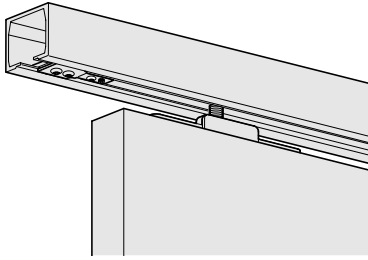# LAMP® FD-70M Sliding Door System Installation Manual PAT.P

Thank you for purchasing our product. Before starting, read all instructions carefully to ensure correct installation.
Follow all the instructions and cautions to avoid unexpected injury caused by incorrect installation.
Product improvements may result in unannounced changes to dimensions and specifications. Check the product itself for details.

■ Safety precautions

The △ icon indicates warnings and precautions. The ⊘ icon indicates warnings and precautions. The ❶ icon indicates actions that must be done (mandatory instructions).

⚠ Warning   Failure to observe these precautions may result in unexpected injury or damage to household goods.

⚠ Be careful of warping of the door. A warped door may not function as expected.

⚠ This product should be installed according to the manual by a person with the appropriate knowledge and experience. If the product is not installed correctly, it may fail to perform as expected or cause unexpected damage or injury.

⊘ Only use the product for its intended purpose. Do not dismantle, modify, or use it on a door that is different from those specified in this manual. Sugatsune bears no responsibility for accidents or injuries resulting from use on doors that do not meet specifications.

⊘ Do not use excessive force to open or close the door. Doing so may damage it.

❶ Build a doorframe that is strong enough to support the door's weight and the stress when the door is opened and closed. A weak doorframe does not just lower the functionality of the door, it also creates a substantial risk that the door may fall off.

This manual describes what is considered the safest and most efficient method to install standard fittings.
Therefore, it is not absolutely necessary to follow this installation sequence and procedure.
Construction professionals may be able to apply their own know-how and experience when installing these fittings even though it differs from the instructions in this manual.
However, even in these cases, we recommend reading the manual before starting work.
The dimensions used in this manual do not take into account discrepancies and deformation of materials resulting from construction and assembly.
These variations must be considered during the construction process.

■ Specifications

Door thickness	Door height	Door weight (1 door)	Adjustable range door heights
Upper Rail·Single ···················· 30 mm minimum Upper Rail·Double ···················· 30~40 mm Upper Rail for cover panel use ··· 30~40 mm Upper Rail for wall mount use* ··· 30~42 mm	2400 mm max.	70 kg max.	± 4 mm vertical

