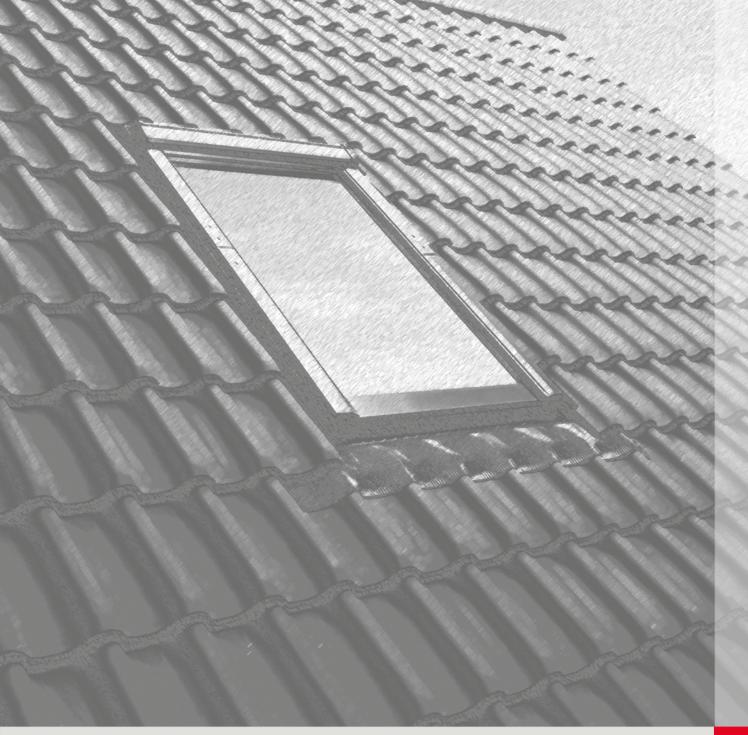


# Operating and maintenance manual Q4 E\_/EF/SF







# Legal notice

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We are always thankful for any ideas and suggestions you may have.

We reserve the right to make changes without notice.





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### Introduction

Congratulations on your new Roto product. You have bought a high-quality product that will give you pleasure for years to come.

This manual provides important information all about your new Roto product. This includes information on care and maintenance. As with other high-quality technical products, only if you care for and maintain it well is problem-free operation ensured. So please take some time to read through this manual carefully, and keep it in a safe place so that you can consult it if the window gets damaged or is in need of repair.

Your Roto partner will be glad to provide you with further advice at any time. We wish you all the best with your new Roto product and are sure it will give you great pleasure.

### Target groups

The operating and maintenance manual is intended for users of roof windows.

### Pictograms for warnings etc.

Please comply with the following safety and danger warnings to ensure a safe and trouble-free use of your Roto products. Your attention is drawn to this information by suitable pictograms.

The pictogram below accompanied by the word "Danger" draws your attention to the threat of danger that can result in immediate death or a serious head injury if it is not averted.



#### Danger:

- The danger is described here.
- The consequences are described here.
- The action to be taken to avert this danger is described here.

The pictogram below accompanied by the word "Warning" indicates a possible danger that can result in immediate death or a serious head injury if it is not prevented.



#### Warning:

- The danger is described here.
- The consequences are described here.
- The action to be taken to avert this danger is described here.

The pictogram below accompanied by the word "Caution" indicates a potential danger that can result in minor or moderate injury if it is not prevented.



#### Caution:

- The danger is described here.
- The consequences are described here.
- The action to be taken to avert this danger is described here.



**Note:** This draws your attention to valuable tips and information about the product.





# For your safety

### Topics:

- Important information on use
- Important safety information for children and handicapped persons
- Important maintenance information

Please comply with the following safety information to ensure a safe and trouble-free use of the Roto products. Read through this safety information carefully and follow it when using the products.



### Important information on use

Please note the following safety information on the use and limitations of this Roto product.



#### Attention:

The roof window may only be opened in order to look out of it, ventilate the room or clean the glass on the outside. Do not climb out of the roof window. This could result in a fatal fall.



#### Note:

The maximum that the roof window may be opened is the cleaning position. Do not push the roof window manually any further than this. This can lead to product damage for which Roto accepts no liability.



