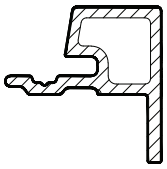
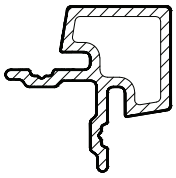
PuraTech™

Technical Installation Guide

PuraComposite™
SUSTAINABLE SOLUTIONS

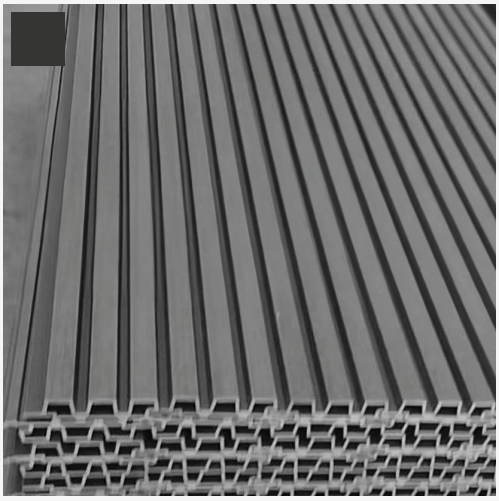
PuraTech™ Cladding Parts

Product	Purpose	Part
M4×30 SS304 (PuraFix™ Stainless Steel Screw)	Used when concealed installation of trims and boards into timber battens	
M5×60 SS316 (PuraFix™ Coloured Screw)	Used for face-fixing the last boards next to trims into timber battens	
PuraTech™ End Trim	Used as the first and last board for vertical installations, and first board for horizontal installations	
PuraTech™ Corner Trim	Used for outside corners for vertical installations	

Storage & handling

Composite wood is sensitive to creep.

- ✓ The boards must always be stored flat. During warehousing of board pallets, please make sure they are supported along their entire length.
- ✓ Keep the tarpaulin on the pallets during work as a protection.
- ✓ Avoid placing loads on board pallets.
- ✓ Carry boards one by one or two by two on their edges.

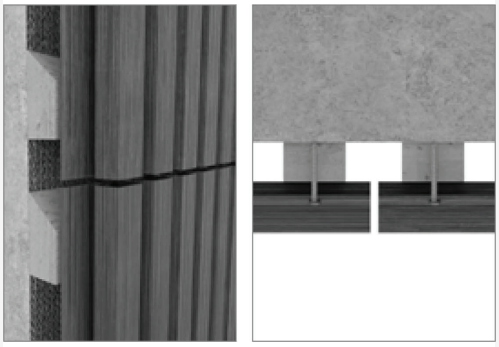


Tools

- ✓ Radial arm saw on table.
- ✓ Power screwdriver equipped with an SR2-type bit (the bit is supplied with box of PuraFix™ screws).

Brackets

- ✓ Horizontal installation: Calibrated battens Class 2 with minimum section of 27 x 40 mm
- ✓ Vertical installation: Calibrated battens, fast-draining Class 2 with minimum section of 27 x 40 mm, or Class 3
- ✓ Dual battens at each board junction
- ✓ Spacing of brackets: 40 / 60 cm



Cutting

Composite wood is sensitive to creep.

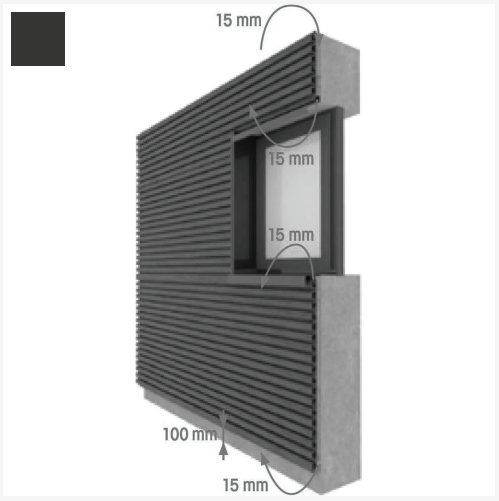
✓ Each board must be calibrated before installation. They may have an oversize of 10 mm. It is therefore important to cut them to the desired dimension in order to have clean joints.

