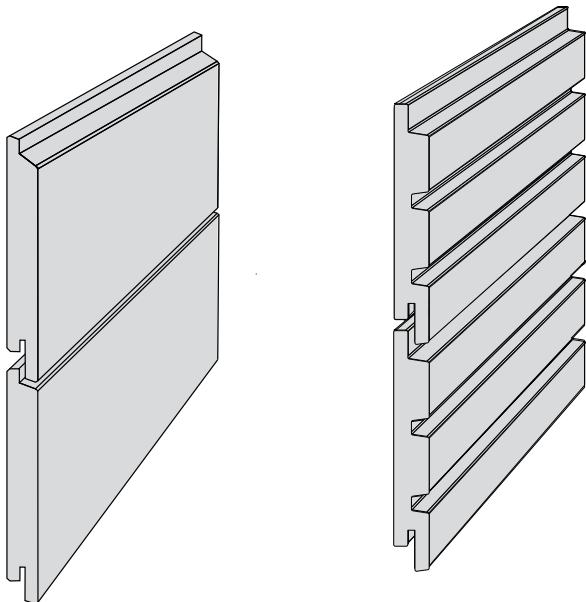


Bamboo X-treme® Outdoor Cladding

installation instructions

rebated & rhombus profiles

horizontal



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions rebated & rhombus 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 horizontal 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 616.7 mm (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 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 rooftrim should be installed to avoid direct (rain)water behind the cladding installation.
- 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.

diagram 1 - normal pattern

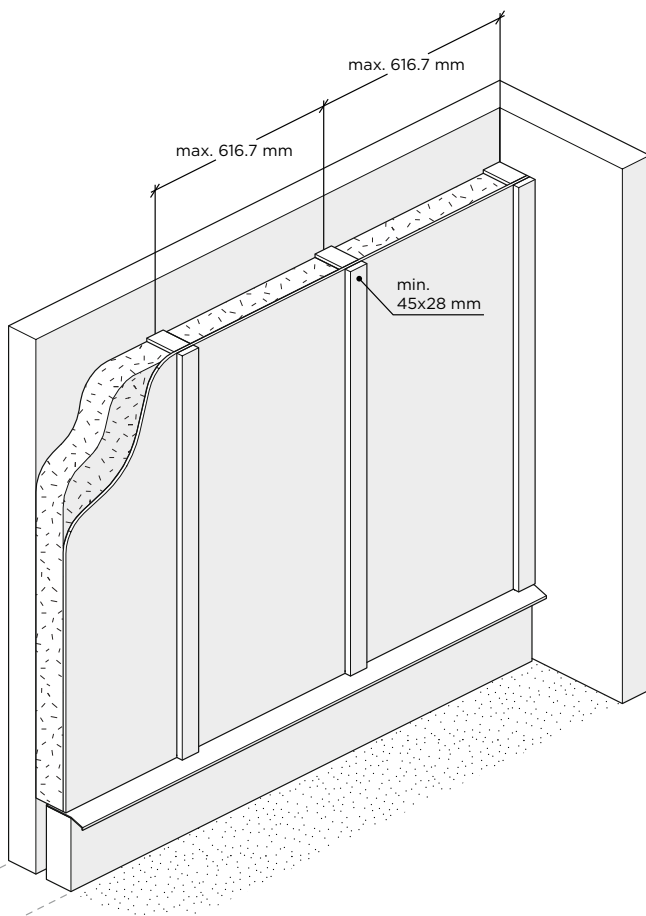
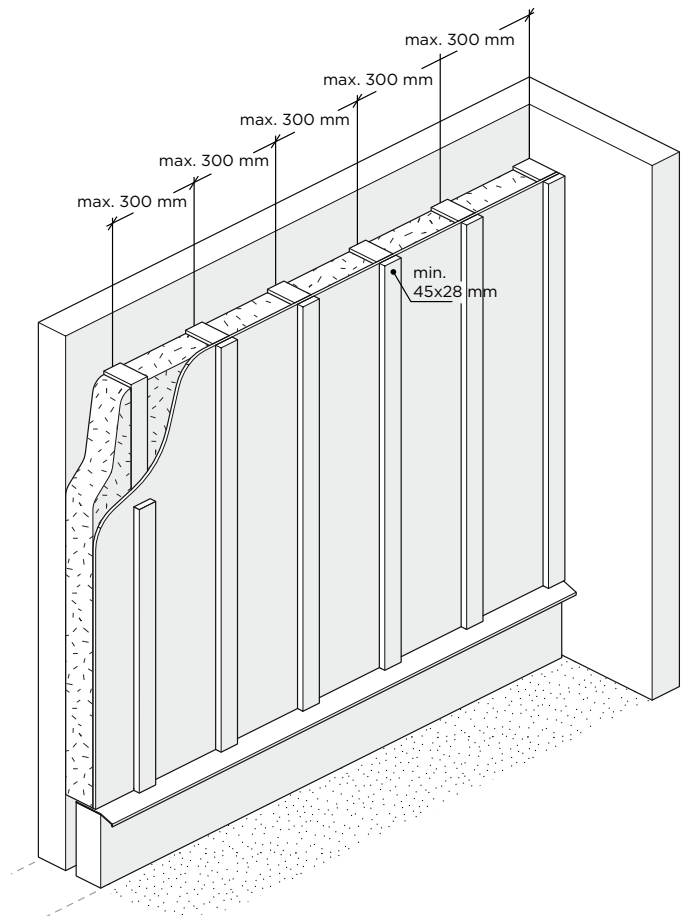


diagram 2 - random pattern



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions rebated & rhombus profiles

horizontal installation

STEP 1 - levelling first row of fasteners

- Start with the lowest row of fasteners (MOSO® Asymmetric Fastener with waved side up) and make sure they are placed fully level (using a spirit level).
- Avoid overtightening the screws as this can pull the fastener slightly into the wood, making it difficult to place the board onto the fastener.

STEP 2 - install first row of boards

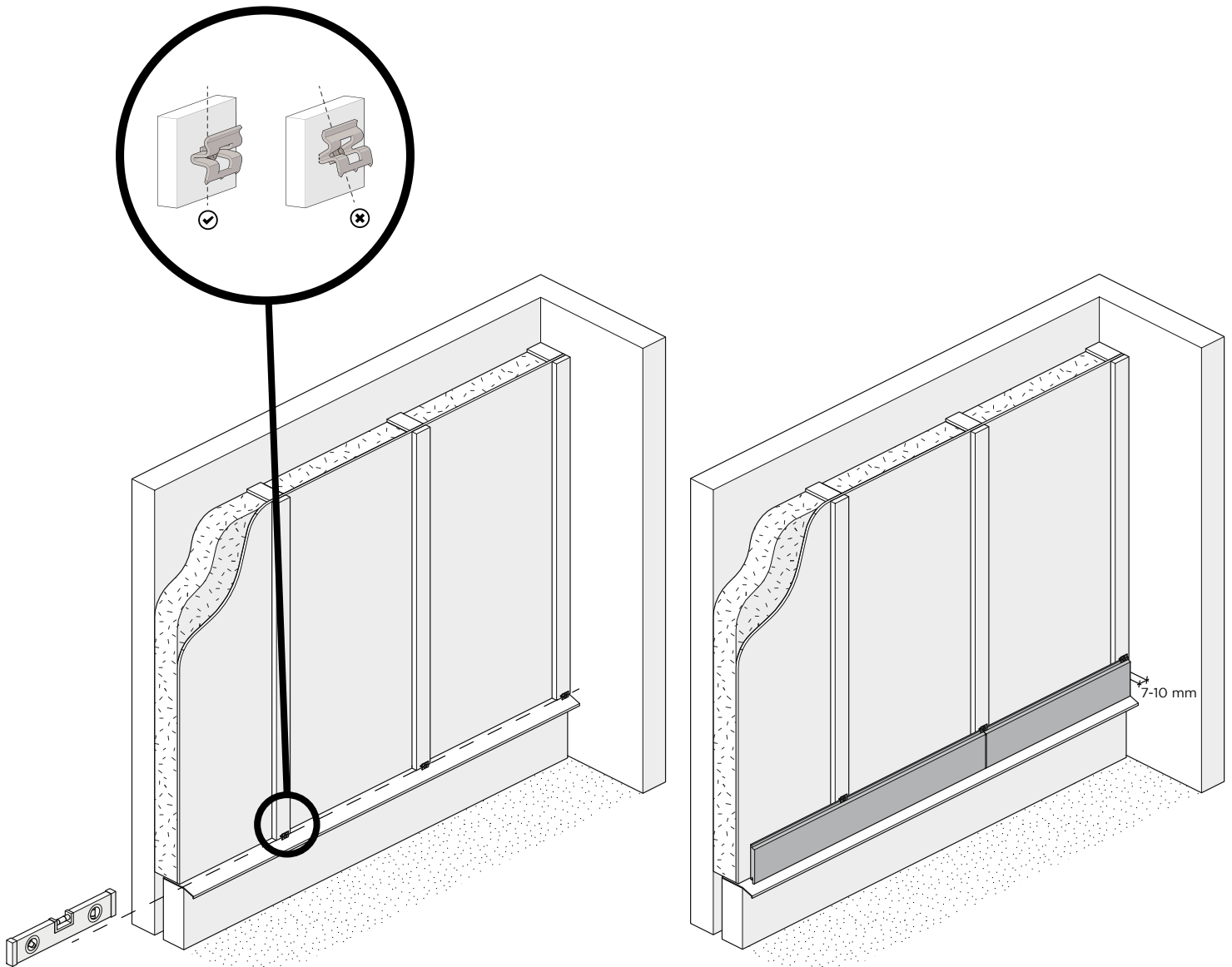
- Place the board onto the row of fasteners. The waved side of the fastener enables an easy grip into the groove of the board.
- Make sure that the fasteners engage deep enough in the groove of the board so that the boards lay level. Tapping the boards should be done carefully, preferably with a rubber 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.

STEP 3 - second row

- Install the second row of fasteners (MOSO® Asymmetric Fastener with the waved side up), 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.



MOSO® Bamboo X-treme® 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 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.

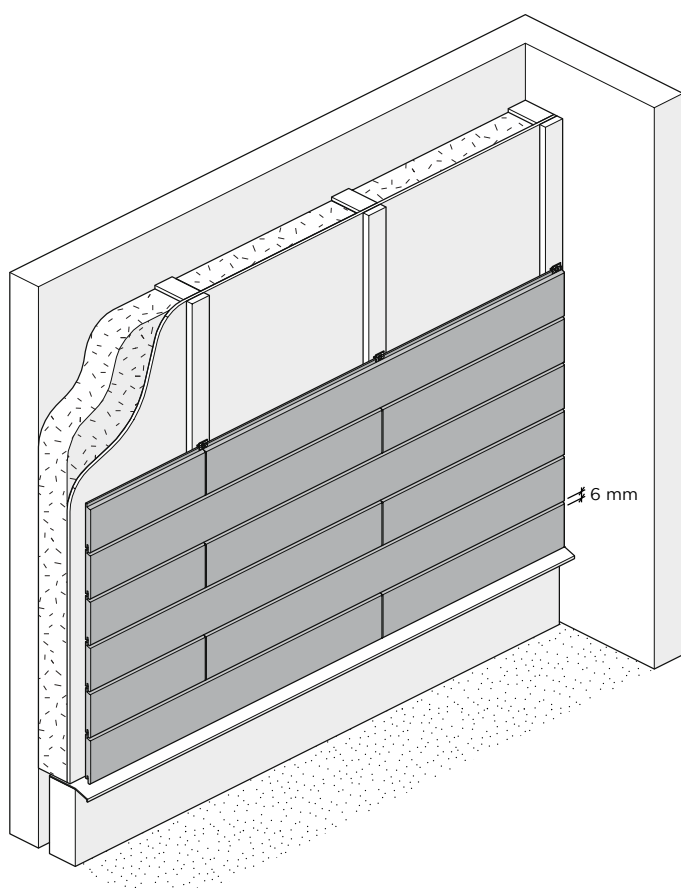
This does not affect the stability or durability of the board.

