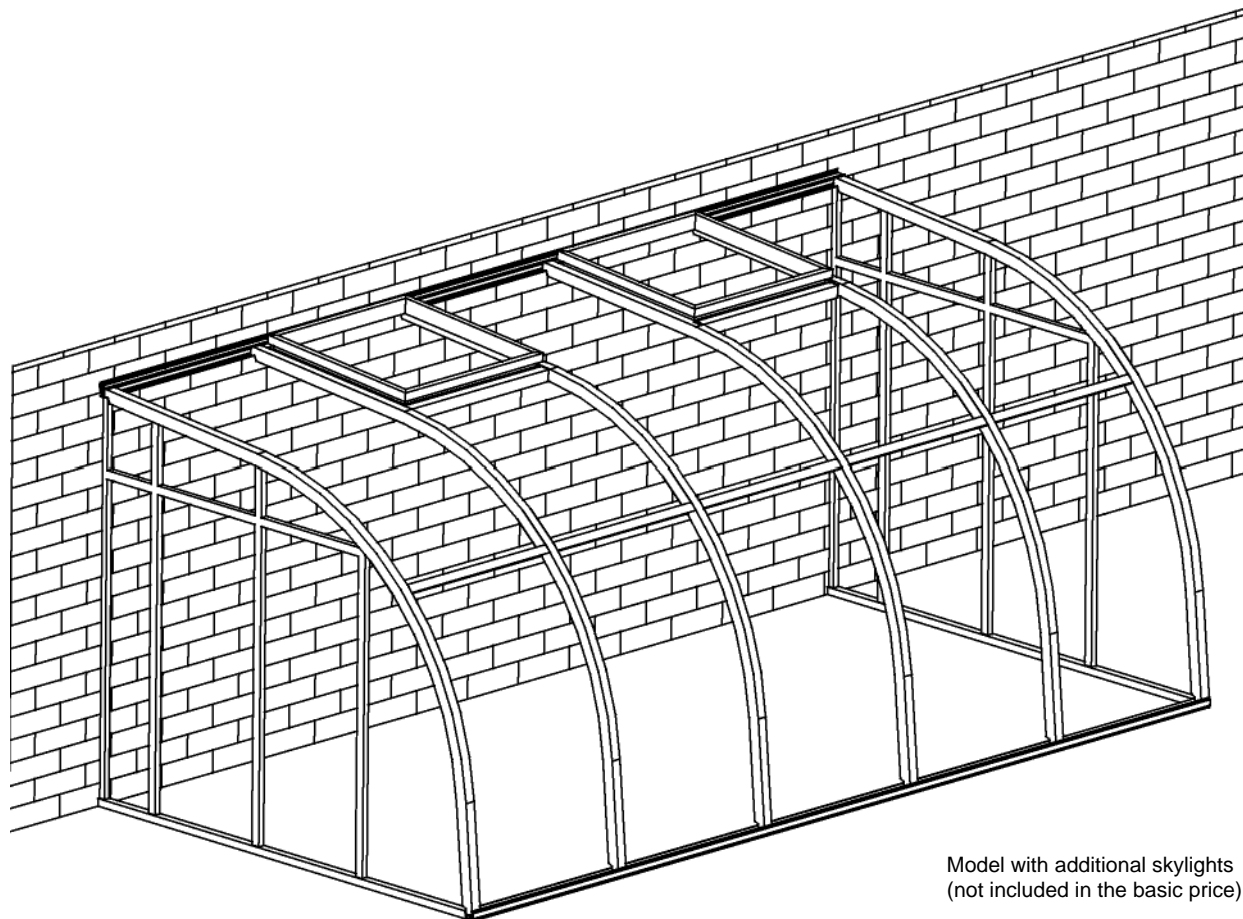


Solar veranda “Berlin”

Subject to technical changes

Assembly instructions

03-248 VI



Model with additional skylights
(not included in the basic price)



Dear garden friend,

we congratulate you on your purchase of a quality product from Hoklartherm.

First read the assembly instructions and follow them step for step!
If something does not work after the first attempt, of course you can give us a call.

Parts and parts list

Before you begin with the assembly, please check the parts list to make sure all parts have been received. Each carton goes through a quality control before it is closed so that it is very unlikely that a part is missing. In the unlikely event that parts are missing, please inform us of the missing positions.

Caution:

The manufacturer does not take any responsibility for damage that results from improper assembly or from acts of God.

The installation of the Solar veranda Berlin must be carried out by at least two people!

Only work with safe, suitable hand tools. When assembling, please make sure that the ladder is properly positioned and safe to use (accident danger!).

Apart from installing screws, we recommend that you work with gloves when assembling (danger of injury, cuts!)

You require the following tools for the installation:







- Tape measure
- Spirit level
- Hammer drill
- 8mm masonry bit
- 8mm steel bit
- 11mm steel bit
- 3/8 hexagonal socket spanner
- SW 13 Allen key
- SW 5 hollow hexagon wrench
- PH2 Phillips screwdriver
- Rubber shears
- Silicone gun

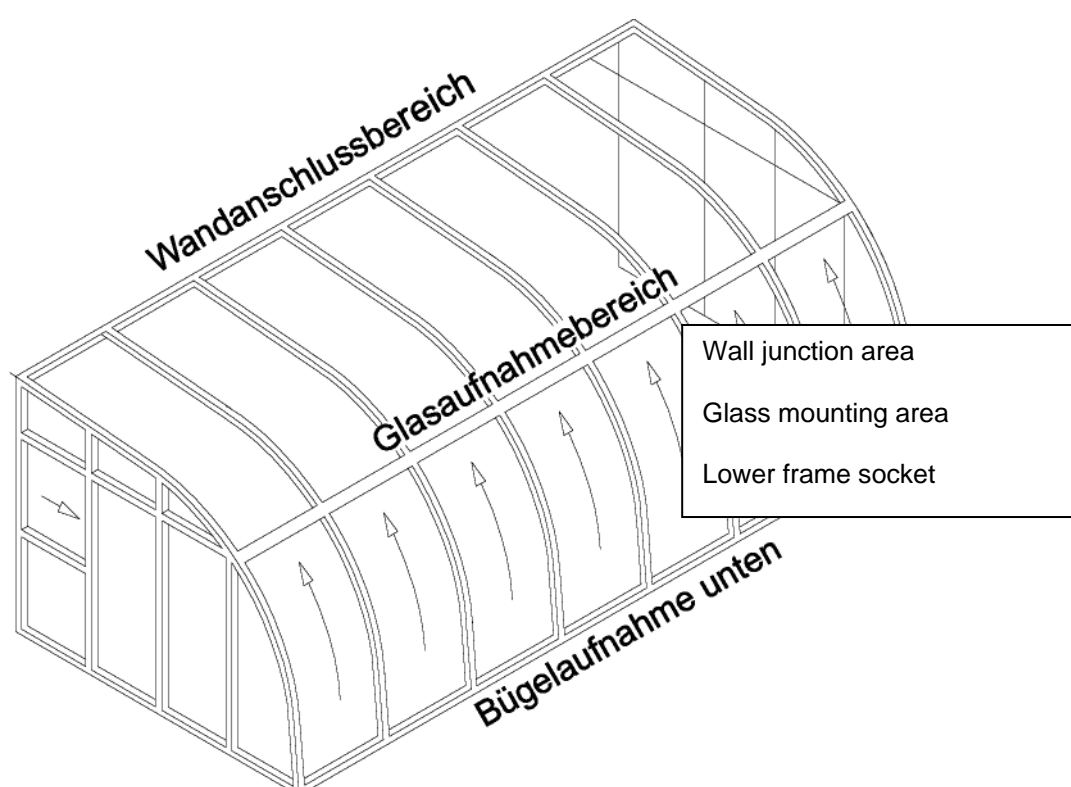
The subsoil should be flat, firm and level (e.g. foundation, concrete bed etc.)
The support wall should be perpendicular (house wall or similar)

Parts list

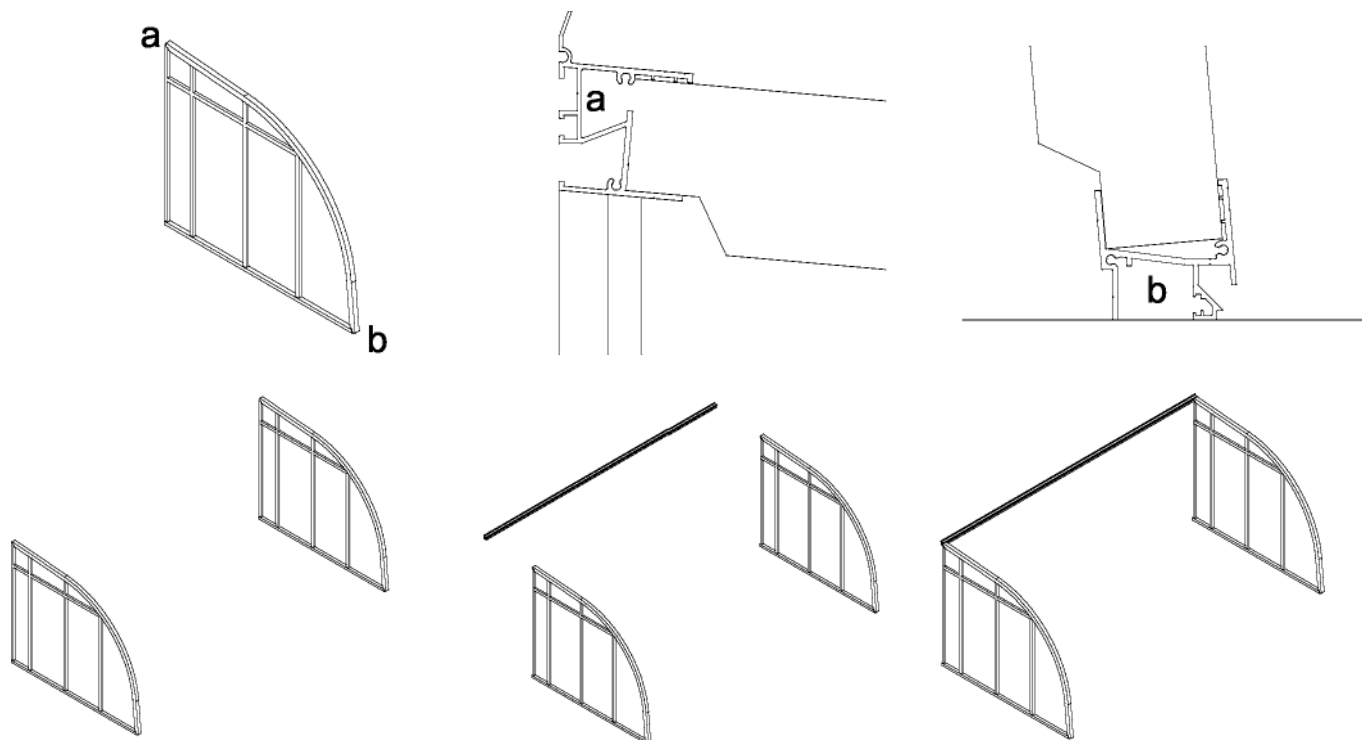
Position		Description	Quantity
1.1		Middle frame (length dependant upon model)	
1.2		Edge frame (length dependant upon model)	
2		Frame socket (length dependant upon model)	
3		Wall installation profile (length dependant upon model)	
4.1		Left covering (length dependant upon model)	
4.2		Middle covering (length dependant upon model)	
4.3		Right covering (length dependant upon model)	
5		Glass retaining bracket (length dependant upon model)	
6		H10 glazing-bead frame divider (length dependant upon model)	
7		Parapet profile (length dependant upon model)	
8		Key - key lock (if the gable has sliding windows)	
9		Height adjustment ground profile "Option"	
10		Gable	
11.1		Multiple sliding door "Option"	
11.2		Revolving door "Option"	
11.3		Sliding door Gable Key	
		(pre-mounted in) with	
12.1		Sliding window "Option"	

