Installation Instructions

WAREMA slat roof Lamaxa L50 / L50 Line

Update/change

- Graphic and dimensions added for wall console installation
- Adjusting the WMS Weather station plus amended

Valid from 1 July 2025
For qualified technicians only
Document number 2054143 [Rev. 20 - en]

warema

Der SonnenLichtManager

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1 Safety and product information

Warnings are marked in the instructions with this symbol.

- Read through the product instructions before use.
- Observe all safety and setting instructions.

The basic safety instructions can be viewed under (**www.warema.de/Sicherheitshinweise**).

Target group

These instructions are intended for use by qualified specialists and fitters.

Activities that pertain to the slat roof structure are only permitted to be performed by qualified fitters.

Activities that pertain to the electrical connection of the components within the slat roof are only permitted to be performed by certified electricians.

Permissible activities

Performing tasks on the product that are not described in these instructions is not permissible. No other alterations are to be carried out on the product other than as described in these instructions without the written approval of WAREMA.

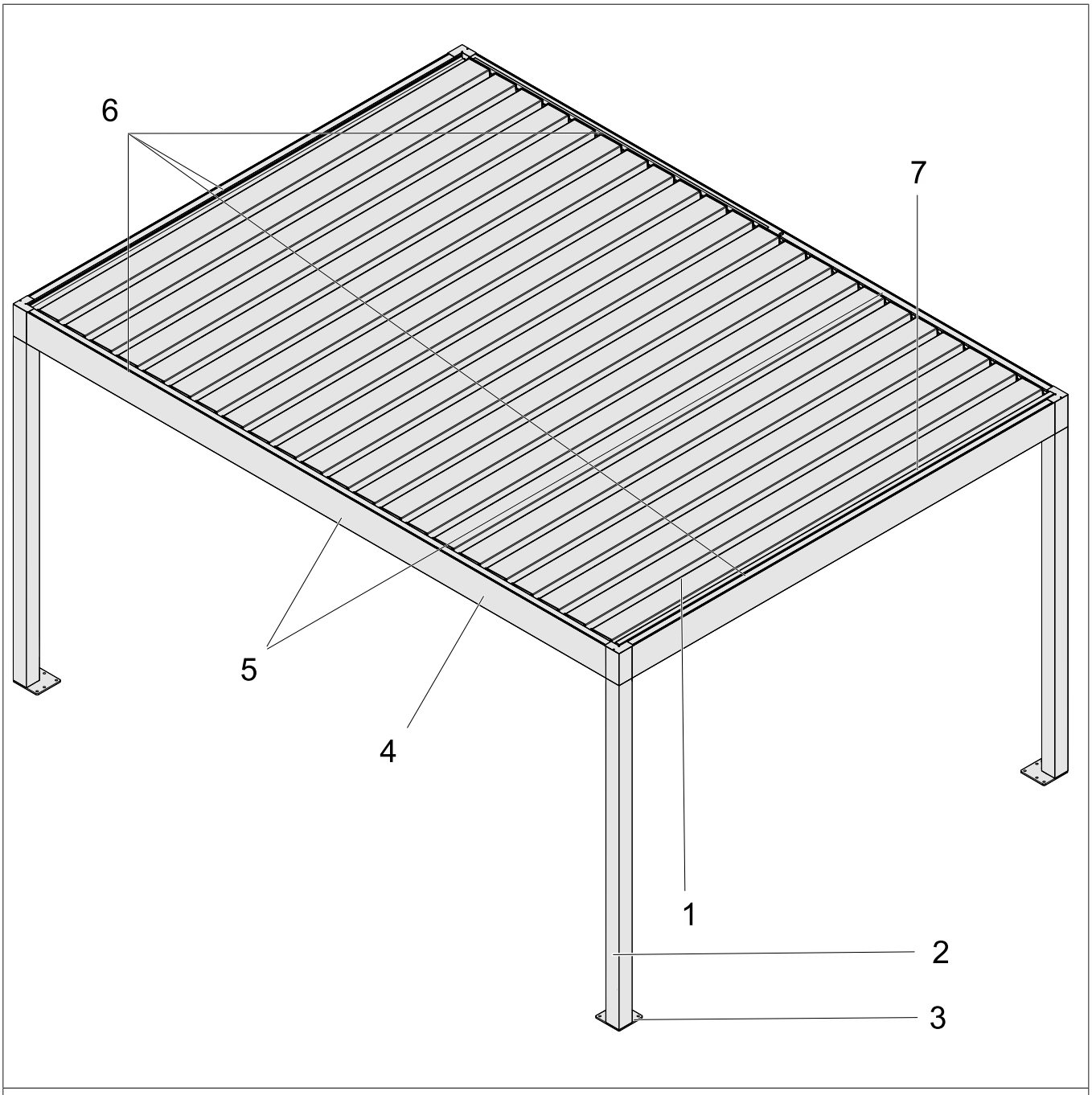
If any questions arise before or during installation, please send an e-mail to **service@warema.de** or call +49 9391 20-9333.

Intended use

The following details apply to the following product: Lamaxa slat roof L50 / L50 Line

The roof system is an open outdoor canopy made from aluminium rather than a self-contained insulated conservatory. Thus, it cannot be guaranteed that the structure will be 100% water-proof.

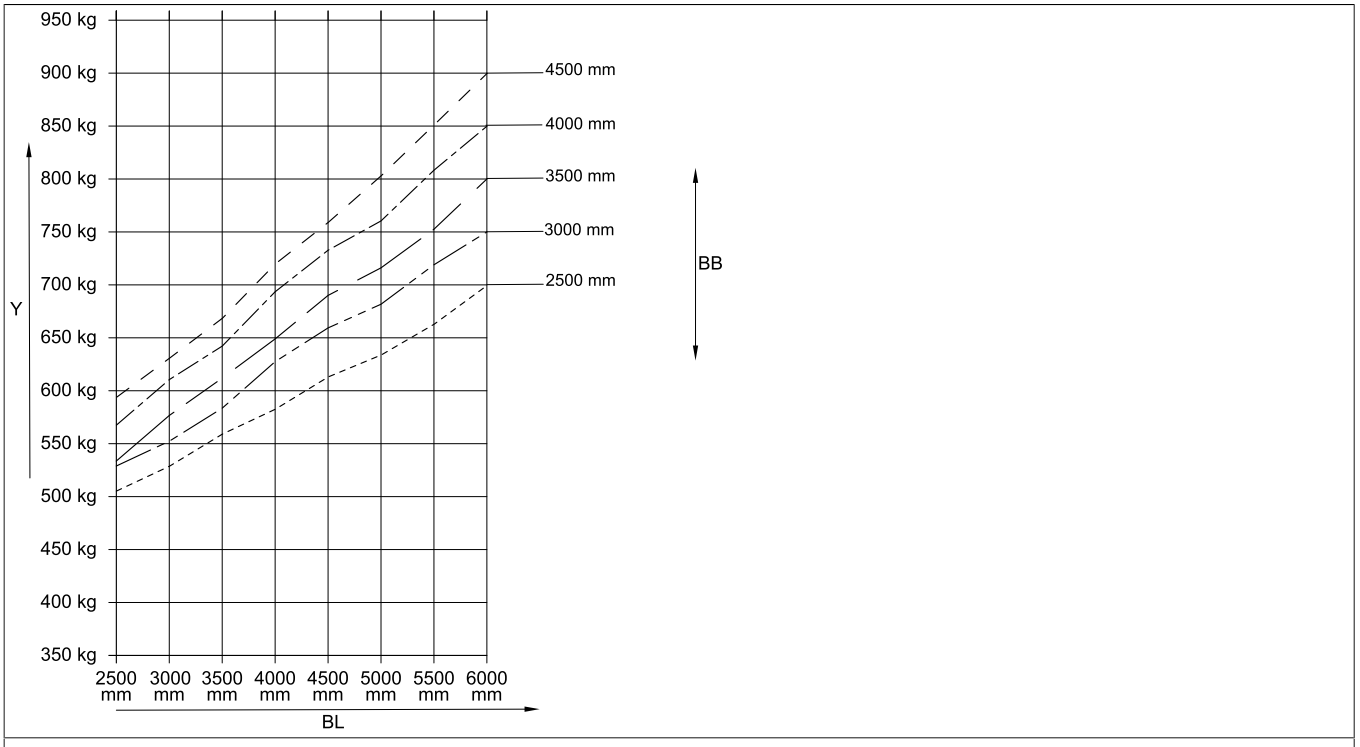
Parts description



1	Slats	5	Beams with slat seat
2	Pole	6	Rain hood
3	Base plate (e.g., external)	7	Partition compensation plate
4	Push rod (concealed)		

Fig. 1: Parts description

Weights



BB	Order width [mm]	Y	Weight
BL	Order length		

Fig. 2: Weights

Wind resistance Slat roof

The maximum permitted wind speed (wind speed limit) for the product with open slats is: 13 m/s (corresponds to approx. 38 to 48 km/h / Beaufort 6)

If the maximum wind speed of 13 m/s (corresponds to approx. 48 km/h) is reached, the slats must be closed.

The installed product will meet the requirements of the specified wind speed if the instructions below are followed during the installation:

- The fixing material used must be suitable for the mounting substructure (the fitter is responsible for the right selection).
- The installation specifications from the fixing material manufacturer must be adhered to (the fitter is responsible for adherence).

Resistance against water that has collected on the slat roof

The product fulfils performance class 2.

The product offers protection against the weather when the slats are closed.

Maximum snow load on slat roof

Order length in [mm]	Order width in [mm]										
	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500
2060	300	300	275	180	155	90	90	75	60	55	50
2280	300	300	275	180	155	90	90	75	60	55	50
2500	300	300	275	180	155	90	90	75	60	55	50
2720	300	300	275	180	155	90	90	75	60	55	50
2940	300	300	275	180	155	90	90	75	60	55	50
3160	300	300	275	180	155	90	90	75	60	55	50
3380	300	300	275	180	155	90	90	75	60	55	50
3600	300	300	275	180	155	120	90	75	60	55	50
3820	300	300	275	180	155	120	90	75	60	55	50
4040	300	300	275	180	155	120	90	75	60	55	50
4260	300	300	275	180	155	120	90	75	60	55	50
4480	300	300	275	180	155	120	90	75	60	55	50
4700	390	300	260	180	155	120	90	75	60	55	50
4920	300	260	240	180	155	120	90	75	60	55	50
5140	300	260	240	180	155	120	90	75	60	55	50
5360	270	245	210	175	155	120	90	75	60	55	50
5580	235	215	180	160	150	120	90	75	60	55	50
5800	200	190	160	140	130	120	90	75	60	55	50
6020	160	145	125	115	100	95	85	75	60	55	50

Tab. 1: Maximum snow load on the slat roof Lamaxa L50/L50 Line [kg/m^2]

Wind resistance GranTex with easyZIP guidance - data on the maximum permissible wind speed limits (optional)

Wind speed limits are the maximum permissible wind speeds which must not be exceeded. When the wind speed limits are reached, the product must be raised.

If a wind sensor is used (recommended by WAREMA), it must be ensured that the set wind speed limit relates to the wind speeds that actually occur at the product. It is recommended that the wind sensor is set one level lower than determined (e.g. to 7 m/s instead of 10 m/s) to enable the product to be raised while also taking gusts of wind into account.

INFO
Due to their design, awnings with easyZIP guidance are able to withstand much higher wind speeds when extended than while they are extending.

The supplied product features a new motor with a responsive obstacle detection mechanism. The motor is capable of detecting an excessive wind load while the product is being lowered, which means that the product is stopped temporarily while it is moving.

Wind resistance GranTex with easyZIP guidance - data on the maximum permissible wind speed limits for ground/ level installation of the roof system (optional)

Basis for the following table

- ▶ Raise the awning.
- ▶ Installation: Installation on the roof system/ground-level installation location of the roof system

Order height in [mm]	Order width in [mm]										
	up to 1000	up to 1500	up to 2000	up to 2500	up to 3000	up to 3500	up to 4000	up to 4500	up to 5000	up to 5500	up to 6000
up to 1000	24	24	24	20	20	20	20	20	20	17	17
up to 1500	24	24	20	17	17	17	17	17	17	13	13
up to 2000	24	20	17	17	13	13	13	13	13	13	13
up to 2500	20	17	17	13	13	13	13	13	13	13	13
up to 3000	20	17	13	13	13	13	13	13	13	13	10

Tab. 2: Wind speed limits for awning with easyZIP guidance (motor with obstacle detection) for raising when the roof system is installed at ground level (details in m/s)

The permissible wind speed is reduced in defined levels (see Tab. 4).

The table values (m/s) should be changed in the following cases:

1 Fabric qualities
  – Soltis fabric 92 — Reduce the value by 1 level (see Tab. 4)

Wind resistance GranTex with easyZIP guidance - data on the maximum permissible wind speed limits for non-ground-level installation of the roof system (optional)

Basis for the following table

- ▶ Raise the awning.
- ▶ Installation: Installation of the roof system/installation of the roof system not at ground level

Order height in [mm]	Order width in [mm]										
	up to 1000	up to 1500	up to 2000	up to 2500	up to 3000	up to 3500	up to 4000	up to 4500	up to 5000	up to 5500	up to 6000
up to 1000	20	20	20	17	17	17	17	17	17	13	13
up to 1500	20	20	17	13	13	13	13	13	13	10	10
up to 2000	20	17	13	13	10	10	10	10	10	10	10
up to 2500	17	13	13	10	10	10	10	10	10	10	10
up to 3000	17	13	10	10	10	10	10	10	10	10	7

Tab. 3: Wind speed limits for awning with easyZIP guidance (motor with obstacle detection) for raising when the roof system is not installed at ground level (details in m/s)

The permissible wind speed is reduced in defined levels (see Tab. 4).

The table values (m/s) should be changed in the following cases:

1 Fabric qualities
  – Soltis fabric 92 — Reduce the value by 1 level (see Tab. 4)

Wind resistance GranTex with easyZIP guidance - data on the maximum permissible wind speed limits - calculation example (optional)

0	1	3	5	7	10	13	17	20	24	28	32

Tab. 4: Levels for determining the wind speed limits (details in m/s)

If the wind speed is reduced by, for example, 1 level, the value listed one column to the left must be used.

Basis for calculation:

- Order width: 4000 mm
- Order height: 1500 mm
- Fabric quality: Soltis fabric 92%

Determined values:

Ground-level installation location

- Wind speed limit as per table: 17 m/s
- Reduction of value by **1** level due to fabric quality: from 17 m/s to 13 m/s
- Wind speed limit to be set on wind sensor: 10 m/s

Installation location not at ground level

- Wind speed limit as per table: 13 m/s
- Reduction of value by **1** level due to fabric quality: from 13 m/s to 10 m/s
- Wind speed limit to be set on wind sensor: 7 m/s

Electric drive data Slat roof

INFO
Observe the separate instructions for the motor.

Electric drive data GranTex with easyZIP guidance (optional)

INFO
Observe the separate instructions for the motor.

Technical data LED strip/RGB strip (optional)

Parameter	Data LED strips[1]	Data RGB strips
Operating voltage V DC	24	24
Degree of protection	IP 67	IP 54
Max. power [W/m]	4.8	12
Max. light power [lm/m]	400	-
Colour temperature [Kelvin]	3000	-

Tab. 5: Data for LED strips/RGB strips (optional)

1 Energy efficiency class: no data necessary [2]

[2] According to the Ecodesign Regulation (EU) 2019/2020 (as of 1 October 2019) on the energy efficiency of light sources, the lighting of this product (surrounding product) contains a removable light source that is outside the scope of the regulation (luminous flux of the smallest unit of the light source < 60 lumens). Therefore, the labelling obligation according to Ecodesign Regulation (EU) 2019/2015 (as of 11 March 2019) Annex II on energy consumption labelling does not apply.

<table>
<tr><th>Parameter</th><th>Data WMS Dimmer smart</th><th>Data ZigBee RGB Dimmer smart</th></tr>
<tr><td>Operating voltage [V AC]</td><td>200 - 240</td><td>200 - 240</td></tr>
<tr><td>Frequency [Hz]</td><td>50 - 60</td><td>50 - 60</td></tr>
<tr><td>Load current [A] at 230 V AC</td><td>6.0</td><td>-</td></tr>
<tr><td>Operating voltage [V DC]</td><td>24</td><td>24</td></tr>
<tr><td>Switching capacity [W] at 24 V DC</td><td><table><tr><th>With WMS Dimmer smart xx</th><th>[W]</th></tr><tr><td>60 L (Art. no. 2023455)</td><td>55</td></tr><tr><td>100 L (Art. no. 2023456)</td><td>95</td></tr><tr><td>200 L (Art. no. 2023457)</td><td>150</td></tr></table></td><td><table><tr><th>With ZigBee RGB Dimmer smart xx</th><th>[W]</th></tr><tr><td>150 W (Art. no. 2031738)</td><td>145</td></tr></table></td></tr>
<tr><td>Degree of protection</td><td>IP 54</td><td>IP 54</td></tr>
<tr><td>Safety class</td><td>I</td><td>I</td></tr>
<tr><td>Operating and storage temperature [°C]</td><td>-20 to +55</td><td>-20 to +55</td></tr>
</table>

Tab. 6: Data for WMS Dimmer smart/ZigBee RGB Dimmer smart (optional)

Technical data Design radiant heater (optionally dimmable) (optional)

INFO
C16 fuse: For the radiant heater, an in-line circuit breaker with type C16 is **mandatory**.

Parameter	Data
Mains voltage	230 - 240 VAC/50 Hz
Power consumption [W]	2200
Power consumption in standby [W]	0.7
Degree of protection	IP 65
Safety class	I

Tab. 7: Data for the Design radiant heater

Optional: A WMS Dimmer 0-10 V may be integrated for switching and dimming the radiant heater.

Parameter	Data WMS Dimmer 0-10 V
Operating voltage [V DC]	12
Power consumption [W]	0.2
Frequency [GHz]	2.40 - 2.48
Degree of protection	IP 54
Safety class	III
Operating and storage temperature [°C]	-20 to +55

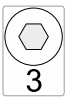
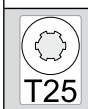
Tab. 8: Data for WMS Dimmer 0-10 V (optional)

2 Tools

Tool/aid	Use
Lifting aid	Beams
Bellows	Cleaning the fixing holes after drilling
Dismantling tool (art. no. 2024013)	Dismantling the guide rail (GranTex with easyZIP guidance)
Protective equipment (protective goggles/gloves)	For primer
Brushes/rags/cloths	For applying primer
Cartridge press/caulking gun	For sealant
Cleaner (**recommendation**: Rhobasol 35DSF or Würth IPA cleaner – **not** included)	For cleaning surfaces where primer and sealant will be applied
Primer (**specification**: Würth Primer for Plastic/Wood/Stone – included)	Pretreatment of surfaces where the sealant will be applied (processing possible from at least +10 °C)
Sealant (**specification**: Würth SMP sealant black – included)	Sealing (processing possible from at least +5 °C)
Sealant smoothing agent (**recommendation**: from Würth – **not** included)	Smoothing the sealant

Tab. 9: Additional special tools and aids

3 Explanation of symbols

	Warning (text) (in the picture, pointing to a warning above)		Warning (text) (in the picture, pointing to a warning above)
	Warning (text) (in the picture, pointing to a notice above)		Info (text) (in the picture, pointing to an info above)
	Screw in/on the part hand-tight (in the picture, always in combination with a red arrow)		Screw in/on the part tightly (in the picture, always in combination with a red arrow)
	Position/insert the part, showing a screw as an example		Screw in/on the part, showing a screw as an example (in the picture, always in combination with the icon for the force to be applied)
	Screw in/on the part, showing a screw as an example (in the picture, always in combination with the icon for the force to be applied)		Release part, showing a screw as an example
	Adjust a part, e.g. to align it, showing a screw as an example		Remove a part, showing a screw as an example
	Drive type of the screw with tool size, showing a cross-head screw as an example		Drive type of the screw with tool size, e.g. showing the slotted screw as an example
	Drive type of the screw with tool size, showing the hex head screw as an example		Drive type of the screw with tool size, showing the hexagon socket screw as an example
	Drive type of the screw with tool size, showing the Torx screw as an example		Drilling with indication of drill bit size

Tab. 10: Explanation of symbols

4 Checking the contents

4.1 Unpacking the product

WARNING
Risk of suffocation from carelessness!

Plastic film, polystyrene parts, small parts, etc., can be very dangerous for children to play with.

- Keep children away from small parts.
- Do not leave the packaging material lying around in disorderly fashion.

INFO
Dispose of the packaging material properly after the unit is unpacked.

- Use care when unpacking the product and components.

4.2 Scope of delivery

INFO

- Check the scope of delivery against the delivery note.
- Check all parts to make sure they are not damaged.
- Compare the situation on-site with the order data.
- If any items are damaged or do not match the order data, discontinue installation and contact WAREMA.

Ground connections with field of application

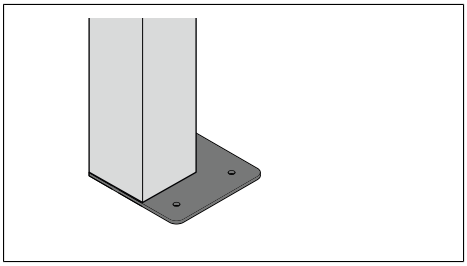


Fig. 3: Base plate (standard, flush on two sides)

Installation of sliding glass sash frames at the sides is permitted.

Downward drainage possible.

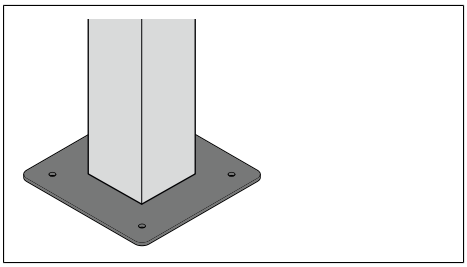


Fig. 4: Base plate (protruding on all sides/discontinued model)

Installation of sliding glass sash frames at the sides is permitted.

Downward drainage possible.

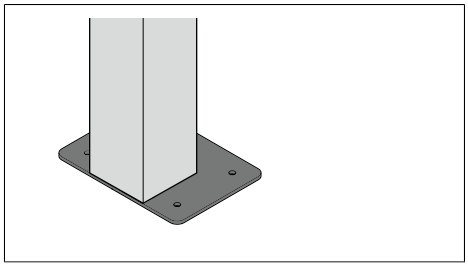
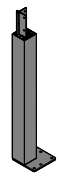
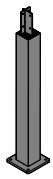
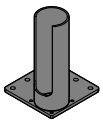
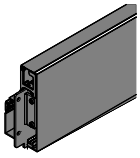
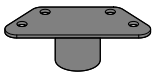
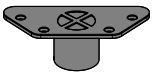
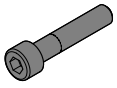
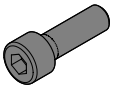
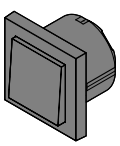
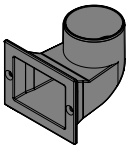


Fig. 5: Base plate for recess installation (flush on one side/discontinued model)

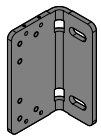
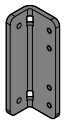
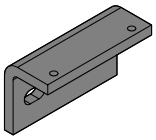
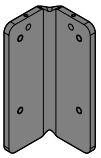
For recess installation only.

Installation of sliding glass sash frames at the sides is permitted.

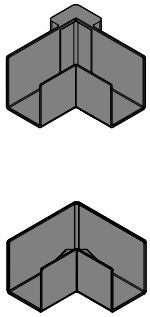
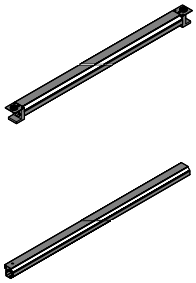
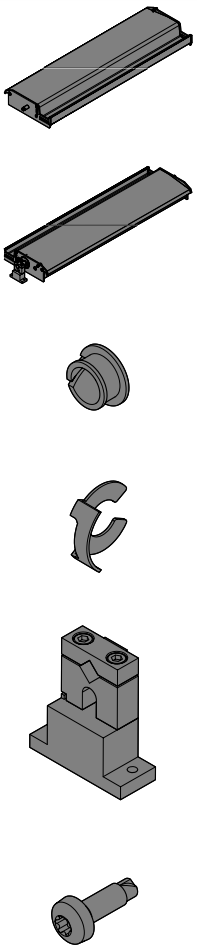
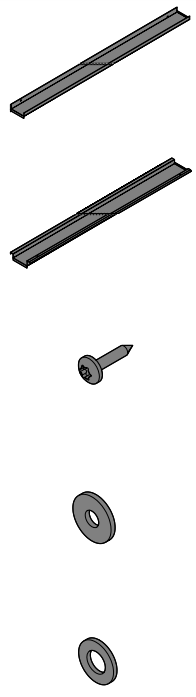
Downward drainage possible.

	Parts description		Parts description
 	■ Pole ■ Centre pole, Star variant	 	■ Base plate ■ DIN 7500 M8x30
	■ Beam	     	Offset pole ■ Fixing adapter ■ Fixing adapter for rain gutter ■ EPDM seal ■ DIN 912 M8x40 ■ DIN 125A 8.4 ■ DIN 912 M8x25
	Power socket (optional) ■ Power socket		Rectangular drainage (optional) ■ Waterspout

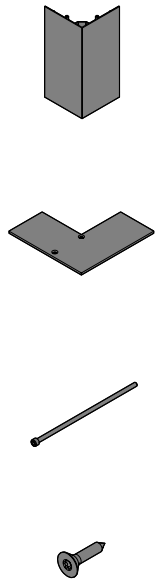
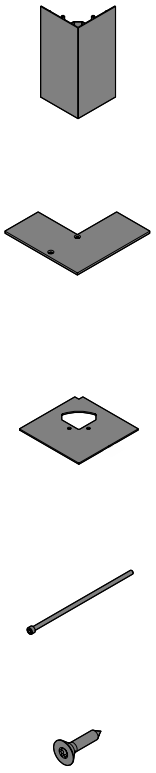
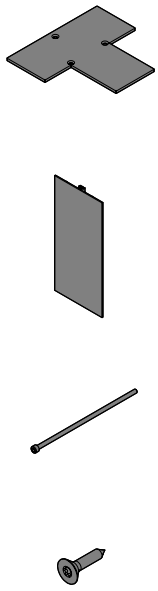
Tab. 11: Parts overview (the parts are shown at varying scales)

	Parts description		Parts description
     	Wall console ■ Wall console ■ Base plate for the wall console ■ DIN 6912 M8x20 ■ DIN 9021 8.4 ■ DIN 9021 13 ■ DIN 934 M12		Offset wall console ■ Wall console
 	Beam installation (pole) ■ DIN 933 M8x20 ■ DIN 125A 8.4	  	Beam installation (offset pole) ■ L angle ■ DIN 933 M8x20 ■ DIN 125A 8.4
 	Beam installation (wall console) ■ DIN 933 M8x20 ■ DIN 125A 8.4	 	Beam installation (offset wall console) ■ DIN 933 M8x20 ■ DIN 125A 8.4

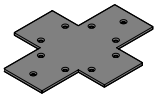
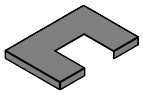
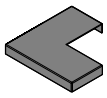
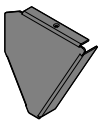
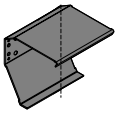
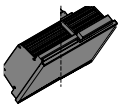
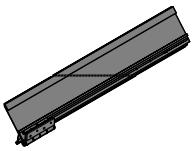
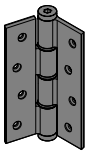
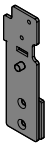
Tab. 11: Parts overview (the parts are shown at varying scales)

	Parts description		Parts description
	■ Drainage corner joint ■ Corner joint		Light rail (optional) ■ Light rail variant with 4x ■ DIN 965 M4x10 ■ Light rail variant with 2x
	■ Inside corner bracket ■ Inside corner bracket, line variant		■ Connection box ■ DIN 7981 4.2x16 ■ DIN 9021 5.3
	■ Slat ■ Motor slat ■ Sliding bushing ■ Locking device ■ Motor holder ■ DIN 7054 4.8x16		■ Partition compensation plate ■ Partition compensation plate, connection box ■ DIN 7981 4.2x16 ■ DIN 9021 5.3 ■ DIN 125A 5.3

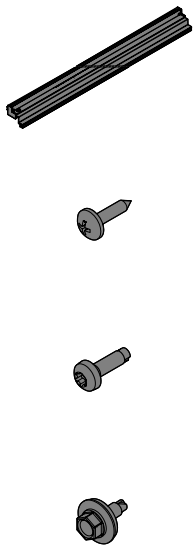
Tab. 11: Parts overview (the parts are shown at varying scales)

	Parts description		Parts description
	Cover (pole) ■ Outside cover ■ Upper cover ■ ISO 4762 M6x190 ■ DIN 7982 3.5x19		Cover (wall console) ■ Outside cover ■ Upper cover ■ Lower cover ■ ISO 4762 M6x190 ■ DIN 7982 3.5x19
	Cover (pole) Line/Star ■ Upper cover ■ Outside cover ■ Centre cover ■ ISO 4762 M6x190 ■ DIN 7982 3.5x19		Cover (wall console) Line/ Star ■ Upper cover ■ ISO 4762 M6x190 ■ DIN 7982 3.5x19

Tab. 11: Parts overview (the parts are shown at varying scales)

	Parts description		Parts description
 	Cover (pole) Star ■ Upper cover ■ DIN 7982 3.5x19	 	Base plate covers ■ Base plate cover, centre ■ Base plate cover, outside
          	Radiant heater (optional) ■ Radiant heater bracket ■ Cover cap ■ Housing ■ Radiant heater ■ Snaplock bracket ■ Console ■ DIN 7982 3.5x13 ■ DIN 7982 3.9x25 ■ DIN 912 M5x30 ■ DIN 125A 5.3 ■ DIN 439 M5	     	Protection profile ■ Protection profile ■ Hinge ■ Spacer ■ DIN 7982 4.8x13 ■ DIN 965 M5x8 ■ DIN 965 A2 M4x12

Tab. 11: Parts overview (the parts are shown at varying scales)

	Parts description		Parts description
	Wall connection profile ■ Wall connection profile ■ DIN 7981 4.8x16 ■ DIN 7504 3.5x13 ■ DIN 7504 K0 4.2x13		

Tab. 11: Parts overview (the parts are shown at varying scales)

5 Installation

INFO
The fixation and the fixing material must be suitable for the existing mounting substructure and must be designed according to the applicable regulations.

INFO

- Perform the installation with at least two persons!

  To **ensure** proper installation, the **mounting aid** must be used.

INFO
When installing the box, make sure that precompressed sealing tape is installed between the box and the lintel reveal.

DANGER
Electric shock!

When working in the immediate vicinity of potentially live parts, such as on-site connecting lines, contact may result in an electric shock.

- Check that the on-site connecting line is de-energised.
- Before installation, de-energise the on-site connecting line and secure it against being switched on again.

WARNING
Risk of injury from a falling product!

The product only meets the requirements of the specified maximum permissible wind speed when installed under certain conditions.

- The specified number of fixations and fixing points must be adhered to.
- Observe the guidelines provided by the screw anchor manufacturer when installing the product.

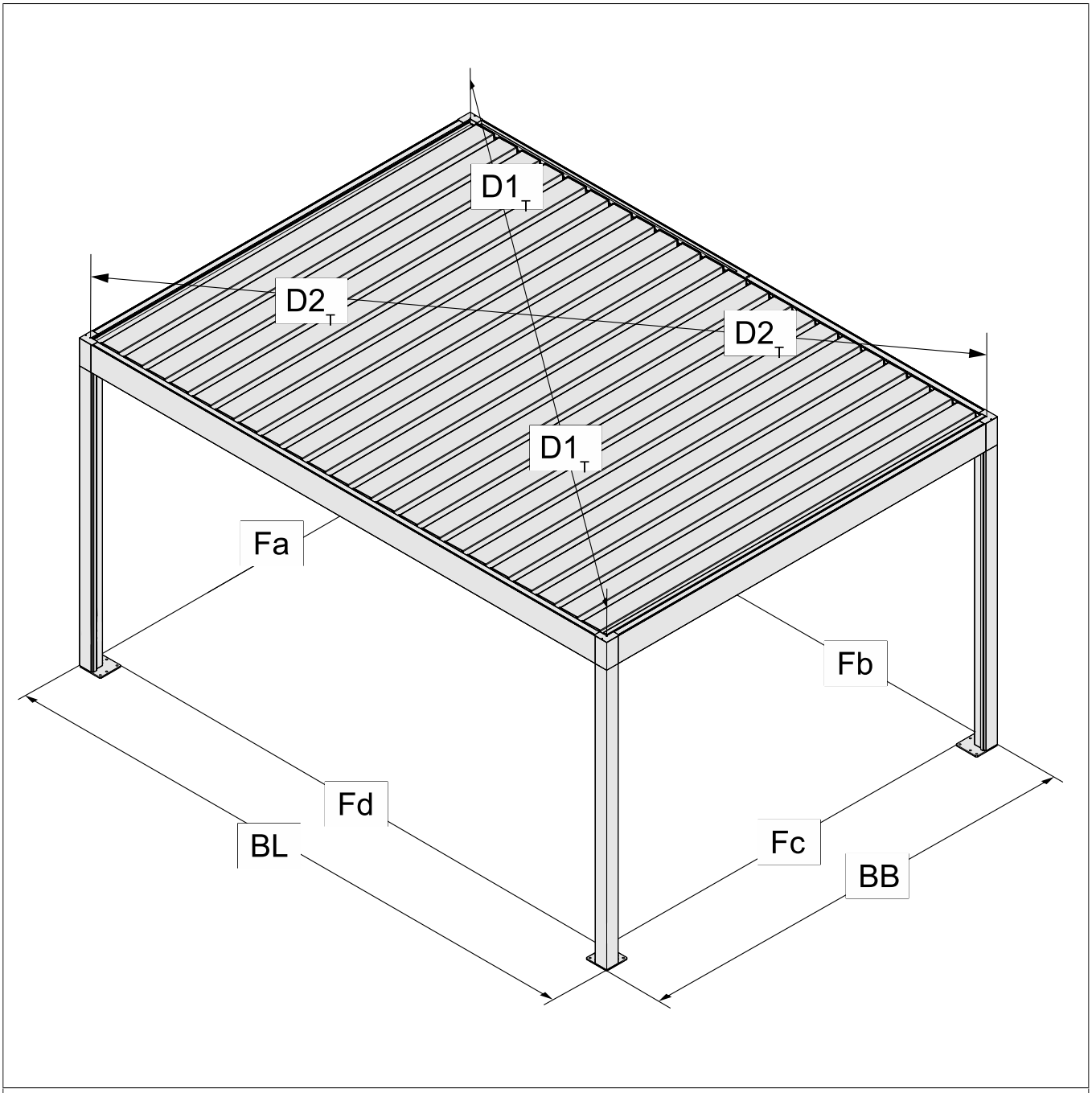
INFO
The point of reference for instructions indicating a side or view is from the outside toward the beam Ta and then in a clockwise direction.

CAUTION
Risk of product damage from stepping on the product!

Stepping on the product may cause parts to sag. This can influence drainage and water may flow more readily toward the facade.

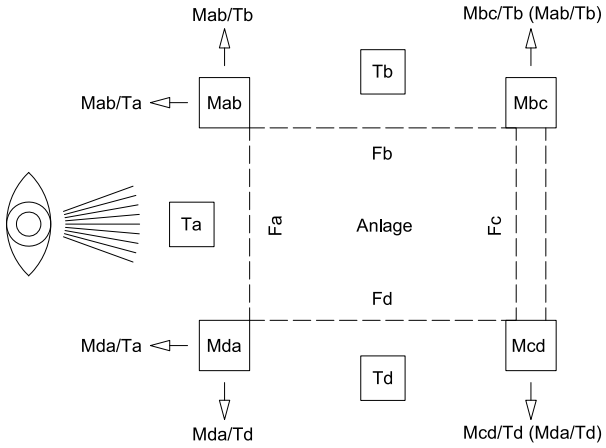
- Stepping on the product is not permitted.

