



These operating instructions contain important product information and safety instructions. This information must be taken into consideration prior to carrying out any activities relating to the product and observed throughout. These operating instructions must be made available to all parties and stored in a safe place.



...we protect people!

TRANSLATION OF THE ORIGINAL OPERATING INSTRUCTIONS

ECONFENCE®
protection · german made

BASIC LINE

PROTECTIVE FENCING

System heights 2000 | 2200 mm

Version: 08/2018



NOTES

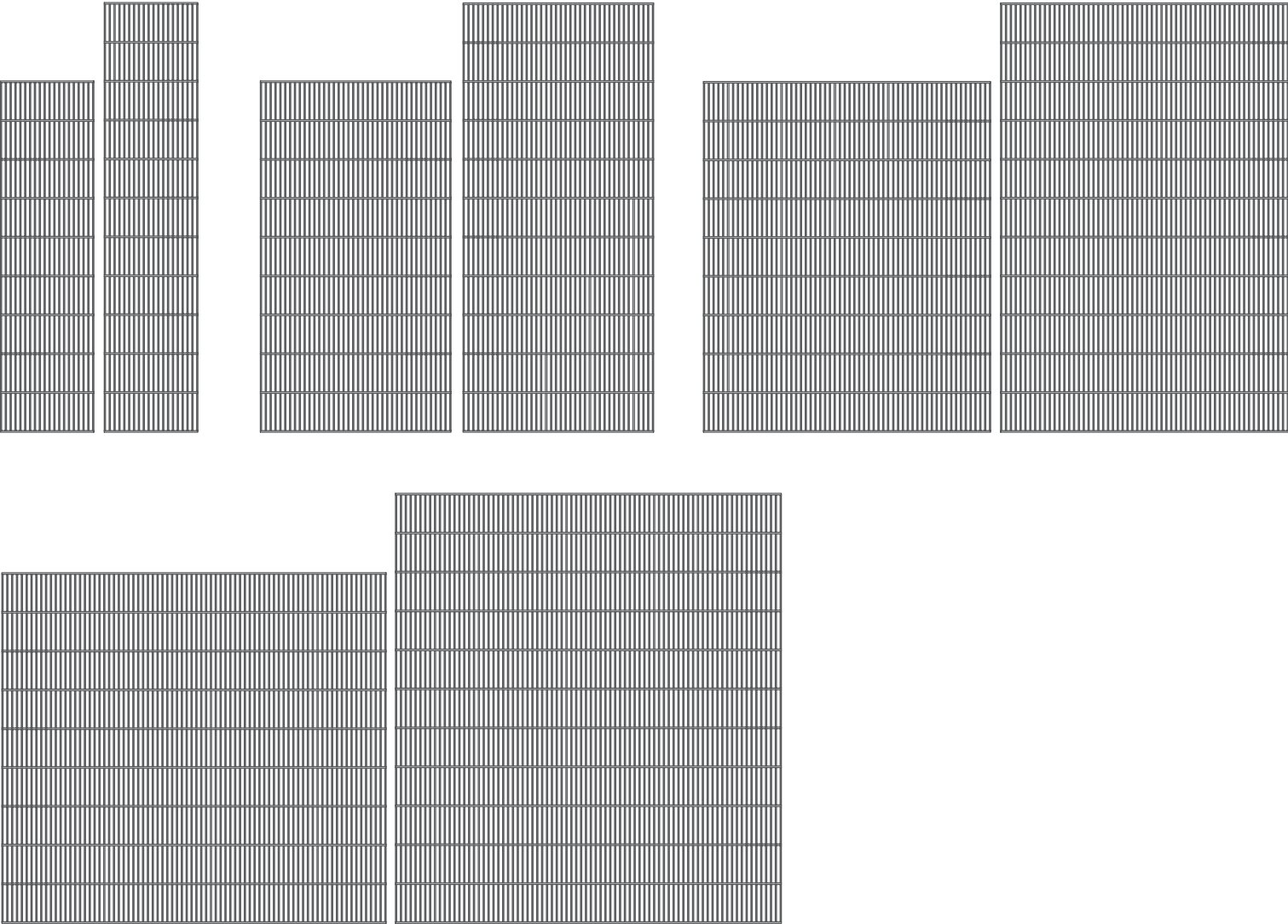
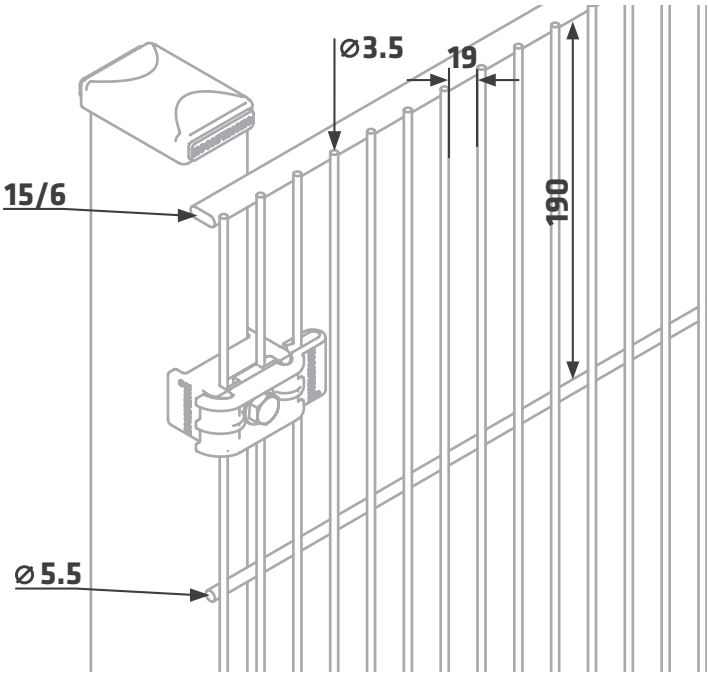
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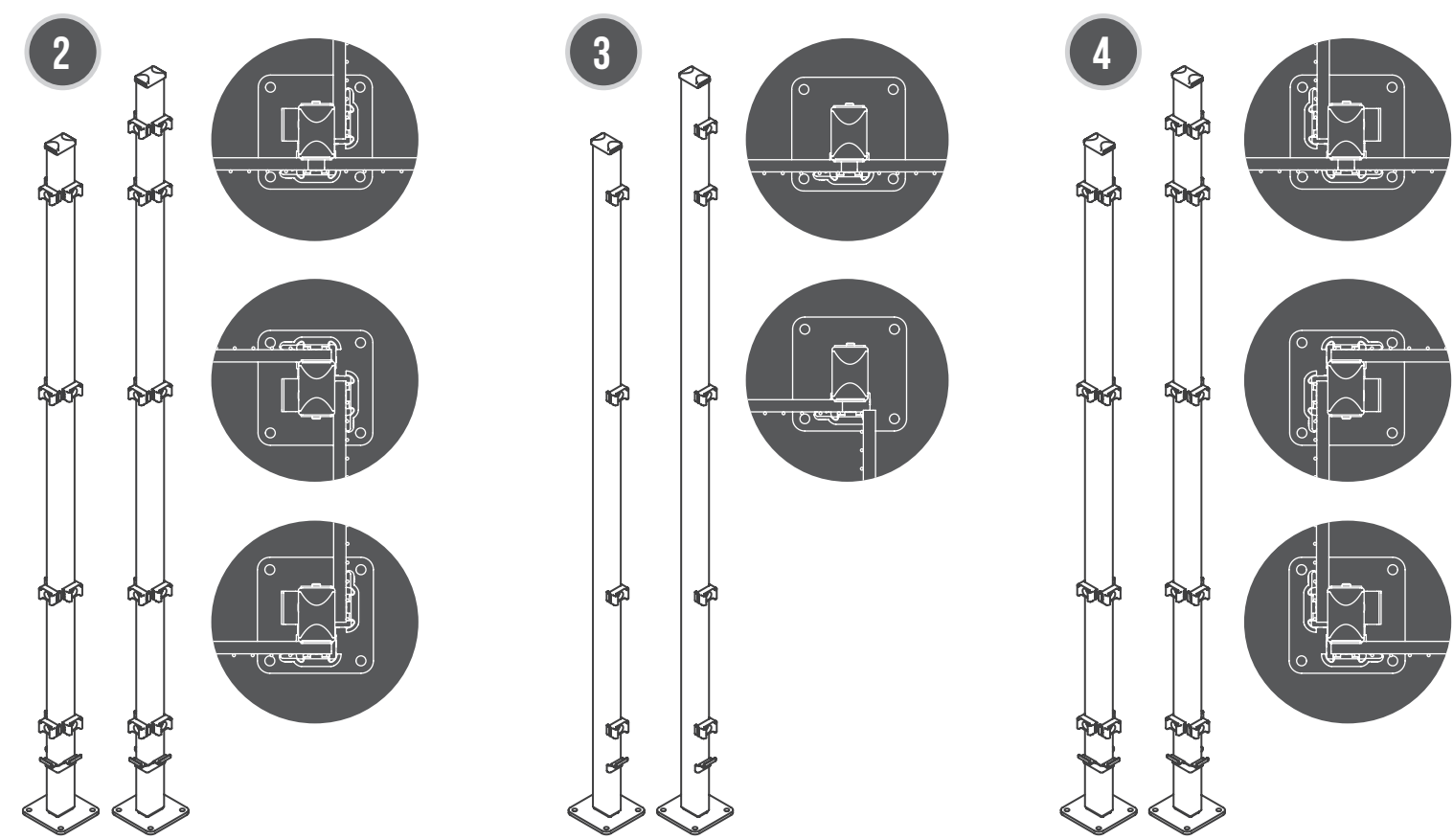
1. Product description and technical data

The protective fencing elements are available in the following design as standard:

1



1. Product description and technical data



BASIC LINE	Widths (mm)	Opening widths (mm)	Heights (mm)	Weights (kg)
1 Mesh elements	485	--	1806	4.80
	485	--	2006	5.44
	984	--	1806	9.65
	984	--	2006	10.65
	1483	--	1806	14.50
	1483	--	2006	16.45
	1983	--	1806	19.35
	1983	--	2006	21.96
2 Corner post, left	60/40	--	2017	8.08
	60/40	--	2217	8.80
3 Row post	60/40	--	2017	7.64
	60/40	--	2217	8.26
4 Corner post, right	60/40	--	2017	8.08
	60/40	--	2217	8.80

2. Intended use and limitations



The ECONFENCE® BASIC LINE protective fencing system is designed to establish a fixed, safe distance to protect people from coming into contact with hazardous machinery and facilities.
The fencing elements are designed for use as fixed guards according to DIN EN ISO 14120.

