Locking bolt up (Fig. 4/1)
 - = locked (panel is fixed)
- Locking bolt down (Fig. 4/2)
 - = unlocked (panel can be moved)

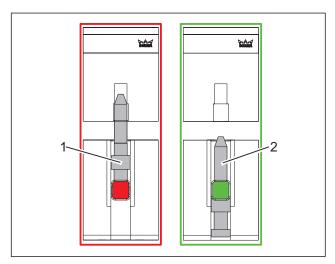


Fig. 4 Upper slide bolt

Face-mounted slide bolt

The face-mounted slide bolt on the folding sliding wall functions according to the following principle:

- Face-mounted slide bolt down (Fig. 5/1)
 - = locked (panel is fixed)
- Face-mounted slide bolt up (Fig. 5/2)
 - = unlocked (panel can be moved)

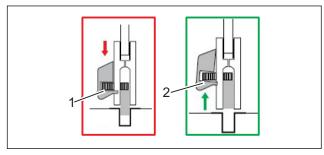


Fig. 5 Face-mounted slide bolt

4.2 Unlocking the panels

Requirements

- · Operating personnel
- · Crank handle

Ensure:

• The folding sliding wall is closed and locked (5.2 Closing the panels, p. 13, 4.3 Locking the panels, p. 11).

Unlocking the upper slide bolt

1. Use a crank handle (Fig. 6/1) to loosen the locking bolts by approx. 3/4 of a turn.

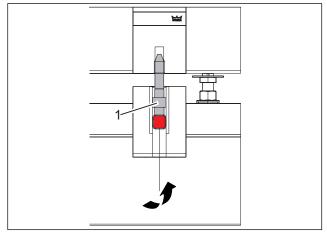


Fig. 6 Locking bolts

ightarrow The upper slide bolt is unlocked and the status display (Fig. 7/1) is green.

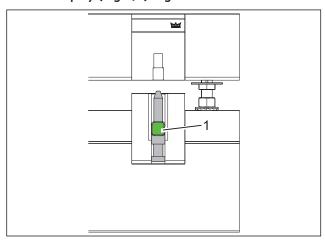


Fig. 7 Panel unlocked

Unlocking the face-mounted slide bolts

- 2. Pull up both face-mounted slide bolts (Fig. 8/1) on the panel using your foot or raise it with your hand.
 - \rightarrow The face-mounted slide bolts are unlocked.

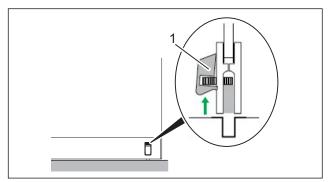


Fig. 8 Unlocking the face-mounted slide bolt

3. If necessary, unlock additional panels.

4.3 Locking the panels

Requirements

- · Operating personnel
- · Crank handle

Ensure:

• The folding sliding wall is closed (5.2 Closing the panels, p. 13).

Locking the upper slide bolt

1. Use a crank handle (Fig. 9/1) to screw in the locking bolt by approx. 3/4 of a turn upwards.

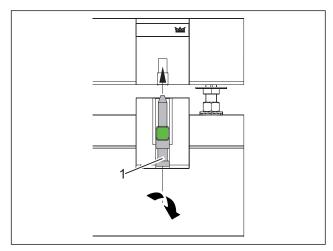


Fig. 9 Locking bolt

ightarrow The upper slide bolt is locked and the status display (Fig. 10/1) is red.

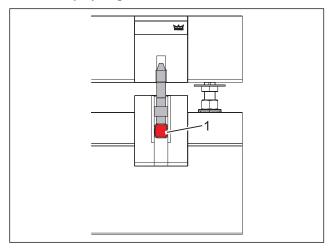


Fig. 10 Panel locked

Locking the face-mounted slide bolts

- 2. Push down both face-mounted slide bolts (Fig. 11/1) on the panel with your foot or hand.
 - \rightarrow The face-mounted slide bolts are locked.