5.1 Product position



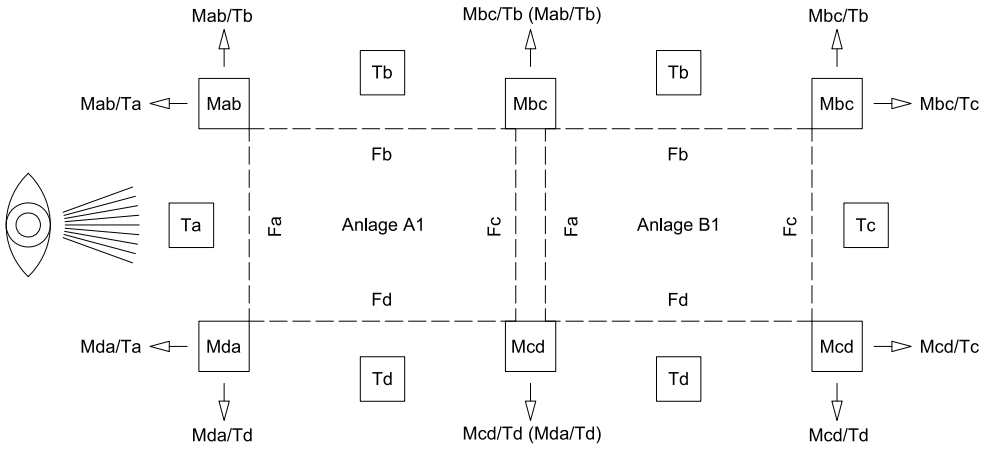
BB	Order width	DT1	Diagonal 1 poles (inside edge to inside edge)
BL	Order length	DT2	Diagonal 2 poles (inside edge to inside edge)

Fig. 6: Product dimensions



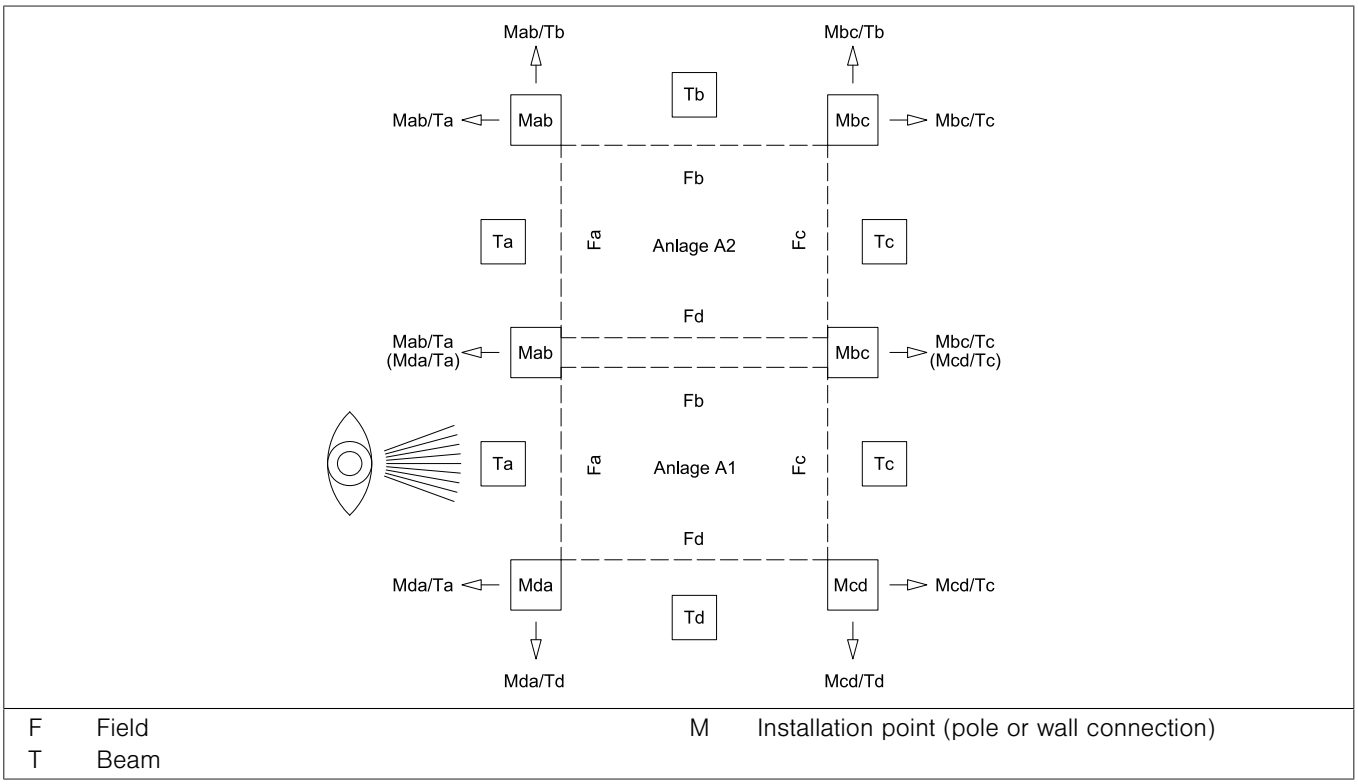
F	Field	T	Beam
M	Installation point (pole or wall connection)		

Fig. 7: Product position



F	Field	M	Installation point (pole or wall connection)
T	Beam		

Fig. 8: Product position



F	Field	M	Installation point (pole or wall connection)
T	Beam		

Fig. 9: Product position

INFO
The distance of the outside panels of the pole or outside surfaces of the beam to a wall must be 10 mm at every possible contact point.

Pole fixing methods

INFO
Note the special features of the fixing methods of the components listed and have any necessary preparations made.

▶ Pole with base plate

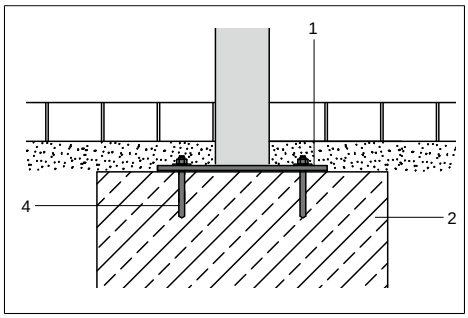


Fig. 10: Ground installation directly on the foundation [2]

- The base plate [1] is attached directly to the ground screw [2] using a suitable fixing material [4].

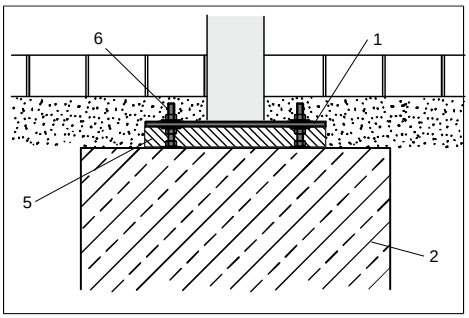
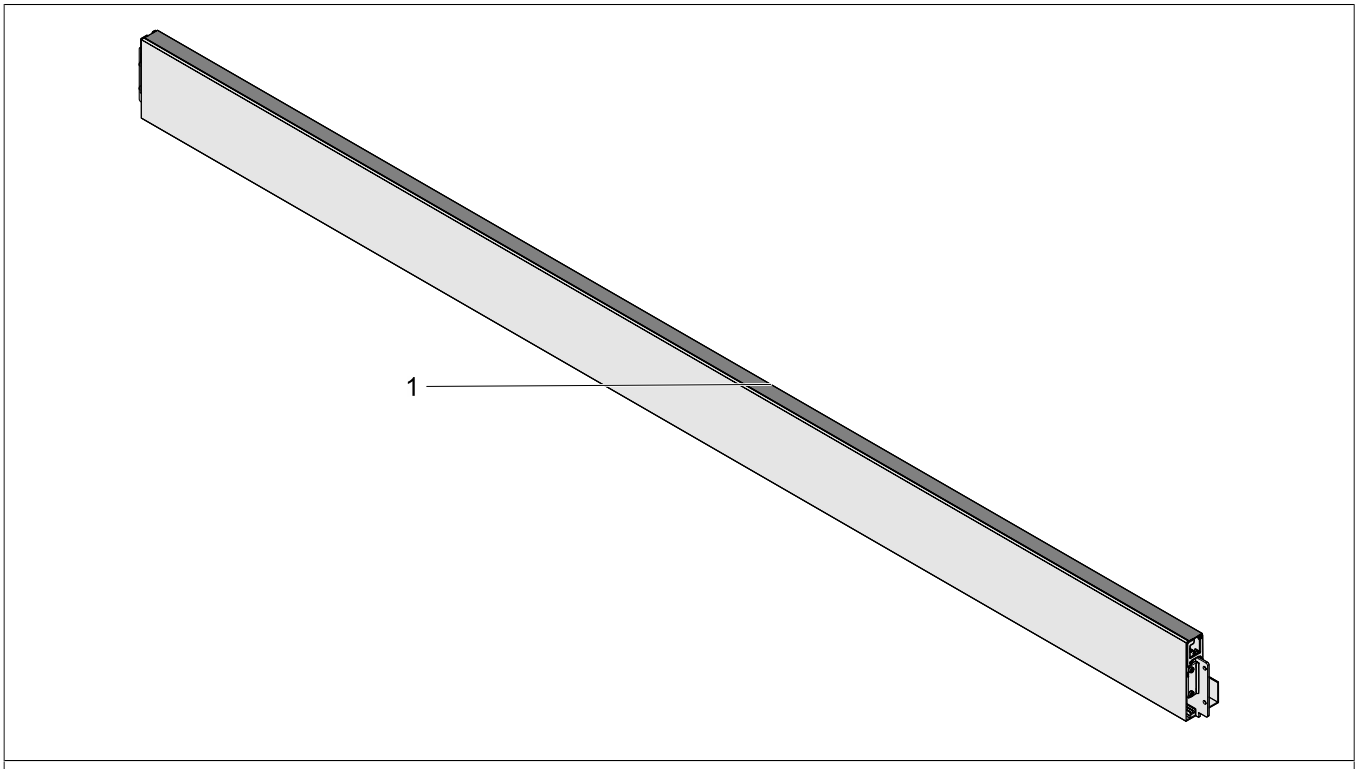


Fig. 11: Ground installation with threaded rod [6]

- Attach the base plate [1] to the threaded rod [6].
  There must be a pressure- and slip-resistant layer [5] between the ground screw [2] and the base plate [1].

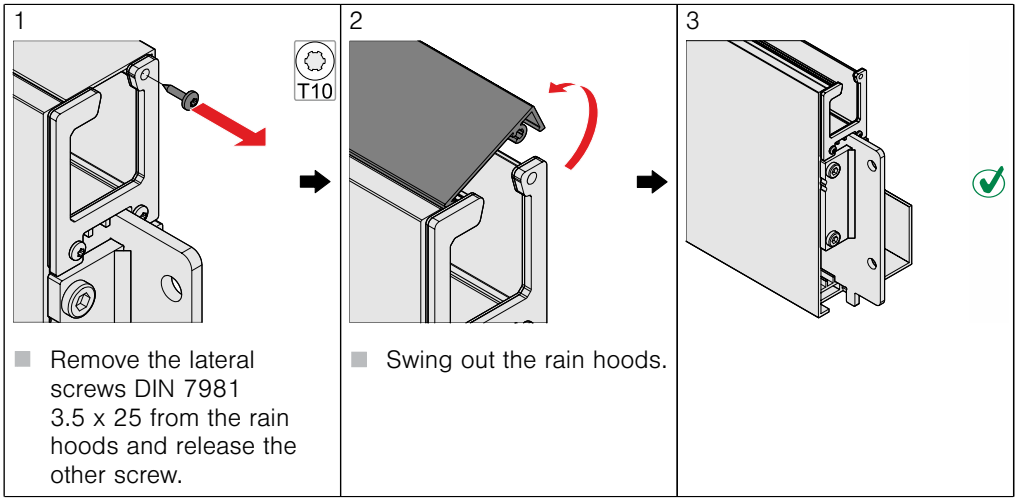
5.2 Preliminary work



1 Rain hood

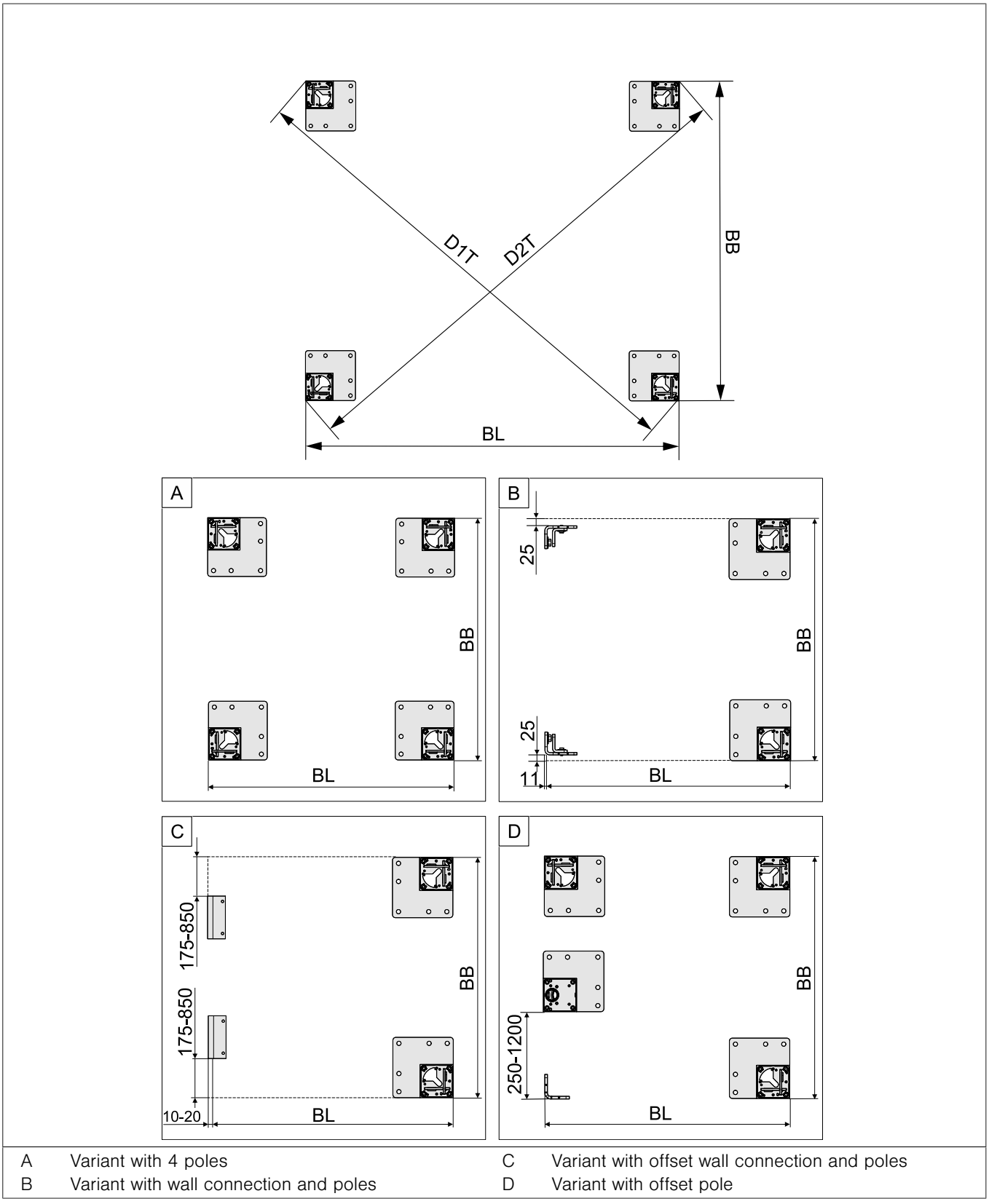
Fig. 12: Removing the rain hood and inspection cover

Removing the rain hood



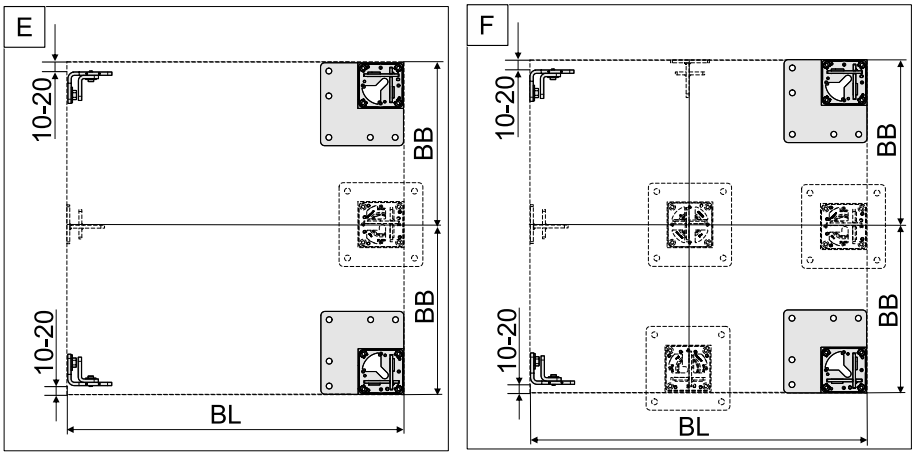
- Remove the lateral screws DIN 7981 3.5 x 25 from the rain hoods and release the other screw.
- Swing out the rain hoods.

5.3 Installing the fixing points



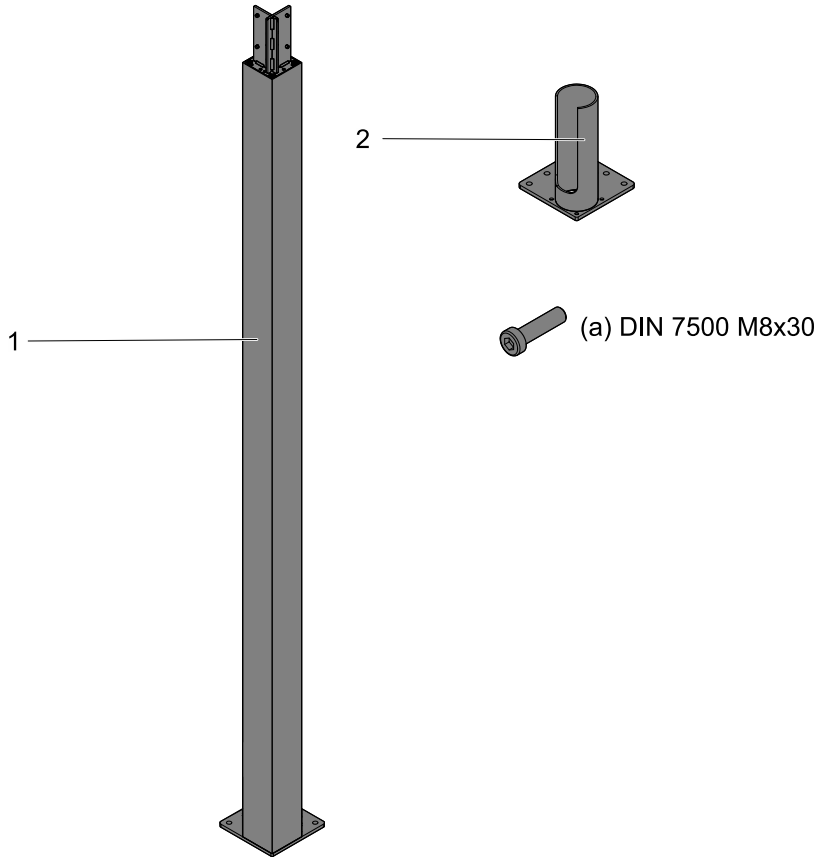
A	Variant with 4 poles	C	Variant with offset wall connection and poles
B	Variant with wall connection and poles	D	Variant with offset pole

Fig. 13: Product variant (dimensions in mm)



E	Line variant with wall connection and poles	F	Star variant with wall connection and poles

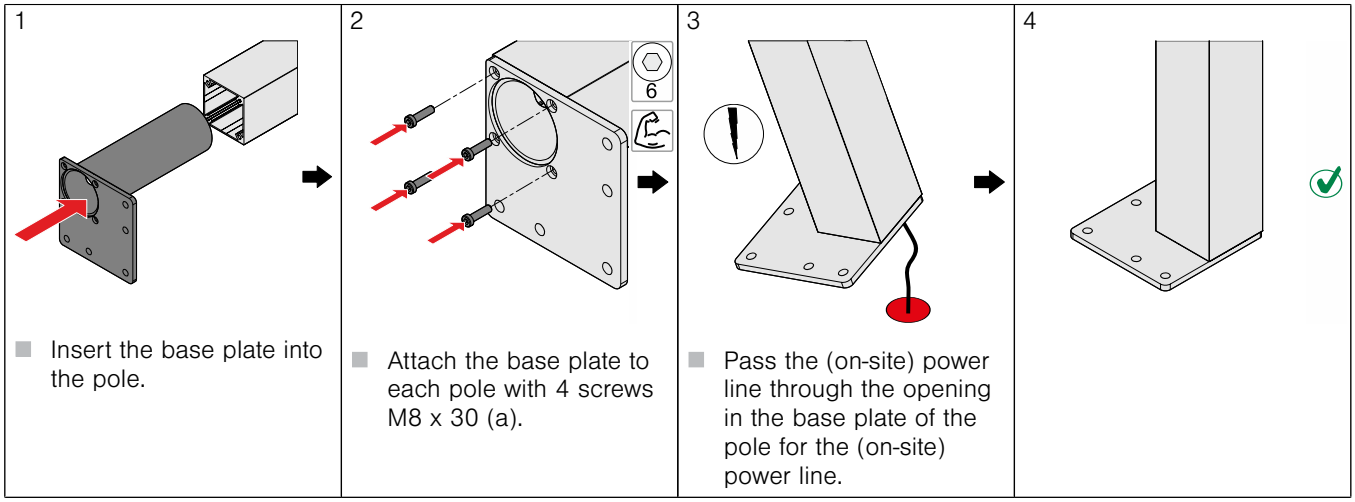
Fig. 14: Product variant (dimensions in mm)



1	Pole	a	Hexagon screw DIN 7500 M8x30
2	Base plate		

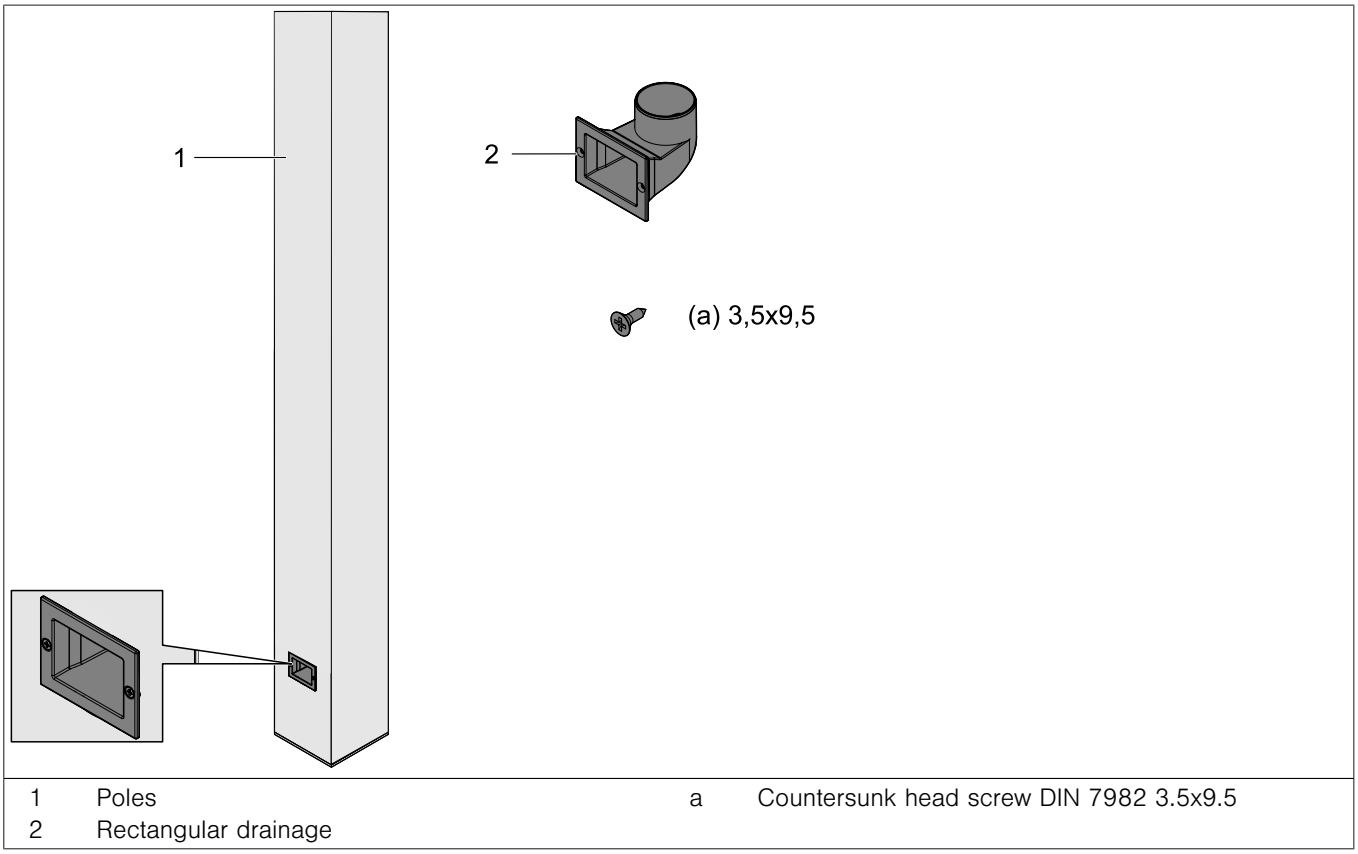
Fig. 15: Pole variants

Installing the posts



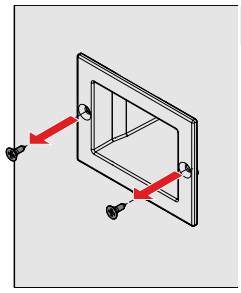
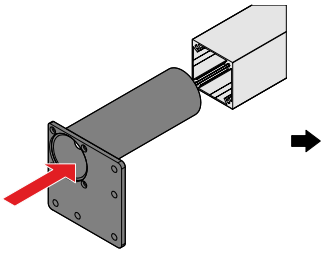
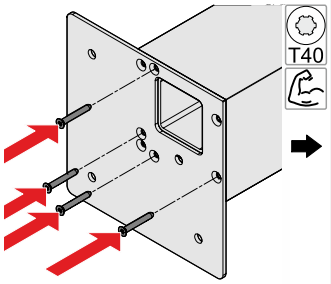
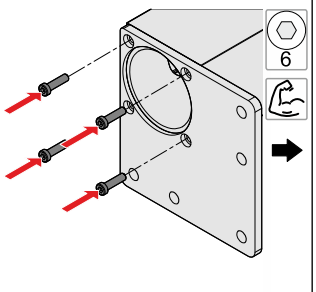
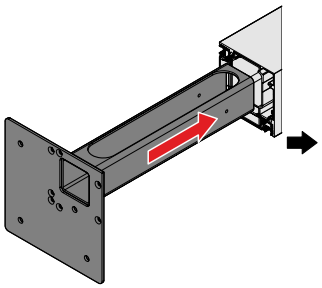
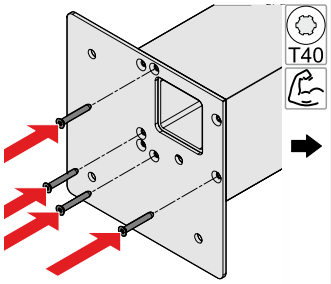
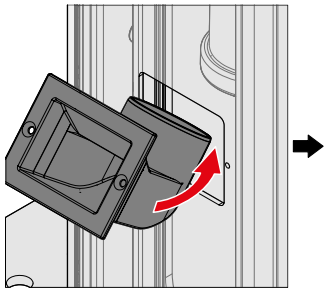
1. Insert the base plate into the pole.
2. Attach the base plate to each pole with 4 screws M8 x 30 (a).
3. Pass the (on-site) power line through the opening in the base plate of the pole for the (on-site) power line.

Installing the pole with a rectangular drainage (optional)

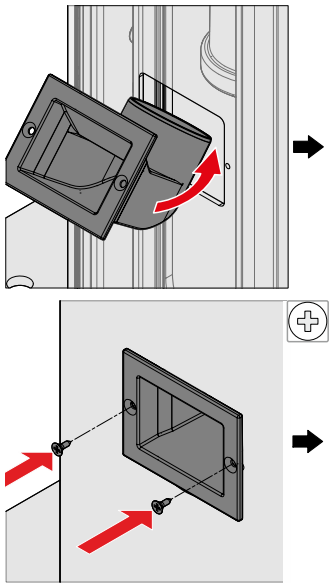


1	Poles	a	Countersunk head screw DIN 7982 3.5x9.5
2	Rectangular drainage		

Fig. 16: Installing the drainage

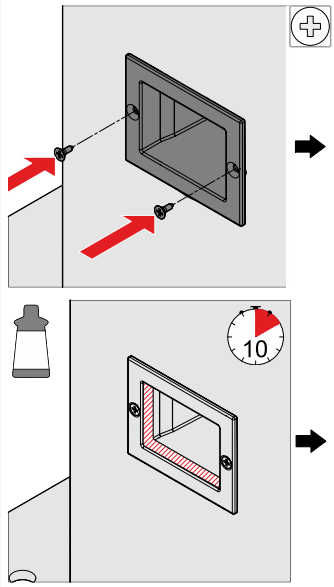
1	2	3	4
			
■ Remove the screws 3.5 x 9.5 (a) .	 ■ Insert the base plate into the pole. ■ Insert the base plate into the pole.	 ■ Attach the base plate to each pole using screws M8 x 60. ■ Attach the base plate to each pole using screws M8x60.	 ■ Attach the base plate to each pole using screws M8 x 30. ■ Swing the rectangular drainage into the pole onto the drainage pipe.

5



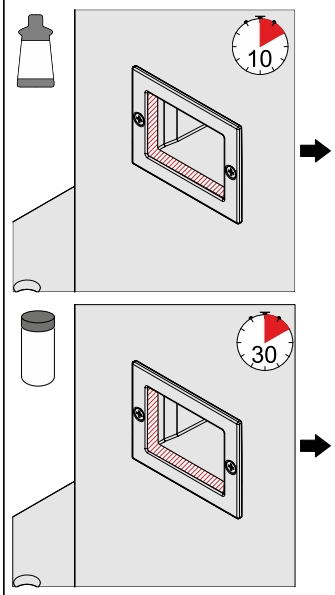
- Swing the rectangular drainage into the pole onto the drainage pipe.
- Fasten the rectangular drainage using screws 3.5x9.5 (a).

6



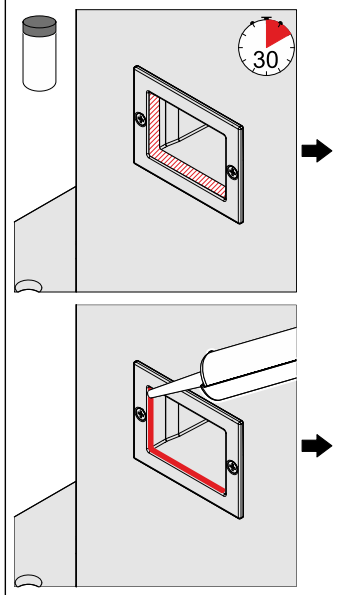
- Fasten the rectangular drainage using screws 3.5 x 9.5 (a).
- Clean the surface on which the sealing adhesive is to be applied (Recommendation: Rhobasol 35DSF or Würth IPA cleaner – NOT included in the scope of delivery). → Then approx. 10 min. wait time

7

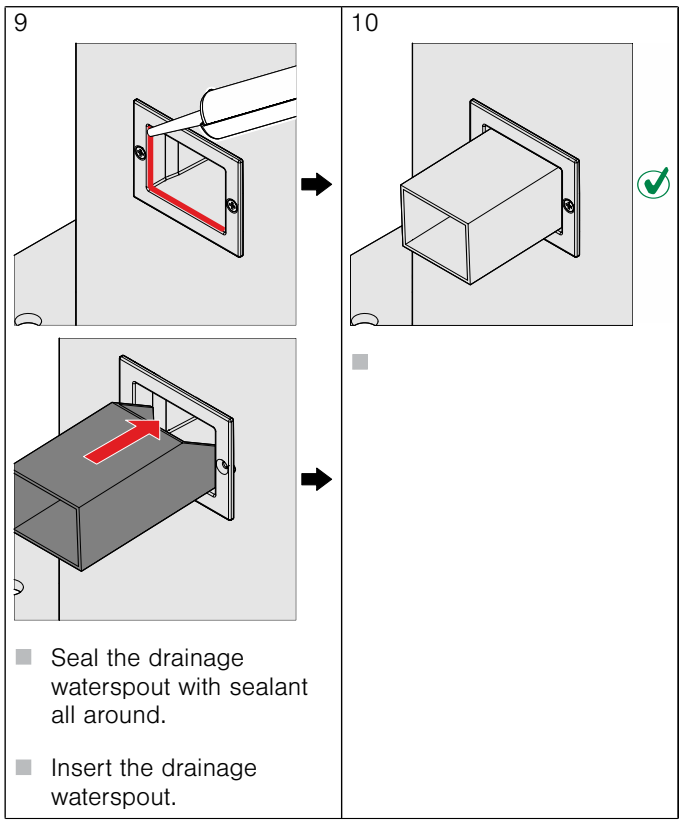


- Clean the surface on which the sealing adhesive is to be applied (Recommendation: Rhobasol 35DSF or Würth IPA cleaner – NOT included in the scope of delivery). → Then approx. 10 min. wait time
- Treat the cleaned surface with primer (specification: Würth Haftplus Primer for Plastic/Wood/Stone – included in scope of delivery; use the REQUIRED personal protective equipment). → Then approx. 30 min. wait time.

