



These operating instructions contain important product information and safety instructions.

These instructions must be read and followed before undertaking any activities in connection with the product. These instructions for use must be accessible to all persons concerned and must be kept in a safe place.



The professional choice

ORIGINAL INSTRUCTION MANUAL

ECONFENCE®
protection • german made

BASIC LINE ZINC

Residential wire mesh partition

System heights 2000 | 2400 mm

Output: 07/2022



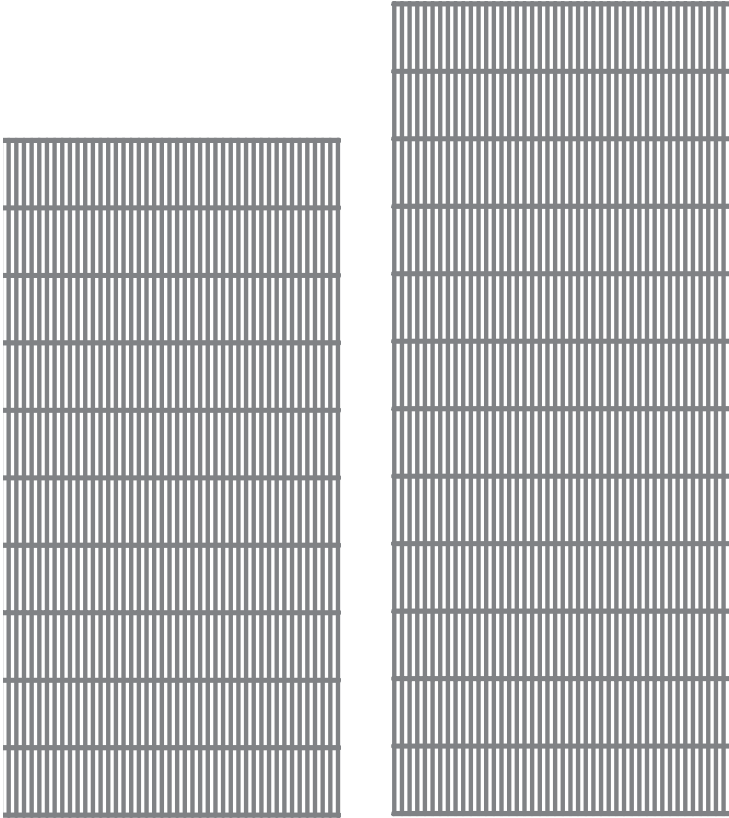
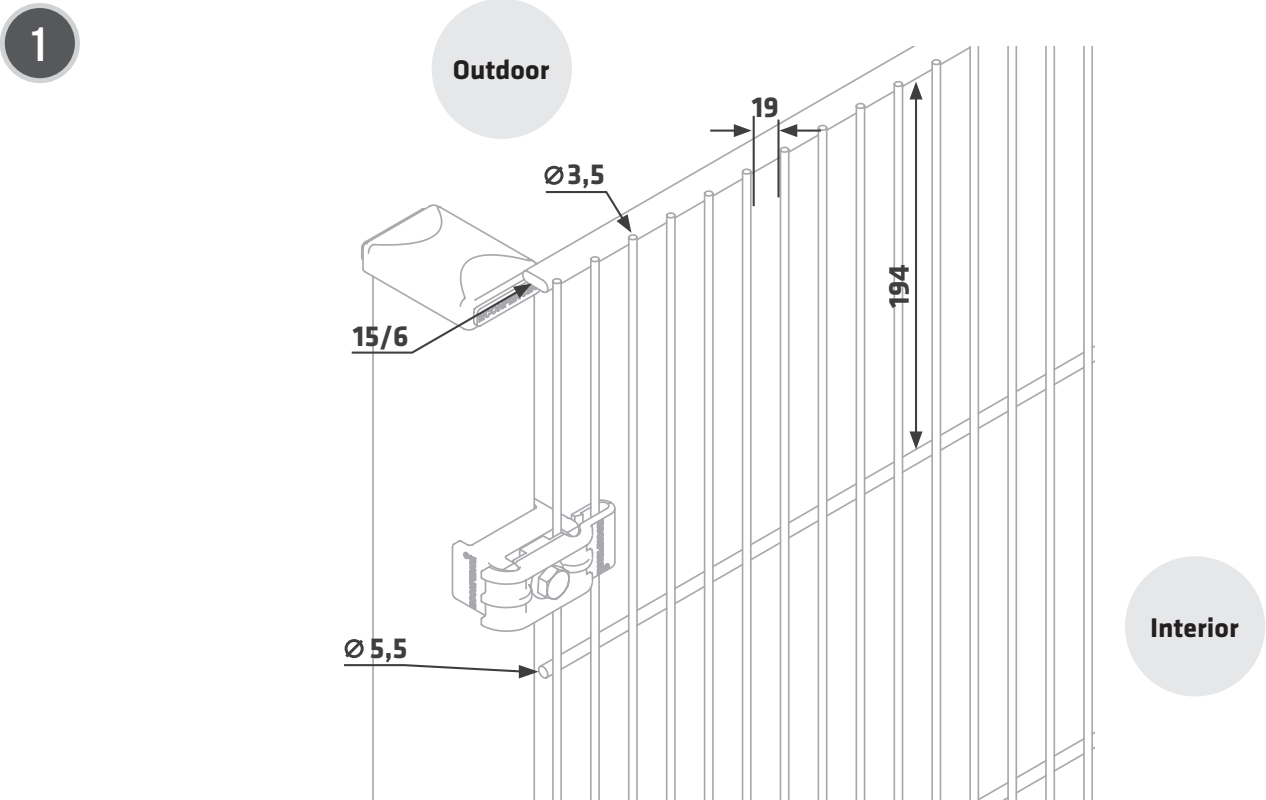
NOTES

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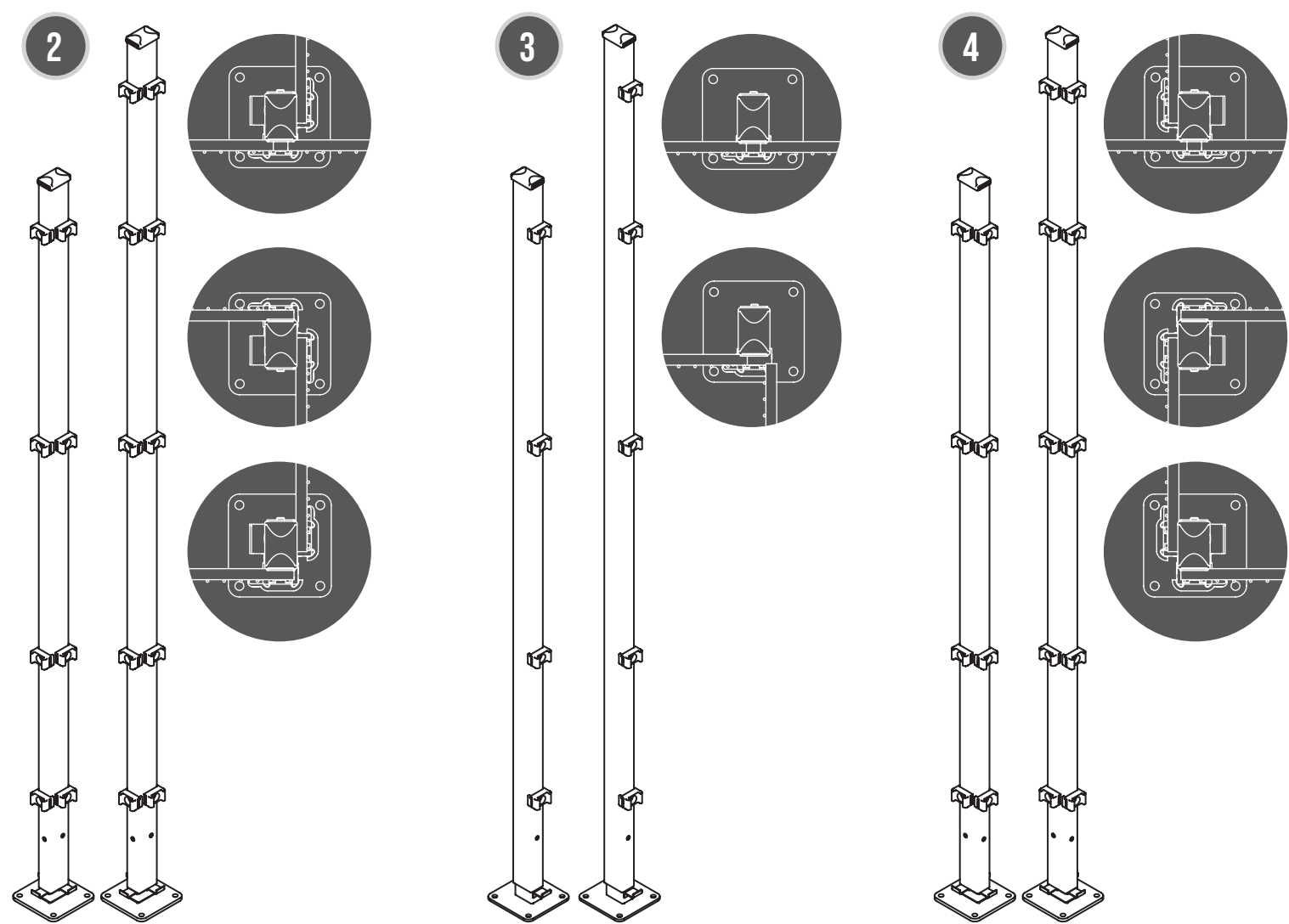
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1. Product description and technical data

The protective grids are available as standard in the following models:



