

EN

Skylux[®] electric screen Solar

Mounting instructions


SKYLUX
Hello daylight!

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SAFETY

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 category 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 1 m 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 25 kg 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.



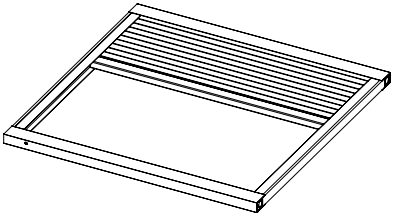








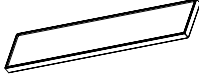
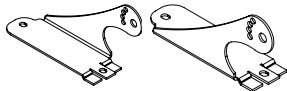








- Safety glasses and hearing protection are mandatory when using saws / grinders.

Always perform a Last Minute Risk Analysis!

If in doubt: STOP! Do not take unnecessary risks. Ask your supervisor if needed.





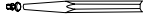
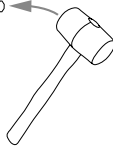


We accept no liability for damage to the cloth due to water droplets, mold, insect droppings or insects in the screen.

OVERVIEW PARTS

	#	Electric screen Solar Possibilities:  Sunblind  Blackout blind  Insect screen
	77375	Leaf spring
	5115	HiLo screw 25 mm PH2 - for installation in PVC curb
	78278	Rivet white 5.6 mm
	111812	Installation instructions electric screen Solar
	110751	Remote control
	112209	Solar panel
	112201 112202	Brackets solar panel
	112205	Drill gauge
	112206	Cable cover
	112212	Cable Solar
	113437	Cylinder screw with hexagon socket
	113438	Split lock washer
	113439	Fastener
	82204	HiLo screw 5.3 x 45 mm PH2 stainl. steel - for installation cable covers
	78278	Rivet white 5.6 mm

Depending on its dimensions, the screen starts on the short or long side.

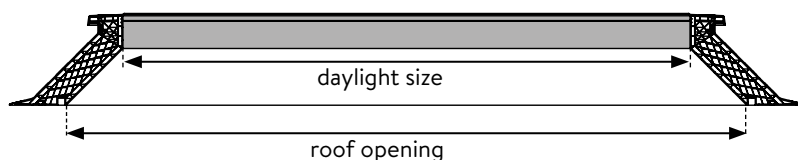
NECESSARY TOOLS

PVC curb	GRP curb
PH2 	
	
Ø 8.5 minimum drill bit length 110 mm	 
	Ø 5 
	Ø 8.5 
	minimum drill bit length 110 mm

DIMENSIONS AND CURB

In general:

The dimensions of the electric screen depend on the **daylight size** of the curb. The electric screen is to be **installed in the daylight size**, at the top of the curb.



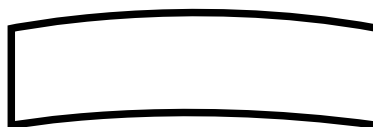
Curb requirements:

It is important that the curb and its daylight size are **perpendicular** and have **no deformations**.

Correct: perpendicular and no deformations



Wrong: not perpendicular and deformations



INTERIOR FINISH

During installation and any further plasterboard finishing at the ceiling and curb, the **accessibility** and possible dismantling of the electric screen must be taken into account. This is to ensure good service afterwards. Disassembly via the top or outside of the skylight/window is not possible.

Finish:

Provide the necessary details for any further finish the inside of the curb.

The standard finish is done with plasterboard up to the roof opening, and up to the provided lining groove at the bottom of the curb if applicable.

If a higher finish with plasterboard is desired, a distance of at least 20 mm must be left between the top side of the plasterboard and the bottom of the electric screen. The customer must always remove the plasterboard if service is needed and/or if the electric screen must be removed.

ORIENTATION

The electric screen is always placed **from the inside** of the curb or skylight/window.

The solar panel is attached to the outside of the iWindow's PVC frame.

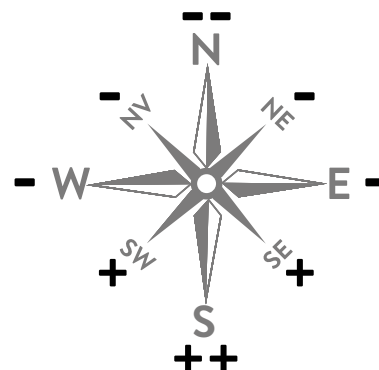
The solar panel will be on the southernmost side.

The angle of the screen with the buttons is always the same as the angle where the solar panel is located.

This way, you will end up in one of the following 6 correct situations.

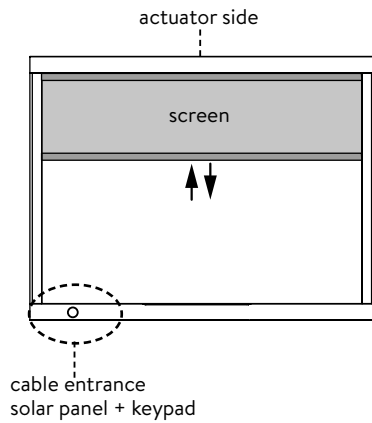
Avoid shadows:

Solar panel must have at least 2 hours of direct sunlight per day.