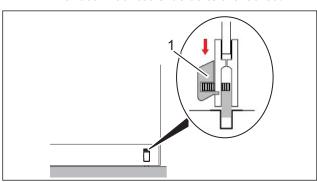


Fig. 11 Locking the face-mounted slide bolts

3. If necessary, lock additional panels.

5 Opening and closing the panels

5.1 Opening the panels



TIPS AND RECOMMENDATIONS

The folding sliding wall's panels are opened in pairs (folded). The interior panel pair is always opened first. Afterwards, the remaining panel pairs are opened.

Requirements

· Operating personnel

Ensure:

• Panels are unlocked (4.2 Unlocking the panels, p. 10).



TIPS AND RECOMMENDATIONS

Depending on the existing system type, the folding sliding wall can be opened in both directions.



Caution!

Crushing hazard when moving the panels!

1. Carefully fold the inside panel pair (Fig. 12/1 or Fig. 13/1).

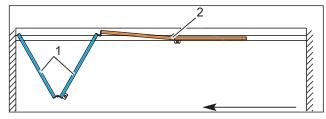


Fig. 12 Opening the inside panel pair – FSW EASY Safe

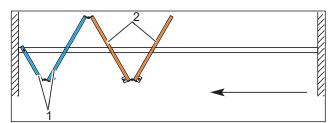


Fig. 13 Opening the panel – FSW EASY Safe-C/-C-Plus

2. When folding the FSW EASY Safe version, ensure that the outside panel pair (Fig. 12/2) remains straight in the system configuration, until the inner panel pair is fully folded together. For the FSW EASY Safe-C/-C-Plus variant, folding the inside panel pair (Fig. 13/1) also folds the outside panel pair (Fig. 13/2). Hold the panels steady when sliding.

 \rightarrow The inside panel pair is folded (Fig. 14/1).

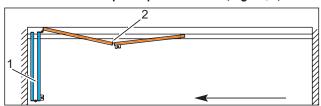


Fig. 14 Folded inside panel pair - FSW EASY Safe

→ The panels in the FSW EASY Safe-C/-C-Plus variant are opened (Fig. 15).

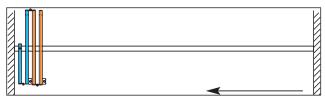


Fig. 15 Folded panel pair – FSW EASY Safe-C/-C-Plus

- **3.** Carefully open and fold together the outside panel pair (Fig. 14/2). Hold the panel steady when sliding.
- **4.** If necessary, open additional panel pairs and carefully fold them in pairs over the track rail. Hold the panel steady when sliding.
 - → The folding sliding wall's panels are opened (Fig. 16).

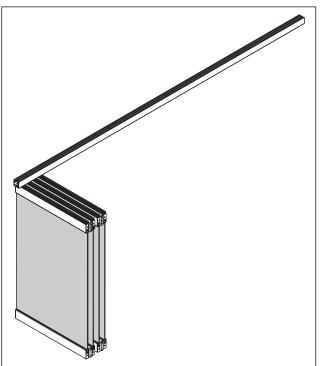


Fig. 16 Folded folding sliding wall (sample model) – FSW FASY Safe

If necessary, secure the panels using the optional floor strikes.

5.2 Closing the panels



TIPS AND RECOMMENDATIONS

The folding sliding wall is closed by pushing back the panels in pairs to their starting position.

Requirements

- · Operating personnel
- If necessary, unlock the panels from the floor strikes.



Caution!

Crushing hazard when moving the panels!

 Carefully slide the outside panel pair (Fig. 17/1 or Fig. 18/1) until the panel pair in the FSW EASY Safe variant is fully unfolded. Hold the panel steady when sliding.



Fig. 17 Close panel pair – FSW EASY Safe

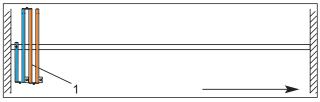


Fig. 18 Close panel pair – FSW EASY Safe-C/-C-Plus

→ The outside panel pair (Fig. 19/1) is unfolded in the FSW EASY Safe variant.

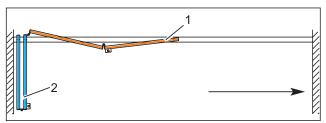


Fig. 19 Unfold panel pair – FSW EASY Safe

3. Carefully move the inside panel pair (Fig. 19/2) in the FSW EASY Safe variant until the panel pair is fully unfolded. Hold the panels steady when sliding.



