

LAMPMonoFlat **LIN-X** hinge.
LIN-X1000Remarks on
Door Size and
Handle PositionMotion
DesignTec**Door Specification**

| | | | |
|--------|-------------|-----------|---------|
| Width | 750~1100mm | Thickness | 24~40mm |
| Height | 2400~2980mm | Weight | 20~90kg |

Remarks

- In order to avoid hinge side contact between the door and frame, please ensure that handle position, width, as well as hinge side clearance are set as shown in the table 1.
- Handle should be positioned within the range of Table 1.

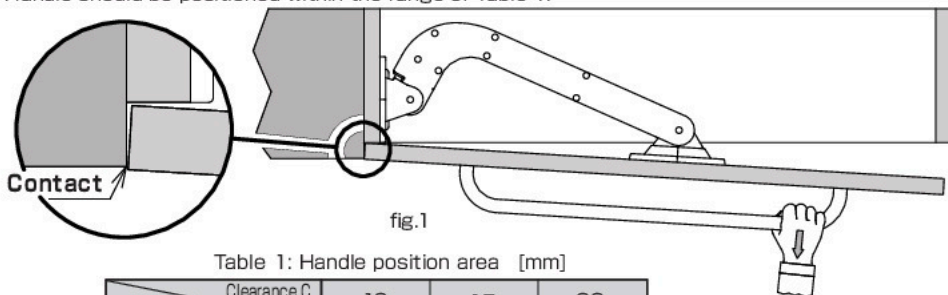


Table 1: Handle position area [mm]

| Door width | Clearance C | 10 | 15 | 20 |
|------------|-------------|----------|----------|----------|
| 750~900 | | Max. 300 | Max. 350 | Max. 500 |
| 900~1000 | | Max. 200 | Max. 250 | Max. 400 |
| 1000~1100 | | Max. 100 | Max. 150 | Max. 300 |

※Door Thickness : 40mm

※Handle position area is centred on the door width.

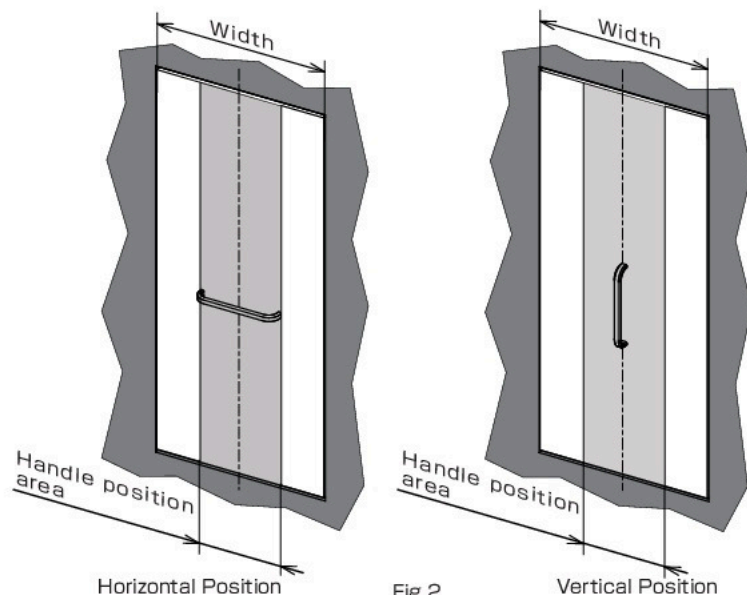


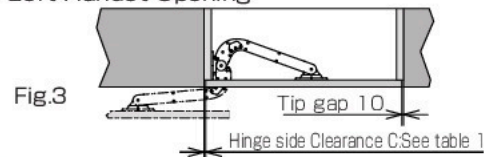
Fig.2

SUGATSUNE

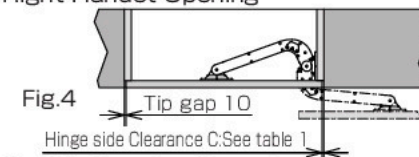
Opening Variation

Opening Variation shown below. Hinge side joint (refer to chart 1) and Tip side joint (10mm) required.

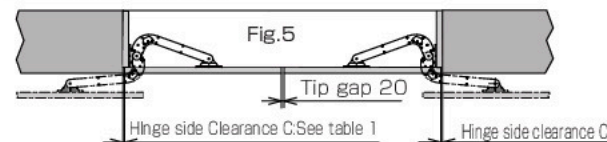
● Left Handet Opening



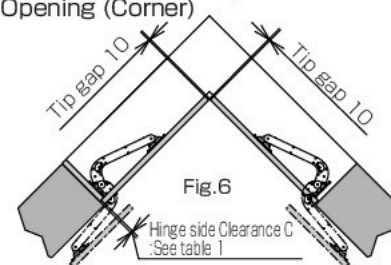
● Right Handet Opening



● Double Opening



● Double Opening (Corner)



For other cases, please contact our sales.

