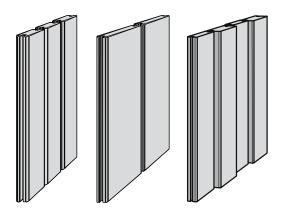
# Bamboo X-treme® Outdoor Cladding

installation instructions

Varibo profiles

vertical



## **MOSO® Bamboo** X-treme® **Outdoor Cladding installation instructions Varibo profiles**

#### important

- Make sure that the installation of the cladding, including Bamboo X-treme® Outdoor Cladding boards, complies with local building regulations.
- The MOSO® Bamboo X-treme® outdoor cladding board is a natural product, some variation in colour, grain and appearance is normal.
   Colour can change fast from dark brown to brown or grey, depending on the climatic conditions and 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 minimized for this product
  through the unique 'Thermo-Density\*' production method. Cracks on
  the ends 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 minimized for this product through the unique 'Thermo-Density\*' production method.
- Keep at least a 5-6 mm ventilation gap between the boards. Installation with MOSO\* Asymmetric Fasteners 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.
- We recommend applying sealer on every (cut) end to prevent water penetration. A sealer is available from MOSO\*.

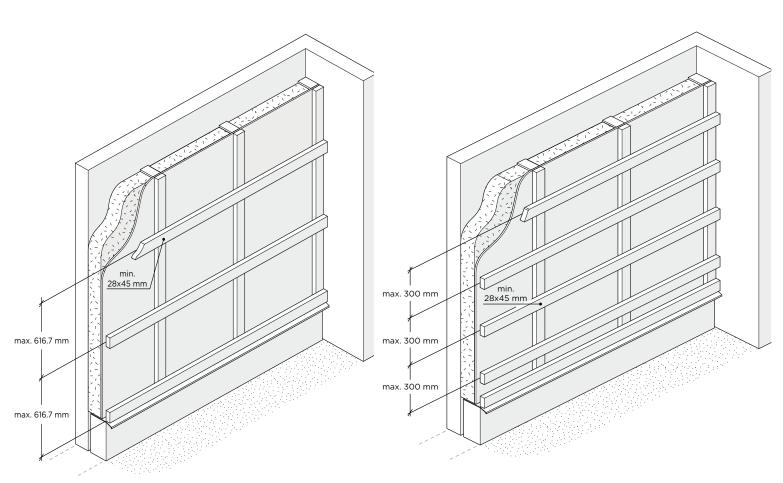
### before vertical installation

- 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.
- On top of these vertical battens, add a set of horizontal battens creating a rigid/flat surface onto which the boards can be fixed.
- Each board should be fixed to at least 3 battens: so the maximum centre-to-centre spacing between the battens is 616.7 mm (1850 mm/3) (diagram 1 - normal pattern). Always install the ends of the boards exactly on the battens.
- If a random joint pattern is desired, the spacing between battens can be maximum 300 mm (diagram 2 - random pattern) and each board must be fixed on at least 2 battens.
- The cladding boards should be fixed using the MOSO\* Asymmetric Fasteners (18 mm). Make sure the MOSO\* Fastener 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.
- screw deep enough into the supporting construction for proper fixing.

   Please note: At the edges of the cladding, keep a gap of 7-10 mm from adjacent materials, to allow for sufficient ventilation.
- At the top of the façade, a rooftrim should be installed to avoid direct (rain)water behind the cladding installation.

