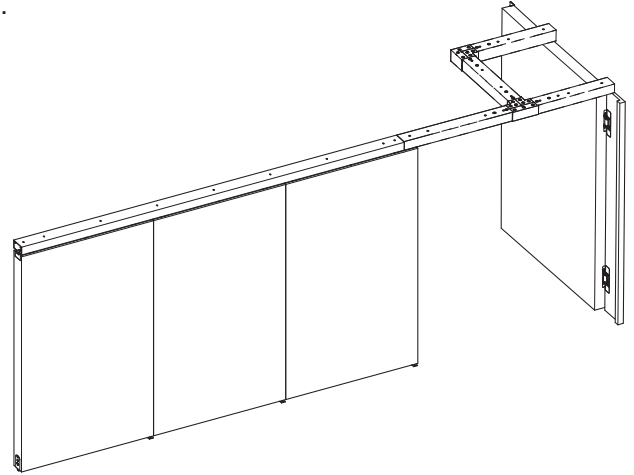


Stackable PARTITION DOOR SYSTEM FDPN40V1D Installation Manual (Perpendicular Stacking)

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 THE PRODUCT

- This product is parts set for installation of sliding partition for indoor use.
- It is possible to stack panels at a side with 90 degree rotation.
- Since panels are suspended, no bottom track is needed. Thanks to exclusively designed rollers, smooth movement of panels are realized.



APPLICABLE PANELS

Partition face	Number of panels	Panel width	Panel height	Panel thickness	Panel weight (each panel)	Panel vertical adjust range
One	3 to 6 (※ ¹)	500 - 900 mm (※ ¹)	Max. 2500 mm	34 - 40 mm	Max. 40 kg	Upward: 0 mm Downward: 7 mm

※¹ These sizes are available by the choice of stacking track.

FOR YOUR SAFE WORK AND CORRECT INSTALLATION

Meaning of symbols

Warning Caution	Prohibited	Required
------------------------	-------------------	-----------------

! WARNING If these warnings are not followed, it may result in death or serious injury.

- ❗ This partition door system should be installed by an experienced person who has correct knowledge. If the system is not installed correctly, the door will not operate smoothly, and or may cause injury.
- ❗ It is necessary to manufacture the frame with sufficient strength so it holds the weight of the door and impact shocks upon opening/closing the door. Also make sure to only use the designated screws and to fasten them firmly. A frame with poor strength or loose screws might result in improper and slower movement of the door. In the worst case, the door might drop down and cause injury.
- ⊘ Do not try to use this product for any other purposes other than originally intended for. Do not use the parts for applications that are out of specification.
- ⊘ Do not disassemble nor modify any parts than those described in this document.

! Caution If these cautions are not followed, it may result in injury or damage.

- ❗ This partition door system is a part for architectural fittings. After installation, make sure to test the finished product thoroughly to ensure that it is well-functioning and safe.
- ❗ Make sure to follow the designated measurements, specifications, and horizontal/vertical angles. Make sure that the frame is not warped, since it may affect the movement of the door.
- ❗ If cutting any parts, make sure to remove any burr before installation. Also check the upper track for any left-over burr or scrap and remove these.
- ❗ When using electric tool, pay attention to avoid over-tightening.
- ❗ Make sure to check the screws for slack at regular intervals (one month from first usage, half year and then one time every year is recommended).

COMPONENT PARTS

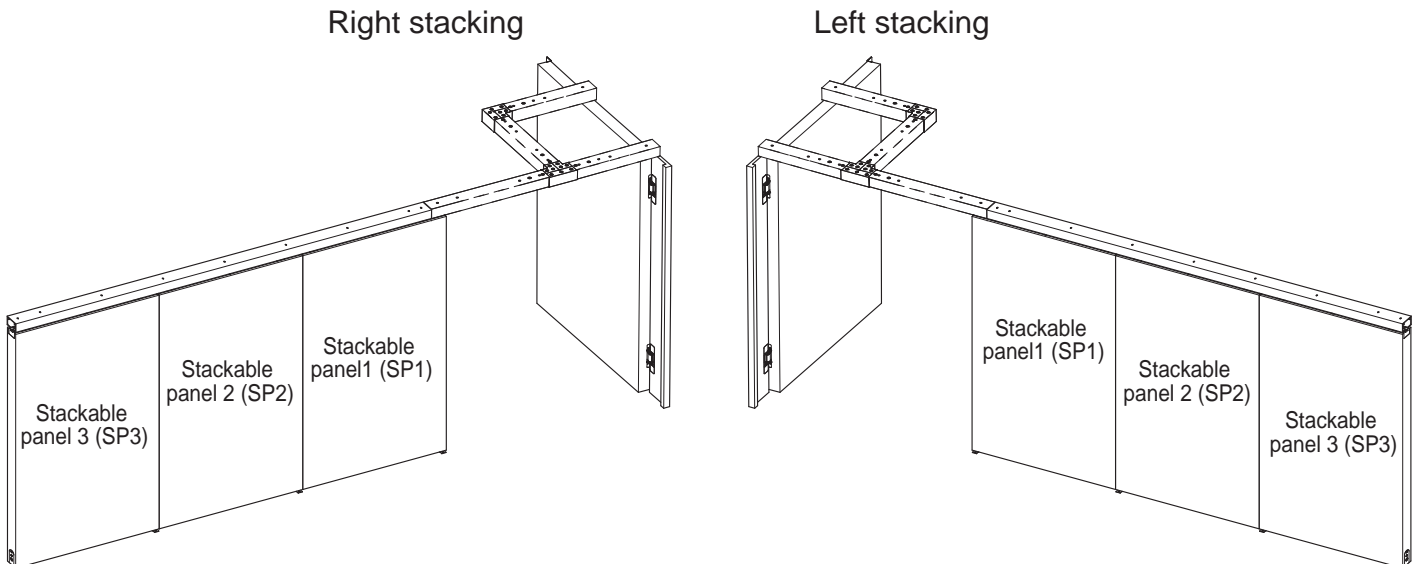
Left or right stacking	No. of panels	①	②	③	④	⑤	⑥	⑦
		Upper track	Stacking track * Refer to the table on page 3 for the choice of stacking track.	Connecting plate (one piece attached to ②)	Recessed rollers for stackable door	Recessed rollers for stackable panel	Hanging bracket (2 pcs/set)	End cap
Left stacking	3	1		1	3 sets		3 sets	6
	4				4 sets		4 sets	8
	5	2		2	5 sets		5 sets	10
	6				6 sets		6 sets	12
Right stacking	3	1		1	3 sets		3 sets	6
	4				4 sets		4 sets	8
	5	2		2	5 sets		5 sets	10
	6				6 sets		6 sets	12

Stackable door is included in "No. of panels".

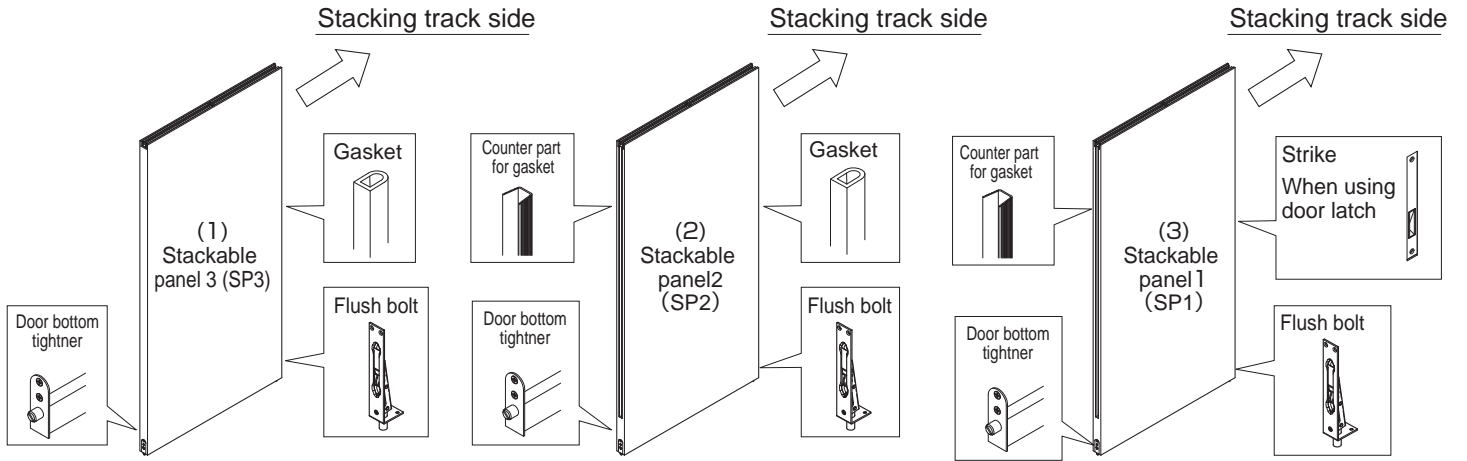
Attachment: Adjust spanner (1 pc)