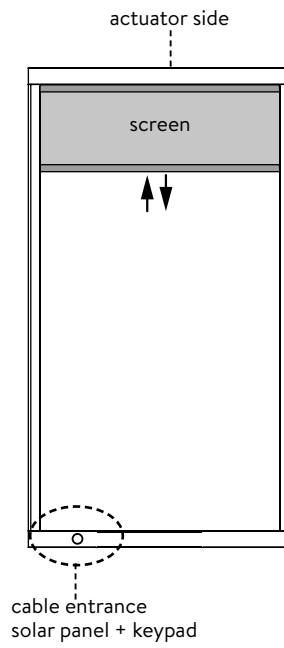
long side of screen \leq 2000 mm

top view



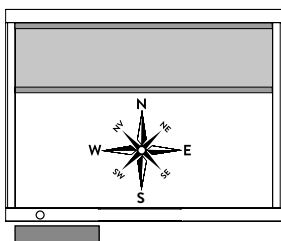
2000 mm < long side of screen > 3000 mm

top view



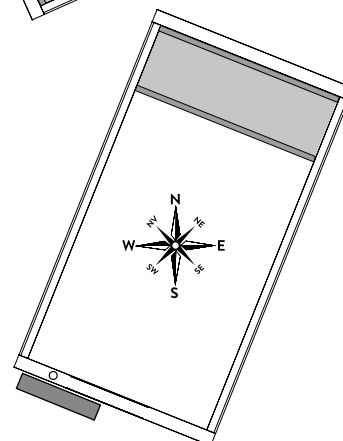
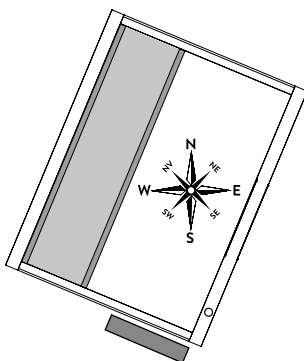
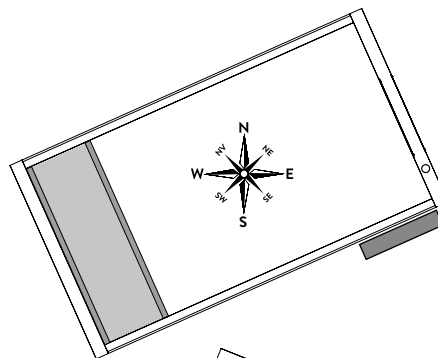
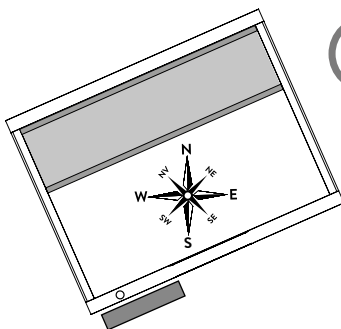
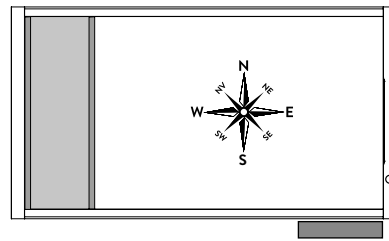
long side of screen \leq 2000 mm

top view



2000 mm < long side of screen > 3000 mm

top view



INSTALLATION OF SOLAR PANEL

Remove everything from the packaging.

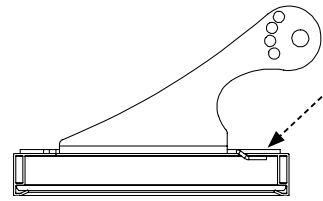
Do not use a utility knife to prevent any damage.



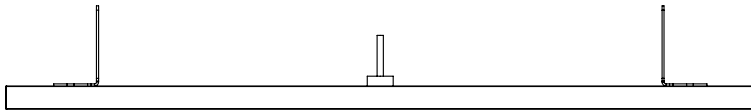
Preparation of the solar panel

Take the solar panel and place it with the cable side up.

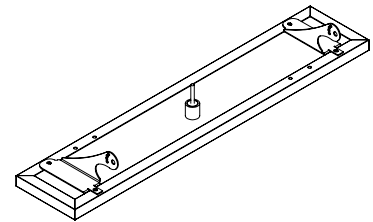
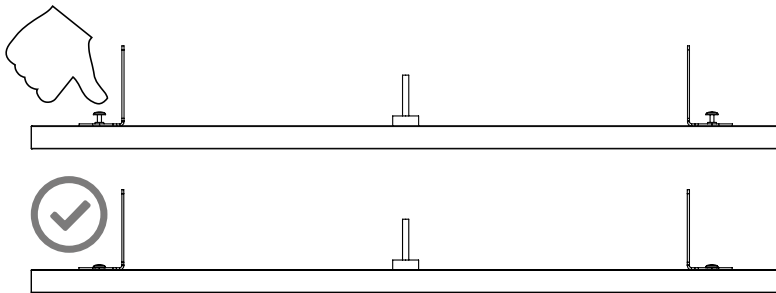
Take the brackets and slide them over the edge of the solar panel profile.



Make sure the brackets are positioned as shown in the image below (high edge of the brackets towards the cable).



Take the rivet and insert it into the corresponding holes of the solar panel and brackets. Press this in so that the bracket is secured.

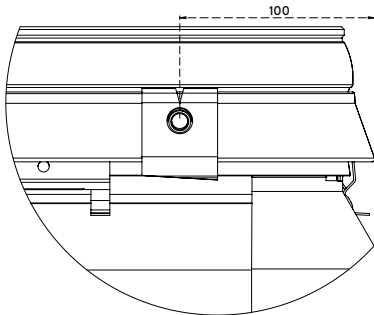


Installation on the roof

Once the angle at which the solar panel will be placed has been determined, the following steps can be taken:

Drill a hole through the PVC frame **WITH the drill gauge**.

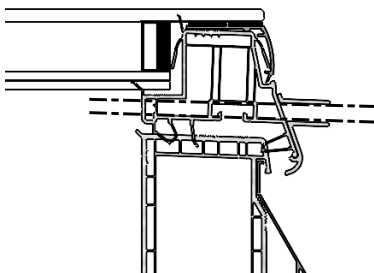
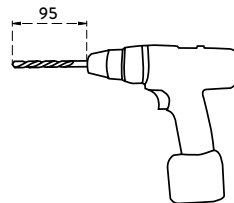
Place the centre of the drilling gauge 100 mm from the corner.



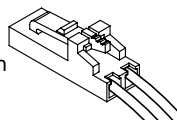
Drill a hole through the curb with $\varnothing 8.5$ mm.

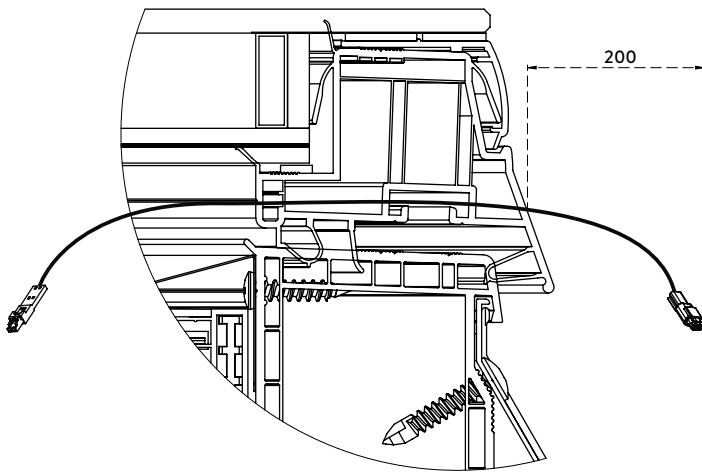
Do not force anything, let the drill follow the chambers of the PVC.

Make sure the drill bit length is 95 mm.

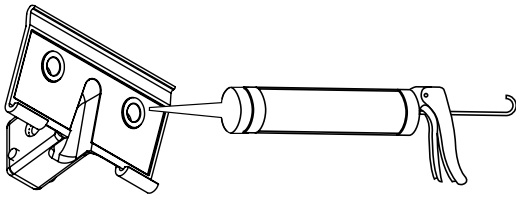


Take the cable and insert the small connector through the drilled hole from the outside to the inside.