8

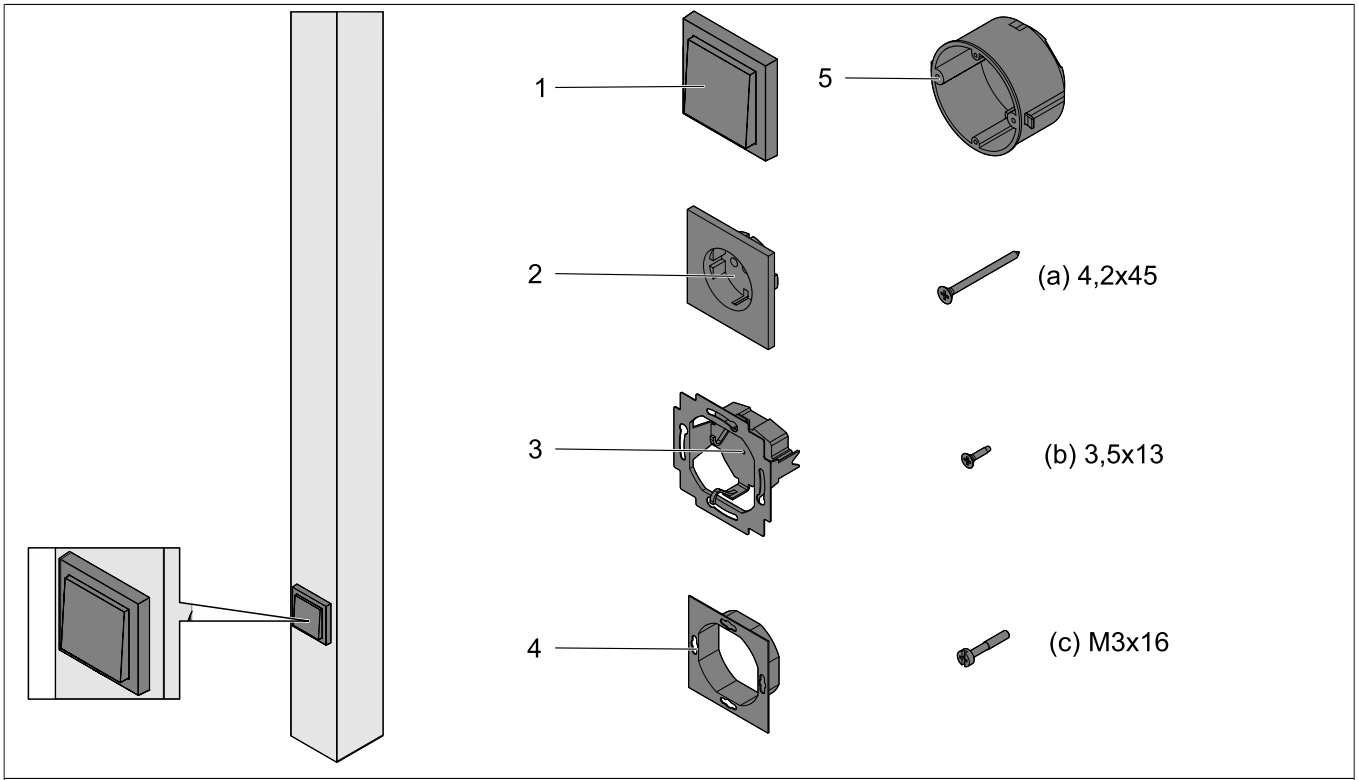


- Treat the cleaned surface with primer (specification: Würth Haftplus Primer for Plastic/Wood/Stone – included in scope of delivery; use the REQUIRED personal protective equipment). → Then approx. 30 min. wait time.
- Seal the drainage waterspout with sealant all around.



- Seal the drainage waterspout with sealant all around.
- Insert the drainage waterspout.

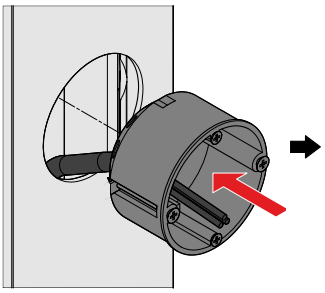
Installing the pole with a power socket (optional)



1	Power socket trim	4	Sealing
2	Power socket frame	5	Pattress box
3	Power socket housing		

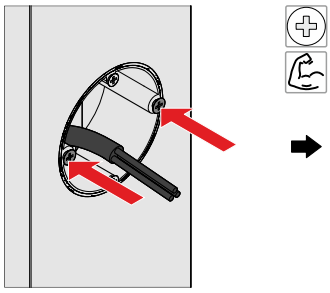
Fig. 17: Installing the power socket

1



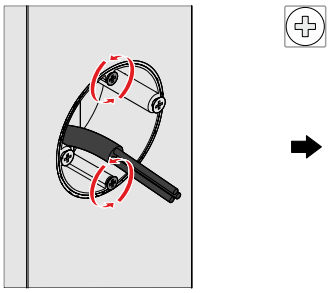
- Pull the cable through the pole and secure it.
- Hold the pattress box in front of the opening. The cable exit must face downward.
- Slide the pattress box into place. The 2 fixing screws for the wall must be horizontal.

2



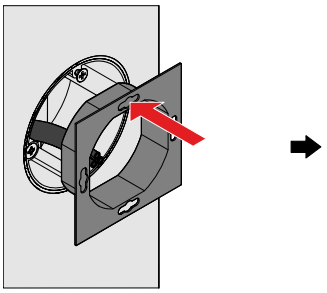
- Tighten the screws 4.2 x 45 (a).

3



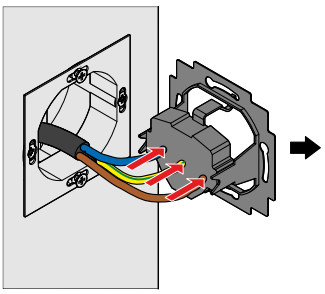
- Release the screws 3.5 x 13 (b).

4



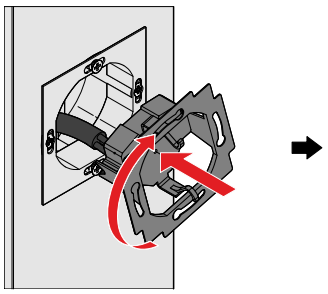
- Mount the cover on the pattress box.

5



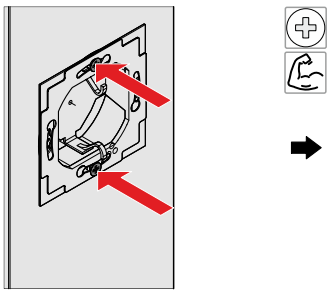
- Connect the connecting line to the power socket insert (note the correct assignment).

6



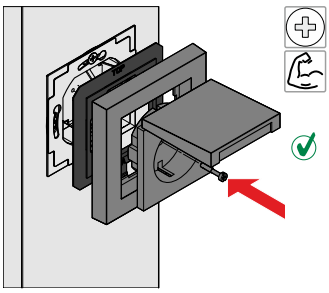
- Insert the power socket insert into the pattress box and turn clockwise.

7



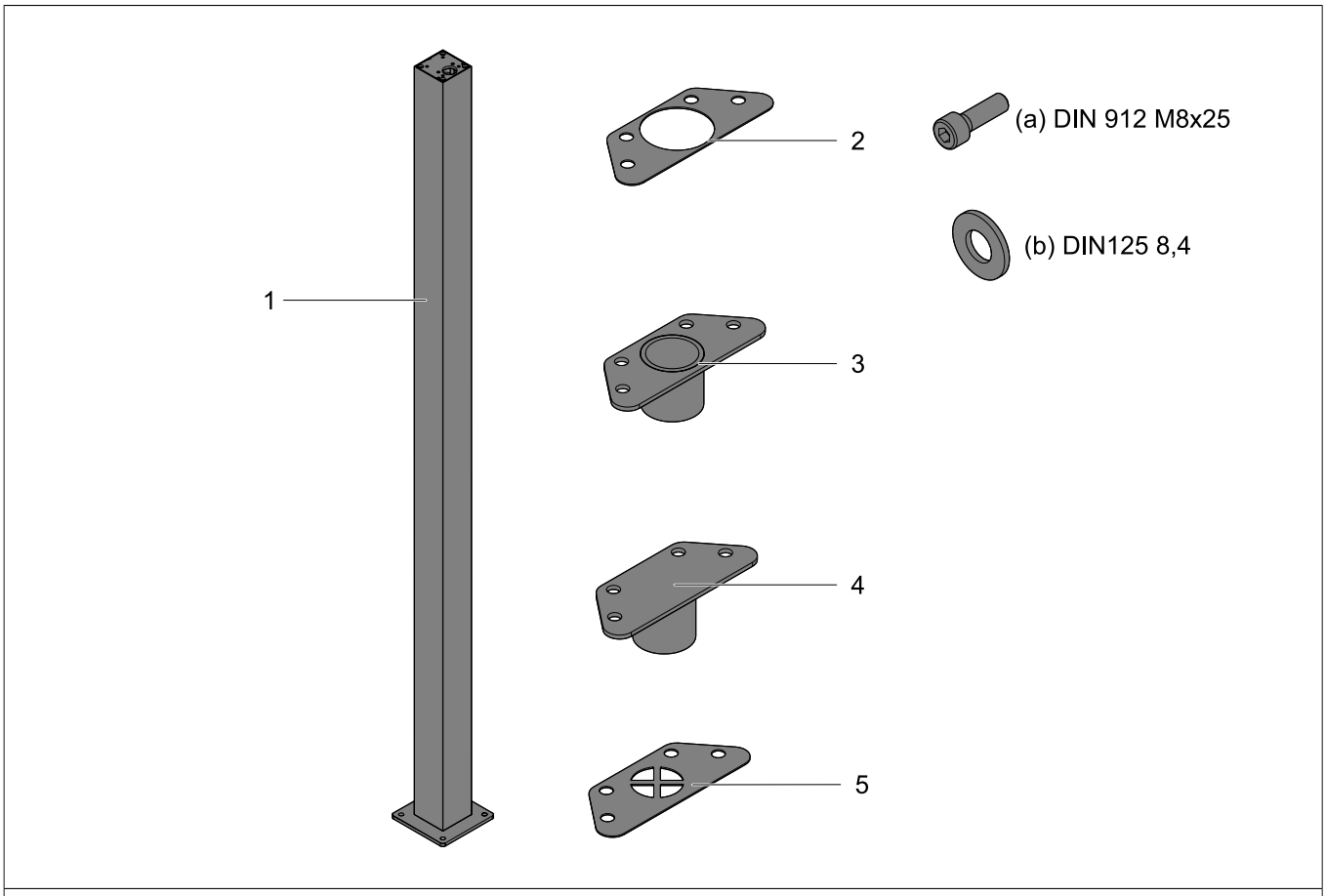
- Centre the power socket insert horizontally and tighten the fixing screws 3.5 x 13 (b).

8



- Position the seal with the cover frame, and then install with the power socket cover and screw M3 x 16 (c).

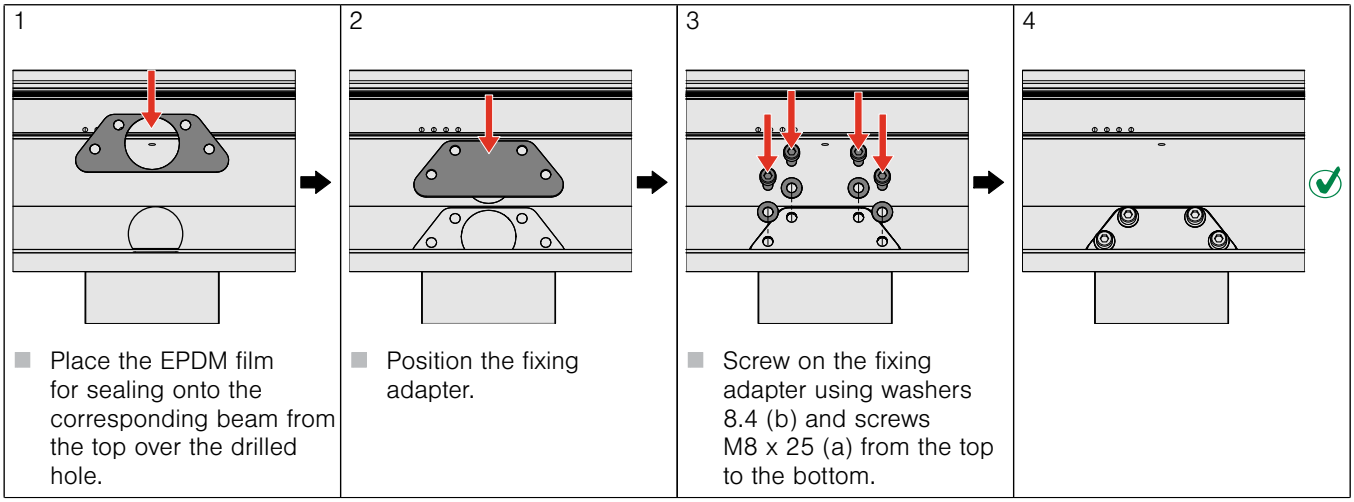
Installing the additional/offset pole



1	Pole	5	Leaf guard
2	Sealing	a	Socket head screw DIN 912 M8x25
3	Fixing adapter for rain gutter	b	Washer DIN 125A 8.4
4	Fixing adapter		

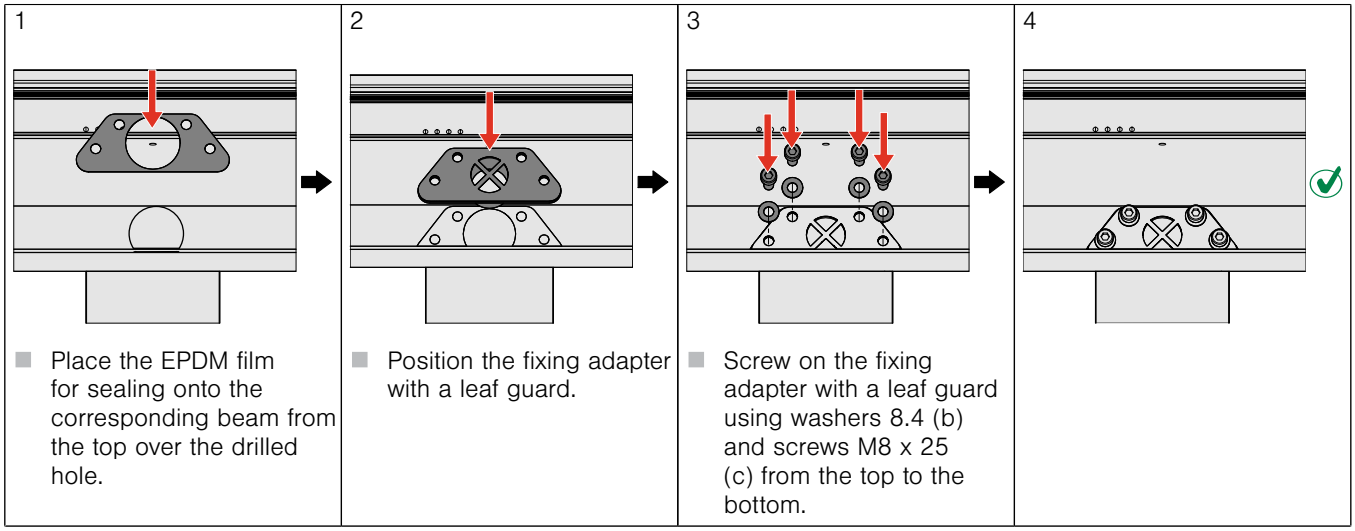
Fig. 18: Overview of additional/offset pole

Additional/offset pole without drainage



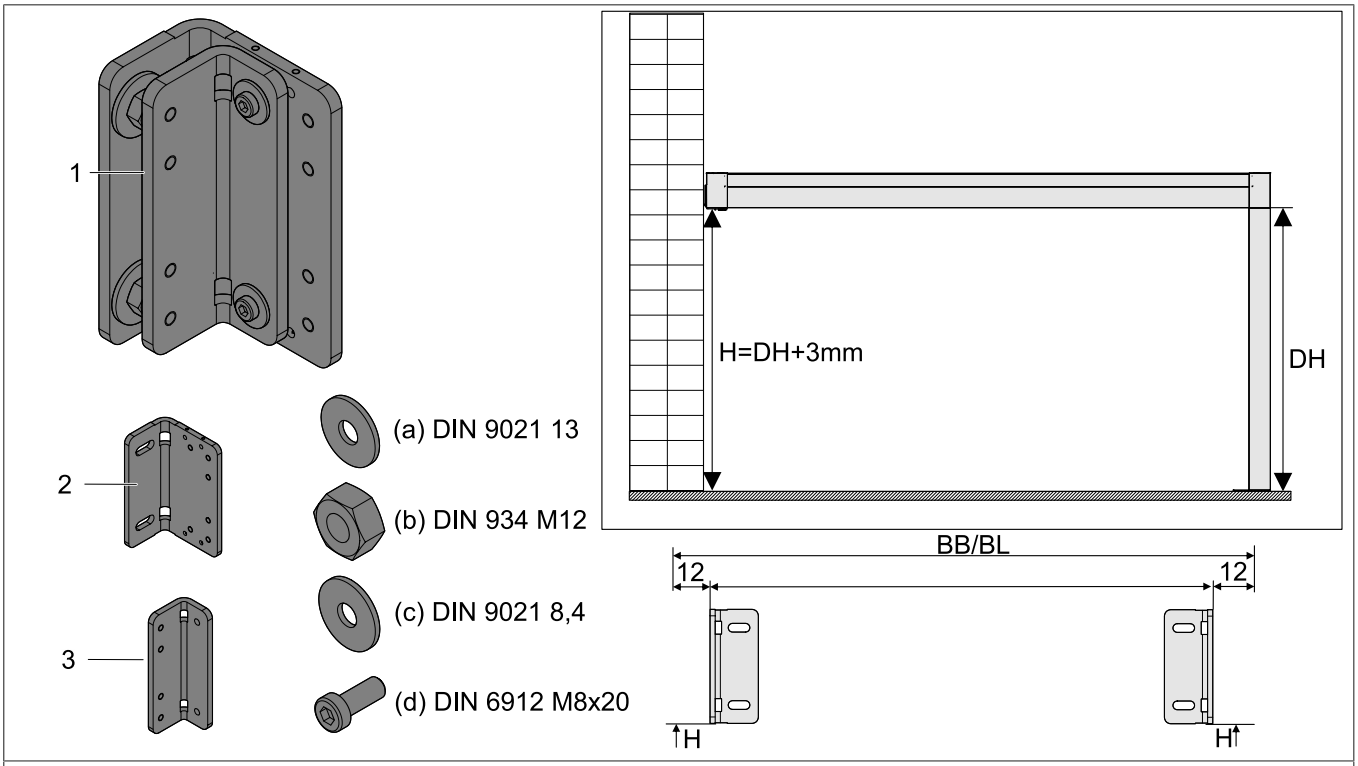
- Place the EPDM film for sealing onto the corresponding beam from the top over the drilled hole.
- Position the fixing adapter.
- Screw on the fixing adapter using washers 8.4 (b) and screws M8 x 25 (a) from the top to the bottom.

Additional/offset pole with drainage



1. Place the EPDM film for sealing onto the corresponding beam from the top over the drilled hole.
2. Position the fixing adapter with a leaf guard.
3. Screw on the fixing adapter with a leaf guard using washers 8.4 (b) and screws M8 x 25 (c) from the top to the bottom.

Installing the wall console



1	Wall console	d	Socket head screw DIN 6912 M8x12
2	Base plate for the wall console	BL	Order length
3	Angle bracket	BB	Order width
a	Washer DIN 9021 13	DH	Front headroom (order data)
b	Hex nut DIN 934 M12	H	Holding position, bottom edge of the wall console (H=DH+3 mm)
c	Washer DIN 9021 8.4		

Fig. 19: Wall console variants (dimensions in mm)

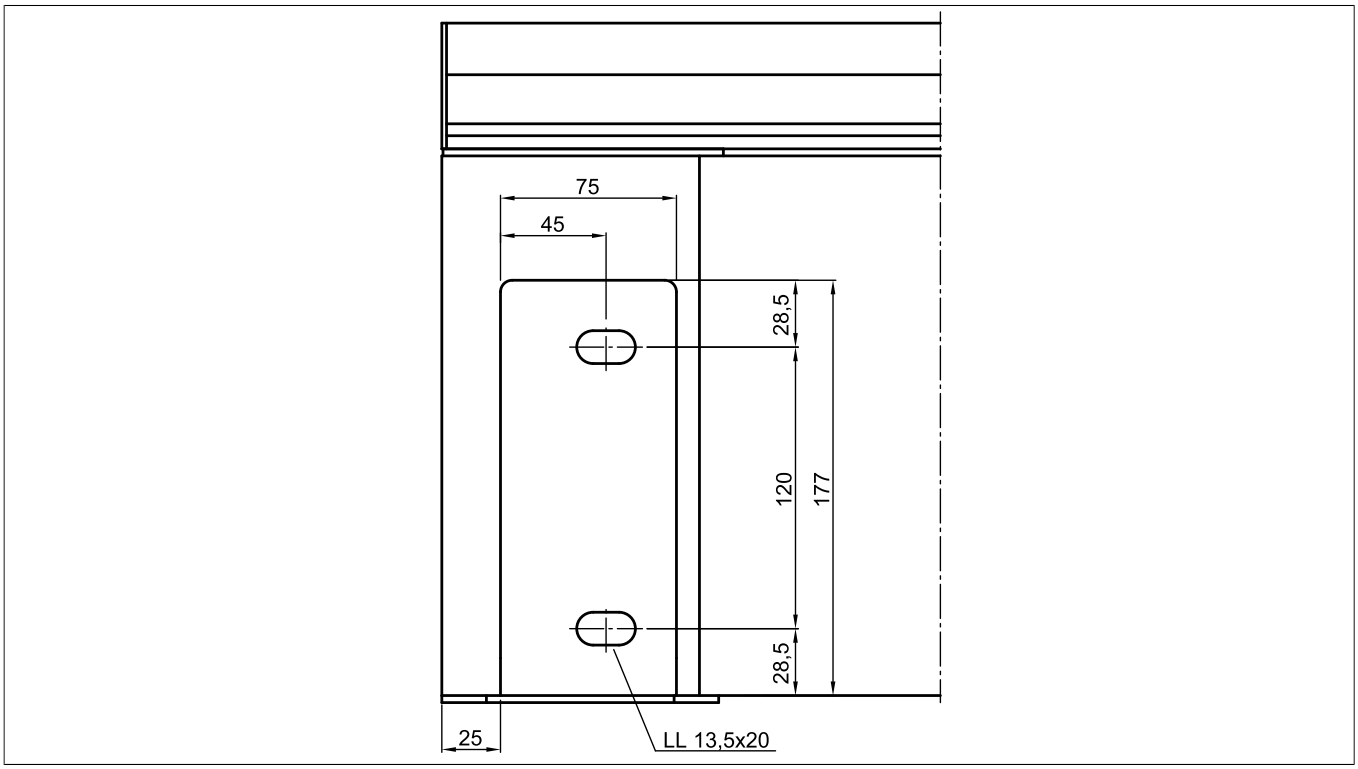
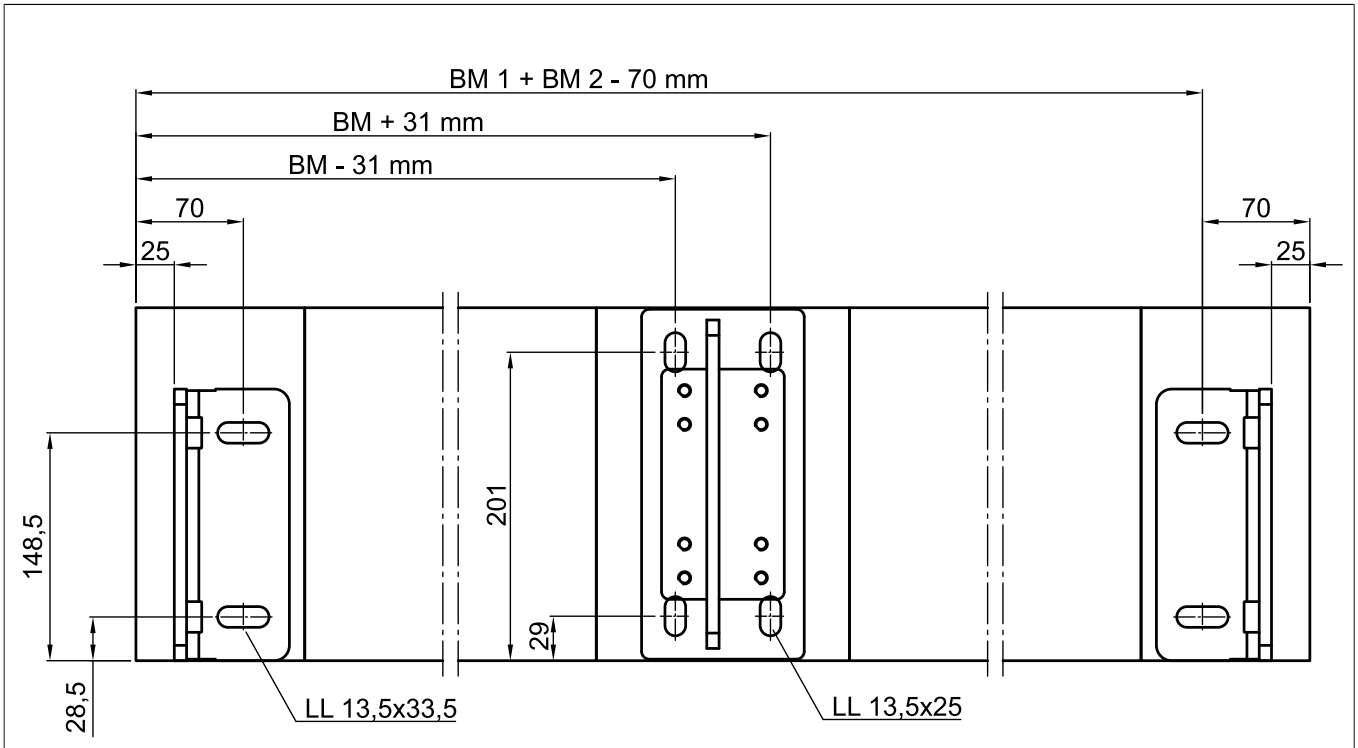


Fig. 20: Side view: wall connection, installation dimensions in mm for L50



BM Order dim.

Fig. 21: Side view: wall connection, installation dimensions in mm for L50 Line

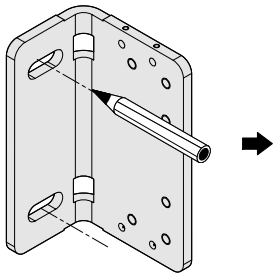
INFO
Pencil in the fixing positions centrally to allow corrections later on.

Watch the edge distances.

INFO

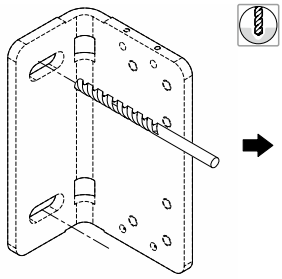
- Check the mounting substructure for unevenness.
- Correct any unevenness.
- The components must be exactly positioned and levelled since alignment will no longer be possible later on.

1



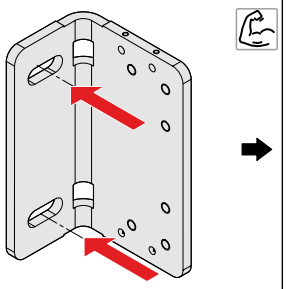
- Hold the base plate against the marking, aligned vertically and horizontally.
- Transfer the fixing template.

2



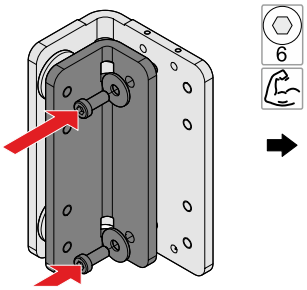
- Drill the fixing holes.

3



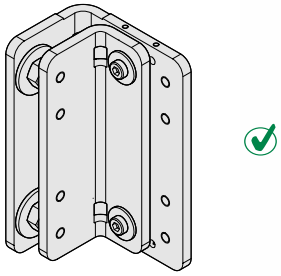
- Attach the base plate of the wall console to the substructure.

4

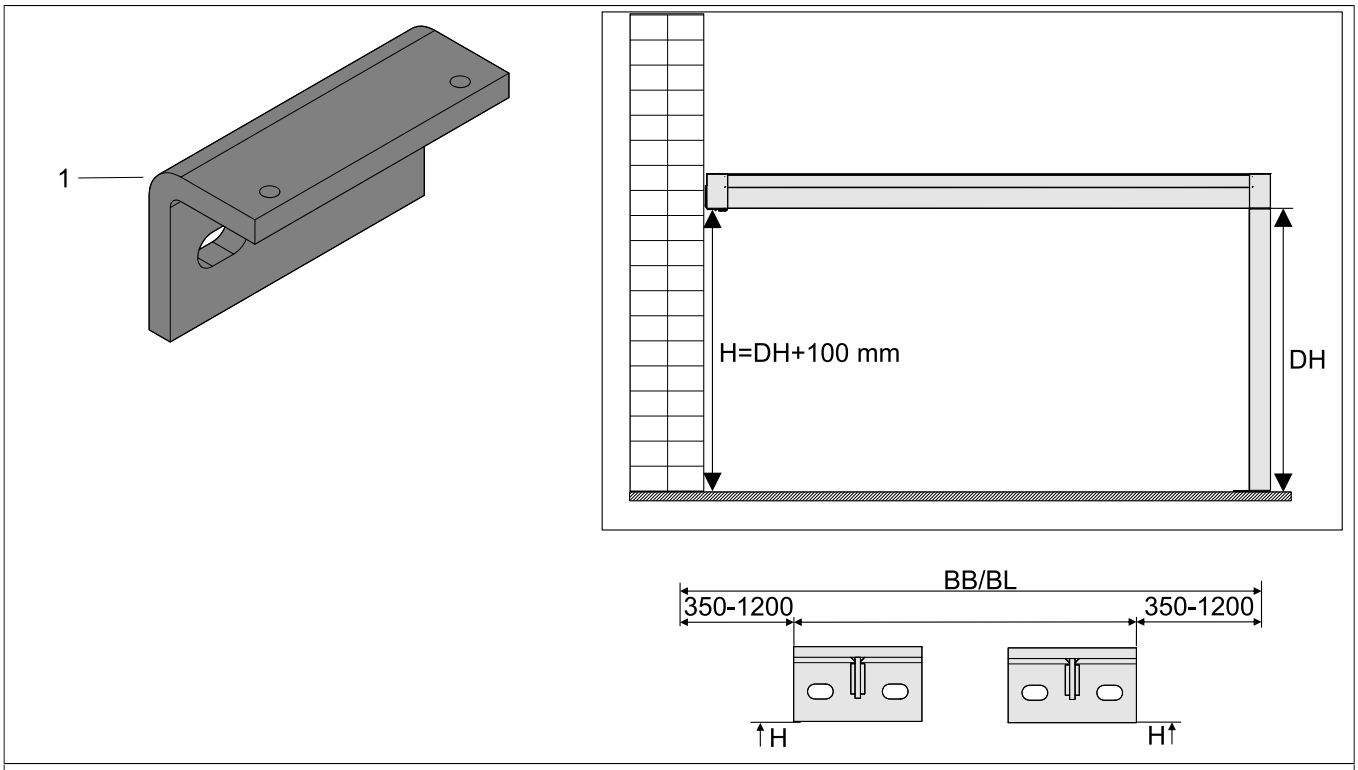


- Fasten the angle bracket to the base plate using the screws M8 x 12 (a) and washers 8.4 (c).

5



Installing the offset wall console



1	Base plate of offset wall console	DH	Front headroom (order data)
BL	Order length	H	Holding position, bottom edge of the wall console (H=DH+3 mm)
BB	Order width		

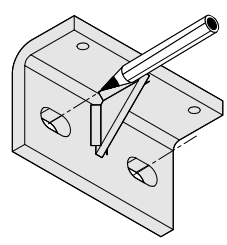
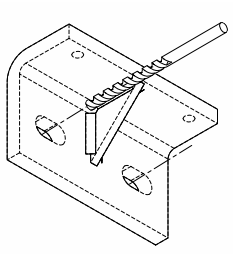
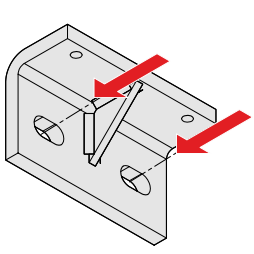
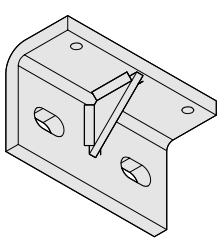
Fig. 22: Overview of the offset wall console (dimensions in mm)

INFO
Pencil in the fixing positions centrally to allow corrections later on.

Watch the edge distances.

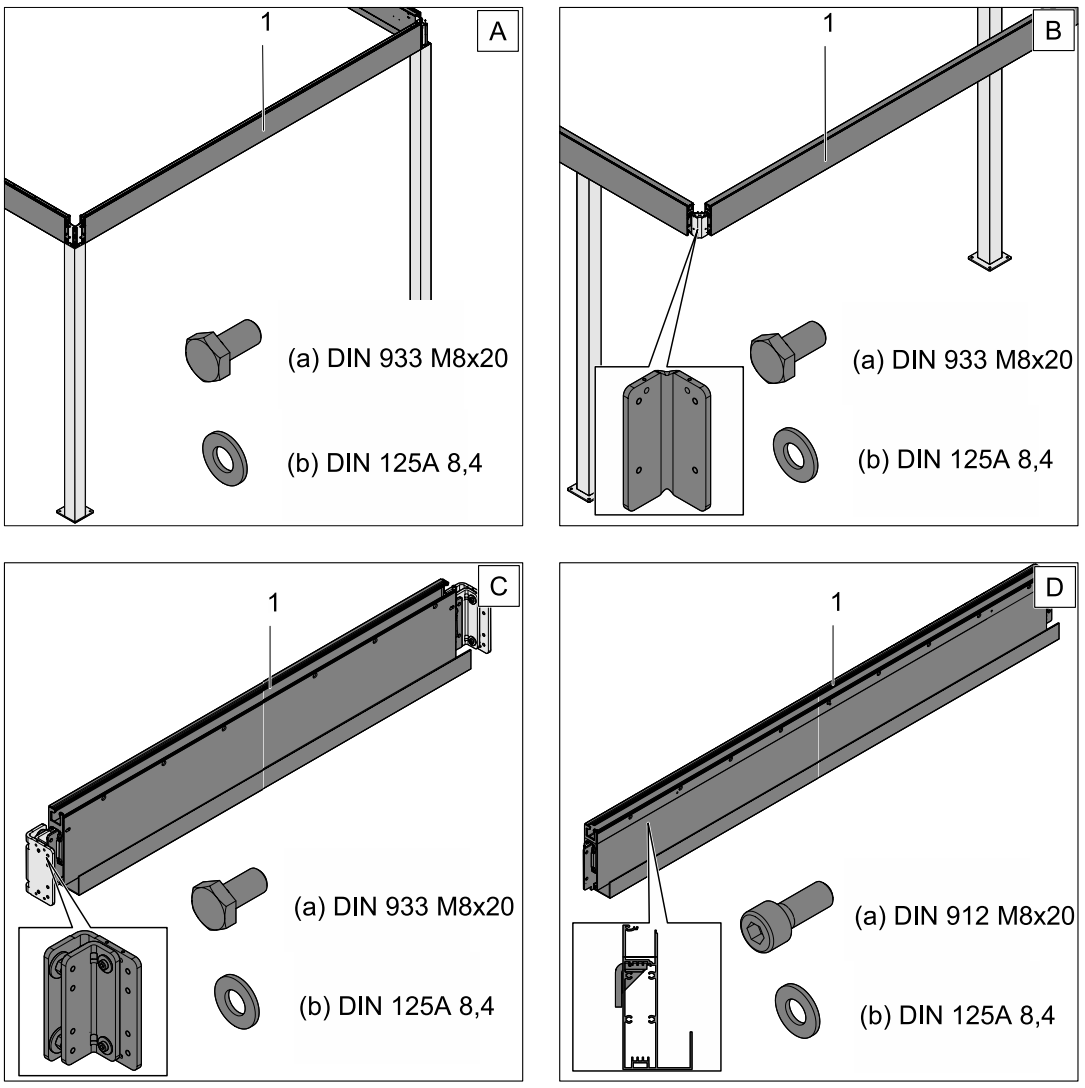
INFO

- Check the mounting substructure for unevenness.
- Correct any unevenness.
- The components must be exactly positioned and levelled since alignment will no longer be possible later on.