Parts sold separately	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯
No. of panels	Flush bolt	Gasket	Counter part for gasket	Door bottom tightener	Hinge	Magnetic Latch Handle	Door Stopper	End plate FDP40-TREP	Stopper FDP40-ESTP
3	3	2	2	3	2 - 3	1	1	-	-
4	4	3	3	4					
5	5	4	4	5					
6	6	5	5	6					
	Must be used on stackable panel to lock.	Must be used to hide the gap between panels. To be used by pairs.		To hide the gap between panel and floor.	Use for a swing door when the panels are closed. These three parts are used in set.			To cover the end of track (This is not a stopper.)	For upper track For stacking track

POSITION OF PANELS



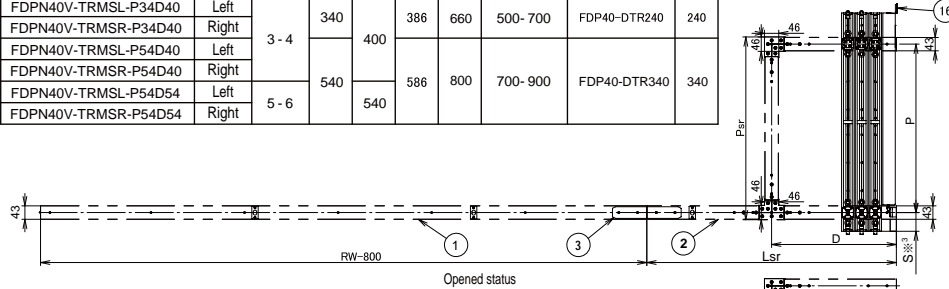
Parts for each panel (sold separately)



INSTALLATION DRAWING (EXAMPLE)

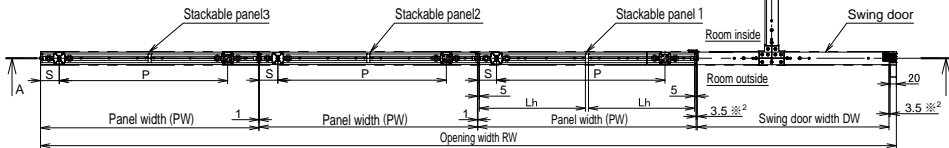
Stacking track	Left or right stacking	No. of panels	Dimension of stacking track				Panel width	Hanging bracket				
			P	D	Ps _r	Ls _r		Stackable panel	Part No.	Lh		
FDPN40V-TRMSL-P34D40	Left	3 - 4	340	400	386	660	500 - 700	FDP40-DTR240	240			
FDPN40V-TRMSR-P34D40	Right											
FDPN40V-TRMSL-P54D40	Left		540	540	586	800				700 - 900	FDP40-DTR340	340
FDPN40V-TRMSR-P54D40	Right											
FDPN40V-TRMSL-P54D54	Left	5 - 6	540	540	800	700 - 900	FDP40-DTR340	340				
FDPN40V-TRMSR-P54D54	Right											

The drawing shows the installation of right stacking. In case of left stacking, positions and direction of the parts are mirror image.

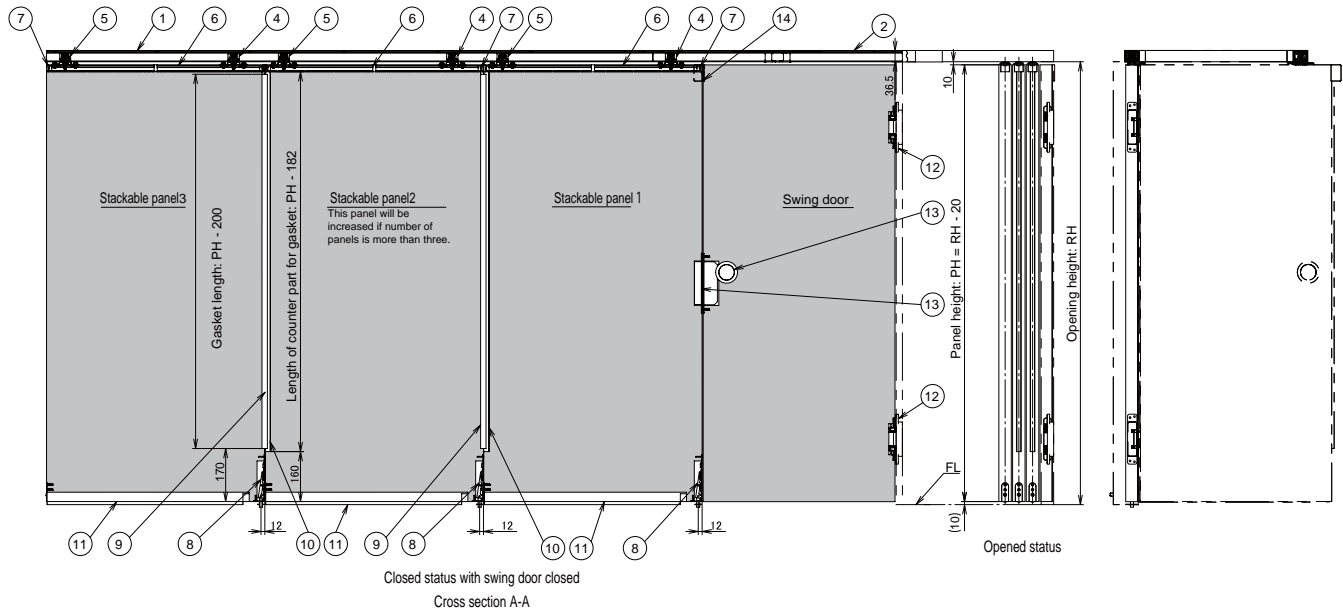


※² When using HES 3D - V135 hinge

※³ When using stacking track (P = 340)
 In case $500 \leq PW \leq 580$
 $S = 60$
 In case $580 < PW \leq 700$
 $S \approx PW - 520$
 $S = 60^\circ$ is also possible if hanging brackets are so that upper roller can be shifted to desired positions.



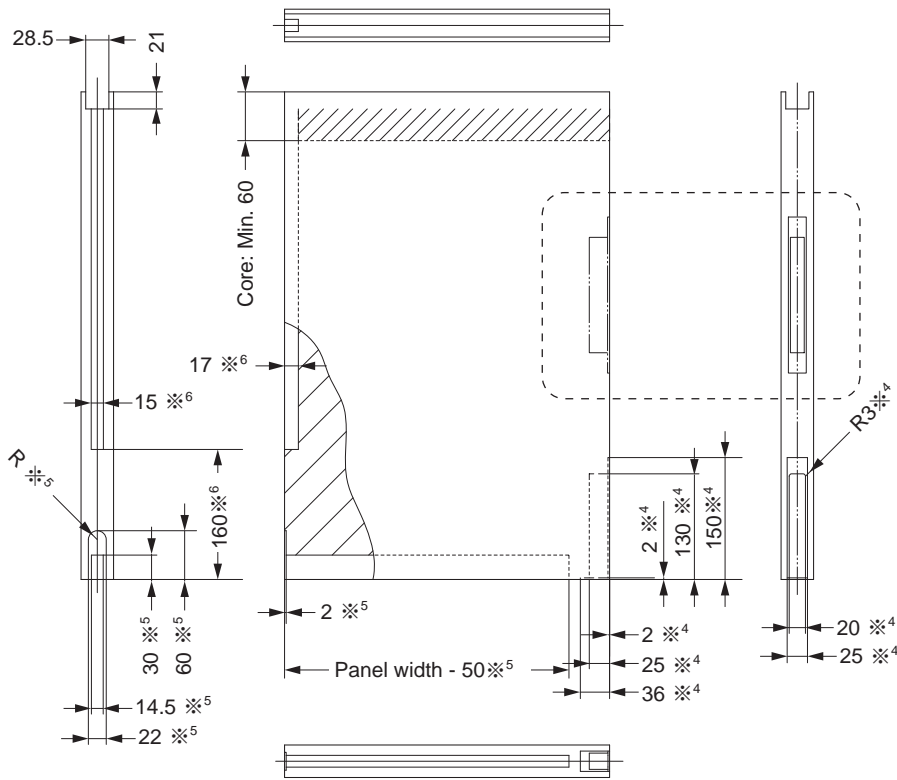
When using stacking track (P = 340)
 In case $700 \leq PW \leq 780$
 $S = 60$
 In case $780 < PW \leq 900$
 $S \approx PW - 720$



