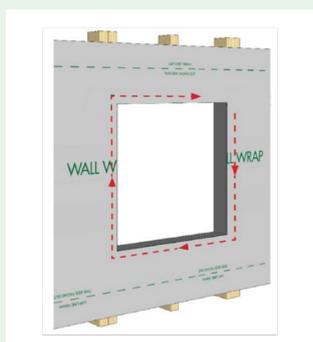![ICANZ - THE RIGHT INSULATION MATTERS logo]

Window Penetrations Installation Guide

Wall Wrap

Window Flashing: For illustration purposes some window flashings may have been removed in this installation guide – the illustrations in this Guide should not be taken as an approved construction method and it is the Builder's responsibility to specify & install window flashings in accordance with the requirements of the NCC or manufacturers recommendation.

Applications

- Applicable for Class 1 residential timber or metal stud frame external walls with brick veneer and lightweight cladding construction.
- The suitability of a wall wrap for the selected application should be assessed in accordance with the Product Technical Statement by an appropriately qualified person prior to purchase or installation.

Required Installation Items

- Adhesive Tape
- Tape Applicator
- Staples or battens
- Staple Gun
- Knife (for edge cutting and repairs)
- Ladder
- Appropriate PPE for cutting (e.g. cut resistant gloves) or using a staple gun (e.g. eye protection)

NOTE: This Installation Guide is only applicable for use with the products and applications listed in this guide when installed in Australia. Installation details shown in this guide provide general guidance only. For applications and installation details not covered in this guide, please contact your product representative.

![pbma logo]

Storage & Maintenance

- Store the wall wrap in its original packaging in a cool, dry area, away from UV light (direct sunlight).

- These products are not designed to withstand prolonged exposure to the elements - accordingly, the exterior cladding should be installed within 6 weeks. Products exposed during this period should be inspected for damage and repaired or replaced prior to installation of the exterior cladding to comply with the Product Warranty. Products exposed for longer than the recommended periods will not be covered by the Product Warranty.

- The use of additional mechanical fasteners should be considered for wall wraps exposed to harsh weather conditions prior to cladding.

- Do not use pressure cleaners, mechanical cleaning devices, chemical agents or mineral-based cleaners on these products.

General Guidance

- It is recommended not to commence installation if it cannot be completed to a safe and secure stage prior to rain or strong winds developing. To avoid the risk of compromising the bond strength of adhesive tape, it is recommended that the building frame and wall wrap be dry and free from residual moisture prior to application.

- As general guidance, this installation guide may not provide the necessary or compliant installation guidance required to meet the National Construction Code (NCC) or relevant Australian Standard - it is the builder's responsibility to ensure compliance is achieved.

- Sealing of the window-to-building frame opening may be required to comply with the NCC or relevant Australian Standards once the sarking installation is complete.

- Wall Wrap should always be installed in accordance with AS 4200.2:2021 Pliable Building Membranes and Underlays - Installation.

- Timber frame: Affix using mechanical fixings (e.g. staples) every 150mm.

- Metal Frame: Affix using adhesive/double-sided tape if cladding is directly fixed to the stud work, or flat washer/packer with screw at 300mm centres for cavity walls.

- The use of screws or nails without a broad headed washer is not recommended as the head & edge of the screw can penetrate the membrane.

- The upper layers shall overlap the lower layer – all overlaps shall be 150mm or 50mm and taped. All end laps shall be fixed at a stud.

- To create an air or vapour barrier, all overlaps and penetrations should be sealed and taped - where possible all overlaps and end joints should line up with a wall stud to allow firm pressure to be applied to the entire tape surface to create a durable bond. It is recommended that a suitable tape applicator or squeegee tool be used.

- To attach or seal the wall wrap to timber or metal framing, ensure the surface is dry and sufficiently smooth to allow continuous contact with a suitable tape. All sharp objects that could potentially puncture the tape or wall wrap should be removed prior to commencing. Firm application pressure should be applied to all surfaces using a suitable tape applicator or squeegee.

- Adhesive tape is not a substitute for mechanical fixings and is only suitable for sealing joints and overlaps Adhesive tape should be applied without mechanical load and be supported by mechanical fixings to prevent mechanical loads stressing the tape bond. Damp surfaces may affect the adhesive bond strength so all surfaces should be dry and clean prior to application.

- All damaged, punctured, or torn material should be repaired or replaced to maintain the original properties of the product.

Method 1

Window Out – Sark into Frame

Step 1

- 1a. Cut a central panel parallel to the window opening which is offset by the depth of the window reveal in the frame – this will leave enough wall wrap to cover the window reveal without leaving excessive waste on the inside of the property.
- 1b. Cut from each corner of the central opening in the wall wrap to each corner of the window opening, being careful to stop just prior to edge of the window frame.