TIPS AND RECOMMENDATIONS

FSW EASY Safe-C/-C-Plus

In the FSW EASY Safe-C/-C-Plus variant (Fig. 20/1), the remaining panels follow when sliding the outside panel pair (Fig. 20/2).

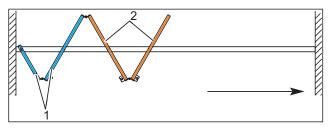


Fig. 20 Unfolding the panel pair – FSW EASY Safe-C/-C-Plus

- **4.** If necessary, move and fold additional panel pairs. Hold the panels steady when sliding.
 - → The folding sliding wall's panels are closed (Fig. 21).

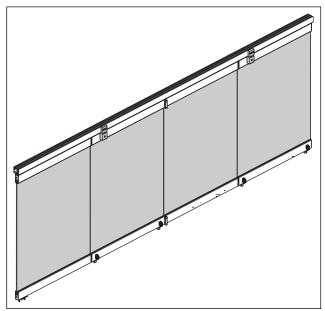


Fig. 21 Folding sliding wall closed (example illustration with FSW EASY Safe)

5. Lock the folding sliding wall if necessary (4.3 Locking the panels, p. 11)

6 Cleaning and servicing the folding sliding wall

6.1 Safety when cleaning and servicing

Improper maintenance



WARNING

Risk of injury due to improper maintenance!

If maintenance is improperly carried out, serious injuries and significant material damage may result.

 Only carry out the maintenance as described in this manual.

Detergents



CAUTION

Possible health damage due to detergents!

Contact with detergents may cause allergies, skin and eye irritations.

- Always comply with manufacturer instructions when handling detergents.
- Follow the safety data sheets of the detergents used, where appropriate.

Wet floor



CAUTION

Risk of injury due to wet floor!

Slipping on a wet floor can lead to falling. Serious injuries may result from falling.

• Immediately clean up leaked or spilled liquids using the appropriate materials.

Unsuitable detergents



ATTENTION

Unsuitable detergents may cause material damage!

Unsuitable detergents may damage the folding sliding wall.

- Only use detergents according to the cleaning plan listed below.
- Always follow the manufacturer instructions when handling detergents.

6.2 Cleaning and servicing plan

Interval	Maintenance work	Requirements
	Clean glass surfaces with glass cleaner.	Cleaning personnel
	Clean the folding sliding wall's metal parts with glass cleaner (6.3 Cleaning the metal parts of the folding sliding wall, p. 15).	Cleaning personnel
As needed	Clean floor strikes for installing the face-mounted slide bolts (6.4 Cleaning the floor strikes for installing the face-mounted slide bolts, p. 15).	Cleaning personnel
	Check glass surfaces for damage and replace, is necessary.	Maintenance personnel
	Check hinges for damage and replace, if necessary (6.5 Checking the hinges, p. 15).	Maintenance personnel
Annual	Check locking devices for smooth operation and clean, if necessary (6.6 Checking the slide bolts for ease of operation, p. 16, 6.7 Checking the face-mounted slide bolts for ease of operation, p. 16).	Maintenance personnel
	Check brush seals for wear and replace, if necessary (6.8 Replacing the brush seals, p. 18).	Maintenance personnel

6.3 Cleaning the metal parts of the folding sliding wall

Requirements

- Cleaning personnel
- Ladder
- Clean painted metal surfaces with glass cleaner (Fig. 22/1).

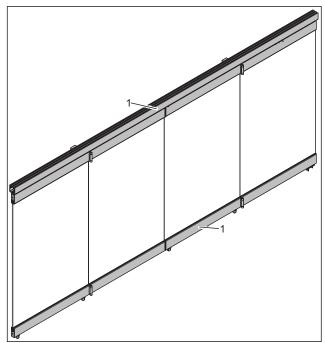


Fig. 22 Clean the metal parts of the folding sliding wall

6.4 Cleaning the floor strikes for installing the face-mounted slide bolts

Requirements

- Cleaning personnel
- 1. Clean all floor strikes (Fig. 23/1).