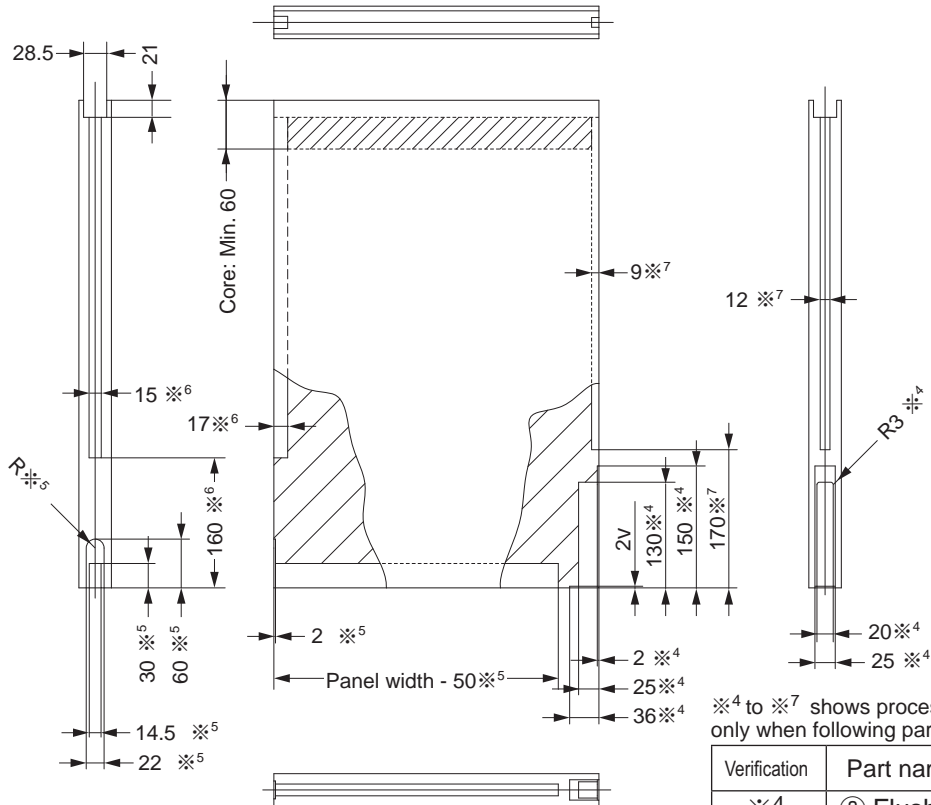
PANEL PROCESS DIMENSIONS

As for the dimensions in , please refer to the manuals of respective products (Latch Handle, Strike, Hinge)

● Stackable panel1 (SP1)



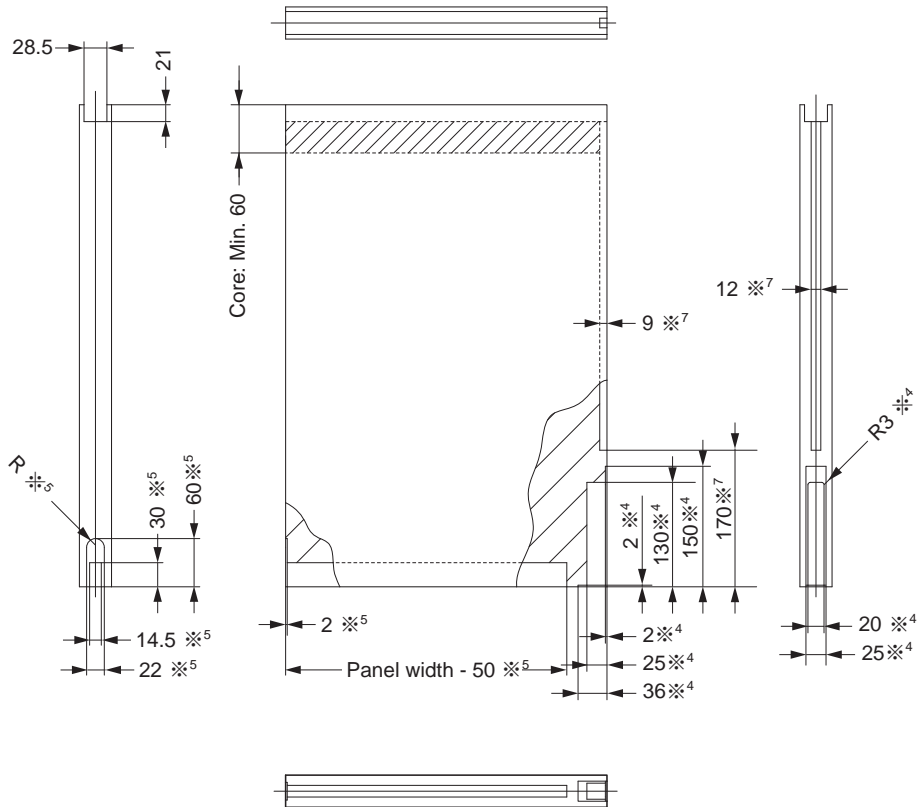
● Stackable panel 2 (SP2) - This panel will be in creased if number of panels is more than three.



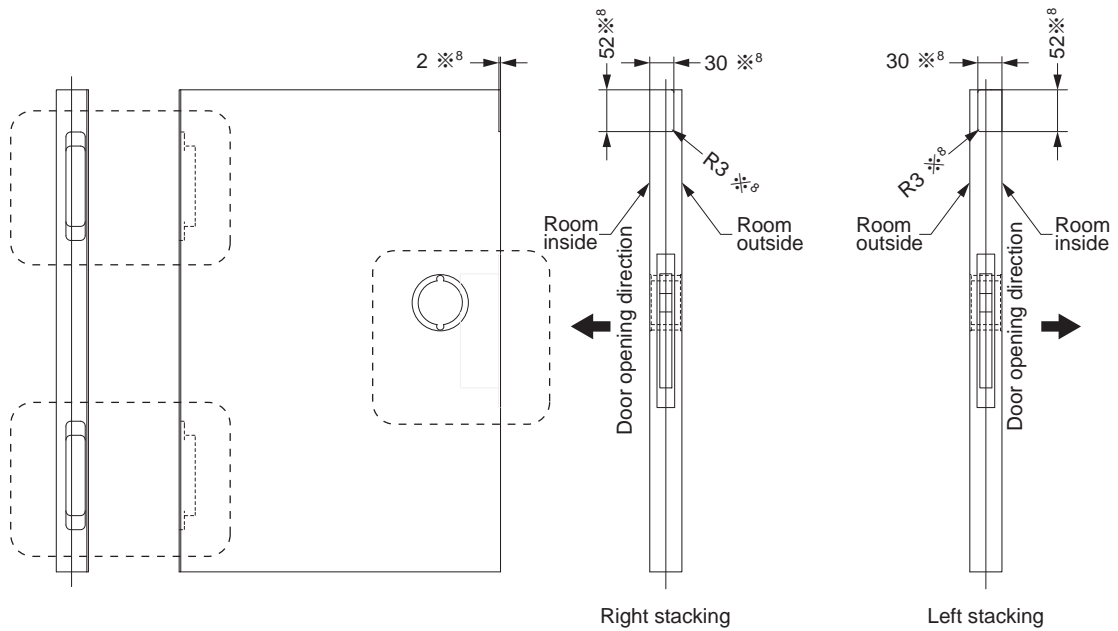
※4 to ※7 shows process dimensions only when following parts are used.

Verification	Part name
※4	⑧ Flush bolt
※5	⑪ Door bottom tightner
※6	⑩ Counter part for gasket
※7	⑨ Gasket

● Stackable panel 3 (SP3)



● Swing door Note that dimensions with ※⁸ are different in left stacking and right stacking.



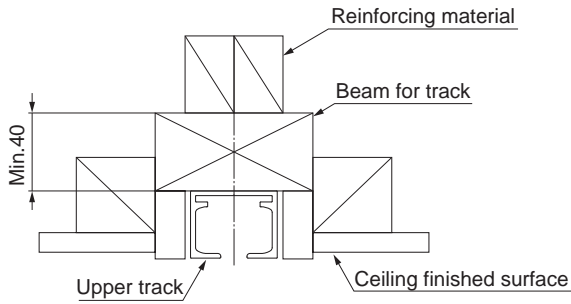
※⁴ to ※⁸ shows process dimensions only when following parts are used.

Verification	Part name
※ ⁴	⑧ Flush bolt
※ ⁵	⑪ Door bottom tightner
※ ⁶	⑩ Counter part for gasket
※ ⁷	⑨ Gasket
※ ⁸	⑭ Door stopper

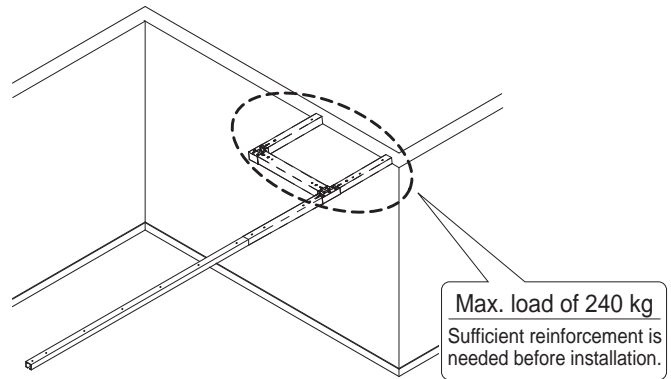
CHECK POINTS FOR INSTALLATION

[1] Structure of beam

Arrange a beam for track with reinforcing material to prevent track from warping.



