

Jarrah eClad Installation and Care & Maintenance Instructions

UPON DELIVERY

1. Check against delivery docket that you have received the correct quantity and profiled product.
2. Check for any damage to packs. Any damage should be recorded on the delivery document. Notify the Supplier immediately as per T&Cs.
3. Notify Supplier immediately after delivery if any items do not meet specification.

ONSITE STORAGE

Jarrah eClad products are all kiln dried and pre-oiled suitable for installation to most locations around Australia. Install the timber as soon as possible after delivery. It is not necessary to acclimatise the timber before installation.

After delivery and before installation the cladding should be kept in its original wrapping where possible. If being stored for any period of time, it needs to be protected from sun, rain and extreme heat.

Packs should be placed on level supports, spaced no more than 600 mm apart, well clear of the ground and over a dry surface. This is to keep excessive moisture out and prevent timber drying out too much. This will also help maintain the timber profile accuracy and straightness.

HANDLING AND CUTTING

When moving all Jarrah eClad finger jointed products, carry them on the edge to avoid excessive flexing and undue stress on joints.

Personal Protection Equipment (PPE) should be worn to protect eyes, nose, mouth and hands when sanding, sawing or planing timber products.

WEATHERPROOFING

The NCC performance requirements stipulate that an external wall (including openings around windows and doors) must prevent the penetration of water that could cause (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) undue dampness or deterioration of building elements. The details in this Guide address these requirements.

HIGH VAPOUR PERMEABLE MEMBRANE BEHIND CLADDING

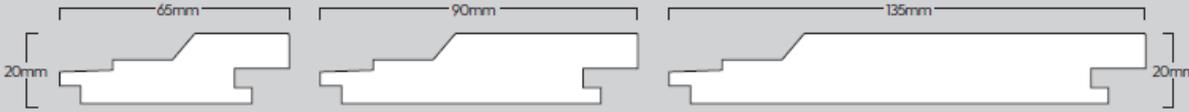
Stud walls are covered with a membrane to improve thermal insulation as well as prevent drafts and wind driven rain from entering the wall cavity. In some regions of Australia wall membranes are also required for additional bushfire protection purposes. Any membrane used behind timber cladding must be highly vapour permeable (low vapour resistance) yet highly water resistant. Vapour barriers such as polythene films and foils which are not vapour permeable or other material such as perforated foil insulation which has very low vapour permeability should never be used immediately behind timber cladding.

SEAL AND PROTECT THE END GRAIN

All cut ends MUST be sealed prior to installation. Any water entering the end grain can travel a long way, so it is important that the end grain is effectively protected from moisture penetration by sealing with a high performance end sealer such as Teknos end sealer.

CLADDING Profiles

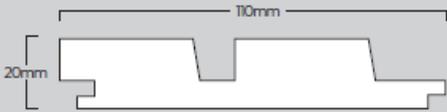
PROFILE: Engineered Jarrah Cladding - SHIPLAP (65mm, 90mm & 135mm wide boards)



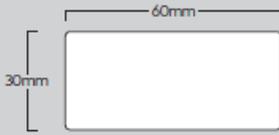
PROFILE: Engineered Jarrah Cladding - SHADOWLINE (65mm, 90mm & 135mm wide boards)



PROFILE: Engineered Jarrah Cladding - JARRAH PANEL (110mm wide board)



Breaker Board/Internal & External Corner Profile



PLEASE NOTE:
Breaker board is not finger jointed.

SPECIFICATIONS

Profile	Grade	Lengths(m)	Width(mm)	Thickness(mm)	Coverage(mm)	Span(mm)
SHIPLAP	S&B	2.7 / 5.4	65	20	50	450
	S&B	2.7 / 5.4	90	20	75	450
	S&B	2.7 / 5.4	135	20	120	450
SHADOWLINE	S&B	2.7 / 5.4	60	20	50	450
	S&B	2.7 / 5.4	90	20	75	450
	S&B	2.7 / 5.4	135	20	120	450
JARRAH PANEL	S&B	2.7 / 5.4	110	20	100	450
BREAKER BOARD	S&B	2.4	60	30	60	450

1. CLADDING DESIGN

Good design practices help to ensure best performance. For example, wide eaves and verandas help to provide protection from exposure to sunlight and rain. Flashings at corners, doors, windows and wall intersections must be detailed to hold a head of water in harsh weather conditions.