* For details see the installation manual for FD-70C-OS.
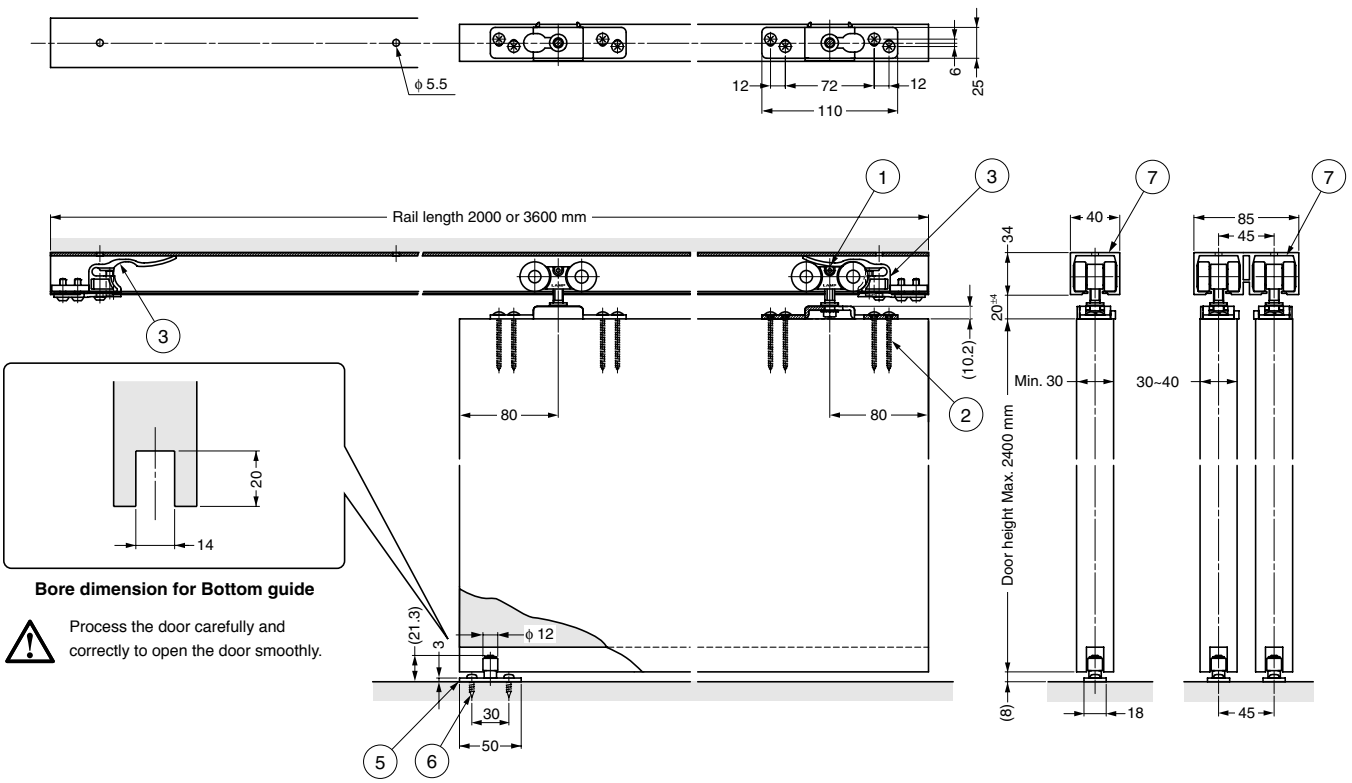
■ Parts Details for one door

Part name	①Upper roller	②Philips truss-head self-tapping screw Nominal 4 x 45 (provided with ①)	③Stopper (hex wrench included)	④Stopper for cover panel use (hex wrench included)	⑤Bottom guide	⑥Philips pan-head self-tapping screw Nominal 4.5 x 16 (provided with ⑤)
Required Quantity	2	8	2 (used with ⑦)	2 (used with ⑧)	1	2
Item No.	FD-70M-WR		FD-70-ST	FD-70C-ST	RR12	