Ventilation

✓ Ground clearance: 100 mm

✓ High and low ventilation (parapet, shutter piece & window head 15 mm)

✓ Air space between wall and covering: minimum 20 mm



Fastening on wooden supports

For better results, we recommend the use of PuraFix™ self-drilling screws:

✓ Material: stainless steel 304 with self-drilling tips

✓ Size: 4.0 x 30 mm

✓ Threading: wood/aluminium

✓ Cavity: SR2

✓ Head diameter: 8.0 mm

✓ Body diameter: 4.0 mm

✓ Drilling diameter: 3.0 mm

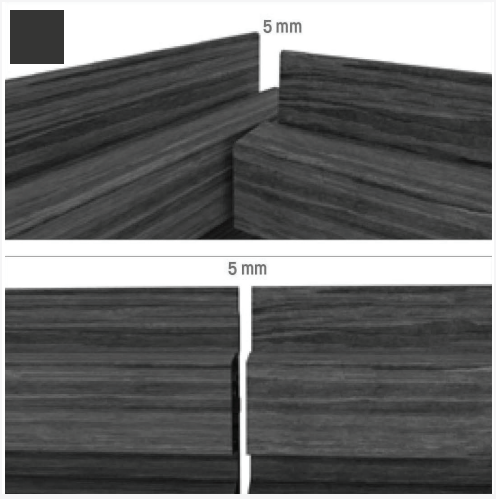
Caution: the screw head must rest on the cladding board, but not exert any force on it, which could initiate cracking.

At the end of the board, leave a 15 mm setback to prevent the risk of cracking.

Expansion

PuraTech™ boards have a coefficient of expansion of 1 mm/m (for a temperature gradient of 40°C). Example: a 3.9 m board exposed to a temperature of 5°C in the morning and 40°C in the afternoon will expand by 3.15 mm.

Maintain a clearance of 5 mm between each end of the boards and all types of obstacles encountered (carpentry, wall, angle, board, etc.)



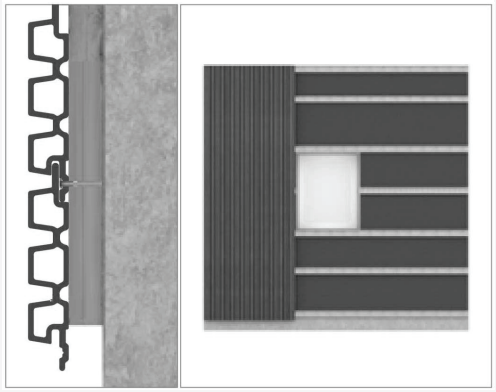
Installation direction

Horizontal installation:

✓ The groove should be positioned at the bottom position and the tongue at the top position

Vertical Installation:

✓ No specific direction



Ageing & upkeep

The polyethylene protective film from the co-extrusion process guarantees UV resistance for 20 years without any apparent fading. Cleaning with water (high-pressure washer) can be done depending on the level of dirt buildup and the amount of exposure the facade has to outside elements.

1. Trim Installation

1.1 Begin by securely attaching the end trim to the batten located at the outermost edge of the wall. Ensure that the end trims are straight with a level and securely fastened to achieve a clean and finished appearance, then mark that position with pencil or chalk.

1.2 Pre-drill pilot holes with a distance of at least 500 mm and at most 1000 mm between them **(fig. 1)** using a power drill and a drill bit that is slightly smaller in diameter than the fixing screws. This will prevent the cladding board from splitting when the screws are inserted.

1.3 Place the end trim in position on the wall and insert the fixing screws through the pre-drilled holes. Use a power drill to tighten the screws securely, but be careful not to over-tighten as this may damage the cladding board.