Any other use shall require the written approval of the manufacturer. If machines or systems are not surrounded entirely by the protective fencing system, the open areas (such as material transfer points and personnel access points) must be secured by the plant engineer in accordance with the risk assessment and the relevant legislation.

Intended use also includes taking the operating instructions into consideration and observing the cleaning, maintenance and inspection conditions. The guard has been designed for industrial machine and system construction and may only be mounted, operated, maintained and repaired by trained, instructed specialists.

The owner / operator must check whether the currently valid standards and regulations require the protective fencing to have a protective earth connection.

The protective earth connection may only be carried out by a qualified electrician.

When incorporating the protective fencing systems into the overall security concept of the machine or system, the following standards must be taken into consideration:

DIN EN ISO 12100	Safety of machinery – General principles for design – Risk assessment and risk reduction
DIN EN ISO 11161	Safety of machinery – Integrated manufacturing systems – Basic requirements
DIN EN ISO 13857	Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs
DIN EN 349	Safety of machinery – Minimum gaps to avoid crushing parts of the human body
DIN EN ISO 14120	Safety of machinery – Guards – General requirements for the design and construction of fixed and movable guards
DIN EN ISO 14119	Safety of machinery – Interlocking devices associated with guards – Principles for design and selection
DIN EN ISO 13849-1	Safety of machinery – Safety-related parts of control systems – Part 1: General principles for design

Depending on the machine / system constellation, other standards which are not listed here must also be taken into consideration.

The system is not intended for outdoor use. Any kind of manipulation is prohibited.

The protective fencing may only be set up in an environment with temperatures from 10°C to max. 50°C (not corrosive ambient air).



...we protect people!

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EG-KONFORMITÄTSERKLÄRUNG

im Sinne der EG Maschinenrichtlinie 2006/42/EG, Anhang II A

EC DECLARATION OF CONFORMITY

according to EC Machinery Directive 2006/42/EC, Annex II A

Hersteller | Manufacturer

Tiemann Schutz-Systeme GmbH
Lübbecker Str. 16
32257 Bünde / Germany



Hiermit erklären wir, dass das Produkt:

Produktbezeichnung: Trennende Schutteinrichtung

Typ: ECONFENCE® BASIC LINE

Baujahr bzw. Seriennummer: ab 05/2016

den einschlägigen Bestimmungen der Richtlinie 2006/42/EG entspricht.

Es wurden folgende harmonisierte Normen angewandt:

- DIN EN ISO 14120:2016-05

We hereby declare that the product:

Product designation: Separating guard

Type: ECONFENCE® BASIC LINE

Year of build or serial number: as of 05/2016

meets the relevant provisions of directive 2006/42/EC.

The following harmonised standards have been applied:

- DIN EN ISO 14120:2016-05

Ort
City

Datum
Date

Unterschrift*
Signature*










Axel W. Tiemann
Geschäftsführer
Managing Director

Der Unterzeichner ist verantwortlich für die Zusammenstellung der technischen Unterlagen und gleichzeitig der verantwortliche Herausgeber der technischen Dokumentation.

*The signatory is responsible for the composition of the technical documents and at the same time the responsible publisher of the technical documentation.

4. Safety instructions and explanation of symbols

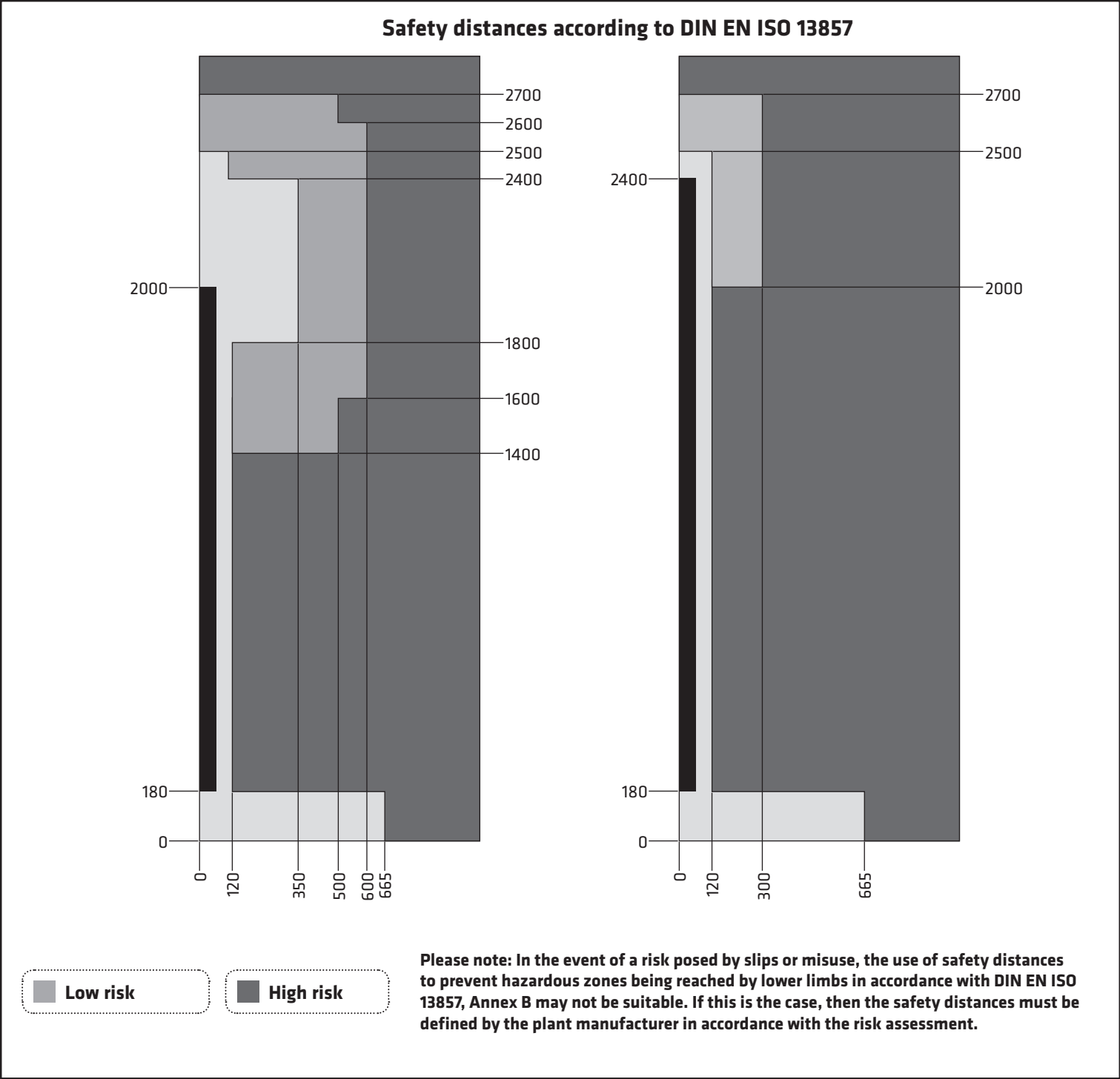
The safety symbols are to be noted and observed in each of the relevant sections of these operating instructions.

Symbol	Explanation
	Safety instruction (Failure to observe will result in injury or death)
	Functional instruction (Failure to observe will result in malfunctions or material damage)
	Hazardous area
	Non-hazardous area
	Magnified/detailed view
	Installation height
	Essential tool (refer to page 10)
	Use ear protectors
	Use protective eyewear

5. Assembly and installation



At least two people are required for assembly and installation. Wear personal protective equipment or fastened working clothes, wear safety footwear and head protection. In addition, goggles with side protectors must be worn during drilling in concrete. If dusts occur, filter mask of at least FFP 1 must be worn.
Only specialist personnel are authorised to carry out assembly and installation.
Prior to commencing the installation work, the machine or system being enclosed must be switched off or else made safe.
The machine / system must be switched off before installation and secured against unauthorised restarting by means of a lock-out/tagout lock. The key must always be carried on your person. Establish / check the required safety distances from the hazardous areas of the machine/system in accordance with DIN EN ISO 13857:



Safety distances only apply with the use of ECONFENCE® mesh elements with a mesh size of 19|190 mm.
Information on dimensions and weight specifications of the system components can be found in Section 1. Technical data, page 4.
The system is only intended to be used on the following surface (see page 10).
Only the fastening elements provided are to be used.
When installing the electrical equipment (such as cables, switches, control cabinet etc.) for the protective fencing system, the Requirements of DIN EN 60204-1 must be observed.

