

User Manual

Metacon-Next RGT EW 60-90



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This is a manual translated into English

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1 Preface

Before using the door, please observe the safety instructions in this document and the instructions for use.

Metacon-Next only supplies products to the "specialist retailers". This means that Metacon-Next only delivers a door. The installation, service and maintenance by and under the responsibility of the "specialist retailer" is taken care of.

Metacon-Next only supplies CE marked doors in accordance with EN 13241 and/or EN 16034.

If assembly and installation of the fire resistant door is done by third parties and changes are made to the door by the installation company, this shall be done with material supplied by Metacon-Next, registered under the serial number of the door.

When the installation company makes this modification in accordance with the current European legislation, it is obliged to mark the installation CE itself.

It is the responsibility of the installation company to install the door in accordance with the operating instructions. The operating instructions should remain with the door at all times.

Type marking with the serial number is attached at the following location: On the drive side on the guide, approximately 1600mm from the bottom. This sticker must not be removed or covered, this information is required for the supply of repair and/or maintenance items, among other things.

Metacon-Next shall not be liable for unsafe conditions, accidents, damages and injuries resulting from, for example:

- Disregarding warnings and/or regulations as displayed on the fire resistant door and/or in the owner's manual;
- Insufficient and/or improper maintenance, Metacon-Next sets a minimum frequency of once a year maintenance as necessary;
- Modifications to the door and accessories by third parties. This also includes the use of other than prescribed replacement parts (e.g. a battery), incorrect connection or setting, modification of the control unit and control program.
- Improper installation or assembly of the product.
- Local (country specific) additional regulations.

Reference documents:

- EN 13241-1; EN 16034;
- Terms and Conditions of the Metaalunie;
- Installation Drawing Metacon-Next;
- Package receipt with item numbers;
- User manuals from the motor and controller supplier;
- User manuals of any included accessories;
- DoP (Declaration Of Performance).

The installation company must follow all instructions in the installation instructions. The user must follow all instructions in the user manual. The user manual should be handed over to the user upon completion to be left at the door.

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2 Introduction

This fire resistant door is mainly intended to separate interconnected spaces (fire compartments) in case of fire and/or smoke development. The purpose of this is to prevent the fire from spreading to other rooms and/or adjacent properties. The fire resistant door can be controlled by a fire alarm system but can also be controlled by a stand-alone alarm system.

The CE marking that is issued is only valid for those performances that are stated in the Declaration Of Performance (DoP), which is supplied with each door.

In accordance with the EN 12635 standard, in this document, after the instructions for use, the installation instructions and regulations for first use will follow.

3 Safety

When installing the fire resistant door, the (safety) regulations applicable to the situation must be observed, for example, the Working Conditions Act. In addition to the regulations, the instructions in this document must be strictly followed. When installing electrical components, the instructions supplied by the manufacturer of these components must be observed.

Since Metacon-Next is only a manufacturer/supplier of "semi-finished products," it is the responsibility of the installation company to ensure that they work in accordance with the relevant instructions and regulations.

Any damage or injury incurred as a result of non-compliance with this user manual, maintenance instructions and improper use cannot be recovered from the fire resistant door manufacturer.

3.1 Safety Features

The installation may be equipped with the following safety devices.

- Roll-off / fall protection / slack cable protection / crushing protection / switching protection.
- Smoke and temperature detectors and/or fire alarm system.
- Shielding below 2500 [mm] from an accessible floor, mandatory in case of a crushing hazard (NEN-EN 294);
- ATEX components, if applicable, see additional manual/instruction

See the product specifications in Chapter 5 for installed features.

3.2 Safety guidelines

- The fire resistant door may only be operated by persons who have taken note of the operating instructions. Under no circumstances may the door be operated by children or persons with reduced physical, sensory or mental capacity. The door may only be used in the manner described in section 4.1.
- The fire resistant door is designed so that the door will always close mechanically failsafe in the event of a fire or smoke alarm. During mechanical failsafe the door will not signal persons and/or materials, in accordance with EN 13241 an optical and acoustic warning signal will be activated. (Exceptions to this rule are possible in consultation with or after approval by the competent authority, the installation company or end user must arrange for this approval to be granted).
- In exceptional situations, the fire resistant door can be supplied with a non-mechanical failsafe system, this door should be closed at all times, it can be used as a passage but should then immediately close again.
- When the door is installed in an escape route ensure that the door is suitable for intended use (escape door). (EN 16034-2) (EN 14351-1 and 2)
- In the case of hold-to-open/hold-to-close operation, the control switch must be positioned so that the operator has a clear view of the opening/closing of the door.
- Before operating, check that there is no visible damage to the door, if damage is found the supplier should be asked to repair the damage, a door with damage should not be operated.
- Before and during operation, check that there are no other persons within an area of ± 2 [m] of the door.
- Before and during operation, check that there are no obstacles under the door.
- During maintenance/inspection of the fire resistant door the installation must be powered down and ensure that it remains powered down.
- Prevent entrapment of persons in the room. If persons are still present, the door should remain open if there is no means of escape.
- When using a mechanical failsafe motor, the door will close immediately upon power failure unless a backup system is present, it will hold the door open until a fire alarm is activated or after the critical voltage of the backup system is reached.
- We recommend that the installation be grounded, with an ATEX version this is mandatory.

3.3 Residual risks

In case of regular use:

- Entrapment can occur when the fire resistant door closes upon fire alarm. The mechanical failsafe closing of the fire resistant door does not take into account the possible presence of persons. The probability of a person becoming trapped is very low due to the low speed of the closing movement and the optical and acoustic warning signals.
- When a gravitational self-closing (failsafe) system on our products / the fire resistant doors, 2 optical and 1 acoustic signals with autonomous power supplies will be provided in accordance with standard EN 12604-2000 / EN 13241-2016;

It is strictly forbidden to place goods/materials in the "run" of the closing and/or opening door leaf.

In case of maintenance:

- During maintenance/inspection of the fire resistant door the installation must be disconnected from the power supply and ensure that it remains disconnected from the power supply. Due to voltages in the installation there remains a risk of electric shock.
- Upon inspection of the movement system, crushing hazard may occur when the door comes/is in motion.

4 Usage instructions

4.1 Normal use (not during fire alarm/calamity)

Before and during the operation of the door, the following steps should be observed;

- Before you operate the door, you should take note of the safety instructions in Chapter 3.
- Check that there is nothing or no one around, against or under the door while operating the door, do not start or stop operating the door immediately if there is.
- You operate the door by means of the control device, usually push buttons or a key switch. While operating the door, you stay at a sufficient distance but within sight of the moving part of the door, 2-8 mtr.
- Make sure that while operating the door, it actually moves in the correct direction, if it does not, stop operating and/or press the stop button and contact the supplier immediately.
- Keep a view of the door at all times during movement.
- Make sure the door is fully opened when opening and fully closed when closing to promote durability.
- If irregularities are detected while operating the door, stop operating and contact the supplier. Possibly an unsafe situation arises, cordon off the area so that the passageway cannot be used, e.g., if the door is not fully opened or closed.

The door can be protected against entrapment of objects and/or persons in several ways.

NOTE: Holding the control will override the protection.

- In the case of hold-to-open/hold-to-close operation, the door will stop immediately after releasing the control.
- If an safety edge protection function is present, the door will automatically go back up after contact with an object and/or a person. Possibly a set of photocells can be added to the safety edge protection function.
- When a set of photocell curtains is installed, the door will not close when the sensor detects an object in the path of this security. Please note that this only works in the line/area of the security sensor. No object and/or person will be detected outside of this.

Note that safety devices are not designed to operate the door!

In order to put the door back into operation after a safety edge/ photocell curtains has been triggered, you must remove the objects and/or persons from the detection area of the safety edges.

4.2 Self-closing function

If the door is in the open position at the moment of "activation" by an (automated) alarm system and mains power failure, it will close automatically. This is done by means of an electric drive with a gravitational failsafe system.

