

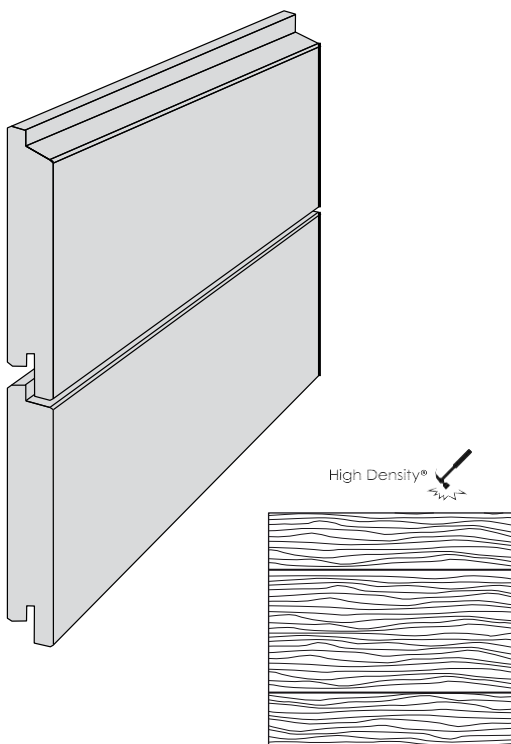


Bamboo X-treme
"Decorative"
CLADDING
Installation & Care
Instructions

Introduction

Bamboo X-treme Cladding is a high density, stable and durable cladding product, that comes with powder-coated stainless steel clip and screw fixings for "invisible" fastening. **This cladding is sold as a "decorative" or "rain-shield" product and requires suitable weather/water-proofing under the cladding if being used on houses, buildings etc.**

The bamboo x-treme cladding boards are 1850 x 137 x 18mm in size with the visible width of the board being 128mm once installed (due to the overlapping profile of the boards). The ends of the boards snugly connect with an end-matching tongue-in-groove join.



Cladding boards are 1850 x 128 (137) x 18mm in size, rebated and unfinished. The clips fit into the grooves on one edge of the board for fixing to joists. Bamboo X-treme "decorative" cladding comes in boxes of 5 boards = 9.25LM per box, weighing 27kgs.

Before Installation

Fix the vertical battens (at least 20 mm thick, 60 mm wide) using screws going through the membrane into the wall construction behind.

This creates a rigid/flat surface for installation of the boards.

Each board should be fixed to at least 3 battens: so the maximum centre-to-centre spacing between the battens is 616.7mm (1850 mm/3) (diagram 1 - normal pattern). Always install the ends of the boards exactly on the battens.

The cladding boards should be fixed using the stainless steel powder-coated clips (18 mm). Make sure the clip is screwed in the middle of the batten so that it is fully supported. Make sure to drive the screw deep enough into the supporting construction for proper fixing.

Please note: At the edges of the cladding, keep a gap of 7-10mm from adjacent materials, to allow for sufficient ventilation.

If a random joint pattern is desired, the spacing between battens can be a maximum of 300mm (diagram 2 - random pattern).