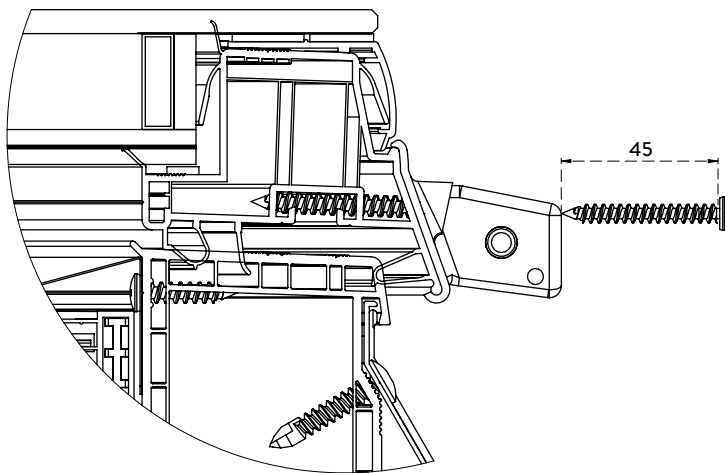


Take a cable cover and apply a layer of silicone to the indentations at the back.

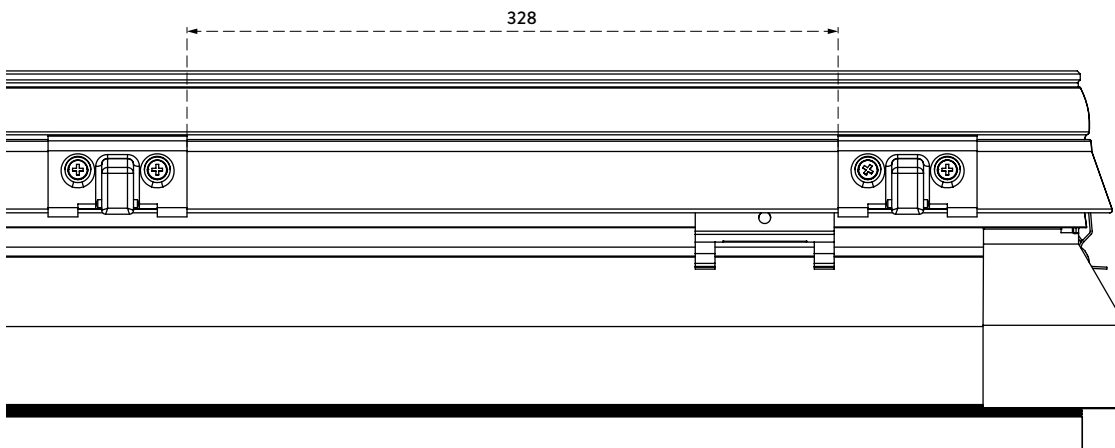


Place the cable cover with silicone over the hole where the cable comes out.

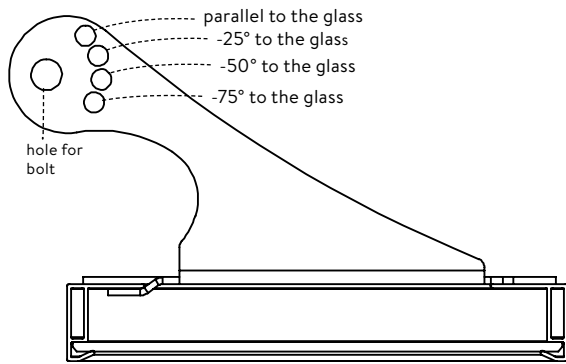
Screw this in place with the $\varnothing 5.3 \times 45$ mm HiLo screws. Make sure the screws do not turn further.



Place the other cable cover at a distance of 328 mm.

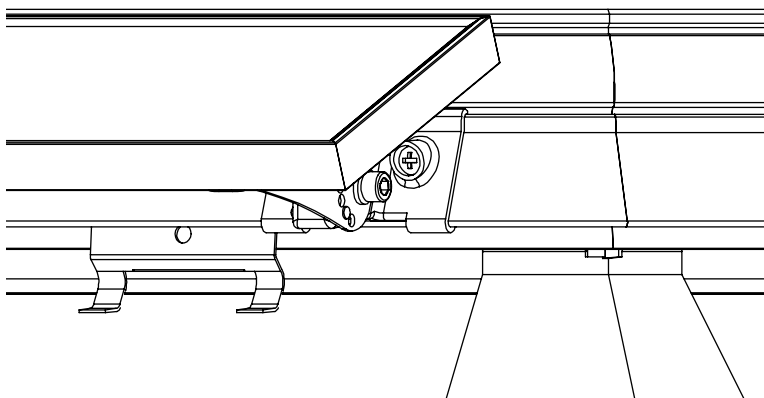
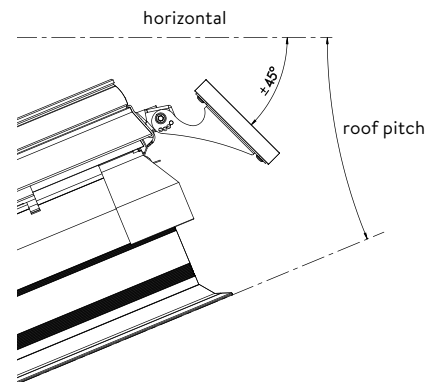
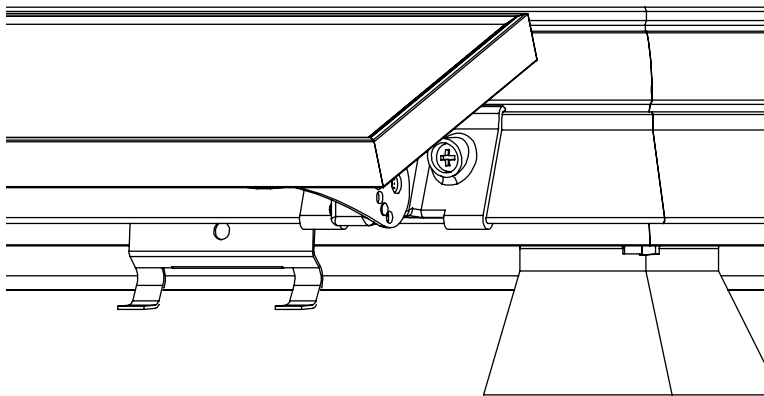


