

## Installation

Overview

### Contents

### Recommended mounting sequence

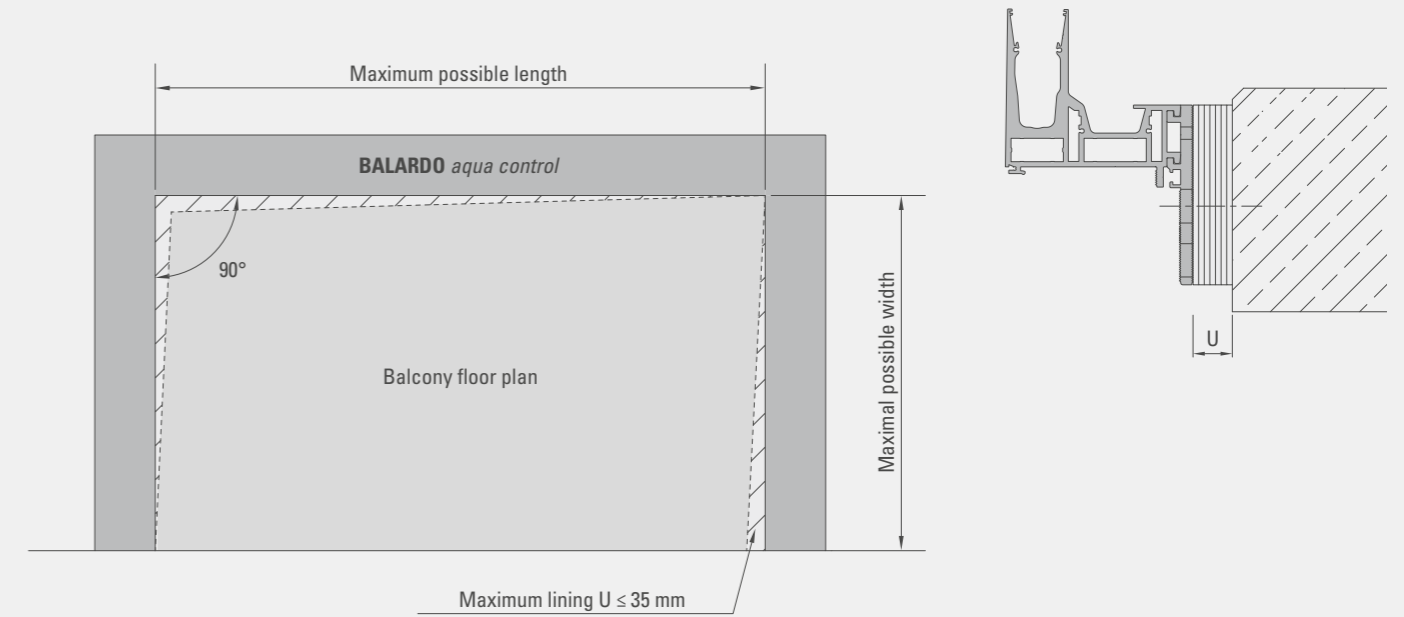
- |  |          |
|--|----------|
| 1. Fixing to the substructure                            | Page 144 |
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All screw connections are to be permanently secured against loosening by means of a suitable threadlock, e.g. Loctite or an equivalent.



## Installation

Substructure



Rail load 0.5 kN/m, concrete quality C25/30	Lining U
Fischer Ultracut FBS II 10 x 120 65/55/35/US A4	≤ 20 mm
Fischer FAZ II 10/70 A4	≤ 35 mm
Hilti HST 3 M10 x 130 70/50	≤ 35 mm

Rail load 1.0 kN/m, concrete quality C25/30	Lining U
Fischer Ultracut FBS II 10 x 120 65/55/35/US A4	≤ 20 mm
Fischer FAZ II 10/70 A4	≤ 35 mm
Hilti HST-R 3 M10 x 130	≤ 20 mm

All screw connections are to be permanently secured against loosening by means of a suitable threadlock, e.g. Loctite or an equivalent.

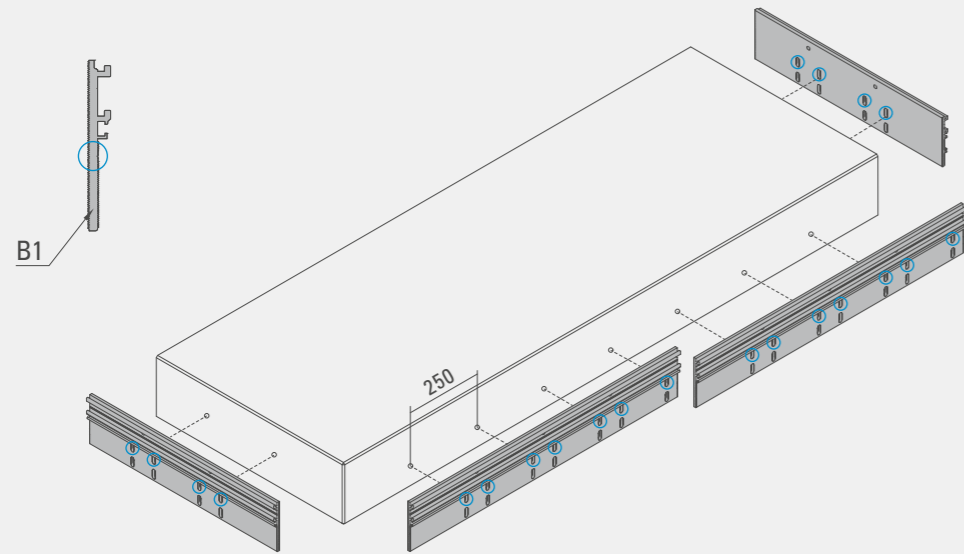
\* Minimum relining width of ≥ 60 mm mm per dowel connection.



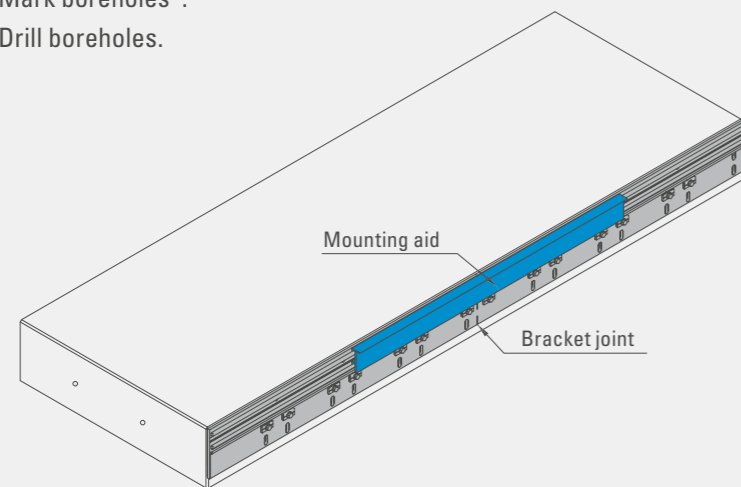
## Installation

Substructure

### System 1



- 1.1 Set brackets with spirit level.
- 1.2 Mark boreholes\*.
- 1.3 Drill boreholes.



- 1.4 Fasten brackets to substructure, only locate screws.
- 1.5 Align the brackets to one another with the mounting aid.
- 1.6 Align and tighten the two outer screws per bracket.
- 1.7 Remove the mounting aid again.

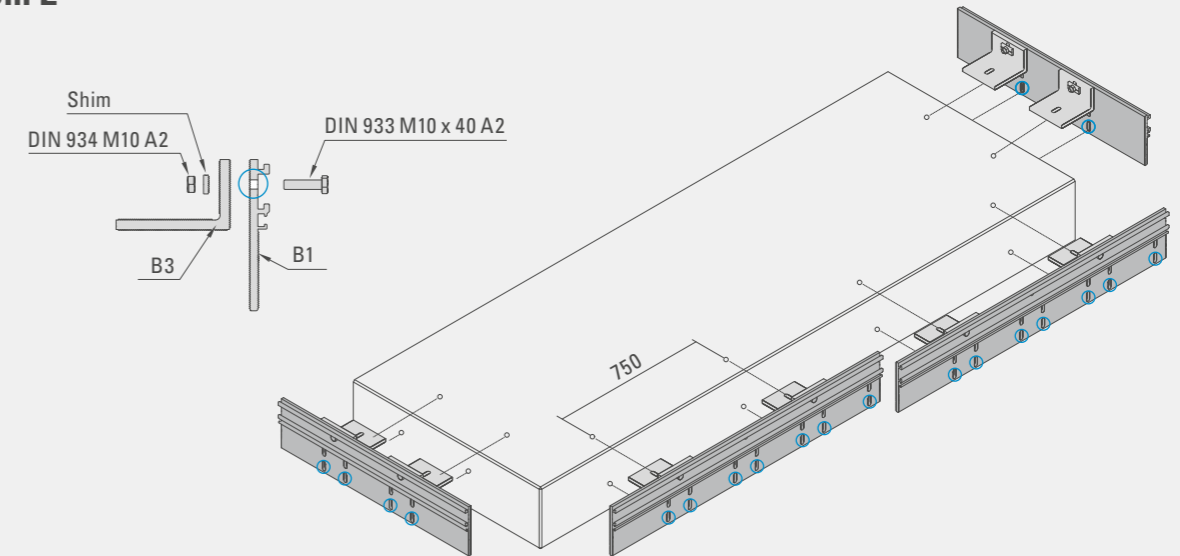
\* For the number of fixing points, see page 24. All screw connections must be permanently secured against loosening by means of a suitable threadlock, e.g. Loctite or equivalent.



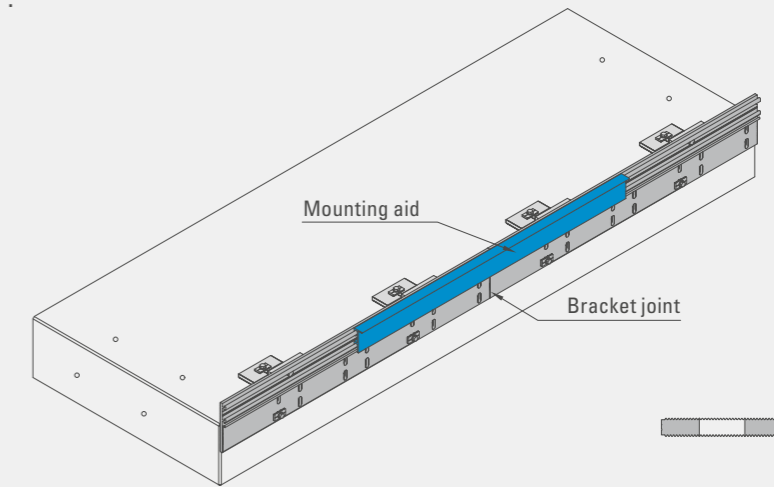
## Installation

Substructure

### System 2



- 1.1 Set brackets with spirit level.
- 1.2 Mark boreholes\*.
- 1.3 Drill boreholes.



- 1.4 Fasten brackets to substructure, only locate screws.
- 1.5 Align the brackets to one another with the mounting aid.
- 1.6 Align and tighten the two outer screws per bracket.
- 1.7 Remove the mounting aid again.

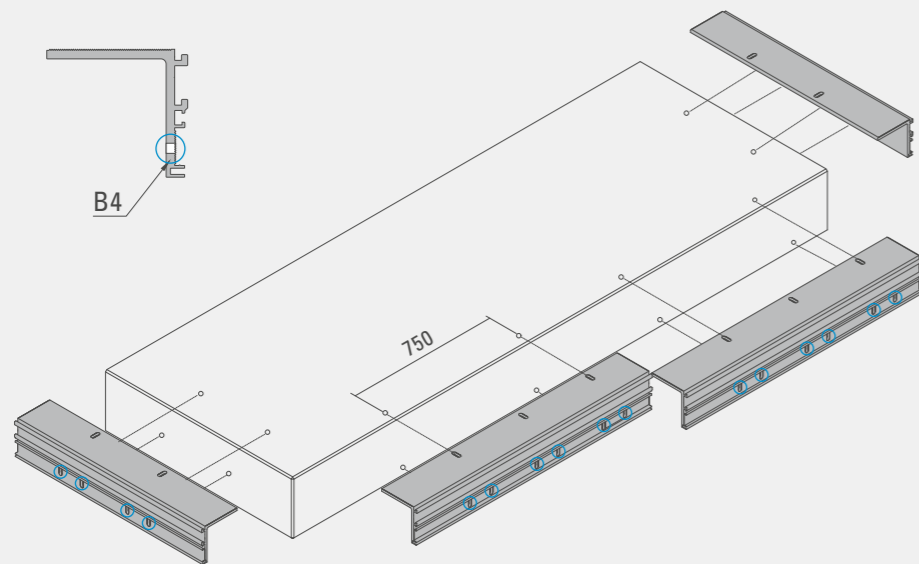
\* For the number of fixing points, see page 36. All screw connections must be permanently secured against loosening by means of a suitable threadlock, e.g. Loctite or equivalent.



