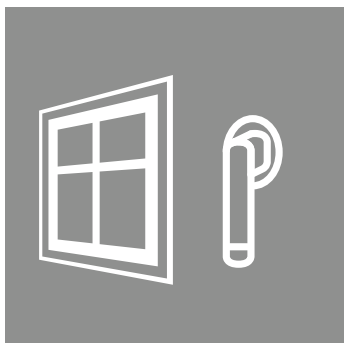




Art. No. 98462_02_EN/10.2021

Aluminium systems

Schüco windows

AWS bottom-hung toplight unit

en

Operating instructions for consumers

Contents

4	1. Notes on these instructions
4	1.1. Use and retention of the instructions
5	2. Safety
5	2.1. About the safety instructions
5	2.2. General safety instructions
8	2.3. Proper use
9	3. Operation
9	3.1. Operation of bottom-hung toplight with window handle (top)
9	3.1.1. Bottom-hung toplight with window handle - opening
9	3.1.2. Bottom-hung toplight with window handle - ventilation
9	3.1.3. Bottom-hung toplight with window handle - closing
10	3.2. Operation of bottom-hung toplight with window handle (side)
10	3.2.1. Bottom-hung toplight with side window handle - opening
10	3.2.2. Bottom-hung toplight with side window handle - ventilation
10	3.2.3. Bottom-hung toplight with side window handle - closing
11	3.3. Bottom-hung toplight with spring catch
11	3.3.1. Bottom-hung toplight with spring catch - opening
11	3.3.2. Bottom-hung toplight with spring catch - closing
12	3.4. Bottom-hung toplight with concealed fitting or toplight fitting
12	3.4.1. Opening and closing with handle
12	3.4.2. Opening and closing with crank handle
13	3.5. Correct ventilation
13	3.5.1. How to prevent damage caused by damp
14	3.5.2. Blast ventilation
15	4. Maintenance
15	4.1. Cleaning and maintenance materials
16	4.2. General cleaning instructions
16	4.2.1. Cleaning the drainage slots
16	4.2.2. Checking and lubricating gaskets
17	4.2.3. Disengaging the toplight fitting (cleaning position)
18	4.2.4. Disengaging the rebate stay (cleaning position)
19	4.2.5. Disengaging the security and cleaning stay (cleaning position)
20	4.3. Maintenance
20	4.3.1. Maintenance contract
21	4.3.2. Maintenance of fittings components
22	5. Decommissioning and disposal
22	5.1. Decommissioning
22	5.2. Disposal

1. Notes on these instructions

1.1. Use and retention of the instructions

Before installing and commissioning, read through this manual thoroughly and adhere to the specified sequence of the instructions. Before installing and commissioning, read through this manual thoroughly and adhere to the specified sequence of the instructions. Schüco International KG shall not be liable for any damage which arises from a failure to adhere to these instructions.

These instructions are part of the product. Keep them in an accessible place so that the information is always available.

2. Safety

2.1. About the safety instructions



KEY WORD

Type / source / consequence of the danger

Pictograms and key words advise of the type of danger and the level of danger:

DANGER		Imminent danger resulting in death or severe injuries.
WARNING		Potential imminent danger which may lead to death or severe injuries.
CAUTION		Potentially dangerous situation which may lead to minor injuries.
NOTE		Imminent danger of damage to property which may lead to damage to or destruction of the product or environment.
INFORMATION		Information Information, tips and advice

2.2. General safety instructions

Follow the safety instructions in this document so as not to endanger your own life or that of others and to ensure error-free operation.



DANGER

- When operating, note that unattended Schüco windows and doors may open and close due to external influences.

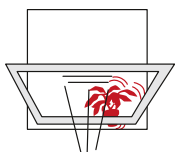
For reasons of simplicity, this manual does not contain every detail of all product types and it cannot cover every possible installation, operation or maintenance scenario.

If you have any questions, please contact your specialist fabricator or your local Schüco sales representative.



DANGER

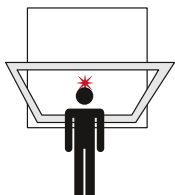
When using aluminium units, take note of the hazards listed below.



Danger of objects falling out when units slam shut

Danger of falling objects

Open units may slam in a draught which may knock over adjacent objects. If there is wind or a draught, please shut windows and window vents. Wind and draughts occur when windows or window door vents in the open position open and close independently and in an uncontrolled manner due to air pressure or suction.