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.

normal pattern



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

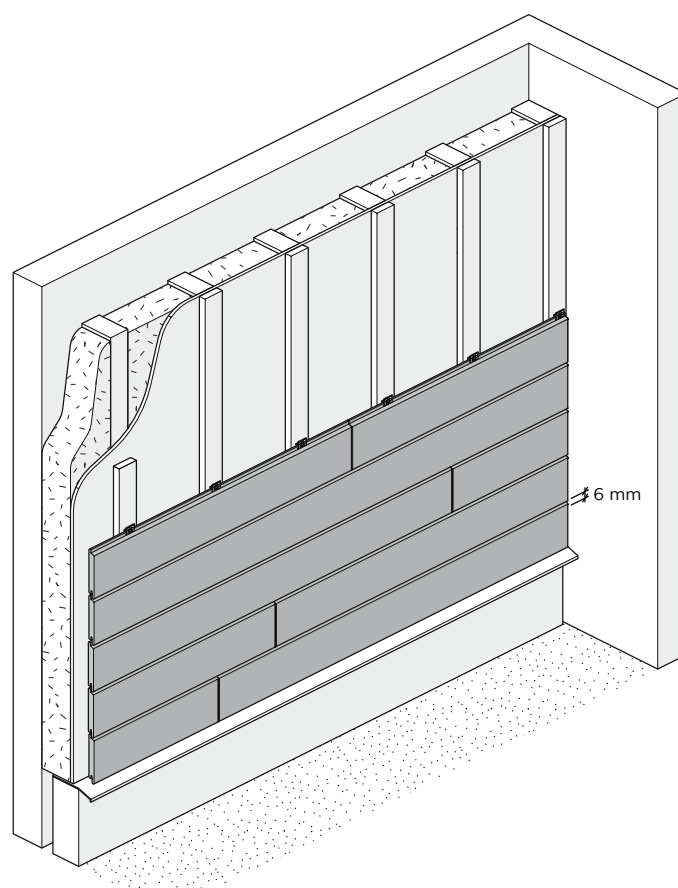
Whilst all due care is taken to ensure the accuracy of the installation instructions, individual circumstances (location, sub structure and installation procedures) may vary and are beyond the manufacturer's control. In case of doubt, therefore, consult the distributor. Always follow the local building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

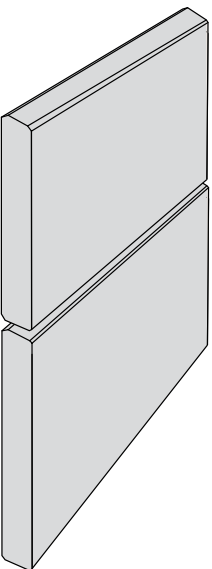


Bamboo X-treme® Outdoor Cladding

installation instructions

trapezium profiles

horizontal



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions trapezium 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.
- 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 horizontal 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 616.7 mm (1850 mm/3) (diagram 1 - normal pattern). Always install the ends of the boards exactly on the battens.
- Use minimum A2 stainless steel quality countersunk head screws. 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 rooftrim should be installed to avoid direct (rain)water behind the cladding installation.
- 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.

diagram 1 - normal pattern

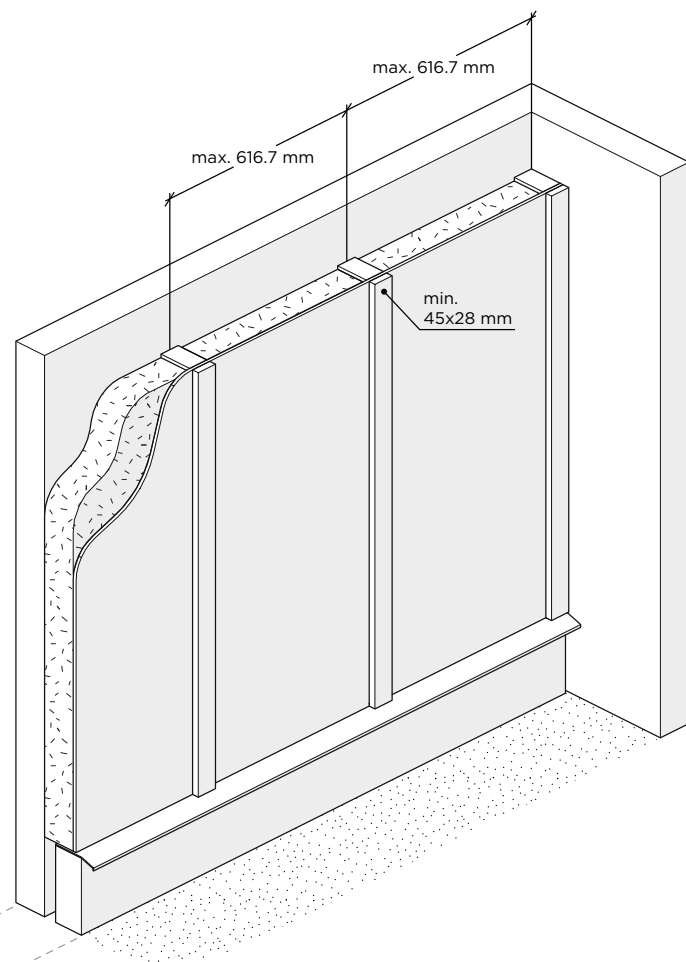
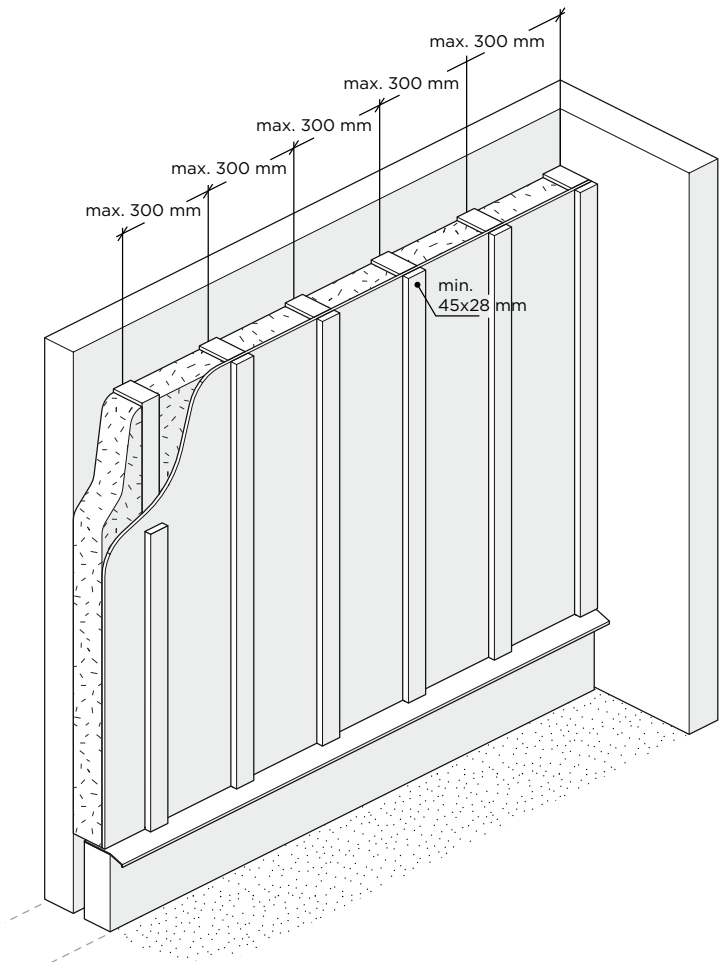


diagram 2 - random pattern



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions trapezium profiles

horizontal installation

STEP 1 - Install first row

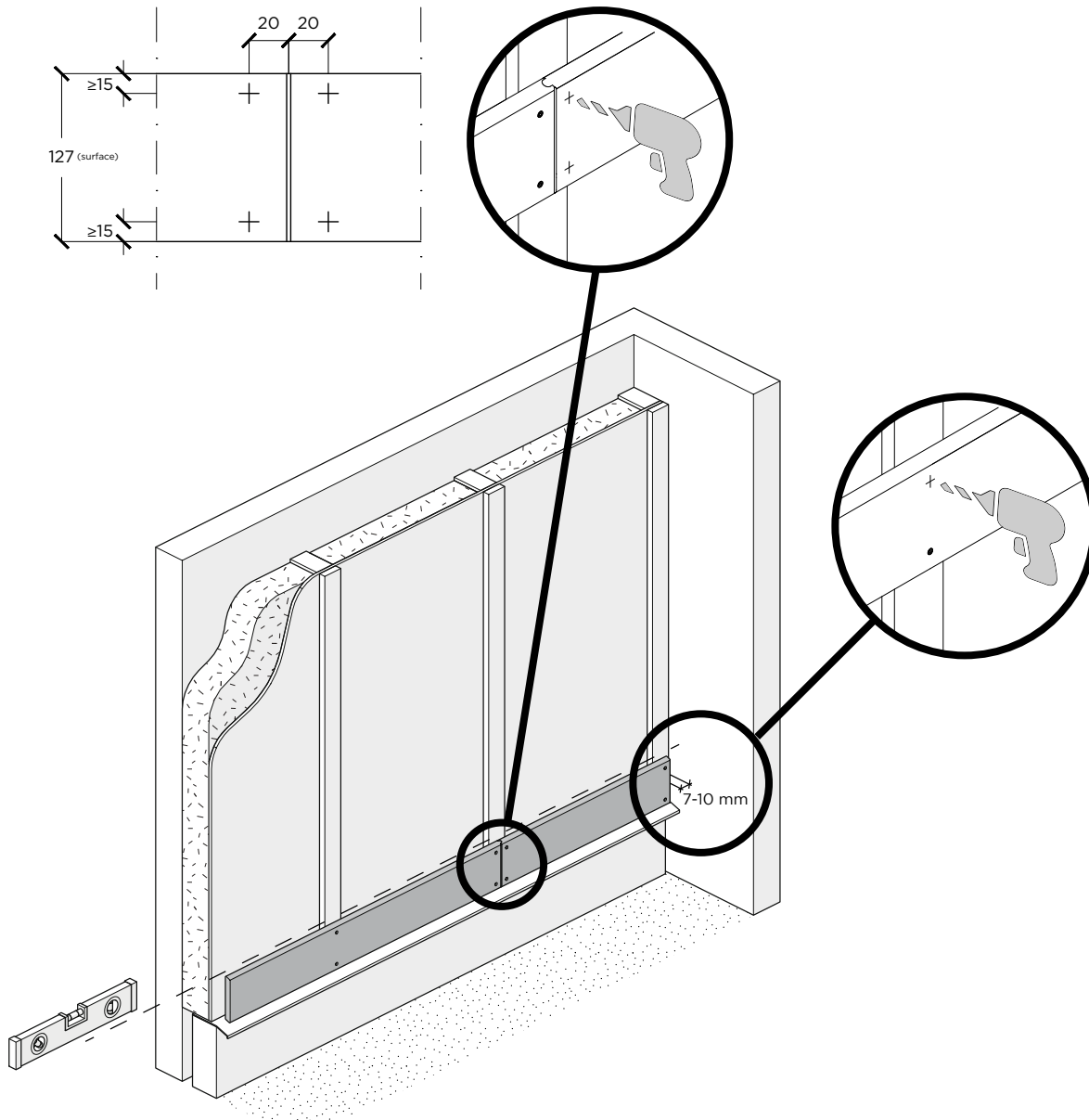
- Start with the lowest row of boards and make sure they are placed fully level (using a spirit level).
- Take care about the positioning of screws, try to align them and thereby obtain an equal distribution. Always use 2 screws at each fixing point. Use minimum A2 stainless steel quality countersunk head screws for installation. Please see the detailed drawing below, which indicates the positioning of screws.
- Make use of a countersink drill to ensure the same sinking depth for every screw.
- Make sure you keep a ventilation gap (7-10 mm) is kept on the edge of the cladding.

STEP 2 - Install second row

- Install the second row of boards, using a minimum 6 mm spacer.
- Please regularly check that the boards are still level.

STEP 3 - Continue with the rest

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



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions trapezium 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 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.

