

AUTOMATIC RESIDENTIAL GATE

Installation Manual



WISNIOWSKI

GATES | WINDOWS | DOORS | FENCES



TABLE OF CONTENTS

1.	Overview	2
2.	Terms and definitions acc. to standard	2
3.	Description of symbols	2
4.	Required installation conditions	2
5.	Environmental protection	2
6.	Installation instructions	2
6.1.	Preparation activities	3
6.2.	Installation sequence	3
6.3.	Drive unit adjustment	4
6.4.	Overload adjustment	4
6.5.	Manual control buttons	4
6.6.	Finishing tasks	4
6.7.	Disassembly	4
7.	Foundation	5
8.	Foundation reinforcement	5

Secure the product against toppling and protect it from any sort of damage during assembly and storage.

- The wiring system and the electric shock protection installations are defined by current norms and regulations. Only a qualified installer is allowed to perform electrical works.
- The drive feed circuit should be equipped with a cut-off protection,

1. OVERVIEW

See: "Automatic residential double-leaf gate Operating and Maintenance Manual".



- The product may be installed and adjusted by a PROFESSIONAL INSTALLER only.**
- The electric drive unit or the controller can only be installed and adjusted by a **PROFESSIONAL INSTALLER** who is competent in automation and mechanical engineering equipment for residential use and must do the installation and adjustments in accordance with the current laws of the country of use.
- The manual covers the installation of the products with standard equipment and optional equipment components. The scope of standard and optional equipment is defined in the commercial offer.**
- Failure to comply with the safety regulations, legal requirements, and recommendations and suggestions contained in the Installation Manual will release the manufacturer from all liability and warranty obligations.**

The overview drawings provided in the manual can differ in terms of manufacturing details. These details are shown in separate drawings where necessary. During installation, make sure to observe the OHS regulations regarding: installation work, locksmithing work done with power tools depending on the installation technology used, and follow all the applicable standards and regulations, as well as the reference construction documentation. During the installation/refurbishment work, protect all the elements from plaster, cement, and gypsum splashes. They might leave stains. After completing the installation and making sure the product operates properly, give the Operating and Maintenance Manual to the owner. The manual should be protected from damage and kept safe. Assemble and install the product in accordance with the requirements of EN 13241. Install the product using only original fastening elements (e.g. bolts, screws, nuts and washers) supplied with the product, compliant with the EN or ISO standards.



Making any modifications or changes to the product accessories is strictly prohibited.

The product shipping packaging is intended to protect the product during transport only. Protect the products in the packaging against weather. Keep the packed product on a hard and dry surface (which must be flat, level and resist variations in indoor conditions) located in sheltered rooms that are dry and well-ventilated; the storage location must be free from all external conditions which may damage the product components and its packaging.



Do not store in wet rooms and/or rooms with vapours which may damage paint coats and/or galvanic coats.

Airtight foil packaging must be unsealed when storing the doors to avoid adverse change of microclimate inside the packaging. Failure to do so may result in the damage of painted and zinc plated coating. Waste and packaging materials (plastic, cardboard, polystyrene, etc.) comply with the applicable European standards. Nylon and polystyrene packaging should be kept out of reach of children.

Read this Installation Manual, as well as the Automatic residential double-leaf gate Operating and Maintenance Manual, and observe all the instructions.

- a residual current circuit-breaker, and an overcurrent protection.
- The power system for the product shall be made as a separate feeder from the switchboard.
- Grounding of the drive unit is obligatory and should be done in the first place.
- Disconnect power supply prior to any works on the electrical system. Disconnect any backup batteries, if used.
- If fuses trip, identify the cause and eliminate the fault before restoring normal operation.
- In case a problem persists and information from this instruction fails to help, contact the manufacturer technical department.
- Any rework or repairs on the system should be conducted only by a professional installer.
- Usage other than stated in this instruction is not allowed.
- Both children and adults must stay away from the operating range of the product.

2. TERMS AND DEFINITIONS ACC. TO STANDARD

See: "Automatic residential double-leaf gate Operating and Maintenance Manual".

3. DESCRIPTION OF SYMBOLS



tighten

4. REQUIRED INSTALLATION CONDITIONS

According to the current European regulations, a power-operated gate must be manufactured along with Directive 2006/42/EC. It must follow the following standards, as well: EN 13241, EN 12453, and EN 12635. Before proceeding with the installation, a risk analysis must be performed, including all safety conditions, as provided by Appendix 1 Machine Directive, to indicate solutions to be used with the installation (planning permission).

The installation should be performed at a temperature not lower than 5°C, the structure should be protected against the adverse effects of ambient conditions such as water, snow, construction site dust, all types of mortars.



- The product cannot be installed in an explosive atmosphere. Safety hazard.**
- Protect the gate drive unit from exposure to water.**

5. ENVIRONMENTAL PROTECTION

See: "Automatic residential double-leaf gate Operating and Maintenance Manual".

6. INSTALLATION INSTRUCTIONS

Proper operation largely depends on correct installation of the product. The Manufacturer recommends its authorised installation companies. Safe and intended operation of the product can only be ensured by correct installation and maintenance carried out according to the Manual. Before you start the installation, check whether the product and all the components are fit for use. Make sure that all the materials and elements are in a perfect condition and are suitable for use.

The stability of the fence largely depends on correct installation of the posts. When installing the posts, the Manual guidelines must be followed at all times to prevent incorrect installation and the potential loss of warranty rights.

Before attempting the installation process, verify that the product the drive unit will be installed on is properly mounted and adjusted and can be operated to open and close easily. Also dismantle the fixing parts and the drive components which do not require power supply.



- **Do not use the drive unit to operate a product which is defective.**
- **Disconnect the drive from a power source before proceeding with the installation works. Also a battery power supply should be disconnected if it has been delivered.**
- **Do not connect the drive unit to a power source before completing the installation process.**

Install the drive unit in compliance with the guidelines from the manufacturer(s) of the product, the drive unit, and accessories. To connect the drive unit, only original subassemblies must be used.

Fitting works should be carried out in accordance with the European directives and standards: 2014/30/UE; 2006/42/WE; 2014/35/UE; EN 13241 as amended. Follow the relevant standards to install safety devices (photocells, edge safety strips, etc.) which are required to protect the users who may enter the operating range of the product from hazards of damage, collision, and injury to people and animals/pets and property damage.



- **It is forbidden to use any additional end fittings or alter the existing ones without the Manufacturer's consent.**
- **Install the operator using the holders and adapter brackets provided by the Manufacturer.**
- **Keep the packaging (plastics, polystyrene, etc.) out of reach of children.**
- **During the performance of installation/renovation work, remove all jewellery and use personal protective equipment (clothes, goggles, gloves etc.).**
- **Disregarding these basic recommendations may cause malfunctioning, damage or warranty loss of the door.**

The product structure for a custom infill has been designed and manufactured in compliance with all technical requirements and standards. After the infill has been installed, the product must comply with the requirements of standards EN 13241 and EN 12453. The infill used must not contain any sharp-edged components or edges and must not cause any additional hazards in connection with the intended use of the product. Safe distances and presence detection capabilities must be ensured, as described in standards EN 12604 and EN 12453. Following the infill installation, a procedure to verify the product's compliance with legal requirements must be carried out immediately on site. Perform a risk assessment, and archive and keep the analysis records for at least 10 years. If irregularities are found, they must be rectified so that the product put into service does not pose a risk during use. Where necessary, the product must be retrofitted with the necessary safety systems and the residual risk must be disclosed and labelled.

In order to preserve the durability of the structure and ensure the proper operation of the product, the infill must be installed permanently. The infill weight may not exceed 20 [kg/m²]. Potential variations in the infill weight should be considered, e.g. due to the absorbent nature of the materials used. A maximum allowed infill ratio is 40%. The installed infill should be made in such a way that its weight is distributed evenly over the surface of the product leaf. The way in which the infill material is joined to the product must not cause additional stresses on its structure, e.g. cause deformation of the product leaf. The infill and its installation must not create areas that could lead to corrosion of the product's structure. The materials used must not increase the fire load density. They must also not contain/release hazardous substances as defined by European law.

In the case of additional national product safety requirements not covered by the above-mentioned provisions, compliance with such requirements must be verified and ensured.