diagram 1 - normal pattern

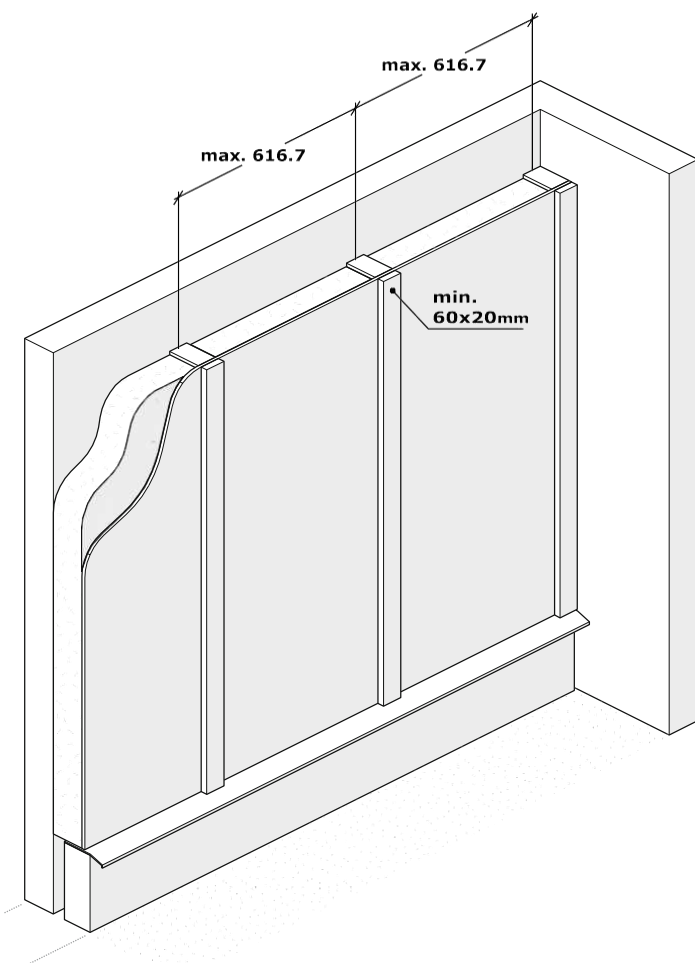
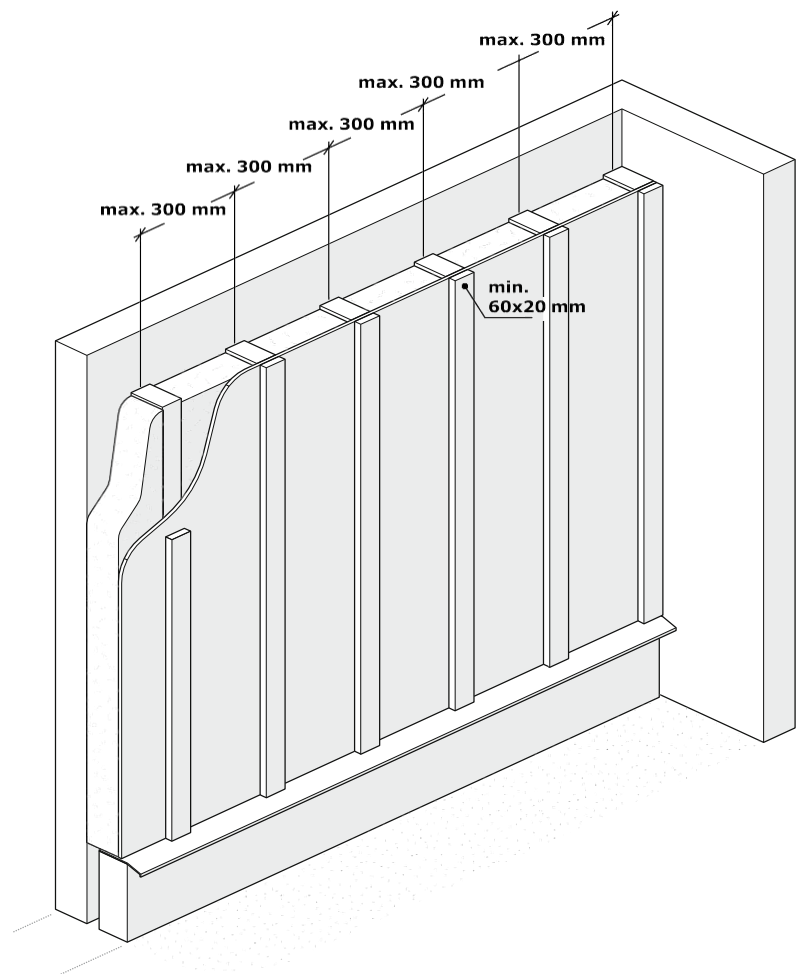


diagram 2 - random pattern



Installation Instructions

Step 1 – Levelling first row of fasteners

- Start with the lowest row of clips. Make sure they are installed level (using a spirit level). Ensure that you position the clips with the two prongs facing up. One screw is allowed for per clip (screw this into the hole between these two prongs).
- Avoid over-tightening the screws as this can pull the fastener slightly into the wood, making it difficult to place the board onto the clip.