Where it is exposed to the weather, cladding should end well above horizontal surfaces. This includes final ground level, paving, decks and roofs to avoid staining from rain splashing and prevent moisture up-take from sitting water. Adequate clearance should be allowed above a ground floor concrete slab to allow for termite inspection. The recommended minimum clearance height is 150mm above final soil level or 100 mm above final paving level. It is also good practice to slope ground and any paving away from the house. For cladding that is above a deck or roof, a minimum clearance of 35 mm is recommended. Cladding should extend at least 50 mm below the wall's bottom plate.

If installed vertically the bottom edges should be cut to slope upwards and inwards (i.e. at an angle of about 15 degrees from the horizontal) to form a drip line.

FIXING METHOD

Jarrah eClad cladding profiles can be installed in a horizontal, vertical or diagonal direction, with the exception of Rusticated 127 which is not suitable for vertical orientation. All profiles are suitable for face fixing and all profiles are designed as a secret fix application.

When installing horizontally or diagonally ensure fixed tongue edge is upward facing. When installing diagonally and vertically ensure the tongue is installed in the direction of the prevailing weather.

MOISTURE AND MOVEMENT

Timber naturally contains a small percentage of water. This means it releases or absorbs water from the air to equalise with the moisture levels in the air where it is installed. The timber expands and contracts in width in response to moisture changes and some movement is considered normal. By far the most movement occurs across the width of cladding boards, not the length.

ALLOW FOR SOME MOVEMENT

Abnormally long periods of hot, dry or wet weather may cause some greater shrinkage or expansion in the width of the board. Properly applied and maintained finishes will minimise the release and take-up of moisture.

Greater movement can be expected where the cladding is installed on unprotected west and north facing walls as these will be subject to greater degrees of sunlight and extreme temperature changes.

INSTALLATION OF TIMBER CLADDING – GENERAL

Installation must be undertaken with weather resistance in mind. Any moisture that does penetrate or form behind the cladding is given a chance to drain away or evaporate.

JOINING BOARDS

If fixing boards horizontally or diagonally, start at the lowest point and install with tongue edge uppermost. Single or long lengths should be used on walls exposed to prevailing weather conditions. Short lengths can be used between windows or on sheltered parts of the wall, such as under eaves and verandas. Sealants should not be depended on for weather resistance. Joints between abutting boards should be minimised to limit opportunity for moisture ingress.

If fixing boards vertically, endeavour to use full length boards and avoid joints. For walls over one storey, install expansion joints and flashing to horizontal joint at each floor level. If butt joints are unavoidable then butt joints in vertical boards should be angle cut at 45 degrees across ends (scarf joints) to minimise moisture uptake in board end grain. Boards should be installed with the tongue facing towards the direction of the prevailing weather.

As work proceeds, check that the boards are level or plumb (as appropriate), loosely fitting each board to that previously fixed to allow some movement over time. Allow an expansion gap of 1 – 2 mm. Avoid over cramping cladding boards to each other.

DRAINAGE CAVITY BEHIND THE CLADDING

It is recommended practice to provide a cavity behind the cladding to allow for the drainage of any moisture that penetrates the exterior cladding.

Adequate provision must be made for drainage to ensure that moisture is not left trapped between the timber cladding and the supporting wall. Care should be taken when installing supporting battens so that they allow drainage within any cavity. The bottom and top of any cavity must also be protected to ensure vermin are not able to enter.

A packer of approximately 5 mm thick and of sufficient durability and strength (suitable packers: plastic spacer, fibre cement, plywood) should be placed to maintain a gap between the batten and the vapour permeable membrane so that water/moisture can drain down the cavity unimpeded.

