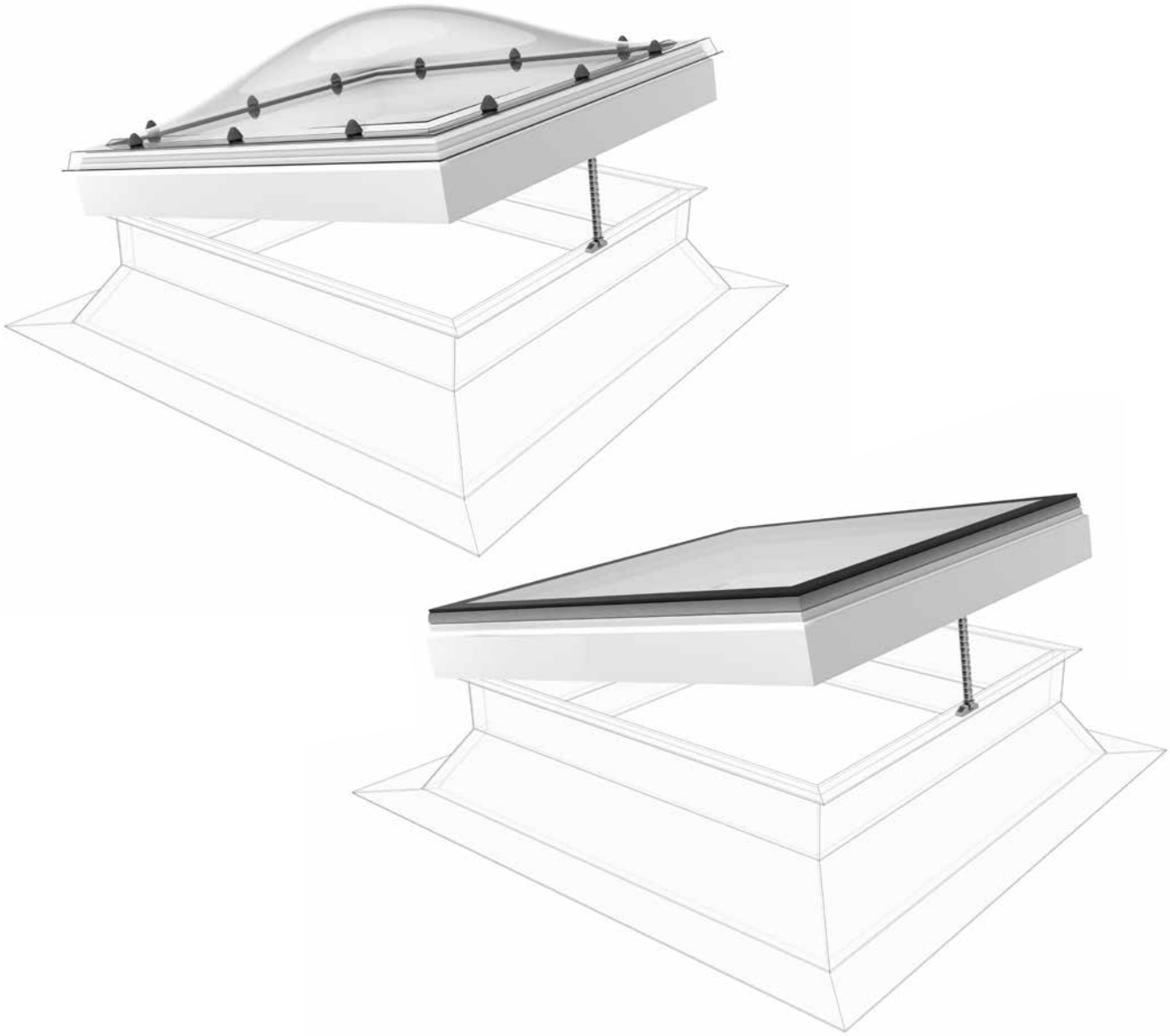

EN

iDome & iWindow Flex 2.0 with DuoControl

Mounting instructions

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2 SAFETY INSTRUCTIONS DURING INSTALLATION

Take the necessary and required safety precautions, such as safety nets and lifelines when installing from the outside, safety goggles, gloves, hard hat, etc.
Do not step on the glass.

Falling from height

- When using ladders to go on the roof:
  - Ladder in good condition?
  - Set up correctly at an angle of 75°?
  - Secured below and on top against moving?
  - Don't take heavy material with you on the ladder (3-point contact rule)! If possible, use a crane to lift the material.
- Do not lift material over the roof edge; use a crane to put the material on the roof.
- Roof zone: make sure the part of the roof where the skylight/barrel vault will be installed is safe enough, e.g. secure the edge (support system in the roof gutter that supports against the outer wall of the building, with suitable A B C categorie depending on the roof pitch) or use a scaffold so no one can fall off the roof. If the roof is not safe enough, always use a harness with lifeline (adapted to the fall height), attached to a suitable attachment point.
- Make sure the roof is stable and does not have dangerous openings or insufficient secure parts (e.g. corrugated sheets, ...). Take the necessary measures if this is not the case: strengthen, use suitable safety nets below the danger zones, ...
- Before making the roof opening for the skylight/barrel vault: make sure there are safety nets conform to the current legislation. The nets must be attached firmly and sufficiently to the building.
- When using an aerial work platform: always wear and secure your harness (mandatory)! Leaving the cage is forbidden.
- Never walk backwards on a roof, always walk forwards.
- Make sure there's enough light in the working zone.

Low-hanging obstacles and falling loads

- Forbidden to walk under or within a radius of 1m of a hanging or lifted load.
- Demarcate the danger zone below the skylight/barrel vault, in the building as well as on the outside near the outer walls (in case material slides off the roof). If the zone is demarcated, people cannot be hit by any falling loads. It's prohibited to enter these danger zones during construction.

Crushing hazard

- All working tools are in good condition, provided with a valid CE label and all necessary safety regulations. These cannot be removed.
- People who use these working tools are educated for this purpose. Protections are always present on all working tools. They are in good condition and need to be set correctly.

Tripping/falling

- Safety is key and it begins with order and tidiness. Clean everything immediately, leave nothing lying around.
- Trash needs to be sorted.
- Be cautious with electric cables (danger of tripping/falling). Never walk backwards!
- Make sure there's enough light in the working zone.

Sharp objects

- Make sure your fingers/hands are not pinched and watch out for cuts while handling skylights or barrel vaults.
- Be careful where you put your hands during the installation.
- Wearing cut-resistant gloves is mandatory.

Ergonomics

- Always lift loads correctly: bend your knees, move your feet instead of forcing your spine, lift as close to your body as possible.
- Parts of more than 25kg must be lifted with at least 2 persons.

Personal protective equipment

- Work clothes, safety shoes and helmet are mandatory for everyone.

- Lifeline and harness are mandatory if the edge is not secured enough or if there are no safety nets below the roof opening. They are also necessary when using an aerial working platform.

- Use gloves when handling skylight or barrel vault parts.

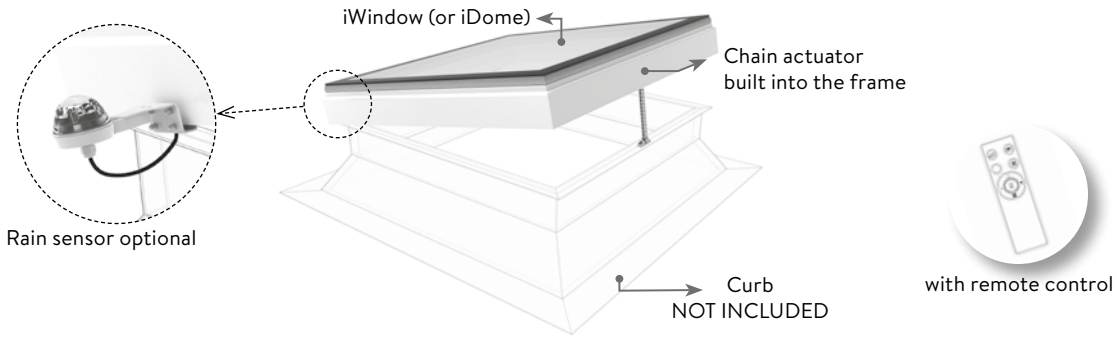
- Safety glasses and hearing protection are mandatory when using saws / grinders.

Always perform a Last Minute Risc Analysis!
If in doubt: STOP! Do not take unnecessary risks. Ask your supervisor if needed.