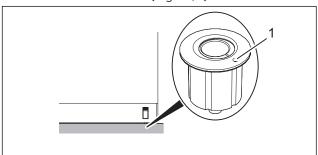


Fig. 23 Clean floor strikes

6.5 Checking the hinges

Requirements

• Maintenance personnel

Ensure:

- The folding sliding wall is open (5.1 Opening the panels, p. 12).
- **1.** Check that all hinges (Fig. 24/1) are firmly tightened and, if necessary, re-tighten or replace.

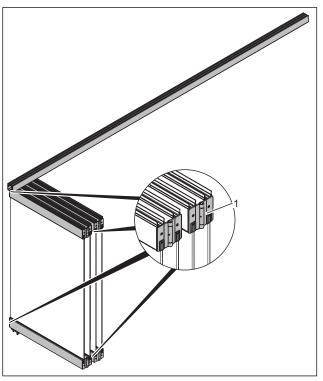


Fig. 24 Check folding sliding wall (example illustration with FSW EASY Safe)

6.6 Checking the slide bolts for ease of operation

Requirements

• Maintenance personnel

Ensure:

- The folding sliding wall is closed (5.2 Closing the panels, p. 13).
- **1.** Check the top slide bolt (Fig. 25/1) for ease of operation and clean, if necessary.

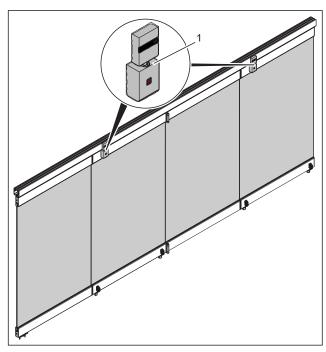


Fig. 25 Locking the devices

2. Adjust the top slide bolts, if necessary.

6.7 Checking the face-mounted slide bolts for ease of operation

Requirements

- Maintenance personnel
- Phillips and flat-head screw driver
- Plastic hammer
- · Glazing shovel

Ensure:

- The folding sliding wall is closed (5.2 Closing the panels, p. 13).
- Check the face-mounted slide bolts (Fig. 26/1) for ease of operation. If necessary, disassemble and clean as written below.

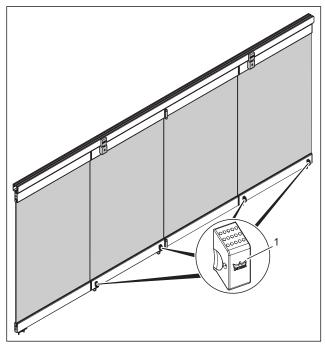


Fig. 26 Checking the face-mounted slide bolts

- **2.** Loosen fastening screw on the face-mounted slide bolts.
- **3.** Remove the face-mounted slide bolts from the sleeve.

4. Press the sleeve (Fig. 27/1) into the floor strike.

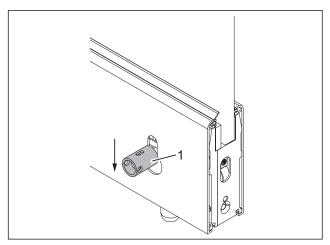


Fig. 27 Removing the sleeve



ATTENTION

Improper actions may cause material damage!

5. Remove the cover profile (Fig. 28/1) from the door rail (Fig. 28/3) with a glazing shovel (Fig. 28/2).

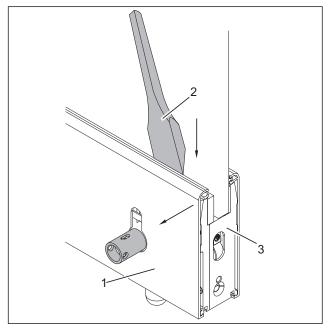


Fig. 28 Removing the cover profile

6. Remove the panel (Fig. 29/1) behind the sleeve (Fig. 29/2).

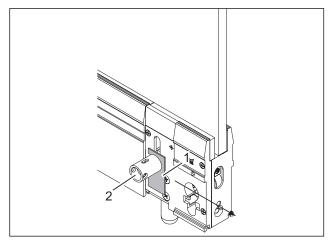


Fig. 29 Removing the panel

7. Clean the exposed locking mechanism.

8. Insert panel (Fig. 30/1) behind the sleeve (Fig. 30/2) on the axis.

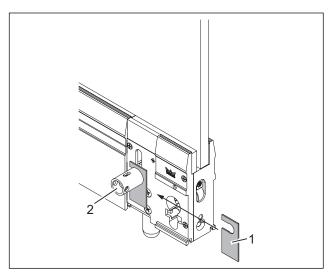


Fig. 30 Installing the panel



ATTENTION

Improper actions may cause material damage!

