

MR30/SA

MR30/SM



Standard Revolving Door

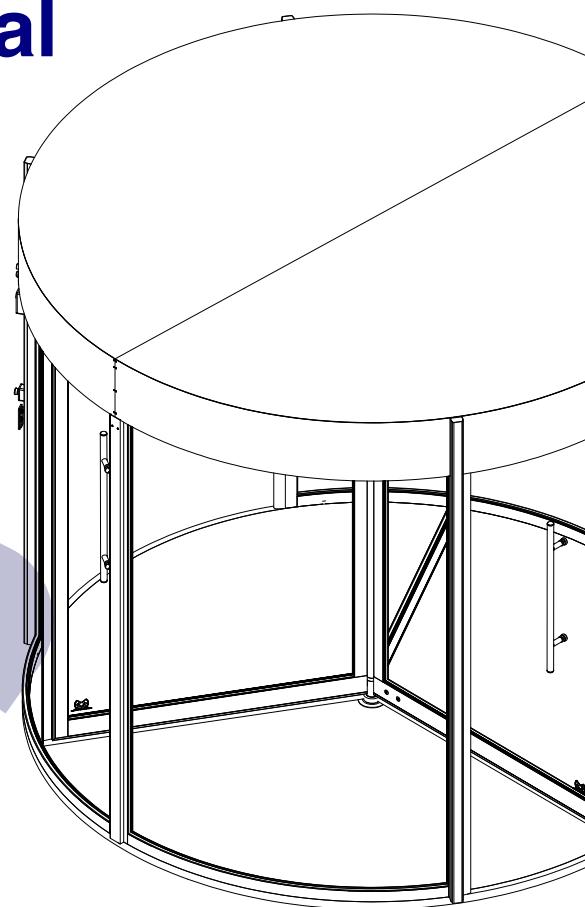
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Installation Manual

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1.GENERAL INFORMATIONS

1.1 Constructional specifications

1.1.1 Mechanic

In the revolving system, there is a mechanic system in the canopy and in the bottom which is put in place to allow the leaves to turn around the shaft system. In the canopy, there is metal device which hinders horizontal movements. In the bottom, there is a ball bearing which carries horizontal and vertical loads. This system is designed as a special system to provide easy mounting and protection against water, dirt and dust.

1.1.2 Brushes

Brushes are applied along all edges of the moving leaves. These brushes are made of horsehair and they never let the dirt accumulate around them because of the loaded electro-static charge. More over these brushes are more hygienic and more elastic. With these brushes, the door leaves provide a complete protection and prevent any outside dirt or noise from entering inside.

1.1.3 Glasses

In the revolving doors, 4+1+4 mm curved transparent laminated glass in the stable leaves and 4+1+4 mm transparent laminated glass in the moving leaves are found as a standard. But if desired, 4+4 mm curved transparent laminated glass and 8 mm transparent laminated glass can be easily applied. Moreover, with having to depend on the above conditions, every kind of glass colour and every kind of reflected glass color can be applied as an optional choice. In all the systems, glasses are protected from the harmful outside conditions.

1.1.4 Handling of moving leaves

In the moving leaves, a 40 mm diameter pipe profile is used as a handle. If desired, a 30 mm pipe profile can be used as a double horizontal handle or any kind of handle which is desired by customer can be applied.

1.1.5 Spot lights

Two spot lights are applied as a standard number in the revolving door. If desired, three or more spot lights can be applied. The switch is mounted on the stable leaves to provide easy use

1.1.6 Materials Used In Production And Finish Options

MR30/SA revolving door systems are made up of aluminum profiles which are designed specifically for revolving doors. The aluminium can be dyed with Rall electrostatic paint or with natural mat anodizing paint. Beside the above options, it is possible to apply shining anodizing paint or colorful anodizing paint. If desired, it is also possible to cover surfaces of the door with stainless steel.

Energy efficiency, smooth and continuous traffic, always seal outside contact while working, high durability and insulation ability along with completing exteriors of different architectural buildings.

*** Important Note: Please coordinate and revise items and paragraphs below to suit the project needs. Please contact the manufacturer company Metaxdoor International for additional equipments and accessories and performance needs.

Quality Assurance

A. Installers Qualifications: Installer shall be factory trained (by the manufacturer) and experienced to perform work of this section.

B. Manufacturer's Qualifications: Manufacturer must have a minimum (5) five years successful experience in the fabrication of revolving doors of the type required for this project. Manufacturer must be capable of providing field service representation during installation, approving acceptable installer and approving application method.

Warranties

A. Manufacturer's Warranty: Units to be warranted against defect in material and workmanship for a period of two years from the Date of Substantial Completion. Manufacturer company must supply spare parts for at least five years if there is a defect in parts due to manufacturing.

B. Distributor's Warranty: Two year warranty: Labor & transportation charges for the replacement of defective parts

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Project Conditions

Field Measurements: Verify actual dimensions/openings by field measurements before fabrication and record on shop drawings. Coordinate with fabrication and construction schedule to avoid construction delays.

1.3 Products

Manufacturer

Manufacture automatic revolving door(s) of type(s) and size(s) specified to plans and door schedule.

Automatic Activation:

1. A motion sensor shall be placed at revolving door entrance to detect someone approaching the door. This actuation shall cause the door to revolve for two complete turn after actuating signal is removed. Door will then slow down and stop at the 'X' position.
2. An emergency key shall be installed inside entrance of the door. There shall be a figure of "escape" on the plate covering the key. Pushing this button shall make the door be released from motor power and provide any sort of manual usage. Once the key returns to its normal position door shall continue its normal operation.

Submittals

- A. Product Data: Submit manufacturer's complete product and installation data.
- B. Drawings: At least two plan views of the door including the accessories.

**Construction:**

Extruded aluminum and glass/glazing materials will be used and shall be constructed maintaining proper clearances and weather seal, shall be stainless and corrosion proof. System will NOT have iron construction and/or welding.