Should you have any further questions, please contact our Customer Service team on +49 (0) 5223 791995-0

5.1. Essential tools

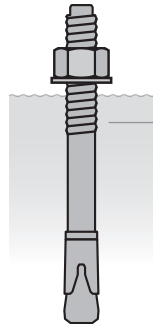
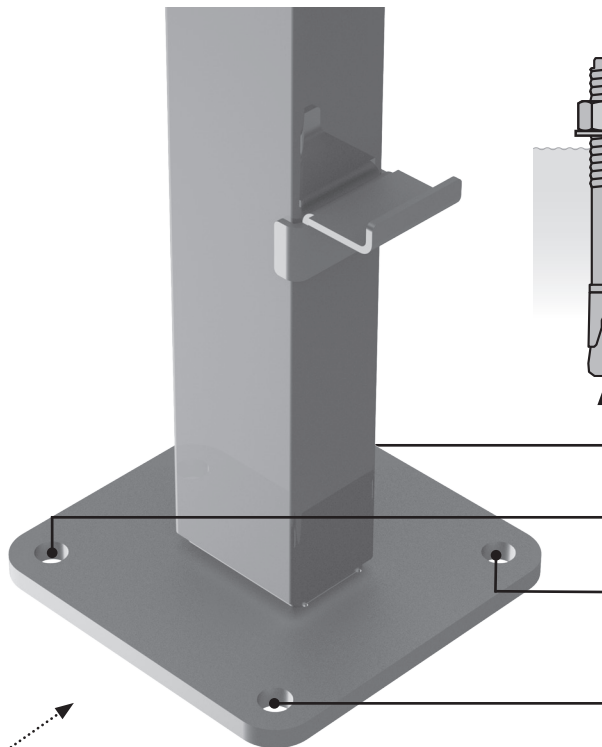
Product	<div data-bbox="874 174 970 273"></div> Tools
<div data-bbox="76 340 801 1093"></div> <div data-bbox="60 1111 379 1146">Post assembly (page 11)</div>	<div data-bbox="874 609 1359 797"><p>Drill with Ø 10 mm concrete drill bit</p><p>Pin chuck ZB10076 (see page 13)</p><p>Hammer</p><p>17 mm socket wrench</p><p>6 mm Allen key</p></div>
<div data-bbox="92 1196 316 1348"></div> <div data-bbox="60 1375 762 1877"></div> <div data-bbox="60 1912 437 1948">Mesh assembly (page 12-17)</div>	<div data-bbox="874 1514 1165 1585"><p>6 mm Allen key</p><p>13 mm socket wrench</p></div>

5.2. Post assembly

Substrate material: Concrete (uncracked) C20/25 to C50/60

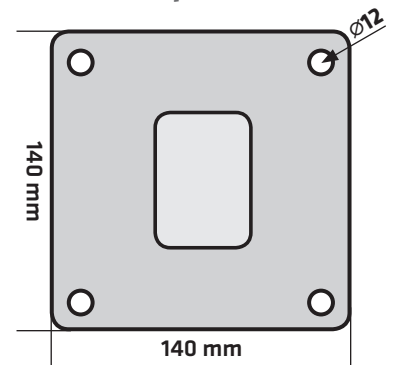


See page 10



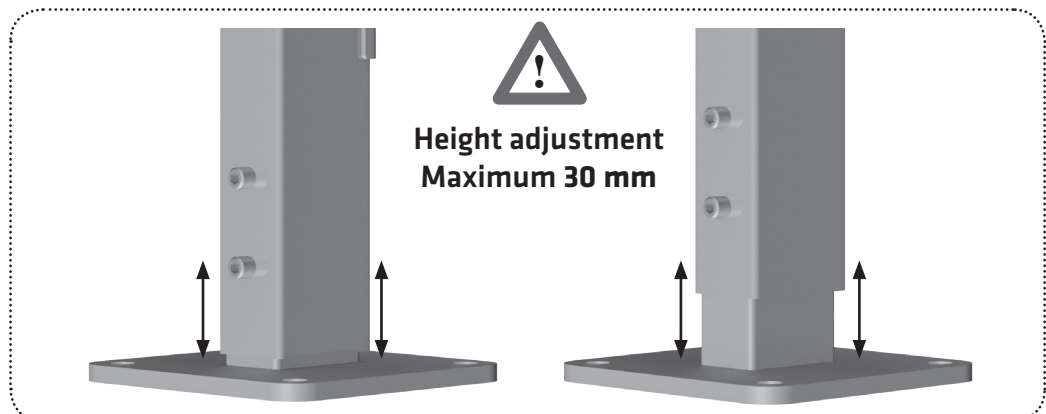
4 x  HSA M10x113 50/40/10

Top view



Technical data:

Dowel size	M10
Dowel length	113 mm
Approvals	ETA-11/0374
Substrate material	Concrete (uncracked) C20/25 – C50/60
Environmental factors	Indoors, dry
Edge clearance	50 mm
Operating principle	Torque-controlled expansion anchor
Standard embedment depth	50 mm
Nominal drill diameter	10 mm
Borehole depth	80 mm
Required tightening torque	25 Nm



