

Installation Guide - Concrete Soffit

PrimePanel Insulation is a high-performance rigid thermal insulation panel designed for commercial and residential developments where superior thermal and fire performance is required. PrimePanel Insulation comprises a thermoset phenolic core with dual reflective aluminium foil surfaces.

Preparation

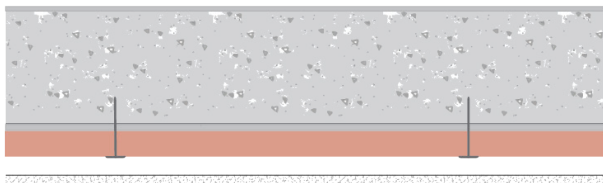
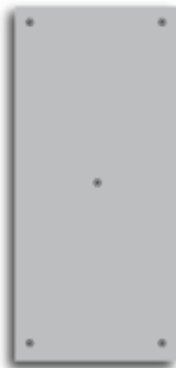
The concrete soffit should be level, clean, dry and free from contaminants prior to installing PrimePanel Insulation. Check the soffit for high points that can result from gaps or irregularities in the original form work. Level off any high points as these could prevent the insulation boards from sitting flat against the concrete soffit. Ensure insulation boards are evenly aligned and closely fitted together before fixing to the substrate.

Concrete Soffit

(With Plasterboard Ceiling)

For soffit applications with a ceiling lining (ie. PrimePanel Insulation will not be exposed) a minimum of 5 fasteners may be used per board.

Evenly distribute 2 fasteners along each length (not less than 50mm, and not more than 150mm, from edge of the board) and 1 fastener in the middle of the insulation board.

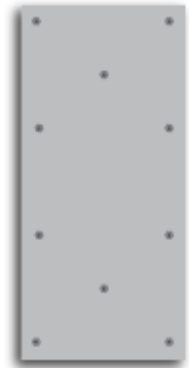


Concrete Soffit

(Without Plasterboard Ceiling)

For soffit applications without a ceiling lining (ie. PrimePanel Insulation will be exposed), use a minimum of 10 fasteners for each board.

Evenly distribute 4 fasteners along each length (not less than 50mm, and not more than 150mm from edge of the board) and 2 fasteners along the middle of the insulation board.

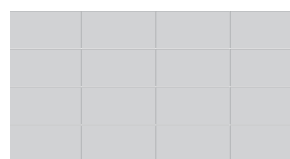


Fixings and Fasteners

Ensure all fastener specifications (including washer diameter, pin length and material) are suitable for the intended application and comply with all project specifications and exposure conditions, in accordance with the fastener manufacturer's recommendations. To obtain a level finish, fasteners should be installed flush with the surface of the insulation. Do not overdrive fasteners or apply excessive force as this may compress the insulation. We recommend testing your chosen fixing method prior to commencing the actual installation to ensure a satisfactory installation is achieved.

Layout Pattern

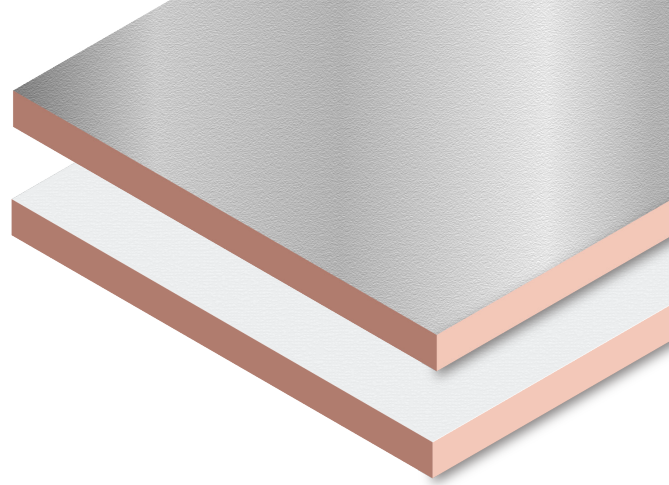
PrimePanel Insulation may be installed in a square-set pattern or a staggered brick pattern. Adjacent insulation boards should be evenly aligned and closely fitted together before fixing to the wall.