1. Convex: (Bending) Design: Shall be 30 mm deep with standard glazing preparation for between 6 mm to 20 mm curved glass/glazing material and offset to interior.

2. Canopy: Canopy design shall provide versatility to adjust the height according to the equipments. Base specifications and manufacturing quality of the door shall not be affected by these changes. At least 2 mm of aluminium sheet shall be used at canopy forehead for plating. Laser sliced aluminium sheets shall be used for the inner ceilings to provide ease of installation and maintenance. Number of sheets depends on the door diameter. Standard aluminium sheet shall be used for the outer ceiling.

Canopy options shall include:

- a. Extended canopy.
- b. Round canopy on segmented enclosure.
- c. Cropped (different on inside and outside) canopy.
- d. Exterior roof fabricated from 2 mm anodized and colored aluminum.
- e. Butyl ceiling film for outer appliances. (Optional)
- f. Energy efficient lighting system.

Door Wing:

Shall be strong stile aluminium with 30 mm of depth. There shall be insulation and seal between glass and profiles. Wings shall be enclosed with hair brushes and shall be easy to replace. 6 mm tempered glazing shall be done on the wings as standard. Stainless handles shall be used as vertical or horizontal. Handles shall be mounted to the pre-prepared holes on the glass.

Door Wing options shall include:

- 1. Vertical or horizontal stainless door handles on tempered, drilled glass.
- 2. Upper and lower wing connections.
- 3. Option of using glass from 6 mm upto 21 mm. Hardware Provider shall include:

- 1. Locks with cylinders provided on two door wings.
- 2. Bottom pivot/bearing: Surface mounted with no excavation below floor line required.
- 3. Center Shaft: 40 mm diameter steel shaft with connections to operator and bottom pivot/bearing.

1.4 Related Work Requirements

Electrical:

220 VAC, 50/60 cycle (field selectable), single phase, 15 amp. Remote switch locations shall require routing of low voltage class II wiring to the operator controls. Remote switch locations shall be predetermined and wired before installation.

Glass And Glazing:

Glass stops, glazing vinyl and setting blocks for field glazing

1. Door Wing Glazing: Standard material will be clear, flat safety glass, 6 mm tempered. Glass shall have holes for handle installation. Optional: Isolated or bullet-proof material up to level III and up to 21 mm can be used.
2. Fixed Wing Glazing: The standard material is curved glare laminated glaze which shall be used. Curved glasses shall have the option of color film appliance or colored glass.

Materials, Finishes And Fabrication:**A.Extruded Aluminum:**

"Accurate Tolerated" ones are advised. Profiles with TS EN 12020-1 standard shall be preferred.

B. Finishes (For All Exposed Aluminum Surfaces):

The aluminium profiles used in the manufacturing of doors shall be anodized as stated in the directions of Qualanod quality norms. In the case of electrostatic painting products must have the Qualicoat quality certificate. Manufacturer companies shall be able to present these quality certificates in case required by the customer. System shall be sufficient to be coated by stainless plate or materials such as brass and the manufacturer company shall be able to apply these options.

C. Door Wing Construction:

1. Corner connections of the wings shall be supported by battens, connected by steel connection materials. Glasses shall fit into the wing using epdm seals and solid nailing method. No kind of lath, silicone or inner glass seal shall be used. A special kind of adaptor shall be used to install hair brushes as this system gives opportunity to change distorted brushes easily.
2. Weatherstripping material captured in extruded aluminum door panel. Surface applied self-adhesive weatherstripping is not acceptable.
3. Optional bullet-proof material shall be applicable inside the aluminium profiles.

D. Enclosure Construction:

Rear joints, mechanically secured by means of screws and formed aluminum corner brackets.

E. Operator Construction:

Shall be mechanic, modular type construction.

Examination

Installer must verify that base conditions previously installed under other sections are acceptable for product installation according to the manufacturer's instructions. Notify the contractor in writing of conditions detrimental to the proper and timely completion of work. Do not start work until all negative conditions are corrected in a manner acceptable to the installer and manufacturer.

1.5 Installations

A. General:

Place the door unit measurements with plumb line and within the margin of errors as specified by the manufacturer. Arrange the necessary support on the ground.

B. Dissimilar Materials:

Separate aluminum materials and other corrodible surfaces from sources of corrosion or electrolytic action contact points.

C. Construction Installation:

There must be a support for manual installation. Coordinate installation with wall flashings and other components of construction.

D. Electrical:

General or electrical contractor to install all wiring to operator on a separate circuit breaker routed into canopy.

Cleaning, Adjustment And Protection**A. Cleaning:**

After installation, installer must take the following steps:

1. Remove temporary coverings and protection of adjacent work areas.
2. Remove construction debris from construction site and legally dispose of debris.
3. Repair or replace damaged installed products.
4. Clean product surfaces and lubricate operating equipment for optimum condition and safety.

B. ADJUSTMENT: Installer to adjust operator and controls for optimum condition and safety.

C. ADVISE CONTRACTOR: of precautions required through the remainder of the construction period, to ensure that doors will be without damage or deterioration (other than normal weathering) at the time of acceptance.



2.SAFETY INSTRUCTION

Explanation of symbols

In these instructions, we have designated all positions concerning your safety with this symbol.

This symbol warns of electrical voltage.

It must be a PE in the structure of processor installation. If there is no PE in the structure, connections should secure according to the national regulations. Installation should only be performed by the specialist. Before installation, make sure that power supply is not connected. You should connect the PE to the main supply and cover.

Do not touch the chain during operation.

Please shut the electricity off before maintaining the control and wiring systems of the door.

The installation of the items should be done by an authorized and trained technician. Usage, maintenance and service must be done by a trained technician, who is authorized by the manufacturer

Please press the emergency button before adjusting the sensitivity and detection parameters of radar and safety sensors.

Do not press lights and disabled access button together for 3 seconds without an authorized technician's supervision. If you do so, the door resets itself. You should not try to access through the door until this process ends. (reset time: 3 whole revolutions) With this action speed values of the door are adjusted automatically depending on diameter.