Danger of injury from vents swinging open

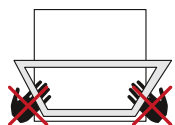
Bottom-hung units can unintentionally swing open when the stays are disengaged. There is a risk of injury from toplight units falling out during opening and closing of the vents.



Risk of injury from open units

There is a high risk of injury when working underneath open windows. Shut open windows before working underneath them and before children enter the room.

There is a danger of injury from open toplight units when they are in the room (vent corners).



Danger of crushing

Be careful not to trap fingers between the window vent and the outer frame when operating windows as well as power-operated (automatic) windows.



Risk of injury from wind

Uncontrolled opening and closing of an open window unit due to increased air movement/wind can damage profiles, fittings, glass and façades – and in the most severe cases even lead to the window vent falling out (may injure humans inside and outside the building).

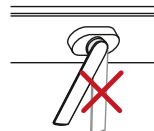
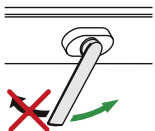
A combination of increased air movement and incorrect operation such as jamming the window vent (sustained opening + wind loads) is more likely to damage the fittings and thereby increase the risk of personal injury.

For this reason, close and lock window and window door units in the event of increased air movement/wind. Do not leave open windows unsupervised.



Do not load extra weight onto the frame or handles.

The additional load may cause deformation of the unit frame or damage to the unit handles.

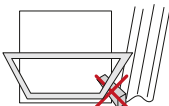


Operate the unit handles in the correct direction only and do not force them beyond the anti-turn stop.

The additional load may cause the unit handles to break.

> Operate only in the closed position (of the vent).

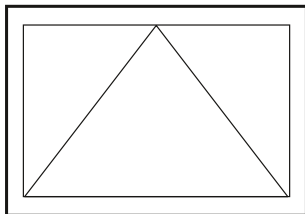
The unit handles must not be moved to positions between the engagement points during opening and closing, as this can damage the fitting.



Do not wedge anything between the unit vent and unit frame.

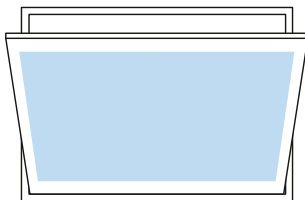
The additional load can cause deformation of the unit frame and fittings. Fittings can be destroyed by excessive force.

2.3. Proper use



A toplight generally describes an elevated window opening.

A bottom-hung toplight unit consists of a window area that can be opened inwards in a tilting movement.



Proper use also includes adhering to the installation and operating instructions. Any alternative use or a use beyond this remit is not in accordance with its purpose.

Incorrect use or unauthorised modification of the product may result in death or serious injury, or damage to the product and other material assets. Only original replacement parts may be used. The manufacturer / supplier shall not be liable for any damage resulting from infringement. The user alone bears the risk.

3. Operation

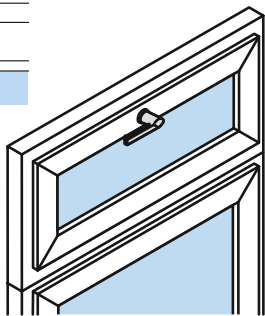
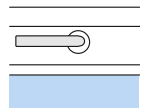
3.1. Operation of bottom-hung toplight with window handle (top)

3.1.1. Bottom-hung toplight with window handle - opening

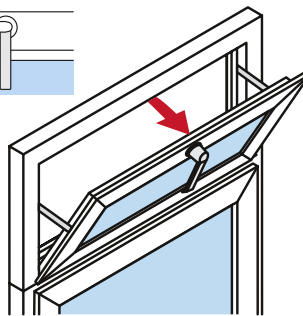
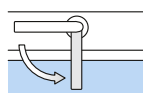
INFORMATION

The maximum opening width is determined by the planning requirements and may be relevant to safety aspects. The setting of the max. opening width therefore cannot be set by the end user.

