

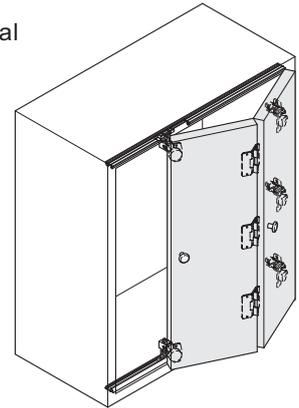
Thank you for selecting our product. Before starting installation, please read this manual thoroughly to ensure correct installation. Please keep this manual at hand for future reference.

ABOUT THIS PRODUCT

- This product is a parts set for installation of folding door system for cabinets.
- The rails can be hidden by the overlay door panels.

FOR YOUR SAFE WORK AND CORRECT INSTALLATION

	This symbol denotes prohibited actions.
	This symbol denotes what must be done.

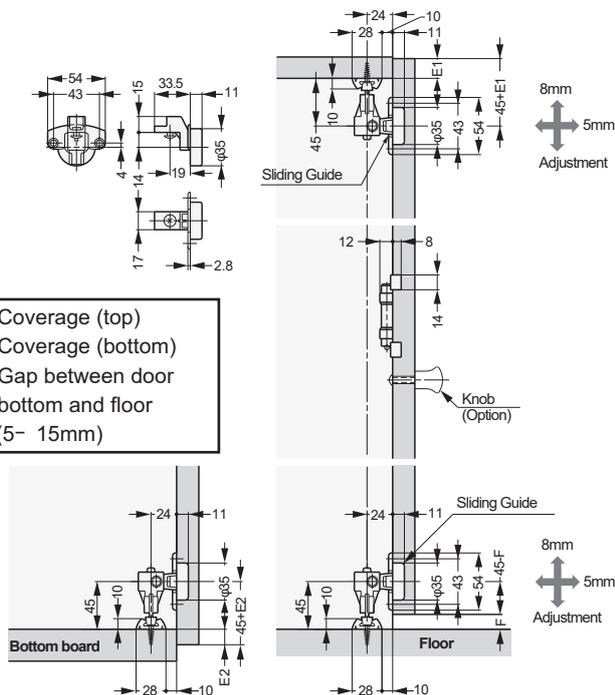


Caution If not followed, injury or damage may result.

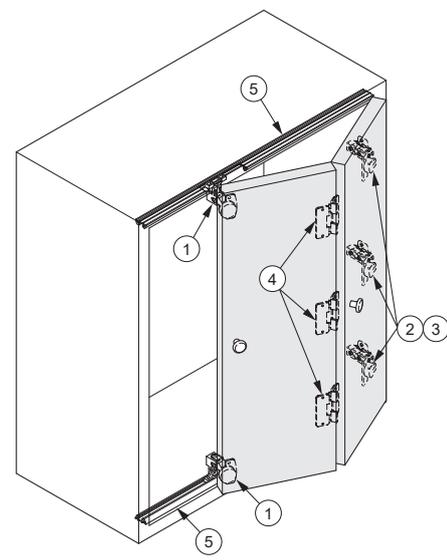
- ⊘ Provide a cabinet that can withstand the weight and impact of opening and closing the door. Be sure to use the specified screws and tighten them securely. If the mounting strength is insufficient, the door may fall and cause injury.
- ⊘ Do not disassemble or modify any parts other than those described in this document.
- ⊘ Follow the specified dimensions, specifications, and alignment of the cabinet. Warping, tilting or twisting of the cabinet or door may cause failure.
- ❗ Make sure to follow the designated measurements and specifications as well as horizontal and vertical angles. Make sure that the cabinet is not warped, since it may affect the movement of the door.
- ❗ This product is a part for furniture. After installation, please check the function and safety of the final product. Please inform the end user how to use the product safely.
- ❗ Make sure to check the screws for slack at regular intervals (one month from first usage, half a year, and then one time every year is recommended).