Position		Description	Quantity
12.2		Skylight "Option"	
13		M8x65mm hexagon socket countersunk head cup screw (DIN7991) Nut (DIN 934) M8 cap	
14		6.5x75mm siding screw with wood screw thread Dowel Cap	
15		Countersunk screw 5.5x70mm Dowel	
16		4.8x19mm fillister head screw (DIN 7981)	
17		9mm glazing-bead "pre-mounted" depending upon model	
18		11mm glazing-bead "pre-mounted" depending upon model	
19		15mm glazing-bead "pre-mounted" depending upon model	
20		20mm glazing-bead "pre-mounted" depending upon model	
21		2-4mm banana weatherstripping in [m]	
22		3-5mm wedge weatherstripping in [m]	
23		6-8mm wedge weatherstripping in [m]	
24		8-10mm wedge weatherstripping in [m]	

Position		Description	Quantity
25		2mm grey upper profile seal pre-mounted in the sliding element	in [m]
26		2mm black upper profile seal	in [m]
27		Bulb seal pre-mounted in the sliding element	in [m]
28		Special silicone	
29		Sliding element	
30		Roof glazing (dimensions dependant upon model)	



Installation of the gable



Remove the safety covers from the gable ends (a, b).
In the final step you will need the caps that are fastened to the safety covers.

Arrange the gables (10) and install the wall junction (3) to the gables. Attach the wall junction profile to the same spot where the safety cover (a) was removed in the proceeding step.

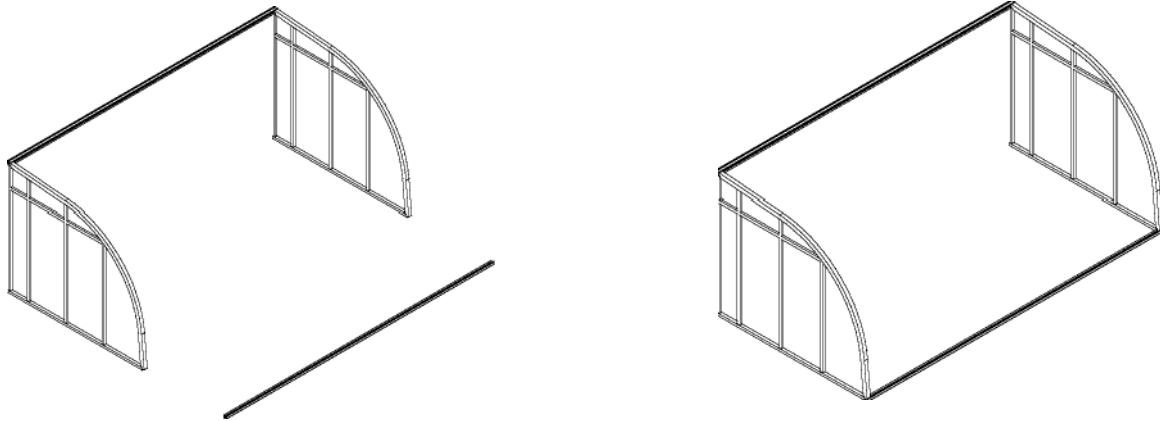
Installation of the gable



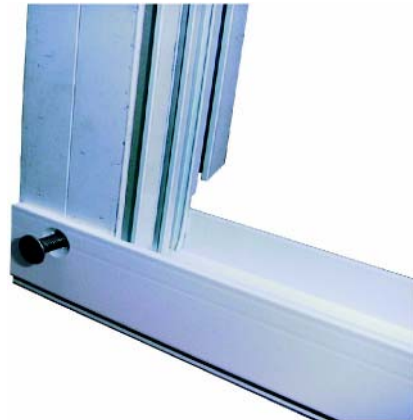
Push the M8x65 mm countersunk screw (13) through the pre-drilled holes and screw the nut on from the underside. After you have finished you can attach the cover cap.

Installation of the gable

a

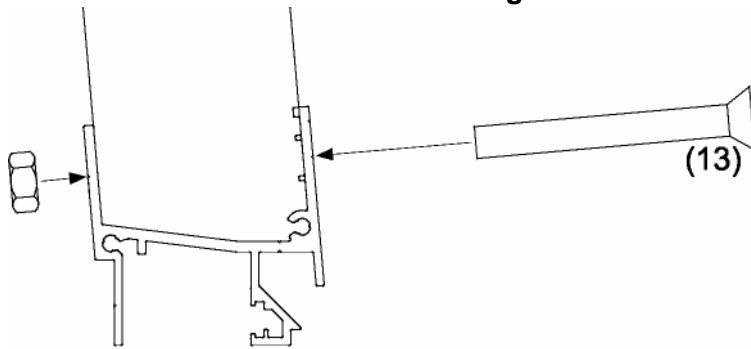


Arrange the gables (10) and insert the gables into the frame socket (2). Install the frame socket to the same spot where the safety cover (b) was removed in the first step.

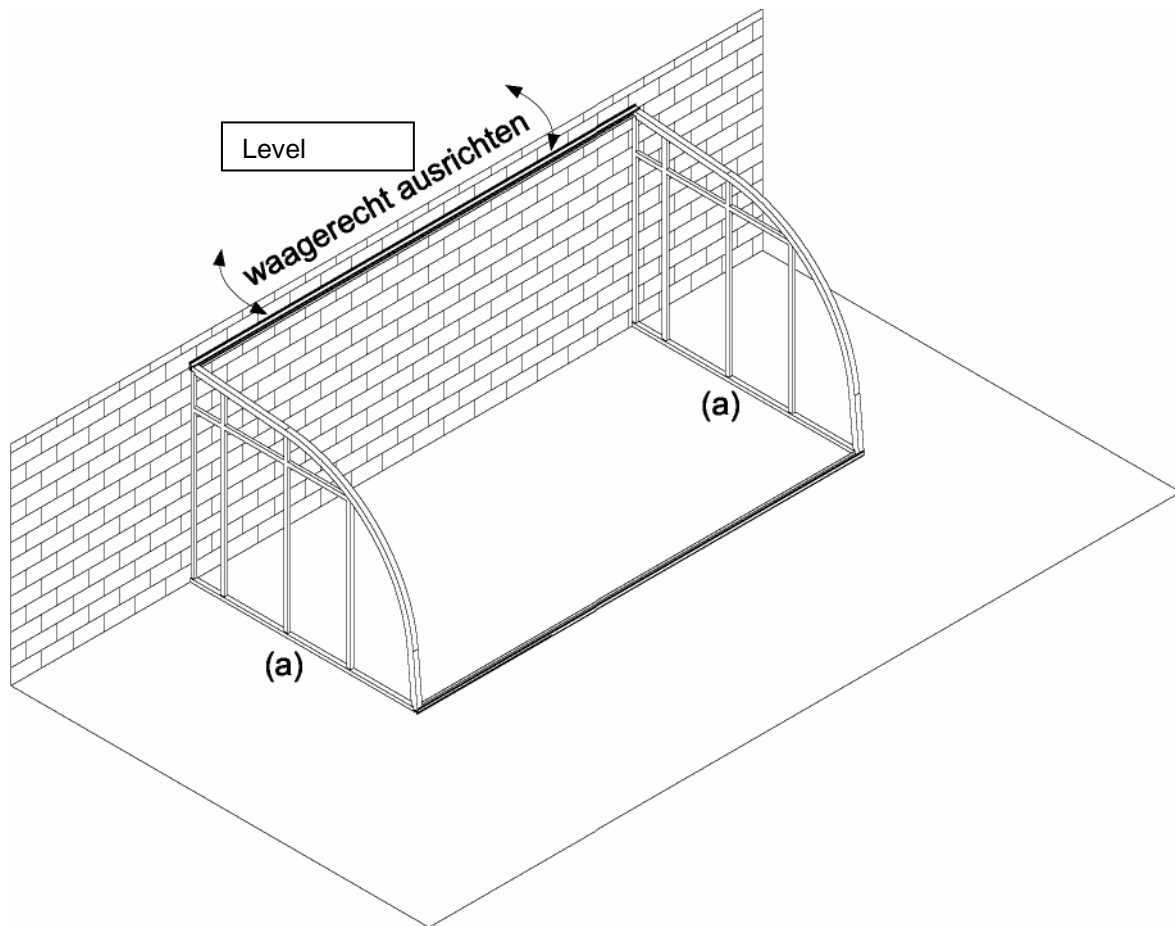


Screw the gables to the frame socket.
Use the countersunk screw & nut (13).

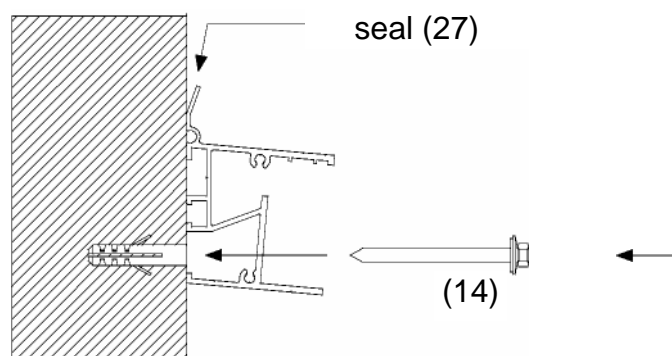
Installation of the gables



Align and fasten the wall junction



Place the Solar veranda “Berlin” onto the wall and check whether the wall junction profile is in a horizontal position. If necessary, shim the gables' ground profile (a) with a suitable material to align the wall junction.

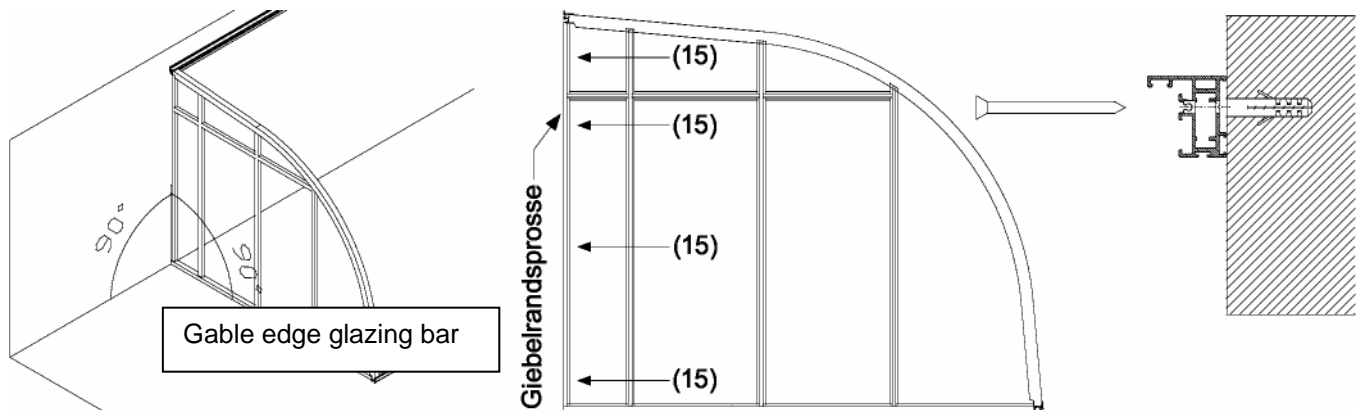


Using an 8mm masonry bit, drill a hole approx. 50-60 mm deep in the brickwork through the pre-drilled holes in the wall junction profile.

