

Thank you very much for selecting FD30-F FOLDING DOOR SYSTEM. Before starting installation, please read this installation manual thoroughly to install the door correctly. Improper installation may result in injury. To prevent such accident, please follow instructions described in this manual. After installing the door, leave this manual to the owner so that the owner is able to use this manual to check the door any time. The door system will be upgraded/improved without announcement, for change in dimensions or specifications, please confirm with delivered door system parts.

**■ FOR YOUR SAFETY WORK AND OPERATION**

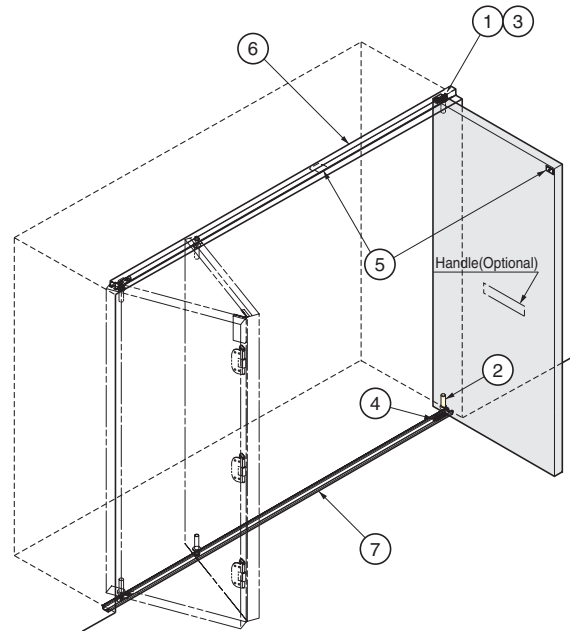
⚠ symbol denotes "warning" and "caution" during work or operation. Ⓣ symbol denotes the item which should be avoided to keep safety. Ⓛ symbol denotes item which should be followed to avoid injury. If this item is not followed, injury may be resulted.

**⚠ Warning: If this warning is not followed, it may result in injury or damage.**

- ⚠ This folding door system should be installed by experienced person who has correct knowledge. If the system is not installed correctly, the door will not operate smoothly, and/or may cause injury.
- Ⓣ Do not try to use this product for any other purposes other than originally intended for. Do not disassemble the components for any modifications. Do not use the system for applications that are out of specification. Any improper use might result in accident or injury. We do not take any responsibility for any damage, accident or injury occurring from an improper use, application or wrong installation.
- Ⓛ Avoid opening/closing the door with excessive force. Such operation may cause trouble.
- ⚠ It is necessary to manufacture the frame with sufficient strength to endure the weight of door and impact shocks upon opening/closing the door. A frame with poor strength might result in improper and slower movement of the door. In the worst case, door might drop down causing injury.

**IMPORTANT:**

- This manual is prepared to describe the installation methods considered most safe and effective to set up and install the sliding door system. The installation procedures or methods can be changed to meet your working conditions or environments.
- In this manual, the dimensions are not considering margin of error or deformation of material. Therefore, please carry out each process such as cutting, taking care of deformation or other changes.



Above illustration shows the combination example of folding door FD-30 FAP (Pivoted folding, Center hinge surface mount).

**■ SPECIFICATIONS**

	Max. Door width	Min. Door thickness	Max. Door height	Max. Door weight	Vertical adjustment
<b>FD30-F</b>	450mm	28mm	2400mm	15kg/door	+3mm

