

PORTAL

**HS ECO PASS threshold
for barrier-free lift and slide elements**

Important notes for all trades involved in waterproofing buildings

Window systems

Door systems

Comfort systems

Contents

1	GENERAL NOTES	4		
1.1	Target group of this sill installation manual	4	6.4.1	Removal of the threshold and the compensation rail in case of subsequent assembly of a sealing plate.....
1.2	Copyright	4	6.4.2	Assembly of the foam rubber seal and the horizontal sealing plate
1.3	Liability restrictions and disclaimer of liability	4	6.4.3	Assembly of the vertical sealing plates.....
			6.4.4	Renewed assembly of compensation rail and step plate
2	INTENDED USE.....	5	6.5	weather bar
3	ADDRESSES	6	6.6	Assembly of the flexible connection flanges
4	STRUCTURE OF THE THRESHOLD ECO PASS.....	7	6.7	Variant „Sky axcent“
4.1	Components relevant for the sill installation	7	6.7.1	Assembly of the sealing bead horizontal small
4.2	Optionally available components	8	6.7.2	Assembly of the outside threshold grille (SIEGENIA)
			6.7.3	Optional: assembly of outside grille (Gutjahr)
5	FUNCTIONAL MODE OF THE ECO PASS THRESHOLD SYSTEM	9	7	SILL INSTALLATION
6	HANDLING THE COMPONENTS (FOR WINDOW PRODUCERS AND ASSEMBLY COMPANIES).....	9	7.1	Correct execution of waterproofing ...
6.1	Elastic adhesives and sealants	9	7.2	Ensure water drainage.....
6.2	Sealing wedges	10	7.2.1	Maximum backwater height.....
6.3	SIEGENIA base profile	11	7.3	Correctly executed sill installation for variant „vertical sealing plate“
6.3.1	Apply sealing material	11	7.4	Correct sealing for variant „flexible connection flange“
6.3.2	Screw on base profile	11	7.4.1	Product description
6.3.3	Line the base profile	12	7.4.2	Fabrication
6.4	Sealing plate/threshold/compensation rail	13	8	REINIGUNG
			9	CLEANING
			10	SIEGENIA-TELEFONNUMMERN.....
			11	SILL INSTALLATION SEMINARS.....

1 General notes

1.1 Target group of this sill installation manual

This sill installation manual is a technical information brochure. It is intended exclusively for specialist companies and architects/planners. It is not suitable for laypersons because of the presumed expertise and the specialised terms used in the manual.

All procedures described in the manual must be carried out only by experienced professionals. The appropriate and safe assembly of the PORTAL hardware is not possible without specialised expertise. This equally applies to their commissioning.

Keep this sill installation manual in a safe location.

1.2 Copyright

The contents of the sill installation manual represent the intellectual property of SIEGENIA-AUBI KG. Their use is permissible in the scope of further processing of the hardware components.

Any use beyond this is inadmissible.

1.3 Liability restrictions and disclaimer of liability

Under no circumstances does this sill installation manual replace or supplement the installation and/or assembly instructions to be prioritised. The recognised rules of technology likewise take priority.

This sill installation manual is for pure information purposes and to give supplementary support to qualified personnel.

We assume no liability if the precedence of our installation and/or assembly instructions are not complied with or the recognised rules of technology are violated.

You can find our installation and assembly instructions at the following Internet address:



<https://downloads.siegenia.com/de/>

2 Intended use



The basic objective of this brochure is to document the possibilities of qualified building waterproofing with the ECO PASS threshold.



- The waterproofing of buildings requires great care and cross-trade planning.
- The detailed development for the sill installation must be created and coordinated by a planner. There must be a complete drainage concept in existence.
- Anyone performing the execution without the involvement of a planner personally assumes the planning responsibility. It is essential that the legal obligations to inform are complied with.
- Follow our recommendation: the window assembly company carries out the sealing of the construction joints. The waterproofing of the building is carried out by a company specialised in such tasks.
- SIEGENIA has developed the ECO PASS threshold to ensure that an uncomplicated and qualified sill installation with a barrier-free threshold is possible.
- Further regulations must be observed according to the current situation



- There is a wide range of specialist literature on waterproofing buildings. In particular, take DIN EN 18531 - 18535 and for the terms DIN 18195 into account in Germany. Further regulations:
 - RAL guidelines for assembly
 - ift publication „Correct installation of down-to-floor windows and doors“
 - ibat „Connection of down-to floor elements“
 - WTA data sheet 4 - 6
 - Technical regulations for waterproofing (in accordance with Flat Roof Guideline)
 - ift directive MO-01/1 2007-01
 - Further regulations must be observed according to the current situation



- The following regulations, in particular must be observed for Austria:
 - ÖNORM B 5320 Installation of windows and doors in walls - Design and execution of the building connection as well as of the joint for windows and/or doors
 - ÖNORM B 3691 Design and execution of roof waterproofing in ÖNORM B 3692 Design and execution of waterproofing for buildings
 - Guideline on window sills for their installation in ETICS and plastered facades as well as in curtain facades
 - Guideline for the connection of windows, sunshades and facades



- For Switzerland, SIA 271 and the data sheet on waterproofing connections for windows and doors are applicable. Further regulations:
 - data sheet for the building shell Switzerland
 - Further regulations must be observed according to the current situation

3 Addresses

SIEGENIA has exchanges information intensively with the following companies:



GUTJAHR Systemtechnik GmbH
Philipp-Reis-Str. 5-7
64404 Bickenbach

E-Mail: info@gutjahr.com
Internet: www.gutjahr.com



ISO-CHEMIE GmbH
Röntgenstrasse 12
73431 Aalen

E-Mail: info@iso-chemie.de
Internet: www.iso-chemie.eu



Triflex GmbH & Co. KG
Karlstraße 59
32423 Minden

E-Mail: info@triflex.de
Internet: www.triflex.com



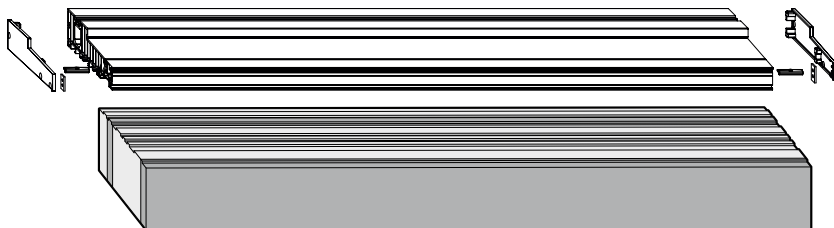
SIGA Cover GmbH Deutschland
Willy-BrandtPlatz 2
12529 Schönefeld