Step 2 – Install first row of boards

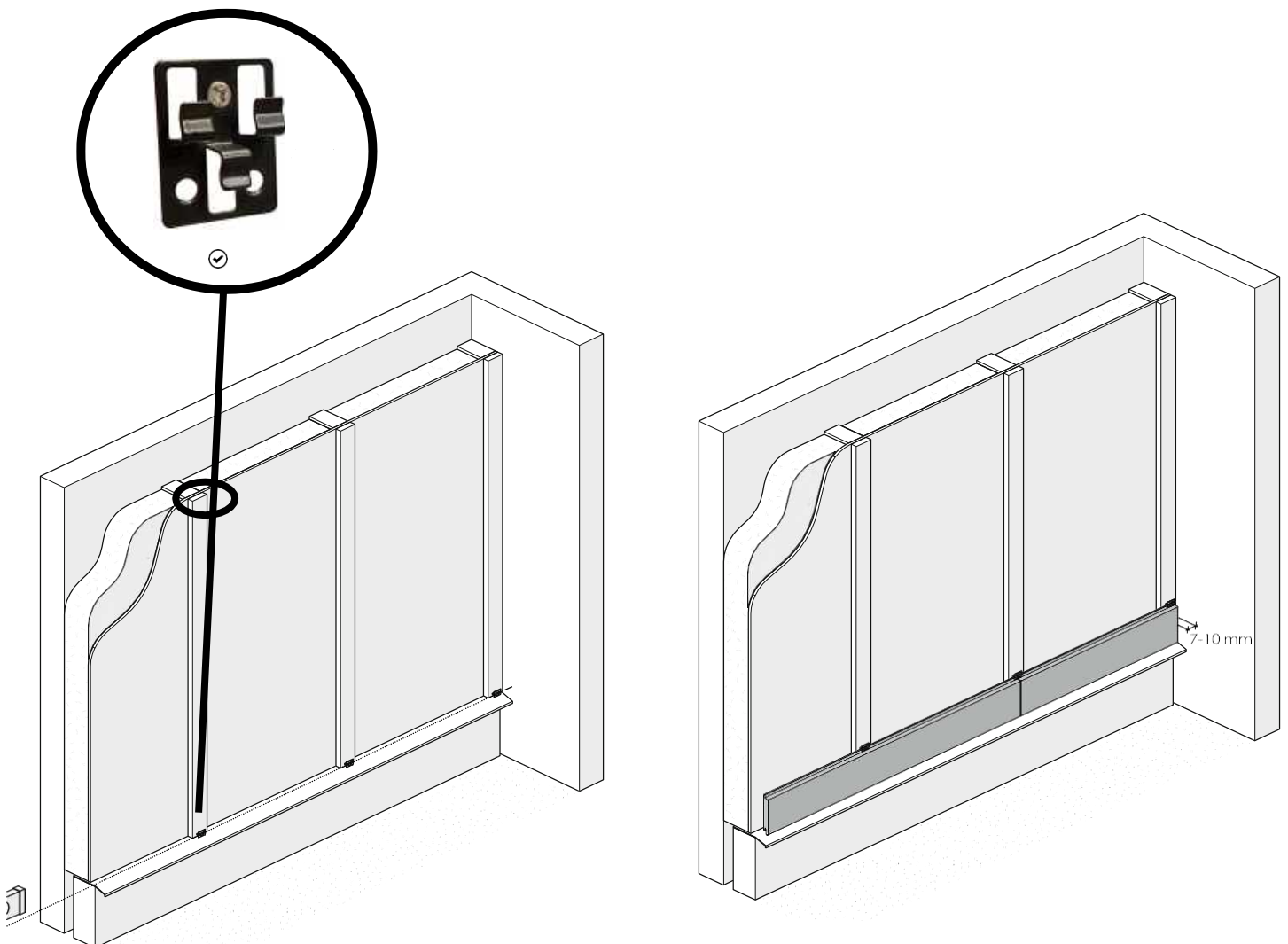
- Place the board onto the row of clips. The waved side of the fastener enables an easy grip into the groove of the board.
- Make sure that the clips engage deep enough in the groove so that the boards lay level. If required, gently tap the boards, preferably with a rubber mallet, to ensure that they are level and well supported by the clips.
- We recommend joining the two adjacent board ends over a batten/beam using one clip per board end.
- Make sure you keep a ventilation gap (7-10mm) on the edge of the cladding.
- The cladding boards can be easily and cleanly cut with a sharp, fine-tooth saw.