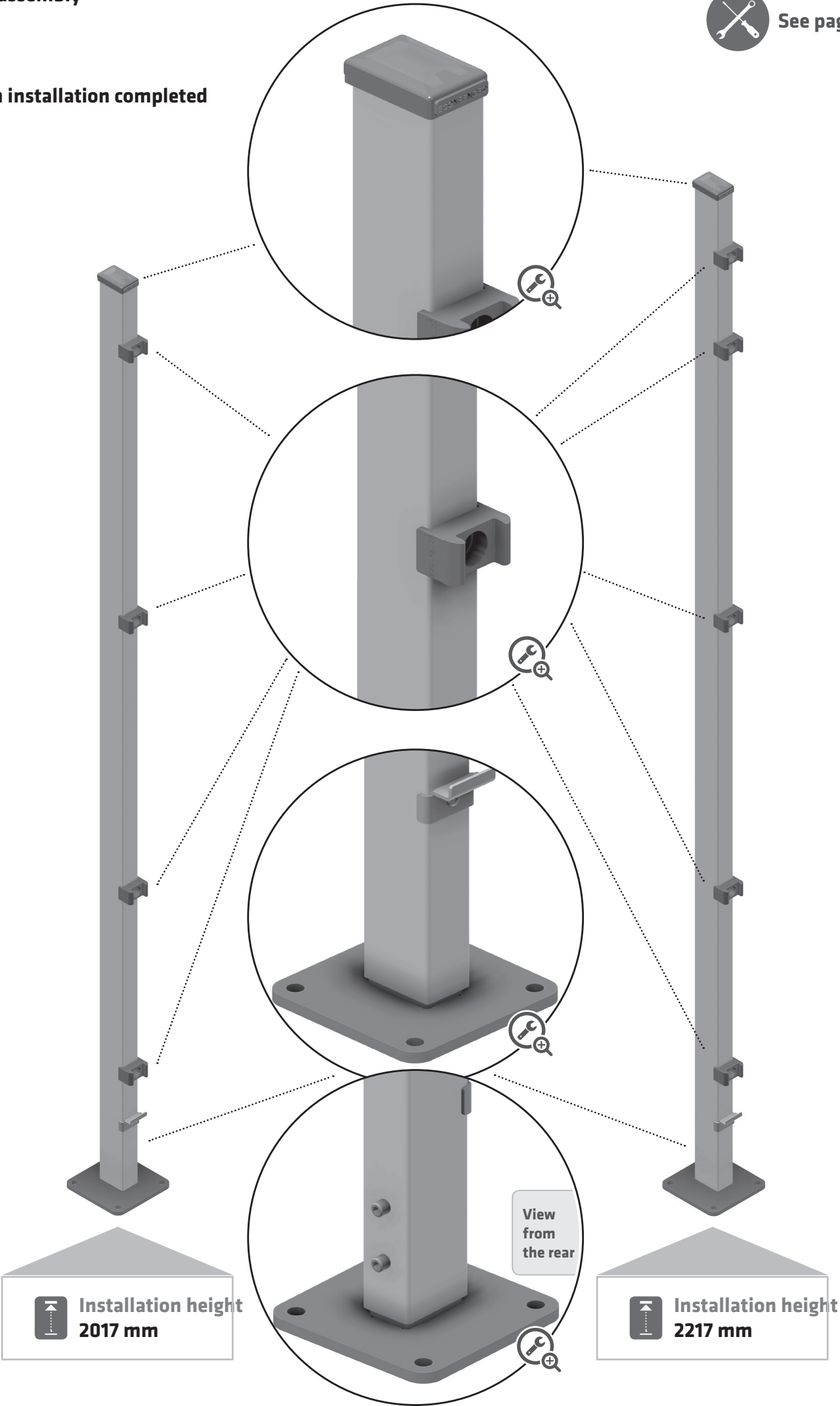
5.2. Post assembly



See page 10

Row post

View with installation completed

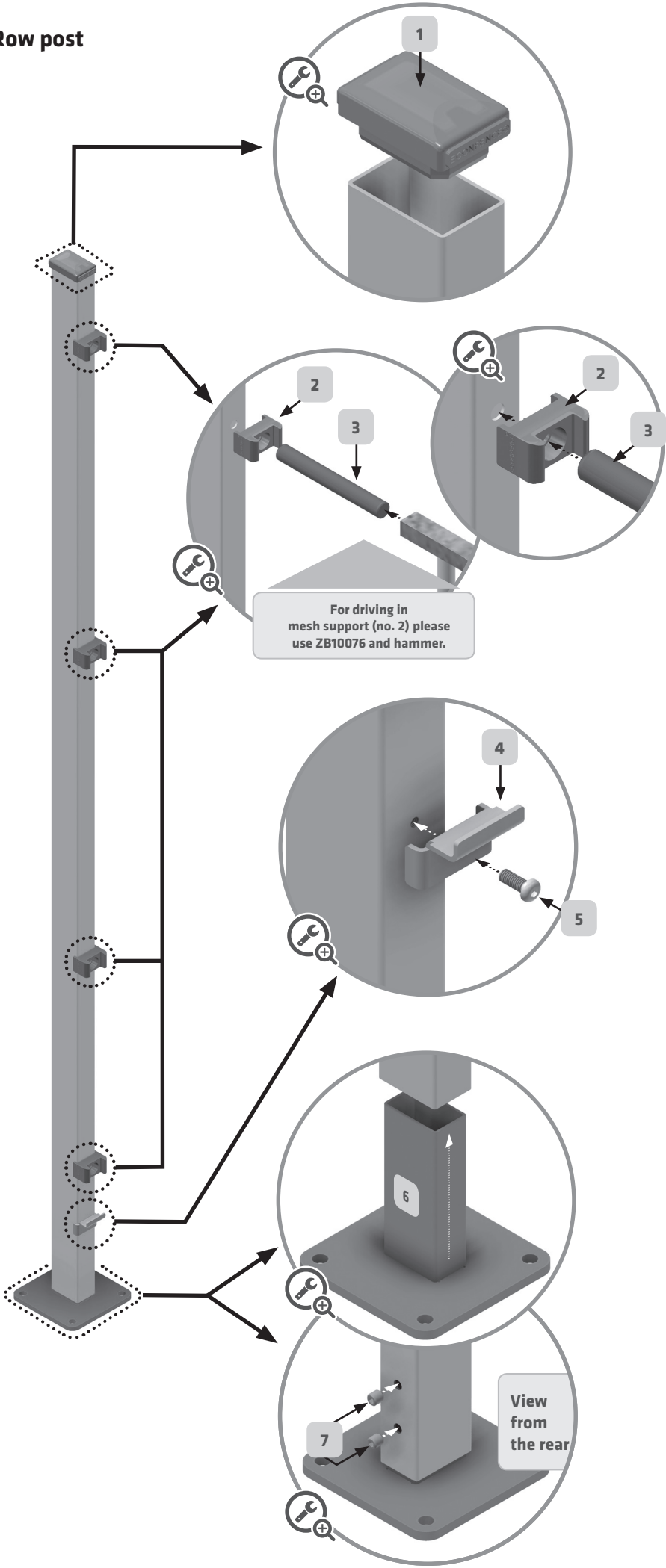


5.2. Post assembly

Row post



See page 10



1	ZB20097	
2	ZB21008	
3	ZB10076	
4	VA-B00024	
5	ISO 7380 M6x16	
6	S00001	
7	DIN913 8.8 M10x10	

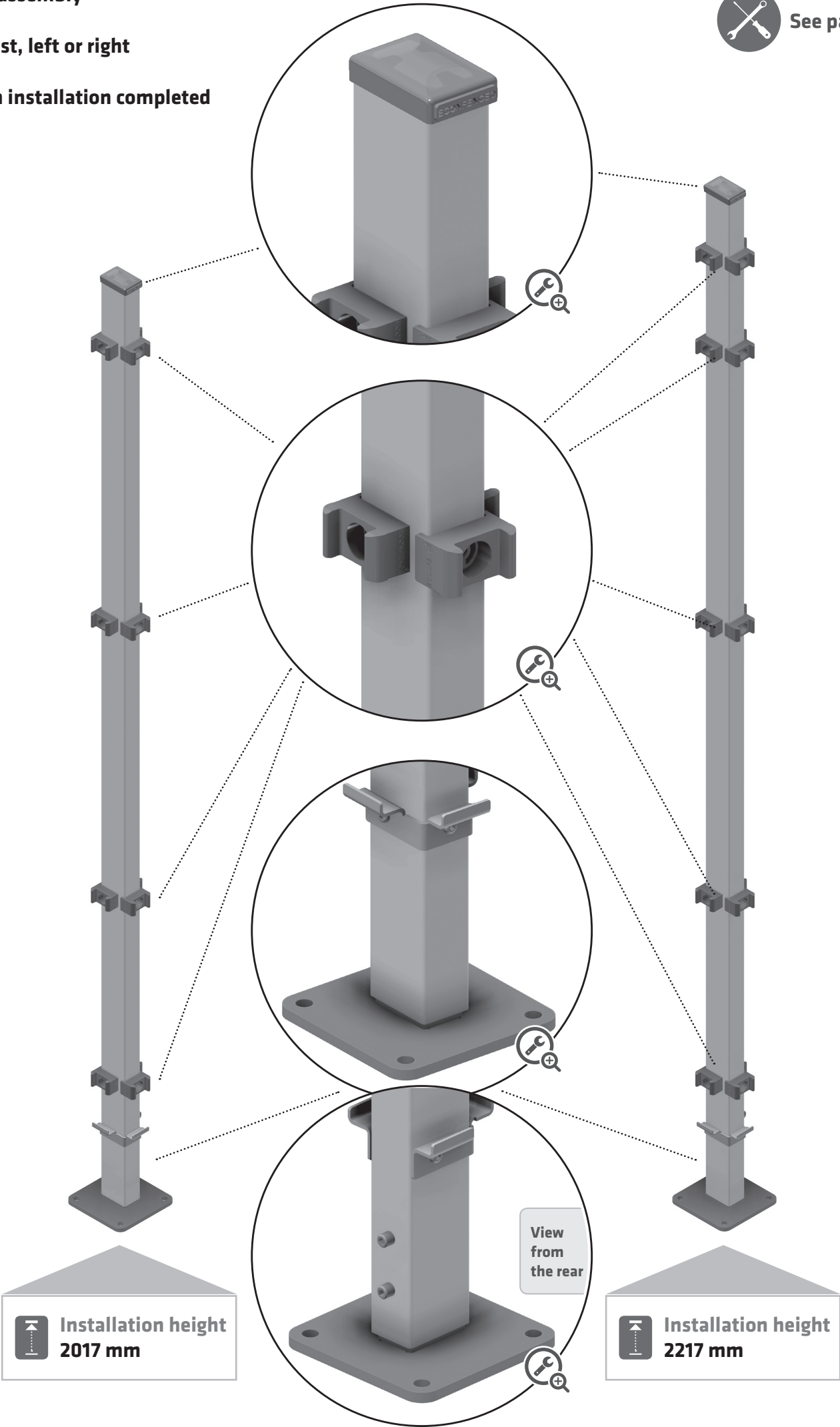
5.2. Post assembly



See page 10

Corner post, left or right

View with installation completed

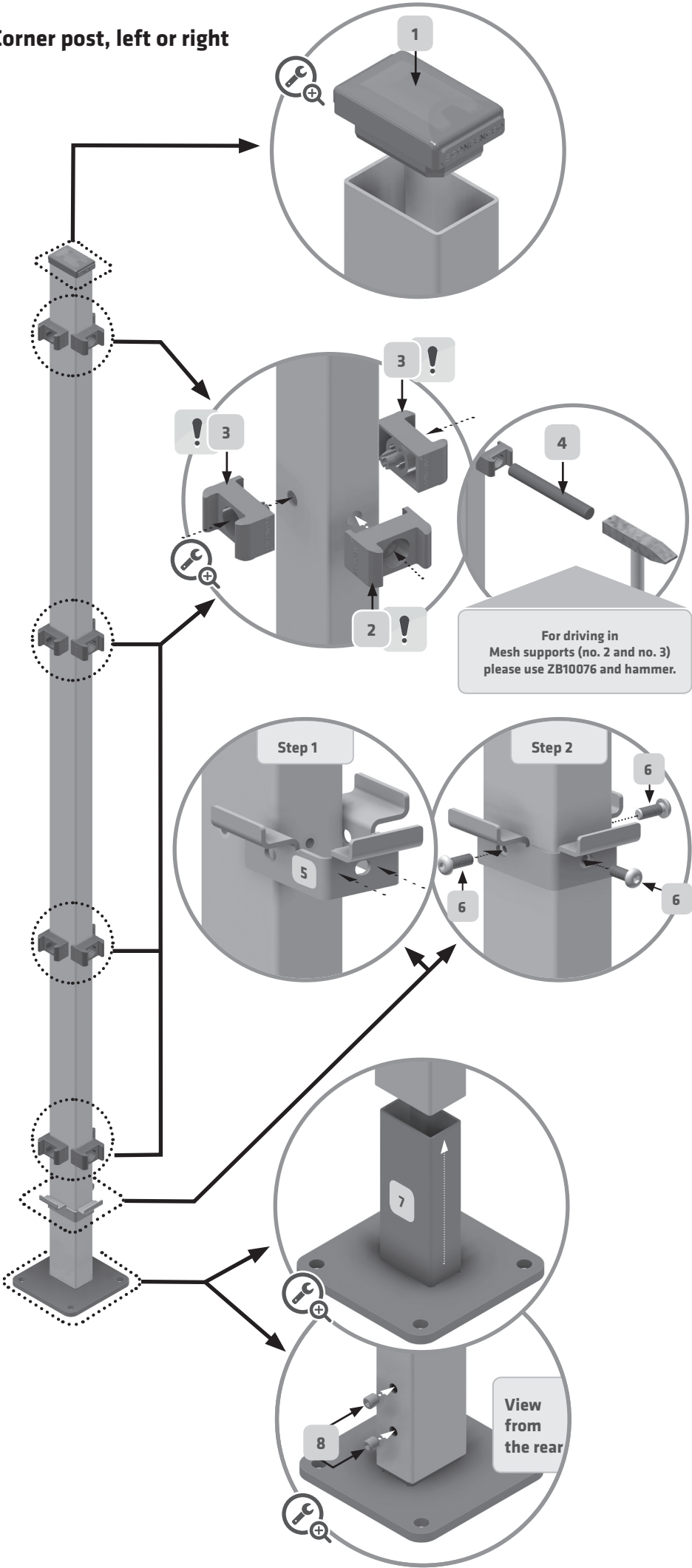


5.2. Post assembly