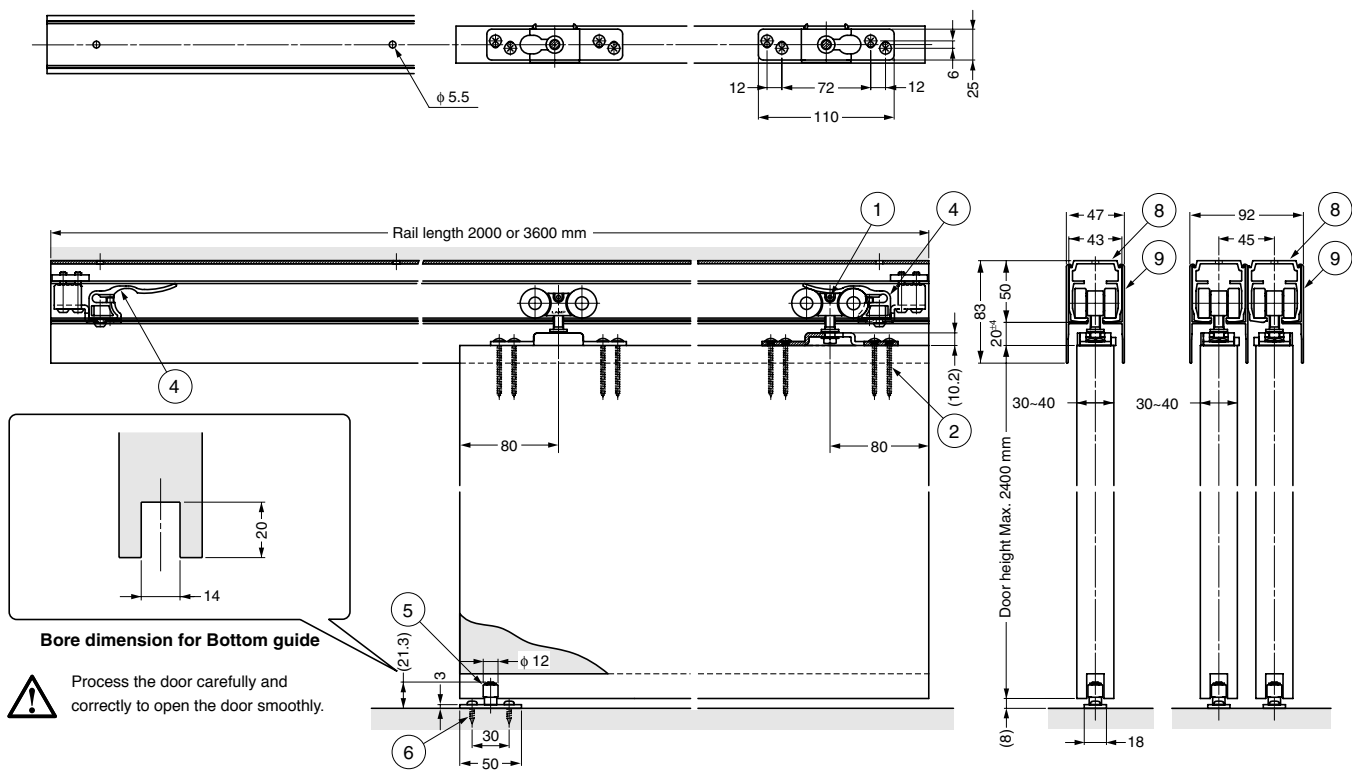| Part name	⑦Upper Rail		⑧Upper Rail cover panel use	⑨Cover panel
	Single	Double		
Required Quantity	1	1	1 (2 for double rail)	2 (3 for double rail)
Item No.	FD-70-2000SIL (2 m) or FD-70-3600SIL (3.6 m)	FD-70-W2000SIL (2 m) or FD-70-W3600SIL (3.6 m)	FD-70C-2000SIL (2 m) or FD-70C-3600SIL (3.6 m)	FD-70C-CP-2000SIL (2 m) or FD-70C-CP-3600SIL (3.6 m)

· Screws to install rails must be provided by the customer.
· N 10 mm spanner (bolt width 10 mm, thickness 6 mm) must be provided by the customer.
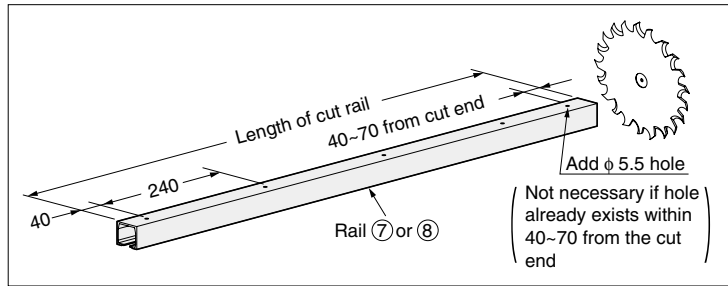
■ Measurement Example of Installation and Processing

Bore dimension for Bottom guide

⚠ Process the door carefully and correctly to open the door smoothly.

Rail length 2000 or 3600 mm

Door height Max. 2400 mm

■ Measurement Example of Installation and Processing (for cover panel use)

Bore dimension for Bottom guide

⚠ Process the door carefully and correctly to open the door smoothly.