Installation of solar panel

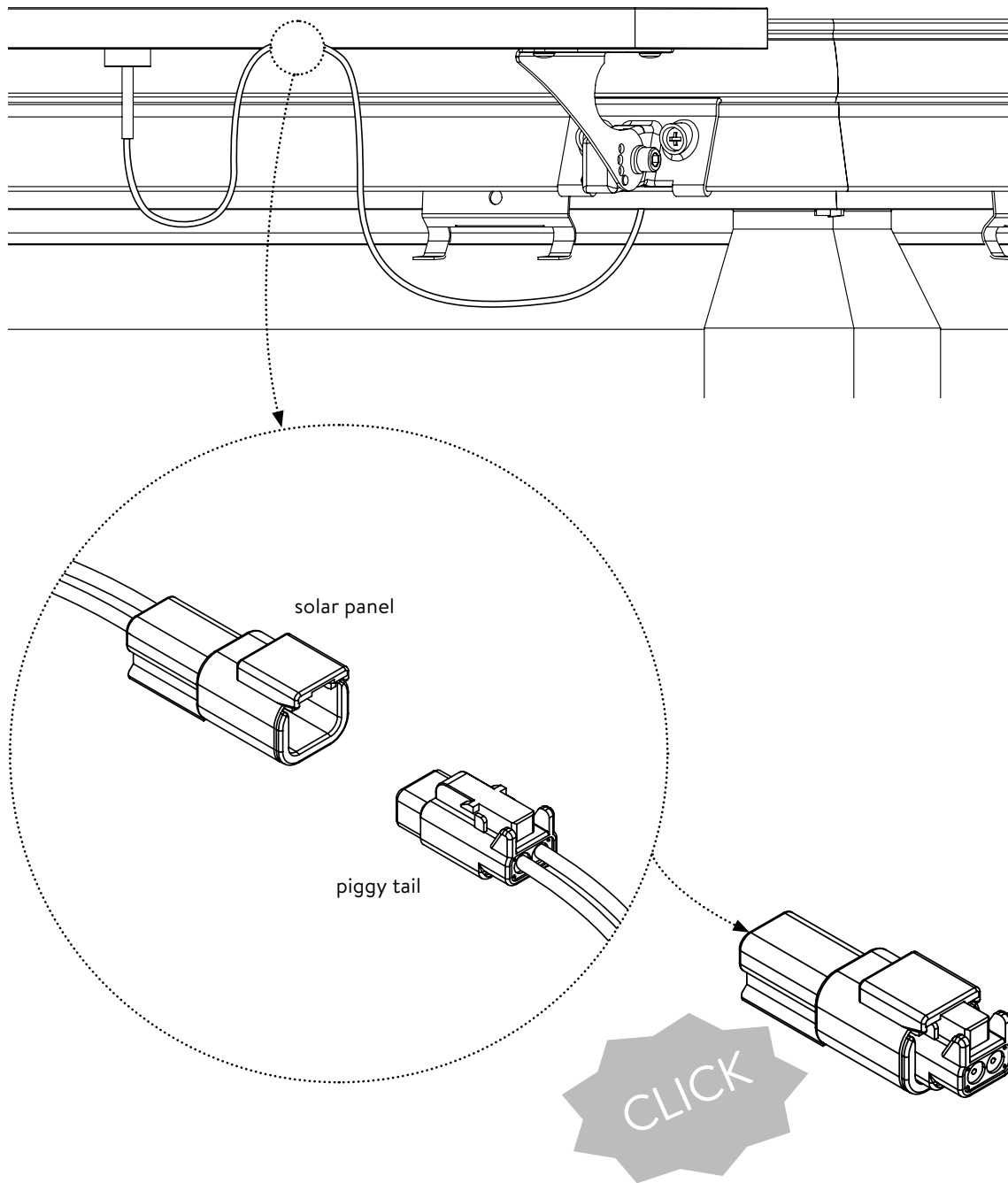


Clip the bracket over the protruding pin of the cable cover and secure with the M6 bolt with the split lock washer.

Choose the optimal opening so that the solar panel is positioned approximately at an angle of 45° to the horizontal.



Attach the solar panel connector with the cable coming from the frame.



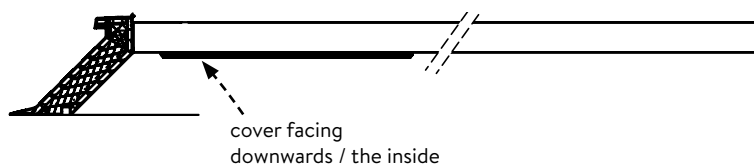
Attach the clicked connectors to the bottom of the solar panel with fasteners.

INSTALLATION ON THE INSIDE

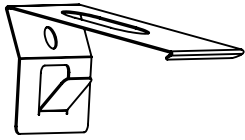
Orientation of the electric screen

Orientation top / bottom:

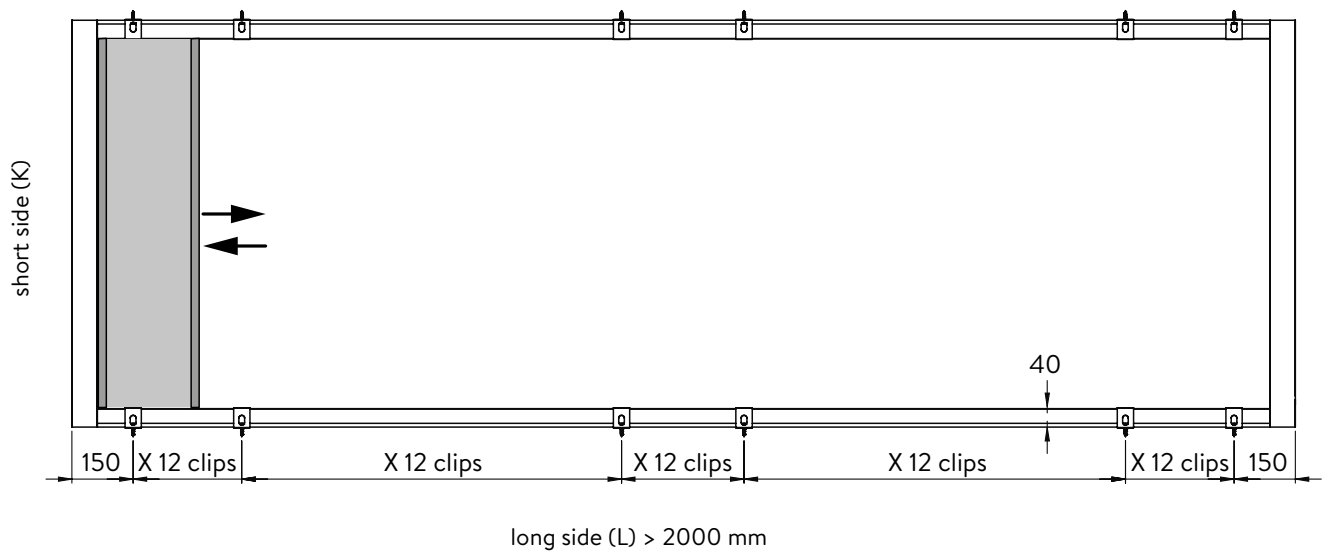
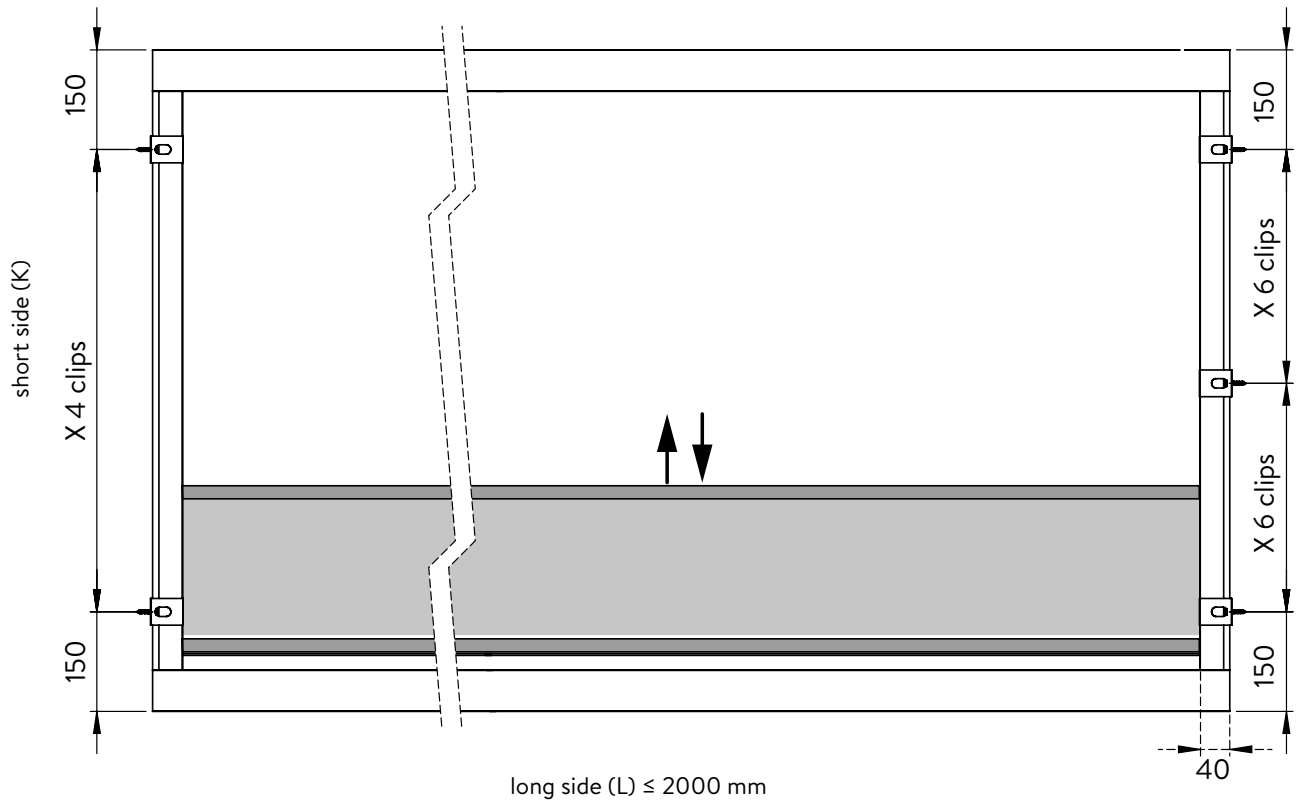
Cover with keypad
always on the bottom.