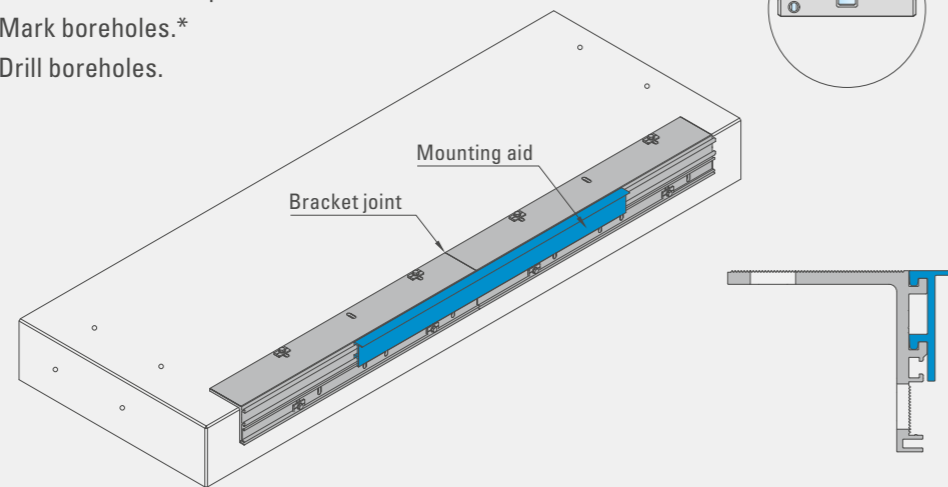
## Installation

Substructure

### System 3



- 1.1 Set brackets with spirit level.
- 1.2 Mark boreholes.\*
- 1.3 Drill boreholes.



- 1.4 Fasten brackets to substructure, only locate screws.
- 1.5 Align the brackets to one another with the mounting aid.
- 1.6 Align and tighten the two outer screws per bracket.
- 1.7 Remove the mounting aid again.

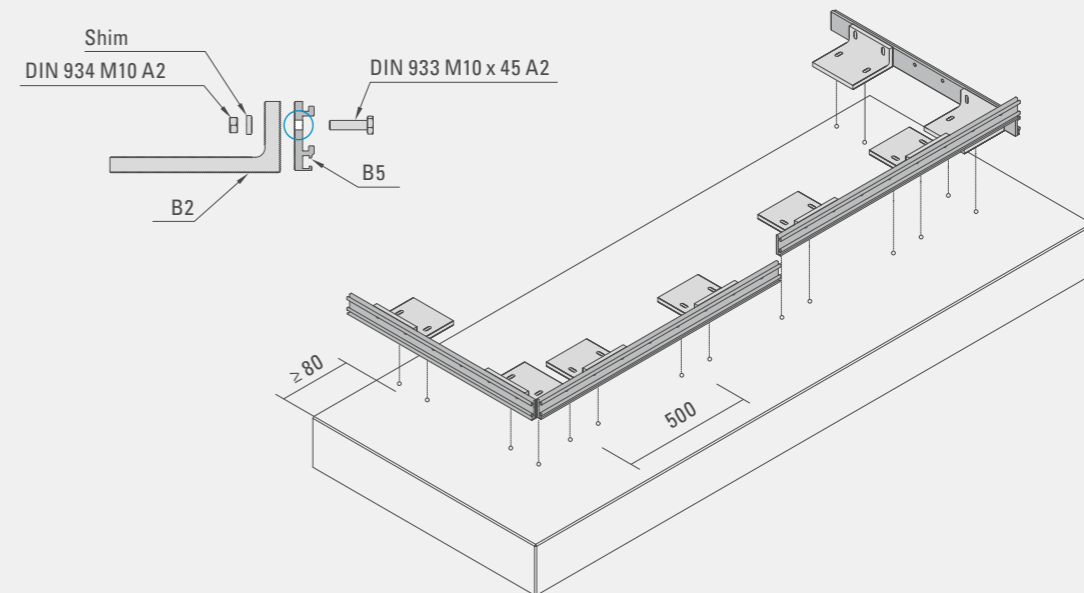
\* For the number of fixing points, see page 48. All screw connections must be permanently secured against loosening by means of a suitable threadlock, e.g. Loctite or equivalent.



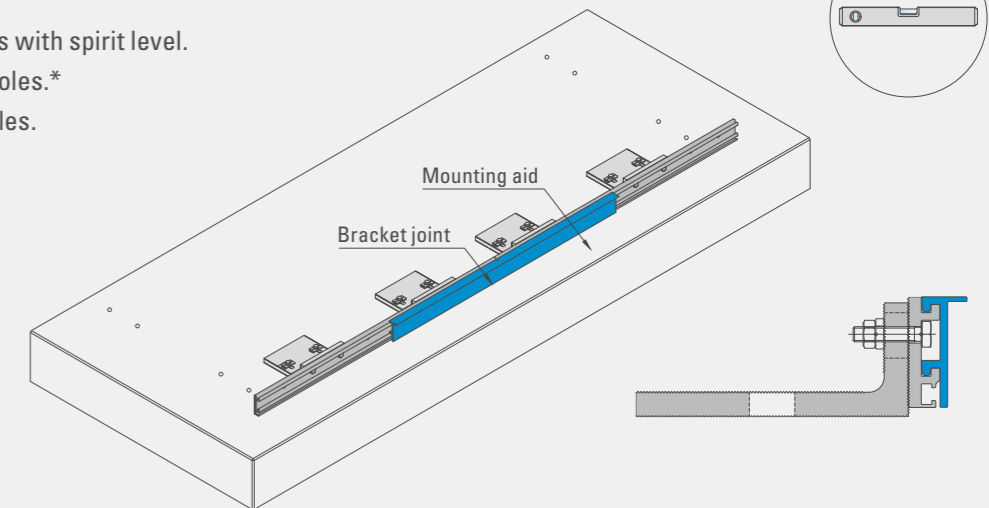
## Installation

Substructure

### System 4



- 1.1 Set brackets with spirit level.
- 1.2 Mark boreholes.\*
- 1.3 Drill boreholes.



- 1.4 Fasten brackets to substructure, only locate screws.
- 1.5 Align the brackets to one another with the mounting aid.
- 1.6 Align and tighten the two outer screws per bracket.
- 1.7 Remove the mounting aid again.
- 1.8 If required, insert locking screw, see page 161

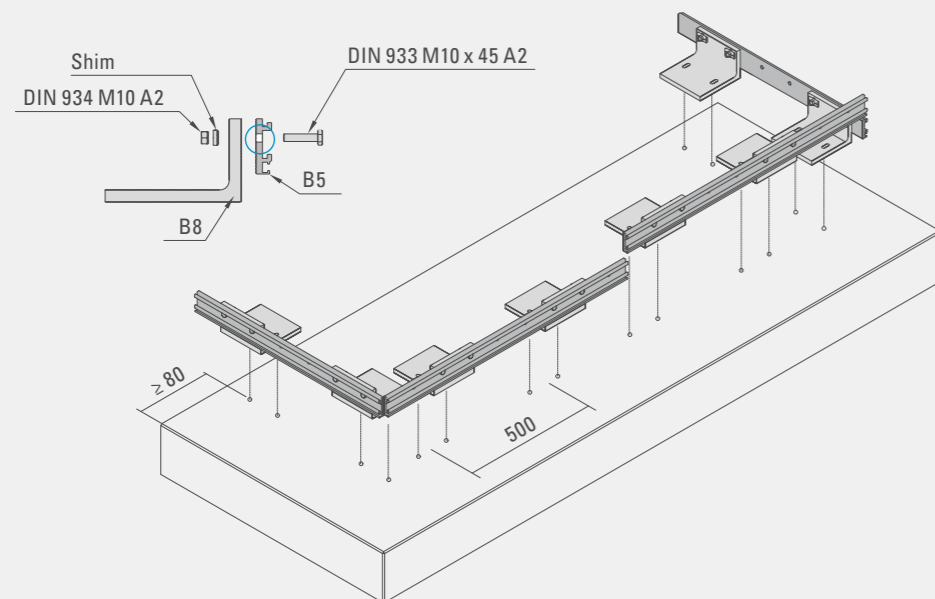
\* For the number of fixing points, see page 60 All screw connections must be permanently secured against loosening by means of a suitable threadlock, e.g. Loctite or equivalent.



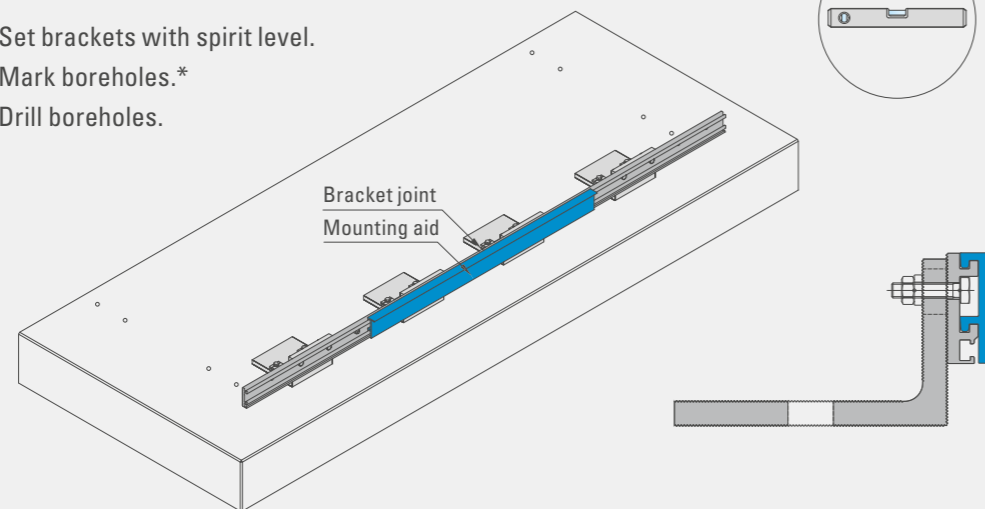
## Installation

Substructure

### System 5



- 1.1 Set brackets with spirit level.
- 1.2 Mark boreholes.\*
- 1.3 Drill boreholes.