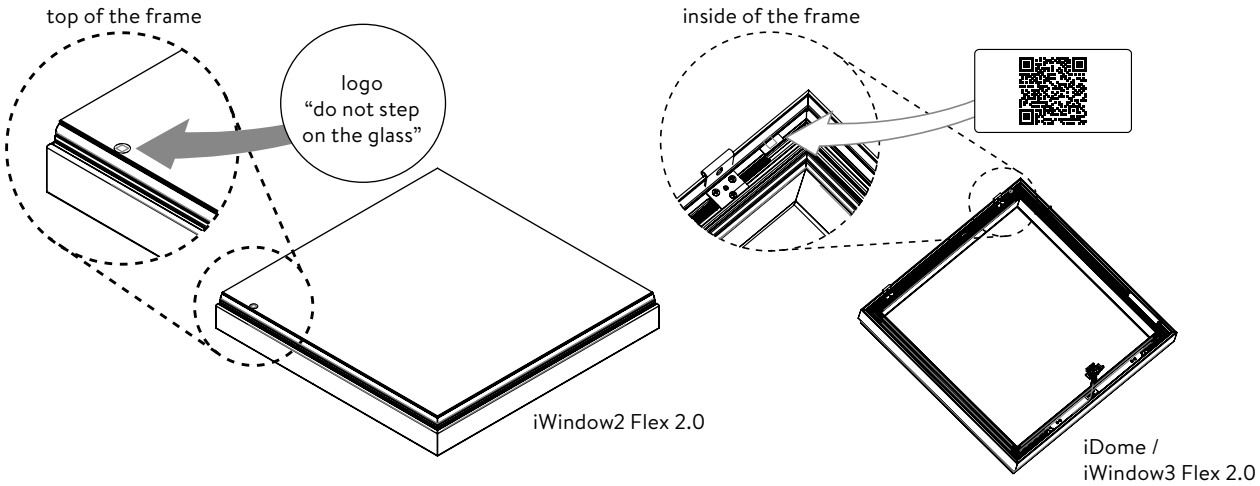
3 GENERAL

The iDome Flex 2.0 or iWindow2-3 Flex 2.0 is the openable hybrid skylight/flat roof window for applications in flat roofs with integrated 230 V chain actuator in the frame.
Flex 2.0 is available in 2 versions:
- without rain sensor
- with rain sensor

To prevent damage caused by rain or snowfall, we recommend the version with rain sensor.
This openable window is suited for fresh air ventilation.
Motor stroke length 25 cm.
The window can be operated via the included remote control or via a Matter compatible smart home application.



Questions or information about your iDome Flex 2.0 or iWindow2-3 Flex 2.0? Scan your NFC code.
You can find the code below the icon 'do not step on the glass' for iWindow2 Flex 2.0 (see drawing). For iWindow3 and iDome Flex 2.0 on the inside of the frame (see drawing). Thanks to this code, unique to your order, our customer service can help you further.



4 IMPORTANT INFORMATION

- Read instructions carefully before installation. Keep these instructions for future reference.
- The operating voltage is 230 V AC.
- Make sure when establishing the connection that there is no voltage at the terminals!
- Routing or installing of electrical cables and connections may only be performed by specialised companies.
- To avoid crushing of body parts, the zone of the openable section must always be avoided during installation.

Version with rain sensor:

- Do not paint or lacquer the rain sensor.
- Dirt on the rain sensor may cause operating problems. Therefore, it is recommended to clean the rain sensor with a soft wet cloth once or twice a year or when required.

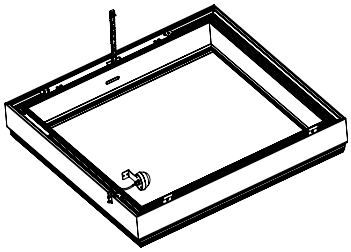
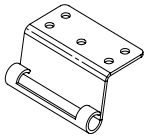
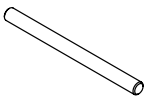
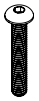
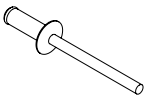
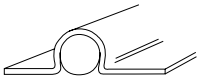
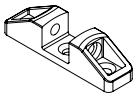
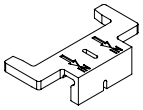
Before starting the installation or maintenance of the iWindow or iDome Flex 2.0, all necessary safety measures must be fulfilled. The iWindow2/3 Flex 2.0 or iDome Flex 2.0 needs to be installed by a professional.
Ask for the Declaration of performance (DoP).

5 BEFORE YOU INSTALL YOUR FLEX 2.0 PRODUCT

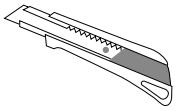
- Check your roof inclination:

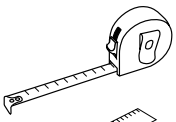
  iDome Flex 2.0: MIN. 0° - MAX. 25°
  iWindow2/3 Flex 2.0: MIN. 5° - MAX. 25°
- A base curb is not included in your Flex 2.0 product. The base curb must comply to the requirements stated in point 8 of this manual: "Requirements base curb (not included in the Flex product)".
- An operating voltage of 230V AC is necessary during installation.
- Provide suitable lifting gear or sufficient manpower (at least 2 persons) to install the heavy glass product.

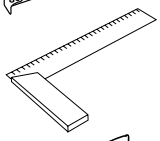
6 CONTENTS OF DELIVERY

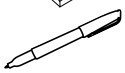
	PVC iOra frame with glass cover (iDome / iWindow) and rain sensor (*) (*) rain sensor optional		Chain bracket screw M6x30
	Bottom hinge stainless steel		Cross recessed screw with raised countersunk head Phillips DIN966 A-H Stainless steel A2 M5x20
	Threaded rod		Prevailing hexagon nut M5
	Hexagon socket mushroom head cap nut		Washer M5
	Hilo screw mushroom head / PH		Button head screw / hexagon socket M4x25
	Blind rivet		Hexagon lock nut M4
	Self-drilling hexagon washer head screw		Hilo screw countersunk head PH 4.8x25
	Cap nut M5 stainless steel		Rubber for cable
	Chain bracket		Chain bracket positioning tool
	RF remote control		

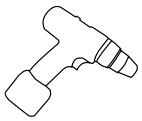
7 REQUIRED TOOLS

Utility knife 

Tape measure 

Square 

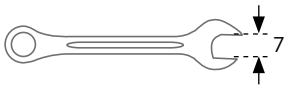
Marker 

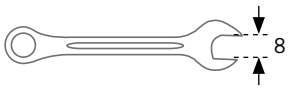
Electric drill 

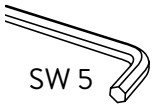
Drill bit diameter 4.5 mm

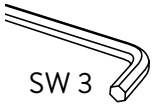
Drill bit diameter 5.5 mm

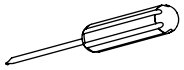
Drill bit diameter 12mm

Wrench SW 7 

Wrench SW 8 

Allen wrench SW 5
for chain bracket
screw M6 x 30 

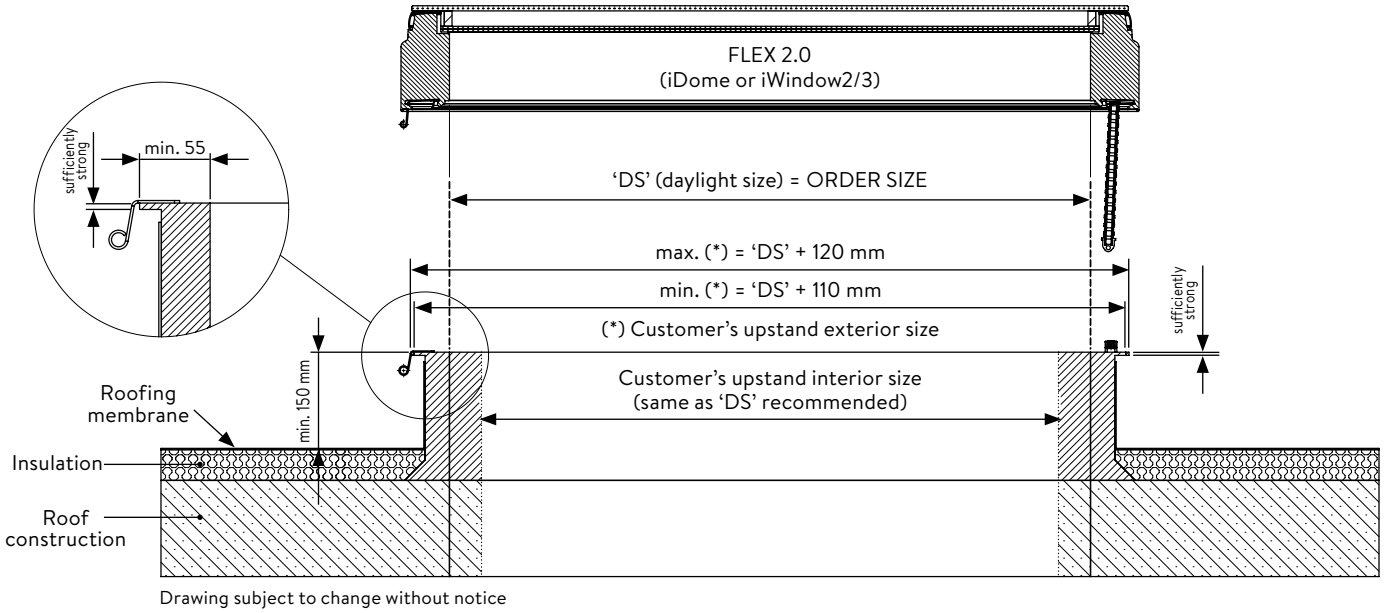
Allen wrench SW 3
for screw M4 

Phillips screwdriver PH2 

8 REQUIREMENTS BASE CURB (NOT INCLUDED)

Your Flex 2.0 product does NOT come with a base curb.
The Flex 2.0 window is optimized to use with a GRP curb.
The Flex 2.0 window can also be used with a PVC curb.
For a curb construction other than GRP or PVC: other mounting hardware may be necessary.

