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CE

LPS 1175 Automatic Cantilever Gate Installation Manual

The document is for the Professional Installer

TABLE OF CONTENTS

[A000177]**Read this Installation Manual, as well as the Industrial fences Sliding gates Operating and Maintenance Manual, and observe all the instructions.**

1. OVERVIEW

[A000178] See: “Industrial fences Sliding gates Operating and Maintenance Manual”.

- [A000132] **The product may be installed and adjusted by a PROFESSIONAL INSTALLER only.**
- [C000445] 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.

- [A000097] **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.**

- [A000104] **Failure to observe the safety regulations, regulatory requirements, as well as instructions and recommendations provided in this Installation and Operating Manual voids all of the Manufacturer's obligations and guarantees.**

[A000179] 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.
[A000115] 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.

[A000152] **Making any modifications or changes to the product accessories is strictly prohibited.**

[B000129] 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.

[B000025] 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.

[A000157] 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.
[A000153] Secure the product against toppling and protect it from any sort of damage during assembly and storage.
[C000075] 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, a residual current circuit-breaker, and an overcurrent protection.
- The gate power supply system should be executed as a separate electrical circuit.
- 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.
- Neither children nor adults should stay within the gate operating area.

2. STANDARD TERMS AND DEFINITIONS

[A000178] See: “Industrial fences Sliding gates Operating and Maintenance Manual”.

3. DESCRIPTION OF SYMBOLS


this sign refers to a specific item in this Installation Manual.


symbol referring to a separate instruction manual for the accessory element


the indoors, or inner side of the door


the outdoors, or outer side of the door


correct position or action


incorrect position or action


option


power operated product


supervision


tighten


unscrew


use little force

4. REQUIRED INSTALLATION CONDITIONS [A000040] According to the current European regulations, a power-op- erated 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). [B000149] 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.

- [C000081] **The product cannot be installed in an explosive atmosphere. Safety hazard.**
- [C000449] **The door drive unit should be protected from contact with water.**

5. ENVIRONMENTAL PROTECTION [A000178] See: “Industrial fences Sliding gates Operating and Maintenance Manual”.

6. INSTALLATION INSTRUCTIONS [A000041] Proper operation largely depends on correct installation of the product. The Manufacturer recommends its authorised installa- tion companies.Safe and intended operation of the product can only be ensured by correct installation and maintenance carried out accord- ing to the Manual. [A000164] 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. [C000415] The stability of the fence largely depends on correct installa- tion of the posts. When installing the posts, the Manual guidelines must be followed at all times to prevent incorrect installation and the poten- tial loss of warranty rights. [D000146] Before drive installation, make sure that the door the drive is mounted on has been mounted and adjusted correctly and opens and closes easily. Also dismantle the fixing parts and the drive components which do not require power supply.

- **The drive must not be installed with a non-operational door**
- **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.**
- [C000451] **Do not connect the drive unit to a power source before completing the installation process**

[B000096] When installing the drive unit, recommendations of the door manufacturer, manufacturer of the drive unit and the accessories should be observed. To connect the drive unit, only original sub-assemblies should be used.

[B000215] 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. Install safety units (photocells, safety bars, etc.) according to applicable standards to protect persons, animals or objects that can appear near the gate from hitting, injury or damage.

- [A000165] **It is forbidden to use any additional end fittings or alter the existing ones without the Manufacturer's consent.**
- [A000129] **Install the operator using the holders and adapter brackets provided by the Manufacturer.**
- [A000026] **Keep the packaging (plastics, polystyrene, etc.) out of reach of children.**
- [A000028] **During the performance of installation/ren- ovation work, remove all jewellery and use personal protective equipment (clothes, goggles, gloves etc.).**
- [A000151] **Disregarding these basic recommendations may cause malfunctioning, damage or warranty loss of the door.**

6.1. PREPARATION ACTIVITIES

[D000491] Preparation activities include preparing foundation and the wiring system. The gate handing is always stated as viewed from the premises side. Foundation for the gate posts should be performed according to the attached drawings. The posts construction to which the gate will be assembled, should provide its stability and rigidity in all planes. 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].

- [C000408] **The foundation design must follow EN 1992 and EN 1997!**
- [D000446] **Prior to construction of the fence, it must be checked if the materials used do not contain contrain- dications to the use with galvanized and painted coatings.**
- [C000497] **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.**
- [B000091] 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!**
- [C000409] **The installation of the posts must guarantee stability. The posts must not deviate from the vertical or become deformed.**
- [A000151] **Disregarding these basic recommendations may cause malfunctioning, damage or warranty loss of the door.**

6.2. INSTALLATION SEQUENCE

Fig. 9 [D000247] Place the guiding frame on the prepared anchors (in accordance with the OHS regulations; the use of a crane is recommended).
Use the installation kit (washer + nut) to fix it to the foundation. Adjust the plumb and level.

Fig. 10 Remove the rail cap.

Fig. 10.1 Slide the leaf onto the carriages (in accordance with the OHS regulations; the use of a crane is recommended).
Adjust the leaf level.

Fig. 10.2 Fit the rail cap.

Fig. 11 Remove the gate from the stand.

Fig. 12 Place the guiding frame with the leaf on the prepared anchors (in accordance with the OHS regulations; the use of a crane is recommended).
Use the installation kit (washer + nut) to fix it to the foundation. Adjust the plumb and level.

Fig. 13 Place the catcher on the prepared anchors. Use the installation kit (washer + nut) to fix it to the foundation.
Adjust the plumb and level.

Fig. 14 Adjust the carriages.

Fig. 15 Adjust the leaf catcher.

Fig. 16 In gates fitted with an adjustable front rod, the leaf can be lifted and lowered.

Fig. 17 The method for opening and disengaging the drive unit.

Fig. 18 Install contact or magnetic sensors depending on the type of the controller.

Fig. 18.1 Adjust the distance between the toothed bar and the toothed wheel.

Fig. 19 When installing a gate with an external drive unit, follow the drive unit manufacturer’s guidelines.

Fig. 20 Install the gate plate sheet or positioning roller.

Fig. 21 Check whether the gate moves easily and smoothly.

[D000210] **When the installation is complete, the gate should move freely along the whole gate leaf and be invariably balanced.**

6.3. DRIVE UNIT ADJUSTMENT

[A000178]See:“IndustrialfencesSliding gates Operating and Maintenance Manual”.

6.4. OVERLOAD ADJUSTMENT

[A000178]See: “Industrial fences Sliding gates Operating and Maintenance Manual”.

6.5. MANUAL CONTROL BUTTONS

[C000008] Manual control buttons are installed:
- in a place where the operator will have an unobstructed view of the door 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

[B000164] On completing the installation, check if the product has a marking plate, 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.

[C000481] Warning labels should be attached permanently in a visible location near the door or the central control unit.

[D000200] 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:

- [D000201] 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

- [B000209] **Verify proper adjustment of the product and its compliance with EN 13241, EN 12453.** Do the checks explained in Section 6.3, 6.4
- [C000459] **Verify proper adjustment and performance of the manual drive unlocking.**
- [C000014] **Check visually the door and the whole system for maladjustment, mechanical damage, tear and wear evidence, cables or operator parts damage.**
- [B000007] **Do not use this product in the case of faulty operation or damage to components.** Do not operate; contact an authorised service centre or a Professional Installer.
- [B000216] **Check the emergency opening mechanism supplied with the operator.**
- [A000144] **The Professional Installer must explain proper operation of the product to its user, including the emergency procedures, and train the user in proper use.**
- [A000011] 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.
- [A000180] **After making sure the product operates properly, give the Operating and Maintenance Manual to the owner.**
- [B000183] **Keep the door pack list for future reference.**
- [A000151] **Disregarding these basic recommendations may cause malfunctioning, damage or warranty loss of the door.**

6.7. DISASSEMBLY OF DOORS

[C000010]Disassembly of the gate should be carried in a sequence reverse to assembly. Turn off the power supply before the disassembly procedure.

[A000011] **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.**

[A000079] **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.

6.8. INSTALLATION OF ADJACENT STRUCTURES

[C000011] Outside of the clear opening of the gate (So) the gate shall be installed within a structure that complies with the same standard as the gate, such that no access can be gained between the structure and the gate.
The structure can be at minimum flush with the front of the support posts either side of the clear opening.

6.9. FINISHED HEIGHT OF THE STRUCTURE

[C000012] The overall gap between the gate bottom of the gate structure and ground level is adjustable, however, it should never be less than 50mm or more than 120mm.

7. FOUNDATION

Fig. 1 So≤12000 – right gate
Fig. 2 So≤12000 – left gate
Fig. 3 So≤12000 – converging gates
Fig. 4 So>12000 – right gate
Fig. 5 So>12000 – left gate

[D000246] **Legend**

F – Footing length
RF – Roller carriages spacing
So – Span between posts, order dimension
B – gate movement length (leaf size):
So≤12000: B=So+RF+1000 [mm]
So>12000: B=So+RF+1400 [mm]
D – Distance between foundation sockets

Footing to be done along with EN 1992 and EN 1997!

1. Cables leading
2. Indented foundation bolt 25-A-II 500 [mm] long.
3. Theoretical fencing post.
4. Footing: gravel concrete C20/C25 concentrated.

[B000297] **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.**

5. It has to go below the freezing depth, specific for the region where the installation takes place, but not less than 1200 [mm].
6. Control cables 2x0.5mm2 for the photocell in a steel or PVC pipe.
7. Power supply 3x1.5 [mm2] or 3x2.5 [mm2] with distance from the supply source of over 30 [m] when 230 [V] is supplied, the installation should be carried out in accordance with PN-IEC 60364 „Electrical Installations of Buildings”.
8. 3x0,5mm2 button-controlled.
9. Gate leaf movement axis
10. Dimensions calculated according to the table in the footing drawing.
11. Safe distance from a fixed barrier.
12. Lay cables with a 1500 [mm] excess.
13. 4x0,5 [mm2] (photocells).
14. Infrared barrier.
15. Finished driveway level.
16. Clear opening of a structural opening.
17. Gate leaf axis line.
18. Foundation for the gate plate sheet or positioning roller.
19. Control cables for photocell 2x0.5 in a steel or PVC tube; cables for communication between drive units YLY 3x1 in a steel or PVC tube.

- **The ends of anchor bolts to be set at one level.**
- **Maintain the true vertical when setting anchors in concrete.**
- **Power supply or control cables sections may not to be changed as it may hamper or prevent the installation.**
- **Use leaf gate axes lines when installing the gate; also check the measurements in line with the figure.**
- **The anchor bolt spacing is given in axes.**

8. FOUNDATION REINFORCEMENT

Fig. 6 So<8000
Fig. 7 8000≤So≤12000
Fig. 8 So>12000

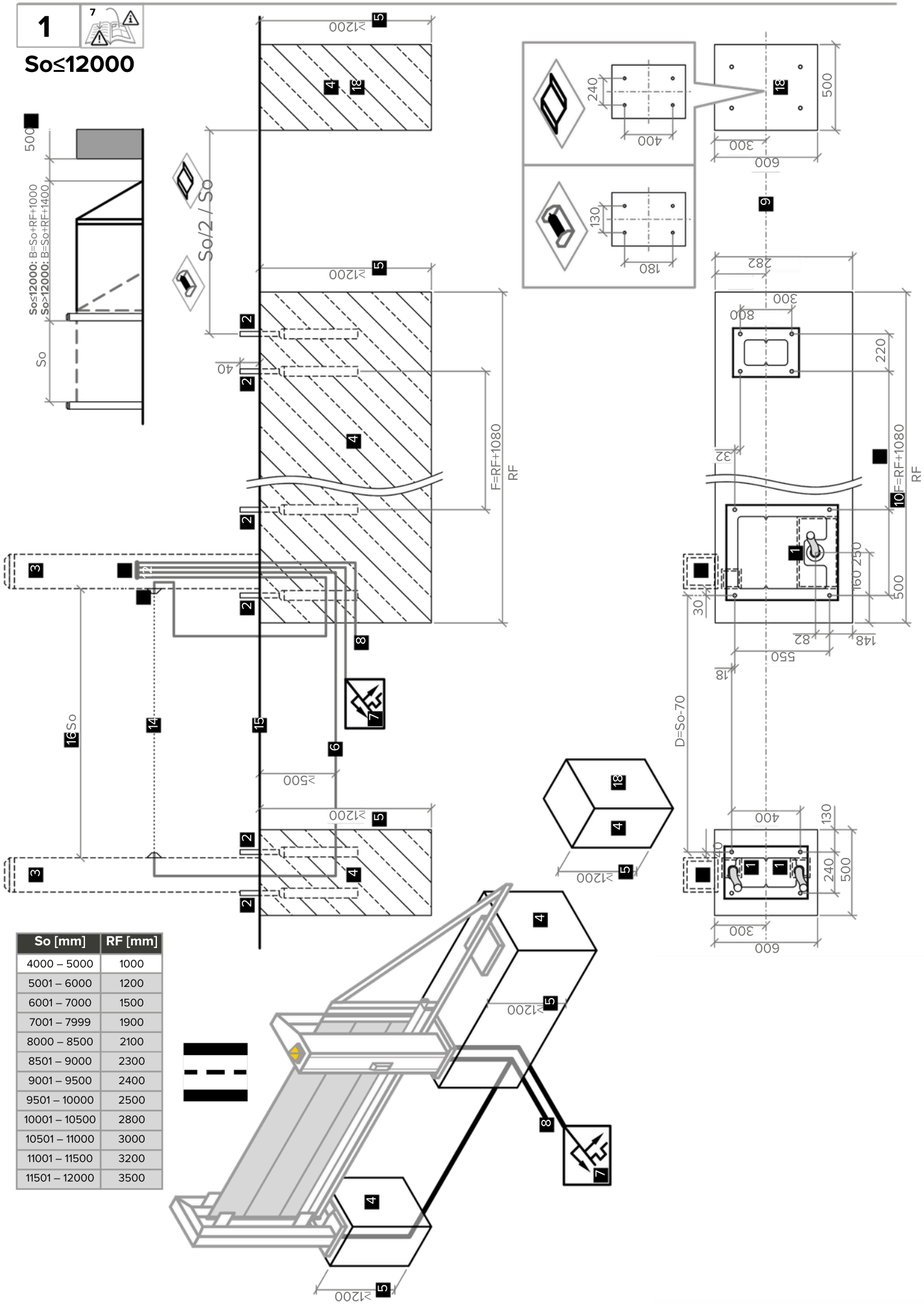
[D000257] **Legend**

(*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) – List of steel reinforcing elements
(*3) – Diameter Ø [mm]
(*4) – Length L [mm]
(*5) – Number per element of N piece
(*6) – Total length in [m] L_{tot}
(*7) – Bar No.
(*8) – Unit mass Mi [kg/m]
(*9) (*10–) M– aTsost aMI m[kags]s
M tot [kg]
(*11) – Steel A-IIIN (RB500)
(*12) – Concrete C20/25
(*13) – Shell C_{min}