Frame(Box) and Door Preparation

- Frame (Box) and Door should be free from warpage and should be prepared square.
- Frame (Box) should be fixed firmly.
- The LIN-X1000 hinge is designed to support doors of up to 90kg. Ensure that the frame is sturdy enough to support the full load of the LIN-X1000 and door. Alternatively, we recommend the use of the 120mm pitch aluminum frame (sold separately) to ensure proper and safe movement.

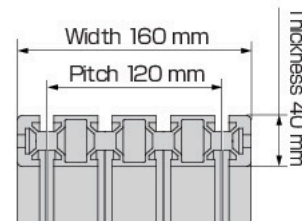
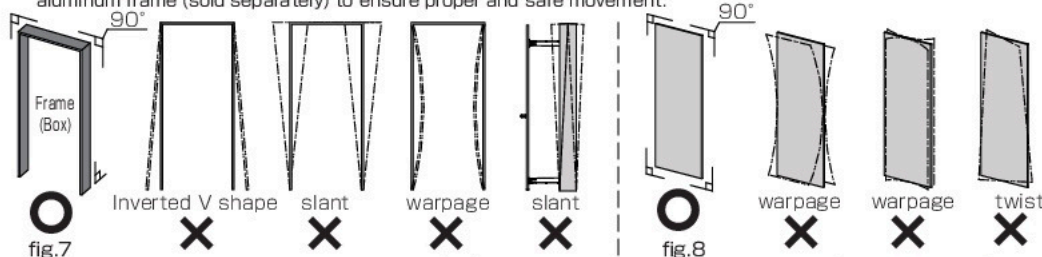


Fig.9 Aluminum frame dimensions

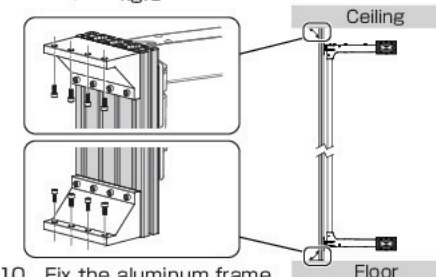
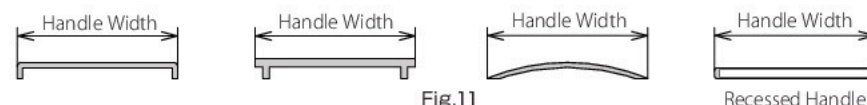


Fig.10 Fix the aluminum frame

Handle design and width condition

- In case installing the handle horizontally, refer to chart 1.



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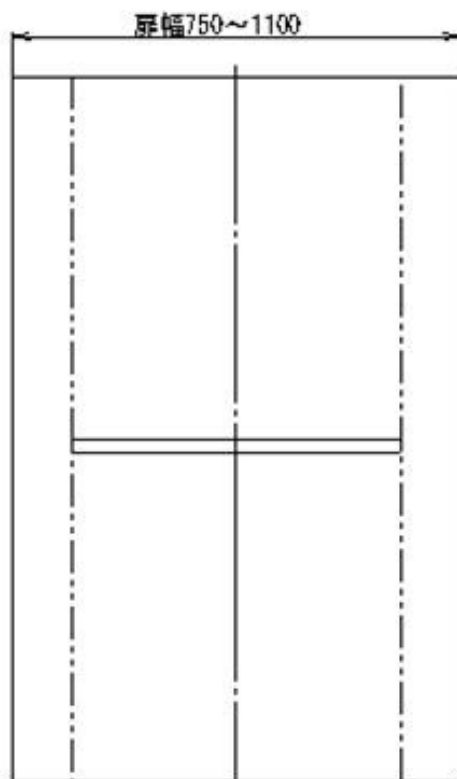
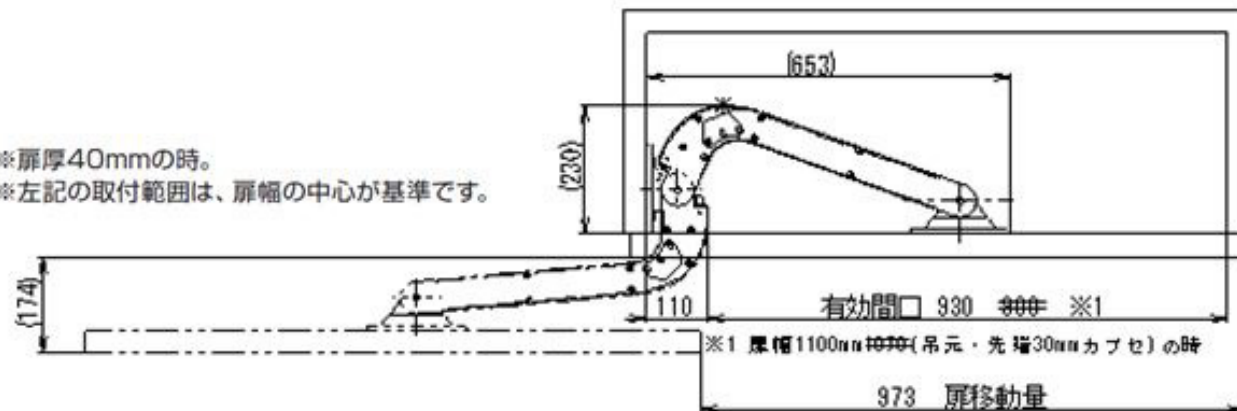
ISO9001 (Japan Offices and Sugatsune America) and ISO14001 (China Production division and Logistics center), certified.