8.1 Curb construction



Drawing subject to change without notice

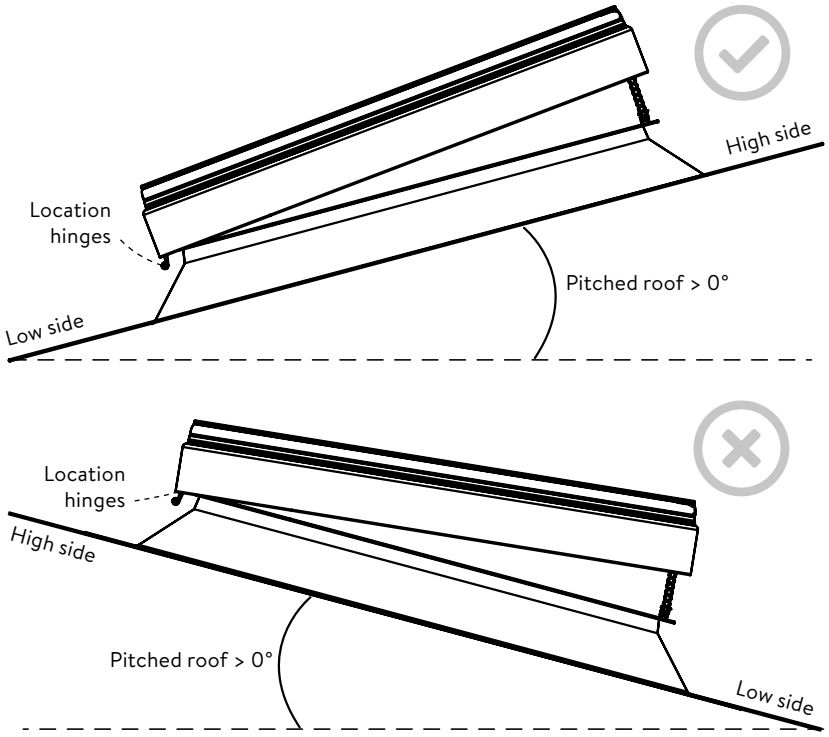
The curb (not included) must comply with the following conditions:

- Upper surface of curb: min. 15 cm above the roofing material
- Maximum overall size of curb = daylight size Flex 2.0 + 12 cm
- Minimum overall size of curb = daylight size Flex 2.0 + 11 cm
- Width of top flange of curb: at least 55mm
- Daylight size of curb and daylight size of Flex 2.0 are preferably equal
- The curb must be strong enough to carry the full weight of the Flex 2.0
- Only suited for polyester, metal or PVC curbs. Not allowed on wooden curbs.

9 PITCHED ROOF & LOCATION OF THE HINGES

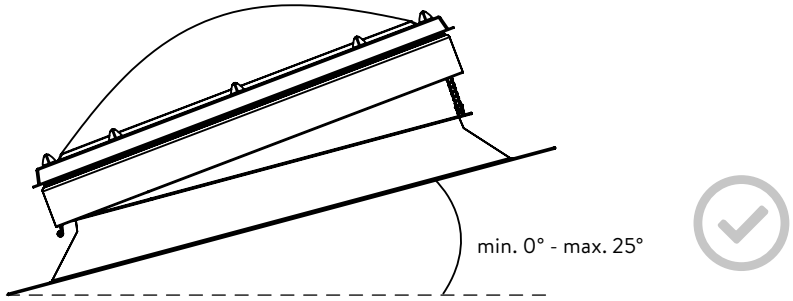
9.1 Pitched roof: location of the hinges

The hinges should always be located on the lowest side of the roof!



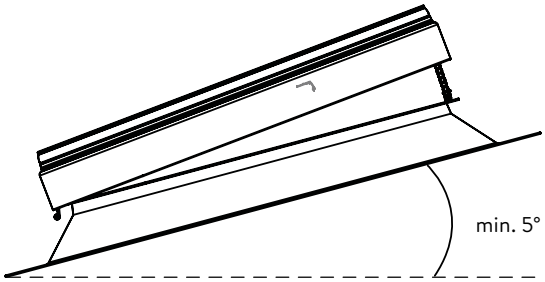
9.2 Minimum roof inclination: iDome

Pitched roof: iDome: roof inclination between 0° & max. 25°
Hinges always on low side.



9.3 Minimum roof inclination: iWindow2 & iWindow3

In case of an iWindow2 and iWindow3, a minimum slope of 5° is advised to prevent dirt on the outside of the glass and water stagnation.
Hinges always on the low side.

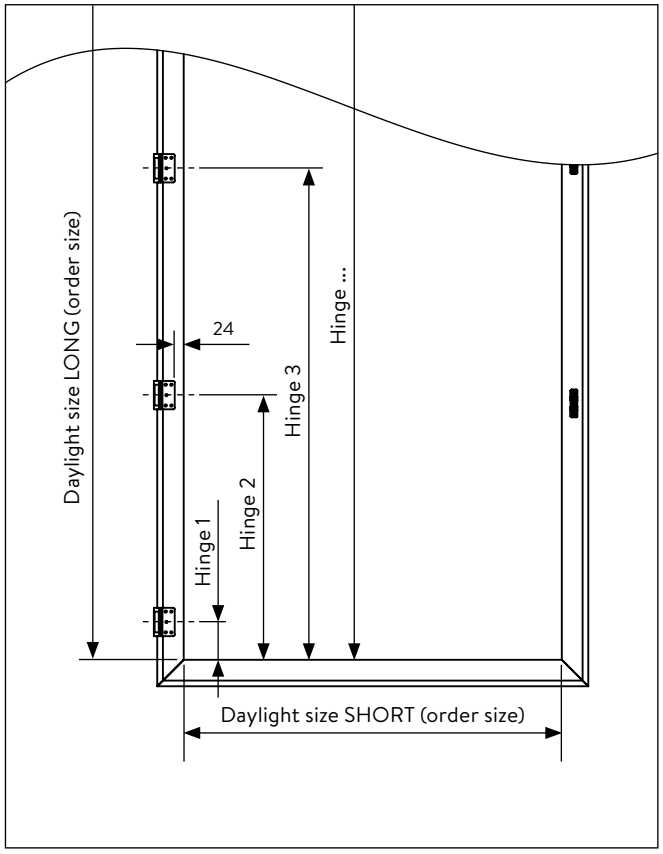


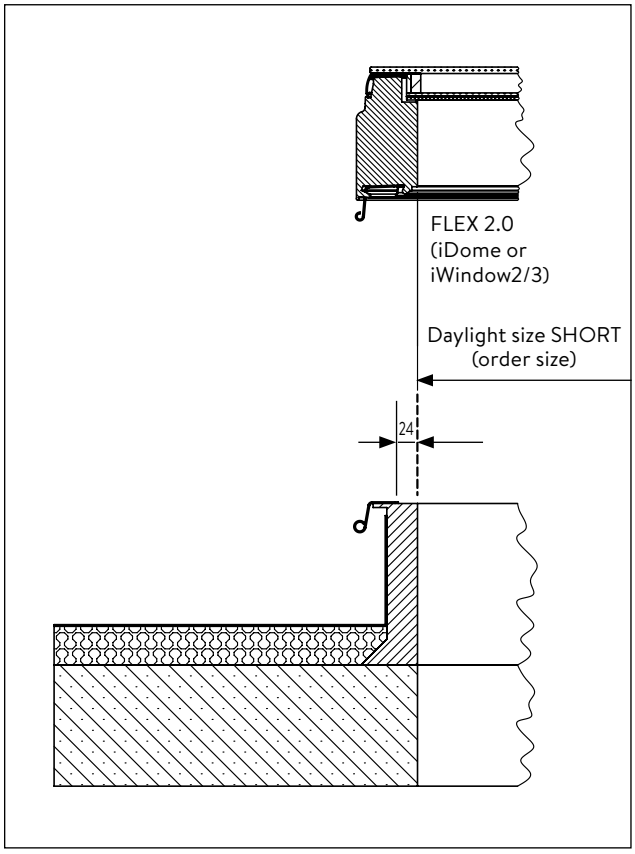
10 MOUNTING THE HINGES ON THE CURB

10.1 Location of the hinges

Install the bottom hinges on the curb. Measure the distance from the daylight size to the middle of the hinges.

It's important the hinges are positioned correctly!





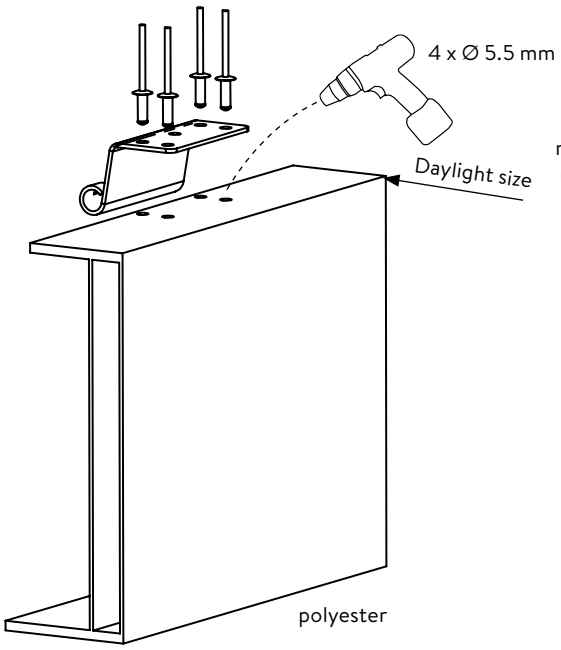
Daylight size of the longest side (centre of the hinges) (mm)	Quantity	Hinge 1	Hinge 2	Hinge 3	Hinge 4	Hinge 5	Hinge 6
700	2	50	650				
750	2	50	700				
800	2	75	725				
850	2	75	775				
900	2	100	800				
1000	2	100	900				
1050	2	100	950				
1100	3	125	550	975			
1200	3	150	600	1050			
1250	3	150	625	1100			
1300	3	150	650	1150			
1400	3	150	700	1250			
1500	3	100	750	1400			
1600	3	100	800	1500			
1650	3	100	825	1550			
1700	3	100	850	1600			
1750	3	100	875	1650			
1800	4	100	633	1167	1700		
1900	4	100	667	1233	1800		
2000	4	100	700	1300	1900		
2100	4	100	733	1367	2000		
2200	4	100	767	1433	2100		
2250	4	100	783	1467	2150		
2300	4	100	800	1500	2200		
2500	5	100	675	1250	1825	2400	
2800	6	100	620	1140	1660	2180	2700