Rail length 2000 or 3600 mm

Door height Max. 2400 mm

SUGATSUNE

· Cut rail ⑦ or ⑧ to the required length, and then drill a hole (φ 5.5) 40 mm from its end to install the rail.
· Carefully clean any chips or dust from inside the rail.

Length of cut rail
40~70 from cut end
240
40
Rail ⑦ or ⑧
Add φ 5.5 hole
Not necessary if hole already exists within 40~70 from the cut end

! Chips or dirt left inside the rail may stick to the rollers creating a rumbling noise when the door is moved. Remove any chips or dirt from inside the roller.

| Step 2 | Cutting the cover panel [Cover panel use only] |

· Cut cover panel ⑨ to the same length as the cut rail.

Length of cut rail
Cover panel ⑨
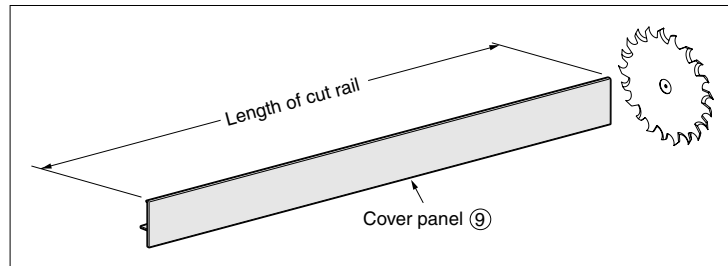
! Be careful to not deform the cover panel when cutting it. If the cover panel is deformed, it may not attach to the rail.

| Step 3 | Assembling parts and mounting the rail |

· Loosen the 2 hex button bolts on stopper with the hex wrench.
· Remove the bracket and holder from upper roller ①, and then insert upper roller ① and stopper ③ or ④ into rail ⑦ or ⑧.
· Install rail ⑦ or ⑧ to the top of the doorframe.

Stopper ③   Stopper ④   Upper Roller ①
Loosen
Hex button bolts
Hex wrench
Remove
Holder
Bracket

Upper Rail ⑦ or ⑧
(Screws must be provided by the customer)
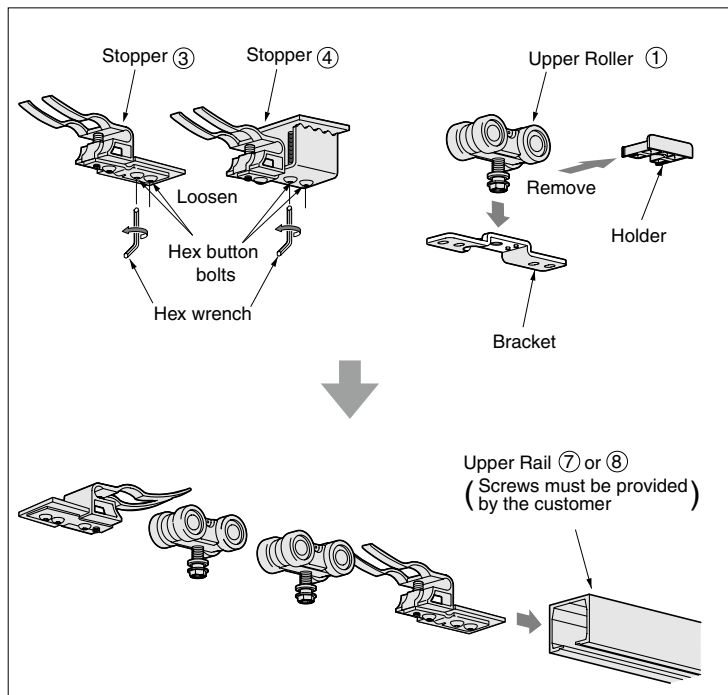
! Screws to install the rail are not provided, they must be provided by the customer.

⚠ **Check with the direction when insert the stoppers**

| Step 4 | Installing the bracket |

· Refering to the diagram below, fix the upper roller bracket using Philips truss-head self-tapping screws ②.

