SKYLIGHTS



### ΕN

# Skylux<sup>®</sup> iDome<sup>™</sup> & iWindow<sup>™</sup> openable with remote control

Mounting instructions



# Safety prescriptions 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 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.

#### Lifting equipment

• Depending on the size and weight of the glass skylight, we recommend to use appropriate lifting equipment for transport and installation. This is important for general safety and to prevent any damage to the product.

#### **Electric installations**

- The electrical installation must be carried out by experienced and qualified persons in accordance with all applicable requirements.
- Take the necessary measures to prevent accidents: Provide the necessary screening, to prevent people from falling into the roof opening or being trapped between the moving parts In certain cases, ventilation hatches may not be opened more than 30 cm in the interests of fall protection.
- Do not allow children near the appliance.
- Ventilation must be closed if there are strong winds ( $\geq$  6 m/s).

#### 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.



## Safety prescriptions for the user

#### Please be careful:



- Carefully read these safety prescriptions before use.
- Get familiar with the operating elements and correct use of the product. Only use the product if you understand the possible dangers.
  - Save the safety prescriptions so you can consult them at any time. Also give them to any new user of the product.

#### **Crushing hazard:**



- Crushing hazard! Keep hands or other body parts away from the opening part!
- Keep people or animals at a safe distance.
- Do not let children use the product.
- Never put your hands or other body parts through the opening part without shutting down the operating voltage first.
- When equipped with rain sensor: if the rain sensor detects rains, the skylight closes automatically!

#### **Repair:**

- If the product still breaks down despite thorough manufacturing and test methods, the repair must be done by qualified installers.
- If the product is out of use during maintenance, check-up or replacement of accessories, the operating voltage must be shut down first.

#### General:

• We advise to use the remote control in the room where the skylight is situated.



Keep the ventilation openings clear to prevent any damage to the actuator.
The inside of the curb must not be covered (plasterboard, MDF ...) if you want to install an electric screen (sunblind, blackout blind or insect screen).

Maintaining the daylight size is important in this case. Even if there is already an electric screen installed, we advise against covering the inside of the curb.

Forbidden to screw or drill in the indicated zone(s) (340 mm) of the curb near the built-in (spindle) actuator(s) to prevent any damage to the actuator(s). The actuator(s) is (are) always installed on the long side and directly opposite of the hinge side. See illustrations on page 5.

#### 1 spindle actuator:



2 spindle actuators:



Daylight size long side (DLZ)	<b>'X'</b>
DLZ ≤ 2000	667 mm
2000 < DLZ ≤ 2600	1167
DLZ > 2600	1567 mm



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## General

The fully finished iDome or iWindow as openable (O) model is pre-mounted on a Skylux PVC curb 20/00 EP (+ 20/00 EP-S). The PVC curb has a built-in detection unit with remote control. The openable model (O) has a built-in spindle actuator. When pulling up the roofing, the 20/00 EP curb can be finished with the supplied flashing profile and corner pieces.

Possible options are the built-in LED lights (L) finished with a polycarbonate cover and the pre-mounted electric inner sun blinds (S) or blackout blind (V) or insect screen (I).

The built-in detection unit also has open contacts to connect fixed push buttons, or to allow the functioning upon a house automation system.

Slope of the dome and curb on page 5.

The Skylux complete set is not suitable for installation above very damp areas (e.g. swimming pools, showers ...) or surroundings with chemical influences (e.g. chlore fumes).

We have several types available, which can all be combined with a Skylux iDome, Skylux iWindow2 or iWindow3.

#### **Overview different types:**

	openable spindle actuator (O)	rain sensor (R)	built-in LED lights (L)	pre-mounted electric sunblind (S)	pre-mounted electric blackout blind (V)	pre-mounted electric insect screen (l)
0	x					
O-R	x	x				
O-LR	x	x	x			
O-S	x			x		
O-SR	x	x		x		
O-LS	x		x	x		
O-LSR	x	x	x	x		
O-V	v				x	
O-VR	x	x			x	
0-1	x					x
O-IR	x	x				x
O-LV	x		x		x	
O-LVR	x	x	x		x	
O-LI	x		x			x
O-LIR	x	x	x			x

## Safety precautions

Before installing or maintaining the Skylux iWindow complete set or Skylux iDome complete set, you must take into account the necessary safety precautions. Provide a safe roof access.

- The working voltage has a capacity of 230 V AC!
- The connection may only be carried out by qualified installers of electrical installations.
- To avoid trapping body parts, the area in which the opening section is located must be avoided at all times during installation.

## Roof opening preparation

- Types without LED lights (O, OS, OV, OI) Finished roof opening = daylight size



#### Make cable passage

The **power cable** emerges from the PVC 20/00 EP curb on the bottom of the long side of the pre-installed curb. Supply a channel at this spot in the roof construction so that 230 V can easily be connected here. That means that standard three-stranded wiring must be supplied.



The **communication cables** emerge from the curb's base. These are open contacts for connecting push-button switches, or controlling the system using a home automation system. In this context, the brown wire always stands for the protective grounding 'Ground'. The colour codes below indicate the different operating cables.

BLAUW - BLEU - BLUE - BLAU

The **communication cables** emerge from the centre of the curb's base in the other direction. These are open contacts for connecting push-button switches, or controlling the system using a home automation system. In this context, the brown wire always stands for the protective grounding 'Ground'. The colour codes below indicate the different operating cables.



To easily fit the connections, provide a small space under the curb or **drill a hole** in the roof construction to allow the cables to be pushed through. Once these preparations have been carried out, the curb can easily be secured.