1.4 Proceed by affixing the corner trims to the battens located at the outside corners of the wall **(fig. 1)**.

It is important to securely fasten the trims to ensure maximum stability and alignment. A proper installation of the trims will contribute to the overall structural integrity and visual appeal of the PuraComposite™ cladding system.

Note: a minimum gap of 3/4" (20 mm) needs to be left between the bottom of trims and the floor (fig. 2)

2. Installing the first board

Start the installation according the direction and starting points **(fig. 2)**:

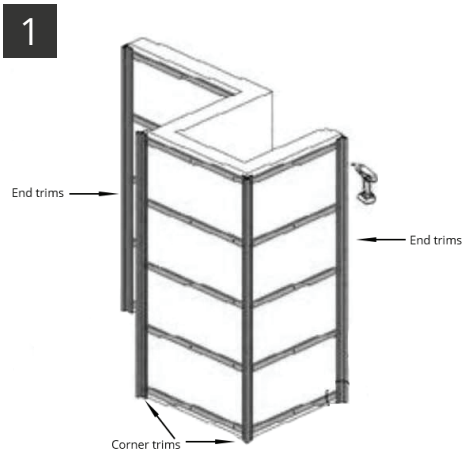
✓ For walls between the outermost edge and inside corners: start from the outermost edge

✓ For walls between inside corners and outside corners: start from the outside corner

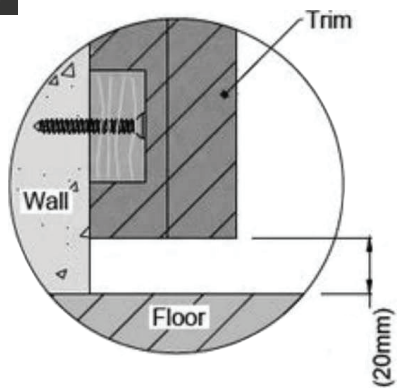
✓ For walls between two outside corners: start from either outside corner

✓ For walls between outside corners and the outermost edge: start from the outside corner

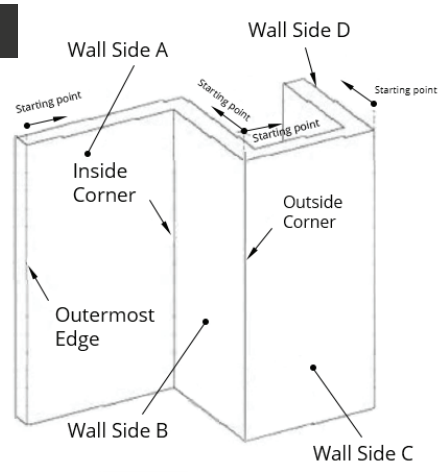
1



2



3



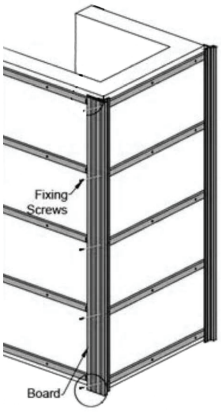
2. Installing the first board (cont.)

2.1 Once the starting point and placement direction is determined, pre-drill pilot holes using a power drill and a drill bit that is slightly smaller in diameter than the fixing screws. Be sure to drill straight to avoid damaging the trim.

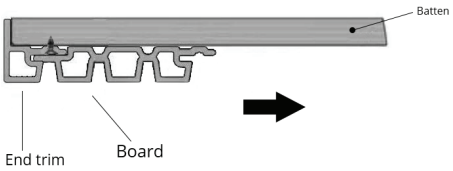
2.2 Position the tongue of the first board over the trim, then secure the board in place by screwing its grooved side onto the batten.

Fig. 5 shows the first board installation on the outermost edge with the end trim. **Fig. 6** shows the first board installation on the outside corner with the end trim.