80   80
12 72 12
110
6
25

Philips truss-head self-tapping screw ② (nominal 4 x 45)
Outside
Outside
Bracket remained in step 3
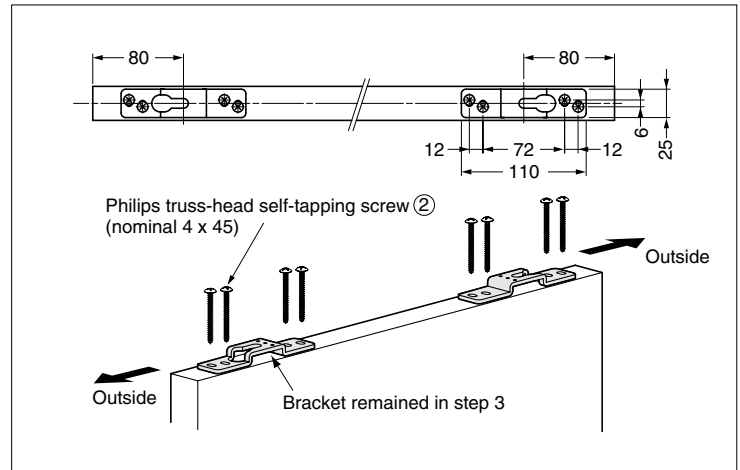
⚠ **Check with the direction when fix the bracket**
U-groove looks toward the outside.

| Step 5 | Installing the bottom guide |

· Install the bottom guide ⑤ so that it remains between the leading and trailing edges of the door when it is opened or closed.

Upper Rail ⑦ or ⑧
Upper Rail ⑦ or ⑧
Bottom guide ⑤
Philips pan-head self-tapping screws ⑥ (nominal 4.5 x 16)
Bottom guide ⑤
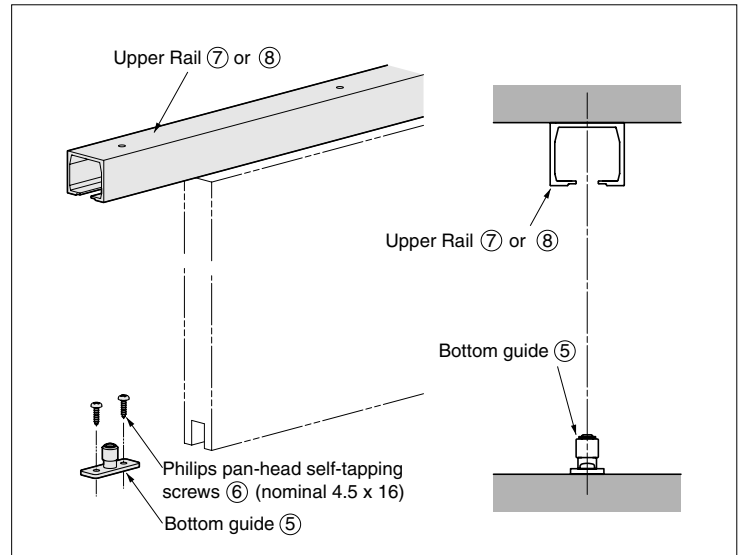
| Step 6 | Hanging the door |

· Insert the bottom guide ⑤ in the groove on the door, and then hang in bracket with the upper roller bolt ①.