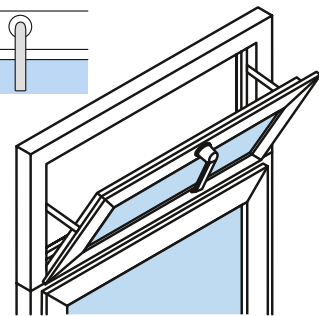
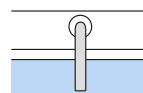
Closed position



Open position

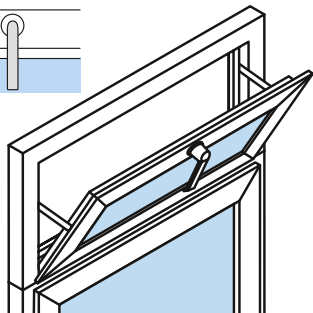
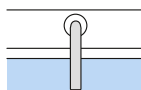


Tilt position



3.1.2. Bottom-hung toplight with window handle - ventilation

Tilt position

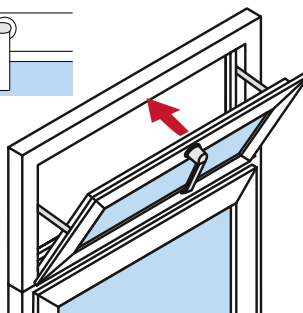
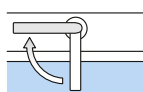
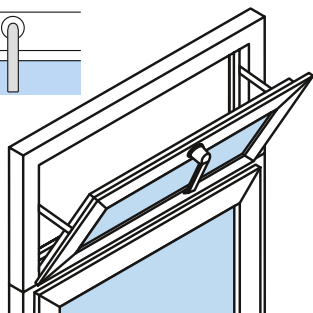
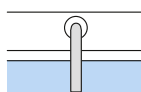


INFORMATION

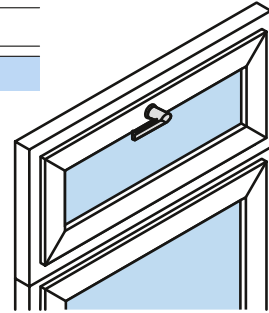
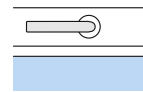
The toplight is prevented from opening onto the unit below by a rebate or security stay.