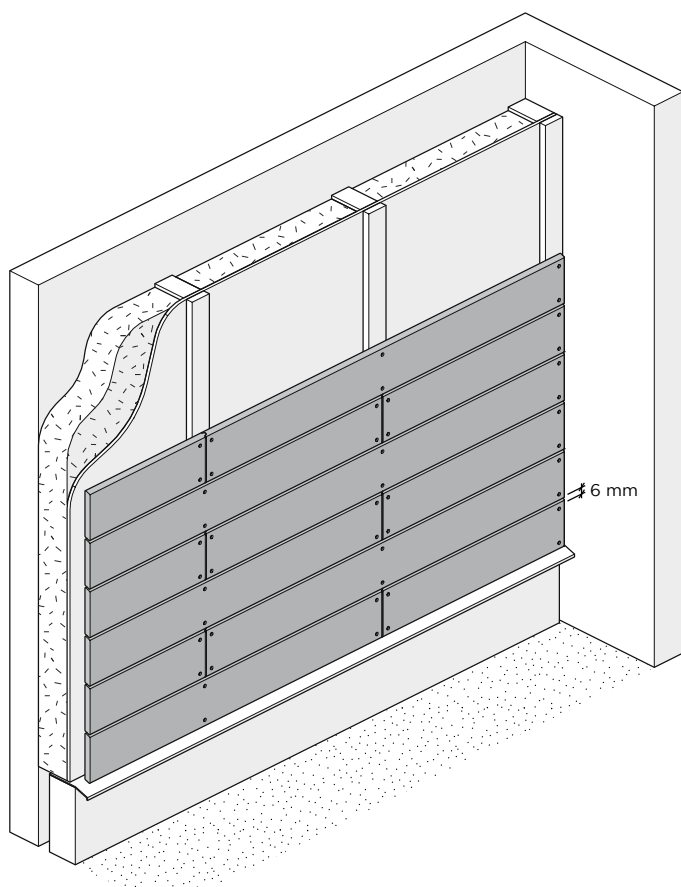
This does not affect the stability or durability of the board.

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.

normal pattern



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

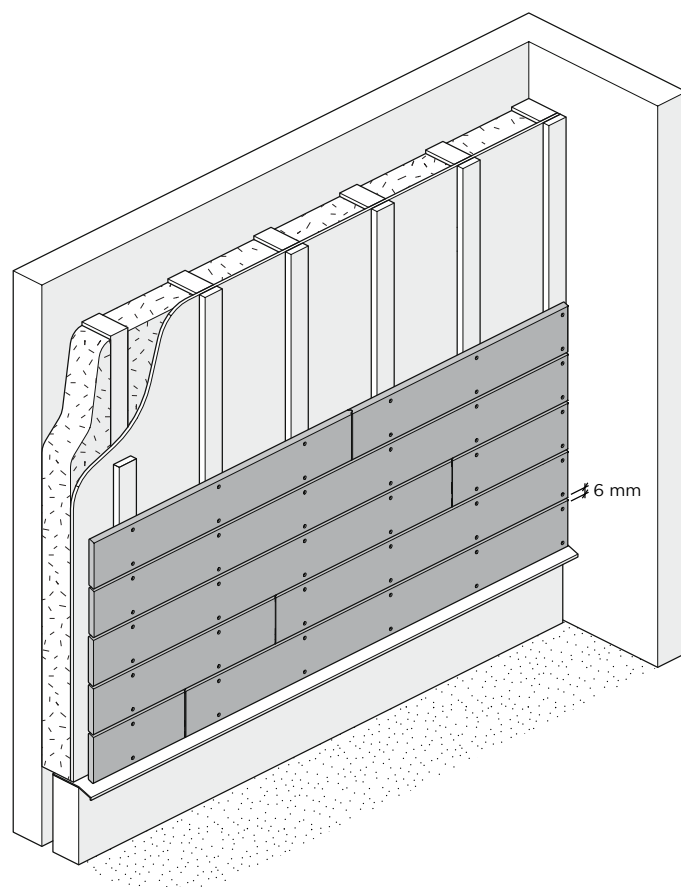
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MOSO warrants the bamboo material and the mounting materials (screws) it supplies but does not warrant the connection with other materials (such as sub frame joist/battens). It is the responsibility of the installer to make sure the used screw matches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

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random pattern

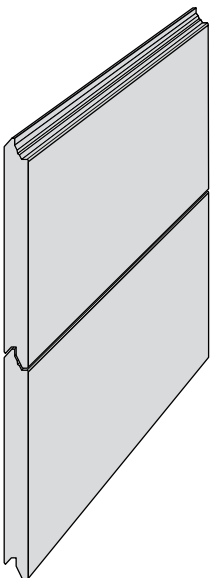


Bamboo X-treme® Outdoor Cladding

installation instructions

closed profiles

horizontal



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions closed 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.
- We recommend applying sealer on every (cut) end to prevent water penetration. A sealer is available from MOSO®.

before horizontal 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 616.7 mm (1850 mm/3) (diagram 1 + page 4 - normal pattern). Each cut board should be fixed to at least 2 battens.
- Any other smaller spacing is possible, as the position of the ends of the boards can be random (boards are interlocked on length - and end-match system with tongue & groove on ends) (page 4 - random pattern).
- At the edges of the cladding, keep a gap of 7-10 mm from adjacent materials, to allow for sufficient ventilation. As there is no ventilation between individual boards, openings (min. 200 mm²/m² facade) should be provided at the top and bottom of the facade (diagram 2).
- At the top of the façade, a rooftrim should be installed to avoid direct (rain)water behind the cladding installation.
- Use minimum A2 stainless steel quality countersunk head screws. Make sure to drive the screw deep enough into the supporting construction for proper fixing.

diagram 1

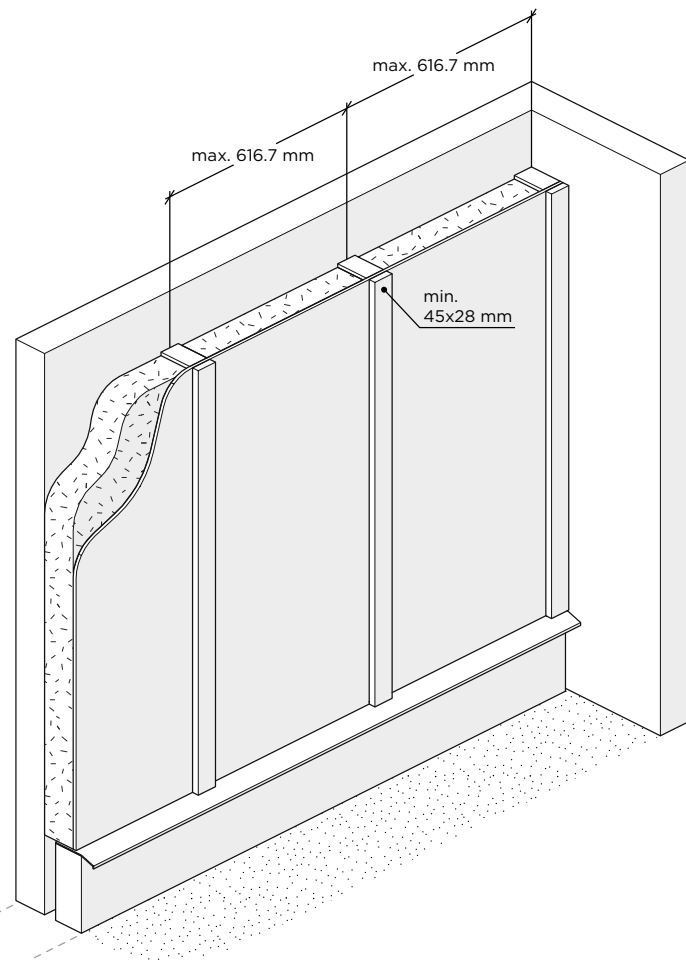
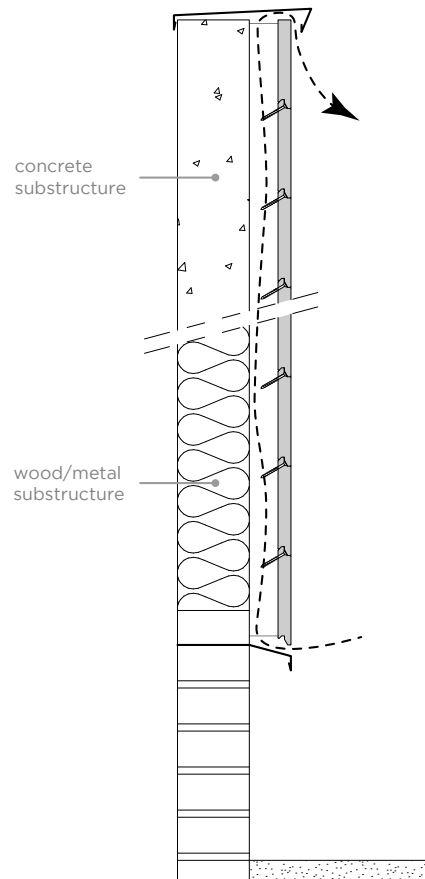


diagram 2



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions closed profiles

horizontal installation

STEP 1 - Install first row

- The top side of the board can be identified by the small groove to position your drill (diagram 3).
- Start with the lowest row of boards and make sure they are placed fully level (using a spirit level).
- Make sure a ventilation gap (7-10 mm) is kept on the edge of the cladding.
- To fix the bottom edge of the board there are 2 commonly used options (diagram 4):
A: Visible screw B: Polymer glue (consult your local supplier for recommended types of glue)
- 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.

- Position your drill in the groove on the topside of the board and drill a hole under 30° angle with sufficient diameter (diameter drill ≥ diameter screw).
- Use minimum A2 stainless steel quality screws for mounting.

STEP 2 - Install next rows

- Place boards on top of the existing row and make sure no seams/gaps exist between the boards. In case manual pushing is not sufficient, use a rubber mallet to tap boards in place.
- Make sure the ends of the boards are completely closed and leave no gaps.

diagram 3

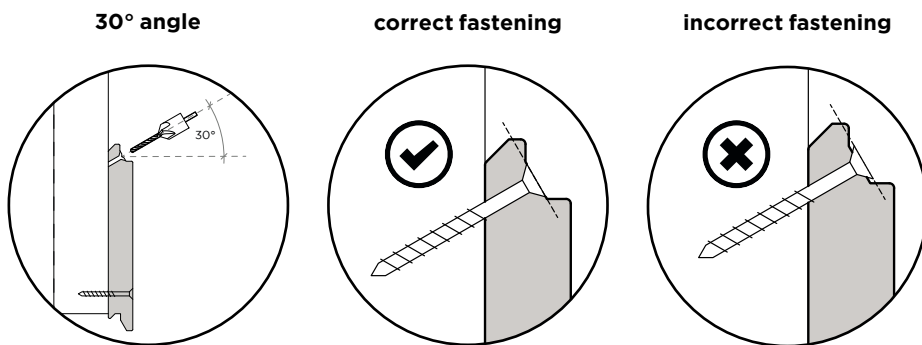
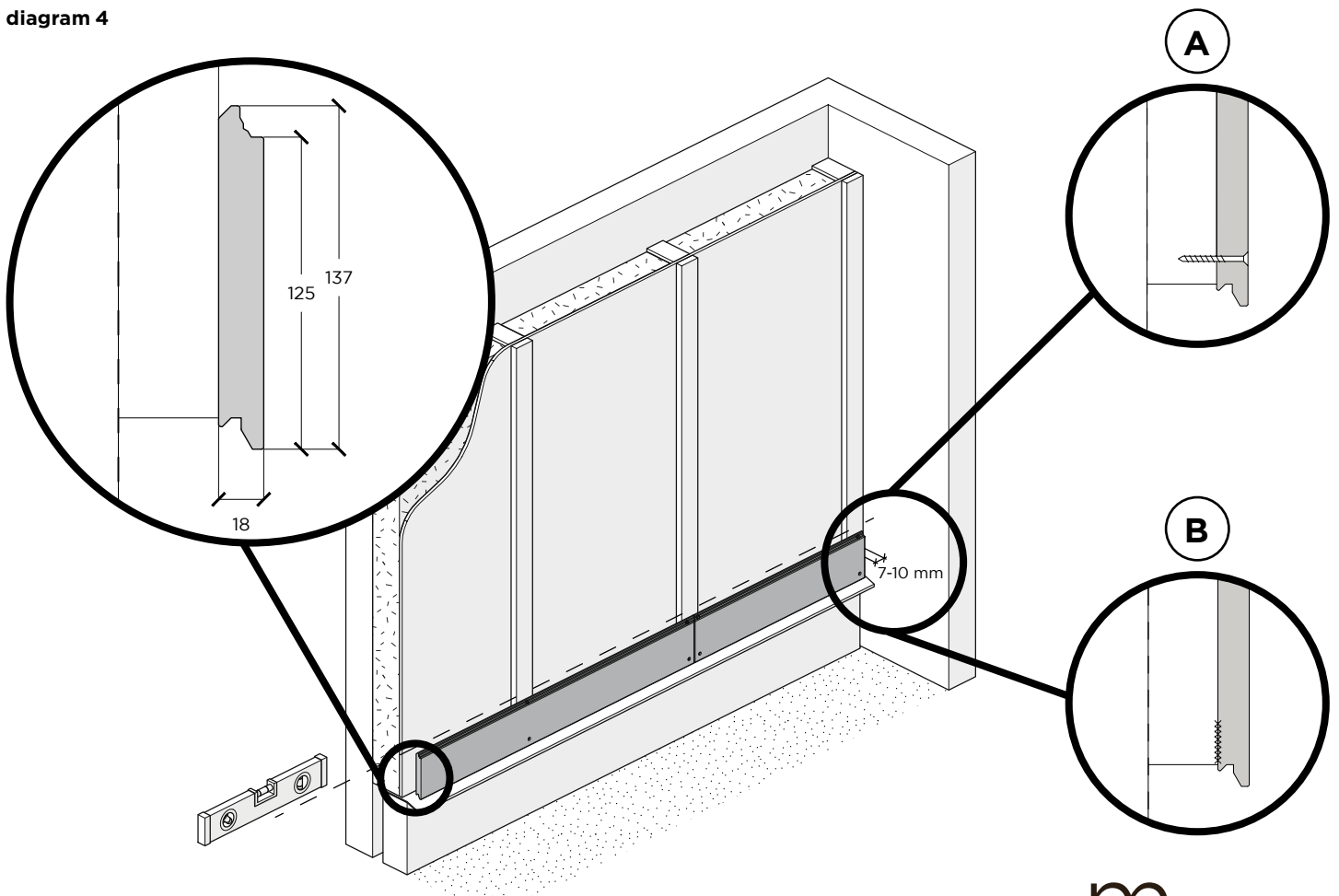


diagram 4



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions closed 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 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.