1	2	3	4
			
■ Hold the base plate against the marking, aligned vertically and horizontally. ■ Transfer the fixing template.	■ Drill the fixing holes.	■ Attach the base plate of the wall console to the substructure.	

5.4 Installing the beams

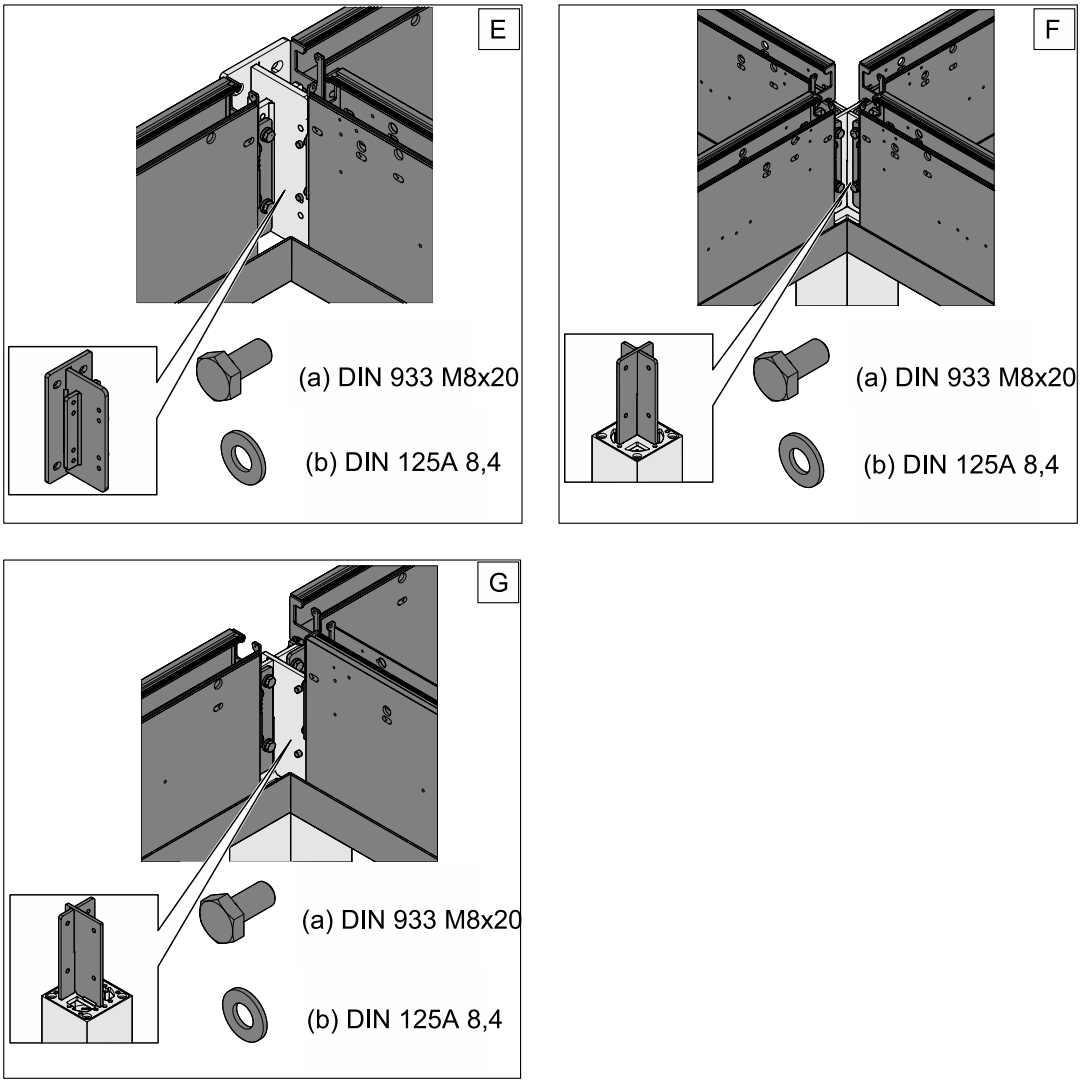
Overview of the beam installation types



1	Beam	C	Variant - installing beams (wall console)
A	Variant - installing the beams (pole)	a	Hex screw DIN 933 M8x20
a	Hex screw DIN 933 M8x20	b	Washer DIN 125A 8.4
b	Washer DIN 125A 8.4	D	Variant - installing beams (offset wall console)
B	Variant - installing beams (offset pole)	a	DIN 912 M8x20
a	Hex screw DIN 933 M8x20	b	Washer DIN 125A 8.4
b	Washer DIN 125A 8.4		

Fig. 23: Overview of the beam installation types

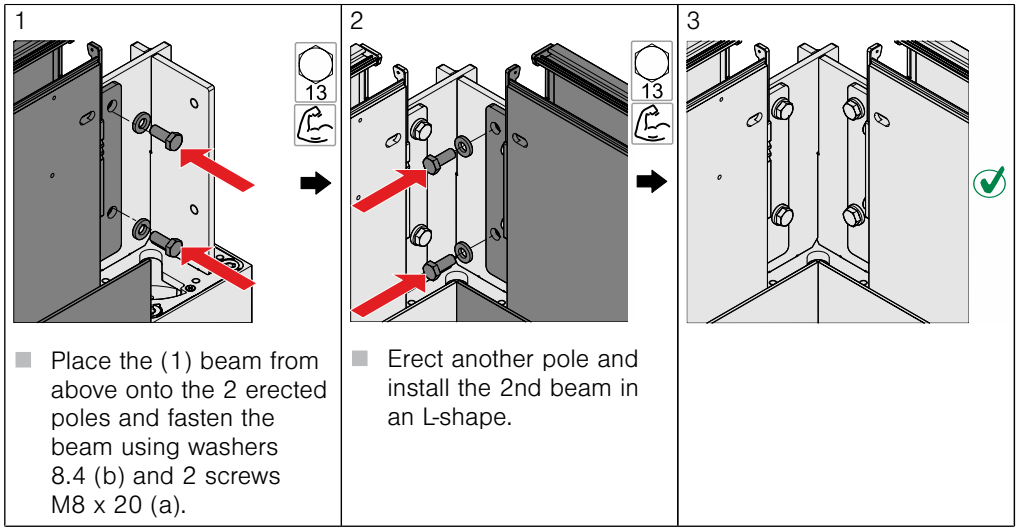
Overview of the Line and Star installation types



E	Variant - installing the beams (Line wall console)	b	Washer DIN 125A 8.4
a	Hex screw DIN 933 M10x20	G	Variant - installing the beams (Line pole)
b	Washer DIN 125A 8.4	a	Hex screw DIN 933 M10x20
F	Variant - installing the beams (Star pole)	b	Washer DIN 125A 8.4
a	Hex screw DIN 933 M10x20		

Fig. 24: Overview of the beam installation types

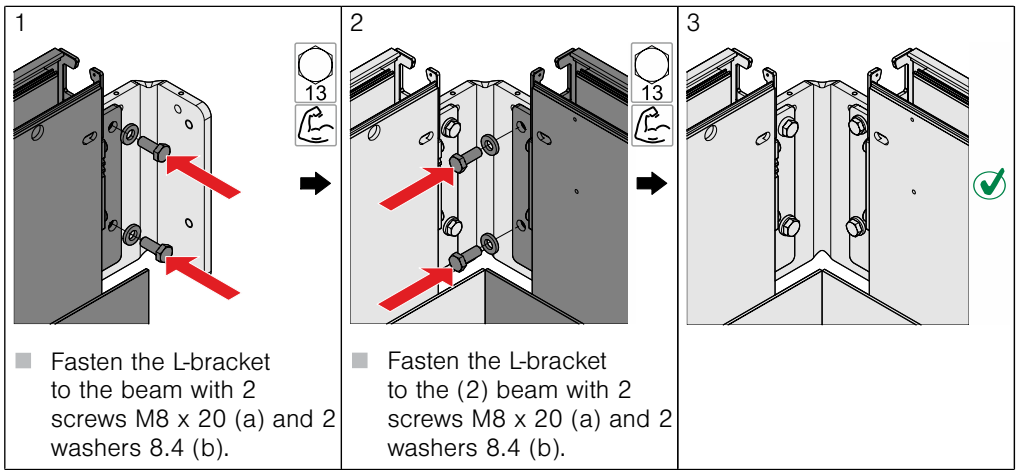
Variant A - installing the beam (pole)



- Place the (1) beam from above onto the 2 erected poles and fasten the beam using washers 8.4 (b) and 2 screws M8 x 20 (a).
- Erect another pole and install the 2nd beam in an L-shape.

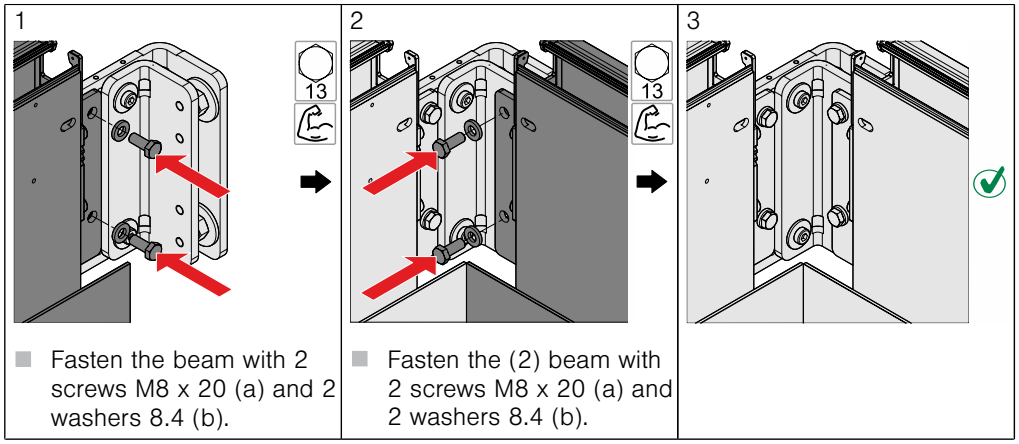
Variant B - installing the beam (offset pole)

NOTICE
When installing the beam with the offset pole, the beam may tip.



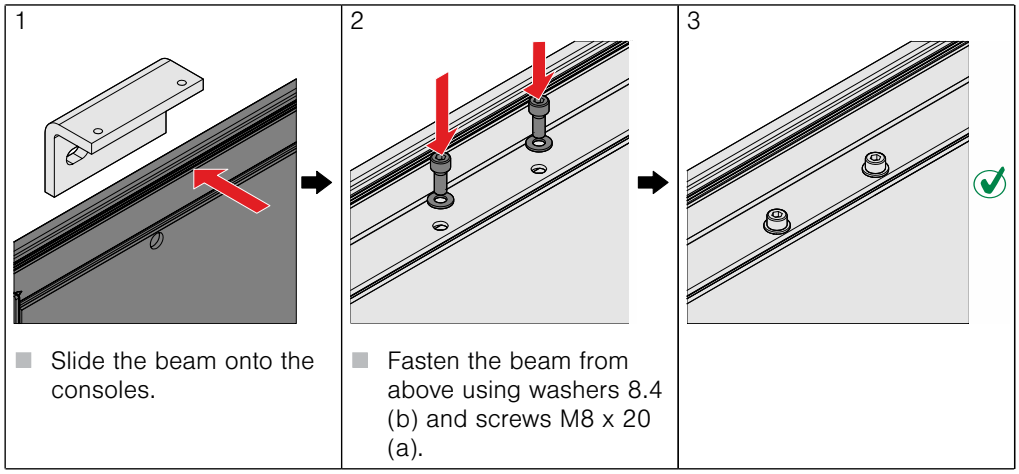
- Fasten the L-bracket to the beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).
- Fasten the L-bracket to the (2) beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).

Variant C - installing the beam (wall console)



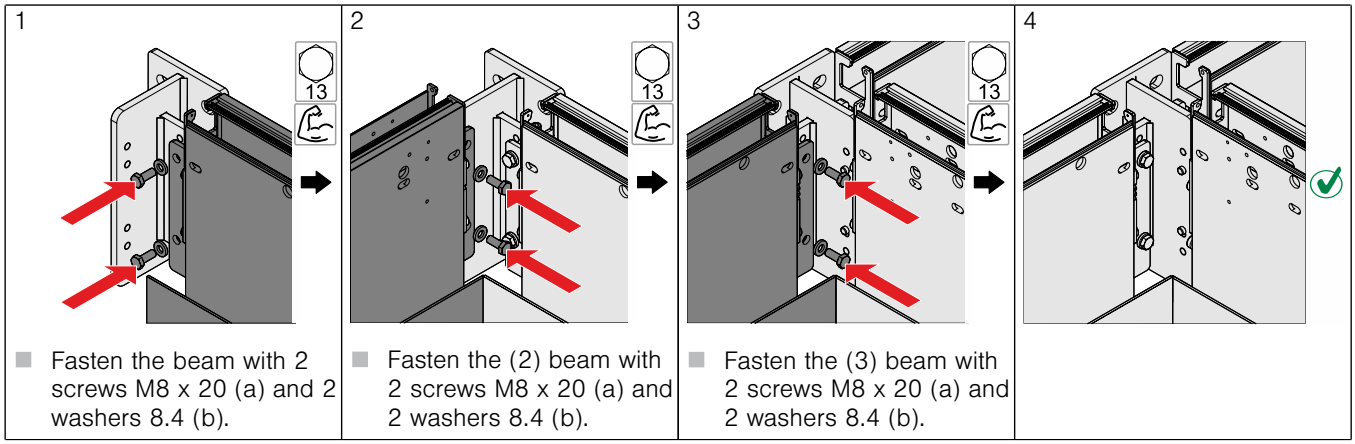
- Fasten the beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).
- Fasten the (2) beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).

Variant D - installing the beams (offset wall console)



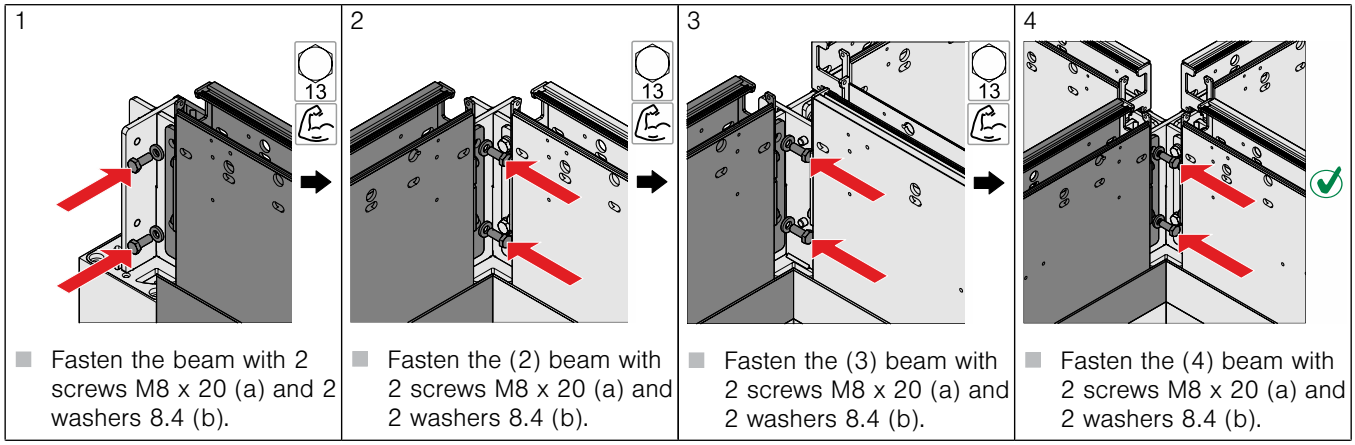
- Slide the beam onto the consoles.
- Fasten the beam from above using washers 8.4 (b) and screws M8 x 20 (a).

Variant E - installing the beams (Line wall console)



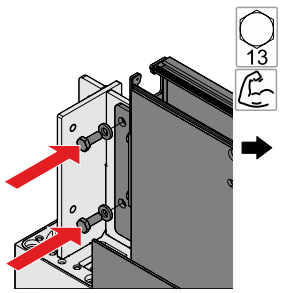
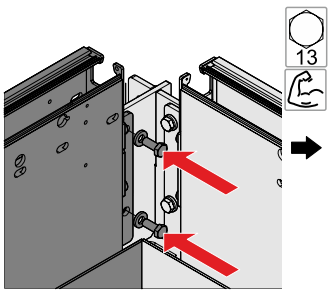
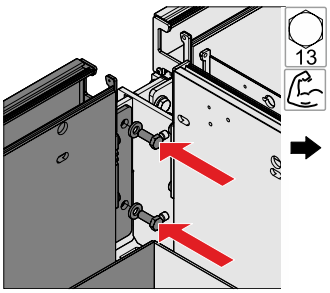
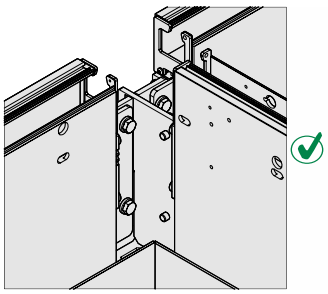
- Fasten the beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).
- Fasten the (2) beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).
- Fasten the (3) beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).

Variant F - installing the beams (Star pole)

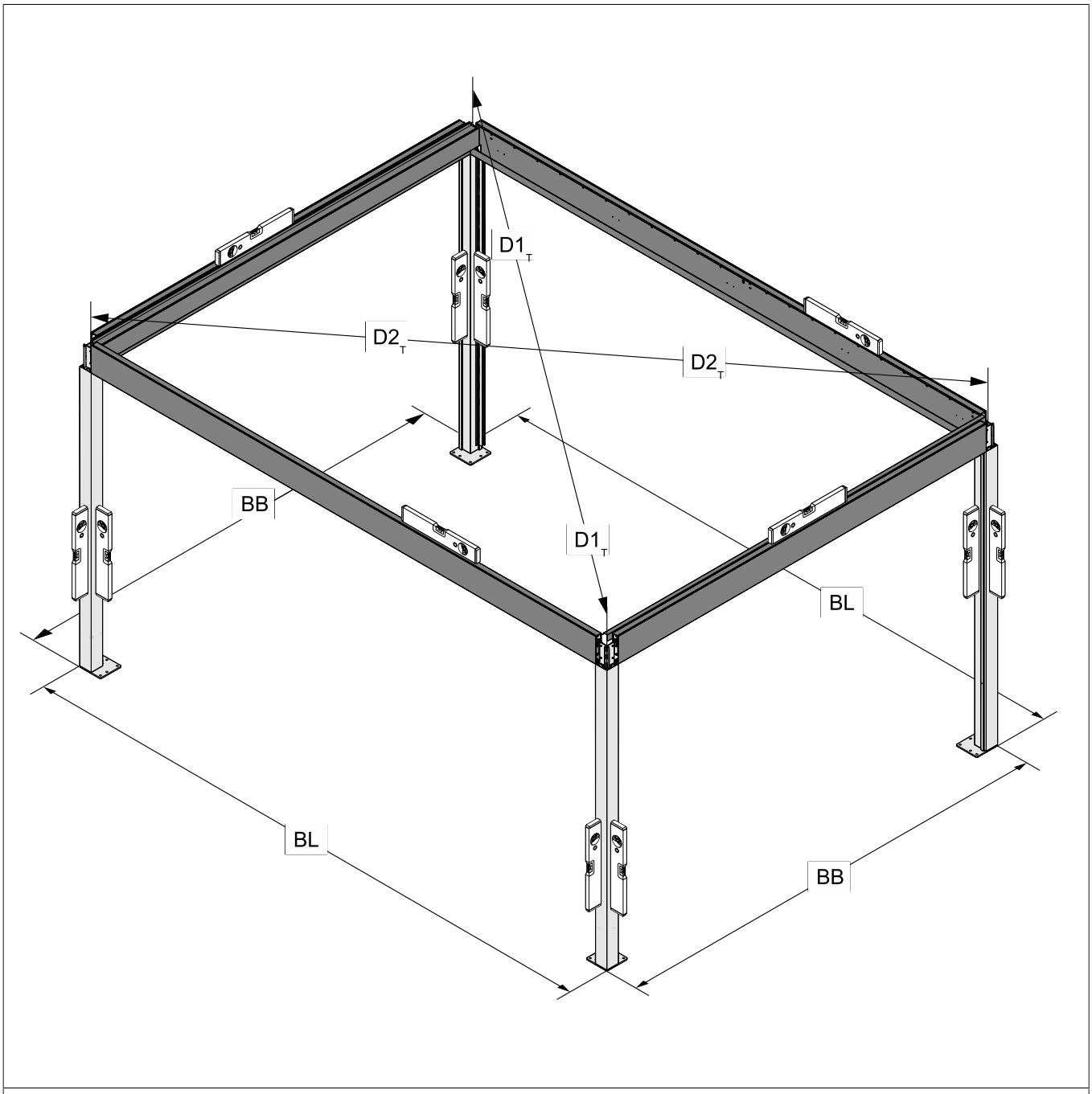


- Fasten the beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).
- Fasten the (2) beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).
- Fasten the (3) beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).
- Fasten the (4) beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).

Variant G - installing the beams (Line pole)

1	2	3	4
			
■ Fasten the beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).	■ Fasten the (2) beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).	■ Fasten the (3) beam with 2 screws M8 x 20 (a) and 2 washers 8.4 (b).	

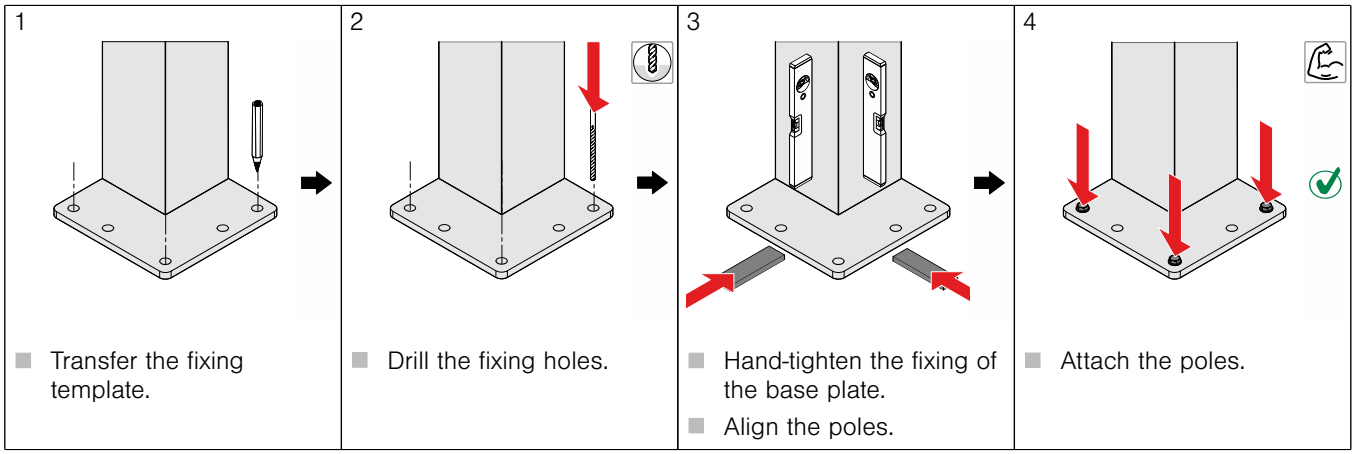
5.5 Aligning and fastening the slat roof



BB	Order width	$D1_T$	Diagonal 1 of beam
BL	Order length	$D2_T$	Diagonal 2 of beam

Fig. 25: Aligning and fastening the slat roof

INFO
The distance between the poles must be equal at the top and bottom.



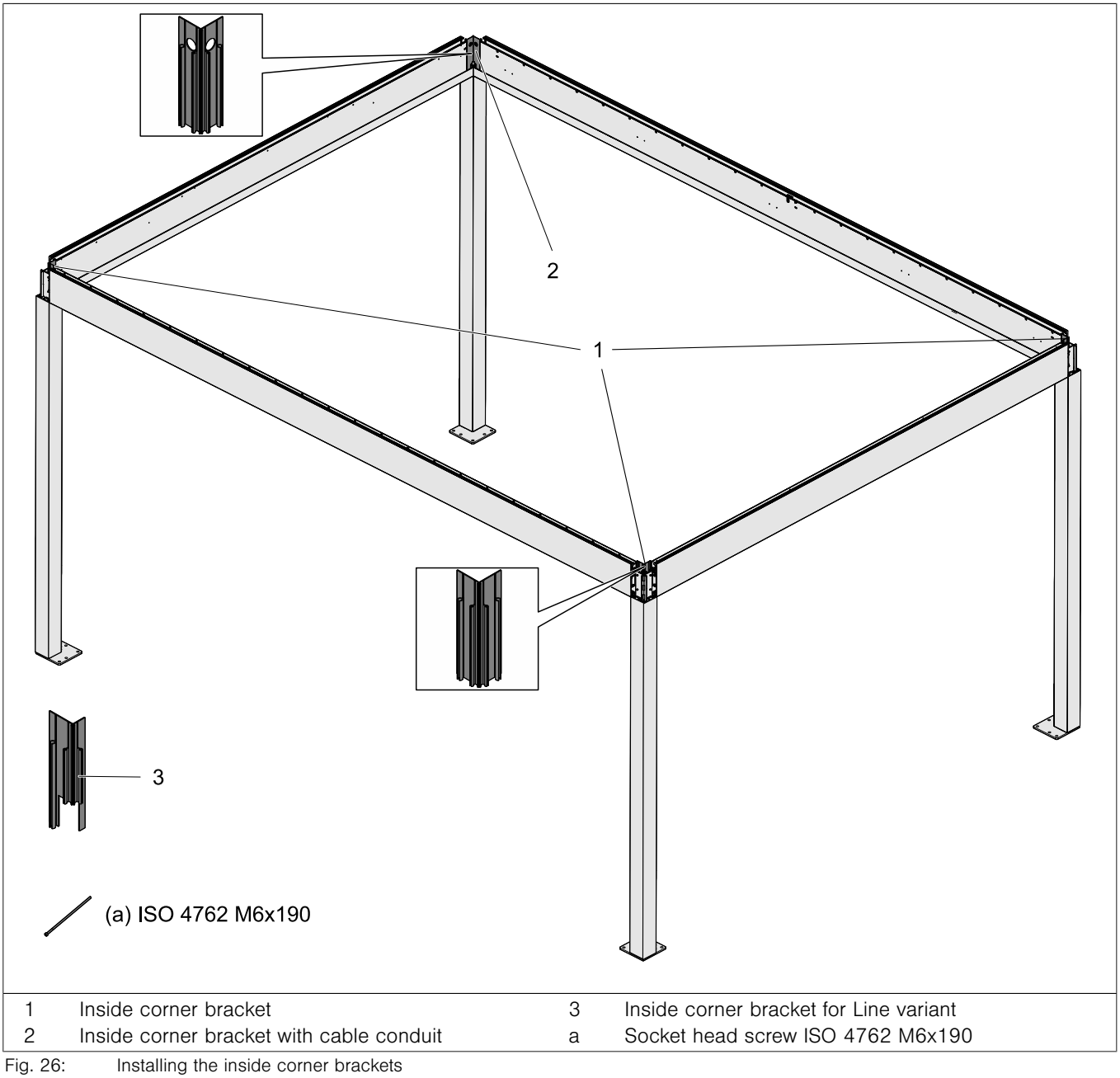
1 ■ Transfer the fixing template.

2 ■ Drill the fixing holes.

3 ■ Hand-tighten the fixing of the base plate.
■ Align the poles.

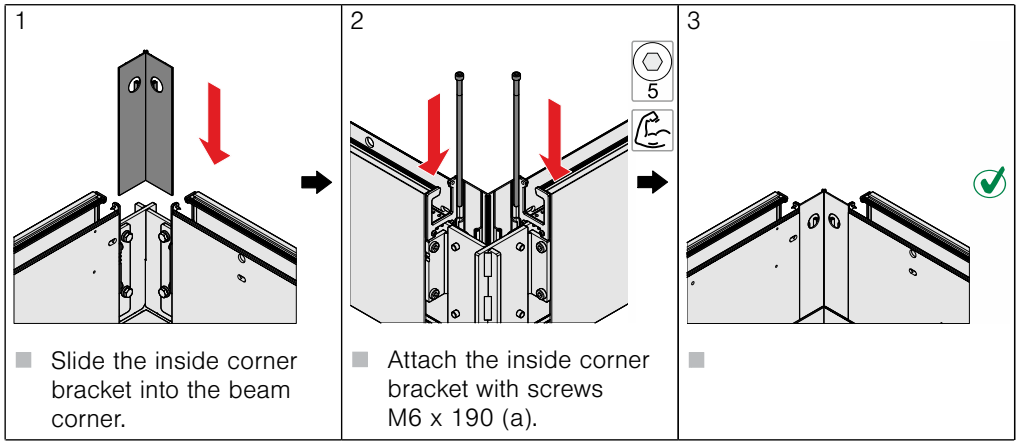
4 ■ Attach the poles.

5.6 Installing the inside corner brackets



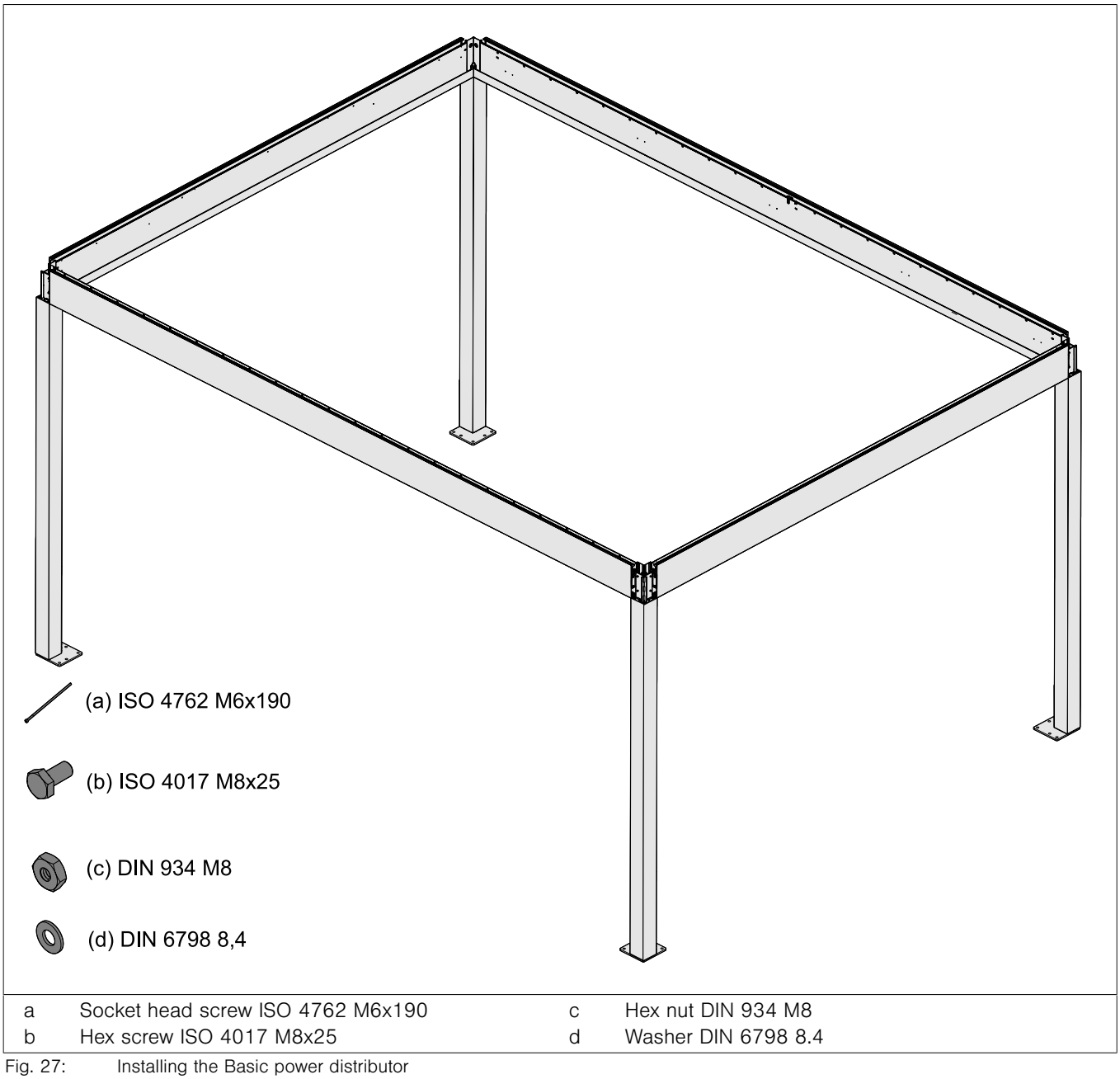
1	Inside corner bracket	3	Inside corner bracket for Line variant
2	Inside corner bracket with cable conduit	a	Socket head screw ISO 4762 M6x190

Fig. 26: Installing the inside corner brackets



- Slide the inside corner bracket into the beam corner.
- Attach the inside corner bracket with screws M6 x 190 (a).
-

5.7 Installing the Basic power distributor (optional)

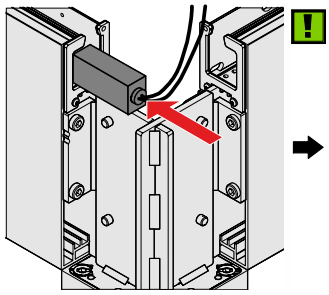


a	Socket head screw ISO 4762 M6x190	c	Hex nut DIN 934 M8
b	Hex screw ISO 4017 M8x25	d	Washer DIN 6798 8.4

Fig. 27: Installing the Basic power distributor

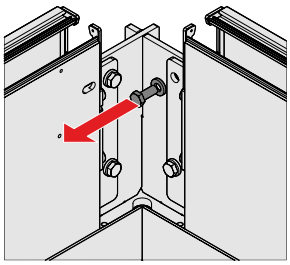
NOTICE
Route the lines with a sufficient radius and do not kink.

1



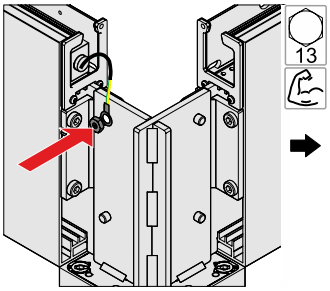
- Push the distributor into the beam.

2



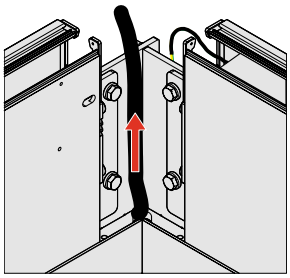
- Replace the screw M8 x 20 on the pole with the earth screw.

3



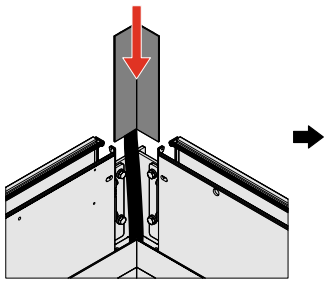
- Attach the earth screw to the seat for the beam using a screw M8 x 25 (b) and a nut M8 (c) and washer 8.4 (d).

4



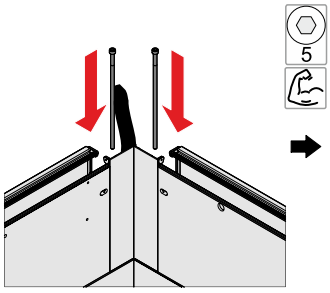
- Pull the power line further out of the pole.