INSTALLATION DRAWING (EXAMPLE)

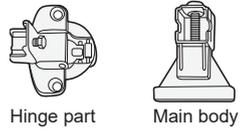
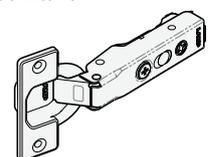
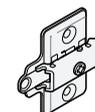
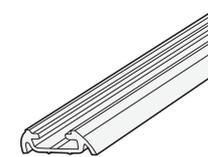
Door Width	Max. 450 mm per door
Door Height	Max. 2400 mm
Door Thickness	15-20 mm
Door Weight	Max. 7 kg per door
Coverage	Max. 19 mm (with Sugatsune 360 hinge)



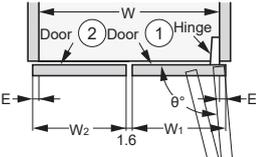
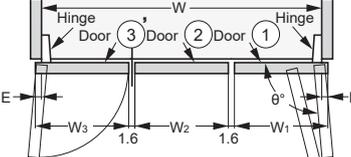
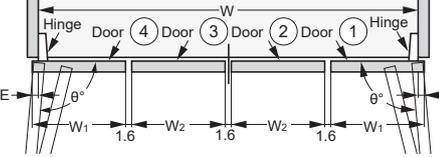
E1 = Coverage (top)
 E2 = Coverage (bottom)
 F = Gap between door bottom and floor (5- 15mm)



COMPONENT PARTS

<p>① Sliding guide FD28-SG</p>  <p>Hinge part Main body</p>	<p>② Concealed hinge 360-26/19T</p> 	<p>③ Mounting plate 360-P4W-32T</p> 	<p>④ Center hinge CH-75</p> 	<p>⑤ Upper & Lower rail</p> 
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CABINET / DOOR WIDTH DIMENSIONS

Application	Hinged door at 90° open	Hinged door at 95° open	Other door at 87° open
2 Doors folding  <p> W = Width of inside cabinet W_1 = Width of door ① and ④ W_2 = Width of door ② and ③ W_3 = Width of door ③' E = Coverage θ° = Opening angle at hinged door </p>	$W_1 = \frac{W + 2E - 4.8}{2}$ $W_2 = W_1 + 3.2$	$W_1 = \frac{W + 2E - 7.8}{2}$ $W_2 = W_1 + 6.2$	$W_1 = \frac{W + 2E - 1.6}{2}$ $W_2 = W_1$
2 Doors folding and 1 swing open 	$W_3 = W_1$ $W_1 = \frac{W + 2E - 6.4}{3}$ $W_2 = W_1 + 3.2$	$W_3 = W_1$ $W_1 = \frac{W + 2E - 9.4}{3}$ $W_2 = W_1 + 6.2$	$W_1 = \frac{W + 2E - 3.2}{3}$ $W_1 = W_2 = W_3$
2 Doors folding and 2 Doors folding 	$W_1 = \frac{W + 2E - 11.2}{4}$ $W_2 = W_1 + 3.2$	$W_1 = \frac{W + 2E - 17.2}{4}$ $W_2 = W_1 + 6.2$	$W_1 = \frac{W + 2E - 4.8}{4}$ $W_1 = W_2$

DOOR PROCESS DIMENSION

The drawing describes the right handed opening type.
The left-handed opening type is a mirror image.

E_1 = Coverage (top)
 E_2 = Coverage (bottom)
 F = Gap between door bottom and floor (5~15mm)

Knob Installation (Sold separately)

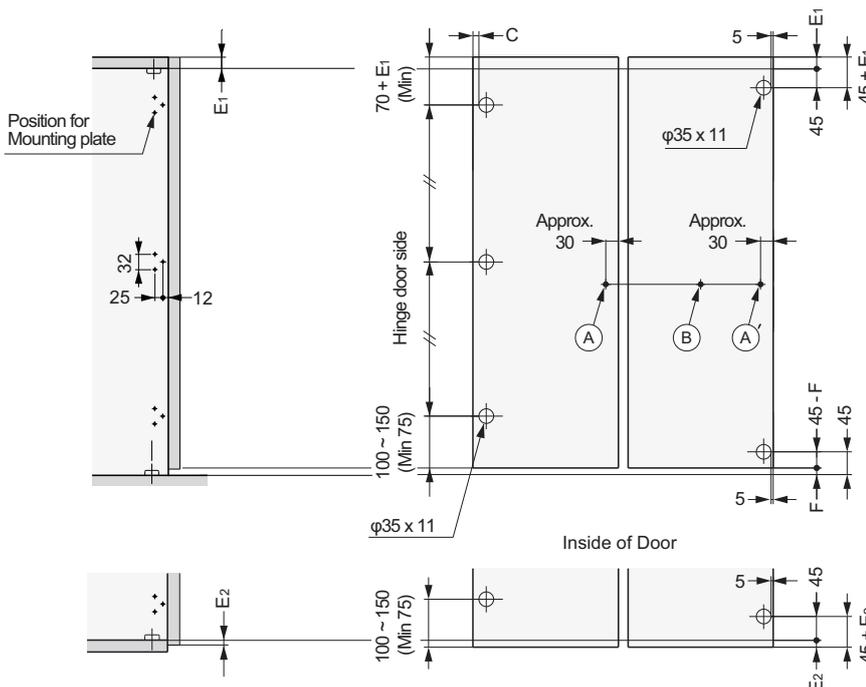
Recommended knob mounting position ① for opening & ② for closing the door.