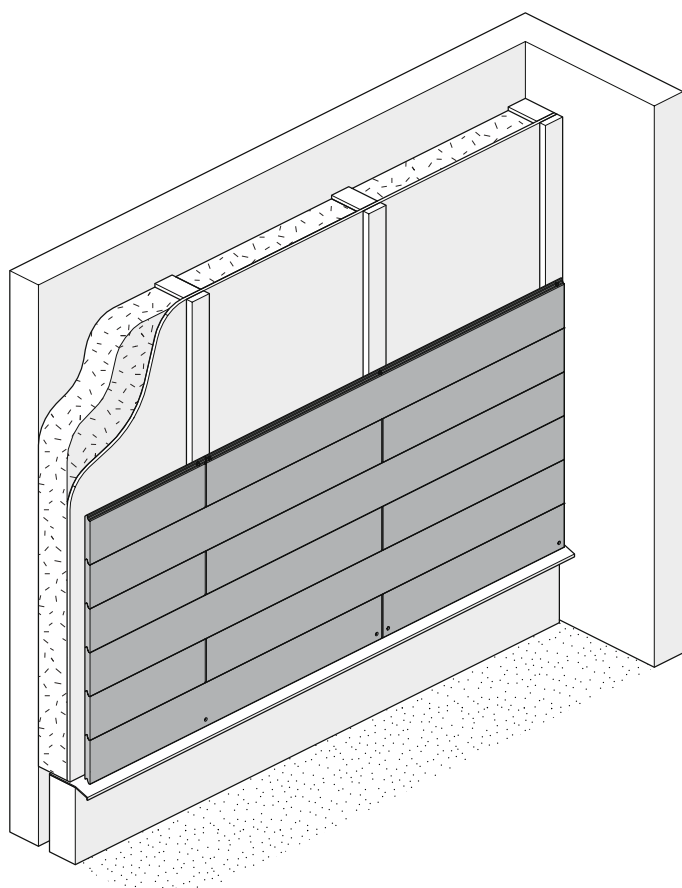
This does not affect the stability or durability of the board.

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.

normal pattern



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

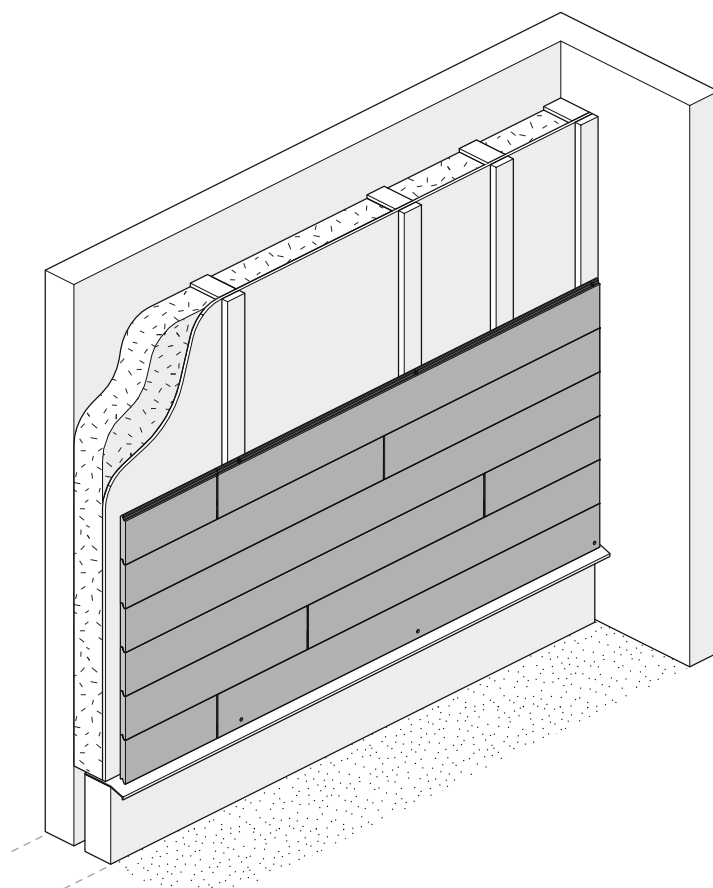
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MOSO warrants the bamboo material and the mounting materials (screws) it supplies but does not warrant the connection with other materials (such as sub frame joist/battens). It is the responsibility of the installer to make sure the used screw matches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

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random pattern

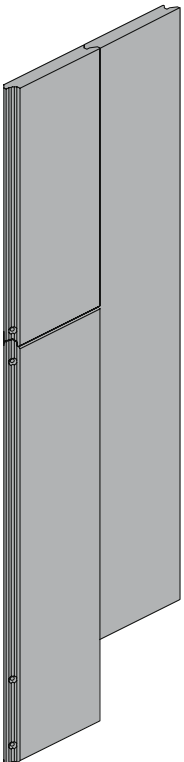


Bamboo X-treme[®] Outdoor Cladding

installation instructions

closed profiles

vertical



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions closed 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.
- 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 28 mm thick, 45 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 + page 4 - normal pattern). Each cut board should be fixed to at least 2 battens.
- Any other smaller spacing is possible, as the position of the ends of the boards can be random (boards are interlocked on length - and end-match system with tongue & groove on ends) (page 4 - random pattern).
- At the edges of the cladding, keep a gap of 7-10 mm from adjacent materials, to allow for sufficient ventilation. As there is no ventilation between individual boards, openings (min. 200 mm²/m² facade) should be provided at the top and bottom of the façade (diagram 2).
- At the top of the façade, a rooftrim should be installed to avoid direct (rain)water behind the cladding installation.

diagram 1

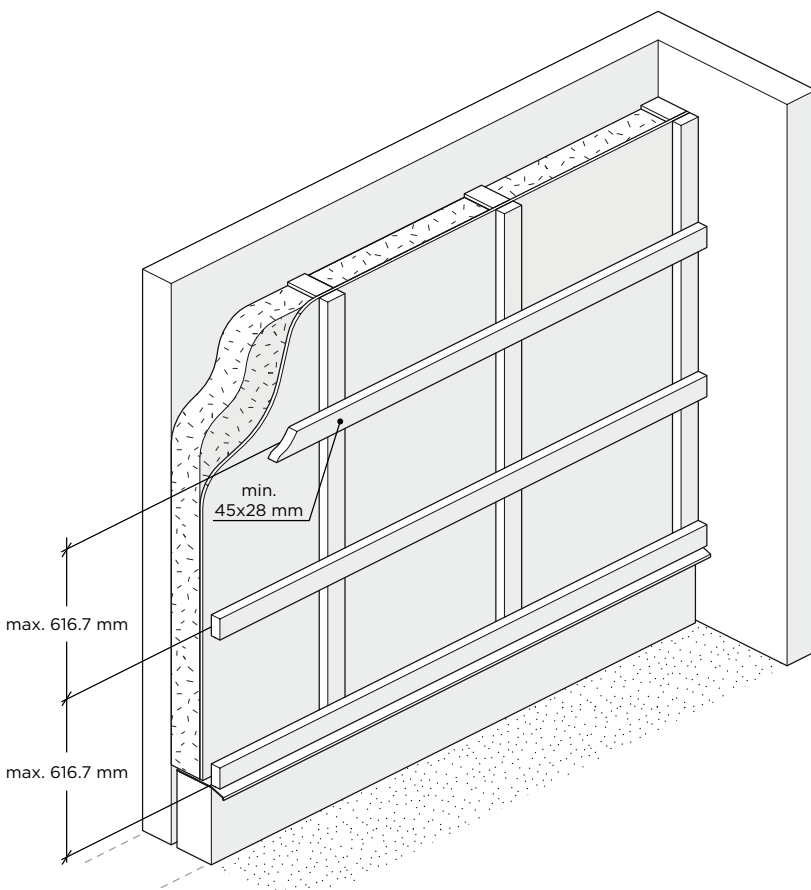
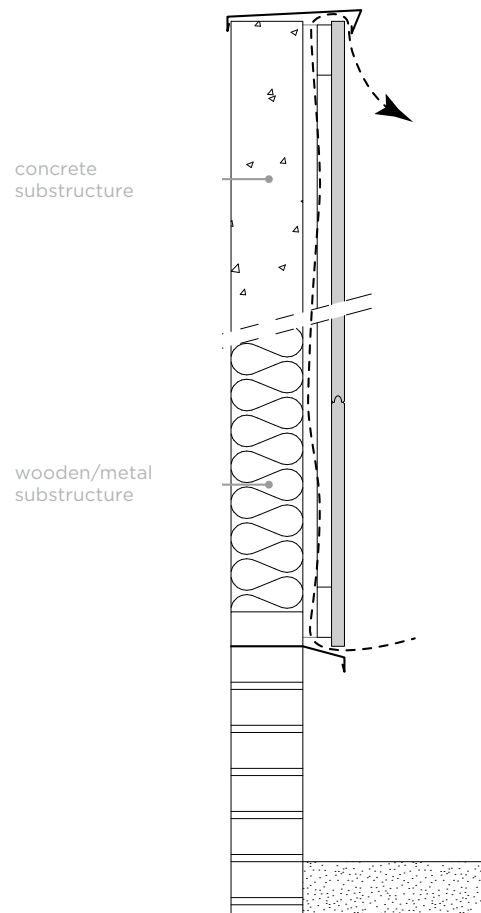


diagram 2



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions closed profiles

vertical installation

STEP 1 - Install first row

- Use the small groove on the side of the board to identify where to position your drill (diagram 3).
- Start with the first row of boards and make sure they are placed completely vertical (using a spirit level).
- 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.
- To fix the other side of the board there are 2 commonly used options (diagram 4): A: Visible screw B: Polymer glue (consult your local supplier for recommended types of glue)
- 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.

- Position your drill in the groove of the board and drill a hole at a 30° angle with sufficient diameter (diameter drill \geq diameter screw).
- Use stainless steel screws of minimum A2 quality for mounting.