5



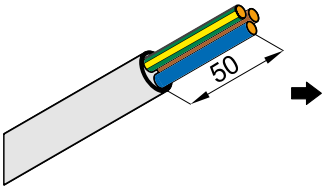
- Slide the inside corner bracket into the beam corner.

6



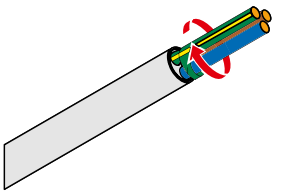
- Attach the inside corner bracket using the screws M6 x 190.

7



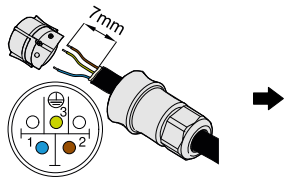
- Strip approx. 40 – 50 mm of insulation off the power line.

8



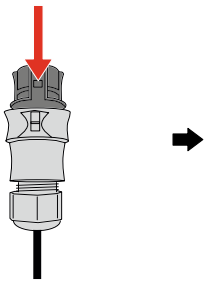
- Shorten the single conductors to fit the plug connector. Leave the protective earth conductor slightly longer than the other single conductors.

9



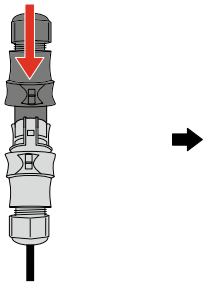
- Strip approx. 7 mm of insulation off the ends of the single conductors.

10



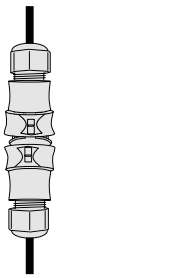
- Disassemble the on-site earth cable connector (in the accessories).
- Pass the earth cable through the metric screw connection.

11

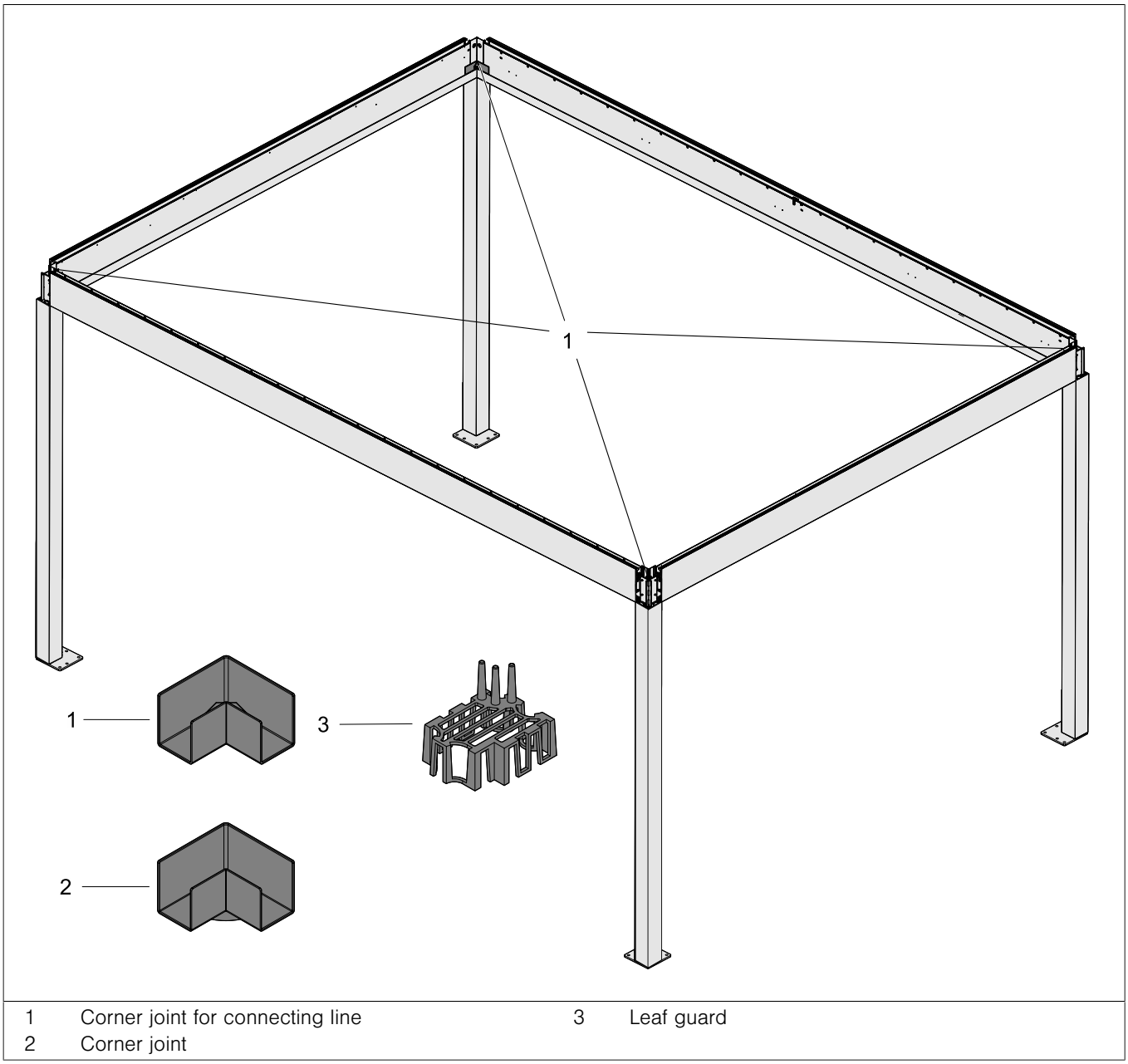


- Connect the power line to the distributor.

12



5.8 Installing the corner joint and leaf guard



1	Corner joint for connecting line	3	Leaf guard
2	Corner joint		

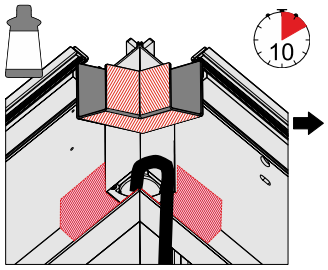
Fig. 28: Installing the corner joint

INFO
The bonding/contact surfaces to which sealant is applied must first be treated with cleaning agent and primer.

Installing the corner joint

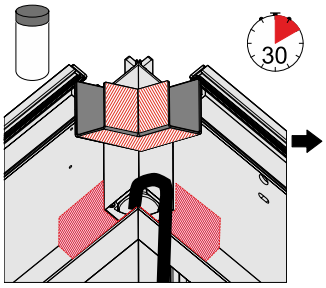
INFO
Do not use the primer all the way to the fabric area of the two beams or on visible surfaces.

1



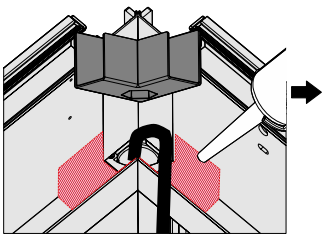
- Clean the surface on which the sealing adhesive is to be applied (Recommendation: Rhobasol 35DSF or Würth IPA cleaner – NOT included in the scope of delivery). → Then approx. 10 min. wait time

2



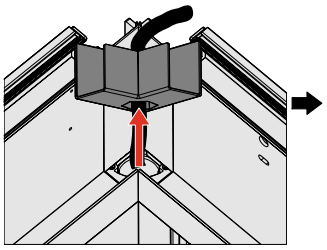
- Treat the cleaned surface with primer (specification: Würth Haftplus Primer for Plastic/Wood/Stone – included in scope of delivery; use the REQUIRED personal protective equipment). → Then approx. 30 min. wait time.

3



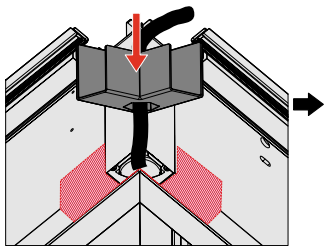
- Apply the sealant over the entire surface of the contour of the corner joint on the beams.

4



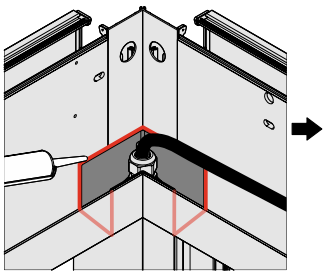
- Push the on-site connecting line through the corner joint.

5



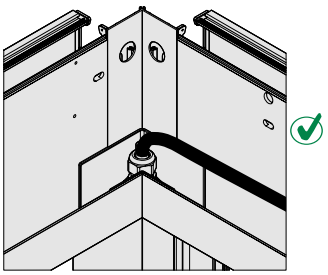
- Press the corner joint firmly onto the beam using a tool.

6



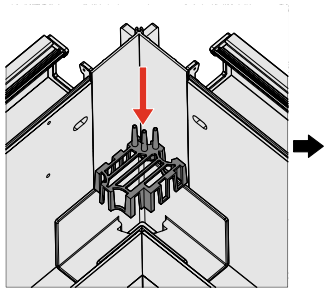
- Seal all corners and edges of the corner joints with sealant.

7



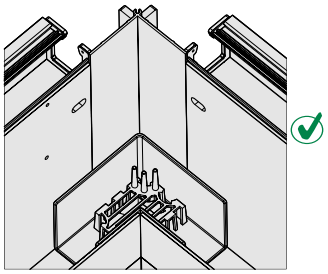
Installing the leaf guard

1

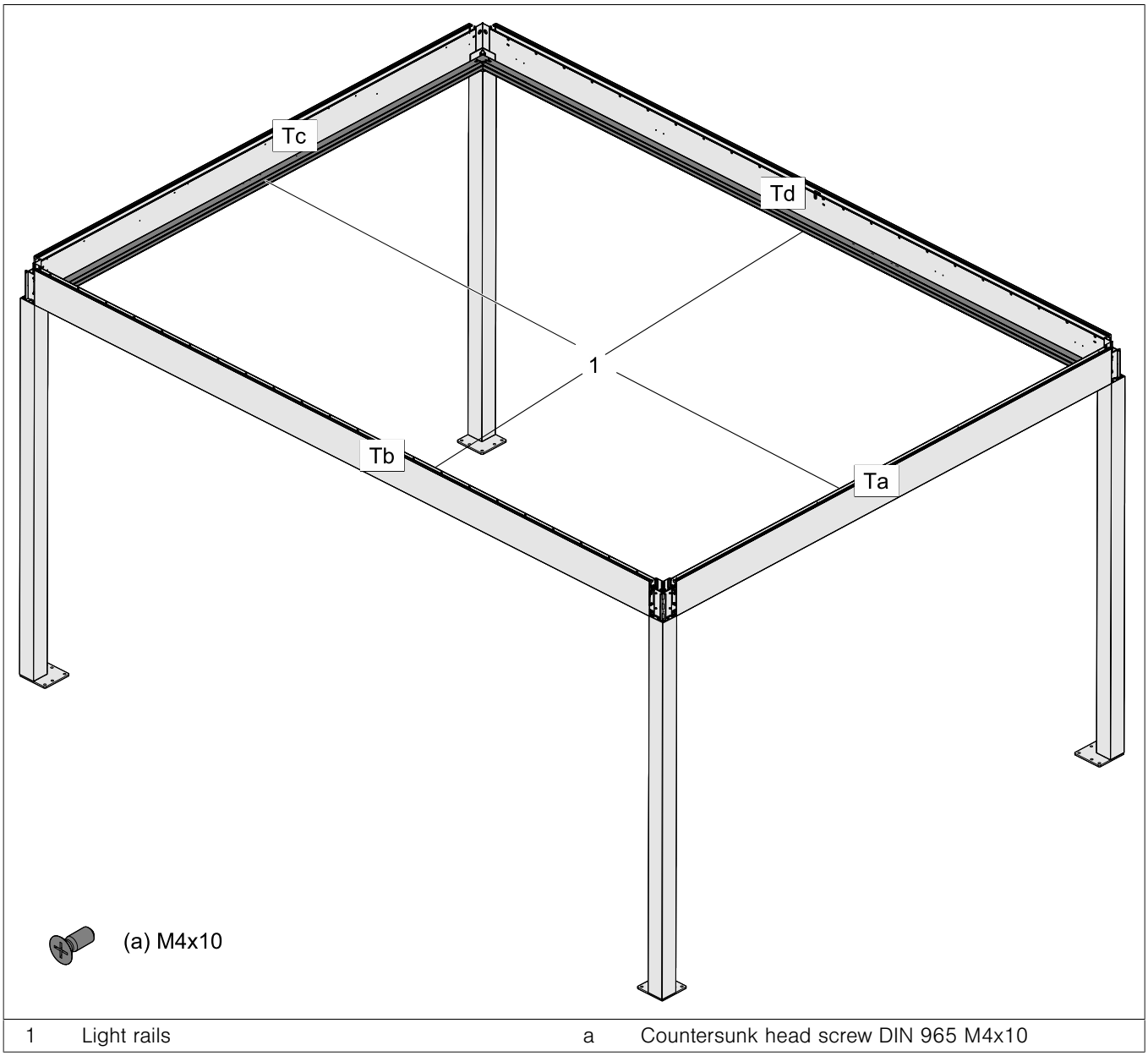


- Insert the leaf guard into the drainage corner.

2



5.9 Installing the light rail and LED pole (optional)



1	Light rails	a	Countersunk head screw DIN 965 M4x10

Fig. 29: Installing the light rails

INFO

- Note the installation direction relative to the connection box: The line ends of the light rail must face the connection box.

INFO

The most favourable processing temperature (object and ambient temperature) for the adhesive tape is between +15 °C and +25 °C.

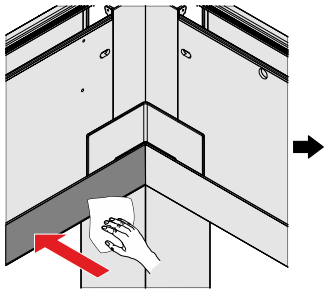
At temperatures below the favourable processing temperature, the adhesive tape achieves an adhesive strength of 60 - 70 % in 3 - 4 days. Pressing down on the adhesive tape again at temperatures between 15 - 25 °C can achieve an adhesive strength of 100 % (e.g. in summer).

If there is a temperature difference between the storage location of the parts to be connected and the installation location, it is recommended to wait before installing them. Otherwise condensation may form and the adhesive strength will deteriorate.

Light rail installation with 2 light rails

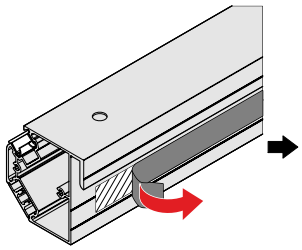
NOTICE
Insert wood blocks between the screw clamp and the coated surfaces.

1



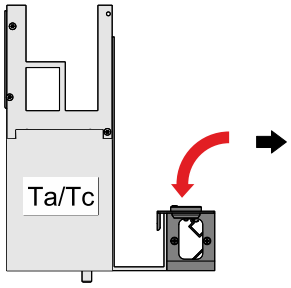
- Clean the rain gutters to remove greases/oils and contaminants.

2



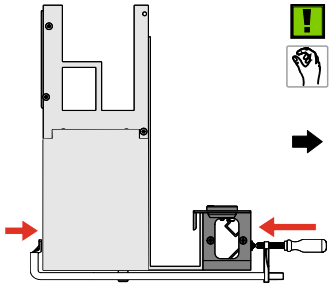
- Remove the protective backing from the adhesive tape on the light rail.

3



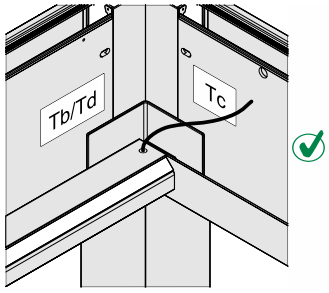
- Attach the hooks of the light rail to the corresponding beam.

4



- Press the light rail firmly against the rain gutter of the beam using screw clamps.

5



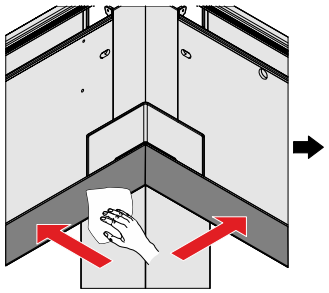
Light rail installation with 4 light rails

NOTICE
Insert wood blocks between the screw clamp and the coated surfaces.

INFO
The bonding/contact surfaces to which sealant is applied must first be treated with cleaning agent and primer.

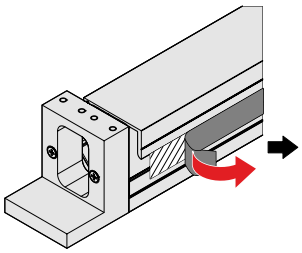
INFO
When installing with 4 light rails, the light rail opposite the connection box is connected to the additional line of the other light rail, which has already been pulled through; this is done using a connector.

1



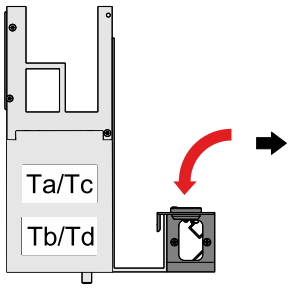
- Clean the rain gutters to remove greases/oils and contaminants.

2



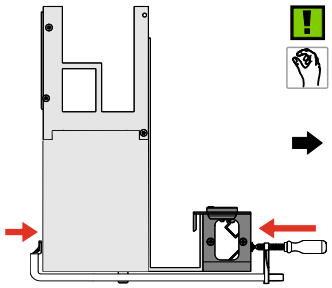
- Remove the protective backing from the adhesive tape on the light rail.

3



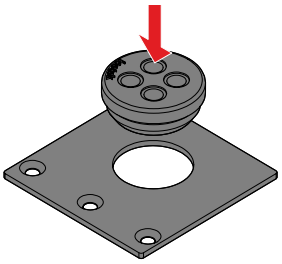
- Attach the hooks of the light rail to the corresponding beam.

4



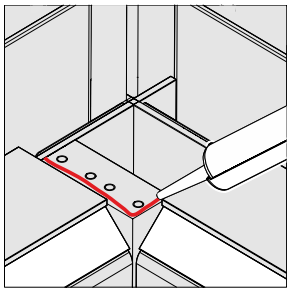
- Press the light rail firmly against the rain gutter of the beam using screw clamps.

5



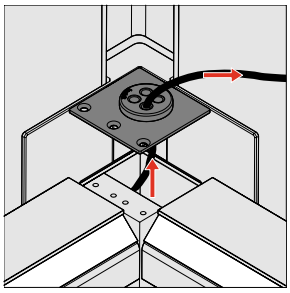
- Press the grommet into the cover sheet.

6



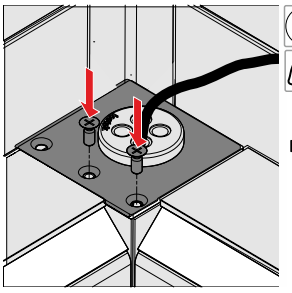
- Apply sealant to the corners of the light rails.

7



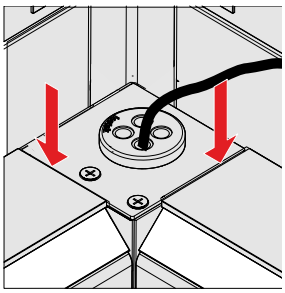
- Pull the line up and out through the grommet at the corners and toward the connection box.

8



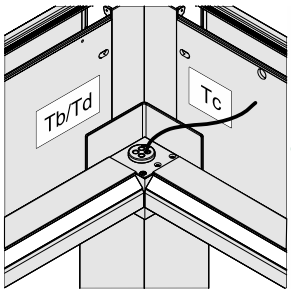
- Attach the cover sheet using screws M4 x 10 (a).

9



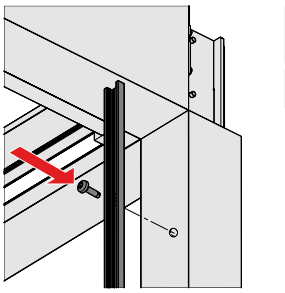
- Properly distribute and remove excess sealant.

10



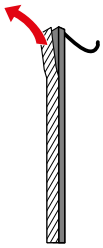
Routing and connecting the LED pole connecting line

1



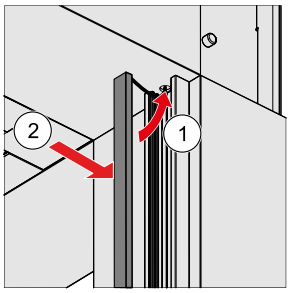
- Attach the profile of the light rail to the pole using the drilling screws 3.5 x 9.5.

2



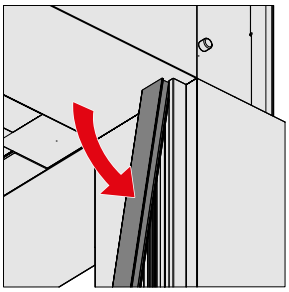
- Remove the protective film from the adhesive tape on the LED strip.

3

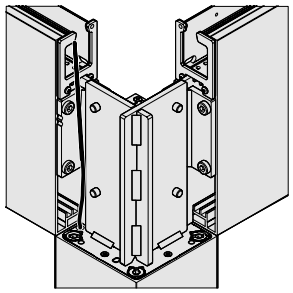
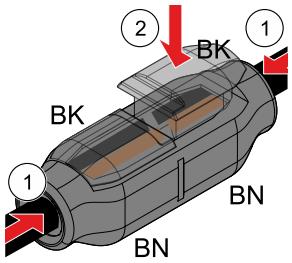
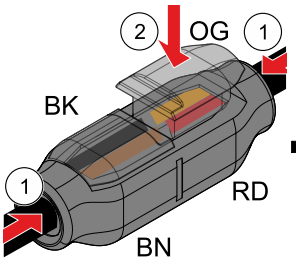
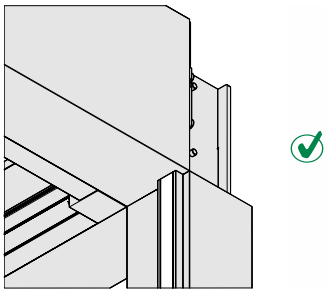


- Slide the LED strip line through the opening on the beam.
- Glue the LED strip into the centre of the profile and pass the line out through the notch.

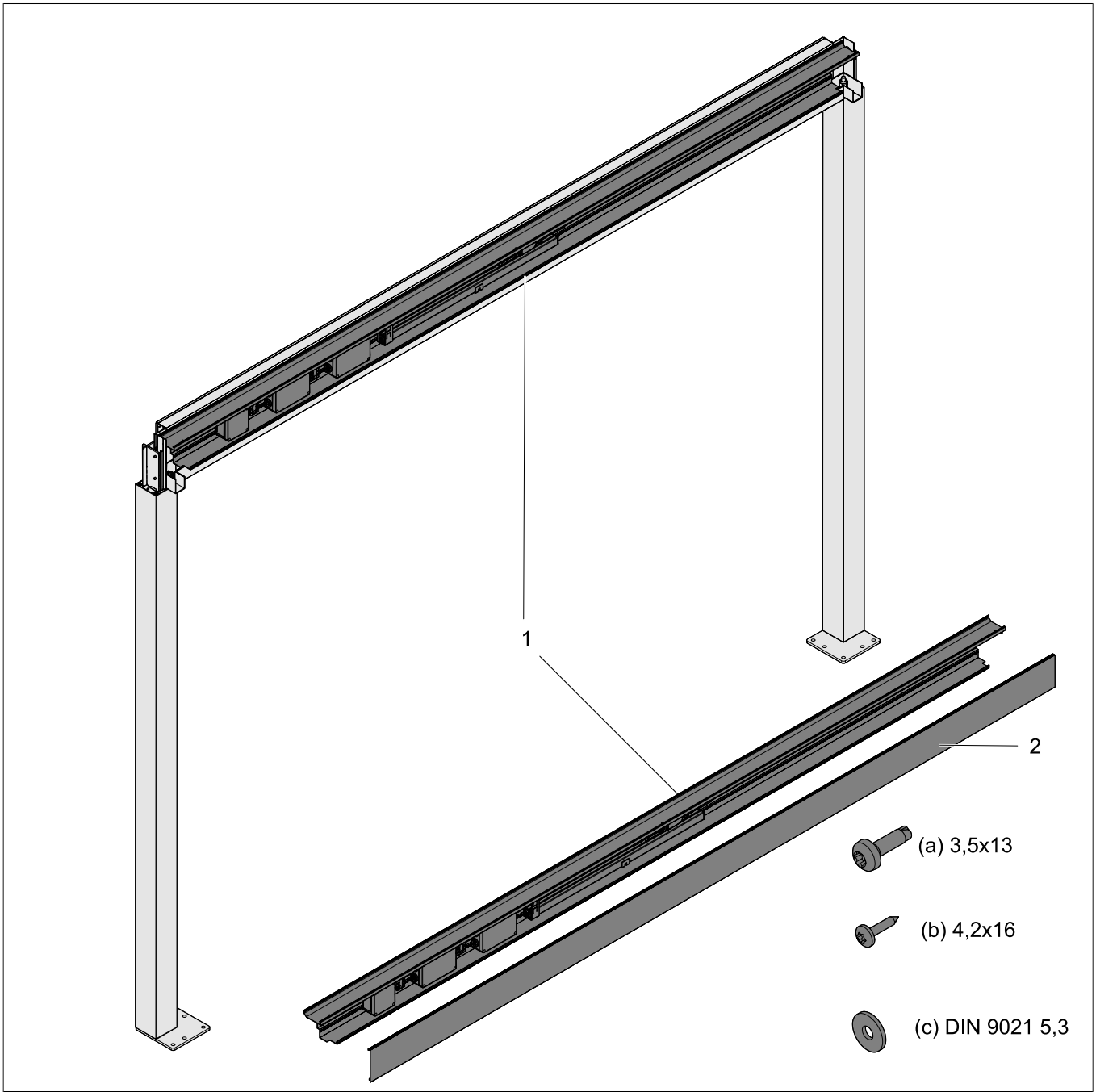
4



- Press the cover of the light rail into the groove.

5	6a	6b	7
			
■ Route the line from the LED pole through the rain gutter toward the connection box position.	■ Insert the wires all the way into the connector. Note the colours. ■ Using an aid such as tongue-and-groove pliers, push in the two activation levers of the connector so they are flush.	■ Insert the wires all the way into the connector. Note the colours. ■ Using an aid such as tongue-and-groove pliers, push in the two activation levers of the connector so they are flush.	

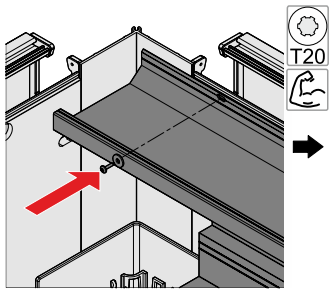
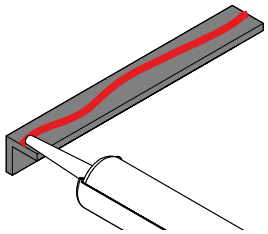
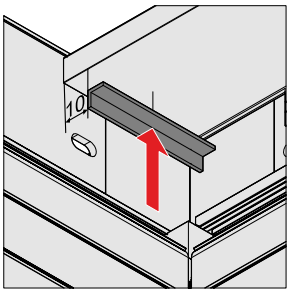
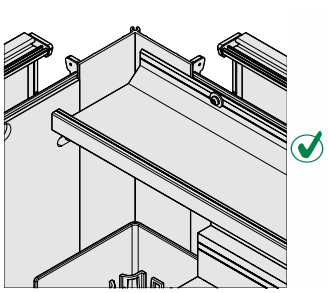
5.10 Installing the connection box (optional)



1	Connection box	b	Pan-head tapping screw DIN 7981 4.2x16
2	Inspection cover	c	Washer DIN 9021 5.3
a			

Fig. 30: Installing the connection box

INFO
The bonding/contact surfaces to which sealant is applied must first be treated with cleaning agent and primer.

1	2	3	4
			
■ Fasten the connection box with 5 screws 4.2 x 16 (a) and 5 washers 5.3 (b).	■ Apply sealant to the drainage angle (width of sealant bead at least 3 mm).	■ Press the drainage angles in place from below against the outer edge of the connection box.	

5.11 Installing the radiant heater (optional)



1	Radiant heater	7	Console
2	Radiant heater bracket	a	Countersunk head tapping screw DIN 7982 3.5x13
3	Cover cap	b	Countersunk head tapping screw DIN 7982 3.9x25
4	Housing	c	Hexagon screw DIN 912 M5x30
5	Radiant heater	d	Washer DIN 125A 5.3
6	Snaplock bracket	e	Hex nut DIN 439 M5

Fig. 31: Installing the radiant heater

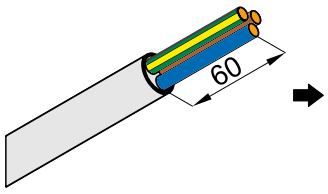
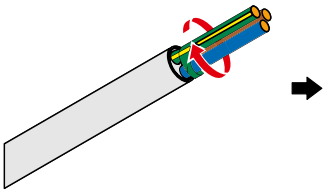
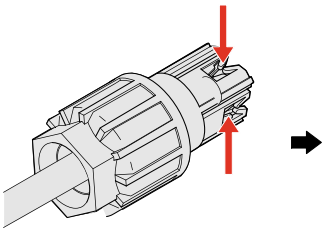
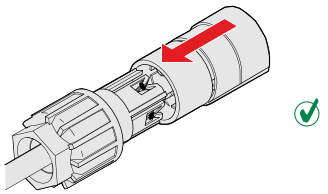
Technical data

INFO
Maximum number per slat roof is 2 pieces

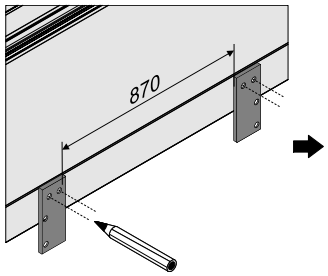
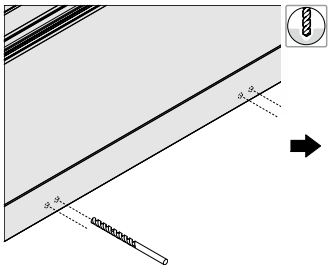
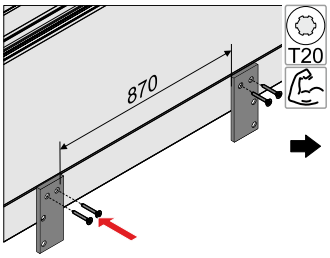
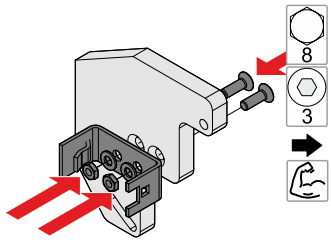
For the radiant heater, an in-line circuit breaker with type C16 is **mandatory**.

The technical data for the Design radiant heater are in the corresponding table (see Tab. 7/Page 9).

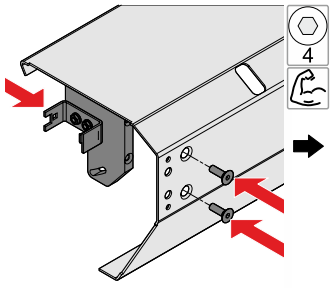
Connecting the plug-in connector

1	2	3	4
			
■ Strip approx. 60 mm off the line.	■ Loop the PE conductor around the live conductor. By pulling forcefully on the line, the PE conductor is pulled out of the terminal as the last step.	■ Insert the line in the nut and inside part. ■ Secure the wires in the line holder of the inside part. Note the label. ■ Cut the wires off flush with the line holder.	■ Slide the centre part onto the nut in the correct position. ■ Screw the nut (size 15) onto the centre part (tightening torque of 1.5 Nm).

Installing the housing

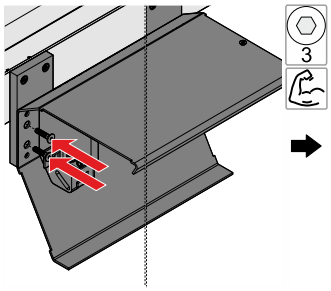
1	2	3	4
			
■ Hold the brackets for the radiant heater against the vertical wall of the rain gutter while adhering to the specified minimum distances. ■ Align the brackets horizontally so that the top edge of the bracket is level with the top edge of the rain gutter and transfer the fixing template.	■ Drill the fixing holes ∅ 3.5 mm at the markings.	■ Attach the intermediate plate to the rain gutter using the drilling screws Zebra Pias 3.9 x 25 (in accessories).	■ Connect the consoles with the snaplock brackets.

5



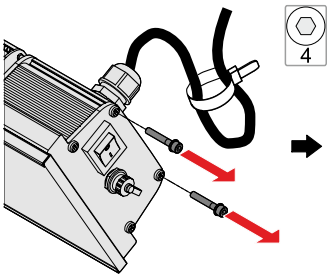
- Install the consoles on the housing.

6



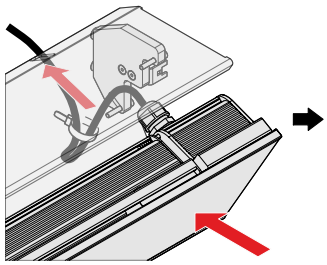
- Attach the housing to the intermediate plate using the screws M5 x 8 (in accessories).

7



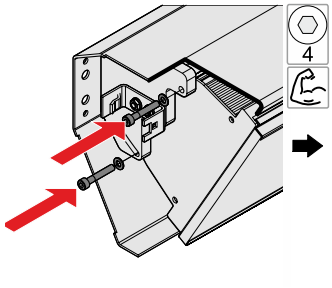
- Unscrew the screws from the radiant heater.

8



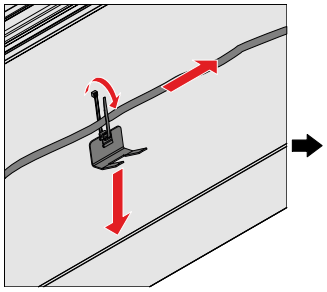
- Position the radiant heater in front of the housing and pass the radiant heater line through the opening in the housing to the outside.

9



- Position the radiant heater between the consoles and fasten it to the console using 2 screws M5 x 30 and 2 washers 5.3.

10



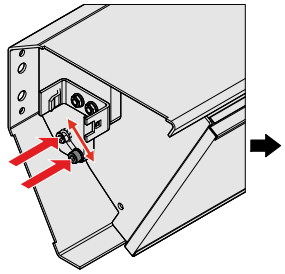
INFO

Installation under connection box

- Introduce a drilled hole into the connection box.

- Route the radiant heater line in the rain gutter toward the connection box.
- Place the bracket into the rain gutter.
- Attach the radiant heater line to the bracket using cable ties.

11



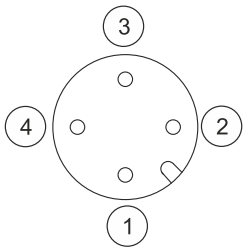
- Release the bottom screws on both sides.
- Adjust the radiant heater in the oblong hole to the desired angle.
- Tighten the bottom screws on both sides.

INFO

The standard inclination is 30°. The inclination angle can be continuously adjusted to a maximum angle of 40°.

Installing the WMS Dimmer 0-10 V (optional)

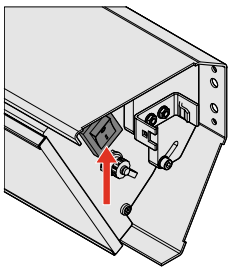
12



1	Operating voltage 12 V DC
2	GND
3	GND
4	Output voltage 0-10 V

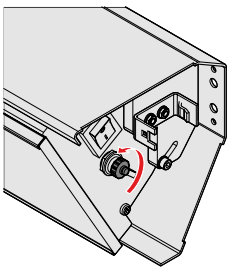
- Switch off the 230 V AC power supply of the radiant heater.

