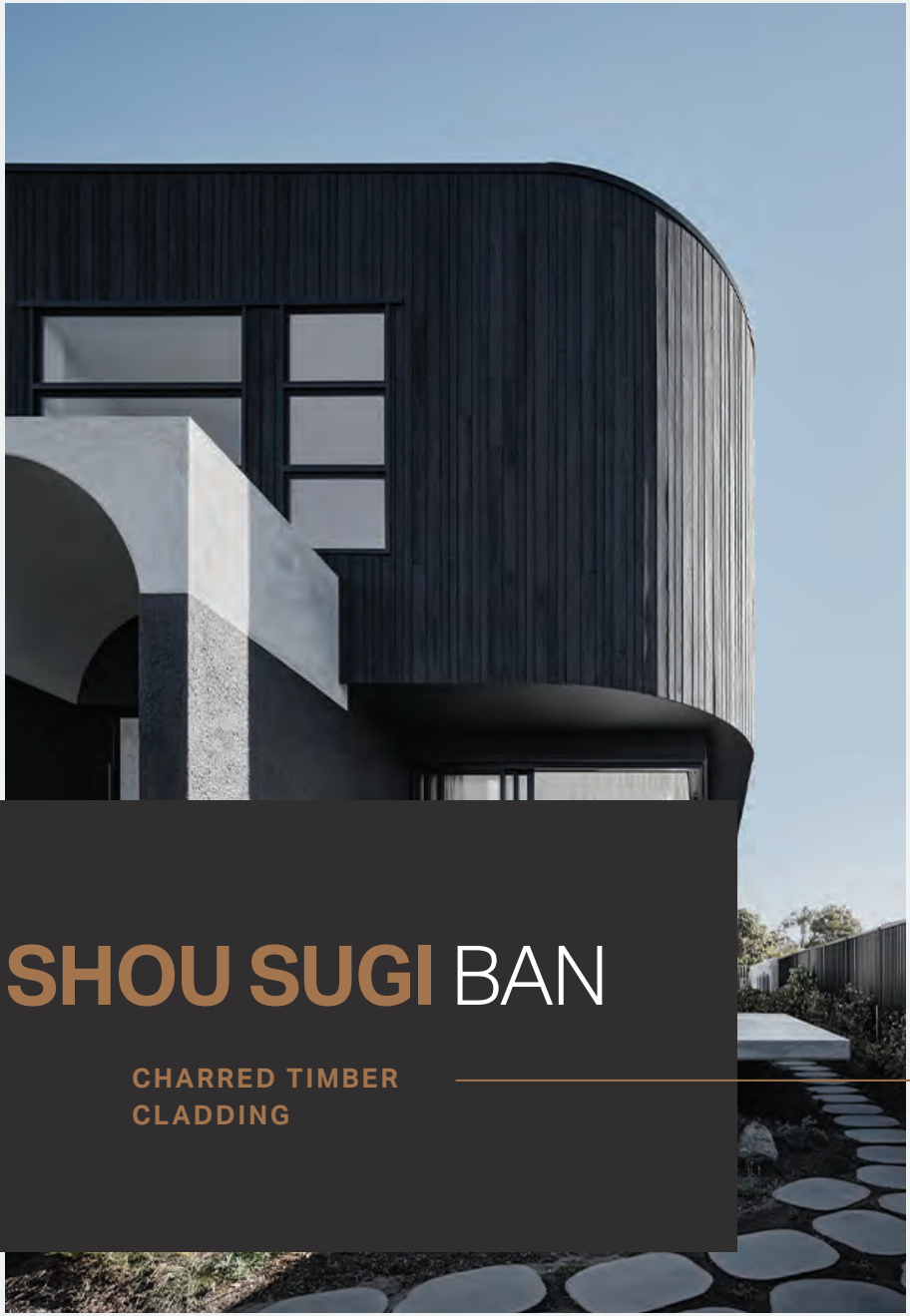


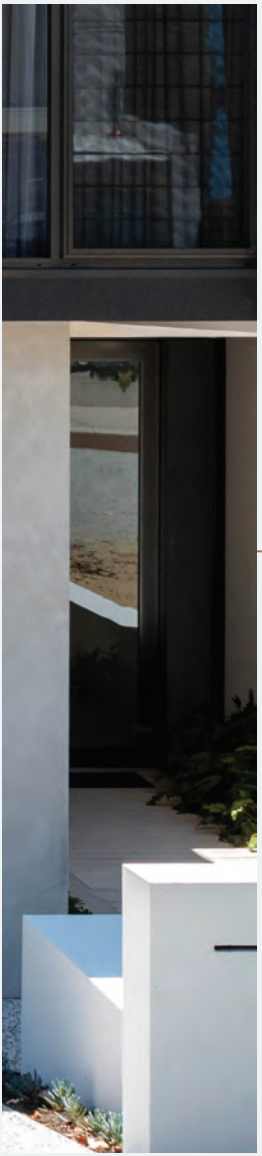
ARCHITECTURAL HARDWOOD DECKING, CLADDING & CEILING SYSTEMS

SHOU SUGI BAN

CHARRED TIMBER CLADDING

MORTLOCK TIMBER

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 fi re. 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 charred timber 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 the resources we have put into this, we are now confident that we provide a consistent finish every time.

TIMBER SPECIES AND SIZES

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

BURNT ASH SHOU SUGI BAN - PREMIUM OPTION

Burnt Ash Shou Sugi Ban charred timber is our premium option for projects not requiring a BAL rating. Compared to Australian hardwoods, Burnt Ash can achieve a consistent depth of char as it is a thermally-modified timber.

SPOTTED GUM
SHOU SUGI BAN

Manufactured from Australian's native hardwood, our Shou Sugi Ban charred spotted gum has a striking aesthetic.

Due its naturally high fire-resistant properties, charred spotted gum battens and cladding are often used in bushfire zones where BAL 29 is required.

TIMBER SPECIES AND SIZES

JARRAH SHOU SUGI BAN

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

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

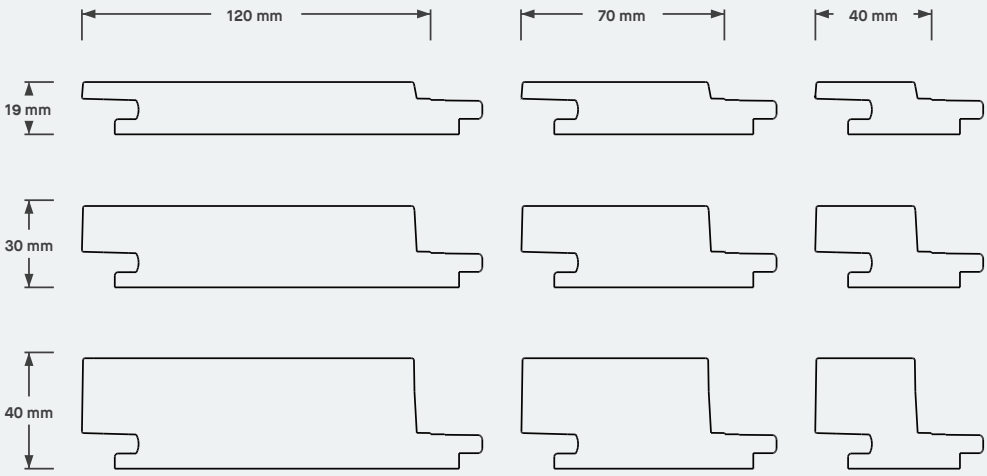
TIMBER SPECIES AND SIZES

IRONGUM SHOU SUGI BAN

Manufactured from irongum, it is mainly used as a cost-effective option. Like jarrah, ironggum achieves BAL 12.5 and BAL 19.

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

SHOU SUGI BAN PROFILES & SIZES



Note: 40x19 not available in Burnt Ash

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, irongum and jarrah are BAL rated timbers. Spotted gum meets BAL 29 and irongum 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, irongum and jarrah are also budget friendly options. If you are considering lower priced 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.

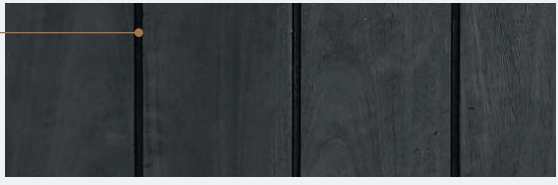
What process is used to char the timber?

Shou Sugi Ban charred timber is manufactured in our factory using a machine we designed and have tested over a two 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?

What sets us apart from other charred timber suppliers is our ability to char the right in the shadow line of our Trendplank profile and the evenness of our charring result.

Any part of the timber that is not charred properly will weather unevenly, meaning that your facade will eventually have areas that are patchy without char, after being exposed to the weather for a few months. The uneven charred surfaced on some products manufactured by others suppliers in the industry are often covered up with a black stain.

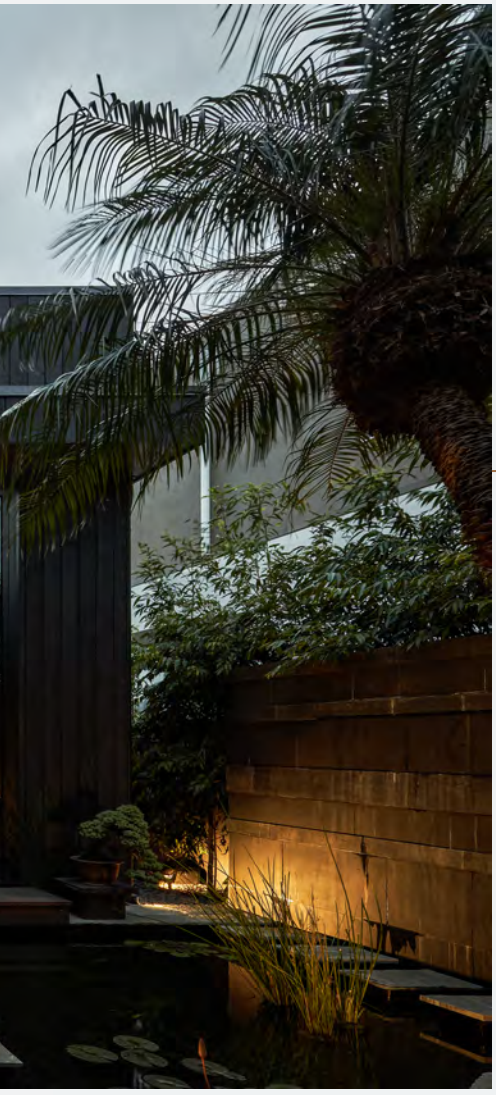


What is the difference with a black stained timber and Shou Sugi Ban?

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 "*Shoo - Soo-gi -Bahn*."



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 & Irongum - 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 wwwcutek.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.ocadenmark.com/shop/product/exterior-wood-oil

MAINTENANCE

Recommendations of required maintenance or Shou Sugi Ban charred timber installed internally and externally.

Maintaining Shou Sugi Ban charred external timber with Cutek Extreme CD50 Black Ash

Shou Sugi Ban charred timber is supplied with one factory-coat of Cutek Extreme CD50 Black Ash. This will provide the timber with its first layer of protection.