Corner post, left or right



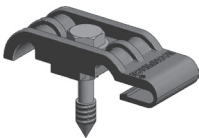
See page 10



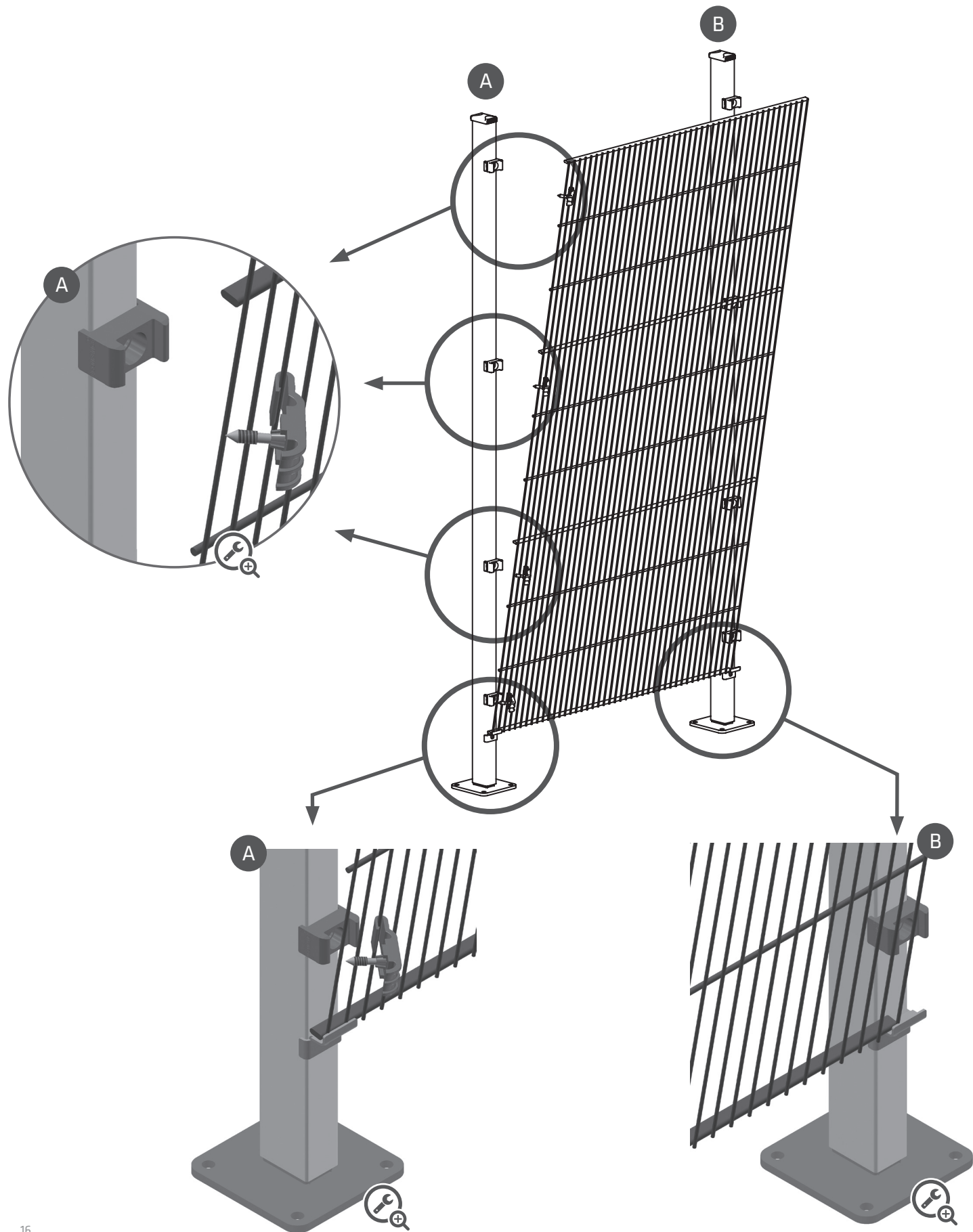
1	ZB20097	
2	ZB21008	
3	ZB21012	
4	ZB10076	
5	VA-B00026	
6	ISO 7380 M6x16	
7	S00001	
8	DIN913 8.8 M10x10	

5.3. Mesh assembly

Installation of clamping element ZB:



See page 10

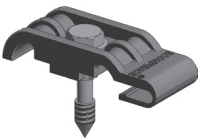


5.3. Mesh assembly

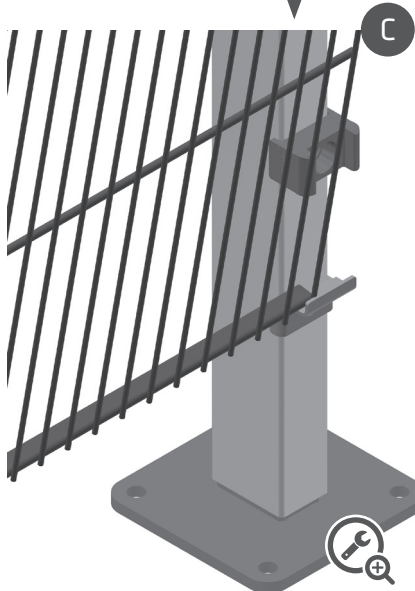
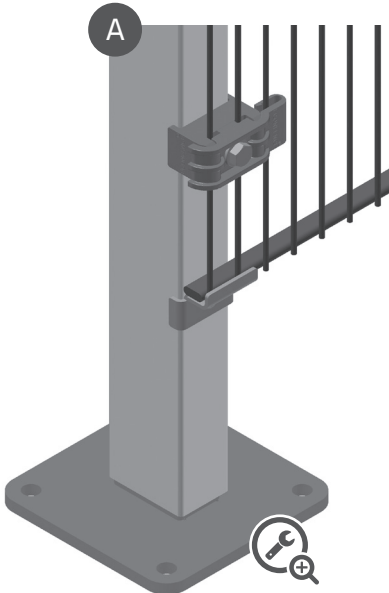
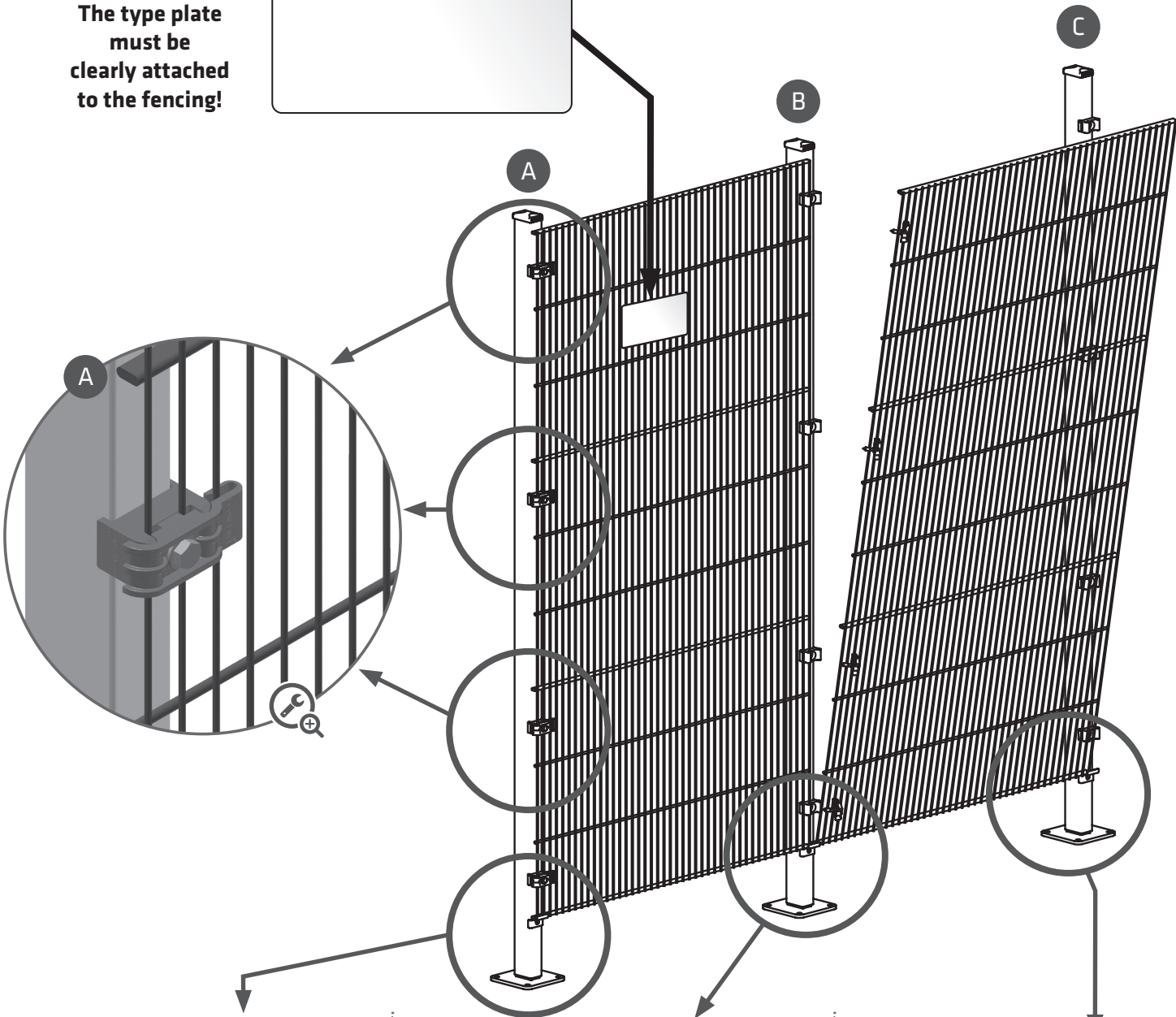
Installation of clamping element ZB3'