STEP 2 - Install next rows

- Place boards next to the existing row and make sure no seams/gaps exist between the boards. In case manual pushing is not sufficient, use a rubber mallet to tap boards in place.
- Make sure the ends of the boards are completely closed and leave no gaps.

diagram 3

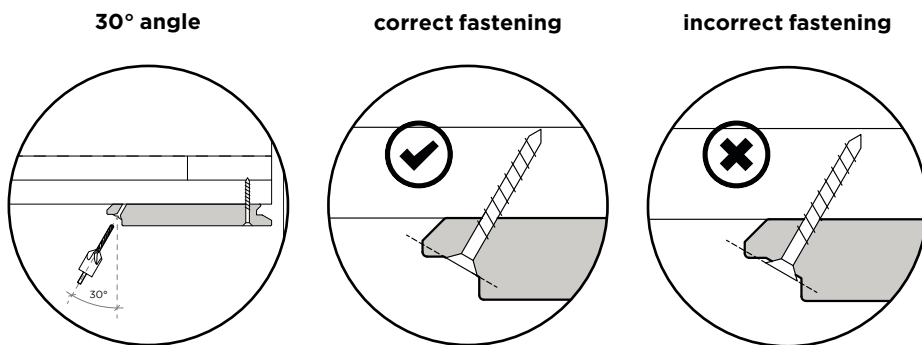
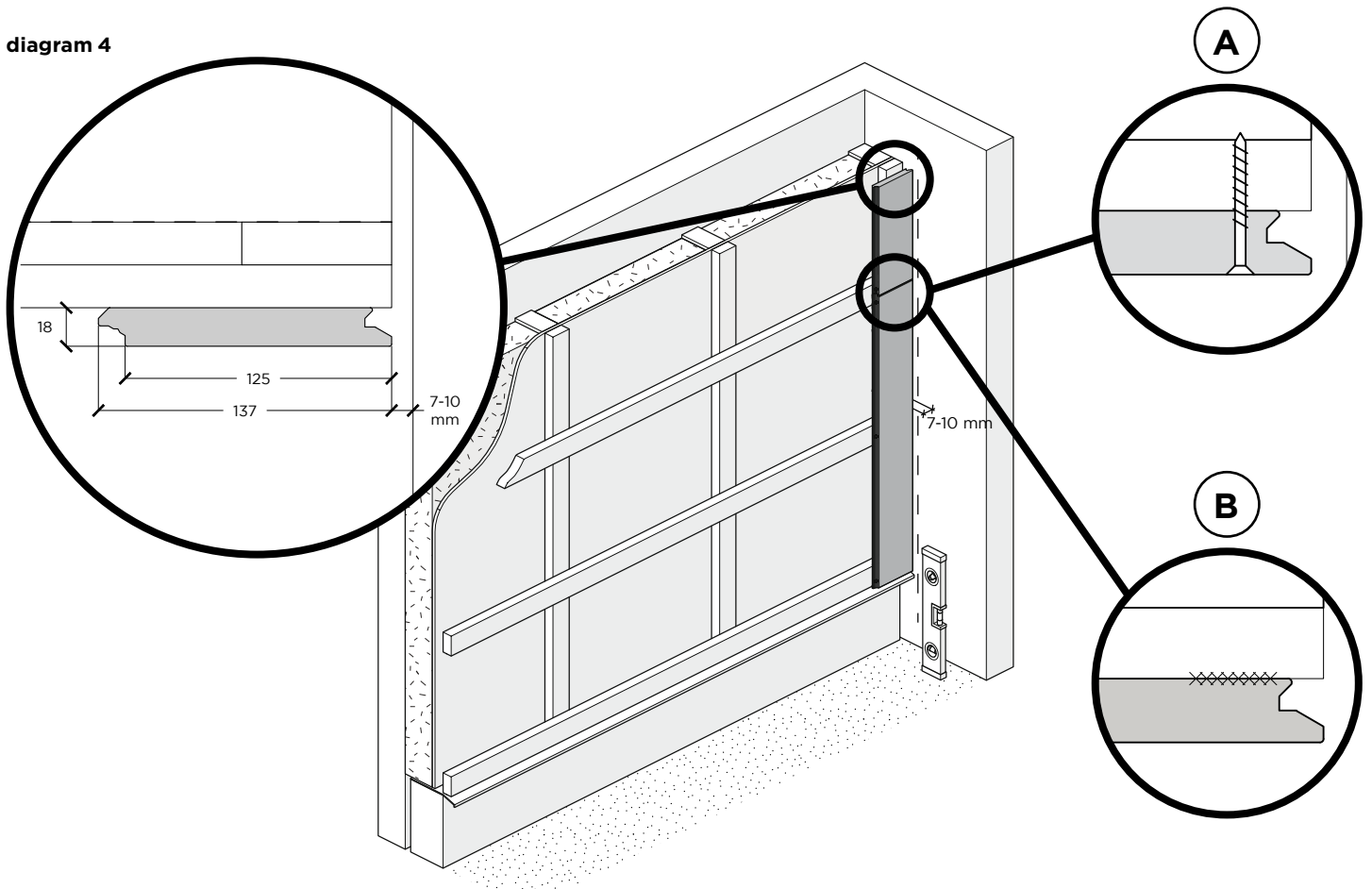


diagram 4



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions closed 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 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.

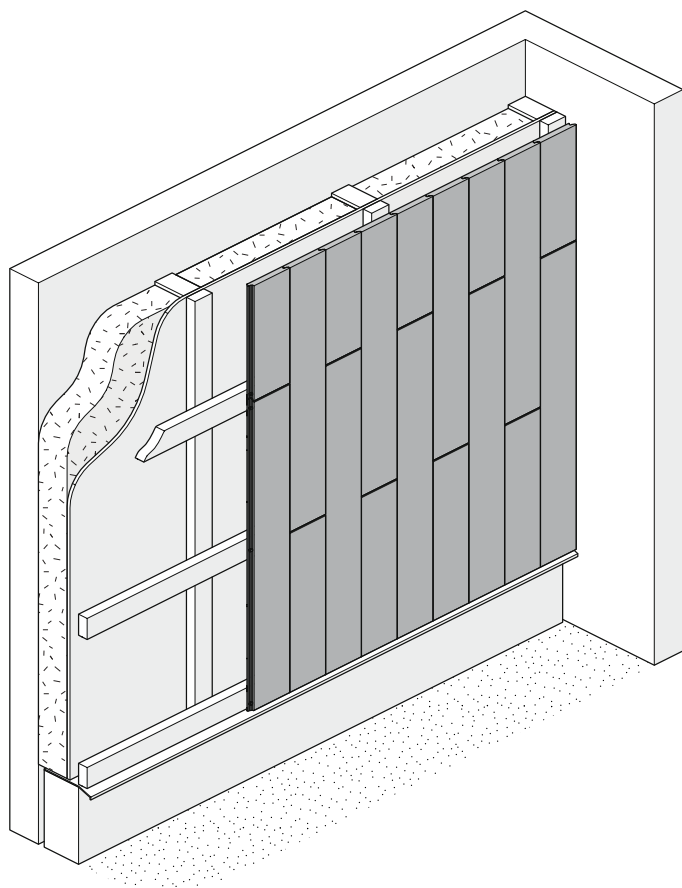
This does not affect the stability or durability of the board.

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.

normal pattern



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

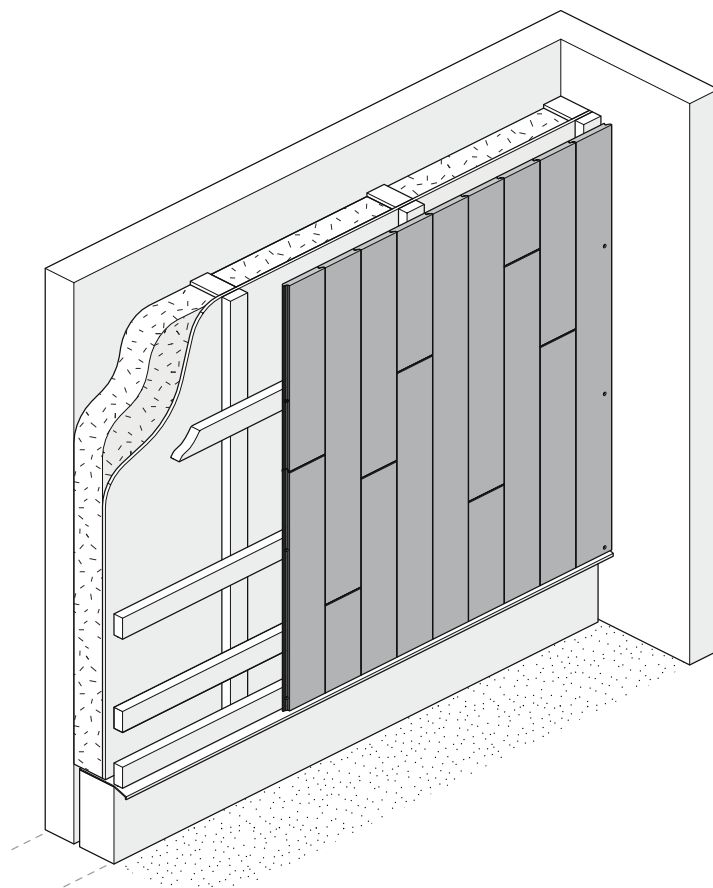
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MOSO warrants the bamboo material and the mounting materials (screws) it supplies but does not warrant the connection with other materials (such as sub frame joist/battens). It is the responsibility of the installer to make sure the used screw matches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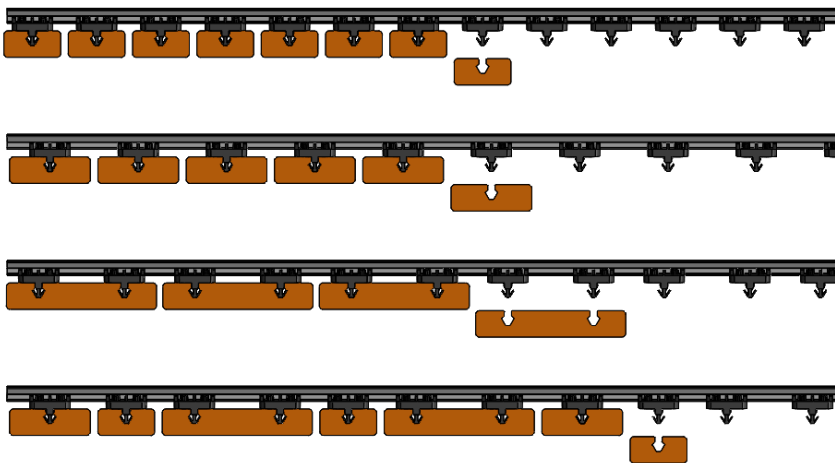
random pattern



Bamboo X-treme[®] Outdoor Cladding

installation instructions

Grad profiles



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions Grad 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.
- We recommend applying sealer on every (cut) end to prevent water penetration. A sealer is available from MOSO®.

before installation

- Fix the Grad installation system following the Grad Cladding Installation instructions and take the MOSO® general cladding instructions below into account. This creates a rigid/flat surface for installation of the boards.
- At the top of the façade, a rooftrim should be installed to avoid direct (rain)water behind the cladding installation.

general installation instructions

- Each board should be fixed to at least 3 rails: so the maximum centre-to-centre spacing between the battens is 616.7 mm (1850 mm/3). Always install the ends of the boards exactly on the Grad clips. Each cut board should be fixed to at least 2 rails.
- If a random joint pattern is desired, the spacing between rails can be maximum 300 mm. Each cut board should be fixed to at least 2 rails.
- Make sure a ventilation gap (7-10 mm) is kept on the edge of the cladding.
- Use stainless steel screws of minimum A2 quality for mounting, when you install a part of the cladding without the Grad system.

vertical installation

- Start with the first row of boards.
- Follow the Grad Installation Instructions and add polyurethane glue onto the lowest row of clips before installing the bottom row boards onto the Grad rails.
- If applicable, ensure the tongue of the board end is positioned upwards, to avoid water staying in the groove.
- Place boards next to the first row. In case manual pushing is not sufficient, use a rubber mallet to tap boards in place.

horizontal installation

- Start with the lowest row of boards.
- Place boards on top of the first row. In case manual pushing is not sufficient, use a rubber mallet to tap boards in place.
- Make sure the ends of the boards are completely closed and leave no gaps.