A gravitational failsafe system means that the door can still close by gravity after the failure/loss/breakdown of the electrical facilities. This movement is controlled by a speed limiter. In case of "control" the door will not take into account objects/people under the door and will close immediately.

Optionally, the photocell curtains can be kept temporarily active and closed after a set time with a force lock.

It is strictly forbidden to place goods/materials in the "run" of the closing and/or opening door leaf.

4.3 Actions after improper use

If an object has become trapped under the door, and the door has come to a stop as a result, perform the following actions.

- Move the door up carefully, until you can remove the object.
- After the object is removed, you must close the door completely.
- Perform a visual inspection before sending the door open.
- If in doubt or if any of these actions fail, contact the supplier.

5 Technical Specifications

Please refer to the order confirmation and/or packing slip.

6 Product

Please refer to the product leaflet and the optional BOM (Bill Of Material)

7 Installation preparation

Before the installation of the door can be started, the following items should be checked:

- Before the installation can begin, the installation company must have familiarized themselves with the contents of this user manual.
- It is the responsibility of the installation company to be aware of the local regulations concerning the installation of the door (e.g. Working Conditions Act).
- Check the work area for accessibility and work space, then cordon off the work area.

Note the following points:

- Check the clear width and height and the available side and top space, the dimensions according to Technical Drawing are leading.
- Check the mounting surface for obstructions.
- Check that the surface is level for installation as indicated on the technical drawing.
- Check that the walls, floor and lintel are perpendicular and straight as shown on the technical drawing.
- Check that the correct electrical connections are present as shown on the technical drawing.
- Assess whether the substrate offers sufficient strength for the construction, if in doubt contact the supplier.
- Check all parts against the packing slip and/or order confirmation, and/or refer to the list of all parts against the optional BOM (Bill Of Material) of the user manual.

7.1 Essential tools for installation

The required tools cannot be determined by Metacon-Next, as this depends on the installation situation. It is up to the supplier and/or installation company to determine the appropriate tools.

8 Installation Instructions

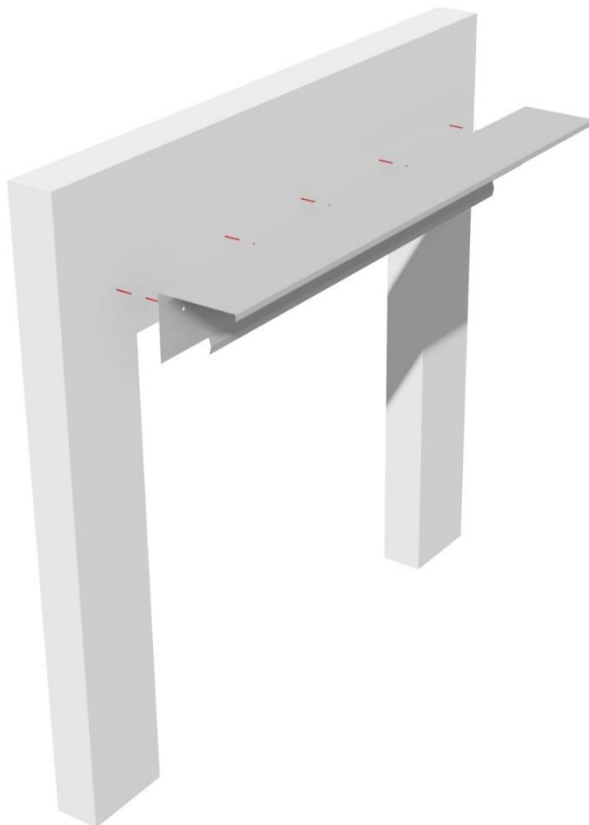
After the installation company has been prepared according to chapter 7, the installation of the door can begin.

Important: Fasteners are optionally provided by Metacon-Next. Use only fasteners suitable for the intended strength and fire resistance and appropriate to the substrate. Follow the instructions of the fasteners supplied.

Step 1: Mounting the rear/upper part of the casing

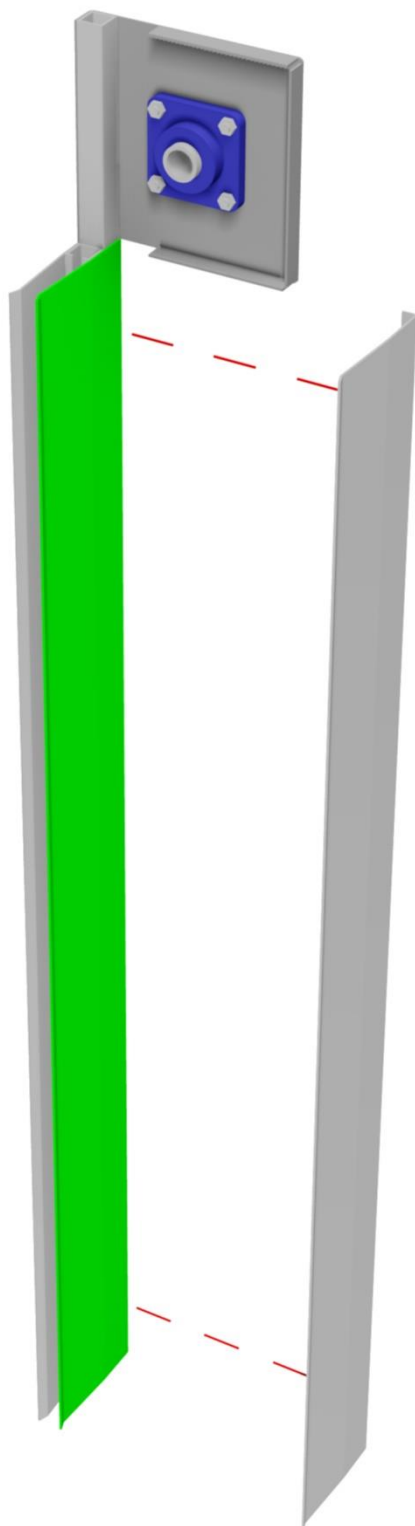
Mount the rear/upper part of the casing. Top of the casing must be at the height according to the Metacon drawing supplied. Left and right sides of the casing must be equally divided with respect to the daylight size. Make sure the casing is level.

Use the pre-drilled holes. Metalstud /HSB holes must be drilled at the height of the vertical profiles in the wall (maximum 600mm centre-to-centre)



