



# **OR-RLM30 DOOR**

**INSTALLATION**

**AND**

**MAINTENANCE**

**MANUAL**



## CONTENTS

1. PRODUCT INFORMATION.....	2
1.1 DEFINITION.....	2
1.2 FIELDS OF APPLICATION.....	2
1.3 STANDARD DIMENSIONS.....	3
2. INSTALLATION – DISMANTLING - TRANSPORT.....	5
2.1 BEFORE BEGINNING THE WORK.....	5
2.2 INSTALLATION.....	6
2.3 DISMANTLING.....	15
2.4 TRANSPORT.....	16
3. OPERATION.....	16
4. MAINTENANCE.....	16
5. SAFETY.....	17
6. IMPORTANT WARNINGS.....	17

## 1. PRODUCT INFORMATION

### 1.1 DEFINITION

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OR-RLM30 Door is a linear operating door designed for openings of up to 3.00m. It is installed at openings of machine safety fence systems with safety distances and heights dimensioned in compliance with ISO 13857. The product package consists of a door wing, door post, support post and MND-D type lock.

In addition to improving machine safety by providing a physical safety barrier around it, when equipped with an electronic lock, it limits the access of the staff to the machine.



**CAUTION:** The product should not be used in places and conditions unsuitable for its purpose.

### 1.2 FIELDS OF APPLICATION

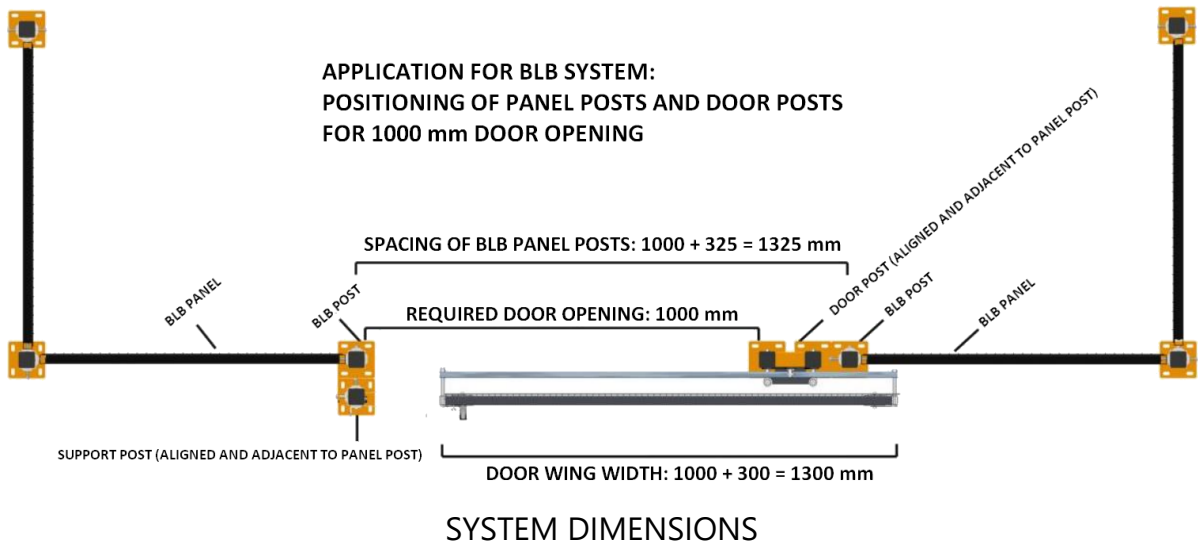
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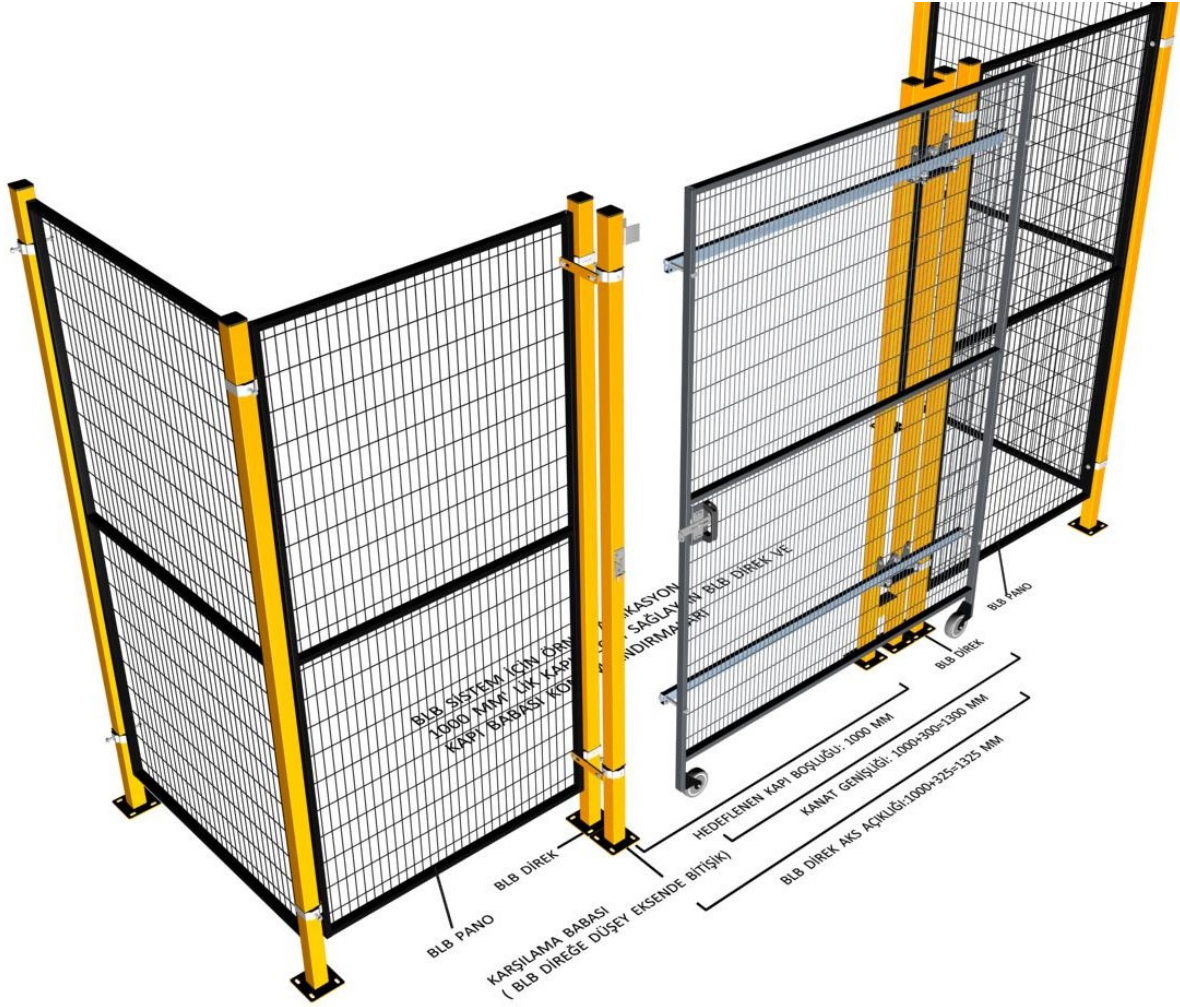
The product is a complementary component of guarding systems for perimeter safety. It is a physical safety item used for fencing in machinery or material located inside a designated area in larger workspaces.

