


Basic installation method of each part/section

■ Foundation

Basic fitting

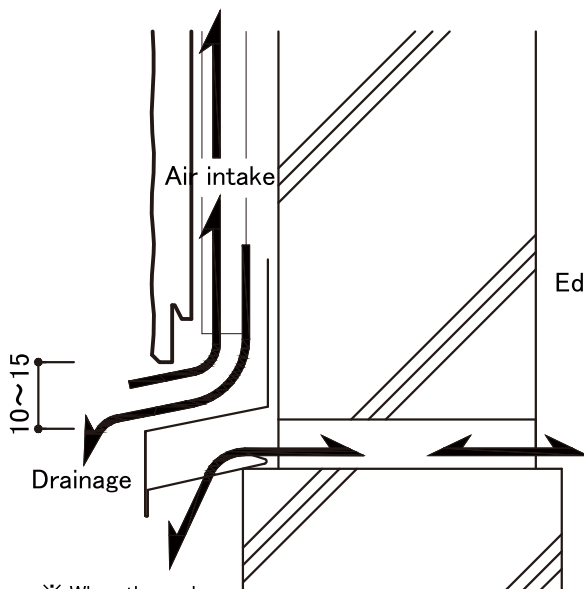
For the foundation, install the siding so that the "intake" function on the exterior wall ventilation method and the "drain" function such as invaded water and condensation water can be exerted.

- Be sure to secure a space of 10 to 15 mm between the siding bottom and the foundation flashing, and do not block it by sealing, etc.
- Be sure to install the foundation flashing horizontally in order to prevent failures including the siding joint gap.
- When the lowest level is a surface edge, such as in case of vertical installation, apply the repair paint on it in order to prevent failures by the absorption from the siding bottom.

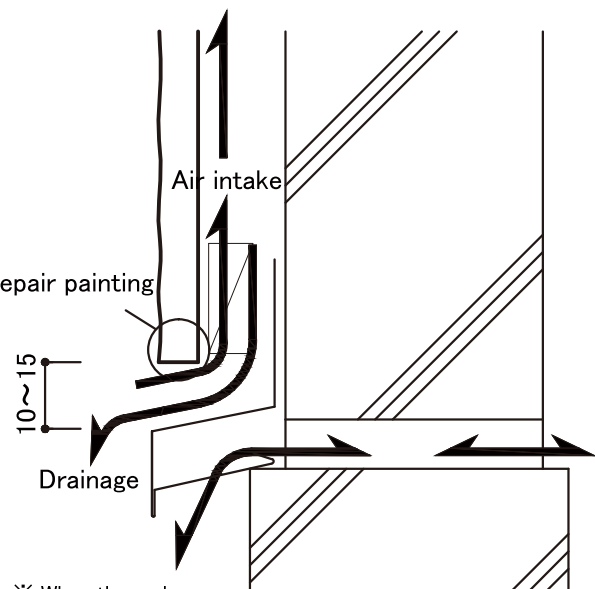
Caution
 Do not block the space between the siding bottom and the foundation flashing. Ventilation and drainage cannot be done.

Exterior wall ventilation

Exterior wall ventilation



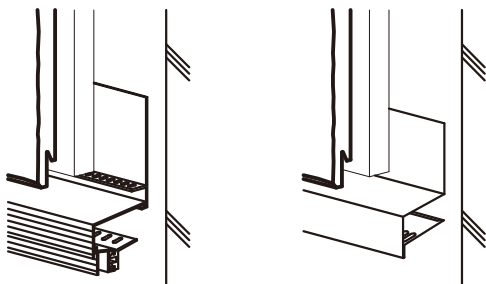
Horizontal installation



Vertical installation

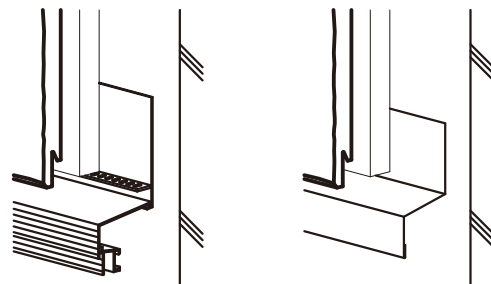
Type of flashing materials

Flashing (with rodent resistant)



Aluminum flashing with slit and insects resistant Flashing with slit (rodent resistant type)

Flashing (without insects resistant)



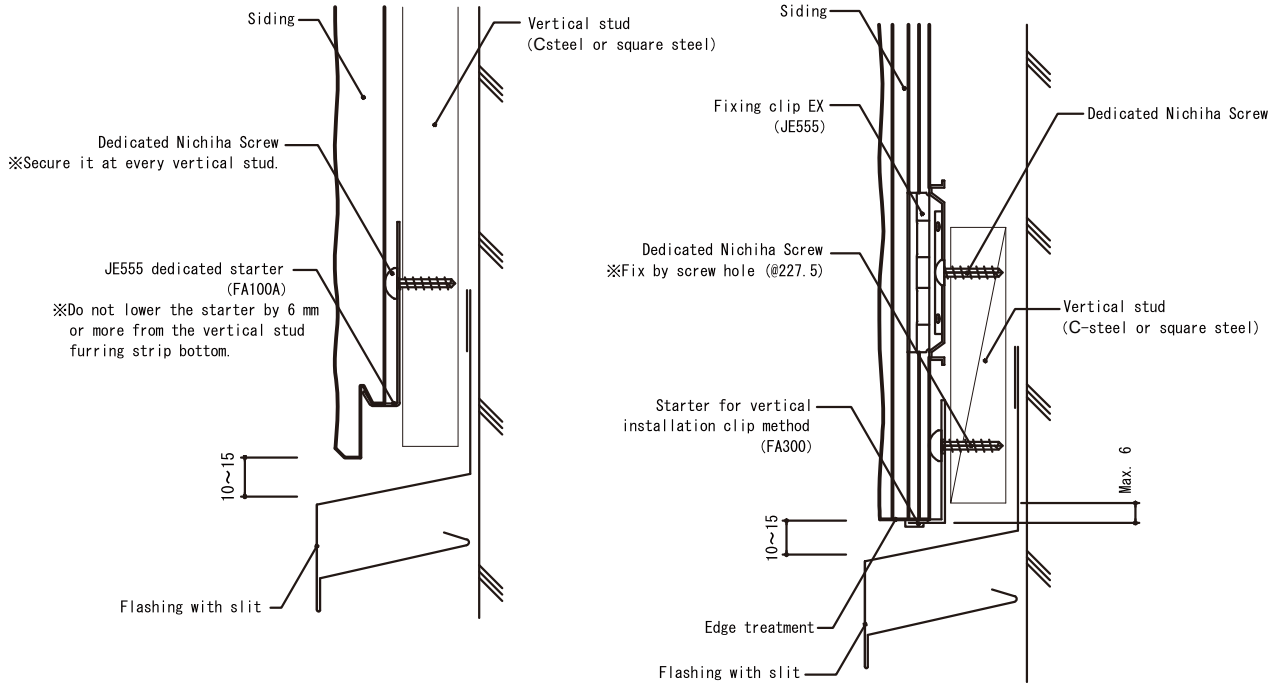
Aluminum flashing with slit Flashing with slit

Basic fitting drawing of each part

■ Foundation

Fixing of the starter

- Pay attention to the level when fastening the starter. Fix the starter with a Nichiha Screw.
- ※ Fix the starter with a Nichiha Screw as the standard method. Do not fix with a nail.
(The board may drop off.)
- For the interval when fixing the starter, refer to the following.