Step 2a: Mounting guides

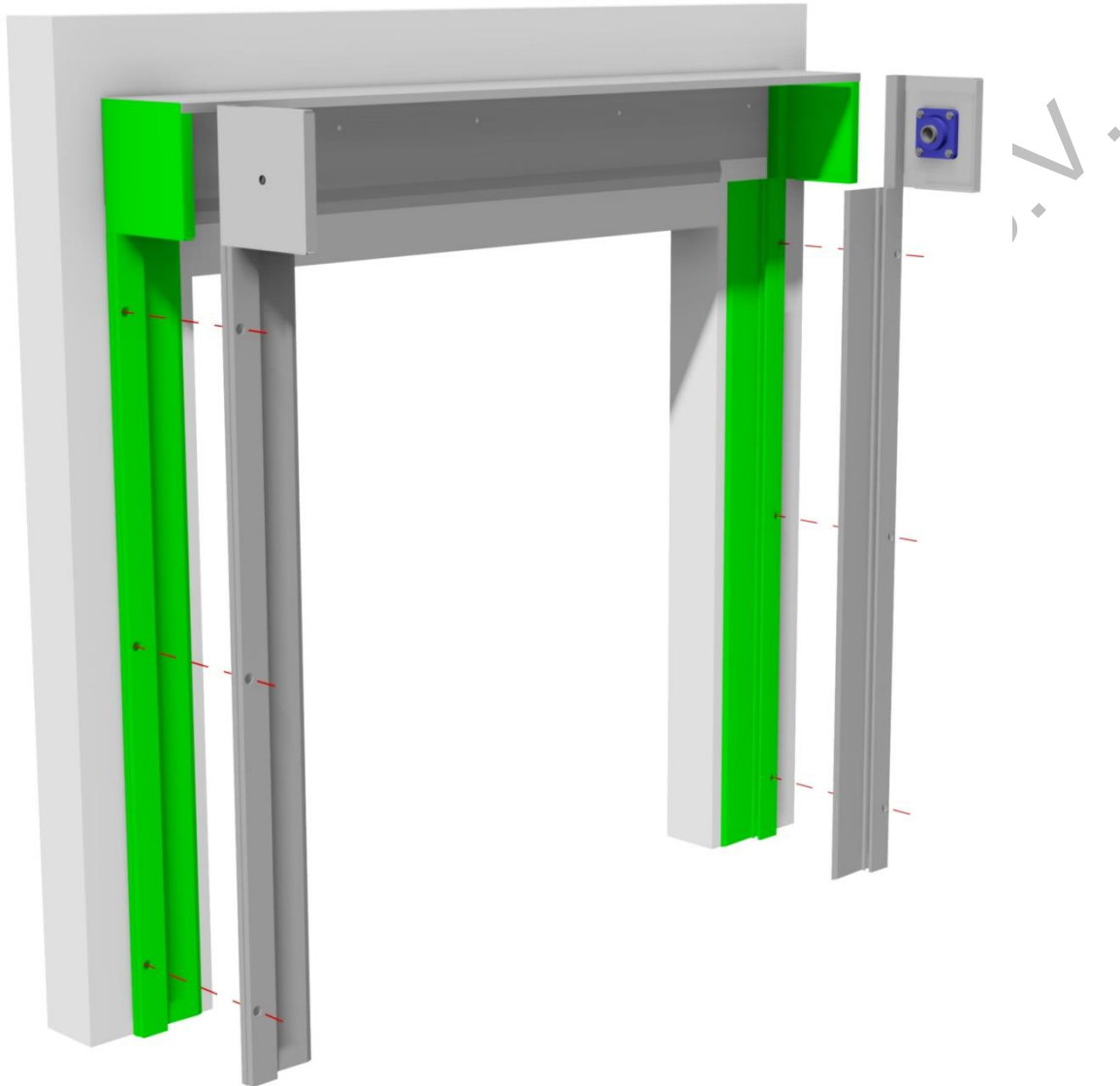
Unscrew the guide plates and put them aside with the mounting material. They will be needed at a later stage.



Step 2b: Mounting guides

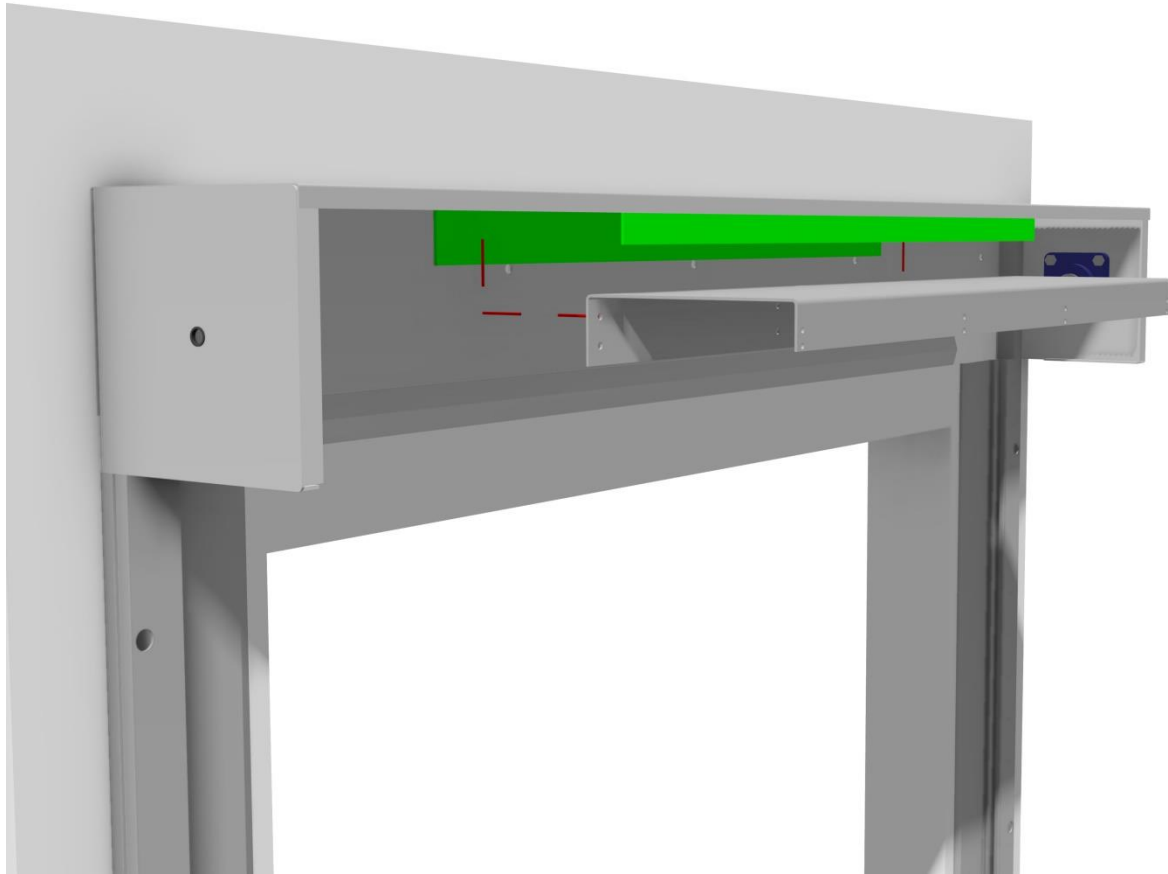
Mount the guides according to the dimensions on the Metacon drawing. Check the width. Check that the guides are parallel and level.

Attention: When mounting on metal stud / HSB also use the holes behind the inlet guide.



Step 3: Mounting the bracket for shared casing (*optional*)

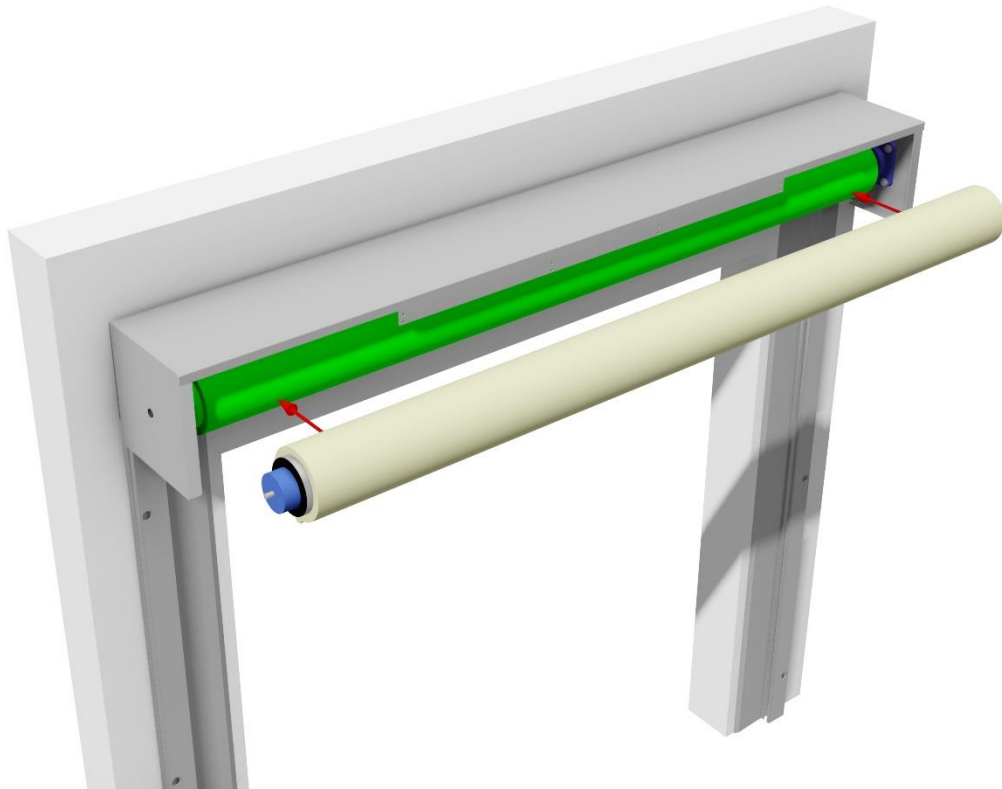
Mount the rear of the bracket on the wall, use screws or bolts with countersunk heads to avoid damaging the fabric. Check that there are no protruding and/or sharp parts in the casing.