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

So≤12000

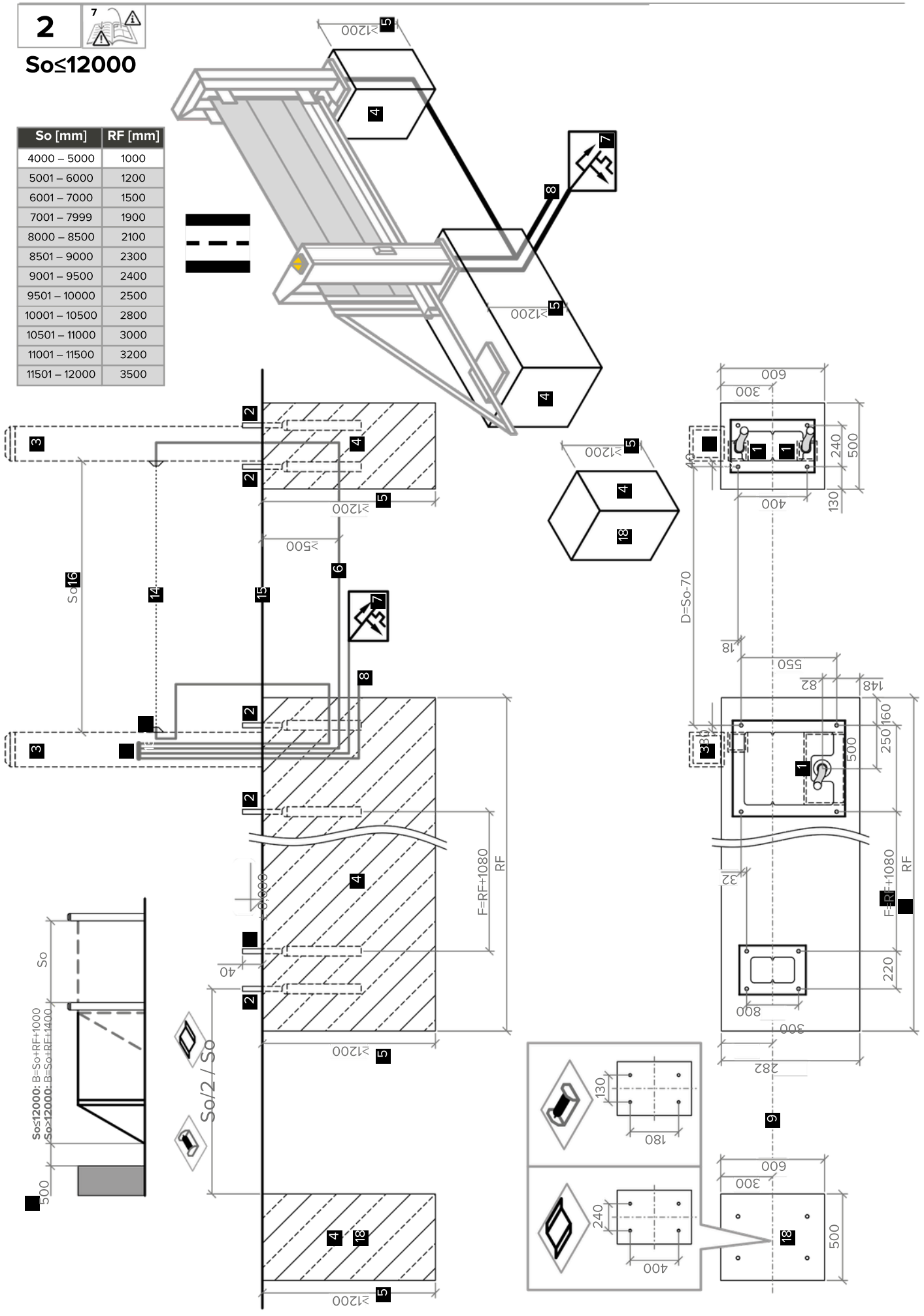


So [mm]	RF [mm]
4000 – 5000	1000
5001 – 6000	1200
6001 – 7000	1500
7001 – 7999	1900
8000 – 8500	2100
8501 – 9000	2300
9001 – 9500	2400
9501 – 10000	2500
10001 – 10500	2800
10501 – 11000	3000
11001 – 11500	3200
11501 – 12000	3500

2

So≤12000

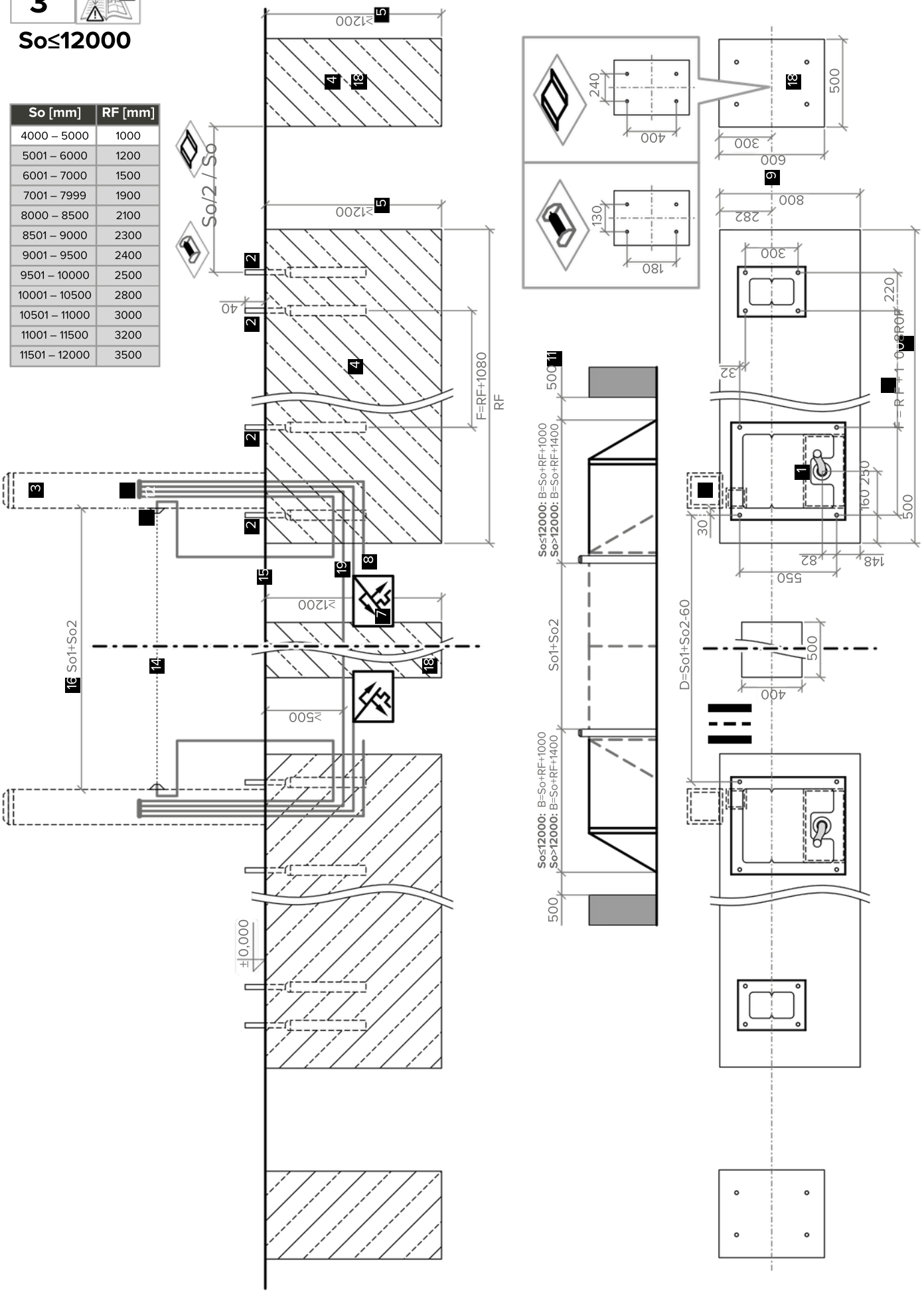
So [mm]	RF [mm]
4000 – 5000	1000
5001 – 6000	1200
6001 – 7000	1500
7001 – 7999	1900
8000 – 8500	2100
8501 – 9000	2300
9001 – 9500	2400
9501 – 10000	2500
10001 – 10500	2800
10501 – 11000	3000
11001 – 11500	3200
11501 – 12000	3500



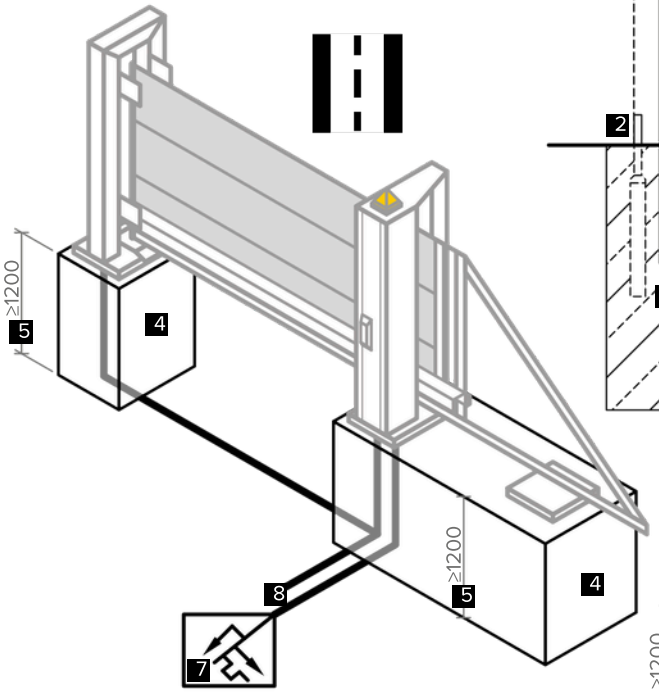
3

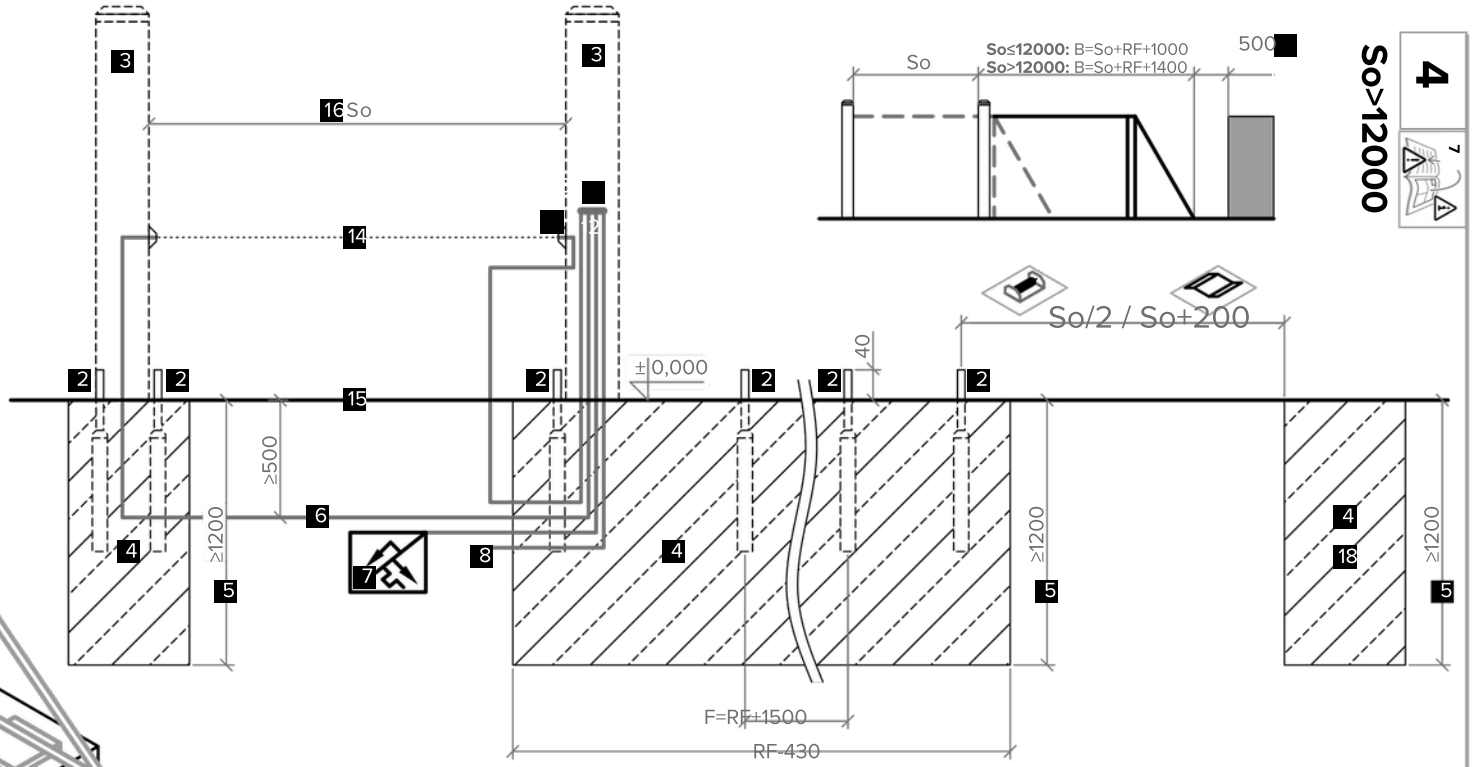
So≤12000

So [mm]	RF [mm]
4000 – 5000	1000
5001 – 6000	1200
6001 – 7000	1500
7001 – 7999	1900
8000 – 8500	2100
8501 – 9000	2300
9001 – 9500	2400
9501 – 10000	2500
10001 – 10500	2800
10501 – 11000	3000
11001 – 11500	3200
11501 – 12000	3500