Bracket
Upper roller ①
Bottom guide ⑤
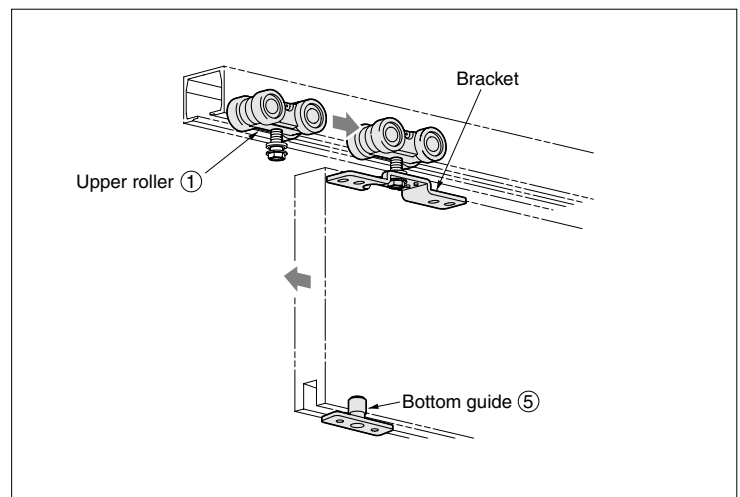
Step 7	Adjusting the door height

· Adjust the door height to turn the M8 hanger bolt using N 10 mm hex wrench so that the gap between the door and the floor is 8 mm.

Bracket

Down
Up
±4mm
Max.
M8 hanger bolt

Cross section

8
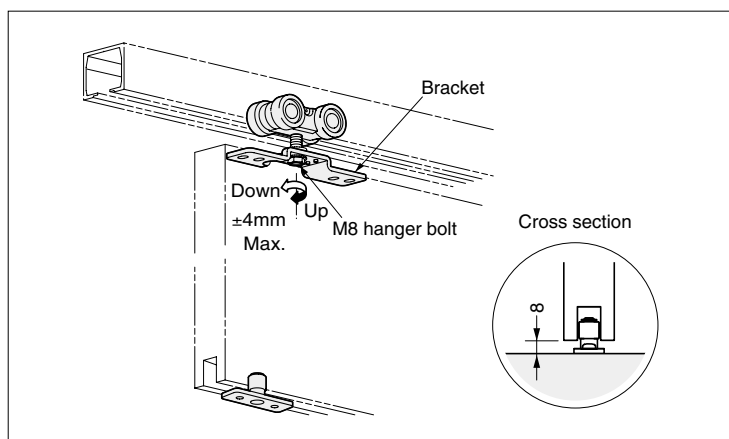
Step 8	Setting the holder

· Insert the holder completely into the bracket to fix the door and the upper roller ①.

Upper roller ①

Bracket

Holder removed in step 3
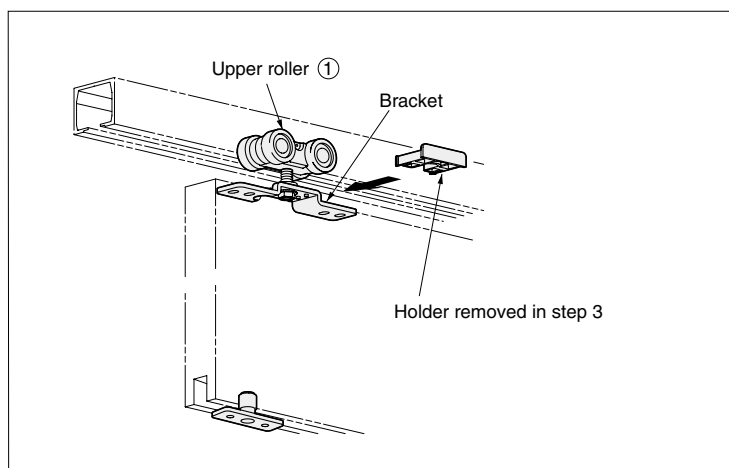
Step 9	Fixing and adjusting the stopper

· Tighten the 2 hex button bolts for stopper ③ or ④ to fix the stopper in an appropriate position.
· Adjust the hex set screw to adjust the force needed to catch the door.
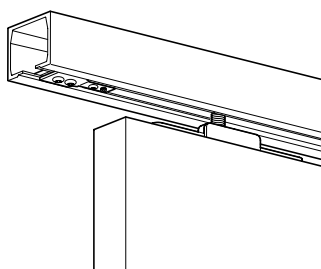· Check that the door opens, slides, and closes correctly.