Place the dowels (14) into the drilled holes and screw the wall junction onto the brickwork.

Use the 6.5x75mm siding screws (14). Next place the caps onto the screw heads and seal the wall junction on the top side with the special silicone (28).

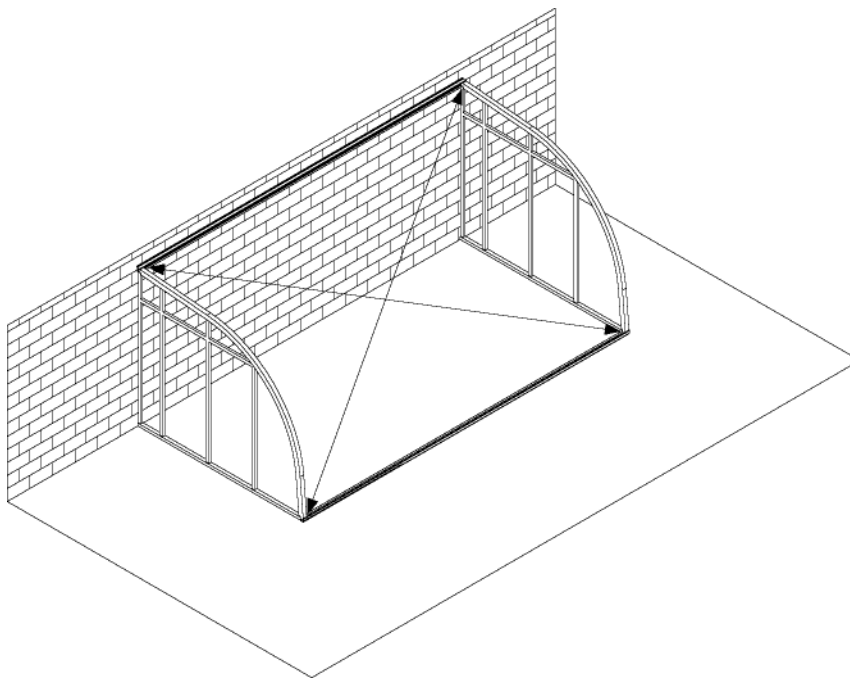
Align and fasten the gables



Align the gables perpendicular.

Use the 5.5x70mm countersunk head screws (15) and suitable dowels to mount the gable to the brickwork. There are no pre-drilled holes in the gable edge glazing bar. Drill a hole using an 8mm steel bit at a suitable position (see figure on the right). Counterbore the drill hole with an 11mm bit so that the screw head is level with the profile.

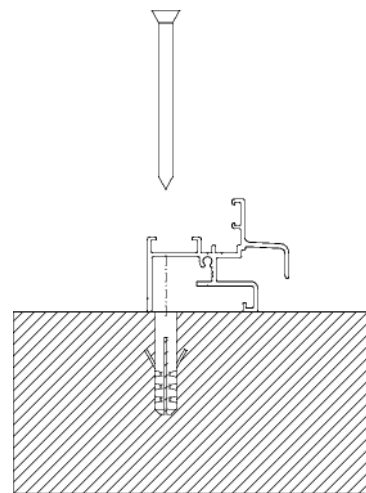
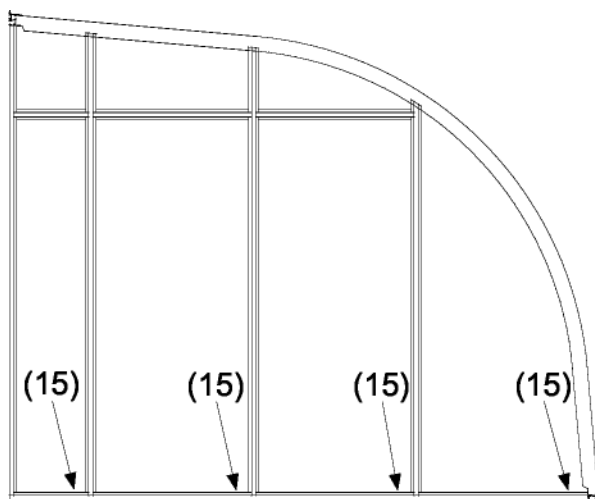
Align and mount the frame socket



Measure the diagonals and align the Solar veranda "Berlin" in such a way that both dimensions are identical. Check that the frame socket is level. If necessary, shim with a suitable material.

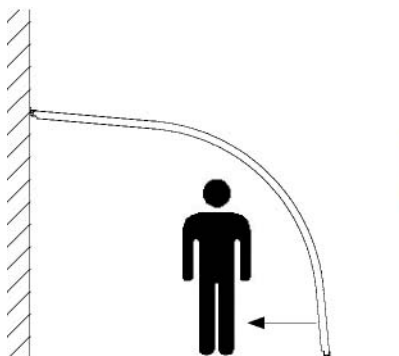
Using an 8mm masonry bit, drill a hole approx. 50-60 mm deep in the foundation through the pre-drilled holes in the frame socket. Press the dowels into the drill holes and screw on the frame socket using the 6.5x75mm siding screws (14).

Mount the gable to the foundation



Screw the gables to the foundation at positions indicated (see above). Use the 5.5x70mm countersunk head screws (15) and suitable dowels. There are no pre-drilled holes in the ground profile. The installation process is the same as with the wall.

Hang the middle frame

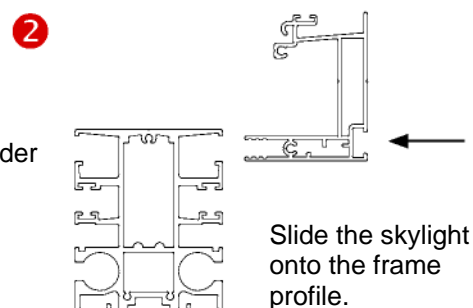
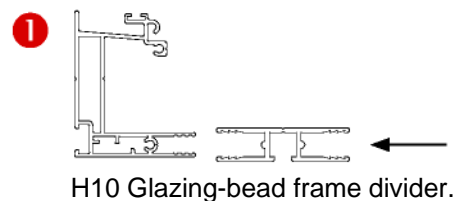
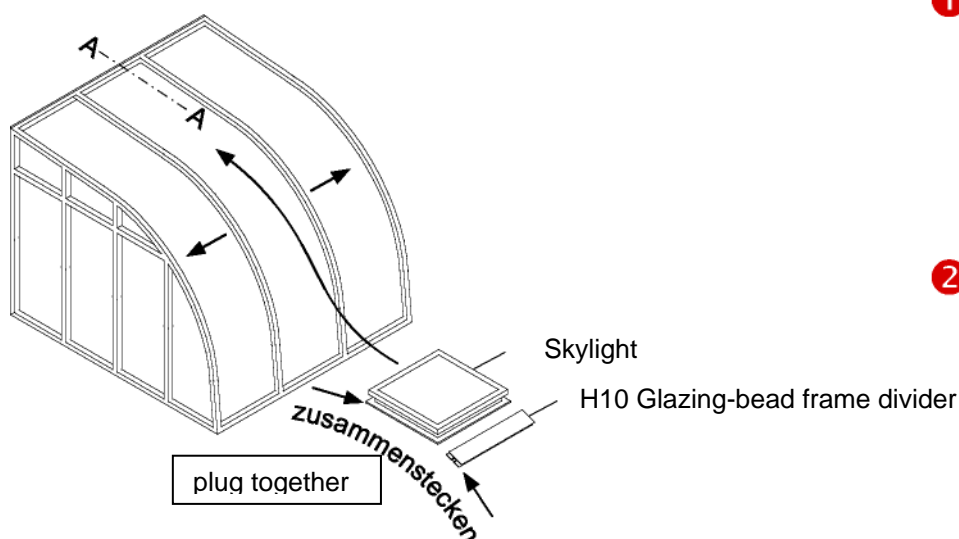


Insert the middle frame into the wall junction profile. Check that the drill holes are covered. Stand in the Solar veranda "Berlin". Bend the frame to you and insert it into the frame socket.

Only screw the middle frames onto the wall junction. Use the countersunk screw, nut & cap (13).

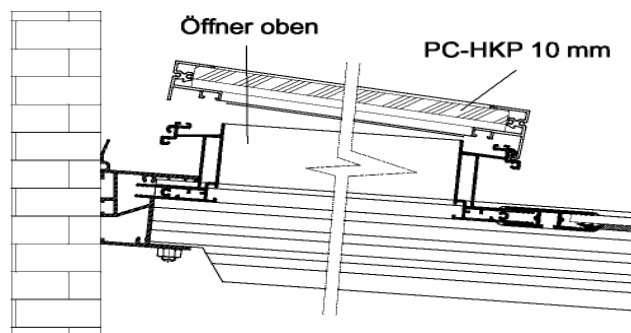
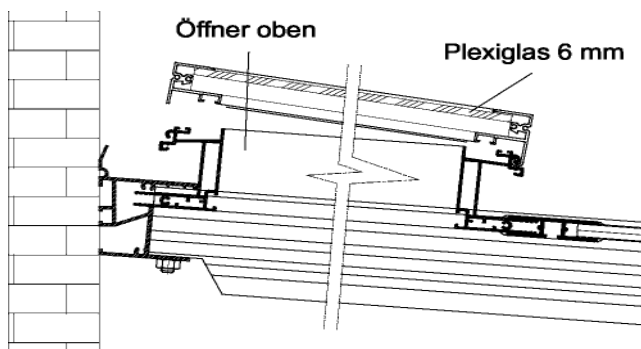


Install the skylight (option)



1. Mount the H10 glazing-bead frame divider to the window frame. Check for the correct skylight opening direction (see profile cross section A-A).
2. Spread the relevant frames slightly apart in the area of the bend. Slide the skylight into the intended slot.
The H10 glazing-bead frame divider is slid into the recess in the frame.