9. Place the cover profile (Fig. 31/2) on the door rail from below (Fig. 31/1) and snap on using a hammer. Do not hit the cover profile (Fig. 31/2) directly with the hammer; rather, use a wood block (Fig. 31/3) to protect the cover surface.

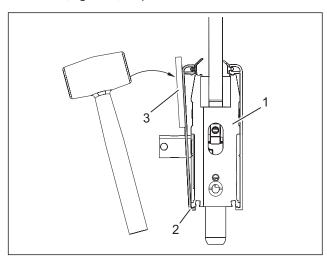


Fig. 31 Snapping on the cover profile

6.8 Replacing the brush seals

Requirements

- Maintenance personnel
- · Phillips and flat-head screw driver
- Ladder

Ensure:

- The folding sliding wall is open (5.1 Opening the panels, p. 12).
- **1.** Remove the cover (Fig. 32/1) of the combination fixing block.

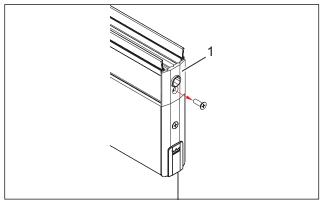


Fig. 32 Removing the cover

2. Remove the combination fixing block (Fig. 33).

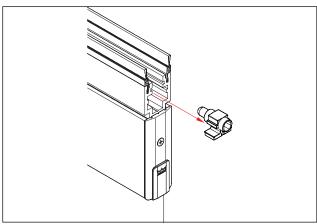


Fig. 33 Removing the combination fixing block

3. Remove brush seals (Fig. 34/2) from the door rail (Fig. 34/1).

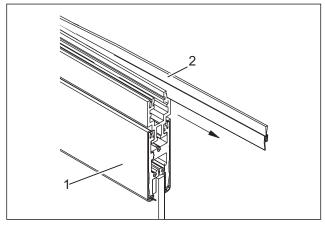


Fig. 34 Removing the brush seal



ATTENTION

Improper actions may cause material damage!

4. Remove the wedging (Fig. 35/1) and save for later use.

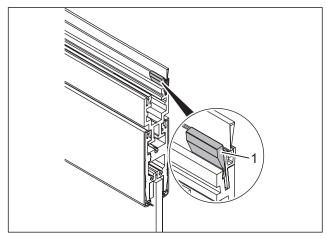


Fig. 35 Removing the wedging

5. Insert the new brush seal (Fig. 36/2) into the door rail (Fig. 36/1).

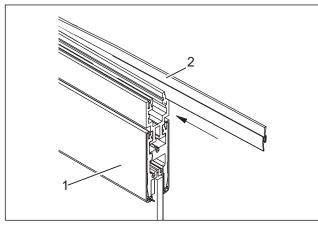


Fig. 36 Inserting the brush seal

6. Wedge the brush seal (Fig. 37/1).

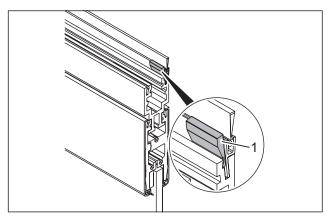


Fig. 37 Wedging the brush seal

7. Insert the combination fixing block into the support profile as shown in Fig. 38.

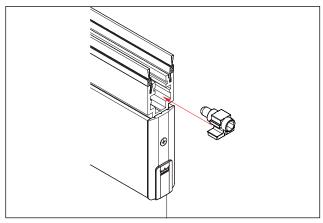


Fig. 38 Inserting the combination fixing block

8. Place cover on combination fixing block (Fig. 39).

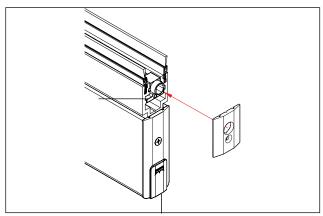


Fig. 39 Placing the cover

9. Tighten the cover (Fig. 40).

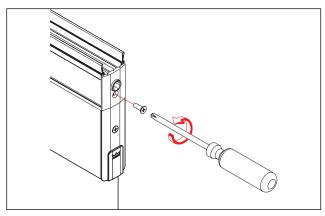


Fig. 40 Tightening the cover

10. If necessary, remove additional brush seals after this process.

7 Troubleshooting the folding sliding wall

7.1 Safety during troubleshooting

Improper troubleshooting



WARNING

Risk of injury due to improper troubleshooting!