3.1.3. Bottom-hung toplight with window handle - closing

Tilt position

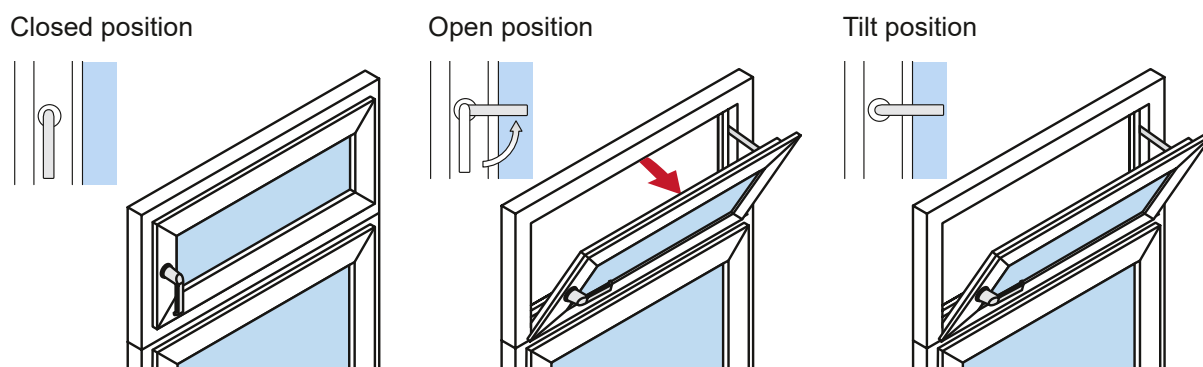


Closed position



3.2. Operation of bottom-hung toplight with window handle (side)

3.2.1. Bottom-hung toplight with side window handle - opening

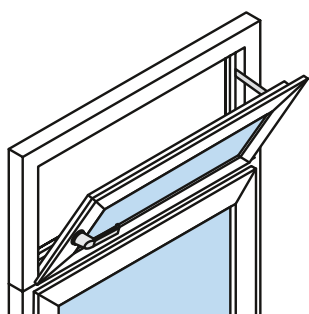


3.2.2. Bottom-hung toplight with side window handle - ventilation

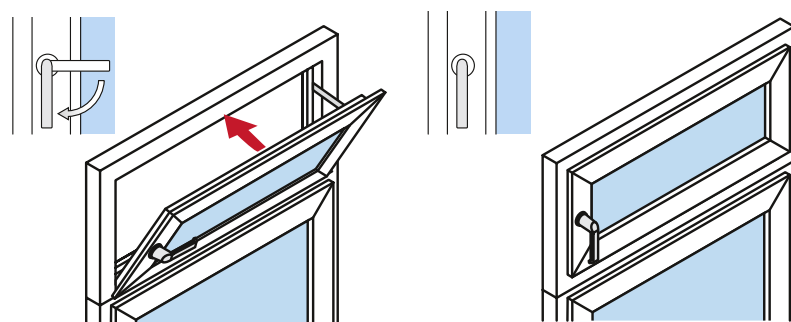


INFORMATION

The toplight is prevented from opening onto the unit below by a rebate or security stay.



3.2.3. Bottom-hung toplight with side window handle - closing



3.3. Bottom-hung toplight with spring catch

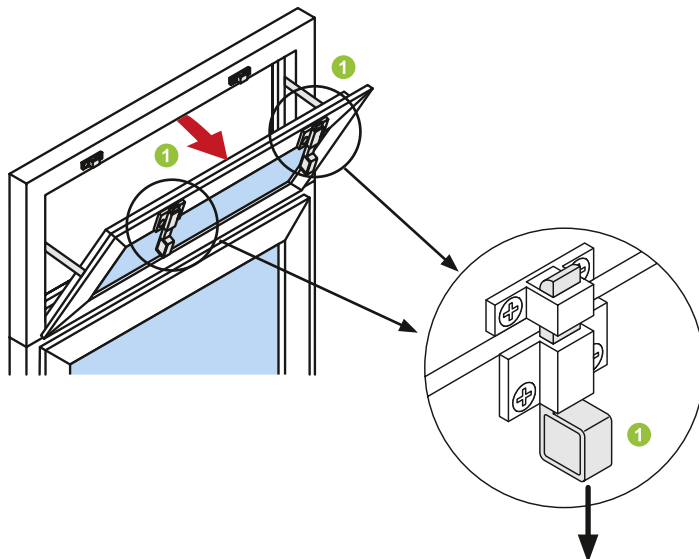
3.3.1. Bottom-hung toplight with spring catch - opening



Danger of injury from vents swinging open

Bottom-hung units can unintentionally swing open when the stays are disengaged. There is a risk of injury from toplight units falling out during opening and closing of the vents.

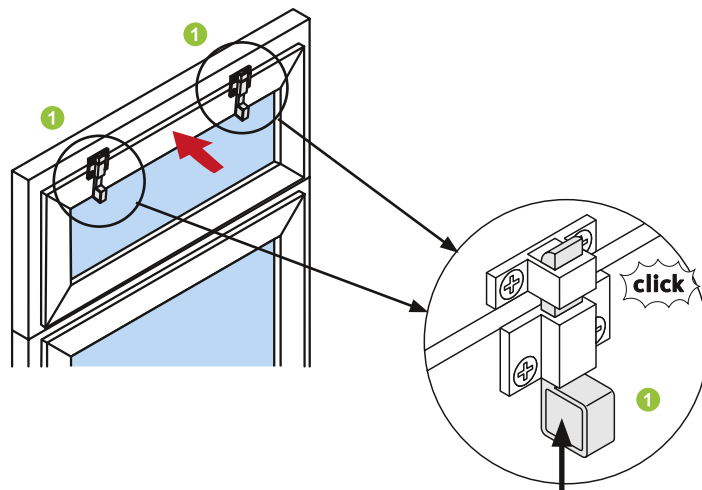
In the case of concealed tilt pivots, the vent can be opened to a maximum position of 90°. The vent must also be given additional support as otherwise irreparable damage will be caused.