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 grey (similar to most timber). If you want to keep a darker colour, regular application of Woca or Sikken's 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 (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

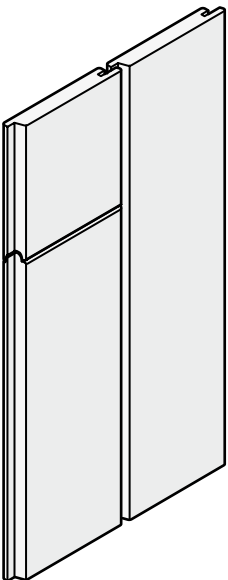
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Bamboo X-treme® Outdoor Cladding

installation instructions

rebated & rhombus profiles

vertical



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions rebated & rhombus 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 28 mm thick, 45 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 rooftrim should be installed to avoid direct (rain)water behind the cladding installation.

diagram 1 - normal pattern

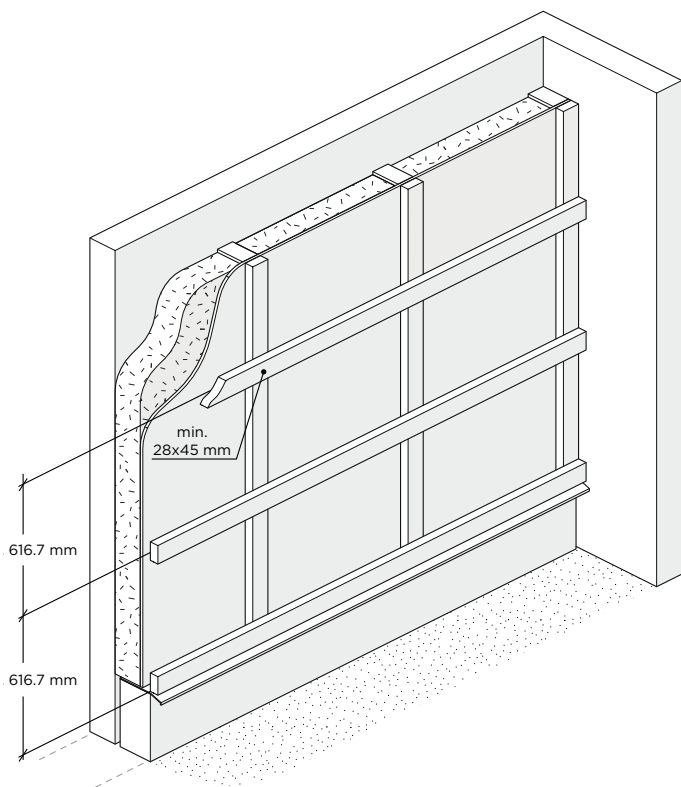
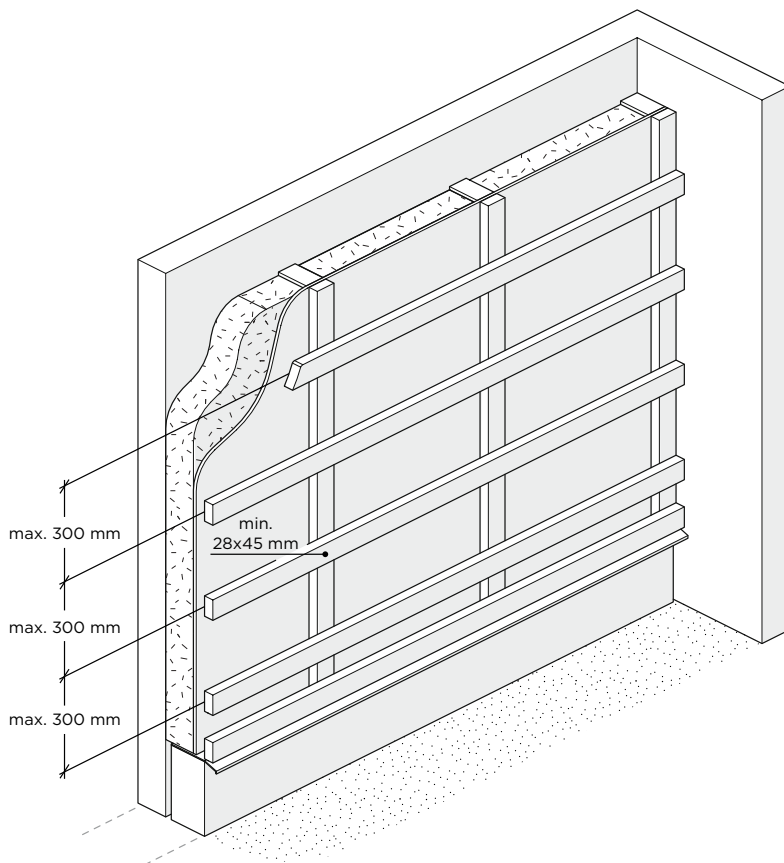


diagram 2 - random pattern



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions rebated & rhombus profiles

vertical installation

STEP 1 - Install first row

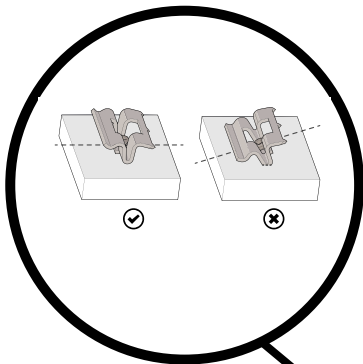
- Start with the first row of boards and make sure they are placed completely vertical (using a spirit level).
- To fix the first row of boards there are 2 commonly used options:
A: Visible screw or B: Polymer glue (consult your local supplier for recommended types of glue).
- The lower board must always 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, 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 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.

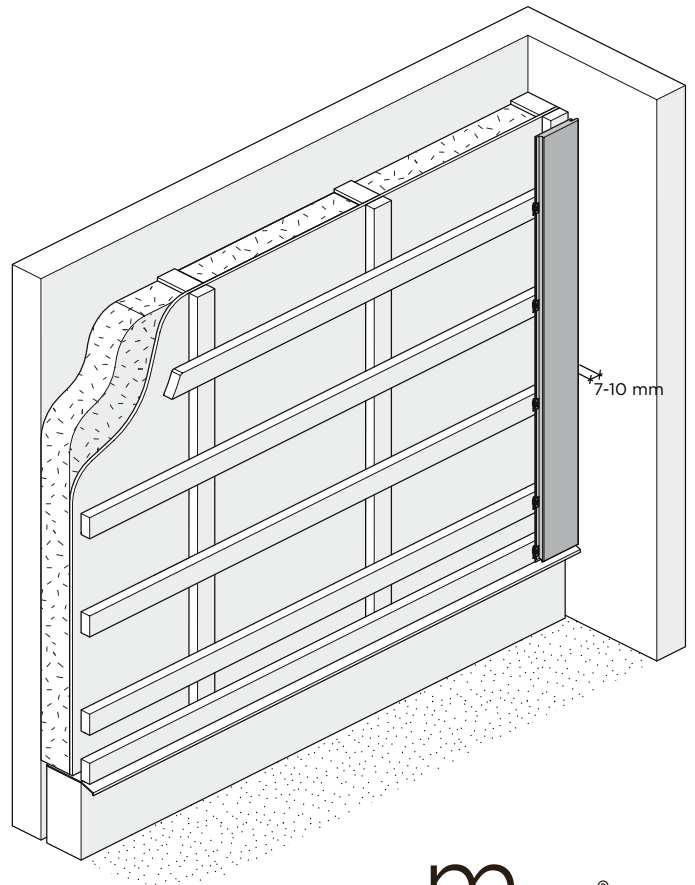
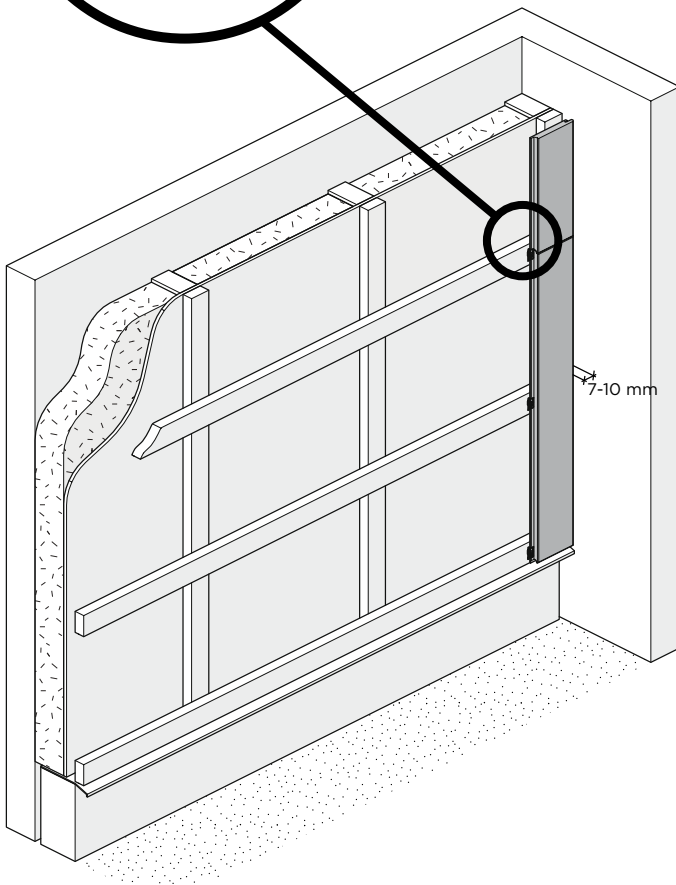
STEP 3 - Continue with the rest

- 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.



normal pattern

random pattern



MOSO® Bamboo X-treme® 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 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.

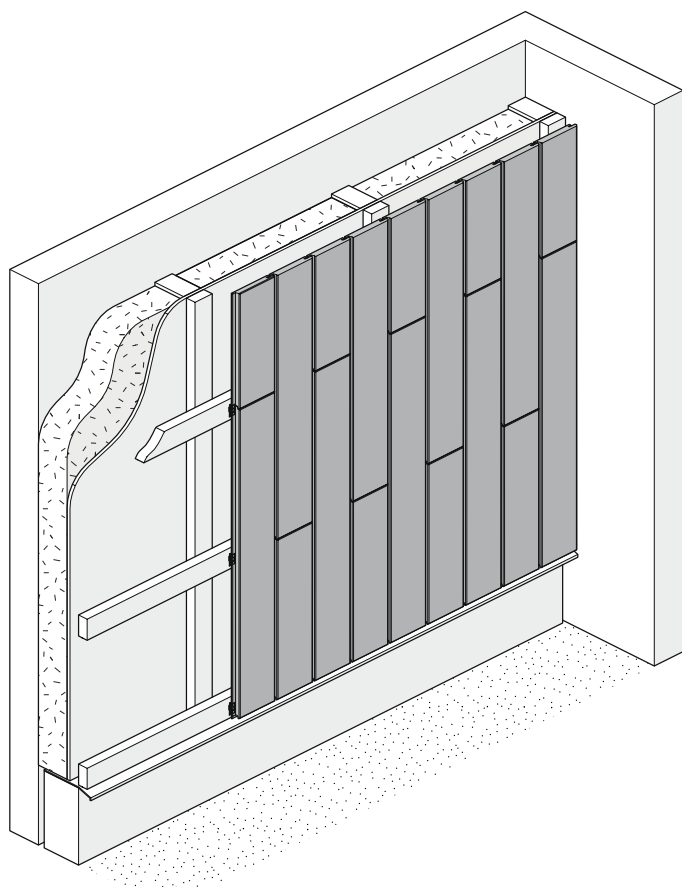
This does not affect the stability or durability of the board.

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.

normal pattern



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

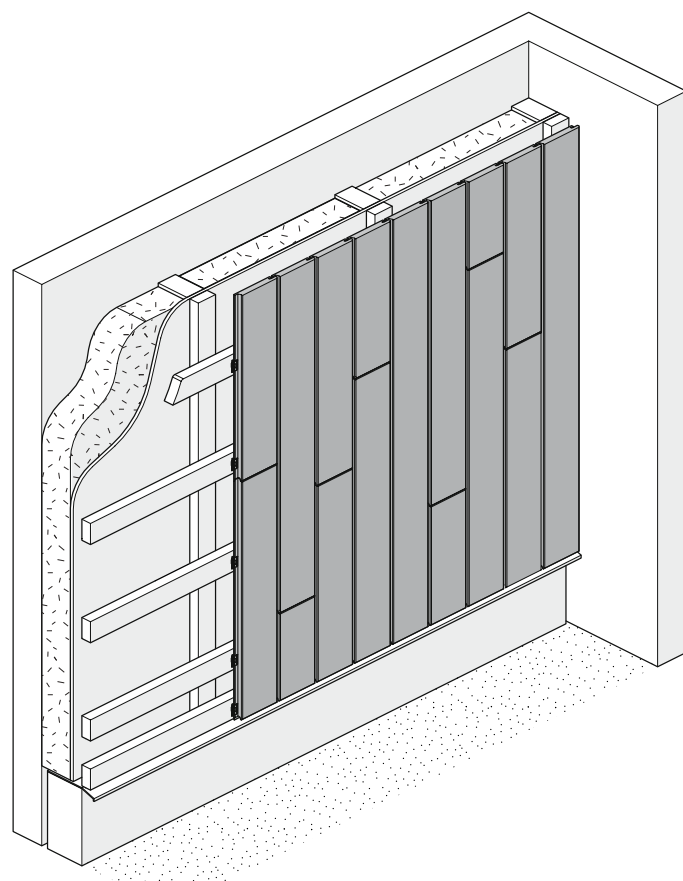
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MOSO warrants the bamboo material and the mounting materials (fasteners/screws) it supplies but does not warrant the connection with other materials (such as sub frame joist/battens). It is the responsibility of the installer to make sure the used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