E-Mail: contact@siga.swiss
Internet: www.siga.swiss

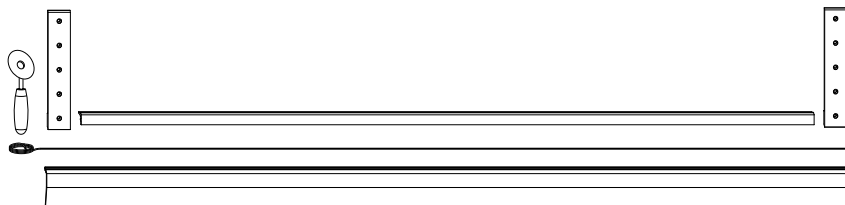
4 Structure of the threshold ECO PASS

4.1 Components relevant for the sill installation

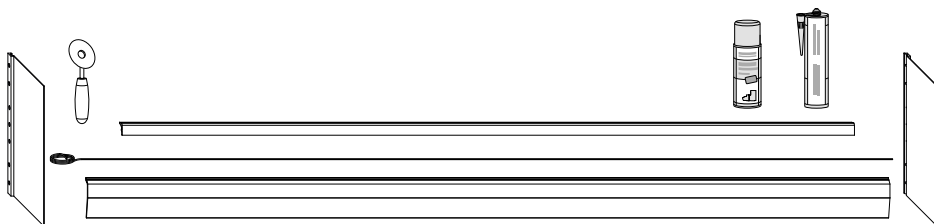
- Threshold with sealing wedges, end caps and inorganic base profile



- Variant with vertical and horizontal sealing plates as well as foam rubber seal and sealing roller



Variant with horizontal sealing plate, flexible connection flange, spray primer FA, assembly adhesive FA as well as foam rubber seal and sealing roller
(only available in barrier-free version)

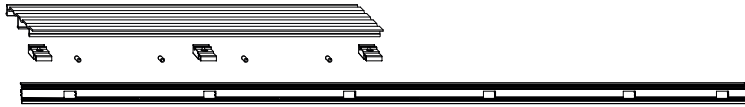


4.2 Optionally available components

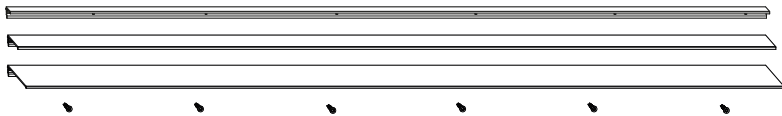
- threshold and compensation rail



- Barrier-free threshold EP, barrier.free plate adapter, dip caps and closure profile EP



- Weather bar B20, B50 and B90 with drill screws T-STAR 15 x 3.9



5 Functional mode of the ECO PASS threshold system

The requirements of qualified sill installation are fulfilled with the ECO PASS threshold system:

- no offset on the sealing area as far as the transition to frame
- min. 50 mm adhesive surface for the horizontal sealing
- Adhesive surface on frame (from upper edge of top layer):



150 mm



120 mm

- Adhesive undergrounds
- homogeneous background material
- Prevention of potential water ingress
- simple adaptation of the weather bar
- precision-fit floor recess for optimal load transfer
- Base profile made of inorganic material for reinforcements and for optimum load transfer

6 Handling the components (for window producers and assembly companies)

6.1 Elastic adhesives and sealants

We recommend using the following elastic adhesives and sealants

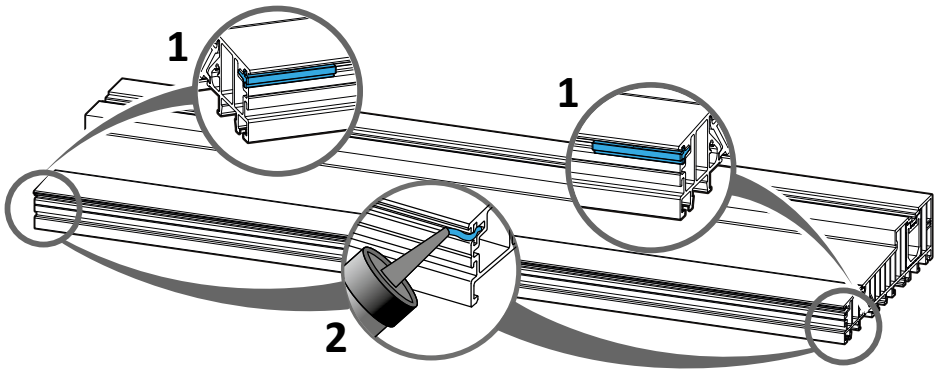
- OTTOSEAL® S 72 from OTTO Chemie
- Collano® A 1970 from Collano Adhesives AG
- comparable, other adhesives and sealants

6.2 Sealing wedges

The threshold must be sealed in the top groove with coloured sealing wedges at both ends (1). If no sealing wedges are available, you can alternatively close the area with sealant.

IMPORTANT:

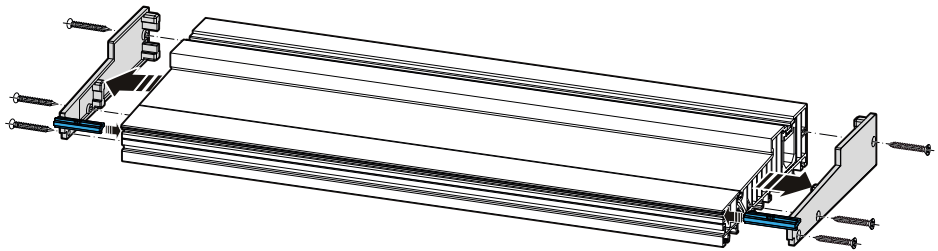
- the groove must be filled completely with sealant; the filling amount corresponds to the length of the sealing wedges (= 35 mm) (2)
- If sealing wedges exist in the BOTTOM groove, they must be removed prior to the assembly of the sealing cord and the sealing plate.



If the top groove can still be closed with sealing wedges, these can be mounted subsequently.

The lateral cover caps must be dismantled for this procedure

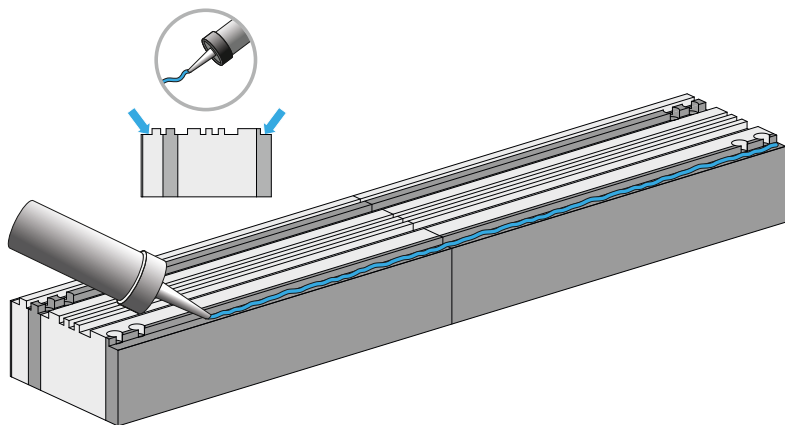
(refer to Assembly instructions „Sealing wedges for ECO PASS“ retrievable via the QR code page 4).