#### Note:

The increased energy efficiency of modern construction elements can lead to the formation of condensation. For this reason, the humidity control of modern, insulated living spaces under the roof must be actively regulated by sufficient ventilation and an appropriate room temperature to ensure an optimum interior climate and to counteract this condensation.

Therefore, ventilate your living space three times a day with the roof window opened completely to prevent the formation of condensation and thus possible product damage for which Roto cannot accept liability.



#### Note:

Use only water to clean the window! Do not use any sharp or pointed objects! Remove dirt immediately!



#### Note:

When you open the window manually, you cannot operate the chain drive.

### Important safety information for children and handicapped persons

Please note the following safety information concerning children and handicapped persons.



#### Attention:

Do not leave children or mentally handicapped persons unsupervised in a room with a roof window. Children and mentally handicapped persons could get stuck when operating the roof window or could climb out of the open window and fall.

### Important maintenance information

Please note the following safety information about maintenance of the Roto product.



#### Attention:

Over time, the screws of your Roto product may loosen due to the fact that wood is being used as a component in a working system. Thus, there is a risk of parts falling down and seriously injuring passers-by or residents. Your should therefore check once per year whether the visible screws of your Roto product have loosened. If yes, have your Roto product checked by a professional.



#### Note

Do not tighten the screws yourself. This can lead to product damage for which Roto accepts no liability.



#### Note:

When you open the window manually, you cannot operate the chain drive.



# Product description

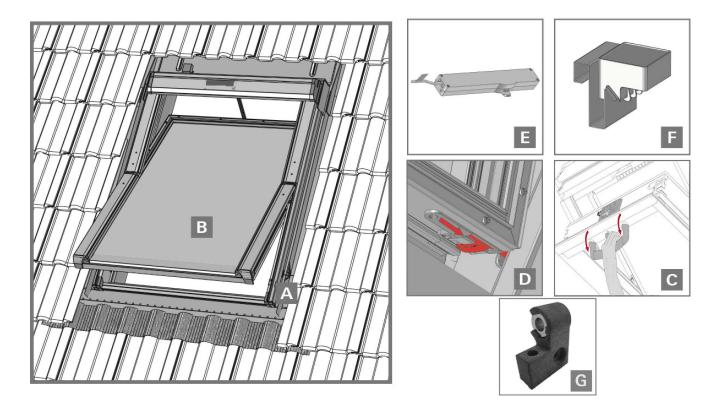
### Topics:

- This section will provide you with everything you need to know about the product.
- Product description
- Main functions



# Product description

The roof window consists of the following parts:



Item	Description
А	Frame
В	Sash
С	Handle
D	Cleaning position bars and striker
E	Drive
F	Rain sensor
G	Magnetic contact / Adapter

### Main functions

The roof window has the following main functions:

- It can be opened to allow you to look out.
- It can be opened for ventilation.
- It can be closed.
- Ventilation with the air vent
- It can be opened to the cleaning position to allow you to clean the glass on the outside.



# Operation

### Topics:

- Description
- Operating the roof window manually
- Operating the roof window electrically

This section tells you everything you need to know to operate the product.



### Description

The roof window can be opened and closed manually using the handle or electrically using the Roto remote control or wall button. This section describes how to do this.



Note: If you are using a Roto remote control device, please also read the operating manual for the device.

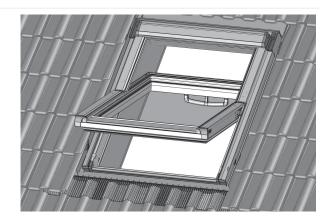
# Operating the roof window manually

The following describes how to open and close the roof window all using the handle.

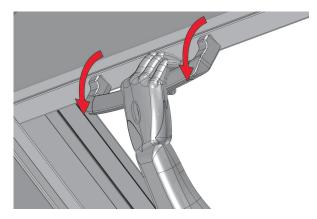


Note: When you open the window manually, you cannot operate the chain drive.

1. Open the roof window. Follow the steps below.



a) Push the handle on the upper sash down.