- 1.4 Fasten brackets to substructure, only locate screws.
- 1.5 Align the brackets to one another with the mounting aid.
- 1.6 Align and tighten the two outer screws per bracket.
- 1.7 Remove the mounting aid again.
- 1.8 If required, insert locking screw, see page 161

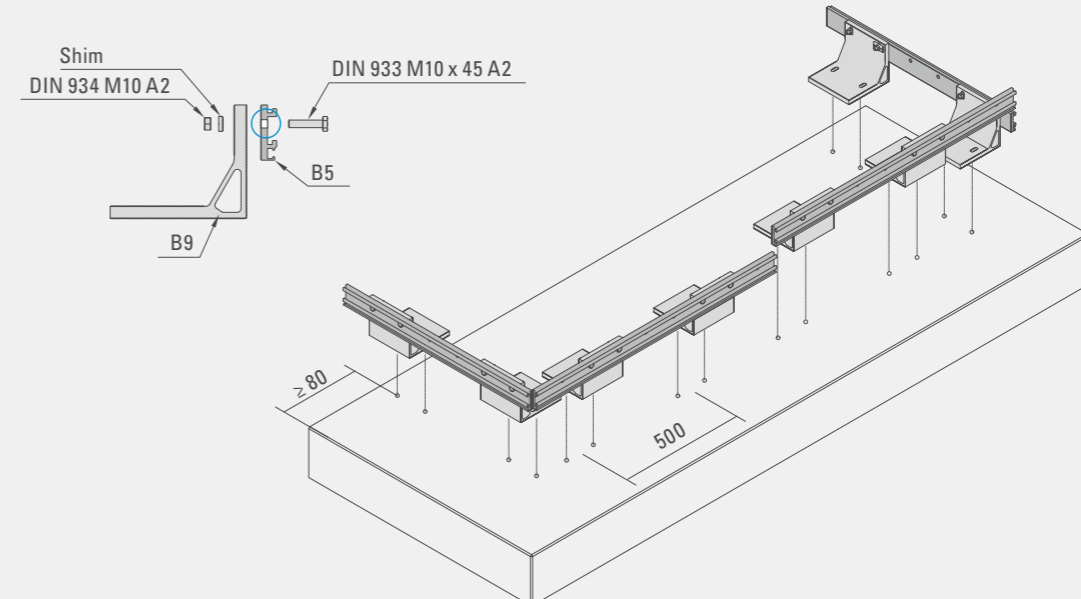
\* For the number of fixing points, see page 72. All screw connections must be permanently secured against loosening by means of a suitable threadlock, e.g. Loctite or equivalent.



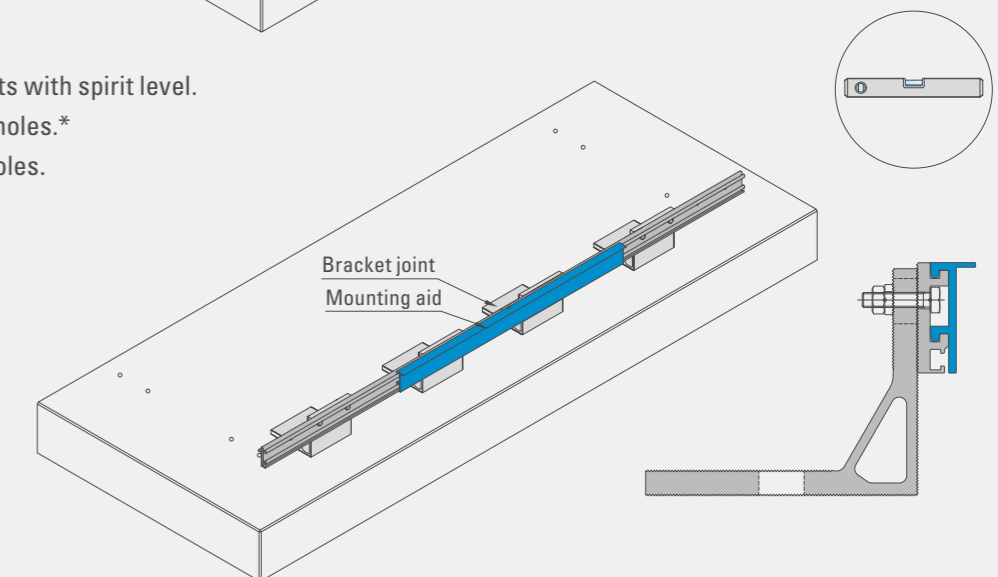
## Installation

Substructure

### System 6



- 1.1 Set brackets with spirit level.
- 1.2 Mark boreholes.\*
- 1.3 Drill boreholes.



- 1.4 Fasten brackets to substructure, only locate screws.
- 1.5 Align the brackets to one another with the mounting aid.
- 1.6 Align and tighten the two outer screws per bracket.
- 1.7 Remove the mounting aid again.

\* For the number of fixing points, see page 84. All screw connections must be permanently secured against loosening by means of a suitable threadlock, e.g. Loctite or equivalent.

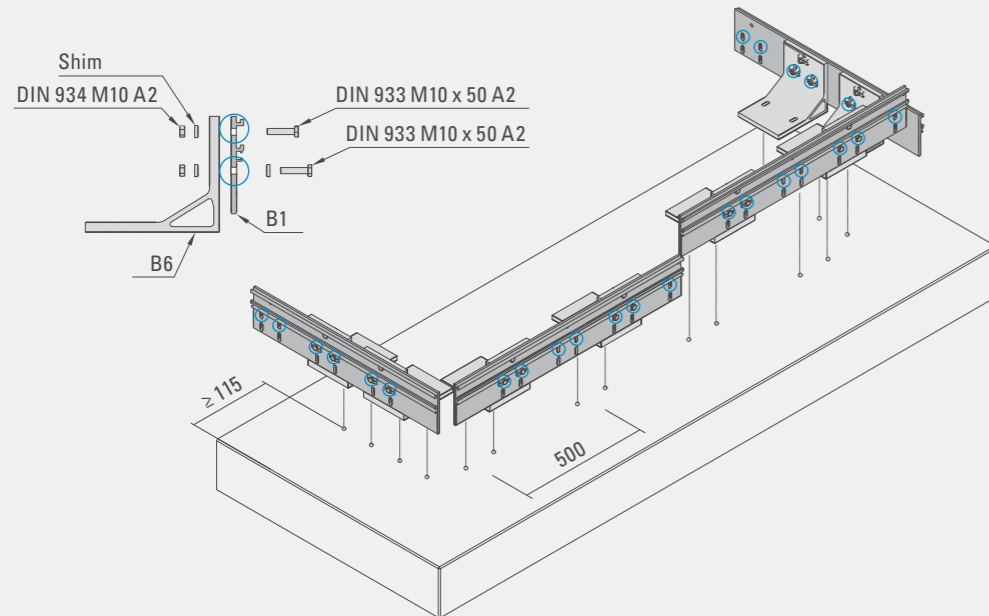




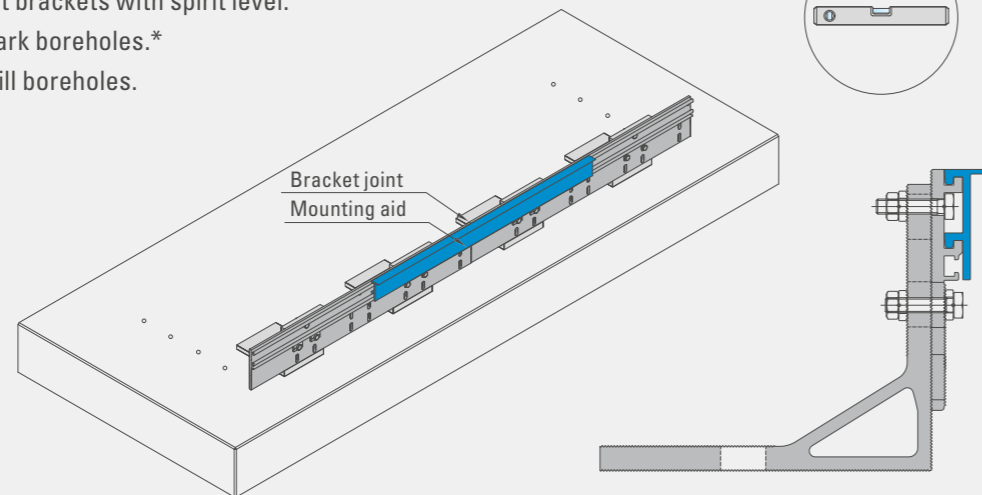
## Installation

Substructure

### System 7



- 1.1 Set brackets with spirit level.
- 1.2 Mark boreholes.\*
- 1.3 Drill boreholes.



- 1.4 Fasten brackets to substructure, only locate screws.
- 1.5 Align the brackets to one another with the mounting aid.
- 1.6 Align and tighten the two outer screws per bracket.
- 1.7 Remove the mounting aid again.

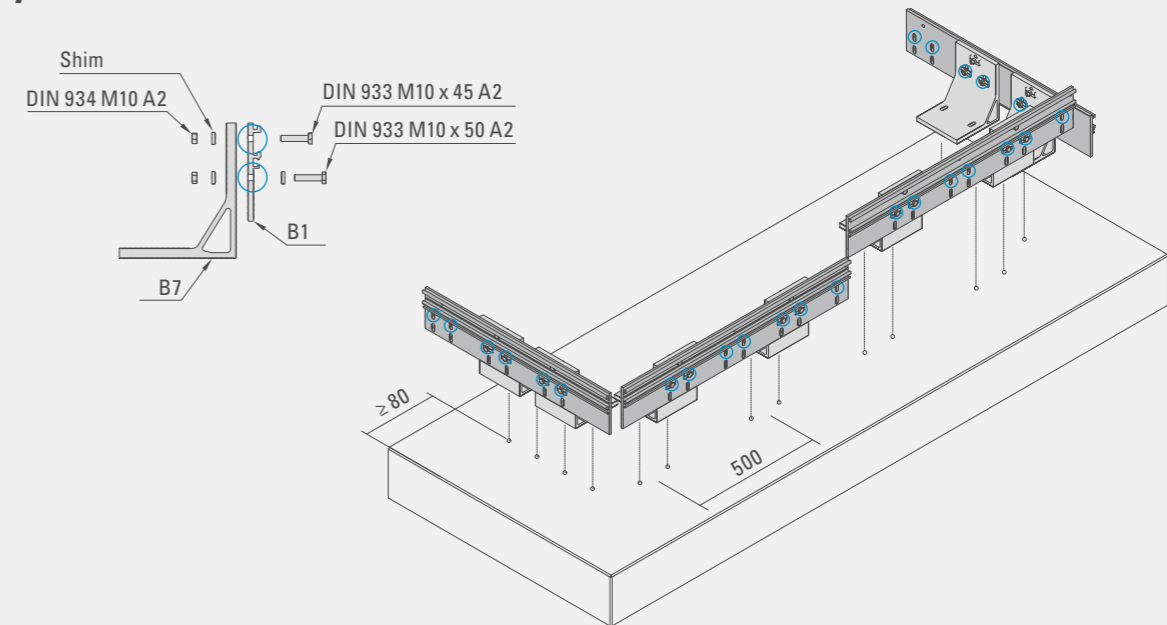
\* For the number of fixing points, see page 96. All screw connections must be permanently secured against loosening by means of a suitable threadlock, e.g. Loctite or equivalent.



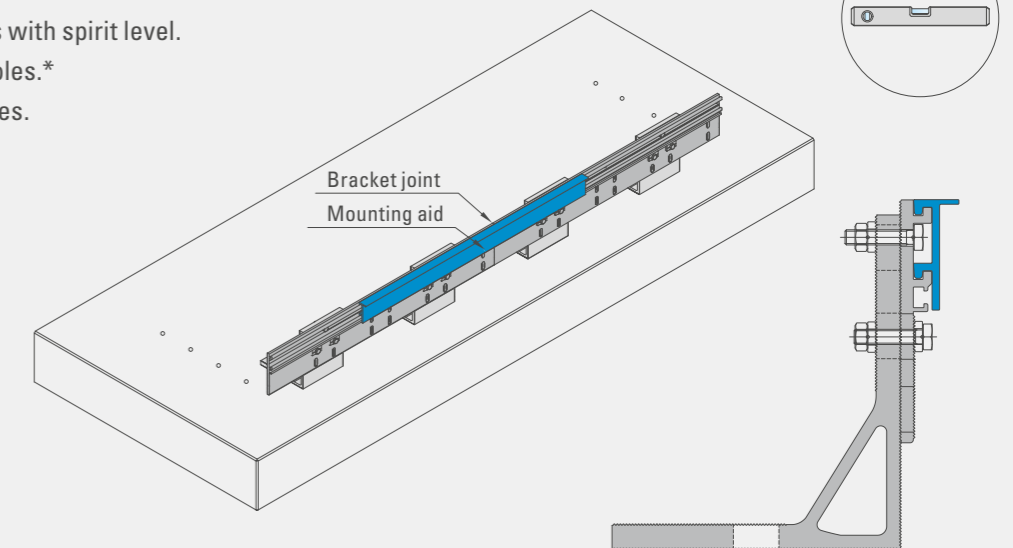
## Installation

Substructure

### System 8



- 1.1 Set brackets with spirit level.
- 1.2 Mark boreholes.\*
- 1.3 Drill boreholes.