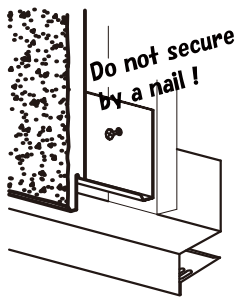


<Horizontal installation: Clip fixing work>

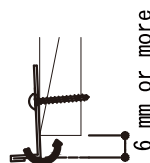
<Vertical installation: Clip fixing work>



- When FA100A and FA100B are secured by a nail, the board may drop off.
- When FA800 and FA800A are secured by a countersunk screw or a nail, the board may drop off.



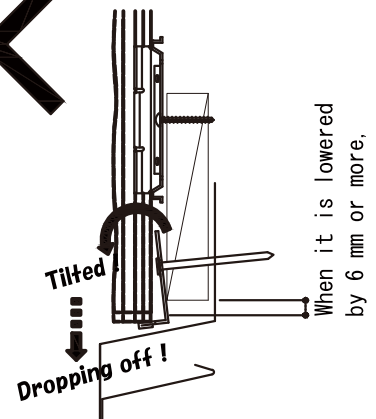
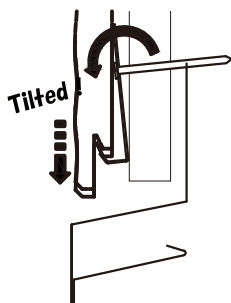
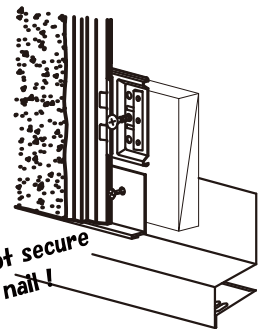
- When FA300 is secured by a nail, the board may be drop off. When it is lowered by 6 mm or more from the horizontal furring strip bottom, the starter itself tilts and the board may drop off.



- ※ When it is lowered by 6 mm or more even if it's secured by the dedicated Nichiha Screw, it may tilt.



Do not secure by a nail!



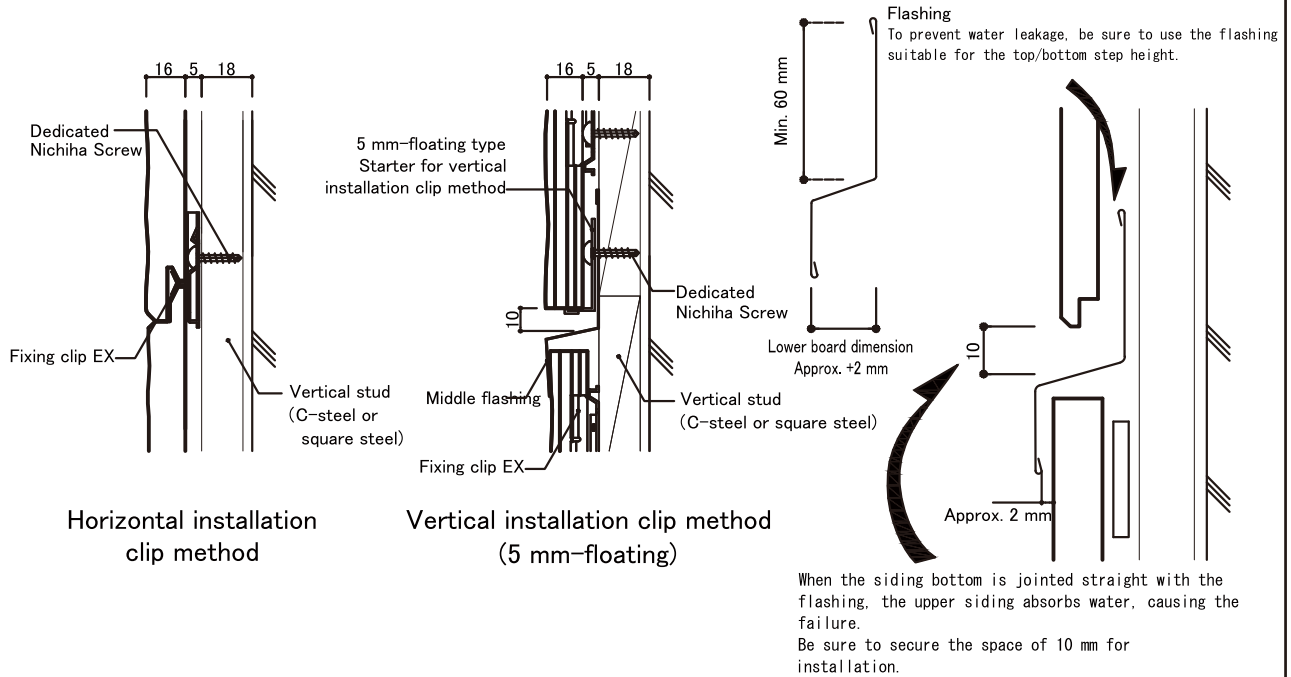
When it is lowered by 6 mm or more,

Basic fitting drawing of each part

■ Top/bottom joint

Basic installation method when the thickness is different between top and bottom

- For the horizontal installation, the ship-lapped joint is the standard; for the vertical installation, the flashing specification is the standard.
- For the joint section whose siding thickness is different between top and bottom, do not implement the sealing joint. Be sure to implement the flashing specification.
- Based on the siding thickness and the method on the lower course, select the flashing.



Horizontal installation clip method

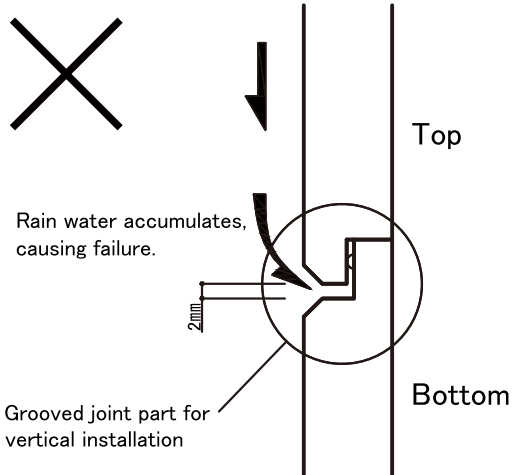
Vertical installation clip method (5 mm-floating)



Do not perform the following installation.