1. Product description and technical data



BASIC LINE ZINC	Width (mm)	Passage width (mm)	Height: (mm)	Weight (kg)
1 Grid element	983	--	2006	23
	983	--	2406	26
2 Universal corner post Left	60/40	--	2045	7,88
	60/40	--	2445	9,17
3 Row post	60/40	--	2045	7,33
	60/40	--	2445	8,56
4 Universal corner post Right	60/40	--	2045	7,88
	60/40	--	2445	9,17

2. Intended use and limitations of use



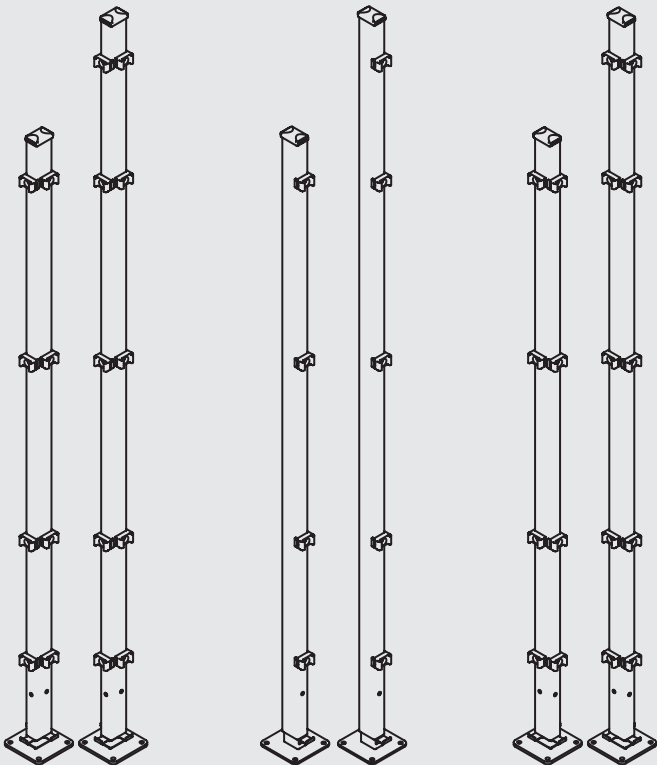
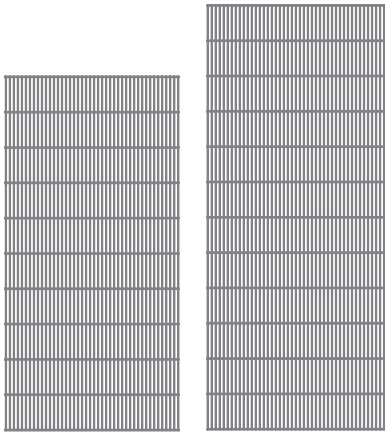
Intended use also includes observing the operating instructions and complying with the cleaning, maintenance and inspection requirements. The protective device is intended for use in machine and plant construction and may only be installed, operated, maintained and repaired by trained and qualified personnel.

3. Safety instructions and explanation of symbols

The safety instructions are to be consulted and observed in the corresponding sections of these operating instructions.

Symbols	Explanation
	Safety instructions (Failure to comply with this instruction may result in injury or death)
	Functional indication (In case of non-compliance, malfunction or material damage)
	Danger zone
	No danger zone
	enlarged view
	Mounting height
	necessary tools (see page 10)
	Use hearing protection
	Use eye protection

4.1. Tools needed

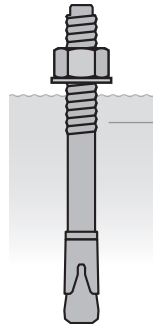
Product	 Tools
 Post mounting (page 11)	Drill with concrete drill Ø 10 mm Impact chuck ZB10076 (see pages 13 and 15) Hammer Socket spanner 17 mm 6 mm Allen key
  Grid mounting (pages 12 - 17)	6 mm Allen key Socket spanner 13 mm

4.2. Post mounting

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

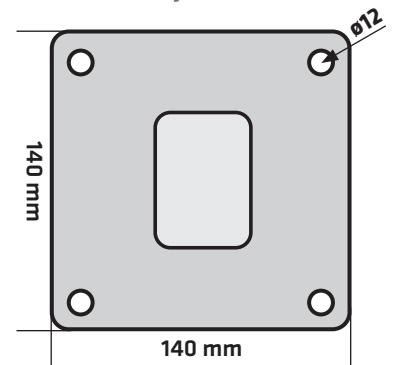


see page 10



4 x  HSA M10x113 50/40/10

Top view



Technical data :

