

PRODUCT INSTALLATION GUIDELINES



□ RHINO BATTS (Glasswool Insulation) FOR WALL & CEILINGS

The following guidelines apply to Rhino Batts, Rhino Batts NAF and RhinoPartition Batts.

Product performance:

- After unpacking, the product is designed to achieve its nominal stabilised thickness within 24 hours of installation.
- The performance of this product may be reduced if stored for too long in its compression packaging.
- The Total R-value depends on installation and may be greater or less than the Material R-value of the product.
- The Material R-value represented on the pack is determined at a mean temperature of 23°C as per AS/NZS 4859.1.
- The Material R-value is independent of heat flow direction (the same R-value is achieved in summer and winter conditions).

Important notes:

- Turn off the power at the fuse box before commencing the installation. Ensure you place a warning tag to prevent power being restored prior to completion of install.
- Before entering the ceiling space, make a sketch of the location of any electrical equipment in the ceiling such as downlights and exhaust fans.
CAUTION: when insulating around downlights or where recessed ceiling fixtures are present:
- Leave a minimum side clearance of 50mm from the body of heat emitting fixtures such as downlights, exhaust fans and flues.
- Cut a hole in the batt to suit the location of the fixture.
- Rhino Insulation batts have been independently tested and passed the requirements of AS3999-Appendix B.
- Do not use small pieces of batts to form part of the barrier around a fixture as these pieces could dislodge and cover the fixture potentially overheating/faulting the device. Use only large pieces of insulation that can be secured in position, where this is not possible fix a recessed luminaire barrier in accordance with AS3999.
- Auxiliary equipment shall be located with a minimum side clearance of 50mm from luminaires, refer to AS3999, Appendix A for further details. Exhaust fans typically vent vertically to the roof space. Leaving a side clearance of at least 50mm, insulate around the perimeter of the fixture and ensure a piece of insulation batt does not stop a fan blade from turning as this can overheat and burn out the device.
- Electric cables and equipment partially or completely surrounded with bulk thermal insulation may overheat and fail. This applies to wiring installed prior to 1989. Refer to AS3999 for details. Cabling post 1989: continuous electrical cabling (240 volts) cannot be fully surrounded by the insulation for a length greater than 300mm. In runs greater than 300mm, the electrical wiring must be touching a timber stud or the plaster lining.
- Ensure you are using required PPE including the following: safety glasses, gloves, protective clothing, dust mask

Flat ceilings:

- When loading the insulation into the attic space, place the unopened insulation packs across the joists.
- Commence working from one side or from the furthest point from the manhole access.
- Open one pack of batts at a time.
- Never walk on plaster ceilings. Stand on ceiling joists only.
- Place the kneeling board across at least two ceiling joists before kneeling.
- Ensure the product is dry, if the product is wet, replace it before proceeding.
- Friction fit the batts between ceiling joists.
- Butt the batts closely together to ensure there are no gaps left at joints.
- Continue until the entire ceiling area is covered extending batts 50mm onto the external wall top plate. Ensure a clearance of not less than 25mm between the batts and the roof cladding material.
- Avoid blocking natural ventilation.
- Using the batt poker, push the batts into areas that are difficult to access.
- Cut the batts to the required size to fit around vents, exhaust fans and flue pipes allowing a side clearance of at least 50mm.
- Cut the batts against a firm straight surface where no electrical or services exist.
- Offcuts may be used to fill small spaces to ensure complete coverage.
- Be careful of electrical wiring in the ceiling. Ensure you do not completely surround the cables with the insulation.
- Ensure the manhole is completely covered with a cut-to-size batt.
- Restore power and remove the caution tag when the job is complete.

Raked ceilings:

- For raked ceilings, the batts should be installed prior to fixing the plasterboard.
- Where friction fitting is not possible (e.g. uneven joist spacing etc.), then the batts shall be supported by string or twine running at right angles to the ceiling joists so they remain in place until the plasterboard is installed.

Brick veneer walls:

- Friction fit the insulation into the wall frames ensuring there are no gaps between the insulation and studs or noggin.
- It is important that the insulation is secured so it cannot fall into the cavity or come in contact with the outer brickwork allowing moisture to pass from the exterior wall to the internal lining.
- Wall wrap (recommended) or long-lasting string/twine should be fixed across the exterior face of the frame before installing the insulation from the inside.
- Where string/twine issued, twine should be fixed between each set of studs from the top to the bottom, running parallel with the studs. Where two lengths are used they should be evenly spaced.
- Ensure that the batts do not protrude past the stud and fit snugly including where insulation is around water pipes or other rigid obstructions in the wall.



Fibre cement or weatherboard clad walls:

- In non-tropic climates, a vapour permeable wall wrap or building membrane must be used so as not to cause accumulation of moisture. Always check with the manufacturer of the cladding material for suitable characteristics of the building membrane.
- Butt the insulation closely together to ensure there are no gaps left at joints.
- Offcuts may be used to fill small spaces to ensure complete coverage.

