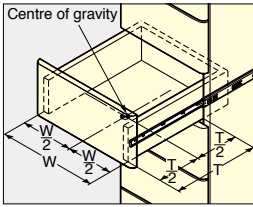


## Cautions for Slide Selection and Installation



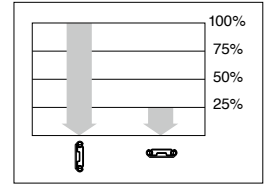
Calculation of slide centre of gravity

The load capacity is determined with the drawer centre of gravity at the centre of travel length and width in the lateral direction. (Refer to left figure). Conditions are set to slide installation width 300mm, about 10 times of withdrawal per month, static load, and the slide is securely fixed to the cabinet and drawer and installed vertically.

### ※Load capacity change by installation method

Load capacity changes greatly with slide not installed vertically.

For example, the load capacity with slide installed horizontally may be less than 25% of that listed in this catalogue.



### [Cautions for Slide Selection]

Slide performance varies depending on its use condition. The durability and load capacity of slide varies greatly depending on cabinet dimensions and centre-of-gravity position, frequency of use, slide installation method, cabinet installation place, etc.

#### ● Slide selection reference

Application examples

※The slide must be installed properly.

Load: 588N (60kgf)

Frequency: 1 time / 3 months

Installation place: Laboratory, computer room

Load: 196N (20kgf)

Frequency: 10 times / day

Installation place: Office

Load: 588N (60kgf)

Frequency: 1 time / day

Installation place: Special places

**Recommended slide: Models with load capacity of 588N (60kgf)**

**Recommended slide: Models with load capacity of 588N (60kgf)**

**Recommended slide: Models with load capacity of 1176-1960N (120-200kgf)**

● Do not change the combination of inner member and outer member.

### [Temperature Range]

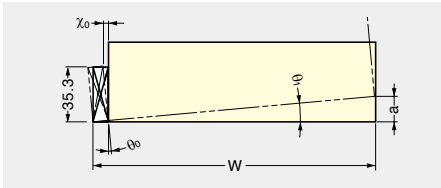
5°C~35°C

## Cautions for Slide Installation

※Various kinds of the parts are made of roll-formed metal sheet which may present sharp edges. Please be careful when to install.

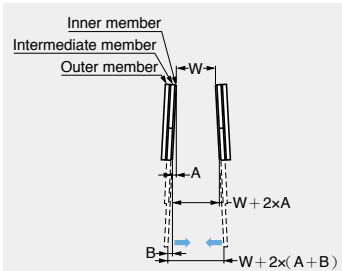
### [Installation Parallelism]

1. Front



Although it depends on the parallelism ( $\theta_0$ ), even if the angle is small, the wider the front width (W), the greater the value of a. Large front width and inconsistent parallelism of left and right slides may cause lateral swing. So please minimise the parallelism.

2. Front / Rear



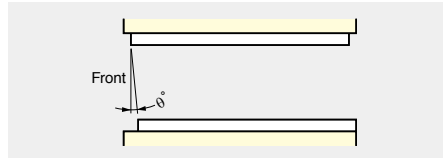
When the rear side is narrowly [widely] installed

When the slide is fully closed, the installation width difference between the front and rear sides is A for single side. When the slide is fully opened, it becomes A+B. The installation width difference between the rear side when fully closed and the front side when fully opened is  $2 \times (A+B)$ . Even if the parallelism deviation is very small, the installation width difference when fully opened becomes larger with the increase of travel length. This difference may cause a force pulling to the inside [outside] on the slide. As the force increases, the ball sliding surface may sag and the strength may be decreased. Also, the slide may not move smoothly. Therefore, please minimise the value of A while considering the installation-side accuracy and installation method (refer to <Installation Example>).

※Allowable range of A: Varies depending on the slide length, travel length, model, and slide use conditions, etc.

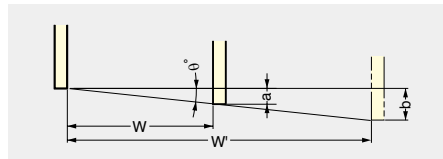
Refer to : P.400

### [Installation Perpendicularity]



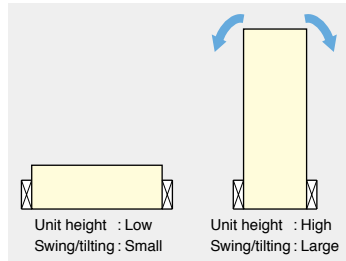
Please minimise the perpendicularity ( $\theta^\circ$ ) to reduce the occurrence of and lateral swing.