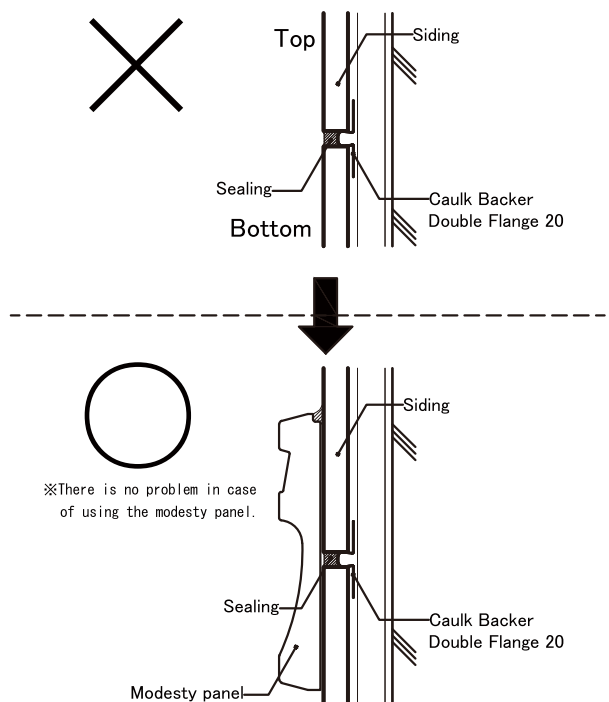
Horizontal installation for exclusive vertical installation use

The ship-lapped joint part for vertical installation use has the space of 2 mm so that rain water can flow to top/bottom sides. When it is used for horizontal purpose, rain water accumulates to the ship-lapped joint parts, causing failure.



Horizontal sealing joint

Only the horizontal sealing joint may cause water leakage by joint crack.



Basic fitting drawing of each part

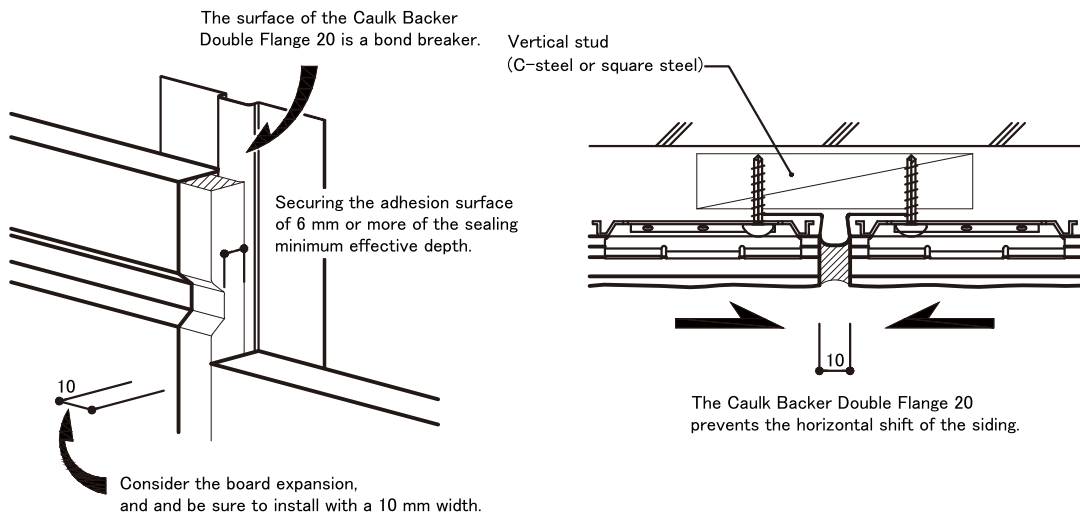
Right/left joint

Basic fitting

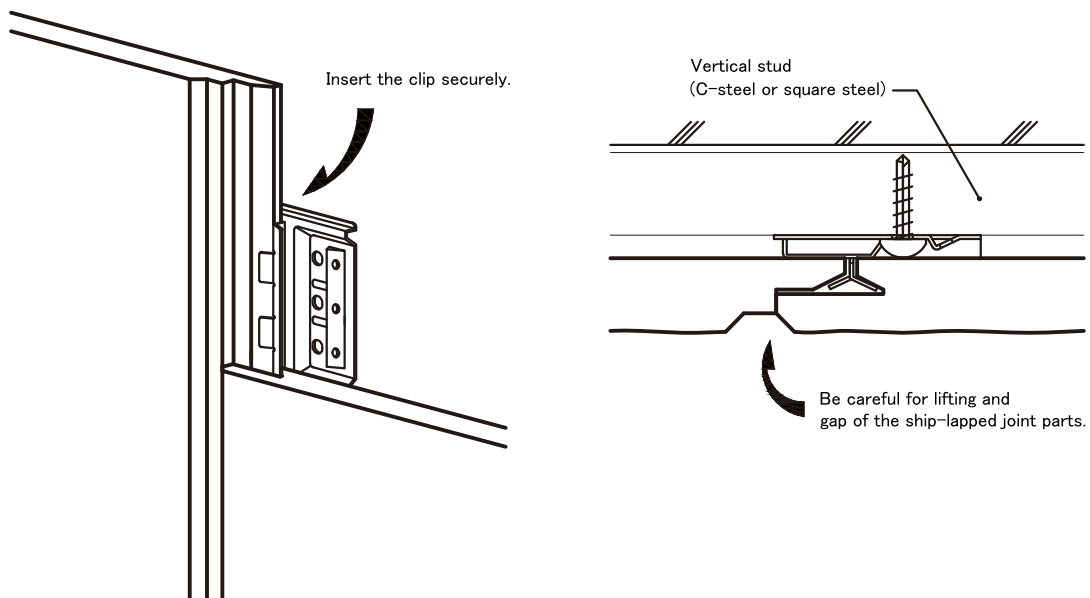
For the horizontal installation, the sealing joint is the standard, for the vertical installation, the ship-lapped joint is the standard.

- Secure the Caulk Backer Double Flange 20 using a Nichiha Screw at every interval of 1 m or less.
- Use the dedicated Caulk Backer Double Flange 20 for right/left joint, and perform the installation so that the sealing follow shortage by three-sided adhesion does not occur.
- In case of the clip installation, be sure to use the dedicated Caulk Backer Double Flange 20 to prevent the horizontal shift. Select the Caulk Backer Double Flange 20 where the sealing depth can be secured at least 6 mm, and the top part covers the siding reliably.

Horizontal installation



Vertical installation

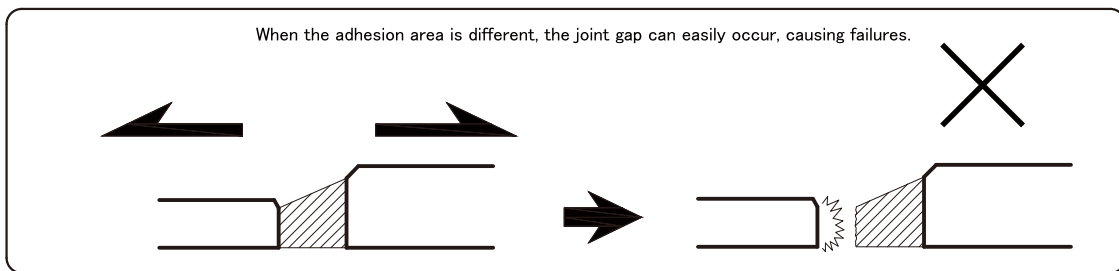
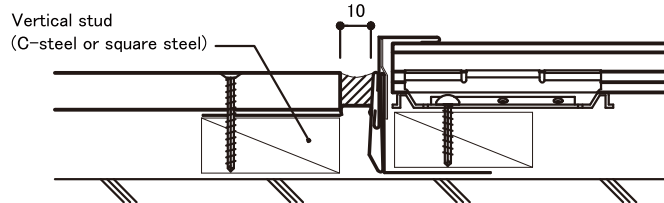


Basic fitting drawing of each part

Left/right joint part

When the siding thickness is different.