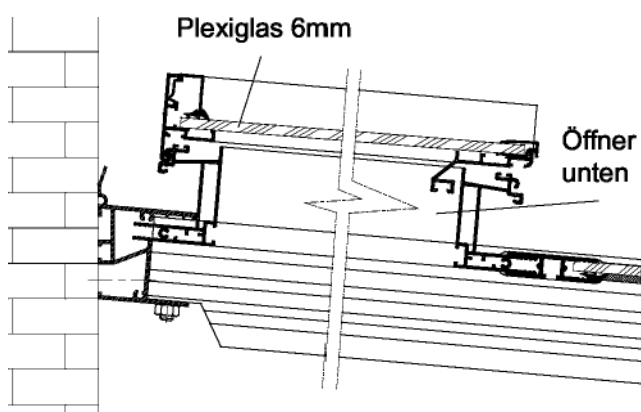
Skylight up to 3.5m deep: Profile cross section A-A



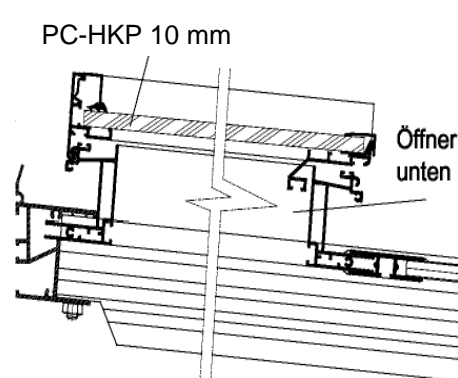
Opener top 6mm Plexiglass

Opener top 10mm PC-HKP

Skylight greater than 3.5m deep: Profile cross section A-A



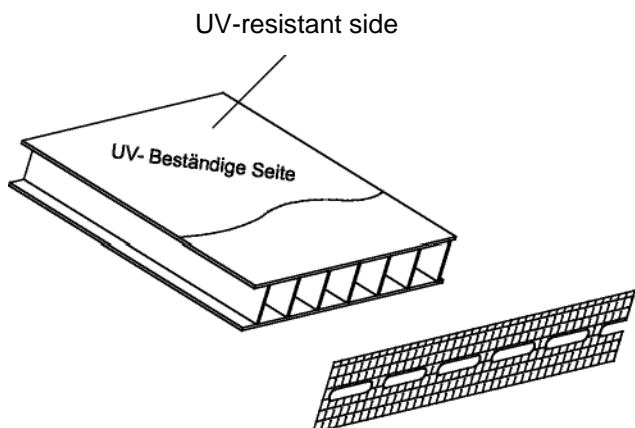
6mm Plexiglass
Opener bottom



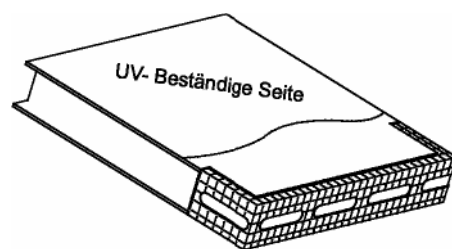
Install roof glazing

Loosen the protective plastic film approx. 10cm from the edge of the double web plates.
The open ends of the double web plates in the standing wall and roof areas must be masked with permeable insecticide tape.

Protective plastic film



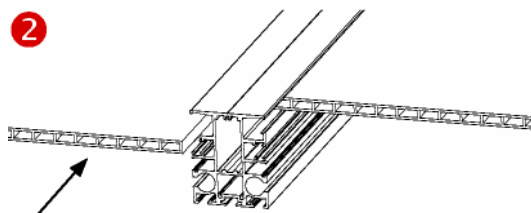
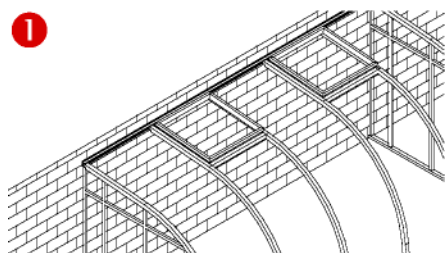
UV-resistent side



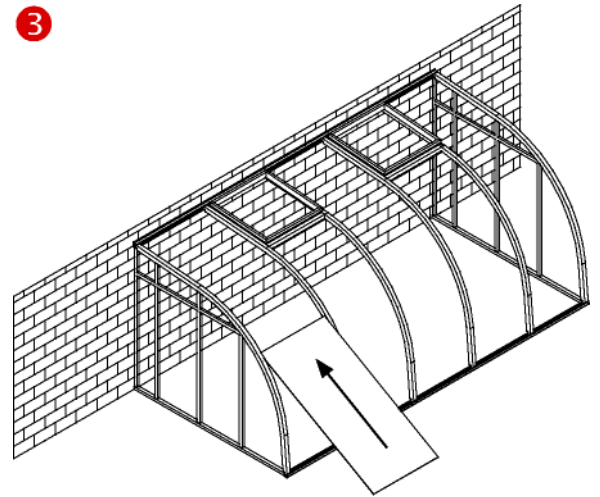
Spread the frames slightly apart in the area of the bend (1). Then slide roof glazing (3) into the intended slot (2). Make sure that glazing sits correctly in the intended channel and that it does not slip out.

The UV-resistant side is marked with a label. The UV-resistant side belongs on the outside.

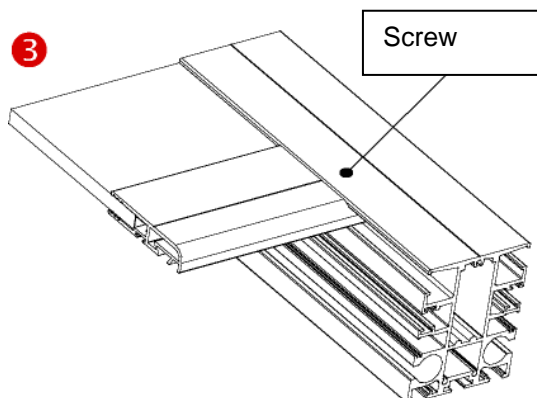
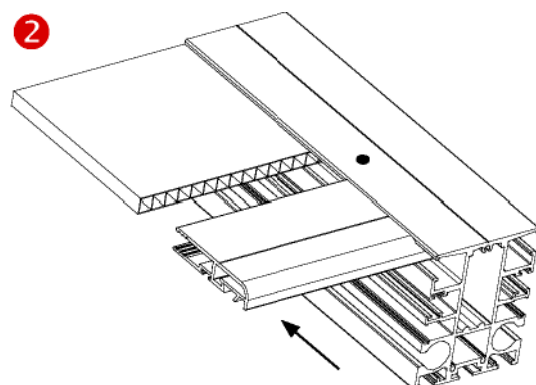
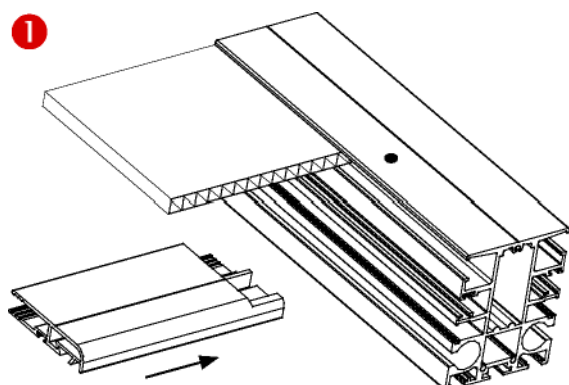
Caution: Only remove the protective plastic films after the Solar veranda has been completely installed.



3

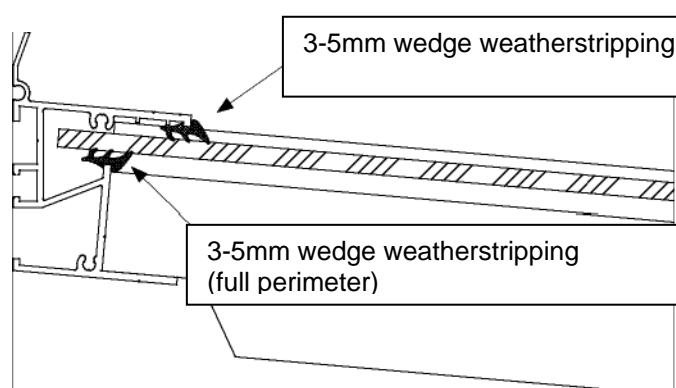


Installation of the glass retaining bracket

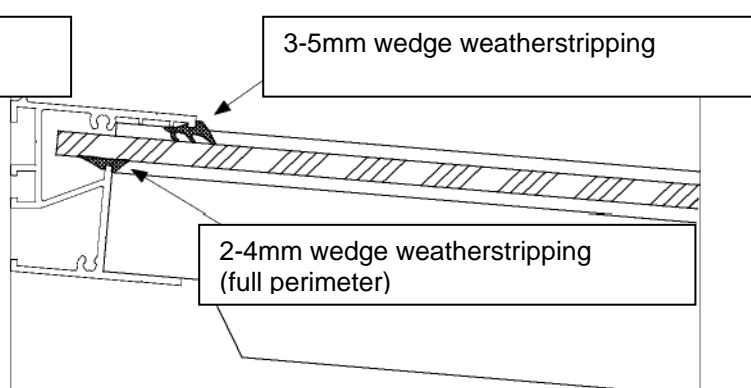


Spread the frames slightly apart in the area of the bend. Place the glass retaining bracket (5) into the frame with the open side to the glazing and the cut out pointing up. Slide the glass retaining bracket onto glazing and fix with a 4.8x19mm fillister head screw (16).

Mount the wedge weatherstripping as shown in the drawing

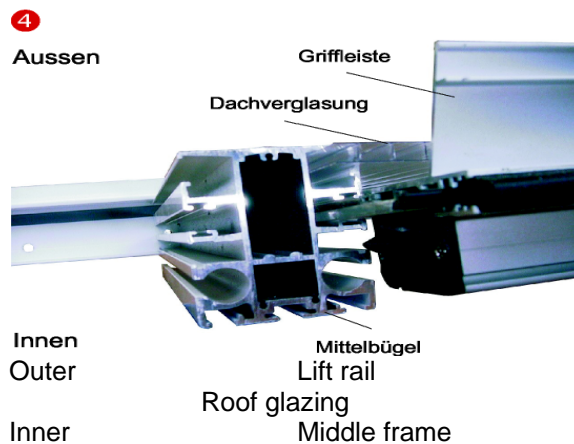
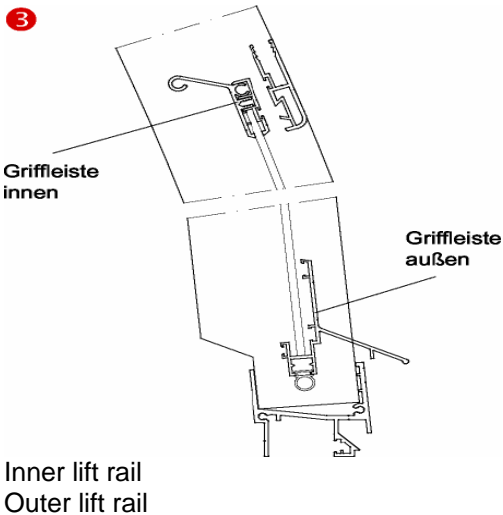
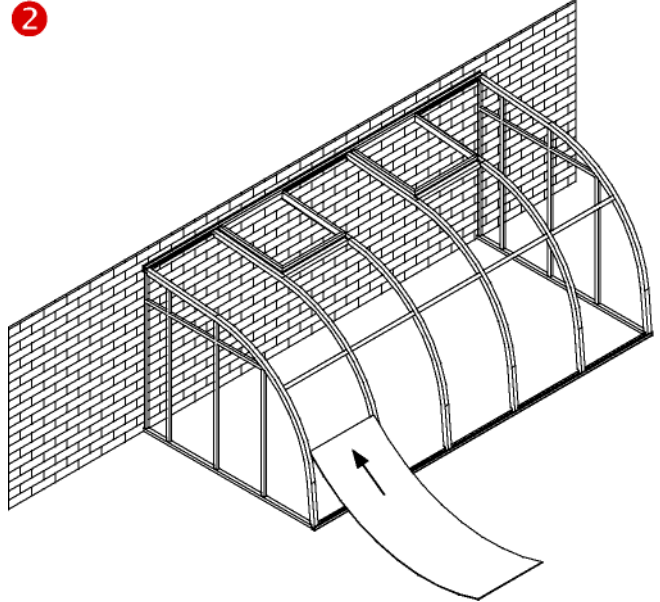
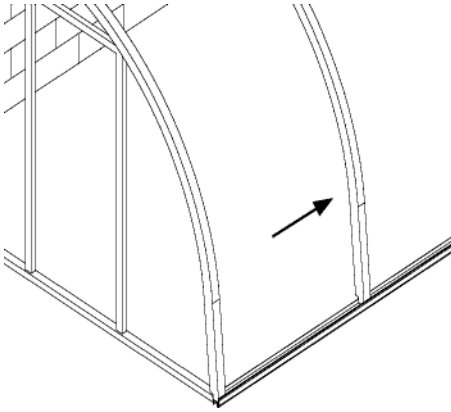