2017.04 1118-1

表1 ハンドルの取付範囲の目安 [mm]

| 扉幅 | 吊元目地 | 10 | 15 | 20 |
|-----------|------|-------|-------|-------|
| 750～900 | | 300以下 | 350以下 | 500以下 |
| 900～1000 | | 200以下 | 250以下 | 400以下 |
| 1000～1100 | | 100以下 | 150以下 | 300以下 |

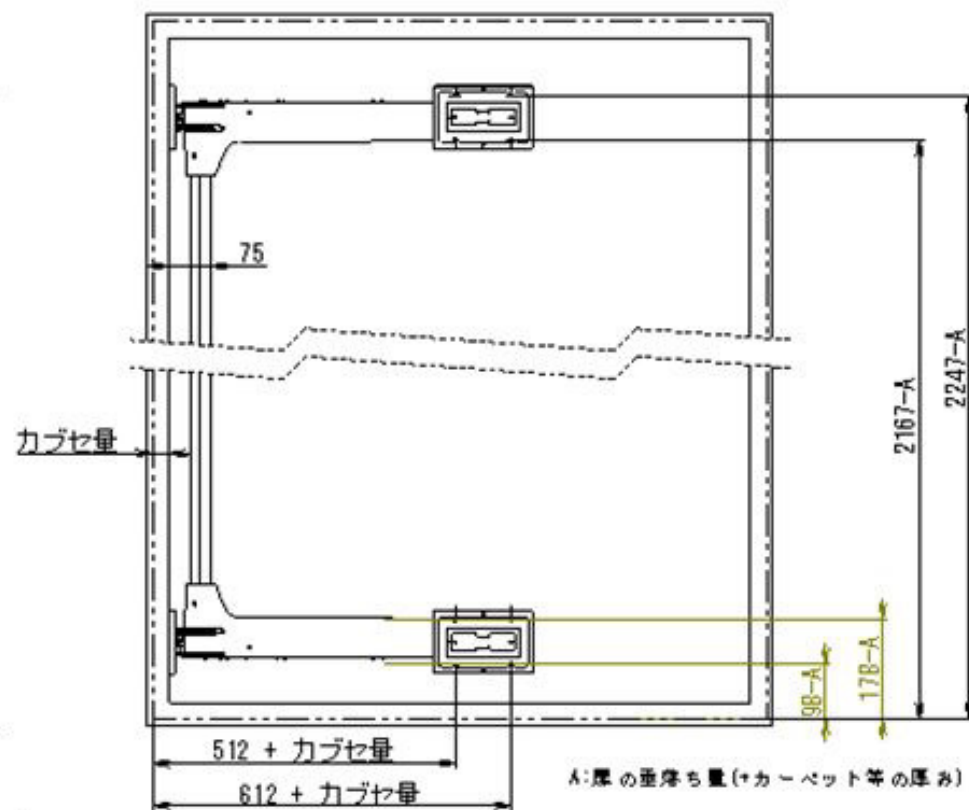
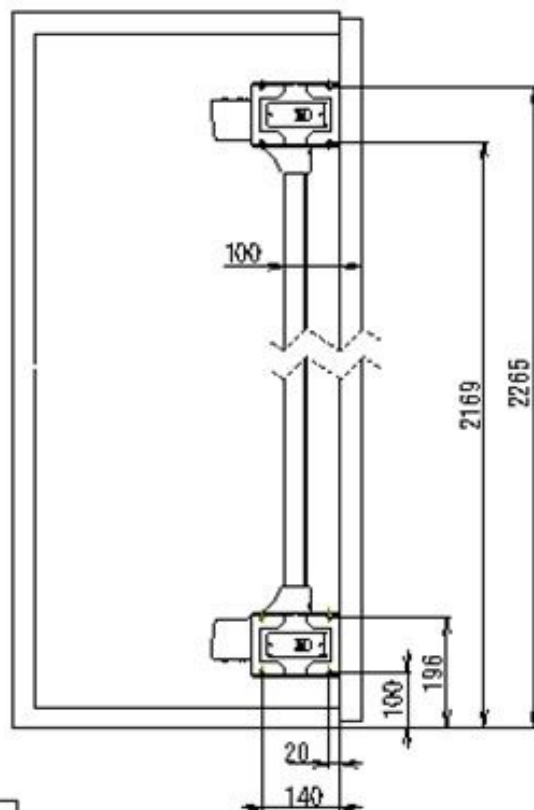
※扉厚40mmの時。
※左記の取付範囲は、扉幅の中心が基準です。