Note:

› Do not cut the wall wrap beyond the corners of the opening in the frame as this will expose the frame.
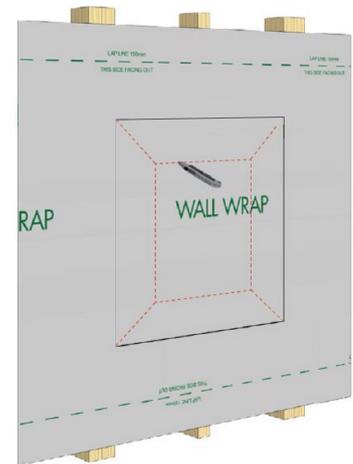
Step 2

- Fold the wall wrap toward the inside of the window opening in the building frame and fasten to the inside face (reveal) of the opening in the building frame at 150mm intervals.
- Trim and remove excess wall wrap as necessary.
- Tape corners of the reveal for 50mm from both sides of the junction.

Note:

› It is recommended that the wall wrap be trimmed before the inside edge of the building frame to avoid interfering with the internal lining.
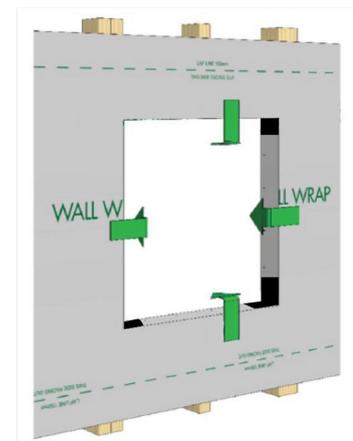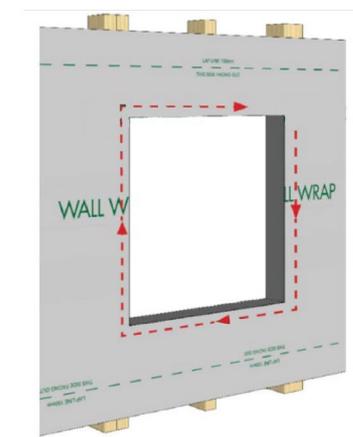

Step 3

- Tape the wall wrap to the opening in the building frame as shown.

Note:

› This installation method seals the wall wrap to the building frame and relies upon others to seal the window to the building frame.

Method 2A

Window In – Sark into Window Frame

Step 1

- With the wall wrap positioned at the same level as the window frame, neatly & closely trim the wall wrap around the perimeter of the window frame – a neat fit will make taping easier later.

Note:

› Only commence wrap installation if the window is permanently fixed in position in the building frame.

› Only remove plastic wrap applied to window & reveal during transit to expose work surfaces.

› Be careful not to cut past the intersection point of each corner.
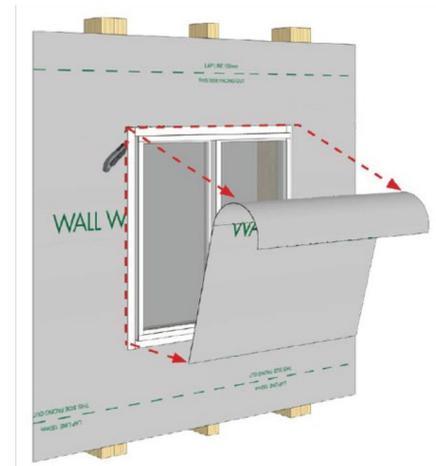
Step 2

- Ensure that the wall wrap is neatly trimmed to all sides of the window frame – avoid creating gaps between the wall wrap and window frame as these will need to be bridged with tape.
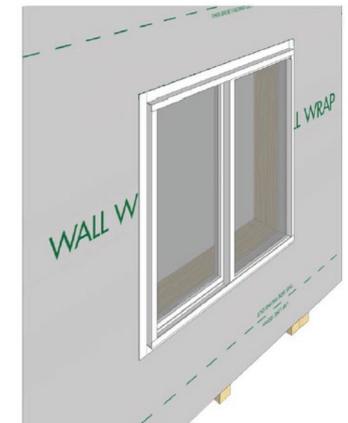
Step 3

- Seal the wall wrap to the window frame, with 50/50 coverage/contact (where possible) on each surface by applying the tape in the following order:
  1. Sill
  2. Jamb (both sides)
  3. Head
- Ensure that the sill and head tape extend beyond the jamb tape as shown.
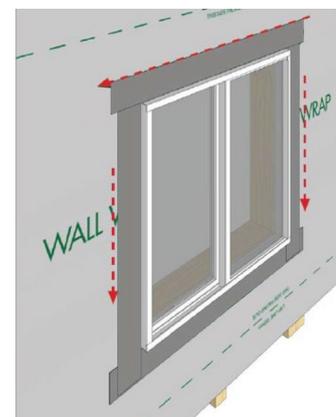
Method 2B

Window In – Seal to Window Flashing

Step 1

- Cut the wall wrap neatly around the window head, sill and jambs being careful not to cut the flashing.
- At the window head, cut the wall wrap at 45° from each corner of the window to allow the head flashing to be positioned behind the wall wrap.

