

RHINO BREATHABLE MEMBRANE INSTALLATION GUIDE



INSTALLATION RECOMMENDATIONS

Rhino Breathable Membrane shall be installed in accordance with AS/NZS 4200.2 Pliable Building Membranes and Underlays, Part 2 Installation Requirements. Rhino Breathable Membrane shall be installed taut over the outer frame, with the printed face outwards and secured to all framing members at regular intervals.

Install horizontally to the outer face of external stud walls, from the bottom plate up, over the flashing, ensuring the lowest timbers or steel frame sections are protected from moisture. Upper layers should overlap lower layers to the outside surface. Vertical laps should be staggered wherever possible and overlap by one full stud spacing. Overlaps should not be less than 150mm unless taped.

Fixings should be located within 50mm from the edge of the membrane and spaced at regular intervals so as not to exceed 300mm to prevent damage by wind. Fixing placement may need to be reduced depending upon wind conditions to prevent damage prior to cladding.

When fixing to timber frames, it is recommended that Plastic Washers or coated flanged screws or punched multi-point metallic-coated steel brads are used. Alternatively 8-10mm staples at 150mm intervals may be used where wind conditions do not create a risk of tearing around the staple head.

When fixing to steel or aluminum it is recommended to use Plastic Washers with tek screws or minimum 20mm diameter washers or through hardboard strips.

When fixing to plywood or other timber substrates use Plastic Washers and ensure the positions of the studs are marked to identify where further fixings such as wall ties can be used.

Users are required to determine if fixing details are appropriate for the design wind load. Stainless steel fixings are recommended as required in corrosive environments.

At penetrations, such as pipes, use Flexi-Tape or an additional piece of Rhino Breathable Membrane fixed around the penetration and taped into position, to channel water away from the opening.

If the membrane is used to provide a continuous air tight layer, all overlaps should be sealed with Rhino Breathable Membrane Tape. In difficult areas or shaped penetrations, use a combination of Rhino Breathable Membrane Tape and mastic sealant to cover over penetration and membrane junction openings. Rhino Breathable Membrane Tape can also be used to repair small tears.

DURABILITY

Although Rhino Breathable Membrane can be used as temporary protection during construction, it cannot be used as a primary waterproofing membrane. The product may be damaged by careless handling, high winds or vandalism, and should not be left uncovered for longer than is absolutely necessary. Any damaged areas should be patch repaired or replaced before primary cladding install completion.

Ensure that Rhino Breathable Membrane is covered by the primary cladding material as soon as possible, and not left exposed to UV for longer than 4 weeks.

Rhino Breathable Membrane is not to be used in open joint rain screen cladding installations where it could be exposed to long term UV radiation.

Some timber treatments may impact on the water resistance of the product so the membrane should only be applied once such treated timber has dried.

STORAGE & HANDLING REQUIREMENTS

Rolls may be stored flat or upright on a clean, level surface and kept under cover.

WINDOWS

Pre-Window Install

Run Rhino Breathable Membrane over openings and leave covered until fenestrations are to be installed. Cut the membrane on a 45° diagonal from each corner of the opening, fold the flaps inside and fix to the inside frame of the opening. A water tight seal is achieved at penetrations by installation of Rhino Breathable Membrane Tape.

NOTE: Rhino Breathable Membrane is not a substitute for use as a flashing of fenestrations. It is recommended that installers follow the Australian Window Association Industry Guide and consult with the cladding and window manufacturer to confirm a suitable method of installation to provide a continuous water barrier and/or air-tight layer between the membrane and fenestration boundary.

CONDENSATION RISK

There are a large number of factors that need to be considered in assessing and managing condensation risk including local climate, building use, position, thickness and type of bulk insulation, location and integrity of vapour barriers, and mechanical or passive ventilation both in the roof space and wall cavities where applicable. It is highly recommended that designers run a condensation risk analysis.

It is recommended for high condensation risk applications, Rhino Breathable Membrane be installed adjacent to an outer cavity. The cavity shall provide a drainage and drying path.