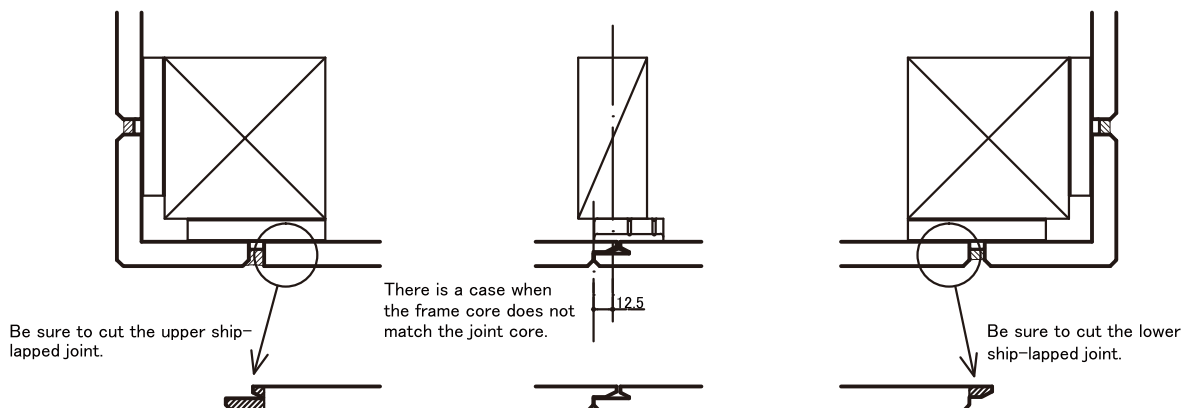
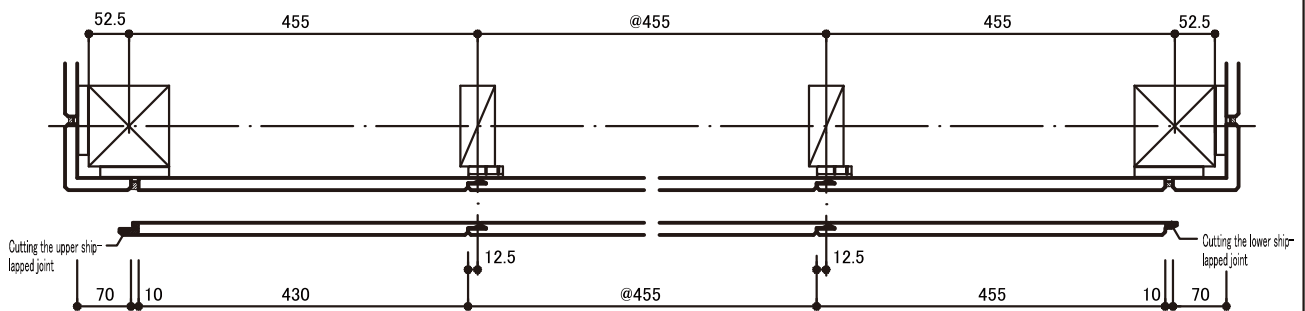
- Install the siding so that the sealing adhesion part shall be even between right and left using the J-Channel. (Insert the J-Channel to the thicker side.)
- (Note) When the surface gap is 2 mm or more, insert the J-Channel (on-site procurement) and cut the edge.



Layout of vertical installation method

When the stud interval is 455 mm.

- Depending on the left/right ship-lapped joint and the clip shape, the joint core is not equal to the frame core.
- Use the outside corner with inner size 70 mm for layout, and perform the layout by cutting the ship-lapped joint as follows.
- When the dimension below becomes large depending on the column size change and the insertion of the board, caution shall be taken to the layout.

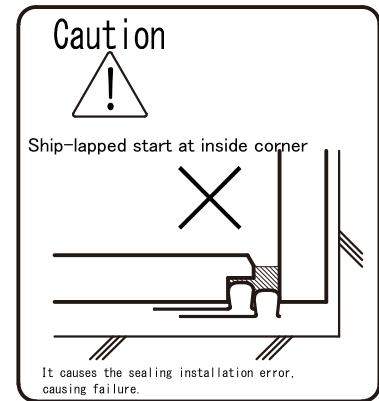
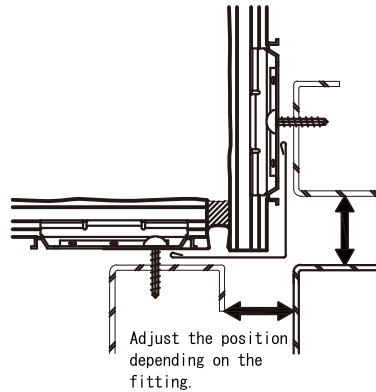
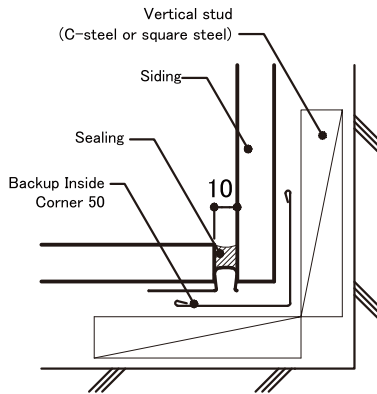


Basic fitting drawing of each part

■ Inside corner/Outside corner

Basic fitting of inside corner

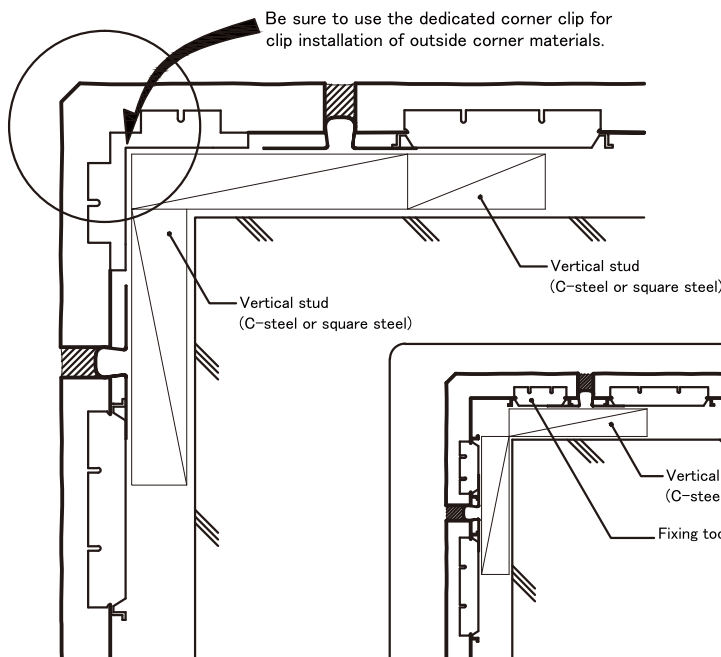
- Add some studs so that each part shall be securely fixed.
- For waterproof, be sure to install the Backup Inside Corner 50.
- Use the Caulk Backer Single Flange 17 and install it with an interval of approx. 10 mm.