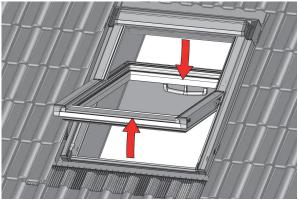


b) Turn the sash.



#### Danger:

- There is a danger of falling.
- If you perform activities on the roof window without being secured, you could fall and suffer life-threatening injuries.
- Therefore, do not lean out of the roof window, make sure you are standing securely, do not hold on to mounted parts and use fall protection when working at greater heights.



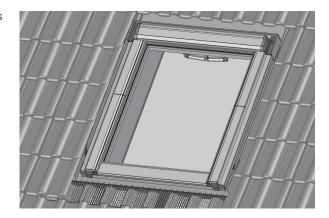


For closing the roof window, please follow the steps below.

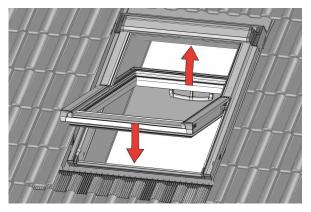


#### Caution:

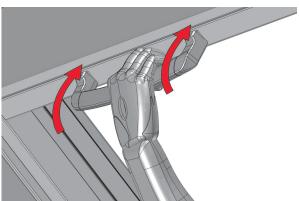
- There is a danger of being crushed when the roof window closes.
- If parts of your body are crushed between the sash and frame when the window is closing, it can result in minor or moderate injuries.
- Take a step back before closing the roof window and ensure that no parts of your body can get caught between the sash and frame.



a) Turn the sash back until the roof window is closed.



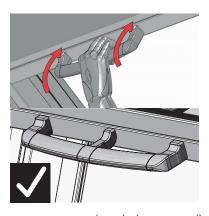
b) Push the handle on the upper sash up.



### Operating the roof window electrically



**Note:** Before opening the window electrically, you must move the handle to the fully closed position.



i

**Note:** When you open the window electrically, you cannot operate the window manually.

#### Electrically operating the roof window in dry weather

This section describes how to open the roof window electrically using a Roto remote control device or wall button.



 Press the "open" button on the Roto remote control device or the wall button to open the roof window.



#### Danger:

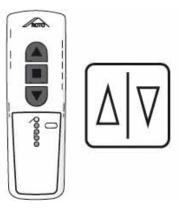
- There is a danger of falling.
- If you perform activities on the roof window without being secured, you could fall and suffer life-threatening injuries.
- Therefore, do not lean out of the roof window, make sure you are standing securely, do not hold on to mounted parts and use fall protection when working at greater heights.
- Press the "stop" button on the Roto remote control device or the opposite wall button to stop the roof window.

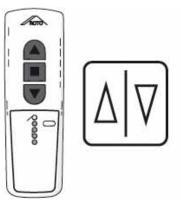


#### Caution:

- There is a danger of being crushed when the roof window closes.
- If parts of your body are crushed between the sash and frame when the window is closing, it can result in minor or moderate injuries.
- Take a step back before closing the roof window and ensure that no parts of your body can get caught between the sash and frame.
- Press the "close" button on the Roto remote control device or the wall button to close the roof window.







#### Electrically operating the roof window in wet weather

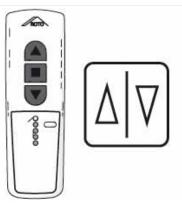
Due to an installed rain sensor, the roof window can only be opened in wet weather if the rain sensor is deactivated. How this works and how you subsequently operate the roof window is described in the following.



1. Press the "open" and "close" buttons simultaneously on the Roto remote control.



**Note:** This deactivates the rain sensor for 20 minutes. If it is still raining after 20 minutes or starts raining again, the roof window closes automatically.



2. Press the "open" button on the Roto remote control device or the wall button to open the roof window.



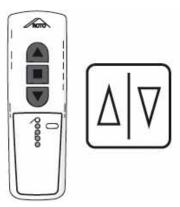
#### Danger:

- There is a danger of falling.
- If you perform activities on the roof window without being secured, you could fall and suffer life-threatening injuries.
- Therefore, do not lean out of the roof window, make sure you are standing securely, do not hold on to mounted parts and use fall protection when working at greater heights.
- Press the "stop" button on the Roto remote control device or the opposite wall button to stop the roof window.