Step 3: Mounting fabric + tube

First of all, remove the transport cover from the rolled up fabric, be careful not to damage the fabric when removing this cover. Leave the wrapping film attached on the fabric.

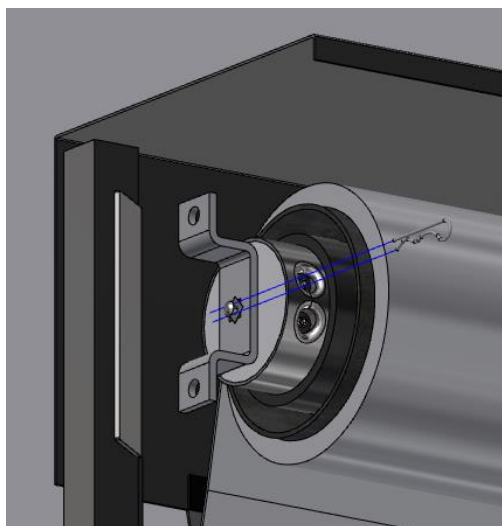
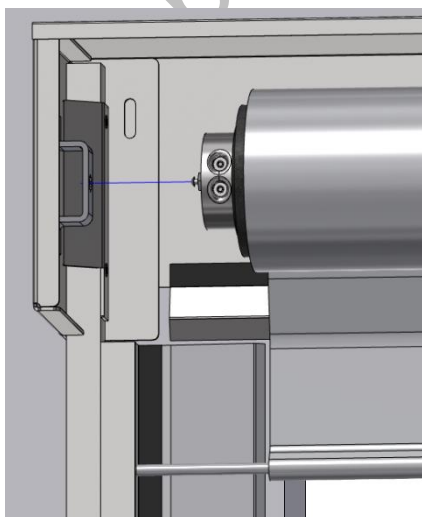
Assemble the tube with the rolled-up fabric including the wrapping film to prevent uncoiling.



Pass the motor cable through the grommet hole. Place the motor in the motor mount and carefully pull the cable out as far as it will go, to keep the cable away from the ribs.

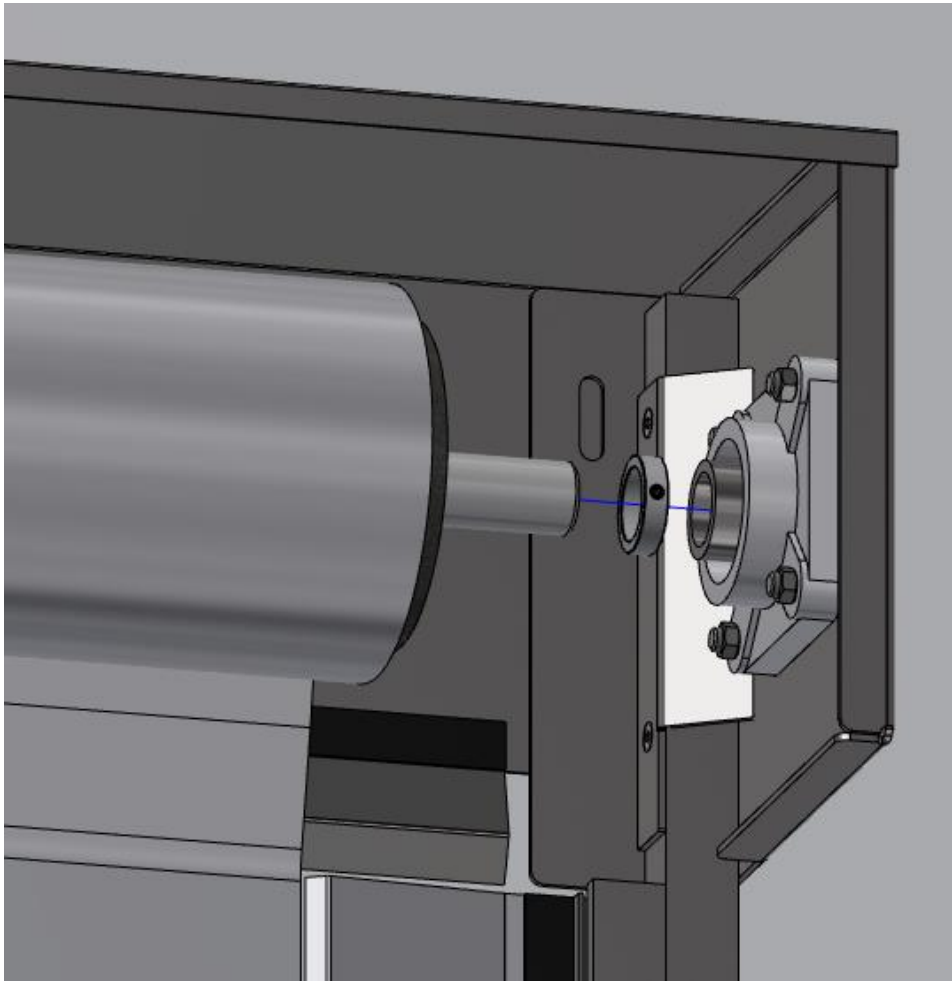


Slide the provided retaining spring over the pin of the motor at the back of the motor bracket.



On the other side, slide the shaft into the bearing. Check that the front of the shaft is against the bearing.

Tighten the Allen screw of the bearing, slide the adjusting ring against the welding ring and tighten the locking screw.