Once installed, it is recommended to apply a second coat of oil. If the charred timber is coated with Cutek Extreme CD50, it is recommended to apply a third coat, three to six months after installation. Following that, it is recommended to recoat the timber with Cutek Extreme CD50 up to every three to five years, depending on the level of weather the timber is exposed to.

Maintaining Shou Sugi Ban Charred External Timber with WOCA Exterior Oil

This first coat of WOCA Exterior Oil completed inside our factory before the product is delivered to site. This will provide the timber with its first layer of protection.

A second coat of WOCA Exterior Oil is recommended after installation of the timber product. For WOCA Exterior oil, this two-coat application can last up to two years, before it needs to be evaluated based on the project's variables.

These variables include exposure to the elements, location, elevation and where on the project the timber has been installed. Once the timber cladding has been out in the weather for two to three months, the weather will wash the loose particles off the timber cladding and the charred, black rub-off eventually goes away.

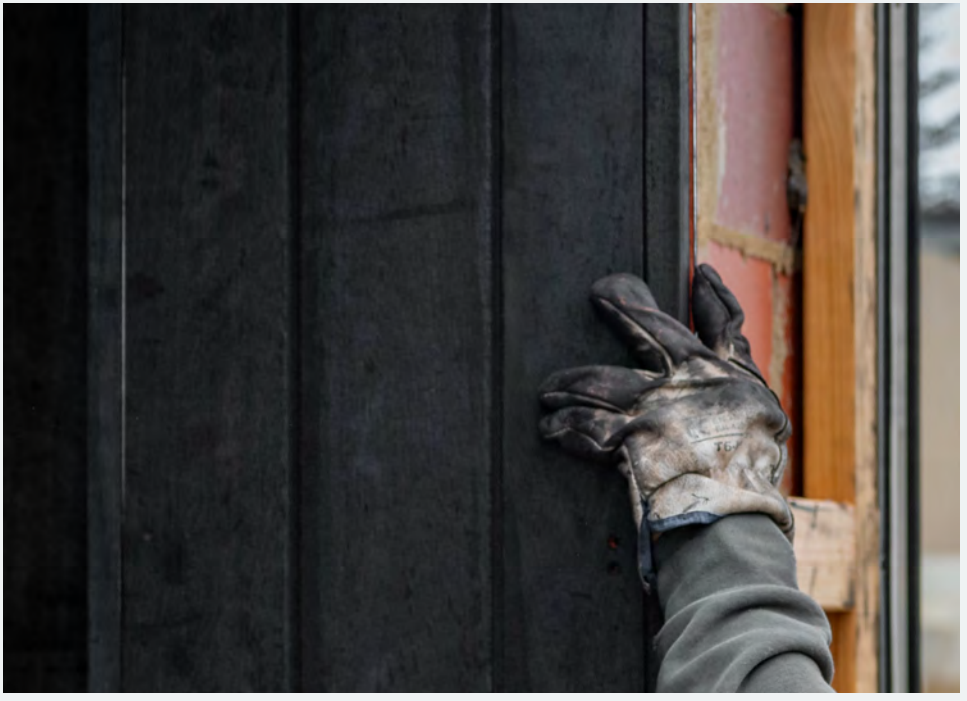
MAINTENANCE

Recommendations of required maintenance or Shou Sugi Ban charred timber installed internally and externally.

Maintaining internally installed Shou Sugi Ban charred timber with WOCA Exterior Oil

This first coat of WOCA Exterior Oil completed inside our factory before the product is delivered to site. This will provide the timber with its first layer of protection.

This coating binds the char layers together and eliminates the rub-off on internal projects. Once installed a second coat is recommended to completely seal the cladding from rub-off. Any general wear and damage can be touched up using WOCA Exterior oil as required.



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

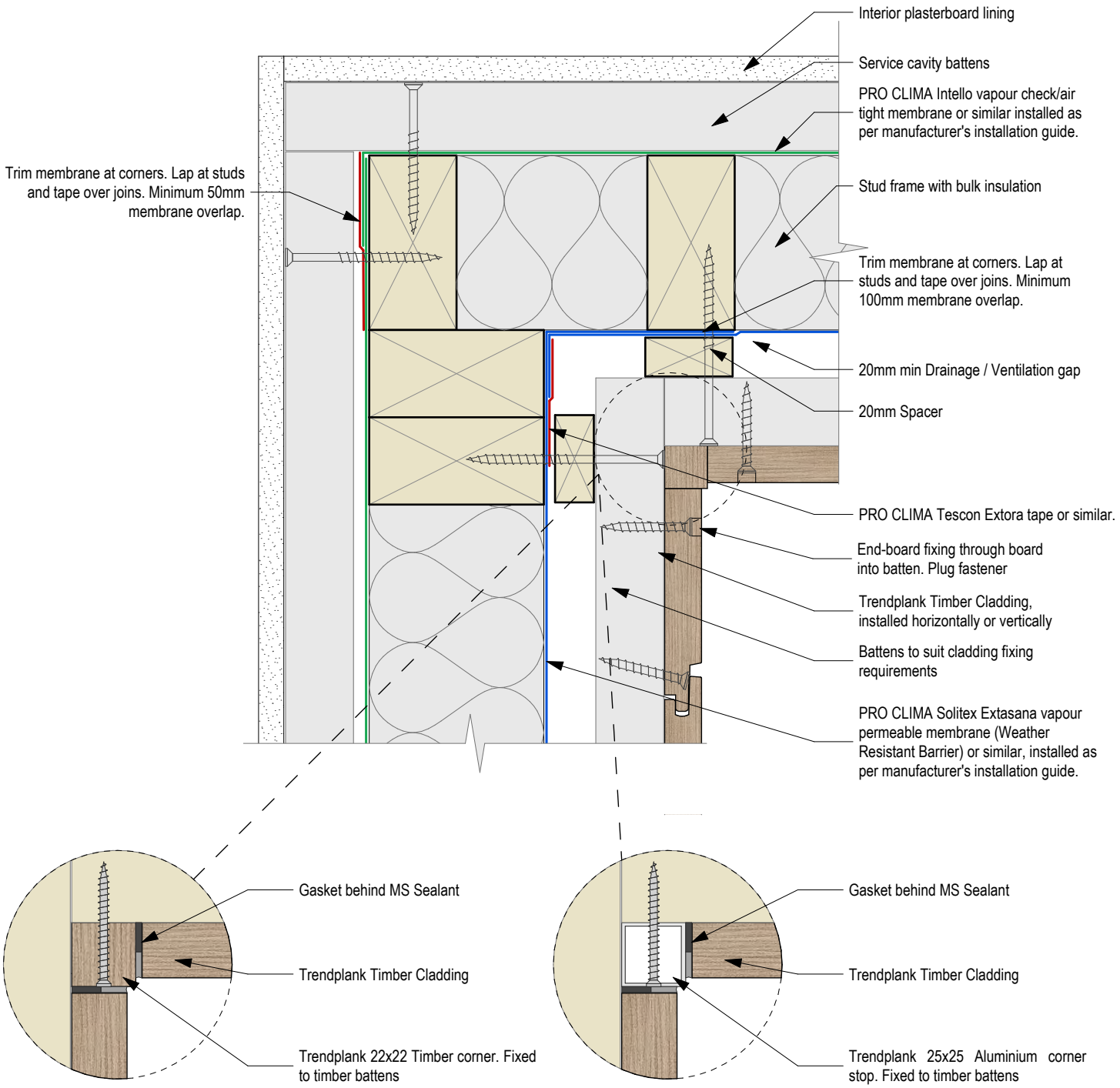
EXAMPLE SPECIFICATION	
Product Name	Shou Sugi Ban Timber Cladding
Timber Species	Burnt Ash
Finish	120×19, 120×19 & 70×19 repeating
Fire Requirements	None
Corner Trims	External Corners to have X Profile with 22×22 Burnt Ash Infill, Internal Corners to have 22×22 Internal Burnt Ash Corner Profile. Shou 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

INTERNAL CORNER



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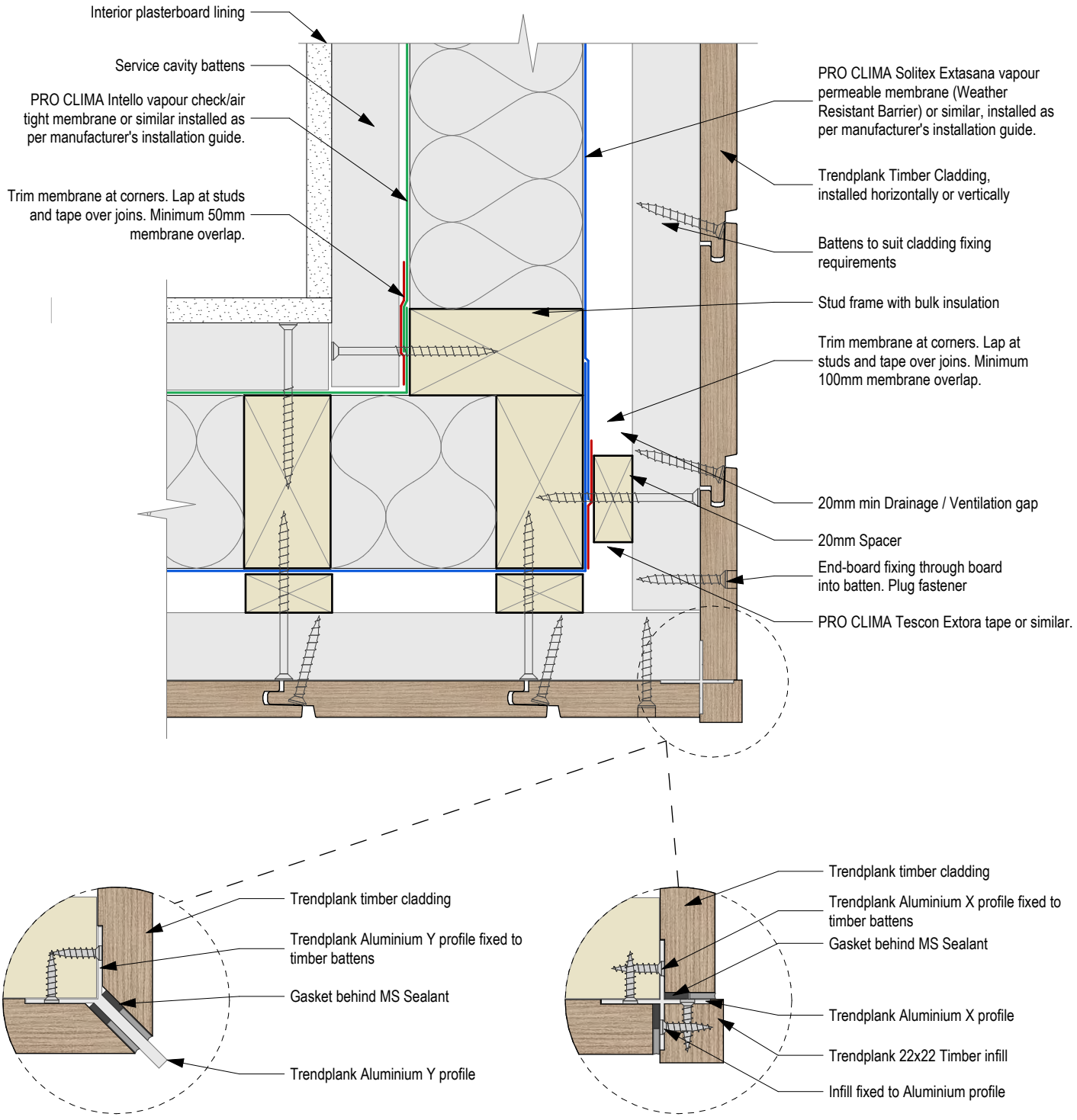
EXTERNAL CORNER