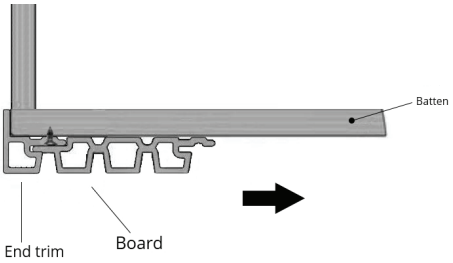
4



5



6



3. Installing the cladding boards

3.1 Position the cladding board snugly against the batten and the trim, ensuring a flush fit.

3.2 Once properly aligned, pre-drill pilot holes using a power drill and a drill bit that is slightly smaller in diameter than the fixing screws. Be sure to drill straight to avoid damaging the trim.

3.3 Place the board back against the batten and insert the screws through the pilot holes into the batten. Fasten the screws securely, being careful not to over-tighten as this may damage the cladding board **(fig. 7)**.

3.4 Once all screws are in place, double-check the alignment and ensure the end trim is securely attached to the batten. Repeat the previous steps until the wall only has space for one more board.

4. Installing the last board on outside corners

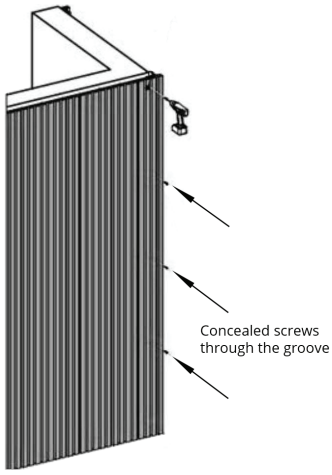
When installing the last cladding board, it will be necessary to use face-fixing screws instead of the concealed screw that was used for the rest of the boards. This is due to the fact that the concealed screw system requires multiple boards to effectively secure the screws.

4.1 If there is not enough space left for a full-sized cladding board, it may be necessary to cut the last board in order to fit it properly. If that is the case, then mark the spot and cut the board precisely on its groove side using a power saw.

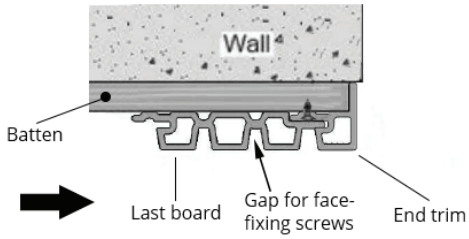
4.2 Once the board has been cut to size, position it in place and attach it to the wall using colour-matching PuraFix™ screws on the gap between the slats on the board. Make sure to secure the screws evenly along the board to prevent any warping or bending.

Fig. 8 shows the installation of an end trim on the outermost edge, and **fig. 9** shows the installation of an end trim on an outer edge.

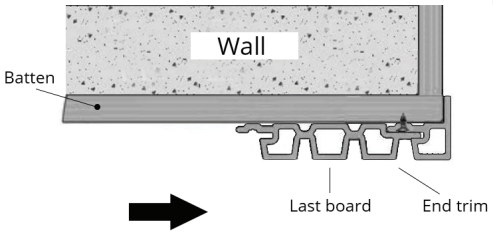
7



8



9



5. Installing the last board on inside corners

No trim is needed for the inside corner.

5.1 When you are at the last cladding board toward the inside corner from the end trim, measure and record the distance between the adjacent batten and the board **(fig. 10).**

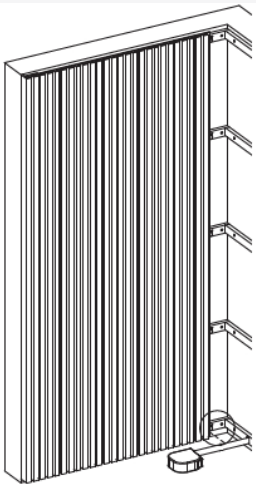
5.2 In order to properly install PuraTech™ 30, ensure there is a minimum gap of 57 mm between the wall and the board. For PuraTech™ 55, a gap of at least 80 mm is required for proper fitting. This clearance is necessary as the slats will be face-fixed, requiring that at least one slat gap be left exposed for screwing.