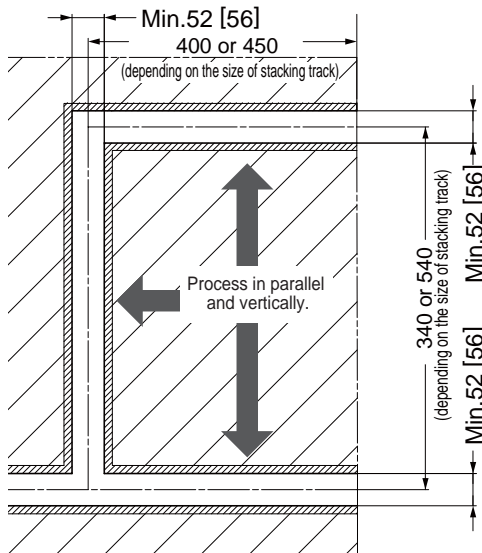
Make sure that the ceiling is strong enough to support a load of 240 kg



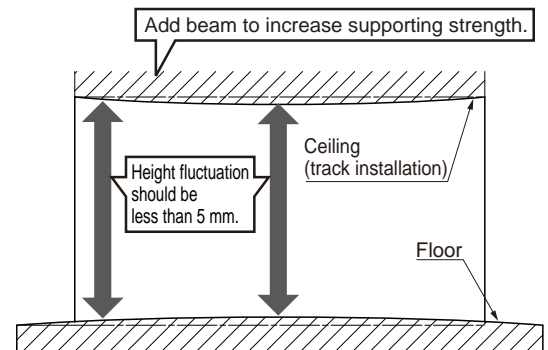
[3] Process when recessing the track

The groove should be processed so that the track would not be deformed.

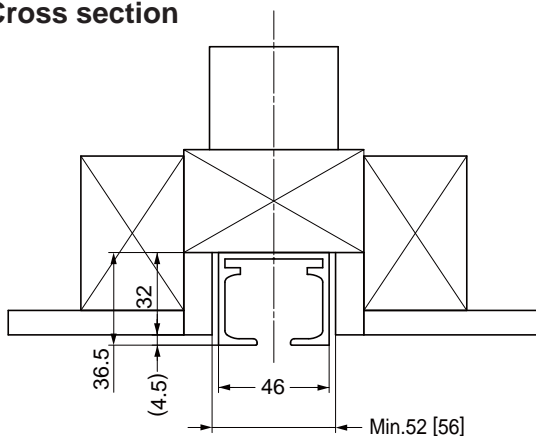
- Width of groove
- Right angle
- Parallel



[2] Check the ceiling for sag and floor for warp



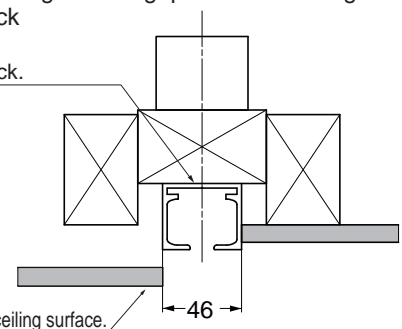
Cross section



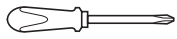
When processing without gap between ceiling face and track

① Mount track.

② Process ceiling surface.



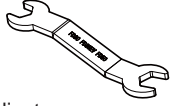
TOOLS NEEDED FOR INSTALLATION



Phillips Screwdriver #2



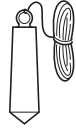
Screwdriver ※11



Adjust spanner
Order code: 250-017-168
Part No.: FD30-FSP



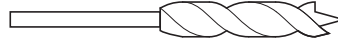
Spanner 10 mm



Plumb ※9



Pan head tapping screw ※11



Drill bit: φ12 ※9



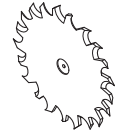
Drill bit: φ5 ※11
φ6 ※12



Drill ※9 ※11 ※12



Adhesive for synthetic rubber and wood ※10



Saw for metal ※11

※9: For installation of flash bolt. As for drill bit φ12, choose suitable one according to the material of the floor.

※10: For installation of gasket (acrylic modification silicon resin, elastic adhesive or the like)

※11: For installation of door bottom tightner.

※12: For hole processing of tracks.

INSTALLATION PROCEDURES

This describes the installation of right stacking. In case of left stacking, positions and direction of the parts are mirror image.

1 Cutting, Hole Processing for Long Parts

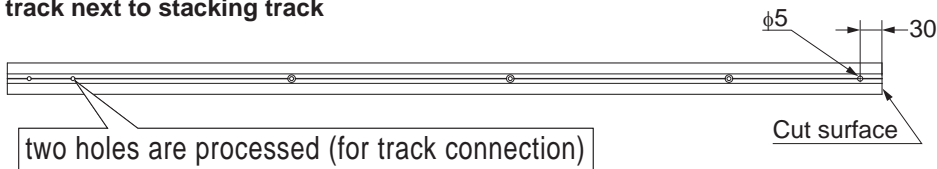
[1] Upper track

(Refer to the shop drawing about the cutting length.)

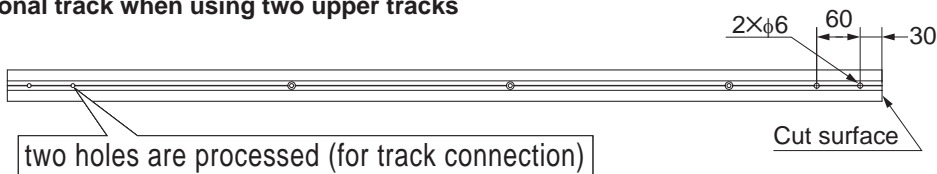
⚠ Caution

❗ Remove any dirt or aluminum chips from the track.

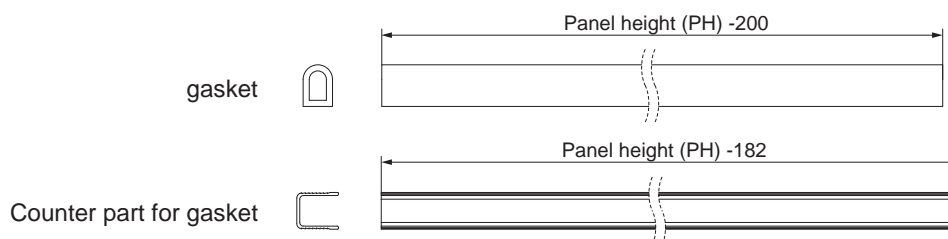
Upper track next to stacking track



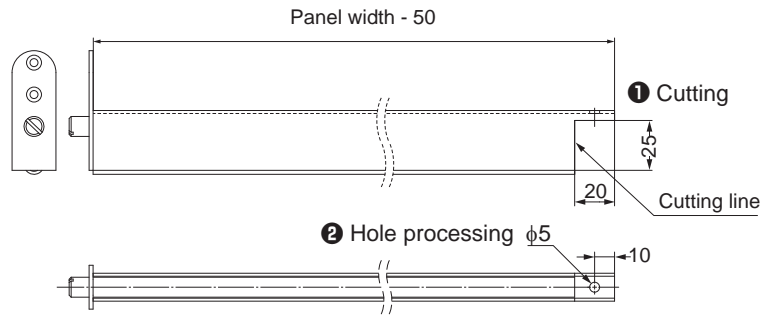
Additional track when using two upper tracks



[2] Gasket, Counter part for gasket



[3] Door bottom tightner



[2] Parts Assembly on Panels

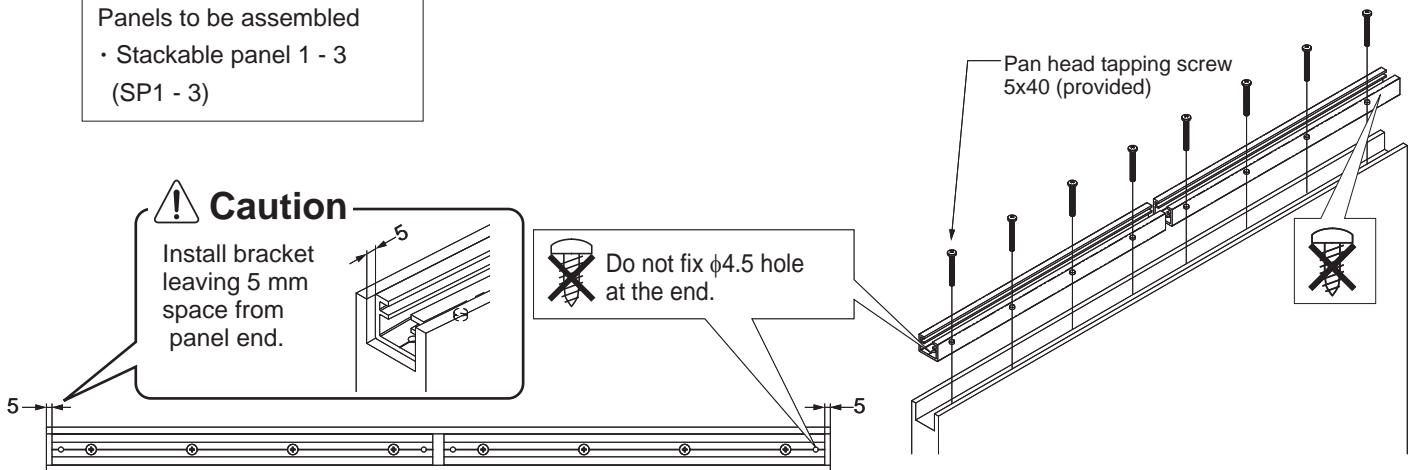
[1] Hanging bracket

Panels to be assembled
• Stackable panel 1 - 3
(SP1 - 3)

! Caution

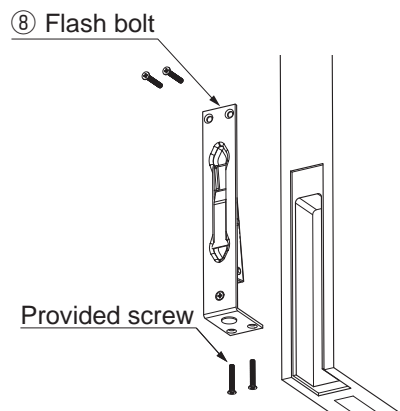
Install bracket leaving 5 mm space from panel end.