Ankle size

M10

Ankle length

113 mm

Authorizations

ETA-11/0374

Base material

Concrete (uncracked) C20/25 - C50/60

Environmental influences

interior, sec

Distance from the edge

50 mm

Principle of action

Force-controlled expansion anchor

Standard installation depth

50 mm

Nominal drill diameter

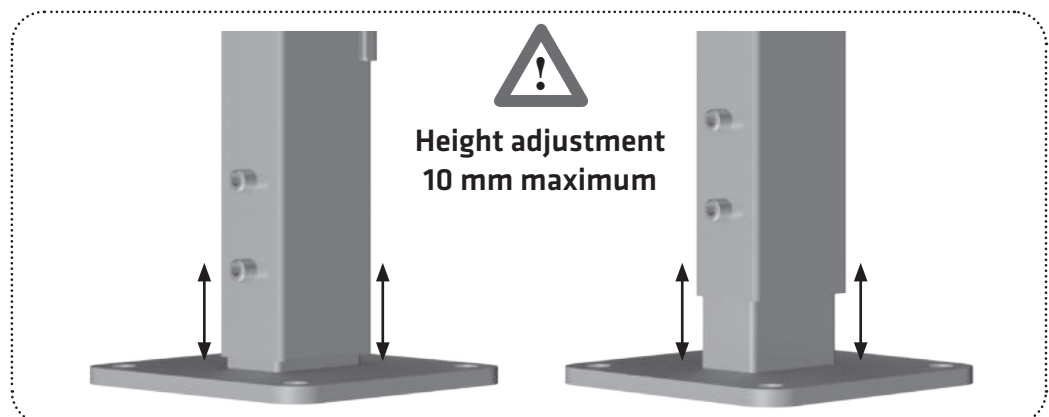
10 mm

Depth of borehole

80 mm

required torque

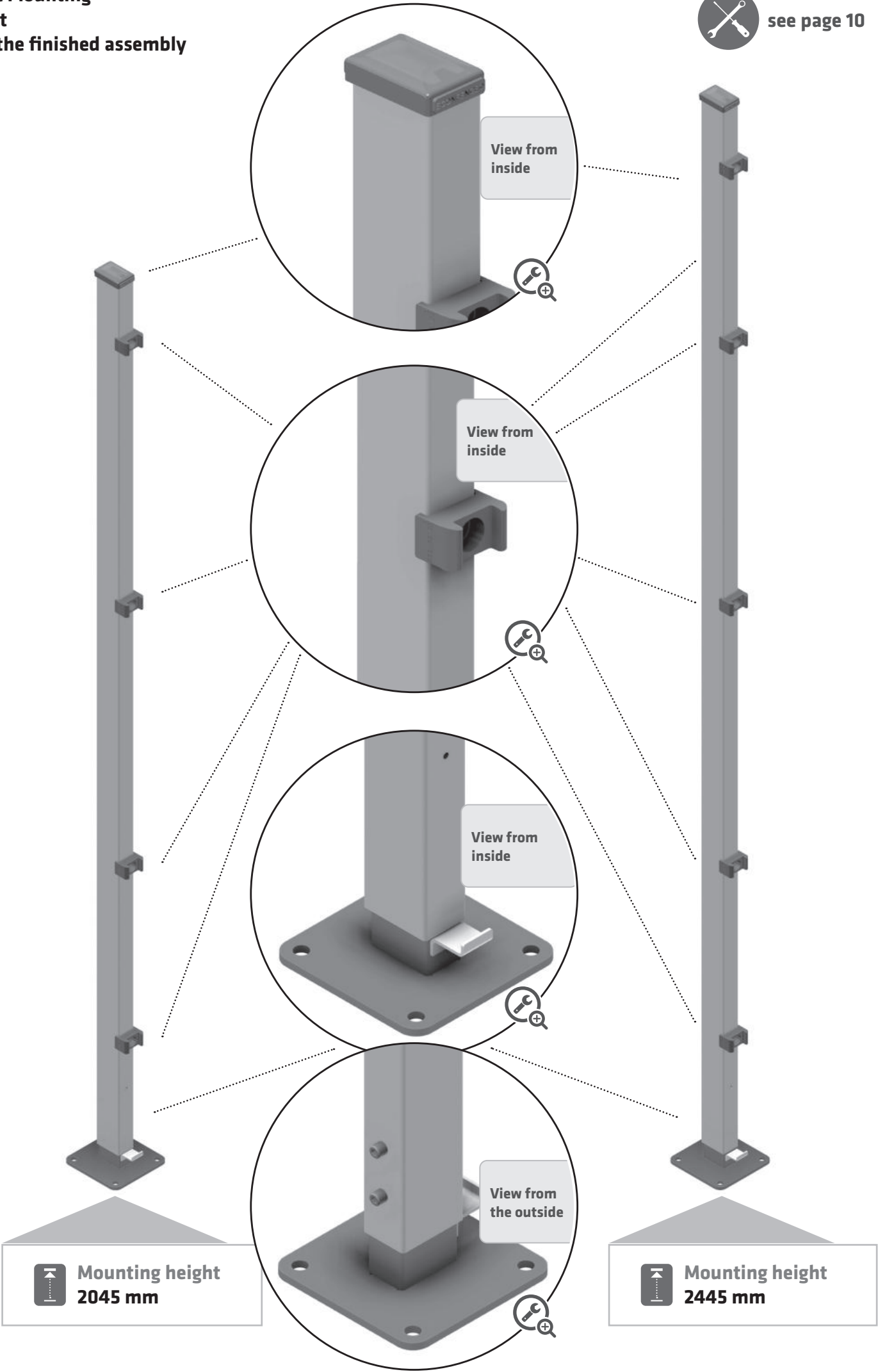
25 Nm



4.2. Post Mounting
Row post
View of the finished assembly



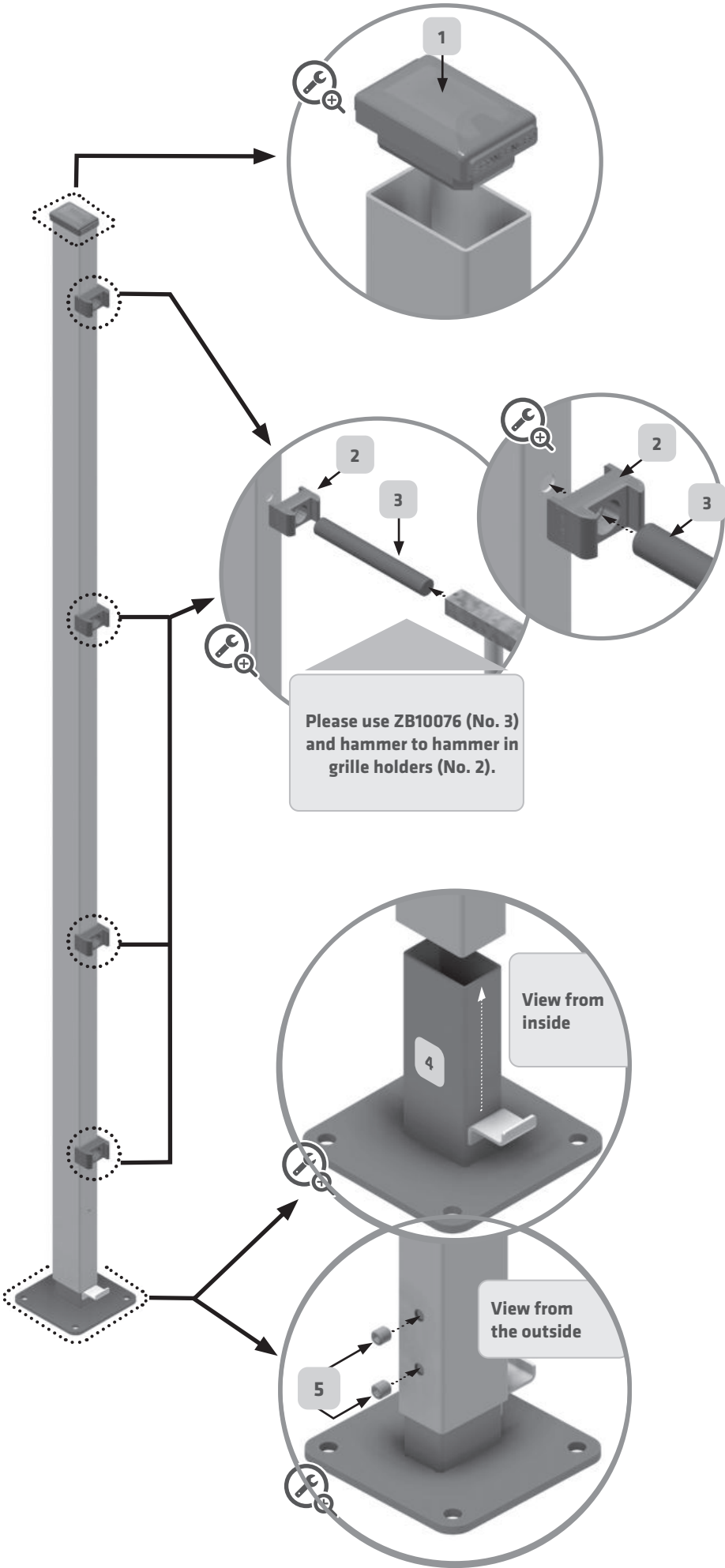
see page 10



4.2. Post mounting
Row post



see page 10



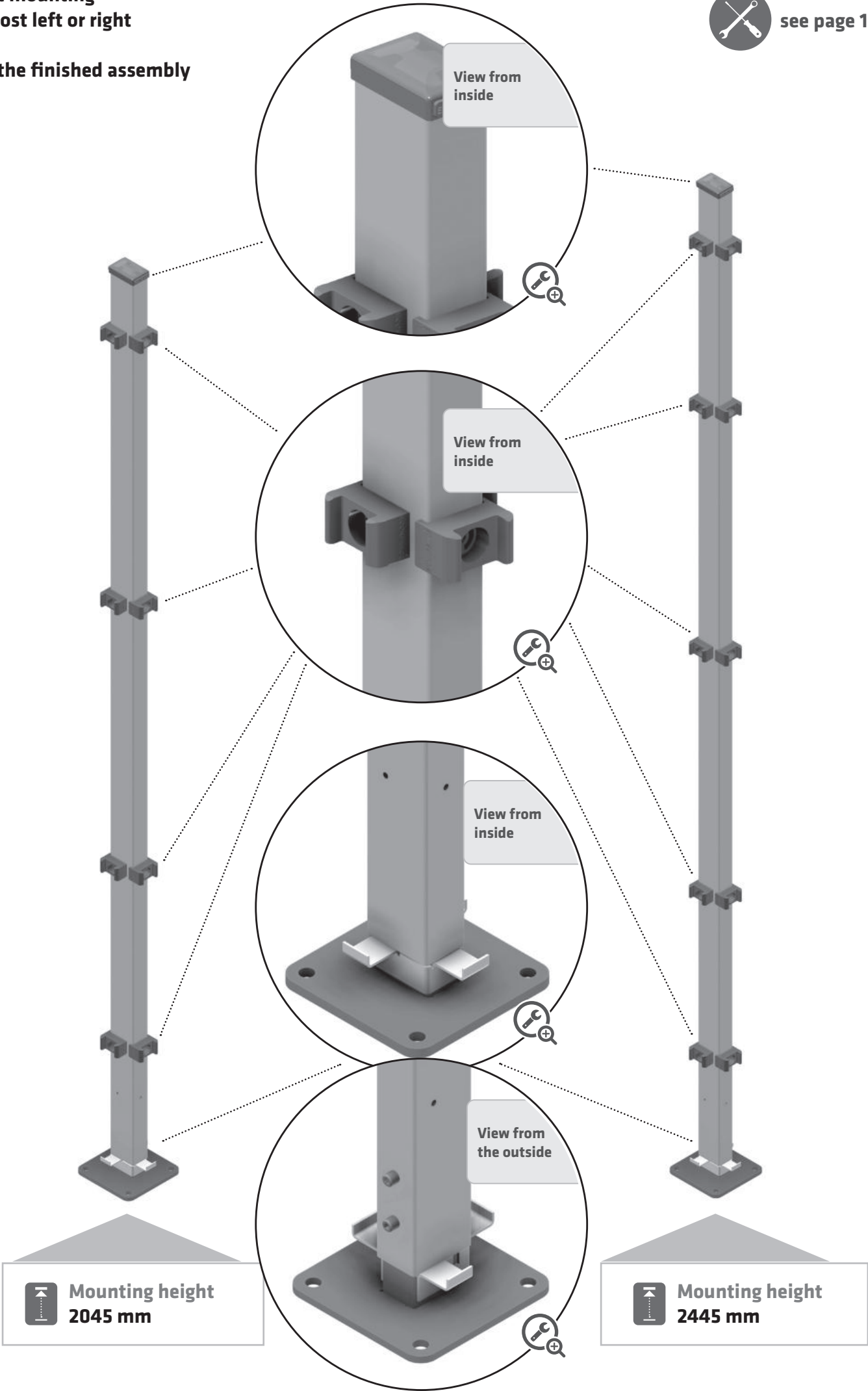
1	ZB20097	
2	ZB21008	
3	ZB10076	
4	S00050	
5	DIN913 M10x10	