6.1. PREPARATION ACTIVITIES

Preparation activities include preparing foundation and the wiring system. The product's opening direction is always as seen from the premises (the outside). Build the foundation for the product posts as shown in enclosed drawings. The structure of the posts on which the product will

be installed must ensure stability and rigidity of the product in all directions. Foundations for the whole fencing should go below the freezing depth, specific for the region where the installation takes place, but not less than 1200 [mm].



- **The foundation design must follow EN 1992 and EN 1997!**
- **Prior to construction of the fence, it must be checked if the materials used do not contain contraindications to the use with galvanized and painted coatings.**
- **Damage to the post or the fence is possible when the (minimum) depth of the post seating differs from the depth specified in the Installation Instructions.**
- Other foundation depths are permitted only after surveying the local ground and water conditions of the installation site, and should be in accordance with the construction practices and technical knowledge. **Make expansion joints in accordance with the enclosed foundation work drawings!**
- **The installation of the posts must guarantee stability. The posts must not deviate from the vertical or become deformed.**
- **Disregarding these basic recommendations may cause malfunctioning, damage or warranty loss of the door.**

6.2. INSTALLATION SEQUENCE

1. Check for preparation activities.

Pre-check the gate (build execution).

Fig. 7-11 Install the hinges considering the assembly type:

Type B

Install the upper and bottom hinges with respect to the post type: steel post – fig. 7.1; brick (concrete) post – fig. 7.2. To install the hinges, screw down the hinge plates to the post – fig. 8. If the posts do not have the holes, then drill the holes and place the rivet nuts. To mount the plates to the brick (concrete) post, place the sleeves acc. to the adhesive manufacturer guidelines. If the posts are laid over with stone, bricks, etc., the sleeve should be fastened to the post core.

Type C

Upper and bottom hinges are screwed down to the brick (concrete) post using adhesive sleeves. Place the sleeves acc. to the adhesive manufacturer guidelines – fig. 7.3.

Type E

Upper and bottom hinges are screwed down to the assembly channel – fig. 7.4 and then the assembly channel is fastened to the post fig. 9. To assemble the channel to the concrete post, place the connector acc. to the manufacturer guidelines, and fig. 11. If the posts are laid over with stone, bricks, etc., the connector should be fastened to the post core acc. to the connector manufacturer guidelines. The connector parameters should correspond to the ones of M10 screw, and have property strength min. 8.8.

Marking A – minimum depth to anchor the connector acc. to the connector manufacturer guidelines.

Type M

Install the upper and bottom hinges with respect to the post type: steel post – fig. 7.7; brick (concrete) post – fig. 7.8. To install the hinges, screw down the hinge plates to the post. Prior to fastening the plates, place a lock nut and bronze washer in the prepared socket. If the posts do not have the holes, then drill the holes and place the rivet nuts. To fasten the plates to the brick (concrete) post, place the sleeves acc. to the adhesive manufacturer guidelines. If the posts are laid over with stone, bricks, etc., the sleeve should be fastened to the post core.

Preliminary adjust the hinges in a nominal position (middle position for screwing and unscrewing the hinges). Install the gate passive leaf on the hinges.

Install the gate active leaf on the hinges.

In the middle between the posts, install the STOP plate.

When the gate is open, install the gate bumper.

When the gate is installed, adjust the gate leaves position.

Install the drive unit brackets.

Fig. 12
Fig. 13
Fig. 14

Fig. 15

Once installed, the product should open easily across the whole leaf movement range and the leaf should remain in balance.



6.3. DRIVE UNIT ADJUSTMENT

See: “Automatic residential double-leaf gate Operating and Maintenance Manual”.

6.4. OVERLOAD ADJUSTMENT

See: “Automatic residential double-leaf gate Operating and Maintenance Manual”.

6.5. MANUAL CONTROL BUTTONS

Manual control buttons are installed:

- at a location where the user has unobstructed view of the product in motion and its surroundings,
- in a place where the device cannot be turned on unintentionally
- away from moving parts
- at a height of at least 1.5 m

6.6. FINISHING TASKS

On completing the installation, check if the product has a marking plate in accordance with the standard, contact an authorised service company if it is not present.



On completing the installation, remove the plastic sheet from the product. Failure to do so will cause very strong bonding of the plastic sheet to the structure caused by heat and sunlight. This will make it almost impossible to remove the plastic sheet and may cause severe damage to the paint finish of the product.

Affix the warning labels permanently and in visible locations near the product or the control panel.

The installer is required to analyse the hazards present during operation of the product and to explain them to the user/owner. The following regular hazards occur during opening of the product: collision and crushing in the closing zone; collision and crushing in the opening zone; injury by pinching between the leaf and the receiver; snagging; and mechanical hazards related to the movement of the product. Before operating the product, make sure that all people are at a safe distance. Do not touch any moving part of the product while it is opening. Keep away at a safe distance from the product while opening: pass through the opening only when the product is fully opened and stationary.

Check the following before the final handover of the product to the owner:

- proper functioning of all safety devices (photocells, etc.)
- manual start and stop
- remote control start and stop
- function logic
- the safety devices operation in simulated emergency situations



- **Verify proper adjustment of the product and its compliance with EN 13241, EN 12453.** Do the checks explained in Section 6.3, 6.4.
- **Verify proper adjustment and performance of the manual drive unlocking.**
- **Visually inspect the product and the installation to make sure there is no evidence of mechanical maladjustment, damage, wear, or damage of wiring and the installed drive unit components.**
- **The door is properly mounted only when its leaf moves smoothly.**
- **Do not use this product in the case of faulty operation or damage to components.** Do not operate.
- **Check the emergency opening mechanism supplied with the operator.**
- **The Professional Installer must explain proper operation of the product to its user, including the emergency procedures, and train the user in proper use.**
- All the actions should be carried out as instructed in this Installation and Operating Manual. Please send any remarks and recommendations you might have to the owner in writing, e.g. note them in the Report Book or in the Warranty Sheet. After completing the inspection, confirm that the inspection was performed by adding an entry in the Report Book or in the Warranty Sheet.
- **After making sure the product operates properly, give the Operating and Maintenance Manual to the owner.**
- **Keep the product pack list for future reference.**
- **Disregarding these basic recommendations may cause malfunctioning, damage or warranty loss of the door.**

6.7. DISASSEMBLY

To remove the product, proceed with the installation procedure in the reverse order. Turn off the power supply before the disassembly procedure.



All the actions should be carried out as instructed in this Installation and Operating Manual. Please send any remarks and recommendations you might have to the owner in writing, e.g. note them in the Report Book or in the Warranty Sheet. After completing the inspection, confirm that the inspection was performed by adding an entry in the Report Book or in the Warranty Sheet.

The manufacturer reserves the right to introduce design modifications due to technological progress that do not alter the product functionality, without prior notice.

This documentation is copyright of the manufacturer. Copying, reproduction and usage in full or in a part without the written consent of the owner is prohibited.

This document has been translated from Polish. In case of discrepancies, the Polish version prevails.

7. FOUNDATION

Fig. 1 Foundation for a double-leaf gate – square base plate

Legend

So – Drive-through width – ordering dimension W

– View from the premises side



Foundation works should be performed according to EN 1992 and EN 1997!

1. Power supply $3 \times 1,5 \text{ mm}^2$ in case of 230[V] power supply, the electrical installation should be made according to PN-IEC 60364 „Electrical Installations for Buildings“
2. Control unit
3. Cable for warning lamp $2 \times 1,5 \text{ mm}^2$ + antenna coaxial cable RG8
4. Cable laying for drive $3 \times 1,5 \text{ mm}^2$
5. Clear opening of the installation opening
6. Power cables for a drive $3 \times 1,5 \text{ mm}^2$ in steel or PCV pipe
7. Photocells
8. IR barrier
9. Control cables for photocells $2 \times 0,5 \text{ mm}^2$ in steel or PCV pipe
10. $4 \times 0,5 \text{ mm}^2$ (photocells)
11. Foundation: gravel concrete C20/C25, concentrated



The waterproofing of the foundation should be performed, the method and manner of the waterproofing depend on the soil-water conditions at the place of the product installation.