The speed parameters of the door located on the hand terminal should not be changed without an authorized technician's supervision.

When the door stops due to an undesired situation, press the emergency button then release it in order to start the door again.

Please do not press the emergency button unnecessarily.

After professional installation of the revolving door, the door should only be used for entrance purposes. Any other type of usage may be hazardous.

There should be 20 A fuse and the wire connections should be 3 X 1,5 mm² 300/500V multicore flexible and pvc insulation on the installation site.

Important notes

SUGGESTIONS FOR AUTOMATIC REVOLVING DOOR INSTALLATION

In order to avoid dangerous situations,

During the opening and closing movements, and this catalog was prepared to provide protection against these dangers to avoid the risk of injury or impingement. Possible protection procedures are as following;

- Take the safety area.
- Do the installation with authorized persons.
- Complete all controls

Observe these safety protections.

See the full quality assurance standards for customer satisfaction.

AFTER INSTALLING THE DOOR

- Personnel should be trained to use the automatic door.
- Mothers and fathers, to inform children about the potential risks related to moving doors and ensure that people are not exposed to unnecessary risks.
- To help the elderly and disabled people.
- To act in an emergency situation.

Preparation for installation

Before the installation ;

- Check the floor. The flooring must be finished properly and be level horizontally.
- Check the door to make sure all pieces of the door have arrived in proper condition. The pieces of the door should arrive in three separate boxes. Active wings, fixed wings and canopy should all be in separate boxes.
- Check the dimensions. The location of installation's dimensions and door's dimensions should match up.
- If the floor is not straight on the horizontal plane, the brushes on the leaves will not press on the floor, ceiling and stable leaves when moving. This is an undesired situation.

Box	Specifications
Canopy	This box contains canopy, top cover panel, forehead panels, lower construction, middle sigma profile and entrance side cover profile.
Active Wings	This box contains normal glasses.
Fixed Wings	This box contains curved glasses.

Installation

Special Safety Instructions

Before starting installation, please read all the installation instructions.

Connecting to the power supply

- For mounting the door there must be earth contact connection on building site.
- If there is no earth contact connection, the connection will be secured in accordance with national directives against accidental switching on.
- The installation must only be carried out by specialized personnel. Make sure that the power supply is disconnected during installation.

Warranty

Dear Customer,

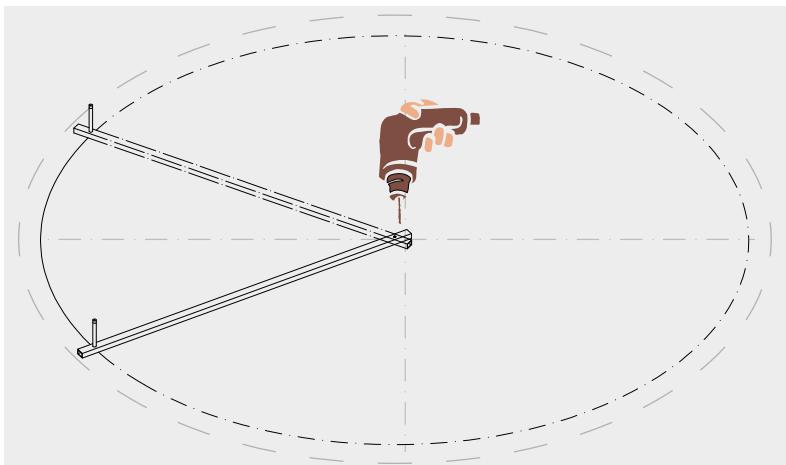
Thank you for purchasing the product. This product has been manufactured according to ISO 9001 quality standards to give you full satisfaction.

Our product warranty is a guarantee against all manufacturing defects during the first two years from invoice date.

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3. MOUNTING OF THE AUTOMATIC REVOLVING DOOR

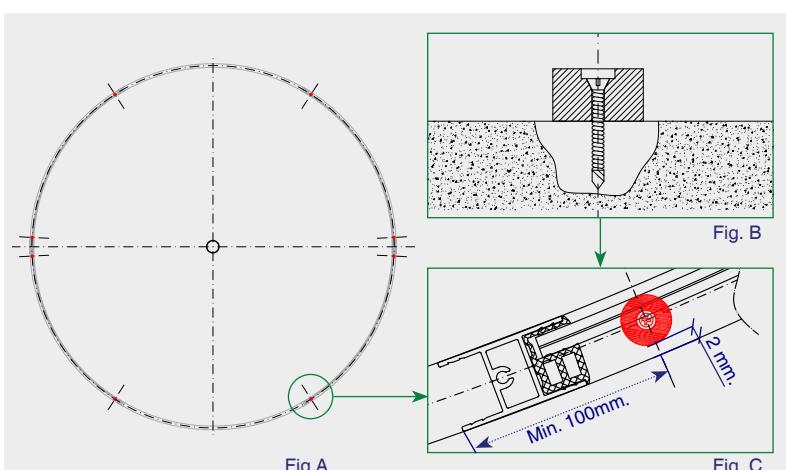


1. Preparing the ground

*The diameter profile should be mounted at the center of installation area and the diameter should be drawn without shifting from the center.