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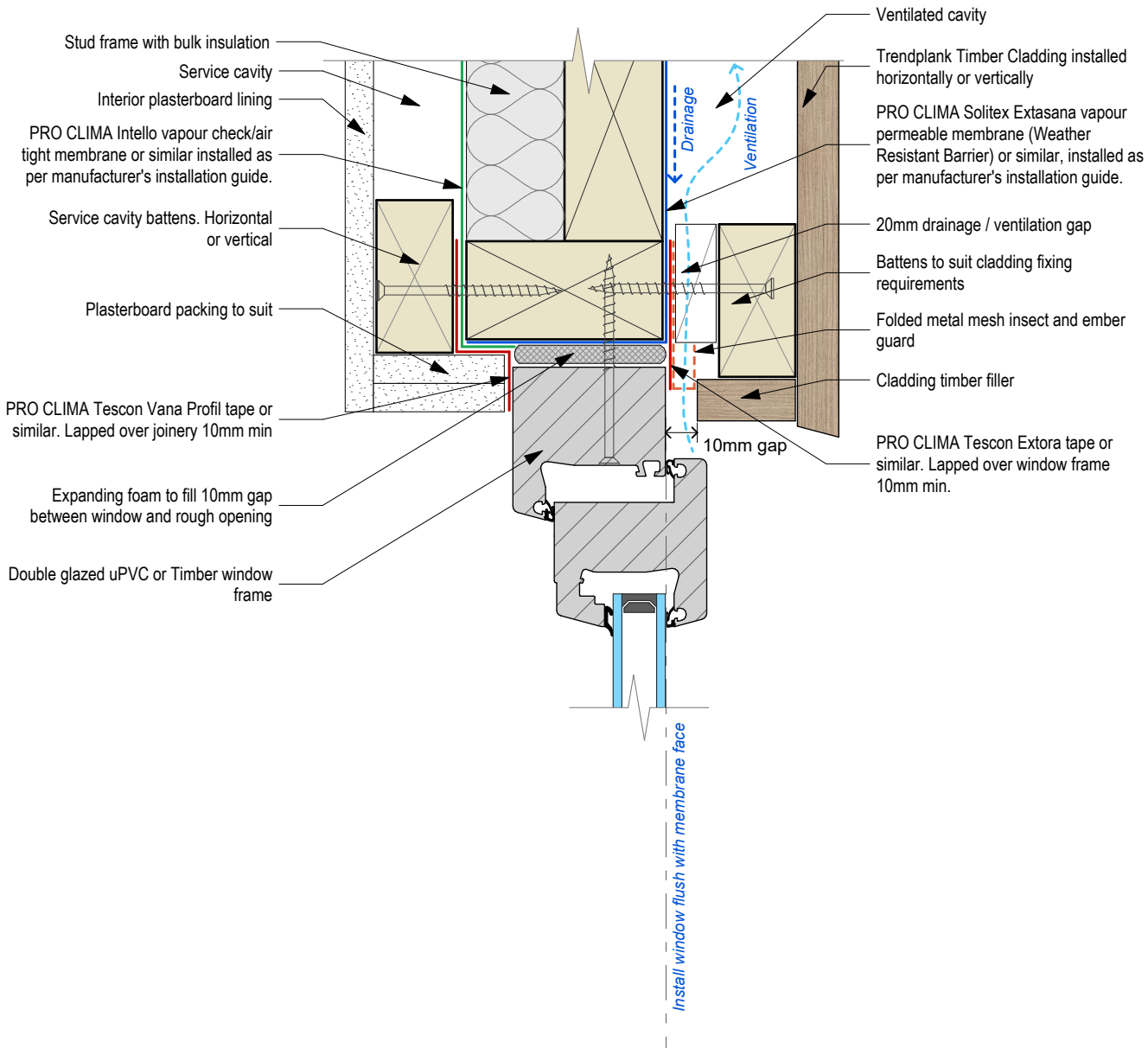
WINDOW HEAD - TIMBER/uPVC



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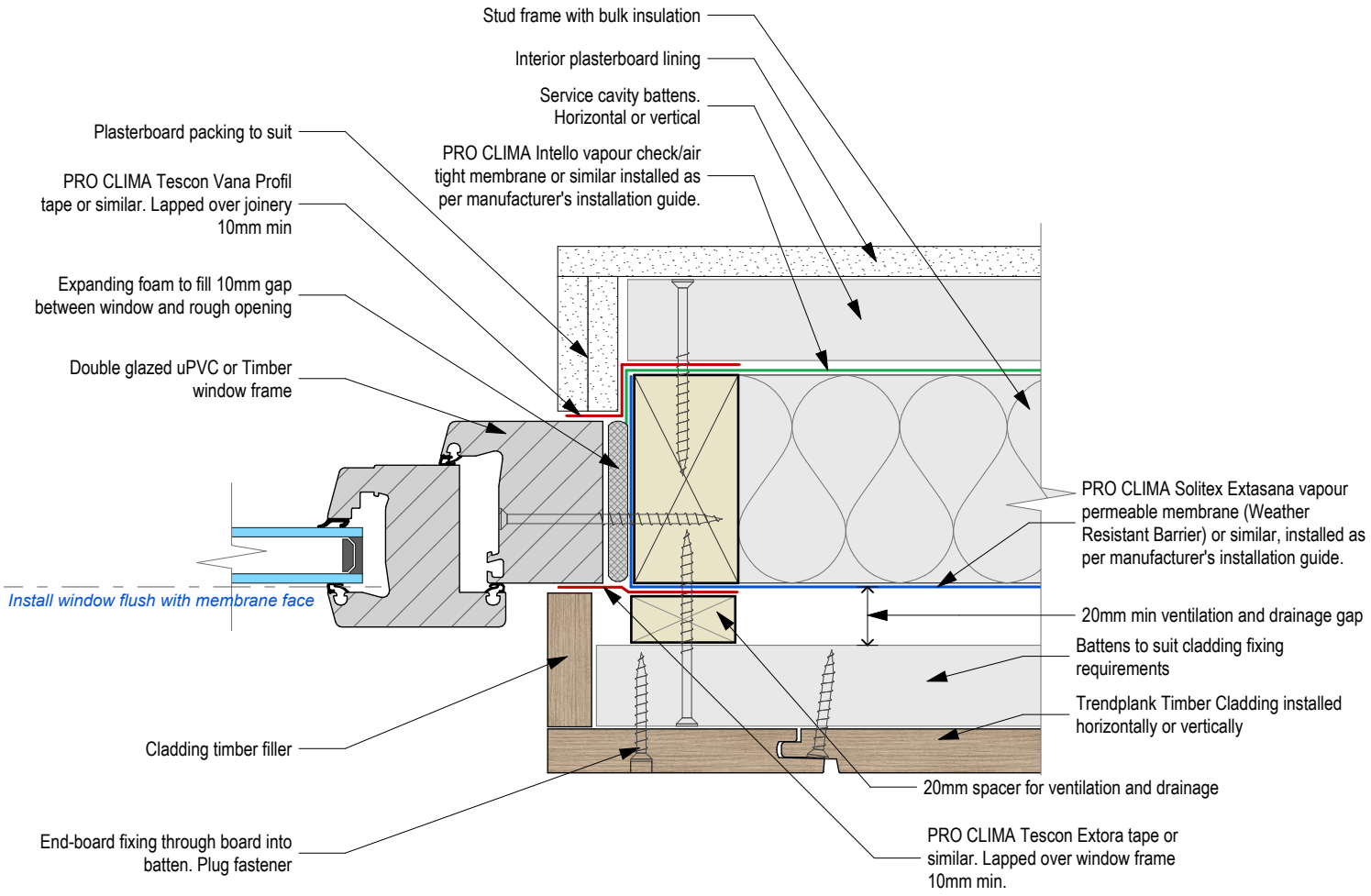
WINDOW JAMB - TIMBER/uPVC



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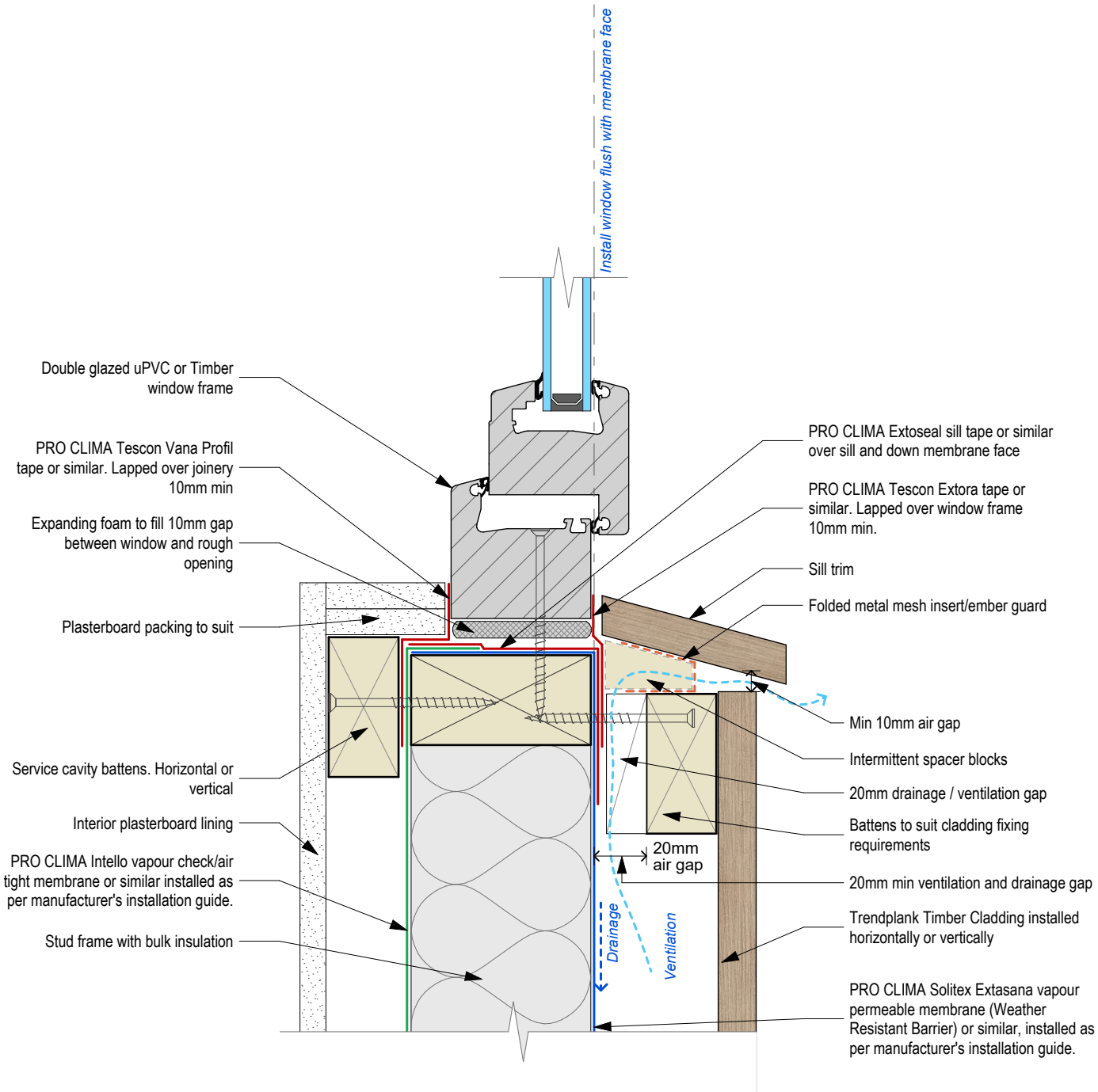
WINDOW SILL - TIMBER/uPVC