Square-set layout pattern



Staggered layout pattern



Handling and Storage

PrimePanel Insulation should be stored indoors on a flat and level base and kept clean, dry and protected from contaminants, weather and impact.

Safety Precautions

Foil facings and foil tape are conductive. Ensure all necessary safety precautions are taken to avoid contact with electrical cables, equipment and fittings.

Cutting PrimePanel Insulation

PrimePanel Insulation boards may be cut to size with a fine-tooth saw, or by scoring the board with a sharp knife and snapping in position over a straight edge, then scoring the reflective facer on the reverse side. Off-cuts may be used to fill gaps. Accurate trimming is important to ensure adjoining boards are evenly and closely fitted together.

Condensation Risk Analysis

The risk of condensation occurring inside a building depends on many factors including the geographical location of the building, the components that make up the building and the manner and order in which they are assembled, the use and integrity of vapour barriers, and the degree of passive or mechanical ventilation inside the building envelope. We recommend a Condensation Risk Analysis is undertaken specific to each project.

External Wind Pressure

Where PrimePanel Insulation may be exposed to external wind pressure, the requirement for additional mechanical fasteners must be considered according to the relevant wind load standards. Please consult with an engineering professional to confirm the fastener specifications and installation recommendations for each application and project.

Surface Movement

Differential movement between surfaces joined by taping creates significant pressure on the join. Self-adhesive tapes in this type of application are not designed to be mechanical joining devices. Care should be taken to ensure that boards are not liable or subject to movement. Tape should be applied only after mechanically securing PrimePanel Insulation.

Taping

Adjacent insulation boards should be taped along each join, corner or angle with high-quality foil insulation tape (min. 70mm wide). Ensure the tape selected is suitable for the actual application, project specifications and climate conditions as per the tape manufacturer's recommendations.

All PrimePanel Insulation board surfaces should be clean, dry, and free from dust, oil, moisture and contaminants prior to taping. The surface should be cleaned immediately prior to the application of tape.

Remove the backing release liner from the tape (no more than 300 to 600mm at a time) and ensure the adhesive surface of the tape is firmly pressed onto the foil surface of the clean insulation board.

Carefully apply tape over the centre of all joins, corners and angles, taking care to apply adequate tape width on both sides of the join, creating an evenly distributed bond to the insulation board (this will avoid additional shear stress on one side). A second application of tape may be required to ensure min. 35mm overlap onto the board's foil surface.

Apply sufficiently firm and uniform pressure to the entire surface of the tape by firmly wiping the tape from the centre out. We recommend using a clean cloth to rub the adhesive tape into the surface grooves of the insulation board to ensure maximum surface contact. Ensure there are no air bubbles between the tape and the insulation board. A flexible squeegee may also be used to remove any air bubbles.

All PrimePanel Insulation board joins, corners, angles and exposed edges should be taped with a *min. overlap of 35mm onto the foil face of the board*. Any PrimePanel Insulation boards that will be installed to the perimeter of a soffit should be pre-taped prior to installation along the edge/s that will be on the perimeter by applying 2 or more layers of tape with min. 35mm overlap to both the top and bottom surfaces of the insulation board.

Tape will not adhere to the foam edges of PrimePanel Insulation. Therefore when taping exposed foam edges, 2 or more layers of tape must overlap min. 35mm onto the top and bottom foil surfaces of the board *and* sufficiently overlap in the middle of the board edge.

Product specifications and installation recommendations are subject to change without prior notice. The information and technical details included herein are given in good faith and apply to the specific uses described. Recommendations for use are general in nature and should be independently verified for suitability and compliance with actual requirements, specifications, laws and regulations. Professional advice and approval from the Principal Certifying Authority for each project should be obtained prior to installation. The user must ensure the product meets aesthetic requirements prior to installation. Australian Insulation Manufacturers Group will not be responsible for rectifying aesthetic surface variations following installation. Please contact Australian Insulation Manufacturers Group for further information.

