

ASSEMBLY OF THE SIDING TYPE SOFFIT

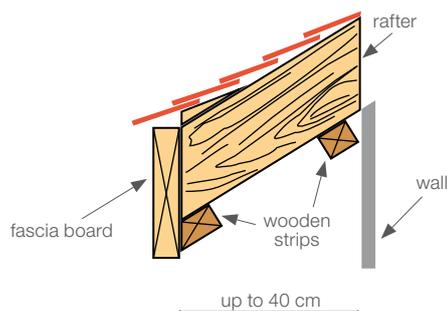
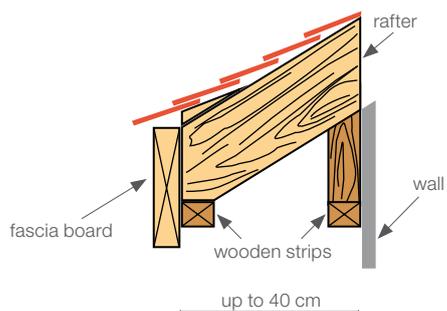
A SIDING-type soffit should be installed on a wooden structure so as to allow for its thermal elongation caused by changing air temperature. The assembly shall be performed at a temperature not lower than 0°C. **Do not use soffit as a siding material on building facades.**

SEQUENCE OF THE ASSEMBLY

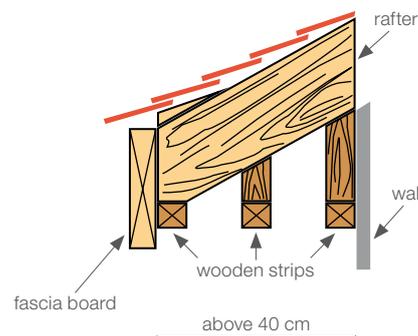
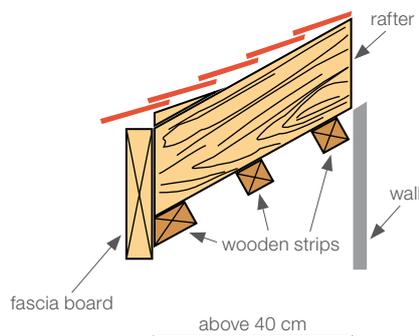
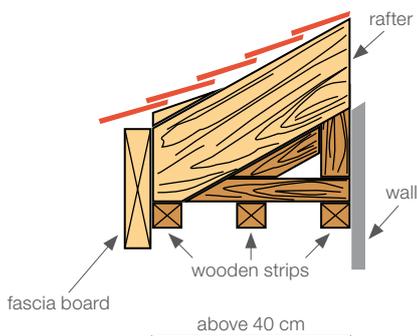
1. The wooden strips which soffit will be attached to should be thoroughly dried, impregnated, mounted and levelled. Use wooden strips of 25 mm x 50 mm or bigger.

Examples of structures for various eave span

eave span up to 40 cm

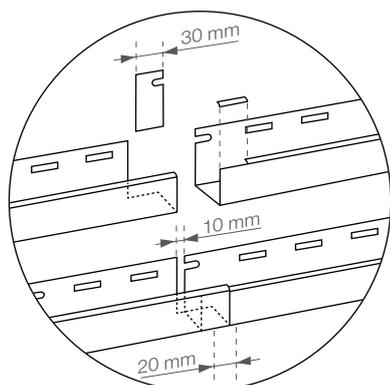


eave span above 40 cm

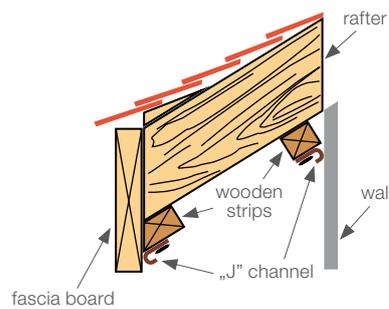
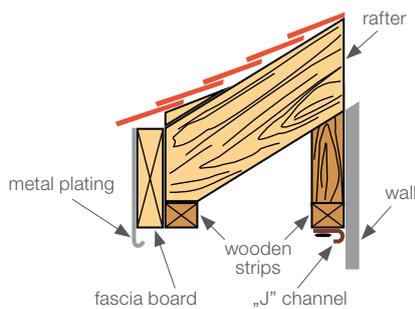


2. Mount J-type channels to the impregnated strips. The channels should be mounted along the entire circumference of the roof. The J-type channels should be connected according to the Fig. A. To finish the soffit on its outside edge one may use an adequately prepared metal ware of the facial board. The J-type channels shall be nailed at the distance of max. 40 cm