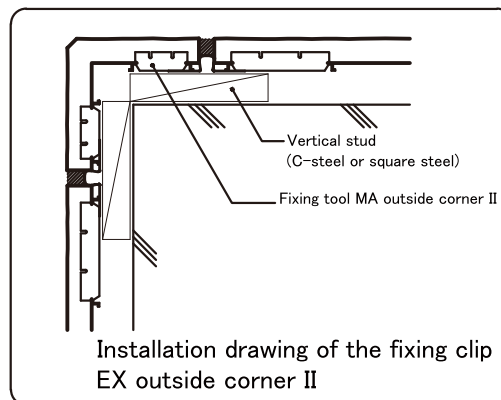
Basic fitting of outside corner

The sealing joint is the standard for both horizontal and vertical installations.

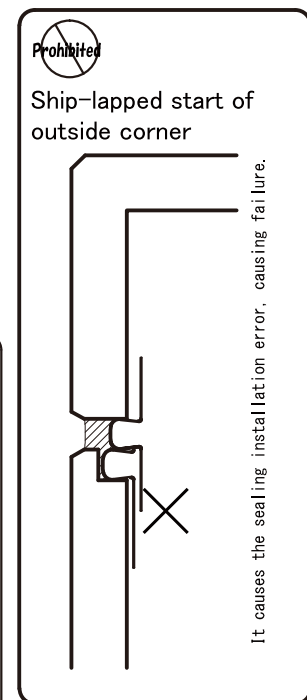
- Use the Caulk Backer Double Flange 20 for the outside corner, and perform the installation so that failures such as the sealing three-sided adhesion and the horizontal shift in the clip installation shall not occur.
- For the ship-lapped start, use it by cutting the ship-lapped joint. The ship-lapped joint as it is causes the installation sealing failure.



Installation drawing of the fixing clip EX outside corner



Installation drawing of the fixing clip EX outside corner II

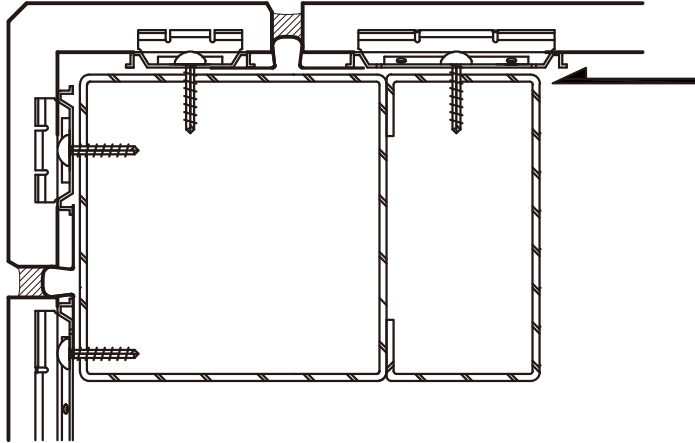


Basic fitting drawing of each part

■ Outside corner

Unevenness of vertical stud

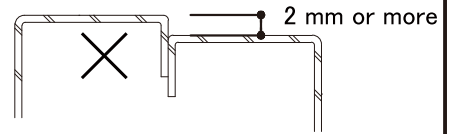
- Special caution shall be taken to the unevenness of vertical studs.
(Installation cannot be performed to the unevenness of more than 2 mm.)



Caution



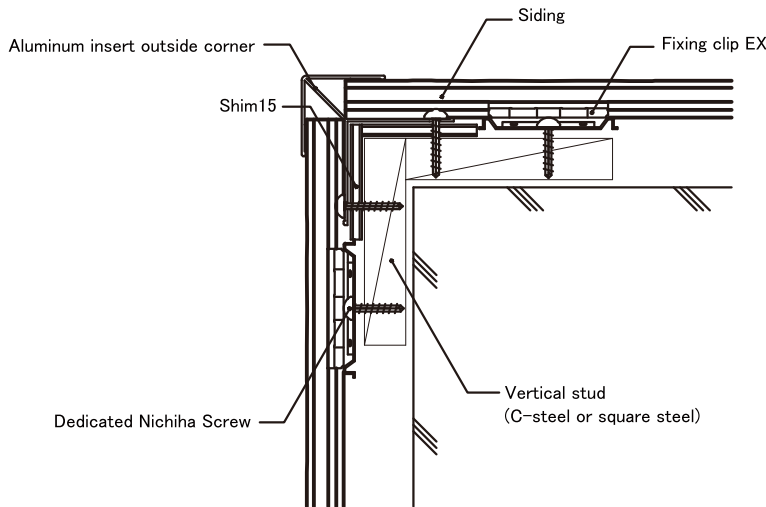
Vertical stud where the gap of more than 2 mm occurs.



Distortion by the unevenness occurs, causing the failure.

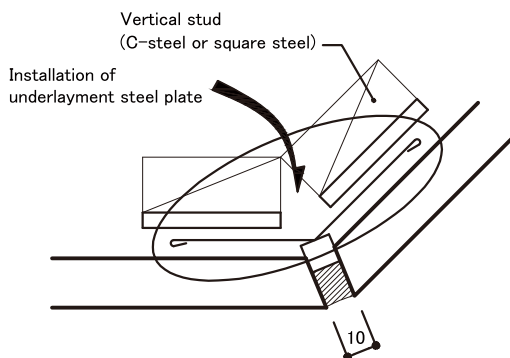
Insert outside corner

- Insert siding into the outside corner insert securely.
- Secure the outside corner insert at every 500 mm or less.



Cautions for obtuse angle outside corner

- For waterproof, be sure to install underlayment steel plate.
- Do not perform the installation of the straight joint and triangle sealing on the edges.



Triangle sealing installation of outside corner



It causes the adhesion failure and cutting failure of the sealing.