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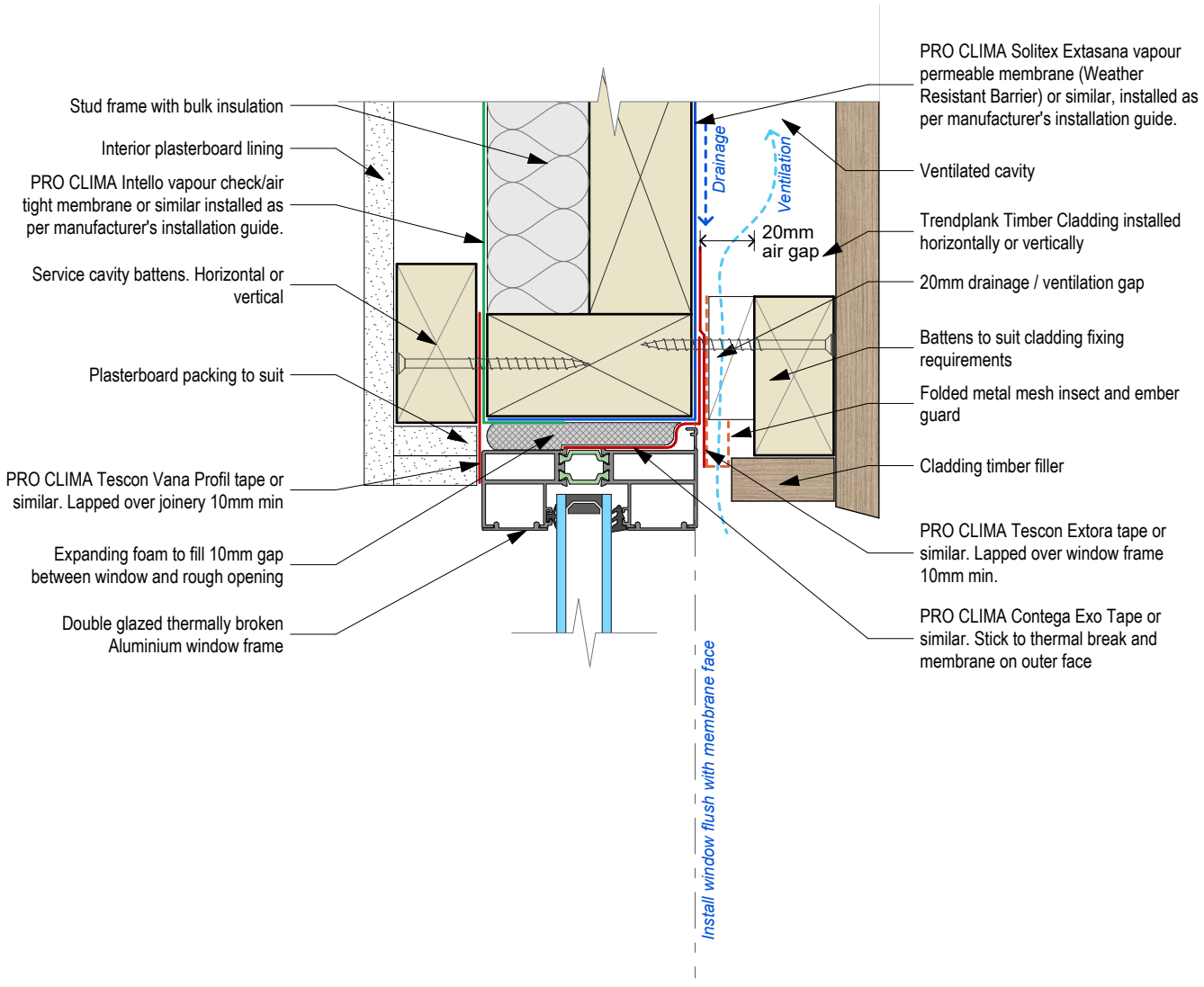
WINDOW HEAD - ALUMINIUM



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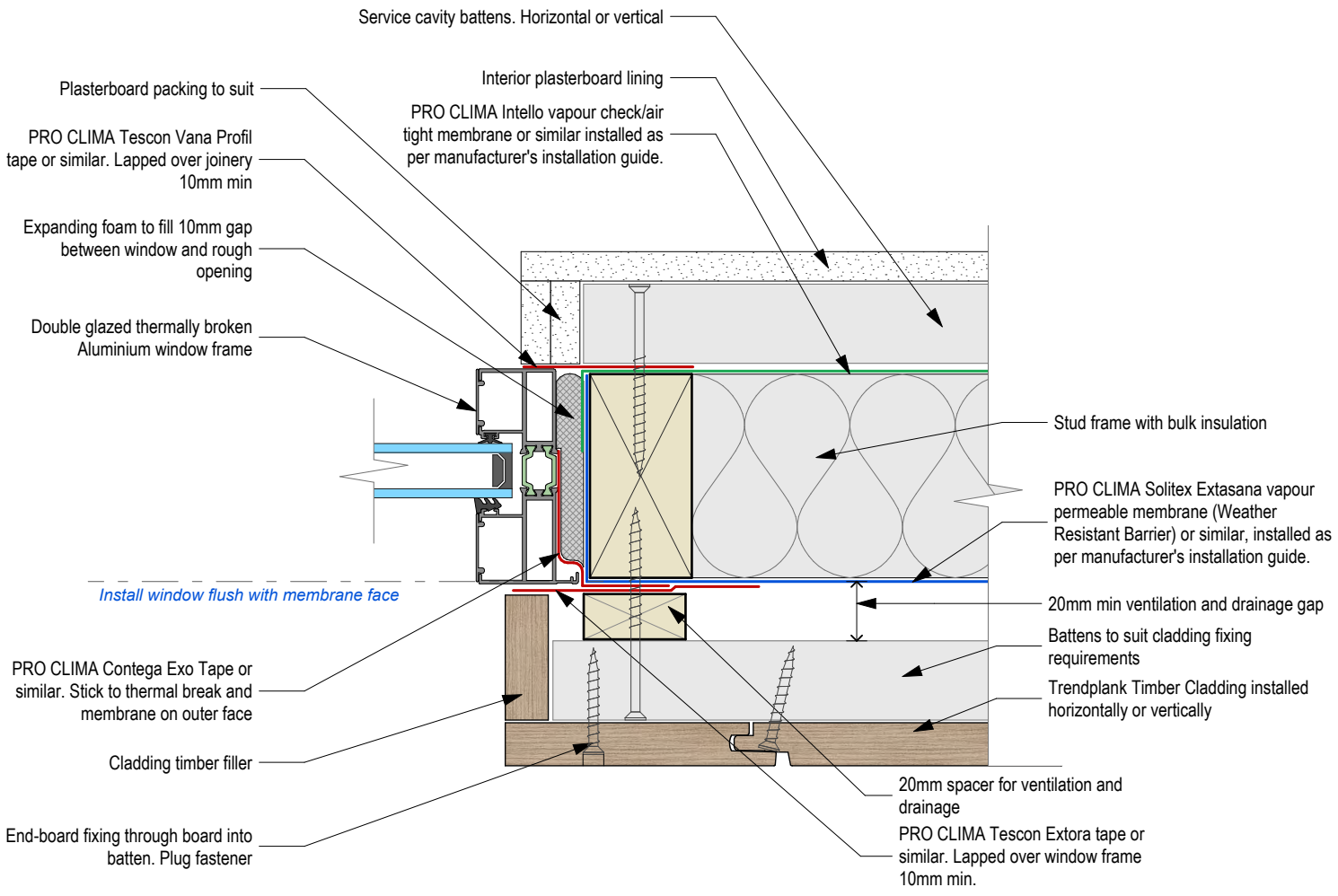
WINDOW JAMB - ALUMINIUM



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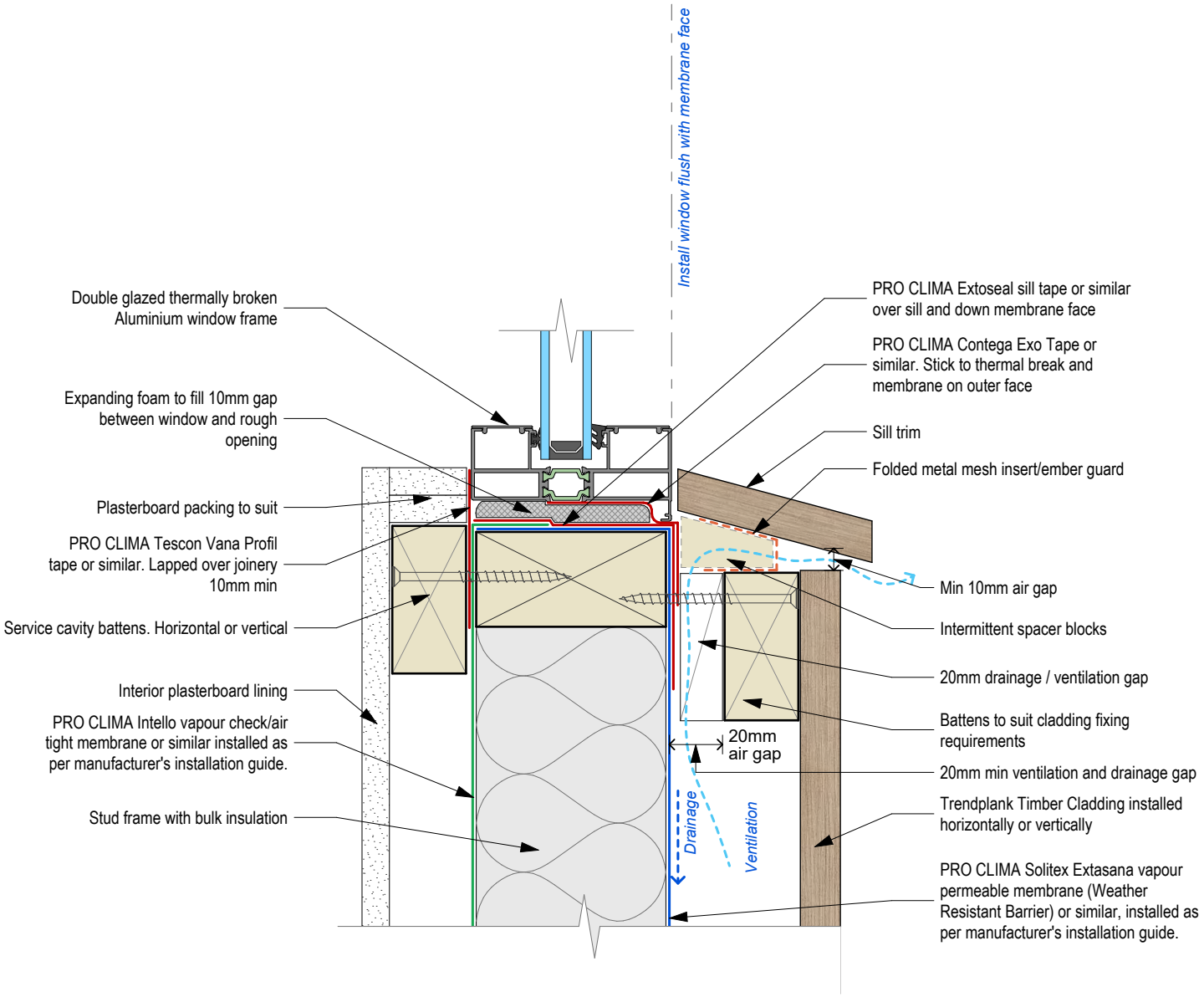
WINDOW SILL - ALUMINIUM