12. Warning lamp
13. The depth should go below the freezing depth, specific for the region where the installation takes place, but not less than 1200 [mm]
14. Gate bumper is installed when the drive does not feature limit switches
15. Bedding (chipping, gravel)
16. $2 \times 0,25 \text{ mm}^2$ (manually-operated - cables)



Power supply and control cables sections should not be changed as it may hamper or prevent the installation.

8. FOUNDATION REINFORCEMENT

Fig. 5 Reinforcement of posts – square base plate

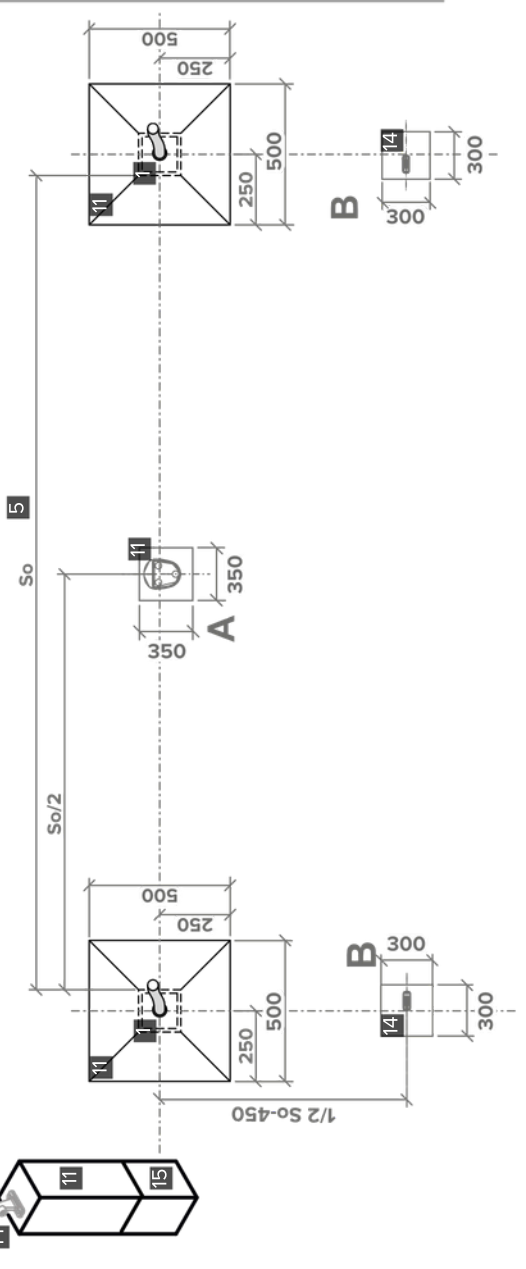
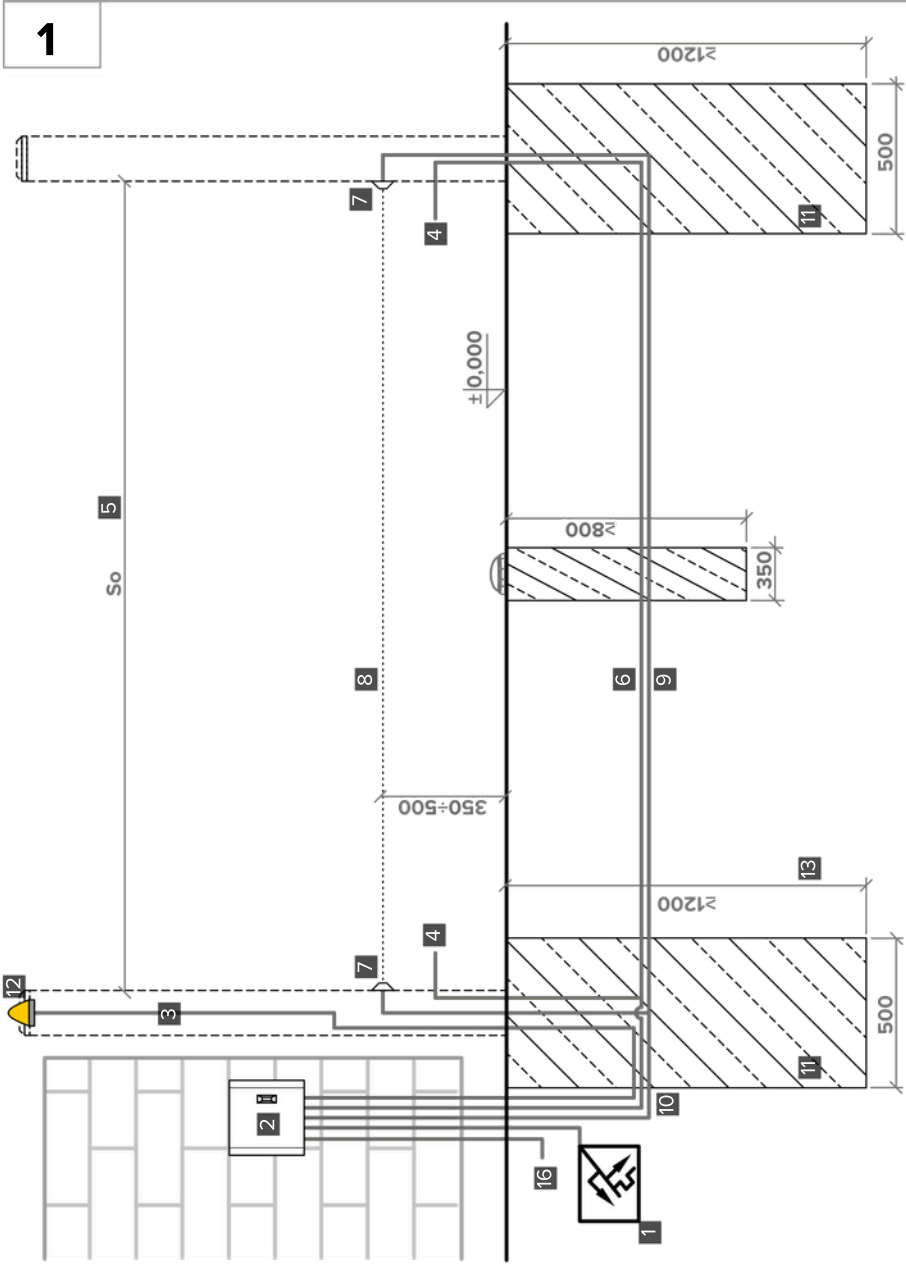
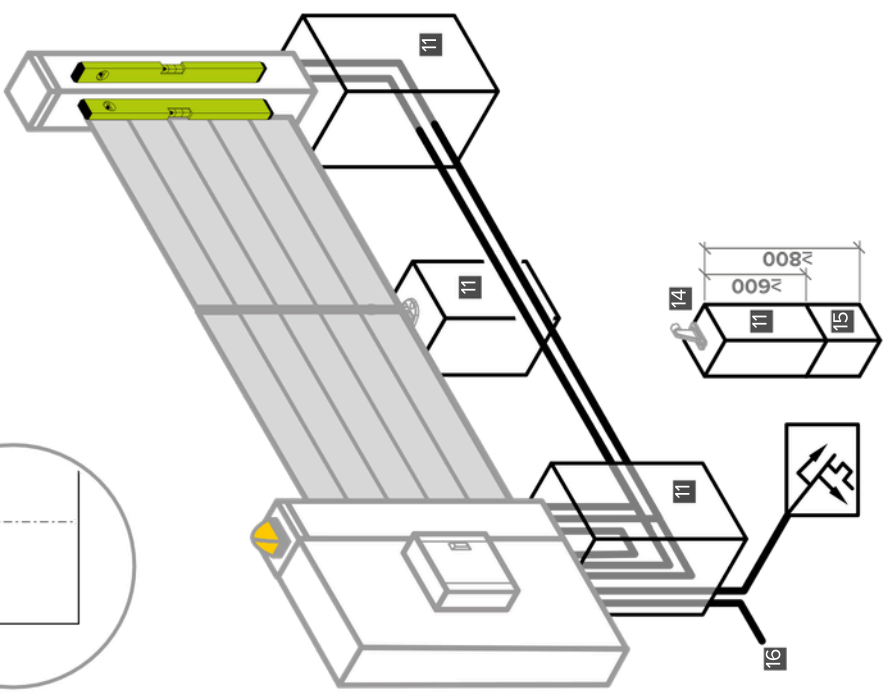
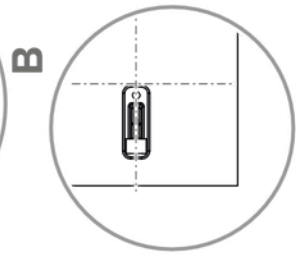
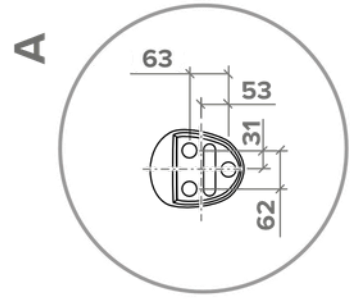
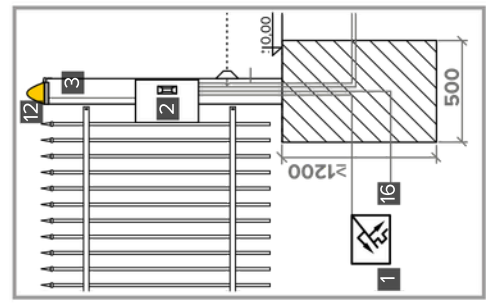
Fig. 6 Reinforcement of posts – round base plate