Example of J-type channel mounting

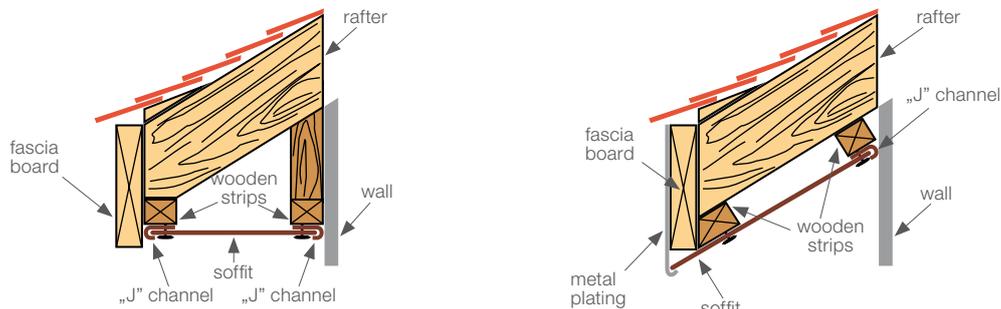


Drawing A

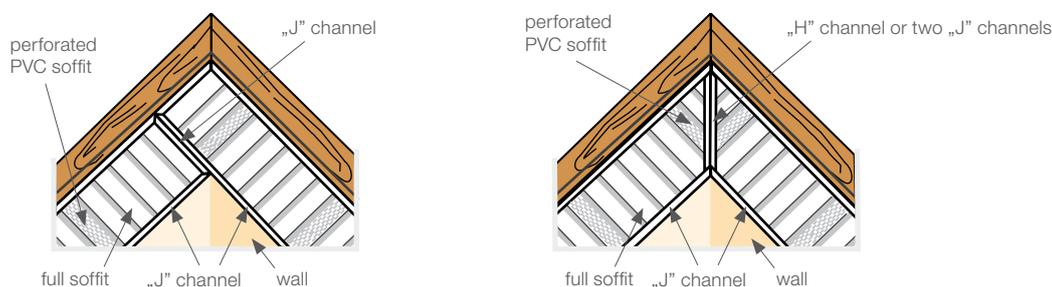


- Bend the cut-to-size panels at the mid-point (half length) and slip it into the J-type channels. The panels should be joint together by interlocking the fold of one panel with the slot of the adjacent panel. It is recommended to install the panels perpendicularly to the eaves. It is allowed to install the panels horizontally or in an inclined position. Nailing distance – 30 cm. The panels shall not be clamped.

Examples of soffit panel mounting.



- In eaves corner soffit may be installed using two methods.



NOTES

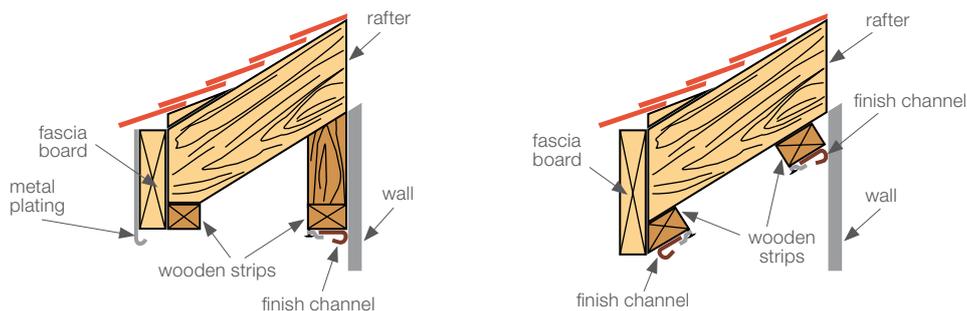
- Use aluminium or galvanized nails, corrosion-protected, length of min. 20 mm and head width of min. 8 mm.
- Nails shall be driven in the middle of the holes provided with a 1mm-clearance between the nail head and the base to enable soffit's thermal elongation.
- Flat head screws may also be used for installation.
- Each third panel shall be perforated to ensure proper ventilation of the roof and the eaves.
- The soffit width is 20.3mm.

ASSEMBLY OF THE MULTI HOLE TYPE SOFFIT

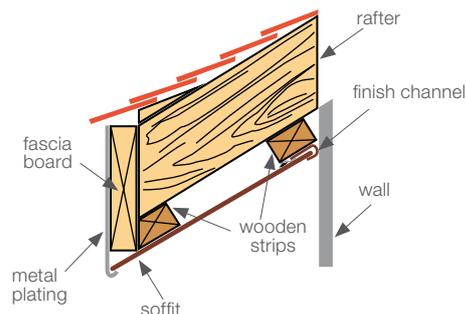
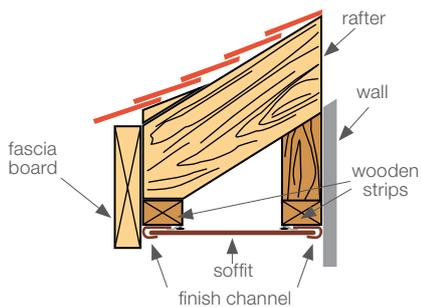
A multi hole type soffit should be installed on a wooden structure so as to allow for its thermal elongation caused by changing air temperature. Use galvanized metal sheet brackets. The 2.5mm-brackets shall be used to mount the panels, the 0.8-mm brackets are used to mount the channels. The assembly shall be performed at a temperature not lower than 0°C. **Do not use soffit as a siding material on building facades.**

