



ARCHITECTURAL HARDWOOD DECKING, CLADDING & CEILING SYSTEMS

SHOU SUGI BAN

CHARRED TIMBER
CLADDING



1800 894 400
info@mortlock.com.au
www.mortlock.com.au



THE SYSTEM

Shou-Sugi-Ban™, also known as Yakisugi Cladding, is a Traditional Japanese method of charring timber with fire. The process forms a carbon layer on the exterior of the boards which protects the timber and reduces the maintenance. We manufacture our Shou Sugi Ban finish in-house allowing us to control the quality of the finish. Manufacturing Shou Sugi Ban Cladding is a delicate process and has taken 3 years to refine and develop. Because of the time and resource we have put into this, we are now confident that we can provide a consistent finish every time.



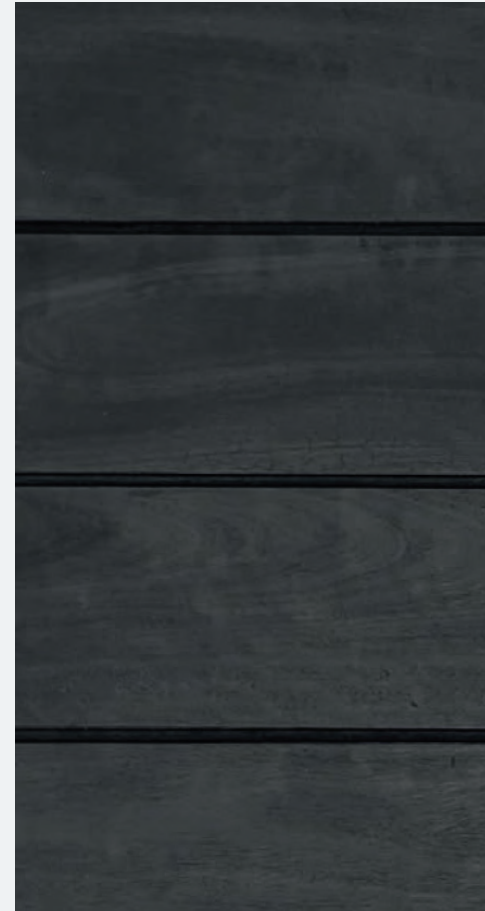
TIMBER SPECIES AND SIZES



BURNT ASH SHOU SUGI BAN - PREMIUM OPTION

Manufactured from Thermally Modified American Ash that is very durable and stable compared to standard Australian Hardwoods. Due to this we are able to char the timber evenly, providing a thicker char layer than Spotted Gum or Jarrah. This means the charring will last much longer with minimal maintenance.

BURNT ASH SIZES & PROFILE	
<p>120mm x 19mm</p>	
<p>70mm x 19mm</p>	
Price Guide	\$\$\$



SPOTTED GUM SHOU SUGI BAN

Manufactured from Spotted Gum, mainly used where a BAL rating for the timber is required, will achieve a BAL 29. Is not as stable as Burnt Ash so we aren't able to char this timber as much which means more maintenance than Burnt Ash.

SPOTTED GUM SIZES & PROFILE	
<p>120mm x 19mm</p>	
<p>70mm x 19mm</p>	
Price Guide	\$\$

Pricing Guide: \$ = Low Price, \$\$\$\$ = High Price




TIMBER SPECIES AND SIZES



JARRAH SHOU SUGI BAN



Manufactured from Jarrah, mainly used as a cost-effective option. Like Spotted Gum, Jarrah it is not as stable as Burnt Ash, so we aren't able to char this timber as much which means more maintenance than Burnt Ash.

JARRAH SIZES & PROFILE	
 <p>70mm x 19mm</p>	
Price Guide	\$



FINE SAWN JARRAH SHOU SUGI BAN

This is your next best option after Burnt Ash, will meet BAL 19 fire rating. As the surface is a fine sawn finish, it allows the charred layer to penetrate the timber deeper than smooth surfaced Spotted Gum and Jarrah. The deeper char layer means the finish lasts longer with less maintenance.

FINE SAWN JARRAH SHOU SUGI BAN SIZES AND PROFILE	
 <p>120mm x 19mm</p>	
 <p>70mm x 19mm</p>	
Price Guide	\$

Pricing Guide: \$ = Low Price, \$\$\$\$ = High Price



FREQUENTLY ASKED QUESTIONS

Why is selecting a stable timber like Burnt Ash important?

When timber is heated to extreme temperature it can cause the timber to split and warp. As Burnt Ash is an extremely stable timber the timber stays flat during the Shou Sugi Ban or charring process allowing a thicker char layer on the surface. As the char layer is thicker, this means it lasts longer when exposed to the weather.

When would I choose Spotted Gum or Jarrah over Burnt Ash?

Spotted Gum and Jarrah are BAL rated timbers. Spotted Gum meets BAL 29 and Jarrah BAL 19. Burnt Ash does not have BAL rating. Where projects require BAL rated timber you would need Spotted Gum or Jarrah depending on the rating. Spotted Gum and Jarrah are also budget friendly options however if you are considering lower price options, consider the long-term maintenance costs for cheaper products. Burnt Ash as mentioned above has a thicker char layer and can last up to 2-3 years longer without maintenance or re-oiling.

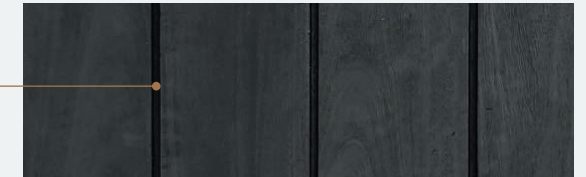
What process is used to char the timber?