Legend

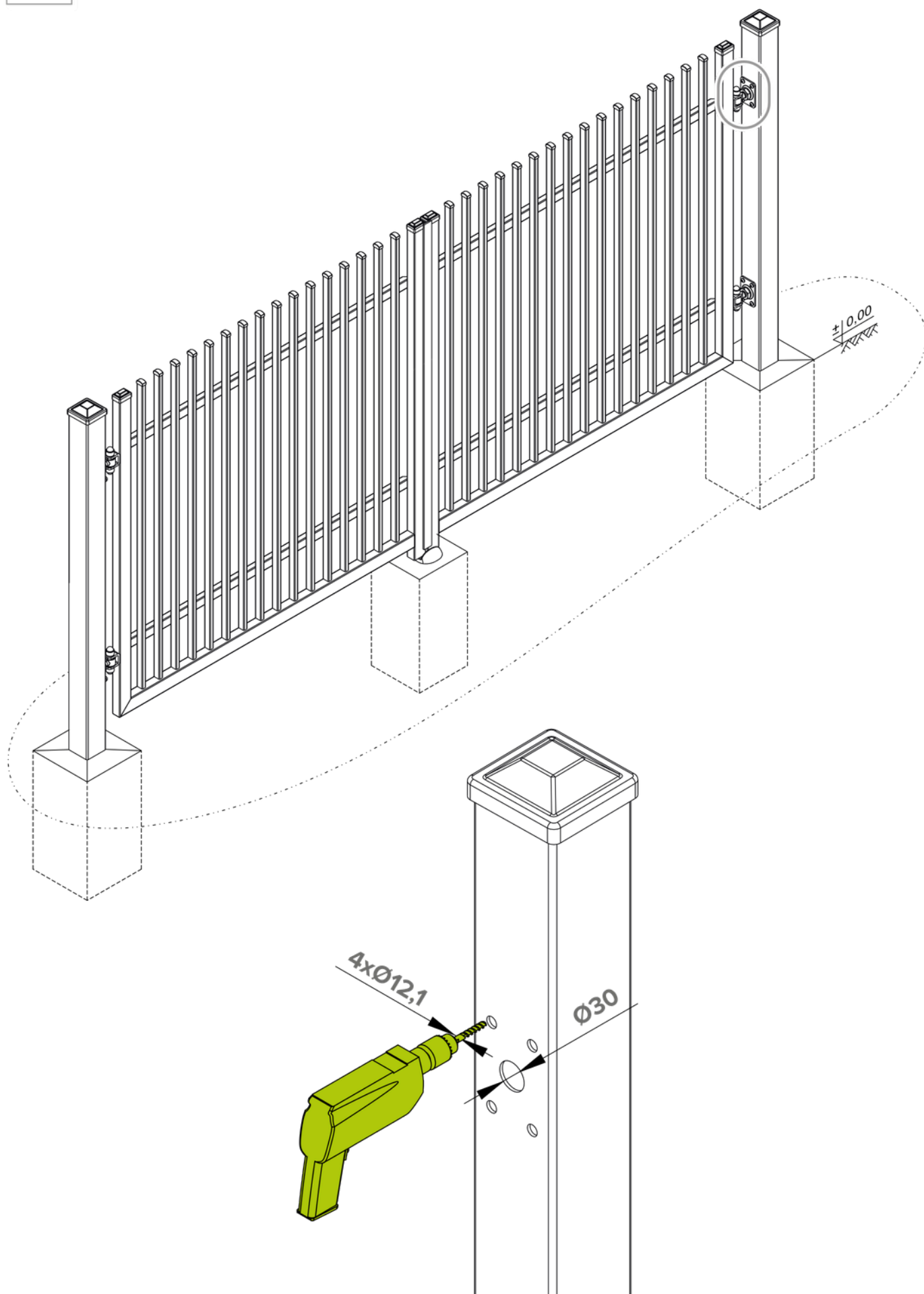
- (*1) – The depth should go below the freezing depth, specific for the region where the installation takes place, but not less than 1200 [mm]
- (*2) – interface (with ground or concrete) - for galvanized posts, apply extra protection layer to prevent the post against corrosion!
- (*3) – or by other manufacturers. In this case anchor bolt endurance parameters should correspond to the parameters stated above.
- (*4) – List of steel reinforcing elements
- (*5) – finishing level (e.g. pitcher)
- (*6) – Diameter $\varnothing$ [mm]
- (*7) – Length L [mm]
- (*8) – Number per element of N piece
- (*9) – Total length in [m] L_{tot}
- (*10) – Bar No.
- (*11) – Unit mass M_i [kg/m]
- (*12) – Mass M [kg]
- (*13) – Total mass M_{tot} [kg]
- (*14) – Steel A-IIIN (RB500)
- (*15) – Concrete C20/25
- (*16) – Shell C_{min}