Note:

› Only commence wrap installation if the window is permanently fixed in position in the building frame.

› The 45° diagonal cut to accommodate the head flashing should be as short as possible whilst still allowing the flashing to be easily positioned behind the wall wrap.

› Only remove plastic wrap applied to window & reveal during transit to expose work surfaces.
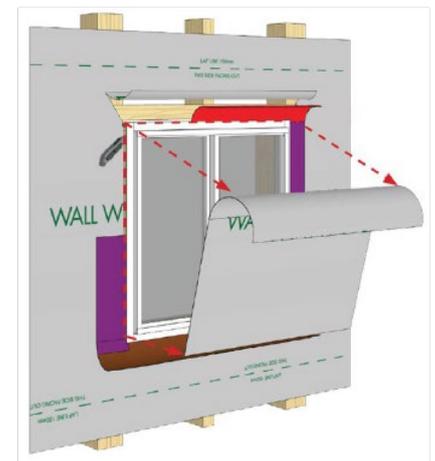
Step 2

Ensure that the window flashings are arranged in the following order:

- Sill flashing: In front of/over the wall wrap
- Jamb flashings: In front of/over the sill flashing and the wall wrap
- Head flashing: In front of/over the jamb flashings and behind the wall wrap flap above window – note that the flashing will protrude in front of the wall wrap flap at each side of the window as shown in the illustration.

Note:

Where the head flashing protrudes in front of the wall wrap flap at each side of the 45° diagonal cut it must remain in front of the jamb flashings.


Step 3

Tape the wall wrap to the window flashings in the following order:

- Head flashing: Extend tape 100mm beyond the 45° diagonal cut
- Jamb flashings (both sides): Extend tape 100mm beyond the 45° diagonal cut for the head flashing
- Head 45° diagonal cut: Extend tape so that it covers the jamb tape

Note:

› Do NOT tape the sill flashing to the wall wrap or tape the flashing-to-flashing joints –sealing the flashing joints and draining the sill flashing in accordance with the National Construction Code and selected cladding is the builder's responsibility.
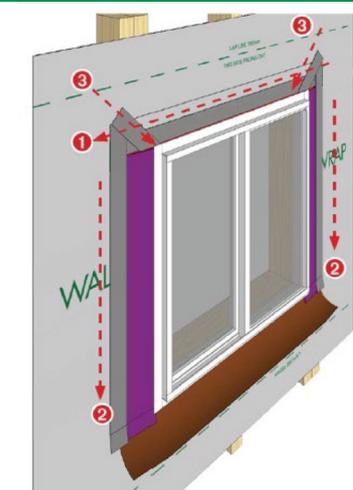
Method 2C

Window In – Seal to Building Frame Opening

Step 1

- Cut the wall wrap neatly around the window frame opening in the building frame, leaving a 20 to 30mm section of the front face of the building frame exposed as shown in the illustration.

Note:

› Only commence wrap installation if the window is permanently fixed in position in the building frame.

› Only remove plastic wrap applied to window & reveal during transit to expose work surfaces.
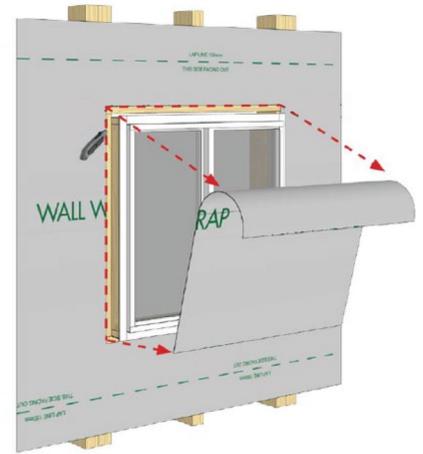
Step 2

- Ensure that the wall wrap is neatly trimmed and that the front face of the building frame is visible around the entire window – it is recommended not expose more than 30mm of building frame.
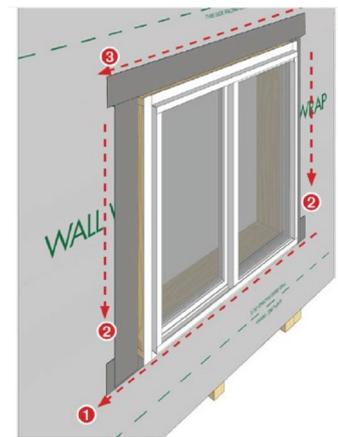
Step 3

Seal the wall wrap to the building frame with 50/50 coverage/contact on each surface by applying the tape in the following order:

- Sill
- Jamb (both sides)
- Head
- Ensure that the sill and head tape extend beyond the jamb tape as shown in the illustration.

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