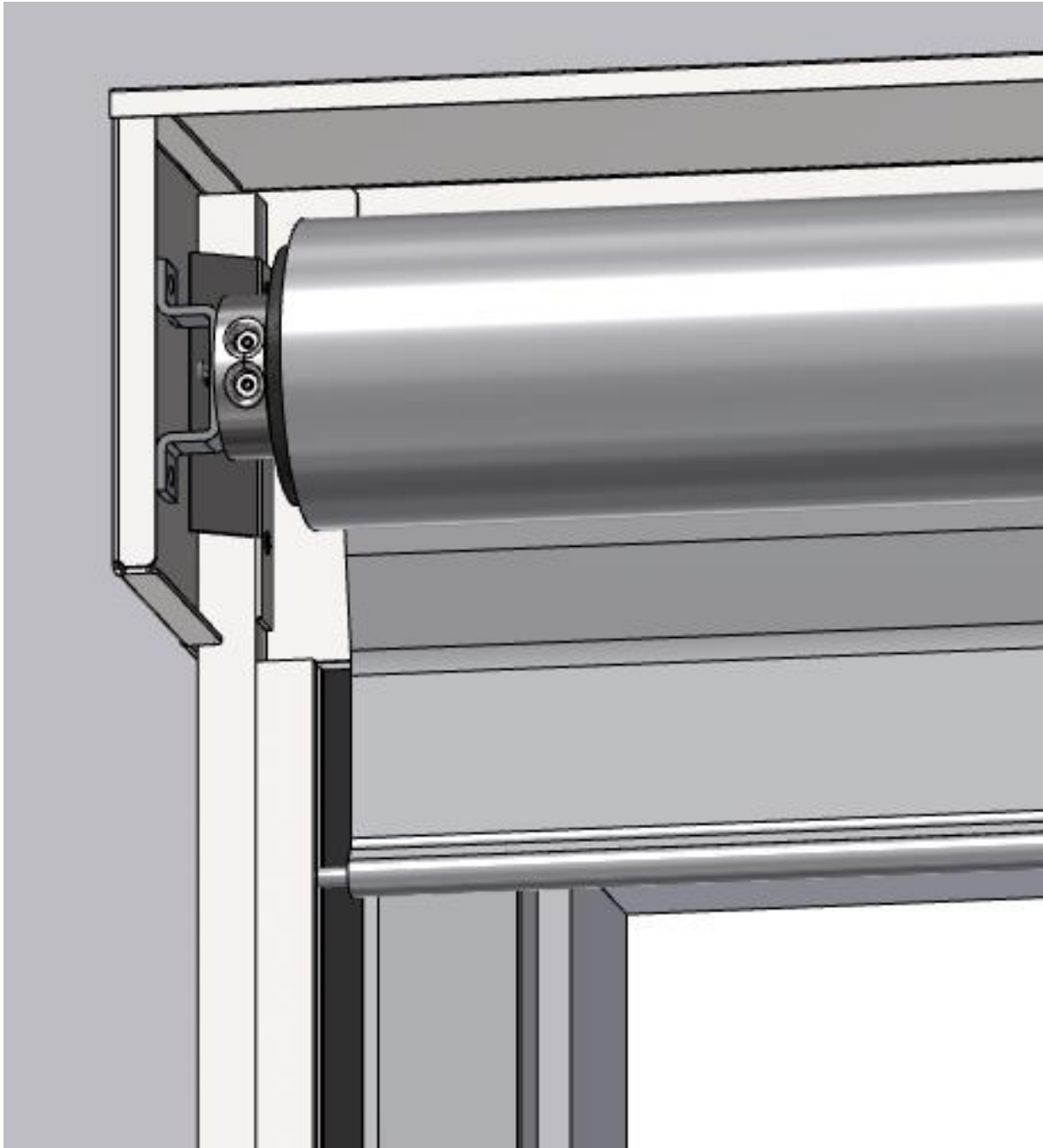
Step 4: Connecting motor & control unit

Connect the motor and the control unit, read the control unit instructions in the manual. Make sure that the motor cable does not obstruct the fabric from rolling up.

Connect the motor to the test/control lead, and connect the 24V motor brake in the control to the appropriate 24V supply.

Plug the power cord into the wall socket and check for power.

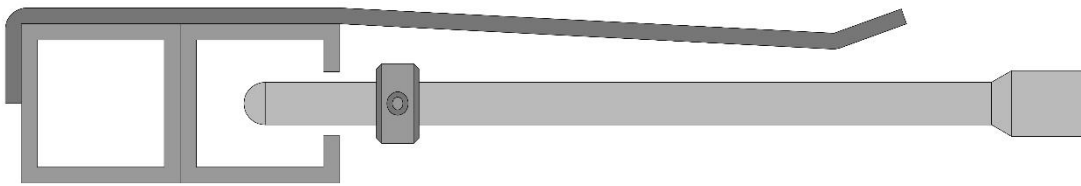
Now remove the film from the motor tube, make sure not to damage the fabric. **(do not operate the fabric!!!)** Insert the weight rod (bottom of the fabric) in the guide.



Step 5: Position weight rod

The rings on the outside of the weight rod must pass freely through the guide according to the illustration below.

After positioning the weight rod in the middle, fix the adjusting rings with the locking screws.



Property of N.

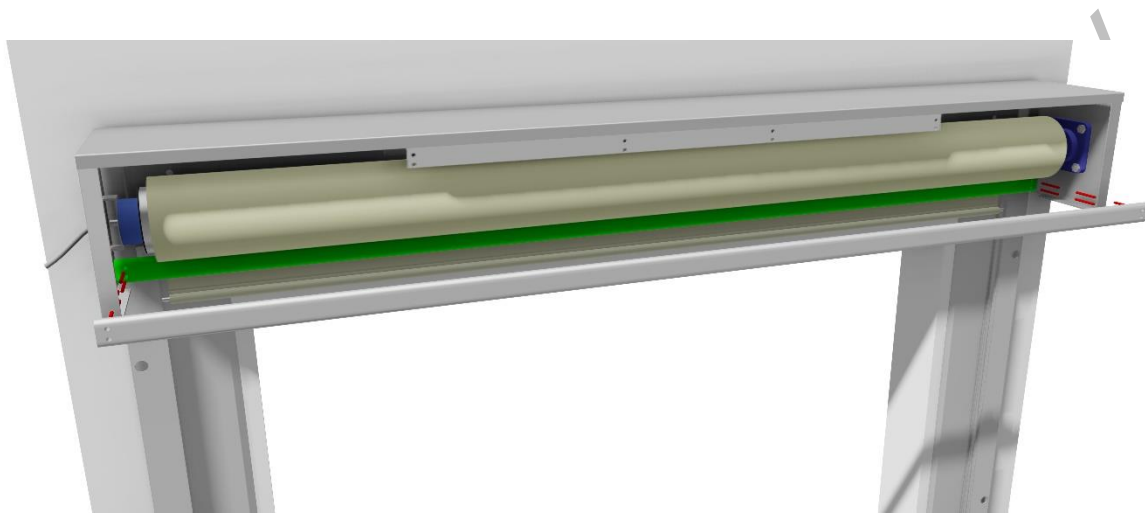
Step 6: Mounting of intermediate beam

Mount the oval-shaped cross bar on the supports in the casing.

The cross bar must be mounted at the appropriate place with the material provided. (1 or 2 screws/bolts per side depending on the type of joist)

The fabric must be between the wall and the oval cross beam.

Take note: In case of coupled oval cross bars and to avoid damage, make sure that the coupling bolts do not face the wall/fabric.



Step 7: Setting end positions

Check the movement of the fabric (the final adjustments are factory set to 95% accuracy). Connect the motor to the test lead and the brake to the control.

Check the top adjustment: the bottom of the fabric must be level with daylight height.

Adjust as necessary as specified in step 8.

Guide the fabric down, check that the fabric and the ribs move in the guides /c-profiles according to the drawing.

Check the downward adjustment: the fabric must drop another 50 mm after touching the floor.

Adjust as necessary as specified in step 8.

Then allow the fabric to move up (open) to a maximum of 500 mm below the casing.

When the fabric is rolling up, some air may accumulate. To avoid problems, roll up the fabric until 500 mm below the casing, then wait 10 seconds for the air to escape. After this, the fabric can be opened completely. Keep sight of the fabric and stop again for 10 seconds if any air pockets develop.



Step 8: Adjusting tubular motors

Please note that the tubular motor has a limited operating time, because it heats up quickly. Therefore, make sure you start adjusting in time.

This is a gravitationally drive. When the motor brake has no power, the fabric will close.

Tips When adjusting, remember the direction and number of rotations. The arrow on the motor indicates the direction of rotation of the tube, the up arrow is for the down adjustment and the down arrow is for the up adjustment.