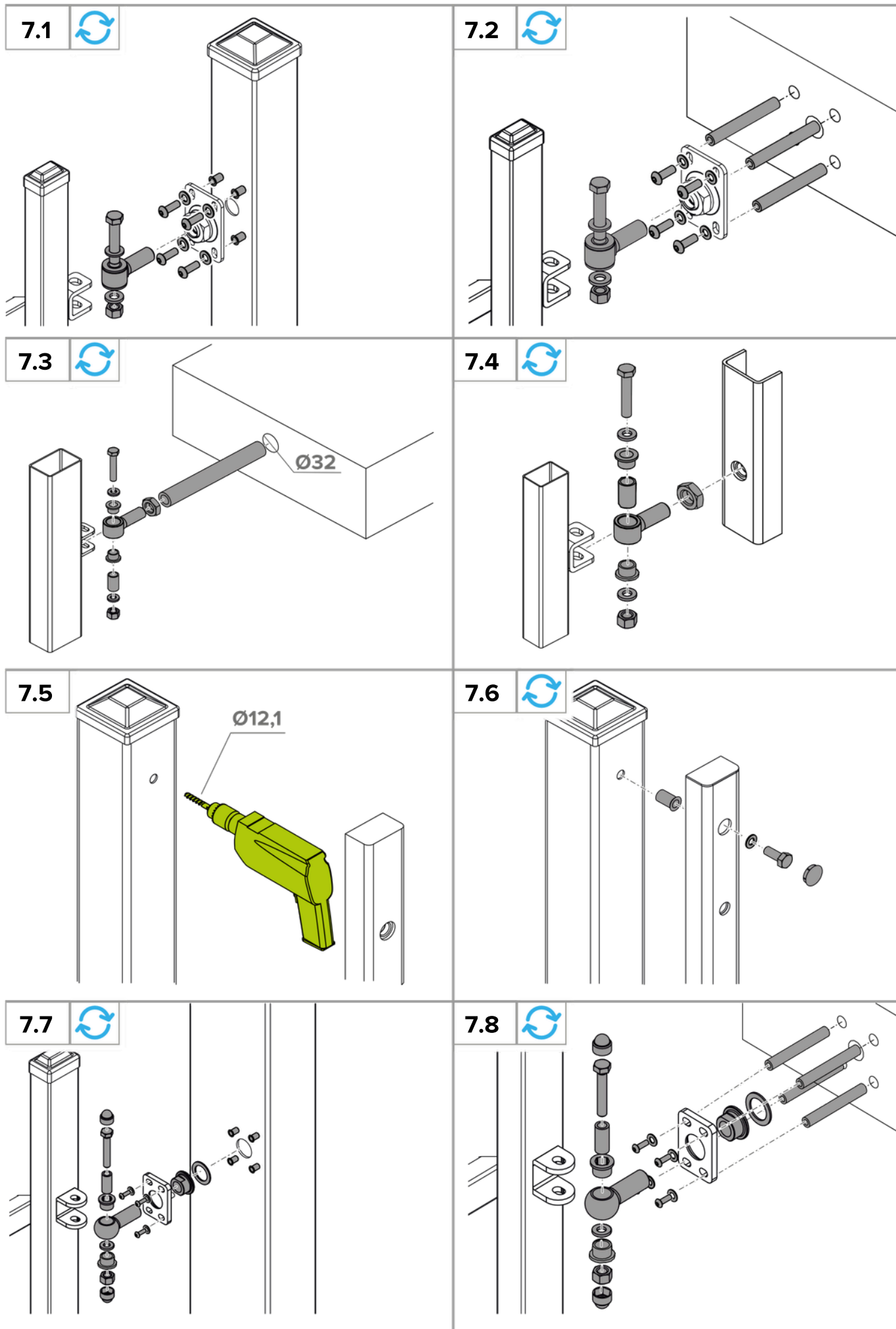


- **Do not fill the post with concrete!**
- **The drawing presents the minimum required reinforcement. Whether the foundation is performed correctly depends on the local ground and water conditions. In individual situations, foundation should be designed.**

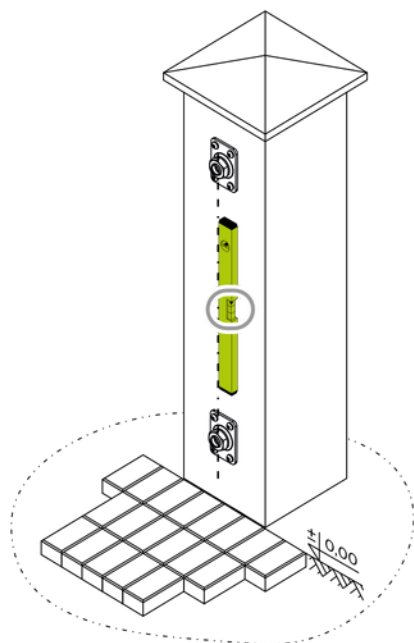


1



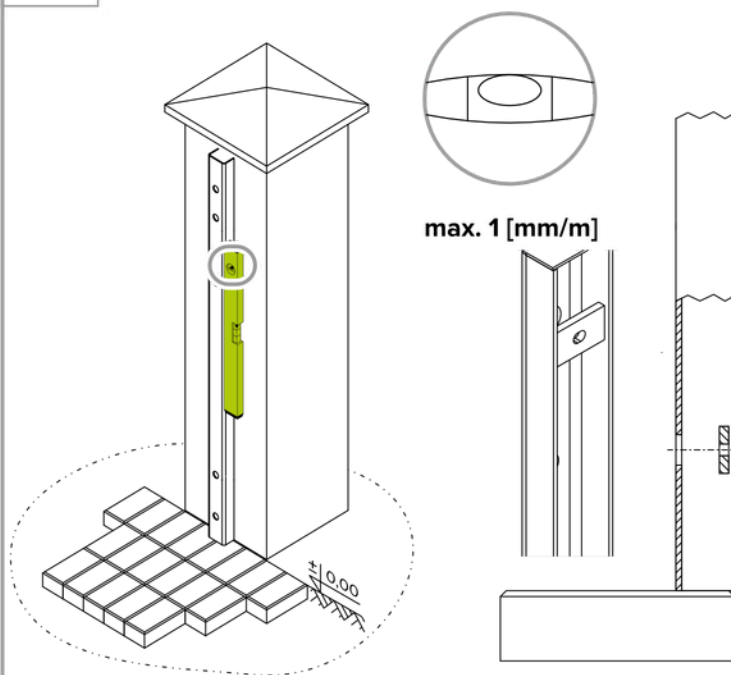


8



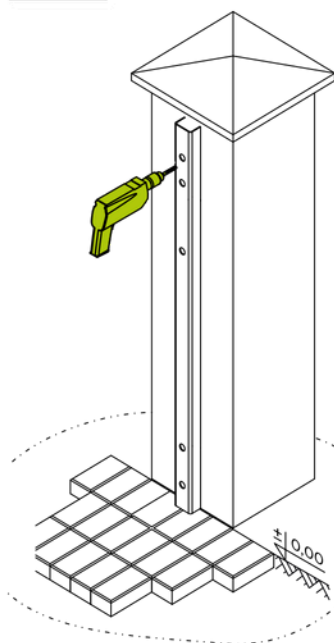
max. 1 [mm/m]

9

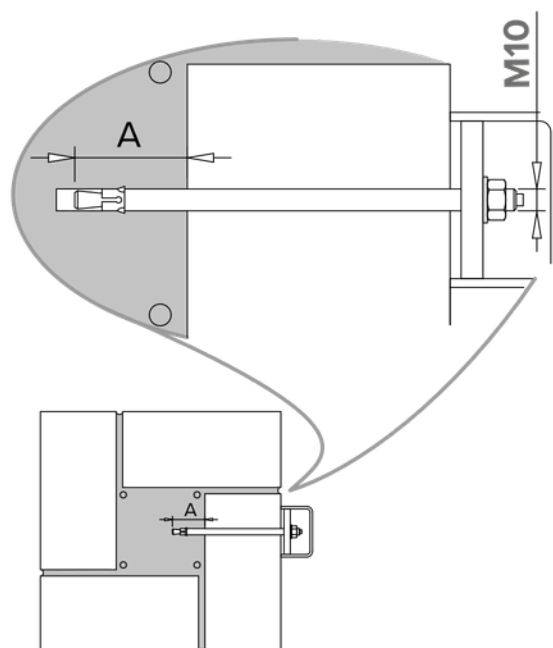
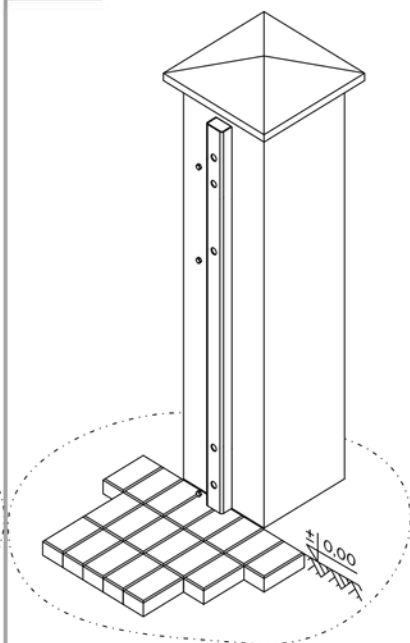


max. 1 [mm/m]