Shou Sugi Ban is manufactured in our Factory using a machine we designed and tested over a 2-year period before we made the product available. There are some secrets to reducing the warping and splitting when charring which we discovered in our trial period. It also has a unique cooling system to cool the timber which is critical to achieve an even charred finish.

What is unique about our charring process?

The evenness of our charred finish as well as being able to char right in the shadow line of our Trendplank profile (see diagram below) is what sets us apart. Any part of the timber that is not charred properly will weather unevenly, meaning that your façade will eventually have areas that are not charred after being exposed to the weather for a few months which is not aesthetically appealing. The uneven charred surfaced on some products manufactured by others are often covered up with a black stain. Our product is black because it's charred evenly.

Shadow line



What is the difference with a black stained timber and Shou Sugi Ban?

Black stained timber requires more maintenance. Shou Sugi Ban has a char layer which is a thicker protective layer that takes longer to weather.

How do you pronounce Shou Sugi Ban?

While there are a few pronunciation variations, we say it "Shoe Soo-gi Ban"



FIRE COMPLIANCE

If specific fire requirements and certification is required for your project, this must be requested and approved during the design phase to avoid delays during construction. If this is not requested prior ordering material, Mortlock Timber may not be able to provide the required certification.



TIMBER SPECIES FIRE DATA

TIMBER SPECIES	BAL RATING	GROUP NUMBER
Burnt Ash - Shou Sugi Ban	Non-BAL Compliant	Group 3
Jarrah - Shou Sugi Ban	BAL 12.5 & 19	Group 3
Spotted Gum - Shou Sugi Ban	BAL 12.5, 19 & 29	Group 3

If fire reports are required, please contact Mortlock Timber.





FINISHING

Timber can be supplied uncoated or Pre-Oiled. Shou Sugi Ban comes standard with Cutek CD50 Black Ash coating which is a penetrating oil and designed for external use. You may see charcoaled surface of the timber rubbing off during installation, this however will reduce after the timber is exposed to the weather for 2-3 months. Further details and application information can be found at www.cutek.com.au

For interior timber where the charcoal rubbing off is not ideal, Mortlock recommends using Woca Black Oil. One coat applied in the factory and a second coat applied once timber is installed. Further details and application information can be found at www.wocadenmark.com/shop/product/exterior-wood-oil



CURVED WALLS

Convex curved walls can be created with Shou Sugi Ban Timber cladding system to a certain radius. Care must be taken when curving timber cladding as this opens the tongue and groove reducing the water tightness of the cladding. Running a sealant (Sikaflex 11FC or similar) in the groove when installing is recommended.

CURVED WALL MINIMUM RADIUS

BOARD SIZE	MINIMUM RADIUS
120×19	1400mm
70×19	700mm

Tighter radius's can be achieved with custom profiles, contact Mortlock Timber to discuss your requirements.

SPECIFICATION

EXAMPLE SPECIFICATION

EXAMPLE SPECIFICATION	
Product Name	Shou Sugi Ban Timber Cladding
Timber Species	Burnt Ash
Finish	120×19, 120×19 & 70×19 repeating
Fire Requirements	None
Corner Trims	External Corners to have X Profile with 22×22 Burnt Ash Infill, Internal Corners to have 22×22 Internal Burnt Ash Corner Profile. Shou Sugi Ban Finish
Contact	Mortlock Timber Group 1800 894 400 info@mortlock.com.au www.mortlock.com.au



PRICING & TENDER SUBMISSION

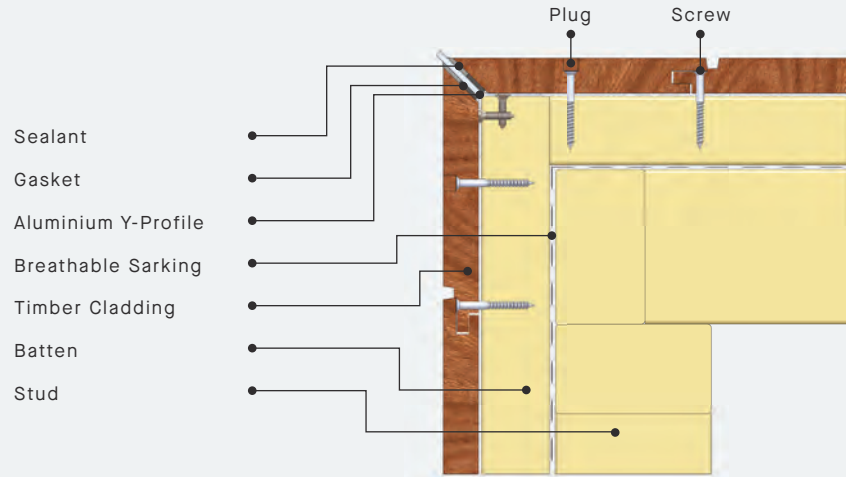
To make large scale projects and tenders easier, we are able measure from PDF drawings which are returned with a detailed BOQ and an itemised proposal for cross referencing.