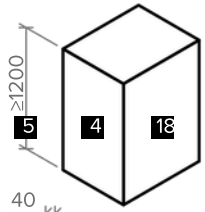
So [mm]	RF [mm]
12001 – 14000	4000
14001 – 15000	4500
15001 – 16000	5000

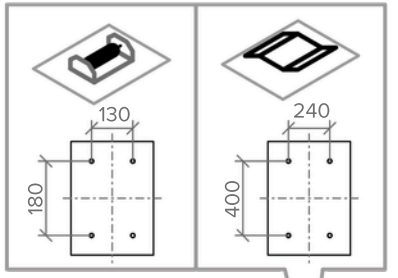


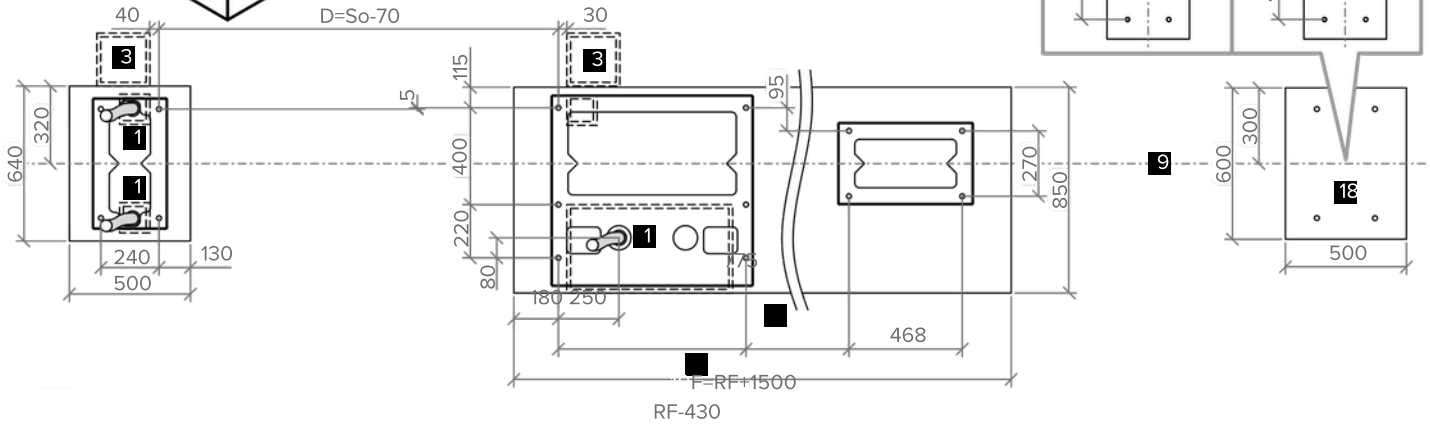


4

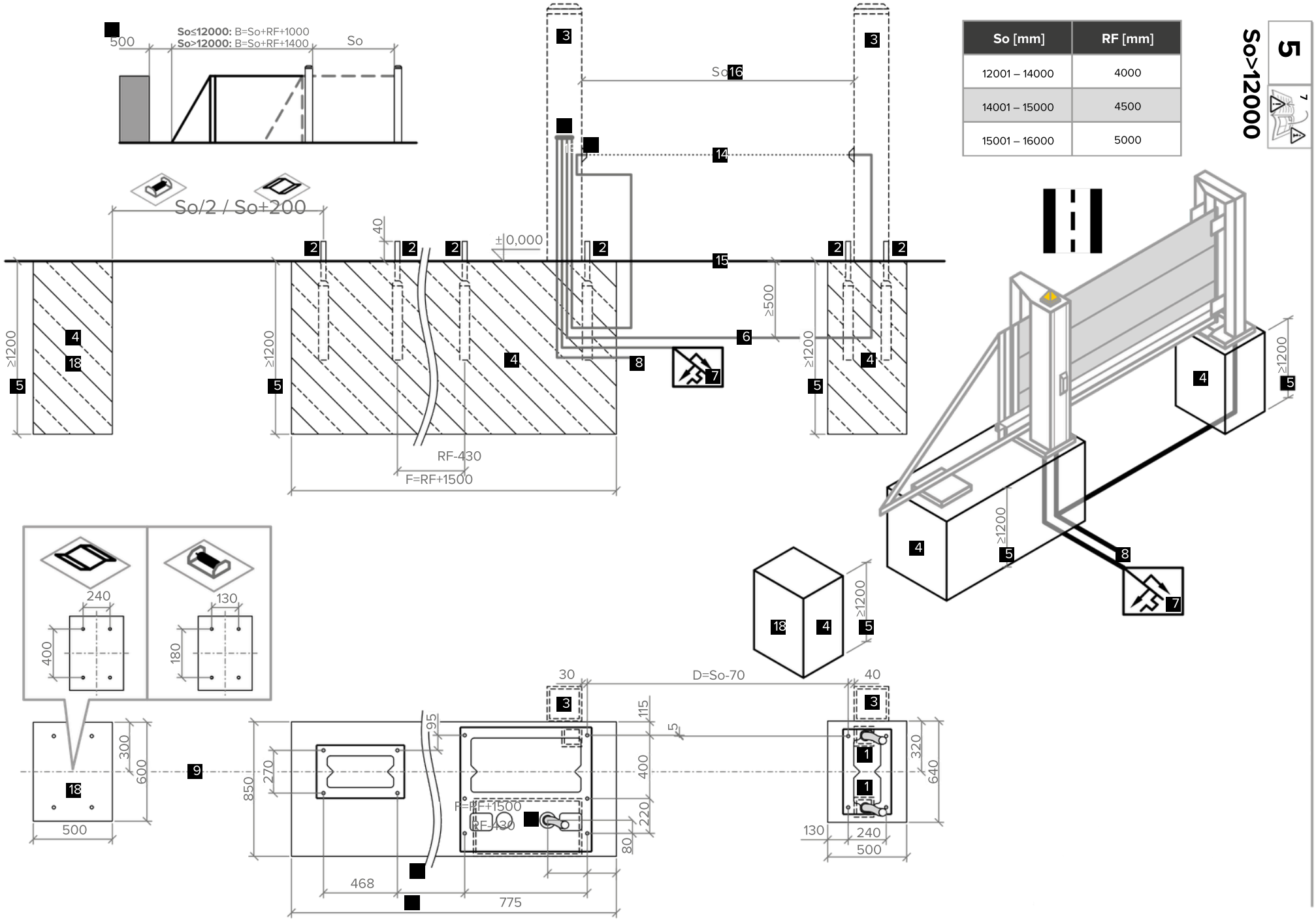
So>12000







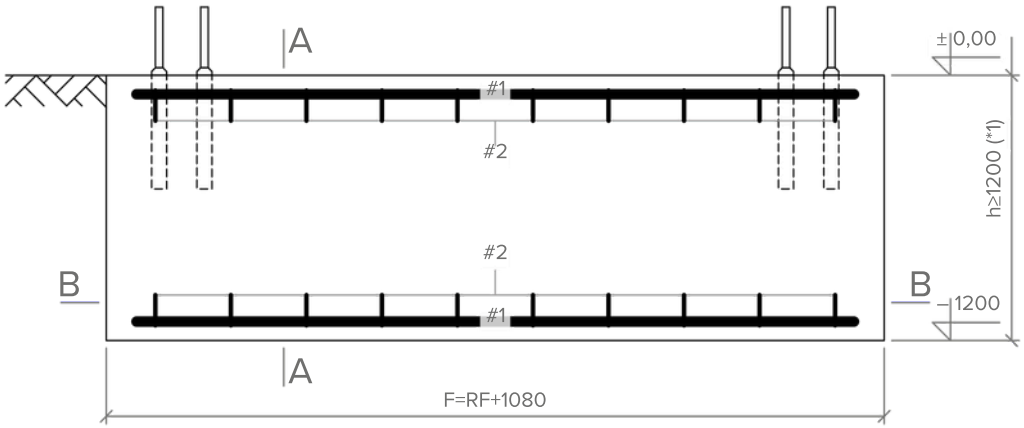
So [mm]	RF [mm]
12001 – 14000	4000
14001 – 15000	4500
15001 – 16000	5000

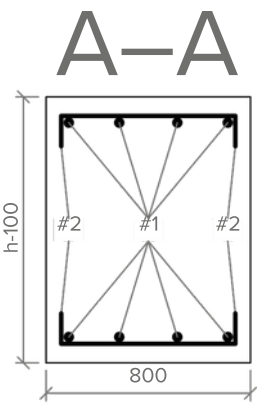


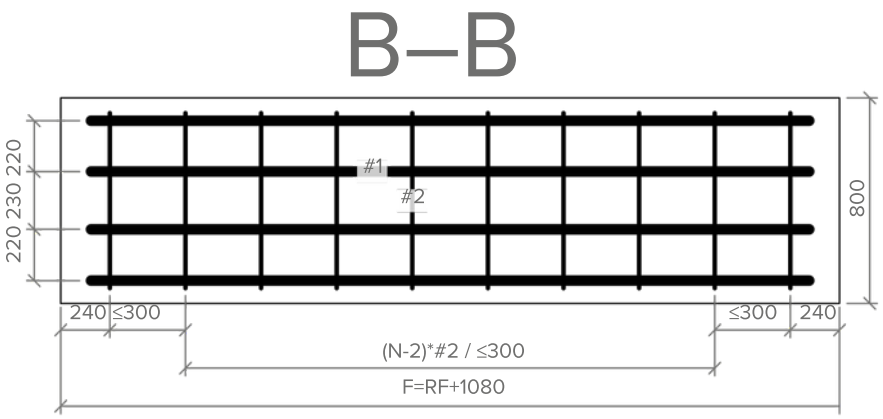
So<8000

#1: Ø14; L=F-160

#2: Ø6; L=850







(*2) Reinforcing Steel Specification					
(*7) Number	(*3) Diameter	(*4) Length L	(*5) Number in 1 elem.N	(*6) Total Length [m] Ltot	
	Ø [mm]	[mm]	szt	Ø6	Ø14
#1	14	F–160=	8		
#2	6	850	0,0068*F–1,2=		
(*8) Unit of mass			kg/m	0,222	1,21
(*9) Mass			kg		
(*10) Total Mass			kg		

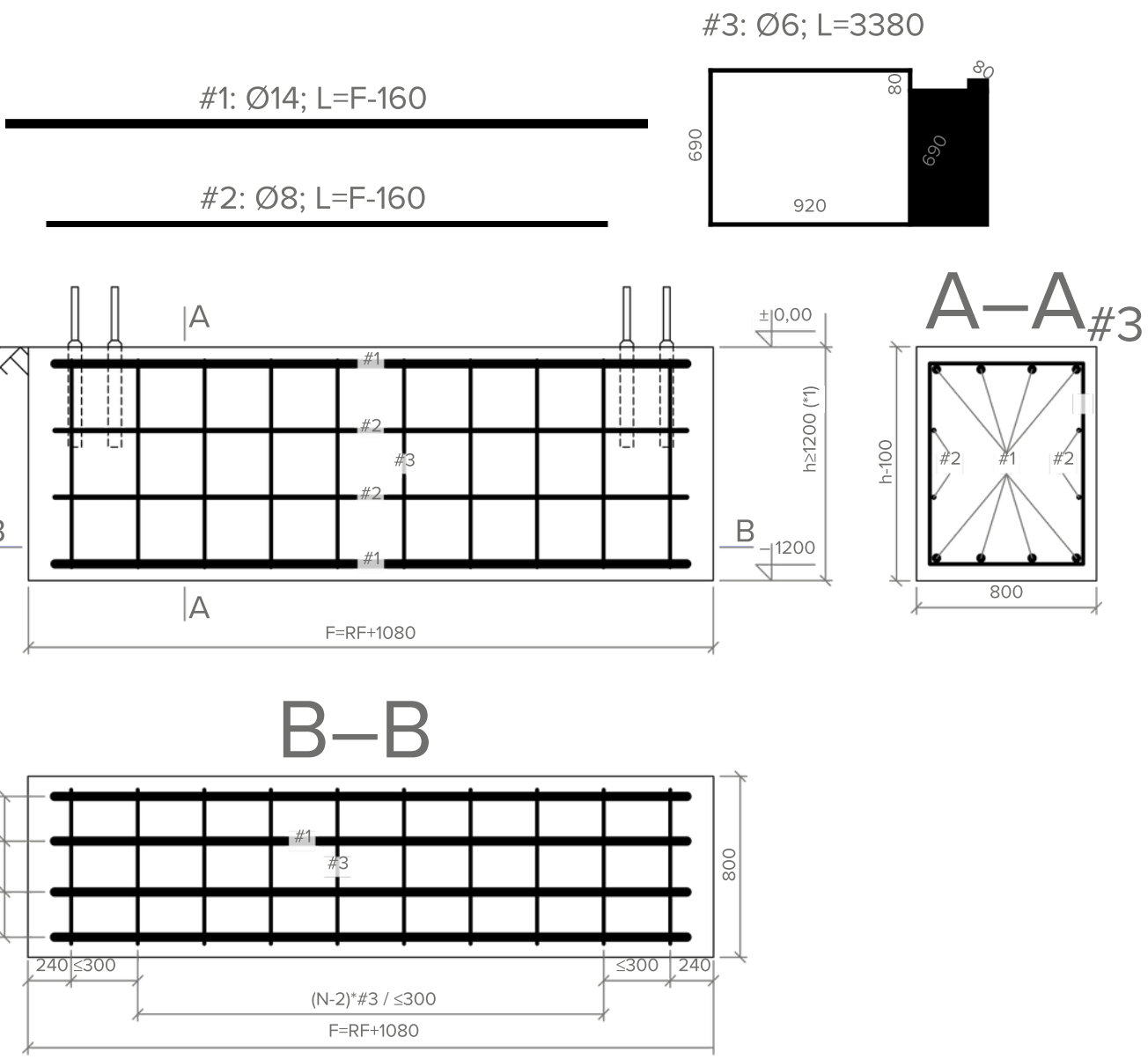
So [mm]	RF [mm]
4000 – 5000	1000
5001 – 6000	1200
6001 – 7000	1500
7001 – 7999	1900

So=6000 [mm]
F=RF+1080=2280 [mm]

#1:	**#2:**
L=F-160	**L=850 [mm]**
L=2280-160	**N=0,0068*F-1,2**
L=2120 [mm]	**N=14,304**
N=8	**N≈15**