5.3 Pre-drill holes in the marked positions using a power drill and a drill bit that is slightly smaller in diameter than the face-fixing screws. This will prevent the cladding board from splitting when the screws are inserted.

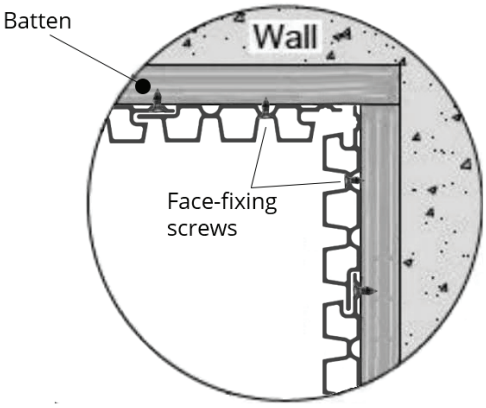
5.4 Place the cladding board in position on the wall and insert the face-fixing screws through the pre-drilled holes. Use a power drill to tighten the screws securely, but be careful not to over-tighten as this may damage the cladding board **(fig. 11)**.

5.5 If there is not enough space left for a full-sized cladding board, it may be necessary to cut the last board in order to fit it properly. Cut the board at any point after the first slat gap (from the tongue side) to ensure you will have enough space to fit the screw **(fig. 12)**.

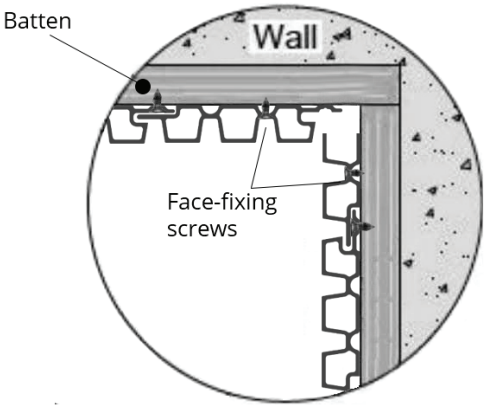
10



11



12



Installation Procedure: Horizontal Installation

The method for horizontal installation is identical to that of vertical installation, except for the first and last steps. For more details, please refer to the steps in the previous section.

1. Trim Installation

1.1 Begin by securely attaching the end trim to the batten at the top of the wall. Ensure that the end trim is straight with a level and that they are fastened snugly to provide a clean and finished appearance.

1.2 Proceed by affixing the corner trims to the battens located at the corners of the wall with a distance of at least 500 mm and at most 1000 mm between each screw.

It is important to securely fasten the end trims to ensure maximum stability and alignment. A proper installation of the corner trims will contribute to the overall structural integrity and visual appeal of the PuraComposite™ cladding system.

Note: a minimum gap of 3/4" (20 mm) needs to be left between the top of the end trim and the ceiling.

2. Installing the first board

2.1 Position the tongue of the first board over the trim, then secure the board in place by screwing its grooved side onto the batten.

Note: pre-drill the fixing holes on the first board before installation to allow for expansion and contraction.

3. Installing the cladding boards

Follow the same process for vertical installation described on **p. 6**.

4. Installing the last board

4.1 To achieve a perfect fit, carefully cut the groove of the last board and face-fix it. If the board doesn't fit perfectly, cut off the excess part of the board leaving at least 57 mm for PuraTech™ 30 and 80 mm for PuraTech™ 55. This clearance is necessary as you will need to face-fix the boards, requiring that at least one slat gap be left exposed for screwing.

4.2 Once the board has been cut to size, position it in place and attach it to the wall using colour-matching PuraFix™ screws on the gap between the slats on the board. Make sure to secure the screws evenly along the board to prevent any warping or bending.

Note: a minimum gap of 3/4" (20 mm) needs to be left between the top of the end trim and the ceiling.