Do not fix $\phi 4.5$ hole at the end.



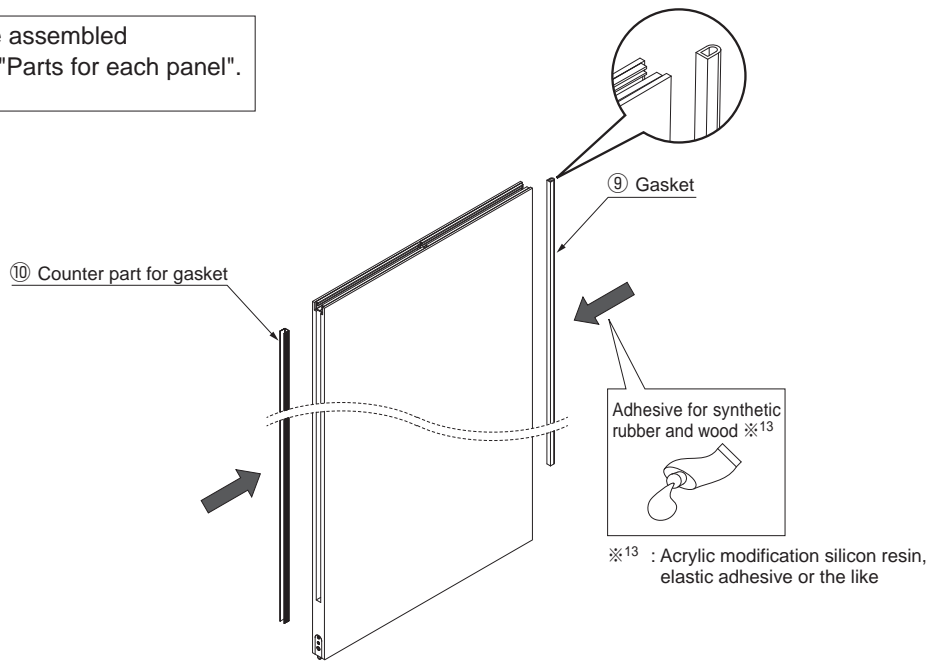
[2] Flash bolt

Panels to be assembled
• Stackable panel 1 - 3
(SP1 - 3)



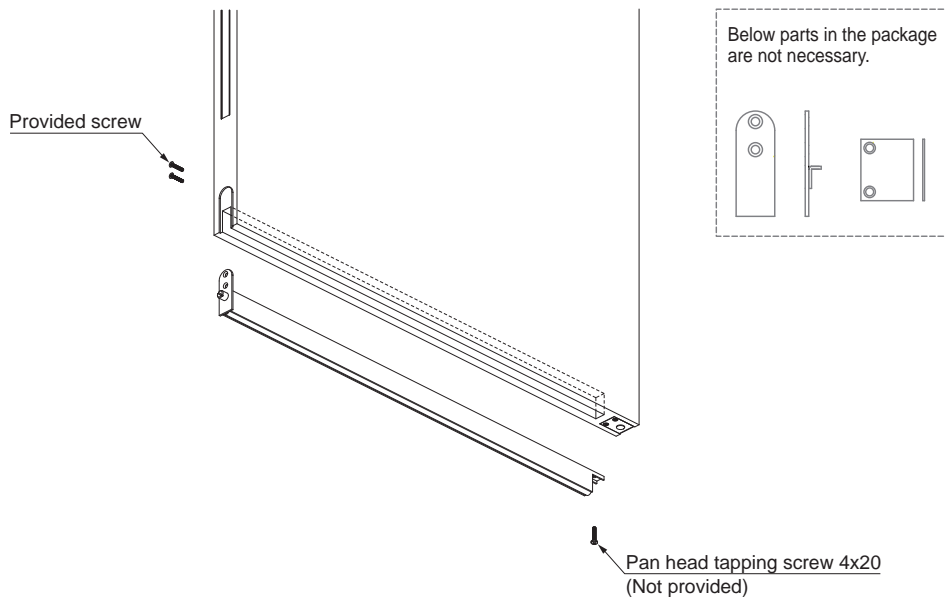
[3] Gasket, Counter part for gasket

Panels to be assembled
See page 3 "Parts for each panel".

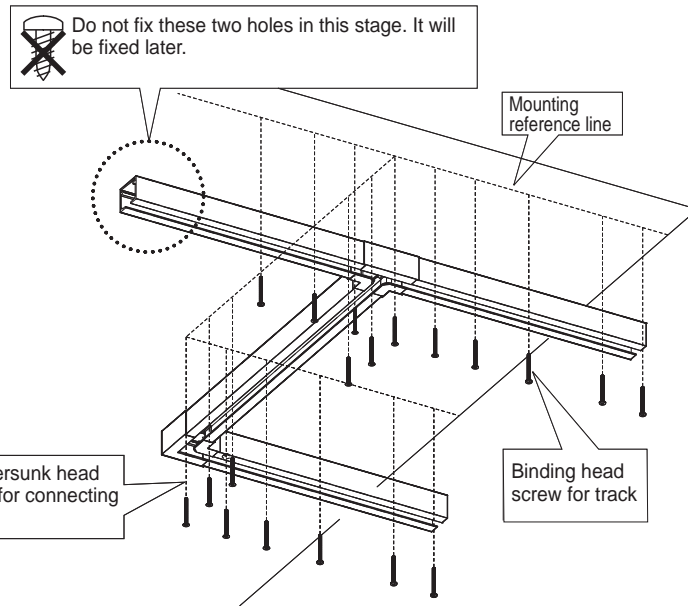
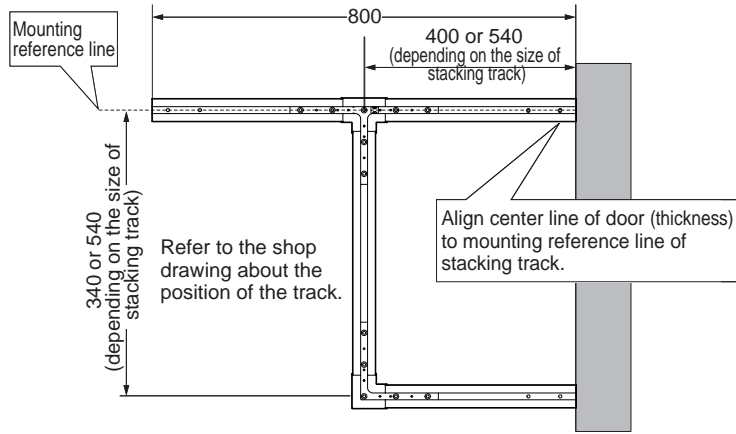


[4] Door bottom tightner

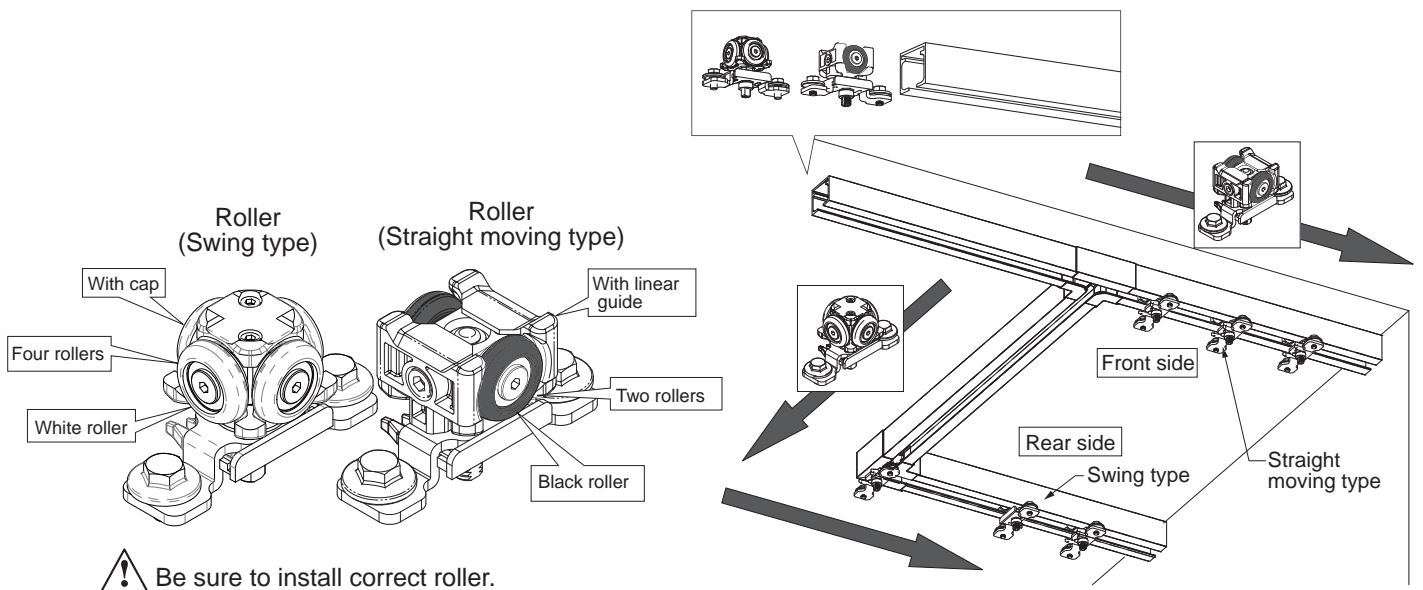
Panels to be assembled
• Stackable panel 1 - 3
(SP1 - 3)