13



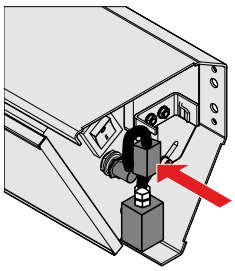
- Switch off the rocker switch of the radiant heater.
- Switch off the 230 V AC power supply of the radiant heater.

14



- Unscrew the protective cap.

15



- Plug the WMS Dimmer 0-10 V into the socket. Ensure that the plug connector has the right orientation.
- Manually tighten the knurled nut of the plug connector.
- Route the connecting line in a loop. Position the connecting line and the WMS Dimmer 0-10 V outside of the snaplock connection.

Connecting the radiant heater

INFO
The product is equipped with a power plug for connecting to a mains socket.

INFO

▶ An on-site all-pole disconnecting and isolating switch must be provided.

With WMS Dimmer 0-10 V

▶ Pair the WMS Hand-held transmitter with the WMS Dimmer 0-10 V.

With WMS Plug receiver power

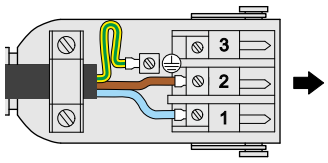
▶ Pair the WMS Hand-held transmitter with the WMS Plug receiver power.

CAUTION
Risk of injury on hot surface!

During installation, the rocker switch could be set to ON by mistake. In this case, the radiant heater would immediately start heating when connected.

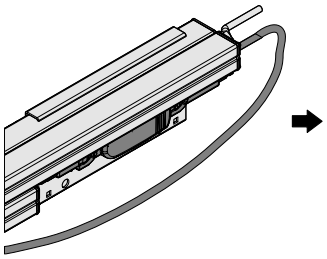
- Before connecting, ensure that the rocker switch is set to OFF.

16



- Connect the STAS 3 coupling to the extension.

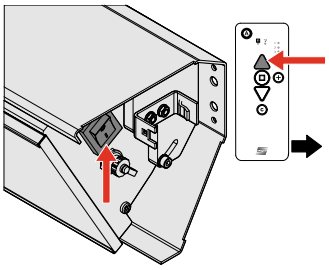
17



- Route the extension in a wide arc around the installed plug-in connector.
- Connect the plug-in connector.
- Attach the extension to the panel above and below using the preinstalled cable ties.

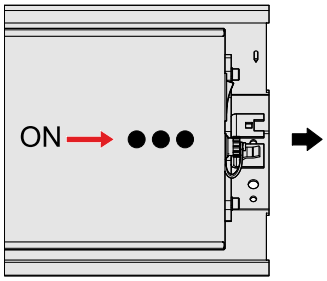
Performing a functional check

18



- Switch on the operating voltage.
- Switch the radiant heater on at the rocker switch.

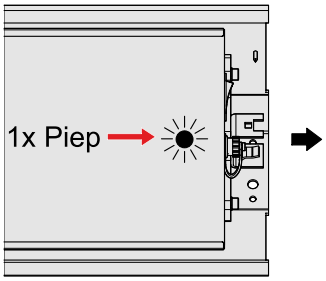
19



Without WMS Dimmer 0-10 V/**Without** WMS Plug receiver power

- The radiant heater begins heating at the maximum level (100%). The ceramic glass disk lights up red after a short time and radiates heat.

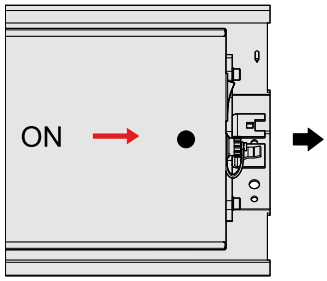
20



With WMS Dimmer 0-10 V (without/with WMS Plug receiver power)

- The radiant heater emits a beep. The radiant heater is in standby mode and the heating status LED flashes.

21



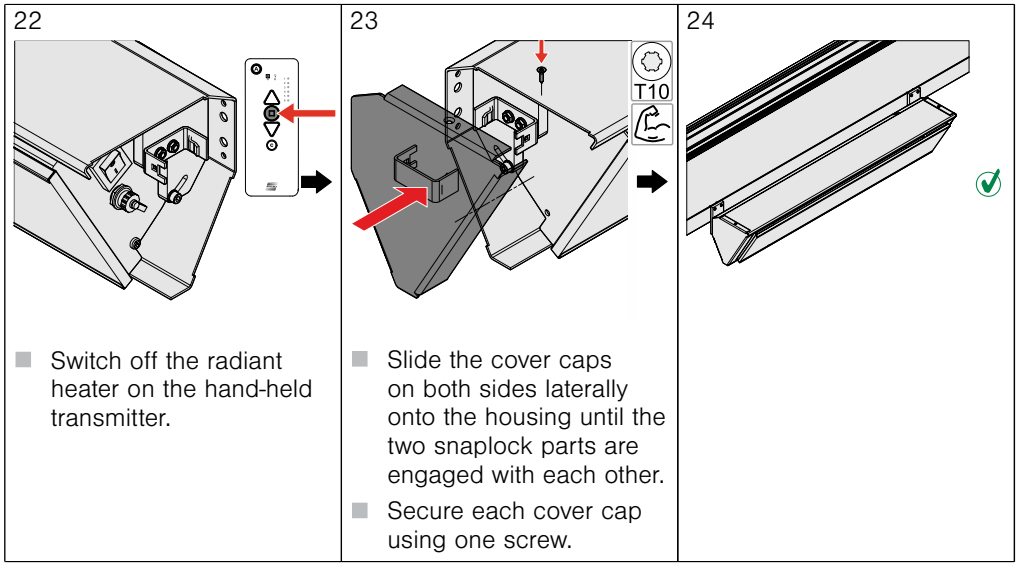
With WMS Dimmer 0-10 V (without/with WMS Plug receiver power)

- Switch the radiant heater on with the programmed WMS hand-held transmitter. The radiant heater begins heating up. The heating status LED lights up red. The product starts at the lowest level (1 LED) with a short press of the button and at the highest level (3 LEDs) with a long press of the button. The ceramic glass disk lights up red after a short time and radiates heat.

Switching off the radiant heater and installing the covers

INFO
The radiant heater must be switched off on the hand-held transmitter before the rocket switch is actuated.

The rocker switch on the radiant heater is not used for switching the unit on and off because it is not accessible.



- Switch off the radiant heater on the hand-held transmitter.
- Slide the cover caps on both sides laterally onto the housing until the two snaplock parts are engaged with each other.
- Secure each cover cap using one screw.

5.12 Connection to connection box (optional)

Electric distribution connection

Note the target group for this task (see Page 3).

INFO
Note the labels on the lines (see Tab. 13) and distributors (see Tab. 14).

Colour	IEC 60757 code
Black	BK
Brown	BN
Red	RD
Orange	OG
Yellow	YE
Green	GN
Blue	BU
Violet	VT
Grey	GY
White	WH
Pink	PK
Turquoise	TQ

Tab. 12: Overview of colour abbreviations

Line label	Meaning	Note
LED Mab	LED strip at installation point Mab	The LED is installed and the line is stored at installation point Mab.
LED Mbc	LED strip at installation point Mbc	The LED is installed and the line is stored at installation point Mbc.
LED Mcd	LED strip at installation point Mcd	The LED is installed and the line is stored at installation point Mcd.

Tab. 13: Labels on the lines

Line label	Meaning	Note
LED Mda	LED strip at installation point Mda	The LED is installed and the line is stored at installation point Mda.
LED Ta	LED strip in light rail at beam Ta	LED installed and line routed in light rail to connection box
LED Tb	LED strip in light rail at beam Tb	LED installed and line routed in light rail to connection box
LED Tc	LED strip in light rail at beam Tc	LED installed and line routed in light rail to connection box
LED Td	LED strip in light rail at beam Tc	LED installed and line routed in light rail to connection box
REG Ta	RGB strip in light rail at beam Ta	RGB installed and line routed in light rail to connection box
RGB Tb	RGB strip in light rail at beam Tb	RGB installed and line routed in light rail to connection box
REG Tc	RGB strip in light rail at beam Tc	RGB installed and line routed in light rail to connection box
RGB Td	RGB strip in light rail at beam Td	RGB installed and line routed in light rail to connection box
Motor c	Tilting motor	The motor is installed and the line is stored in the beam
H Ta	Radiant heater on beam a	Line in accessories
H Tc	Radiant heater on beam c	Line in accessories
LED slat (up to 4 pieces maximum)	LED strip in slat	LED installed and line routed via Tb to connection box

Tab. 13: Labels on the lines

Symbol	Meaning
	**Distributor LED** LED strip in pole
	**Distributor LED** LED strip directly in beam
	**Distributor LED** LED strip indirectly in beam **Distributor 230 V** RGB strip in beam, indirect
	**Distributor 230 V** Tilting motor
ZIP	**Distributor 230 V** Window awning with ZIP guidance

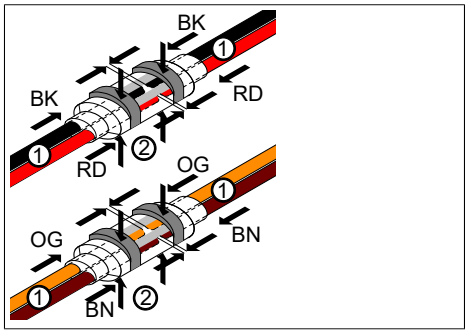
Tab. 14: Overview of the symbols of distributor LED and distributor 230 V

INFO

For RGB strips, two connectors are used.

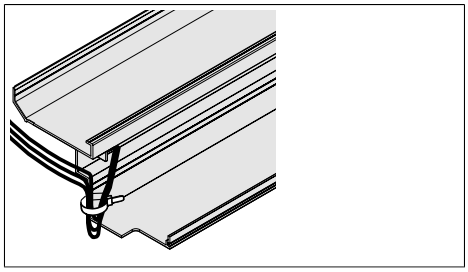
Strip	Extension line	Dimmer
Black	Black	Black
Red	Red	Red
Green	Orange	Orange
Blue	Brown	Brown

Tab. 15: RGB colour assignment

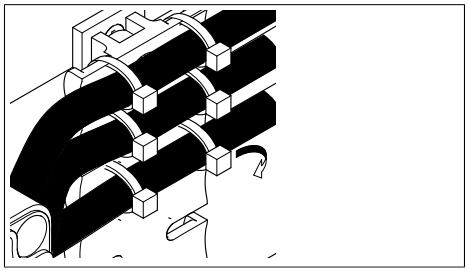


Special feature of RGB strip: direct connection with dimmer

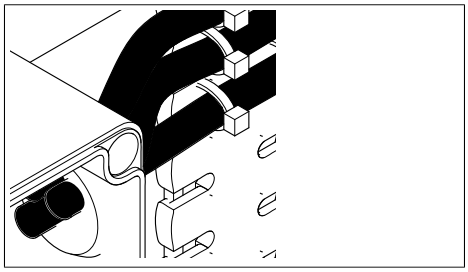
- Insert the wires all the way into the connector. Note the colours.
- Using an aid such as tongue-and-groove pliers, push in the two activation levers of the connector so they are flush.



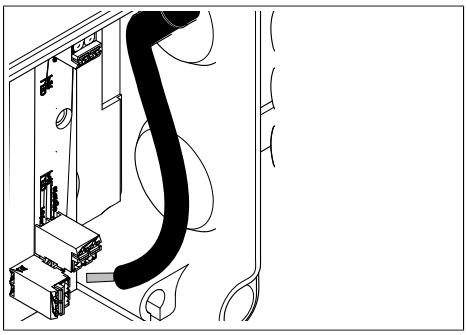
- Slide the lines into the cable channel toward the distributor.
- Route the lines as a loop and fasten with cable ties.



- Route the lines to the distributor via a strain relief.
- Attach the lines to the strain relief with cable ties.

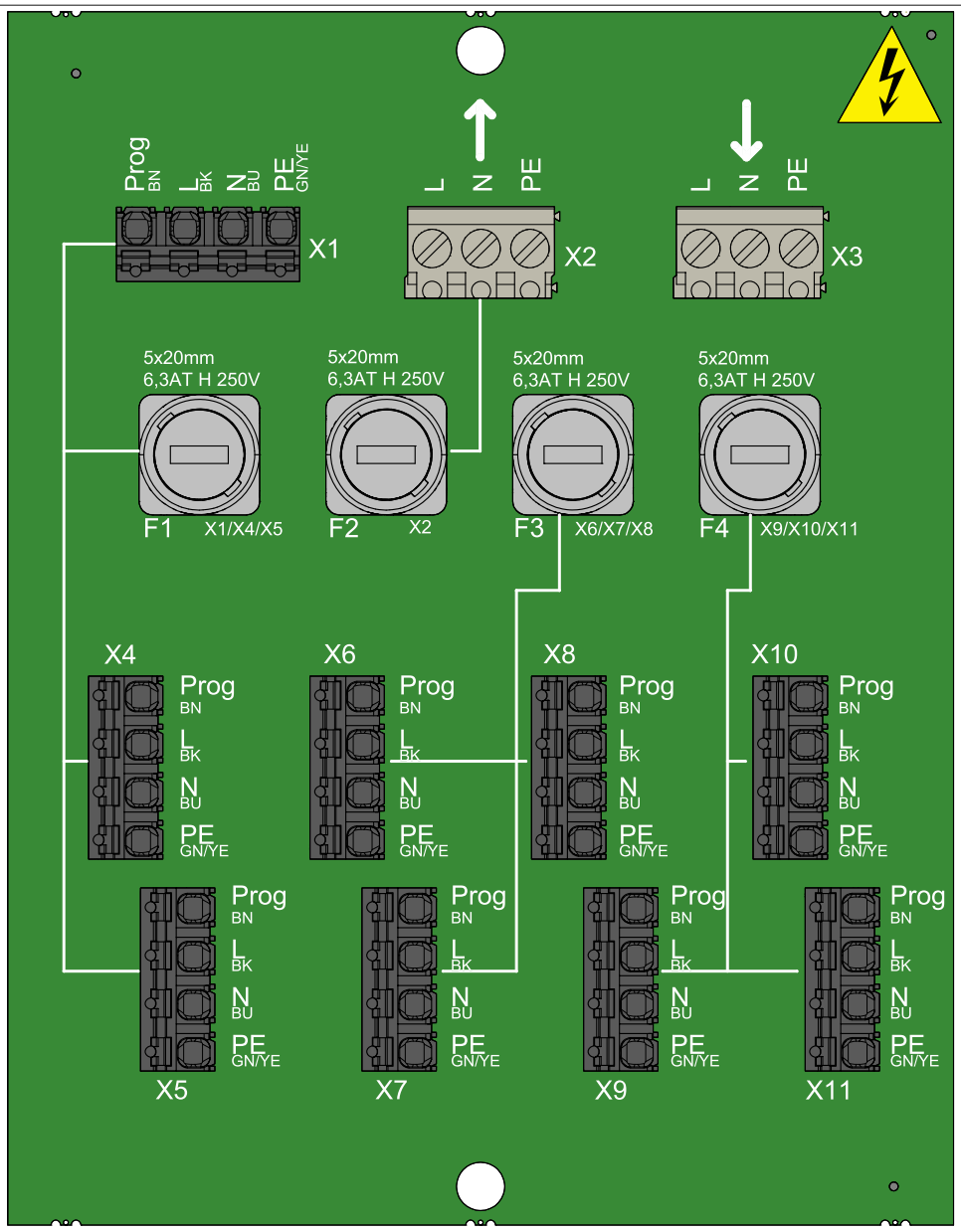


- Insert the lines into the appropriate distributor.



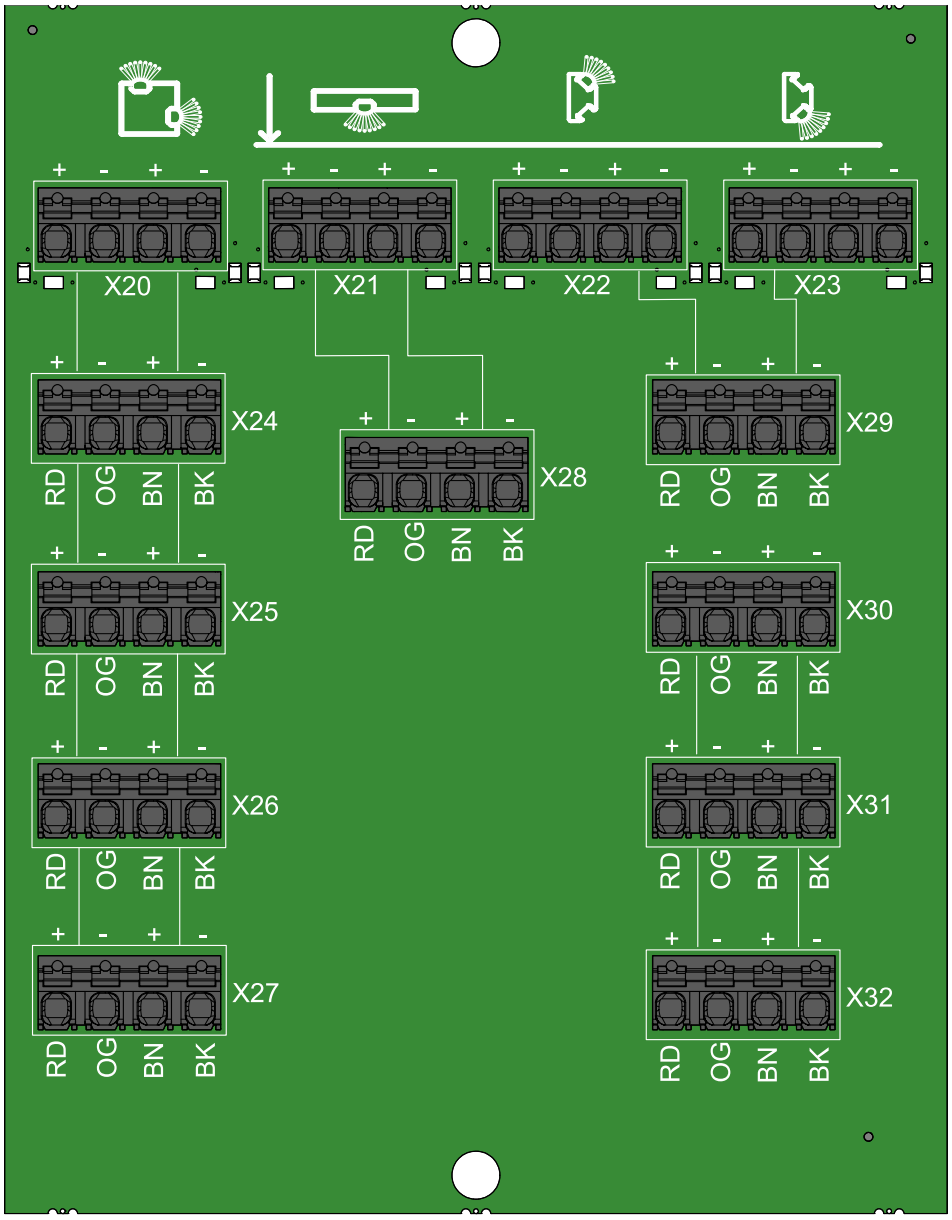
- Strip the lines.
- Equip the lines with ferrules.
- Insert the line (see label) into the corresponding slot on the printed circuit board.

Distributor 230 V



Prog/ BN Brown wire	N/ BU Blue wire
L/BK Black wire	PE/ GNYE Green-yellow wire

Fig. 32: Distributor 230 V



	LED pole	BN	Brown wire
	LED slat	BK	Black wire
	Indirect beam LED lighting	RD	Red wire
	Direct beam LED lighting	OG	Orange wire

Fig. 33: Distributor LED

5.13 Line routing within the product

WARNING
Risk of electric shock from insufficient care!

The line can be damaged by moving parts!

- Keep the line away from all moving parts.

INFO
Inspect the lines. If the line is damaged, the product is **not** permitted to be connected.

The 230 V line must be routed separately from the 24 V line.

INFO
All lines included in the scope of delivery must be routed in the product.

- Line for drive Lamaxa (230 V) – max. 1 pieces
- Line for awning (230 V) – max. 4 pieces
- Line for radiant heater (230 V) – max. 2 pieces
- Line for LED strips (24 V) – max. 8 pairs
- Line for RGB strips (24 V) – max. 4 pair

The only lines that may be connected in the electrical distribution are those that have a power consumer.

Wiring diagram

INFO
These instructions show only the standard line routing. All other line routings are available via the following QR code.

The line routing to the distributors is marked when the line is passed through the inside corner of a cover panel. If the line routing passes through the rain gutter directly into the connection box, this is not marked on the plan.

The meanings of the abbreviations and colours are explained below.

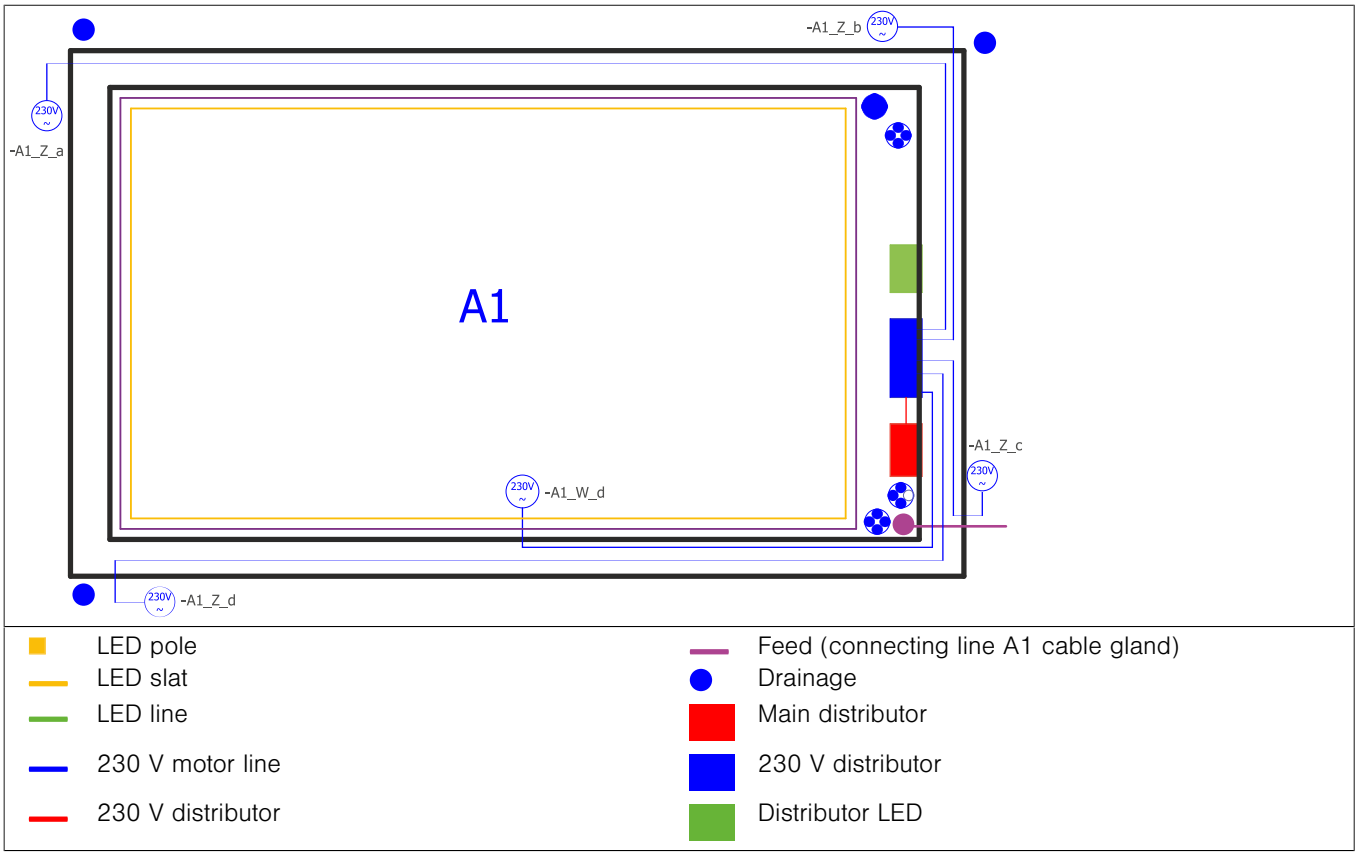


Fig. 34: Wiring diagram (basic equipment)

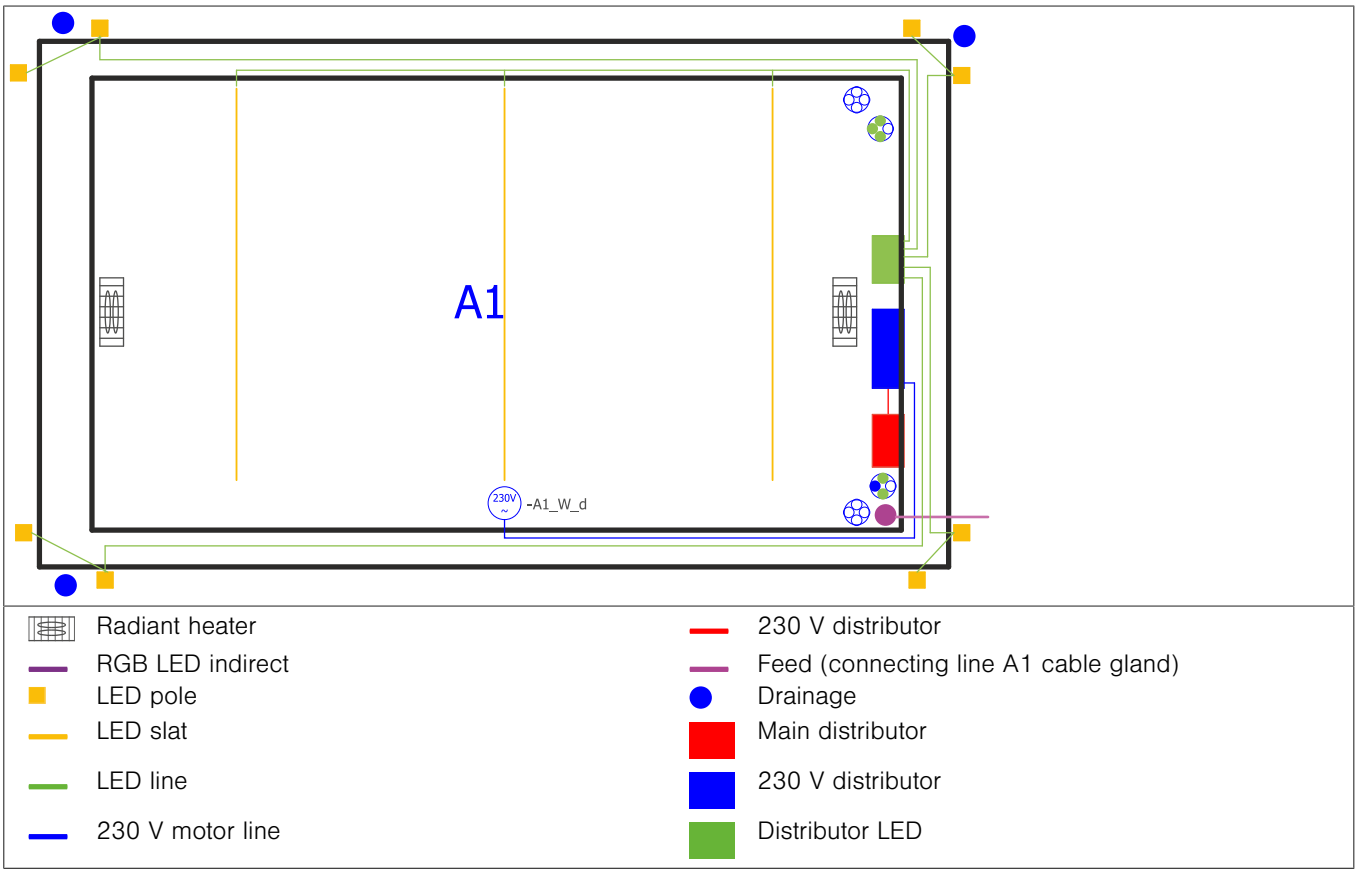


Fig. 35: Wiring diagram (maximum equipment)

Abbreviation	Meaning
FX	Field (e.g. F1)
H FX	Radiant heater field (e.g. H F1)
M_F	Slat roof drive (moving)
M_W	Slat roof drive (tilting)
M	Drive of integrated awning
ⓜ	Drive of integrated awning with additional pole
PX	Pole (in corner)/corner (e.g. P1)
PXz	Additional pole (e.g. P1z)
PXeV	Offset pole (e.g. P1eV)
TX	Beam (e.g. T1)
W	Drainage gutter
	Location/direction of view
	Electric distribution connecting line/location

Tab. 16: Explanation of abbreviations used in line routing 230 V

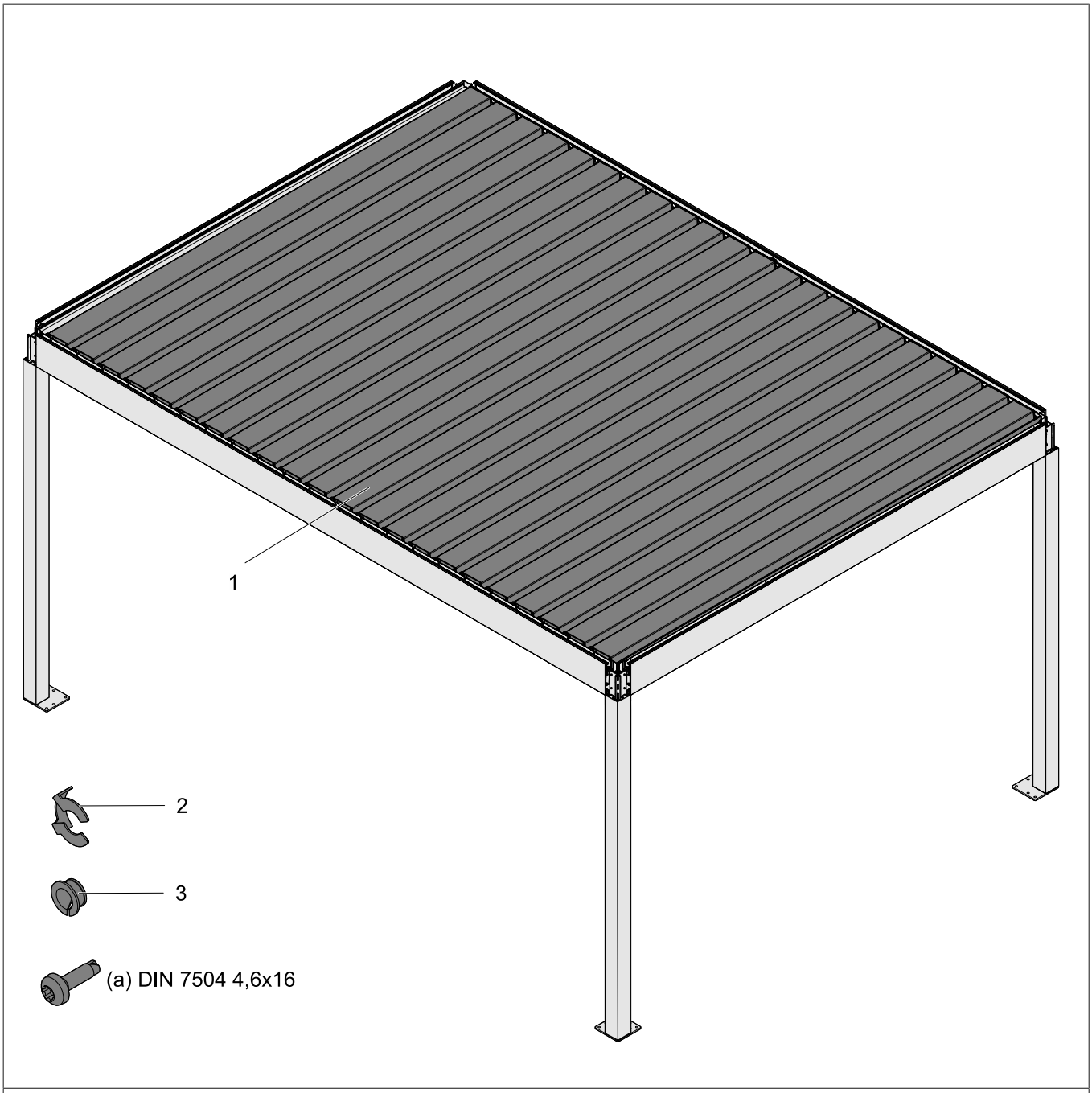
Abbreviation	Designation/definition
FX	Field (e.g. F1)
LED_P	LED strip pole
LED_T	LED strip beam
LED_{Pz}	LED strip additional pole
RGB	RGB strip
PX	Pole (in corner)/corner (e.g. P1)
PXz	Additional pole (e.g. P1z)
PXeV	Offset pole (e.g. P1eV)

Tab. 17: Explanation of abbreviations used in line routing 24 V

Abbreviation	Designation/definition
TX	Beam (e.g. T1)
W	Drainage gutter
	Location/direction of view
ϟ	Electric distribution connecting line/location

Tab. 17: Explanation of abbreviations used in line routing 24 V

5.14 Installing the slats

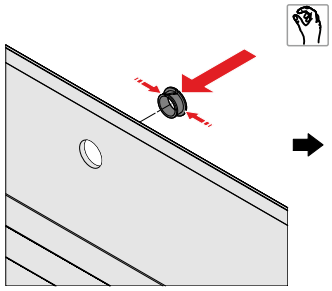


1	Slat	3	Sliding bushing
2	Locking device	a	Pan-head drilling screw DIN 7504 4.6x16

Fig. 36: Installing the slats

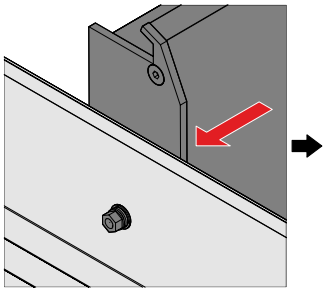
Installing the motor slat

1



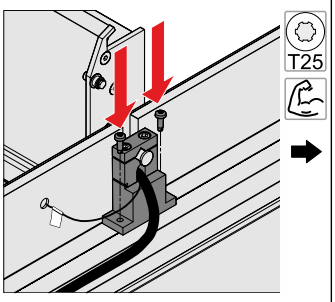
- Press the bushing for the motor slat into the openings provided for this purpose on the non-drive end in the beams.

2



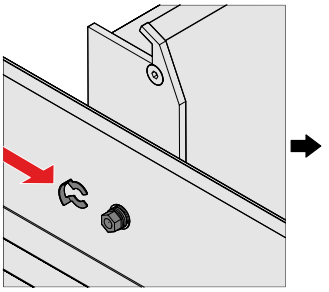
- Push the motor slat with the non-drive end into the bushing.

3



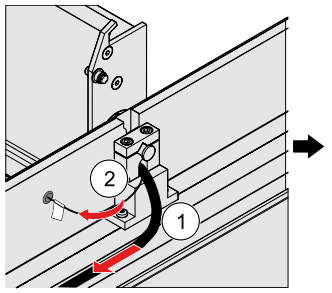
- Lower the motor slat into the indicated position and fasten using 2 screws 4.8 x 16 (a).

4



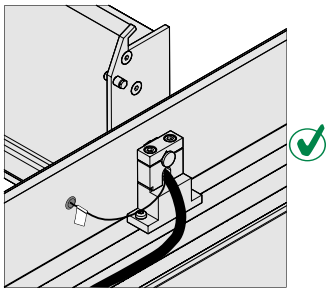
- Secure the motor slat on the non-drive end using the securing pin.