A knob installed at ③ position can be used for both opening and closing.

Required Parts

Door Height	Concealed hinge ② Mounting plate ③ (pcs)	Center hinge ④ (pcs)
900 mm	2	2
1600 mm	3	2
2000 mm	4	3
2400 mm	5	4

Coverage at hinge door side	C - Dimension
19 mm	5 mm
18 mm	4mm
17 mm	3mm



INSTALLATION PROCEDURE

1 Cutting rails

Cut Upper rail & Lower rail to the required length.

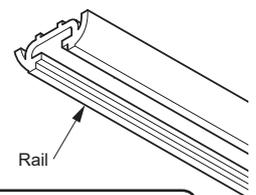
$$\text{Length} = W - 1.5$$

⚠ Caution

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

2 Installing rail

Insert Upper roller to Upper rail before mounting.

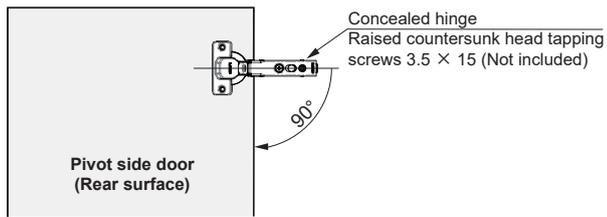


⚠ Caution

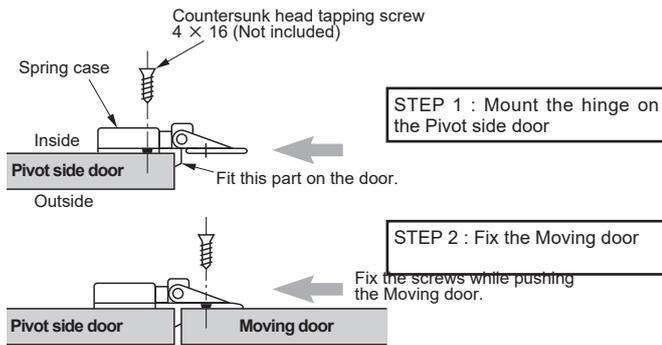
When installing the rails, ensure that the upper rail and lower rail are parallel.

3 Installing concealed hinges

Install Concealed hinge for Pivot side door.
Install the hinge of Sliding guide for moving door.



4 Installing center hinges

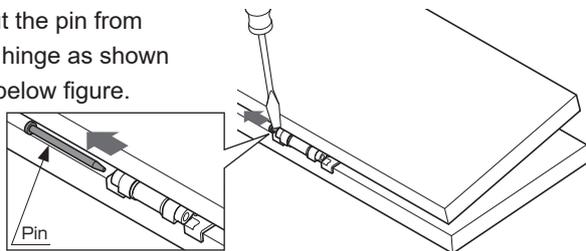


5 Installing knob

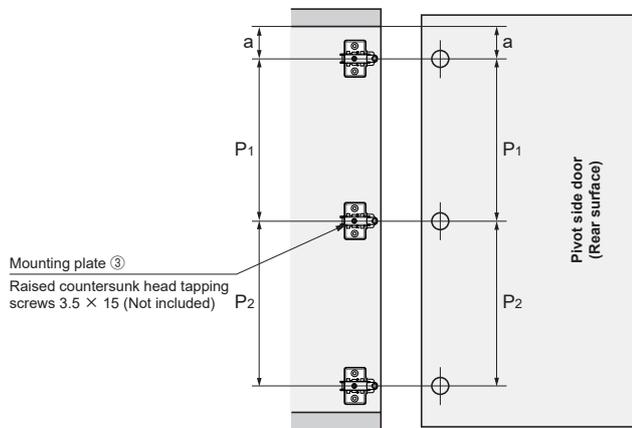
As for the position of the knob, please refer to "Door Process Dimensions" on page 2 and "How to operate the knob" on page 4.

6 Separating door panels

Pull out the pin from center hinge as shown in the below figure.