(*11) Steel A-IIIN (RB500)
(*12) Concrete C20/25
(*13) Lag Cmin=50 [mm]

8000≤So≤12000



So [mm]	RF [mm]
8000 – 8500	2100
8501 – 9000	2300
9001 – 9500	2400
9501 – 10000	2500
10001 – 10500	2800
10501 – 11000	3000
11001 – 11500	3200
11501 – 12000	3500

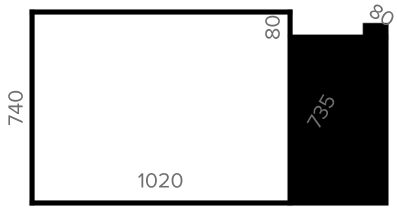
(*2) Reinforcing Steel Specification						
(*7) Number	(*3) Diameter Ø	(*4) Length L	(*5) Number in 1 elem.	(*6) Total Length [m] Ltot		
	[mm]	[mm]	szt	Ø6	Ø8	Ø14
#1	14	F–160=	8			
#2	8	F–160=	4			
#3	6	3380	0,0034*F–0,6=			
(*8) Unit of mass			kg/m	0,222	0,395	1,21
(*9) Mass			kg			
(*10) Total Mass			kg			

So=8000 [mm]
F=RF+1080=3180 [mm]
#1: L=F-160
L=3180-160
L=3020 [mm]
N=8
#3:
L=3380 [mm]
N=0,0034*F-0,6
N=10,212
N≈10

(*11) Steel A-IIIN (RB500)
(*12) Concrete C20/25
(*13) Lag Cmin=50 [mm]

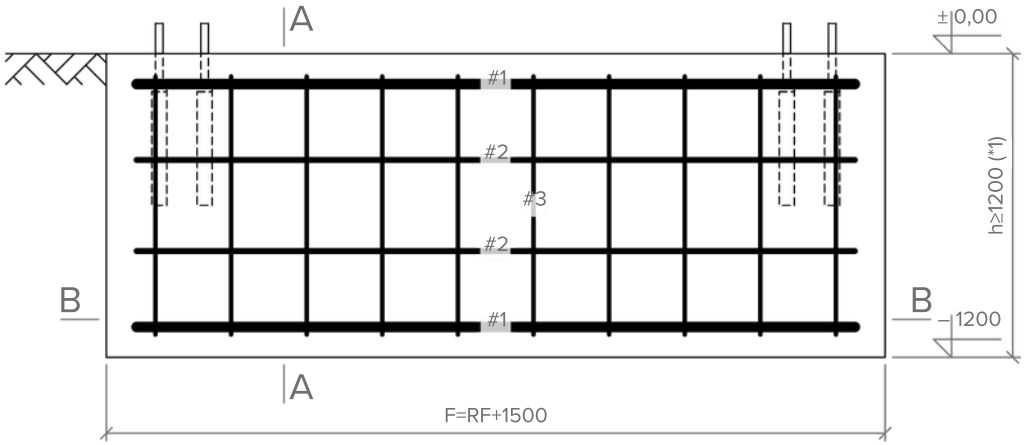
So>12000

#3: Ø6; L=3675

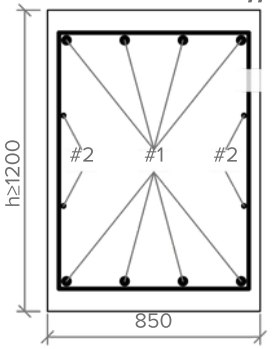


#1: Ø14; L=F-160

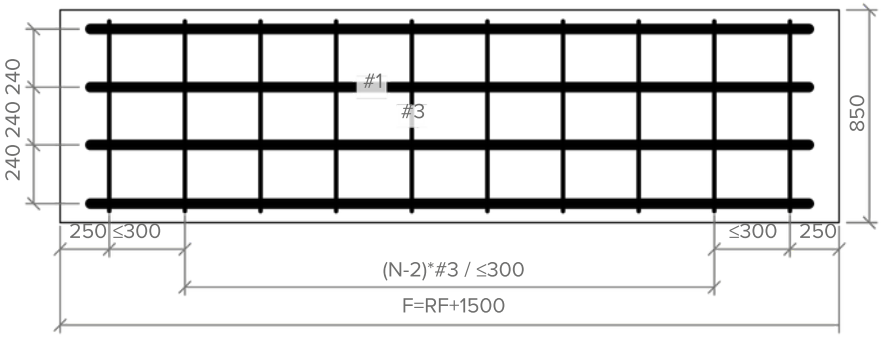
#2: Ø8; L=F-160



A–A#3



B–B



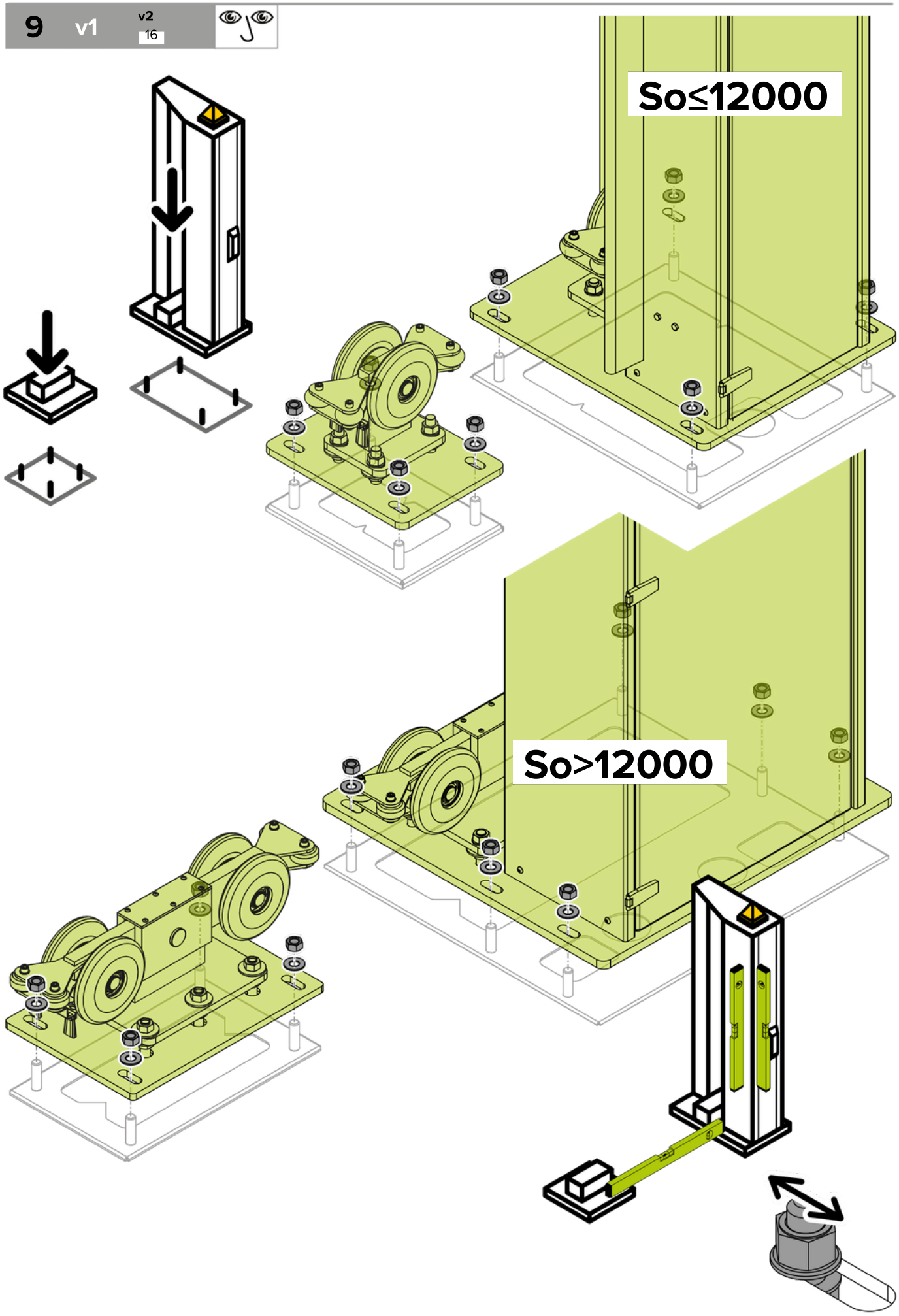
(*2) Reinforcing Steel Specification						
(*7) Number	(*3) Diameter Ø	(*4) Length L	(*5) Number in element N	(*6) Total Length [m] Ltot		
	[mm]	[mm]	szt	Ø6	Ø8	Ø14
#1	14	F–160=	8			
#2	8	F–160=	4			
#3	6	3675	0,0034*F–0,6=			
(*8) Unit of mass			kg/m	0,222	0,395	1,21
(*9) Mass			kg			
(*10) Total Mass			kg			

So [mm]	RF [mm]
12001 – 14000	4000
14001 – 15000	4500
15001 – 16000	5000

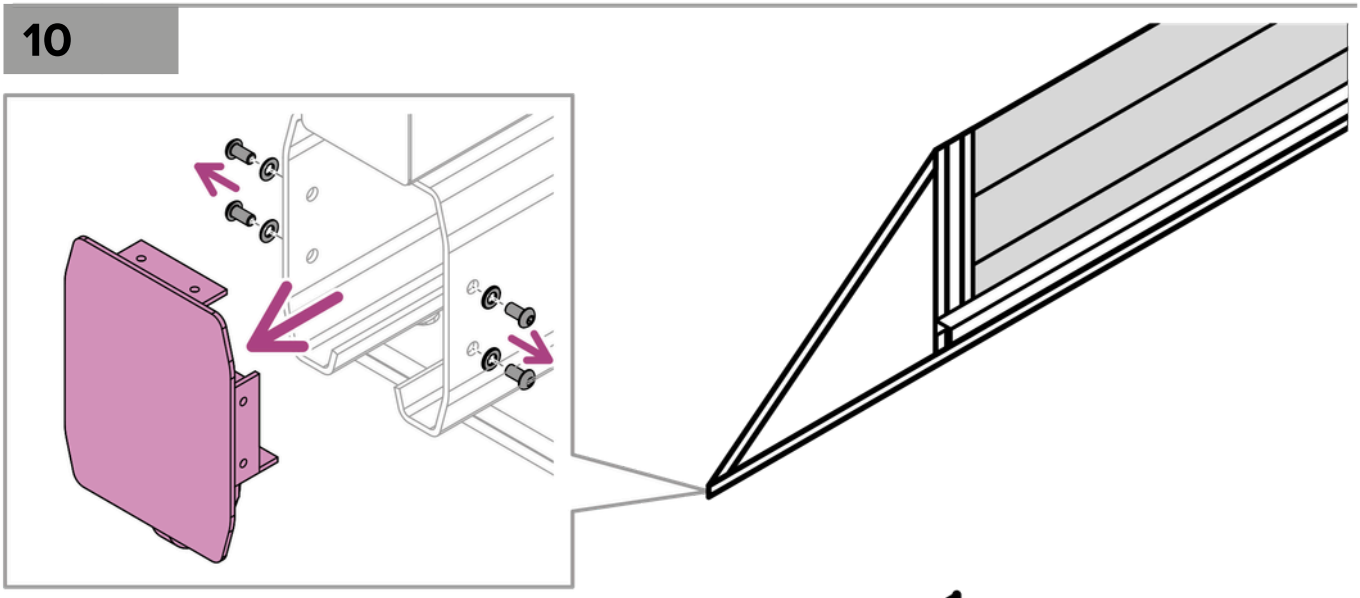
So=13000 [mm]
F=RF+1500=5500 [mm]

#1:	**#3:**
L=F-160	**L=3675 [mm]**
L=5500-160	**N=0,0034*F-0,6**
L=5340 [mm]	**N=18,1**
N=8	**N≈*19***

(*11) Steel A-IIIN (RB500)
(*12) Concrete C20/25
(*13) Lag Cmin=50 [mm]


So≤12000
So>12000

10



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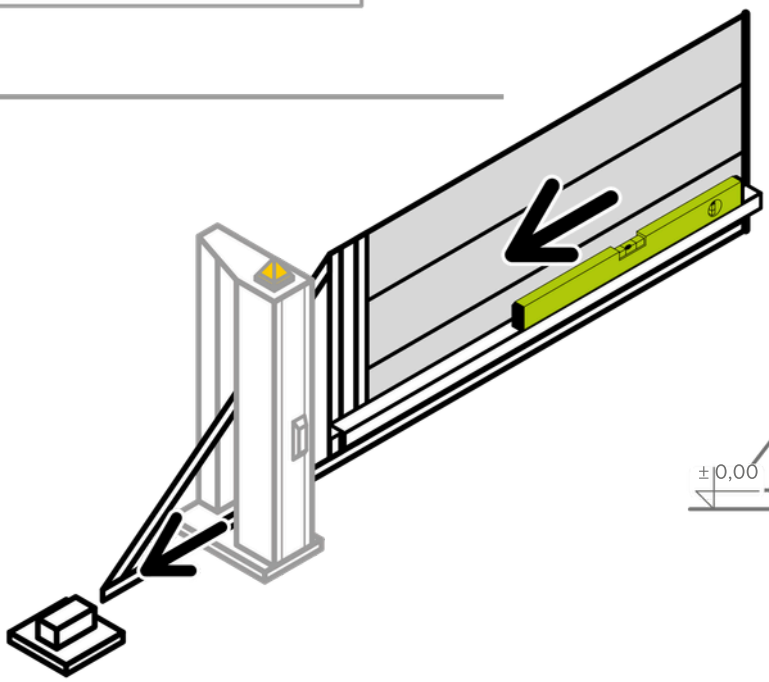