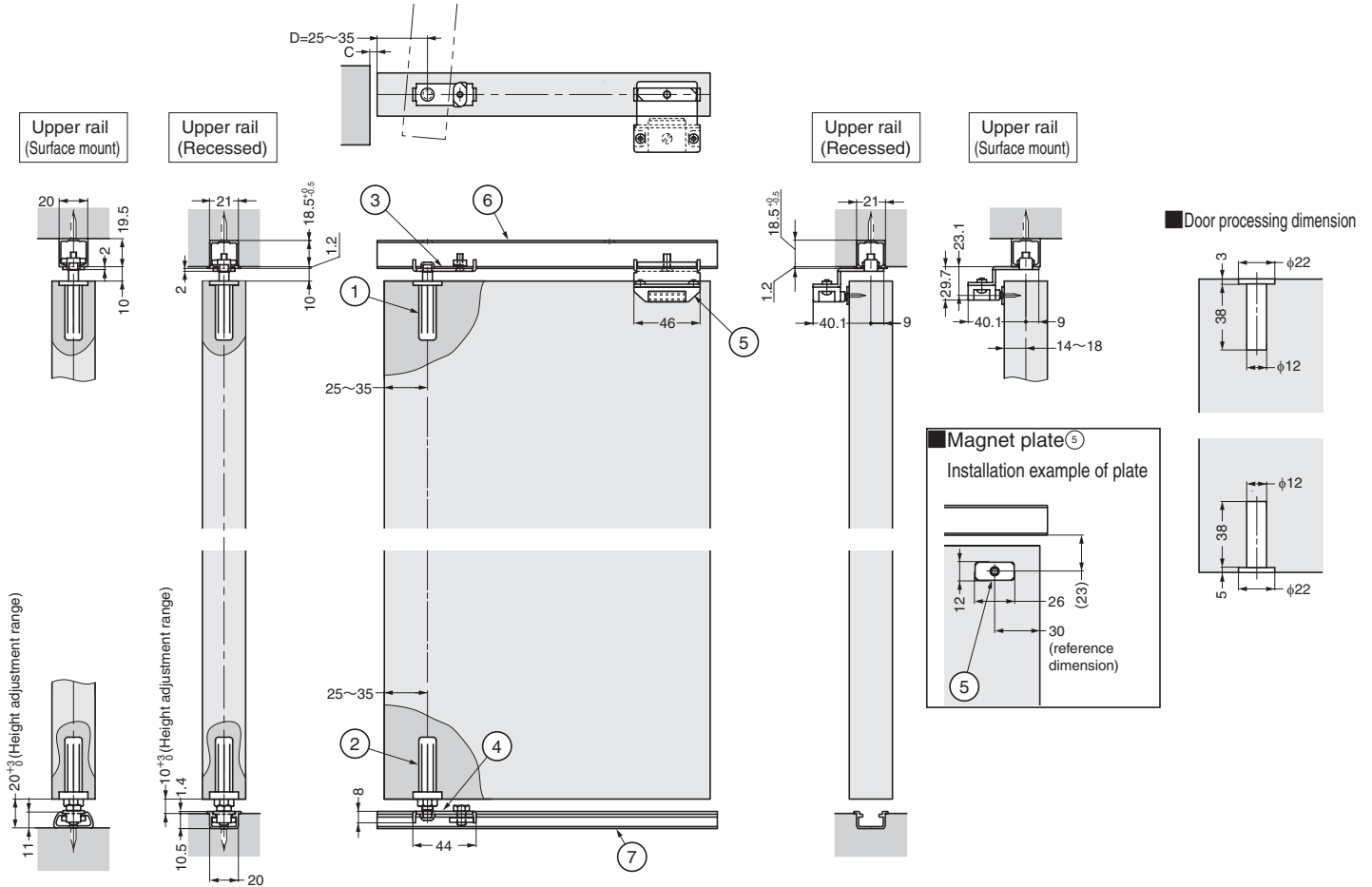
**■ COMPONENT PARTS**

	①	②	③	④	⑤	⑥		⑦	
	Upper pivot	Lower pivot	Pivot bracket, (upper)	Pivot bracket, (bottom)	Magnet support metal	Rail (Surface mount)	Rail (Recessed mount)	Guide rail (Surface mount)	Guide rail (Recessed mount)
						Select either type		Select either type	
	1	1	1	1	1				

As optional parts, additional door latch are offered. Please refer Page 4 for detail.

# INSTALLATION DRAWING(EXAMPLE)

Door thickness	C = Gap
30	4.0
35	5.2
40	6.5



No.	Name	Dimensional drawing	Specification
①	Upper pivot		Single Part order code:250-017-162 Part No.:FD30-FTP ● Material Polyamide/Steel ● Finish Yellow Zinc Chromate/Milky white
②	Bottom pin		Single Part order code:250-017-163 Part No.:FD30-FBP ● Material Polyamide/Steel ● Color Yellow Zinc Chromate/Milky white
③	Pivot bracket, upper		Single Part order code:250-017-141 Part No.:FD30-FSKU ● Material Steel ● Finish Yellow Zinc Chromate
④	Pivot bracket, bottom		Single Part order code:250-017-165 Part No.:FD30-FSK ● Material Steel ● Finish Yellow Zinc Chromate(trivalent)
⑤	Magnet plate		Single Part order code:250-017-145 Part No.:FD30-FMC ● Material Steel/ABSresin ● Finish Yellow Zinc Chromate/Dark brown ● Attached screw Flat head wood screw 2.4x13