Machine safety fence systems are used for increasing safety by limiting access of staff near all kinds of equipment which could be dangerous for humans, like automatic or semi-automatic machines with mechanical actions, robotic cells, cells containing extremely hot or cold processes, etc.

### 1.3 STANDARD DIMENSIONS

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**NOTE:** APPLICATIONS WITH BT PANELS ARE AS SHOWN ON PAGE 18

## 2. INSTALLATION – DISMANTLING – TRANSPORT

### 2.1 BEFORE BEGINNING THE WORK

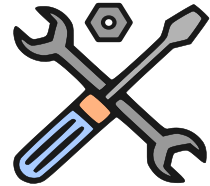
- Use **personal protective gear** (barrette, steel toe shoes, gloves, goggles etc.)



- Take precautions to **limit the entrance to the workspace.**



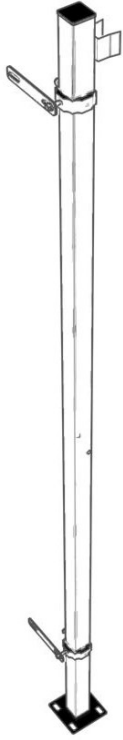
- Use only **appropriate equipment and tools.**



## 2.2 INSTALLATION

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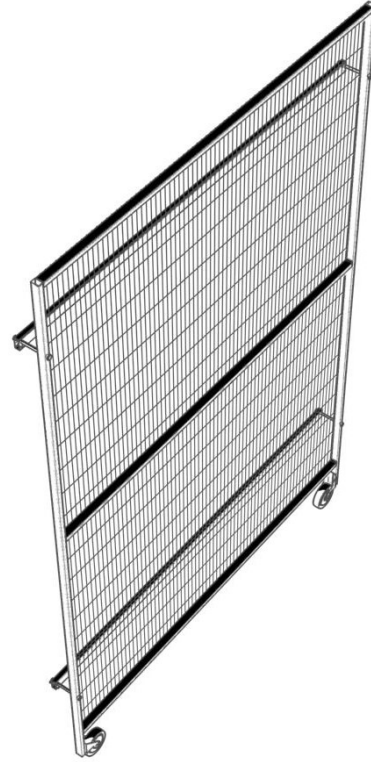
### CONTENTS OF THE PACKAGE:



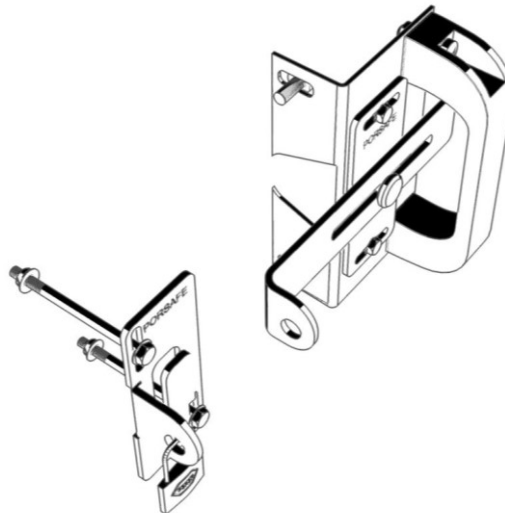
SUPPORT POST (1 pc)