ハンドル位置 補足図

A: 扉の垂れ落ち量の目安

| 扉質量 | 扉の垂れ落ち量 | 扉質量 | 扉の垂れ落ち量 |
|------|---------|------|---------|
| 20kg | 2mm | 60kg | 8mm |
| 30kg | 3.5mm | 70kg | 9.5mm |
| 40kg | 5mm | 80kg | 11mm |
| 50kg | 6.5mm | 90kg | 12.5mm |



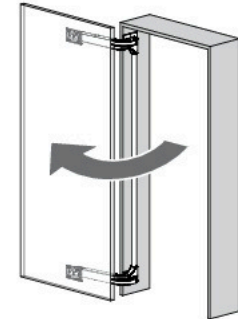
| 注文コード | 品番 |
|-------------|-----------|
| 250-034-706 | LIN-X1000 |

| | | | |
|---------------|--------------|--------------|-----|
| 作図 2016/05/26 | 環境適合: G2 | 出図区分: | 出図印 |
| 尺原 1:10 () | 単位 mm | 6桁 LIN-X1000 | |
| SUGATSUNE | 承認 | 取付図 | |
| 設計 星久木 | 図面番号 PD18526 | | |
| 作図 星久木 | | | |

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

- Can be used for both cabinet and passage doors.
- Easy installation and adjustment.
- Door will be flush with surrounding walls.
- There is no need of embedding a rail on the floor.



FOR YOUR SAFE WORK AND CORRECT INSTALLATION

⊘ This symbol denotes prohibited actions.

ⓘ This symbol denotes what must be done.

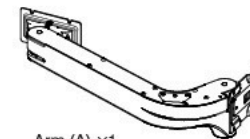
⚠ WARNING: If these warnings are not followed, it may result in death or serious injury.

- ⓘ This (lateral swing 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 endures the weight of the 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, 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 specifications.
- ⊘ Do not disassemble nor modify any parts than those described in this document.
- ⊘ Arms are only designed to hold the door. Do not sit on them or hang anything else than the door.
- ⊘ Do not use excessive force to further open the completely opened door or open/close the door as this could result in malfunction.

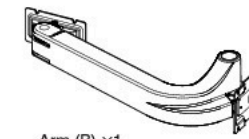
⚠ Caution: If these cautions are not followed, it may result in injury or damage.

- ⓘ This lateral swing door system is a part for furniture or 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 and specifications as well as horizontal and vertical angles. Make sure that the frame is not warped, since it may affect the movement of the door.
- ⓘ The company is conducting strict checks on the products. However, if any defects are found on the product, contact the retailer.
- ⓘ When cleaning heavy soiling, wipe off with neutral detergent diluted with water.
- ⓘ Make sure to test the screws for slack at regular intervals (one month from first usage, half year and then one time every year is recommended).

COMPONENT PARTS



Arm (A) ×1



Arm (B) ×1



Cover for Mounting Plate ×4
(Door Side)



Cover for Mounting Plate ×4
(Hinge Side)



Connecting Bar ×1 (Packed separately.)



Truss head tapping screw 6×25 ×16

■ Tools needed for assembly (Please prepare * when in installing on aluminum frame.)

• Screwdriver(+) No.3 • Screwdriver(+) No.2 • Hex key 4mm * Aluminum frame 40×160

* Screw (M6×12) & Nut × 8 set * Aluminum frame fixing angle, including fixing screws and nuts. * Hex key 5mm

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SPECIFICATIONS

| | | | |
|--------------------|------------------|----------------|----------------|
| Door Width | 750 ~ 1070 mm *1 | Door Thickness | 24 ~ 40 mm |
| Door Height | Max.2980 mm | Door Weight | Max.90 kg/Door |
| Temperature of use | 0 ~ 40 °C | | |

*1 Dimensions for a full opening of the cabinet.

① Handle should be installed within the range below.

Table 1: Handle position area [mm]

| Door width | Clearance C | 10 | 15 | 20 |
|-------------|-------------|----------|----------|----------|
| 750 ~ 900 | | Max. 300 | Max. 350 | Max. 500 |
| 900 ~ 1000 | | Max. 200 | Max. 250 | Max. 400 |
| 1000 ~ 1100 | | Max. 100 | Max. 150 | Max. 300 |

※Door Thickness : 40mm

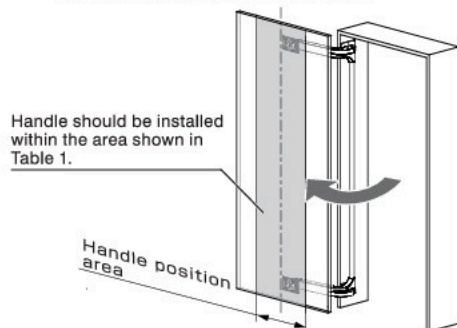
※Handle position area is centred on the door width.