5



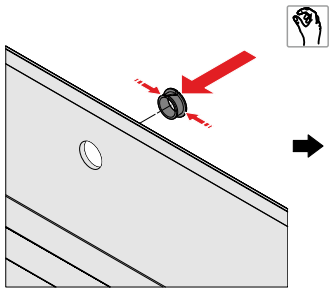
- Route the line to the connection box, if present.
- Pass the antenna through the provided grommet and pull it out by approx. 50 mm. Then insert it in the cutout intended for this purpose in the beam.

6



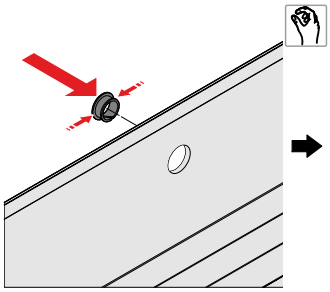
Installing the slat

1a

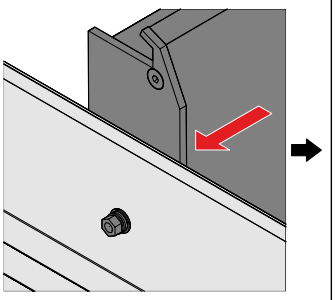


- Press the bushings into the provided openings on both sides in the beams.

1b

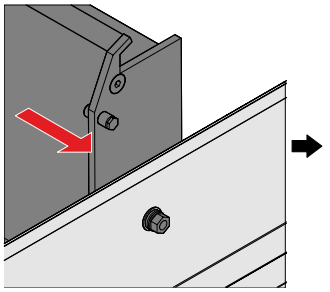


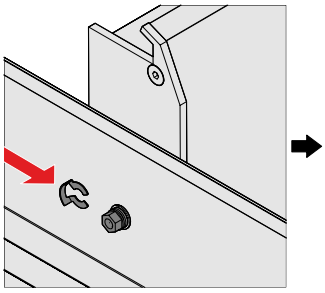
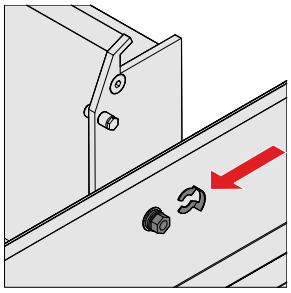
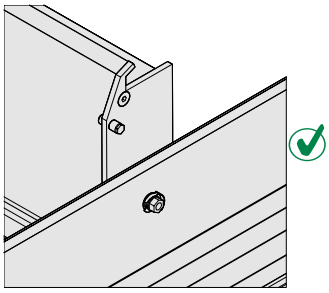
2a



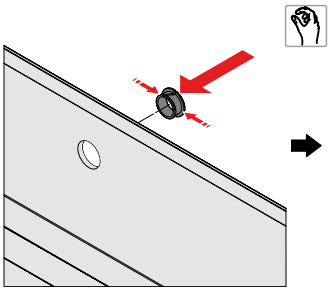
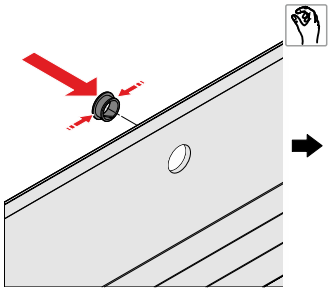
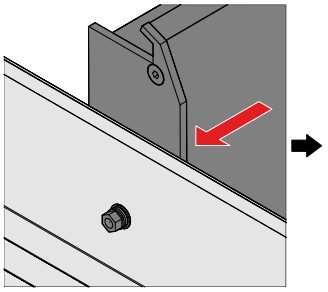
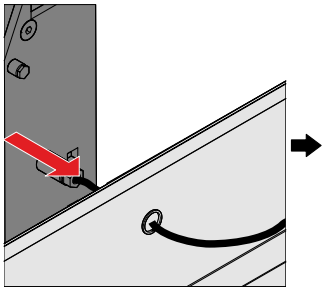
- Insert both sides of the slat into the provided openings.

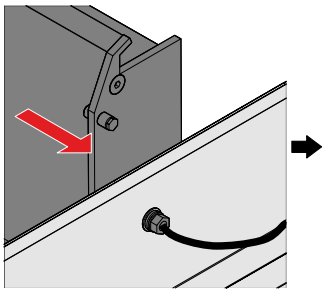
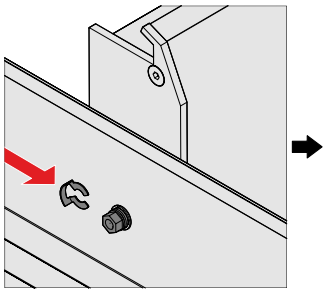
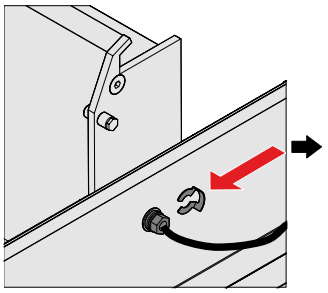
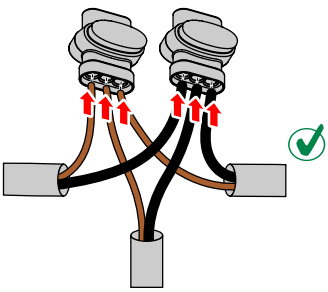
2b



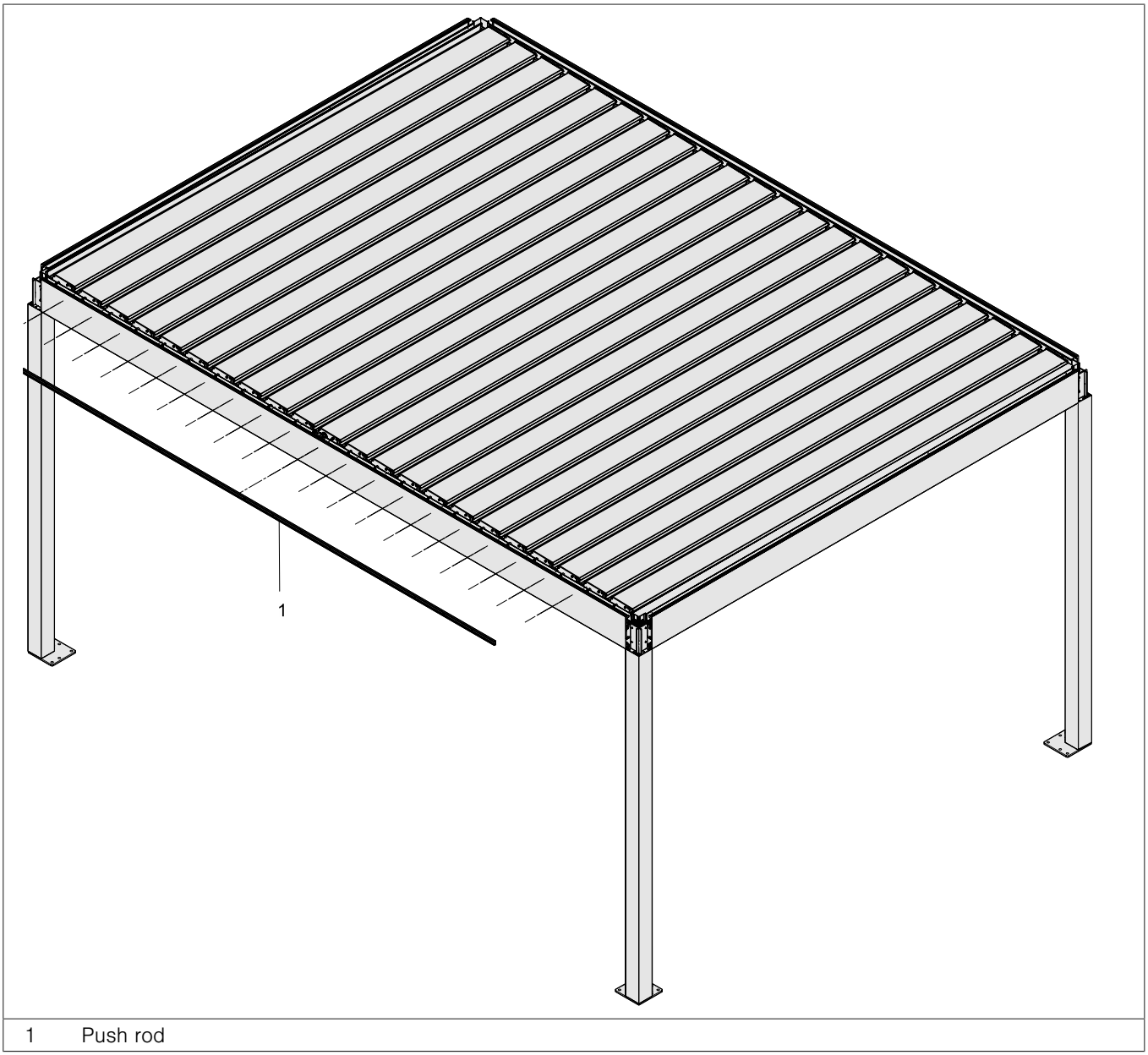
3a	3b	4
		
■ Lock the pins of the slat on both sides.		

Installing the LED slat

1a	1b	2	3
			
■ Press the bushings into the provided openings on both sides in the beams.		■ Insert the slat into the bushing on the opposite side.	■ Insert the line through the opening of the bushing.

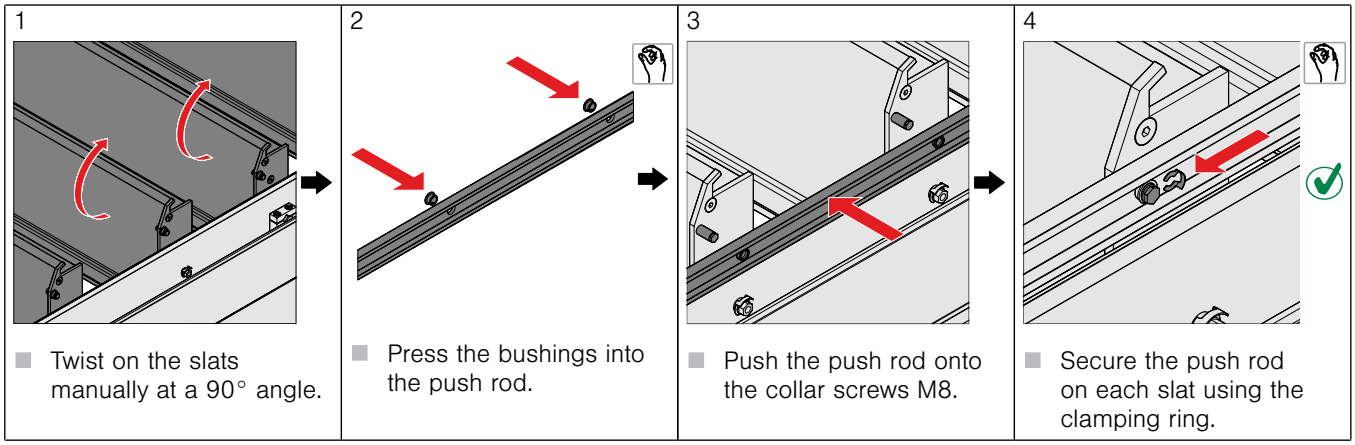
4	5a	5b	6
			
■ Insert the slat into the provided opening.	■ Lock the pins of the slat on both sides.		■ Connect the LED lines, if present, with the quick connectors and route to the connection box. ■ Disconnect the ring line in the beam in the area of the LED line. ■ In each case, connect 3 wires of the same colour in 1 quick connector. ■ Squeeze the quick connector using water pump pliers.

5.15 Installing the push rod



1 Push rod

Fig. 37: Installing the push rod



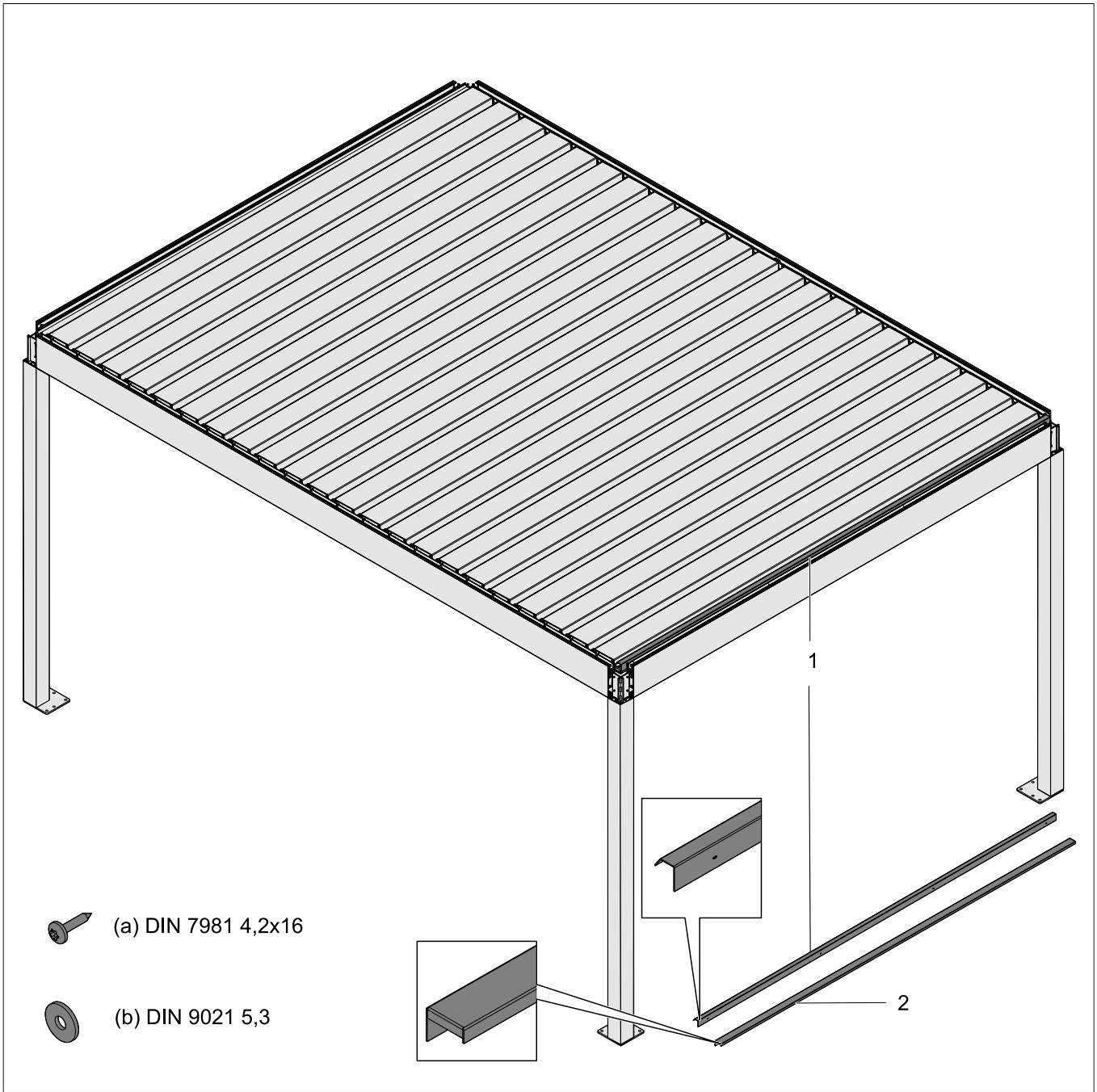
5.16 Setting the motor limit positions

INFO
Teach the motor limit position of the slat roof using the WAREMA Smart programming cable.

INFO

- Note the "Setting instructions and wiring diagram" included with the drive.
- When using a control: follow the separate instructions.

5.17 Installing the partition compensation plates/programming the RGB hand-held transmitter



1	Partition compensation plate variant 1	3	Pan-head drilling screw DIN 7981 4.2x16
2	Partition compensation plate variant 2	4	Washer DIN 9021 5.3

Fig. 38: Installing the partition compensation plate

INFO
The weather station and the RGB hand-held transmitter must be programmed before the connection box is closed.

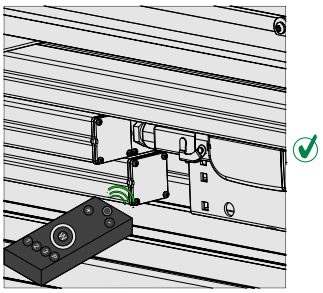
INFO
All electrical components of the product must be connected.

Programming the RGB strip for the hand-held transmitter (optional)

INFO
Teach the hand-held transmitter for the product (see the accompanying installation and operating instructions for the hand-held transmitter).

The hand-held transmitter must be no farther than 50 mm away from the dimmer.

1

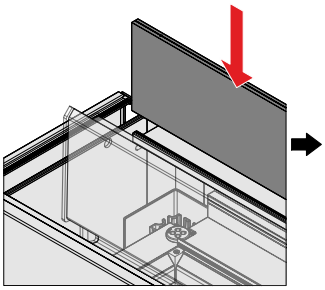


- To teach the RGB strips, hold the hand-held transmitter a maximum distance of 50 mm away from the dimmer.

Installing the partition compensation plate on the connection box side

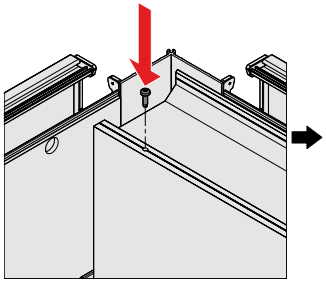
INFO
The following procedure describes the installation sequence of the connection box in field A variant of the partition compensation plate.

1



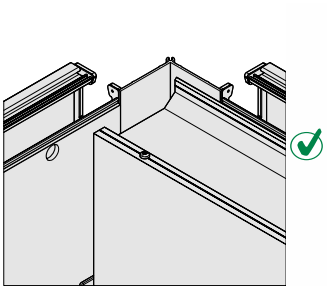
- Position the inspection cover on the connection box from above.

2

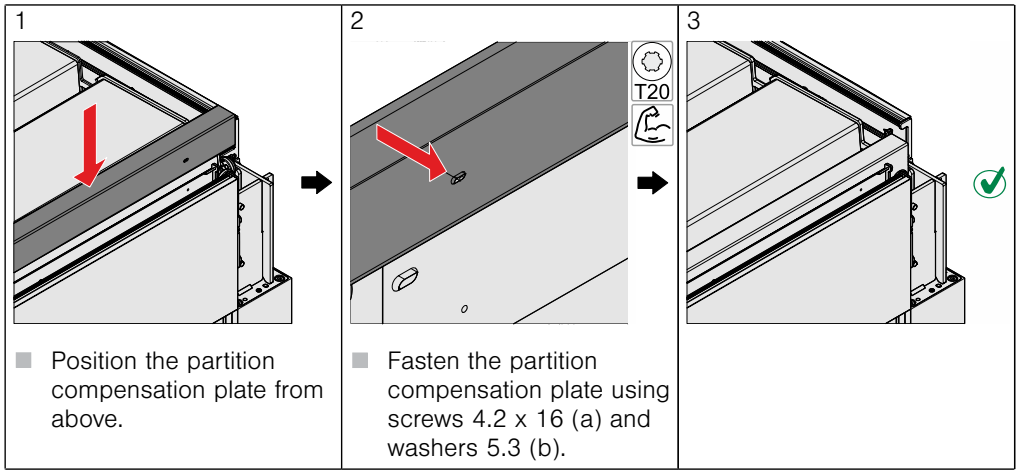


- Attach the inspection cover with the screws 4.2 x 16 (a) and the washers 5.3 (b).

3

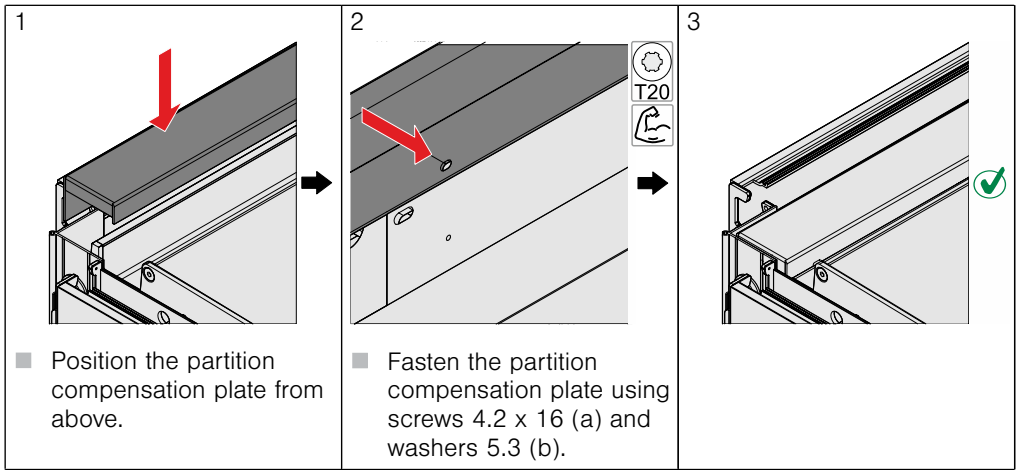


Installing the partition compensation plate variant 1



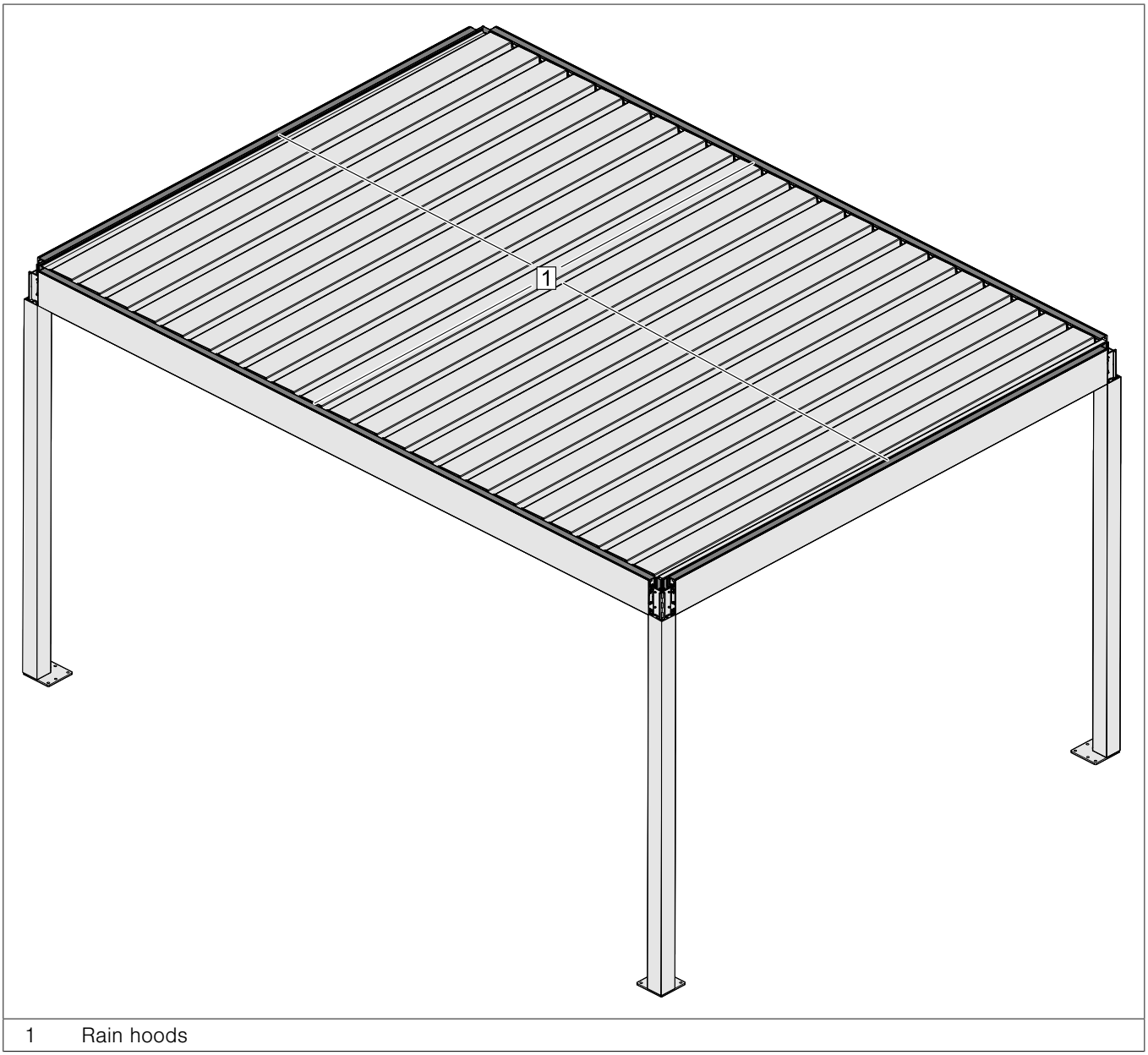
- Position the partition compensation plate from above.
- Fasten the partition compensation plate using screws 4.2 x 16 (a) and washers 5.3 (b).

Installing the partition compensation plate variant 2



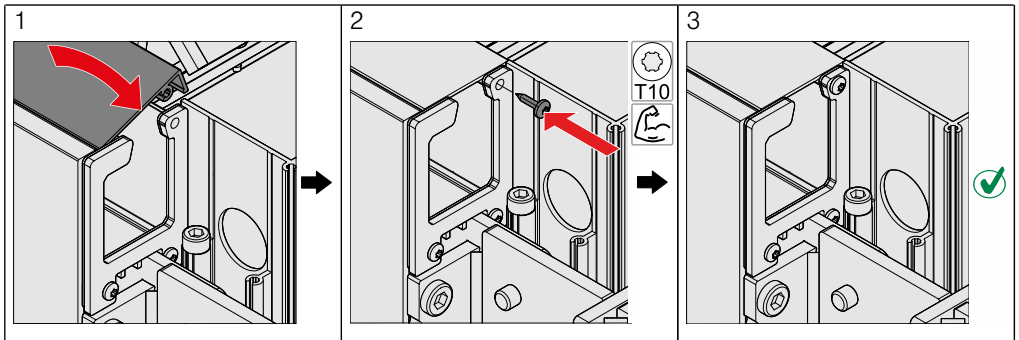
- Position the partition compensation plate from above.
- Fasten the partition compensation plate using screws 4.2 x 16 (a) and washers 5.3 (b).

5.18 Installing the rain hood



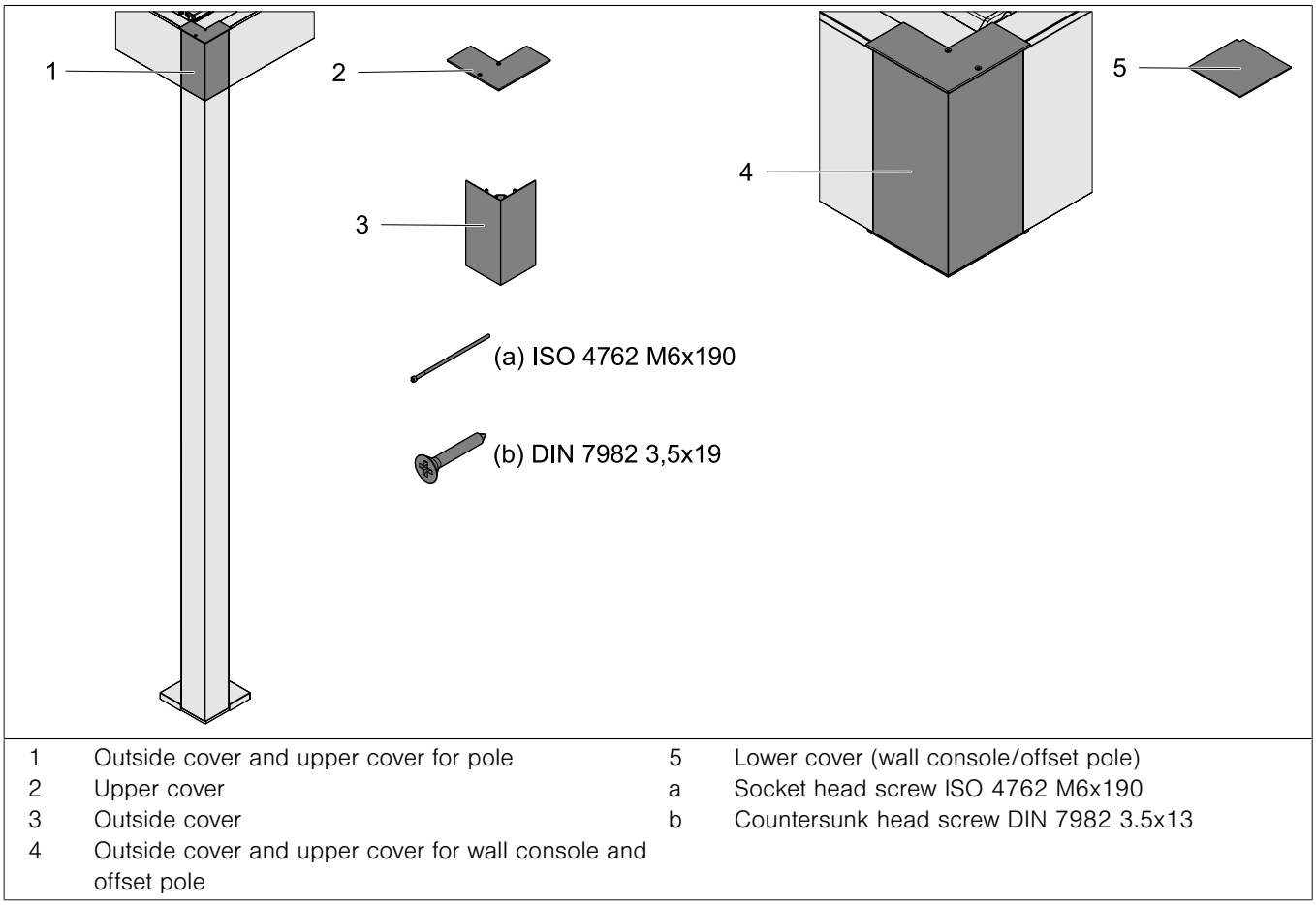
1 Rain hoods

Fig. 39: Installing the rain hoods



- Swing the rain hoods on the beams.
- Attach the rain hoods on both sides using screws 3.5 x 25 (a).

5.19 Installing the outside covers and upper cover

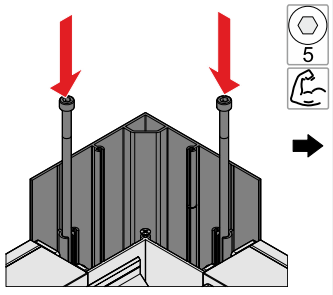
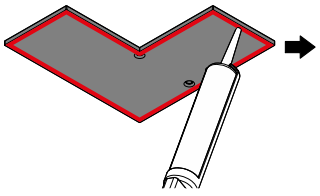
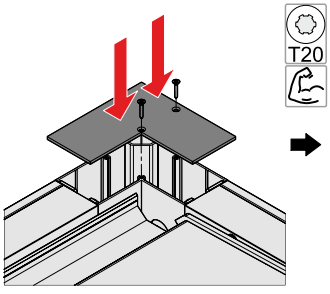
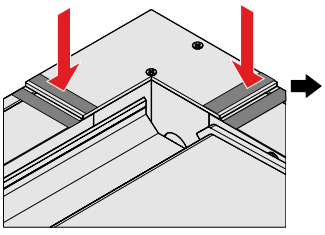


1	Outside cover and upper cover for pole	5	Lower cover (wall console/offset pole)
2	Upper cover	a	Socket head screw ISO 4762 M6x190
3	Outside cover	b	Countersunk head screw DIN 7982 3.5x13
4	Outside cover and upper cover for wall console and offset pole		

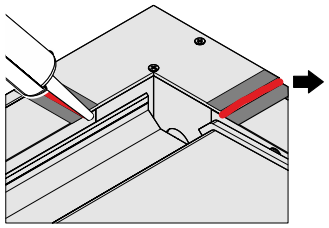
Fig. 40: Installing the outside cover and upper cover

INFO
The bonding/contact surfaces to which sealant is applied must first be treated with cleaning agent and primer.

Installing the outside cover and upper cover (pole)

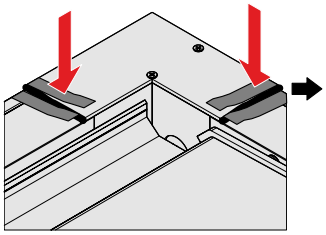
1	2	3	4
			
■ Screw the outside covers (3) (outside) on all poles from the top downward using screws M6 x 190 (a).	■ Apply sealant around the edge of the top covers (width of sealant bead at least 3 mm).	■ Place the upper covers (2) on the corners and screw each in place using 2 screws 3.5 x 19 (b).	■ Apply adhesive tape a distance of 10 mm between the cover edge on the rain hood and on the upper cover.

5



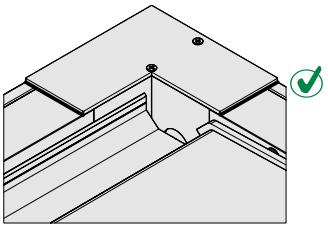
- Apply the sealant to the edge of the cover and smooth it out.

6



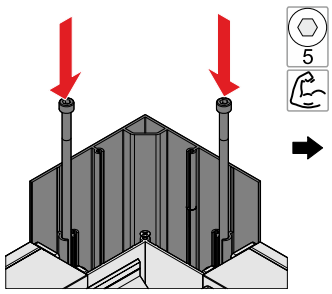
- Pull off the adhesive tape.

7



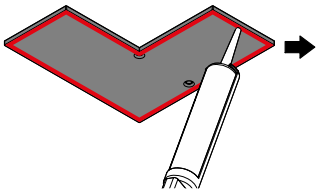
Installing the outside cover and upper cover (wall console)

1



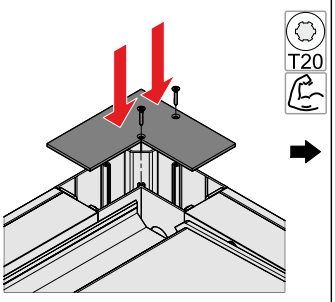
- Screw the outside covers (4) (outside) on all poles from the top downward using screws M6 x 190 (a).

2



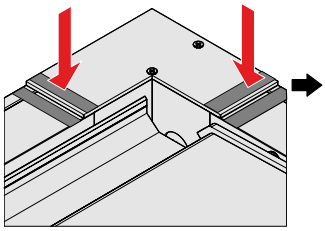
- Apply sealant around the edge of the top covers (width of sealant bead at least 3 mm).

3



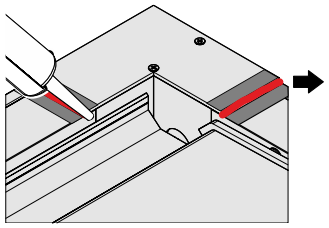
- Place the upper covers (2) on the corners and screw each in place using 2 screws 3.5 x 19 (b).

4



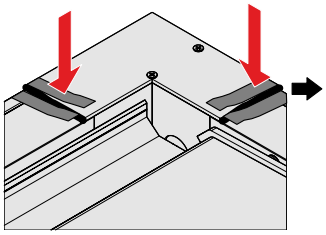
- Apply adhesive tape a distance of 10 mm between the cover edge on the rain hood and on the upper cover.