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random pattern

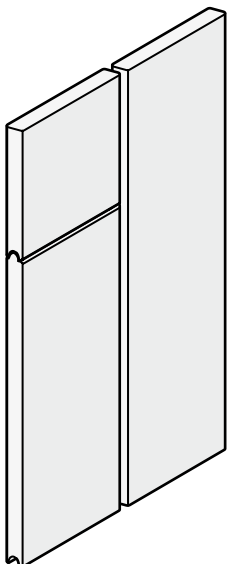


Bamboo X-treme® Outdoor Cladding

installation instructions

trapezium profiles

vertical



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions trapezium 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.
- 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 28 mm thick, 45 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 + page 4 - 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). Each cut board should be fixed to at least 2 battens.
- Use stainless steel screws of minimum A2 quality for mounting. Make sure that the screw is screwed deeply enough into the support structure for proper fixation.
- 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

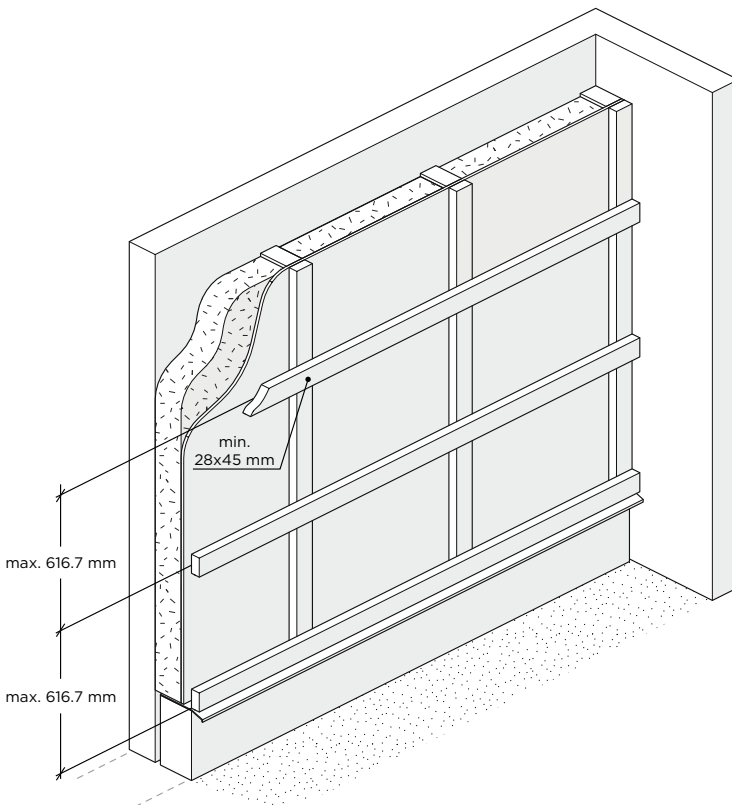
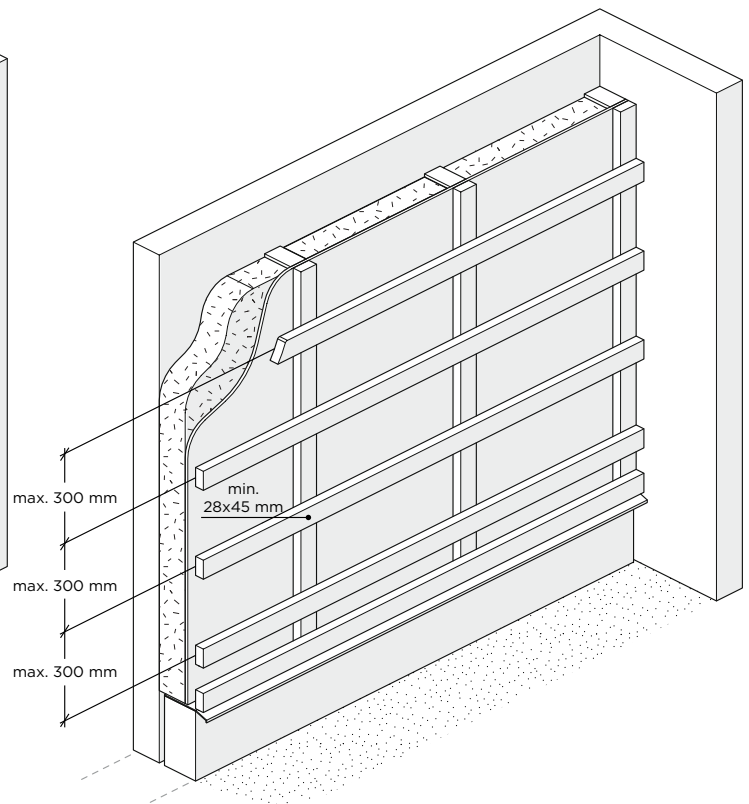


diagram 2 - random pattern



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions trapezium profiles

vertical installation

STEP 1 - Install first row

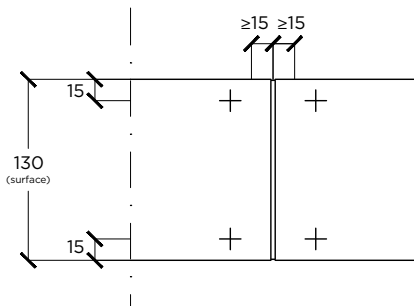
- Start with the first row of boards and make sure they are placed vertical level (using a spirit level).
- Take care about the positioning of screws, try to align them and thereby obtain an equal distribution. Always use 2 screws at each fixing point. Use minimum A2 stainless steel quality countersunk head screws for installation. Please see the detailed drawing below, which indicates the positioning of screws.
- Make use of a countersink drill to ensure the same sinking depth for every screw.
- Make sure you keep a ventilation gap (7-10 mm) is kept on the edge of the cladding.
- 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

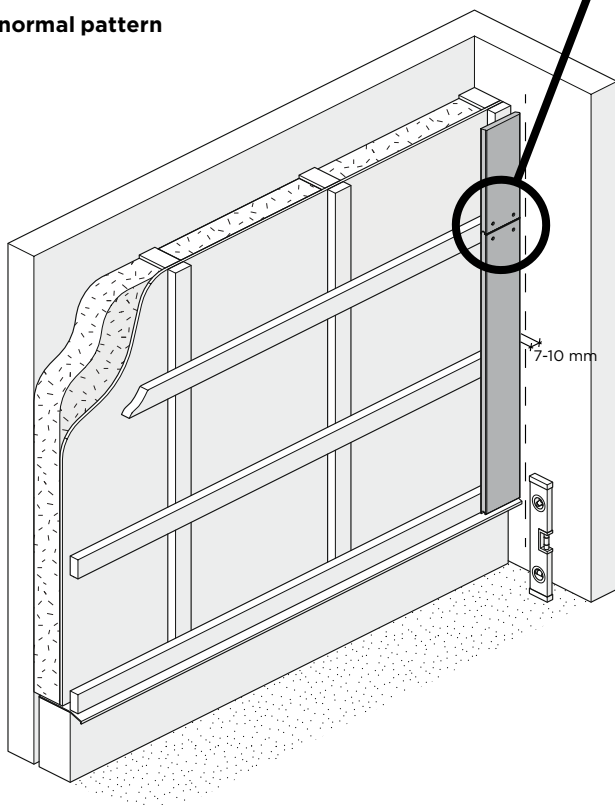
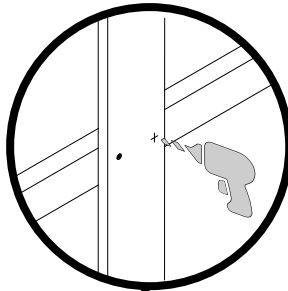
- Install the second row of boards, using a minimum 6 mm spacer.
- Please regularly check that the boards are still placed fully vertical (using a spirit level).

STEP 3 - Continue with the rest

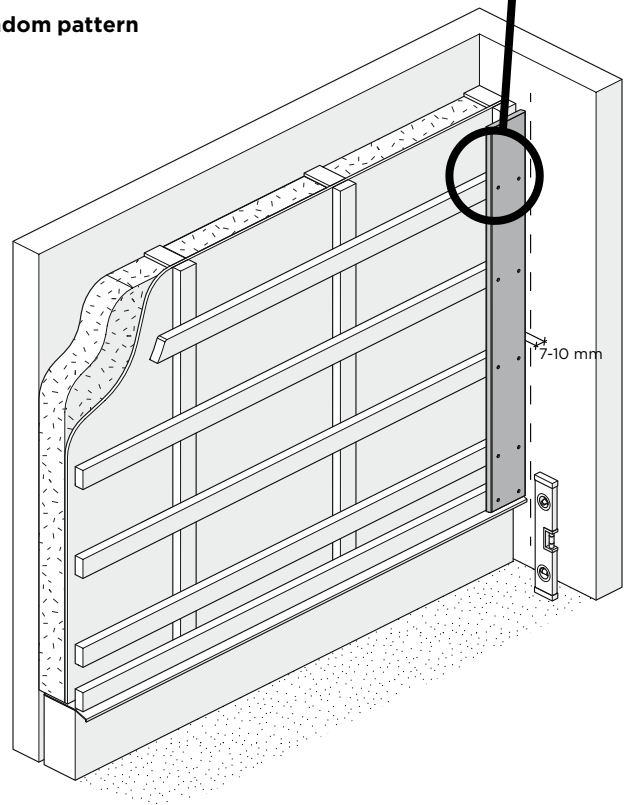
- Continue with step 1 and 2 to install the cladding boards in this way to cover the full surface.



normal pattern



random pattern



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions trapezium 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 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.

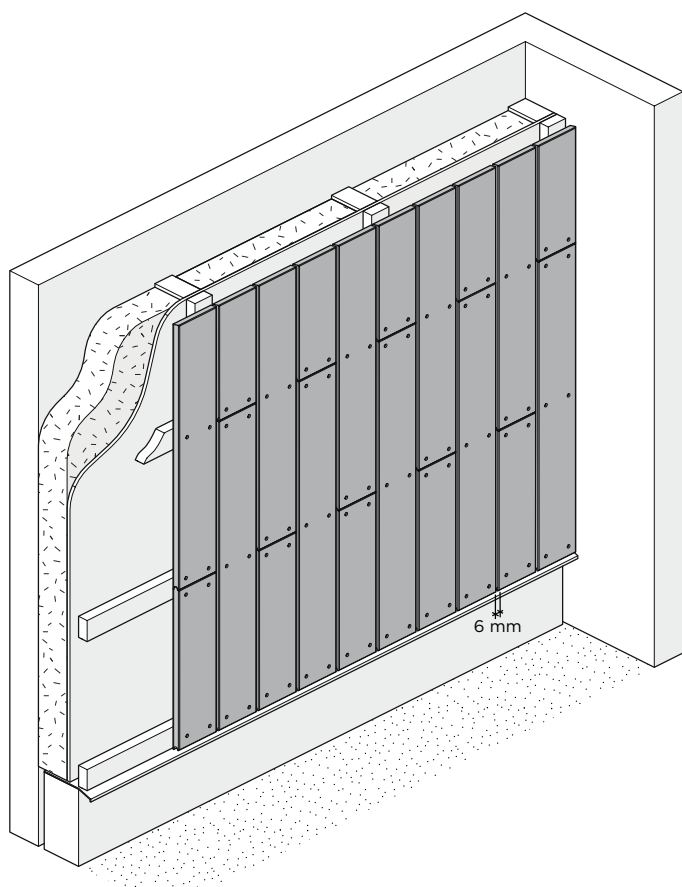
This does not affect the stability or durability of the board.