Roof glazing: 6mm Plexiglass



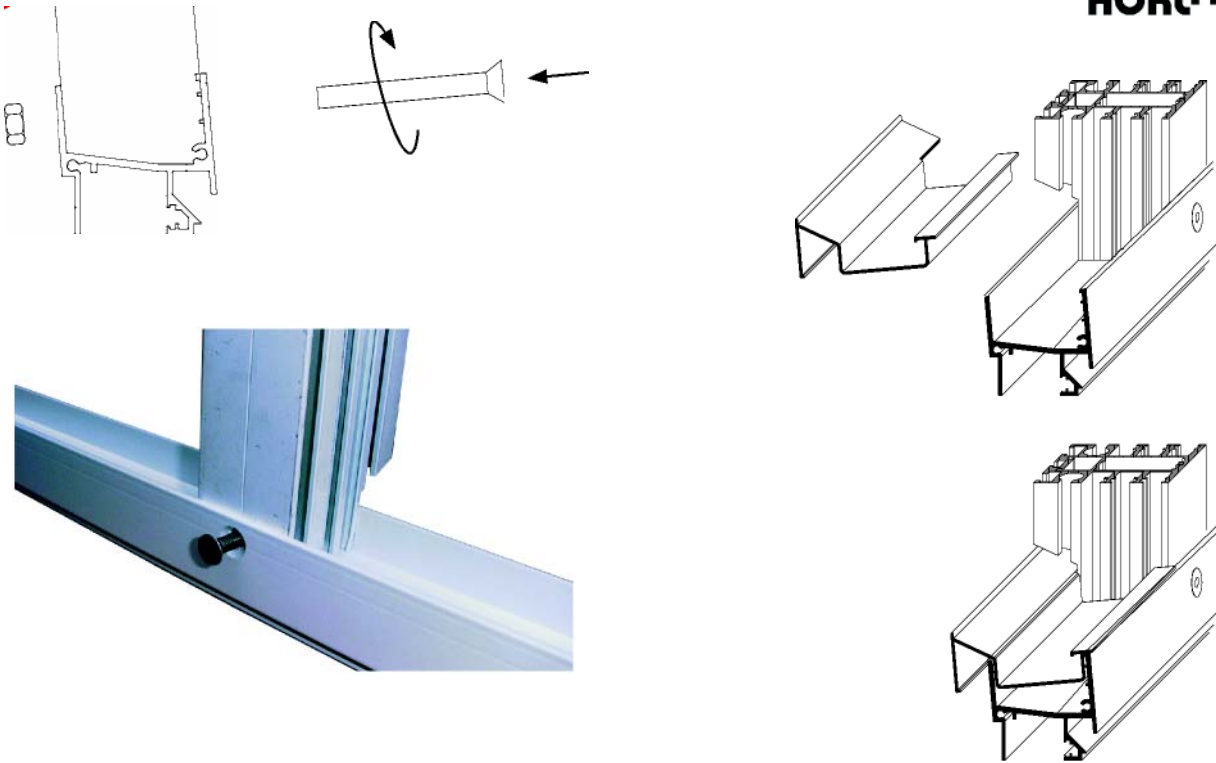
Roof glazing: 8mm SDP Plexiglass

Assembly of the sliding element



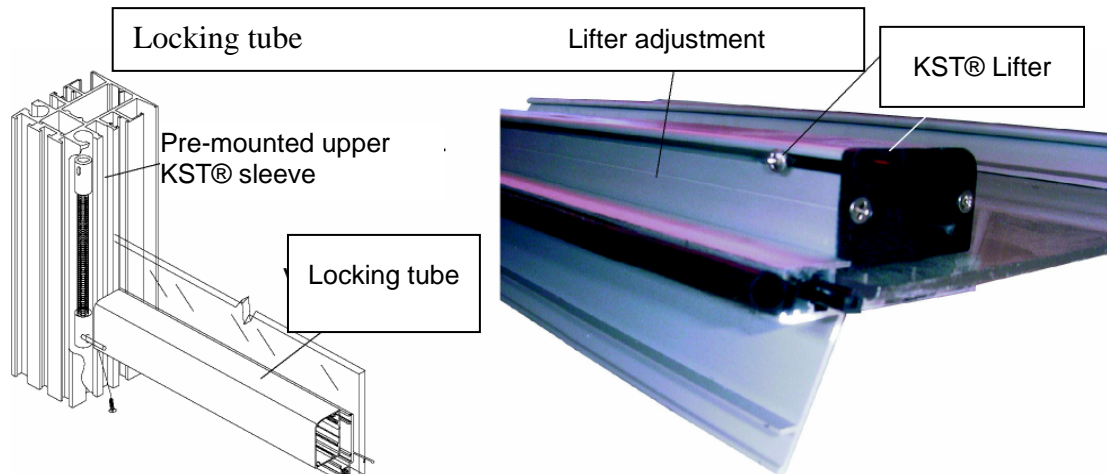
Once you have finished installing the roof glazing you can begin with the sliding elements. First remove approx. 10cm of the protective plastic film from the edge of the elements. Press the frames slightly apart in the area of the ground profiles (1) and install the sliding element into the frame (2) from below. The inner lift rail points up, the outer lift rail points down (3). When assembling, make sure that the glazing (4mm Plexiglass) of the sliding element runs in the channel with the brush seal (pre-mounted, 4).

Caution: Remove the protective plastic films only when the Solar veranda "Berlin" has been completely installed.



After you have installed all of the sliding elements you can screw the frames onto the frame socket (1). Use the M8x65mm countersunk screw & nut (13). Next set the cover profile into the frame socket (2). The cover profile can be removed at any time for cleaning. Before going any further, check the locking of the sliding elements.

Installation of the KST® System (power support sliding technology)

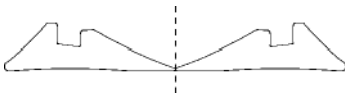


The KST® rubber spring is placed in the intended guide channel and pre-mounted along with the upper KST® sleeve onto the frame.

In order to be able to connect the sliding element with the KST® System you must open the sliding element all the way to the positive stop. Now pull the lower KST® sleeve to the locking tube. Loosen the lifter adjustment and push the KST® lifter into the KST® sleeve. Retighten the lifter adjustment after you have pushed the KST® lifter into the lower KST® sleeve.

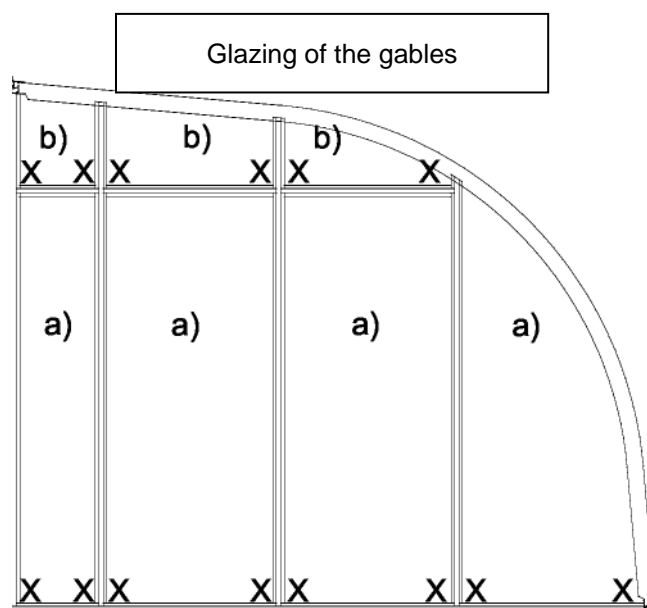
Seal overview

	Seal	Intended purpose
	2-4mm banana weatherstripping	Door glazing, sliding window from the outside Roof glazing from the inside (with 8mm SDP Plexiglass)
	3-5mm wedge weatherstripping	Sliding door and windows full perimeter interior (with 5mm Plexiglass, 10mm PC-HKP, 5mm thick window glass) WA-profile and roof glazing (only with 6mm Plexiglass) Gable from the interior Skylight glazing (with 6mm Plexiglass and 10mm PC-HKP) only with Berlin skylight depth of more than 3.5m
	6-8mm wedge weatherstripping	Outer gable glazing - only outer frame
	Bulb seal	Lift rail down, footing underside (pre-mounted)
	3mm upper profile seal (black)	Outer gable glazing
	2mm upper profile seal (grey)	Lift rail down, one per sliding section (pre-mounted)



The wedge weatherstripping must be separated.

Important!
Compress all seals together when installing as they shrink when cold.

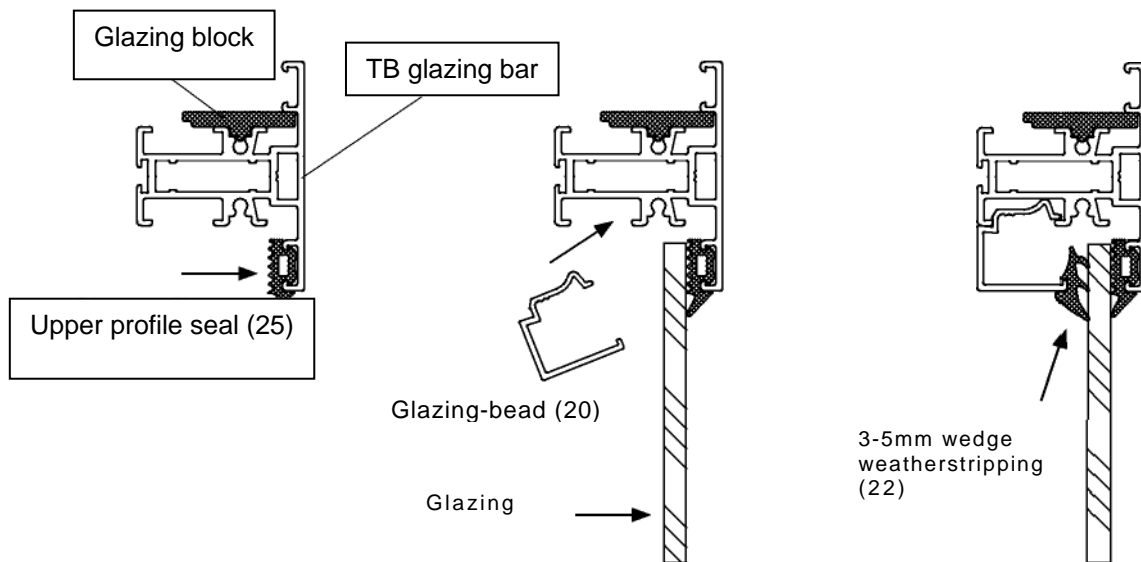


In order to start glazing you must remove the glazing and sheet beads. It is best to only remove the glazing-beads from the window that you are working on.