1. Release the spring catches (1) at the same time by pulling the loops.

2. Open the bottom-hung vent.

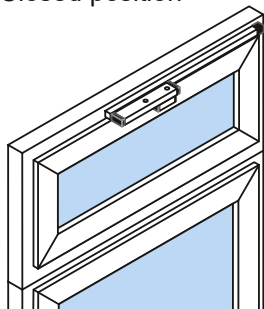
3.3.2. Bottom-hung toplight with spring catch - closing



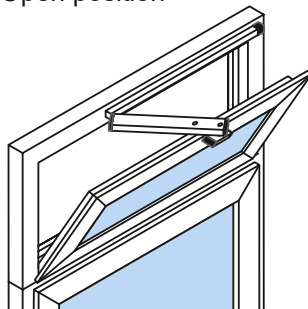
1. Push the bottom-hung vent until both spring catches (1) engage.

3.4. Bottom-hung toplight with concealed fitting or toplight fitting

Closed position



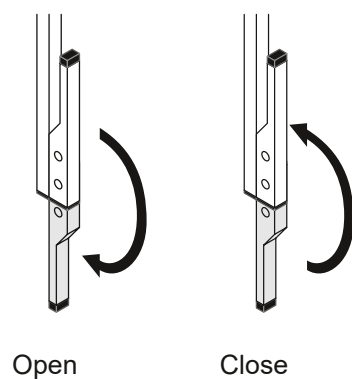
Open position



Methods of operation:

Handle
Crank handle

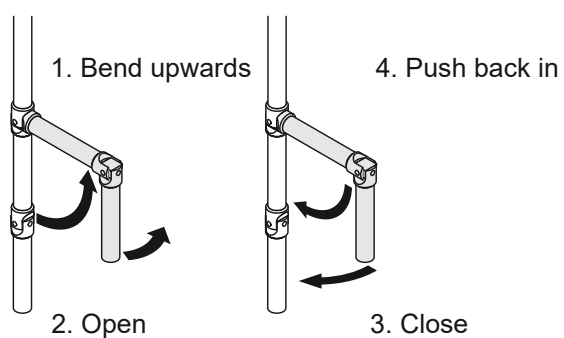
3.4.1. Opening and closing with handle



1. Open the toplight by pulling down the handle.

2. Close the toplight by pulling up the handle.

3.4.2. Opening and closing with crank handle



1. Remove the crank handle from the holder and move into the turn position.

2. Open the toplight by turning the crank handle to the left.

3. Close the toplight by turning the crank handle to the right.

4. Fix the crank handle to the holder.

3.5. Correct ventilation

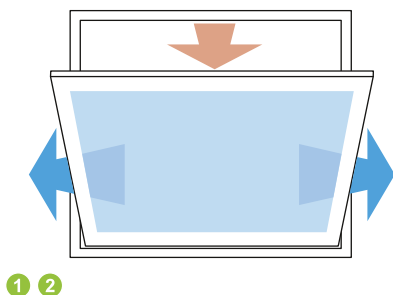
3.5.1. How to prevent damage caused by dampness

The high weathertightness of the AWS Schüco window systems reduces the exchange of air between the inside and outside. Depending on use, high humidity loads could occur. This is caused by evaporation from people and plants and facilities with high humidity levels such as bathrooms and kitchens.

The accumulation of water vapour leads to an increase in humidity and has to be let out to prevent damage caused by damp. The formation of condensation on materials that are not sensitive to water such as aluminium window frames and glass is permissible for a short time and in small quantities (DIN 4108-2). This phenomenon can be countered by sufficient ventilation.

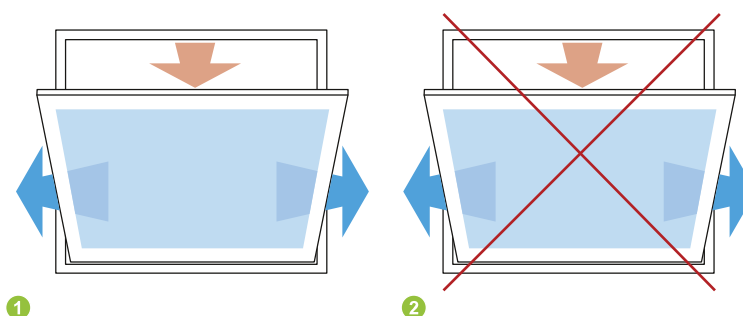
Ventilation in summer / winter

Summer



- ① Short blast ventilation.
- ② Prolonged ventilation only when heating is switched off.

Winter



- ① Short blast ventilation.
- ② Avoid continuous ventilation through tilted windows in winter to prevent the interior becoming too cold.