#### Caution:

- There is a danger of being crushed when the roof window closes.
- If parts of your body are crushed between the sash and frame when the window is closing, it can result in minor or moderate injuries.
- Take a step back before closing the roof window and ensure that no parts of your body can get caught between the sash and frame.
- Press the "close" button on the Roto remote control device or the wall button to close the roof window.











# Cleaning

### Topics:

• Cleaning the outside of the roof window

This section will provide you with everything you need to know about cleaning the product.



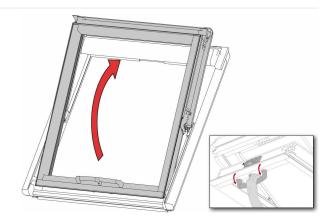
### Cleaning the outside of the roof window

The following describes how to clean the outside.



Note: When you open the window electrically, you cannot operate the window manually.

1. Open the roof window manually and pivot the sash all the way.

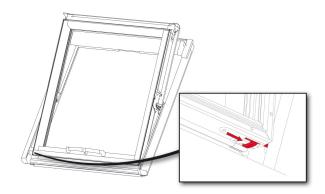


2. Push the cleaning position bars of the upper sash into the striker of the frame mount to secure the sash in position.



#### Danger:

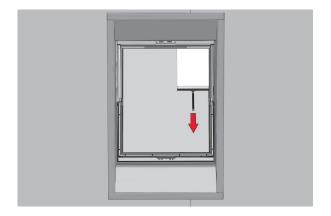
- There is a danger of falling when cleaning, maintaining or adjusting the roof window.
- If you have not correctly secured the roof window by means of the cleaning position locking mechanism, you could topple forward, fall and suffer a lifethreatening injury.
- You should therefore check that the cleaning position bars are correctly inserted into the striker.



3. Clean the outside of the roof window.



**Note:** Use only water to clean the window! Do not use any sharp or pointed objects! Remove dirt immediately!



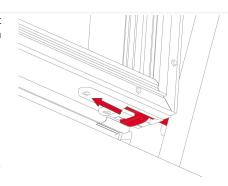


**4.** Push the cleaning position bars of the upper sash out of the striker of the frame mount to secure the sash in position.

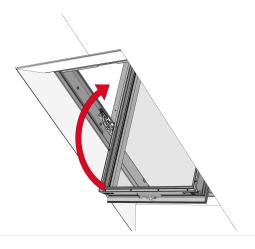


#### Note:

Ensure that the cleaning position bars have been fully pushed back. If you do not do this, you could damage the frame mount when pushing the sash up, or the sash will not engage properly.



**5.** Close the roof window.







# Adjustment

### Topics:

• Determining the clearance at the top and bottom

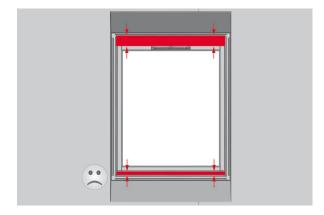
This section tells you everything you need to know about the adjustments you can make to the product.



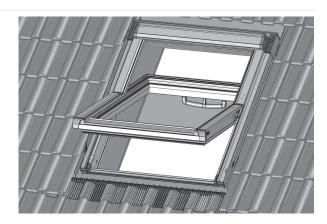
### Determining the clearance at the top and bottom

Because wood is used as a component in the working system, the clearance at the top and bottom may change over time in such a way that causes the roof window to stick slightly when closing. The figure illustrates this.

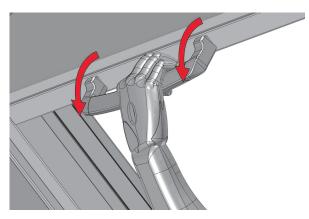
This section describes how to adjust the side clearance.



1. Open the roof window. Follow the steps below.



a) Push the handle on the upper sash down.

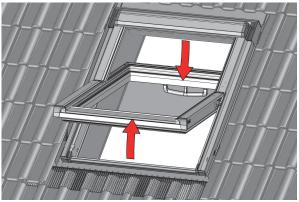


b) Turn the sash.