Important! Only remove the protective plastic films after you have finished the installation (only with plastic glazing). Check the correct fit of all glazing blocks (X)

Glazing the gables

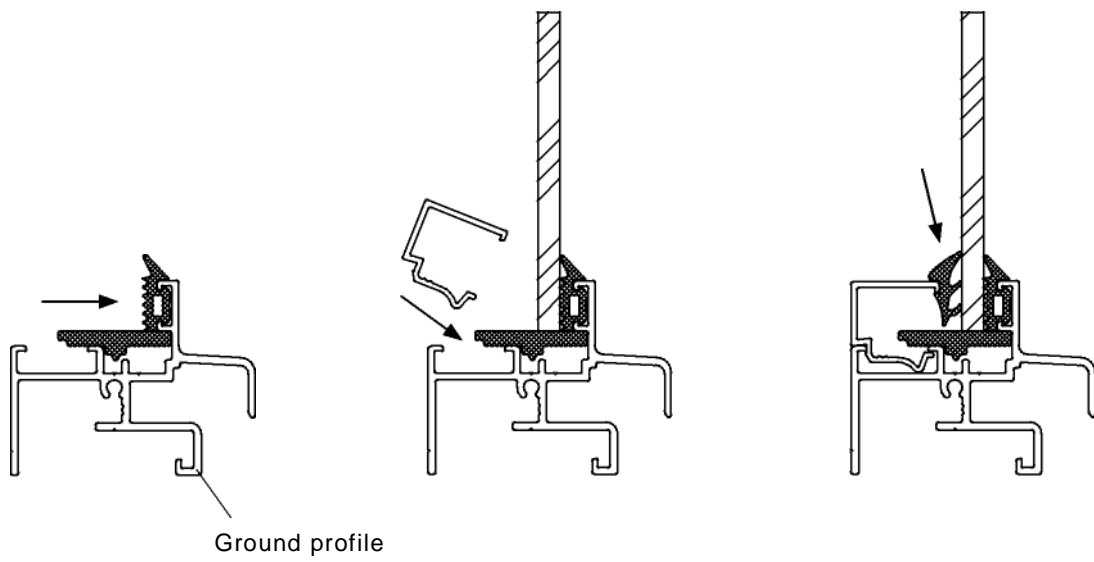
Glaze area a)



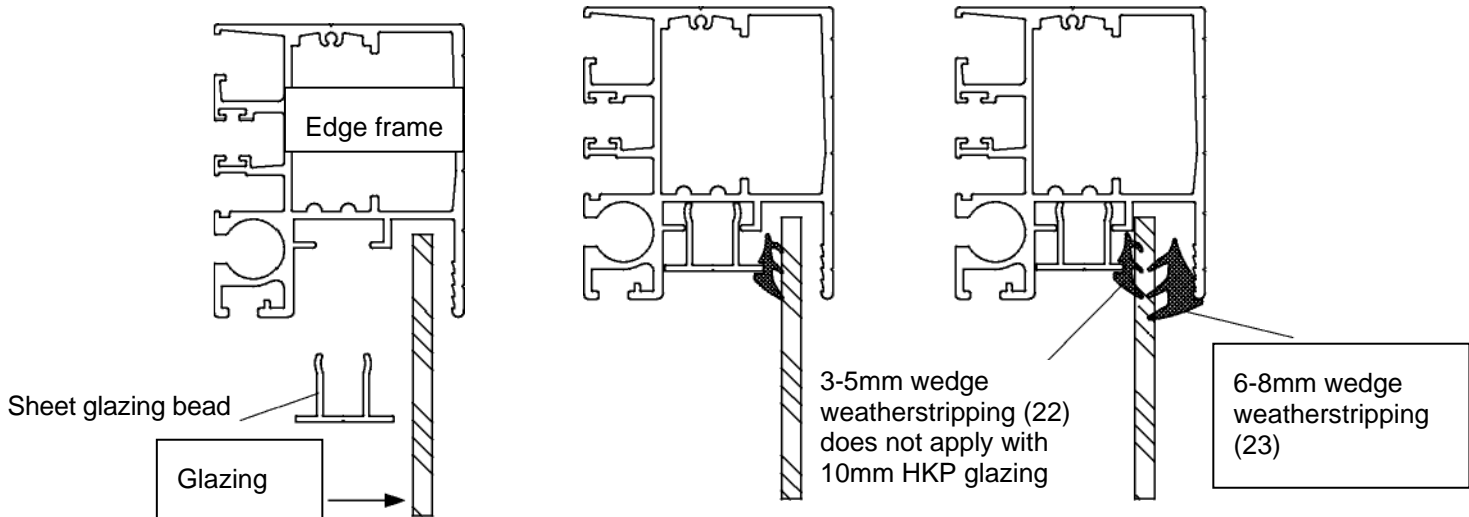
Press the upper profile seal (25) into the vertical and horizontal channels of the TB glazing bar (see drawing top left) and into the ground profile (see drawing bottom left) of the gable.

Bring the glazing into position and place the glazing-bead (20) into the TB glazing bar (top centre) and into the ground profile (bottom centre).

When you have installed the glazing-beads you can insert the 3-5mm wedge weatherstripping (22) between the glazing-bead and the glazing.



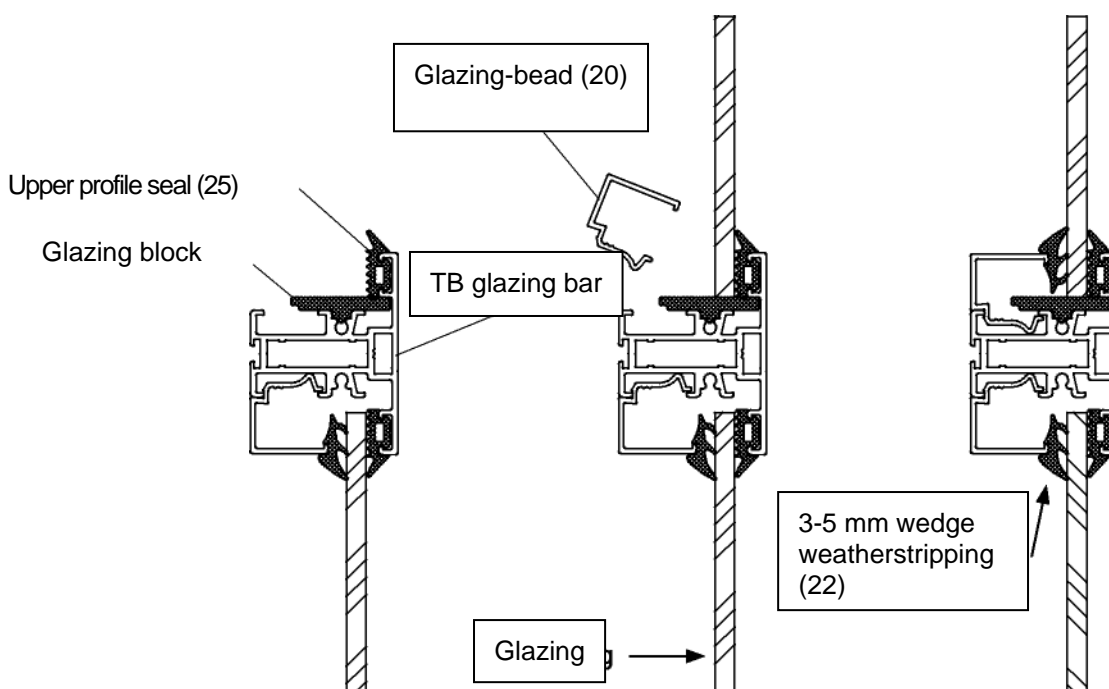
Glaze area b)



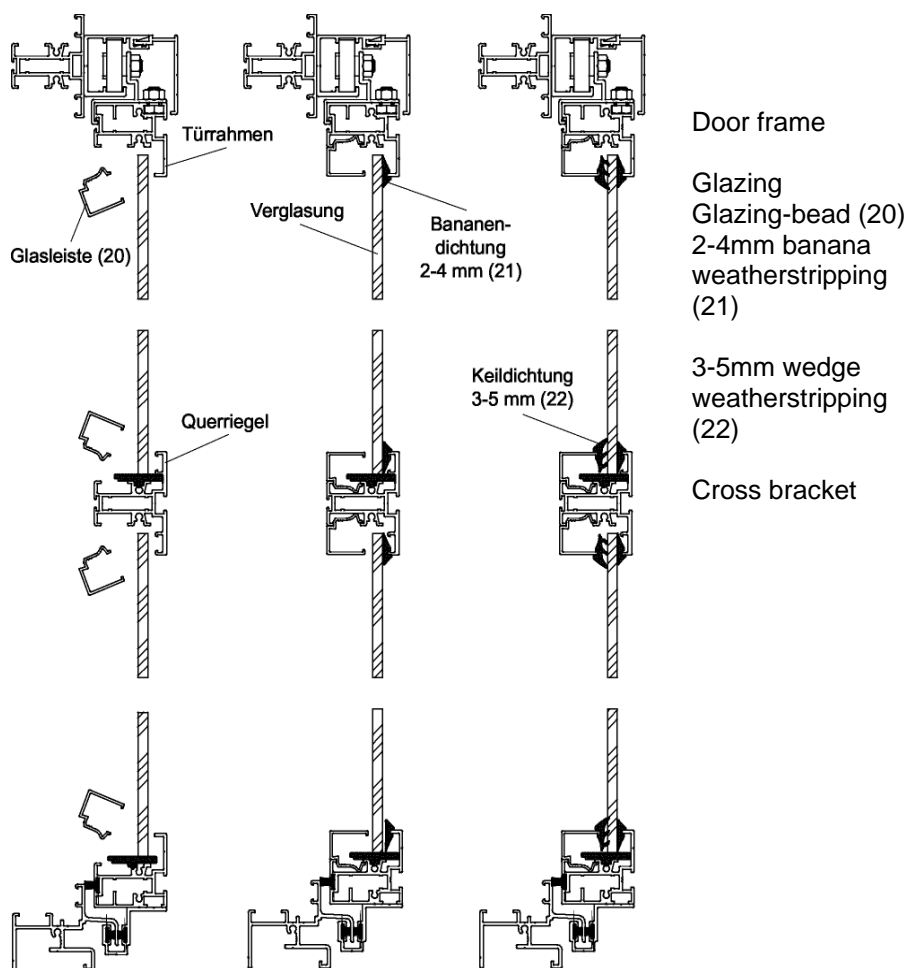
Press the upper seal (25) into the vertical and horizontal channels of the TB glazing bar (see drawing lower left). Bring the glazing in position and install the sheet glazing bead into the edge frame (drawing top left).