Installation of the mounting clips



Position and number of clips:
 Mounting clips must always be provided on the rail sides of the screen.



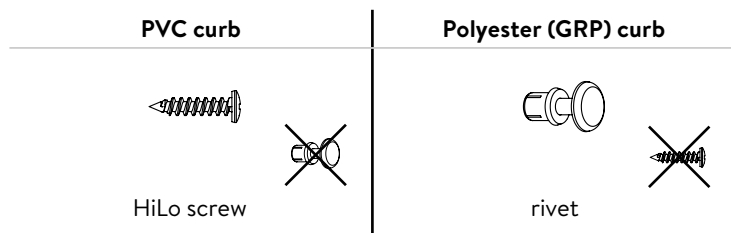
Intermediate distance X

daylight size	from K = short side	number of clips	# clips per side	between start and -1	between 1-2	between 2-3	between 3-4	between 4-5	between 5-6	between 6 - end
400 x 400		4	2	150	100					150
400 x 700		4	2	150	100					150
400 x 1000		4	2	150	100					150
400 x 1300		4	2	150	100					150
400 x 1400		4	2	150	100					150
400 x 1600		4	2	150	100					150
400 x 1900		4	2	150	100					150
400 x 2200	K	12	6	150	133	668	300	668	133	150
400 x 2800	K	12	6	150	199	901	300	901	199	150
450 x 1050		4	2	150	150					150
470 x 470		4	2	150	170					150
500 x 500		4	2	150	200					150
500 x 700		4	2	150	200					150
500 x 800		4	2	150	200					150
500 x 1000		4	2	150	200					150
500 x 1100		4	2	150	200					150
500 x 1400		4	2	150	200					150
500 x 1700		4	2	150	200					150
500 x 2000		4	2	150	200					150
500 x 2300	K	12	6	150	166	684	300	684	166	150
550 x 550		6	3	150	125	125				150
600 x 600		6	3	150	150	150				150
600 x 800		6	3	150	150	150				150
600 x 900		6	3	150	150	150				150
600 x 1200		6	3	150	150	150				150
600 x 1300		6	3	150	150	150				150
600 x 1500		6	3	150	150	150				150
600 x 1600		6	3	150	150	150				150
600 x 1800		6	3	150	150	150				150
600 x 2000		6	3	150	150	150				150
700 x 700		6	3	150	200	200				150
700 x 1000		6	3	150	200	200				150
700 x 1300		6	3	150	200	200				150
700 x 1500		6	3	150	200	200				150
700 x 1600		6	3	150	200	200				150
700 x 2000		6	3	150	200	200				150
700 x 2200	K	12	6	150	133	668	300	668	133	150
750 x 750		6	3	150	225	225				150
750 x 1050		6	3	150	225	225				150
750 x 1250		6	3	150	225	225				150
750 x 1650		6	3	150	225	225				150
750 x 1750		6	3	150	225	225				150
750 x 2250	K	12	6	150	149	676	300	676	149	150
800 x 800		6	3	150	250	250				150
800 x 1100		6	3	150	250	250				150
800 x 1200		6	3	150	250	250				150
800 x 1300		6	3	150	250	250				150
800 x 1400		6	3	150	250	250				150
800 x 1600		6	3	150	250	250				150
800 x 1700		6	3	150	250	250				150