4.2. Post mounting
Corner post left or right



see page 10

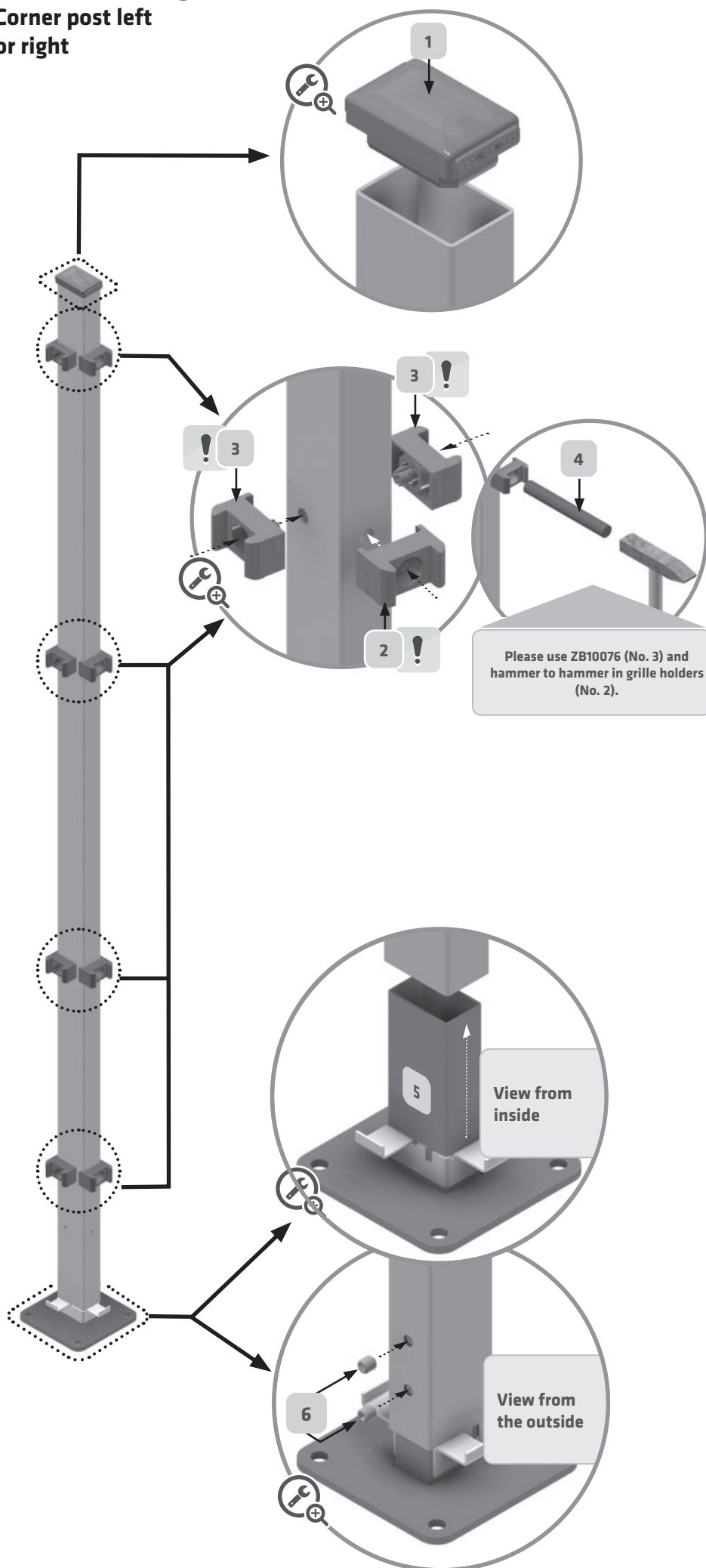
View of the finished assembly



4.2. Post mounting Corner post left or right



see page 10



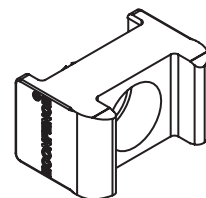
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ZB20097