We require a full set of plans to the architects specifications. Where corner trims are not specified, we allow for the standard aluminium X Profile with the 22×22 timber infill in the same timber species as the cladding. Email plans or Tender invite to info@mortlock.com.au

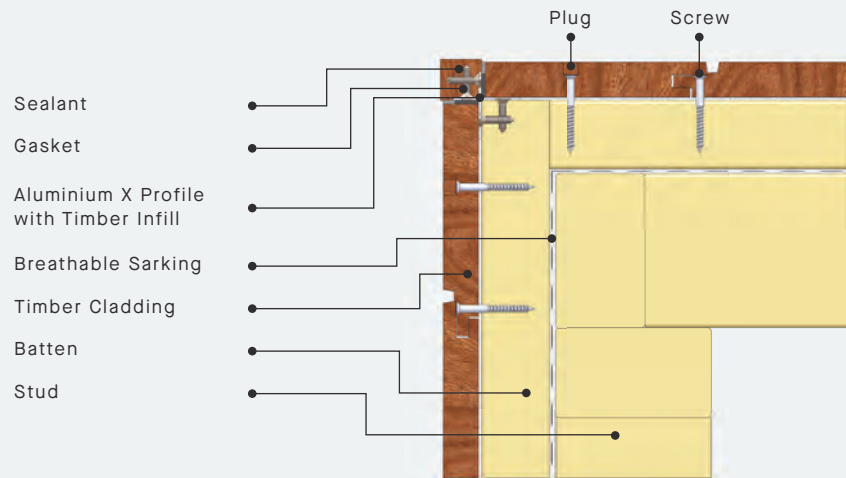


TRENDPLANK CONSTRUCTION DETAILS

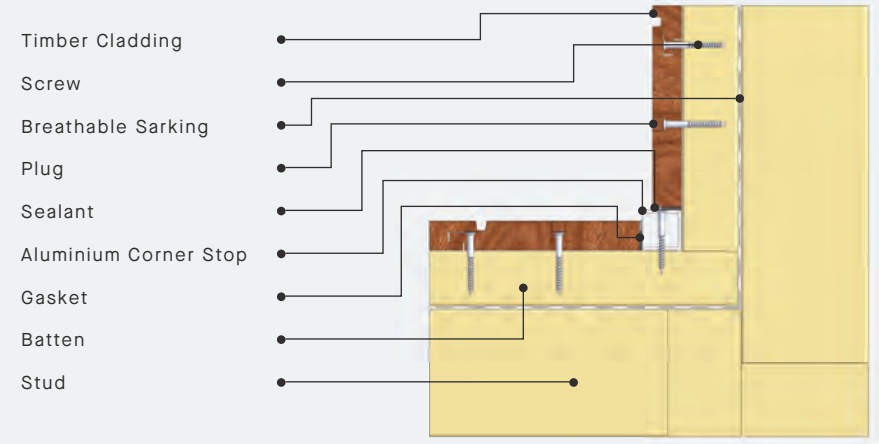
ALUMINIUM Y PROFILE



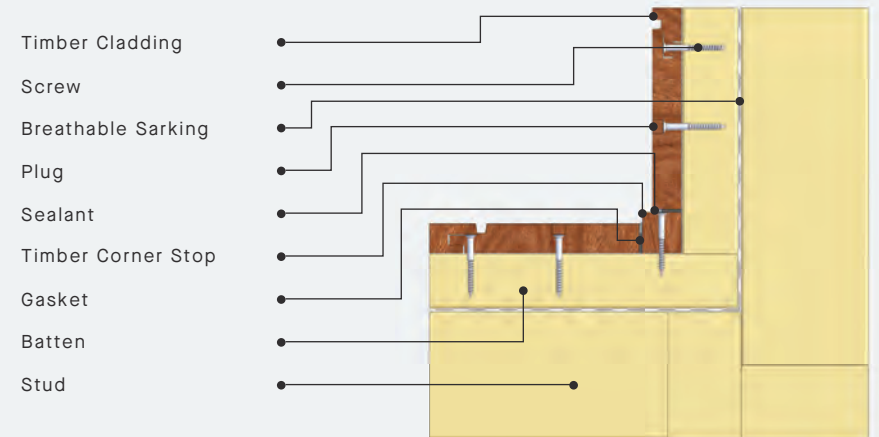
X PROFILE WITH 22X22 TIMBER INFILL



25X25 ALUMINIUM INTERNAL CORNER

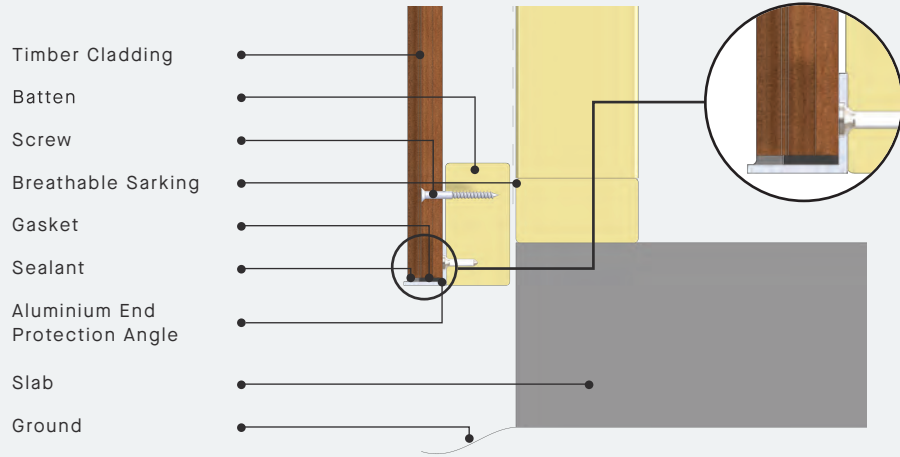


22X22 INTERNAL TIMBER CORNER

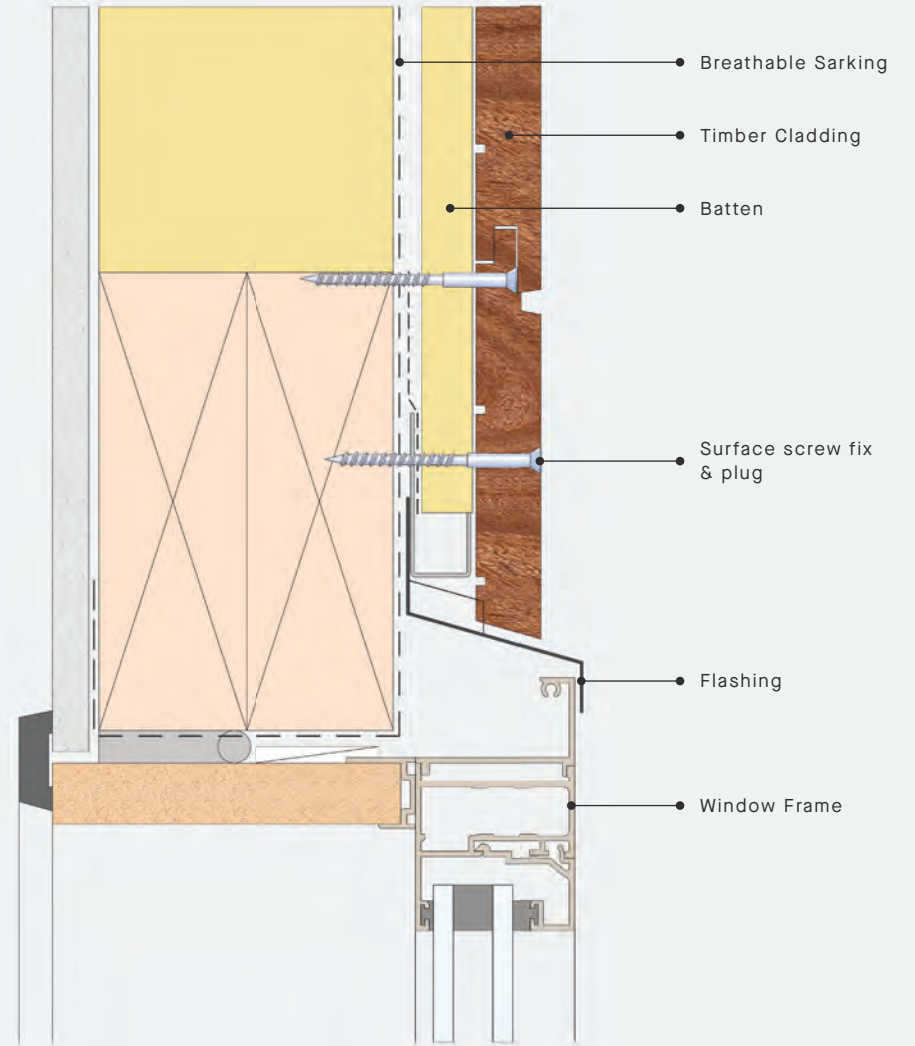




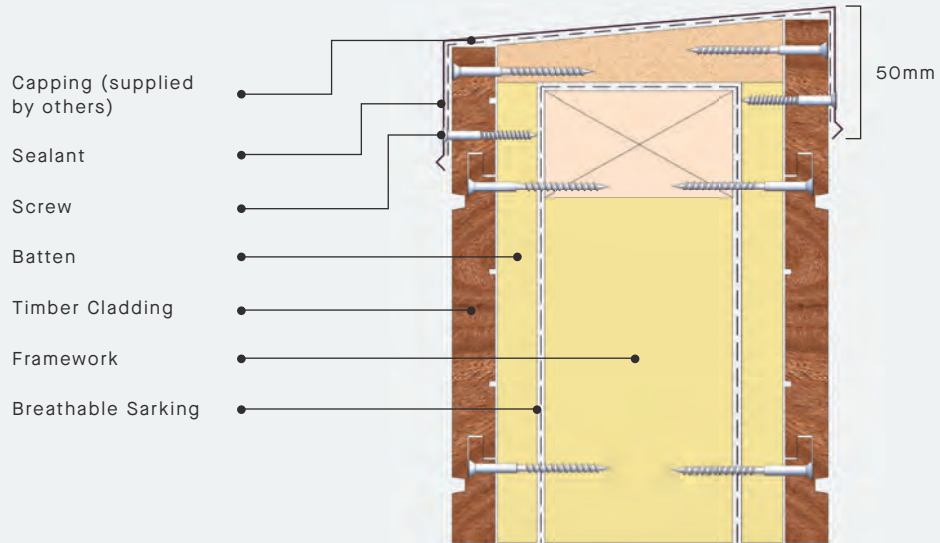
END STOP DETAIL



WINDOW HEAD DETAIL



PARAPET WALL TOP CAPPING

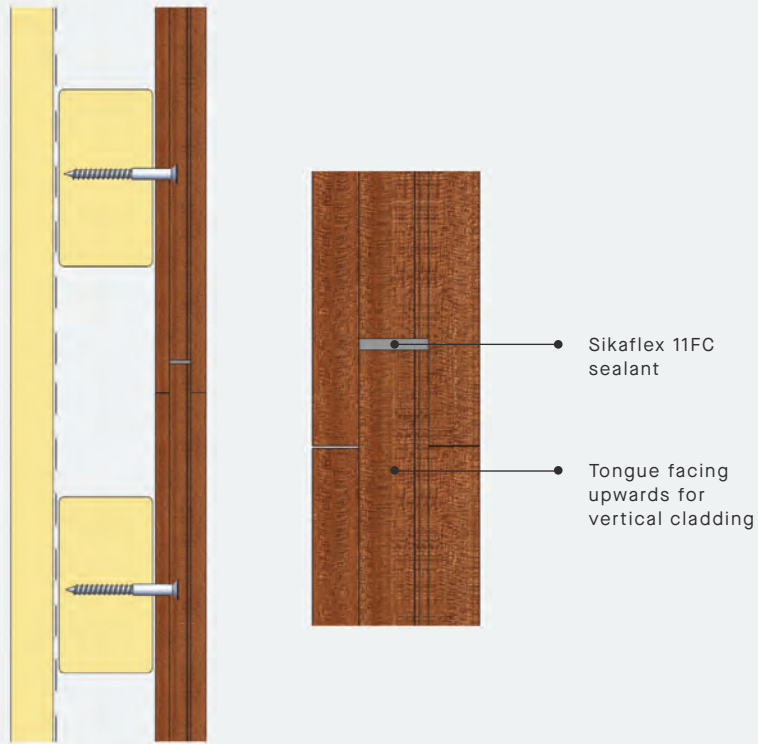




END MATCHING

End matching is a tongue and groove profile applied to the ends of the boards so they can be joined offstud. End matching assists with water proofing, eliminates the need to measure and trim the ends of the boards saving time installing and reduces the waste of timber from 10% to approx. 5%.