● For wood frame installation,
please refer to **1 ~ 8**.

● For aluminum frame installation,
please refer to **1 ~ 2** and **9 ~ 13**.

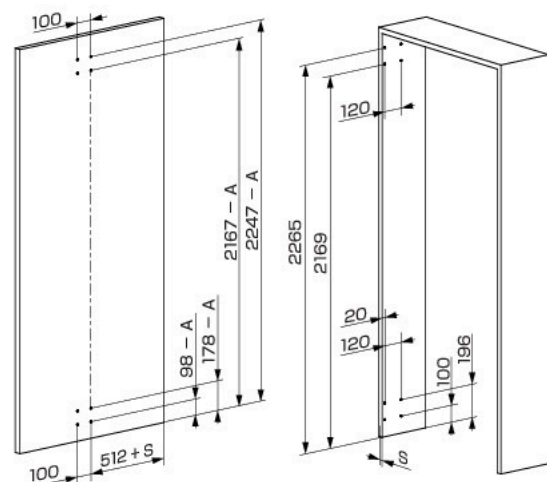
1 Hole drilling

Please refer to the cut out dimensions shown on the right or the template of P.7.



This drawing shows the left handed opening type.
Installation for right handed opening is symmetrically opposite.

For the installation on the aluminum side frame,
please refer only to the door side.



A: adjustment factor (refer to the table below)

S: door overlay

*The drawing below takes into consideration a 10mm clearance between the floor and the door.

① The table below shows the adjustment factor A depending on the door weight. Ensure that you adjust according to your door weight.

| Door weight | Adjustment factor A | Door weight | Adjustment factor A | Door weight | Adjustment factor A |
|-------------|---------------------|-------------|---------------------|-------------|---------------------|
| 20 kg | 2 mm | 50 kg | 6.5 mm | 80 kg | 11 mm |
| 30 kg | 3.5 mm | 60 kg | 8 mm | 90 kg | 12.5 mm |
| 40 kg | 5 mm | 70 kg | 9.5 mm | | |

• If you use a thick carpet, ensure that there is enough clearance for free movement of the door.

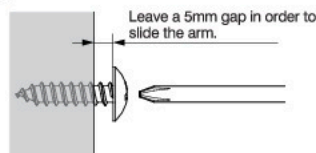
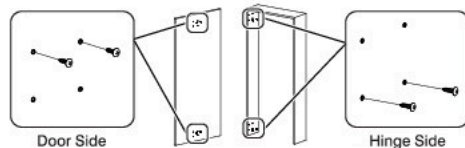
• A ±7mm height adjustment is possible after installation.
Please refer to P.4 2.

2 Pre-installation

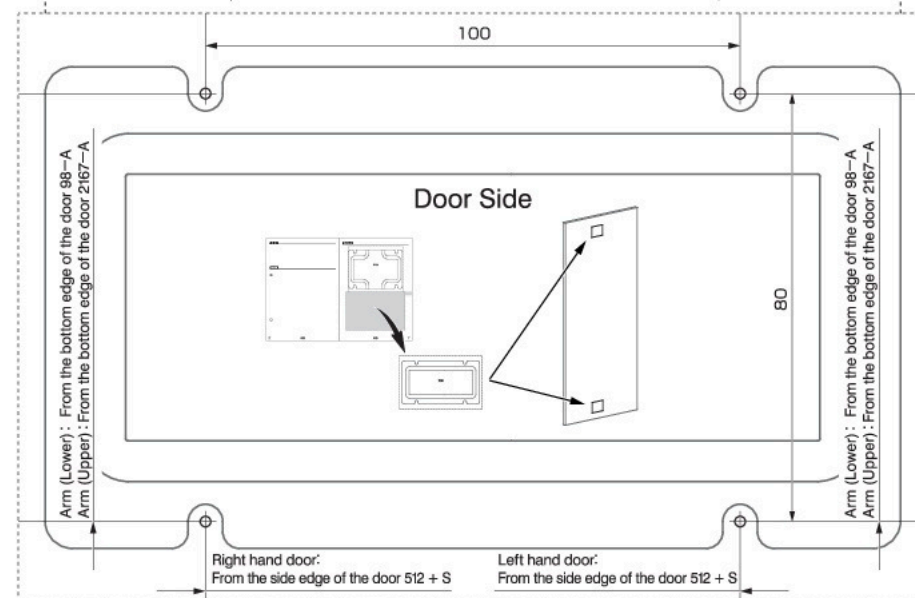
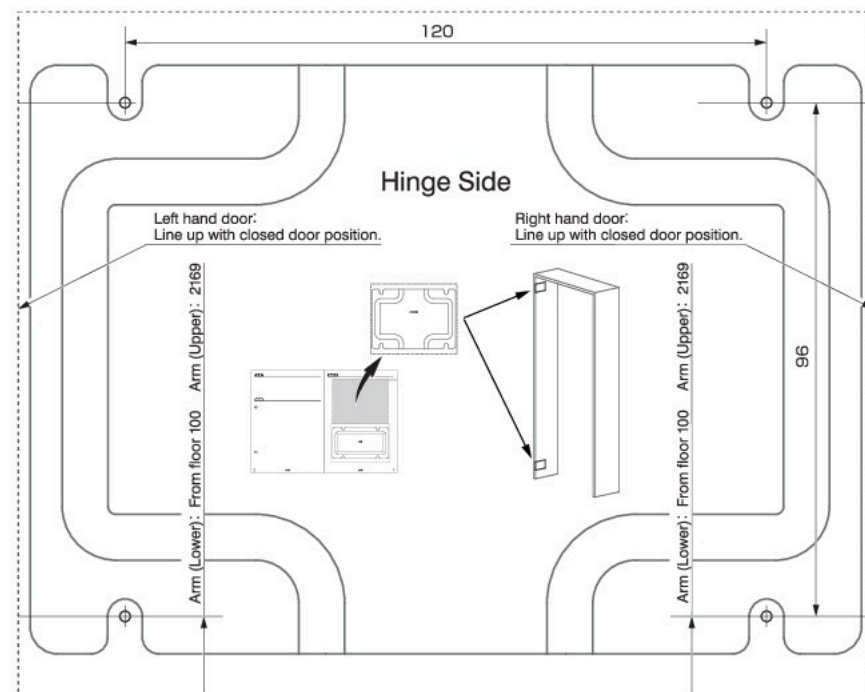
Pre-fix the 4 lower screws (2 for top and 2 for bottom arm) on the hinge side, and 4 upper screws on the door side,