10.2 Mounting hardware for the hinges

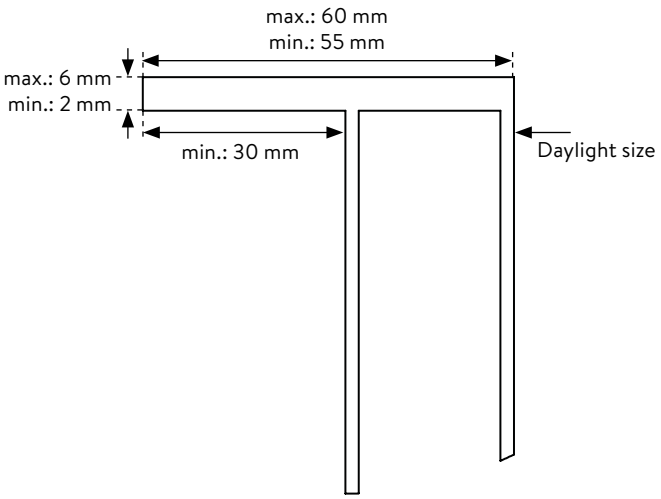
Use the appropiate hardware to mount the hinges on the curb!
Your Flex 2.0-product includes mounting hardware for polyester, metal or PVC curbs.
For other types of curbs or curbs with different flange dimensions: Use suitable mounting hardware to attach the hinges.

10.2.1 Polyester curb

Use the supplied rivets.
Pre-drill the holes with a 5.5 mm drill bit.

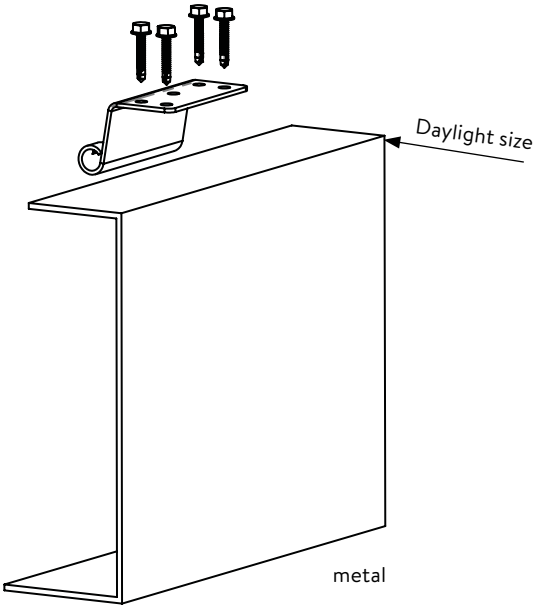


Curb flange dimensions:

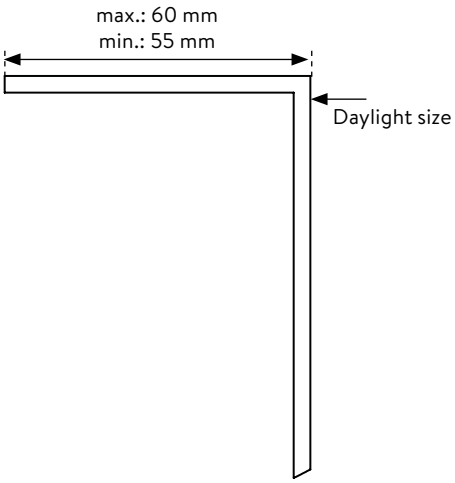


10.2.2 Metal curb

Use the supplied self-drilling hexagon washer head screws 4.8 x 25.

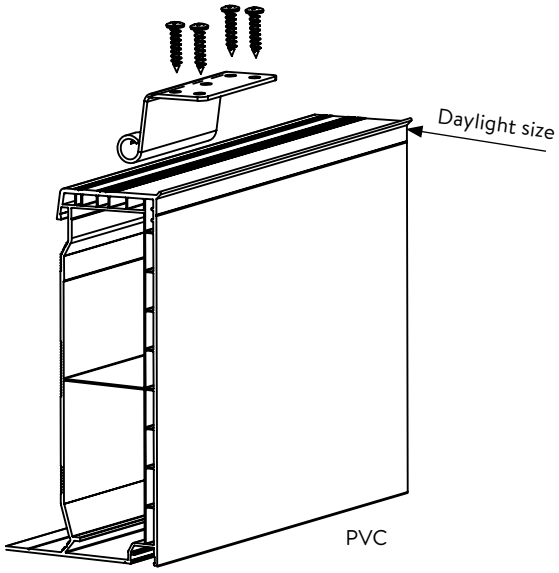


Curb flange dimensions:

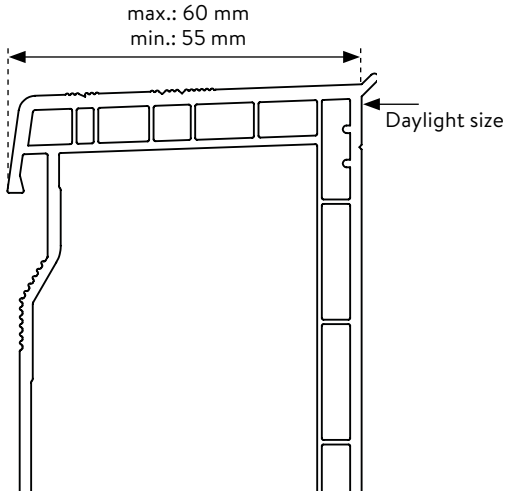


10.2.3 PVC curb

Use the included HILO screws mushroom head/PH.



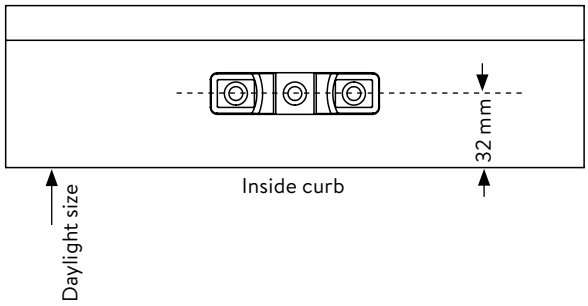
Curb dimensions:

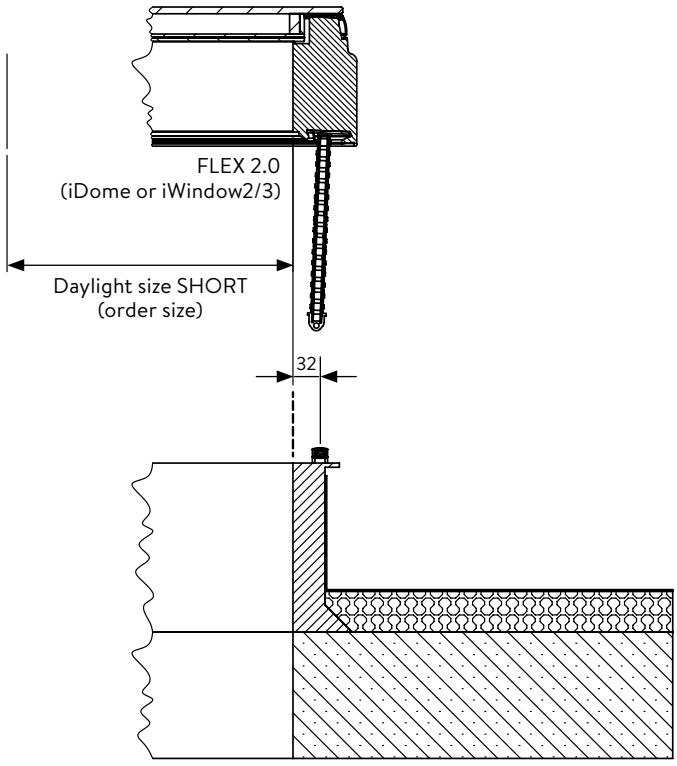


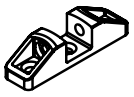
11 MOUNTING THE CHAIN BRACKET ON THE CURB

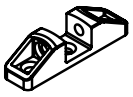
11.1 Location of the bracket(s)

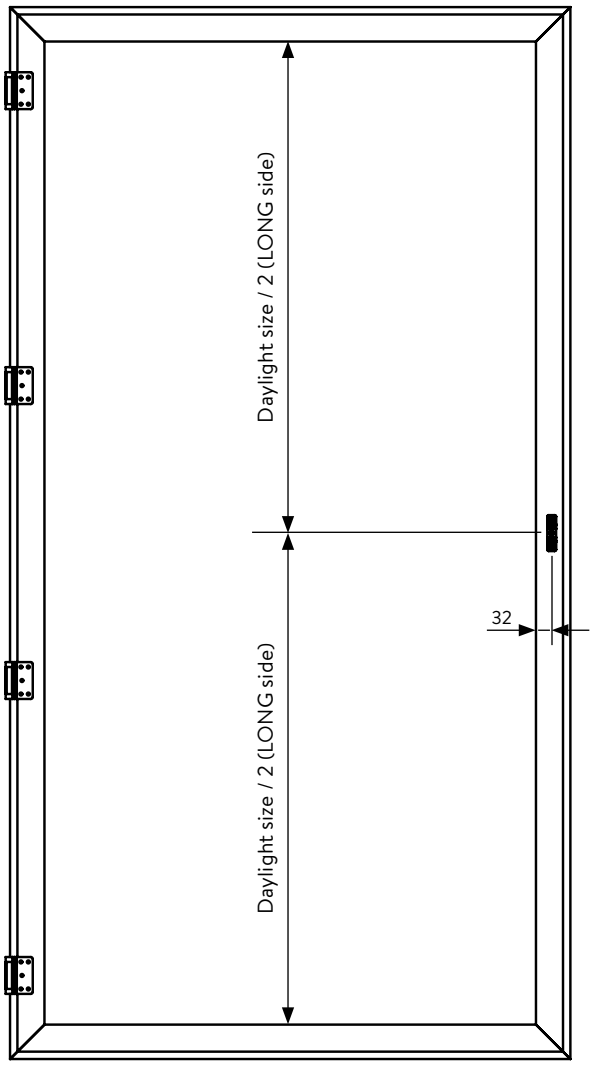
Important notice:
the middle of the chain bracket must be placed 32 mm from the daylight size (longest side).