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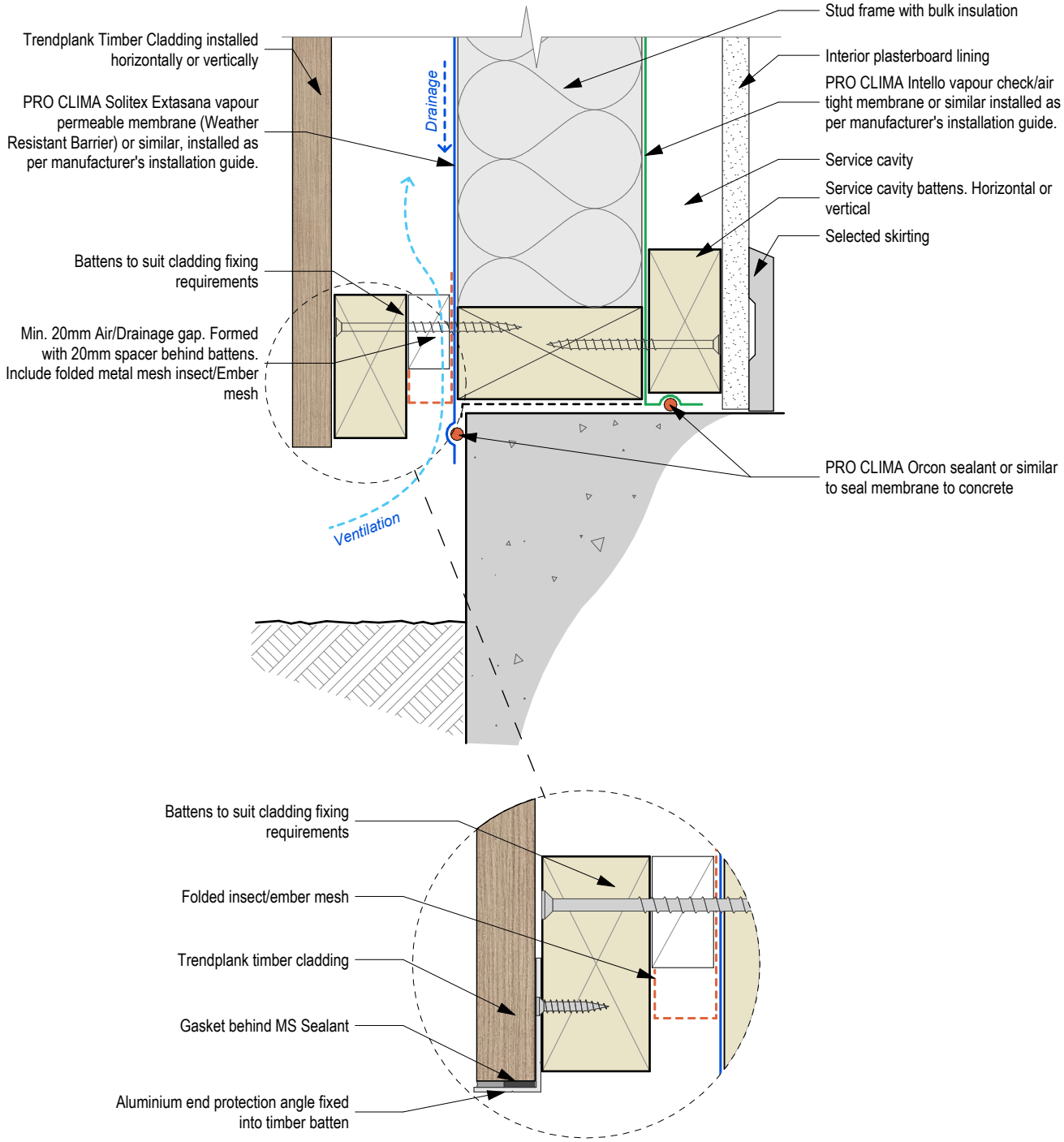
WALL BASE



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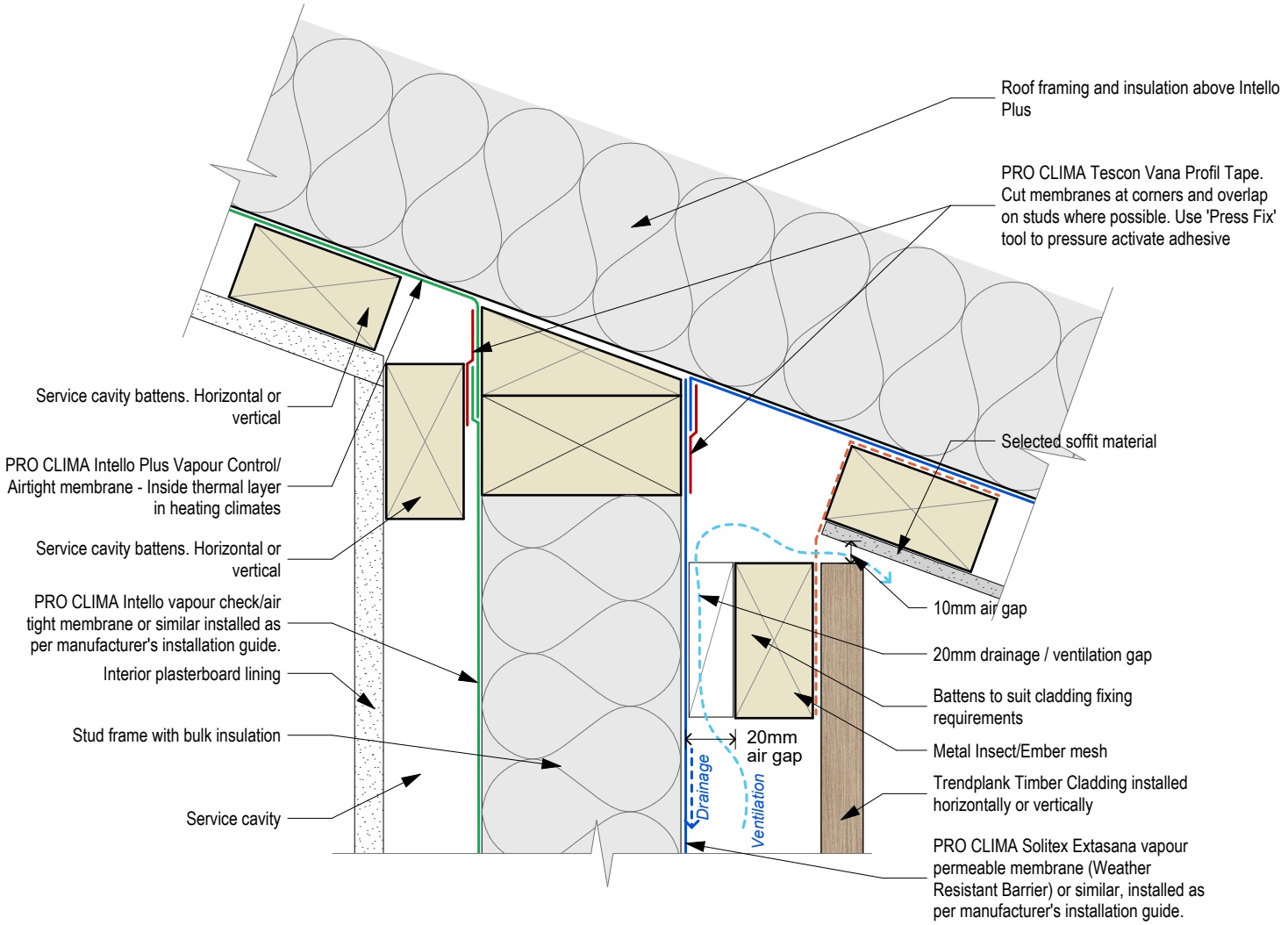
www.mortlock.au