Step 3 – Second row

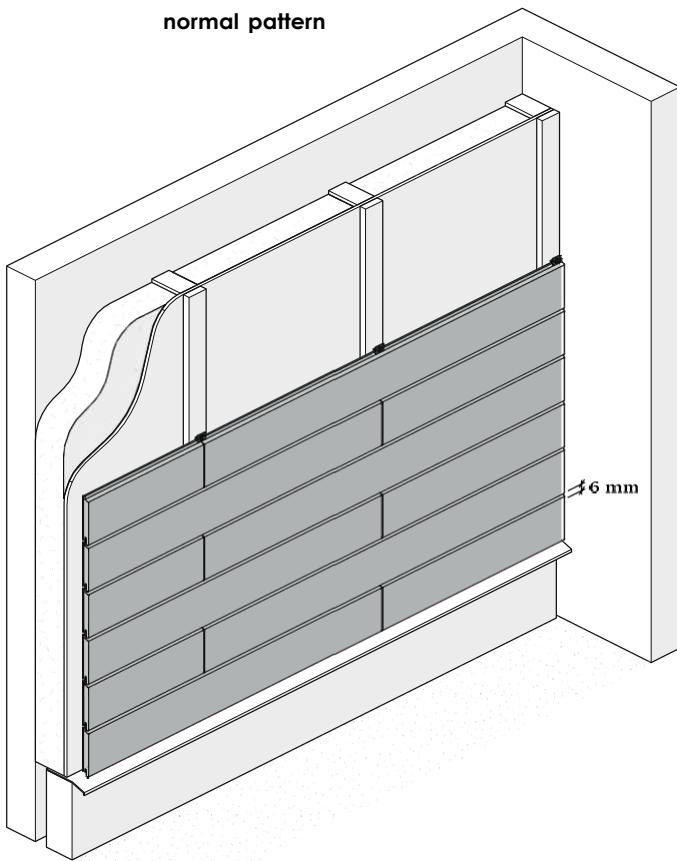
- Install the second row of clips, pushing them down on the tongue of the first row of boards. Install second row of boards.

Step 4 – Continue with the rest

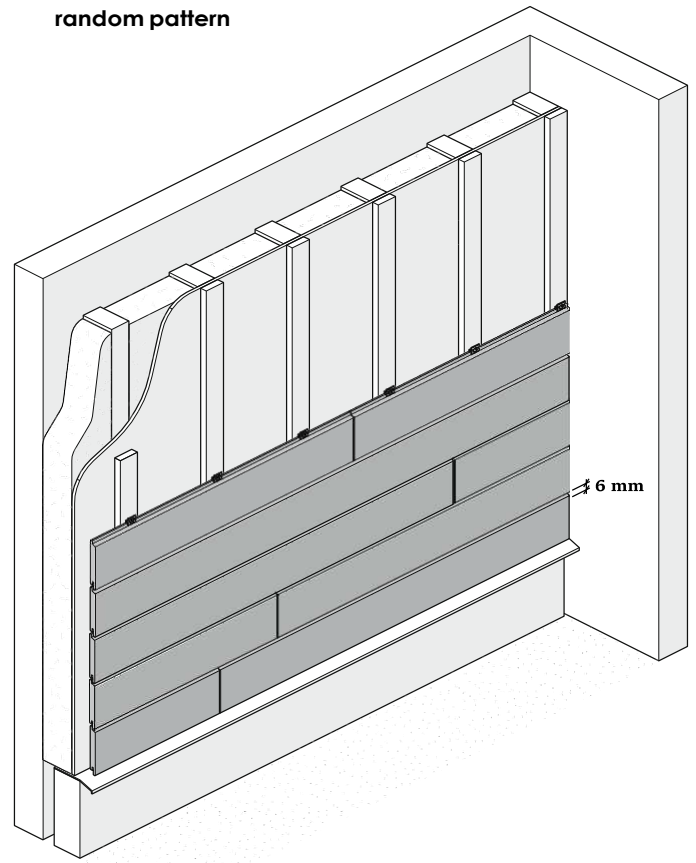
- Continue to install the cladding boards in this way to cover the full surface.



normal pattern



random pattern



Important Information

The Bamboo X-treme outdoor cladding board is a natural product, some variation in colour, grain and appearance is normal. The colour is likely to change from the original darkish brown to a lighter brown or silver-grey colour over time, depending on the sun/UV and climatic conditions, along with the maintenance schedule.