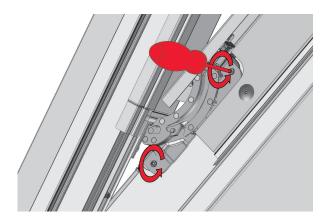
#### Danger:

- There is a danger of falling.
- If you perform activities on the roof window without being secured, you could fall and suffer life-threatening injuries.
- Therefore, do not lean out of the roof window, make sure you are standing securely, do not hold on to mounted parts and use fall protection when working at greater heights.

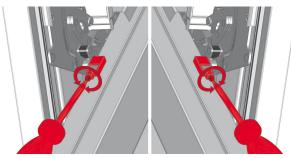




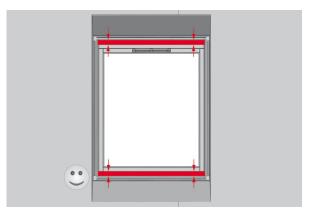
**2.** Use a suitable screwdriver to loosen the screws on both sides at the indicated positions.



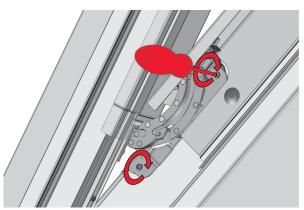
**3.** Use a suitable screwdriver to turn the screws at the locations shown in one direction.



**4.** Check the clearance - does the roof window stick when closing? If yes, then repeat the steps above until the roof window closes smoothly without sticking.



**5.** Use a suitable screwdriver to tighten the screws again on both sides at the indicated positions.



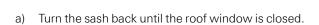


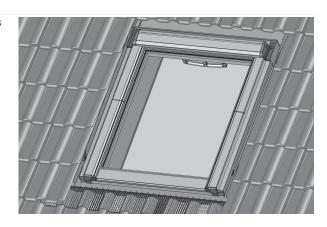
**6.** For closing the roof window, please follow the steps below.



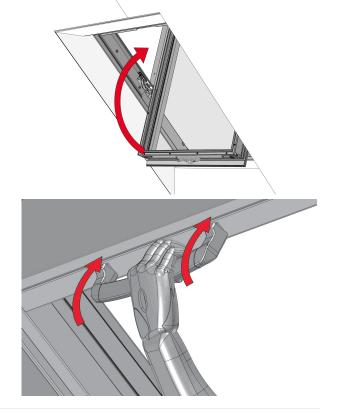
#### Caution:

- There is a danger of being crushed when the roof window closes.
- If parts of your body are crushed between the sash and frame when the window is closing, it can result in minor or moderate injuries.
- Take a step back before closing the roof window and ensure that no parts of your body can get caught between the sash and frame.





b) Push the handle on the upper sash up.



The clearance at the top and bottom is now correctly adjusted.



### Maintenance

#### Topics:

- Lubricating the roof window
- Cleaning the frame flashing
- Care and cleaning of the sash seal
- Painting the roof window

This section will provide you everything you need to know about maintaining the product.



#### Note:

Carry out the steps of all sections of this chapter regularly at the specified intervals. This is the only way that Roto can guarantee a continuous and trouble-free operation.

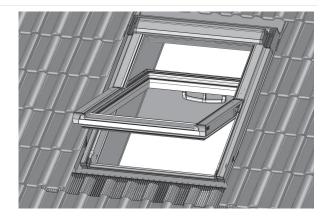
In addition to your own maintenance, we also recommend having professional maintenance performed at regular intervals.



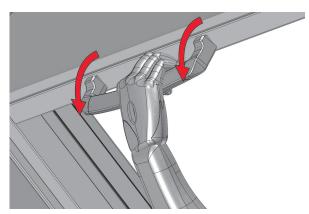
### Lubricating the roof window

To ensure that the roof window continues to operate without problems, it must be lubricated annually. This section describes how to do this.

1. Open the roof window. Follow the steps below.



a) Push the handle on the upper sash down.