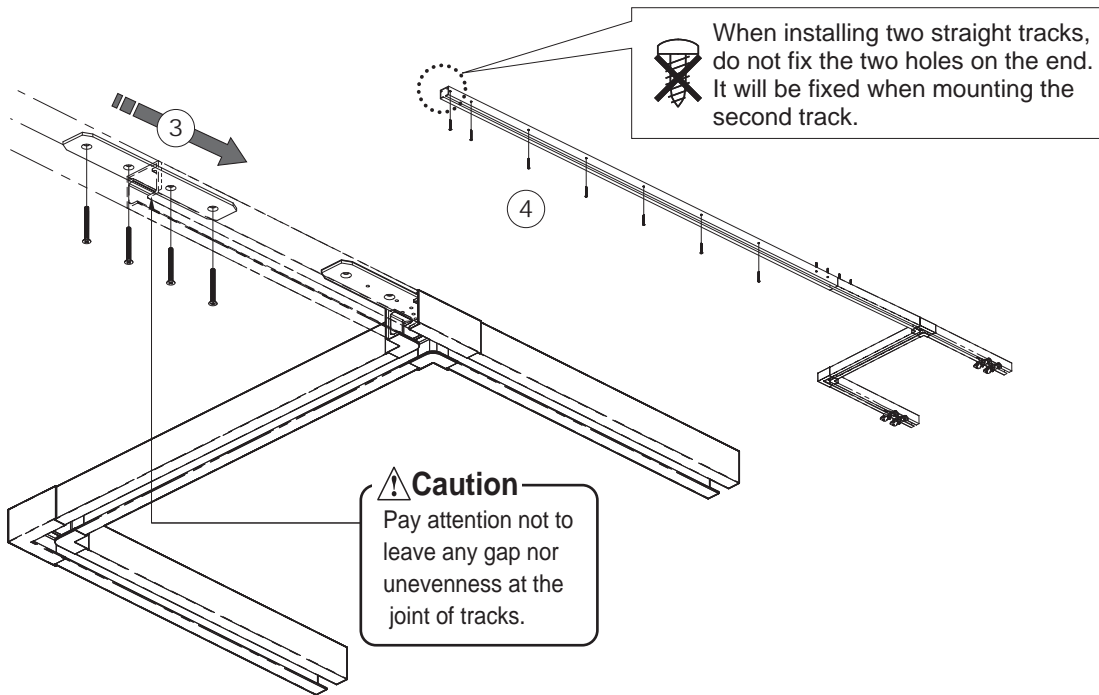
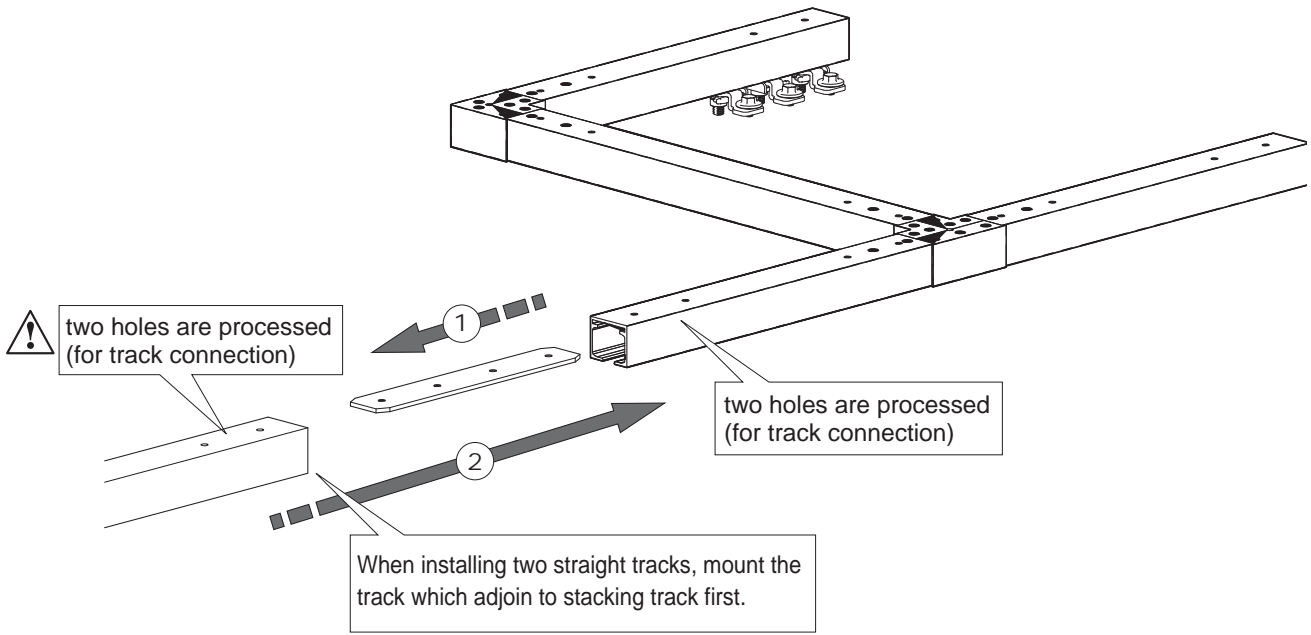
3 Mounting Stacking Track



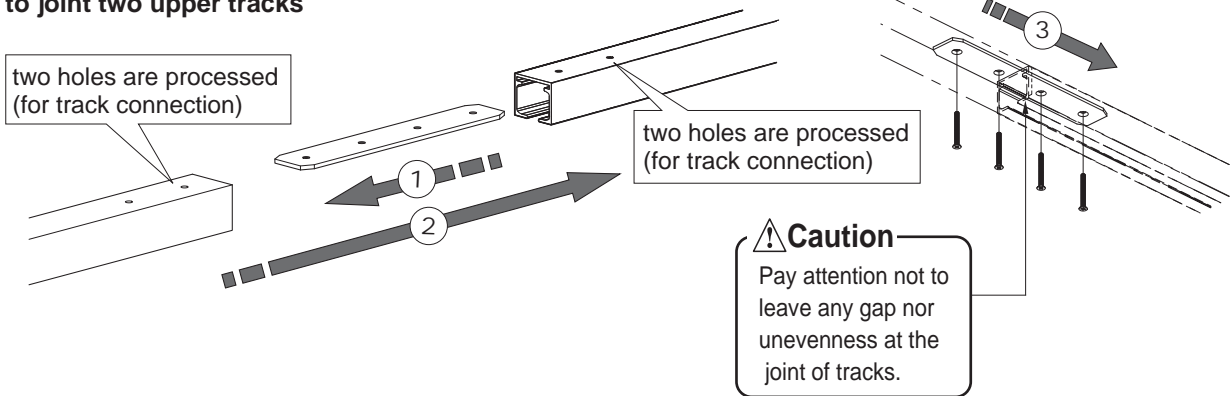
4 Installing Recessed Roller



5 Mounting Upper Track



How to joint two upper tracks



6 Hanging Panels

[1] Order of Hanging

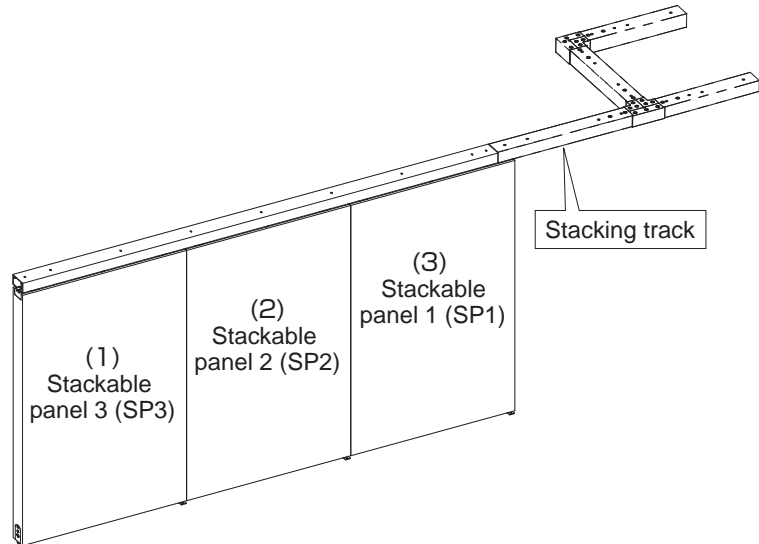
(1) Stackable panel 3 (SP3)