DOOR POST (1 pc)



DOOR WING (1 pc)

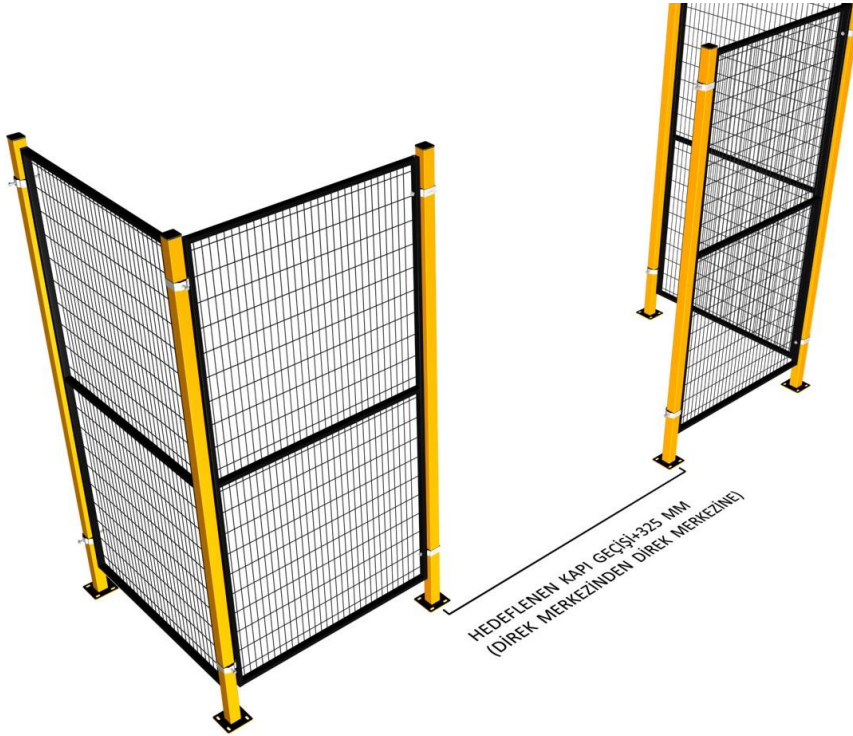


MND-D LOCK (1 set)

**(NOTE: IF AN ELECTRONIC LOCK IS USED, A MOUNTING BRACKET IS DELIVERED INSTEAD OF THIS ITEM.)**

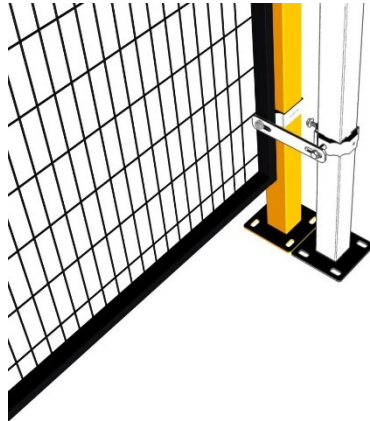
1. Initially, the necessary opening must be observed while installing the safety fence. This dimension is, **Required door opening + 325 mm**.

Example: For a door opening of 1000mm, this dimension must be  $1000+325=1325\text{mm}$ ; for a door opening of 1200mm, this dimension must be  $1200+325=1525\text{mm}$ .

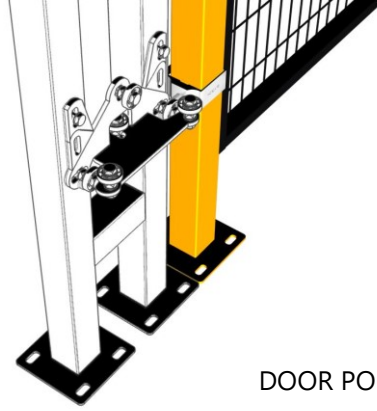


2. Fix the **Support and Door posts** on the ground with M10/90 steel dowels.

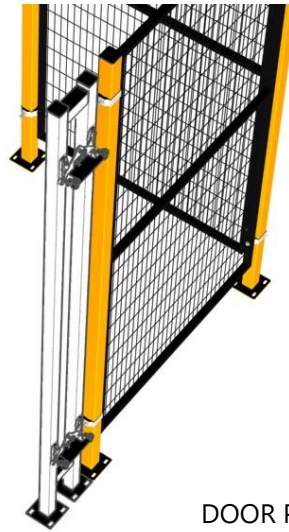
**Door post** comes with RLM 30 sheave kit, and the **Support post** comes with support and guide brackets installed on them, as shown on page 6.