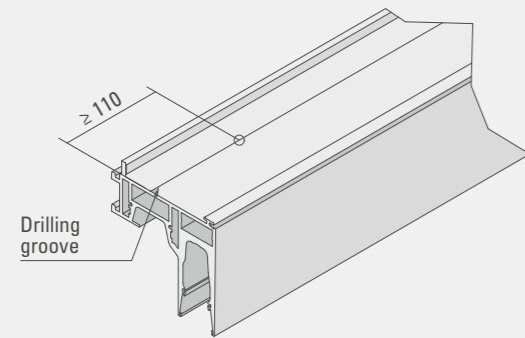
- 1.4 Fasten brackets to substructure, only locate screws.
- 1.5 Align the brackets to one another with the mounting aid.
- 1.6 Align and tighten the two outer screws per bracket.
- 1.7 Remove the mounting aid again.

\* For the number of fixing points, see page 108. All screw connections must be permanently secured against loosening by means of a suitable threadlock, e.g. Loctite or equivalent.

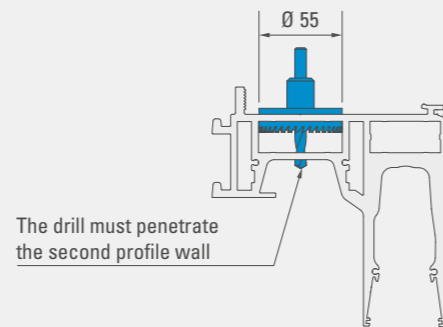
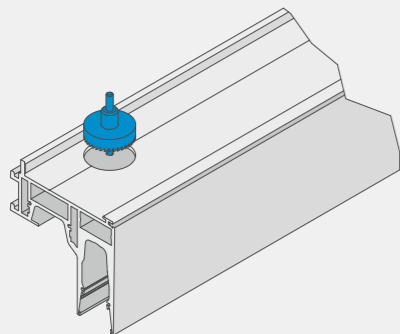


## Installation

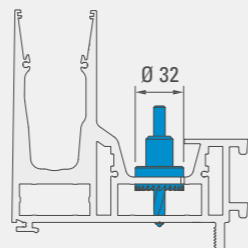
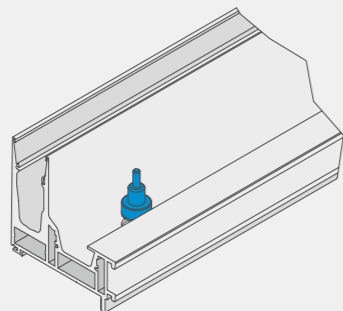
Drain connection



- 1 Determine drilling position.



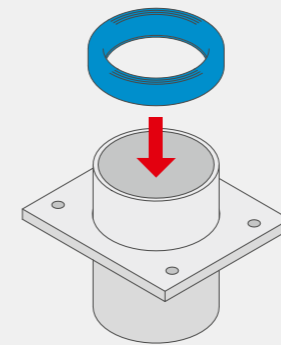
- 2 Drill the profile from below with a  $\text{Ø } 55$  core drill, use the profile groove.



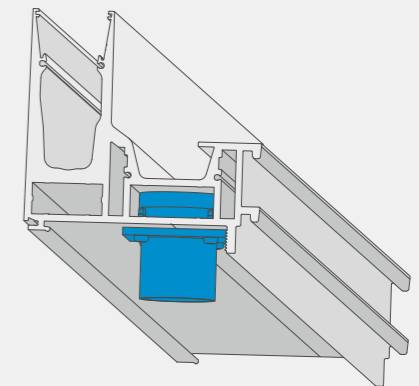
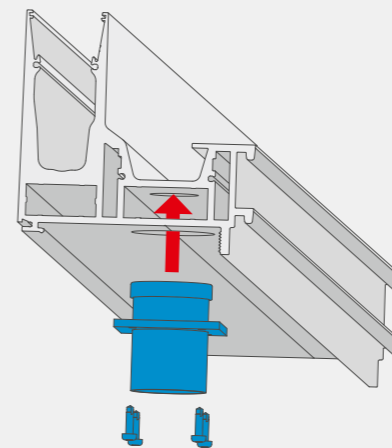
- 3 Drill the profile from above with a  $\text{Ø } 32$  core drill, use centring hole from previous hole.

## Installation

Drain connection



- 4 Press the sealing ring onto the drain connection.



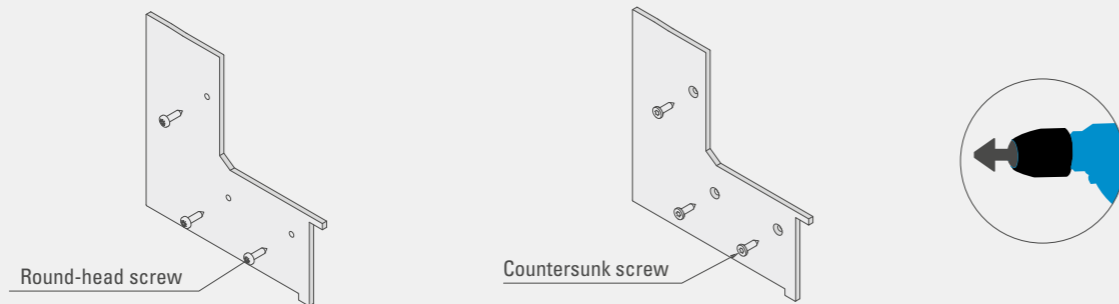
- 5 Insert the connection piece in the profile and fasten it with 4 x self-tapping screws DIN 7504 4.8 x 19 mm A2.

The professional assembly and the execution of the sealing of the individual elements and the entire system suitable for permanent use must be ensured by the customer.



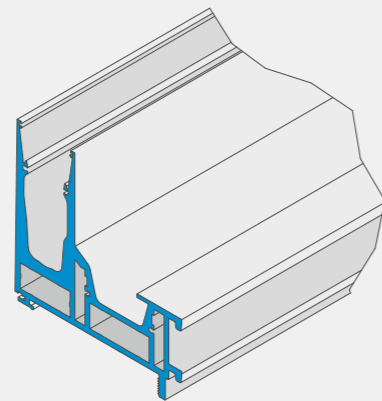
## Installation

End cover

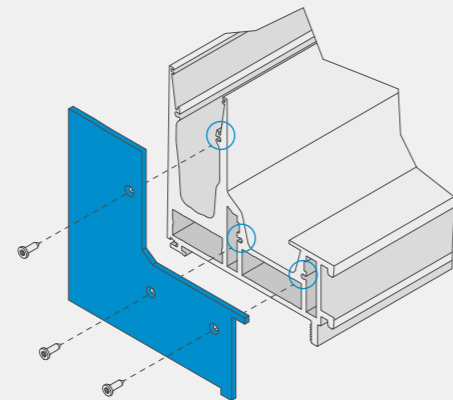


If countersunk screws are used, the cover must be lowered.

- 1 Clean the adhesive surface with adhesive cleaner\*.
- 2 Apply sealant\* to the face of the profile.



- 3 Put on the cover and screw on with 3 x self-tapping screws DIN7981 / DIN 7982 4.2 x 16 mm A2.



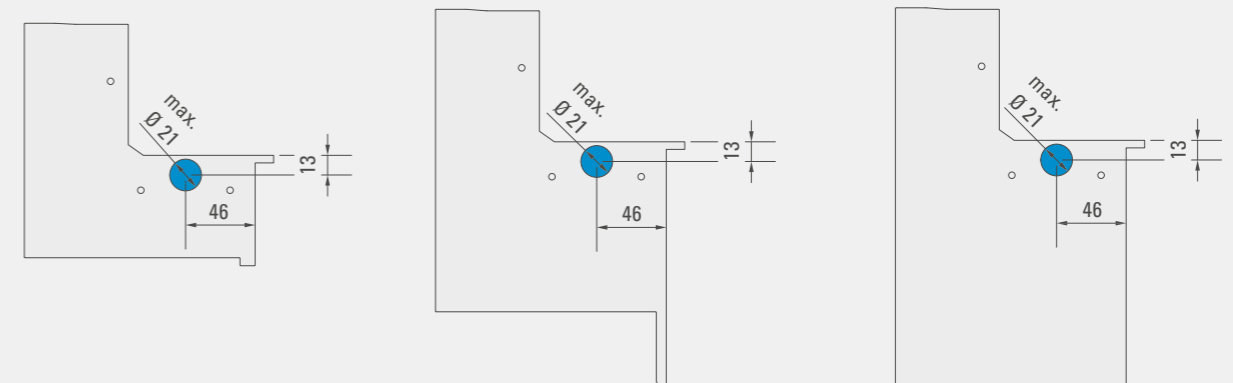
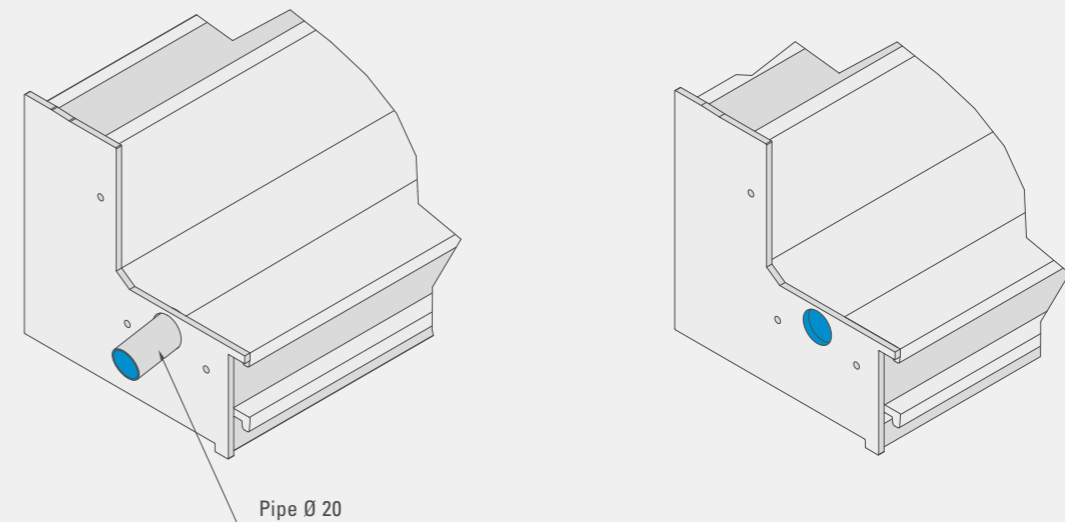
\* For tested tightness, use Sika Haftreiniger (adhesive cleaner) and Sikaflex Pro 3 or equivalent.  
The professional assembly and the execution of the sealing of the individual elements and the entire system suitable for permanent use must be ensured by the customer. When using the sealant, the specifications and guidelines of the sealant manufacturer must be observed.