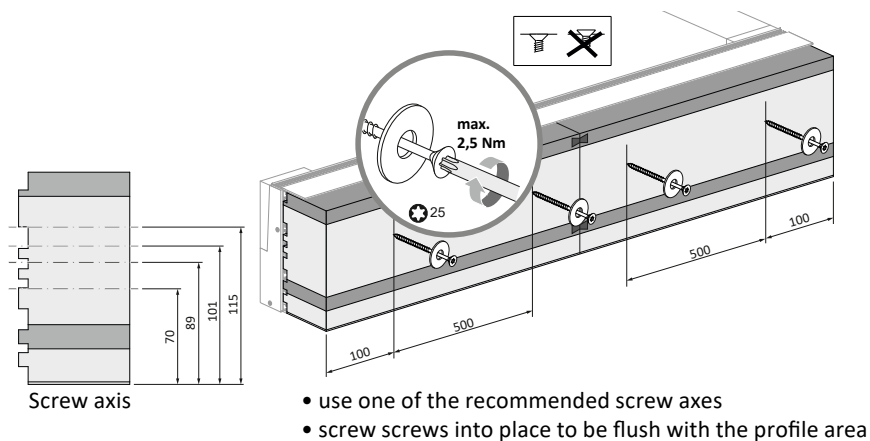
6.3 SIEGENIA base profile

If a SIEGENIA base profile is used, check that the sealing and fixing is correct. (refer to Assembly instructions „Base profiles for ECO PASS“ retrievable via QR Code page 4).

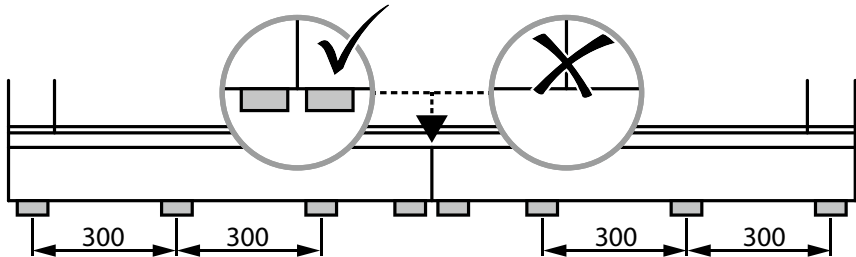
6.3.1 Apply sealing material



6.3.2 Screw on base profile



6.3.3 Line the base profile



- The base profile must be lined at intervals of 300 mm to be pressure-tight and sound-absorbing
- Additionally line base profiles consisting of two joined parts at the joint

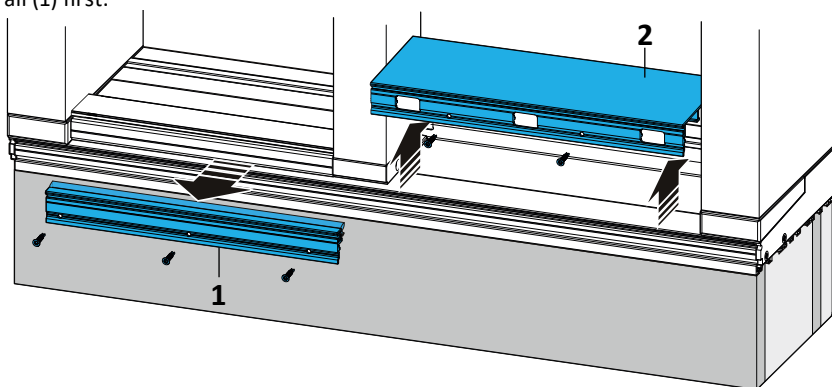
SIEGENIA offers inorganic linings with 2 mm, 5 mm and 10 mm heights. You can obtain these via fitting distributors. For fixing the base profile to the floor, observe the instructions of the producers of the fasteners. Other inorganic linings can be optionally used.

6.4 Sealing plate/threshold/compensation rail

The sealing plates are optional accessories, please order separately. The use of the sealing plates guarantees an even and smooth fabrication surface for the bottom and lateral sealing.

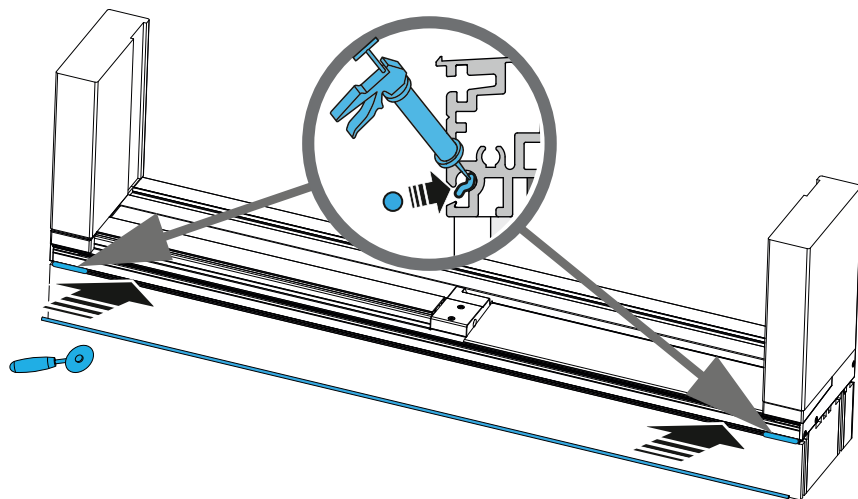
6.4.1 Removal of the threshold and the compensation rail in case of subsequent assembly of a sealing plate

- For the barrier-free ECO PASS threshold, dismount the threshold (2) and the compensation rail (1) first.

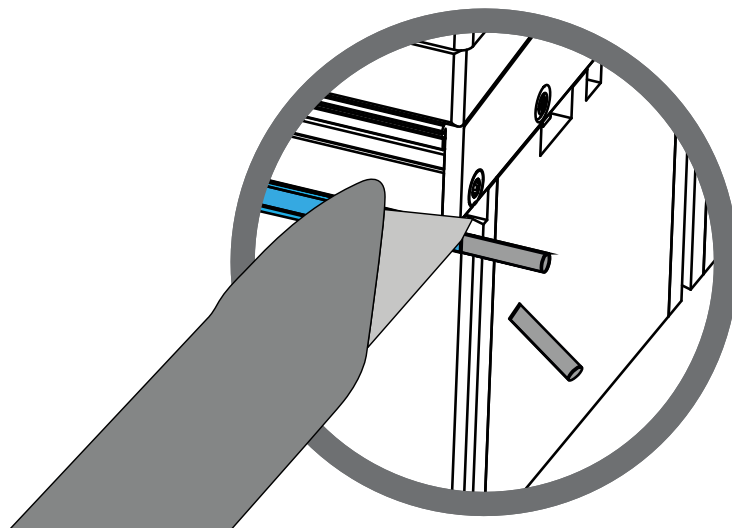


6.4.2 Assembly of the foam rubber seal and the horizontal sealing plate

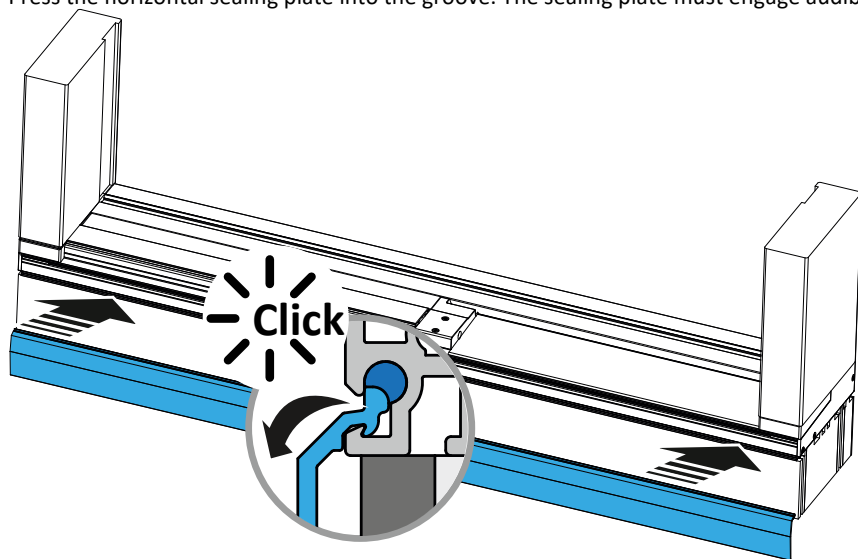
- Fill some adhesive RH and LH into the bottom groove of the horizontal sealing plate in order to improve the fixing of the foam rubber seal. Then insert the foam rubber seal and roll into place with the sealing roller.