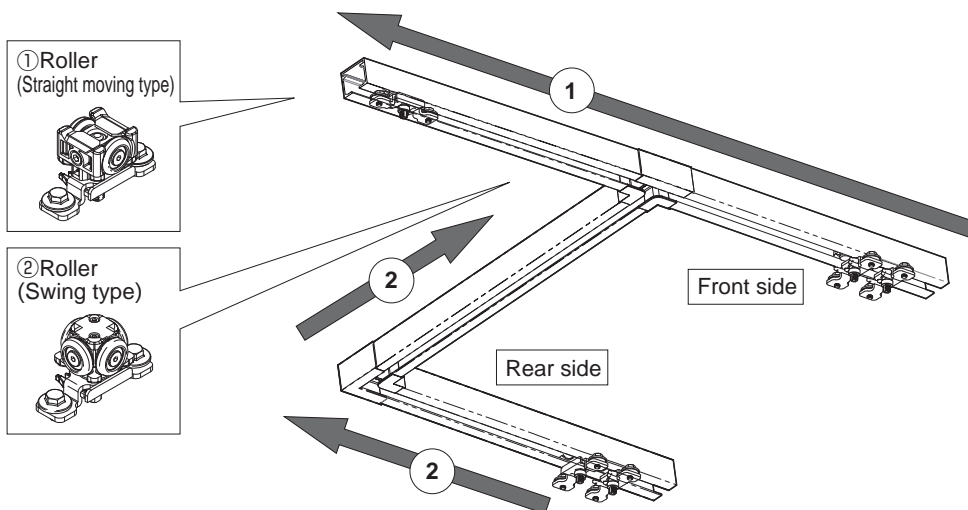
(2) Stackable panel 2 (SP2)



(3) Stackable panel 1 (SP1)



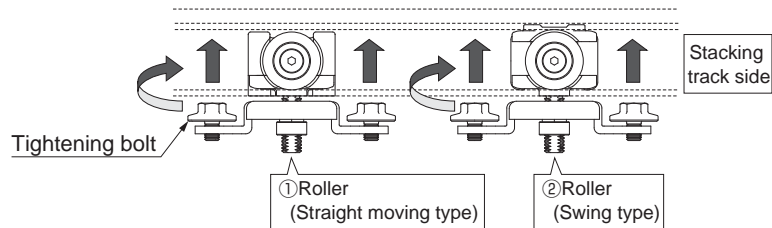
[2] Preparation of recessed rollers



① Move straight moving type roller at front side, first.

② Move swing type roller at rear side next. (per pair)

③ Loosen the tightening bolts on the rollers.

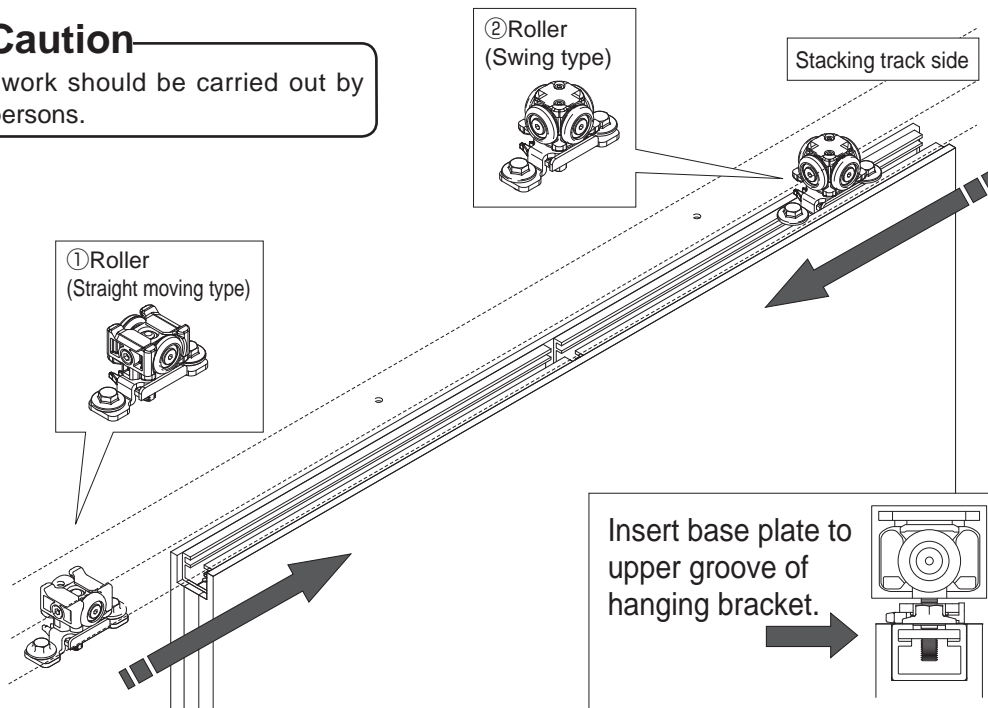


[3] Hanging panels

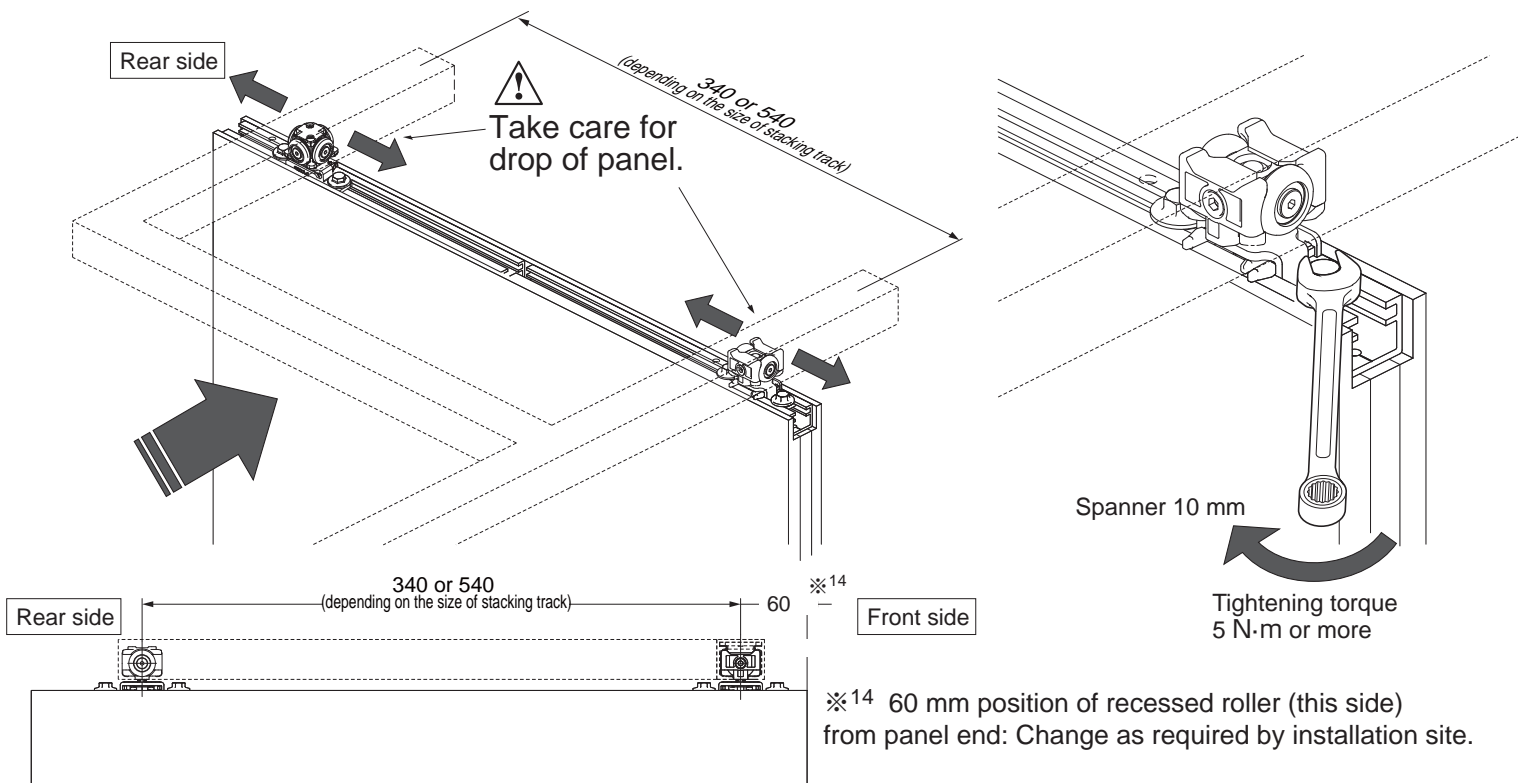
This describes an example of stackable panel 3 of right stacking.
The panel edge with flash bolt faces stacking track.
In case of left stacking, direction of the parts are mirror image.