The installation method for end-matching is the same whether the cladding is vertical or horizontal. Sikaflex 11FC or similar needs to be applied to the gap, then boards are pushed together. Excess sealant to be cut off once dry. Where cladding is installed vertically the tongue should be installed facing upwards.





IMPORTANT INFORMATION

TEMPORARY FLASHING

Wall cavities are not designed to drain large amounts of water. If cladding is being installed before permanent flashing or weather protection, temporary flashing needs to be installed to prevent any water getting into the cavity behind the cladding. If water does enter the wall cavity this will cause the cladding to expand and cup.

UNEVEN WEATHERING

Uneven weathering will be caused where cladding is left stacked in the sun prior installing or scaffolding is up for long periods of time. The shadows from scaffolding will leave a shadow effect on the wall. The only way to resolve this is to leave the cladding exposed for a few months and the uneven weathering will eventually fade. Cladding installed in shady areas will not weather as much as timber in fully exposed areas.

MINIMUM GROUND HEIGHT

We recommend timber cladding be a minimum of 75mm above the ground to avoid moisture and dirt impacting on the finish. End grain must be sealed with an aluminium profile or similar, Trendplank weather seal and caulking as per detail.

BREATHABLE AIR CAVITIES

To ensure long-term durability, air cavities must be allowed so that timber is able to breathe and be kept dry. Where timber is installed vertically and battens behind cladding are horizontal, weep holes are required.

EXPANSION ALLOWANCE

Timber is a porous material and some movement should be expected, so it's important to consider the movement effects early on. Trendplank is not designed to be pushed up tight together, we recommend spreading the boards 1-2mm apart rather than completely tight together depending on the climate of the area.



Cladding pushed up tight



Cladding with 2mm expansion allowance

WATER-PROOFING

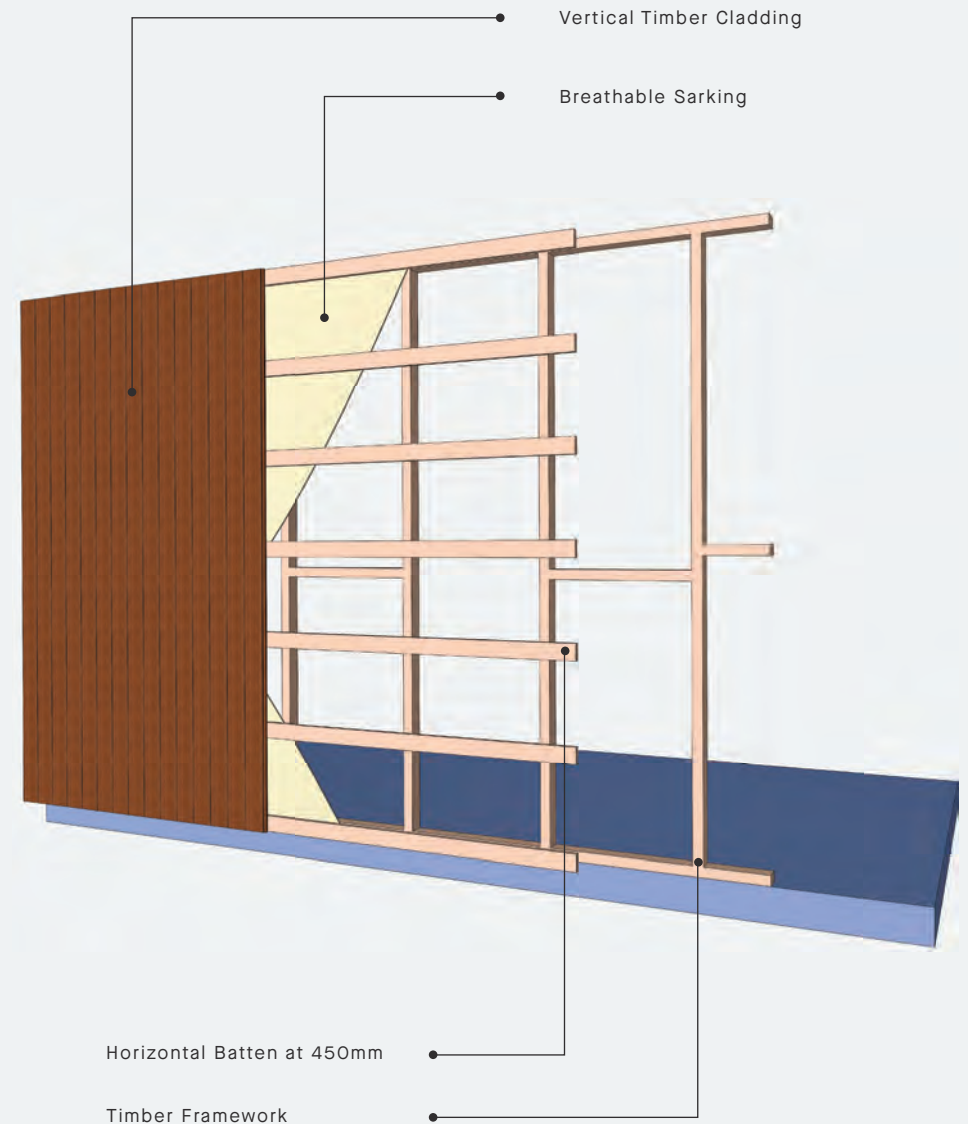
Timber cladding is not completely waterproof. It is the builder's responsibility to make sure the building is waterproof and cladding is installed according to the Building Code of Australia and the architectural design specification.