**Make sure that the ground level is well-arranged to install the door properly.



2. Fixing the corks

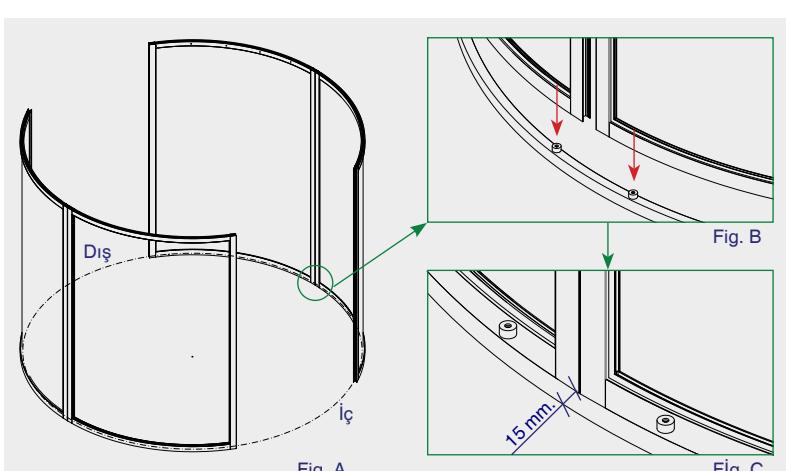
*There are two pieces cork for each fixed wing.(Fig.A)

*The corks should be mounted at 2mm inside from diameter line and min.100mm inside from stable wing's vertical profile. (Fig.B-C)



**In case of that the corks are not mounted at the center , the brushes touch much more or the space occurs between the moving wings brushes and stable wings.

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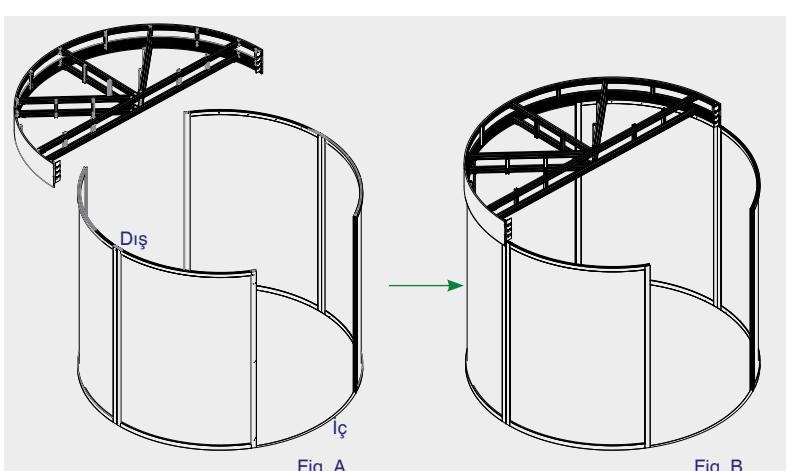


3. Fixing the stable wings

*The stable wings should be mounted by taking inner and outer zone into consideration according to label codes over the canopy. There is a $15+15=30$ mm diameter difference between the stable wings and the canopy.



** If you don't take the label codes into account,it would be faulty installation so that the fixed wing that position switch is installed takes places outside.

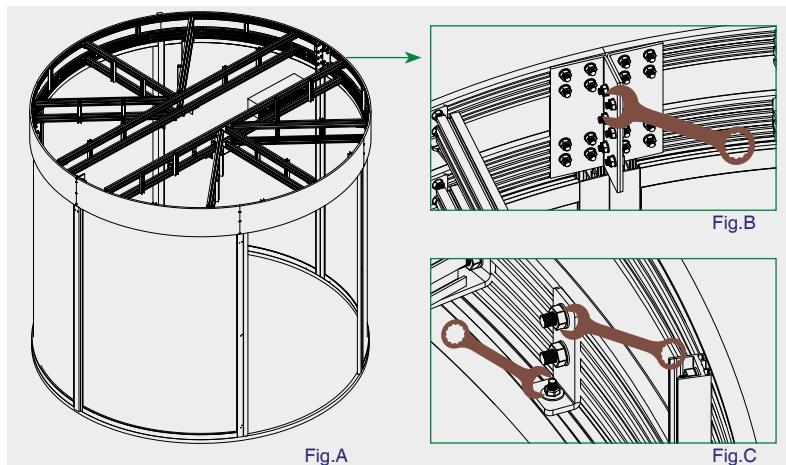


4. Fixing the canopy

*Both of canopy(inner and outer) should be mounted according to the described label codes over the canopy(Fig.A-B)



**It should be installed so that the canopy junction point is aligned with the stable wings junction point.



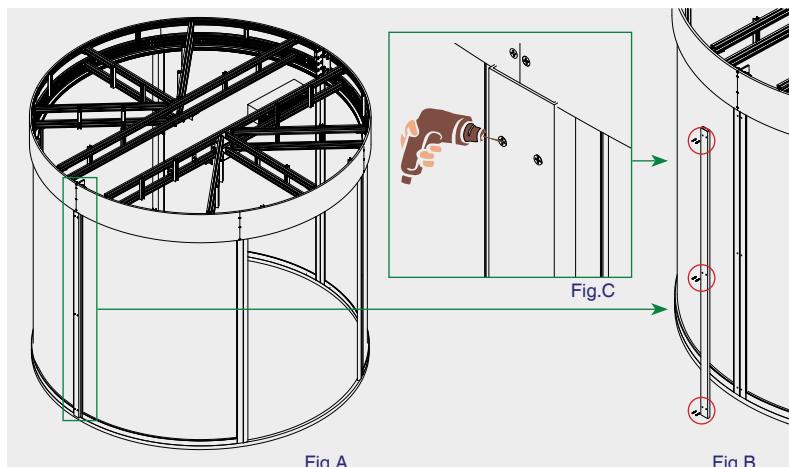
5. The installation of canopy and having the stable wings towed

*The canopy junction bolts are secured outer and inner canopy by screwing together.(Fig.B)

*Fixed wings are secured from canopy juction point to passage width.Fixed connection brackets on the canopy must be loosen and they are tightened on the canopy.Wing top horizontal profile is secured by screwing so as to take place 45mm inside the canopy.(Fig.C)

!
**You make sure that canopy junction screw and fixed wing securing screw are tightened very carefully.

!
**After securing,there shouldn't be space between fixed wing and canopy.