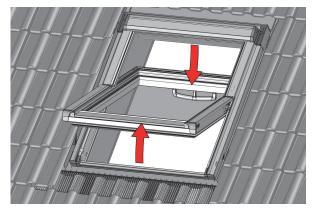


b) Turn the sash.



#### Danger:

- There is a danger of falling.
- If you perform activities on the roof window without being secured, you could fall and suffer life-threatening injuries.
- Therefore, do not lean out of the roof window, make sure you are standing securely, do not hold on to mounted parts and use fall protection when working at greater heights.

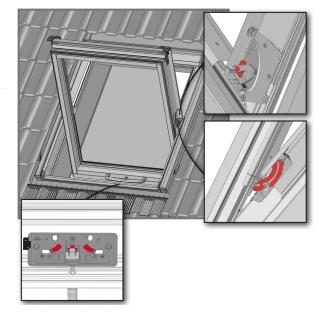




2. Lubricate the roof window at the joints shown.



**Note:** The hardware spray from the Roto care set (article number: 456625 (wood), 251336 (plastic)) is the best option for this.



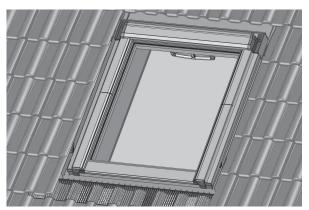
**3.** For closing the roof window, please follow the steps below.

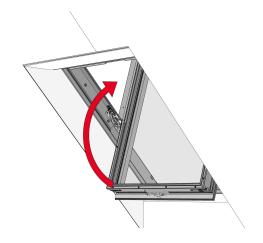


#### Caution:

- There is a danger of being crushed when the roof window closes.
- If parts of your body are crushed between the sash and frame when the window is closing, it can result in minor or moderate injuries.
- Take a step back before closing the roof window and ensure that no parts of your body can get caught between the sash and frame.

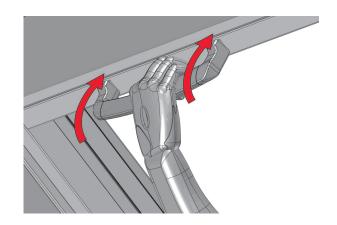








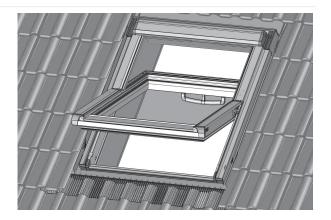
b) Push the handle on the upper sash up.



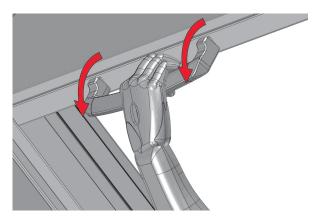
# Cleaning the frame flashing

To ensure that the roof window continues to operate without problems, the frame flashing must be cleaned annually. This section describes how to do this.

1. Open the roof window. Follow the steps below.



a) Push the handle on the upper sash down.



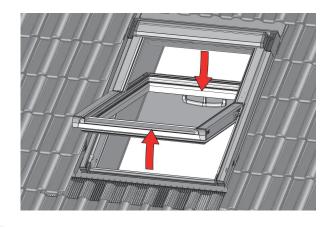


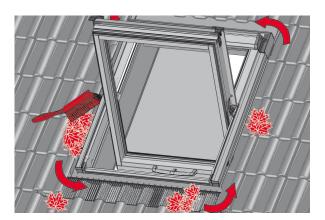
b) Turn the sash.



#### Danger:

- There is a danger of falling.
- If you perform activities on the roof window without being secured, you could fall and suffer life-threatening injuries.
- Therefore, do not lean out of the roof window, make sure you are standing securely, do not hold on to mounted parts and use fall protection when working at greater heights.
- **2.** Clear the roof window and frame flashing of leaves, moss, dust and other dirt to allow the rainwater to flow off and prevent puddles from forming.



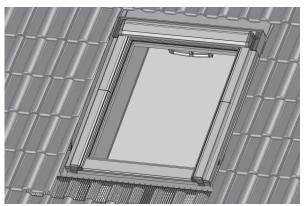


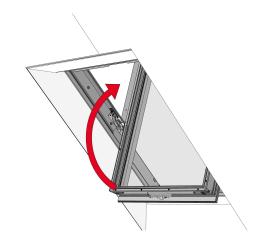
**3.** For closing the roof window, please follow the steps below.



