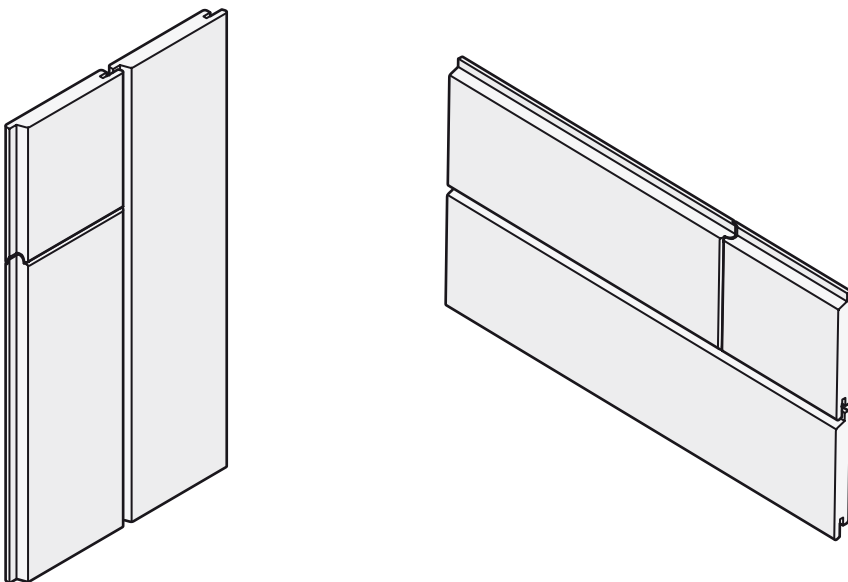


# Bamboo Thermo® Outdoor Cladding

installation instructions

## Dutchlap & Fluted Profiles

Vertical & Horizontal Install



# MOSO Bamboo Thermo Outdoor Cladding

## installation instructions Dutchlap & Fluted profiles

### important

- The MOSO® Bamboo Thermo® outdoor cladding board is a natural product, some variation in color, grain and appearance is normal. Color can change fast from dark brown to brown or gray, 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. Each cut board should be fixed to at least 2 battens.
- If a random joint pattern is desired, the spacing between battens can be maximum 300 mm (diagram 2 - random pattern). Each cut board should be fixed to 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.
- 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 roof trim should be installed to avoid direct (rain)water behind the cladding installation.