## Preparation: curb slope

According to EN 1873 skylights can be installed at a slope of up to 25°. The Skylux curb can therefore be installed on a pitched roof or with roof inclination between 0° (iDome) & min. 4° (iWindow) and 25°. For a complete set combined with a **Skylux iWindow**, a **minimum angle of 5°** is recommended to prevent soiling of the outside of the glass and water stagnation.



## Installation sequence of the openable skylight

- 1. Installing the curb of the openable skylight
  - a. Pull up the roofing
  - b. Install the flashing profile (if applicable)
- 2. Installation of the skylight
- 3. Finishing the skylight

## Installing the curb of the openable skylight

The lower curb is always of the type 20/00 EP. Screw the curb onto the fixed roof construction with the special screws through the line on the flange (timber screws  $5.2 \times 60$  or steel screws  $4.8 \times 60$ ). Start at 7.5 cm from the ends. The distance between the screws must not exceed 30 cm.







#### Installation of curb:

Make sure the daylight size always remains the same over the entire length (and width)! A constant daylight size, the straightness of the profiles and the perpendicularity of the angles is important to guarantee the correct functioning of the product and accessories.





#### Pulling up the roofing + flashing profile:

Next, pull up the roofing (1) against the top flange of the top curb. The flashing profile (2) and corresponding corner profiles can be used here (see separate mounting instructions for the flashing profile).



## Installation of the skylight

The openable glass cover is already pre-mounted on the curb. Extra installations are not necessary.

# Finishing the skylight

#### For the glass skylights Skylux iWindow2 or iWindow3:

remove all protection foil (\*) and stickers with maintenance tips. The skylight is now ready for use.

For the hybrid skylight Skylux iDome, a plastic skylight dome of your choice must be installed afterwards. Remove all protection foil (\*) and the stickers with maintenance tips and install the skylight dome following the Skylux mounting instructions. Afterwards, the finished skylight is ready for use.

(\*) During construction and refurbishment works (e.g. during plastering with excess construction moisture), it is recommended to temporarily seal the ventilation grid on the inside of the curb or to leave it closed with the protective foil.

## Control

Ventilation function: the ventilation button will operate the actuator in the opposite direction of the last movement. Once the function has been activated, the movement can always be stopped by pressing the button again. The sunblind, blackout blind or insect screen always closes automatically when the window is opened for ventilation. This is a safety feature to help protect against wind load and negative pressure. Nevertheless, the sunblind can still be activated at any time; however, this is at the customer's own risk.

Sunblind (S) or blackout blind (V) or insect screen (I): when activated, the blind is openend or closed in the opposite direction of the last movement. Once the function has been activated, the movement can always be stopped by pressing the button again. The sunblind (S) or blackout blind (V) or insect screen (I) closes automatically when the window is opened (see explanation of ventilation function).

LED (L): this function turns the LED lights on or off.

Rain detection: the skylight can be provided with a rain sensor (optional). If the rain sensor sends an active signal, the skylight will close automatically. The skylight remains closed afterwards. If you want to open it, you must use the remote control or communication cables. Bear in mind, however, that you will not be able to open the skylight during the first 20 minutes after the last precipitation detection. If the rain sensor is only fitted at a later date, communication cables for home automation systems will have to be used. This signal cable can also be used as a 'close everything' function in your home automation system.

#### Remote (RF): the remote control supplied is automatically connected to the complete set.

However, if the remote control is lost or faulty, it can be connected as follows:

For openable models (O):

- 1. Remove the clip-on cover on the inside of the window.
- 2. Remove the support plate from the spindle using 2 screwdrivers and pull the plate down.
- 3. The window can now be pushed open.
- 4. A 'learn' button is located on top of where the actuator is situated that can be pressed without removing the actuator.
- 5. Press the button until you hear a buzzer (when the button is pressed, an LED indicator will light up).
- 6. Press any button on the remote control.
- 7. You will hear several 'beeps' meaning the two are connected.

#### For fixed models (F):

- 1. First remove the clipsed iDome or iWindow from the curb.
- 2. Press the button next to the Skylux logo (more or less in the centre of the curb).
- 3. Press any button on the remote control.
- 4. You will hear several 'beeps' meaning the two are connected.



## Maintenance tips

It remains necessary to clean the glass skylights regularly.

Do not clean or touch skylights with products that are not suitable for acrylic or polycarbonate, including silicone, wood protectors, adhesives, unsuitable sealant tape, chemical vapours, etc. Tar stains must be removed using turpentine. Rinse abundantly with water. Clean the skylight with water and non-aggressive soap (no abrasives) and always rinse abundantly. Clean PVC curbs with PVC cleaner. Clean the mesh of the optional electric insect screen regularly.

Maintenance tips rain sensor:

The sensor must be cleaned regularly, depending on how dirty it is. Clean the sensor with a damp cloth but do not use any abrasives.

## **Technical details**

Туре	Voltage	Propulsive force	Traction force	Course	Speed
<b>O</b> openable with spindle actuator	230 V AC / 3 A	1000 N	300 N	100 mm	7 mm/s

- Temperature range: -20°C ~ +70°C	<ul> <li>Voltage:</li> <li>Consumption:</li> <li>Leakage:</li> <li>Opening/closing speed:</li> <li>Closing force:</li> <li>Durability:</li> <li>Functioning cycle:</li> <li>Temperature range:</li> </ul>	230 V AC ± 10% / 50 Hz 3A (max. 85 W) < 2 mA / 240 V AC ± 15 s 1500 N > 10,000 activations 10%, max. 2 min / 18 min -20°C ~ +70°C
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Attention: the CE certification is only valid if the composition, execution and the installation regulations are respected. Skylux guarantees the CE conformity as described in the documentation and according the plant regulations of the appliances. Every variance, cancels the CE conformity. Skylux iWindow2 and iWindow3 meet the EN 1873:2014+A1:2016 performances but are not CE, as there is no specific norm for glass skylights.

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

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