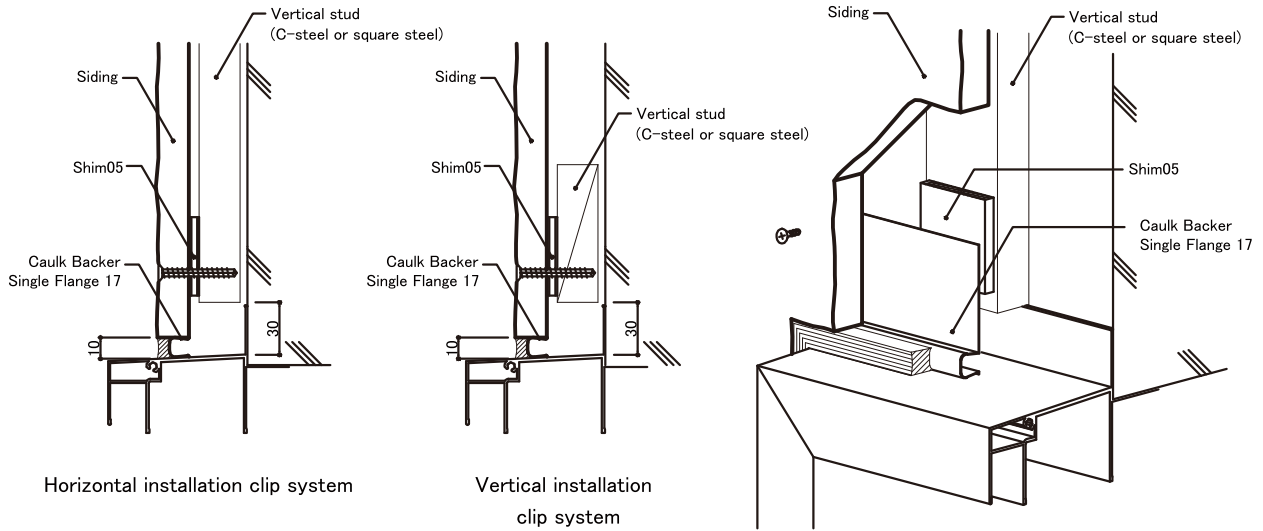
Since material handling and installation vary from country to country, the following information may not apply to the US, Canada, Mexico, and China. For these countries, please refer to the information provided by the local subsidiary of Nichiha.

Basic fitting drawing of each part

■ Openings

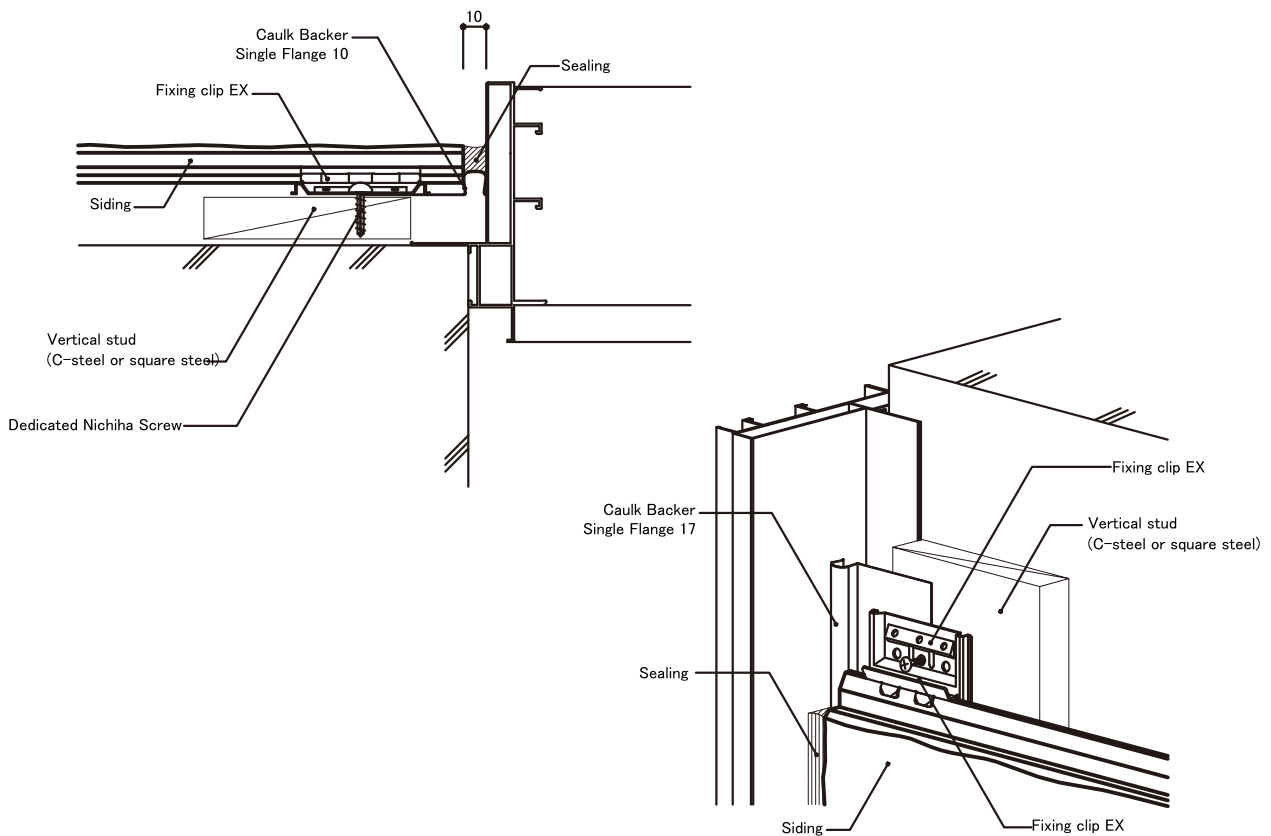
Openings: Fitting on the upper side

■ The purpose of the upper side of openings is to flow rain water intruded from side to side just in case and to circulate air by securing the full air road on the backside of the siding. In order to secure the airway, install the Caulk Backer Single Flange 17 as the figure below.



Openings: Fitting on left/right side

■ As well as the left/right sides of openings, secure the full airway on the backside of the siding. Install the Caulk Backer Single Flange 17 as the figure below.

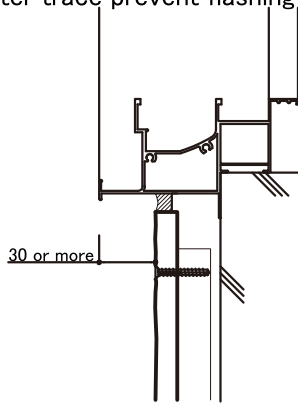


Basic fitting drawing of each part

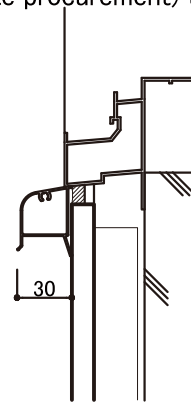
■ Openings

Openings: Fitting on the lower part

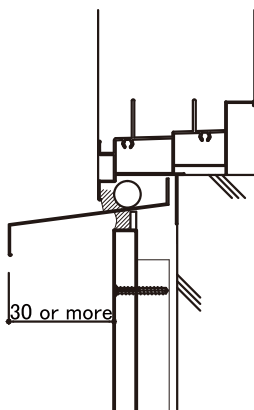
- Use an external sash or half-external sash in consideration of the siding thickness, and the protruded section dimension of flashing of sash lower frame shall be 30 mm or more than the siding surface. If the protruded section of flashing cannot be secured by 30 mm or more, install the water trace prevent flashing or the general flashing (on-site procurement) to secure the dimension.