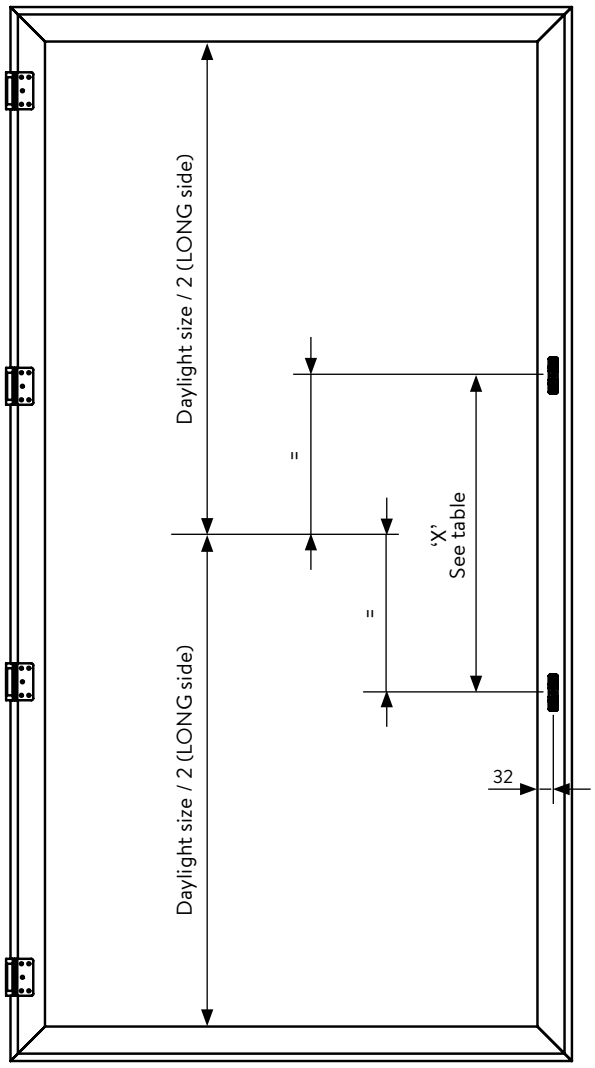




1 x Ⓜ = 1 x 

2 x Ⓜ = 2 x 

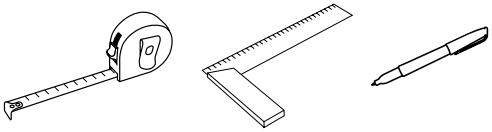




Spacing between chain brackets (in case of 2 actuators):

Daylight size	'X' (spacing chain brackets)
1303 < daylight size ≤ 2000	644 mm
2000 < daylight size ≤ 2600	1144 mm
2600 < daylight size ≤ 3200	1544 mm

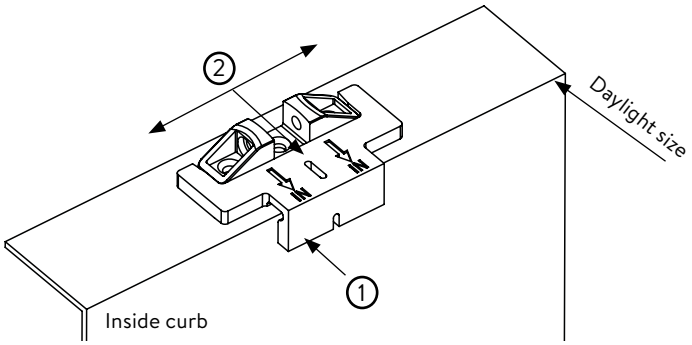
Accurately mark the 2 positions with a marker:



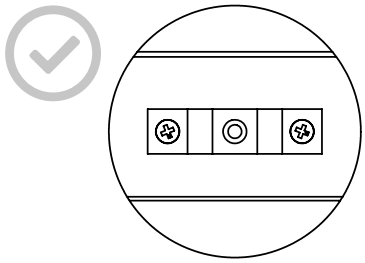
11.2 Mounting the chain bracket to the curb

① Press the positioning tool against the inside of the curb

② Align the slot in the positioning tool with the marking on the curb.



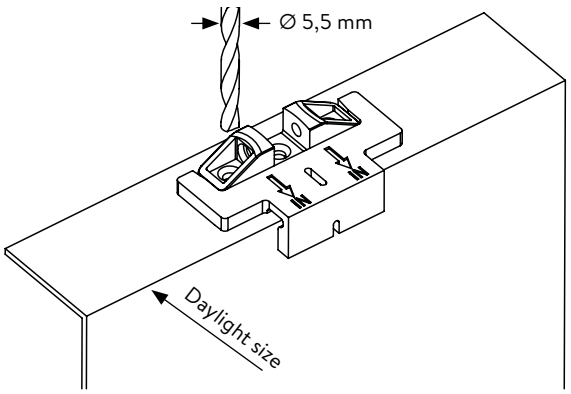
Use the appropriate hardware to mount the hinges on the curb!
Your Flex 2.0-product includes mounting hardware for **polyester**, **metal** or **PVC** curbs.
For different types of curbs or curbs with different flange dimensions: use suitable mounting hardware to attach the hinges.



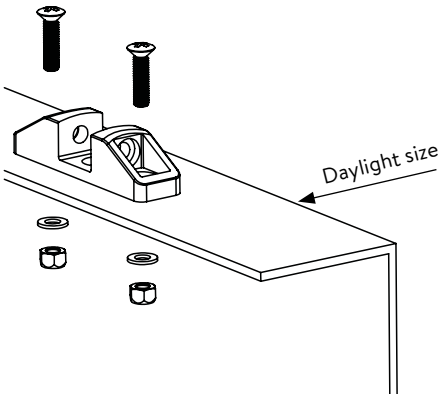
Only use the two outer holes!

11.2.1 Polyester & metal curbs

Position the bracket correctly.
Pre-drill with a Ø 5.5 mm drill bit.

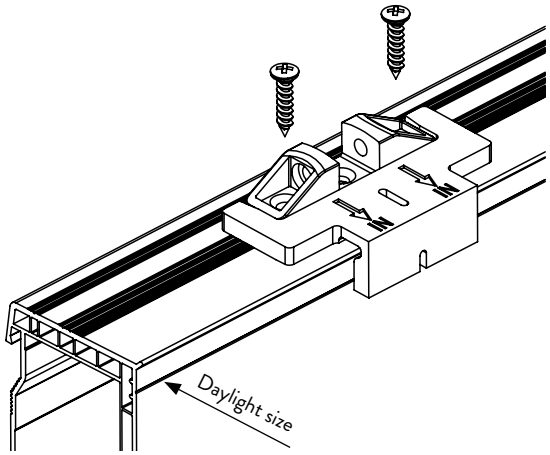


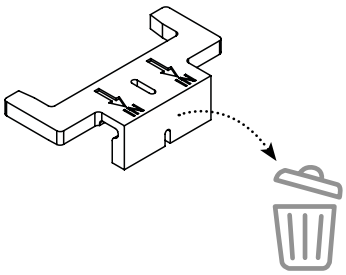
Fix the bracket with the included bolts, washers and nuts M5.



11.2.2 PVC curb

Position the bracket correctly using the positioning tool.
Use the included HILO screws to fix the bracket.





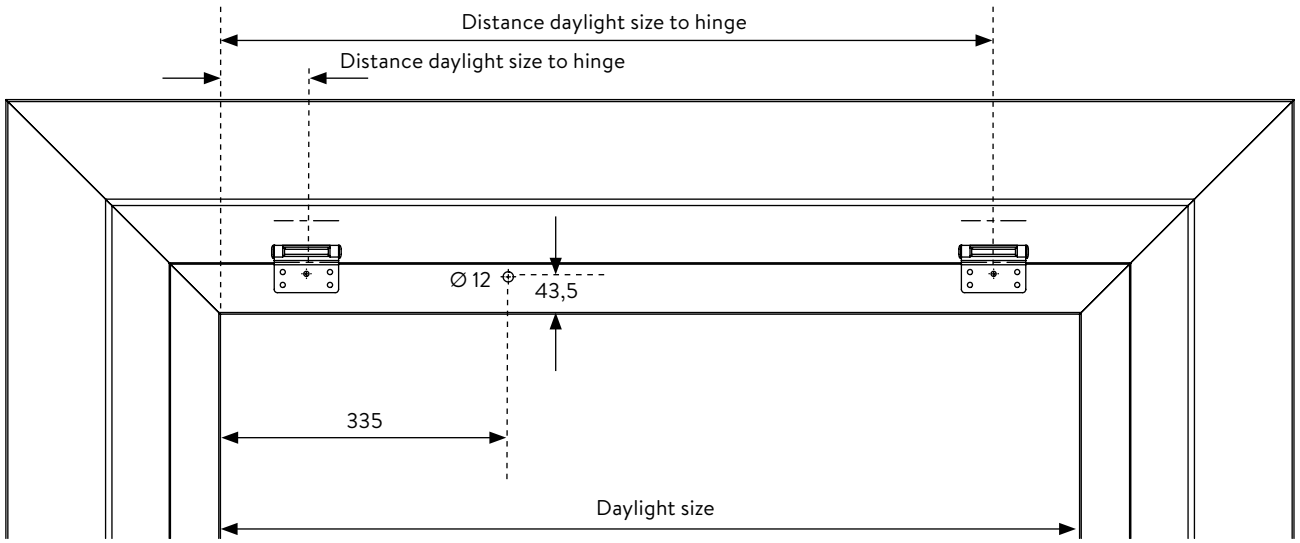
12 PREPARATION OF THE CURB FOR CABLE

Your Flex 2.0 product is equipped with 1 electrical cable containing 6 cores.
This cable serves 2 purposes:

- Providing 230 V AC power
- Connection to a switch to operate your Flex 2.0 product

The cable comes out of the frame on the hinge side of the setup.
Drill a hole ∅ 12mm in the upper flange of the curb for the electrical cable.