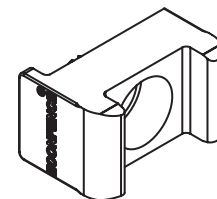
2

ZB21008



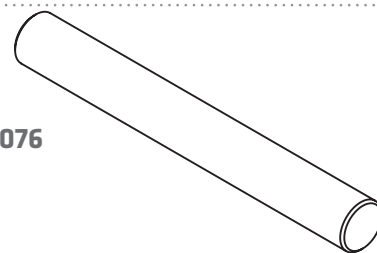
3

ZB21012



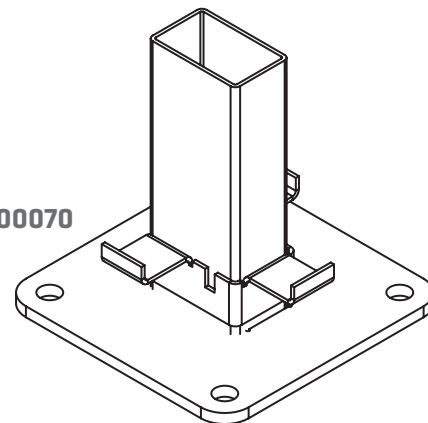
4

ZB10076



5

S00070



6

DIN913 M10x10

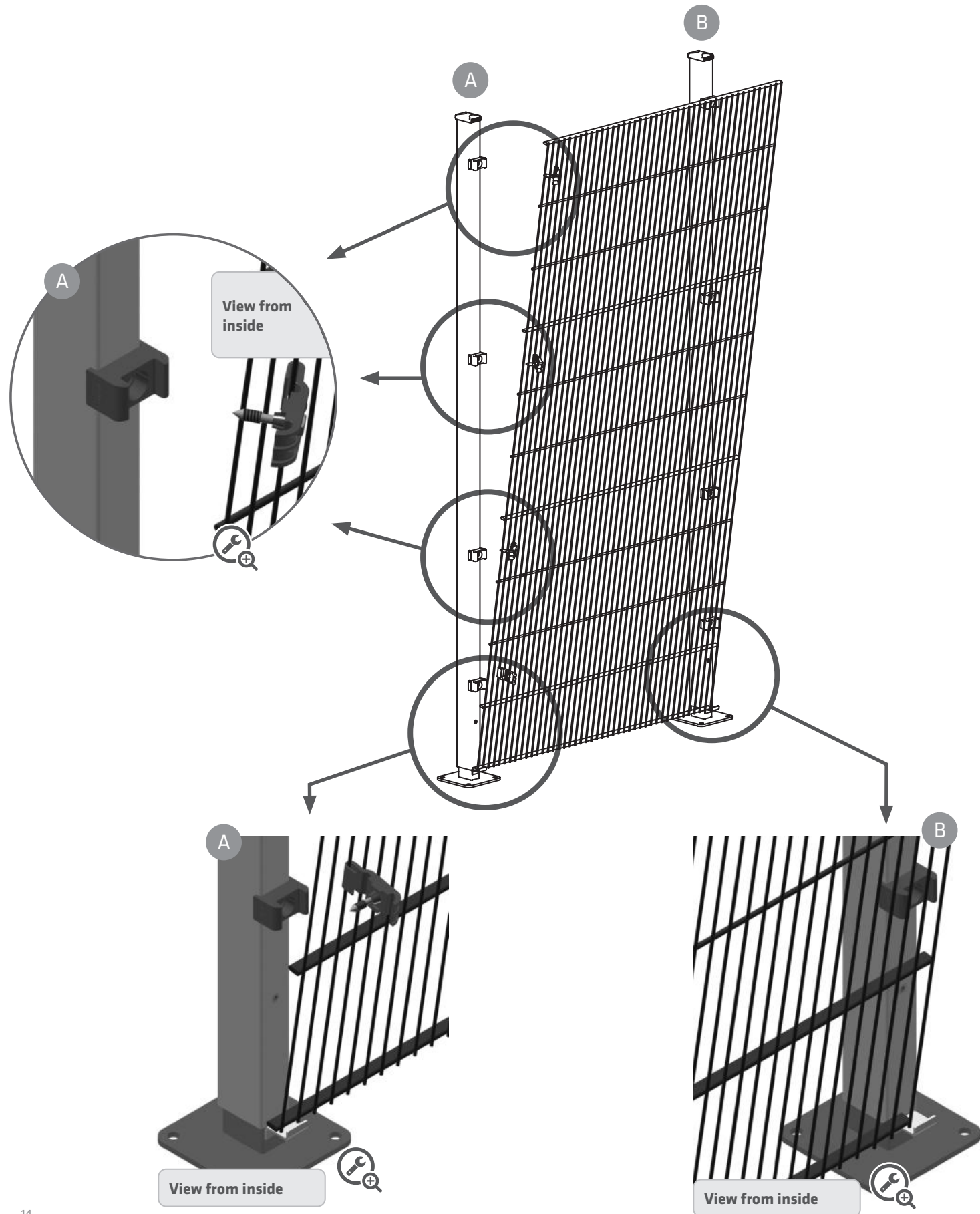


4.3. Grid mounting

Mounting clamping element ZB31004



see page 10

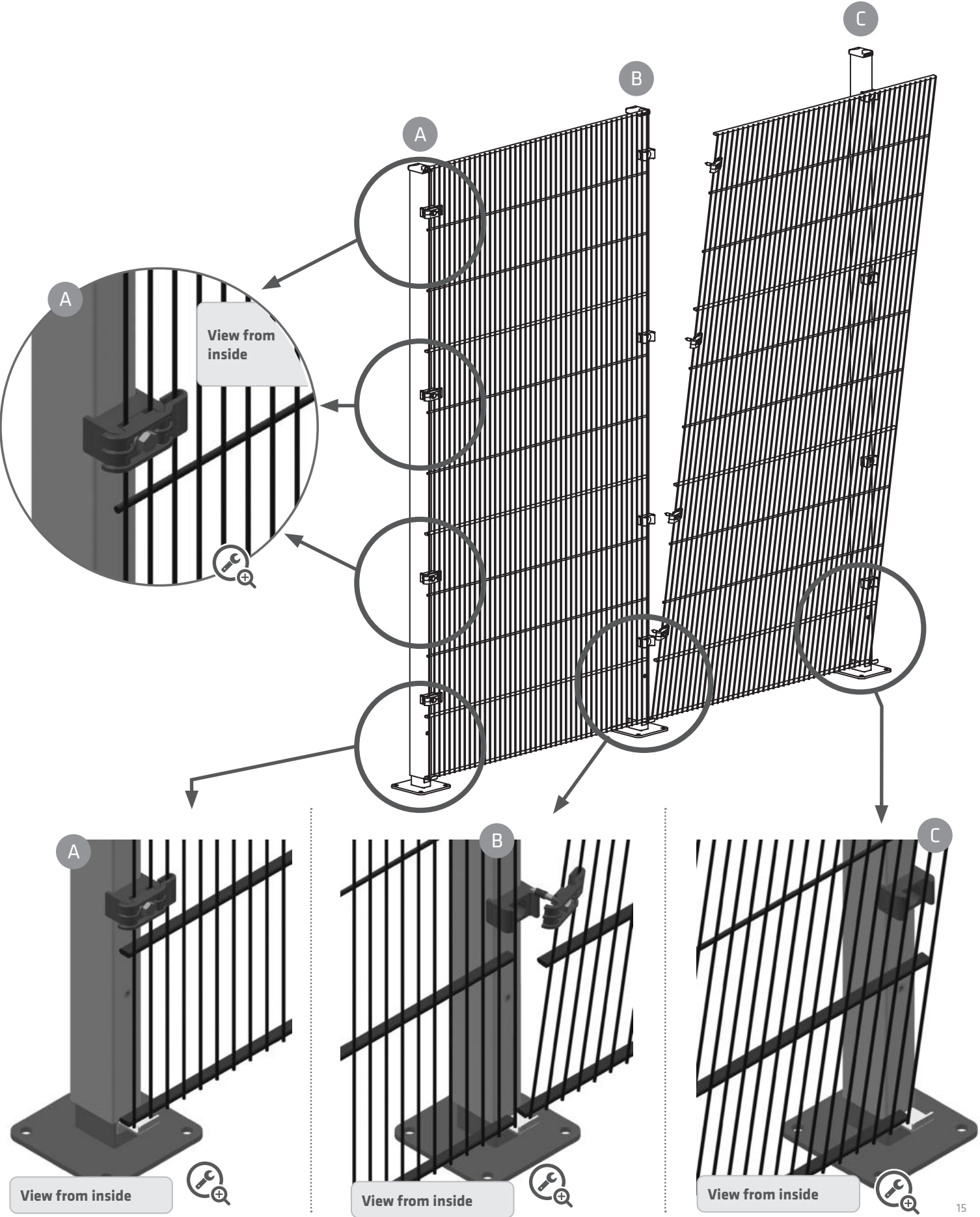


4.3. Grid mounting

Mounting clamping element ZB31004



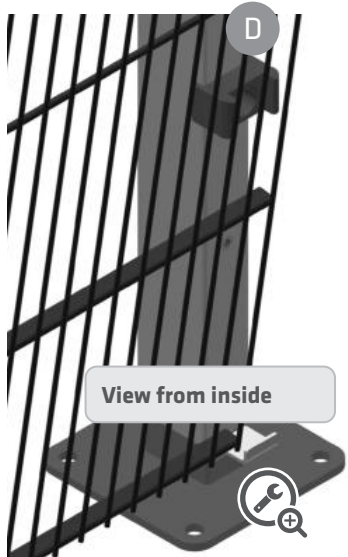
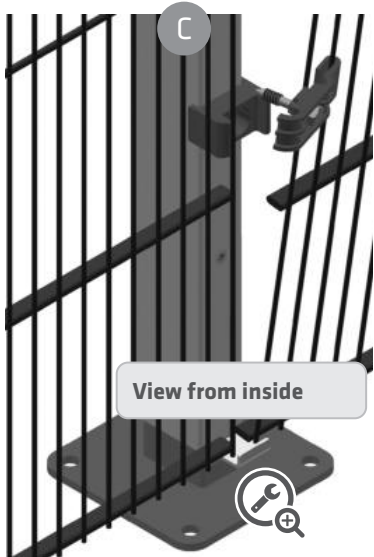
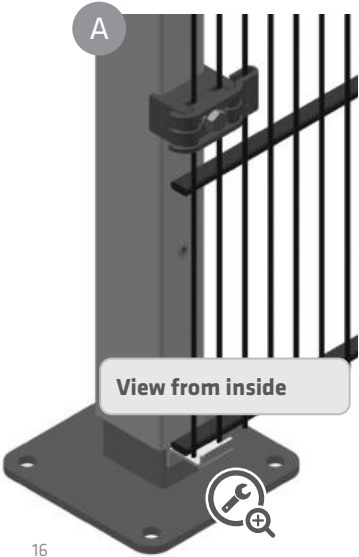
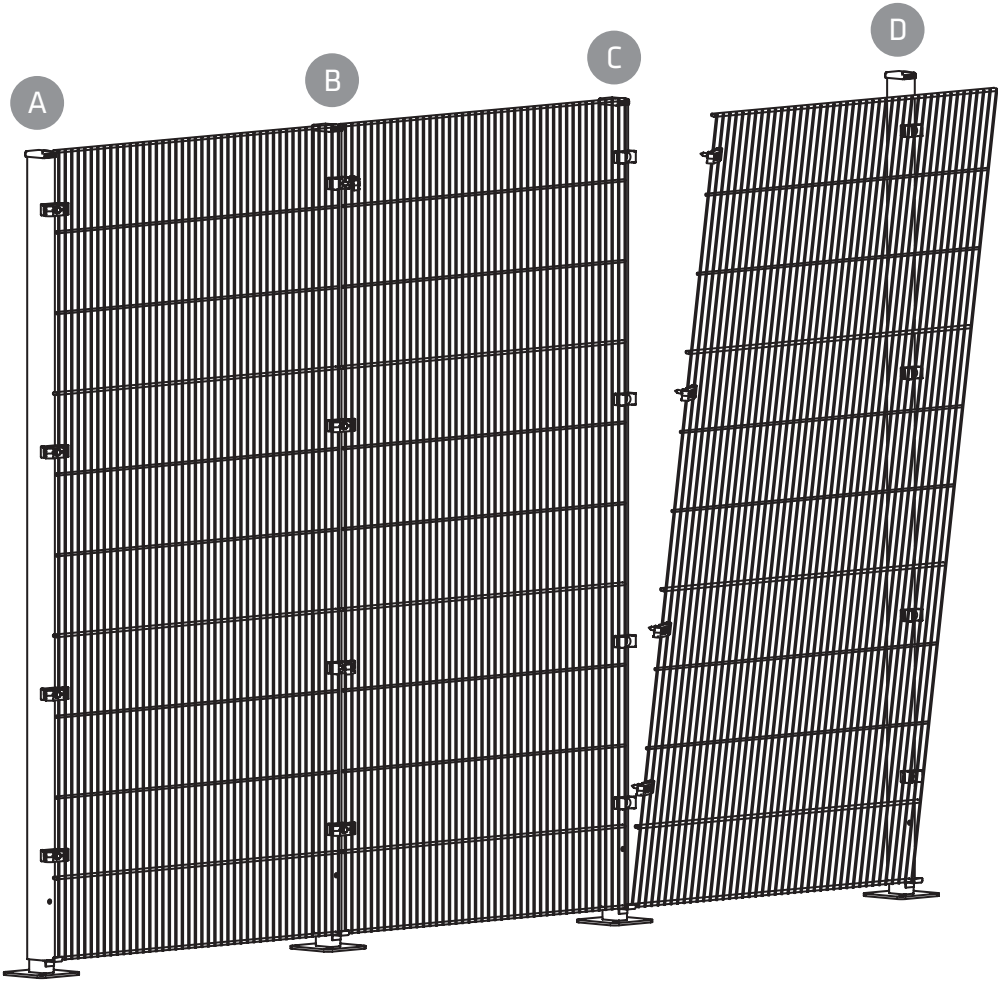
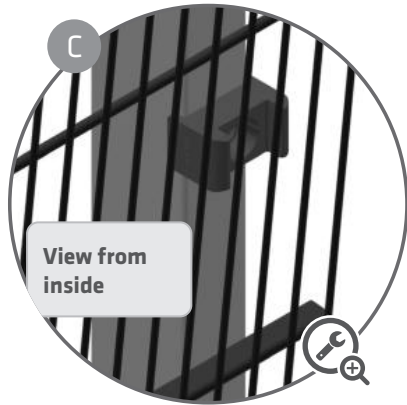
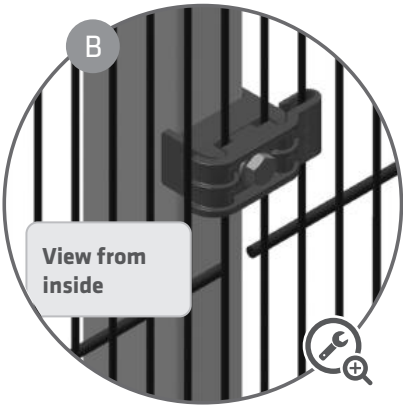
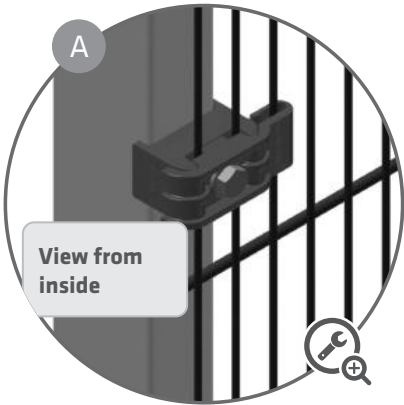
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4.3. Grid mounting