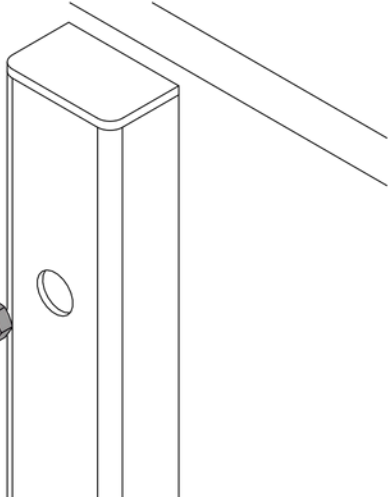
10



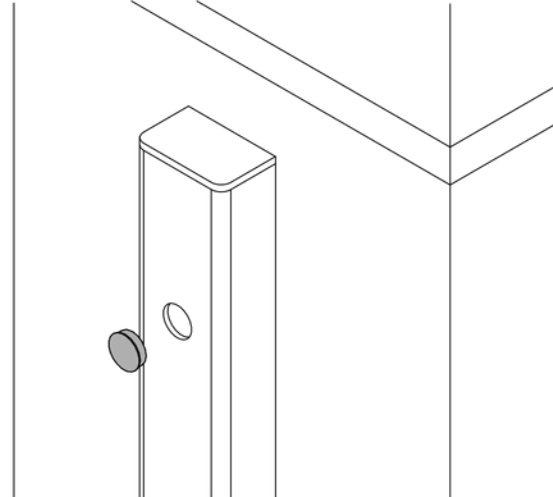
11



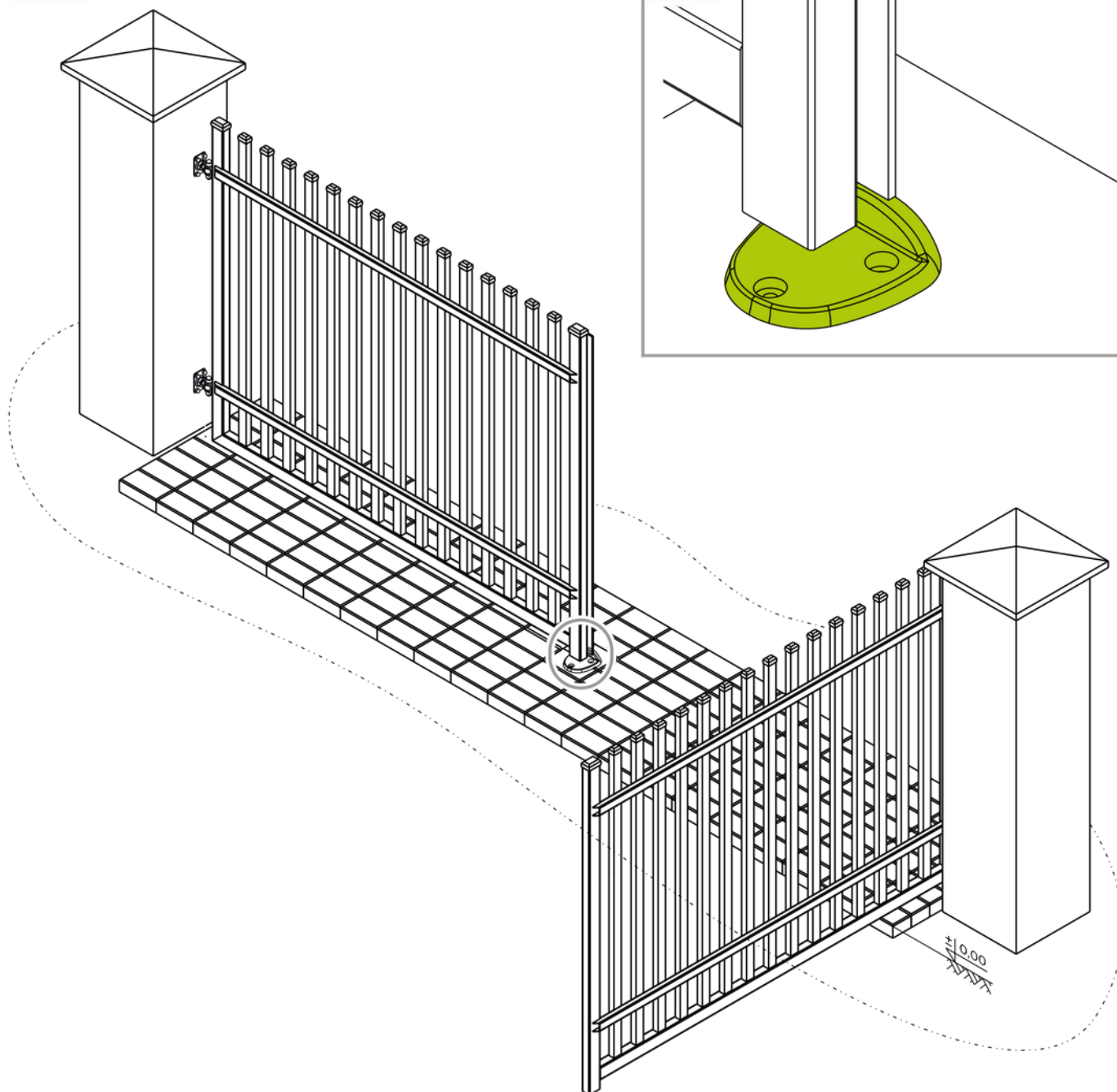
11.1



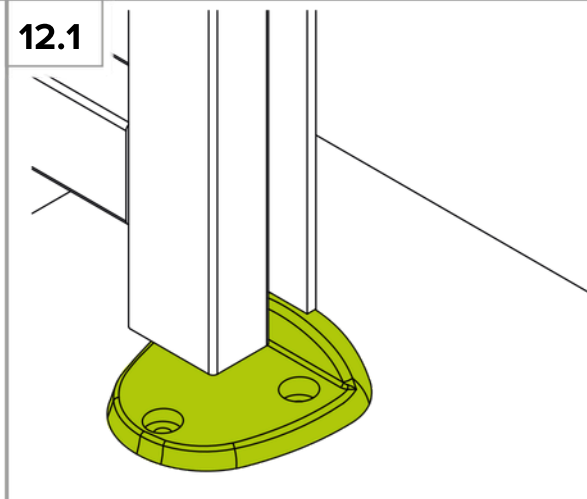
11.2



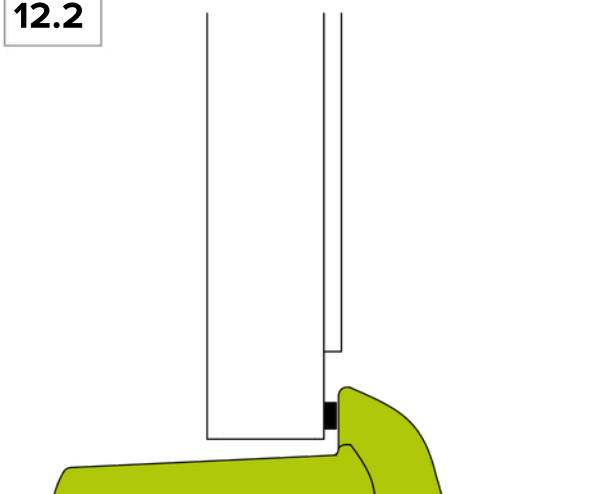
12



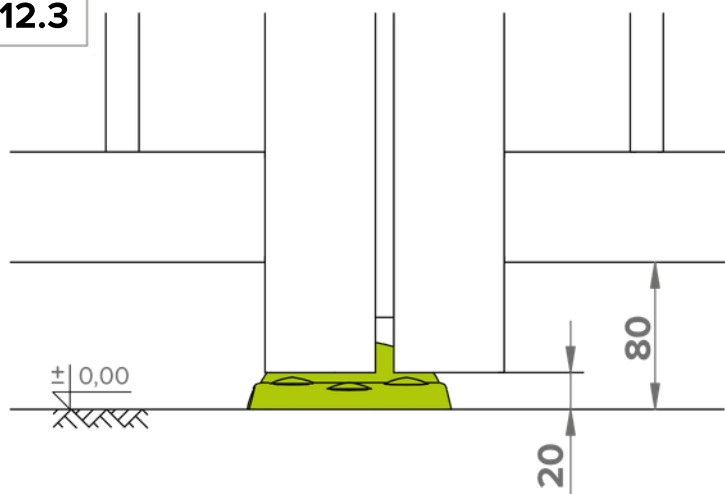
12.1