using the truss tapping 6x25 screws provided.

* For the installation on the aluminum side board, please refer only to the door side.



TEMPLATE

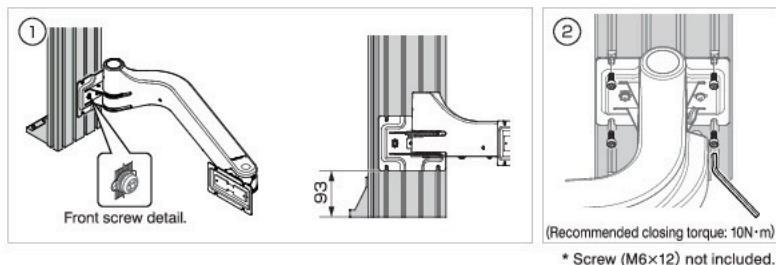
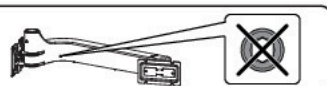


10 MOUNTING ARM (LOWER)

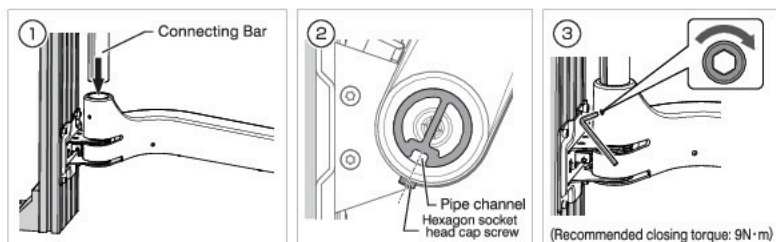


Caution

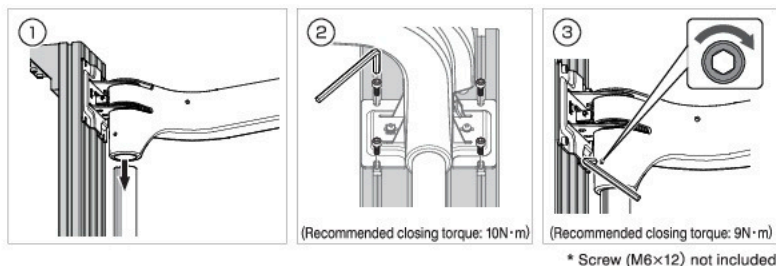
Do not loosen or fasten the screw with hex-hole on the arm.



11 INSTALLATION OF CONNECTING BAR



12 MOUNTING ARM (UPPER)

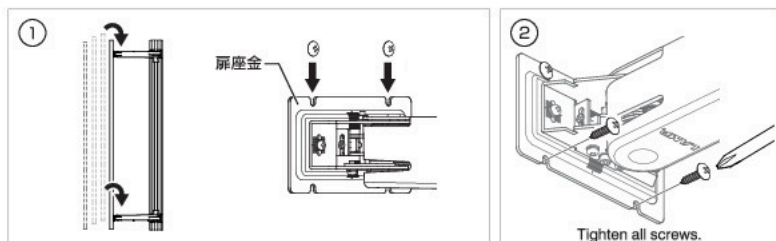


13 INSTALLING DOOR



WARNING

We recommend that 2 people install the door in order to reduce risks of injury and damage to the door.