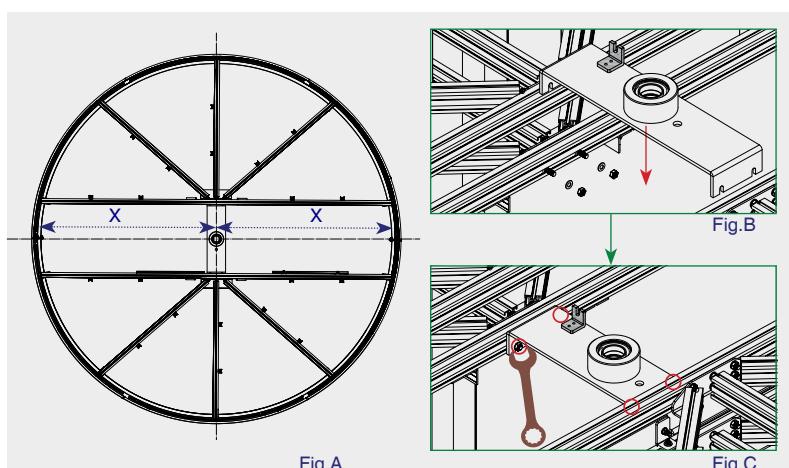


6. The installation of axis profiles

*The axis profile should be installed so as to integrate two stable wings.The screws are mounted at screw socket that is prepared before.(Fig.B-C)

!
**Do not screw any place except for pre-made screw sockets.

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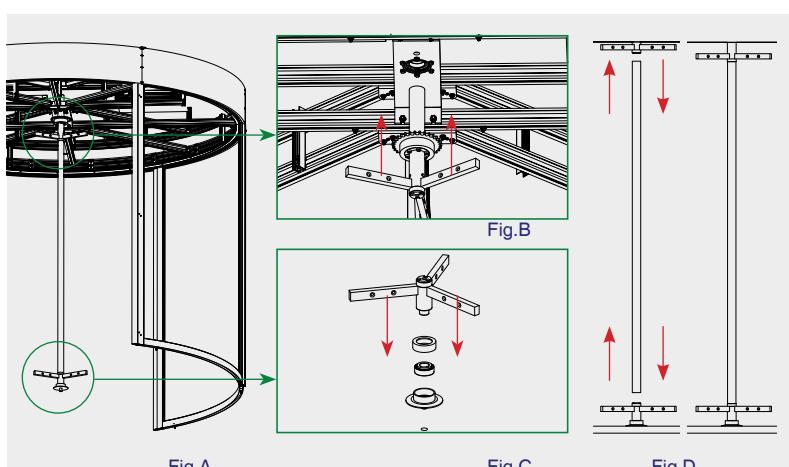
7. The connection of middle-center bracket

*The middle-center bracket is centered at middle of the canopy.(Fig.A-B)

*It should be mounted by tightening from the describes points.(Fig.C)

!
**You make sure that the bolts of middle center bracket are tigthened carefully.

!
**You should do installation so as to reciprocate the motor strut device over the the middle-center bracket and motor connection device over the canopy.



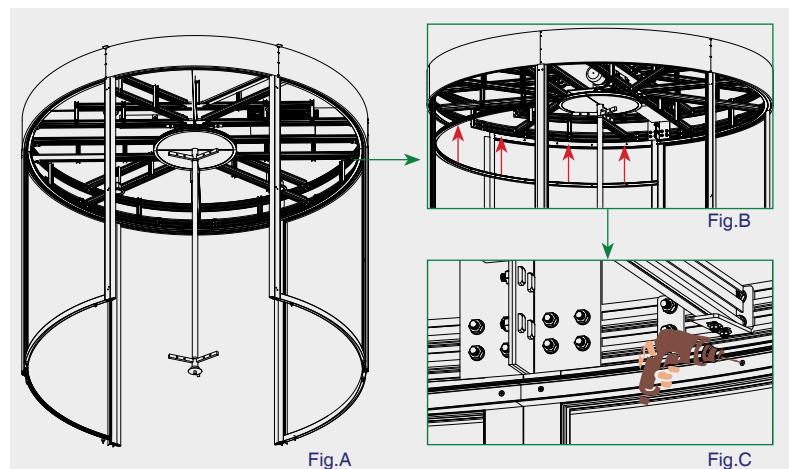
8. Installation of the middle-center

*Bottom and top center are connected.(Fig.B-C)

*The middle-center profile is installed by mounting at center profile as the top center is lifting.(Fig.D)

!
**After the middle-center is installed,you should check out the center in order to avoid center offset.

!
**20mm diameter hole should be drilled at the center of the door to fix the bottom roller bearing.If the hole is drilled wider than 20mm,it will be happened centering fault.

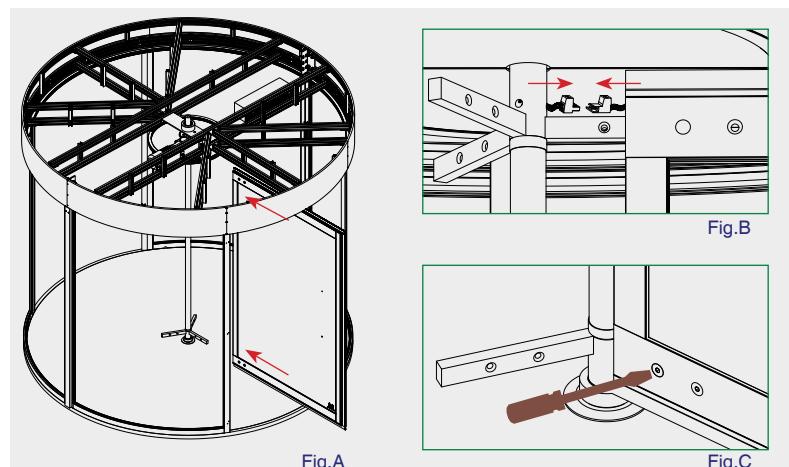


9. Installation outer U profile

*Middle center outer U profile occurs two pieces. According to described labels inside profile should be replaced to inside and outer profile should be replaced to outer. They should be fixed according to pre-made screw socket.(Fig.B-C)



**You should use pre-made screw socket to fix outer profile.



10. Installation of the moving wings

*Moving wings should be mounted at bottom and top wings connection brackets at middle center without forcing.(Fig.A)