## Installation

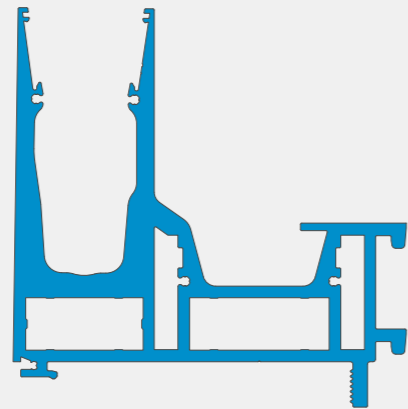
Drainage through end cover – optional

### Example of on-site water drainage

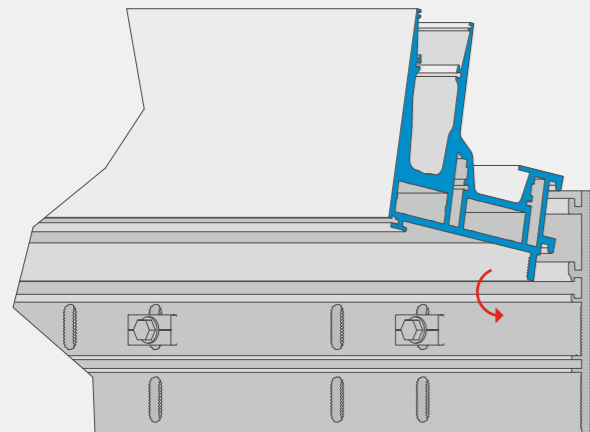


## Installation

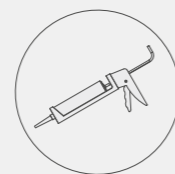
Basic profile



1 Clean the adhesive surface with adhesive cleaner.



2 Mount the base profile.

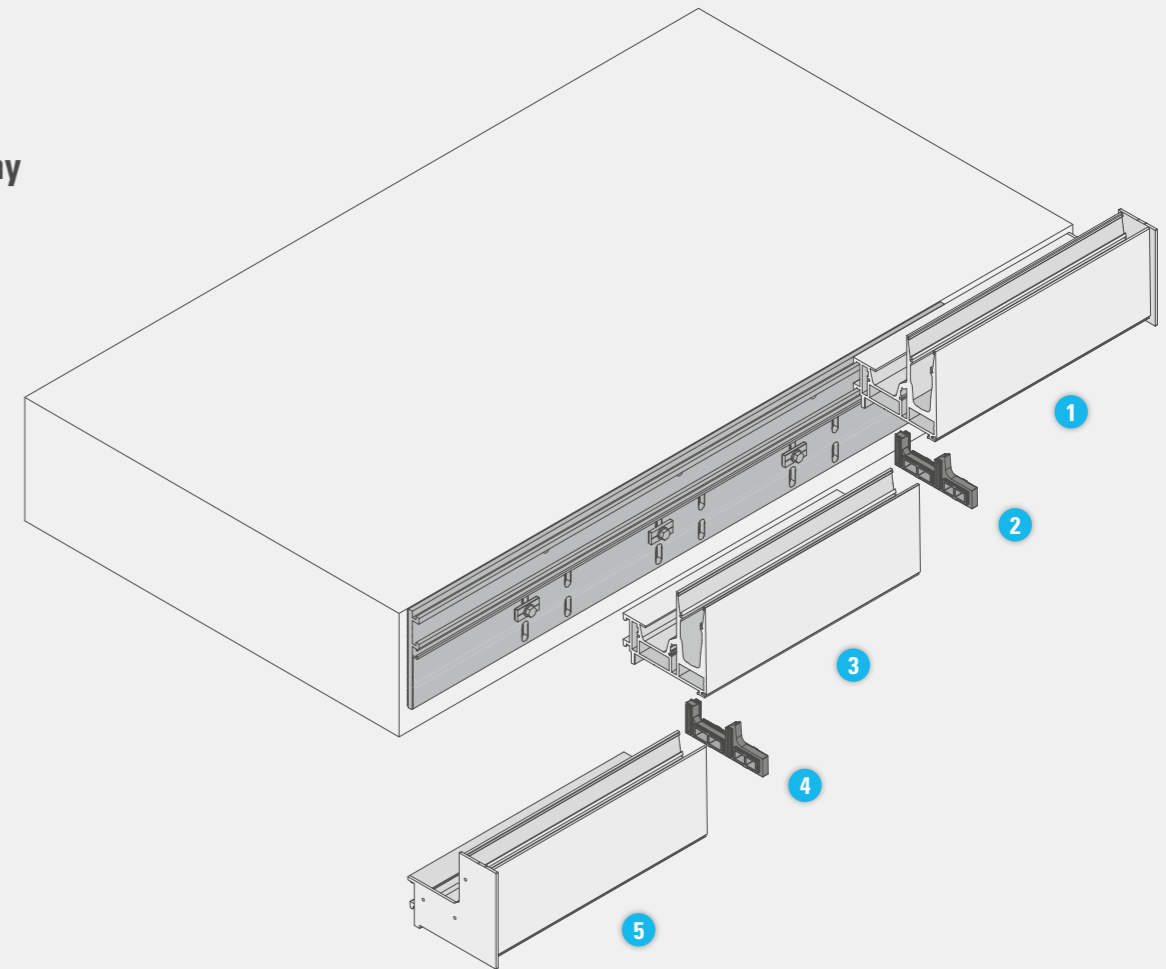


3 As a mounting aid, we recommend the use of the sealant Sikaflex PRO-3 to fix the butt moulding. Then, press the butt moulding into the basic profile.

## Installation

Mounting sequence I balcony

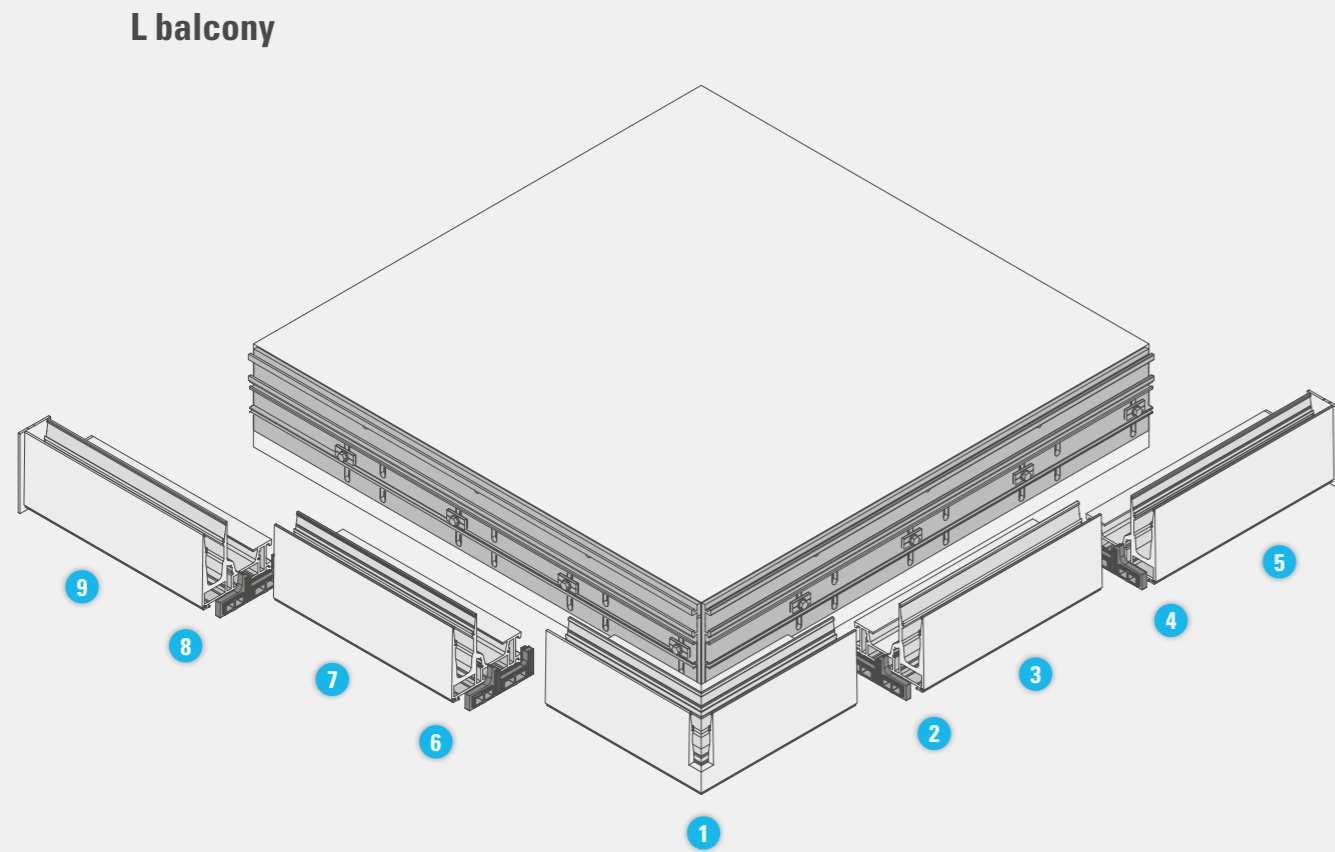
I balcony



6 After hanging the profiles, tighten all screws of the substructure and secure against loosening (e.g. Loctite).

## Installation

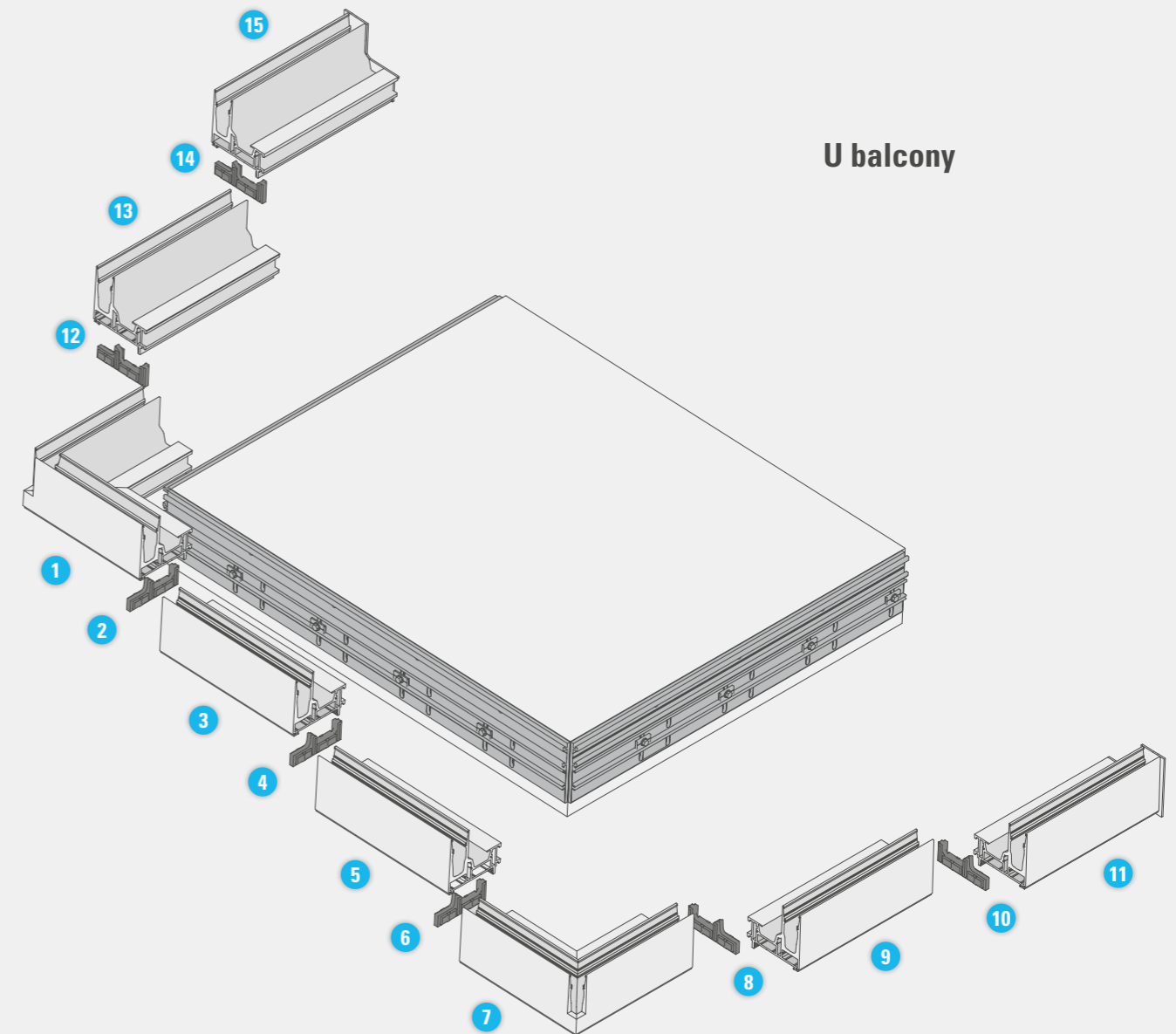
Mounting sequence L balcony



10 After hanging the profiles, tighten all screws of the substructure and secure against loosening (e.g. Loctite).

## Installation

Mounting sequence U balcony

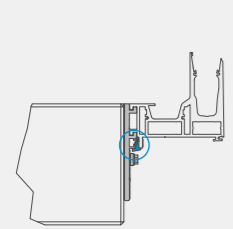
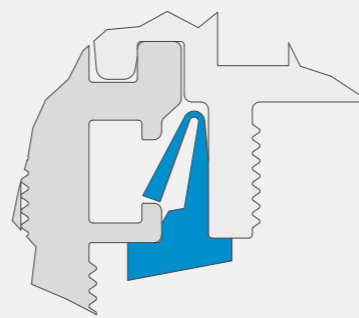
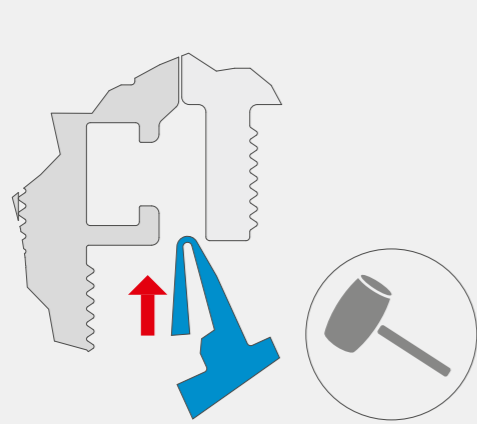