Improper repair may result in injuries and material damage.

- Only repair the items described in this manual.
- Have all additional repairs completed by dormakaba only.

7.2 Fault table

Fault description	Cause	Remedy	Requirement
Panels run sluggishly	Improper height setting for the panel.	Have the panel height setting checked by maintenance personnel (∜Montageanleitung)	Maintenance personnel
in the track rail.	Track rail is dirty.	Clean the track rail (7.3 Cleaning the track rail, p. 20).	Maintenance personnel
The face-mounted slide bolt cannot be locked.	Floor strikes are dirty.	Clean the floor strikes (6.4 Cleaning the floor strikes for installing the face-mounted slide bolts, p. 15).	Cleaning personnel
Upper slide bolt cannot be locked or locked with great difficulty only.	Upper slide bolt is dirty.	Clean upper slide bolt and, if necessary, re-adjust (6.6 Checking the slide bolts for ease of operation, p. 16).	Maintenance personnel

7.3 Cleaning the track rail

Requirements

- Maintenance personnel
- Ladder

Ensure:

- The folding sliding wall is opened (5.1 Opening the panels, p. 12).
- 1. Check the track area of the interior track rail (Fig. 41/1) for dirt and clean, if necessary.

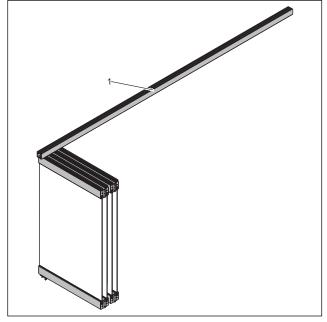


Fig. 41 Cleaning the track rail (example illustration with FSW EASY Safe)

8 Disassembling and disposing of the folding sliding wall

8.1 Safety during disassembly

Improper disassembly



WARNING

Improper disassembly poses a risk of injury!

Parts that fall down or are knocked over may cause serious to deadly injuries. Angular parts, spikes and corners on or in disassembled parts or on the required tools may cause injuries.

- Only have authorized personnel disassemble the folding sliding wall.
 Disassemble parts properly.
- Please be mindful of the parts' relatively high dead weight. Use a pallet truck, if necessary.
- Secure the parts so that they do not fall down or become knocked over.
- Ensure that there is sufficient space before beginning work.
- Carefully handle parts with open, sharp edges. Ensure that the workplace is organized and clean!
- Parts and tools that are loosely on top of each other or lying around are accident hazards.

Please contact dormakaba if you have any questions.

8.2 Uninstalling the folding sliding wall

Requirements

- · Qualified installer
- · Protective clothes
- · Safety shoes
- Ladder
- Phillips and flat-head screw driver
- · Allen wrench, 3 mm
- · Allen wrench, 5 mm
- · Allen wrench, 6 mm
- · Open-end wrench, 8 mm
- Open-end wrench, 17 mm
- Glass suction cup
- · Setting blocks
- · Wooden or plastic wedges

Ensure:

- The panels are unlocked (4.2 Unlocking the panels, p. 10).
- · There is a system drawing.
- **1.** Remove the face covers (Fig. 42/1) on the panels (Fig. 42/2).

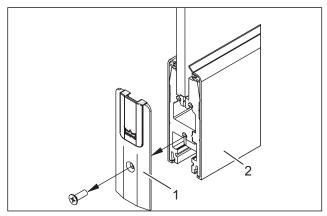


Fig. 42 Loosen the face cover

- 2. Insert the wedge into panel and secure the panel.
- **3.** Loosen the hinges (Fig. 43/1) on the front and rear side of the panel.