See page 10



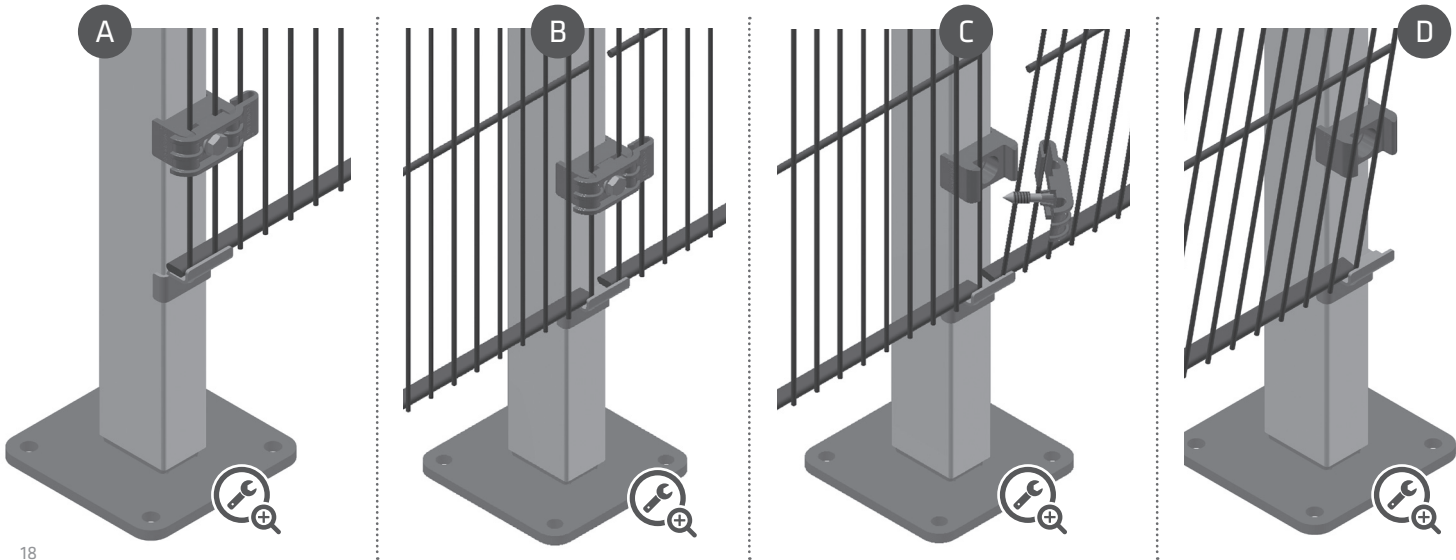
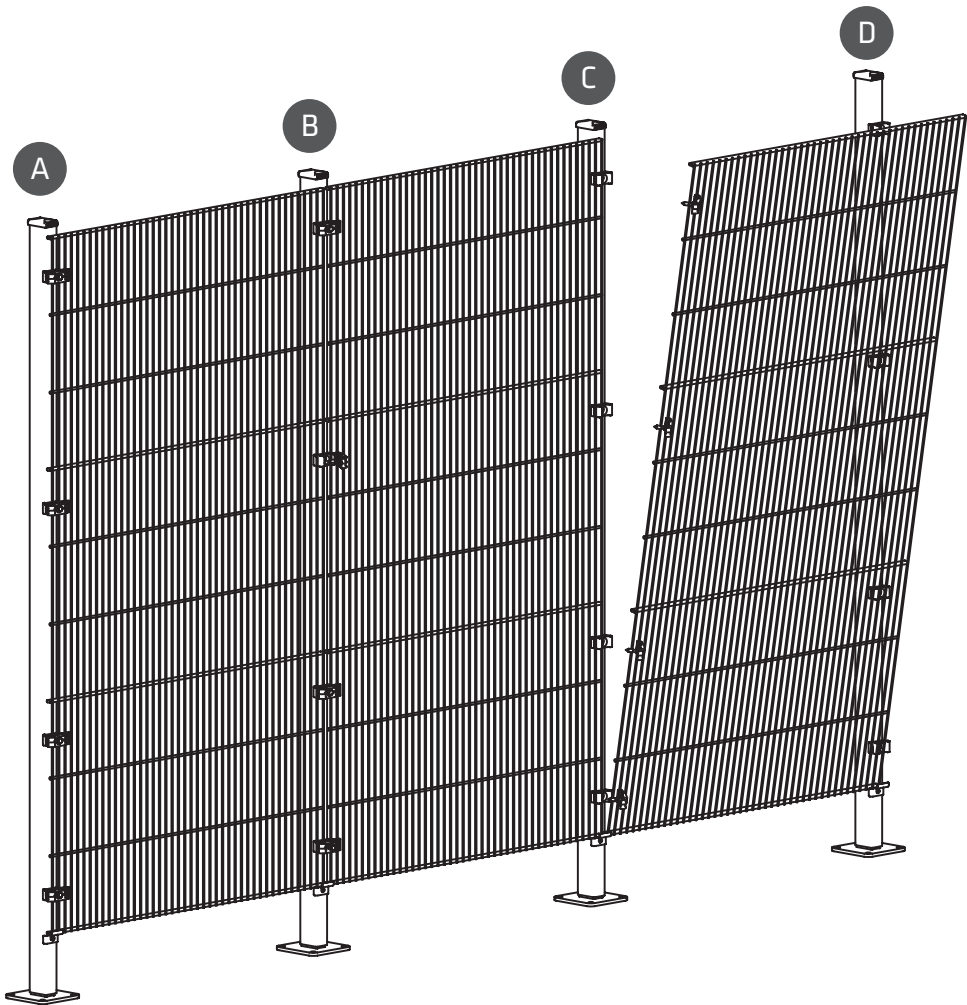
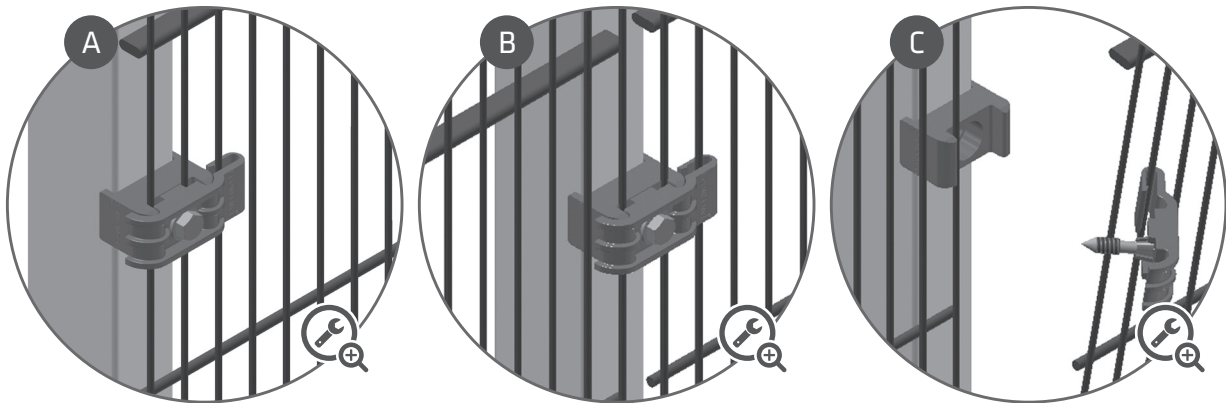
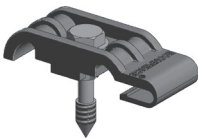
The type plate
must be
clearly attached
to the fencing!



5.3. Mesh assembly

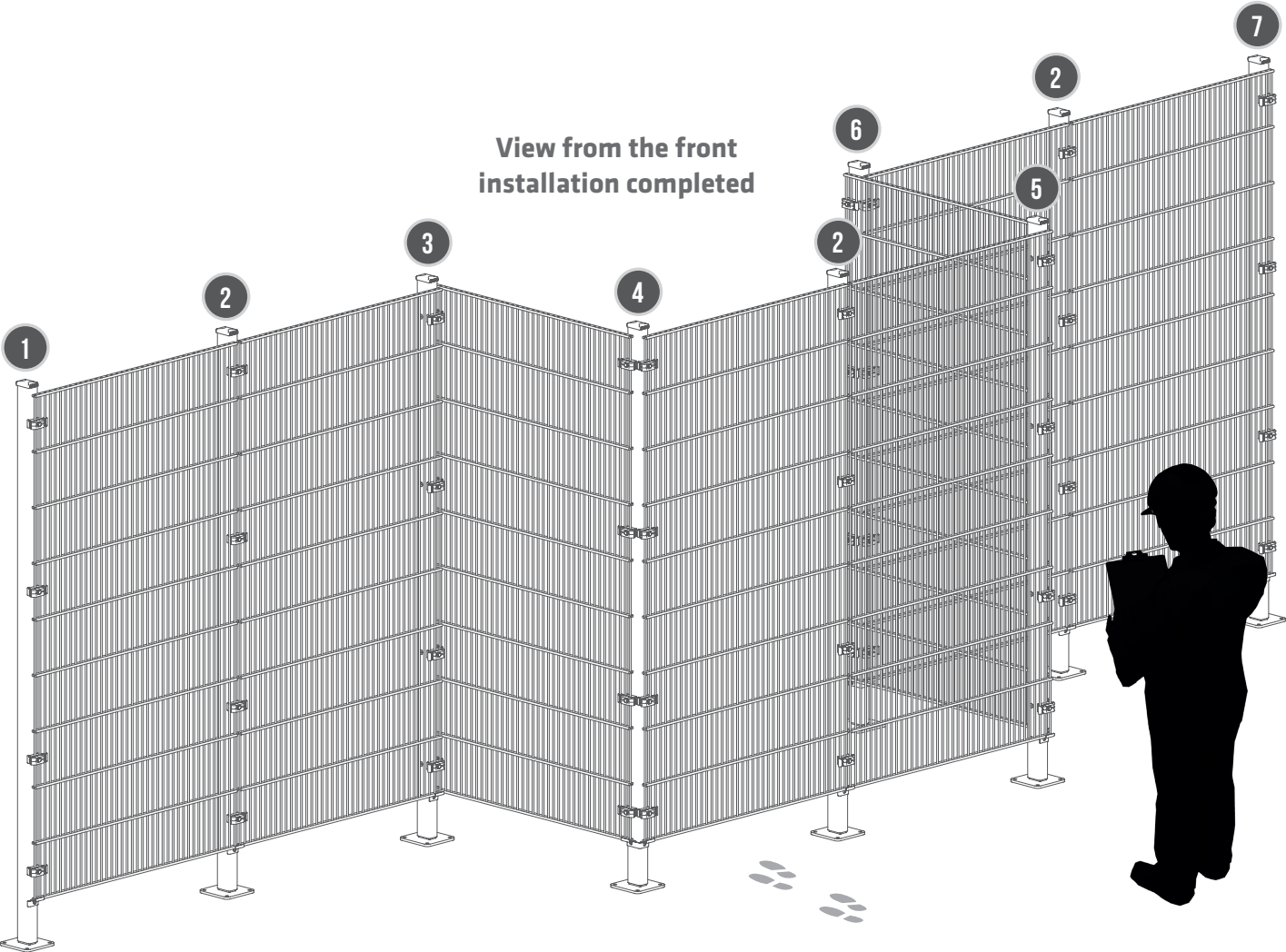
Installation of clamping element ZB31004