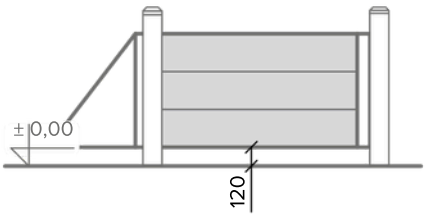

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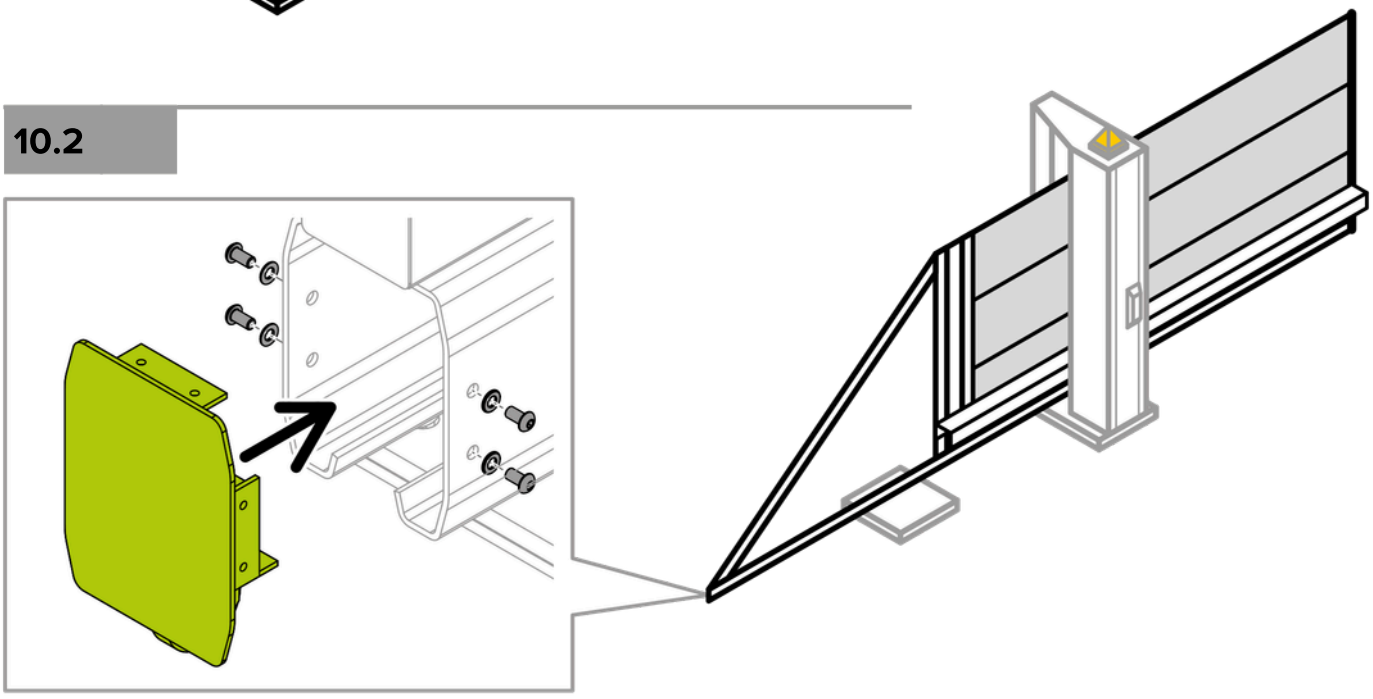

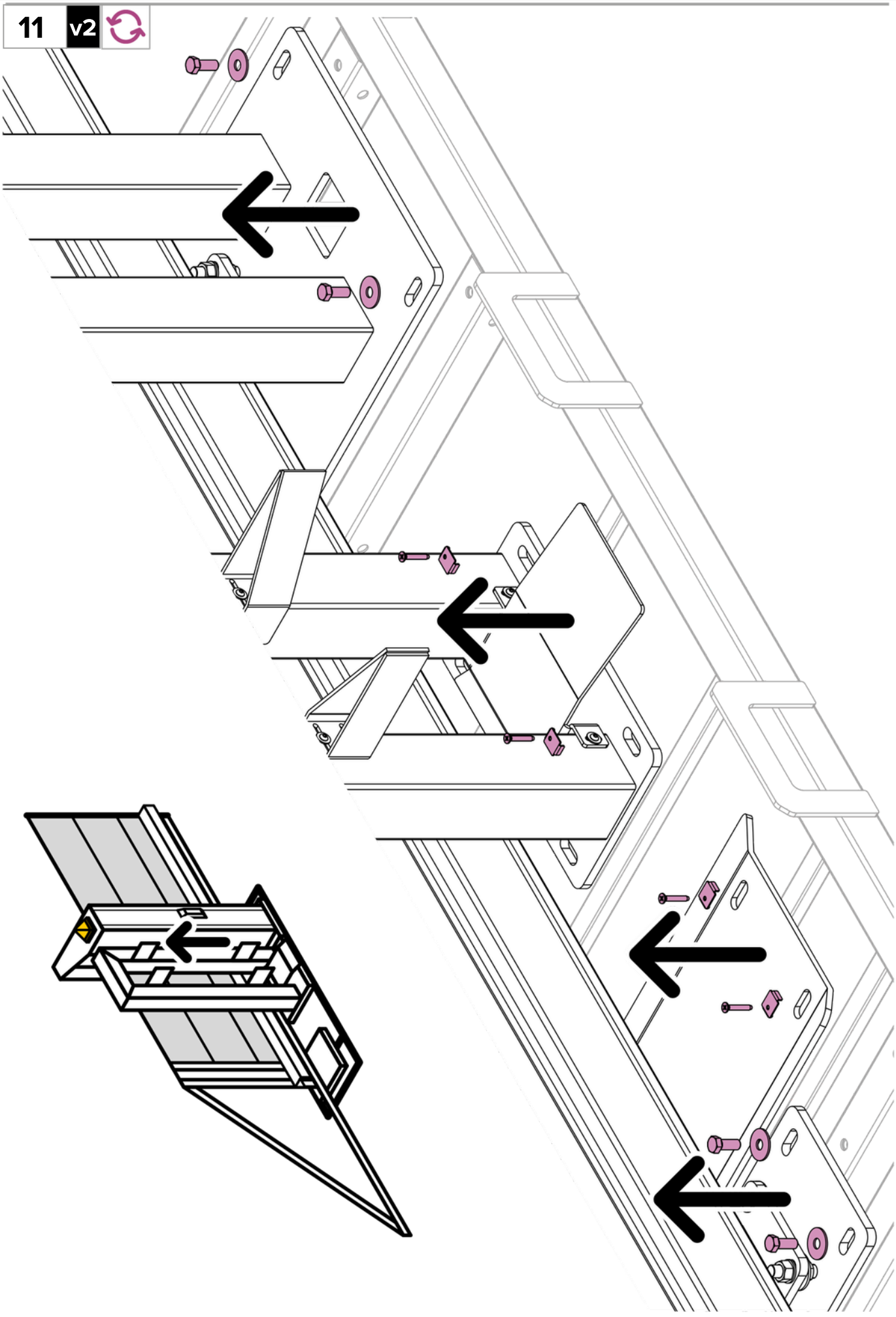
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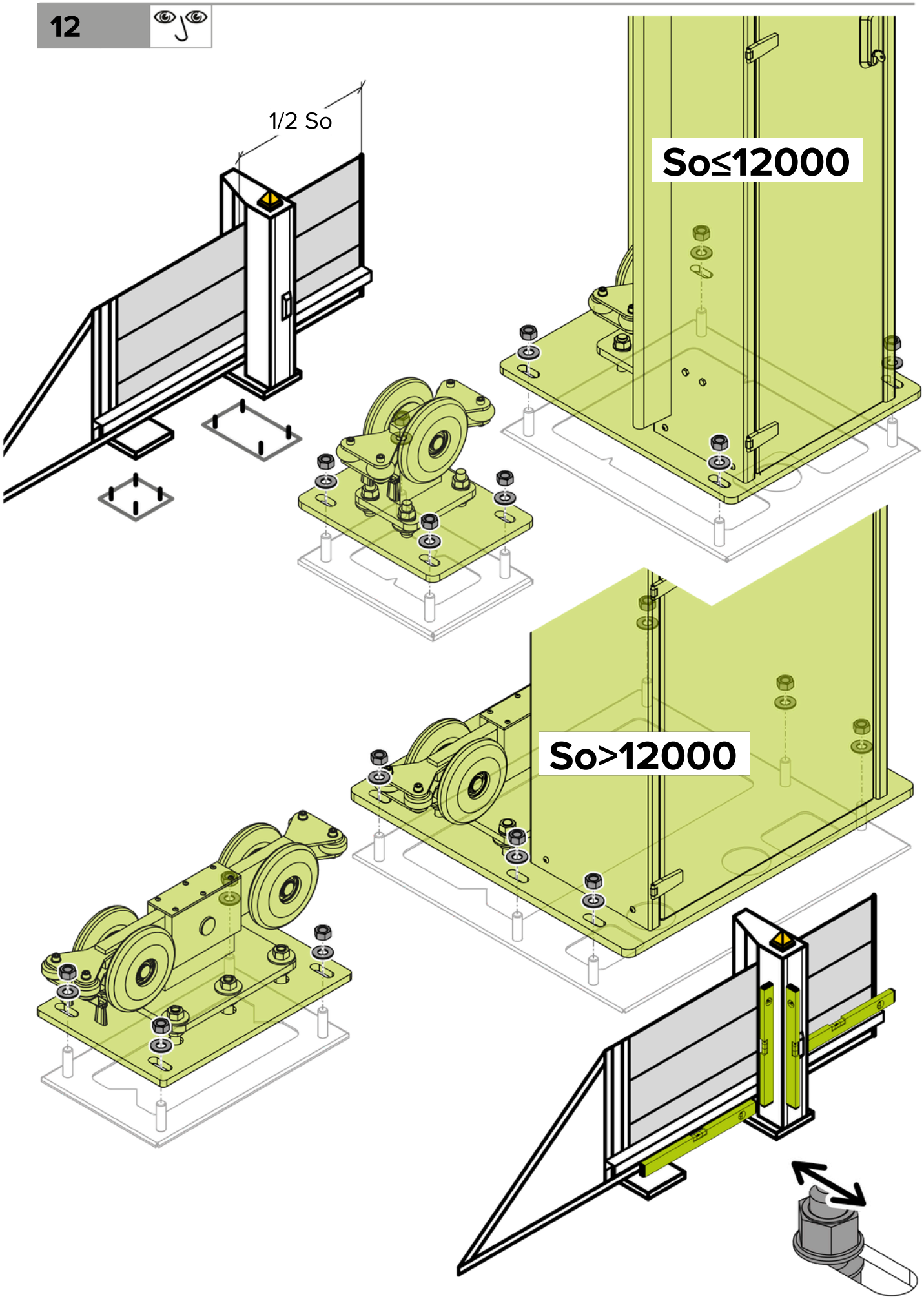
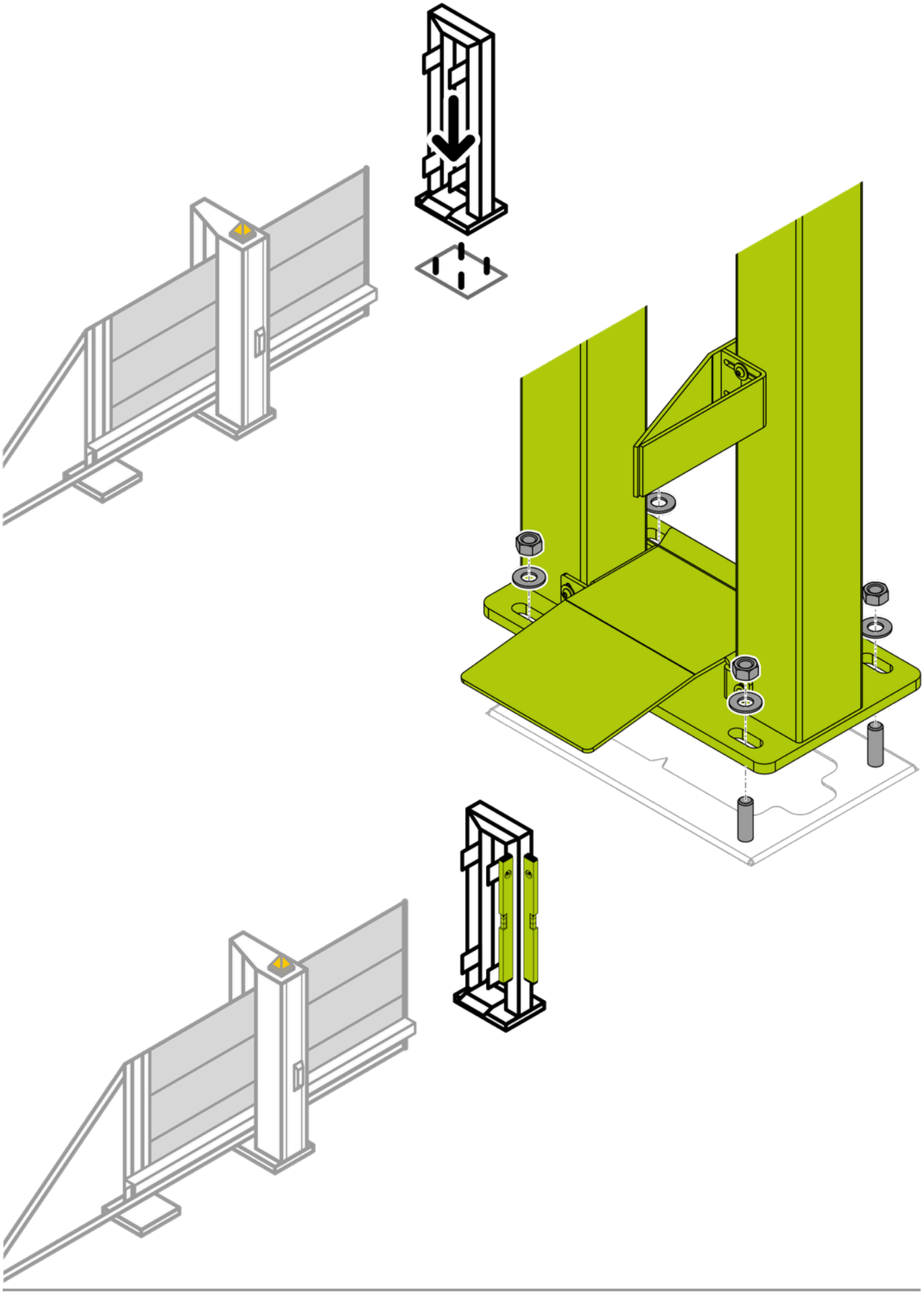
v2