### [Installation Width]



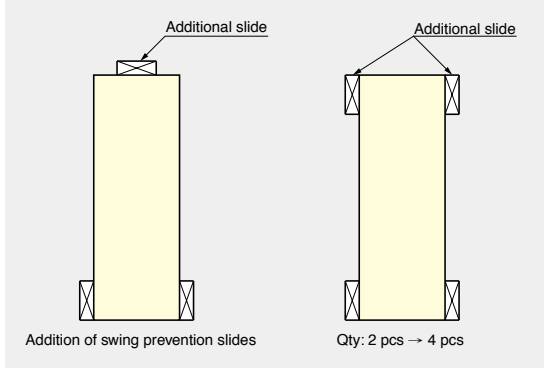
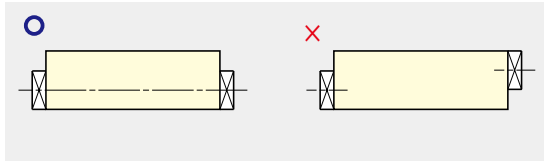
When the slide installation width is large, even if the swing factor of slide is small, the swing becomes strong as the width increases. Also, depending on the handle position and shape, swing may be caused by unstable opening/closing operation of drawer (opening/closing operation is not performed at the centre of the front plate).

### [Drawer Unit Height]



If the drawer unit is high, depending on the installation position, the swing (tilting) of the drawer unit may apply large load to the slide, causing deflection or damage.

**[Installation Position of Left and Right Slides with Respect to Drawer Unit]**

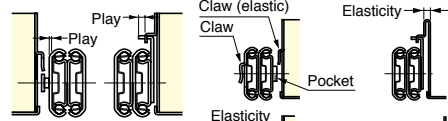


Therefore, please consider model selection, installation position, number of used slides (adding slides for preventing swing) and other conditions such as load. Refer to <Installation Example>

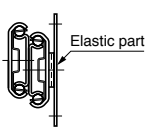
The allowable swing and tolerance may be larger for more flexible slide installation part. For increasing the allowance, please devise the installation method carefully.

**<Installation Example>**

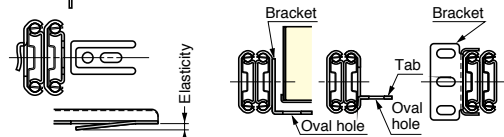
1. Give a play between the slide and the installation part.
3. Make the installation part elastic.



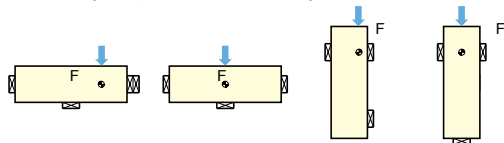
2. Make the slide elastic.



4. Use bracket and tab to make oval mounting hole.



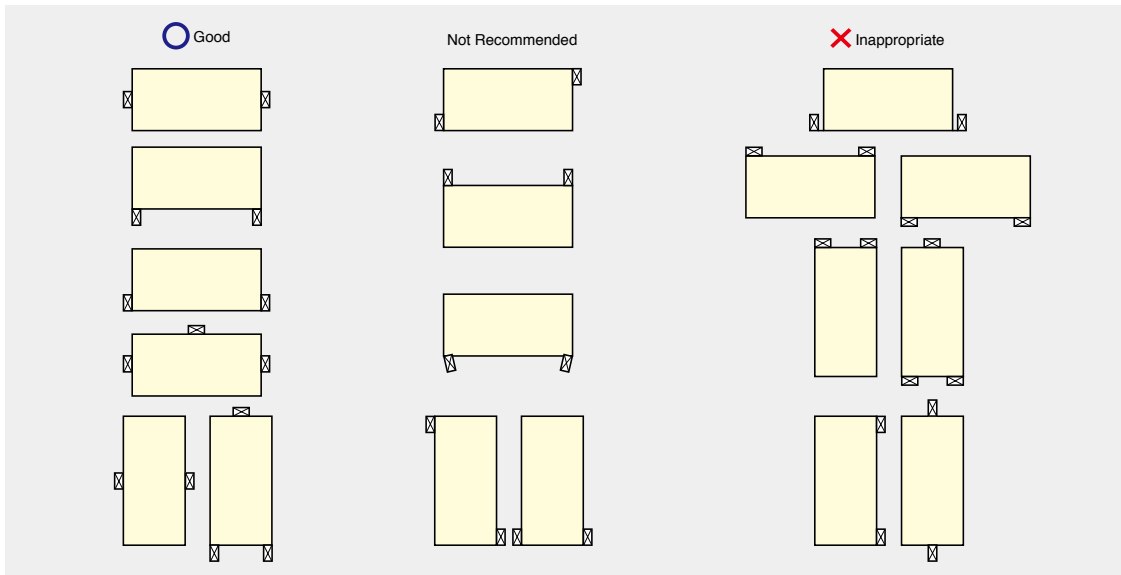
5. Determine the number and models of slides depending on the load, centre-of-gravity position, drawer size (height, front width), etc.



Load: Heavy	Load: Heavy	Load: Heavy	Load: Heavy
Centre of gravity: Eccentric	Centre of gravity: Centre	Centre of gravity: Eccentric	Centre of gravity: Centre
Front width: Wide	Front width: Wide	Drawer: High	Drawer: High

**[Installation of Drawer Slides]**

There are following possible installation methods, which may be good, not recommended or inappropriate. The most important thing for slide installation is to install the slides in parallel.



**※What is ball creep?**

Sometimes the slide can only move within a range less than the travel length. This is called ball creep. Ball creep is likely to occur when slides are not installed in parallel, when not using all the travel length, when not moving smoothly, or when sliding up and down, etc.

Ball creep may be corrected by forcibly opening the slide fully. At this time, please pull it out slowly. Fast opening or strong shock may cause damage.