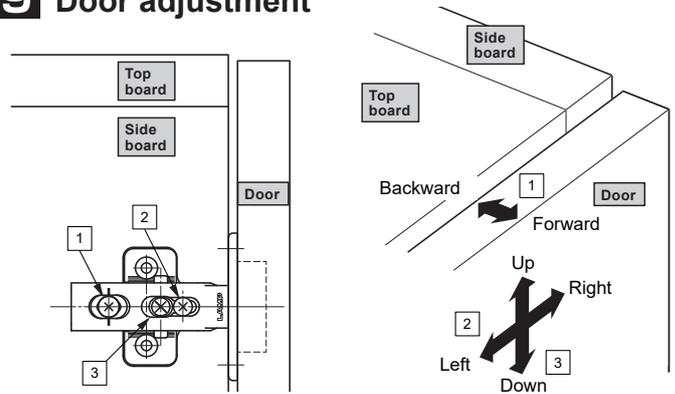
7 Fixing the mounting plates for Pivot side door



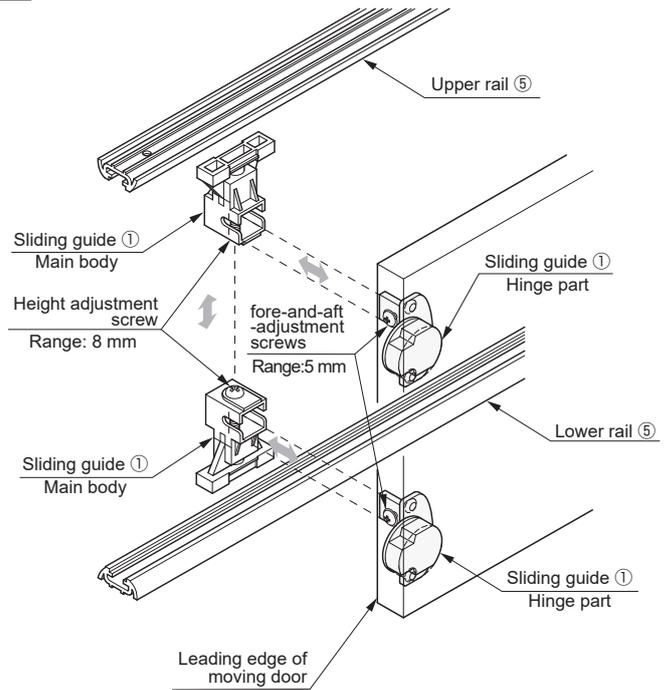
8 Hanging the doors

Put a support of suitable height under the doors, clip the hinges on the door to the mounting plates on the cabinet.

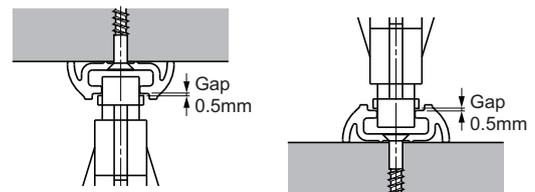
9 Door adjustment



10 Installing sliding guide

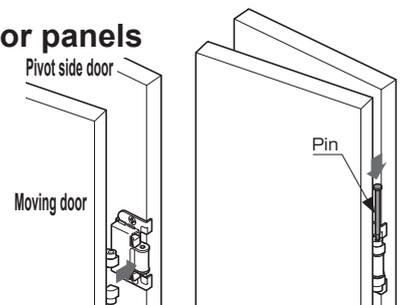


Adjust the height of the sliding guide so that the gap will be around 0.5 mm.



11 Assembling door panels

Couple the hinge parts as shown in the right figure, then insert the hinge pin from above.



12 Checking the door movement

Open and close the door for several time and check if the door moves smoothly. Then re-tighten the fixing screws of all parts.

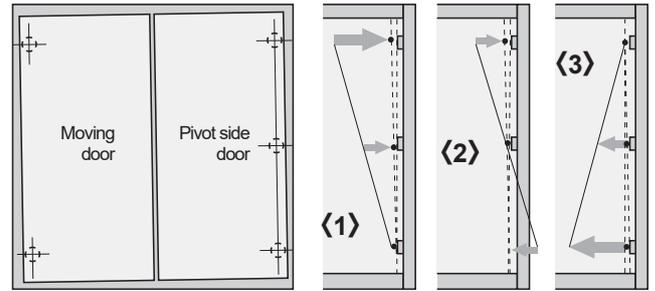
⚠ Periodically check if all of the screws are not loose. If the looseness is found, tighten it.