SEQUENCE OF THE ASSEMBLY

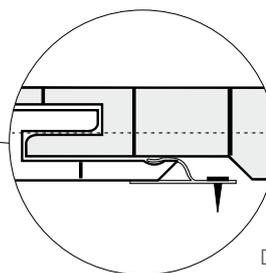
- To install the supporting structure use wooden strips, dried and protected with an anti-fungi agent. The minimum size of the strips is 25 x 50 mm. The strips should be mounted perpendicularly to the panel and to keep the panel faces aligned in the same plane. The distance between the strips shall not be higher than 30 cm. Examples of support structures for various eaves types – see p. 27.
- Mount the finish channels to the levelled and impregnated strips by means of clamps. The clamps and fixing them nails or staples should be protected from corrosion. Minimum length of the staples – 14 mm. The finish channels should be joint together with an overlap. An adequately prepared metal ware can also be used as the finish material. Mounting distance – max. 30 cm.



3. The first panel shall be cut to the required size with a hack saw and inserted into the finish channels. Fix it to the strips with clamps.



4. Next panels shall be mounted by interlocking its edge with the slot of the preceding panel and fixed to the support structure by means of clamps (Detail 1). Mounting distance – max. 30 cm.



Detail 1

5. To make the corners use two finish channels.

CALCULATION OF THE LENGTH OF THE ELEMENTS DEPENDING ON THE TEMPERATURE

The soffit panels up to 1m shall be cut to the length 4 mm shorter than the spacing between the internal edges of the J-type channels. When the panel length exceeds 1m the adjustment shall reflect the temperature while assembling and the length of the panel. The panel length change ΔL , resulting from the changes of temperature, can be calculated using the following formula:

$$\Delta L = L \times \Delta t \times \alpha$$

α – linear elongation coefficient – for PVC $\alpha = 0,08 \text{ mm} / \text{m}^\circ\text{C}$

L – length of the soffit

Δt – difference between the minimum ($t_{\text{min}} = -30^\circ\text{C}$) or the maximum ($t_{\text{max}} = +40^\circ\text{C}$) and the temperature at which the assembly is performed (t_{mont}).

Example:

Soffit panel length is 2 m. The assembly was performed at $+20^\circ\text{C}$

$$\Delta L1 = L \times (t_{\text{max}} - t_{\text{mont}}) \times \alpha$$

$$\Delta L1 = 2 \text{ m} \times (40^\circ\text{C} - 20^\circ\text{C}) \times 0,08 = 3,2 \text{ mm} - \text{the panel will be longer by maximum.}$$

$$\Delta L2 = L \times (t_{\text{min}} - t_{\text{mont}}) \times \alpha$$

$$\Delta L2 = 2 \text{ m} \times (-30^\circ\text{C} - 20^\circ\text{C}) \times 0,08 = -8 \text{ mm} - \text{the panel will be shorter by maximum.}$$

The calculations show that the panel should be cut to 1,996 m. The panel reduction $\Delta L2$ will be invisible (the depth of the J-type channel is around 18 mm).

STORAGE AND TRANSPORTATION

To avoid deformations all elements should be stored and transported in a flat pile under a roof and supported on its entire length. The piling height shall not exceed 1m. The room temperature in the storage area shall not exceed 50°C . **The products wrapped up with a plastic packaging shall not be exposed to a direct sunlight.** During the transportation the load must be restrained to ensure no load movement. Avoid crushing the products and throwing them.

PACKAGING

Siding-type soffit elements are packaged in cardboard boxes. Multi hole type soffit panels are packaged in cardboard boxes and the channels are wrapped up with packaging film. The packages fit to the length of particular panels and channels.

ATESTATION AND STANDARDS

SIDING TYPE SOFFIT:

- Technical Approval ITB nr AT-15-3087/2012
- PZH nr HK/B/0425/02/2012 i HK/B/1468/01/2011 attestation
- Declaration of Conformity

MULTI HOLE TYPE SOFFIT:

- Technical Approval AT-15-3087/2012
- PZH nr HK/B/0425/01/2012 attestation
- Declaration of Conformity