WALL TO ROOF



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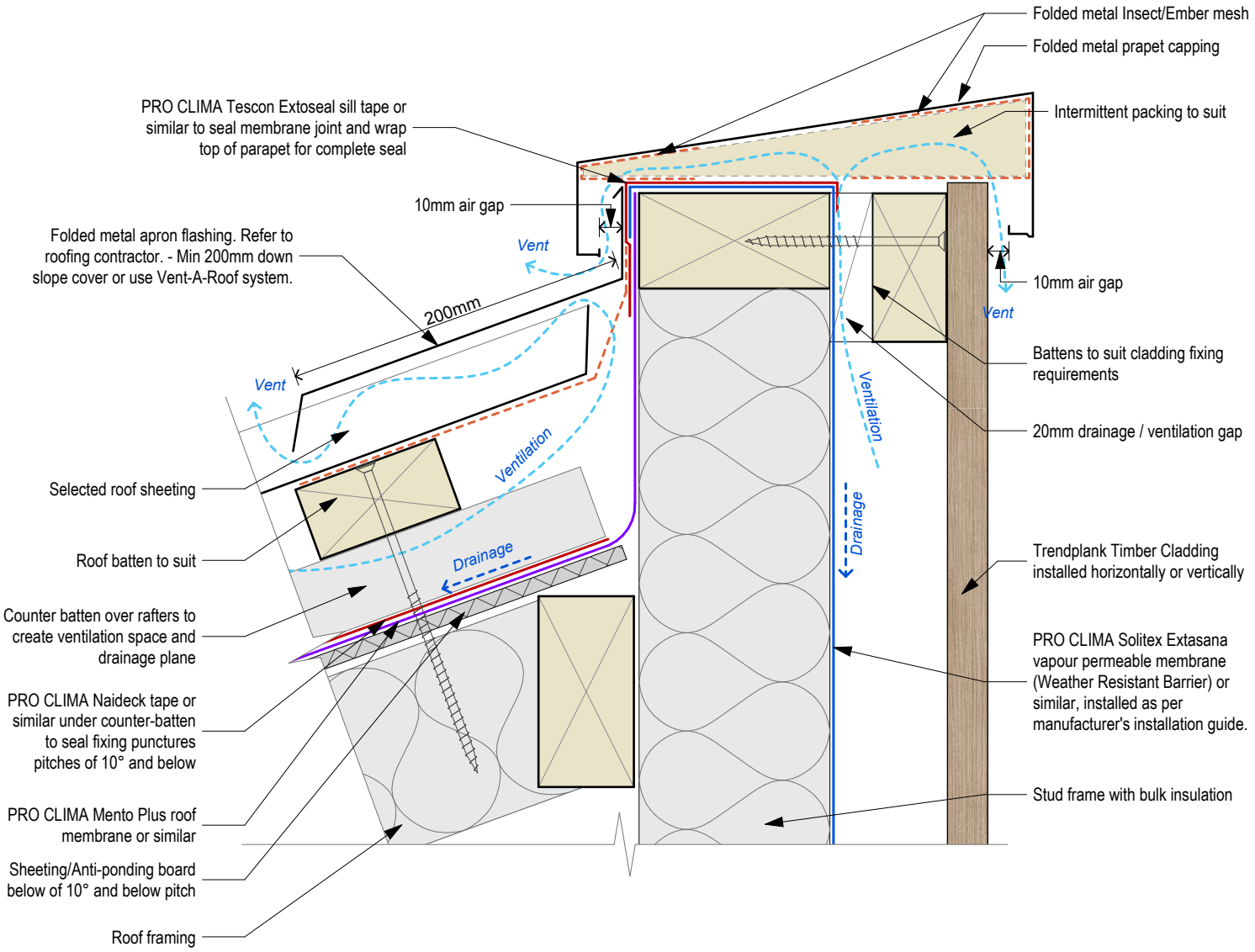
PARAPET - TOP OF ROOF SLOPE



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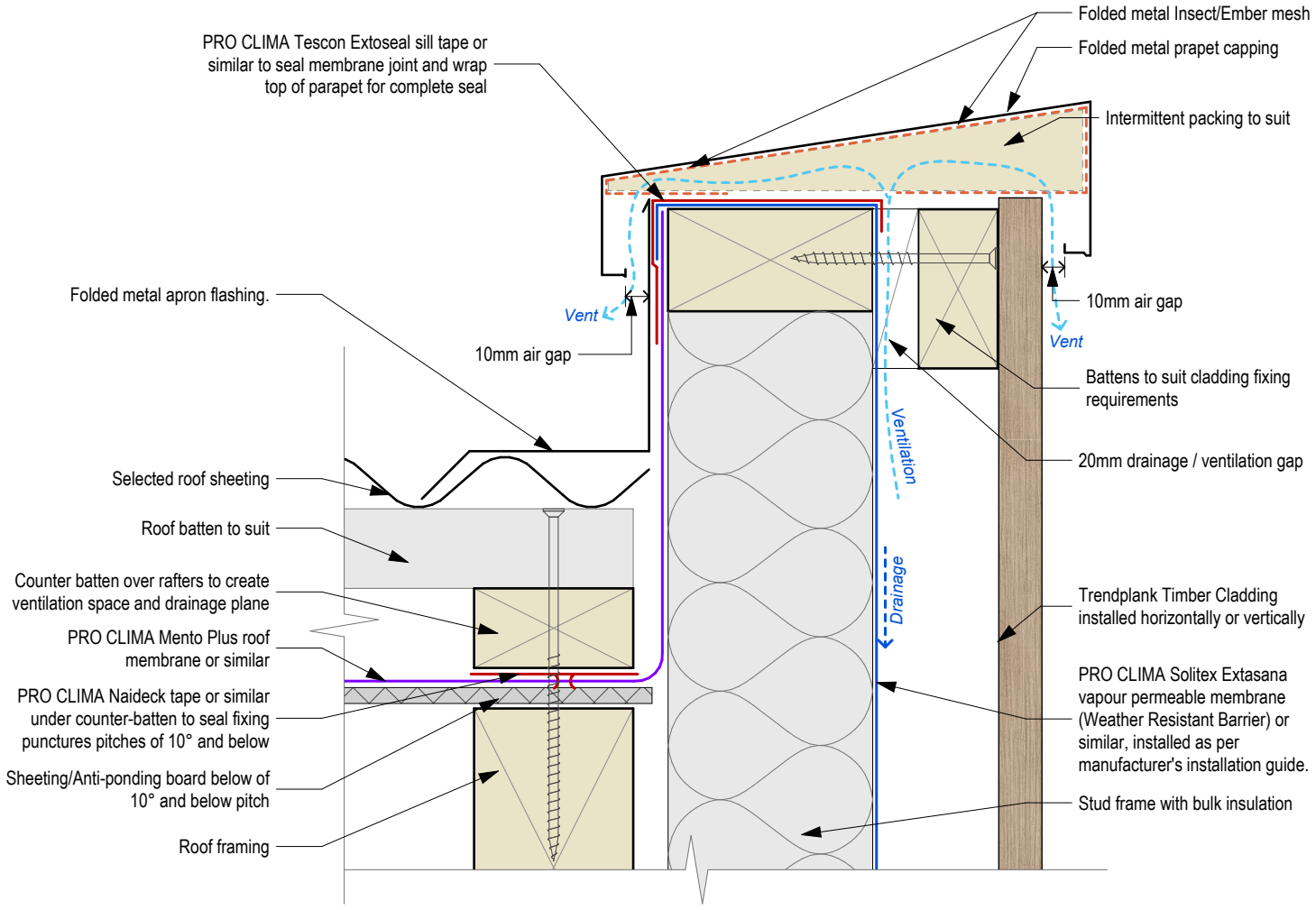
PARAPET - SIDE OF ROOF SLOPE



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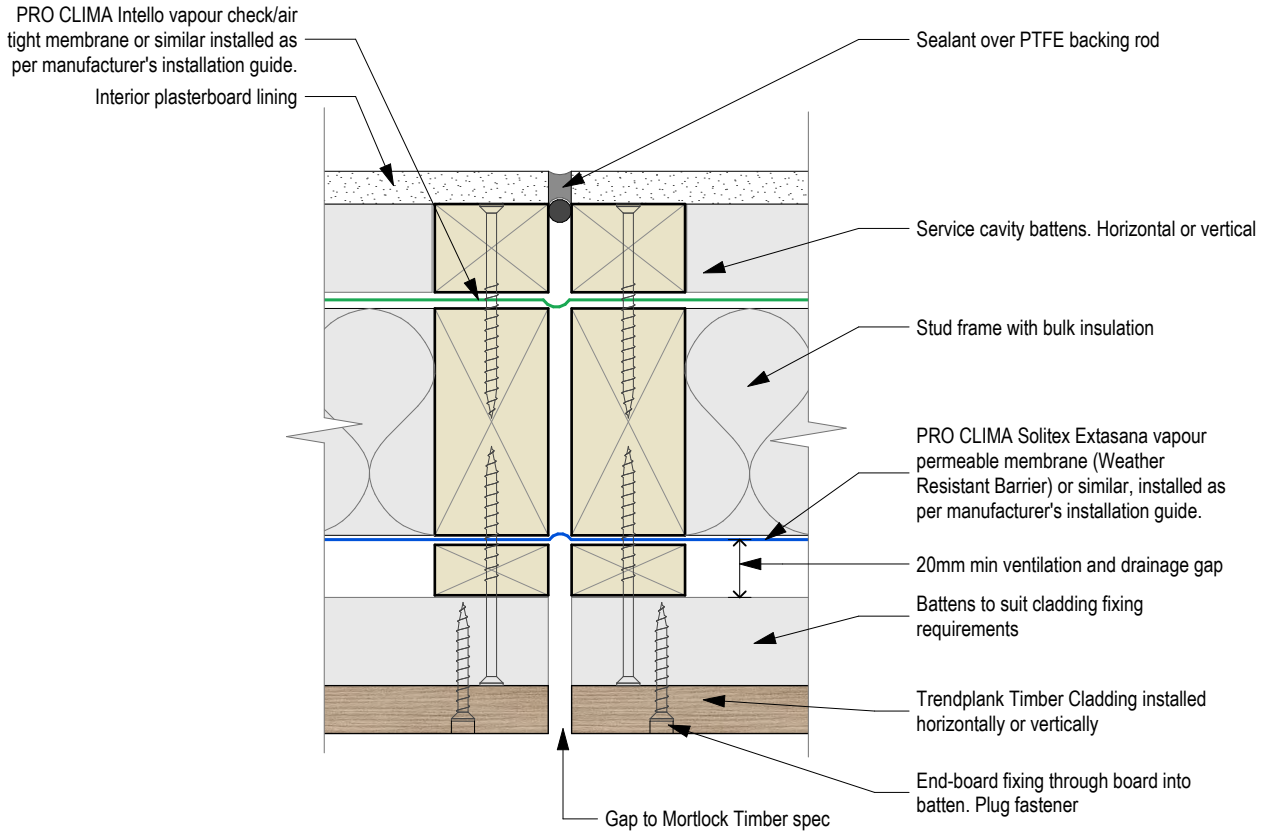
EXPANSION GAP



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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

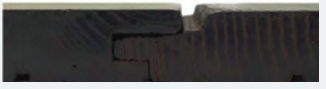
We recommend timber cladding be a minimum of 75mm above the ground to avoid moisture and dirt impacting on the finish. End grain must be sealed with an aluminium profile or similar, Trendplank weather seal and caulking as per detail.