16 After hanging the profiles, tighten all screws of the substructure and secure against loosening (e.g. Loctite).

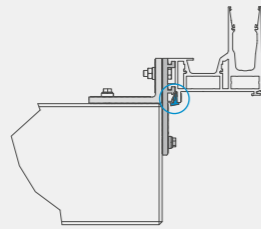
## Installation

Anti-lift-out device

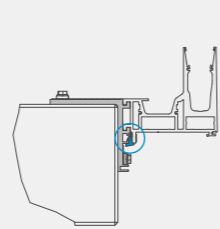
**Securing clip** 1 piece per meter



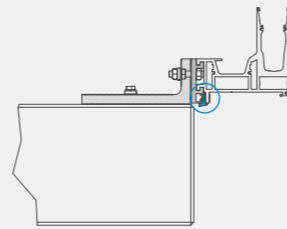
System 1



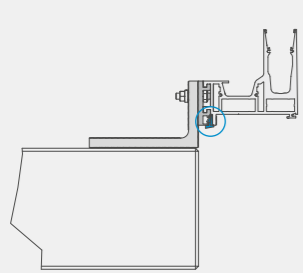
System 2



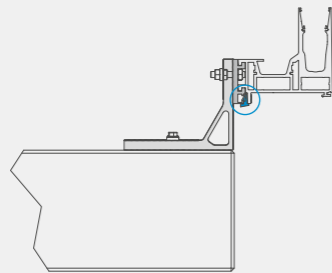
System 3



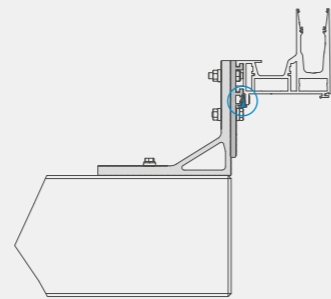
System 4



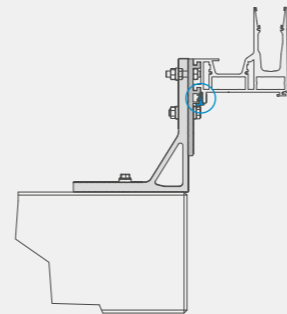
System 5



System 6



System 7

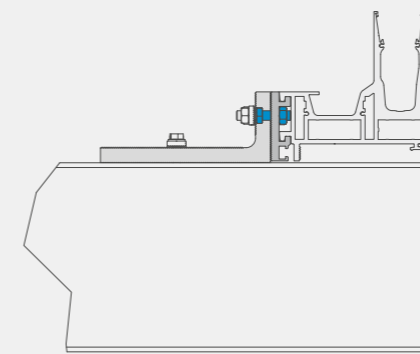
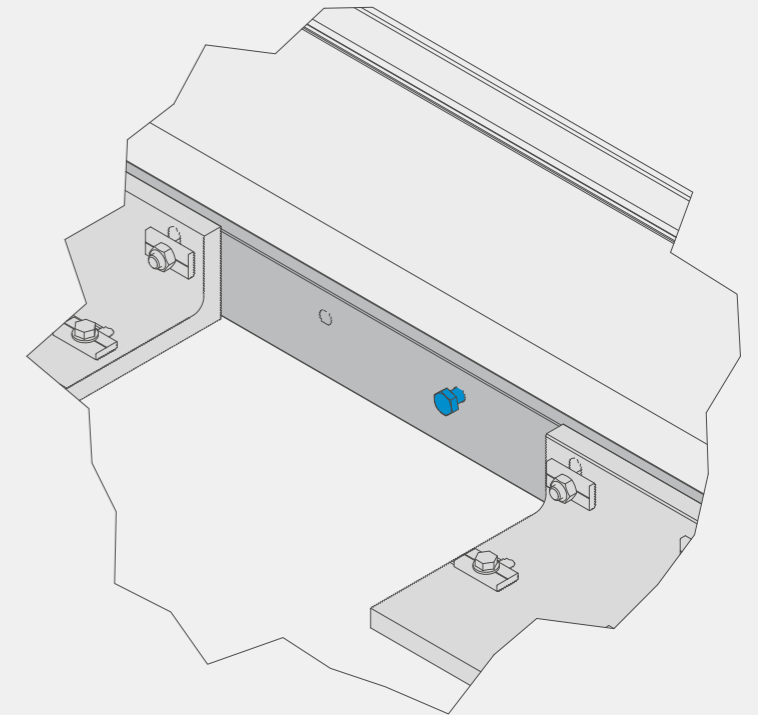
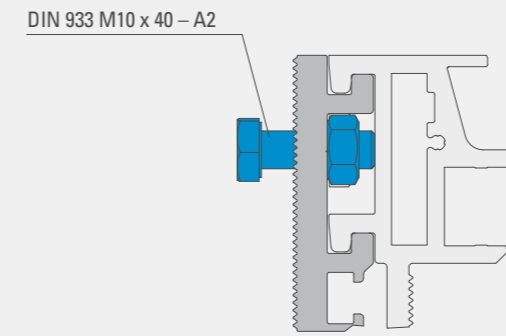