ADJUSTMENT OF THE INCLINED DOOR

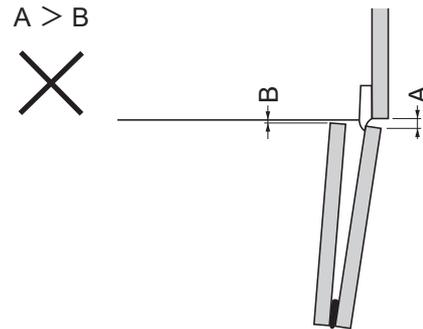
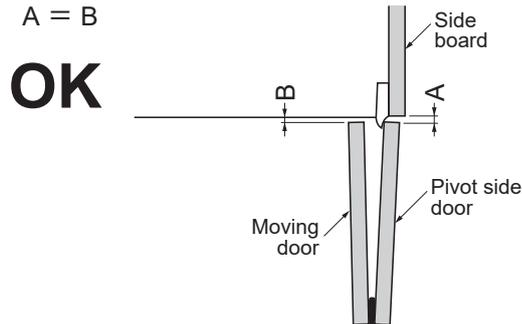
When the door is inclined a lot like the right illustration, adjust the door by the adjustment screws on the concealed hinges. Do not try to adjust it by the screws on the sliding guide.

There are three ways of adjustment as below..

- <1> Reduce the upper gap by the top and middle hinges.
- <2> Reduce the upper gap by the top hinge and increase the lower gap by the bottom hinge.
- <3> Increase the lower gap by the bottom hinge.



SUGGESTIONS FOR DOORS IN EQUAL WIDTH

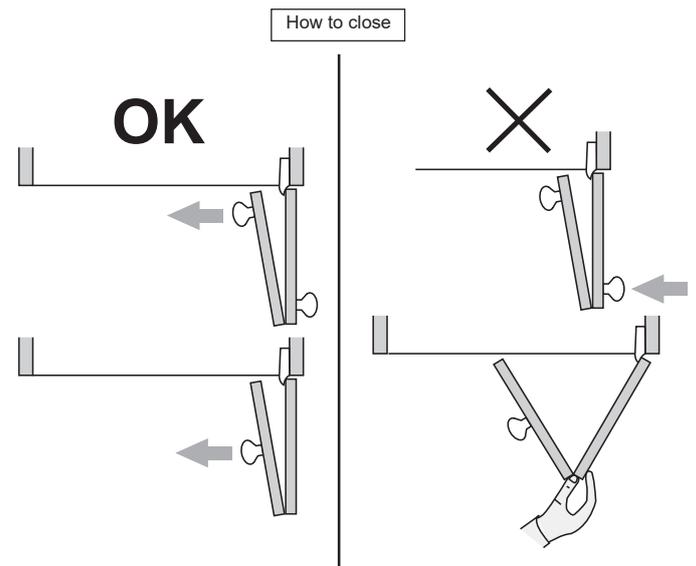
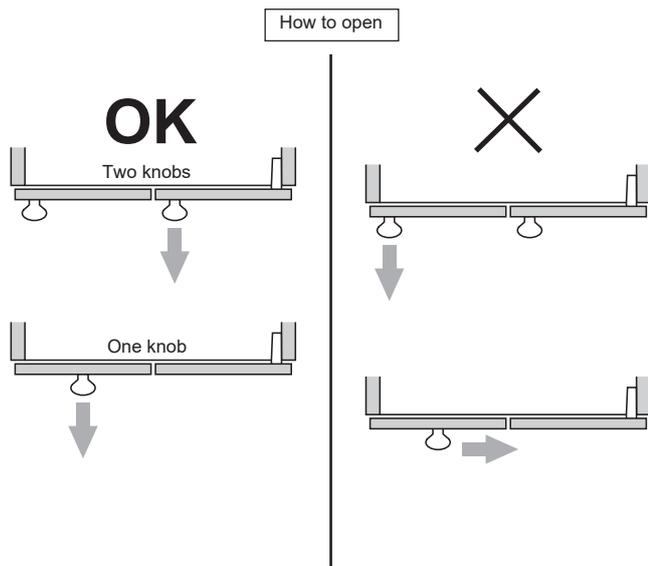


Adjust the fore-and-aft position of the concealed hinges so that the both A and B gaps are the same.

If "A" is bigger than "B", the closing action would not be smooth. Re-adjust the gaps as below.

1. Loosen all fore-and-aft-adjustment screws on the concealed hinges, and reduce the gap A, then re-tighten the screws.
2. If "A" is still bigger "B", increase the gap B by adjusting the screws on the sliding guides.

HOW TO OPERATE THE KNOB



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