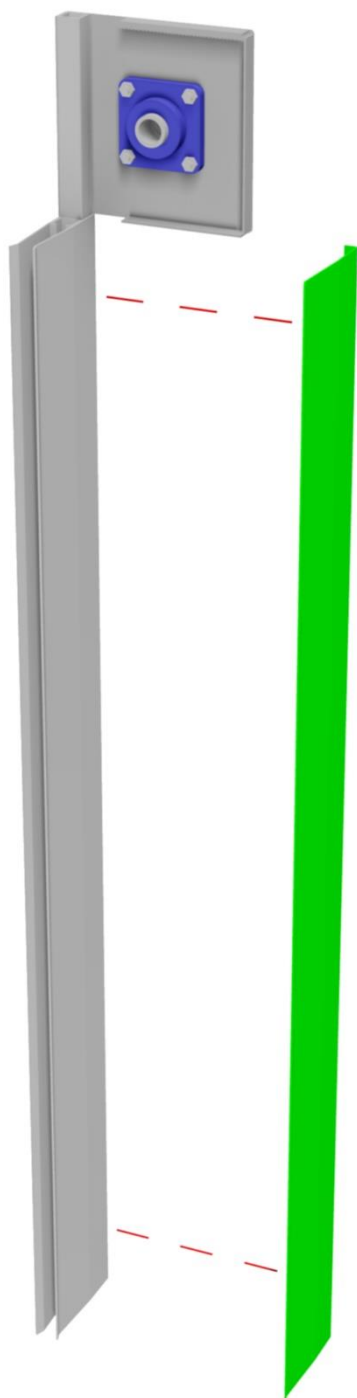
Adjust the limit switches of the motor, using the adjustment pin provided. The description below is for open doors;

- Lower the fabric for +/- 500 mm, then roll it up completely.
- Top adjustment: check that the fabric stops at the correct height.
 - If the fabric stops too high, lower the fabric +/- 500 mm and turn the lower adjusting screw 5 turns to the - (minus) and try again. Repeat this as long as the fabric stops at too high a point.
 - If the fabric stops too low, hold down the button of the test/control cable, gently turn the lower adjusting screw towards the + (plus) until the desired position is reached.
- Bottom adjustment: check that the fabric stops at the correct height.
 - If the fabric stops too high, hold down the lowering button of the test/control cable, gently turn the upper adjusting screw towards the (plus) until the desired position is reached.
 - If the fabric stops too low, raise it +/- 500 mm above the floor and turn the upper adjusting screw 5 turns to the - (minus) and try again. Repeat this as long as the fabric stops at too high a point.



Step 9: Mounting of front side guide plates

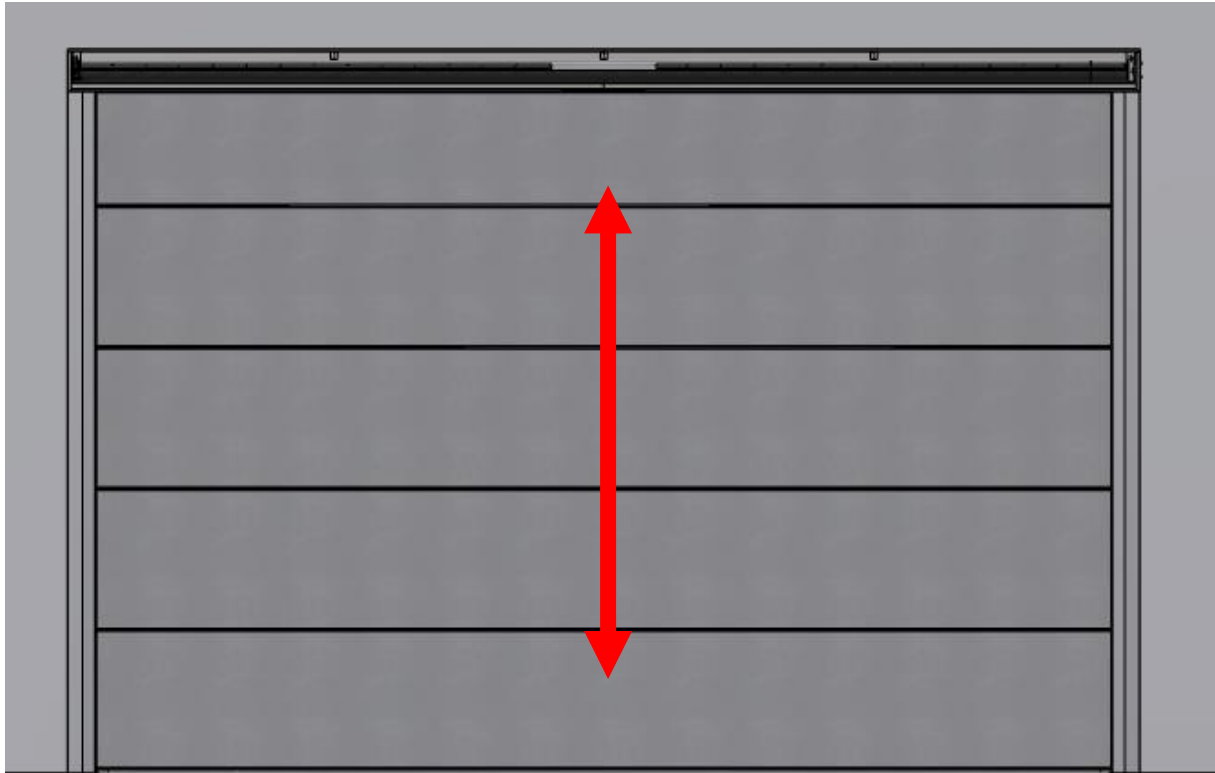
Mount the front of the guide plates which were removed in step 2 on the guides.
Mount the guide plates in the same way using the same fasteners.



Step 10: Assembly check

Move the fabric up completely. Watch for air pockets.

Check the run of the fabric. The fabric, including the ribs and weight rod, must be distributed symmetrically on the left and right in the guide rails.



When the fabric is rolling up, some air may accumulate. To avoid problems, roll up the fabric until 500 mm below the casing, then wait 10 seconds for the air to escape. After this, the fabric can be opened completely. Keep sight of the fabric and stop again for 10 seconds if any air pockets develop.

Step 11: Connecting the control unit

Connect the controller.

Connect the motor to the controller as indicated in the manual supplied with the controller.

Check whether the controller is in deadman's mode. If not, set this mode.

Check that the film probe matches the direction of rotation.

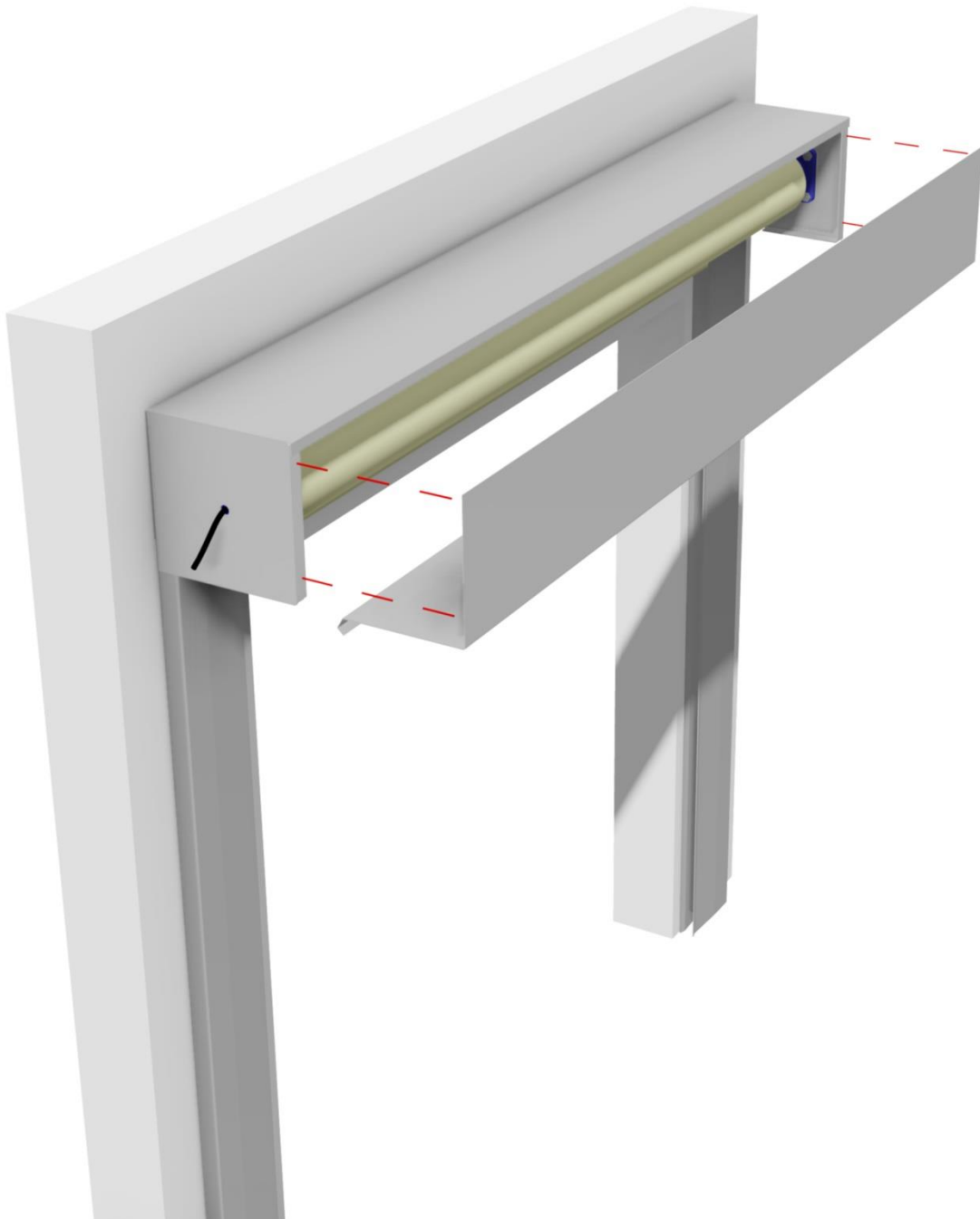
The control unit supplied is factory set; check motor running times and deadman's switch.

