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#### Processing instructions for Zwarthout | Shou-Sugi-Ban

This document is a guideline. The company or individual who installs the Zwarthout | Shou-Sugi-Ban is responsible for its correct processing.

During the charring process of Shou-Sugi-Ban, the chemical composition of the wood changes. The wood becomes more stable, and therefore more durable. But the high temperatures in the oven may also warp the wood slightly.

## Design

A quality finish contributes significantly to the lifespan of wooden facade and roof cladding. A generous jettying protects the facade against rain, wind and hail. Roof edge profiles and sash water bars protect the ends of the wood against tearing and rain.

#### Transport

Zwarthout | Shou-Sugi-Ban products must be handled and transported with the utmost care. Therefore, we always transport products with a carbon layer (Naoshima, Tonosho, Ayagawa, Marugame, Sanuki) with layers of protective foil or cardboard in between. Without additional precautions, the boards cannot be stacked higher than 60cm. The packages cannot be stacked on top of one another, unless they have been packed in a wooden crate.

## Check

Zwarthout uses dedicated partners for the shipment of its products. Always check the shipment before and during unloading. Please report any damages or missing materials to Zwarthout. Prior to installing, please also check whether the profile, the dimensions and the finish match the order. If the delivered products are damaged or do not meet the aesthetic requirements that you would expect from us, please refrain from installing them. Set these products aside and contact Zwarthout.

## Acclimatisation

Wood products are known to react to changes in temperature and humidity. Wood for interior application should not be delivered before the building is wind and waterproof and the interior climate is similar to the average living conditions. Allow the wood to acclimatise until the moisture content has stabilised. This ensures that the wood works to a lesser extent once it has been installed.

#### Storage

Zwarthout | Shou-Sugi-Ban products must be handled with care at building sites. If the Zwarthout | Shou-Sugi-Ban is not installed immediately, store it in such a manner that is protected from rain and dirt. If the wood is covered, please ensure plenty ventilation. Store the wood horizontally on small beams,



# zwart

approximately 10cm from the floor. Do not stack any other materials on top of the wood to prevent any damage. Here too, you may not stack the wood higher than 60cm. All heavily charred products must be stored with layers of protective bubble wrap in between.

## Naoshima

Loose carbon particles and other dirt such as sand, can be carefully removed with a hose. Carbon does not attach itself to wooden sills, masonry or concrete, among other things. In the event of any visible segments of pale wood, these can be treated with a small (manual) gas burner.

#### Finish

It is important to treat all saw cuts with (black) stain or paint during installation. This prevents moist penetration and significantly extends the lifespan of the wood.

## Mounting materials

The boards are mounted with SS screws with a black head, or black carbon steel screws. The type of screw depends on the type of wood, dimensions, and the project location. SS screws (Fe 410) must always be used for Marugame. The length of the screw depends on the thickness of the board. SBR standards dictate that screws for closed facade cladding should be three times the thickness of the board. This is two times the thickness of the board for open facade cladding. If desired, Zwarthout can supply the screws.