⚠ Caution

This work should be carried out by two persons.



[4] Adjusting positions of recessed rollers, Fixing of rollers



[5] Hanging rest panels, Adjusting roller positions

Repeat above works ([3] and [4]) against Stackable panel 2 (SP2) and Stackable panel 1 (SP1)

7 Check Movement of Stackable Panels

[1] Operation check

Repeat sliding out operation of each panel from stacked position for several times to confirm the position of rollers.

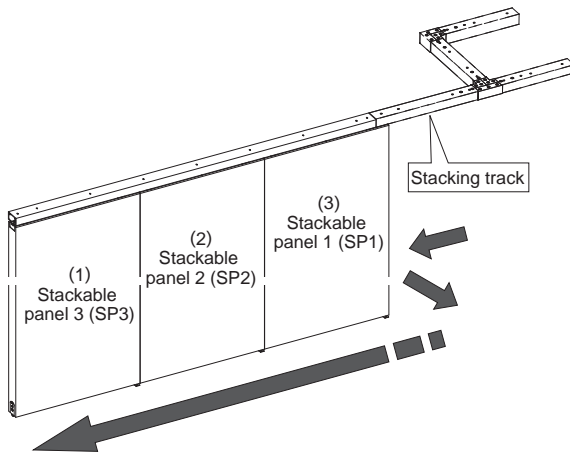
[2] Adjustment

If improper movement is found, readjust the position of rollers.

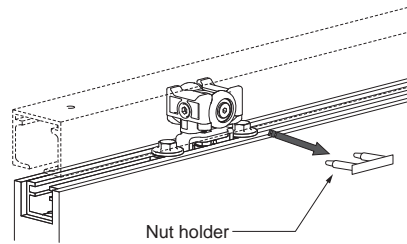
8 Panel-to-Panel Alignment (Adjusting Vertical Position)

[1] Arrange the panels

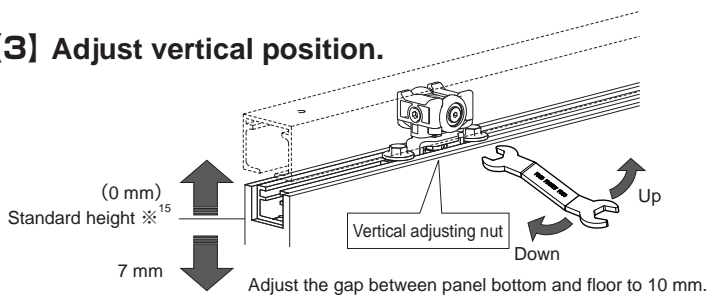
Pull out all stacked panels and doors along straight part of the track as shown.



[2] Pull out nut holder.

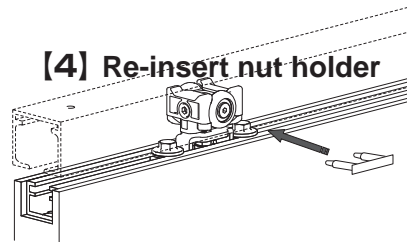


[3] Adjust vertical position.



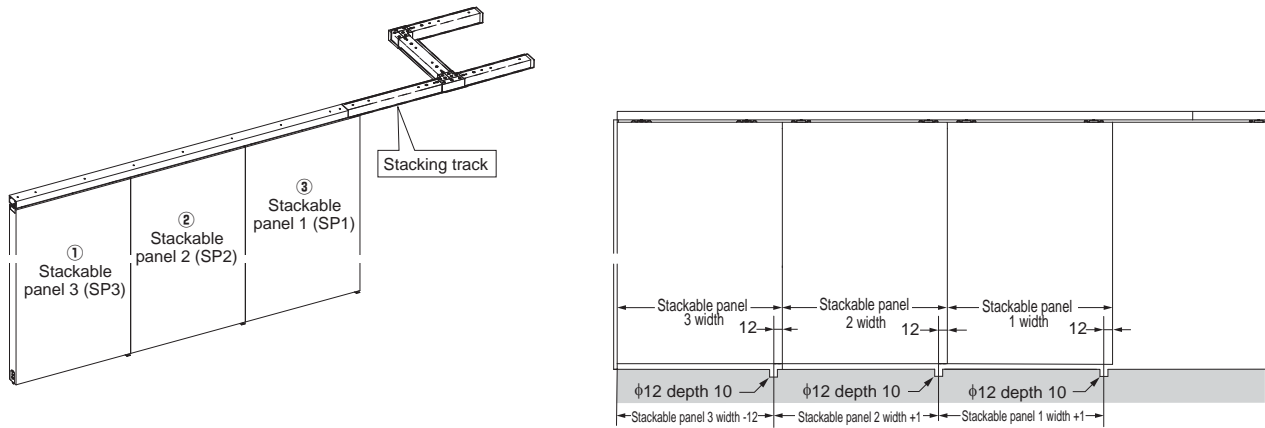
※¹⁵ Default setting;
Gap between track and panel: 10 mm

[4] Re-insert nut holder



9 Mounting Strike for Flash Bolt

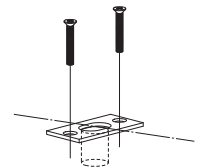
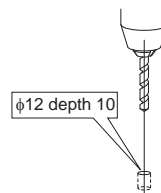
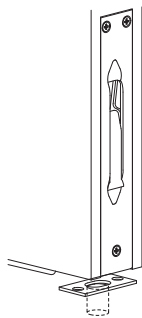
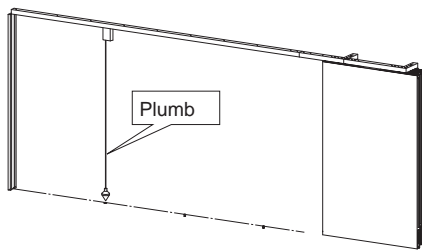
Mount each strike in the order of ① to ③, while positioning one by one.



【1】 Position the strike just below the center of upper track.

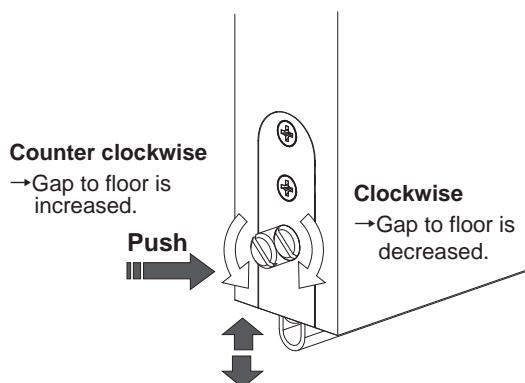
【2】 Determine the position while closing the panel.

【3】 Drill a hole on the floor. 【4】 Fix the strike with provided screws.

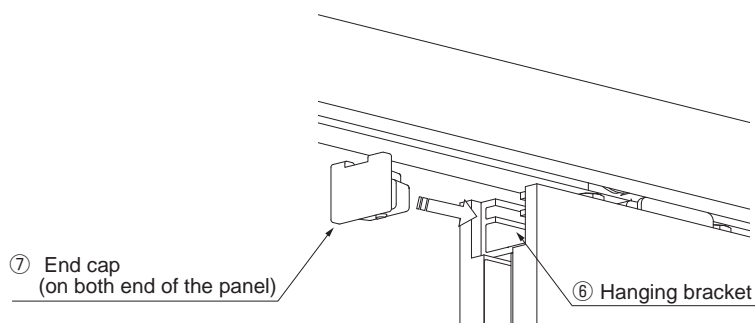


10 Adjusting door bottom tightner

- Adjust the gap by turning the spindle on bottom tightner ⑩.
- Check the gap also when the panel is locked with flush bolt.



11 Mounting end cap



■ TROUBLESHOOTING

TROUBLE	CHECK	SOLUTION
Panel does not go in stacking track.	Check if panel's recessed roller mount pitch deviates from stacking track.	Adjust recessed roller mount pitch. If recessed roller set bolt is loosened, retighten. Refer to 6 - [4] Assembling Recessed Rollers, Hanging Panels.
Panel is caught during operation.	Check if fixing screw on upper track is loosened.	Recessed roller may contact to screw. Loosen the screw.
	Check if upper track is jointed to stacking track correctly.	The connecting part of upper track and stacking track should be connected with provided connecting plate, with no gap and no unevenness. Refer to 5 Mounting Upper Track.
Abnormal sound when sliding panels.	Check if any dirt or aluminum chips remains in upper track.	Clean inside of upper track.
	Check rollers in the track for existence of aluminum chips.	Remove the track and remove rollers, then clean the roller.
	Check if the screw installing track to ceiling for looseness.	Retighten screw to avoid roller contact against screw.
Heavy movement of panel.	Check if panel contacts to the floor.	Confirm track fixing screws are not loosened. Readjust panel height so that clearance between panel bottom and floor becomes 10 mm.
Panels move automatically.	Check if upper track is installed horizontally.	Reinstall upper track horizontally with level gauge.

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