CLADDING INSTALLATION

1. Check studs for straightness and plumb. Pack or plane level as required. Studs maximum 450 mm centres.
2. Install high vapour permeable membrane over studs. All overlaps (minimum 150 mm) facing down.
3. Install cavity battens directly over studs and over vapour permeable membrane.
4. Stagger fixings down the batten to keep centre free to allow fixing of cladding.
5. Install flashings and corner details.
6. Mark the board increments on the battens. Make sure to allow for loose fitting/expansion gaps.
7. The tongues of each board should face up to prevent water from being trapped inside the rebate.
8. For horizontal and diagonal fixing 450mm Stud centres should be used, with a cavity batten of the same width as the stud fixed to each stud. For vertical fixing a H3 timber batten at least 19mm thick should be fixed horizontally at 450mm centres. Allowing water to drain from the cavity must be taken into consideration.
9. Board ends should be pre-drilled to prevent splitting minimum 20mm from any end cut. Angle the fixing at least 15 degrees to vertical to allow settlement of the frame.
10. Install a starter cladding board at the bottom. Ensure bottom of the board is at least 100 mm above finished ground level. Ground, concrete or paving should slope away from the building.
11. Install subsequent cladding boards on top of starter board. Follow the increment markings or use spacers to maintain an expansion gap. Check level of each board before fixing.
12. Place butt end joints over a stud or batten. Use double battens to support abutting boards. Stagger any butt end joints up the wall.
13. Ensure end grain of each board is sealed prior to installation.

SECRET FIXING OF CLADDING

Jarrah eClad cladding profiles may be secret fixed using self-drilling cladding screws. These screws are to be Spax 45mm small head cladding screws stainless steel.

Counter sinking of screws should be used to allow embedment of the screw to provide a smooth neat flush finish for joining of the next board. Ensure not to over counter sink screw heads and weaken remaining timber.

Screws should be installed minimum 9 mm from the edge on an angle and driven home such that they sit flush on the tongue allowing the over lapping board to lock into place.

Secret fixed boards need to be glued to the batten. A continuous bead (6 mm to 10 mm approximately) of Soudal SMX35/50 adhesive is to be applied to the batten before fixing.

EXPANSION GAPS

Care must be taken to ensure that there is a clearance within the overlap of two adjacent boards to allow for any expansion in the width of the board. The recommended gap is 1 to 2 mm.

This gap can be achieved with the aid of appropriate spacers at the back or front of the boards. Any spacers must be removed after fixing. Alternatively, mark the vapour permeable membrane or a spacing rod with the spacing for each board allowing for 1 to 2 mm spacing between them.

Where cladding is used over a number of storeys, an additional dedicated expansion gap of 10 mm is required at every storey and under window sills. This can be achieved by leaving a gap of at least 10mm between boards. The gap formed can be weather protected by covering the gap with a metal formed flashing.

The flashing is fixed to the studs or battens and is bent to overlap on top of the cladding board below. Face nailing/screwing will be required to fix the first board above the expansion gap. Gable ends of building may also need a dedicated expansion gap.

CARE AND MAINTENANCE

All Jarrah eClad products are factory pre-oiled prior to delivery with high quality Woca water based exterior oil. M&B recommend that all re-coating you use the recommended products or a high quality water based exterior oil to reduce expansion and contraction, minimize water uptake or loss and reduce colour discolouration.

All timber cladding products will react differently when exposed to varying weather elements. Regular inspections and cleaning is a MUST to ensure your cladding stays beautiful and performs well for many years to come. Areas of the cladding exposed to full sun for longer periods of time or installed in close proximity to the ocean will require a greater level of maintenance to those areas that are protected by an overhead structure, adjoining buildings, shaded areas or shade sails. Etc

The general rule of thumb is if the cladding looks dry and feels dry to the touch then it requires attention.

Should you be doing maintenance then the following should apply,

1. Wash down the entire surface of the cladding to remove all dirt, grit and any foreign objects with a high quality timber cleaning product that contains a blend of cleaners, revivers and sterilizing agents. Follow the manufacturer's application recommendations to ensure a positive outcome.
2. Allow entire cladding product to dry fully before moving to the next step.
3. Should any areas require a light sanding to bring cladding surface back to a smooth surface then these areas should be cleaned again after sanding and allowed to dry before applying the coat of oil.
4. For recoating your cladding M&B recommend high quality water based exterior oil such as Woca or Intergrain which are compatible products to the original pre-coating oil.
5. If using a non M&B recommended product we strongly recommend you trial the coating in a small area away from the main cladding area for performance and compatibility before applying it to the entire cladding surface. It is recommended that when trialling an alternative product you apply a minimum of 2 coats of the cladding oil allowing sufficient time between coats as per manufacturers recommendations and make a decision based on the trial outcome.
6. Always read and follow coatings manufacturer's application specifications.