#### Caution:

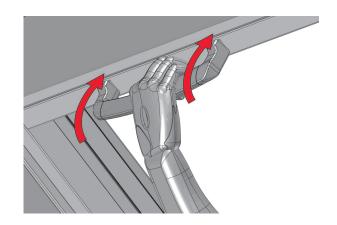
- There is a danger of being crushed when the roof window closes.
- If parts of your body are crushed between the sash and frame when the window is closing, it can result in minor or moderate injuries.
- Take a step back before closing the roof window and ensure that no parts of your body can get caught between the sash and frame.
- a) Turn the sash back until the roof window is closed.







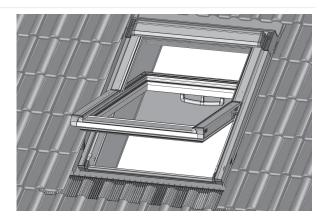
b) Push the handle on the upper sash up.



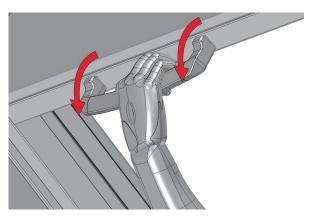
### Care and cleaning of the sash seal

To ensure that the roof window has a long service life, the sash seal must be cleaned and maintained annually. This section describes how to do this.

1. Open the roof window. Follow the steps below.



a) Push the handle on the upper sash down.





b) Turn the sash.



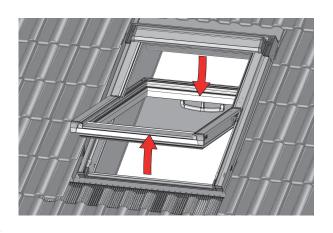
#### Danger:

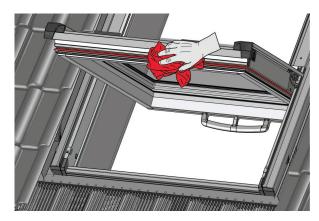
- There is a danger of falling.
- If you perform activities on the roof window without being secured, you could fall and suffer life-threatening injuries.
- Therefore, do not lean out of the roof window, make sure you are standing securely, do not hold on to mounted parts and use fall protection when working at greater heights.





**Note:** Use only gentle cleaning agents to clean the window.





3. Clean the sash seal at the upper sash frame.



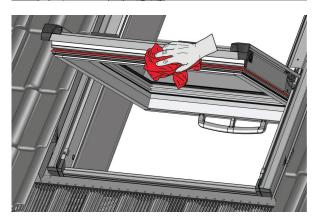
**Note:** Use only gentle cleaning agents to clean the window.



**4.** Spray a seal care product onto a cloth and apply it to the sash seal at the lower sash frame.



**Note:** The seal care product from the Roto care set (article number: 456625 (wood), 251336 (plastic)) is the best option for this.





**5.** Spray a seal care product onto a cloth and apply it to the sash seal at the upper sash frame.



**Note:** The seal care product from the Roto care set (article number: 456625 (wood), 251336 (plastic)) is the best option for this.

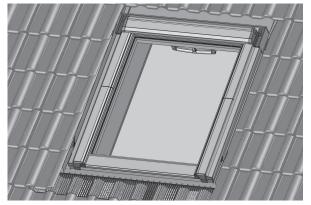


**6.** For closing the roof window, please follow the steps below.

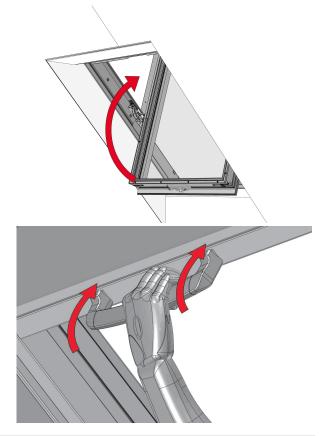


#### Caution:

- There is a danger of being crushed when the roof window closes.
- If parts of your body are crushed between the sash and frame when the window is closing, it can result in minor or moderate injuries.
- Take a step back before closing the roof window and ensure that no parts of your body can get caught between the sash and frame.



a) Turn the sash back until the roof window is closed.