No.	Name	Dimensional drawing	Specification
	Rail (surface mount)		● Material Aluminum alloy ● Finish Anodized aluminum (Silver or amber) ● Length 910mm, 1820mm, 2000mm, 2730mm, 3000mm, 3640mm, 4000mm
⑥	Rail (recessed mount)		● Set screw is not attached. (recommended screw is tapping screw of 3.5x20)
	Guide rail (surface mount)		● Finish Anodized aluminum (Silver or amber) ● Length 910mm, 1820mm, 2730mm, 3640mm
⑦	Guide rail (recessed mount)		● Attached screw Tapping screw 3.5x16

# ASSEMBLY

## Confirmation before assembly

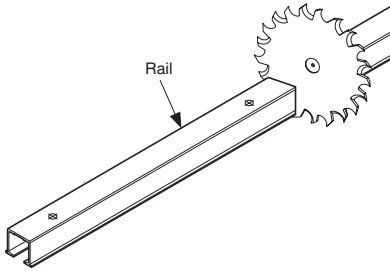
- Check that dimensions of frame, floor, door and rail are correct.
- Check that door is not warped.
- Check that frame and floor are not inclined.
- Check that all parts are prepared.
- Check that door is processed correctly.

⚠ Remove any dirt or aluminum chips from the rail as they would damage the rollers and cause noise during operation.

## PROCEDURE 1 PREPARATION AND INSTALLATION

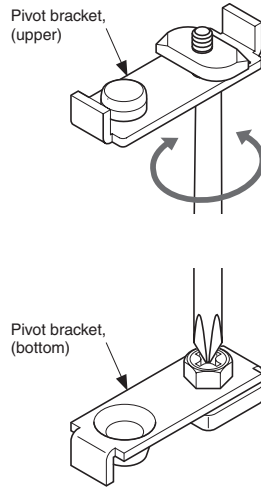
### 1. Cutting the rail

Cut the rail applying a reinforcer to prevent deformation of cut section.



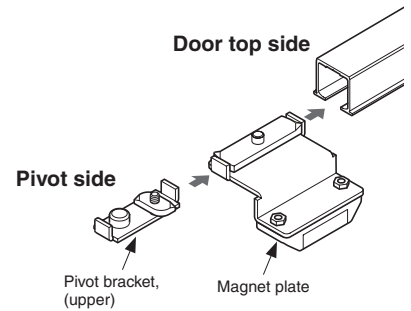
### 2. Preparation before mounting parts

Loosen fix screws on upper and bottom Pivot brackets.



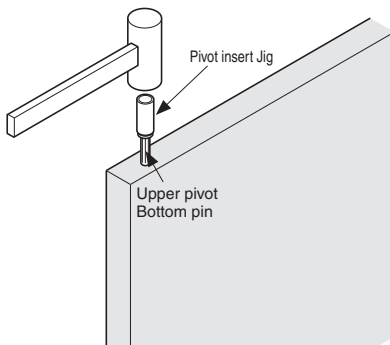
### 3. Assembly of parts

Taking care for parts direction, assemble upper Pivot bracket. Temporarily tighten the screw, mount the rail without dropping down mounted parts.



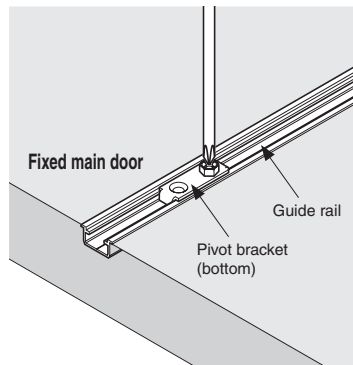
### 4. Striking in upper pivot and bottom pin

Using a Pivot insert Jig, strike in the upper pivot to upper part of door. Strike in the bottom pin to lower part of door. Carefully install to prevent breakage of plastic part.



### 5. Installing Pivot bracket(bottom)

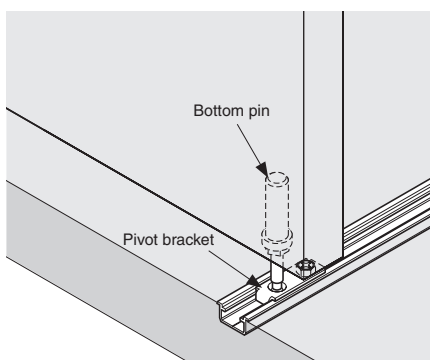
Mount Pivot bracket(bottom), taking care direction. And install guide rail. Then, fix the Pivot bracket to correct position.