 See page 10

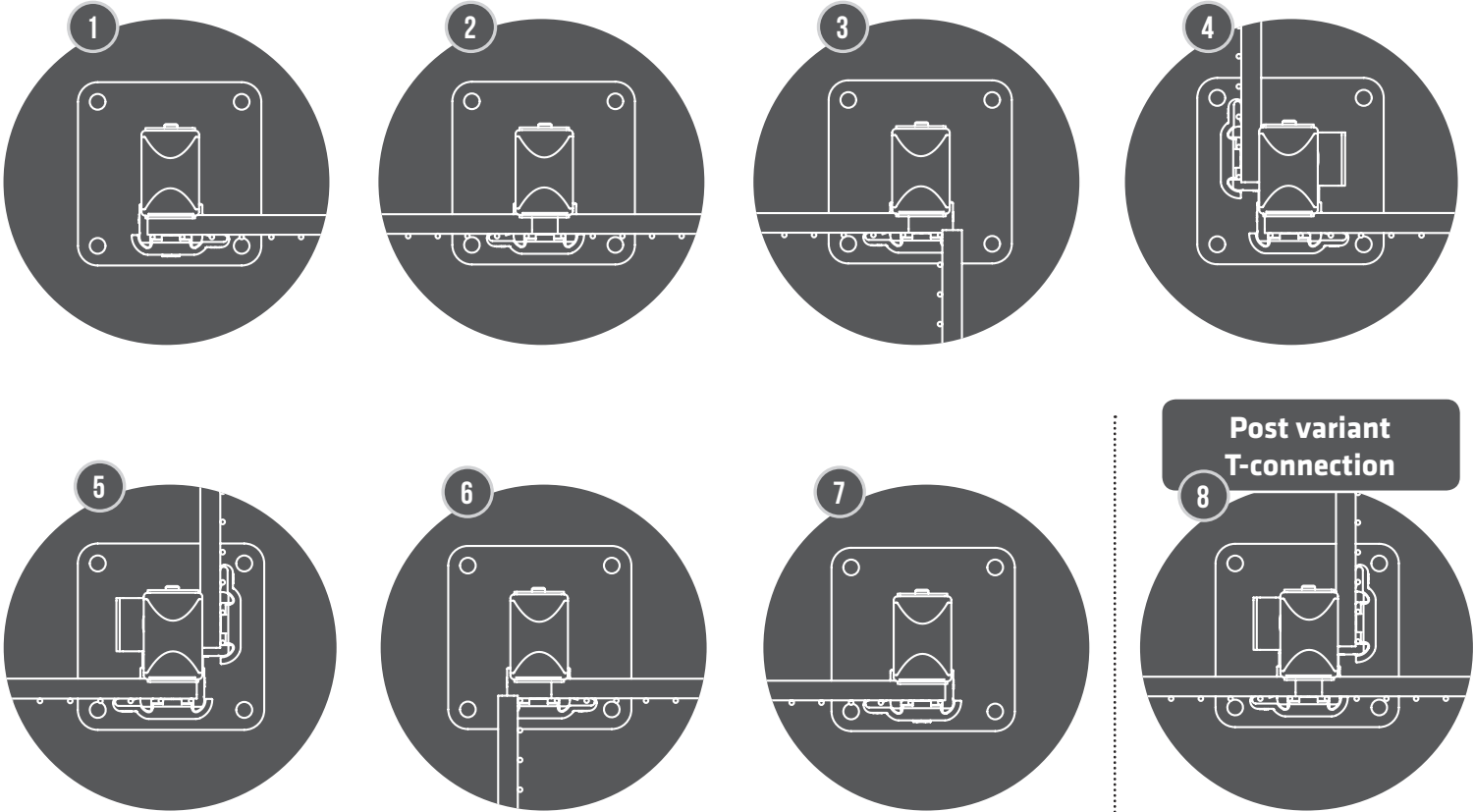


5.3. Mesh assembly

View from the front
installation completed



View of post variants from above – complete installation

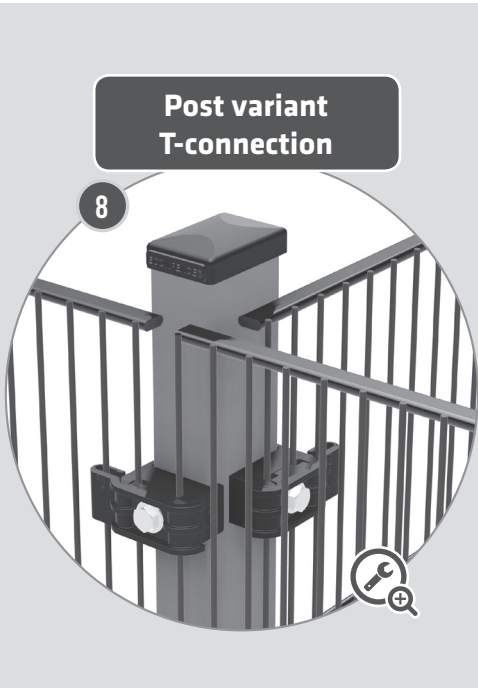
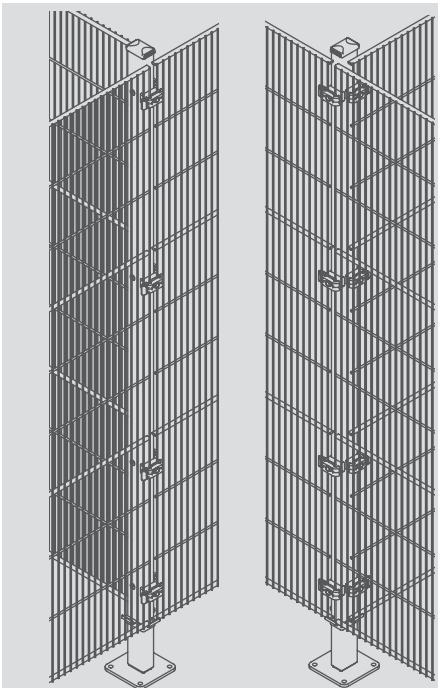
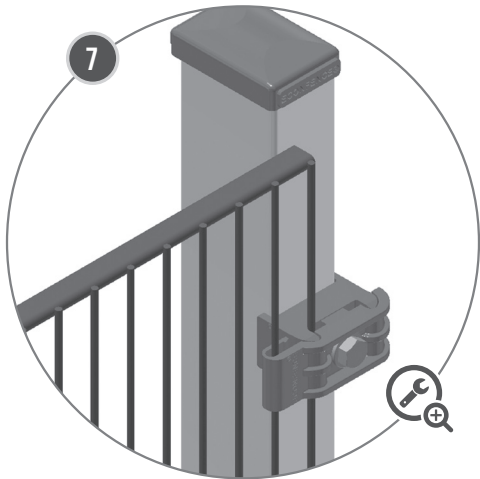
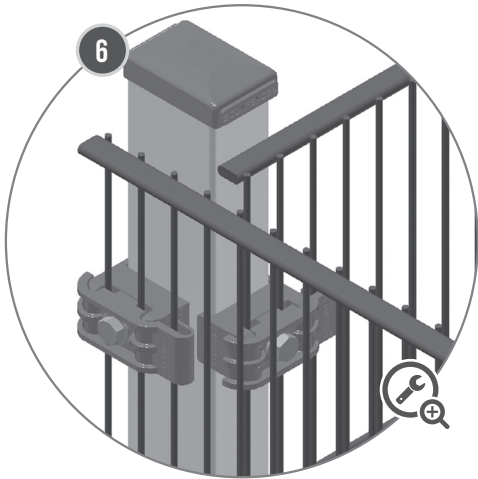
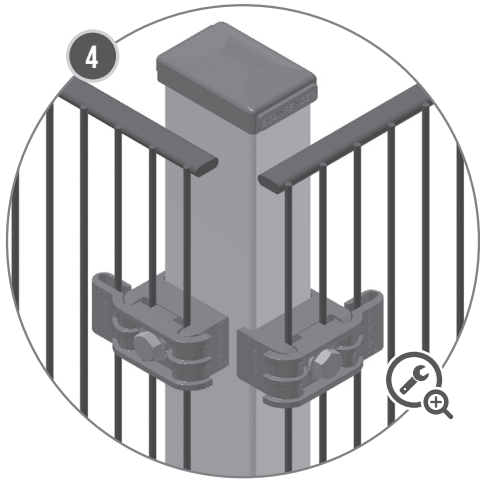
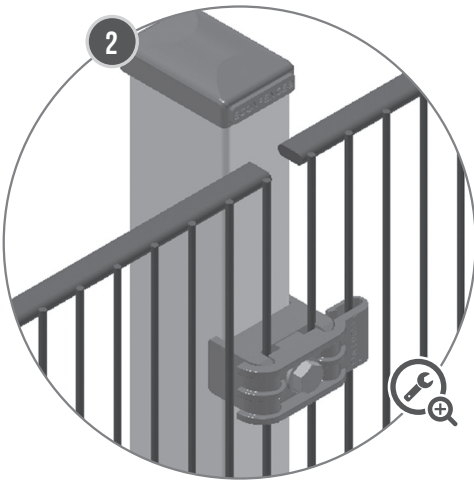
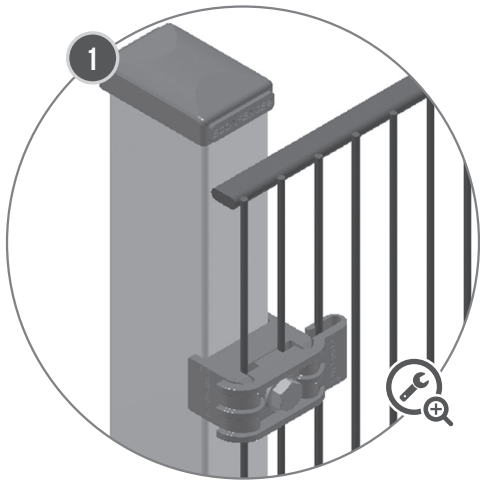
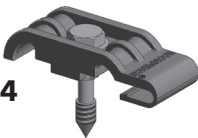