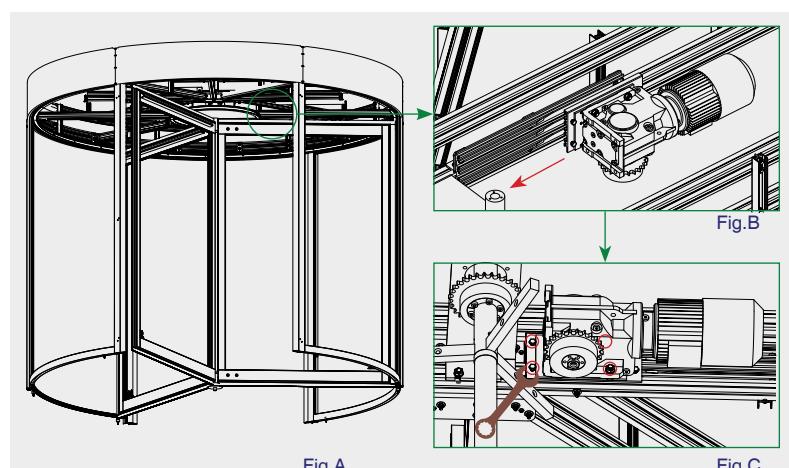
*Curtain sensor sockets must be mounted without fixing the wings fully.(Fig.B)

*Wings connection screws are not tightened fully until all wings will be mounted.(Fig.C)



**If the door has 4 wings you should install the second wing across to the first wing so as to make balanced.

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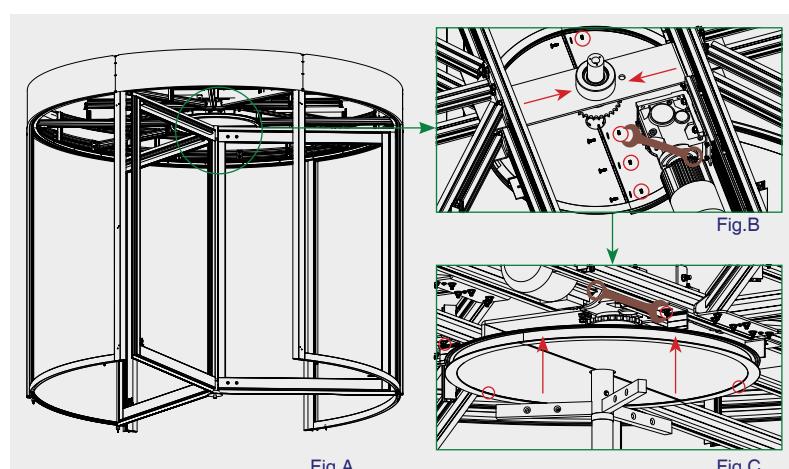
11. Installation of motor unit

*Motor is replaced to connection bracket at the canopy by wheeling.(Fig.B)

*The tension adjustment is made with tensioner device at middle center connection bracket by connecting with the chain to motor and center gear. After that the motor unit is fixed by screwing from described places.



**You must install the motor gear and middle-center gear on the same level. Otherwise the tension will make a noise or it will be separated from the gear.



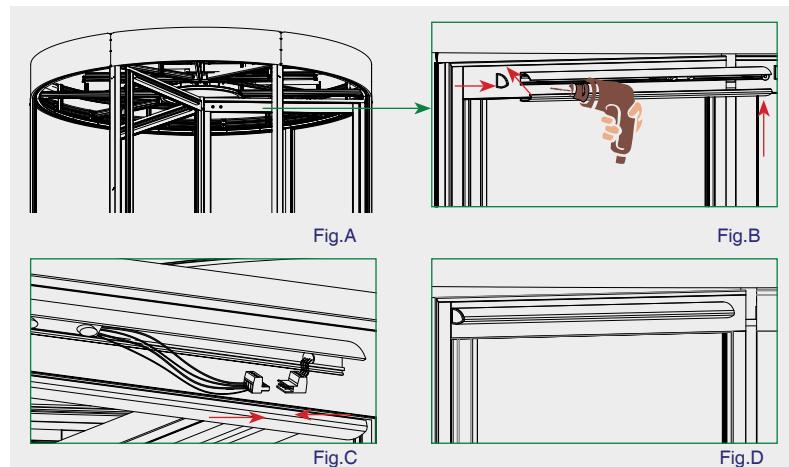
12. Installation of middle center panel

*Middle center panel is connected with two pieces so as to be equal to outer U profile according to label codes.(Fig.B)

*middle center panel is fixed to canopy with its connection bracket.(Fig.C)



** It should be installed by equaling mutually four points of middle center panel to canopy.

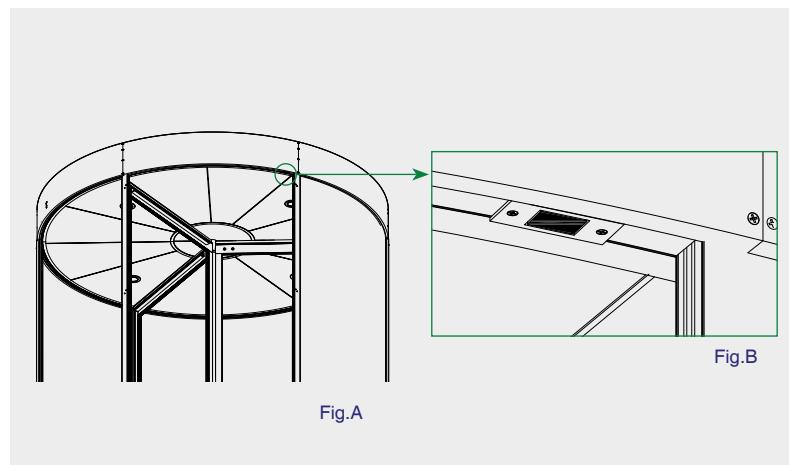


13. Installation of curtain sensors

*Curtain sensor profile is fixed from pre-made screw socket on the wings.(Fig.B)