System 8

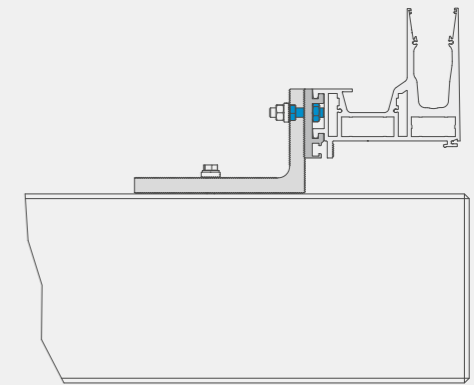
## Installation

Anti-lift-out device

**Locking screw** 1 piece per meter



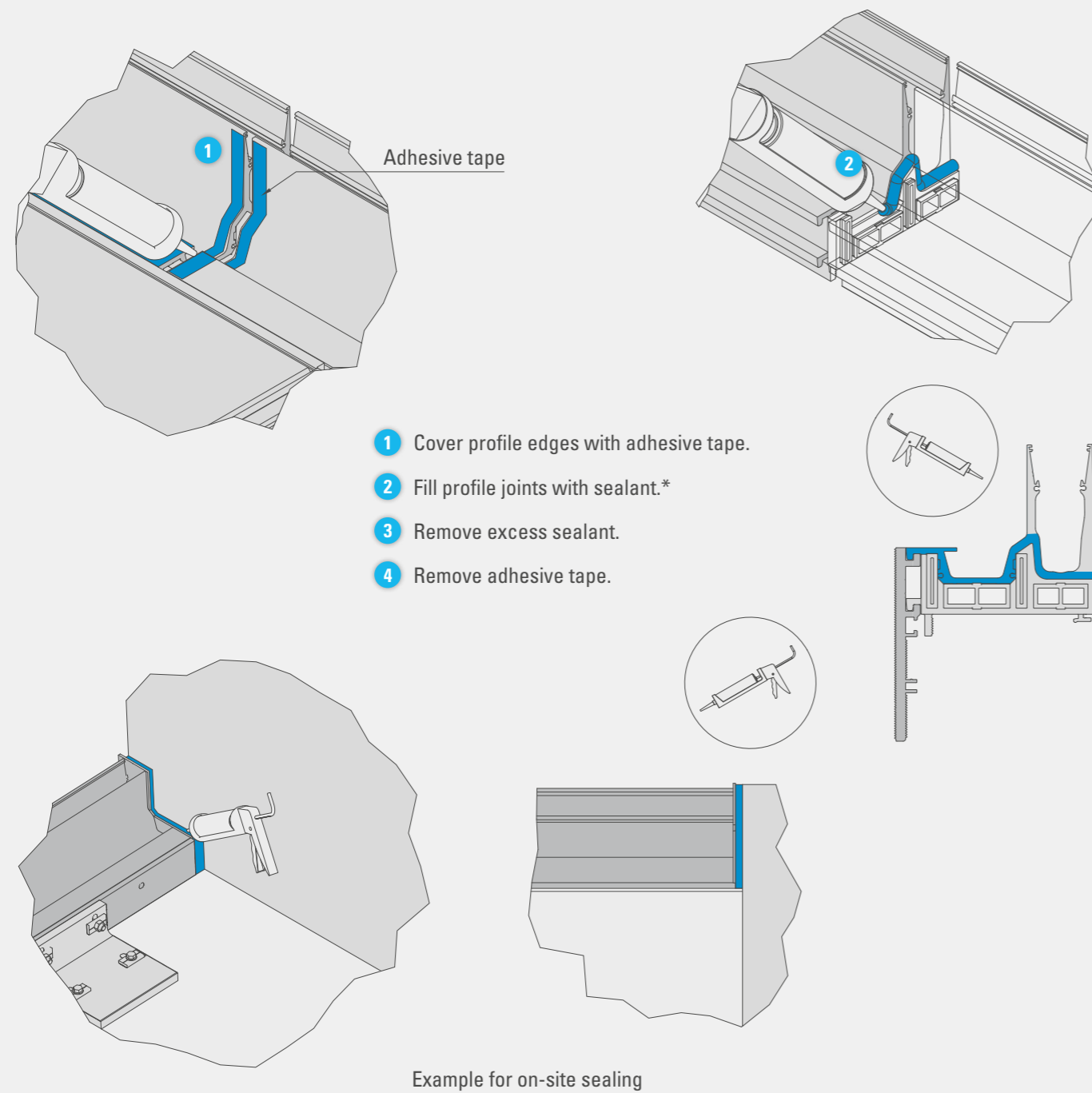
System 4



System 5

## Installation

Sealing



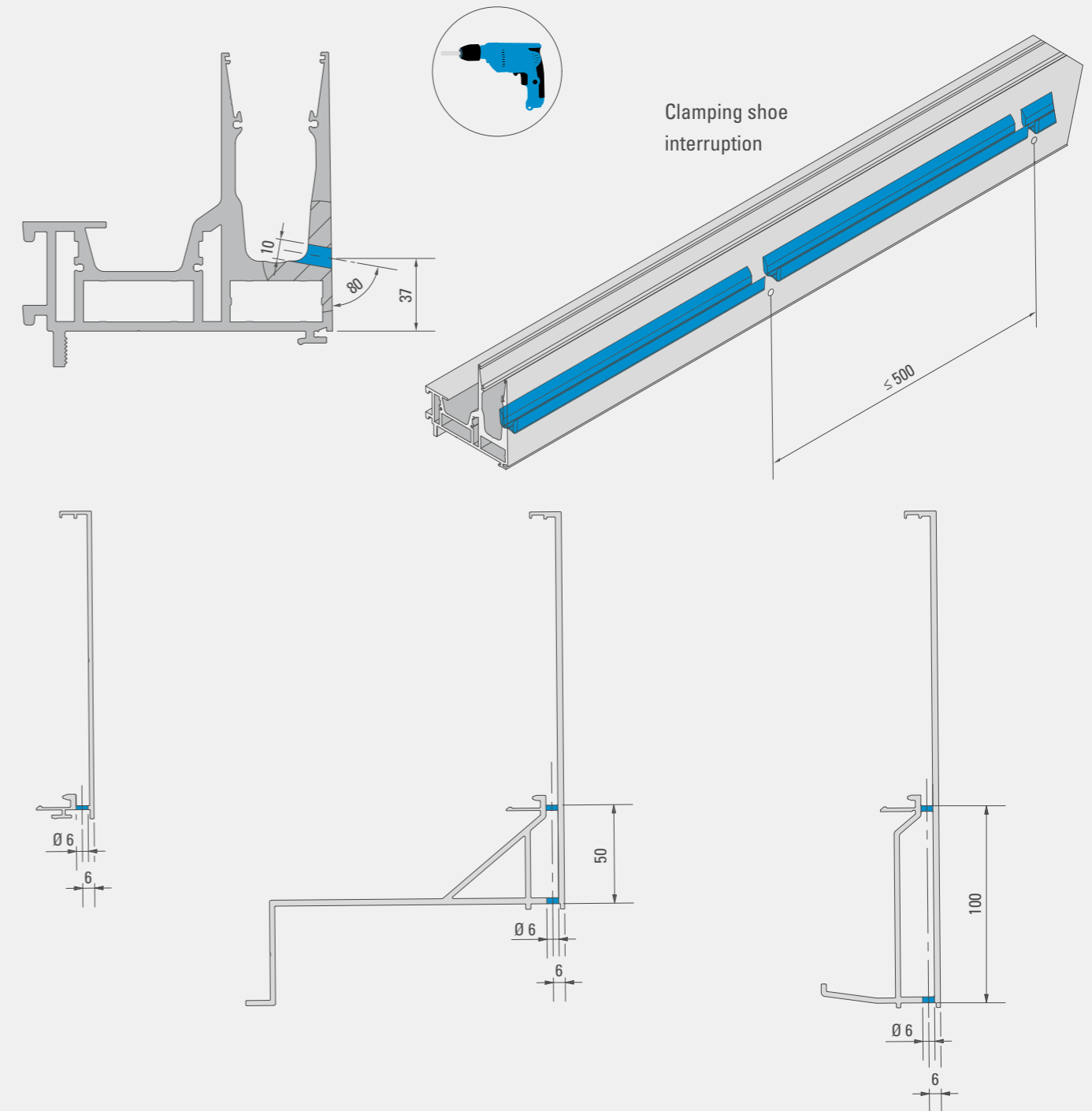
\* For tested tightness, use Sika Haftreiniger (adhesive cleaner) and Sikaflex Pro 3 or equivalent.  
The professional assembly and the execution of the sealing of the individual elements and the entire system suitable for permanent use must be ensured by the customer. When using the sealant, the specifications and guidelines of the sealant manufacturer must be observed.



## Installation

Glass rebate drainage

### Example for glass rebate drainage



Check drainage in conjunction with ETICS.

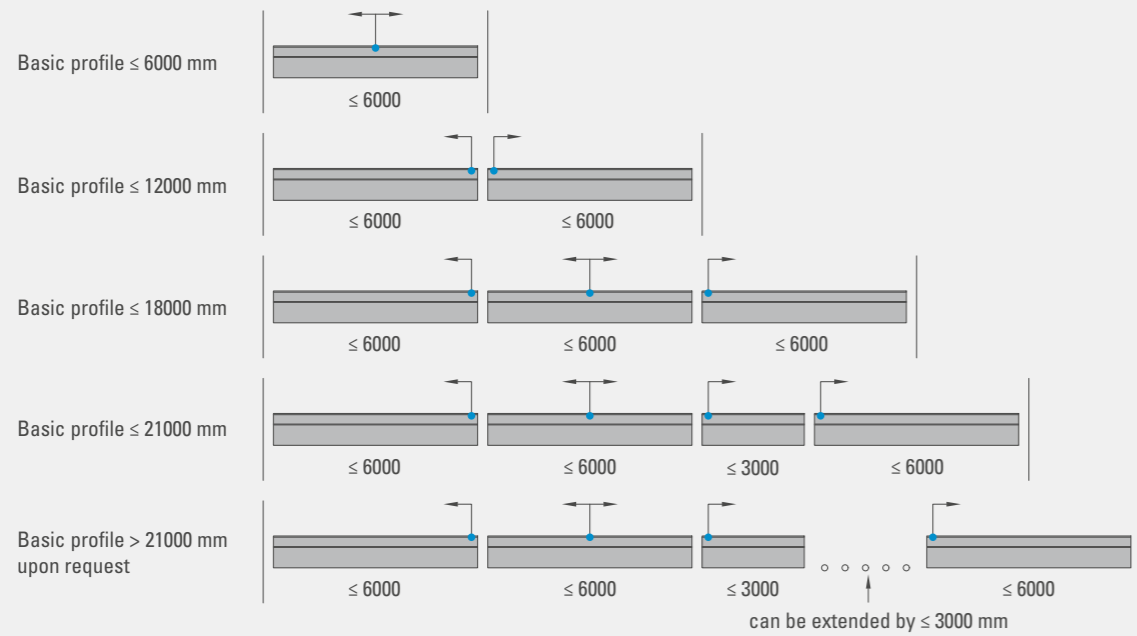




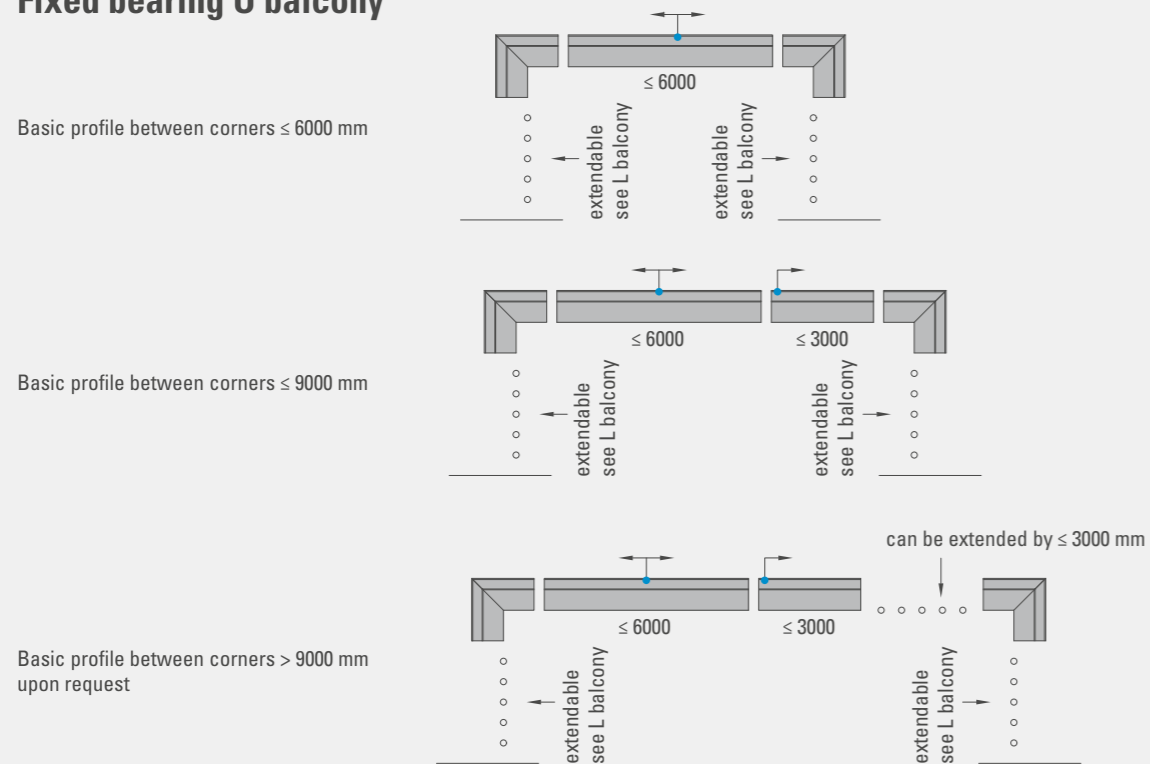
## Installation

Fixed bearing points

### Fixed bearing straight balcony / I balcony



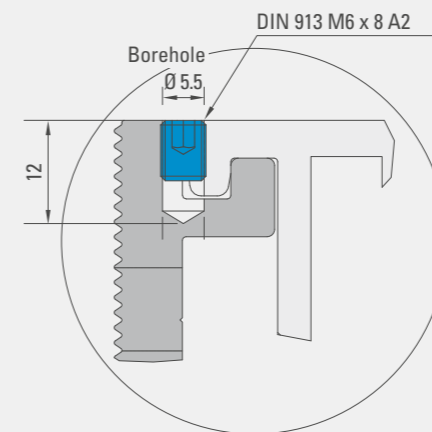
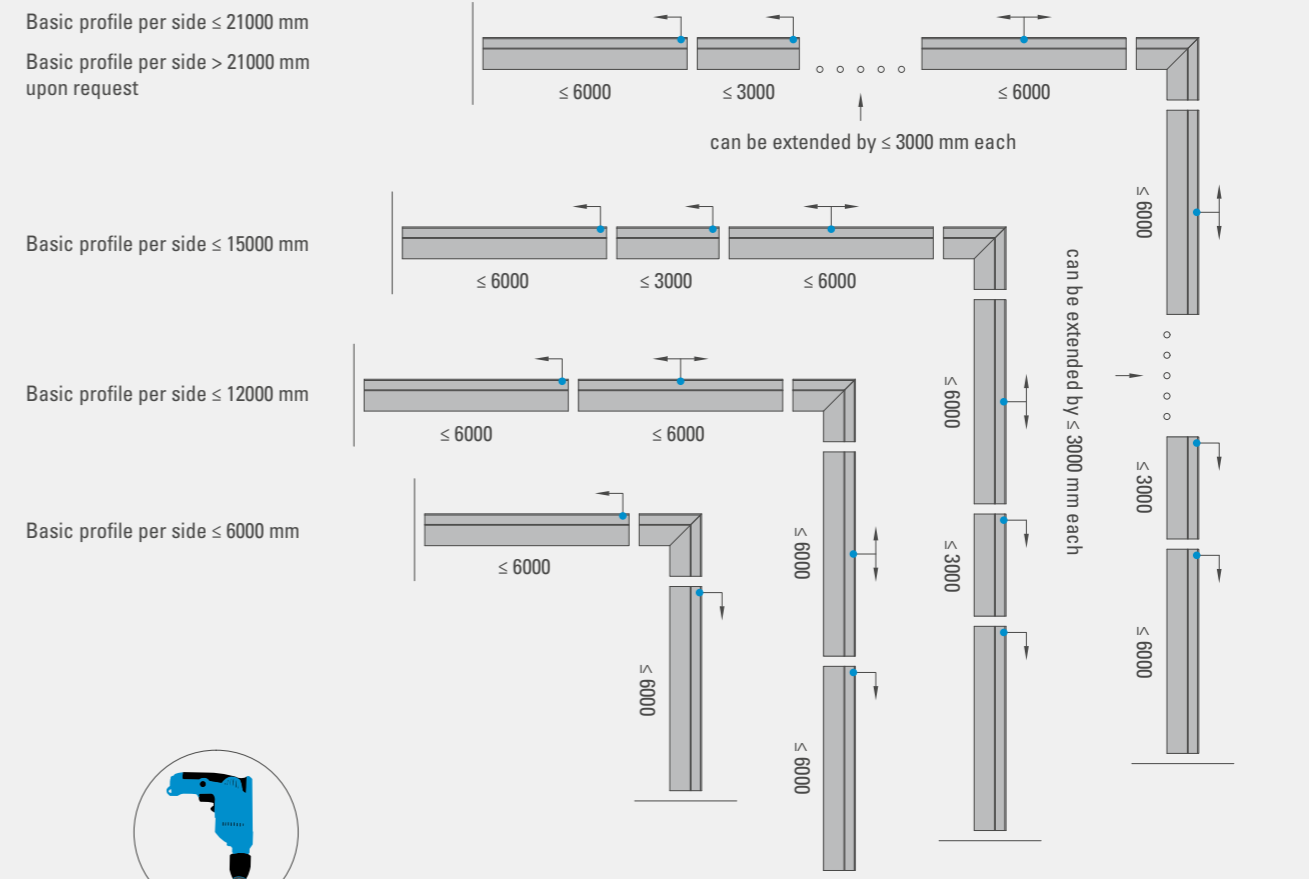
### Fixed bearing U balcony