- Trim any projecting foam rubber seal to be flush with the threshold.



- Press the horizontal sealing plate into the groove. The sealing plate must engage audibly.

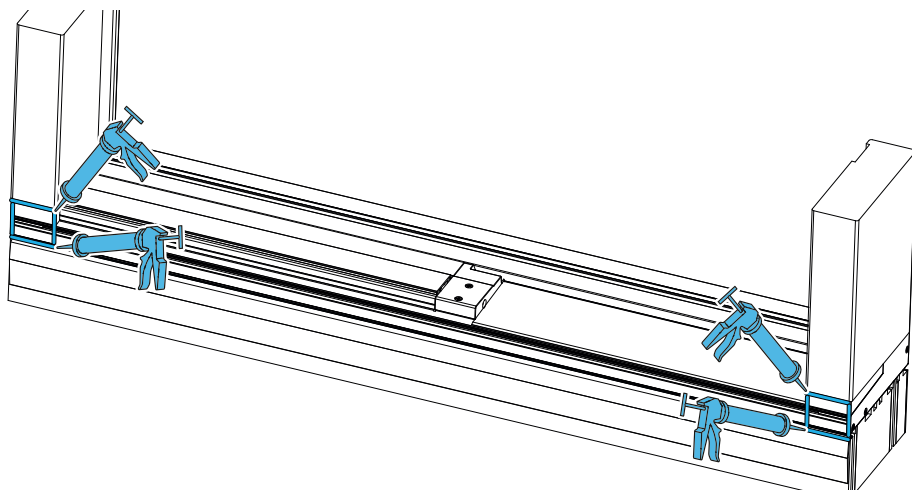


6.4.3 Assembly of the vertical sealing plates

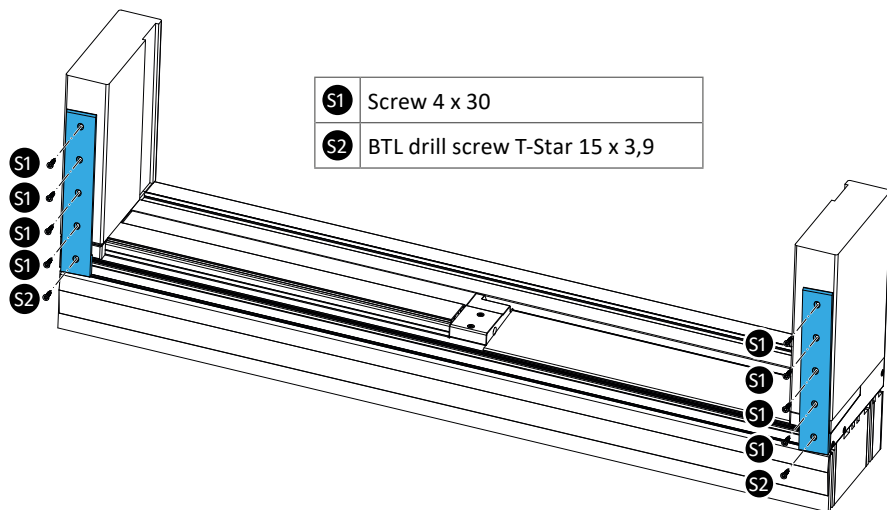


Secure the compression of the vertical sealing plates to the frame element. Fill in any joints, unevenness and misalignment under the vertical sealing plates with sealant. Water ingress to the vertical sealing plates **MUST** be prevented by means of professional assembly and sealing.

- Fix the vertical sealing plates on both sides to the frame element.
Only possible in combination with angled, horizontal sealing plate.
- Apply sealant into the threshold in the assembly area. Ingress must be prevented.

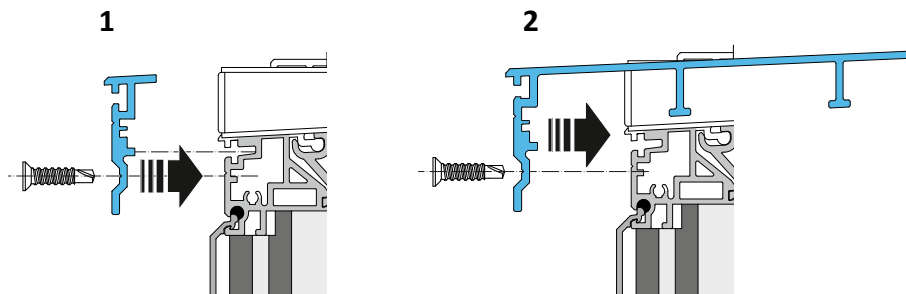


- Fixing the vertical sealing plates.
Screw into place from the bottom to the top; beginning with „S2“.

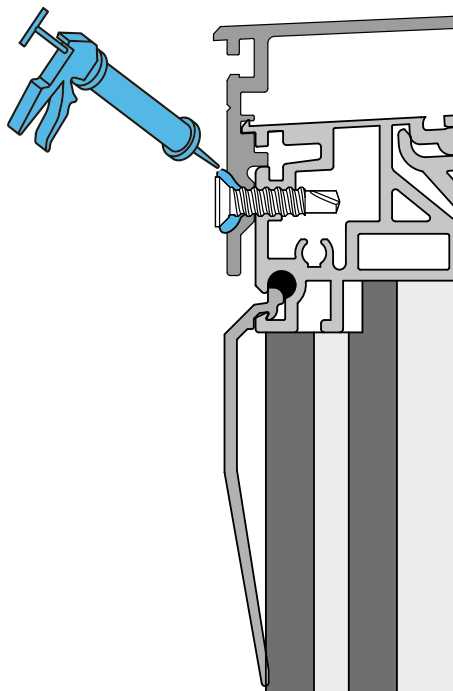


6.4.4 Renewed assembly of compensation rail and step plate

- Fix the compensation rail (1) and the step plate (2) again using the previously loosened drill screws:

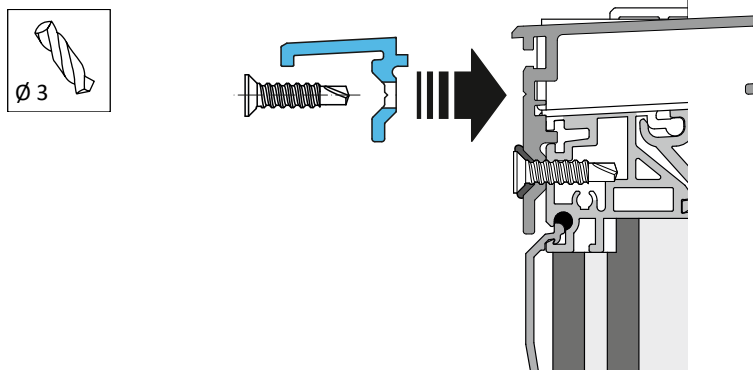


- If a drill screw is loosened after the initial assembly, it must be separately sealed once again after the renewed fixing:

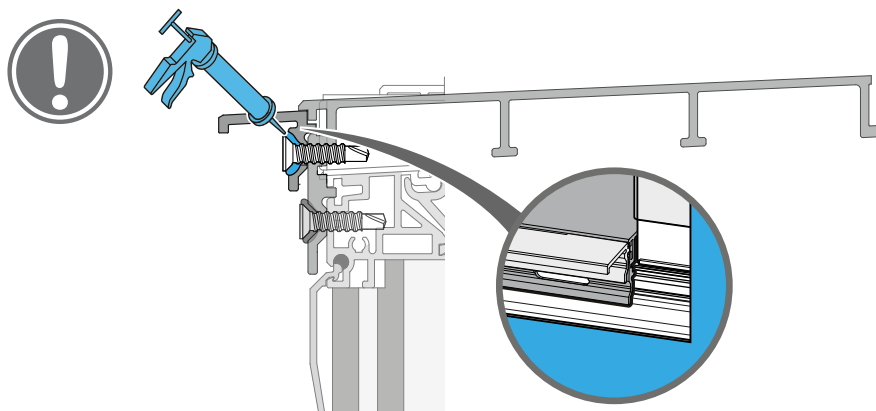


6.5 weather bar

- Mount the weather bar using the enclosed screws. If the screws are missing, exclusively non-corrosive drill screws T-Star 15 x 3.9 (SIEGENIA order number PZUB0600-00001_) or comparable screws must be used.
- For loose delivered weather bar:
assembly on the threshold: align the weather bar to the threshold and screw firmly to the threshold. Pre-drill the screw holes with $\varnothing 3$ drill.



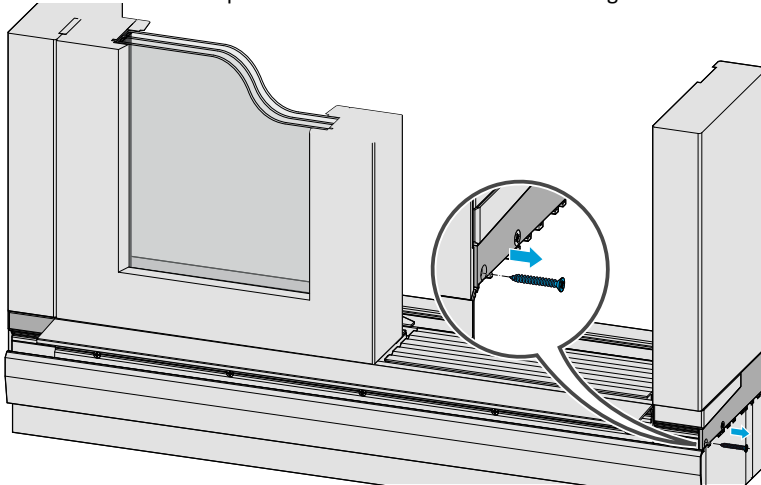
- If a fixed weather bar is dismantled and then remounted, the sealing must be checked. The screws must be sealed separately after they have been screwed into place again.



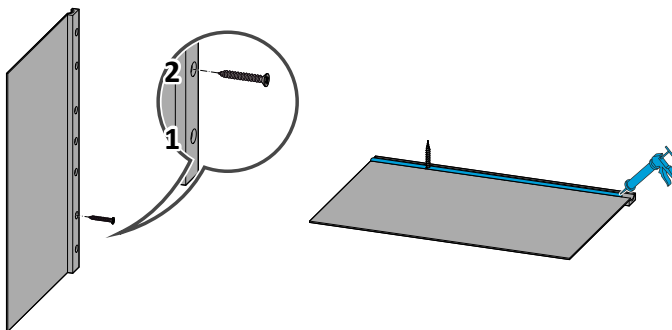
- The weather bar must not reach the reveal. Trim accordingly prior to assembly.

6.6 Assembly of the flexible connection flanges

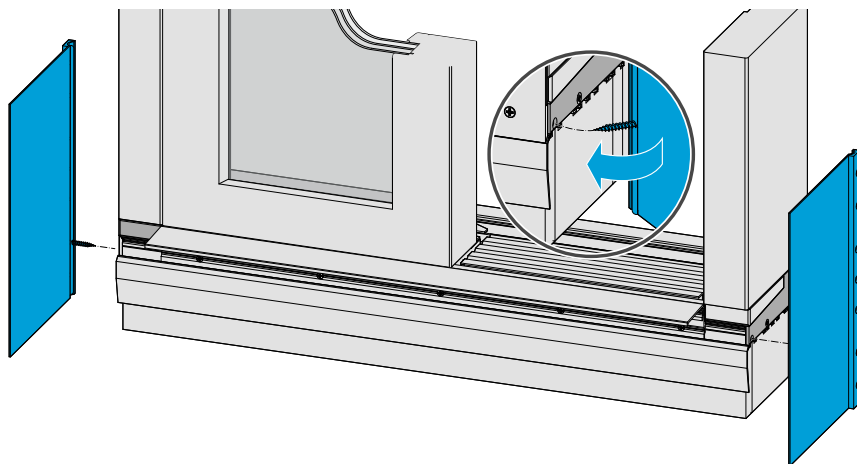
- Loosen the outer fixing screws of the threshold lateral cover caps on both sides. In the following installation step, the flexible connection flanges are laterally fixed from the bottom to the threshold through the second screw hole with these screws. This specifies the installation position of the flexible connection flange.



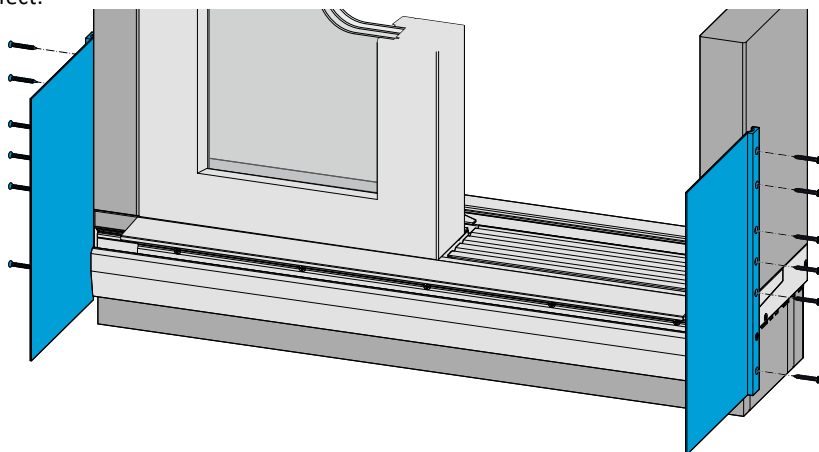
- Screw the previously loosened outside fixing screws into the flexible fixing flanges from the bottom, through the second screw hole, as shown.
- Apply SIEGENIA mounting adhesive FA along the entire length of the chamfer of the connection flanges. The spray-on width must be at least 6 mm.



- Adjust the flexible connection flanges horizontally and fix with the previously screwed in fixing screws into the screw holes of the lateral cover caps of the threshold.