OCCUPATIONAL HEALTH AND SAFETY

Rhino Breathable Membrane is not designed for fall prevention purposes and is not intended to support a person's weight, or to be walked upon.

Installing lightweight membranes in high wind conditions is difficult and appropriate precautions should be taken during installation.

Tested to AS/NZS 1530.2 Rhino Breathable Membrane achieves a flammability index of low (i.e. ≤ 5).

PRODUCT PERFORMANCE

Rhino Breathable Membrane performs to specification in normal building applications when installed in accordance to AS/NZS 4200.2 and this user guide. The information herein is supplied in good faith and to the best of our knowledge was accurate at the time of publication.

Users are advised to make their own determination as to the suitability of this information in relation to their particular purpose and specific requirements.

RHINO BREATHABLE MEMBRANE RP-51-BM-L INSTALLATION GUIDE

THE ULTIMATE PROTECTION

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KEY POINTS

1. It is "good practice" for the membrane to be separated from the exterior cladding by a minimum 20mm vented cavity. This allows for the drainage of any moisture that has penetrated the exterior cladding or condensation that may form on the rear face of the cladding.
2. Adequate provision for the drainage, absorption or diffusion of moisture is required to ensure that moisture is not left trapped between the Rhino Breathable Membrane and the external cladding. This is especially important for vapour tight or non absorbent claddings such as metal.
3. Care should be taken when installing bulk insulation so that this does not restrict drainage within the cavity.
4. Upper layers should overlap lower layers to ensure water is always shed towards the outside of the membrane and building.
5. Vertical laps should be staggered wherever possible and should overlap by one full stud spacing or overlapped at a stud with additional fixings and taped.
6. If the membrane is used to provide a continuous air tight layer, all overlaps should be sealed with Rhino Breathable Membrane Tape.
7. Follow installation manuals from cladding manufacturers and consult the supplier where advice is contradictory.

Recommended Applications and Technical Properties		Reference	RP-51-BM-L
Residential Wall			✓
Duty		AS/NZS 4200.1	Light Wall
Vapour Permeability		ASTM E96	1.010µg/N.s
Vapour Resistance		ASTM E96	1.0MN.s/g
Vapour Control Membrane (VCM) Classification		ASTM E96	Class 3, Vapour Permeable
Emittance		AS/NZS 4201.5	Non-Reflective
Water Control Classification		AS/NZS 4201.4	Water Barrier
Surface Water Absorbency		AS/NZS 4201.6	High
Resistance to Dry Delamination		AS/NZS 4201.1	Pass
Resistance to Wet Delamination		AS/NZS 4201.2	Pass
Shrinkage		AS/NZS 4201.3	<0.5%
Tensile Strength Machine Direction (kN/m)		AS1301.448	N/A
Tensile Strength Lateral Direction (kN/m)		AS1301.448	N/A
Edge Tear Resistance Machine Direction (N)		TAPPI T470	45
Edge Tear Resistance Lateral Direction (N)		TAPPI T470	45
Burst Strength (N)		AS/NZS 2001.2.19	>200
Flammability Index		AS/NZS 1530 Part 2	Low (≤5)
Electrical Conductivity		AS/NZS 4201.5	Non-Conductive
Availability			RP-51-BM-L
Width 1350mm	Length 30m	Area 40.5m ²	Weight 4.4kg RP-51BM-L-30
Width 1350mm	Length 50m	Area 67.5m ²	Weight 7.1kg RP-51BM-L-50
Width 1500mm	Length 30m	Area 45.0m ²	Weight 4.8kg RP-51BM-L-30-15
Width 1500mm	Length 50m	Area 75.0m ²	Weight 7.9kg RP-51BM-L-50-15

THIS PRODUCT MEETS THE REQUIREMENTS OF AS4200.1

Product Identifier	RP-51BM-L
Duty	Light Wall
Vapour Classification	Class 3 Vapour Permeable
Vapour Permeability	1.010ug/N.s
Water Control Classification	Water Barrier
Flammability Index	Low ≤5
Electrical Conductivity	Non-conductive
Emittance	Non-reflective

Classifications in accordance with AS4200.1
This product should be installed in accordance with AS4200.2

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