Stopper ③ or ④

Tighten
Strong
Weak

Hex button bolts

Hex set screw

Hex wrench
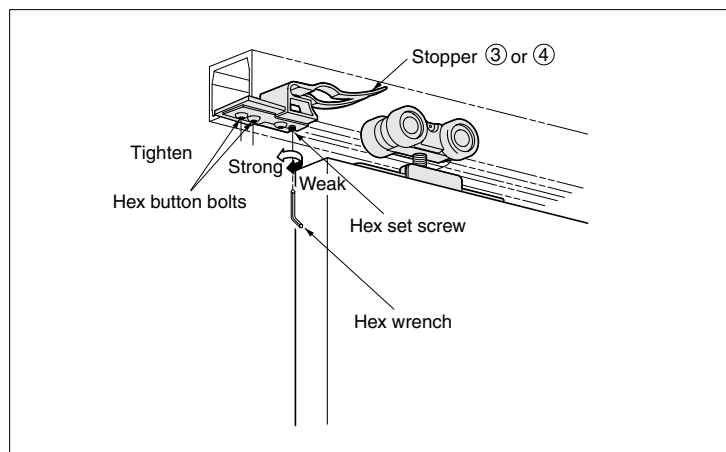
Step 10	Attaching the cover panel [Cover panel use only]

· Insert cover panel ⑨ onto cover panel use upper rail ⑧. Firstly hook the cover panel's hook on the top edge of the rail (1) and then press on the bottom edge of the cover panel to fit it (2). Align the ends of the rail and cover panel when assembling them.
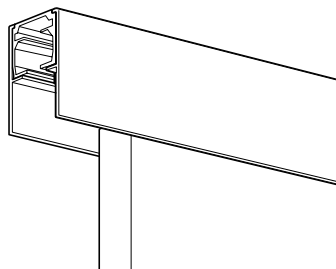
Cover panel use rail ⑧

1

Cover panel's hook

Cover panel ⑨

2
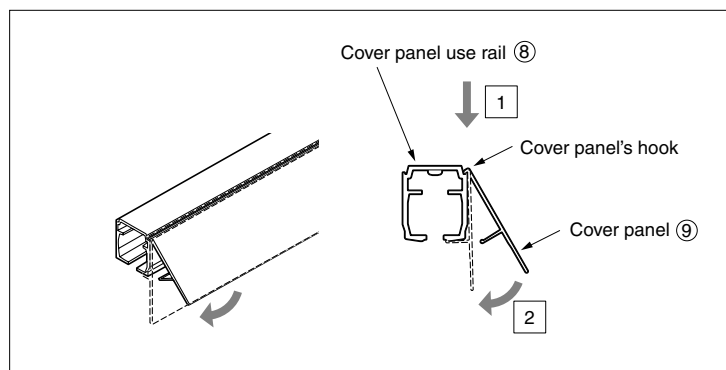
Final drawing FD-70M type

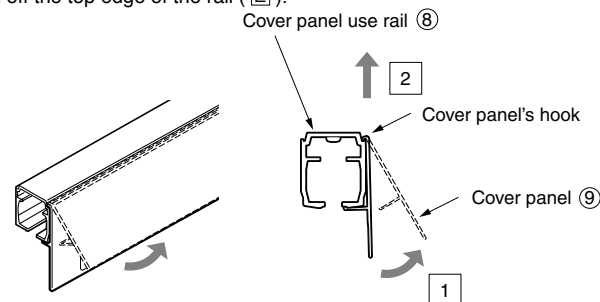■ **Standard (no cover panel)**   ■ **Cover panel use**

■ **How to remove the cover panel**

· Pull the bottom edge of the cover panel from the rail (1).
  When the bottom of the cover panel comes off, lift the cover panel's hook up and off the top edge of the rail (2).

Cover panel use rail ⑧

2

Cover panel's hook

Cover panel ⑨

1