Mounting clamping element ZB31004

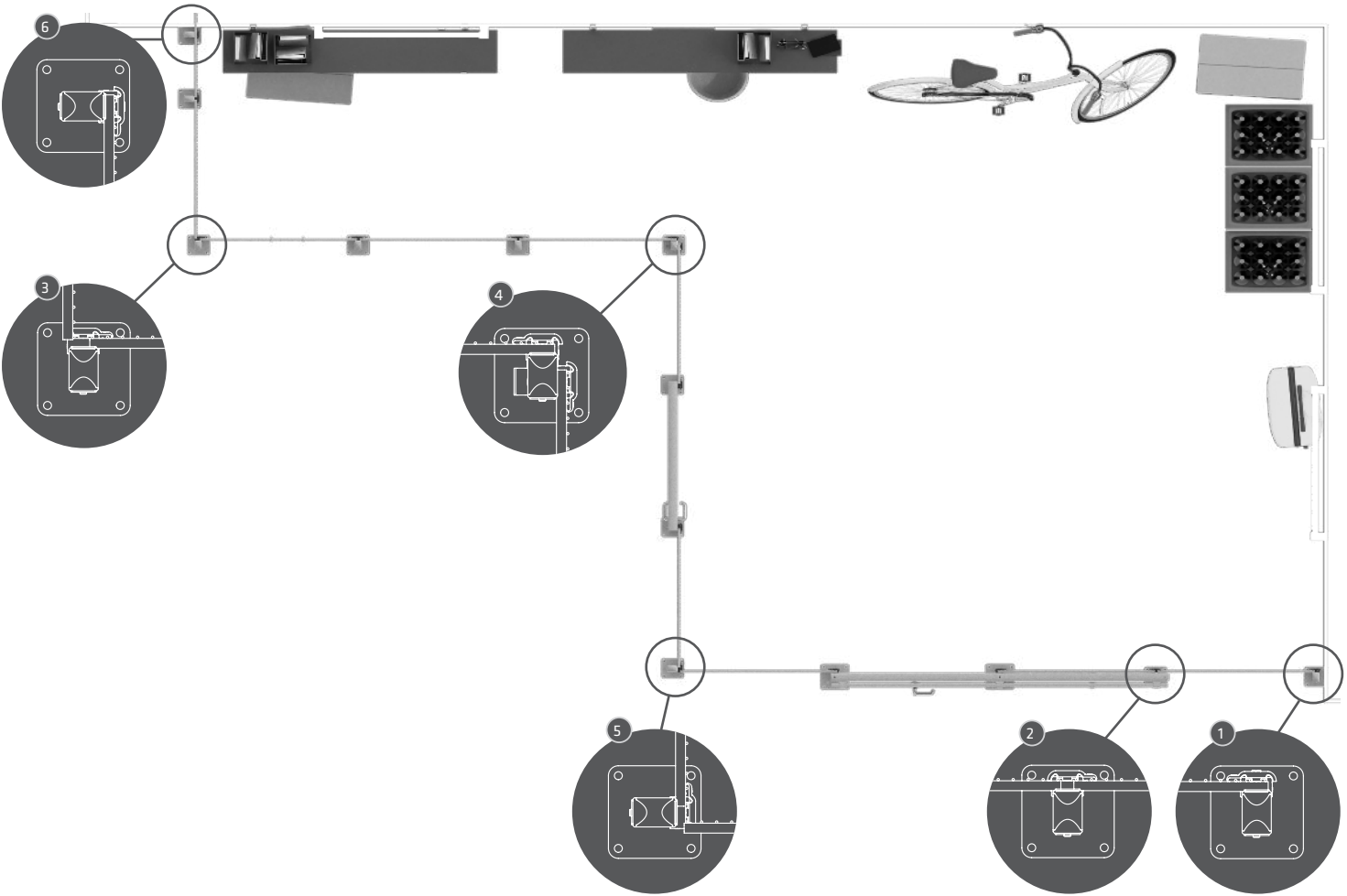
 see page 10



4.3. Grid mounting



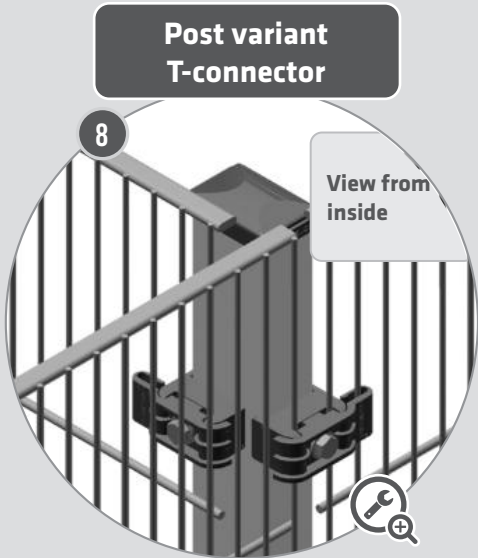
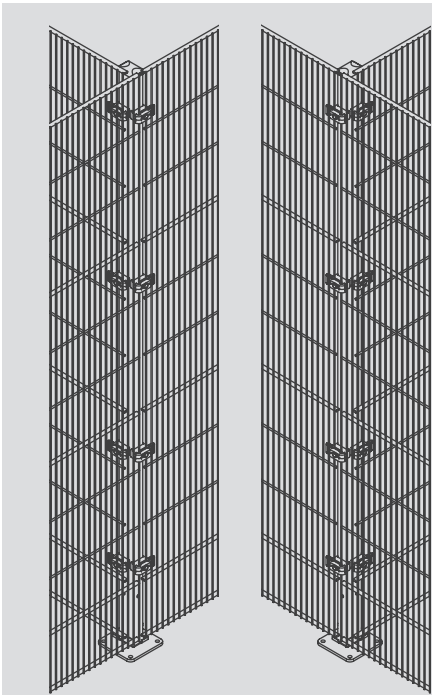
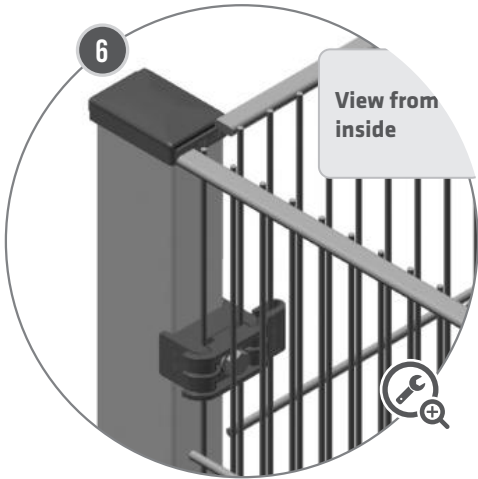
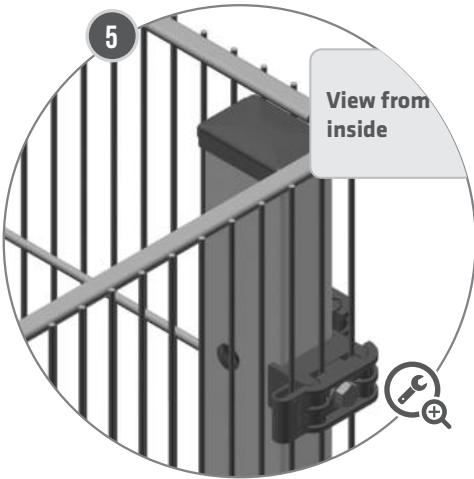
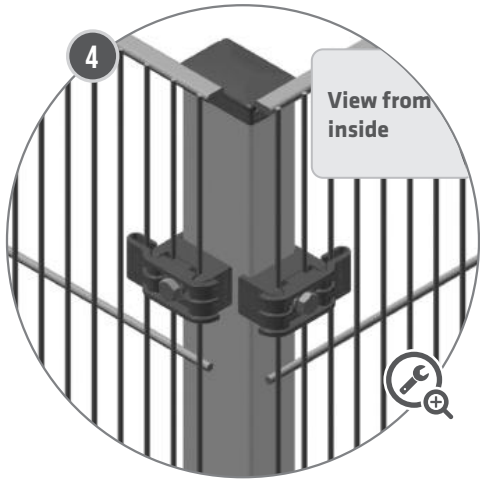
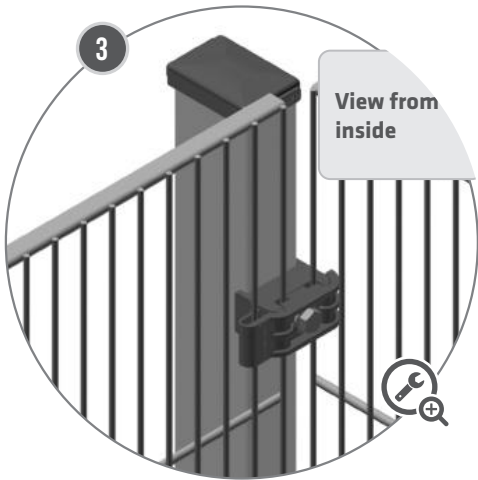
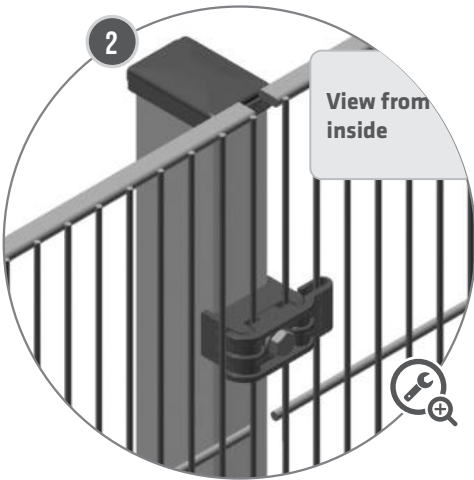
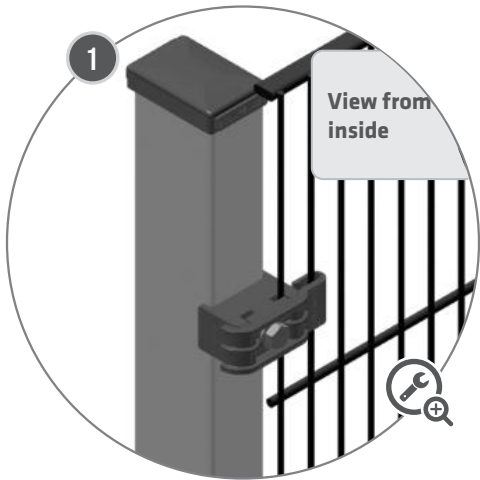
View of mullion variants from above - finished assembly