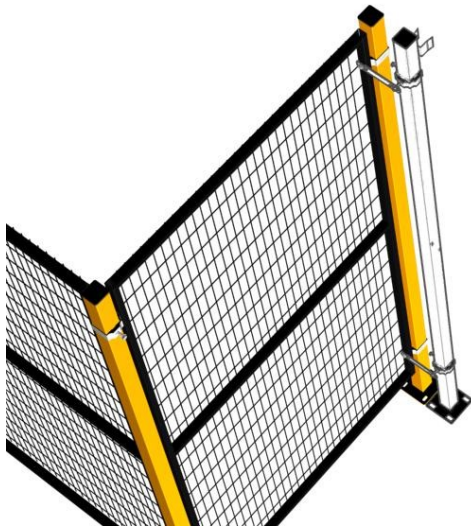




DOOR POST

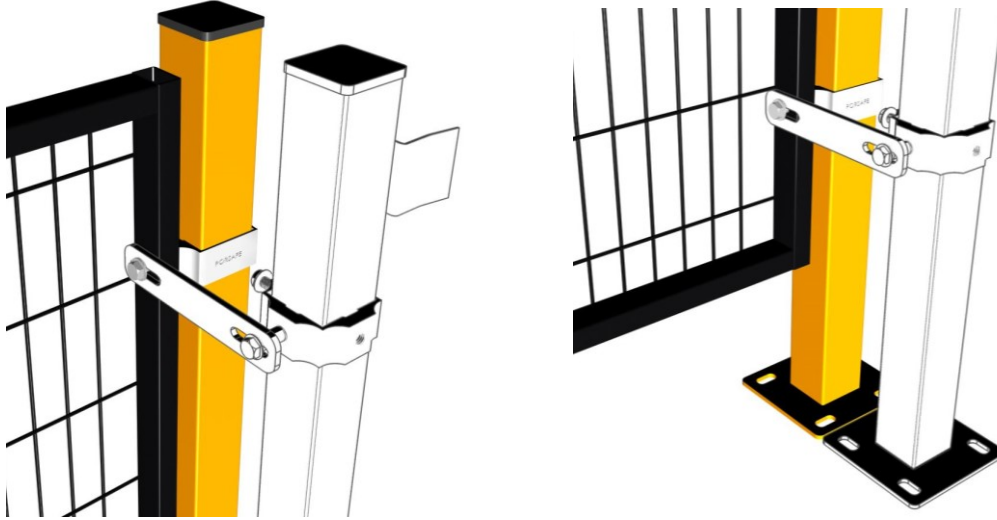


DOOR POST



SUPPORT POST

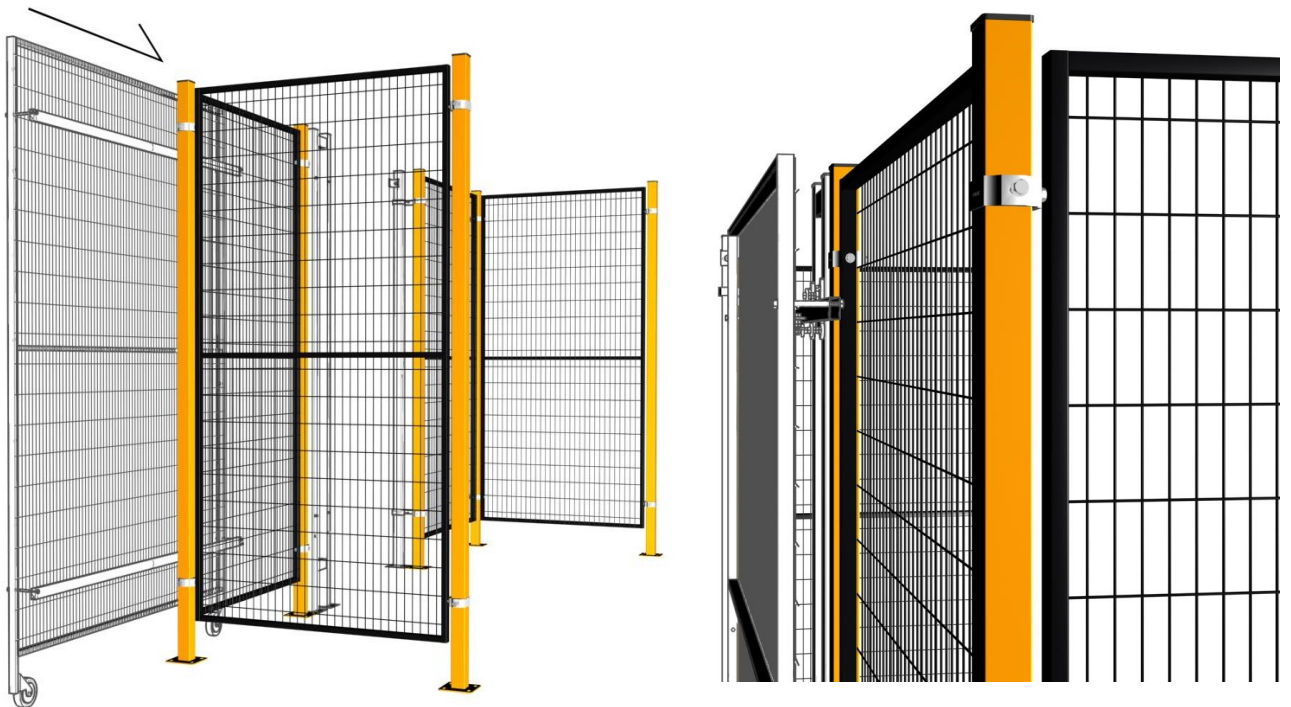