diagram 1 - normal pattern

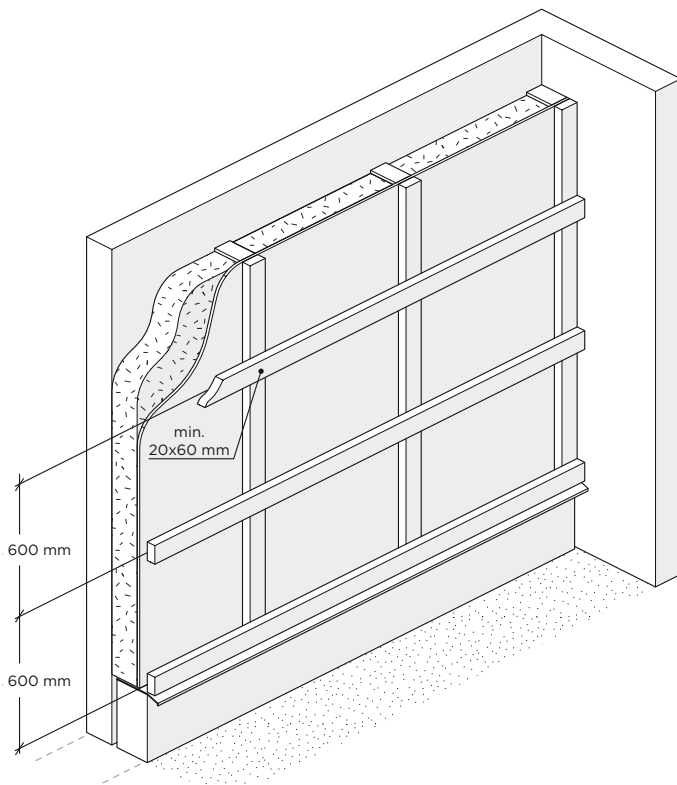
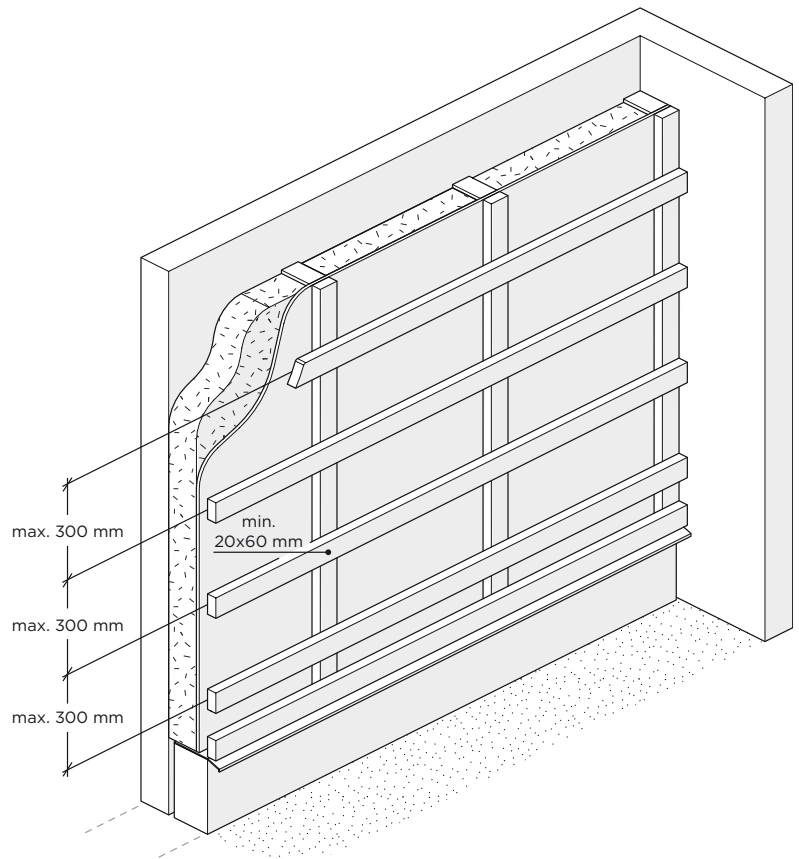


diagram 2 - random pattern



# MOSO Bamboo Thermo Outdoor Cladding

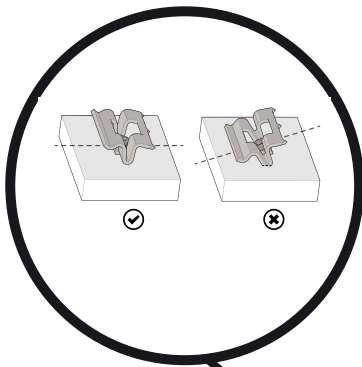
## installation instructions Dutchlap & Fluted profiles

### vertical installation

#### STEP 1 - Install 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 or 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, pre-drilling & countersinking the bamboo is enough.