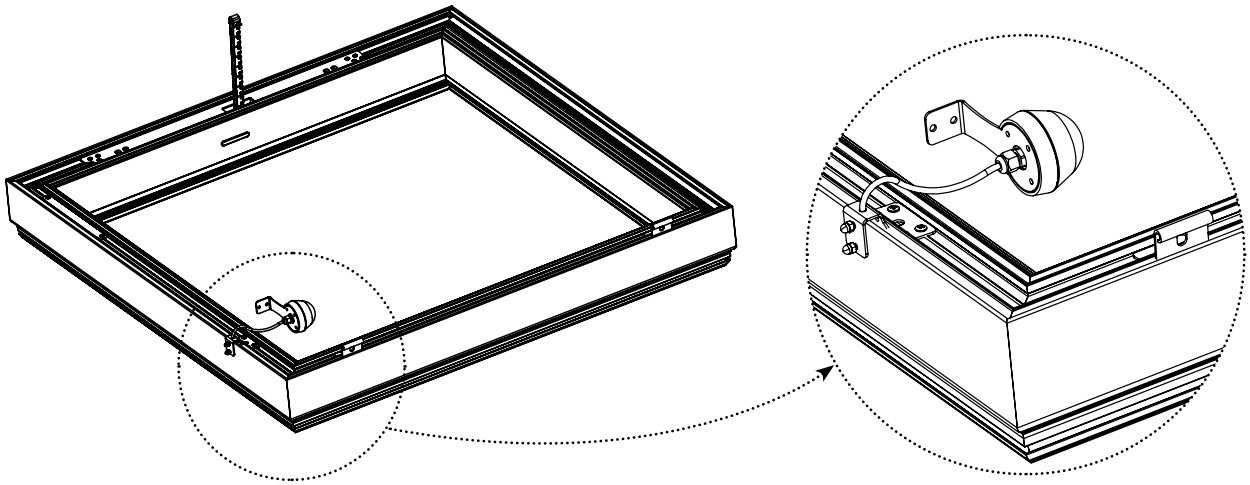
Top view



13 PRE-INSTALLING THE RAIN SENSOR ON WINDOW

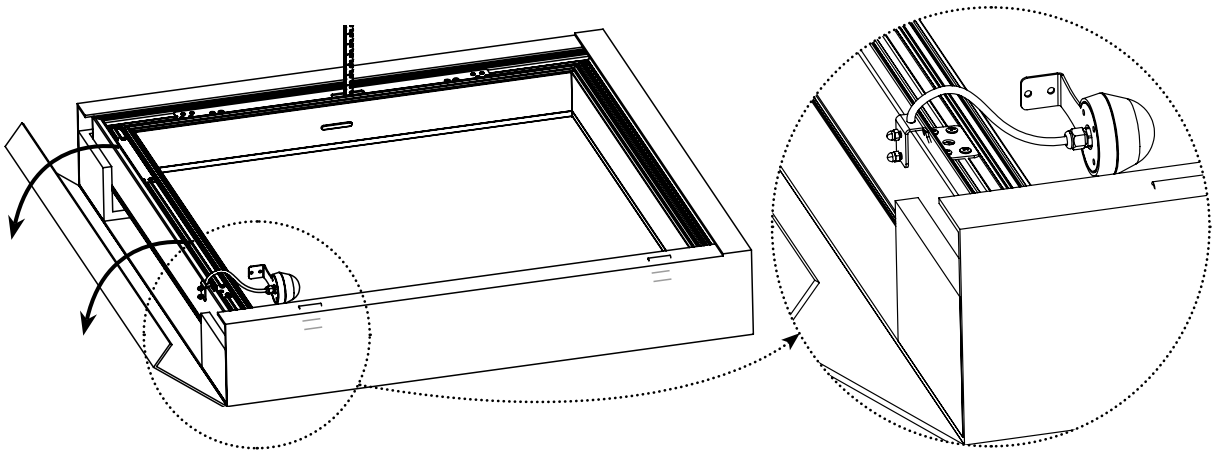
Only if equipped with rain sensor.

For transport, the rain sensor is stowed inside the window.

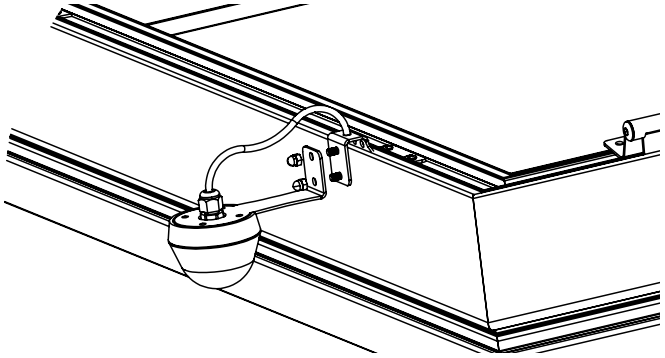


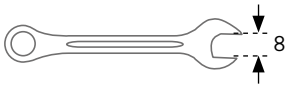
13.1 Mounting rain sensor on bracket

Before removing the window from the packaging:
Open up the side where the rain sensor is located in order to have easy access to the rain sensor bracket.

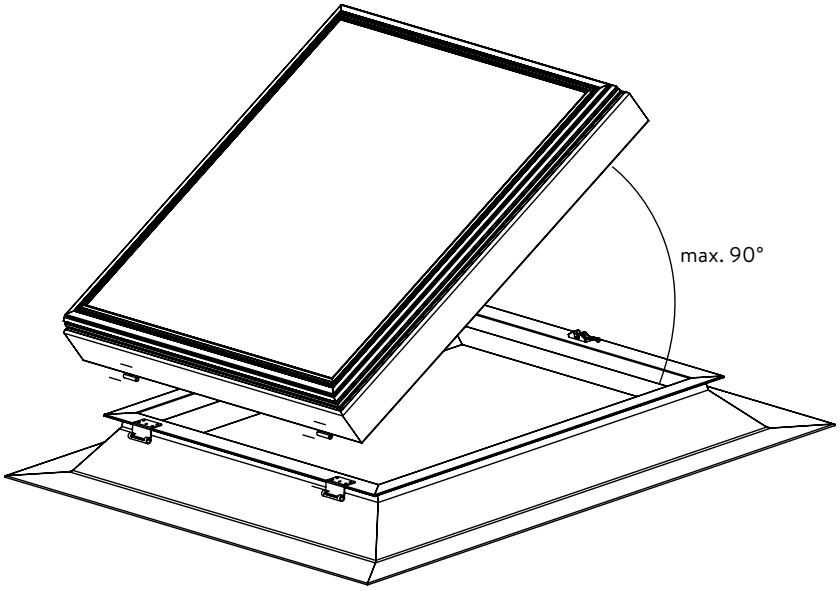


Use the 2 included hexagon domed cap nuts. Tighten with a wrench 8 mm.