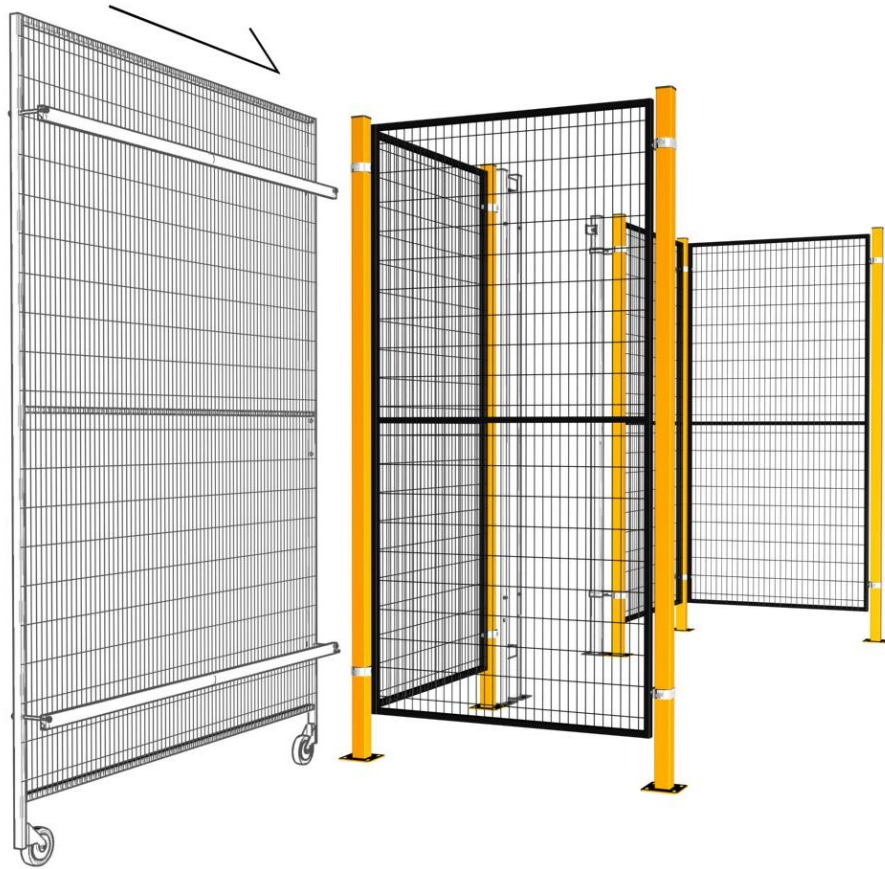
3. Fix the Support post firmly to the BLB fence post by the lower and upper support brackets.