1/2 So
So≤12000
So>12000



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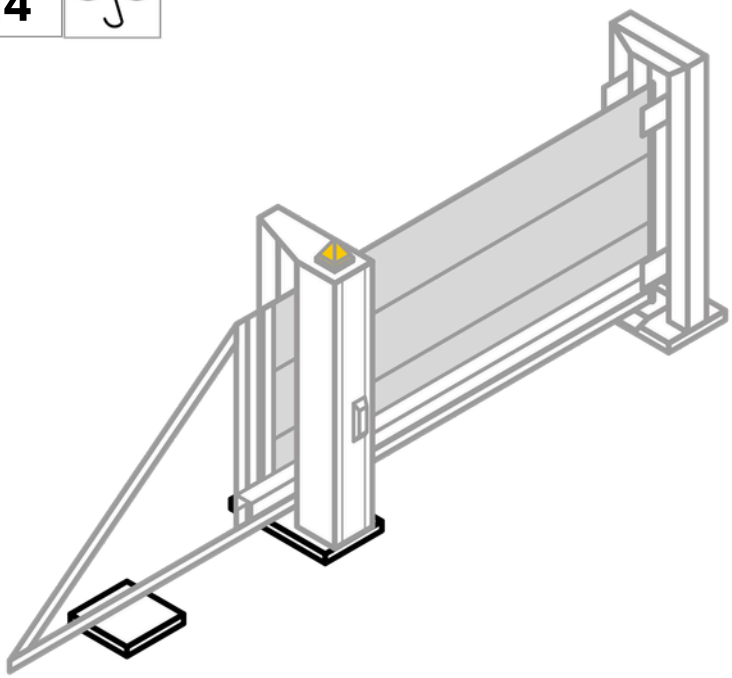

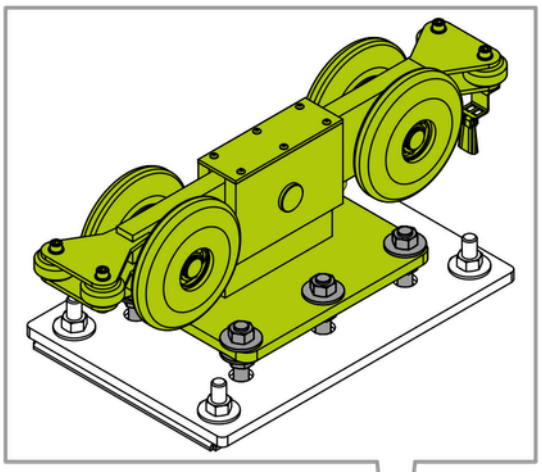

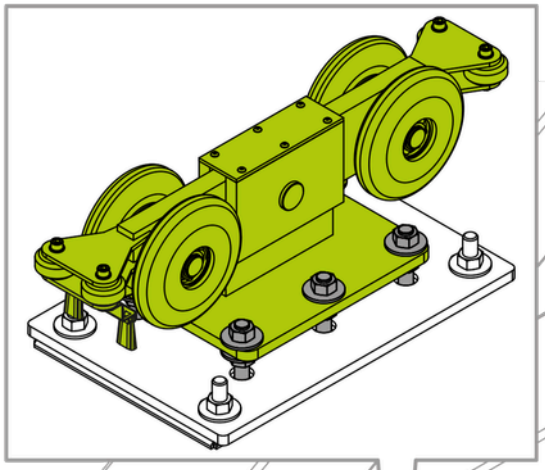

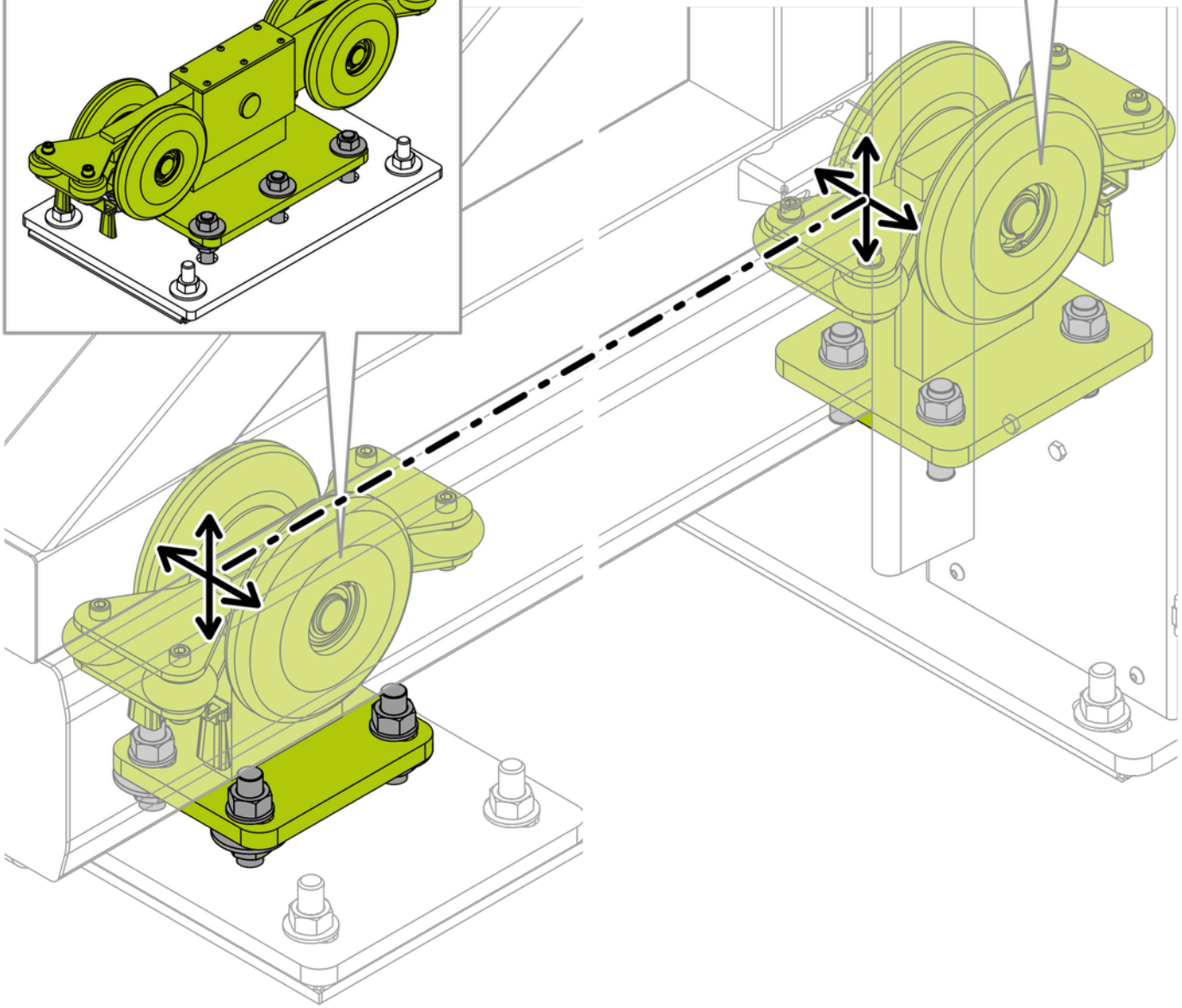

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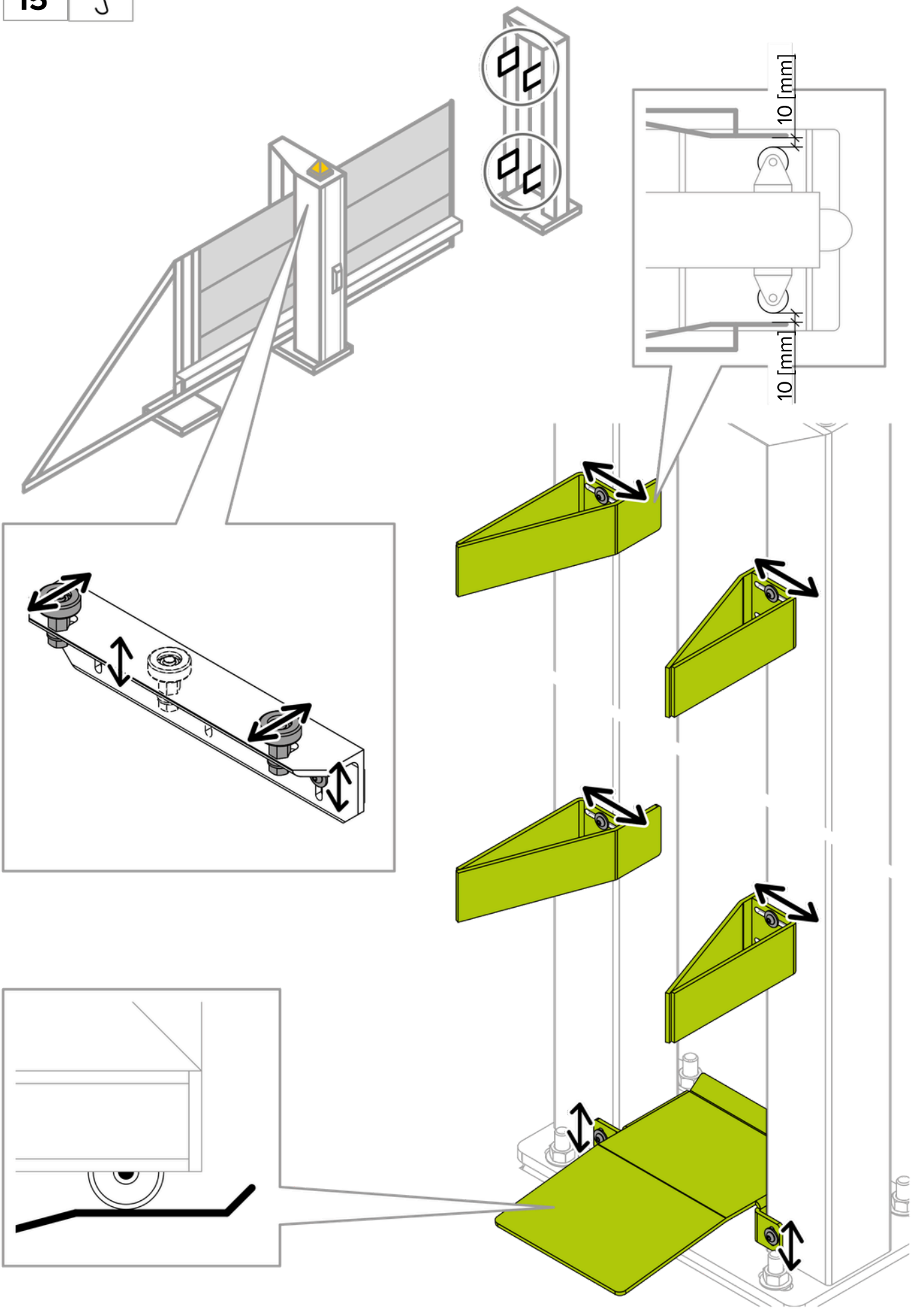

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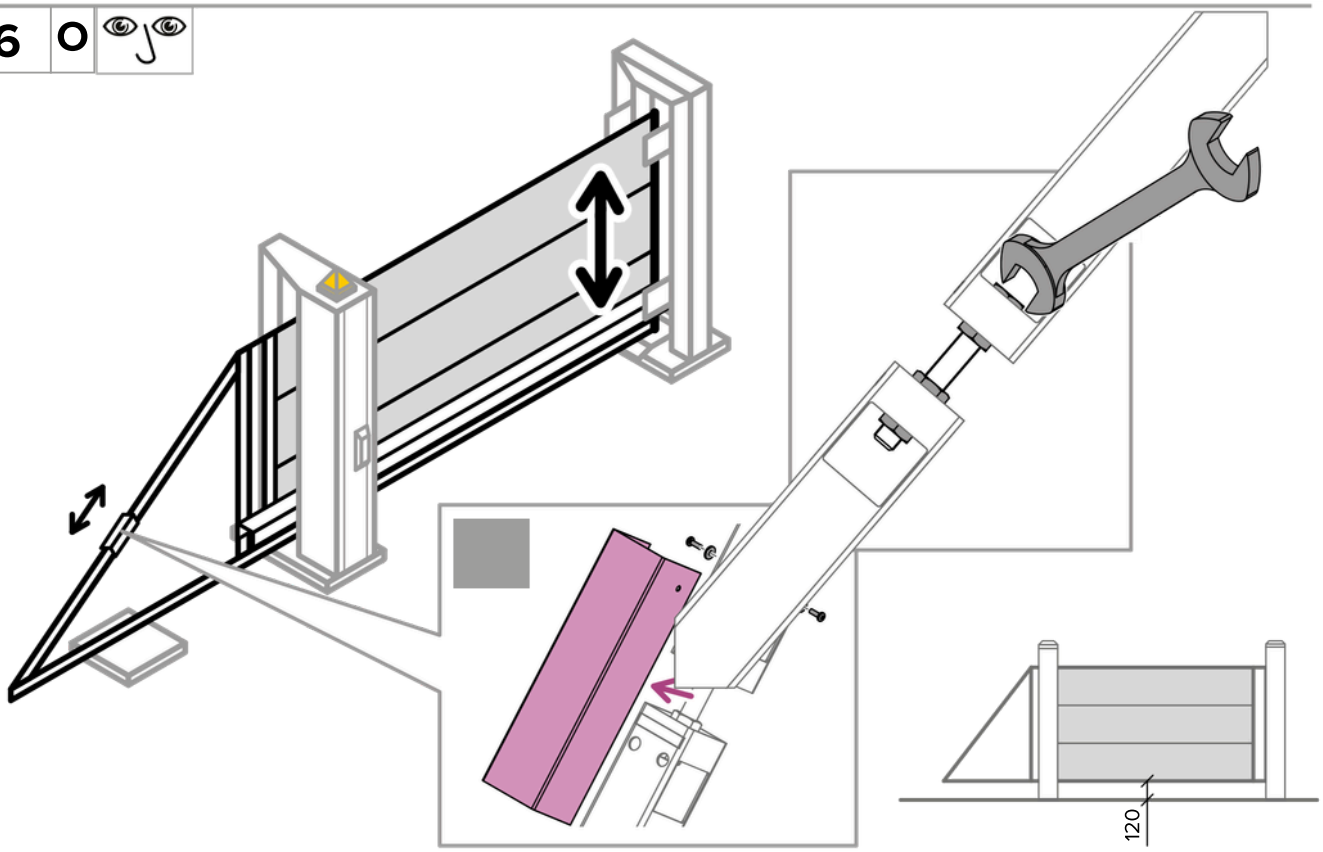