Intermediate distance X

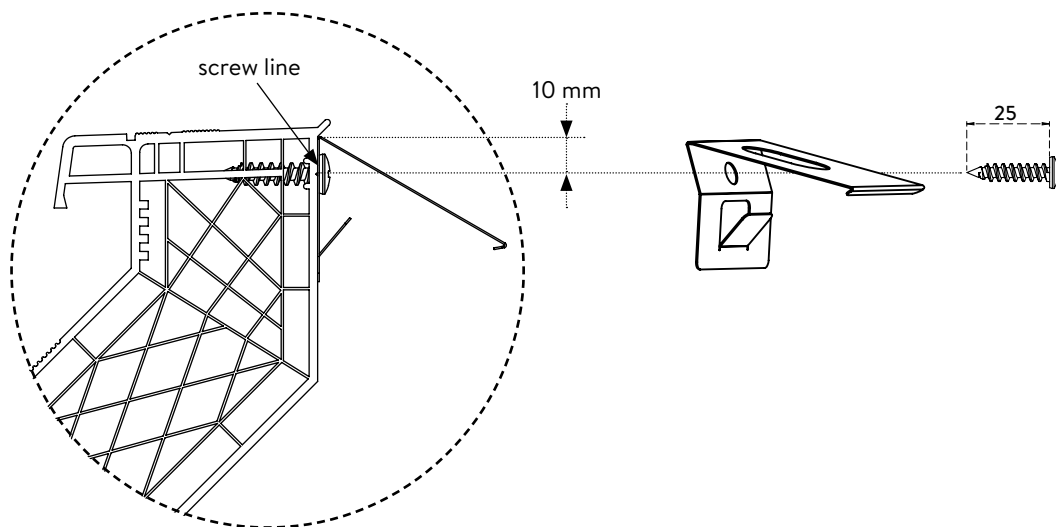
daylight size	from K = short side	number of clips	# clips per side	between start and -1	between 1-2	between 2-3	between 3-4	between 4-5	between 5-6	between 6 - end
800 x 1800		6	3	150	250	250				150
800 x 2000		6	3	150	250	250				150
800 x 2200	K	12	6	150	133	668	300	668	133	150
800 x 2300	K	12	6	150	166	684	300	684	166	150
800 x 2500	K	12	6	150	233	718	300	718	233	150
800 x 2800	K	12	6	150	199	901	300	901	199	150
850 x 850		6	3	150	275	275				150
900 x 900		6	3	150	300	300				150
900 x 1200		6	3	150	300	300				150
900 x 1500		6	3	150	300	300				150
900 x 1800		6	3	150	300	300				150
900 x 2100	K	12	6	150	99	651	300	651	99	150
1000 x 1000		6	3	150	350	350				150
1000 x 1300		6	3	150	350	350				150
1000 x 1500		6	3	150	350	350				150
1000 x 1600		6	3	150	350	350				150
1000 x 1800		6	3	150	350	350				150
1000 x 2000		6	3	150	350	350				150
1000 x 2200	K	12	6	150	133	668	300	668	133	150
1000 x 2300	K	12	6	150	166	684	300	684	166	150
1000 x 2500	K	12	6	150	233	718	300	718	233	150
1000 x 2800	K	12	6	150	199	901	300	901	199	150
1000 x 3000	K	12	6	150	266	934	300	934	266	150
1050 x 1050		12	6	150	150	150	150	150	150	150
1050 x 1650		12	6	150	150	150	150	150	150	150
1050 x 2250	K	12	6	150	149	676	300	676	149	150
1100 x 1100		12	6	150	160	160	160	160	160	150
1100 x 1400		12	6	150	160	160	160	160	160	150
1100 x 1700		12	6	150	160	160	160	160	160	150
1100 x 2300	K	12	6	150	166	684	300	684	166	150
1200 x 1200		12	6	150	180	180	180	180	180	150
1200 x 1400		12	6	150	180	180	180	180	180	150
1200 x 1500		12	6	150	180	180	180	180	180	150
1200 x 1800		12	6	150	180	180	180	180	180	150
1200 x 2100	K	12	6	150	99	651	300	651	99	150
1300 x 1300		12	6	150	200	200	200	200	200	150
1300 x 1600		12	6	150	200	200	200	200	200	150
1300 x 1900		12	6	150	200	200	200	200	200	150
1400 x 1400		12	6	150	220	220	220	220	220	150
1500 x 1500		12	6	150	240	240	240	240	240	150
1600 x 1600		12	6	150	260	260	260	260	260	150

Screw the mounting clips in the daylight size of the curb by using the supplied fixations; depending on the curb type:



PVC curbs:

Screw the mounting clips in the daylight size of the curb, on the screw line (if available), at 10 mm from the top side. Use the HiLo screws 25 mm PH2.
 Align the top side of the mounting clips with the top side of the curb flange.

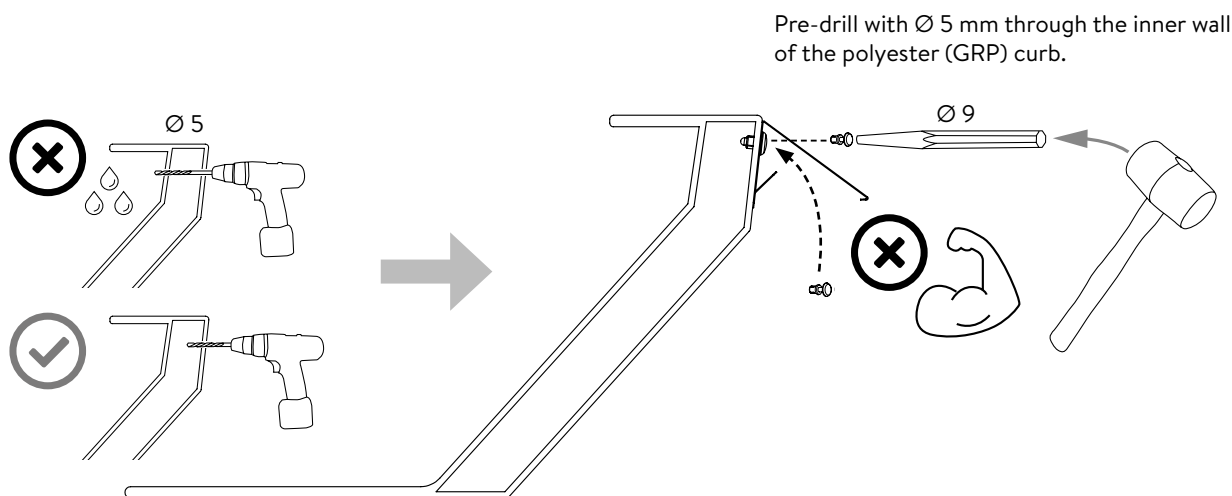


Please note:

Do not screw through the curb towards the outside to avoid any water infiltration from the outside.

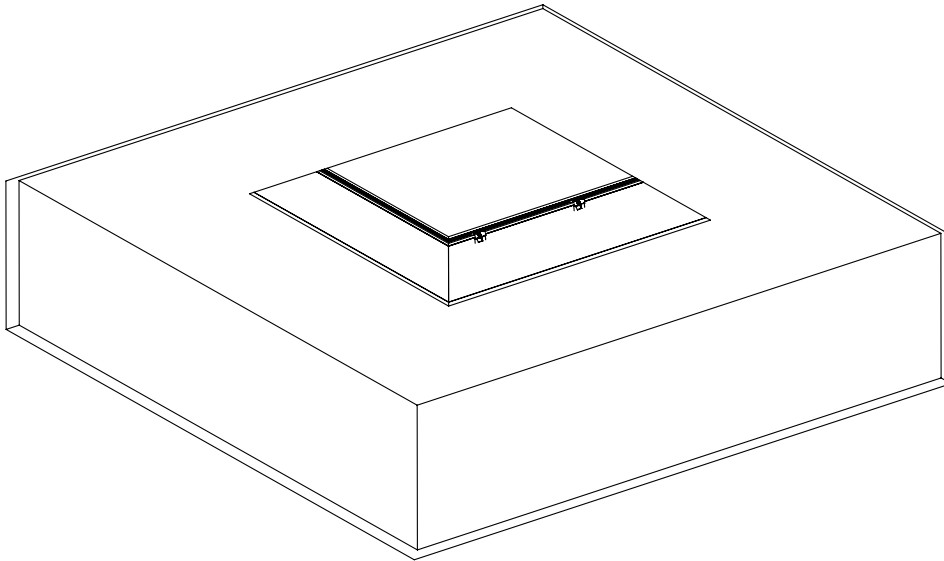
Polyester (GRP) curbs:

Do not screw in the polyester curbs. Use the rivet.
 Only drill a hole in the inner wall of the polyester curb and use the rivet.