normal pattern

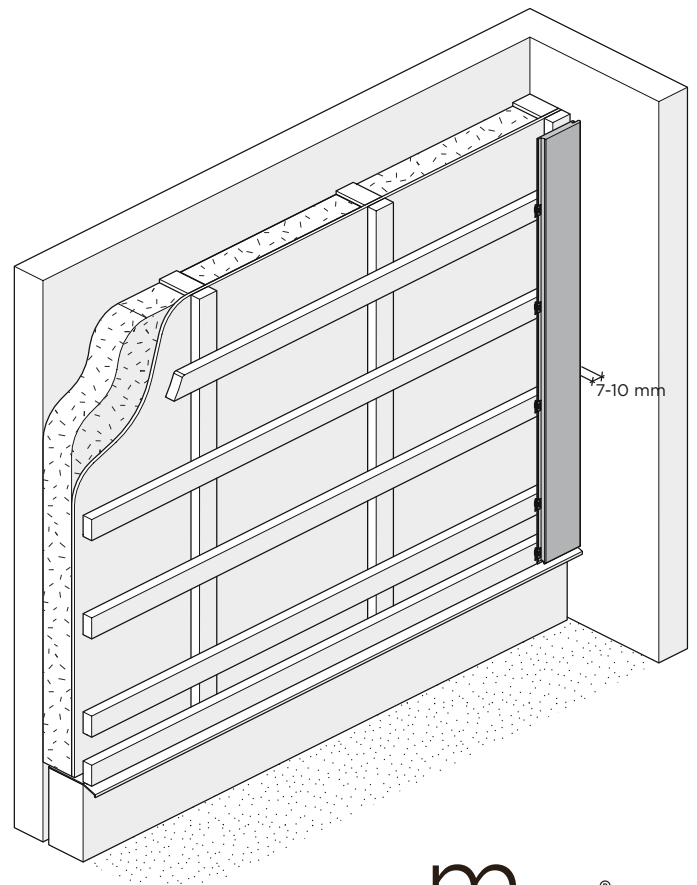
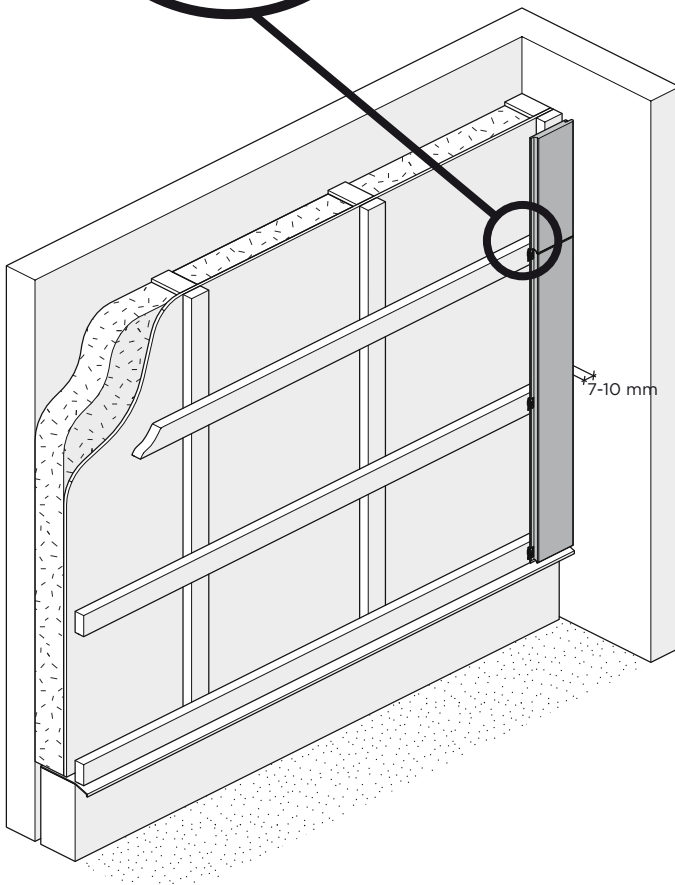
#### STEP 2 - Install second row

- 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 mallet.
- 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



# MOSO Bamboo Thermo Outdoor Cladding

## installation instructions rebated & rhombus profiles

### 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 gray (similar to most timber).  
If you want to keep a darker color, regular application of Woca or Sikken is necessary.