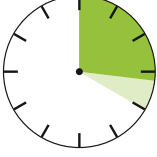
3.5.2. Blast ventilation

Depending on use, the window should be fully opened several times a day to ensure blast ventilation. As illustrated the perfect ventilation time depends on the time of year and should be in the range of 4–6 minutes in winter.

Blast ventilation ensures maximum protection against moisture damage. This effective exchange of damp air requires little heat energy as the interior barely cools down at all during the short period of ventilation.

The ventilation is even more economical if during ventilation the thermostat valve is turned off during ventilation and back on again after the windows are shut again.

Recommended duration of blast ventilation in the months:

December January February	4 - 6 minutes	
March November	8 - 10 minutes	
April October	12 - 15 minutes	
May September	16 - 20 minutes	
June July August	25 - 30 minutes	

Ventilation time required to exchange the air during blast ventilation (wide open window with no wind) depending on seasonal outside temperature.

4. Maintenance

4.1. Cleaning and maintenance products



When cleaning colour-coated units, observe the instructions for use of the cleaning agent.



The following items must NOT be used for cleaning:

- ▶ Tools with sharp edges, e.g. knives, metal scrapers, steel wool, the scouring side of household sponges etc. will damage surfaces.
- ▶ Aggressive cleaning fluids or solvents, e.g. cellulose thinner, nail polish remover etc. will also cause irreversible damage to unit surfaces.



Maintenance products suitable for aluminium units are available from Schüco specialists:

Aluminium maintenance kit 298 672:

- Cleaner and preservative
- Stainless steel cleaner
- Gasket cleaner
- Fittings spray
- Cleaning cloth

Maintenance products for anodised aluminium units:

Basic cleaner 298 181

For initial and basic cleaning.
Cleans and preserves the aluminium surface.

Metal polish 298 010

This cleaner for anodised surfaces restores the matt finish to the aluminium and preserves the surface (can also be used on stainless steel).

Universal aluminium cleaner 298 001

Removes stubborn grime, minor scuff marks and scratches.



4.2. General cleaning instructions



For the best window care, clean the window frames and gaskets at the same time as the window panes. Use a mild, non-scouring cleaning agent.

Solid substances

Plaster, mortar or similar is best removed using a wooden or plastic spatula.

Marks

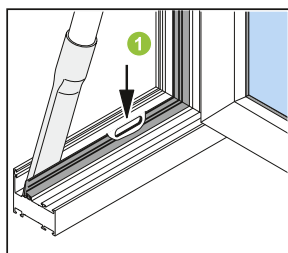
Can be removed safely and without residue using a cleaning agent from our range of cleaning products for aluminium units.



NOTE

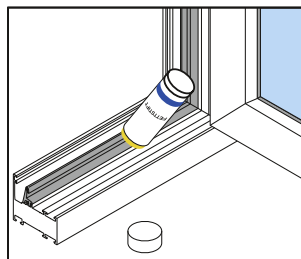
To prevent damage, observe the instructions for use given on the cleaning agent.

4.2.1. Cleaning the drainage slot



- Remove dust and dirt from the space between the gaskets and the external side of the frame using a vacuum cleaner.
- Blocked drainage slots can be cleaned using a cocktail stick or cotton bud (1).

4.2.2. Checking and lubricating gaskets



- Rub all gaskets with a grease stick or Vaseline. This will maintain suppleness and prevent sticking.
- At the same time, check all gaskets for damage.



NOTE

Ask a Schüco specialist to replace any defective gaskets.

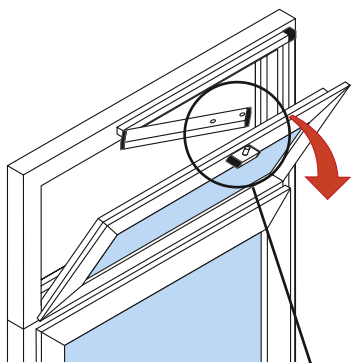
4.2.3. Disengage toplight fitting (cleaning position)



WARNING

Support the bottom-hung vent before disengaging the fitting. Ensure that the entire weight of the vent is supported. Supporting the bottom-hung vent will prevent it swinging open freely. Ensure that there are no people or objects within the opening arc of the window.