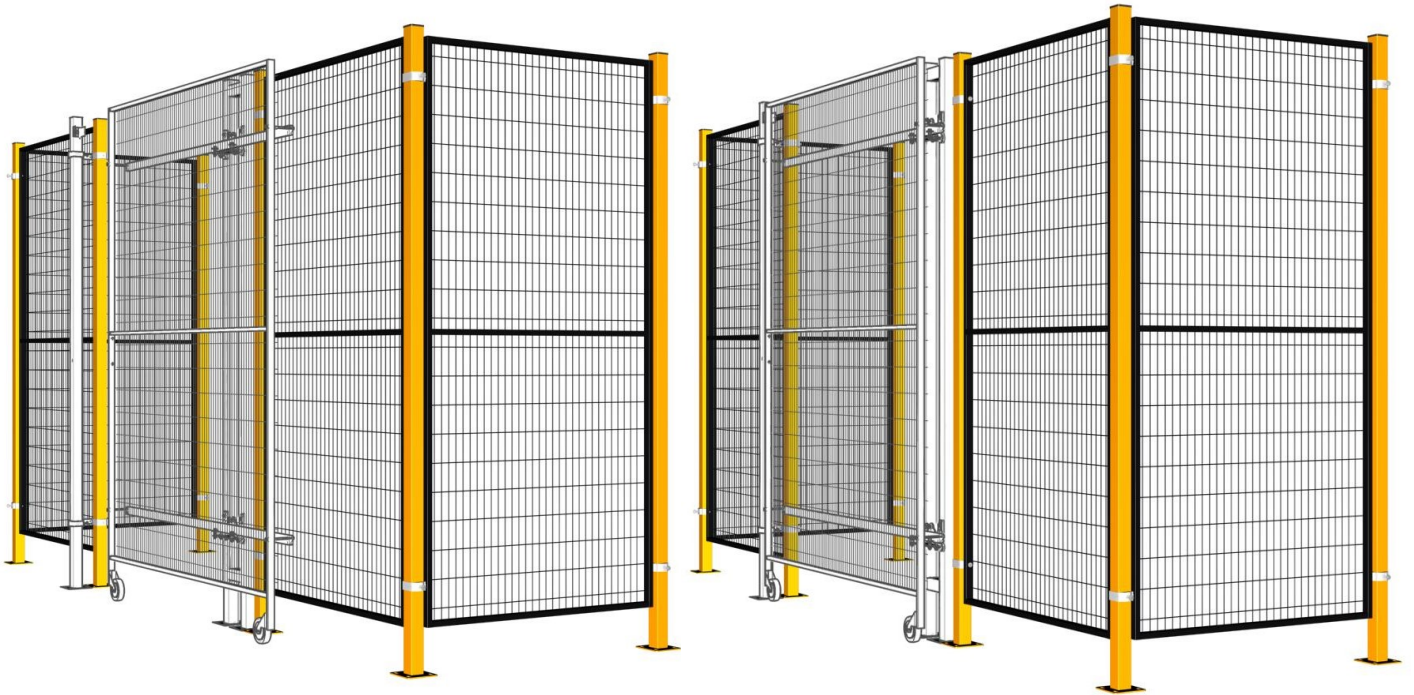
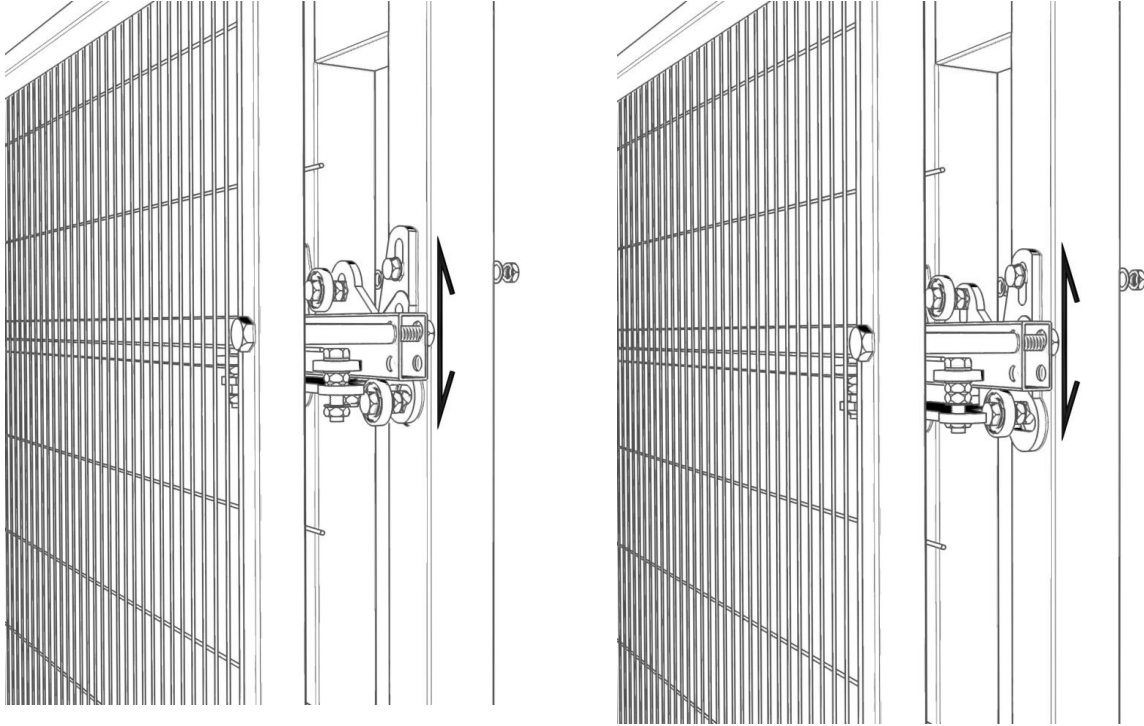


4. Slide the door wing through the door post from the rear side. Test the wing by moving it back and forth on the ground. In case of need, loosen the bolts at the back of the sheave kit, adjust it vertically to the ideal position and tighten the bolts again.

5.







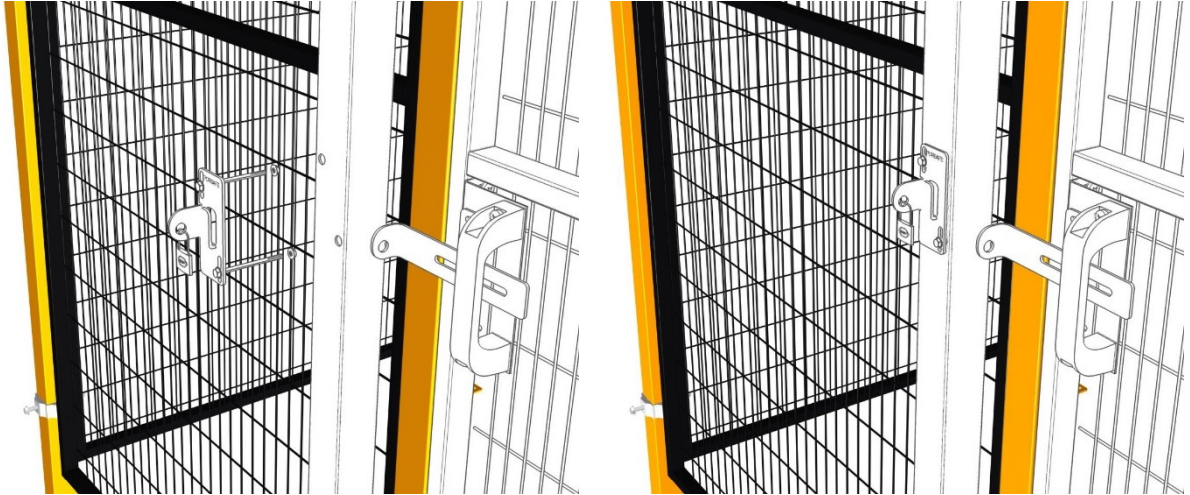
6. Loosen the screw of the guide bracket on the Support post and fully close the door wing in its proper position. The proper position is attained when the door wing is aligned with the support post.