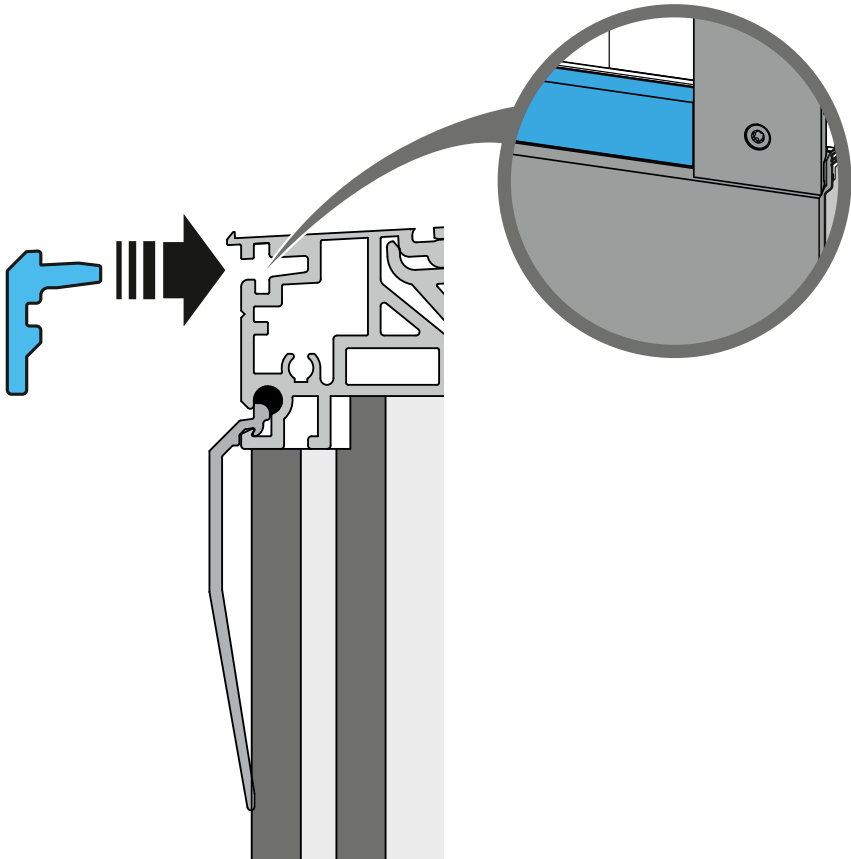


- Fix the flexible connection flanges completely to the frame and to the SIEGENIA base profile with screws
- If there is a slight leakage of mounting adhesive while screwing, you can be certain that there is sufficient mass in the chamfer. Remove any projecting material to achieve a flush effect.



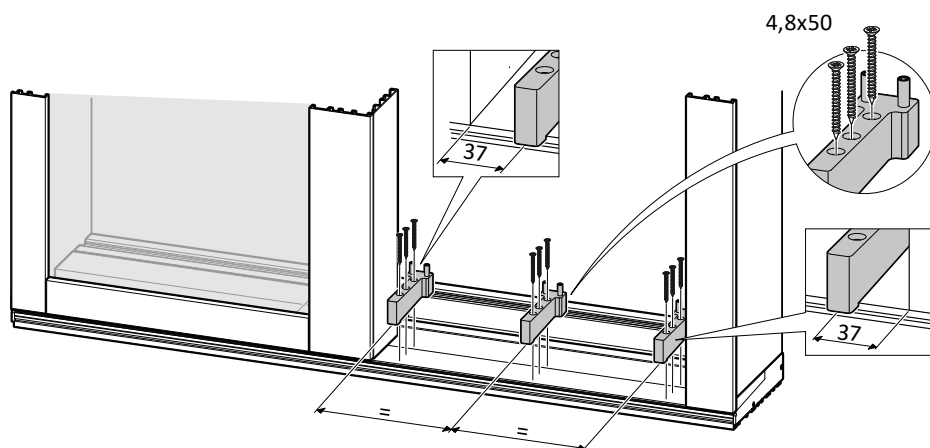
6.7 Variant „Sky axxent“

6.7.1 Assembly of the sealing bead horizontal small

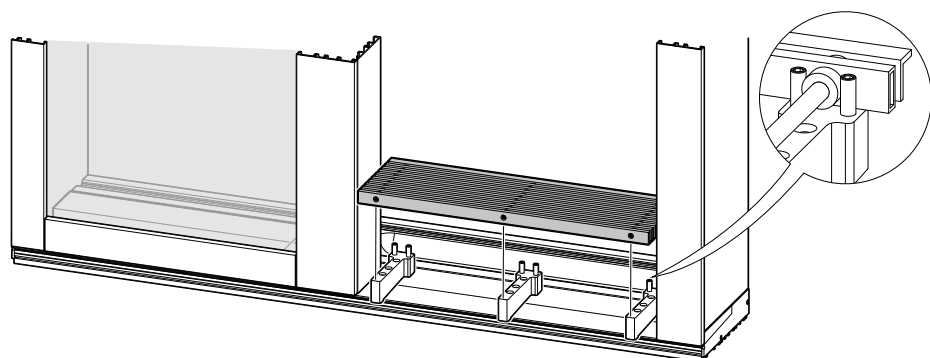


6.7.2 Assembly of the outside threshold grille (SIEGENIA)

1.

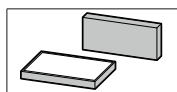


2.



6.7.3 Optional: assembly of outside grille (Gutjahr)

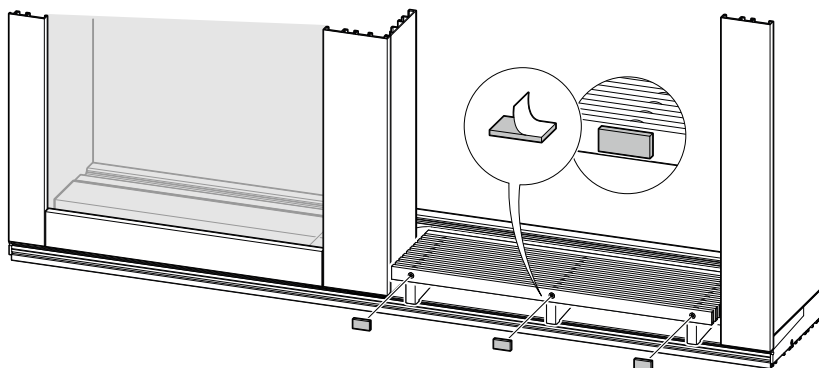
1.