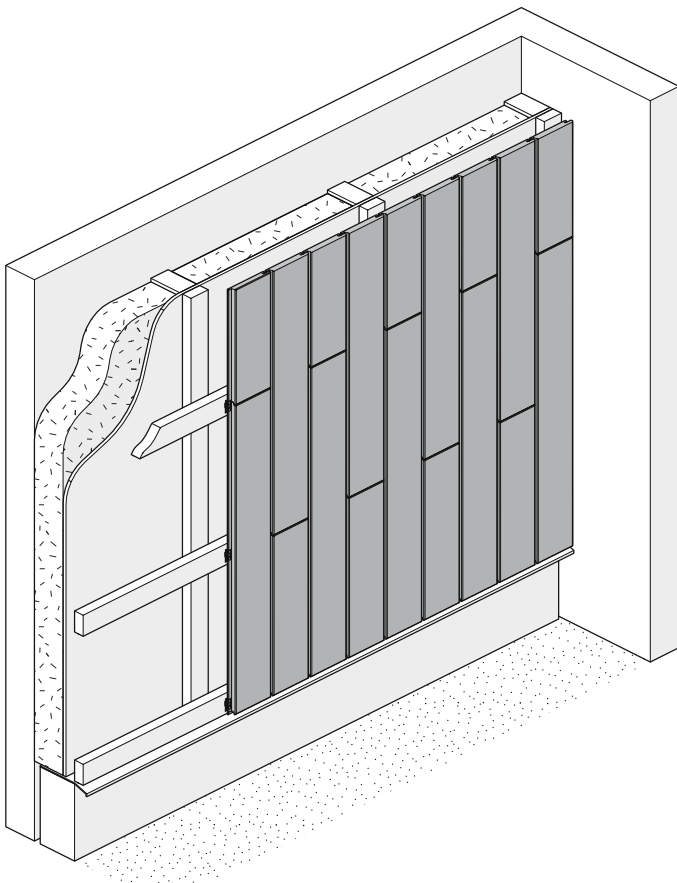
Maintenance needed:

- 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 Thermo®. After installation, there might be some bleeding or leaching of color 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 Thermo® material, however controlled water drainage and prevention of splash water is required to prevent any discoloration of surrounding or underlying building components.

### normal pattern



### storing

Store MOSO® Bamboo Thermo® in a cool and dry place away from direct sunlight, and protected from weather influences, dirt and dust.

### additional note

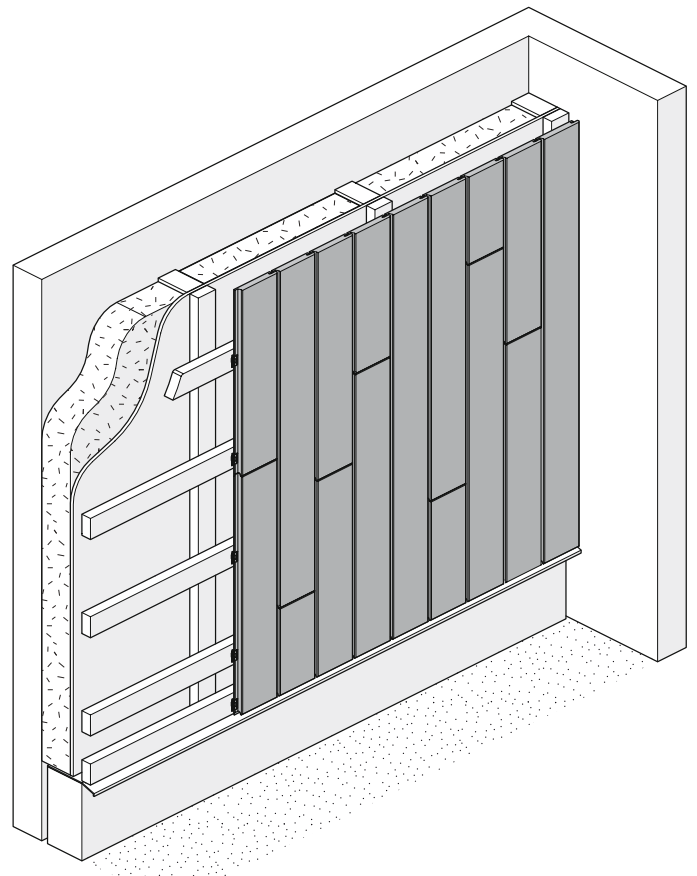
Whilst all due care is taken to ensure the accuracy of the installation instructions, individual circumstances (location, sub structure and installation procedures) may vary and are beyond the manufacturer's control. In case of doubt, therefore, consult the distributor. Always follow the local building 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-outdoor.com/product/bamboo-thermo-siding/](http://www.moso-bamboo-outdoor.com/product/bamboo-thermo-siding/)**

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### random pattern



# MOSO Bamboo Thermo Outdoor Siding

## installation instructions

### storage and handling

MOSO® Bamboo Thermo® should be kept out of direct sunlight and should not be exposed to inclement weather before installation.