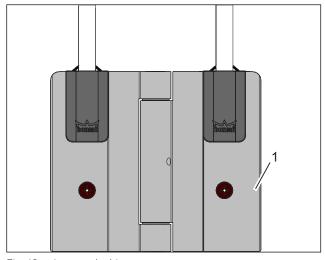


Fig. 43 Loosen the hinge



TIPS AND RECOMMENDATIONS

The position of the revision piece is noted in the system drawing.

4. Remove the revision piece (Fig. 44/2) by loosening the screw and removing the set screw (Fig. 44/1).

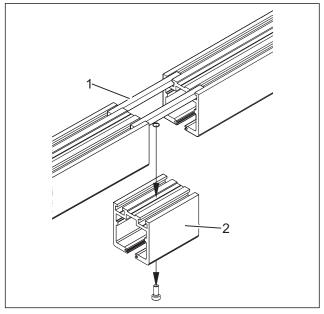


Fig. 44 Removing the revision piece

5.



Warning!

Risk of injury due to improper actions!

Push all panels out of the track rail through the revision opening using 2 people. Afterwards, remove panels from the work area.

6. Loosen the swing panel by loosening the nut on the bolt (Fig. 45/1) using a 17-mm wrench.

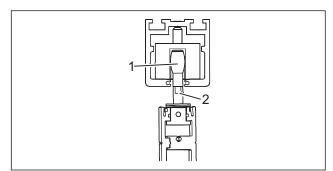


Fig. 45 Loosen the swing panel

- **7.** Remove the swing panel's retaining washer from the track rail.
- **8.** Loosen the bolts (Fig. 45/1) counter-clockwise using the wrench flat (Fig. 45/2) of a 8-mm wrench.

9.



Warning!

Risk of injury due to improper actions!

Slightly lift the swing panel (Fig. 46/2) with 2 people and laterally remove it from the top pivot bearing (Fig. 46/1). Afterwards, remove the swing panel from the work area.

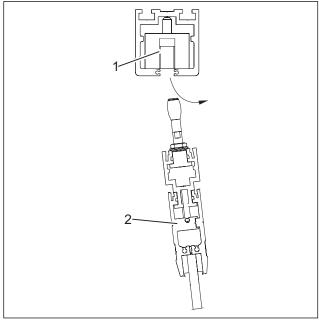


Fig. 46 Remove the swing panel

- **10.** If necessary, remove the 2nd swing-out panel after steps 5 7.
- 11. Loose and remove all floor strikes (Fig. 47/1).

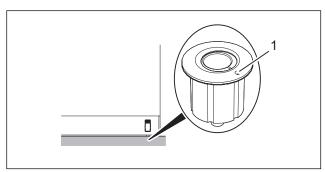


Fig. 47 Loosening the floor strikes

Disassembling and disposing of the folding sliding wall

12. Loosen floor pivot (Fig. 48/1) with a Phillips screwdriver and remove.

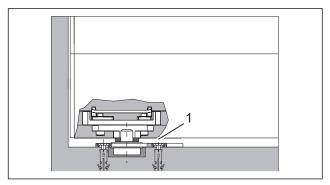


Fig. 48 Loosening the floor pivot

13. Remove the track rollers from the track rails.

14.



Warning!

Risk of injury due to improper actions!

Remove the track rail with at least 2 people.

15. Successively place the disassembled panels on the setting blocks with 2 people. Loosen and remove the lower and upper door rails (Fig. 49).

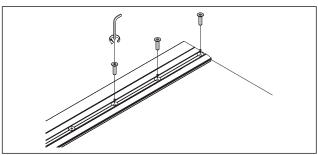


Fig. 49 Loosen the door rail

8.3 Disposal of the folding sliding wall

Recycle the disassembled parts of the folding sliding wall:

- Scrap the metals.
- Recycle the plastic elements.
- Dispose of the remaining components according to the properties of the material.

ENVIRONMENTAL PROTECTION

Improper disposal may harm the environment!

Improper disposal may create hazards for the environment. In case of doubt, obtain information on environmentally-responsible disposal from your municipality or special waste management facility.

DORMA-Glas GmbH Max-Planck-Straße 33 – 45 32107 Bad Salzuflen Germany T: +49 2333 793-0