5.3. Mesh assembly



See page 10

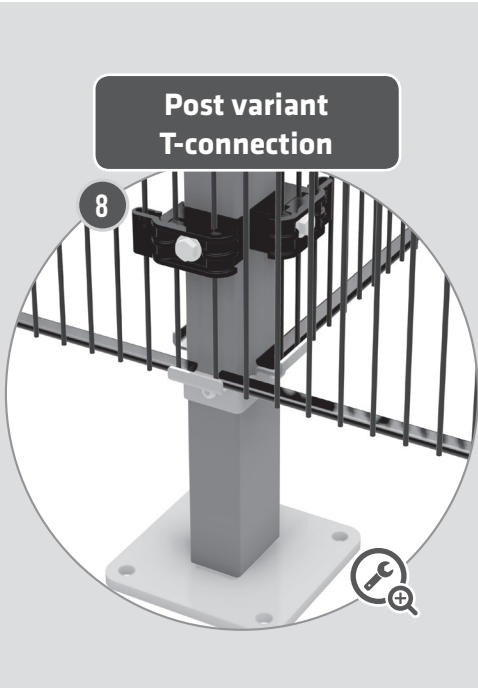
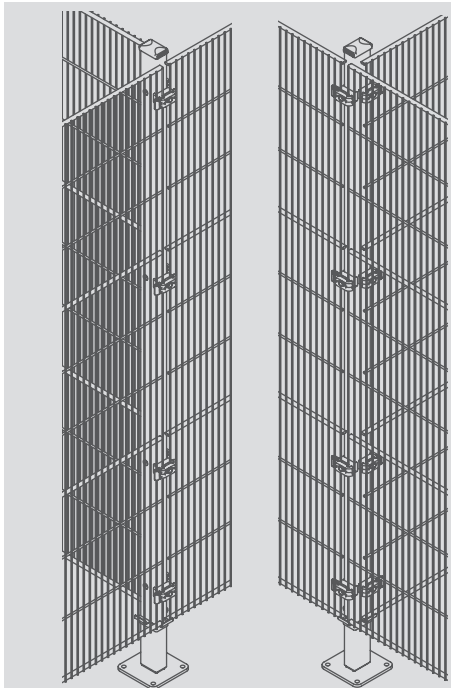
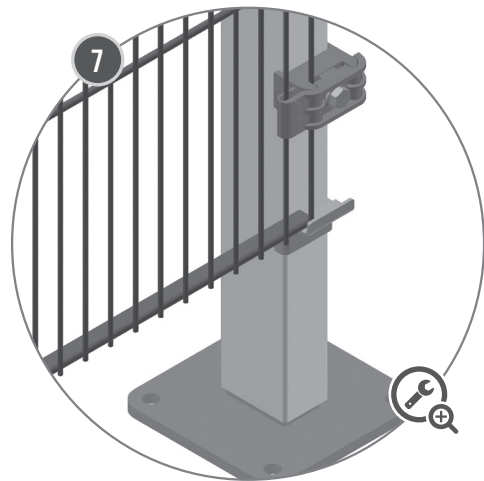
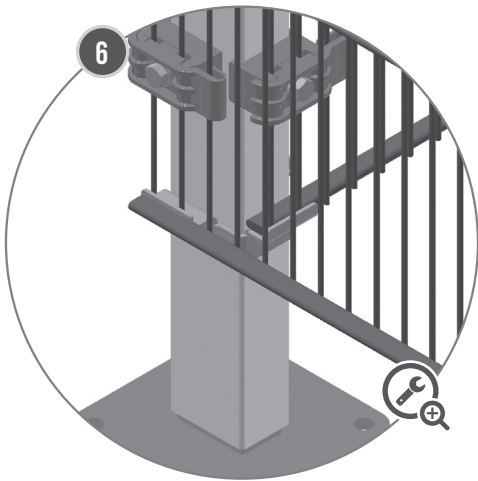
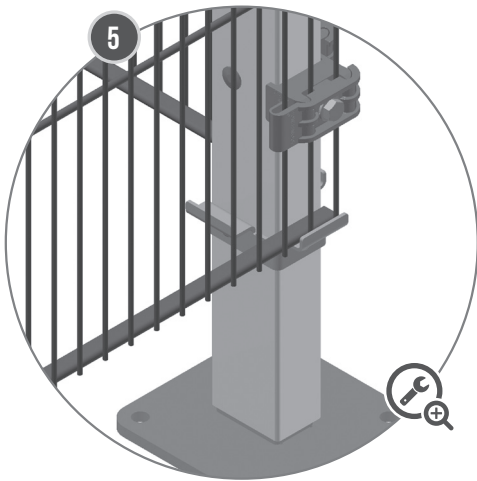
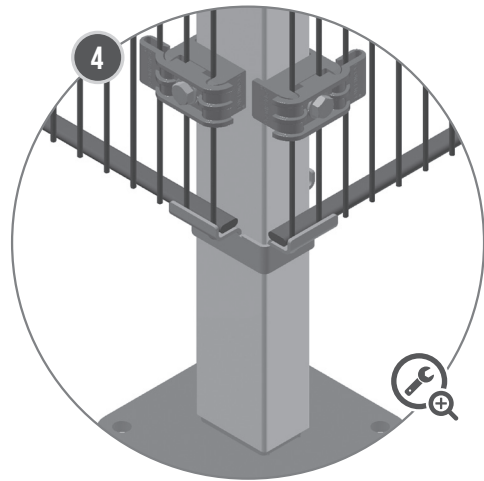
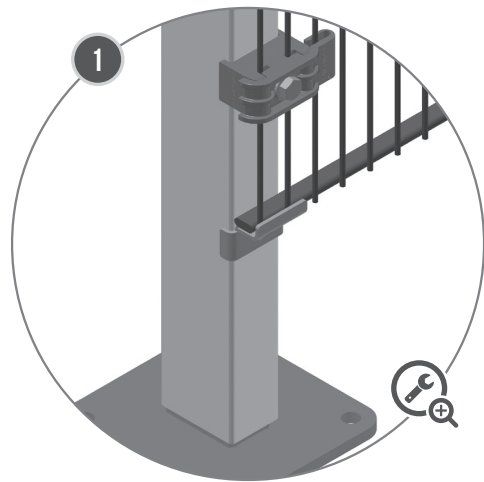
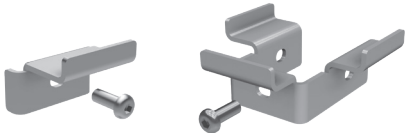
Complete installation views of clamping element ZB31004



5.3. Mesh assembly

 See page 10

Complete installation views of bottom mesh connector



5.4. Creating openings in mesh elements



The size and position of the openings must not compromise the stability of the mesh elements.

The minimum safety distances between hazardous areas and openings must be observed according to DIN EN ISO 13857.



In the case of openings for conveyor technology (such as a conveyor belt or roller conveyor), the requirements of DIN EN 619 must be observed.

Wear protective eyewear and ear protectors when creating the recesses with an angle grinder (Flex).

Once the cutting process is complete, the cut sections must be deburred and sealed if necessary. The use of edge trims is recommended.

6. Maintenance

The ECONFENCE® protective fencing system is essentially maintenance-free.



Annual checks are to be carried out by specialist personnel to ensure its protective function remains intact. Damaged parts must be replaced.

7. Disassembly and disposal

Two people are required for disassembly work and these must both be specialist personnel.



Prior to commencing the disassembly work, the machine or system must be switched off or else made safe.

Any electrical equipment attached to the protective fencing system must be disconnected or else made safe.

The system must be disposed of in line with local regulations.

8. Spare parts and accessories

Order no.	Designation	Fig.
ZB20097	Post cap with collar, black plastic, for a post profile measuring 60x40mm	1
ZB31004	Clamping element, black plastic, clamping range 4 mm, with pre-assembled steel screw, ST 8x40 mm	2
ZB21008	Mesh support, row post (drive-in version), black plastic, for a post profile measuring 60x40mm	3
ZB21012	Mesh support, corner post (drive-in version), black plastic, for a post profile measuring 60x40mm	4
ZB10076	Pin chuck for mesh support (wooden)	
ZB31047	Lower mesh connector for BL row post for post profile 60x40mm, with screw	5
ZB31048	Lower mesh connector for BL universal corner post for post profile 60x40mm, with screw	6
ZB31051	Installation set mesh fixing (drive-in version) for BL row post 5 x ZB31004, clamping element, black plastic 4 mm, with pre-assembled steel screw 5 x ZB21008, mesh support row post (drive-in version), black plastic 1 x ZB31047, lower mesh connector for BL row post, with screw	
ZB31052	Installation set mesh fixing (drive-in version) for BL corner or door corner post, left 5 x ZB31004, clamping element, black plastic 4 mm, with pre-assembled steel screw 5 x ZB21012, mesh support row post (drive-in version), black plastic 1 x ZB31049, lower mesh connector for BL corner post, left, with screw	
ZB31053	Installation set mesh fixing (drive-in version) for BL corner or door corner post, right 5 x ZB31004, clamping element, black plastic 4 mm, with pre-assembled steel screw 5 x ZB21012, mesh support row post (drive-in version), black plastic 1 x ZB31050, lower mesh connector for BL corner post, right, with screw	
S00001	Post insert base for profiles measuring 60x40 mm, 140x140 mm plate, galvanised	7
DIN913 8.8 M10x10	Fixing screw for removable post base (2 screws required per base)	
ZB20025	Hilti stud anchor, galvanised steel, HSA M10x113 50/40/10 for non-cracked concrete	
ZB20027	Hilti capsule adhesive anchor HVU M10x90 with anchor rod HAS M10x90/21 for non-cracked concrete	
ZB20054	Paint spray, RAL 7035 - light grey, 400 ml, gloss	
ZB20055	Paint spray, RAL 1021 - colza yellow, 400 ml, gloss	
ZB20056	Paint spray, RAL 9005 - jet black, 400 ml, gloss	
ZB20057	Paint spray, RAL 9005 - jet black, 400 ml, matt	
ZB40005	Mesh customisations and recesses according to customer layout	

Technical specifications subject to change.

Abb.1



Abb.2

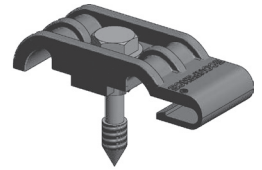


Abb.3



Abb.4



Abb.5

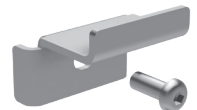


Abb.6

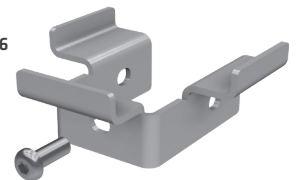
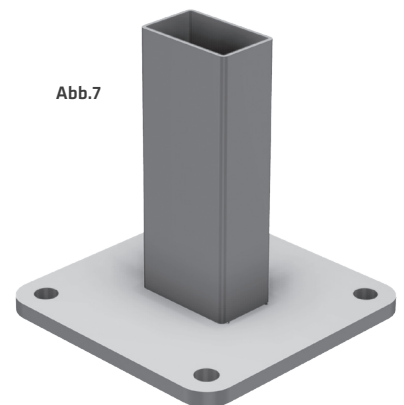


Abb.7



Should you have any further questions, please contact us on +49 (0) 5223 791995-0.



...we protect people!

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