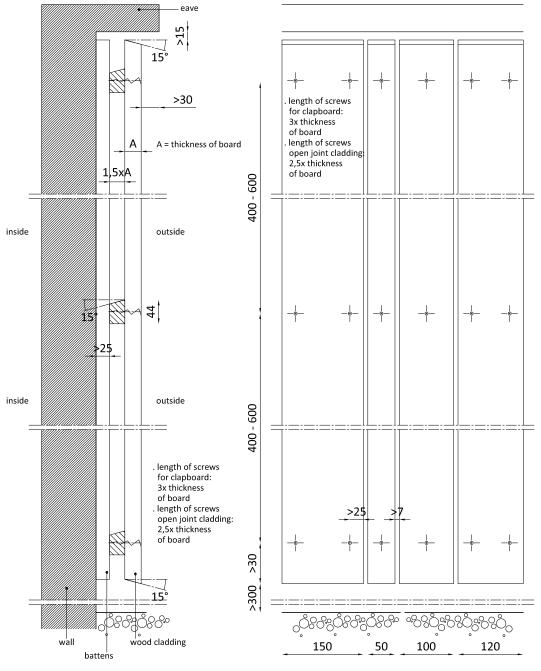
## Installation

The boards must always be shortened, since the charred end is sensitive to moist. The framework for the Zwarthout | Shou-Sugi-Ban must be adapted to the installation method: horizontal, vertical, panels or otherwise. The slats have a maximum distance of 600mm (centre-to-centre). The thickness of the horizontal slats must be 1.5x the thickness of the board. Vertical slats must have a minimum thickness of 25mm. The slats must be installed according to the prevailing guidelines for facade cladding. The top of the horizontal slats must be chamfered at an angle of at least 15°. The chamfered side slopes towards the interior wall. For a ventilated facade, the (vertical) boards are installed with a space of 7mm or more in between. The ends on the top and bottom are chamfered at an angle of 15°, and stained or painted black. Zwarthout highly recommends the use of a rhombus profile for horizontal facade boards. In that case, the top and bottom ends must be chamfered at an angle of approximately 15°. This ensures that rain water runs of the board without any problems. Here too, the vertical saw cuts must be stained or painted black. For every facade with joints, the slats and the moisture-proof coating must be black. This is to prevent interference from any other colours in the joints.





# Installation guidelines vertical



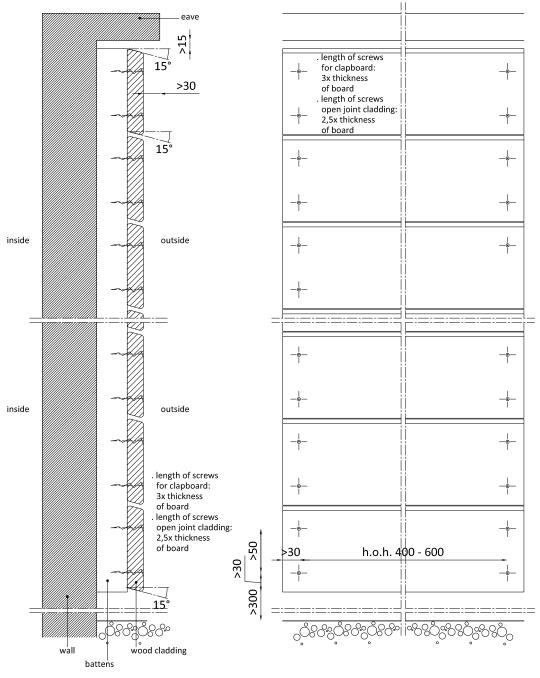
section

front elevation





# Installation guidelines horizontal



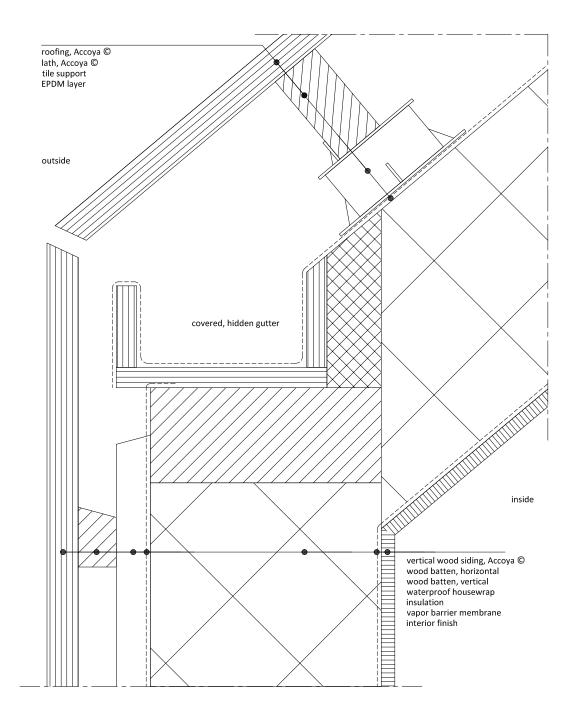
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front elevation





# Roof solution detail principle (Marugame only) / gutter hidden & closed







# Roof solution detail principle (Marugame only) / gutter hidden & open