Connection of other components will follow.

Step 12a: Mount the front of the casing(*without the brackets*)

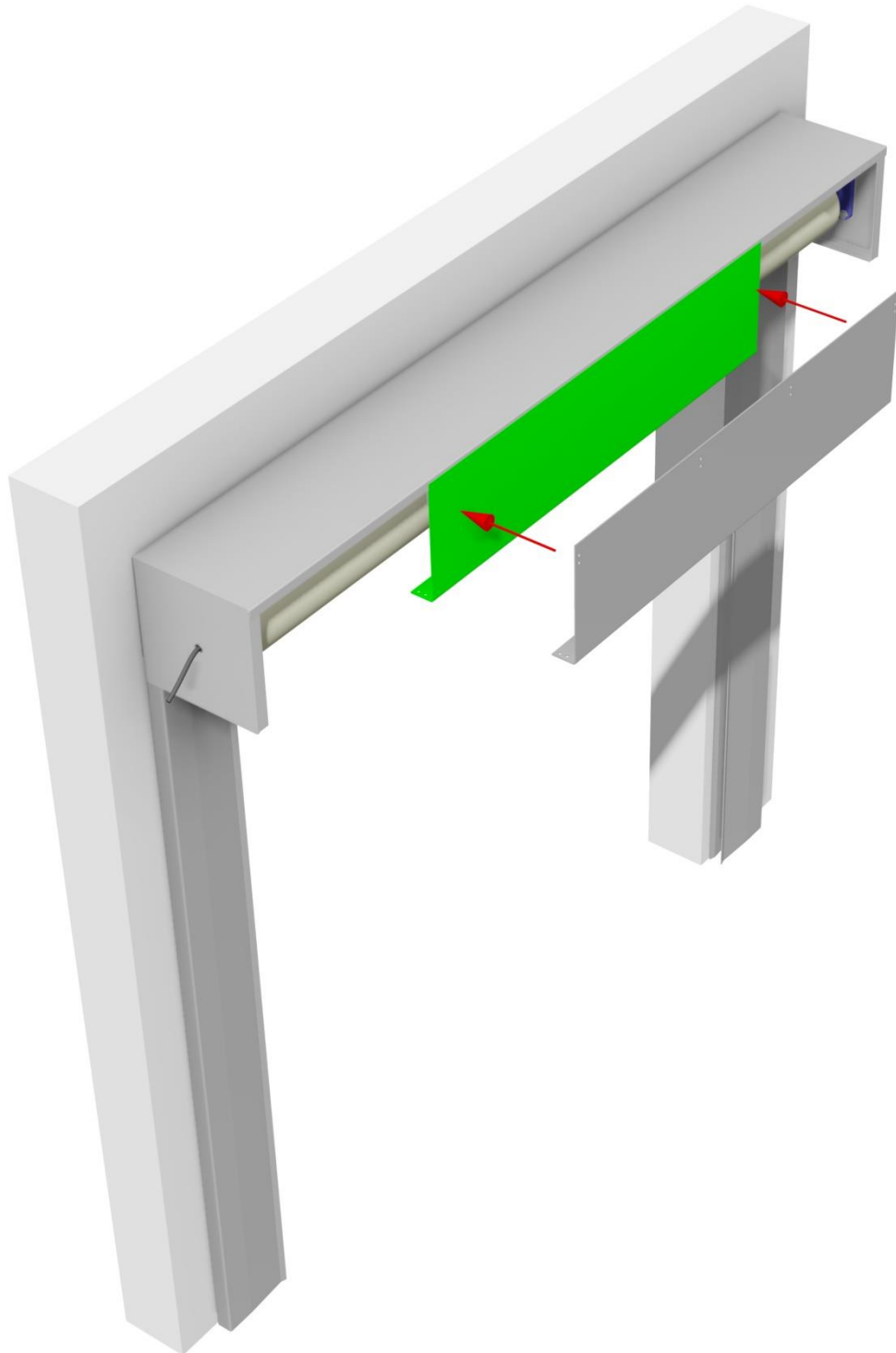
Mount the front/bottom casing.

- Mount the front/bottom of the casing on the supports.