### safety

Drilling, sawing, sanding, and machining Bamboo Thermo® generates dust. Avoid inhaling dust by wearing a dust mask. Visit [www.moso-outdoor.com](http://www.moso-outdoor.com) for MSDS information.

### required tools

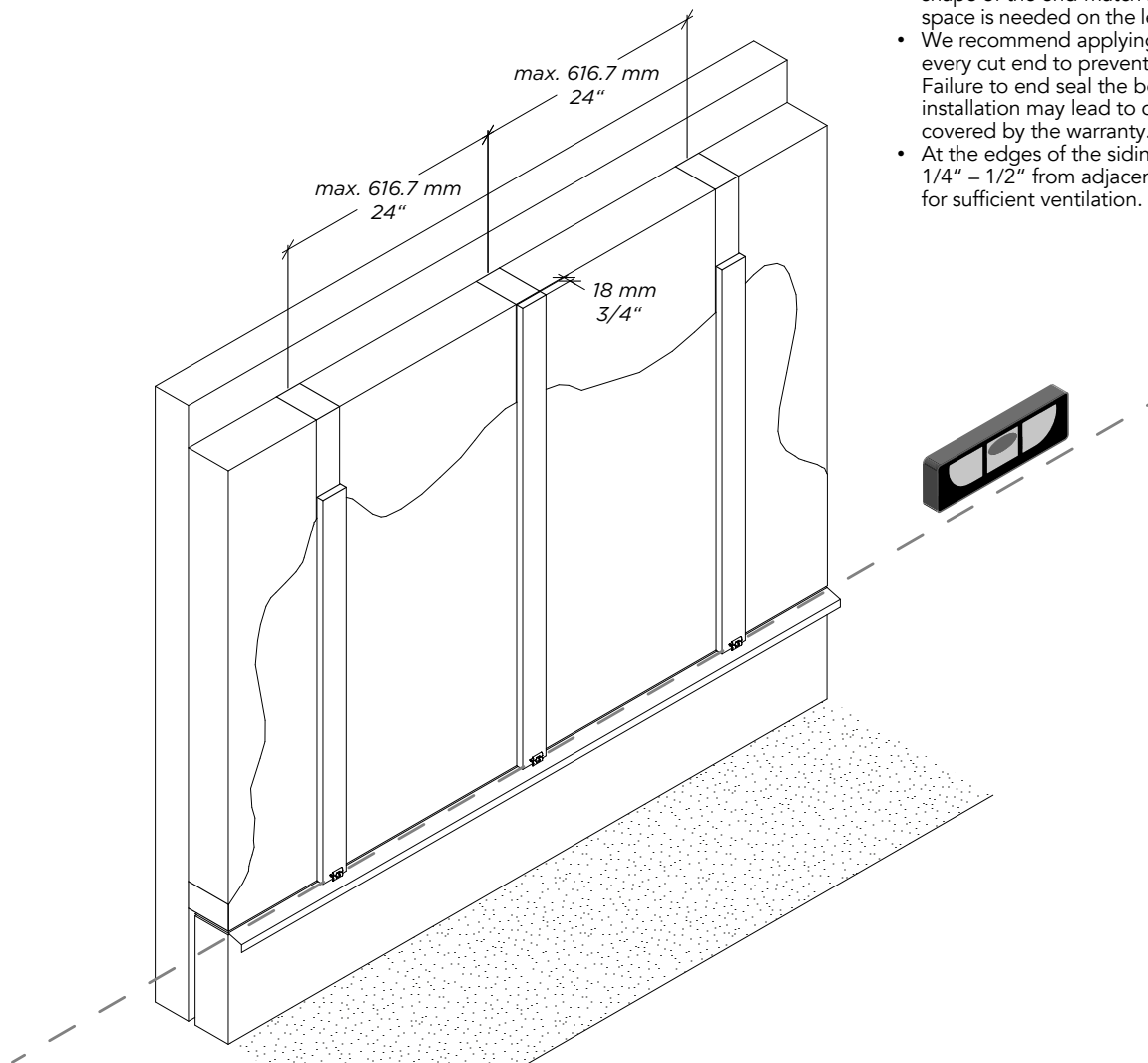
- Drill
  - Drill bits
  - A four foot and eight-foot level
  - Safety glasses
  - Power screw gun with ratcheting torque setting
  - Chop saw
- Bamboo Thermo® can be crosscut with a quality chop saw, using a carbide-tipped blade. Ripping can be done on a standard table saw, using a properly aligned quality fence with a carbide-tipped blade. Anchorseal-2 Wood
  - Sealer or equivalent is strongly recommended on cross-cut ends to minimize the effects of weather on these exposed ends.
  - Bamboo Thermo® can be routed or planed with high-speed steel or carbide cutters.
  - When required, only sand in the direction of the grain (i.e. belt sander. Never use an orbital sander.)