*Curtain sensor socket and the socket on the wing are connected together.(Fig.C)

*Installation is completed by closing curtain sensor cover.(Fig.D)



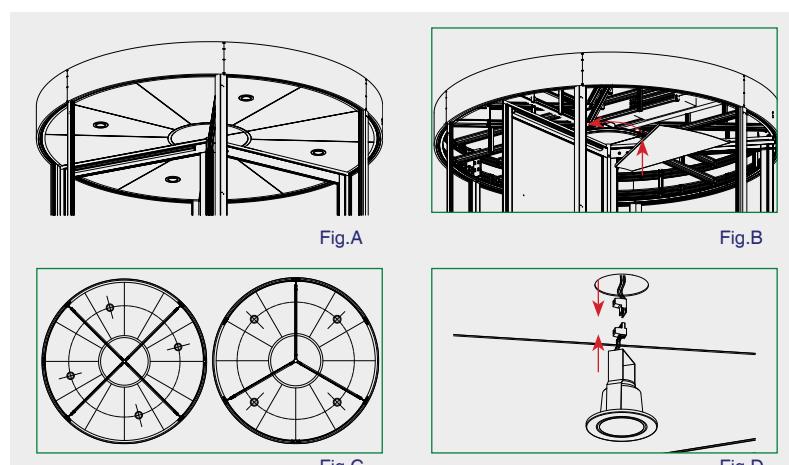
14. Spotscan

*After making spotscan connections,Spotscan activation time is between 2-10 sec.



**You make sure that there is no object that spotscan detects Otherwise it detects the object so the door will not rotate.

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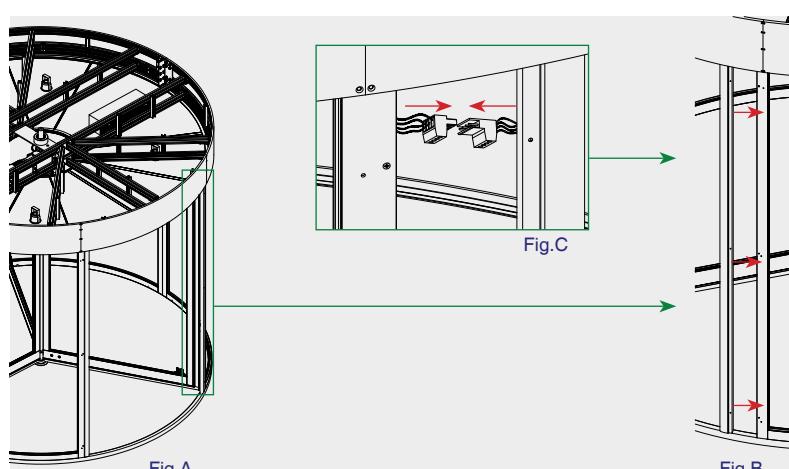
15. Installation of inside ceiling panels and spot lights

*Inside ceiling panels should be installed according to the described labels. Inside ceiling panels should be installed in places that is screwed mutually over outer U profile and middle center profile.(Fig.B)

*Firstly spot lights sockets are installed. Then they are installed in spot sockets slowly by stretching the bows that are placed on the spot lights armature to upward.(Fig.D)



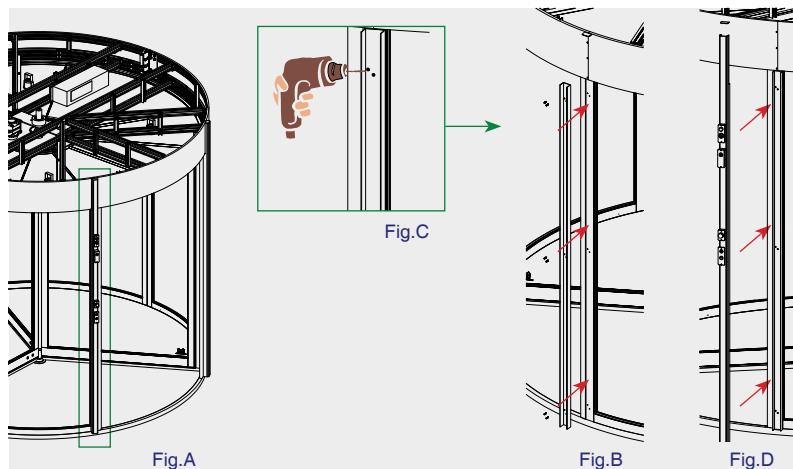
**Spot places are not replaced over the moving wings as shown figure C. Otherwise brushes are damaged because of temperature of spot lights. You should be careful while installing spot lights because of electric current.



16. Installation of hand pneumatic

*When pneumatic of fixed wings are installed, firstly the top part is installed inside profile socket of fixed wing. After that bottom part is installed.(Fig.B)

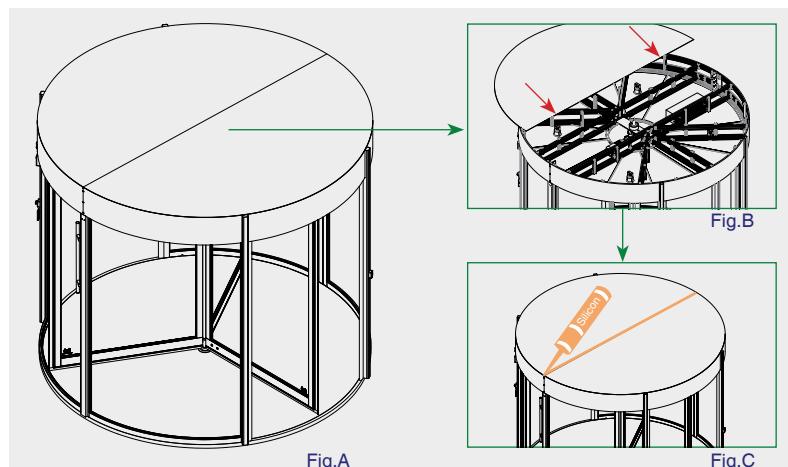
*Over the canopy,they are connected with socket that is coming from electric box and socket on the pneumatic.(Fig.C)