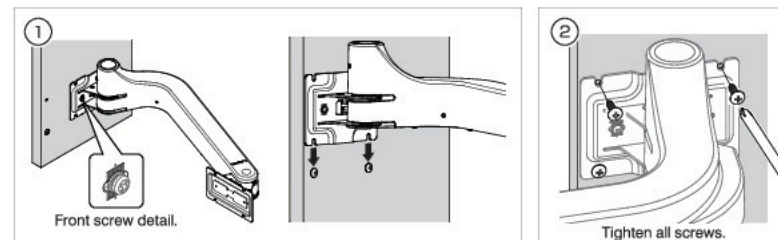
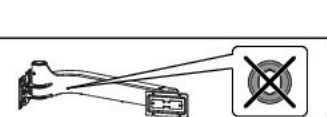
● For the adjustment and installation of the cover, please refer to **7** and **8**.

3 MOUNTING ARM (LOWER)

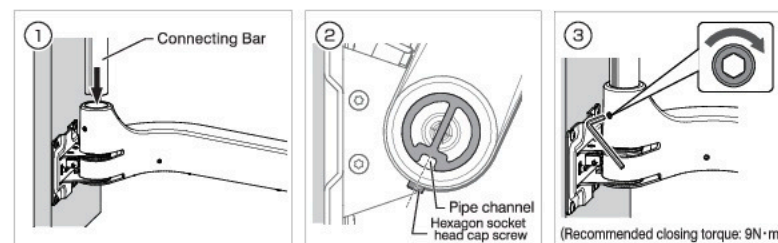


Caution

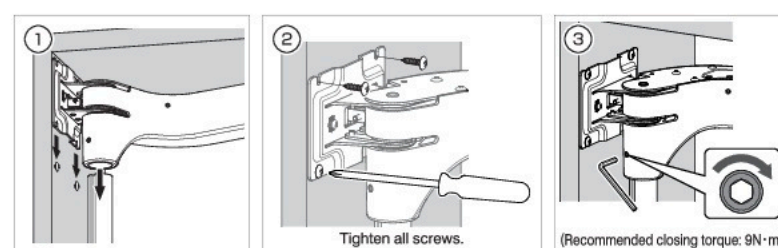
Do not loosen or fasten the screw with hex-hole on the arm.



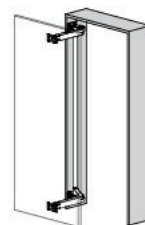
4 INSTALLATION OF CONNECTING BAR



5 MOUNTING ARM (UPPER)

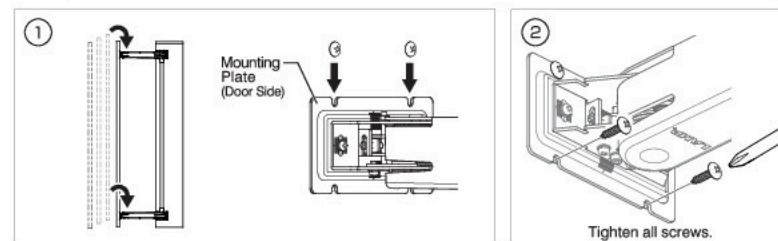


6 INSTALLING DOOR



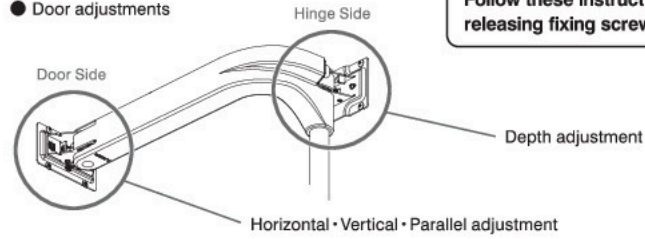
WARNING

We recommend that 2 people install the door in order to reduce risks of injury and damage to the door.



7 ADJUSTMENTS

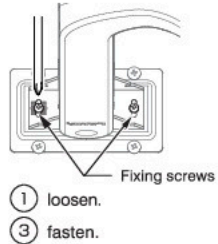
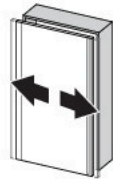
● Door adjustments



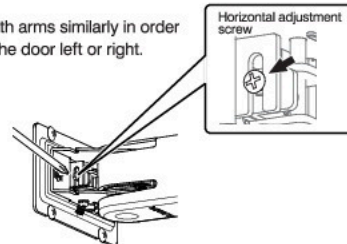
⚠ Caution

Follow these instructions carefully as trying to adjust without releasing fixing screws first might damage the product.

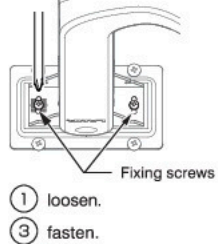
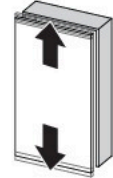
Horizontal adjustment ±7 [mm]



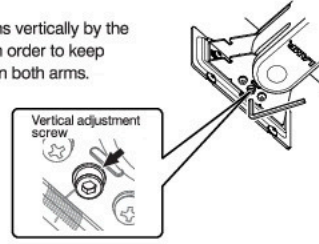
② Adjust both arms similarly in order to move the door left or right.