Set the glazing-bead into the TB glazing bar (drawing bottom centre).

Press on the inside of the 3-5mm wedge weatherstripping (22) between the frame glazing bead and glazing (does not apply with 10mm HKP glazing) (drawing top centre) as well as between the glazing-bead and glazing (drawing lower right). Install the 6-8mm wedge weatherstripping onto the outer side (23) (drawing top right).



Sliding door glazing

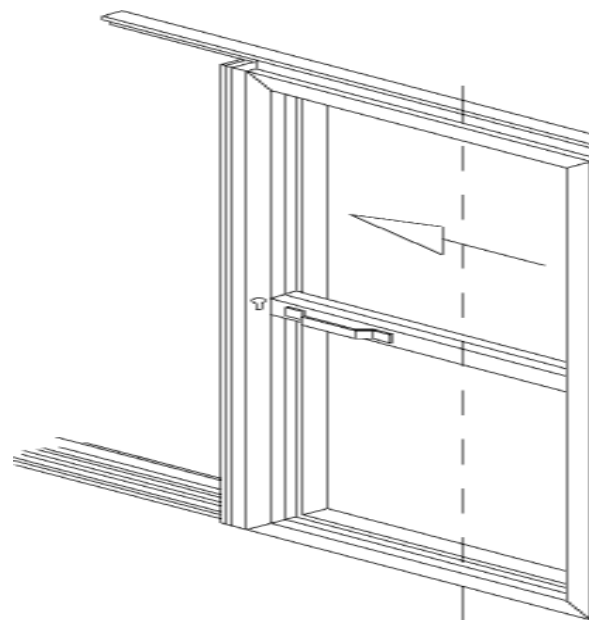


Door frame

Glazing
Glazing-bead (20)
2-4mm banana
weatherstripping
(21)

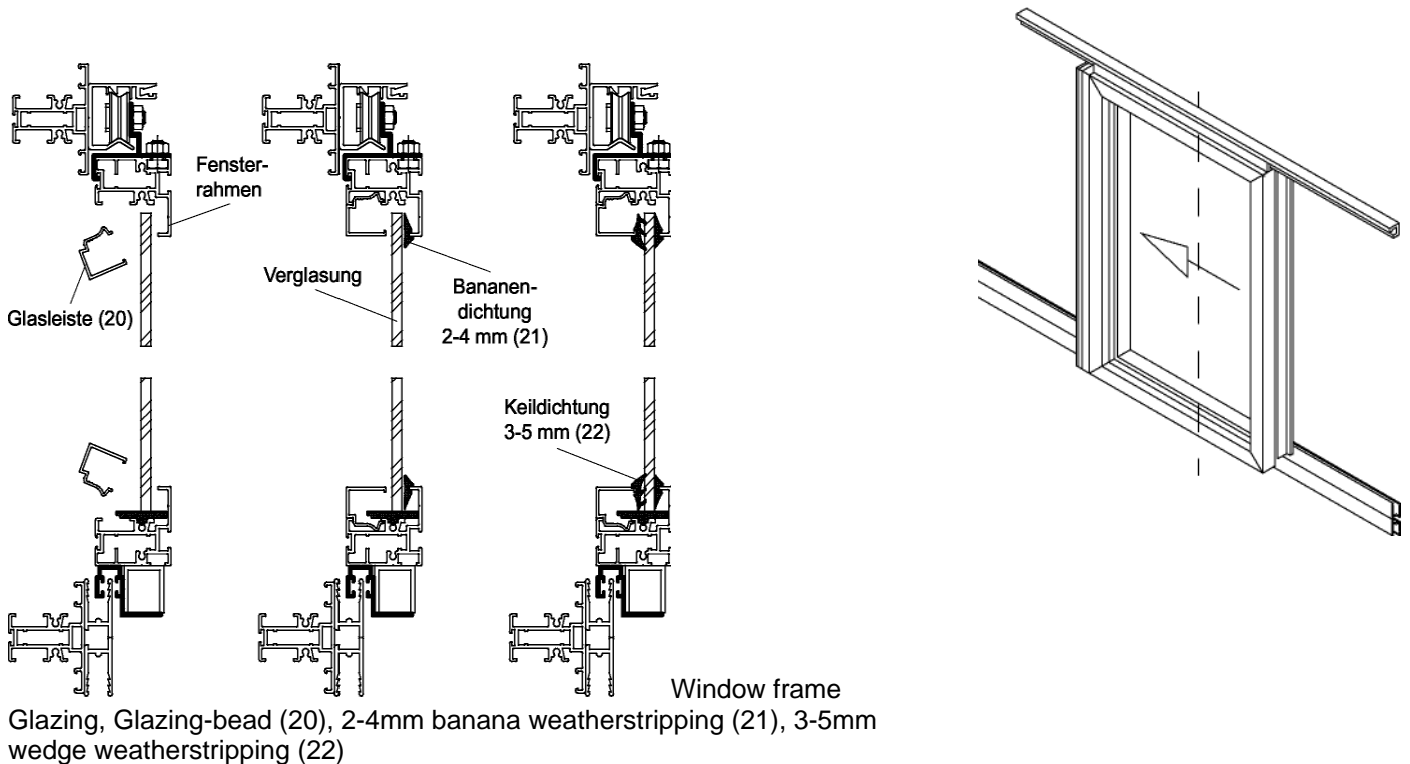
3-5mm wedge
weatherstripping
(22)

Cross bracket



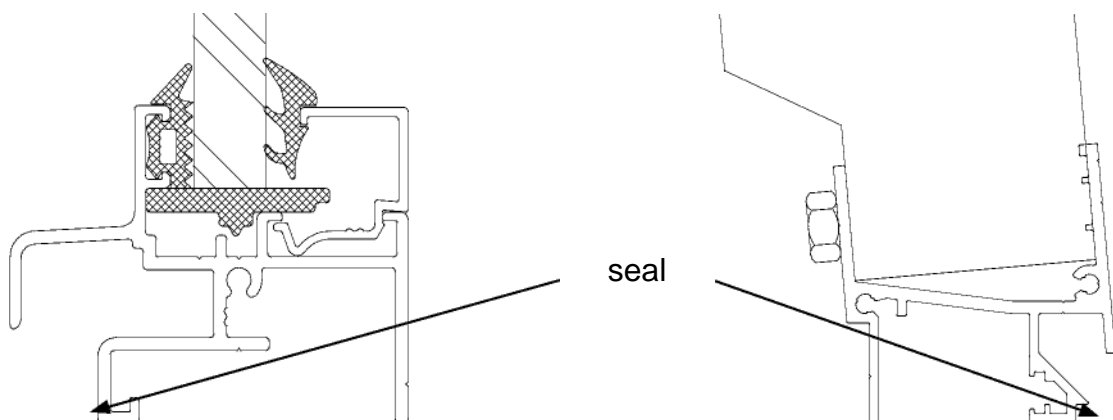
Bring the glazing into position and set the glazing-beads (20) into the door glazing bar (see drawing centre left) and into the door frame profiles (full perimeter, drawing top and bottom left). When you have installed the glazing-beads you can push the 2-4mm banana weatherstripping (21, full perimeter) onto the outer side between the door glazing-bead frame and window. Next install the 3-5mm wedge weatherstripping onto the inner side (22, full perimeter).

Sliding window glazing

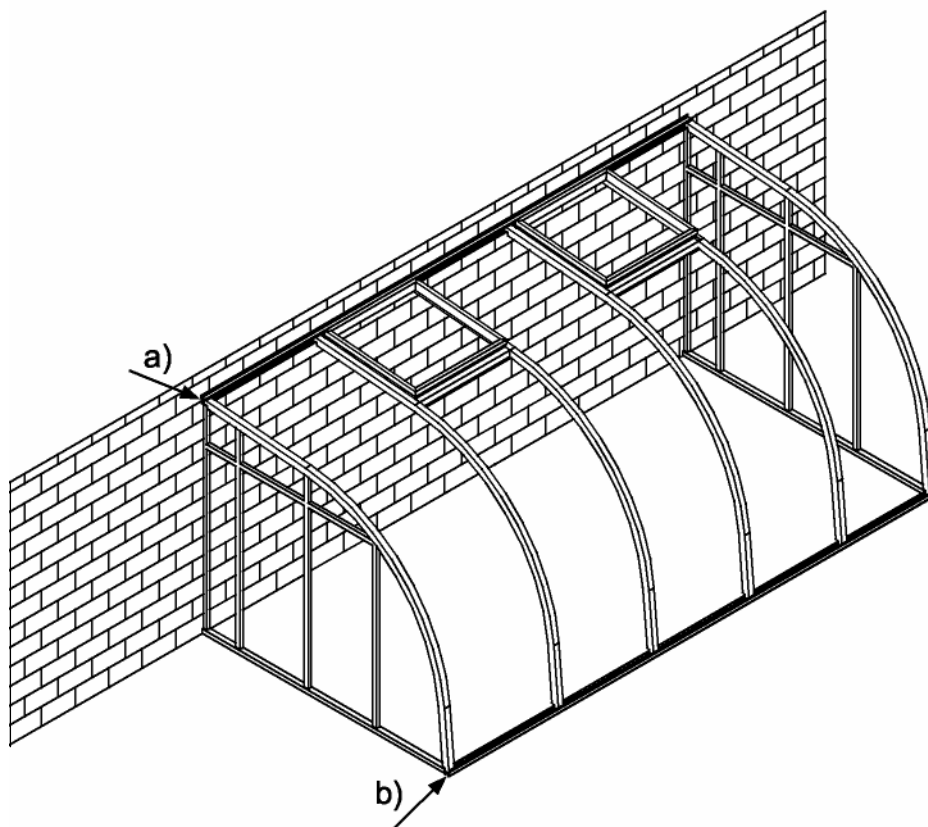


Bring the glazing in position and install the glazing-bead (20) into the window frame profile (full perimeter, drawing top and bottom left). When you have installed the glazing-beads you can push the 2-4mm banana weatherstripping (21, full perimeter) onto the outer side between the window frame and glazing. Next install the 3-5mm wedge weatherstripping onto the inner side (22) (full perimeter).