17. Installation of Griyaj

*When griyaj is installed, firstly griyaj socket is installed in fixed wing vertical profile according to pre-made screw socket. (Fig.B-C)

*Griyaj covers are installed according to described labels. (Fig.D)



18. Installation of ceiling panel

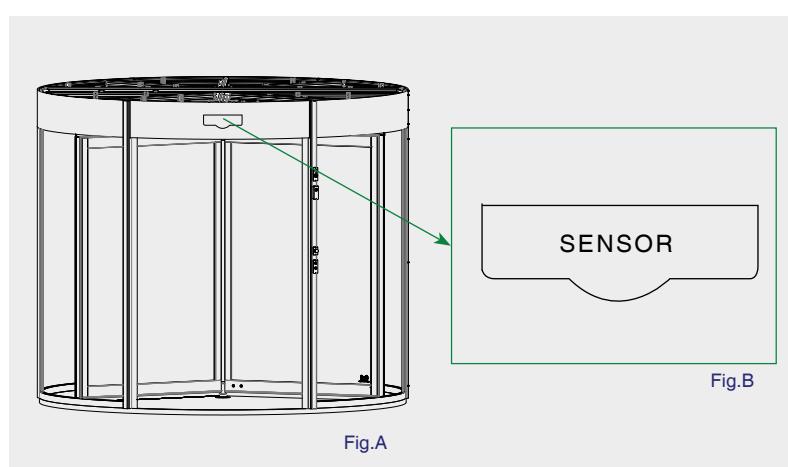
*Top ceiling panels are put over the canopy without overbrim to outside canopy.(Fig.B)

*Open junction points are isolated with silicone.(Fig.C)



**You must isolate open points of panels so as to protect from water. Otherwise electronic devices are damaged because of water.

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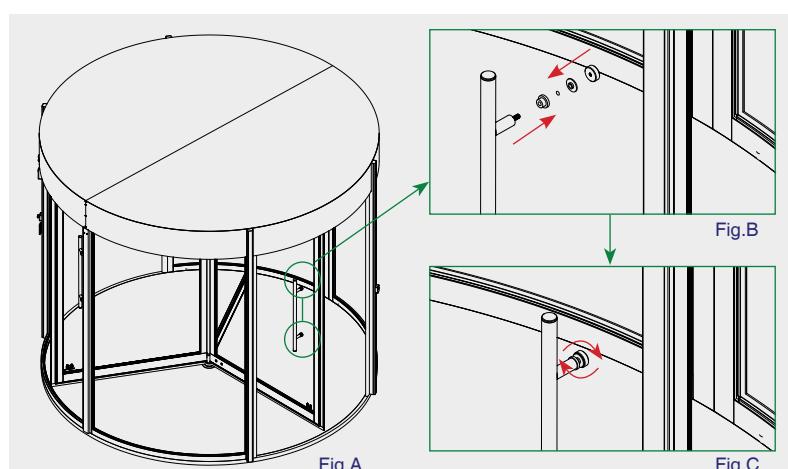


19. Installation of Radar

*Inside and outer radars are installed in middle of the passage width.(Fig.A-B)



**Door rotates 2 full rounds when radar are active and the it stops at X position.The door continues to rotate as long as radars are active.



20. Installation of stainless handle

*Stainless handle is installed in mutually glass hole of plastic caps.(Fig.B)

*Stainless handle is fixed with mutually turnscrew.(Fig.C)



**During installation of stainless handle,glasses and metal parts shouldn't touch each other. Fixation turnscrew isn't tightened too much.



Safety instructions



Do not push the wings



Do not run through the revolving door



Do not play in the revolving door



Please assist those less able such as the elderly



Children should not be left unsupervised when using doors

NOTES



Arslanyapı Otomasyon San. Tic. Ltd. Sti.

Sanayi Mahallesi İSISO Sanayi Sitesi

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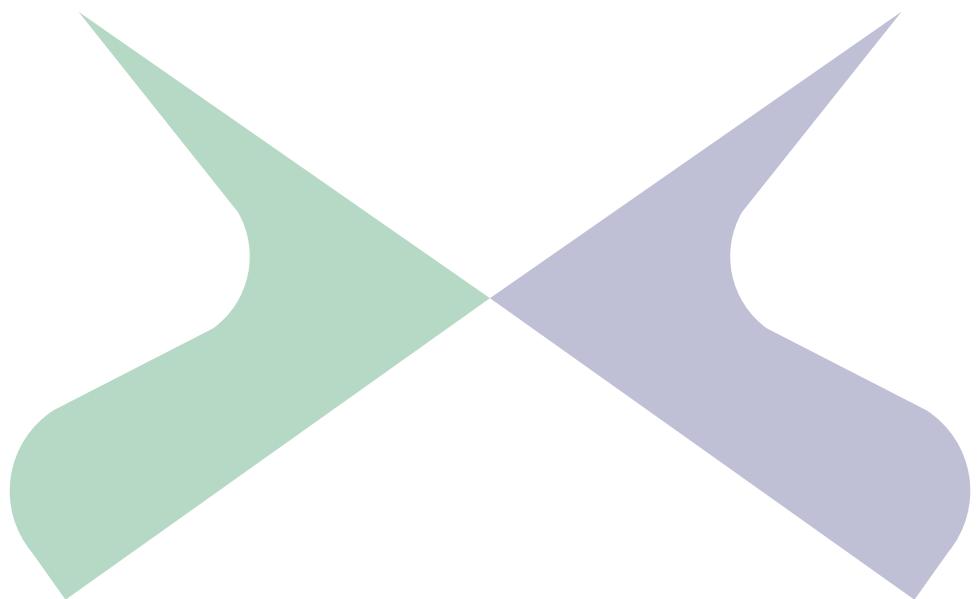
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