## PROCEDURE 2 HANGING DOOR

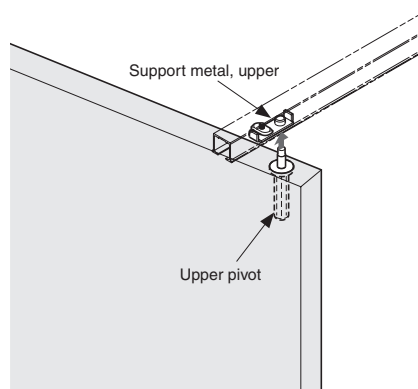
### 1. Hanging door (bottom part)

Place the end of Bottom pin to the hole of Pivot bracket, as shown.



### 2. Hanging door (top part)

Pressing the pin of the Upper pivot on the door, insert it in the hole of Pivot bracket.

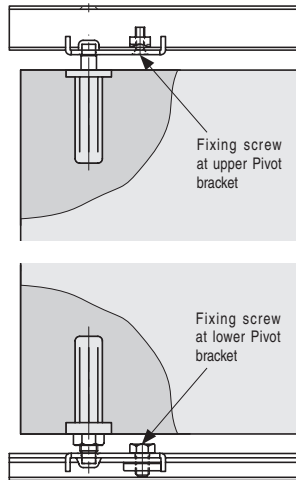


## PROCEDURE 3

## DOOR ADJUSTMENT

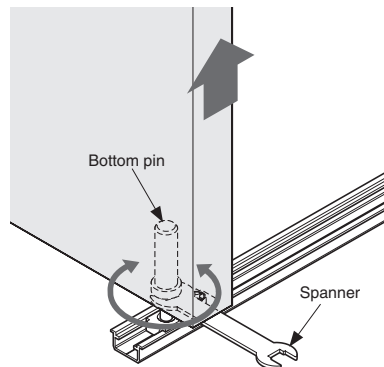
### Adjusting inclination of door

Adjusting of door inclination: Loosen screw of Pivot bracket with Philips screw, and loosen Hex. section on Pivot bracket with spanner, Then, set the door at vertical position, and retighten both screws.



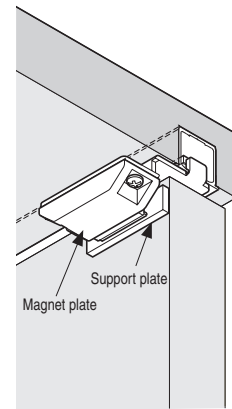
### Fixing screw at lower support metal

Adjust hexagonal part on Bottom pin using spanner attached.



### Fixing magnet plate

Fix magnet plate by tightening fix screw. Then, after closing the door, determine position of support plate. Fix the plate.



**Final confirmation...Confirm that all screws are securely tightened. And, confirm that all screws are used without mistake.**

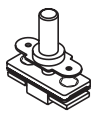
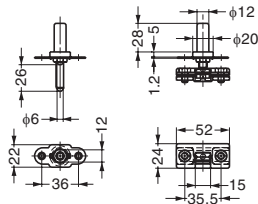
### PERIODICAL INSPECTION

- Clean inside of rail.
- Check upper space and lower space of the door. If necessary, correct the space.

## TROUBLESHOOTING

Trouble	Check	Solution
Abnormal noise during operation	Check if door touches adjacent parts.	Provide necessary space between door and adjacent objects.
Heavy door operation	Door bottom touches the floor.	Confirm that screws on the rails are not loosened. And, adjust door height. Adjust the clearance between door bottom and floor to 10mm. (20mm : Surface mount type guide rail)
	Check if door touches adjacent parts.	Provide necessary space between door and adjacent objects.
	Check if door is warped.	Use the door without warp.
Door starts to move.	Check if center of lower pivot shaft is aligned with upper roller.	Adjust to align both centers (upper roller and pivot shaft center).
	Check if the upper rail is set horizontally.	Using a level gauge, reset upper rail horizontally.

## OPTIONAL PARTS (SOLD SEPARATELY)

Part Name	Dimensional Drawing	Specifications
Additional door latch 		<p>Door head latch used when combining folding door with additional door Order code:250-017-172 Part No.:FD30-FHL</p> <ul style="list-style-type: none"> <li>● Material Polyacetal/Steel</li> <li>● Finish Dark brown/Colored chromating</li> <li>● Accessory screw Countersunk tapping screw 3x16</li> </ul>

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