Small cracks and splinters on the surface and on the board ends can arise from the different drying characteristics of the surface and ends. The surface will also become rougher over time. This phenomenon is normal for most wood species and is minimised for this product through the unique 'Thermo-Density®' production method. Cracks on the cut ends of the boards can be further minimized by applying sealer.

Slight dimensional changes or cupping of the boards can occur after installation. This phenomenon is normal for most wood species and is minimised for this product through the unique "Thermo-Density®" heat treatment production method.

Keep the ventilation gap between the boards, that the clips provide. Installation with the stainless steel powder coated clip ensures correct spacing automatically.

Due to the stability of the boards and the shape of the end-match system, no expansion gap is needed where the boards connect with each other.

It is recommended applying a sealer on every (cut) end to prevent water penetration. This can normally be purchased from your local hardware store.



Cleaning and maintenance

You can leave the cladding without any oiling/maintenance, but take into consideration that without maintenance and oiling the cladding will develop more of a rougher, fissured surface that will lighten quicker and become silver-grey over time, as it weathers (similar to most timber products).

If you want to keep a darker colour, the application of WOCA or Sikken's (or similar) oil maintenance material is needed:

- Clean the cladding with water
- Let the cladding dry
- Smooth off any rougher areas with a stiff brush or light sanding
- When the cladding is completely dry and clean, apply the finish according to the supplier's instructions.

Normal Phenomena

Cracks on the surface and on the ends of the boards can occur due to the different drying characteristics of the surface and board ends. This does not affect the stability or durability of the board. The surface side of the boards will become rougher over time and can form (small) splinters as a result of continuous water absorption and desorption due to dry and wet weather periods. Dimensional change or cupping of the boards can occur after installation. These phenomena are normal for most hardwood species and Bamboo X-treme cladding. After installation, there may be some minor bleeding or leaching of colour from the bamboo material when it gets wet eg. when it rains. This possible bleeding is typical for most wood products and will disappear over time. The brownish liquid can easily be cleaned from the Bamboo X-treme cladding material, however controlled water drainage and prevention of splash water is required to prevent any discoloration of surrounding or underlying building components.

Storing

Store Bamboo X-treme cladding in a cool and dry place away from direct sunlight, and protected from the weather, dirt and dust.



Technical Specifications

- Density: +/- 1150 kg/m³
- Dimensional stability: length: + 0.1 %; width + 0.9% (24 hours in water 20°C)
- Resistance to Indentation - Brinell Hardness: ≥ 9.5 kg/mm² (EN 1534)
- Reaction to fire: Class B-s1-d0 (EN 13501-1)¹
- Flame Spread Index: Class A (ASTM E84)
- Thermal emittance: 0.81 (ASTM C1371)²
- Solar Reflectance (SR) : 0.32 (ASTM C1549)²
- Solar Reflectance Index (SRI): Low 27, Medium 30, High 33 (ASTM E1980)²
- Modulus of Elasticity: 13565 N/mm² (mean value - EN408)
- Bending Strength: 54.4N/mm² (characteristic value - EN408)
- Biological durability: Class 1 (EN 350 / CEN/TS 15083-2), simulated graveyard test; Class 1 (EN 350 / CEN/TS 15083-1)
- Effectiveness against Blue Stain: Class 0 (EN 152)
- Use Class: Class 4 (EN 335)
- CO₂ neutral: LCA report TU Delft (ISO 14040/44) (www.moso-bamboo.eu/lca)
- Environmental Product Declaration - EPD (EN 15804) (www.moso-bamboo.eu/epd)
- FSC®: Products may be available with FSC® certification on request.
- Contribution LEED BD+C - v4: MR 1, MR 2, MR 3 (FSC®) SS 7 v2009: MR6, MR7 (FSC®)
- Contribution BREEAM: MAT 1, MAT 3 (FSC®), MAT 5 (HD)
- Plantation offers a 25 year warranty on our Plantation Bamboo X-treme® cladding (see warranty on website)

¹Tested on 18mm thickness, without gaps between boards, with ventilation space behind boards

²Tested on 3 years weathered Bamboo X-treme® decking



The mark for responsible forestry FSC® C002063
www.fsc.org
Only the products defined as such, are FSC certified



www.plantationbamboo.co.nz

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