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

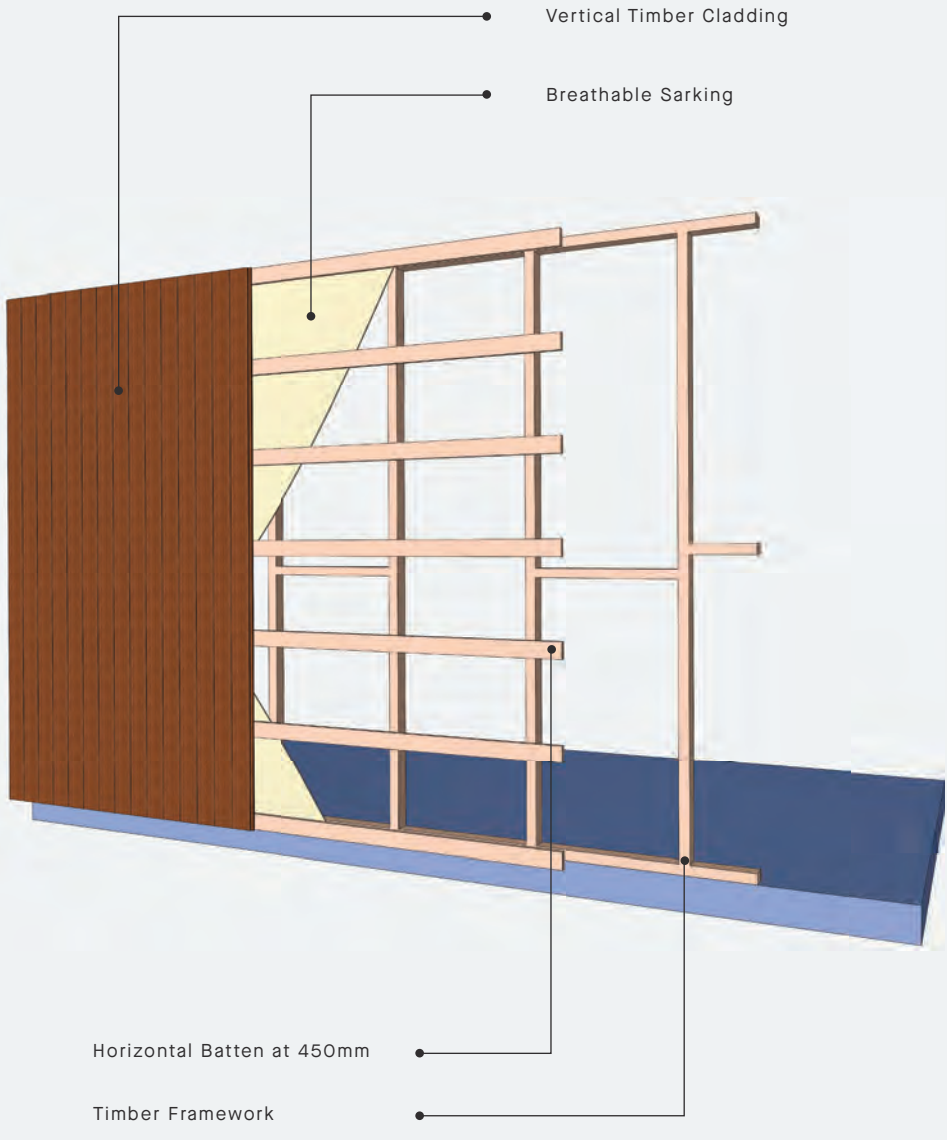
WATER-PROOFING

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.


Vertical Timber Cladding
Breathable Sarking
Horizontal Batten at 450mm
Timber Framework

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

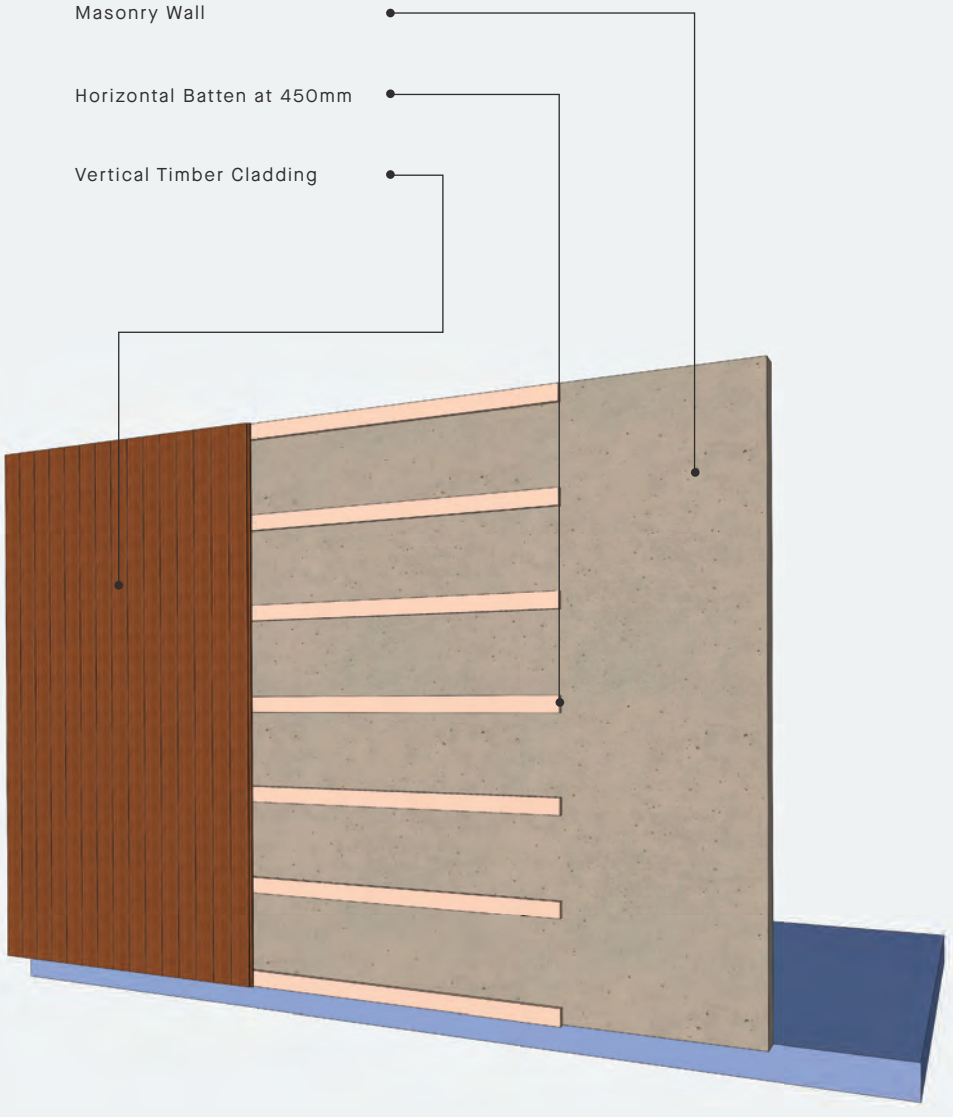
Install the bottom angle, corner stops and various flashings where necessary. See construction details.

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.


Masonry Wall
Horizontal Batten at 450mm
Vertical Timber Cladding

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.

STEP 2

Fix vertical battens (e.g. 70×35 pine or top hat section) at nominally 450mm centres.

STEP 3

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 4

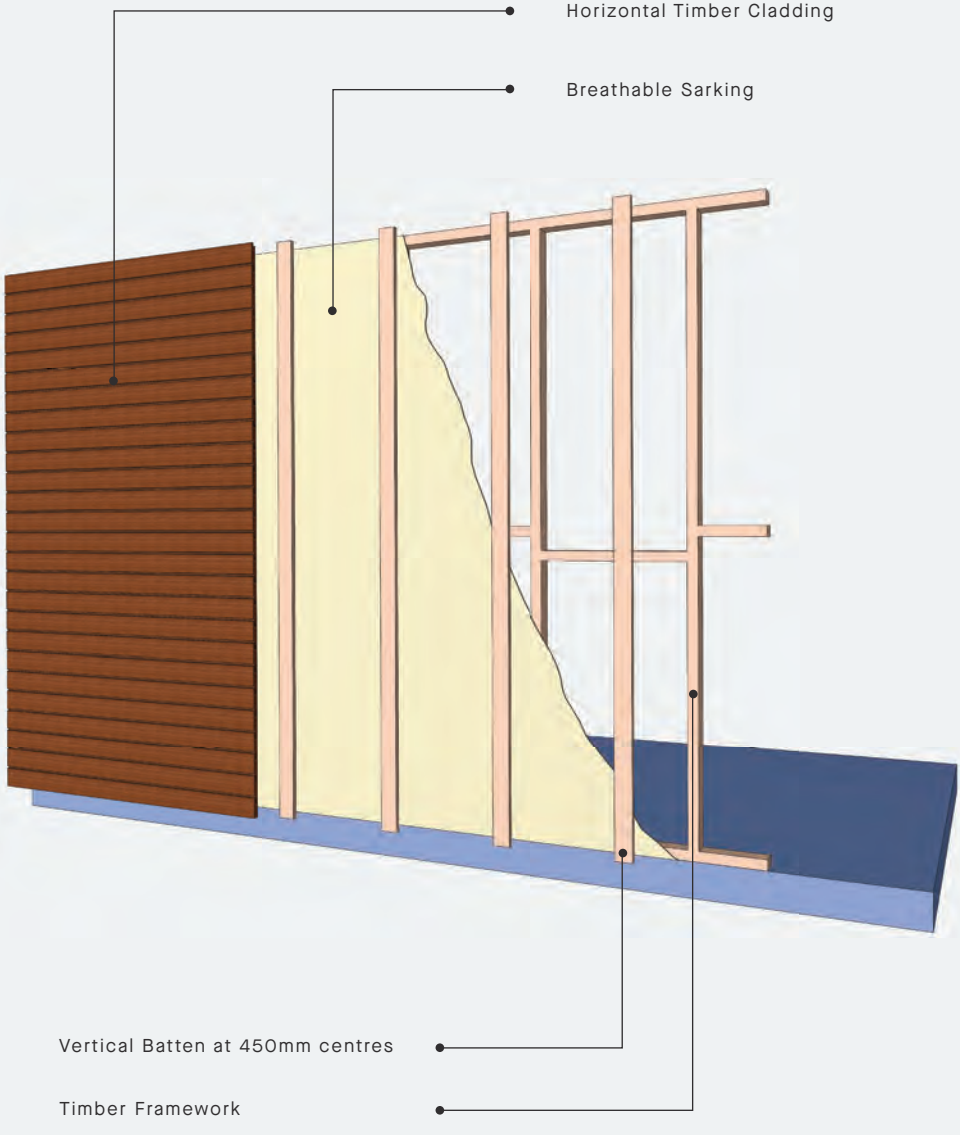
Install the bottom angle, corner stops and various flashings where necessary. See construction details.

STEP 5

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 6

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.