#### diagram 1 - normal pattern

#### diagram 2 - random pattern



## **MOSO® Bamboo** X-treme® **Outdoor Cladding installation instructions Varibo profiles**

#### vertical installation

#### STEP 1 - Installing first row

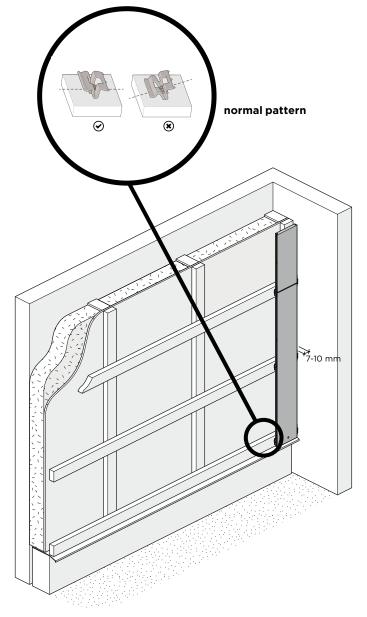
- Start with the first row of boards and make sure they are placed completely vertical (using a spirit level).
- To fix the first row of boards there are 2 commonly used options (diagram 4): A: Visible screw B: Polymer glue (consult your local supplier for recommended types of glue).
- The lower board must always be secured with a screw or glue, whereby the screw or glue must be able to bear the weight of the boards placed on top of the lower board, unless the boards are secured with screws or glue at different heights.
- Install the first row of fasteners (MOSO® Asymmetric Fastener) on the boards with the hooked sides in the groove of the first board, press them firmly into the groove of the first row of boards.
- Avoid overtightening the screws as this can pull the fastener slightly into the wood, making it difficult to place the board onto the fastener.
- Make sure a ventilation gap (7-10 mm) is kept on the edge of the cladding. Ensure the tongue of the board end is positioned upwards, to avoid water staying in the groove.
- If the sub structure is soft wood, predrilling & countersinking the bamboo is enough. If the sub structure is hardwood/bamboo, also predrill the sub structure.

#### STEP 2 - Install second row

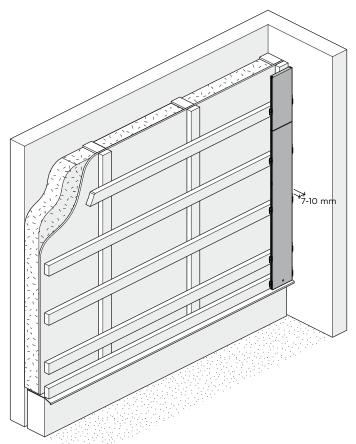
- Place the board onto the row of fasteners. The waved side of the fastener enables an easy grip into the groove of the board.
- Make sure that the fasteners engage deep enough in the groove so that the boards are installed completely vertical (using a spirit level).
   Tapping the boards should be done carefully, preferably with a rubber maller
- We recommend fixing the 2 adjacent board ends on a batten/beam using 1 fastener per board end.
- Make sure you keep a ventilation gap (7-10 mm) on the edge of the cladding.
- The lower board must always be secured with a screw or glue, whereby the screw or glue must be able to bear the weight of the boards placed on top of the lower board, unless the boards are secured with screws or glue at different heights.

#### STEP 3 - Continue with the rest

- Install the next row of fasteners (MOSO\* Asymmetric Fastener) with the hooked sides in the groove of the previous board, press them firmly into the groove of the first row of boards.
- Install the next row of boards and secure the lower boards with a screw or glue.
- Continue with steps 2 and 3 to install the cladding boards in this way to cover the full surface.



#### random pattern



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#### cleaning and maintenance

You can leave the cladding without any maintenance, but take into consideration that without maintenance and oiling the cladding will develop a rougher, fissured surface that will lighten quicker and become arey (similar to most timber)

grey (similar to most timber). If you want to keep a darker colour, regular application of Woca or Sikkens maintenance materials is needed:

- Clean the cladding with water.
- Let the cladding dry.
- When the cladding is completely dry 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 MOSO\* Bamboo X-treme\*. After installation, there might be some bleeding or leaching of colour from the bamboo material when it gets wet, e.g. when it rains. This possible bleeding is typical for wood and will disappear over time. The brownish liquid can easily be cleaned from the Bamboo X-treme\* material, however controlled water drainage and prevention of splash water is required to prevent any discoloration of surrounding or underlying building components.

#### storing

Store MOSO\* Bamboo X-treme\* in a cool and dry place away from direct sunlight, and protected from weather influences, dirt and dust.

#### additional note

Whilst all due care is taken to ensure the accuracy of the installation instructions, individual circumstances (location, sub structure and installation procedures) may vary and are beyond the manufacturer's control. In case of doubt, therefore, consult the distributor. Always follow the local building code.

MOSO warrants the bamboo material and the mounting materials (fasteners/screws) it supplies but does not warrant the connection with other materials (such as sub frame joist/battens). It is the responsibility of the installer to make sure the used screw matches such materials during the full lifetime of the product.

These instructions are subject to change. For the latest version visit www.moso-bamboo.com/x-treme/cladding

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#### normal pattern

#### random pattern