INSTALLATION

Vertical Wall Cladding - Timber Frame Construction

-
- STEP 1** Install the breathable sarking over the studs with all overlaps facing downward and all joints fully taped.
-
- STEP 2** Ensure all corner trims, end stops and any flashing required under the cladding is installed.
-
- STEP 3** Fix horizontal battens (e.g. 70×35 pine or top hat section) at nominally 450mm centres.
-
- STEP 4** Make sure that there is proper drainage provision for any moisture running down the sarking in what will be the breathable cavity. This may include, but is not limited to, notching out the bottom plate or batten, having the noggins set back from the front face of the studs and running the sarking underneath the window header flashings so that moisture can escape.
-
- STEP 5** Install the bottom angle, corner stops and various flashings where necessary. See construction details.
-
- STEP 6** Mark the board increments on the front face of the studs/ mounting battens. This is necessary to make sure that the expansion gap on the cladding is allowed for, to prevent cumulative error and the lines going out of alignment and to make sure that you start and finish the run with a suitable board width.
-
- STEP 7** Install cladding by pre-drilling and fixing through the tongue, the screw may need to be inserted on a slight angle. The next board groove should cover the screw in the previous board.





INSTALLATION

Vertical Cladding - Masonry Wall Construction

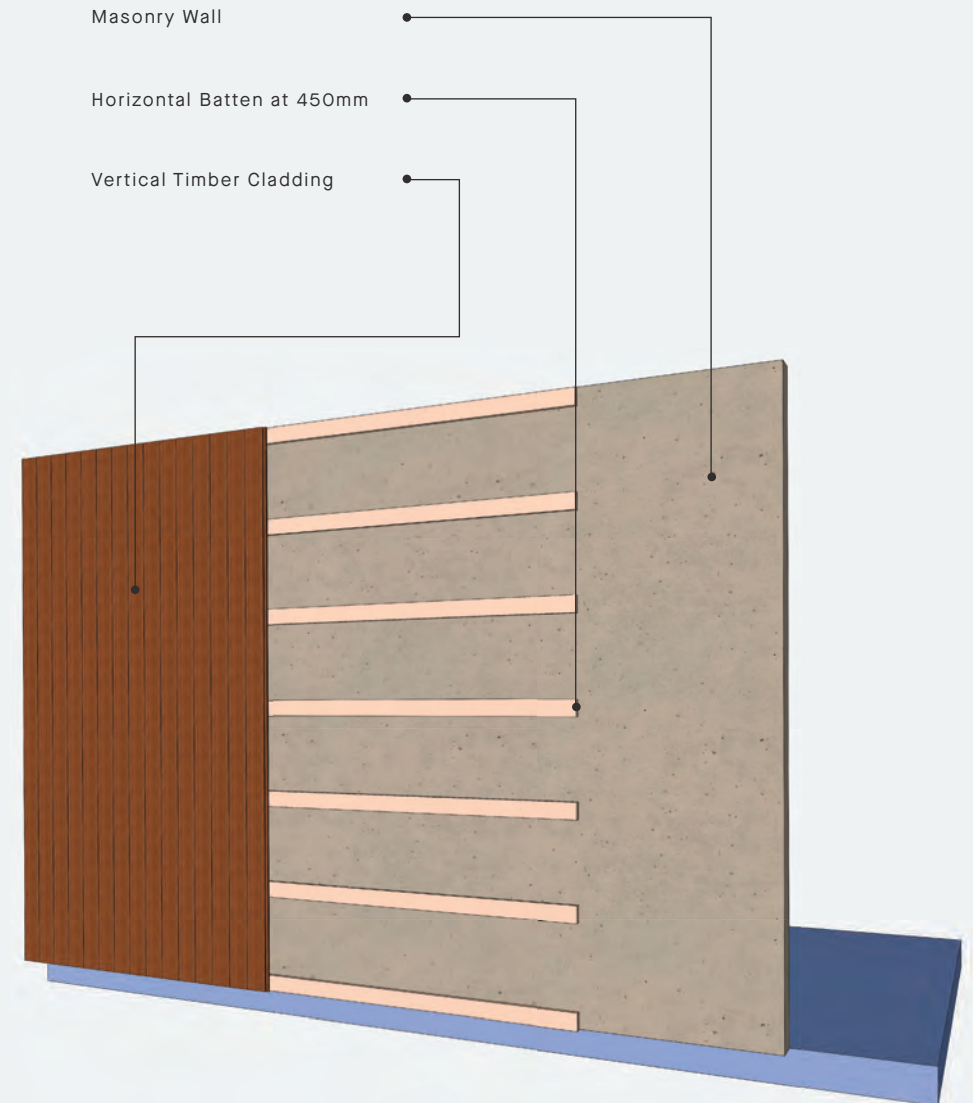
STEP 1 Fix horizontal battens (e.g. 70×35 H3 treated pine or top hat section) at nominally 450mm centres to masonry wall.