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.

normal pattern



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

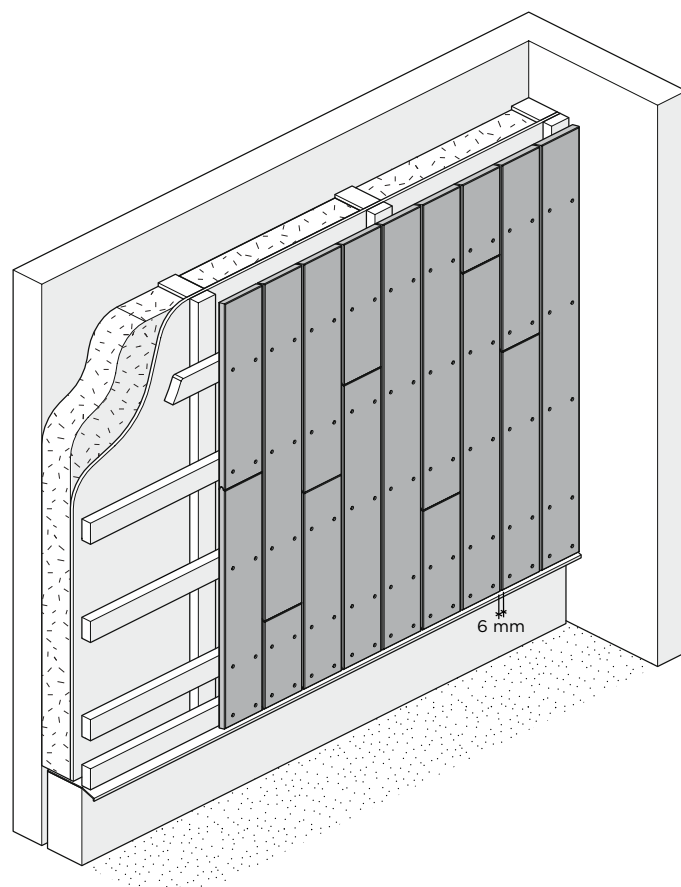
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random pattern

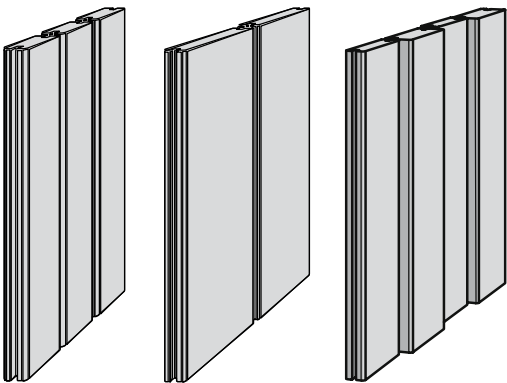


Bamboo X-treme® Outdoor Cladding

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.
- 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

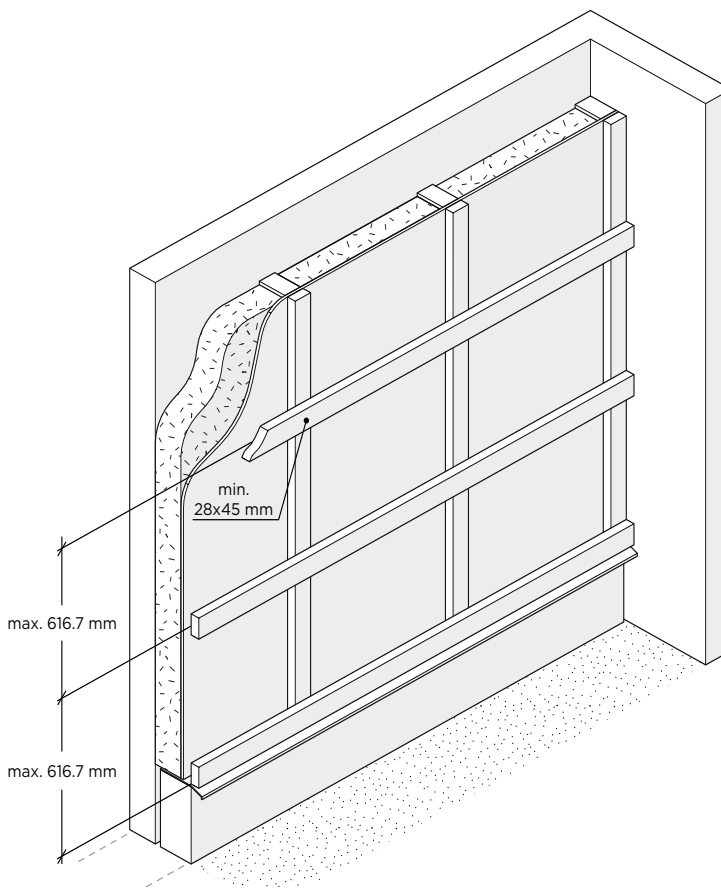
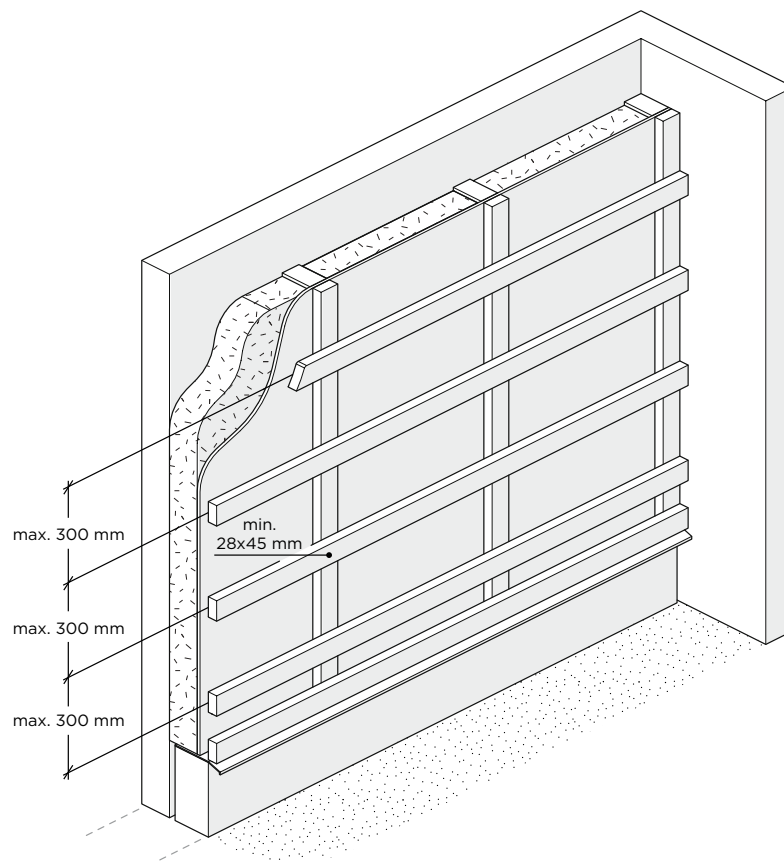


diagram 2 - random pattern



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions Varibo profiles

vertical installation

STEP 1 - Installing first row

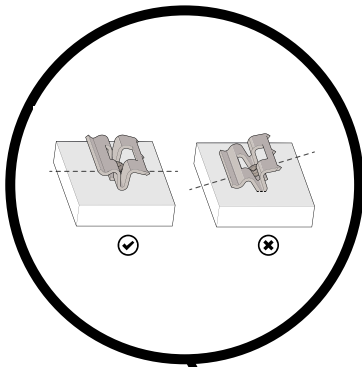
- Start with the first row of boards and make sure they are placed completely vertical (using a spirit level).
- To fix the first row of boards there are 2 commonly used options (diagram 4): A: Visible screw B: Polymer glue (consult your local supplier for recommended types of glue).
- The lower board 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 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.

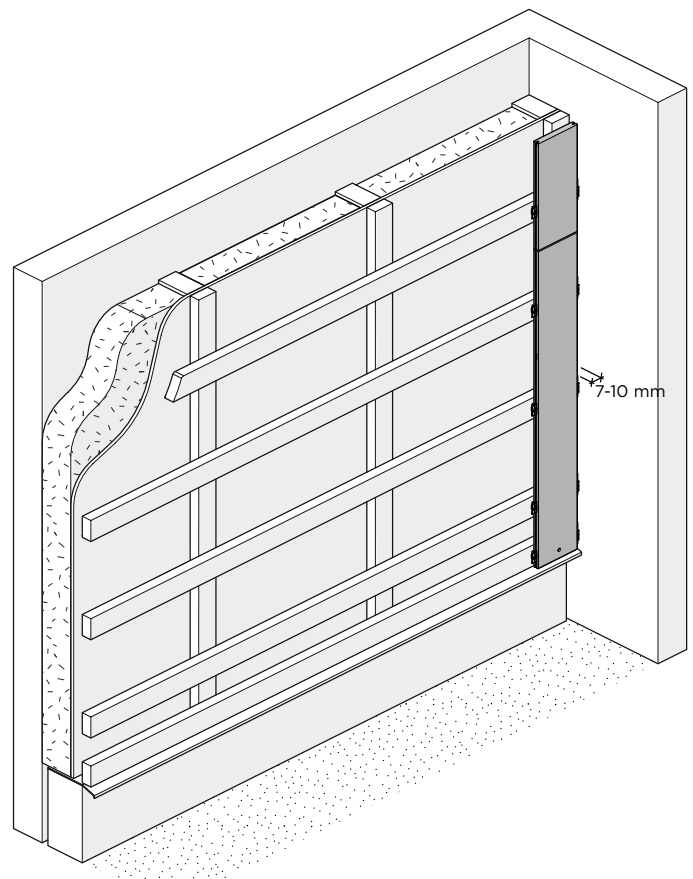
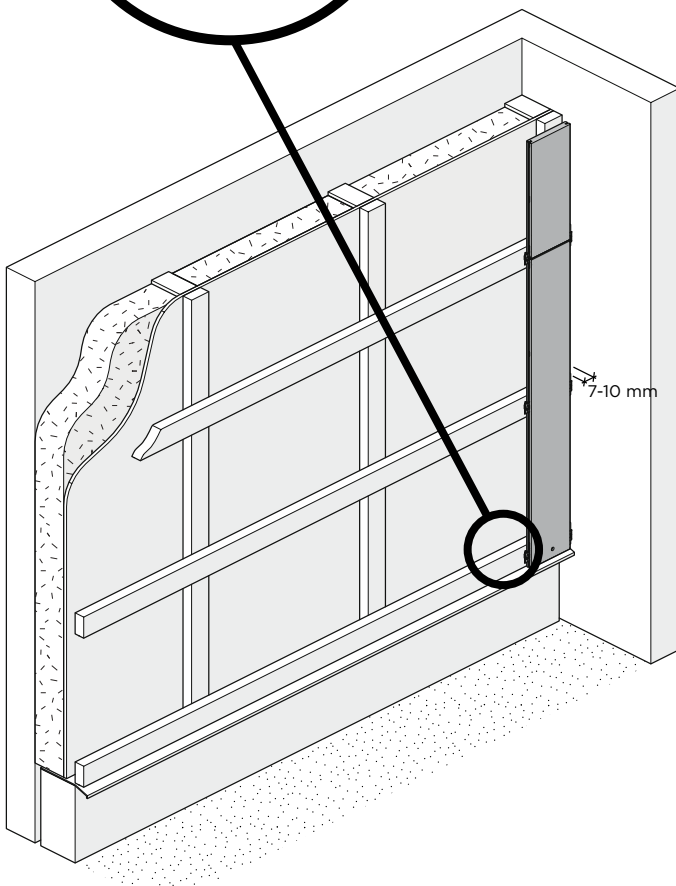
STEP 3 - Continue with the rest

- 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.



normal pattern

random pattern



MOSO® Bamboo X-treme® Outdoor Cladding

installation instructions Varibo 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 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.

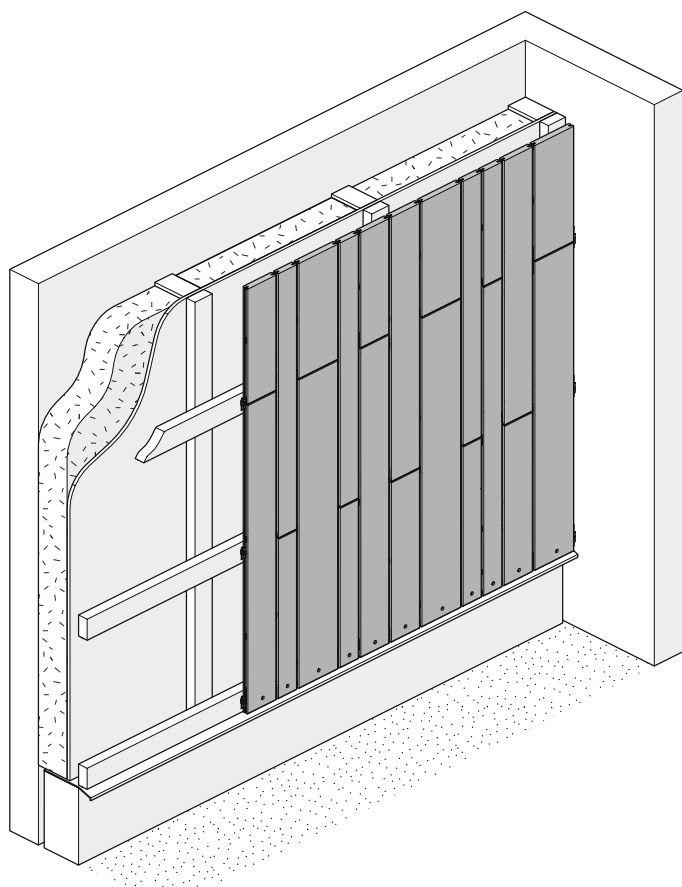
This does not affect the stability or durability of the board.

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.

normal pattern



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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random pattern