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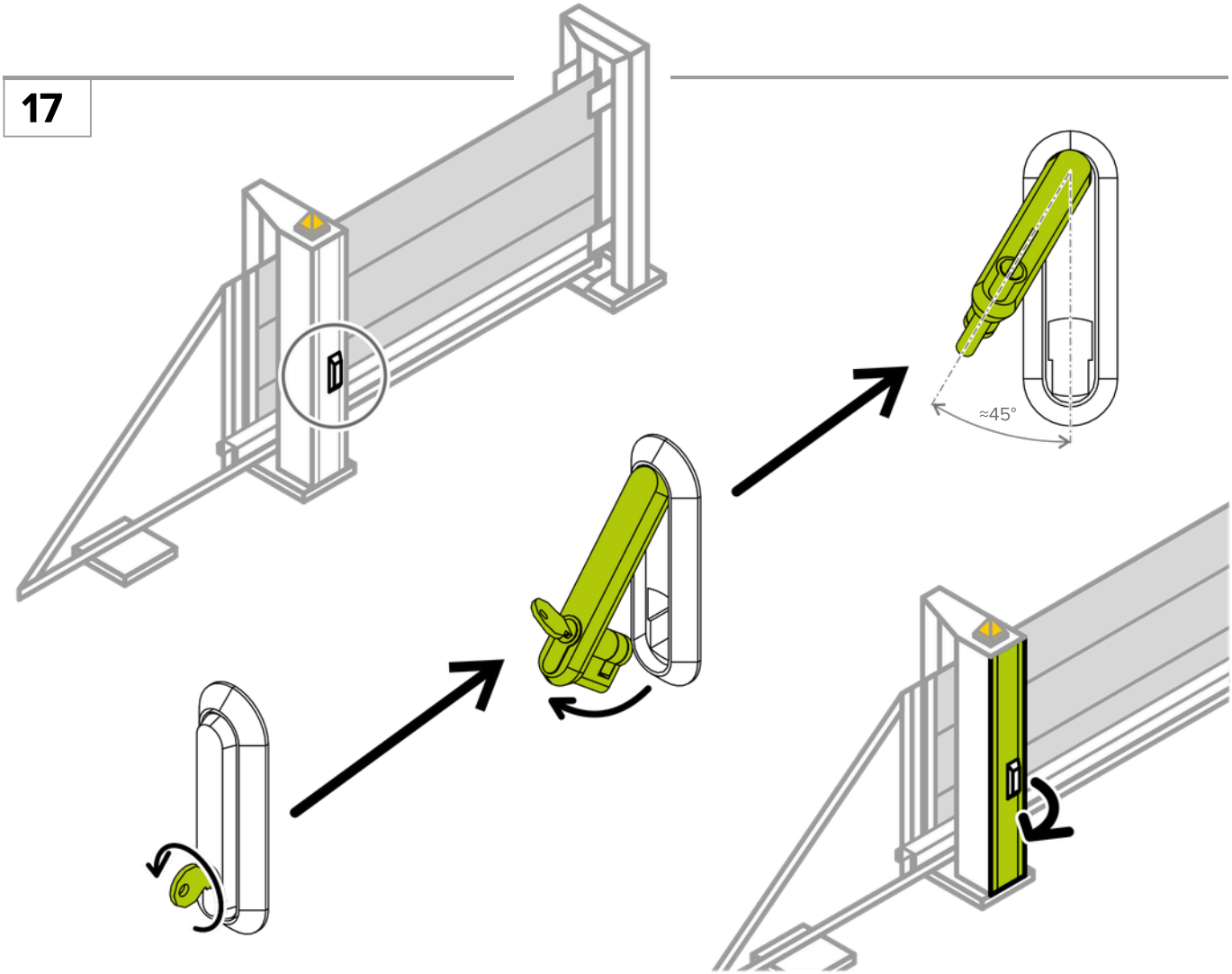
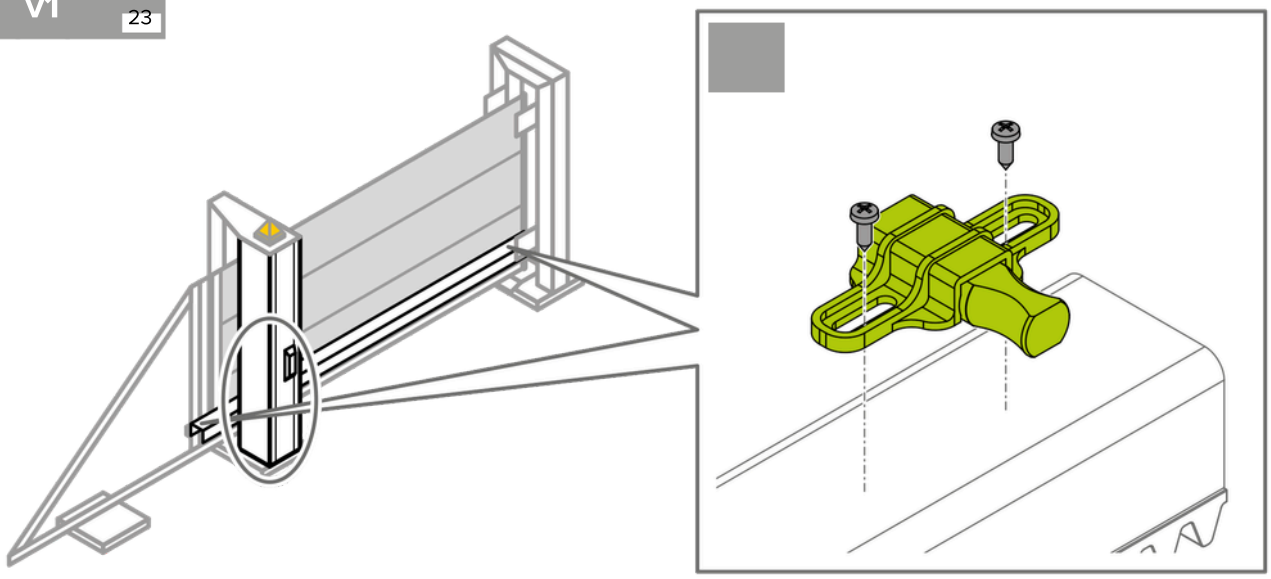
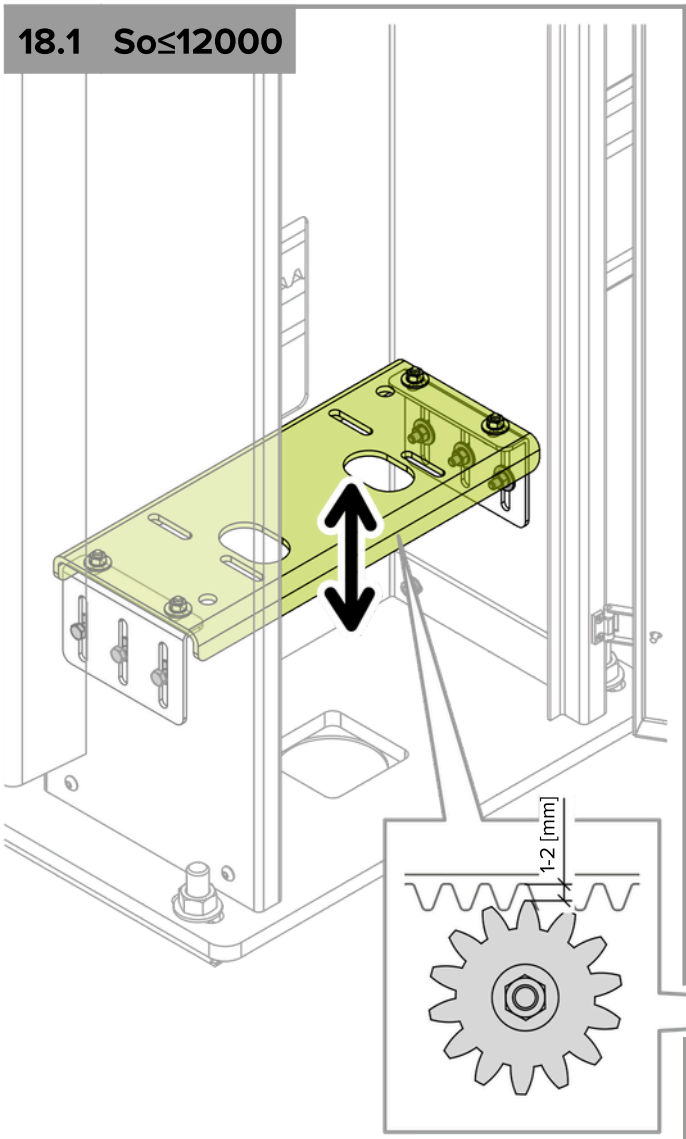


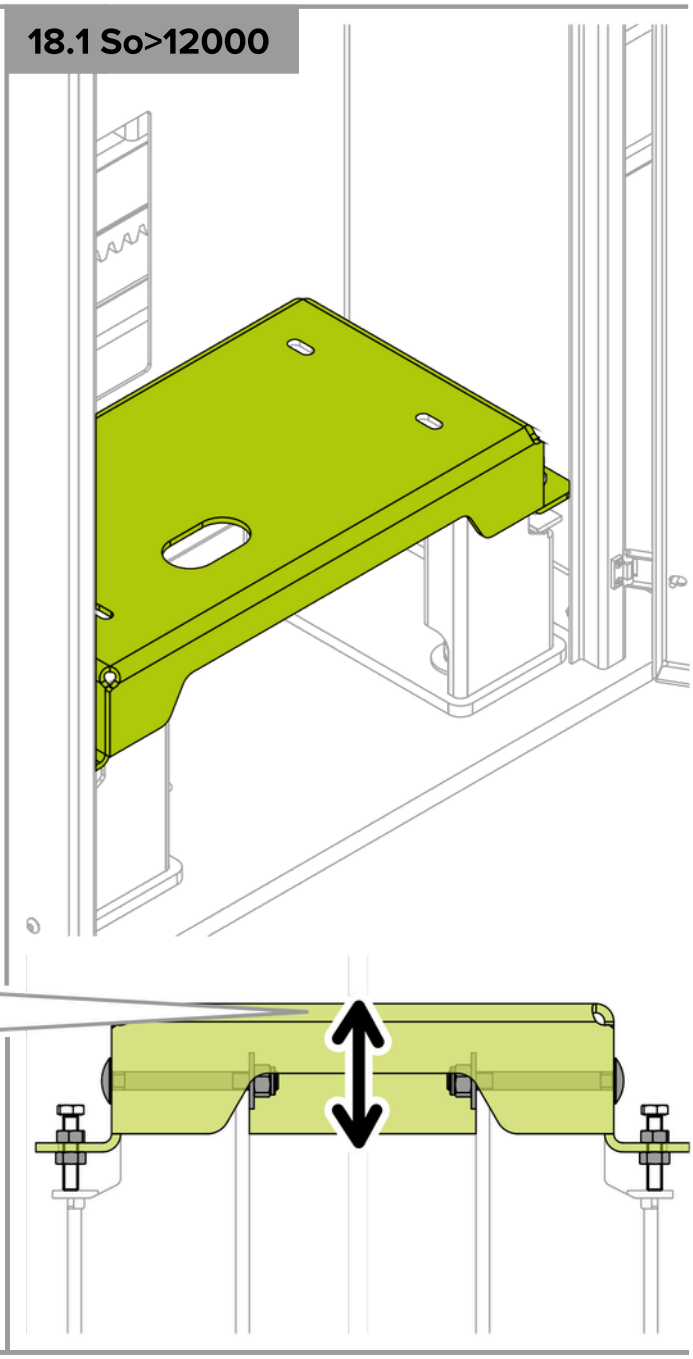
18 v1 v2 23



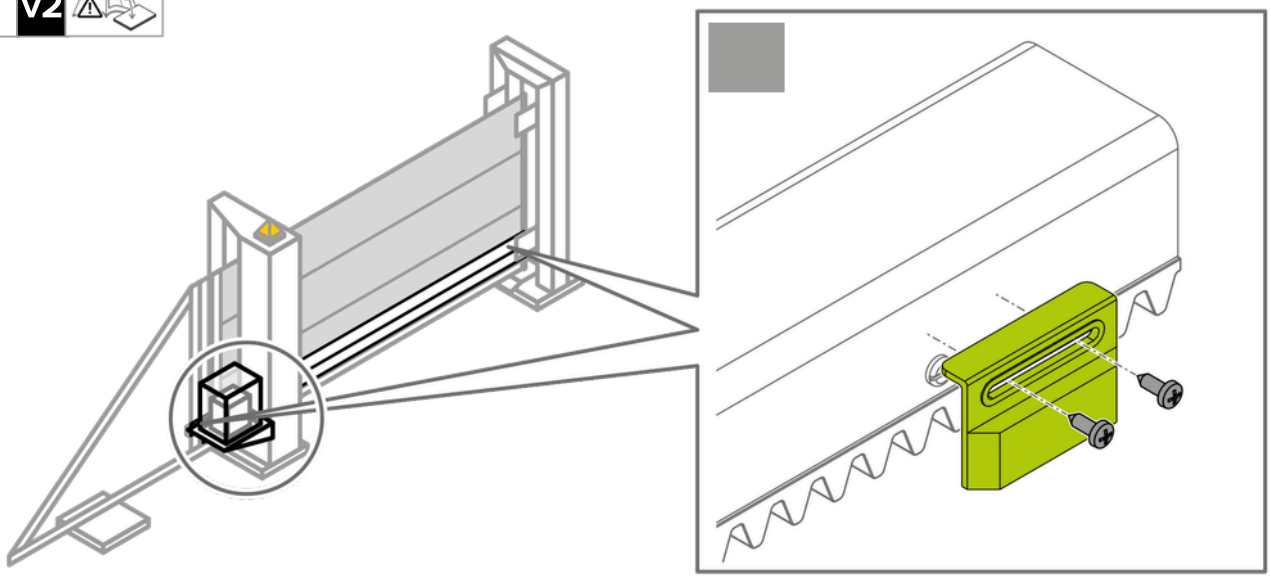
18.1 So≤12000



18.1 So>12000



19 v2



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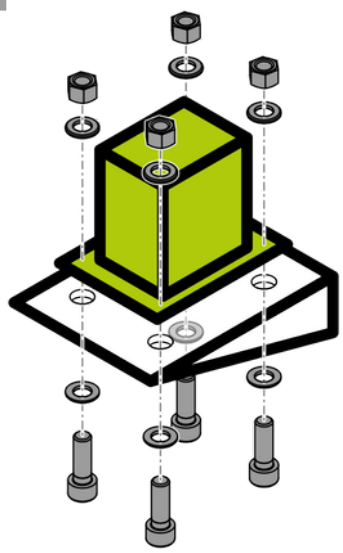