Distance plate axxent

Material: PZUB0770-09702_

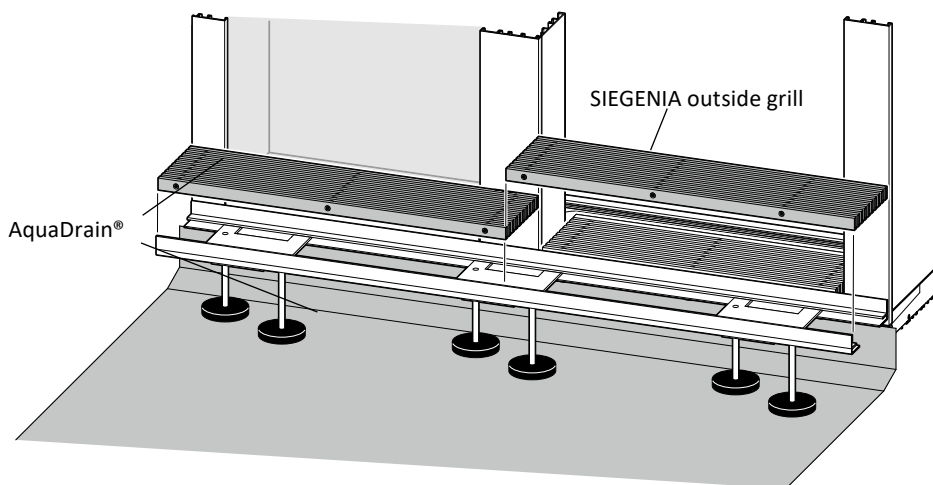
10 piece



2.

GUTJAHR AquaDrain®

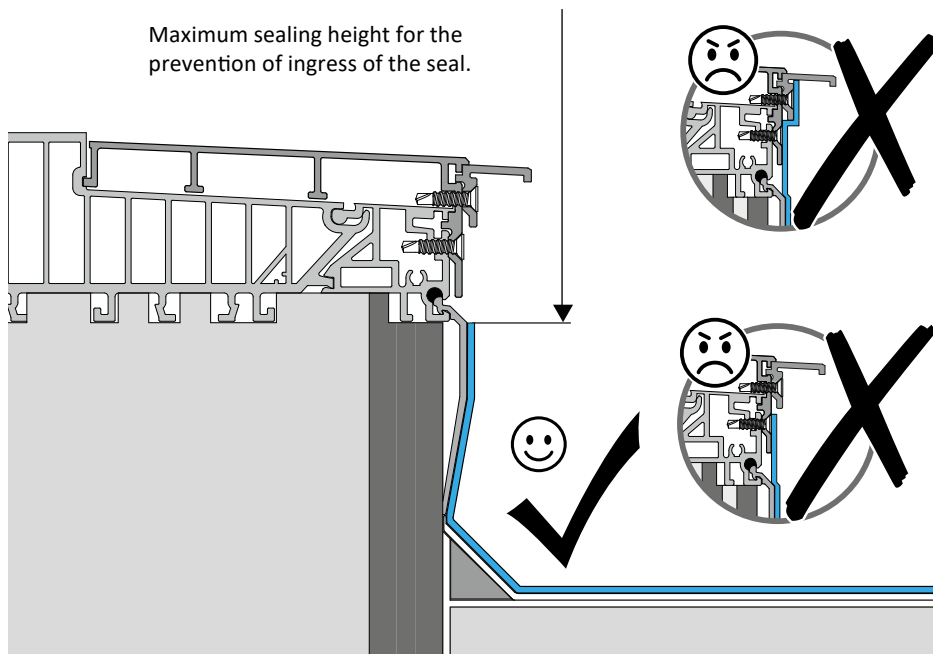
flexible grille height-adjustable



7 Sill installation

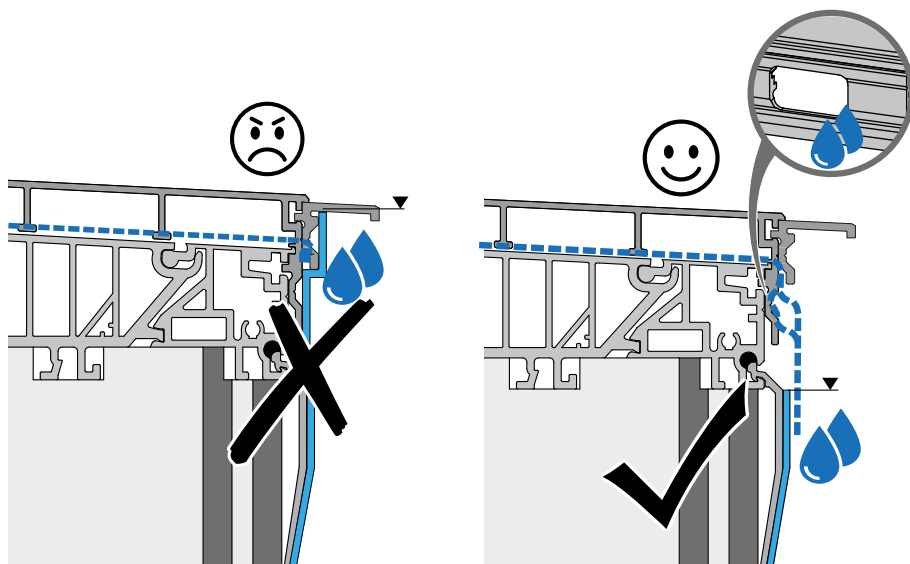
7.1 Correct execution of waterproofing

- All silicone residue must be removed from the sealing plates. The sealing plates must be thoroughly cleaned.



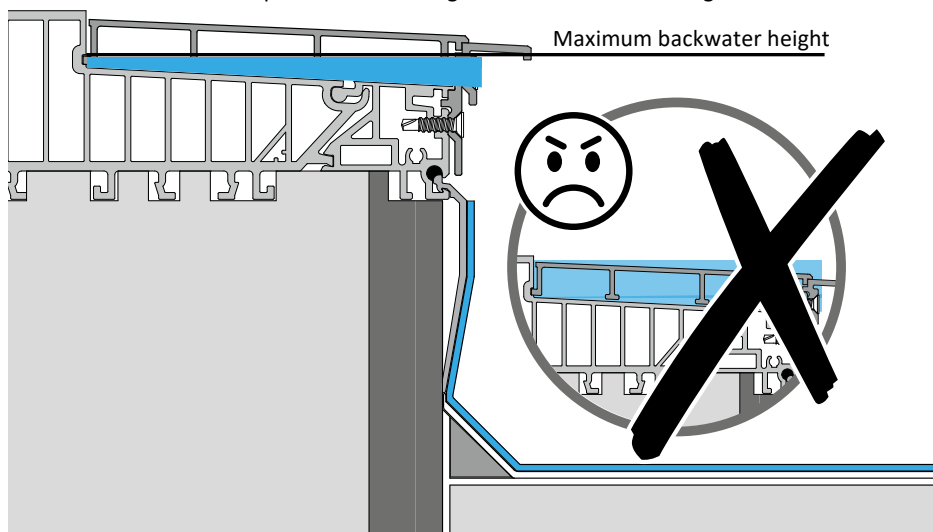
Fix the sill installation on the bottom edge of the threshold to the sealing plate.