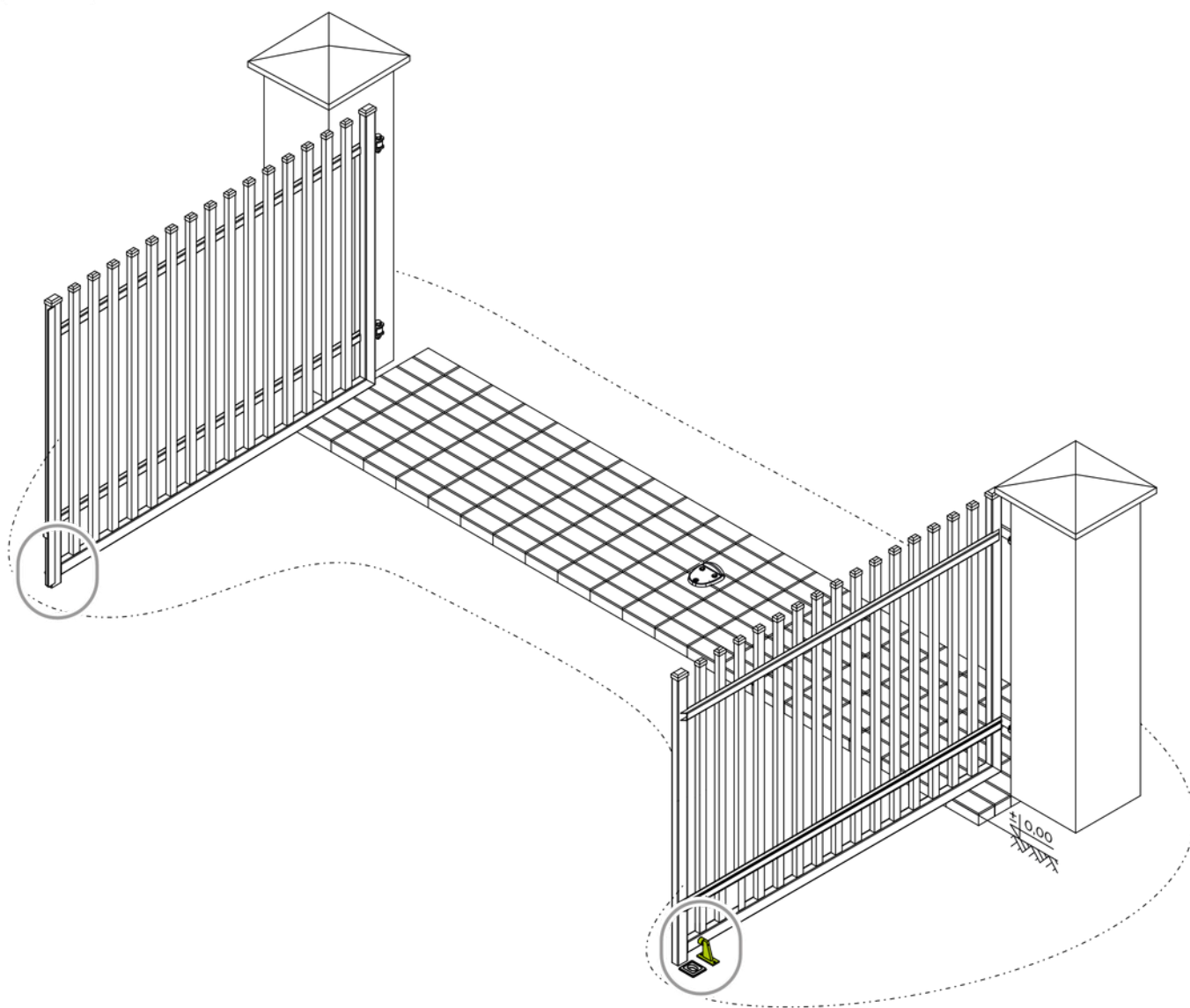


12.2

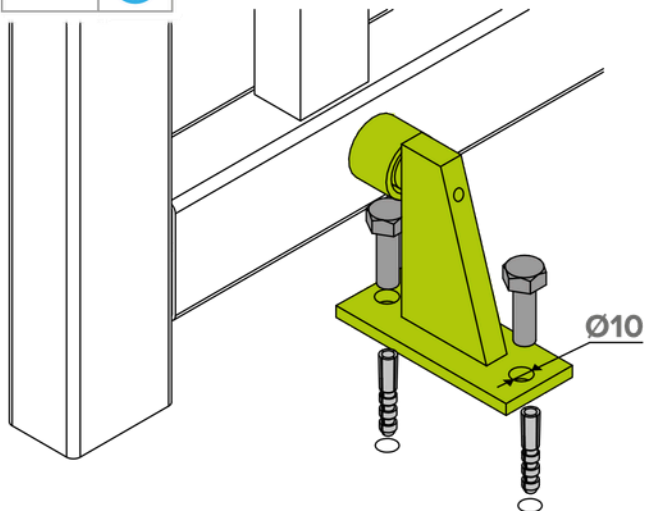


12.3

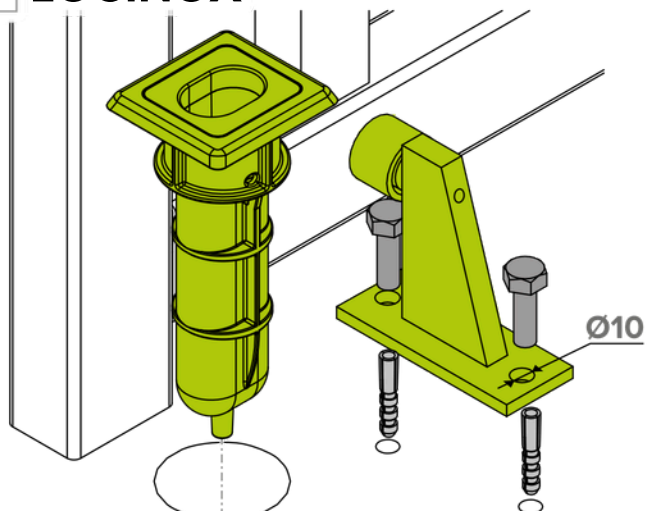


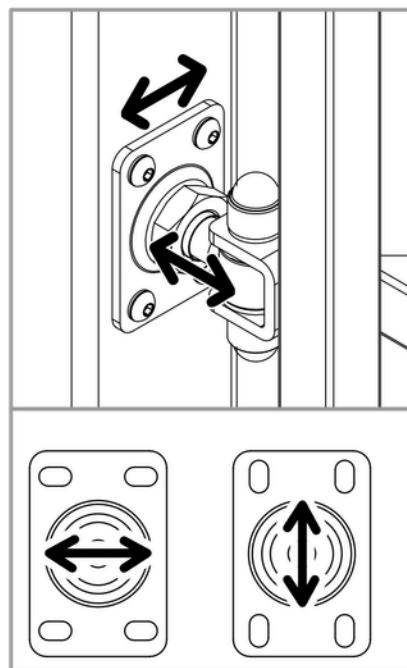
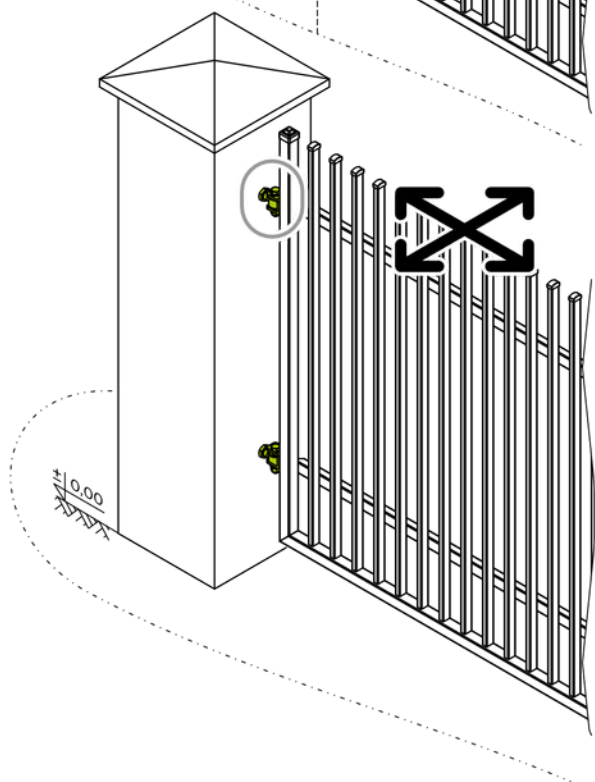
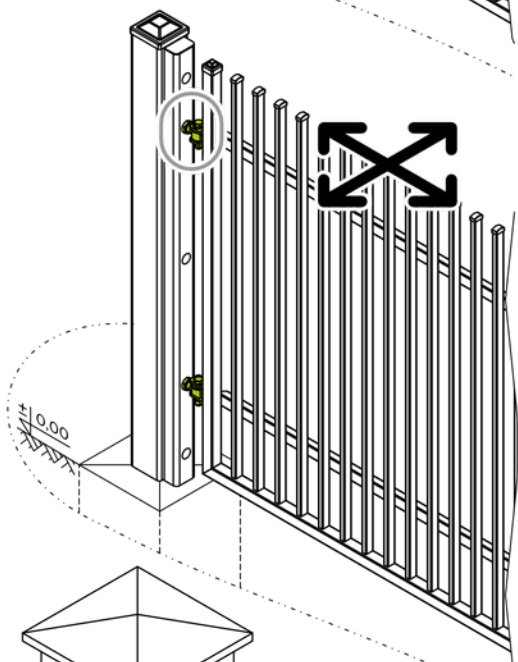
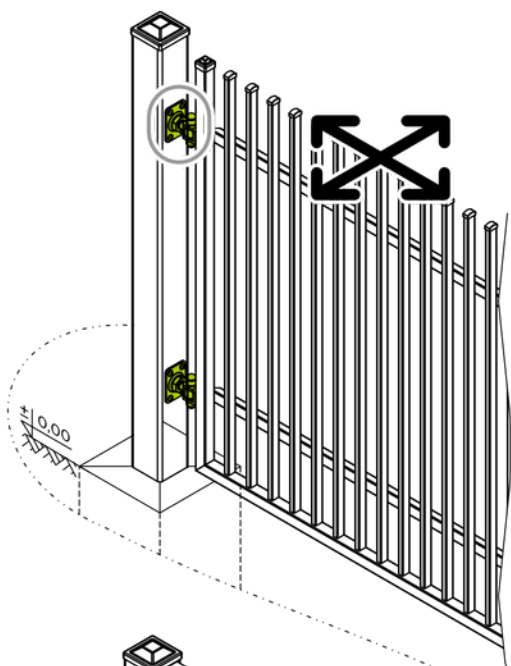