5



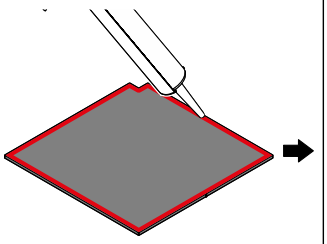
- Apply the sealant to the edge of the cover and smooth it out.

6



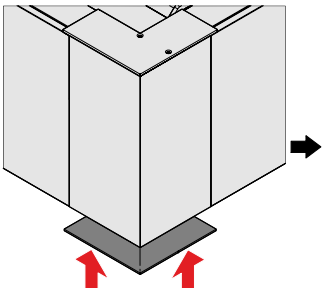
- Pull off the adhesive tape.

7



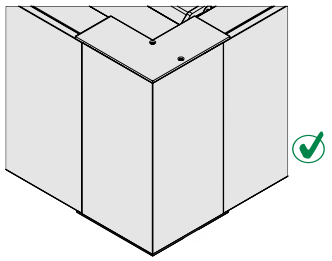
- Apply sealant on the inside of the lower cover over an area the size of the wall console (width of sealant bead at least 3 mm).

8

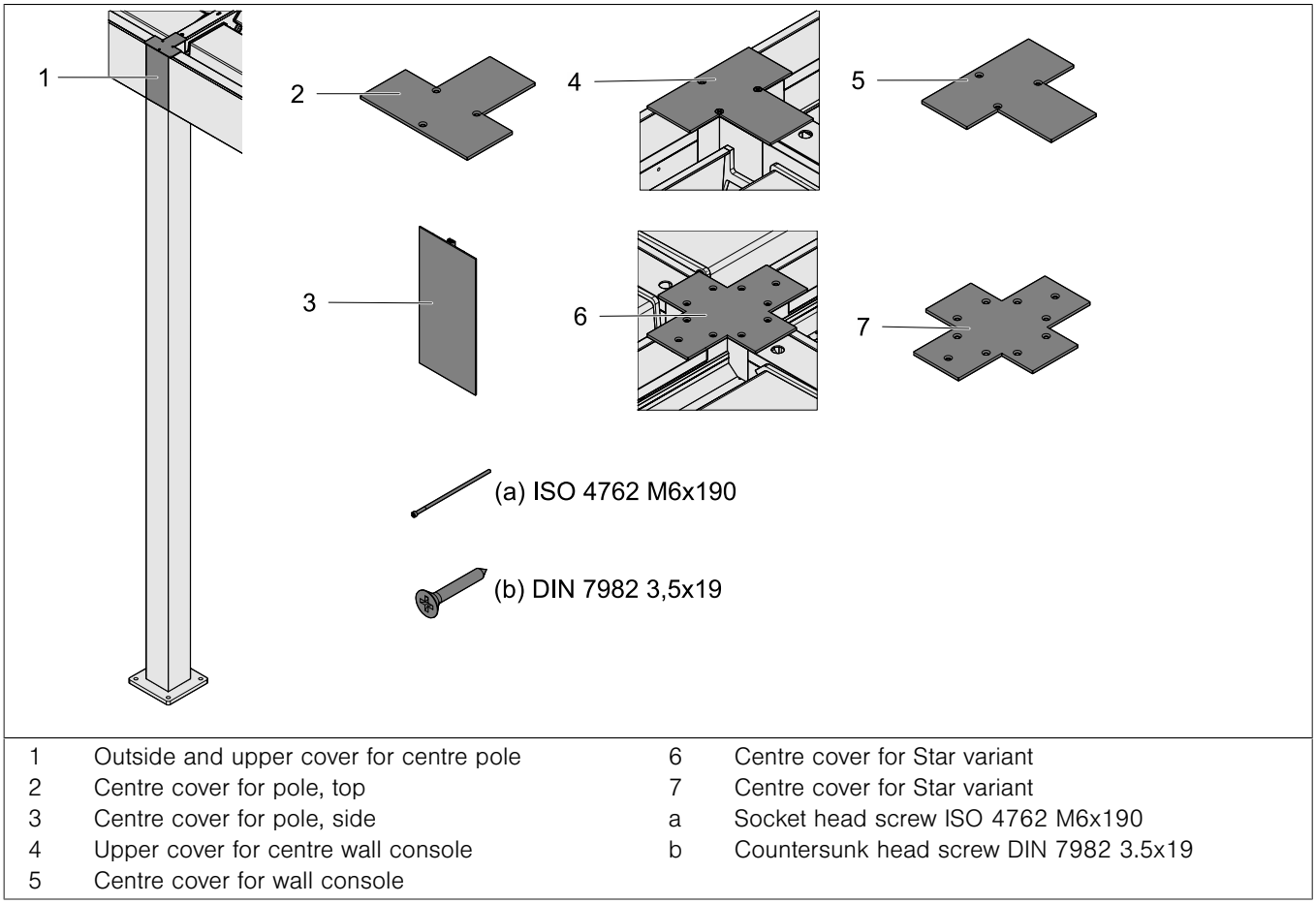


- Firmly press the cover onto the wall console holder from below.

9



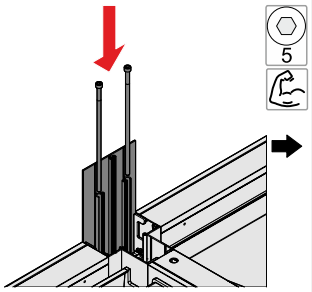
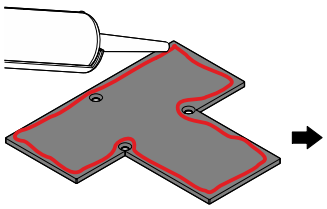
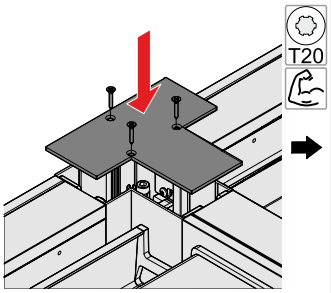
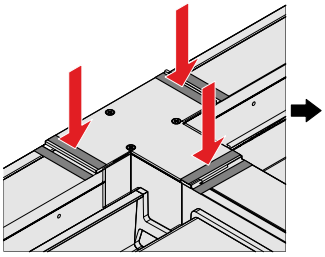
Installing the outside cover and upper cover (Line and Star)



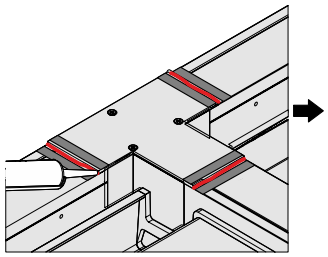
1	Outside and upper cover for centre pole	6	Centre cover for Star variant
2	Centre cover for pole, top	7	Centre cover for Star variant
3	Centre cover for pole, side	a	Socket head screw ISO 4762 M6x190
4	Upper cover for centre wall console	b	Countersunk head screw DIN 7982 3.5x19
5	Centre cover for wall console		

Fig. 41: Installing the centre outside cover

Installing the centre cover

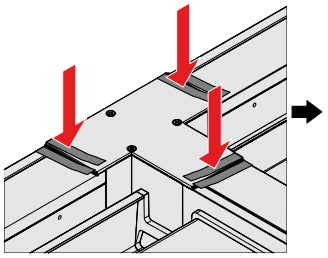
1	2	3	4
			
■ Screw the centre covers (3) (outside) on all poles from the top downward using the screws M6 x 190 (a).	■ Apply sealant around the edge of the top covers (width of sealant bead at least 3 mm).	■ Place the upper covers (2) on the corners and screw each in place using 2 screws 3.5 x 19 (b).	■ Apply adhesive tape a distance of 10 mm between the cover edge on the rain hood and on the upper cover.

5



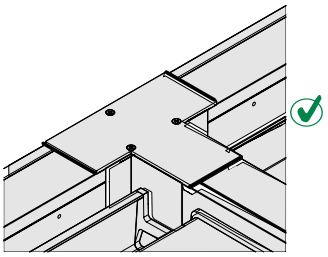
- Apply the sealant to the edge of the cover and smooth it out.

6



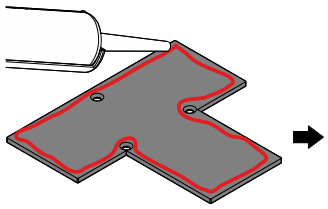
- Pull off the adhesive tape.

7



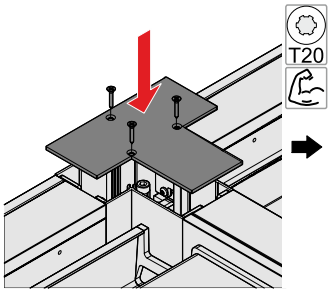
Installing the centre cover (wall console)

1



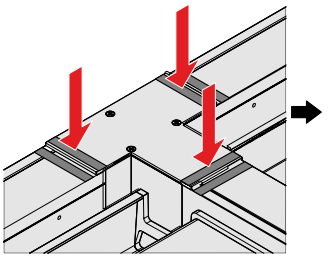
- Apply sealant around the edge of the top covers (width of sealant bead at least 3 mm).

2



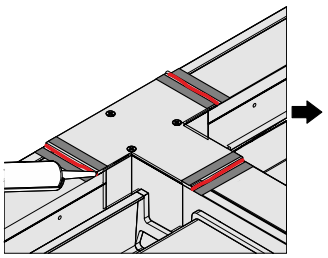
- Place the upper covers (2) on the corners and screw each in place using 2 screws 3.5 x 19 (b).

3



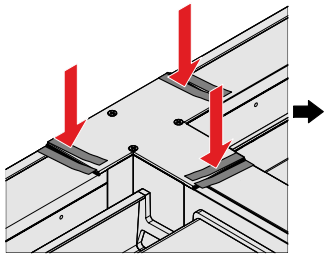
- Apply adhesive tape a distance of 10 mm between the cover edge on the rain hood and on the upper cover.

4



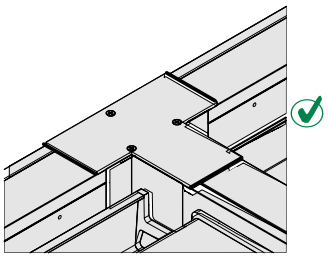
- Apply the sealant to the edge of the cover and smooth it out.

5



- Pull off the adhesive tape.

6



5.20 Performing a functional check (slat roof)

CAUTION
Risk of crushing from failure to exercise care during operation.

Persons who are located within the projection area may be injured.

- Keep the path of the product clear of people.
- Keep children away from the operating elements.

Functional check procedure

INFO
To be able to perform a functional check, a **PRCD-S personal protection line** must be connected to the electric distribution.

The unit is operated using the **WMS Hand-held transmitter**. The procedure is described in the "Trial run" section of the accompanying instructions for the motor.

- Connect the personal protection line PRCD-S with the line piece of the electric distribution.
- Connect the personal protection line PRCD-S with the power supply.

INFO
of the motors used are not intended for continuous operation.

The integrated thermal protection switches the motor off after approx. 4 minutes. The product will be ready again for use after 10 to 15 minutes.

- When using the product, avoid operating the motor continuously over a lengthy period.

General procedure

- Extend and retract the product several times. Check the front and rear limit positions of the product. If necessary, adjust the motor limit positions see Chapter 5.28/Page 83.

Cut off the line piece at the distributor.

GEFAHR DURCH STROM
Electric shock!

The line piece on the distributor is connected to the power supply via the personal protection line.

- Before cutting off the line piece at the distributor, the PRCD-S personal protection line must be unplugged again.

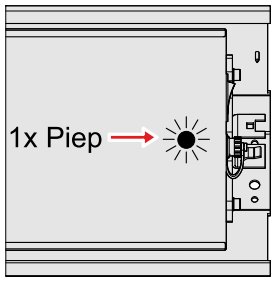
INFO
With RGB strips: only cut off the line piece after the RGB hand-held transmitter has been programmed and the power socket has been tested.

Switching on the operating voltage on the radiant heater (if present)

INFO
When using a WMS Plug receiver power, the heating status LED does not flash.

- Switch on the operating voltage.
- Ensure that the radiant heater does not begin heating.

1



With WMS Dimmer 0-10 V

- The radiant heater emits a beep. The radiant heater is in standby mode and the heating status LED flashes.

5.21 Installing the awning with easyZIP guidance (optionally)

INFO
To install the awning with easyZIP guidance, follow the accompanying instructions.

Sealing the box between the beams

- Seal the box of the awning with easyZIP guidance at the beam at the top and at the side with EPDM tape.

Line routing for the awning with easyZIP guidance

- Route the line from the awning through the pole and high up into the beam.
- Route the line from the beam into the connection box.

5.22 On-site connection

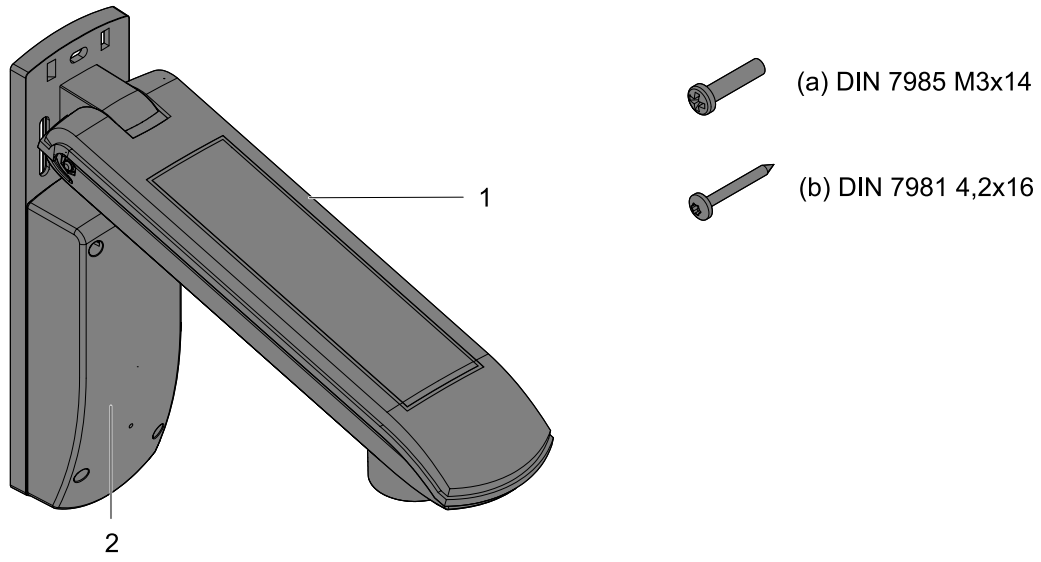
Note the target group for this task (see Page 3).

GEFAHR DURCH STROM
Electric shock!

Electrical work on electrical systems that expand the electrical house installation are only permitted to be performed by an installation company registered in the installers directory of the network operator.

- Contract a registered installation company to perform the on-site connections in adherence with the applicable standards.

5.23 Installing the WMS Weather station plus (optional)



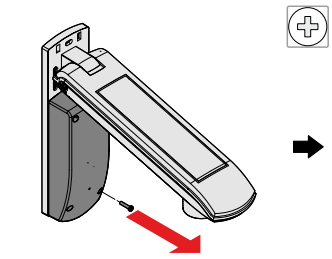
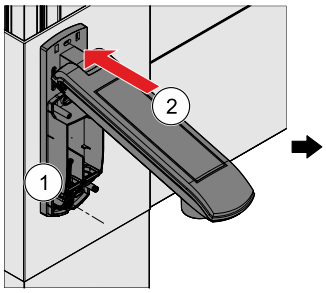
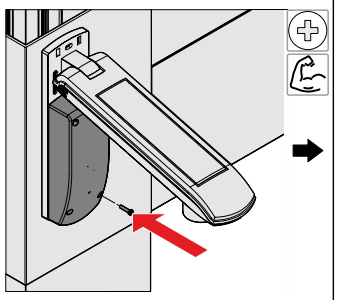
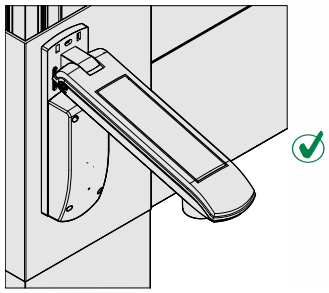
1	Weather station	a	Pan head screw DIN 7985 M3x14
2	Cover	b	Pan-head tapping screw DIN 7981 4.2x16

Fig. 42: Installing the weather station (optional)

INFO
The WMS Weather station plus must be installed in a location that is exposed to the weather.

Important information on the installation location is contained in the accompanying instructions for the WMS Weather station plus.

These instructions only describe the installation directly on the pole of the slat roof. If the location of the slat roof does not meet the requirements placed on the installation location, the weather station is not permitted to be attached to the pole of the slat roof but must instead be installed in a suitable location. Instructions on the general installation can be found in the accompanying instructions for the WMS Weather station plus.

1	2	3	4
			
■ Unscrew the screws of the cover and remove them.	■ Pass the line (1) through the hole in the mounting plate. ■ Attach the mounting plate to the pole using screws 4.2 x 16 (b). ■ Connect the line in the weather station. Note the accompanying instructions for the WMS Weather station plus.	■ Attach the cover to the mounting plate using screws M3 x 14 (a).	

INFO
The respective WMS studio pro file (.wmsp file) and a parameter protocol is available in myWAREMA for download approx. 2 – 3 workdays before the goods are delivered. This file, the free WMS studio pro PC software and the WMS flash drive can be used to integrate the unconfigured WMS products (which have not been taught) such as the integrated awnings with easyZIP guidance or WMS Weather station plus in the WMS network and to comfortably adjust the settings.

5.24 Adjusting the WMS Weather station plus (optional)

INFO
If the installation location of the roof system is not at ground level, the WMS Weather station plus with a power supply is **mandatory**. Automatic lowering of the vertical textile shading via the control must be prevented.

Note:
The ice monitoring overrides all other control modes and cannot be overridden manually (safety function). The ice alarm can be reset via WMS WebControl pro without a password (per app and browser). After the end of the safety function, the comfort modes are active again and may trigger a new movement.

	Automatic control *1)					
	ZIP *2)			**Lamaxa** *3)		
	Limit value	**Control mode**	**Position ZIP**	**Limit value**	**Control mode**	**Position of Lamaxa**
Wind	> 13 m/s *4)	On	Retract	> 13 m/s	On	Tilt the slats horizontally (close)
Rain	-	Off	-	Rain	On *6)	Tilt the slats horizontally (close)
Ice *5)	< +4 °C and rain	On	Retract	< +4 °C and rain	On	Tilt the slats horizontally (close)

*1) **Note:**
The comfort functions (such as sun control, time switch) must be deactivated in winter. Deactivation can be performed using the hand-held transmitter WMS WebControl pro, app or browser.
Safety functions (wind, rain, ice) must be set as described in the table.
The customer is fully responsible for adhering to the operating conditions specified by WAREMA.

*2) ZIP = Vertical textile shading (optional)

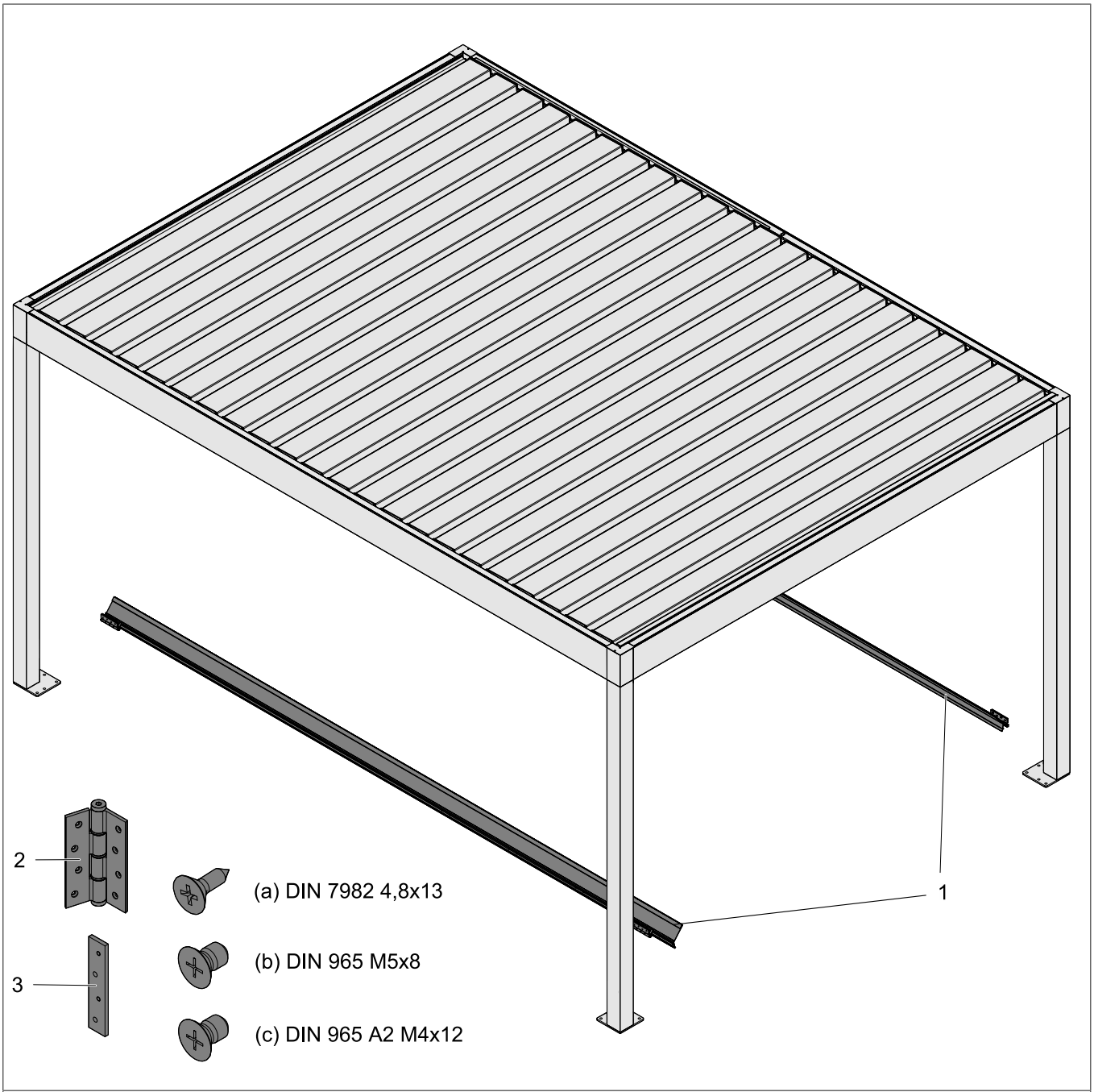
*3) Lamaxa = slat roof or fabric roof

*4) The wind speed limit to be set for the control/weather station must be taken from the wind resistance chapter
The installation location of the wind sensor has an influence on the triggering behaviour of the control/weather station.

*5) **Note:**
The ice monitoring overrides all other control modes and cannot be overridden manually.
To prevent freezing of the slats, the slats can be opened slightly in the cold winter months. The adjustment must be made by the qualified specialist.
If the size-dependent snow load is exceeded, the slat roof must be cleared of snow.
In areas with heavy snowfalls, the slat can be positioned vertically (90°) so that snow does not weigh down the construction of the slat roof. The adjustment must be made by the qualified specialist.

*6) In the winter months (November - April), the control function must be set to **off**.

5.25 Installing the protection profile



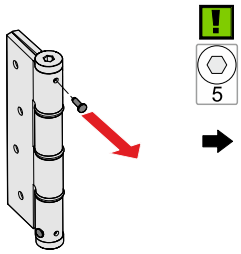
1	Protection profile	a	Tapping screw DIN 7982 4.8x13
2	Hinge	b	Countersunk head screw DIN 965 M5x8
3	Spacer	c	Countersunk head screw DIN 965 A2 M4x12

Fig. 43: Installing the protection profile

INFO
The hinge arms are under tension when delivered.

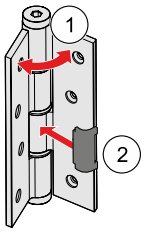
INFO
Because it is hooked in place, the protection profile can be aligned manually. The drilled holes in the hinge and protection profile must lie one on top of the other.

1



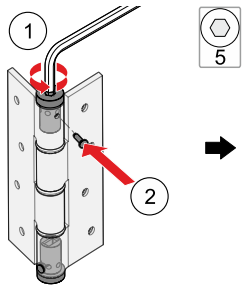
- Take the hinge out of the packaging and release the black pin with a size 5 hex key.
- Remove the pin from the hinge by moving the tool back and forth.

2



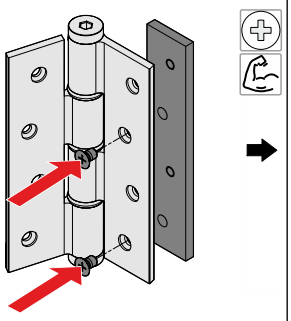
- Fold open the hinge leaves and position the mounting aid into the opening in the hinge provided for this purpose. The mounting aid is used to ensure that the hinge leaves do not fold together and the integrated spring can be put under tension.

3



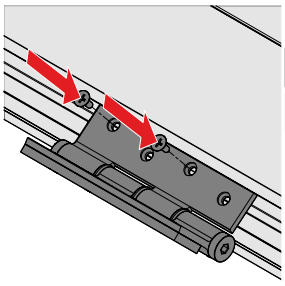
- Turn the hinge flange anticlockwise using a hex key.
- Insert the pin into the fourth stacked hole and remove the hex key.

4



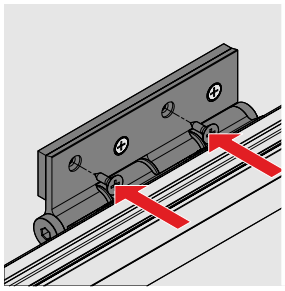
- Attach the spacer to the hinge leaf using 2 screws M5 x 8 (b).

5



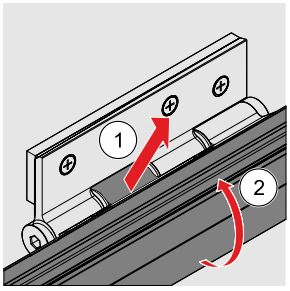
- Hook the protection profile into the hinge leaves.
- Attach the hinge leaves to the protection profile using 2 screws 4.8 x 13 (a).

6



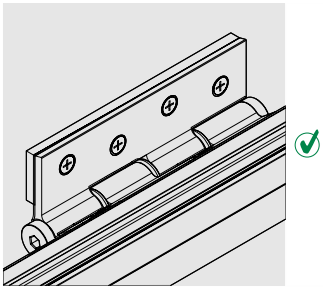
- Fasten the hinge assemblies on the beam at the drilled holes provided for this purpose using 2 screws M4 x 12 (c) each.

7

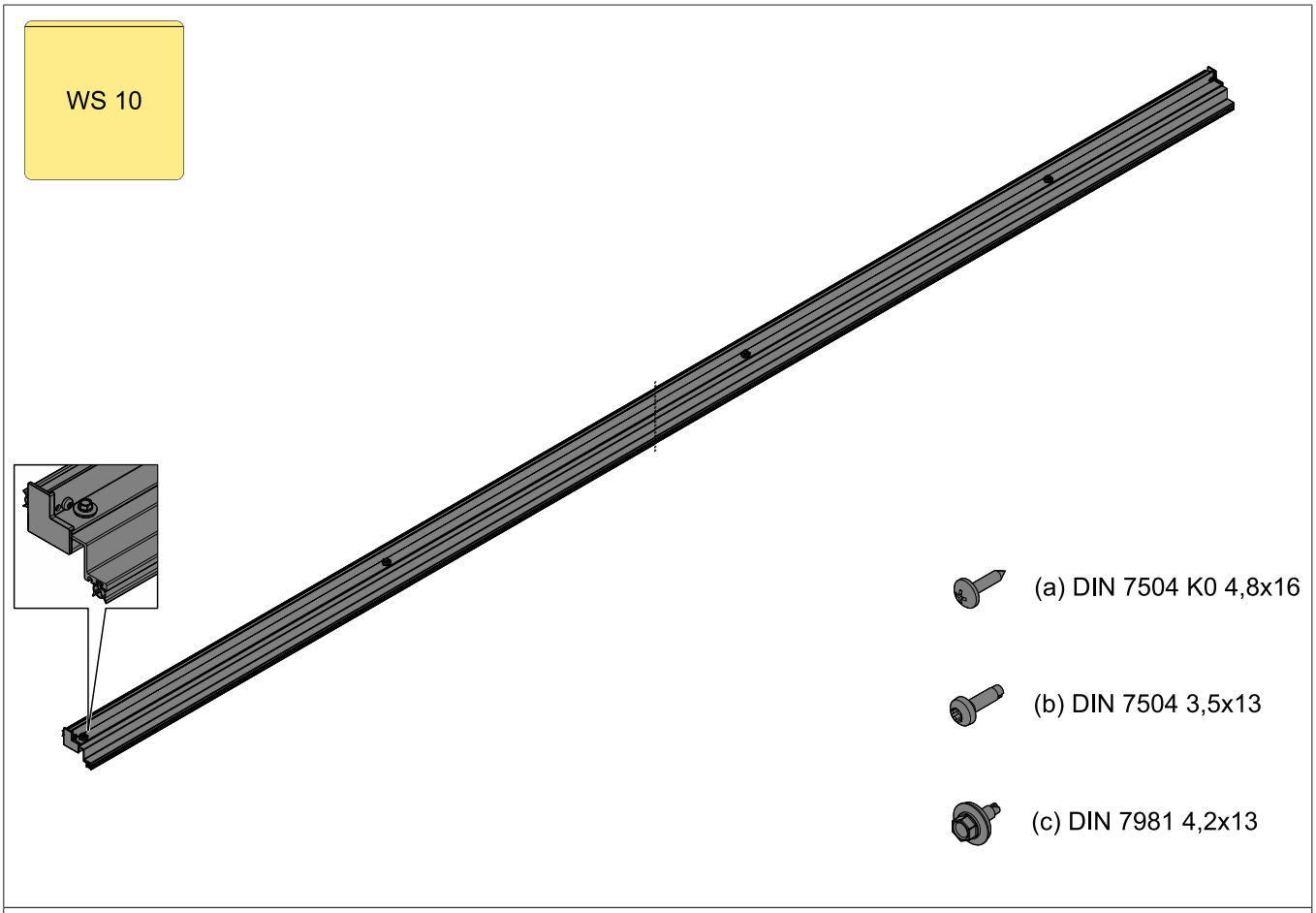


- Remove the mounting aid (1) from the hinge after installing the slats and fold up the protection profile (2) manually.

8

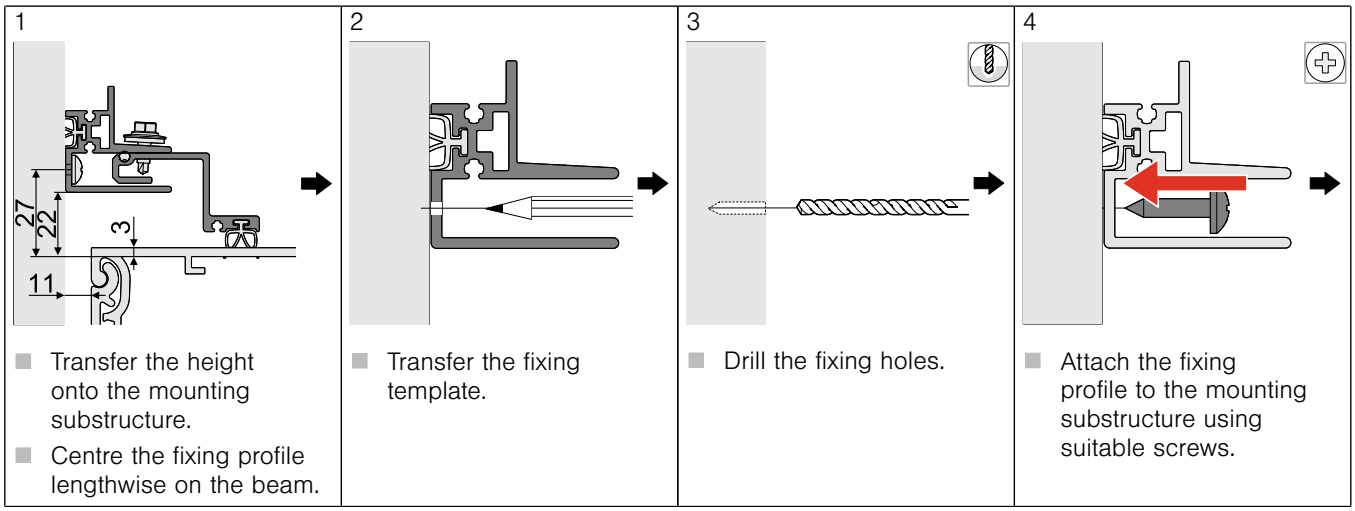


5.26 Installing the fixing profile of the wall connection system on the wall via the beam (optionally)



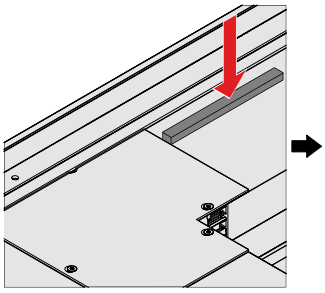
a	Drilling screw with seal DIN 7504 K0 4.2x13	c	Pan-head tapping screw DIN 7981 4.8x16
b	Pan-head drilling screw DIN 7504 3.5x13		

Fig. 44: Installing the wall connection profile (all dimensions in mm)



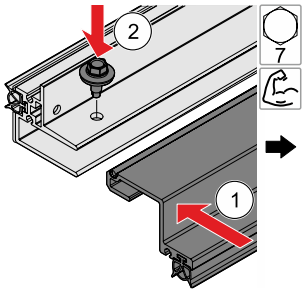
- Transfer the height onto the mounting substructure.
- Centre the fixing profile lengthwise on the beam.
- Transfer the fixing template.
- Drill the fixing holes.
- Attach the fixing profile to the mounting substructure using suitable screws.

5



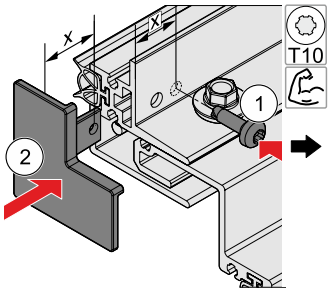
- Glue the foam sealing strip in place in rear area on the rain hood (approx. 30 mm from the rear edge).

6



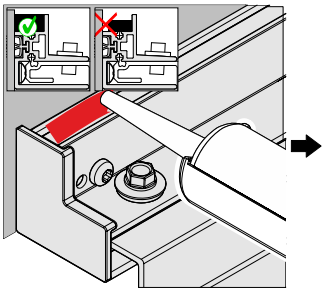
- Slide the hood profile all the way into the fixing profile and fasten it using screws 4.2 x 13 (c).

7



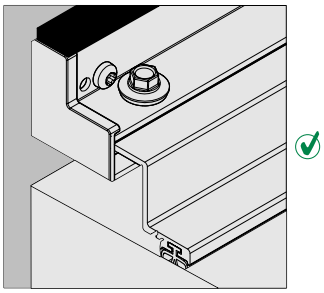
- Transfer dimension "x" of the side part (2) onto the fixing profile, then slide it into the fixing profile and fasten using screws 3.5 x 13 (b).

8



- Fill the joint at the wall with joint sealant along the entire surface.

9



5.27 Finishing the installation

General information

- Hand the documentation over to the operator.
- Instruct the operator on how to use this product.
- Complete and issue the handover report.

5.28 Troubleshooting: Incorrect motor limit positions

Cause	Remedy
The motor has not been learned in or has not been operated three times	■ Learn in the motor (see separate instructions for the motor).

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