### please note

- Local building codes must always be consulted. Most counties require building permits.
- MOSO® Bamboo Thermo® is a natural product, which varies in color, grain and appearance. Color can change fast from dark brown to brown or gray, depending on the maintenance schedule.

### before installation

- Bamboo Thermo® siding should not be installed in contact with the ground at grade level, a concrete slab, deck materials or standing water. Allow a minimum of 1" - 2" clearance between the bottom edges of the rain screen and the ground, slab, or deck to allow for adequate ventilation.
- Keep at least 3/16" ventilation space between the boards (in vertical direction).
- Installation with MOSO® Bamboo Asymmetric fasteners ensures correct spacing automatically.
- Because of the stability of the boards and the shape of the end-match system no expansion space is needed on the length (board ends).
- We recommend applying end sealer wax on every cut end to prevent water penetration. Failure to end seal the boards at the time of installation may lead to checking which is not covered by the warranty.
- At the edges of the siding, keep a distance of 1/4" - 1/2" from adjacent materials, to allow for sufficient ventilation.



# MOSO Bamboo Thermo Outdoor Siding

## installation instructions

### the installation

- Apply a waterproof membrane against the wall and screw vertical battens (at least 3/4" thick x 1-7/8" wide / 1x2" (19 mm thick x 60 mm wide) onto that, creating a rigid / flat surface onto which the boards can be fixed.
- Each board should be fixed on at least 3 battens so the maximum center-to-center distance between is 2 ft (616.7 mm / 24").
- The siding boards should be fixed using the MOSO® Fastener (CLIP-SCREW-BX08-360pc). Use a screw that is suitable for the material of the chosen batten.
- Make sure the MOSO® Fastener is screwed in the middle of the batten so that it is fully supported.
- **STEP 1 leveling fasteners**
  - Start with the lowest row of fasteners and make sure they are placed fully level (using a spirit level).
  - Avoid over-tightening the screws as this can pull the fastener slightly into the wood, making it difficult to place the board onto the fastener.
  - We recommend fixing the end of the boards (end joints) on a batten, using 2 fasteners; one fastener for the ends, top and bottom, will suffice for fastening the end-matched ends of the boards. If a random joint pattern is desired, the distance between the battens should be maximum 300 mm / 12" (see drawing random pattern below).
- **STEP 2 install first row of boards**
  - Make sure that the fasteners engage deeply enough in the groove so that the boards lay level. Tapping the boards should be done carefully, preferably with a rubber mallet.
  - Install the first row of boards.
- **STEP 3 second row of fasteners**
  - Install the second row of fasteners, pushing them down on the edge of the first row of boards.
- **STEP 4 install rest of boards**
  - Install the second row of boards in the same way, and continue for the rest of the surface.
  - Check regularly if the boards are level.

### maintenance

The surface sides of the boards will get rougher and silver over time. If you want to keep a darker color, regular maintenance is needed:

- Clean the material with water.
- Let the material dry.
- Apply a coat of exterior penetrating oil for hardwoods.
- We recommend to repeat this (cleaning + reapplying oil) at least once per year.

### additional note

While all due care is taken to ensure the accuracy of the installation instructions, individual circumstances (location, wall structure/sheathing and installation procedures) may vary and are beyond the manufacturer's control. In case of doubt, please consult your local dealer/distributor. These instructions are subject to change. For the latest version visit [www.moso-outdoor.com](http://www.moso-outdoor.com)

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Applies to Dutchlap profiles and Fluted Accent siding