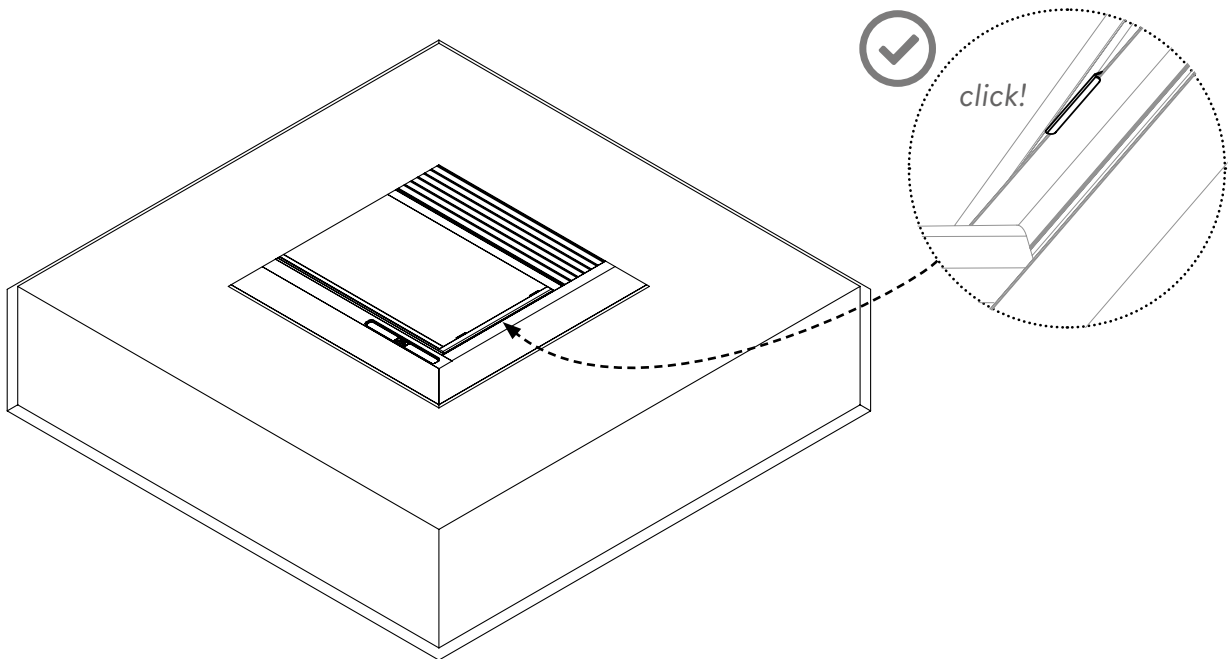


Place the electric screen

Take the electric screen and install it correctly as described above.
Place and clip the electric screen on the inside of the skylight/window in the mounting clips.

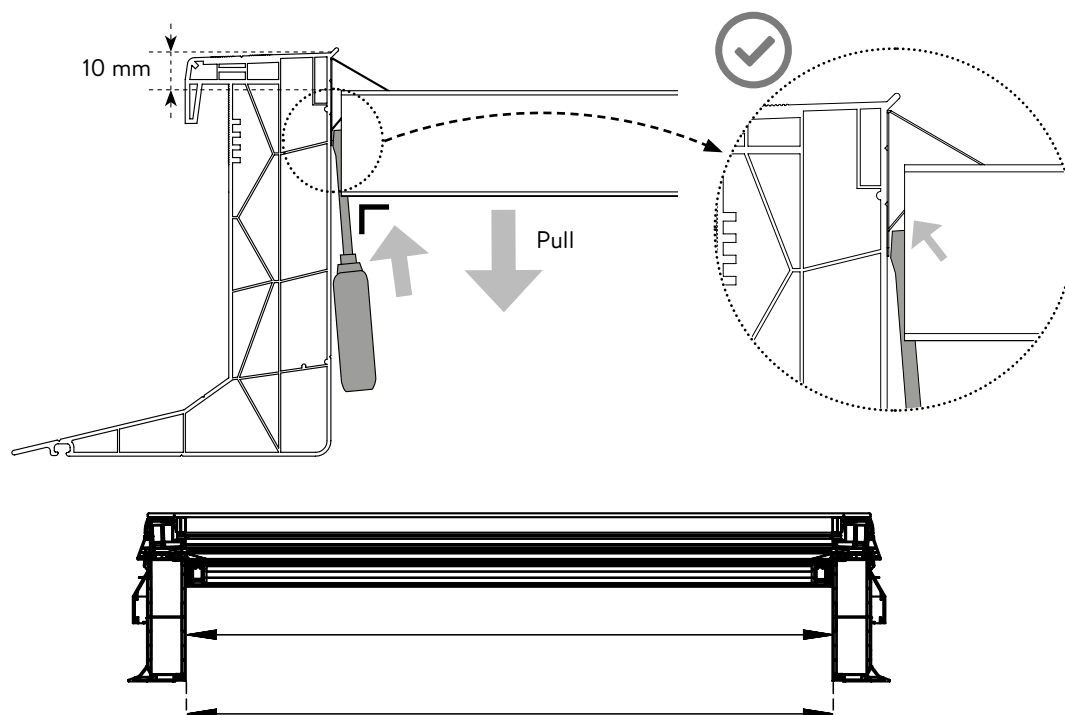


Attach correctly (clip):



Prevent the electric screen from getting blocked by the mounting clips during opening and closing.