4.3. Grid mounting

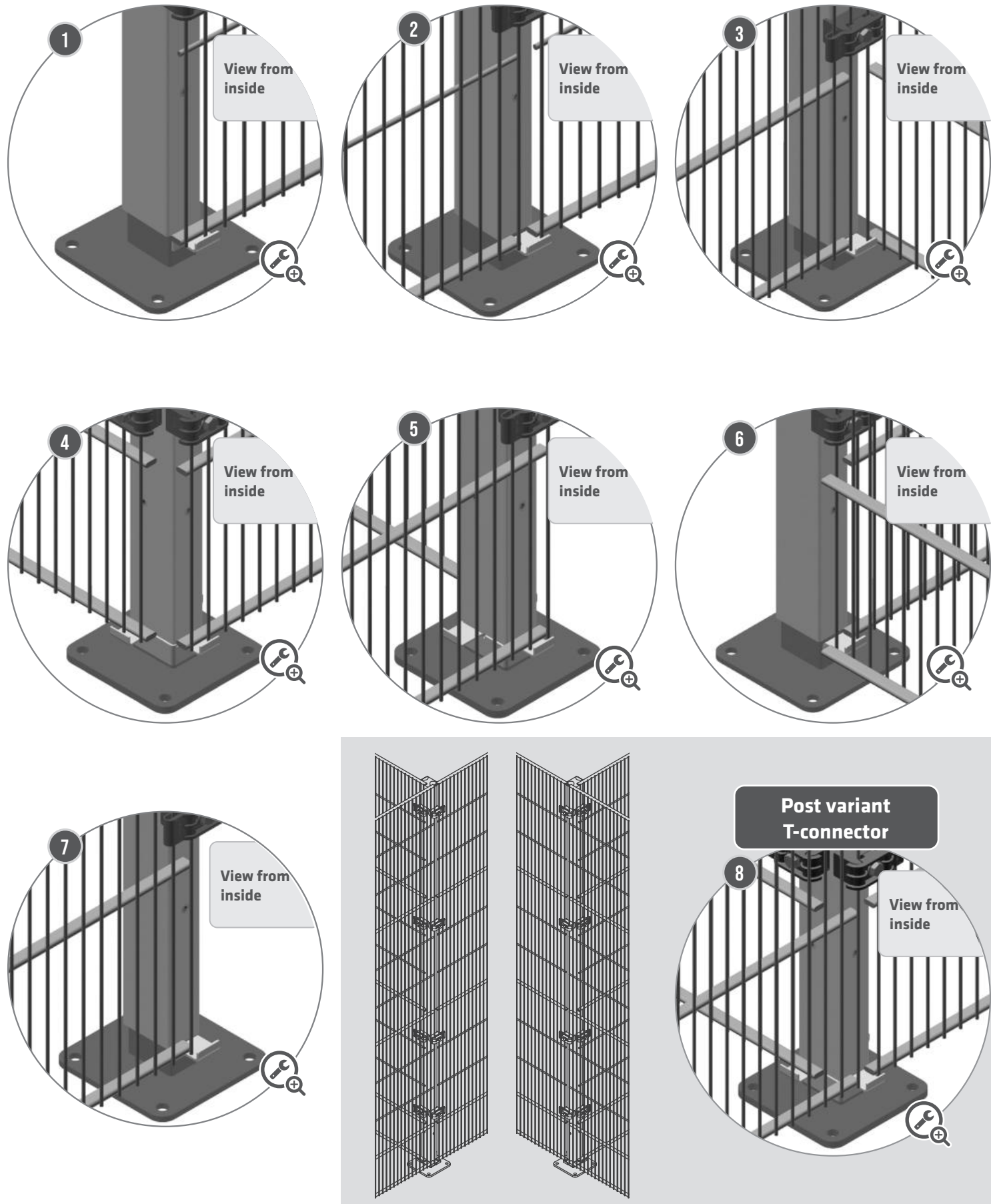
 see page 10

View of the finished assembly Clamping element ZB31004 inside the partition





View of finished assembly lower grid mounting



4.4. Making openings in grid elements



The size and position of the openings must not impair the stability of the fence element.

The minimum safety distances to danger points at openings must be observed in accordance with DIN EN ISO 13857.



For openings for conveyor technology (e.g. conveyor belt, roller conveyor, etc.), the requirements of DIN EN 619 must be observed.

Wear protective goggles and ear protection when processing the cut-outs with an angle grinder (Flex).

After the cutting process, the interfaces must be deburred and sealed if necessary. The use of edge trims is recommended.

6. Maintenance

The ECONFENCE® safety fence system is basically maintenance-free.



To ensure the protective function, annual inspections must be carried out by suitable specialist personnel of the operator. Damaged parts must be replaced.

7. Dismantling and disposal

Two persons are required for disassembly and this may only be carried out by qualified personnel.



Before dismantling, switch off the machine or system or bring it into a safe condition.

If applicable, de-energise the electrical equipment attached to the safety fence system or bring it into a safe condition.

Dispose of in accordance with local regulations.

5. Pendulum test

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BASIC LINE ZINK

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PENDELPRÜFVERFAHREN GEMÄSS DIN EN ISO 14120:2015

PRÜFBERICHT NR.

BLZ202010-1

GEGENSTAND DER PRÜFUNG

Trennende Schutzeinrichtung ECONFENCE® BASIC LINE ZINK
Systemhöhen 2000/2400 mm

PRÜFORT

Bünde

PRÜFDATUM

08.10.2020

AUFPRALLENERGIE

Pendelenergie: 950 Joule
Harter Schlagkörper: 120 kg

$$W = m \cdot g \cdot h = 120 \cdot 9,81 \cdot 0,807 = 950 \text{ J}$$

MATERIAL

Gitter: 2006 X 1983 mm (H x B) mit Maschenweite 19 x 190 mm
Drahtstärke: Horizontale Runddrähte einseitig 5,5 mm bzw. Flachstahl 15/6 mm, senkrechte Drähte 3,5 mm, punktverschweißt
Pfosten: 60/40/2/2045 mm
Gitterklemmelement: Kunststoff, schwarz, Klemmbereich 4 mm, mit vormontierter Blechschraube ST 8x40 mm
Bodenbefestigung: Hilti Segmentanker HSA M10x113 50/40/10

PRÜFUMFANG

Die Prüfung wurde nach der Pendelschlagtest-Methode gemäß DIN EN ISO 14120 durchgeführt. Um die Energie von 950 J zu erreichen, wurde das 120 kg Schlagpendel auf 807 mm vom Ausgangspunkt (Einschlaghöhe) angehoben. Das Schlagpendel wurde so eingestellt, dass der Aufprall das Gitter mittig bei 2/3 Höhe, über dem Boden traf. Belastungsrichtung von der Anlagenseite.

PRÜFERGEBNIS

Die trennende Schutzeinrichtung, BASIC LINE ZINK, hält sehr hoher Aufschlagenergie stand. Das Resultat ist eine dynamische Verformung von 550-600 mm und eine bleibende Deformierung der Zaunelemente von 200-250 mm, gemessen vom Ausgangspunkt. Trotz der sehr starken Aufprallenergie gab es weder Durchbrüche noch haben sich Kleinteile abgelöst.

.....
Frank Tiemann
Geschäftsführer

.....
Axel Tiemann
Geschäftsführer

5. Pendulum test

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BASIC LINE ZINK

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PENDELPRÜFVERFAHREN GEMÄSS DIN EN ISO 14120:2015

PRÜFBERICHT NR.

BLZ201910-2

GEGENSTAND
DER PRÜFUNG

Trennende Schutzeinrichtung ECONFENCE® BASIC LINE ZINK
Systemhöhen 2000mm/2400 mm/ 3000mm/4000mm

PRÜFORT

Bünde

PRÜFDATUM

10.10.2019

AUFPRALLENERGIE

Pendelenergie: 115 Joule
Weicher Schlagkörper: 50 kg

$$W = m \cdot g \cdot h = 50 \cdot 9,81 \cdot 0,235 = 115 \text{ J}$$

MATERIAL

Gitter: 2006 X 1983 mm (H x B) mit Maschenweite 19 x 190 mm
Drahtstärke: Horizontale Runddrähte einseitig 5,5 mm bzw. Flachstahl
15/6 mm, senkrechte Drähte 3,5 mm, punktverschweißt
Pfosten: 60/40/2/2200 mm
Gitterklemmelement: Kunststoff, schwarz, Klemmbereich 4 mm,
mit vormontierter Blechschraube ST 8x40 mm
Bodenbefestigung: Hilti Segmentanker HSA M10x113 50/40/10

PRÜFUMFANG

Die Prüfung wurde nach der Pendelschlagtest-Methode gemäß DIN EN ISO 14120 durchgeführt.
Um die Energie von 115 J zu erreichen, wurde das 50 kg Schlagpendel auf 235 mm vom Ausgangspunkt
(Einschlaghöhe) angehoben. Das Schlagpendel wurde so eingestellt, dass der Aufprall das Gitter mittig
bei 2/3 Höhe, über dem Boden traf. Belastungsrichtung von der Bedienerseite.

PRÜFERGEBNIS

Die trennende Schutzeinrichtung, BASIC LINE ZINK, hält sehr hoher Aufschlagenergie stand. Das Resultat ist eine dynamische Verformung von 200-250 mm und eine bleibende Deformierung der Zaunelemente von 10-20 mm, gemessen vom Ausgangspunkt. Trotz der sehr starken Aufprallenergie gab es weder Durchbrüche noch haben sich Kleinteile abgelöst.

.....
Frank Tiemann
Geschäftsführer

.....
Axel Tiemann
Geschäftsführer

6. Spare parts and accessories

Reference	Designation	Fig.
ZB20097	Post cap with collar, black plastic, for post profile 60x40mm	1
ZB31004	clamping element, black plastic, clamping area 4 mm, with pre-mounted ST 8x40 mm tapping screw	2
ZB21008	Grid support for in-line posts (press-in version), black plastic, for post profile 60x40mm	3
ZB21012	Grid support for corner post (push-in version), black plastic, for post profile 60x40mm	4
ZB10076	Knock-in chuck for grid support (wood)	
S00050	Post foot for in-line installation, profile 60x40 mm, plate 140x140 mm, galvanised	5
S00070	Post foot for corner mounting, profile 60x40 mm, plate 140x140 mm, galvanized	6
DIN913 M10x10	Grub screws for post feet (2 pieces are required per post foot)	
ZB20025	Hilti steel segment anchor, galvanised, HSA M10x113 50/40/10 for non-cracked concrete	
ZB20027	Hilti HVU Composite Anchor M10x90 with HAS Anchor Rod M10x90/21 for non-cracked concrete	
ZB40005	Custom-made grids and cut-outs or according to the customer's layout	

We reserve the right to make technical changes.

i If you have any questions, please do not hesitate to contact us at +49 5223.791995-0.