STEP 2 Make sure that there is proper drainage provision for any moisture running down the wall in what will be the breathable cavity. This may include, but is not limited to, notching out the bottom plate or battens, having the noggins set back from the front face of the stud's escape.

STEP 3 Install the bottom angle, corner stops and various flashings where necessary. See construction details.

STEP 4 Mark the board increments on the front face of the studs/ mounting battens. This is necessary to make sure that the expansion gap on the cladding is allowed for, to prevent cumulative error and the lines going out of alignment and to make sure that you start and finish the run with a suitable board width.

STEP 5 Install cladding by pre-drilling and fixing through the tongue, the screw may need to be inserted on a slight angle. The next board groove should cover the screw in the previous board.





INSTALLATION

Horizontal Cladding - Timber Wall Construction

STEP 1 Install the breathable sarking over the studs with all overlaps facing downward and all joints fully taped.

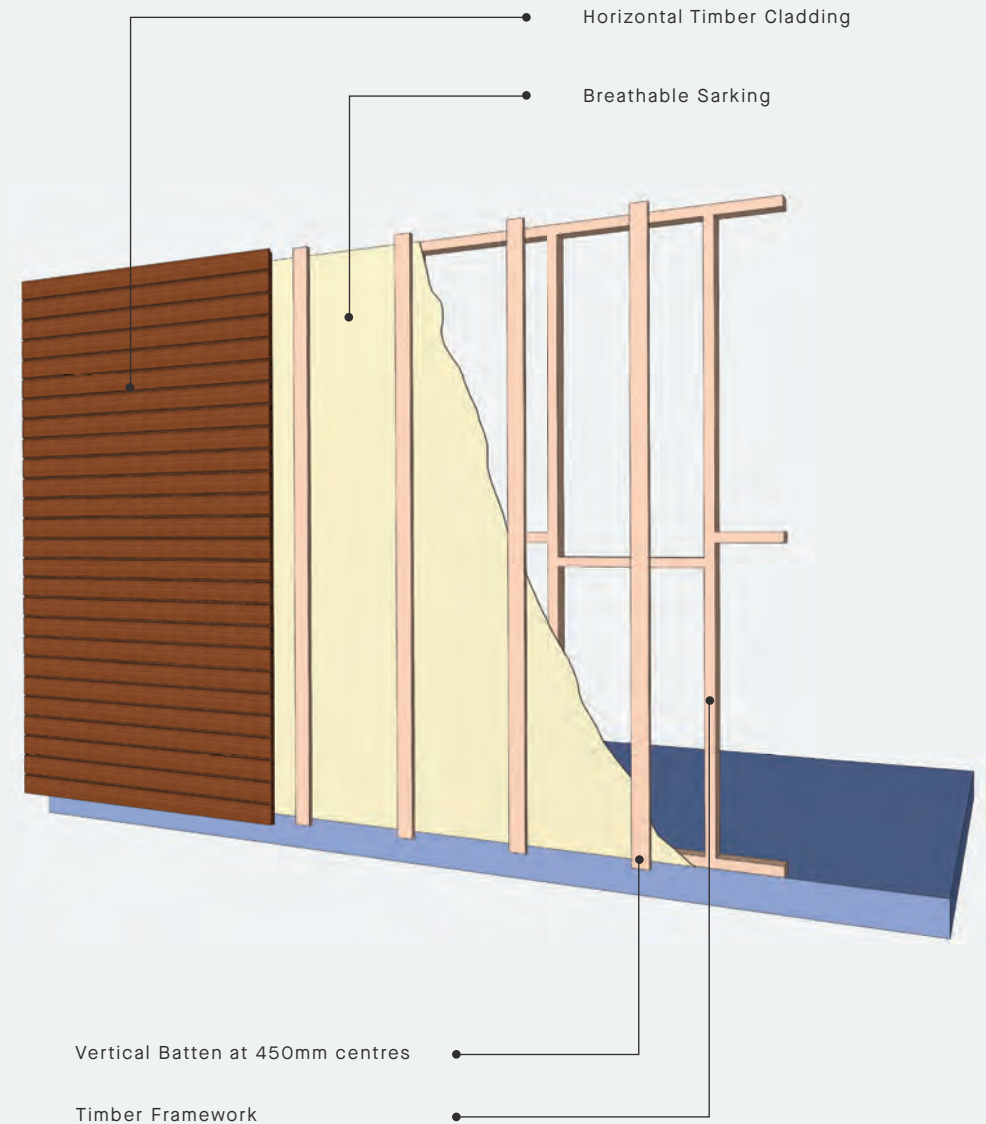
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INSTALLATION