Seal

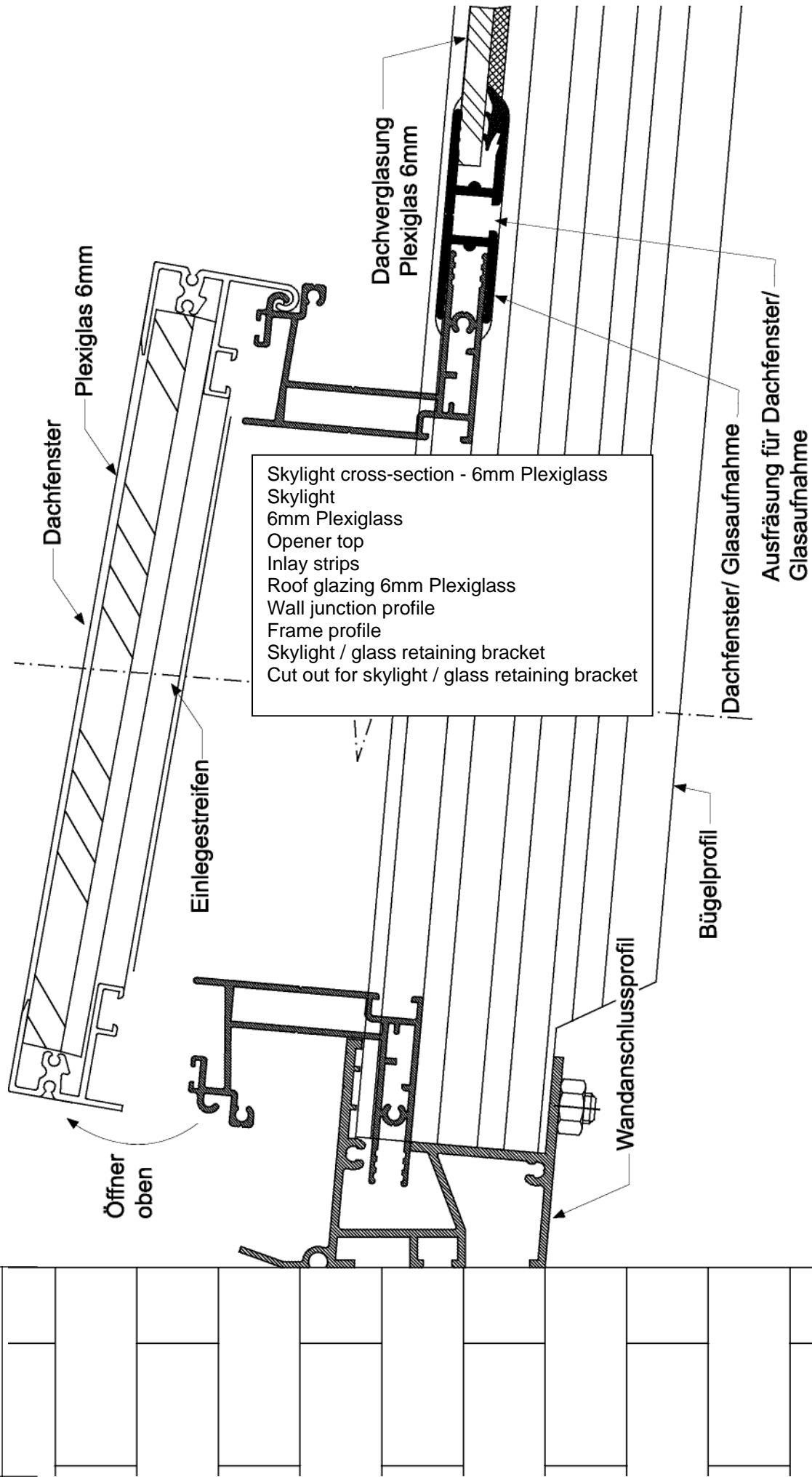


Seal the area between the ground profile and foundation along the full exterior perimeter. In addition, seal the outer edge between the gables and wall. Use the special silicone (28).

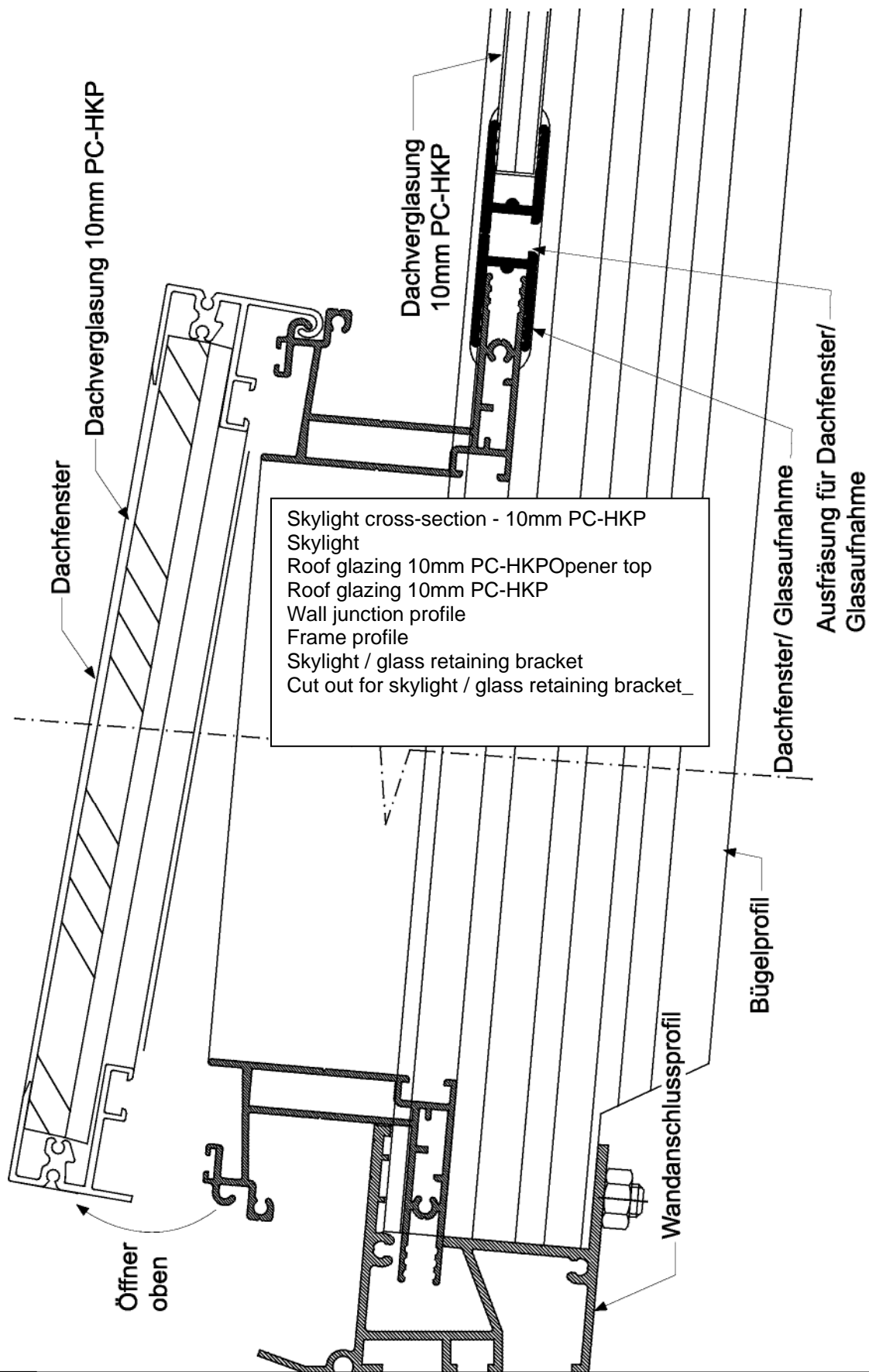


Install the cover caps that you removed along with the gable safety covers at the beginning of the installation (page 6) onto the wall junction and ground profile.
Seal the end sheets and profile joints with special silicone (27).

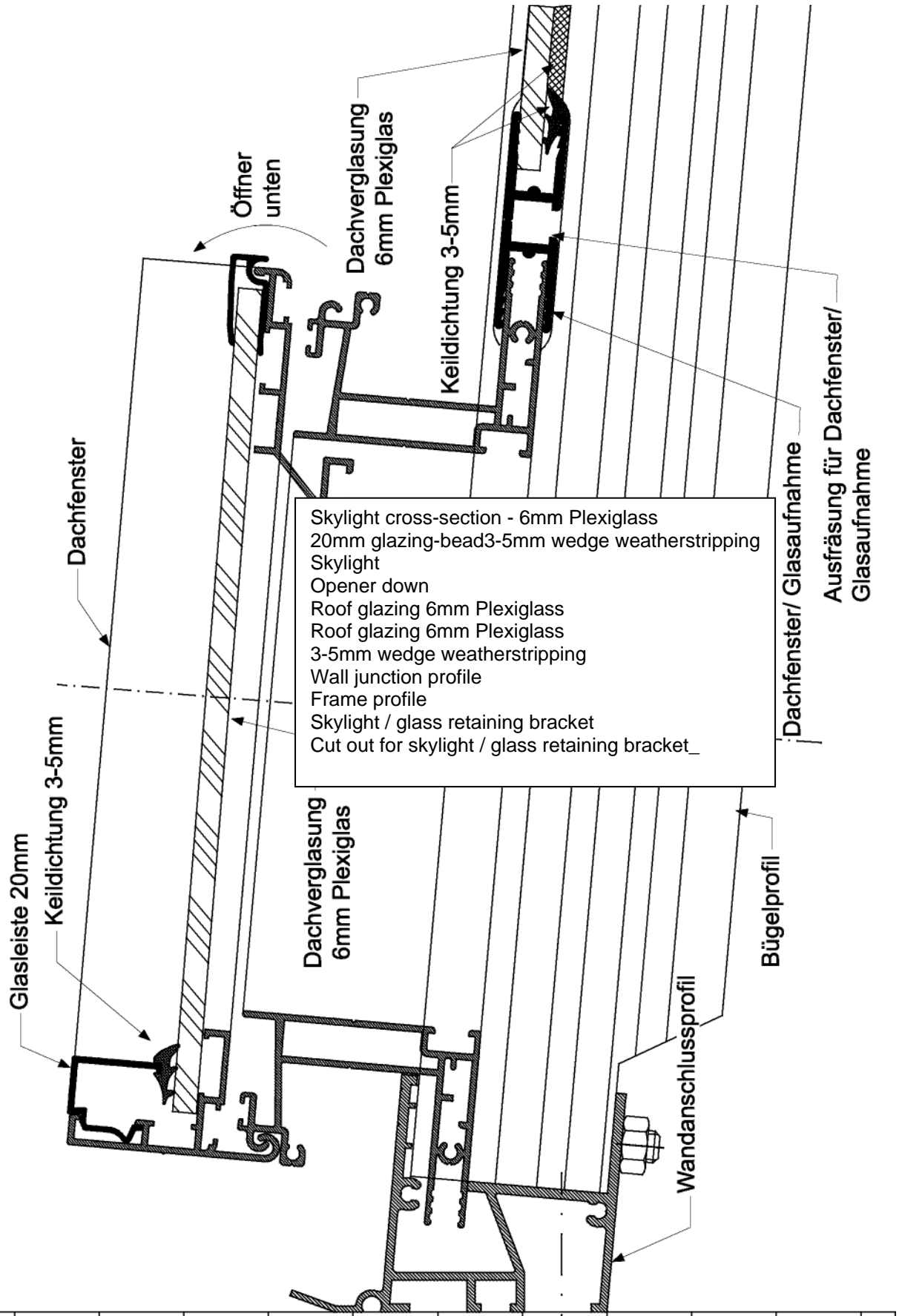
Querschnitt Dachfenster - Plexiglas 6mm



Querschnitt Dachfenster - PC-HKP 10mm



Querschnitt Dachfenster - Plexiglas 6mm



Querschnitt Dachfenster - PC-HKP 10mm