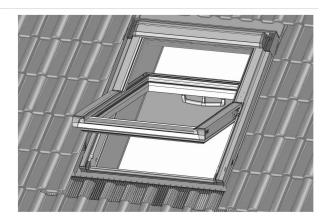
b) Push the handle on the upper sash up.



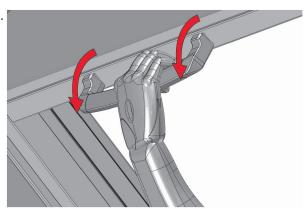
### How to clean the solar module (if applicable)

To use the maximum solar energy to charge the battery, you must clean the solar module every year. This section describes how to do this.

1. Open the roof window. Follow the steps below.



a) Push down the handle on the upper end of the sash.

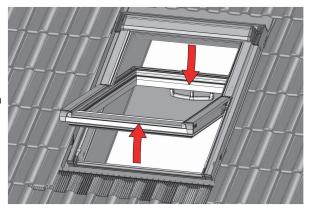


b) Turn the sash.



#### Danger:

- Consider the risks of falls from a height.
- If you carry out unsecured work on the roof window, you could fall and suffer a life-threatening injury.
- Therefore, do not lean out of the roof window, make sure your standing position is safe, do not hold on to mounted parts, and use safeguards to prevent falls from great heights.

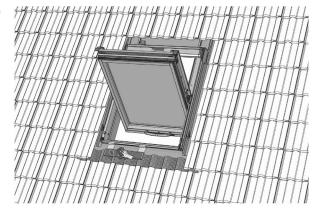




**2.** Free the solar module from leaves, moss, dust, and othe dirt so it can use the maximum solar energy to charge the battery.



**Note:** Use only water and a soft cleaning rag for cleaning!

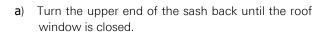


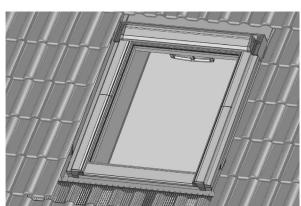
**3.** Follow the steps below to close the roof window.

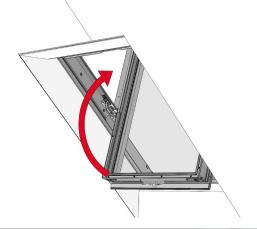


#### Caution:

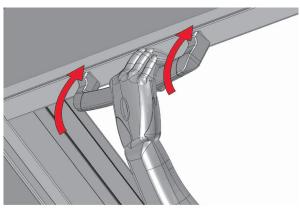
- The roof window exposes persons to the hazards of crushing when closing.
- If parts of your body are crushed between the sash and the frame when the window is closing, it can result in minor or moderate injuries.
- Take a step back before closing the roof window and ensure that no parts of your body can get caught between the sash and frame.







b) Push up the handle on the upper end of the sash.

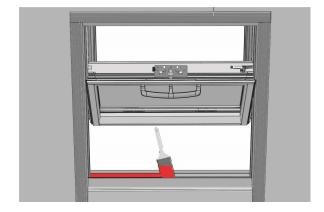




# Painting the roof window

The wooden parts of your roof window are painted with a water-based, wood treatment system that does not use pentachlorophenol (PCP), lidane, dioxin, or formal-dehyde.

To ensure a long service life of the roof window, it should be painted every second to third year (depending on the room use).



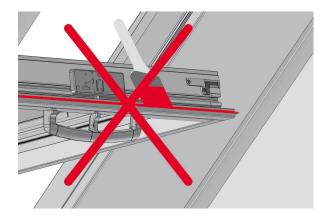


**Note:** Preferably use thinned, water-based acrylic paint.





**Note:** Make sure that you do not paint the sash seal as this can lead to product damage for which Roto assumes no liability.







# Appendix

Topics:

This section contains the document's appendix.

• Contact details







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