Cavity brick walls (double brick):

- Glasswool insulation is not recommended for external wall full fill cavity applications.

Internal partition walls:

- Friction fit the insulation into the wall frames ensuring there are no gaps between the insulation and studs or noggins
- Ensure that the batts do not protrude past the stud and fit snugly

Special Application:

Note: if your application/installation is outside these guidelines, please contact your Energy Assessor prior to commencing the install to obtain written approval for your specific application.

RHINO BATT GLASSWOOL INSULATION Packing Installation Instruction

This is a step by step guide to the safe and correct installation of RHINO BATT GLASSWOOL INSULATION.

■ Equipment required

- Dust Mask
- Overalls
- Sharp Knife
- Cutting Board 1300mm wide
- Torch
- Kneeling Board approx 50mm x 200mm x 1200mm
- Two Sticks approx 2m long
- Polypropylene Tape
- Staple Gun and Staples
- Step Ladder



For Walls:

Check the label to make sure the R-Rating matches what is required.

Cut the plastic wrapper and allow the segments to expand.

For stud spacings of 600mm use 580mm segments and for stud spacings of 450mm use 430mm segments. For other stud spacings cut segments 5-10mm oversize to gain a tight friction fit.

Where there is no building wrap like internal garage walls hold the insulation in by using the polypropylene tape. Run the tape horizontally two rows per cavity approx 300mm apart on both sides of the insulation. Ensure roof void walls are strapped.

Use the small off cuts to fill the small cavities in corners and above windows.



For Ceilings when the lining has been installed (Existing Housing):

Check the label to make sure the R-Rating matches what is required.

Place the bales into the roof space. Cut the plastic wrapper and allow the segments to expand.

Move to the furthest point from the man hole using the kneeling board and standing on joists only. Place the segments between the joists or trusses and place them from the outer wall plate inwards using the sticks where required. Ensure there are no folds or gaps. Cut where necessary to gain a good fit.

Ensure the segments are at least 50mm over the top plate but must be at least 25mm away from the roof or underlay to prevent wicking of water into the insulation.

Leave a minimum clearance of 50mm from the body of heat emitting fixtures such as downlights, exhaust fans and flues. Cut a hole in the batt to suit the location of the fixture. This insulation has been independently tested and passed the requirements of AS3999-Apendix B. Do not use small pieces of batts to form part of the barrier around a fixture as these pieces could dislodge and cover the fixture potentially overheating /faulting the device. Locate transformers on the ceiling plaster with a minimum gap of 50mm around the device; alternatively place the transformer onto Glasswool batt. Exhaust fans typically vent vertically to the roof space. Leaving a clearance of at least 50mm, insulate around the perimeter of the fixture and ensure a piece of insulation batt does not stop a fan blade from turning as this can overheat and burn out the device.

■ For Ceilings when the lining has not been installed (New Housing):

Check the label to make sure the R-Rating matches what is required.

Cut the plastic wrapper and allow the segments to expand. For 450mm and 900mm joist or truss spacings use 430mm segments and for 600mm joist or truss spacings use 580mm segments.

Using the two sticks place the pieces on top of the ceiling battens running from the top plate on one side to the top plate on the other side placing the pieces end on end. The insulation must be under the electrical cables where possible.

Make sure all cavities are filled with insulation.

When the job is complete ensure there is a complete insulation envelope and that there are no folds or gaps.



RISK



SAFETY



FIRST AID



DISPOSAL

■ HEALTH AND SAFETY MEASURES

- (1) Ensure the dust masks are used.
- (2) Wear overalls and a shirt with long sleeves.
- (3) Ensure that there is sufficient light in the working areas.
- (4) Take care around electrical wires when cutting and stapling.
- (5) If working in the ceiling be alert for exposed nails, pipes and timber that will be unable to take your weight.
- (6) Electric cables and equipment partially or completely surrounded by bulk thermal insulation may overheat and fail. This applies to wiring prior to 1989. Refer to AS3999-1992 including Amendment 1:section 2.6 for details. Cabling post 1989: continuous electrical cabling (240 volts) cannot be fully surrounded by the insulation for a length greater than 300mm. In runs greater than 300mm, the electrical wiring must be touching a timber stud or the plaster ring.
- (7) Wash work clothes separately from other clothes.
- (8) In case of contact with eyes, rinse immediately with plenty of water.
- (9) In case of itching, wash skin with soap and water.

■ MOISTURE

RHINO BATT Glasswool Insulation will not absorb water, but it will retain water. Care must be taken to ensure the insulation does not get wet both before installation and after installation. The following measure will help prevent the insulation from getting wet:

- (1) Do not install the insulation against an exterior masonry product. (i.e exterior concrete block wall.)
- (2) Timber framing should be sufficiently dry before the insulation is installed.
- (3) The building wrap must be installed before the insulation and in extreme cases the exterior cladding should be installed before the insulation.
- (4) Wherever possible vents from bathrooms should be ducted to the soffit rather than directly into the ceiling cavity.
- (5) Ensure the bales of insulation are stored in dry conditions.

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