7.2 Ensure water drainage

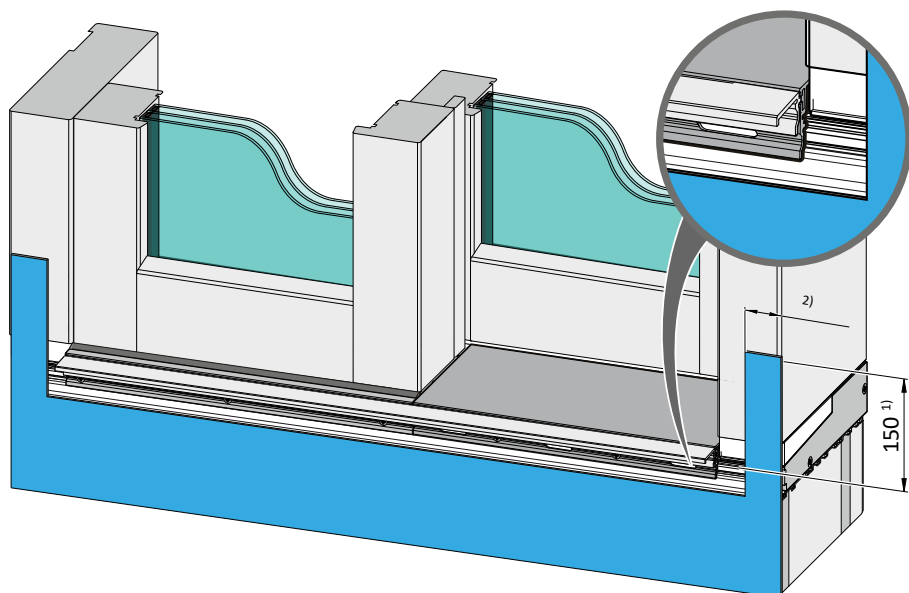


7.2.1 Maximum backwater height

- The groove for the flat step plate is ALWAYS the maximum upper edge for the backwater. This dimension is independent of the height of the installed running rail.



7.3 Correctly executed sill installation for variant „vertical sealing plate“



¹⁾ from upper edge of top layer (flooring)

²⁾ Dimension in coordination with the planner; either 35 mm or 50 mm width

Correctly executed of sill installation

- Seat of sealing plate and weather bar is checked
- Sealing up to the incline edge of the sealing plate
- Waterproofing
 -  150 mm from upper edge of top layer/flooring
 -  120 mm from upper edge of top layer/flooring
- No fixing holes (e.g. roller shutter guides) in the sealed area
- Do not plaster the weather bar.
After plastering the reveal, the interval to the weather bar must be at least 5 mm.

7.4 Correct sealing for variant „flexible connection flange“

7.4.1 Product description

The flexible connection flange seals behind the roller shutter strip, where it is no longer possible for the structural caulker or plumber to achieve a clean connection. It provides connection widths of approx. 40 mm for the subsequent trade.

The flexible connection flange consists of a self-adhesive bitumen sealing tape and a screwable PVC strip with chamfer. The chamfer ensures that sufficient SIEGENIA mounting adhesive FA perfectly seals the connection. The connection therefore remains backwater-proof.

The flexible connection is specially designed for the ECO PASS threshold and certified in accordance with ift directive MO-01/1.

After the assembly of the elements, the connection according to DIN 18533 or ÖNORM B 3691 and B 3692 can be very easily and quickly accomplished by the subsequent trade with suitable materials such as:

- liquid plastic (Mo-01/1 tested with triflex ProDetail (PMMA, 2K))

For the adhesion we recommend the:

- SIEGENIA assembly paint primer FA
- SIEGENIA assembly spray primer FA

Warm background in case of low temperatures.



7.4.2 Fabrication

Prime the masonry with SIEGENIA-LFB primer or SIEGENIA spray primer and roll the bitumen tape onto the building without any creases and ensure strain-free adhesion. The sealing (connection flange) must always be on the masonry and not on the insulation.

The bitumen flap should be glued into place immediately after assembly otherwise the adhesive force could decrease.

If necessary, glue the impact edges together peripherally with SIEGENIA mounting adhesive. This will prevent the foil from rolling up when the masonry is not plastered for a longer period or when the bottom connection is non-binding.

The subsequent tradesmen can then continue work immediately with the recommended liquid sealing.

We recommend warning up the surfaces during the cold seasons. If necessary, prime the area that can be plastered over with SIEGENIA-LFB primer.



The bottom connection can now be treated with liquid sealant such as

- RALMO liquid sealant ÖKO (**is specially designed for the ECO PASS threshold and certified in accordance with ift directive MO-01/1**)
- Triflex ProDetail
- Frankosil 1K and Frankolon 2K
- REVOPUR WP 200
- Kemperol 2K PUR
- Botament RD2
- Remmers MB 2K

- Sikafloor 405
- Sopro DichtSchlämme Flex RS 623, Sopro TurboDichtSchlämme 2K TDS 823, Sopro ZR-Turbo Reaktivabdichtung as well as Sopro KellerDicht 1K KD 752 and Sopro KellerDicht 2k KD 754
- maxit AD-1K-Außendicht and maxit SDS16
- Hane IMBERAL DAB 30P and DAKORIT PUR1K 30P

or with tapes such as

- – RALMO Tape 4000
- – RALMO-EPDM or
- – Bitumen sheeting (cold and torched)

fabricated to be backwater-resistant.

8 Reinigung

9 Cleaning

Use a pH-neutral detergent, diluted with warm water, to clean the PVC surfaces of the threshold, sash and frame elements.

The dosage guideline is 3 ml cleaner to 5 litre water. Most contamination can be removed with this detergent solution.

Leave the cleaning agent to react for maximum 10 minutes. After every cleaning, rinse the surface thoroughly with clear water.

These cleaners and substances damage the PVC:

- solvent-based cleaners
- chlorine-based cleaners
- acetone-based cleaners or acetone
- ester-based cleaners
- scouring-agent-based cleaners or scouring agents
- chemicals such as nitro-dilution
- benzine, alcohol or similar agents
- aids such as steel or scouring sponges or scouring pads



The use of citrus-, orange- or mint extract-based cleaning agents leads to discolouration of the PVC parts!

We assume no liability for defects/damage caused by the use of unsuitable cleaning agents.

Empfehlung:

Als Reiniger für die Kunststoffprofile der Bodenschwelle empfehlen wir **Cosmofen 10 Cosmo CL-300-120**.

Recommendation:

we recommend Cosmofen 10 Cosmo CL-300-120. as a cleaner for the PVC profiles of the threshold.

You can find additional notes on cleaning in the notice sheet „Cleaning and maintenance of PVC windows“ from the German Association for the Quality of PVC window profile systems (in German Gütegemeinschaft Kunststoff-Fensterprofilssysteme e.V.:

https://www.gkfp.de/fileadmin/gkfp/inhalte_2017/Veröffentlichungen/Reinigung_Pflege_von_Kunststofffenstern.pdf



Hand out this cleaning information to the end user. And have their receipt confirmed.

10 SIEGENIA-Telefonnummern



SIEGENIA-AUBI KG
Am Fohlengarten 6
54411 Hermeskeil

Tel.: +49 6503 917-0
Fax: +49 6503 917-100



SIEGENIA GRUPPE
Salzburger Straße 18
5301 Eugendorf

Tel.: +43 6225 8301
Fax: +43 6225 8301-115



SIEGENIA-AUBI AG
Zelgstrasse 97
3661 Uetendorf

Tel.: +41 33 3461010
Fax: +41 33 3461020

11 Sill installation seminars

SIEGENIA offers seminars on the topic of sill installation.

Participants in these seminars will deepen their knowledge about the contents of this sill installation manual.

If you are interested, please contact:

SIEGENIA-AUBI KG
Abteilung Service
Industriestr. 1-3
57234 Niederdielfen

Tel.: +49 271 3931-555
Fax: +49 271 3931-77021
E-Mail: trainings.advance@siegenia.com

www.siegenia.com



SIEGENIA®
brings spaces to life