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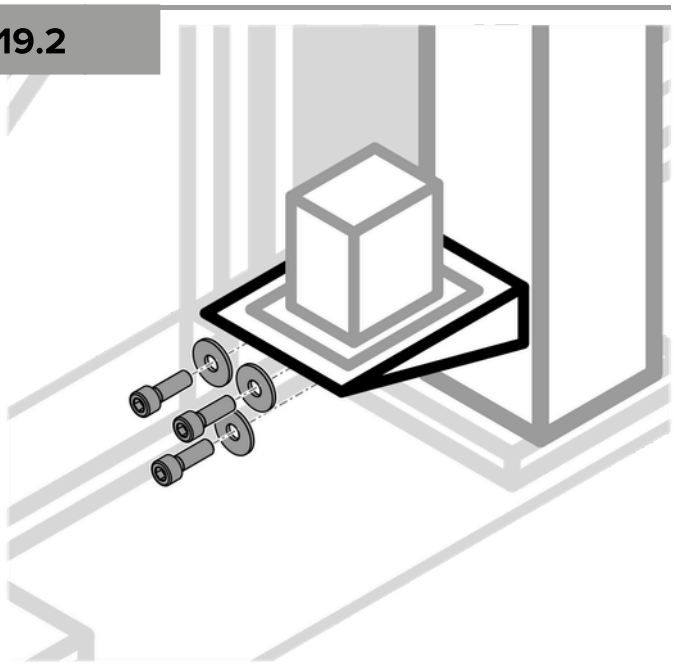

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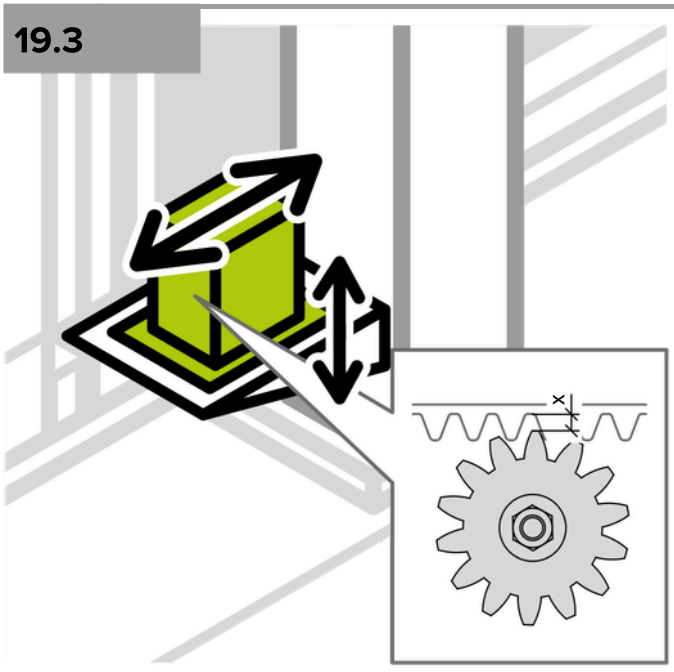

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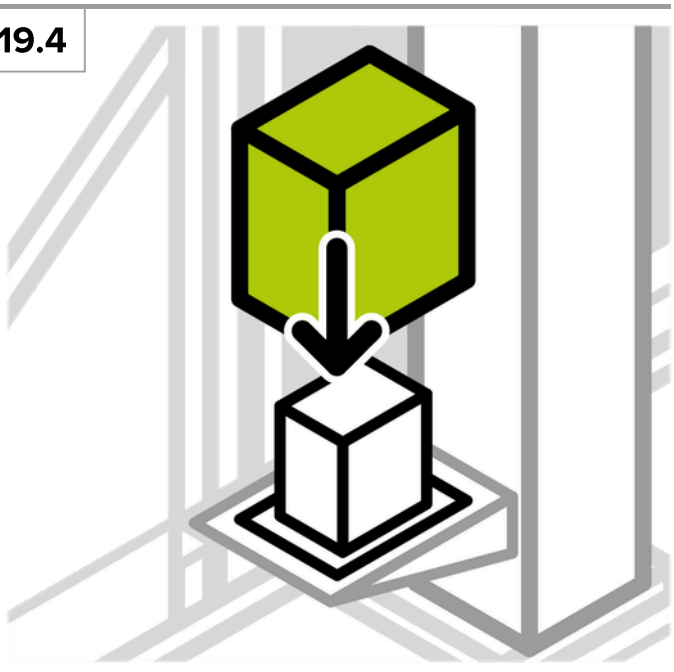

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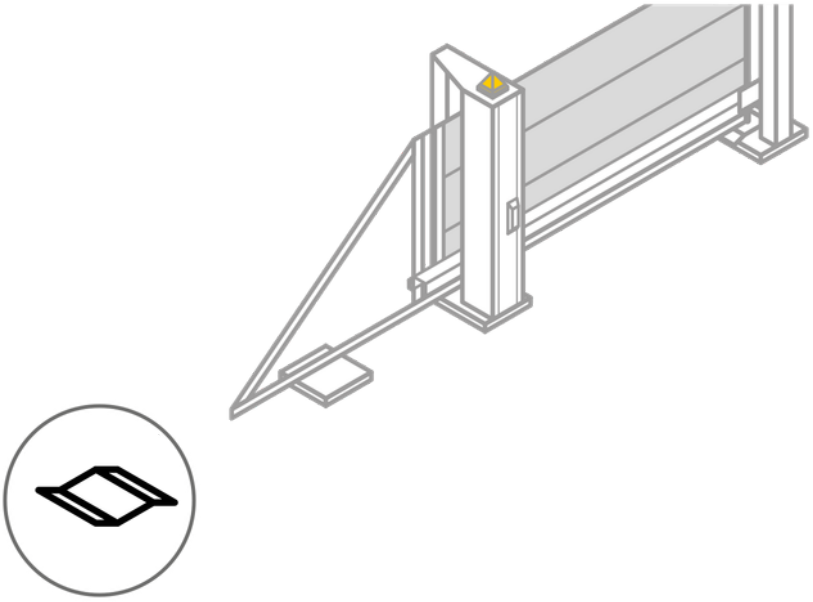
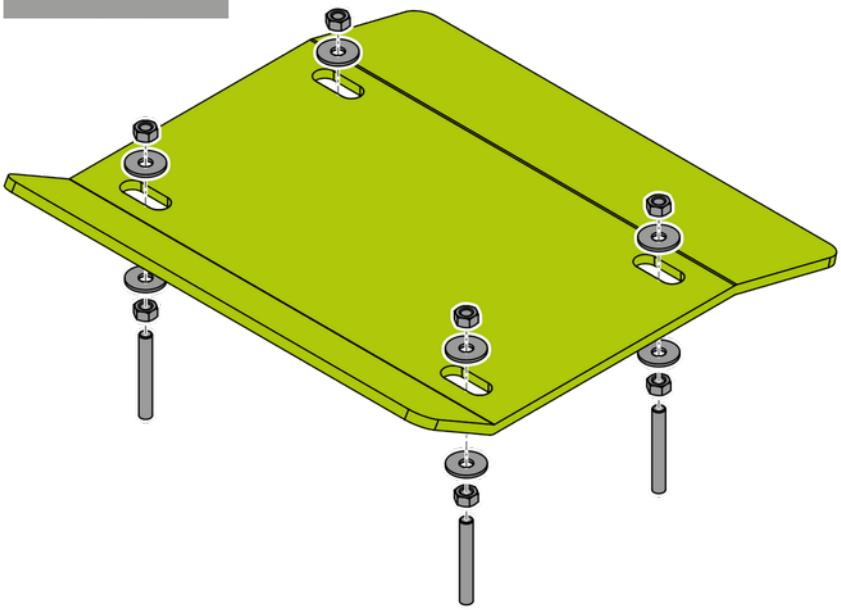
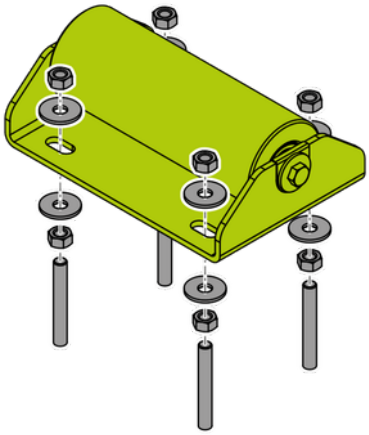


20.1 v1



20.2 v2



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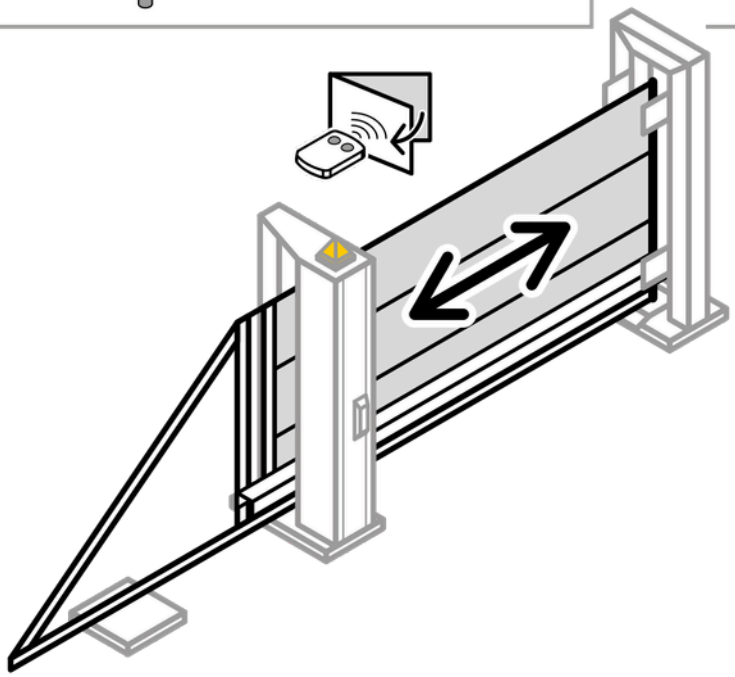
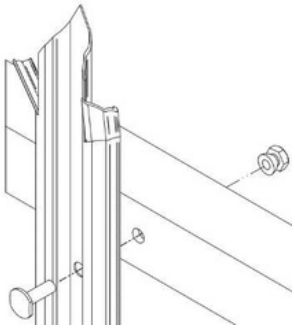


Pale Installation

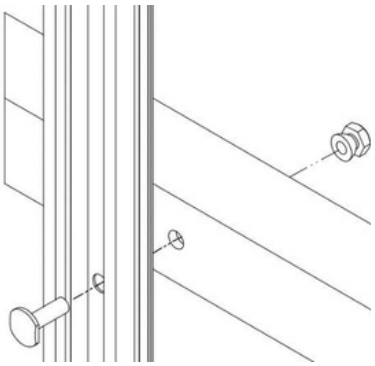
Install the pale with the supplied M8 x 25mm patched T-Bolts in the corresponding hole with the adjacent rail and shear the nut off on the inside of the gate.



1

Note: T-Bolts will always be fed from the attack side. Any substituted bolts will invalidate the LPS 1175 SR1 (A1) certification.

Follow step 1 for the two remaining rails (three rails in total per gate)



2

Patch Fixing Information

NOTE: PaliFence® rail and pale fixings have been developed specifically for the LPS 1175 SR1 (A1) testing. Any variations, substitution or adaptations to the below fixing specification will invalidate the certification!

What is a patched fixing?

When applied, the patch permanently fuses to the screw thread, increasing removal torque by acting as a wedge. This ensures the screw locks securely in any position during assembly, providing top-notch vibration resistance and torque for controlled loading in various applications.

Recommended installation advice?

Patched Fixing	Shear Nut Usage	Storage	Installation Temperature	Curing Time	COSHH
M8 x 25mm Patched T-Bolt	Must use galvanised shear nuts provided in the PaliFence® kit.	Must be stored in a dry environment, ideally more than 5°C	Fixings should be installed in temperatures greater than 5°C	Patched fixings reach maximum curation at 48 hours	No COSHH data to hand.
M12 x 30mm Patched Bolt					

Can Patched fixings be re-used?

For maximum strength, it's recommended to not re-use any patched fixings that shake or vibrate loose. A new fixing should be applied, following the above installation advice.

Can alternative fixings be sourced?

Installers must use the supplied fixings. Any deviations away from the specification will invalidate the certification.

FirstFence® HIRE & SALES

PALES INSTALLATION SIGN OFF

NOTE: to ensure PaliFence® remains within the certified scope and effective to LPS 1175 SR1 (A1) standards, it is essential the below checklist has been followed and signed off by the site supervisor.

Action	Description	Remedial Action	Pass or Fail?	Initial	Date
Missing patched bolts	Pales installed without patched fixings	Remove the pale, don't sign off - ask First Fence Ltd for replacement fixings			
Patched bolts fitted the wrong way	Bolts thread through from the inside to the face - shear nuts on the outside	Remove the pale, don't sign off - ask First Fence Ltd for replacement fixings			
Misaligned pales & rail holes	Any pales that exceed 135mm centres	Replace the rails to ensure certified centres are maintained			
Bent or Deformed Pales / Rails	Any deformity to the pales or the rail caused during transit or similar	The pressures and forces applied during transit may invalidate certification if components are deformed before installation. Replace as necessary.			

Sign off declaration:

I hereby confirm that PaliFence® has been assembled and installed in accordance with the above requirements, and any remedial works have been carried out before the final signoff:

Site Supervisor _____

Sign off Date _____

Relationship to the Client _____

Signature _____

WISNIOWSKI

GATES | WINDOWS | DOORS | FENCES

WIŚNIOWSKI SP. Z O.O. S.K.A.
PL 33-311 WIELOGŁOWY 153
TEL. +48 18 44 77 111
FAX +48 18 44 77 110
WWW.WISNIOWSKI.PL
N = 49° 40′ 10″ E = 20° 41′ 12″

06/2025/ID-99081/KTM-653D110990811