In the case of concealed tilt pivots, the vent can be opened to a maximum position of 90°. The vent must also be given additional support as otherwise irreparable damage will be caused.

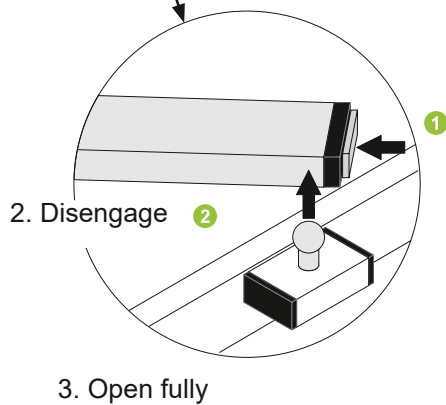


In order to open the bottom-hung vent wide enough for cleaning, the toplight fitting must be disengaged.

Open the bottom-hung vent

1. Support the open vent and press the locking button (1).
2. Disengage the main arm (2).
3. Slowly open the vent wide.

To re-engage, follow the same procedure in reverse order.



1. Push

2. Disengage

3. Open fully

4.2.4. Disengage the rebate stay (cleaning position)



WARNING

Support the bottom-hung vent before disengaging the fitting. Ensure that the entire weight of the vent is supported. Supporting the bottom-hung vent will prevent it swinging open freely. Ensure that there are no people or objects within the opening arc of the window.

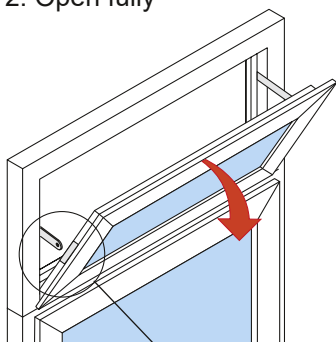
In the case of concealed tilt pivots, the vent can be opened to a maximum position of 90°. The vent must also be given additional support as otherwise irreparable damage will be caused.



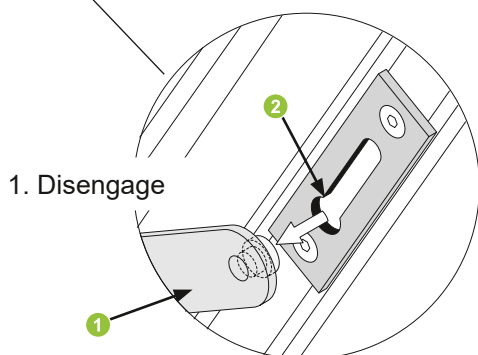
NOTE

Take care when opening the bottom hung vent that surface-mounted fittings (window handles) do not damage the unit below.

2. Open fully



In order to open the bottom-hung vent fully (cleaning position), the rebate stays at the sides must be disengaged.



Open the bottom-hung vent

1. Push the open vent so far out that the stay arm (1) can be removed from its guide (2).
2. Slowly open the vent wide.

To re-engage, follow the same procedure in reverse order.

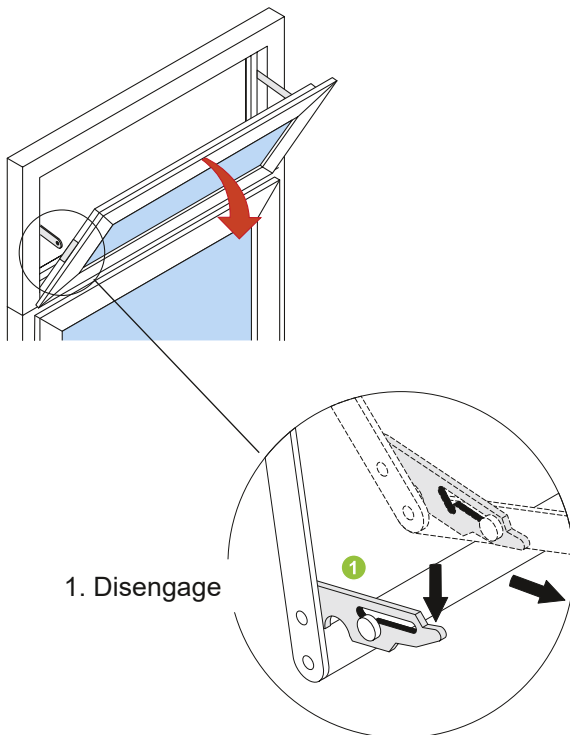
4.2.5. Disengage the security and cleaning stay (cleaning position)



WARNING

Support the bottom-hung vent before disengaging the fitting. Ensure that the entire weight of the vent is supported. Supporting the bottom-hung vent will prevent it swinging open freely. Ensure that there are no people or objects within the opening arc of the window.