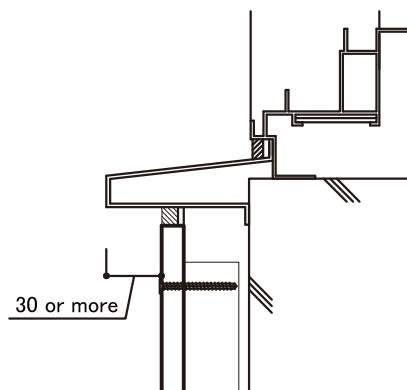
With sash



Water trace prevent flashing



Flashing (on-site procurement)



Flashing (on-site procurement)

Caution



If there is not much space under the sash or no flashing, rain water and condensation water on the sash frame or on the glasses fall directly on the siding. Repeated these phenomena cause dirt. In winter, that falling water freezes, causing the deterioration of siding function.

Depending on the region and the usage, be sure to use the sash flashing.

○ If a sash flashing is not used, failures shown by the photos below may occur.



• The falling water and the condensation water become icicle and it freezes on the siding.
→ Frost damage occurs.



• The coating on the siding is abased.
→ Frost damage (film abrasion) occurs.



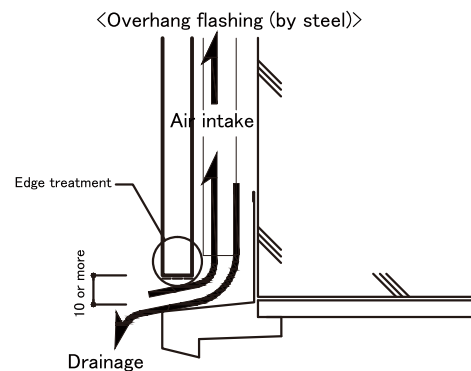
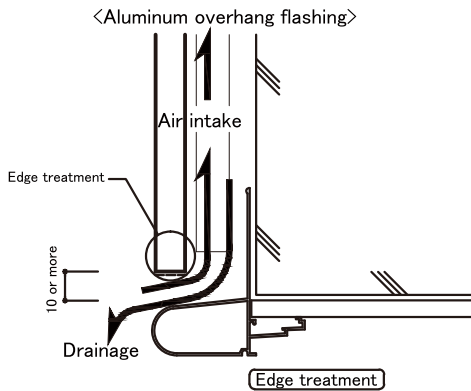
Basic fitting drawing of each part

Overhang

Basic fitting

Install the overhang so that "intake" function on the exterior wall ventilation method and "drainage" function such as intruded water and condensation water can be exerted.

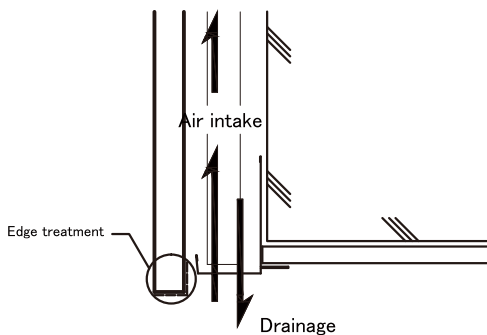
- Fix the overhang members to the structures using the Nichiha Screw with the interval of 500 mm or less.
- Be sure to secure the space of 10 mm or more between the siding lower end and the members, and do not block it by sealing.
- When the siding lower end is a cross section, be sure to perform the repair paint (edge treatment) in order to prevent failures by absorption from the cross section.



Edge treatment

Apply the Nichiha siding sealer to the cross surface with no sealing. After drying, apply the Nichiha siding sealer again. (Application: twice)

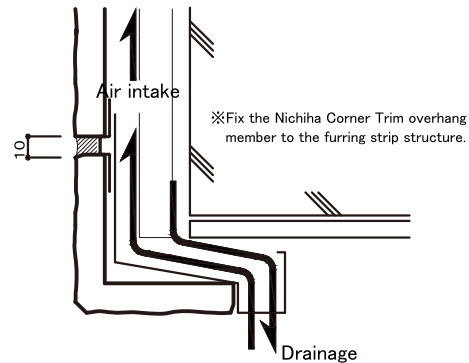
<Dripping wall ventilation member>



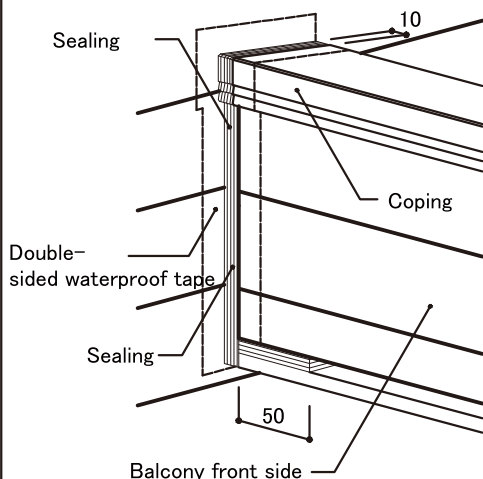
Edge treatment

In case of the dripping wall member, because the siding edge surface is exposed, apply the Nichiha siding sealer to the edge surface. After drying, apply the repair paint.

<Nichiha Corner Trim overhang member>



<Overhang flashing and wall inside corner>



Prohibited

The following fitting may cause a failure.

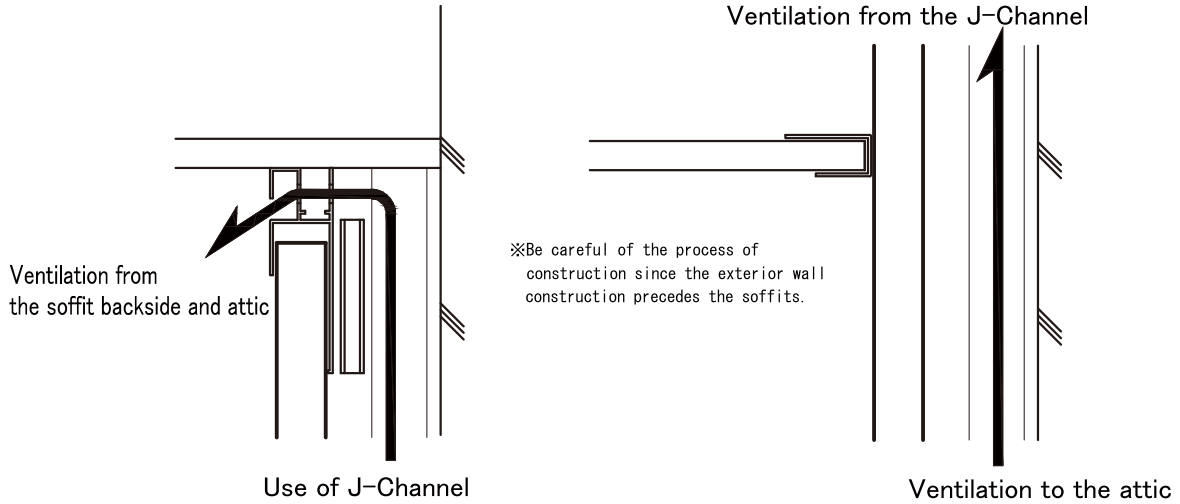
- (1) Rain water and condensation water intruding into the backside cannot be discharged, causing failures that create stains on soffits.
- (2) The air intake route of exterior wall ventilation cannot be secured.