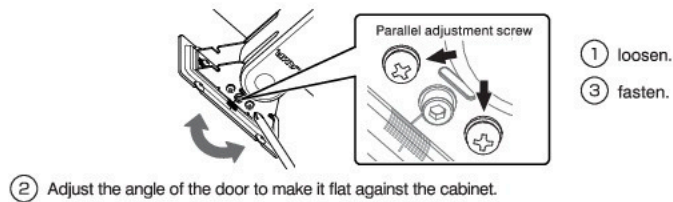
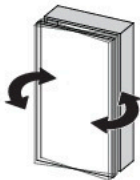
Vertical adjustment ±7 [mm]



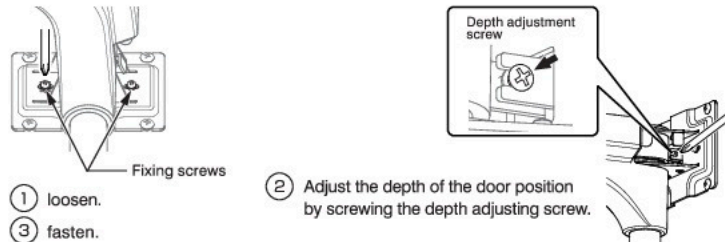
② Adjust both arms vertically by the same amount in order to keep the load even on both arms.



Parallel adjustment ±3 [°]



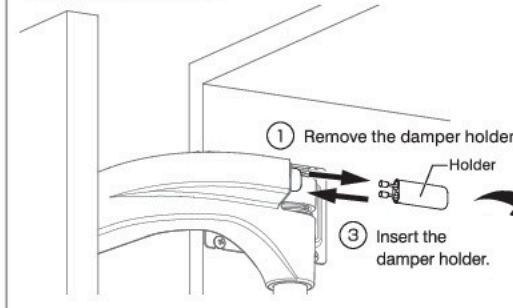
Depth adjustment ±5 [mm]



(Recommended closing torque: 2 N • m)

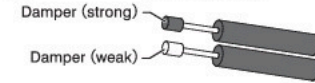
● Setting of Damper Force (Adjust the door closing speed)

Changing the dampers



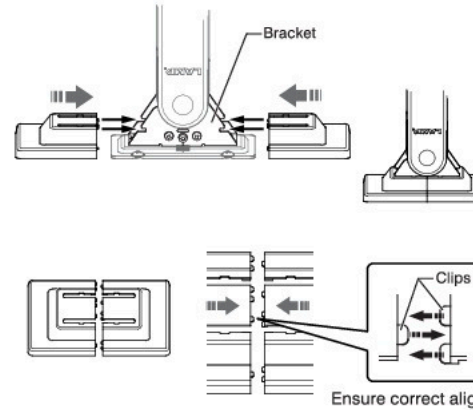
| Holder | Damper | Damper Force | | | | |
|------------|--------|--------------|---|---|---|---|
| | | Default | 4 | 3 | 2 | 1 |
| Arm(Upper) | strong | ● | ● | ● | ● | ● |
| | weak | ● | ● | ● | ● | ● |
| Arm(Lower) | strong | ● | ● | ● | ● | ● |
| | weak | ● | ● | ● | ● | ● |

② Select the dampers as per your application.
* Ensure that the dampers are inserted in the direction shown on the left.

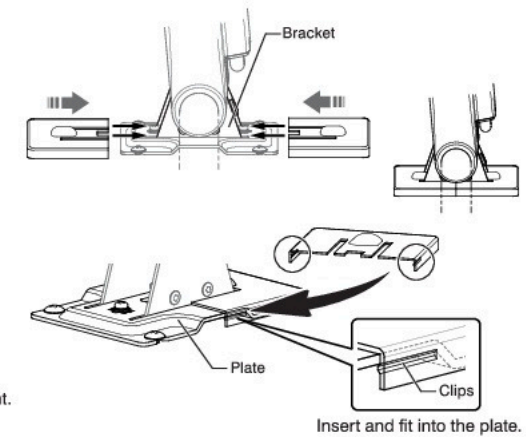


8 INSTALL THE COVER FOR MOUNTING PLATE

Cover for Mounting Plate (Door Side)



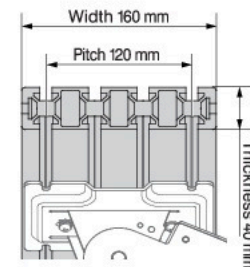
Cover for Mounting Plate (Hinge Side)



ALUMINUM FRAME SIDE BOARD

9 INSTALL ON THE ALUMINUM FRAME

Aluminum Frame Dimensions



Fix the aluminum frame