Fig.1

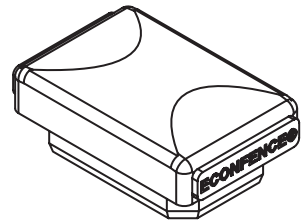


Fig.2

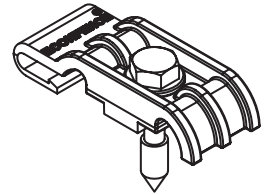


Fig.3

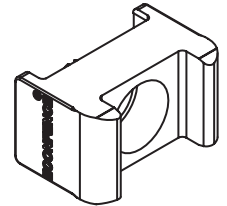


Fig.4

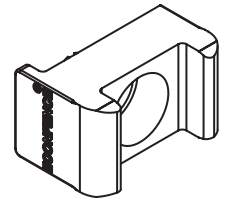


Fig.5

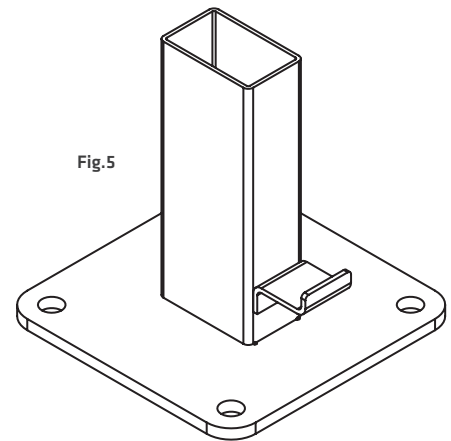
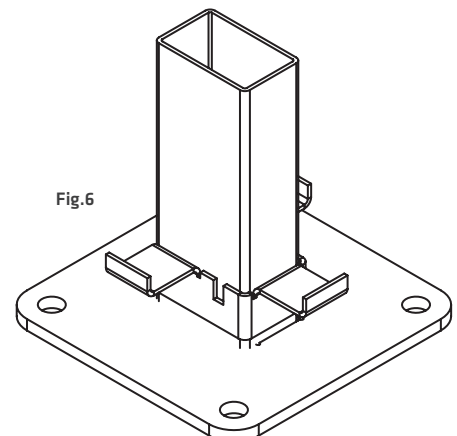
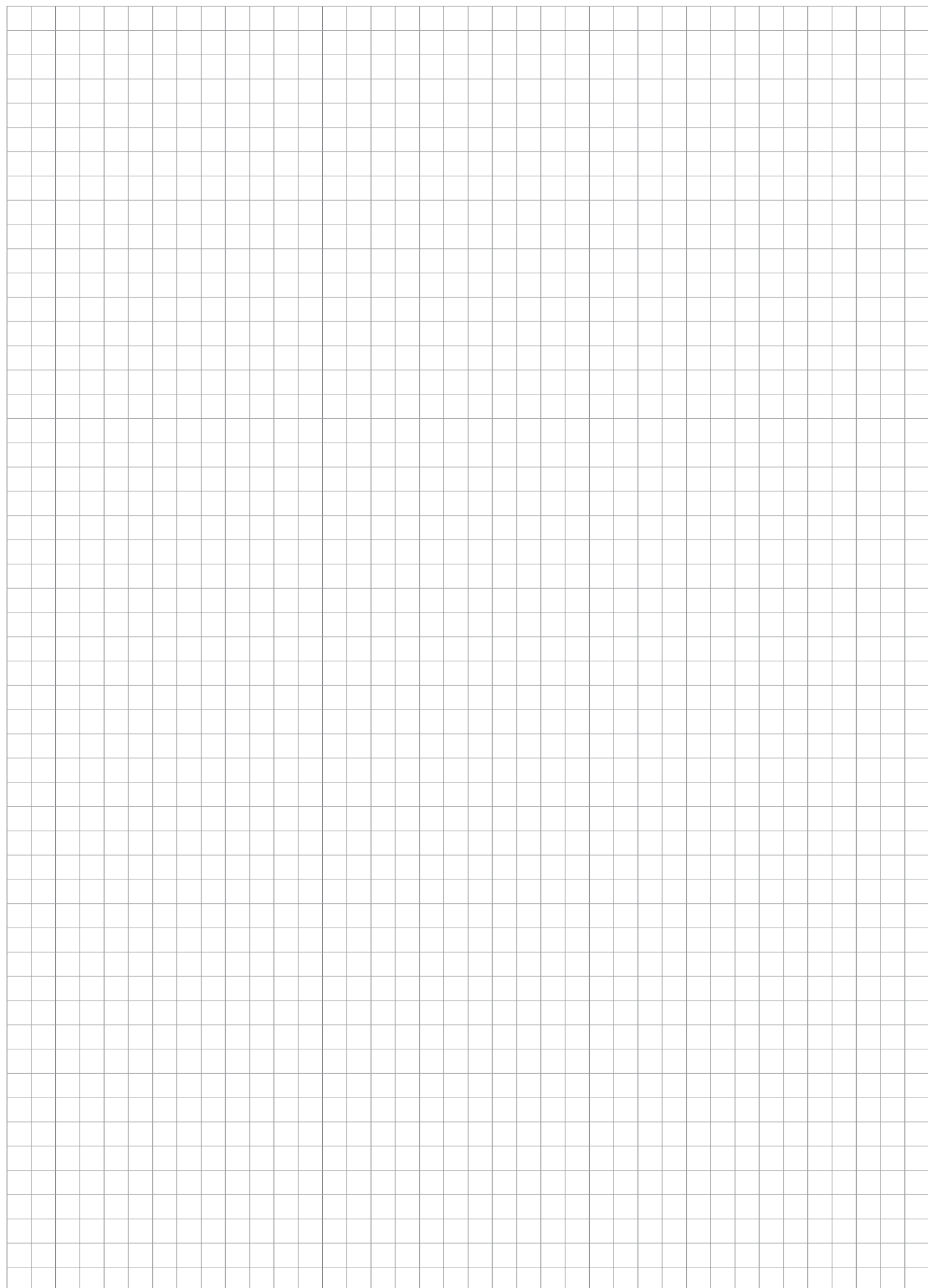


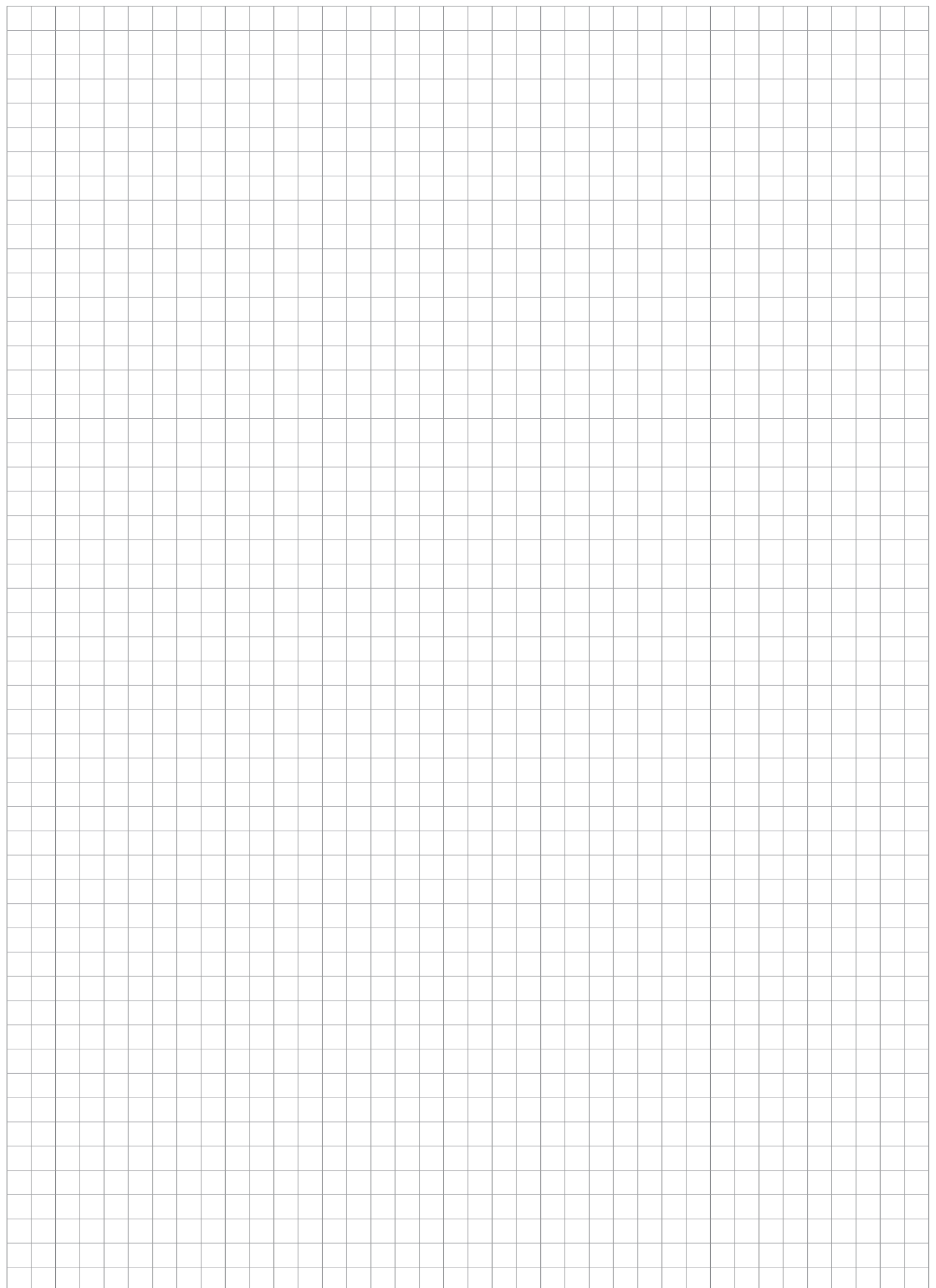
Fig.6



NOTES



NOTES





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