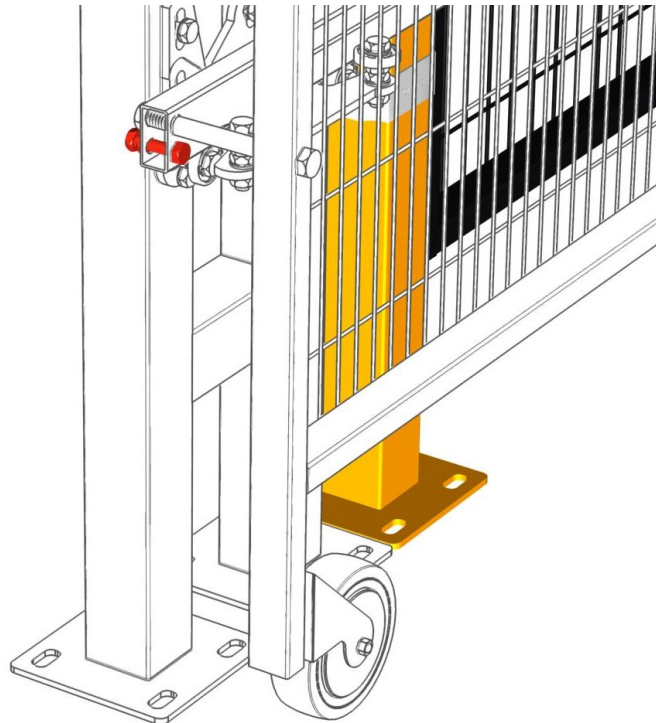
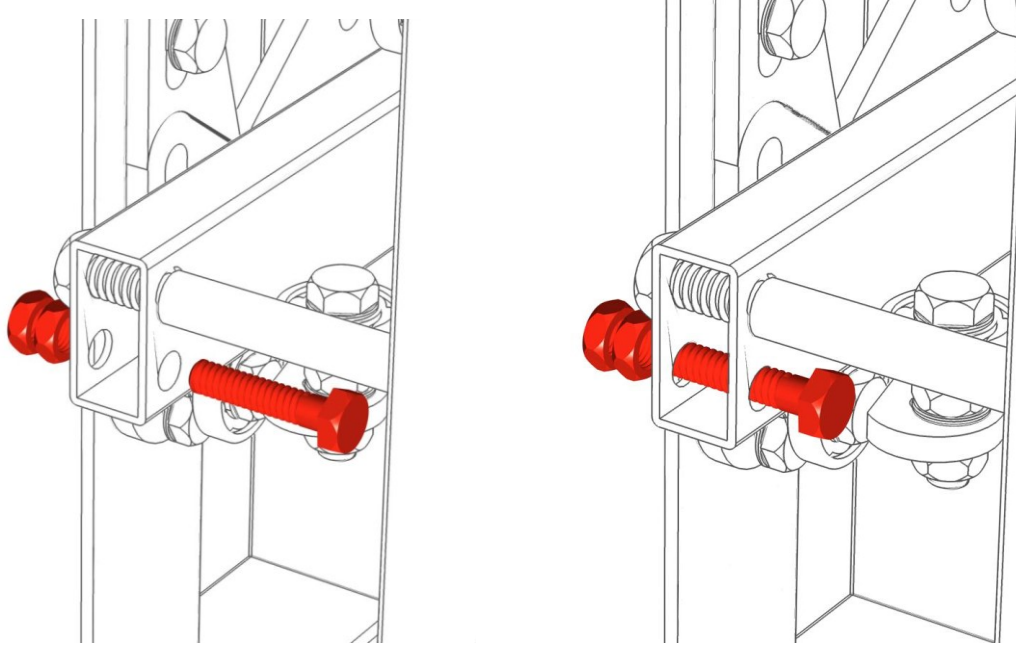
7. Place the wing-side piece of the MND-D lock in its position on the wing and fix it with the screws.