In the case of concealed tilt pivots, the vent can be opened to a maximum position of 90°. The vent must also be given additional support as otherwise irreparable damage will be caused.



1. Disengage

In order to open the bottom-hung vent fully (cleaning position), disengage the rebate stays at the sides.

Open the bottom-hung vent

1. Support the open vent and release from the ratchet (1).
2. Slowly open the vent wide.

Re-engage: after closing the bottom-hung vent, the security stay re-engages automatically.

4.3. Maintenance

4.3.1. Maintenance contract

If these operating instructions do not answer all your questions, refer to your Schüco specialist for help or contact Schüco directly. In addition to providing expert advice, they can advise you on particular modifications and repairs.

Schüco specialists and Schüco International KG can offer you the additional benefit of a maintenance contract. Under the terms of the maintenance agreement, they will undertake all maintenance and repair work. Your units will be maintained at their optimum functional performance and value without the need for additional resources.



NOTE

The fittings in the window, door and façade units require specialist, systematic maintenance, care and inspection to ensure they retain their value and remain fit for use and safe. Therefore, it is recommended that you conclude a corresponding maintenance contract for windows, doors and façades.



DANGER

- Risk of injury due to maintenance work carried out incorrectly.
- Incorrect maintenance could lead to severe injury or damage to property.



NOTE

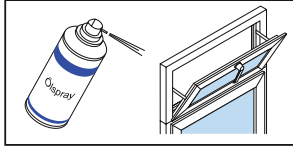
All repairs and modifications should be undertaken by a Schüco specialist or by Schüco International KG directly. Only repairs by a specialist using “original parts” ensure the continued correct operation of your Schüco units.

To conclude a maintenance contract with Schüco International KG, please contact Schüco directly:

Tel. +49 521 783 1111

serviceteam@schueco.com

4.3.2. Maintenance of fittings components



All moving parts of the fittings in your Schüco units are virtually maintenance free. However, a little acid-free oil and grease keep the mechanics smooth and ensure user comfort for a long period. Spray the locking pins and the positioning points of the tilt stay with the lubricant spray from the Schüco range.

Only a light application is required at all points.
To avoid contamination, wipe off excess lubricant after lubrication.



NOTE

- AvanTec SimplySmart plastic and hybrid locking bars do not require maintenance.
- Schüco fittings are generally lubricated in the factory. We recommend that any lubrication, maintenance and adjustment work is carried out at least once a year by a qualified specialist.
- Fittings components with an additional positioning and stop function, e.g. energy-absorbing limiting stays or vent brakes, must not be lubricated or oiled.



If required, Schüco fittings can be maintained with an acid and resin-free oil.

Lubricant spray 298 741
Grease 298 118

Maintenance work to be performed at least once a year (in school and hotel buildings every six months):

- Ensure fittings components are secure and check for any signs of wear. If required, tighten fixing screws and have a specialist company replace worn components.
- Grease all moving parts and locking parts of the fittings and check for proper functioning.

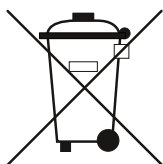
5. Decommissioning and disposal

5.1. Decommissioning

Commission a specialist to remove the units professionally.

5.2. Disposal

Commission a specialist to dispose of the units professionally.



The materials used can be recycled. Observe the environmental requirements with regard to recycling, re-use and disposal of operating materials and components in accordance with the local, country-specific and international current technical regulations and official regulations. Make a contribution towards protecting our environment and dispose of the units at a collection point.

en

Original operating instructions

Schüco International KG
Karolinenstraße 1-15
33609 Bielefeld
Tel. +49 (0)521 783-0
Fax +49 (0)521 783-451
www.schueco.com

The "Schüco" logo and other logos are protected in Germany and various international markets. Detailed information is available on request.

Art. No. 98462/04.2025/Printed in Germany
We reserve the right to make changes and to correct errors.
Products may differ from illustrations.