Horizontal Cladding - Masonry Wall Construction

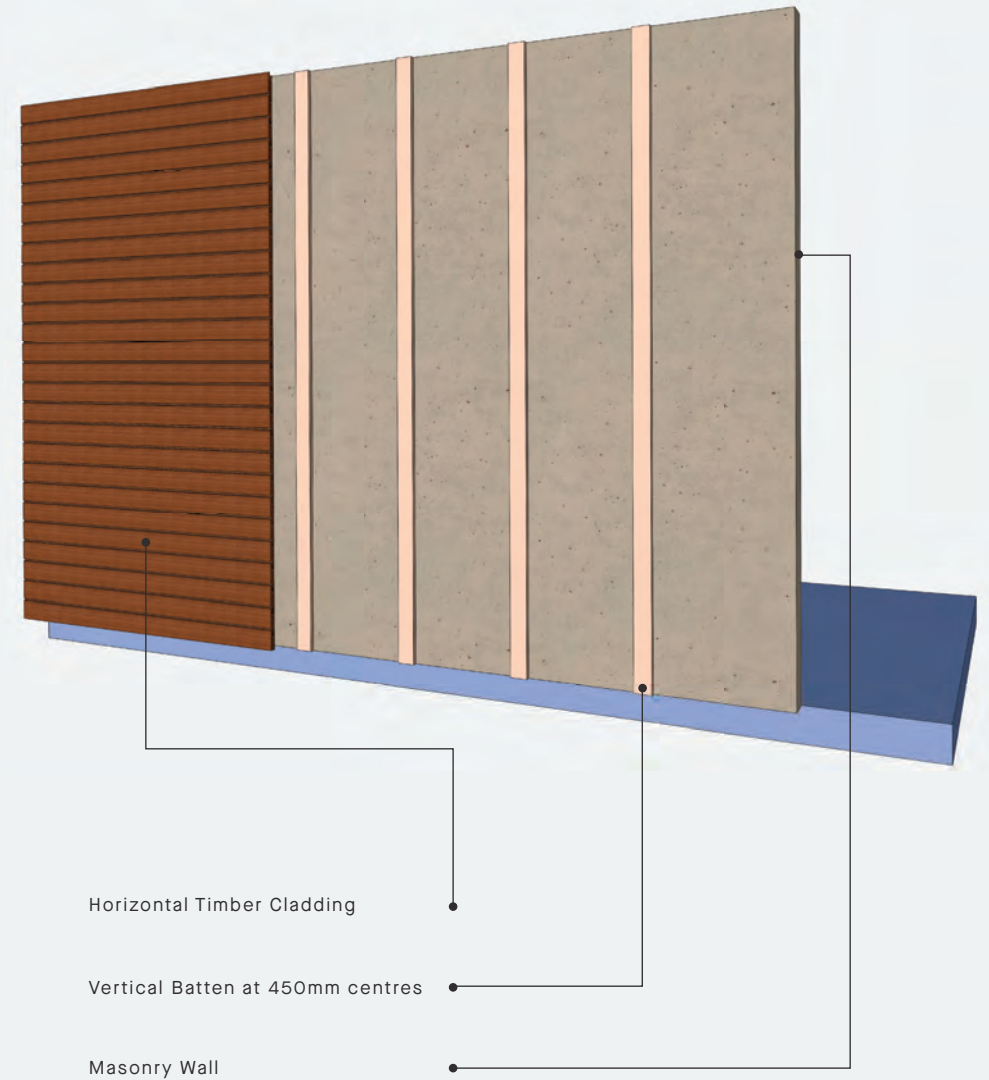
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FURTHER INFORMATION

ONSITE STORAGE

Mortlock Timber kiln dry the timber to Australian standards. It is recommended to install the timber as soon as possible after delivery so that it maintains its accuracy and straightness. If possible, the timber should be kept in its original pack until installation. If it is repacked, it should be done the same as the original pack to maintain straightness and quality. Ensure that it is at least 50mm above ground and stored on a flat surface to prevent bowing. It should be stored in a cool dry place out of the weather until ready to install.

WARRANTY

Mortlock Timber provides project specific warranties which must be requested prior ordering material.

MAINTENANCE

Exterior maintenance can be done using Cutek CD50 Black Ash Oil. Mortlock Timber recommends recoating every 18 months - 2 years for spotted gum and 3 - 4 years on Burnt Ash. Application information on Cutek Oil can be found at www.cutek.com.au

Interior timber typically does not need recoating. If re-coating is required, we recommend brushing on a coat of WOCA Black oil. Application instructions can be found at www.wocadenmark.com/shop/product/exterior-wood-oil

CLEANING

If cleaning is required, this can be done with a soft bristled broom running in the direction of the timber. Any stains can be treated with warm soapy water or timber cleaners compatible with the coating. Cleaning interior timber can be done by gently wiping down the timber with a damp cloth.





PROJECT DETAILS	
Project	Lachlan Pde Residence
Location	Launceston, TAS
Board Size	120x19
Timber Species	Burnt Ash





PROJECT DETAILS	
Project	Komeyui Japanese Restaurant
Location	South Melbourne, VIC
Board Size	120×19
Timber Species	Burnt Ash

DESIGN & INSTALLATION CONSULTING

Our team can work through detailing and specification requirements to meet specific project requirements. We can assist with budget management without compromising aesthetics and ensure our products perform with an extended life cycle.

SAMPLES

Mortlock Timber Group samples department is stocked with our full range. We use express delivery service and generally deliver samples to your door within 2-3 days. Custom samples and sample boards can take 3-6 weeks depending on requirements.



W: www.mortlock.com.au

T: 1800 894 400

E: info@mortlock.com.au

Distribution: WA | SA | VIC | NSW | QLD | TAS