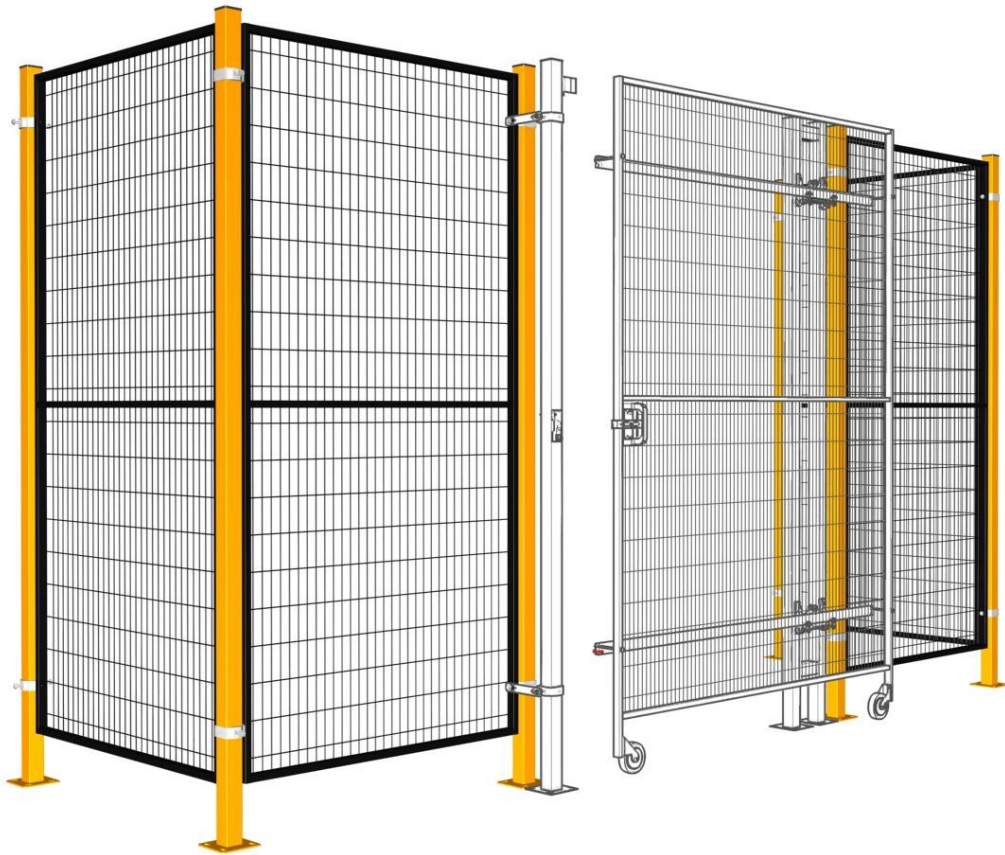
8. Fix the post side piece of MND-D lock on the support post. It must be placed vertically in the matching position with the wing-side piece of the lock.



9. Install the stopper bolt in its place to prevent the wing from being pulled off the sheave kit.



10. Make the final visual and manual inspection. Finish the installation work by removing the equipment and tools from the work area.



### **2.3 DISMANTLING**

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1. Dismantling is done through the steps described above, in reverse order.
2. Group the dismantled pieces, rack and place them properly on a palette, to ensure safe transport.



## 2.4 TRANSPORT

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1. Depending on the conditions and resources available, transportation can be done by a fork-lift, pallet truck, or piece by piece by hand.
2. Sharp edges of the pieces must be covered with protective material.
3. Proper precautions must be taken against the risk of sliding or tipping over of racked material.



## 3. OPERATION

Machine safety fence system is a structure for limiting access to the encircled area to provide human and machine safety, as the name indicates.

Signs and symbols relevant to this purpose must be placed and the staff must operate according to these warnings.

Operators who must enter within the safety area must be qualified and authorized.

The doors must be operated as specified and there must be no obstructions during opening.

It is the operator's responsibility to provide the above-mentioned conditions and take additional necessary precautions.

## 4. MAINTENANCE

Hinge and ground fixations must be checked visually and manually, periodically.

Maintenance is necessary to sustain the functionality of the protective system and keep it in operating conditions.

Routine maintenance must be done every 3 months, with the exception of urgent cases.



## 5. SAFETY

Authorized staff must handle installation, dismantling and transport of the safety fence system.

Safety zone encircled by the safety fence system must be well illuminated, warning signs relevant to the safety zone must be placed and authorized staff must be informed.

Warning signs must be placed around the safety fence to prevent forklift, crane or other transport vehicles to hit and damage the fence; other staff working close to the fence system must be warned and informed.

## 6. IMPORTANT WARNINGS

- The product should not be used in places and conditions unsuitable for its purpose.
- If the door is used in the safety fence of machinery with risk of danger, precautions must be taken as specified in ISO 14120, ISO 12100 standards.
- Any locks or other equipment with start/stop functions which are not supplied in our product package must be applied following the ISO 12100 standard.
- In cases of dangerous levels of electrostatic charge or risk of electric leakage from machinery and equipment, ISO 12100 standards must be strictly observed.
- Layout plan of the products in the workspace must comply with ISO 13857 safety distances standards.
- Use warning signs for the application.
- If it is needed to access the dangerous zone when the machinery within the safety zone are in operation, take precautions as given in ISO 12100.
- Proper warnings and precautions must be in place to prevent access and interference of unauthorized staff to the safety zone.