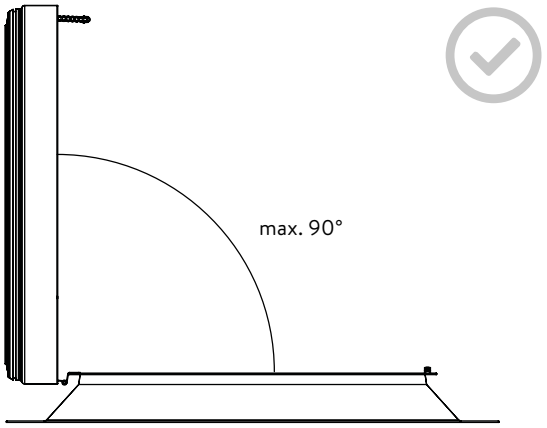


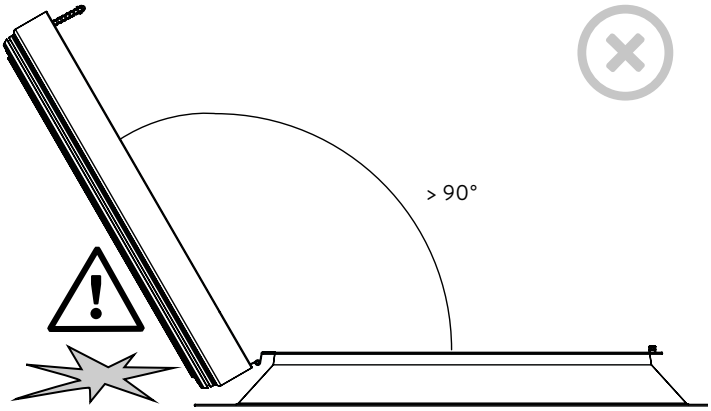
14 ASSEMBLY GLASS FRAME ON CURB



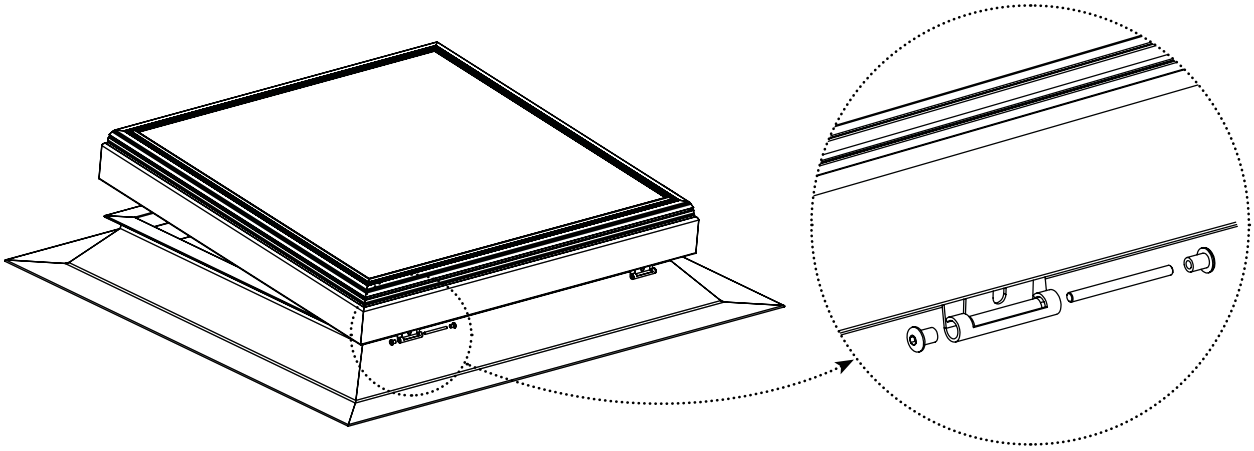
Lift and open the frame with glass cover at max. 90° and hold the frame in this position.

Turning over without support can cause damage!



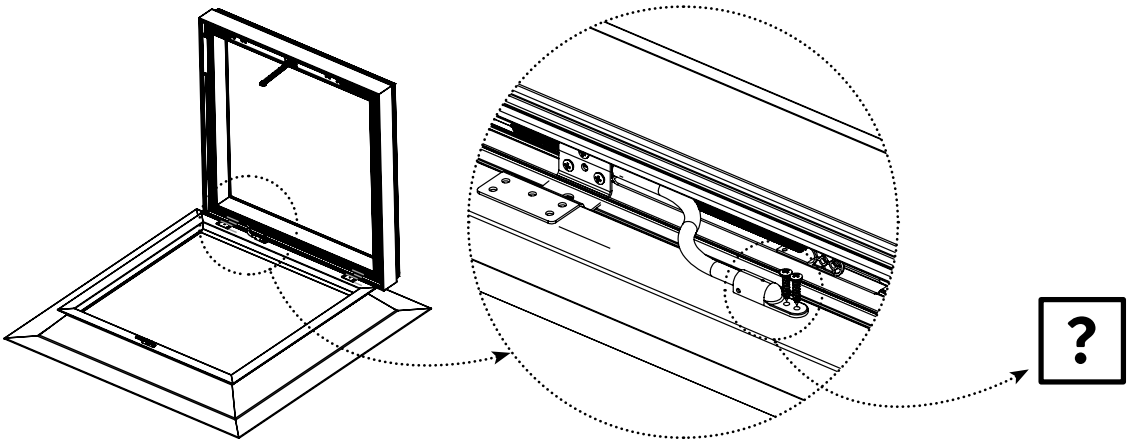


The hinge brackets are then permanently secured with the supplied threaded rod and two cap nuts. These can be made burglar-proof by adding a drop of Loctite to the cap nuts. This glue application may also help to prevent incorrect opening of the window after installation.



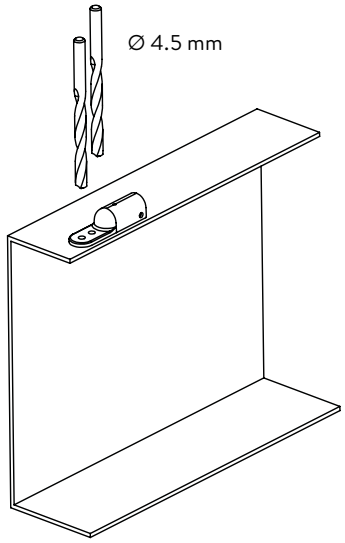
15 ELECTRICAL CABLE THROUGH THE CURB

Take the outcoming electrical cable and put it through the drilled hole in the curb.
Fix the cable routing with the appropriate hardware.



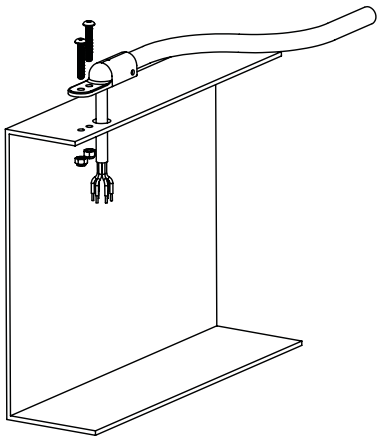
? Polyester or metal curb?

Use the cable routing as a guide to drill 2 holes in the curb.



polyester or metal

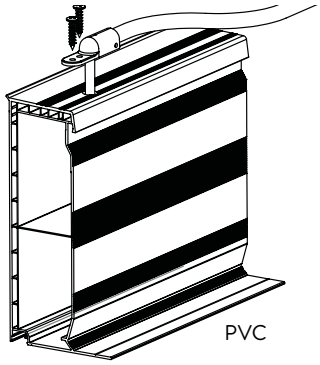
Use the included M4 bolts and nuts to fix the cable routing.



polyester or metal

? PVC curb?

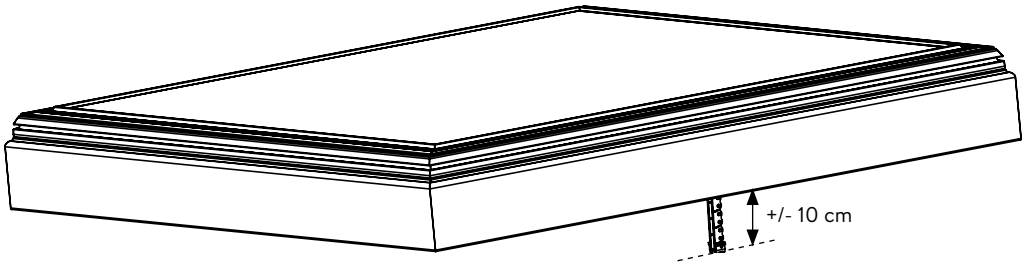
No pre-drilling needed. Use the included screws to fix the cable routing.



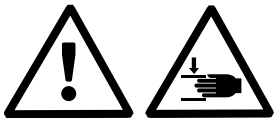
PVC

16 ACTUATOR CONNECTION TO BRACKET

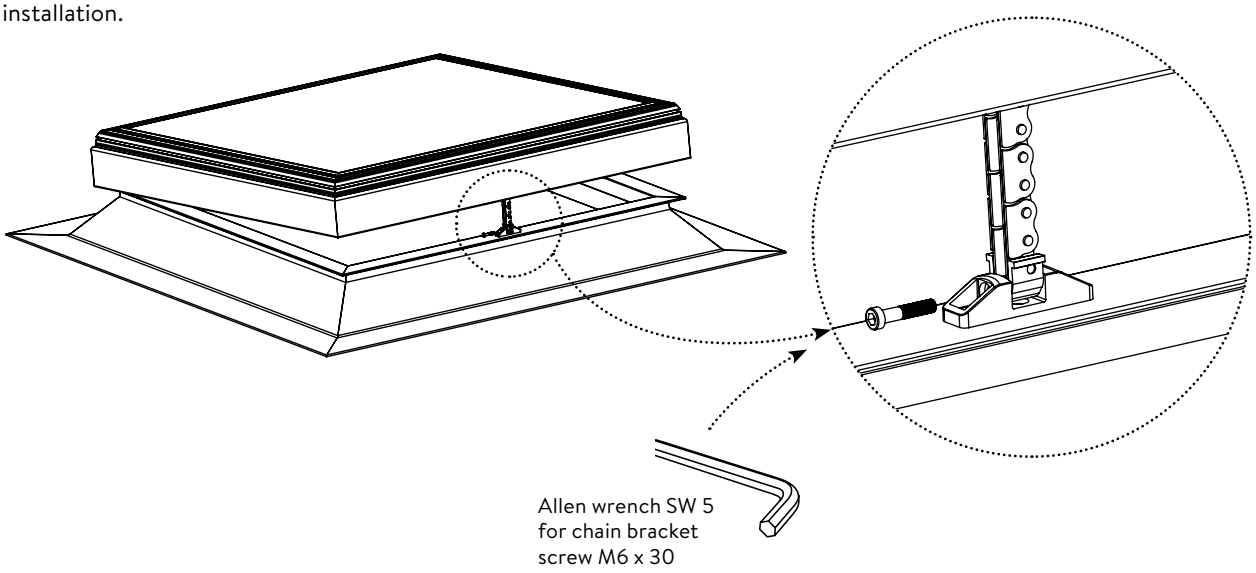
Right out of the box, the chain length of your Flex 2.0 product sticks out approximately 10 cm.
This is done so you do not need to have mains power to mount the chain to the bracket.