Basic fitting drawing of each part

■ Soffit

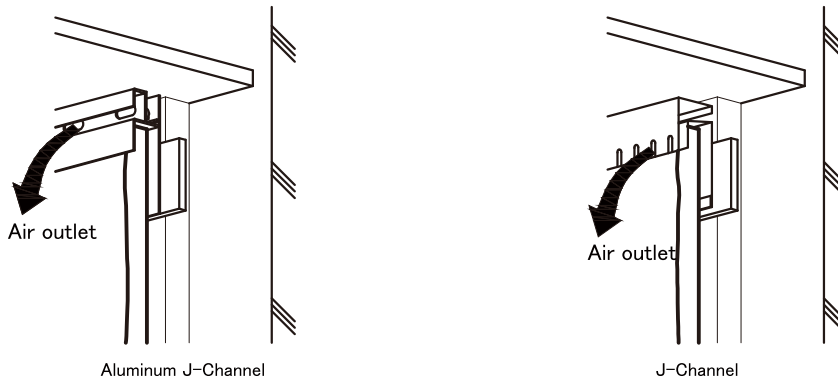
Basic fitting

- The soffit is the air outlet section on the exterior wall ventilation method. Attach the furring strip or use the J-Channel so that air can be discharged to the soffit backside and attic.

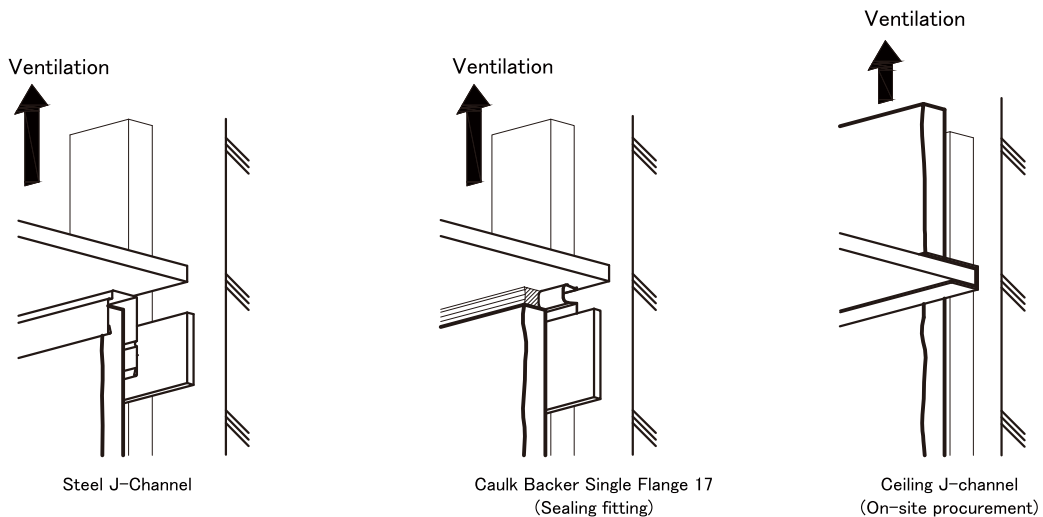


Type of soffit installation by accessories

■ J-Channel ventilation



■ Soffit backside and attic ventilation



Basic fitting drawing of each part

Others

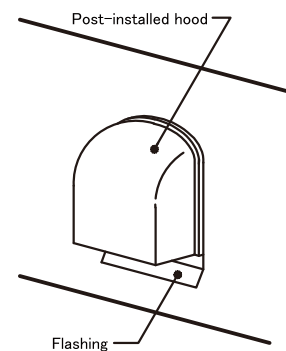
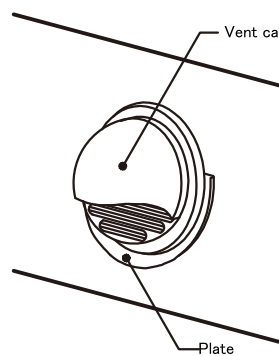
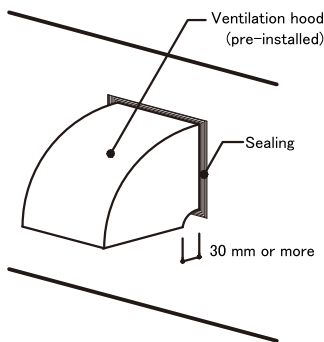
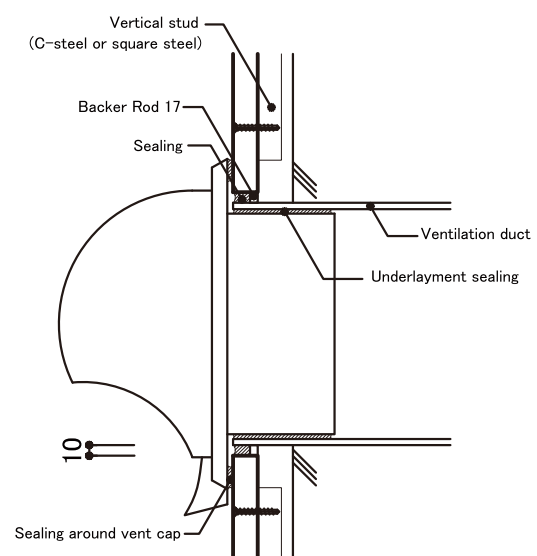
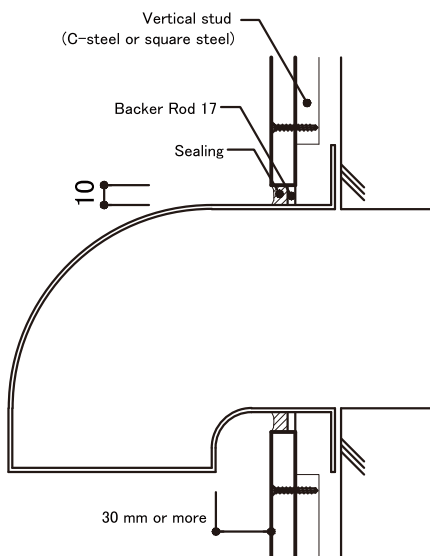
Basic fitting around air vent

- Secure the sealing joint with approx. 10 mm between the air vent, ventilation duct and the siding.
- In case of pre-installation type, separate the air vent from the siding by 30 mm or more shown by the figure below.
- In case of post-installation type, be sure to use the one with the plate or flashing.
- In case of post-installation type, perform the underlayment sealing before installing the main body.
- Extend the ventilation duct (piping, etc.) to the exterior wall, and perform the insulation treatment as necessary.

※ Especially, in case of cold area, perform the insulation treatment suitable for regions, and keep the duct tip from the exterior wall by 100 mm or more.

<In case of pre-installation type>

<In case of post-installation type (vent cap/post-installation hood)>



<In case of cold region>