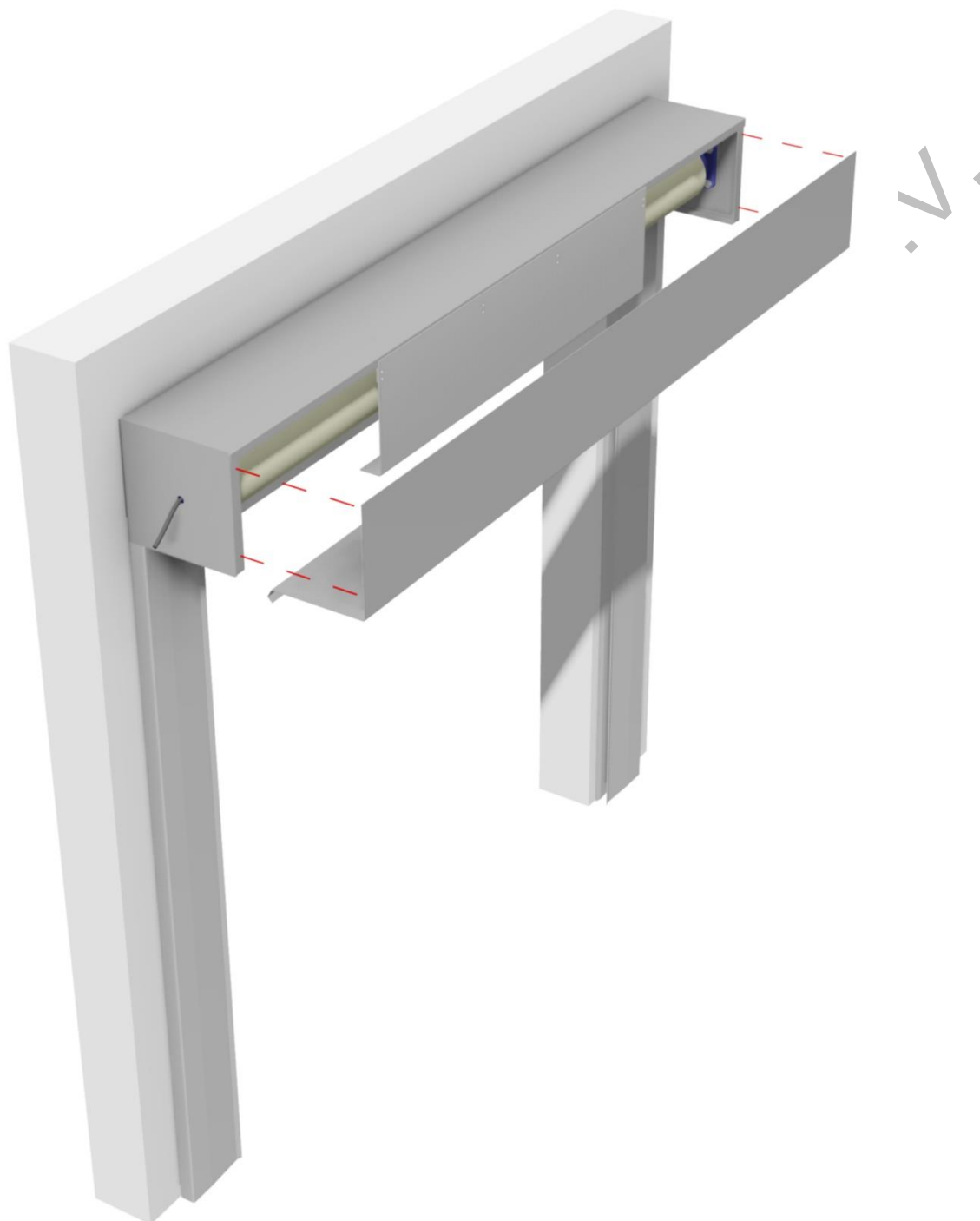


Step 12b: Mount the front of the casing (*with casing bracket*)

Mount the front/bottom casing (with casing bracket). Screw the front of the bracket to the part already attached.



Then mount the front of the casing on the support and casing bracket.
When drilling the mounting holes for the casing bracket, be careful not to damage the fabric,
fasten with thread-forming screw M5, 20 mm from the edge of the case.



Step 13: Connecting optional accessories

The assembly of the product is complete, any accessories supplied may now be connected.

You can connect optional components as indicated in the control box manual.

UPS systems only have the function to keep the systems open temporarily, after a power failure. When connecting without a power supply, the system may become deeply discharged, causing it to malfunction. Depending on type and use, this is possible after 2 hours. After installation, the UPS must be connected to the final mains supply or remain unplugged and switched off, see the UPS manual supplied.

Step 14: Final check

Use maintenance/check schedule in chapter 10 to make sure that everything works correctly and sign off for proper functioning.

PAY ATTENTION:

- This product can only be used in emergencies and not suitable for daily use.
- This product is not suitable to be left in the closed position.
- This product is not suitable for situations with over- or under pressure during opening / closing.

9 Initial use

The first use is performed by the installation company. This party must complete the document; "Appendix A" immediately after installation and leave it at the door.

The door should be checked against the check/maintenance list and each step should be ticked off and signed incl. name in block letters.

The door has a sound pressure level of 70 dB(A) or lower when commissioned.

When this check is positive on all points, the door can be delivered to the user.

10 Maintenance, faults and repairs

10.1 Regular maintenance

Each door is provided with an identification stating the type of door and the order number and position number. In case of any malfunction, this number should be communicated to the supplier. Metacon-Next keeps a technical file in the archive with reference to the order number and position number.

For the correct functioning of the installation it is necessary to have regular maintenance carried out. In order to claim on the manufacturer's warranty, maintenance must be carried out at least once a year under "normal" use. Maintenance should be performed by a competent installer. Metacon-Next recommends entering into a maintenance contract with the supplier. **Insufficient maintenance may lead to an unsafe situation. See EN 12635.**

The following steps should be checked during maintenance (and first use);

Appendix B "Door type - maintenance instructions".

10.2 Cleaning

The frequency with which the door is cleaned is up to the user. It is recommended that once a year the door be wiped only with a damp cloth to prevent any damage. Other cleaning methods will result in termination of the manufacturer's warranty. Make sure that electrical parts do not come into contact with moisture during cleaning. Note that climatic conditions may lead to a changed cleaning frequency.

10.3 Faults and repairs

During maintenance and repair work, the door must be powered down. Troubleshooting and repairs should be carried out by competent installers. In case of a malfunction, the supplier should be contacted. If the supplier cannot solve the malfunction, Metacon-Next can be contacted.

11 Storage and transport

The parts are packed for transport on a pallet in foil or in a plastic sleeve, so that they are protected from the weather during transport. The pallet should always be stored in a dry and frost-free place. To avoid condensation in the packaging, please open the packaging upon receipt. Transport is relatively easy as Metacon-Next only delivers semi-finished products. If the package weighs more than 20 kg, it must be moved with suitable lifting equipment. Unloading the goods must also be carried out using suitable equipment. Unless stated otherwise, packages can be unloaded with a forklift.

12 Environment and disposal

The locally applicable environmental regulations must be observed (separate disposal of environmentally harmful substances). For de-installation of the product, the reverse sequence of the installation instructions can be applied (see chapter 8).

Property of Metacon-Next B.V.

Annex A: "RGT EW 60-90 - Technical data"

Door data	
• Order number
• Position
• Serial number
• Location of the door
• Date of installation
Manufacturer's data	
• Name	Metacon-Next B.V.
• Address	Zuidbaan 450 2841 MD Moordrecht The Netherlands
• Phone number	+31 (0) 182 23 15 25
• E-mail	info@metacon-next.com
• Website	www.metacon-next.com
Details of the installation company	
• Company name	
• Phone number	
• E-mail	
• Website	
Drive data	
• Manufacturer	
• Product number	
• Serial number	
Control data	
• Manufacturer	
• Product number	
• Serial number	
• Software version	
Safety equipment data 1	
• Manufacturer	
• Product number	
• Serial number	
• Software version	
Safety device data 2	
• Manufacturer	
• Product number	
• Serial number	
• Software version	

This door must be used in accordance with the instructions described in Section 4 of the user manual.

Annex B: "RGT EW 60-90 - Maintenance instructions".

1. ☐ Identify the door by means of a type of identification
2. ☐ Start with an overall visual inspection
3. ☐ Close the door completely
4. ☐ Carry out the overall visual check again
5. ☐ Disconnect the control unit from the mains supply
6. ☐ Checking that all fasteners/points are present/used and that they are secure
7. ☐ Check rails for damage and/or wear
8. ☐ Check curtain for damage and/or wear
9. ☐ Check that the curtain is still properly aligned in the rails (the space between the outside curtain and inside rails should be equal on the left and right)
10. ☐ Check that the limit switches are still correctly adjusted;
 - ☐ Top position: bottom of curtain equal to clear height
 - ☐ Bottom position: curtain should stop after contact with the floor
11. ☐ Check safety components for proper operation
12. ☐ Control of closure at fire alarm
13. ☐ Check electrical cabling for damage and fastening
14. ☐ Check the batteries in the control unit for function and delivery date, they should be no more than 2 years old (ambient temperature may shorten service life)
15. ☐ Checking that the bearings, adjusting rings and gears are secured
16. ☐ Check electrical closing time measurement, note in logbook
17. ☐ Check for gravitational closure, plus time measurement, record in logbook
18. ☐ Read out cycles/movements in control box, note in logbook
19. ☐ Record performed actions, observations, and replaced parts in the logbook
20. ☐ Check if the documents are present at the door

Periodic replacement of the following components is necessary for the continued proper functioning of the door with the declared performance give;

Replace after;

Bottom weight

Horizontal wind hook (threads)

Curtain

cycli	year
1000	5
5000	10
5000	10