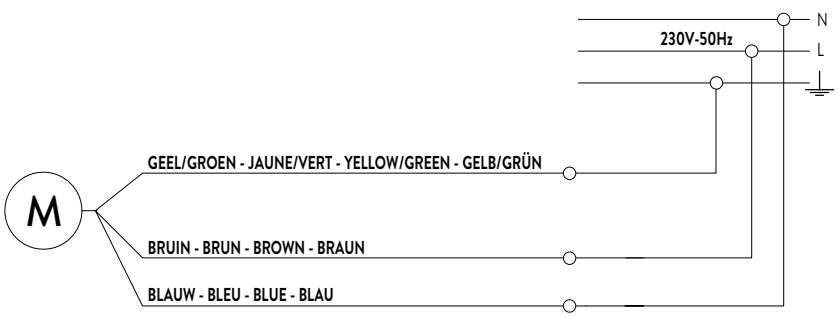
Remove any protection foam from the chain.



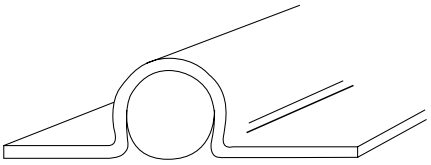
CAUTION: crushing hazard!
Safely place temporary spacer elements (e.g. wooden blocks) between the frame and the curb as assistance during the installation.



Electrical connection



Setup cable passage can be used:
If the installation of the cable towards the inside of the new or existing curb is difficult, then the cable can also be laid on the outside of the roof structure by using the supplied rubber cable passage.

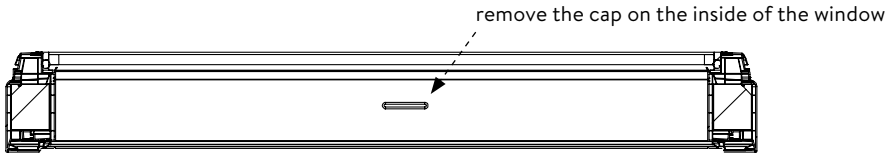


17 DISASSEMBLY

(When having problems with the power supply or actuator.)

Remove the small white cap on the inside of the window (on the side of the actuator).
Use two small objects to push in both holes of the actuator.
The window can now be opened manually.

WARNING: the Flex 2.0 is not suited for frequent roof access!



iWindow2/3 Flex flat roof window

Remove all protective foil and stickers with tips (maintenance tips and tips for the installer). When finished, the product is ready to use.

iDome Flex hybrid skylight

The hybrid skylight must always immediately be provided with a single- or double-walled plastic skylight of choice. There cannot be any damp or dirt between the glass cover and the plastic dome. Remove all protective foil and stickers with tips (maintenance tips and tips for the installer) and mount the skylight according to the mounting instructions of the skylight. When finished, the product is ready to use.

18 TECHNICAL INFORMATION

Version	Voltage (**)	Pushing force	Pulling force	Stroke	Velocity
Single actuator	24 V DC	600 N	600 N	250 mm	12.5 mm/s
Second actuator (*)	24 V DC	600 N	600 N	250 mm	12.5 mm/s

(*) For Flex 2.0 with 2 actuators
(**) Effective operating voltage for the actuator(s). Connection voltage is 230 V AC

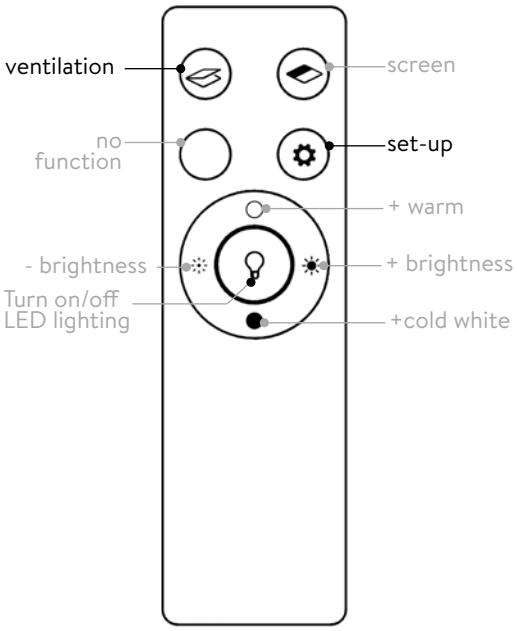
- Voltage: 230 V AC ± 10 % / 50 H
- Actuator voltage: 24 V DC
- Open / close velocity: ± 40 s
- Life cycle: > 10.000 activations
- Work cycle: 10 % max. 2 min / 18 min
- Temperature range: (-10 °C to + 60 °C)
- Rain sensor: 24 V DC

19 CONTROL

19.1 RF remote control

The provided remote control is connected in advance to your Skylux device.

19.1.1 Functionalities



Ventilation: open/stop/close the window.

Screen (sunblind (S) or blackout blind (V) or insect screen (I)): open/stop/close the screen.

LED: turn LED lighting on or off

\+ brightness LED

\- brightness LED

\+ cold white

\+ warm white

Set-up: use this button to change the device settings (see FAQ, page 12)

19.1.2 Rain detection

The skylight can optionally be equipped with a rain sensor. When there is an active signal, the skylight will close automatically. The skylight remains closed after detection of precipitation. If you still want to open the skylight, you must use the remote control. However, keep in mind that the skylight will close again after 30 minutes if the rain sensor still detects precipitation. If you would like to install an additional rain sensor afterwards, you can choose a wireless Matter compatible rain sensor or a sensor that is compatible with the chosen home automation app. Please note: the automation that closes the skylight when it rains must be programmed in your home automation app.

19.1.3 Keypad

There is a keypad on the ventilation grid in the skylight curb. This is equipped with three push buttons and 3 LED lights. The function of the keypad is to adjust certain device settings and provide feedback to the user.
It is important that this keypad is always accessible after installation and finishing.

19.1.4 FAQ

The remote control no longer works

Step 1 • Check reception

Move closer to the device. Check whether the green light on the keypad lights up when you press a button. This means that the signal has been received correctly.

Step 2 • The battery of the remote control is dead

If the green light on the keypad is not lit (see test above), check the battery of the remote control. Open the cover on the bottom of the remote control and replace the 3V CR2032 button cell battery.

Step 3 • There is a problem with the power supply

Check the power supply of your device.
Briefly press the set-up button on the remote control . Check the number of lights that are lit on the keypad:

- 3: power supply is OK
- 0: possible problem with the power supply

Step 4 • The remote control is not paired with your device

If the green light does not illuminate during operation and there is no problem with the power supply, then the connection may be lost.
>> Follow the instructions below 'I want to pair multiple products on one remote control'.

Step 5 • If the red light on the keypad blinks, the device is in error

LED flashes 2x: object detection: your device detected an object, which stopped the movement.
Check your device and remove the object if necessary.
LED flashes 3x: loose cable detection: the electrical connection of your device may be defective.
>> Contact Skylux (service@skylux.be).

19.1.5 I have lost the remote control

It is possible to pair a new remote control to your device:

1. Order a new remote control (www.skylux.eu).
2. Push and hold the pairing button on the keypad (P) and release it after hearing 2 beeps
   At the same time, the green LED on the keypad will also flash twice.
3. The blue LED on the keypad will now flash.
4. Now press any button on the new remote control.
5. 3 short beeps confirm the connection, the green LED on the keypad will also flash 3 times.

19.1.6 I want to pair multiple products on one remote control

1. Push and hold the pairing button on the keypad (P) of the device you wish to add and release the button after hearing 2 beeps . At the same time, the green LED on the keypad will also flash twice.
2. The blue LED on the keypad will now flash.
3. Now press any button on the new remote control.
4. 3 short beeps confirm a successful pairing of the device. The green LED on the keypad will also flash 3 times.

Please note: If you pair multiple devices with one remote control, the remote control may not have sufficient range to control all devices. This means that the devices may not all be in the same position. If this is the case, you can synchronise the devices again by long pressing the function symbol on the remote control within range of the device, this will place all devices in the same position.

19.1.7 I want to use multiple remote controls for one device

1. Use a remote control that is already paired to the device. If you don't have a remote control, please follow the instructions below 'I have lost the remote control' and repeat for each additional remote control.
2. Push and hold the set-up button and release it after hearing 2 beeps . At the same time, the green LED on the keypad will also flash twice.
3. The blue LED on the keypad will now flash.
4. Now press any button on the new remote control.
5. 3 short beeps confirm that the new remote control has successfully been paired. The green LED on the keypad will also flash 3 times.

Please note: a maximum of 10 remote controls can be paired per device.

19.1.8 I want to unpair my remote control(s)

1. Push and hold the reset button on the keypad (R) and release it after hearing 2 beeps first and then 3 beeps ♫♫♫ At the same time, the green LED on the keypad will also flash three times.
2. The red light LED on the keypad will now blink.
3. Confirm the reset by briefly pushing the reset button “R”.
4. 3 short beeps ♫♫♫ confirm that the remote control(s) have successfully been unpaired. The green LED on the keypad will also flash 3 times.
5. If you want to pair again, follow the instructions below ‘I have lost the remote control’.

19.1.9 Specifications

The remote control is only meant for inside use. Do not expose the remote control to humidity or rain.

RF frequency	433 MHz
Dimensions	121 x 36 x 10 mm
Batterie	3V CR2032
Colour	Black

19.2 Smart Home control

Scan the QR code to view the instructions for adding your device to a Smart Home application.

Please note: The QR code on the front of this manual and on the supplied remote control is the Matter QR code. You need this to add your device in the chosen Home Automation app. Do not lose this code!

ONLY USE ORIGINAL PARTS SUPPLIED BY SKYLUX. FAILURE TO USE ORIGINAL PARTS VOIDS THE GUARANTEE.

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Hello daylight!