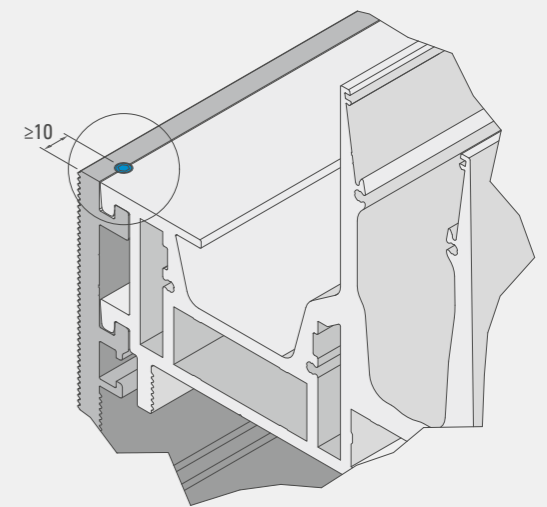
## Installation

Fixed bearing points

### Fixed bearing L balcony



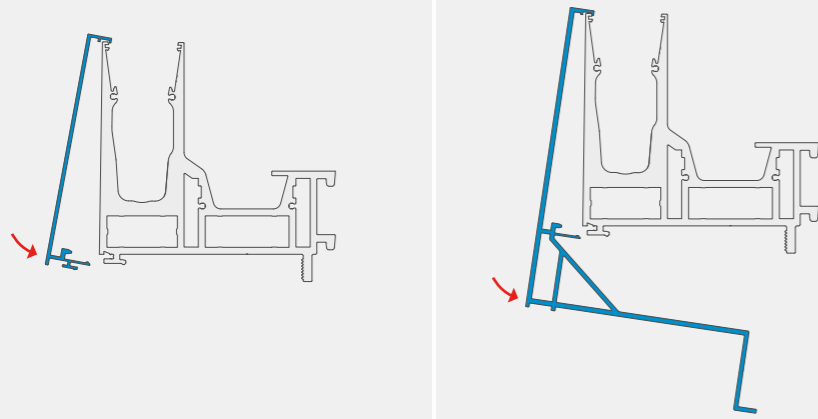
Thread cutting not necessary.



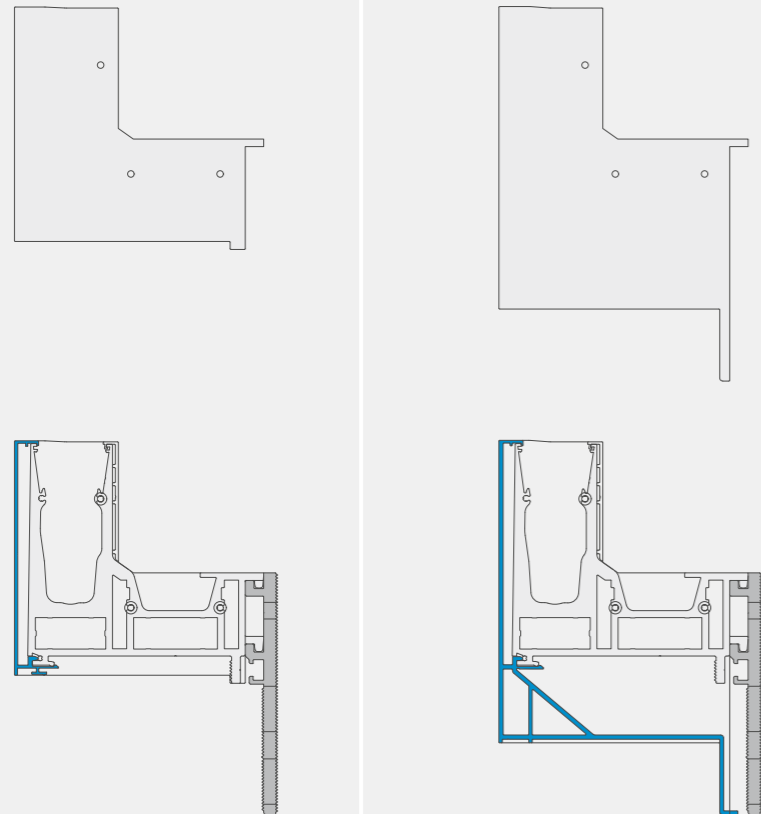
## Installation

Fascia

### Outer fascia



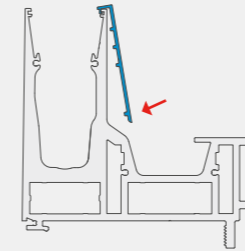
### End cover



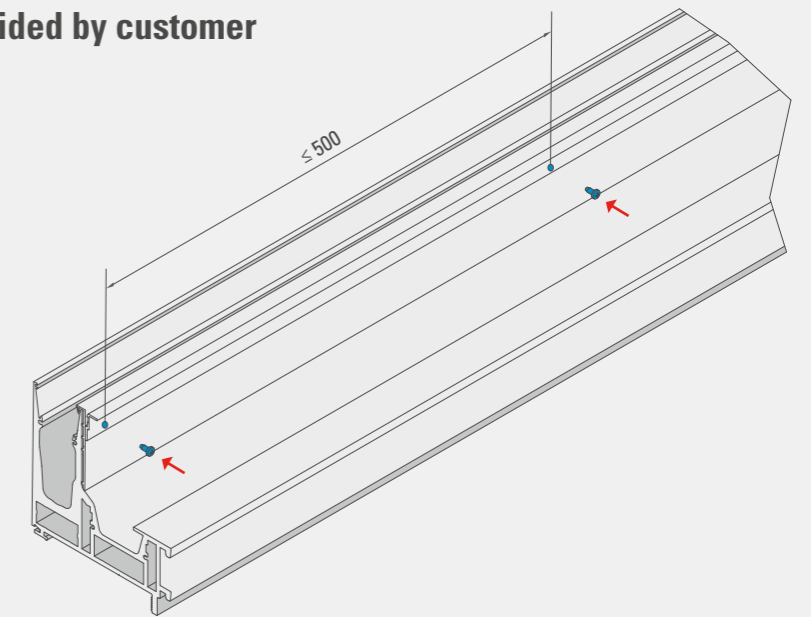
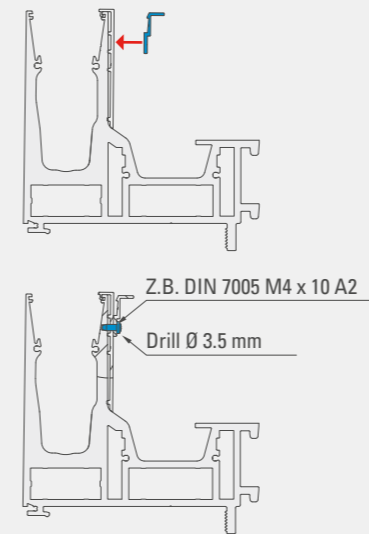
## Installation

Fascia

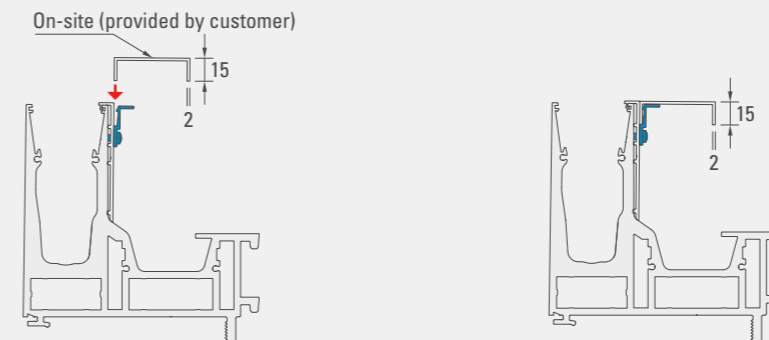
### Inner fascia



### Connection profile for cover provided by customer



### Example for optional cover provided by customer



# Installation instructions

## CLEVERFIX mounting on the BALARDO *aqua control*

### Adjustable from both sides.

CLEVERFIX mounting allows you to adjust your panes from the inside and outside at any time and on any construction site!

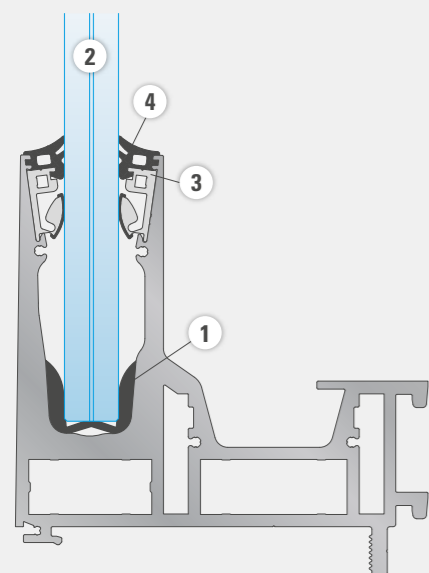
Regardless of inside or outside. You can use a cordless screwdriver to easily adjust the threaded studs to move the pane through the positioning elements and thereby position these correctly for your construction project.



▶ Installation video available at [www.glassline.de/montage-cleverfix](http://www.glassline.de/montage-cleverfix)

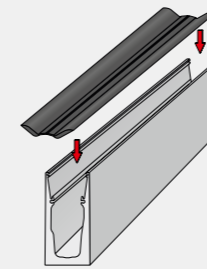


## The CLEVERFIX mounting set

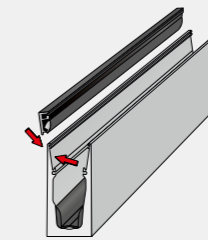


- |   |                             |                           |   |
|---|-----------------------------|---------------------------|---|
| 1 | Clamping shoe               | Material: EPDM            | Delivery length: 3000 mm                        |
| 2 | Glass                       |                           |   |
| 3 | Positioning elements        | Material: POM + Aluminium | Delivery length: 1000 mm<br>Screws: M 6 x 12 mm |
| 4 | Internal and external seals | Material: EPDM            | Delivery length: 3000 mm                        |

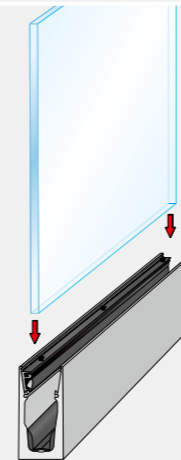
## Installation instructions for CLEVERFIX



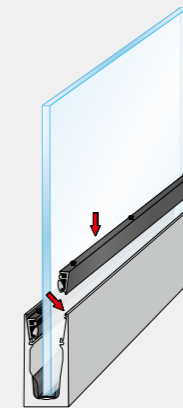
1 Insert the clamping shoe.



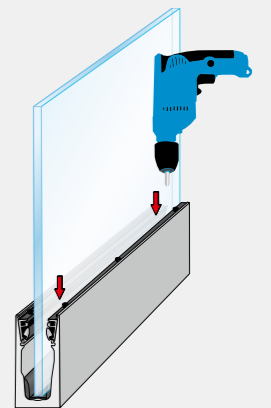
2 Clip in the outer positioning element.



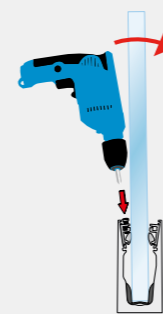
3 Insert the glass pane.



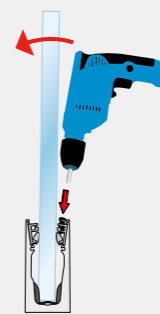
4 Clip in the inner positioning element.



5 Fix the screws to the positioning element and insert the pane into the correct place. You can use a cordless screwdriver to easily adjust the set screws on the inside and outside. Distance between the screws: 200 mm.



6 By screwing in the threaded stud to the left, the positioning element presses against the pane and pushes it to the right.



7 By screwing in the threaded stud to the right, the positioning element presses against the pane and pushes it to the left.



8 Insert the end seals. Before doing so, observe the fascia mounting.

Please use a longer bit.