Pull the electric screen horizontally in relation to the curb:



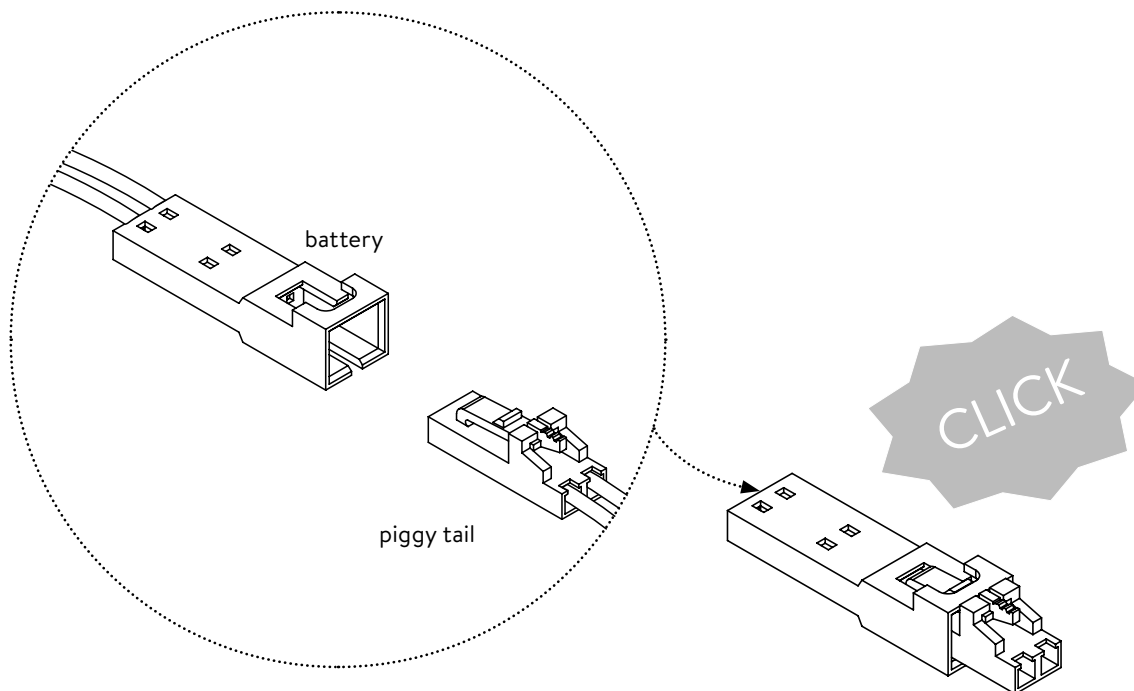
Interior finish

Make sure the cover with keypad is always accessible.

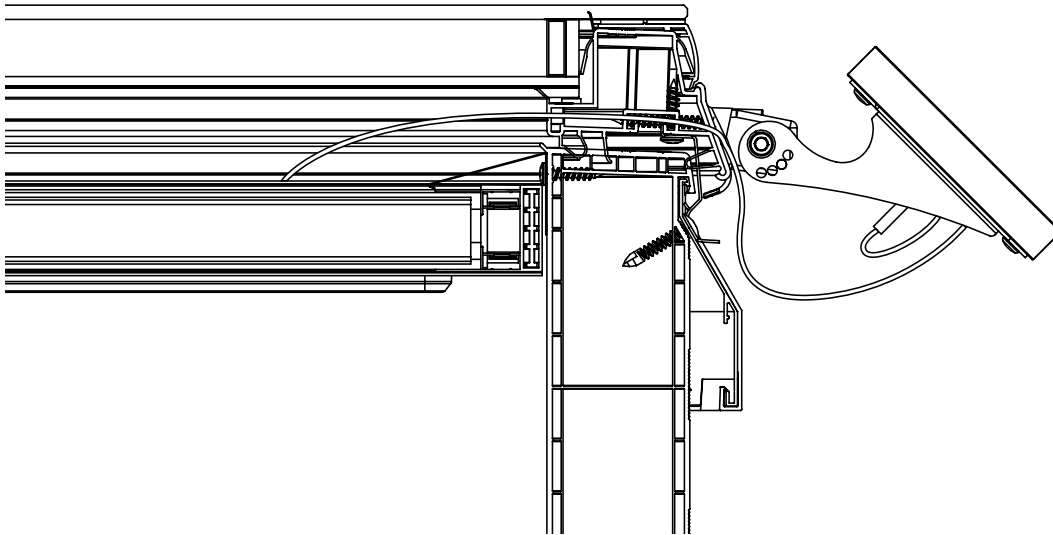
Please note that the screen must be easy to dismantle in the event of disassembly. This is to provide the best possible after-sales service.

Connect the screen

On the inside, attach the connector that comes out of the screen to the connector that you have put through the frame.



When there is sufficient (day)light, the actuator control will start (3x beeps and the green LED flashing at the same time). The batteries are approximately 80% charged.



Once this is attached, insert the connector into the hole at the top of the screen.

Test the screen by pushing the “screen” button of the remote control.

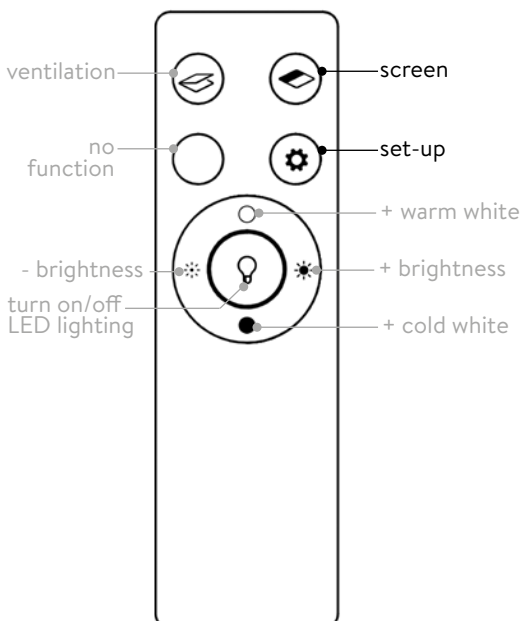
The installation is finished!









CONTROL

RF remote control

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

Functionalities

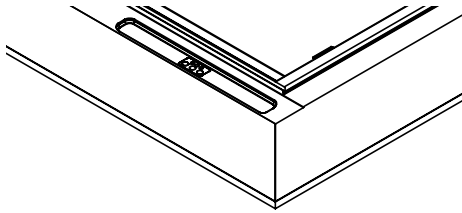


-  Ventilation: Open/stop/close the window
-  Screen (sunblind or blackout blind or insect screen): open/stop/close the screen.
-  LED: not applicable for the screen
-  + Brightness LED
-  - Brightness LED
-  + cold white
-  + warm white
-  Set-up: Use this button to change the device settings (see FAQ, page 19).

KEYPAD

There is a keypad on the visible side of the screen. This is equipped with three push buttons and 3 LED lights. The function of the keypad is to adjust certain device settings (by means of the 3 push buttons) and to provide feedback to the user (by means of the 3 LED lights).

It is important that this keypad is always accessible after installation and finishing.



The keypad can be found on the cover at the bottom of the screen.

FAQ

Control of 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: battery is in good condition
- 2: battery is about to die
- 1: battery is critical, the controls will no longer work
- 0: battery is completely dead or defective

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).

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.

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.

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. Now press any button on the new remote control.
4. 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.

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.
5. If you want to pair again, follow the instructions below 'I have lost the remote control'.

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

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!

General use

The electric screen Solar is suited for normal use in normal climate conditions for flat roof windows and/or skylights.

Do not store, place or transport the electric screen in places where extra heat accumulation can occur, nor in places that are extremely humid.

Following aspects are excluded from normal use in normal climate conditions: damage due to overvoltage, lightning strike, water damage, vermin, fire, glass breakage, extreme shocks or similar external influences, based on actions of third parties and other events or accidents that are excluded from normal use of the screen and on which the manufacturer does not have any influence.