13.1

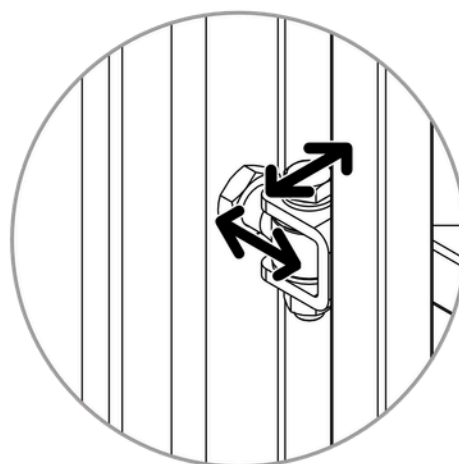


13.1

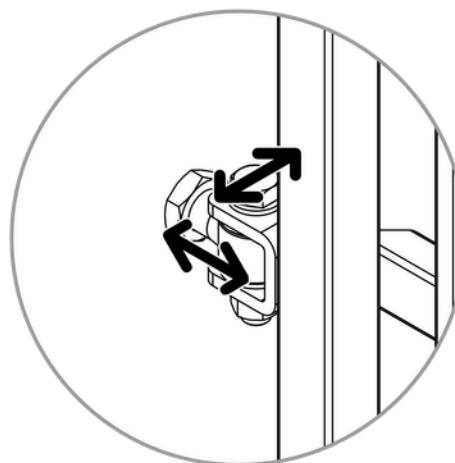
LOCINOX



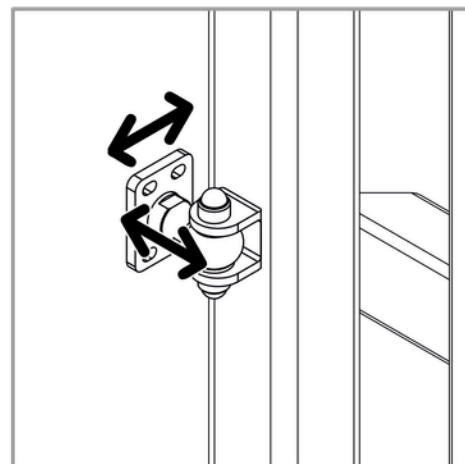
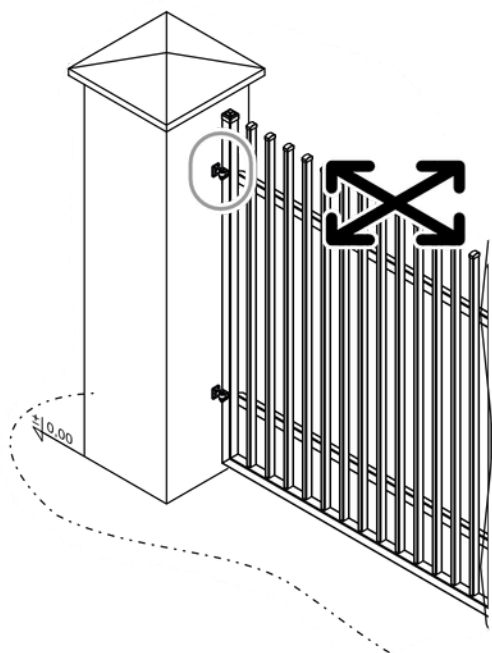
14.1



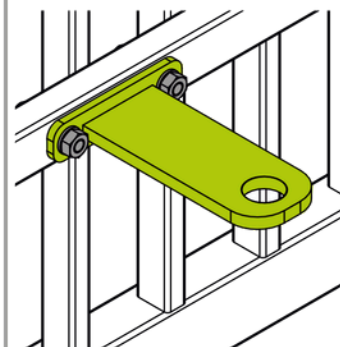
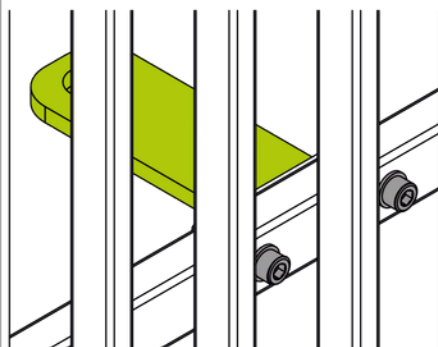
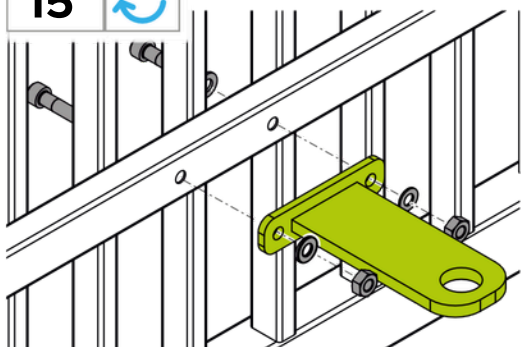
14.2



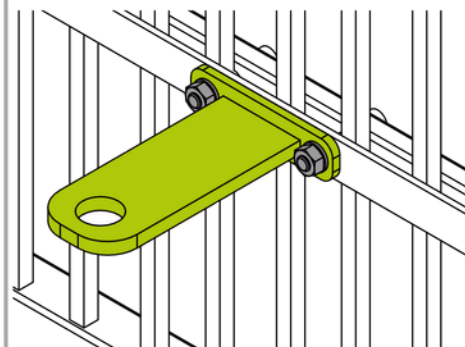
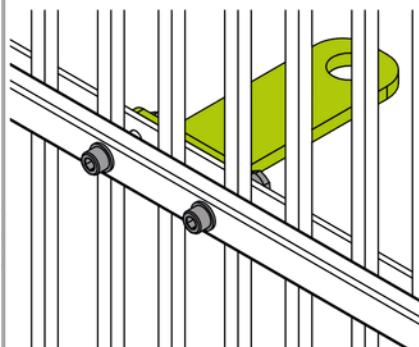
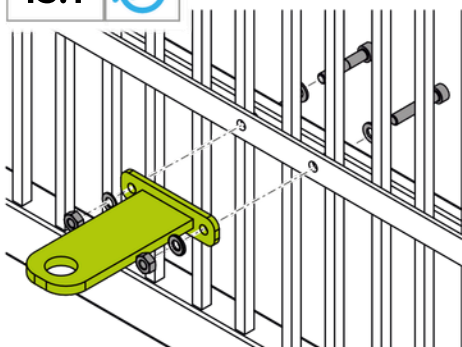
14.3



15



15.1



15.2