Horizontal Timber Cladding
Breathable Sarking
Vertical Batten at 450mm centres
Timber Framework

INSTALLATION

Horizontal Cladding - Masonry Wall Construction

STEP 1

Fix vertical 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

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STEP 5

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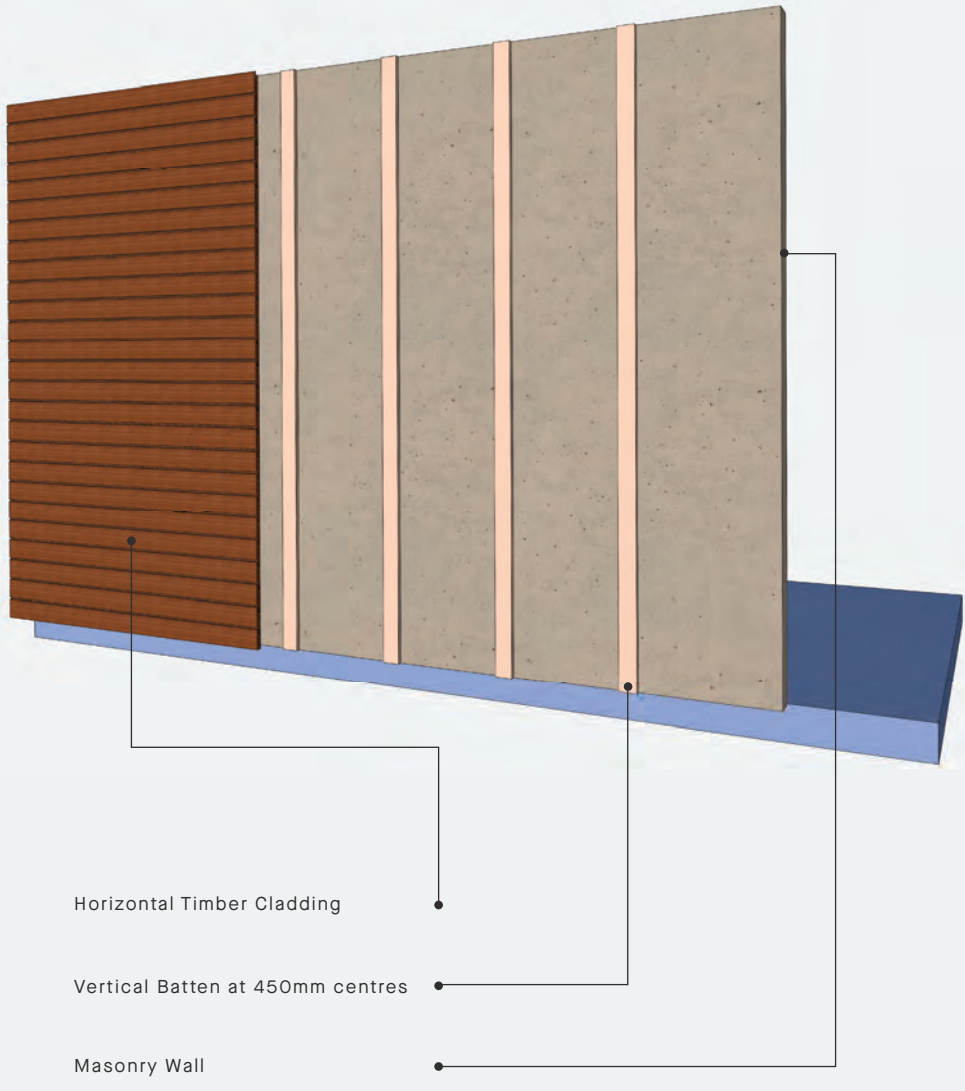

Horizontal Timber Cladding
Vertical Batten at 450mm centres
Masonry Wall

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

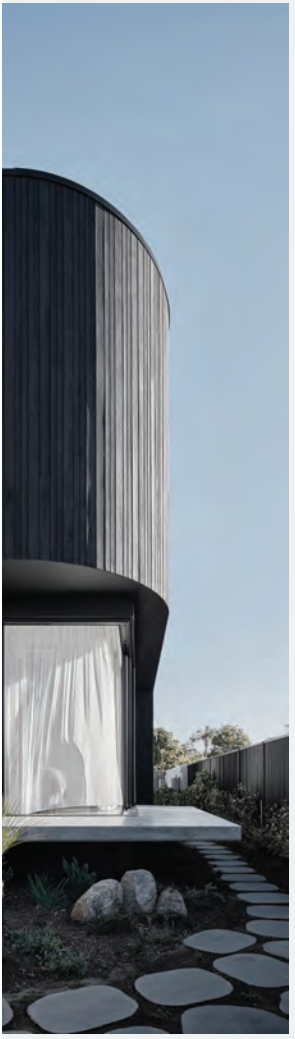
Exterior maintenance can be done using Cutek CD50 Black Ash Oil. Mortlock Timber recommends recoating every 18 months - 2 years for spotted gum and 3 - 4 years on Burnt Ash. Application information on Cutek Oil can be found at www.cutek.com.au

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 treating 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	ARUMA
Location	Burleigh Waters, QLD
Board Size	120x19mm
Timber Species	Jarrah




30 Aruma

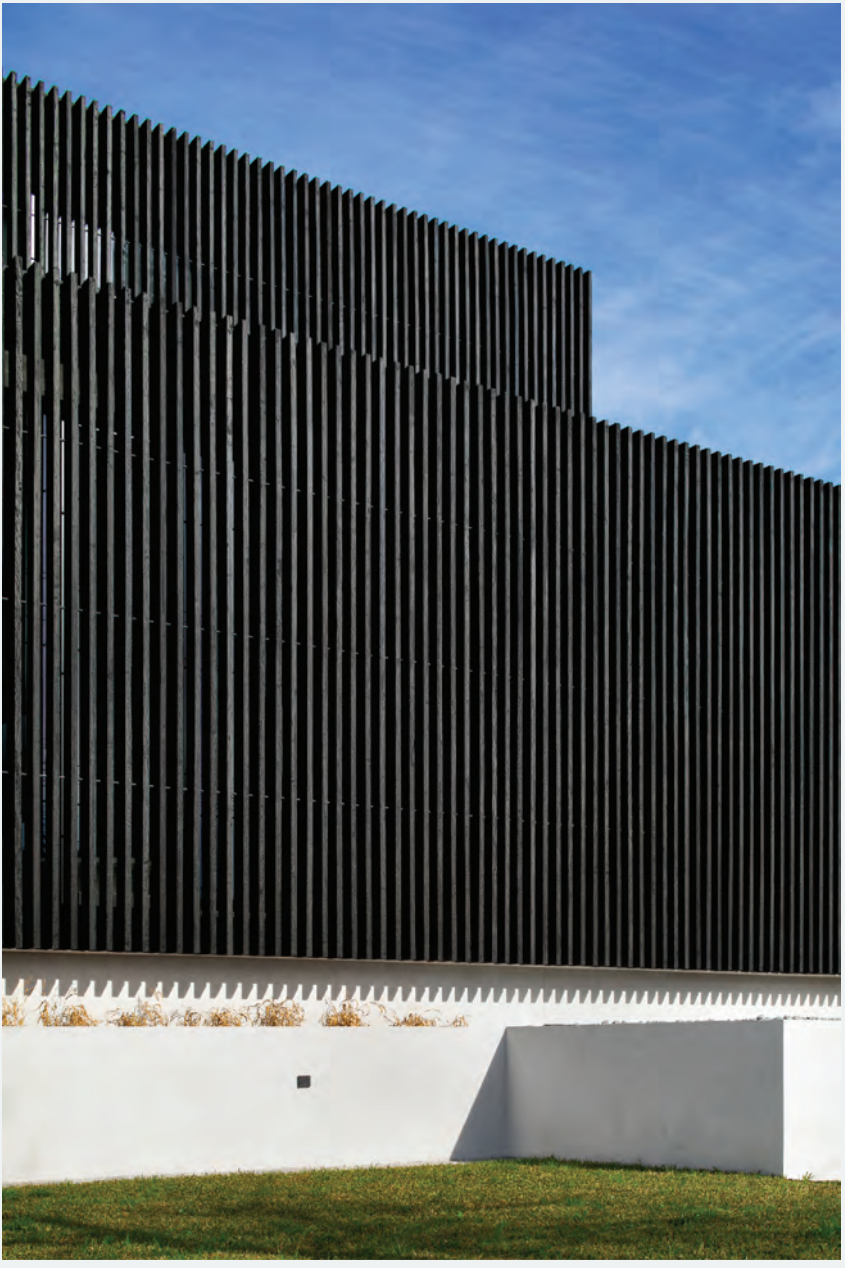
PROJECT DETAILS	
Project	The Myrtle
Location	Esperance, WA
Board Size	120×19mm
Timber Species	Spotted gum

PROJECT DETAILS	
Project	The Milldam
Location	Tasmania
Board Size	120x19mm
Timber Species	Burnt Ash

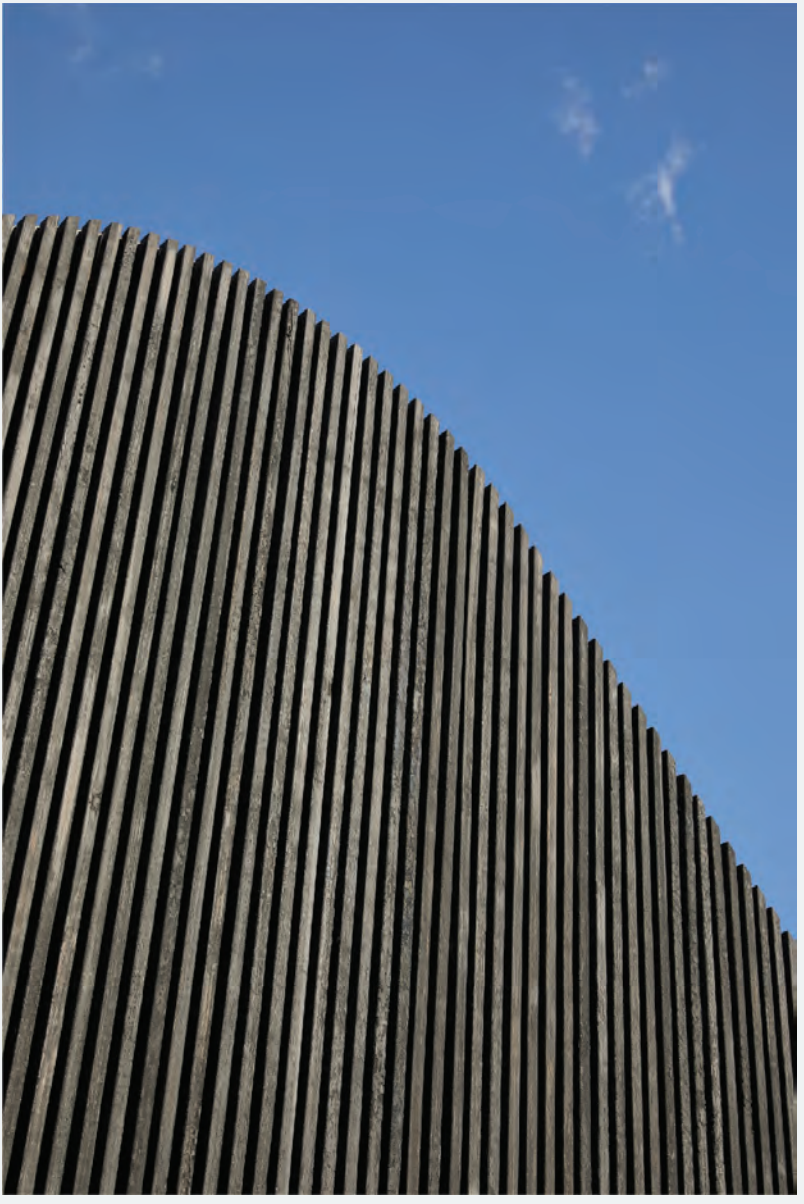
PROJECT DETAILS	
Project	Lane Cove
Location	Lane Cove NSW
Board Size	120×19mm
Timber Species	Burnt Ash

PROJECT DETAILS	
Project	Bulli
Location	Wollongong NSW
Board Size	122x19mm
Timber Species	Spotted Gum

PROJECT DETAILS	
Project	Rosedale
Location	Glen Iris VIC
Board Size	120x19mm & Custom Batten Sizes
Timber Species	Burnt Ash & Spotted Gum



PROJECT DETAILS	
Project	Main Ridge
Location	Main Ridge, VIC
Board Size	120x19mm
Timber Species	Spotted Gum



DESIGN & INSTALLATION CONSULTING

Our team can work through detailing and specifi cationrequirements to meet specifi c 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.

MORTLOCK
TIMBER

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