

DESIGN AND INSTALLATION GUIDE



V1.0 Nov 2025

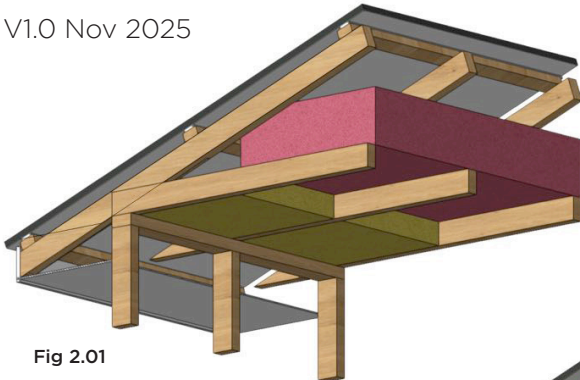


Fig 2.01

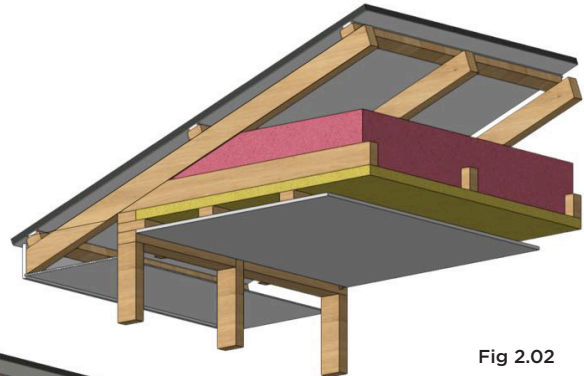


Fig 2.02

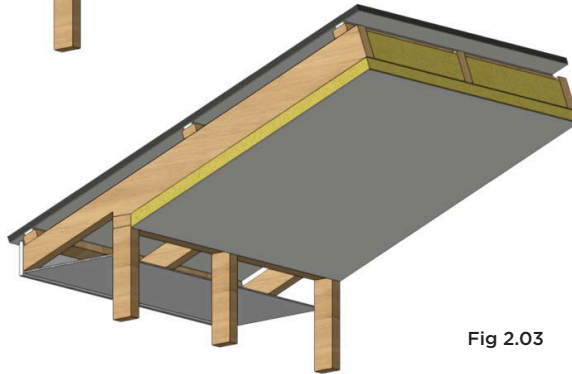


Fig 2.03

PRODUCT NAME

Masons PrimeTherm ERS WarmCeiling

DESCRIPTION AND INTENDED USE

Masons PrimeTherm ERS WarmCeiling is a superior quality closed-cell sheet insulation manufactured from rigid thermosetting polyisocyanurate (PIR) closed-cell foam.

PrimeTherm ERS WarmCeiling is available in sheets 2400mm x 1200mm (2.88m²) The thickness range is 25mm – 150mm.

This should be read in conjunction with relevant PrimeTherm ERS WarmCeiling drawings, MSDS, BPIR and TDS. See Masons website: mpb.co.nz, or contact your Masons Account Manager for details.

MECHANICAL PROPERTIES & THERMAL PERFORMANCE - R-VALUES

Facing Type	0.022 W m-k thickness in mm	R Value after aging* (estimated)	Density kg/m ³	Compressive strength KPA
All	50	2.03	40	158
All	80	3.24	40	158
All	100	4.05	40	158

* What is the Aged R Value? R Value is a measure of thermal resistance -R.

PIR board R values reduce slowly post production. Typical PIR board R value reduction is thinner boards up to >13-15%. Thicker boards circa >10% R values stabilise after approx. 2 years.

Building designers use aged R values for an accurate thermal modelling of the building performance.



KEY BENEFITS

PrimeTherm ERS WarmCeiling is designed for New Zealand conditions, increasing thermal performance by providing a thermal barrier to the ceiling and protecting the interior from heat-loss. Improves energy efficiency to decrease heating and cooling costs over the life of the building.

PrimeTherm ERS WarmCeiling can be installed above or between ceiling joists OR as a continuous layer below the ceiling joists. (In the latter scenario it's recommended to use foil faced boards so an airtight and fully sealed layer can be formed.)

LIMITATIONS ON THE USE OF PRIMETHERM ERS WARMCEILING

Masons recommend specification and installation by Licensed Building Practitioners with product and application experience.

- Successful installation requires technical knowledge including project specific design requirements.
- PrimeTherm ERS WarmCeiling contributes to satisfying building code requirements as part of a system that is designed, installed and maintained in accordance with product literature and project specifications.

DESIGN REQUIREMENTS SUPPORTING THE USE OF PRIMETHERM ERS WARMCEILING

PrimeTherm ERS WarmCeiling must be designed to NZBC, manufacturers specifications and product performance standards. Design applications to match the intended use as ceiling insulation. Installation to be performed by experienced licensed building practitioners in accordance with installation instructions as follows. If fire safety is a consideration design accordingly. Must be fixed tightly and securely.

DESIGN CONSIDERATIONS

- **Thermal Performance** – Select board based on climate zone and required R Value. Aim to reduce thermal bridging by using continuous PIR board under joists.
- **Moisture Control** – If a continuous layer is specified use foil faced PIR board with taped joints to create a sealed and airtight vapour barrier.
- **Fire Safety** – Use IC-F rated downlights to avoid cutting into the PIR board.

TOOLS AND ACCESSORY PRODUCTS

- **Tape measure**
- **Knife or fine toothed saw**
- **Work platform**
- **Hammer/ Drill-driver**
- **Expanding polyurethane foam** - such as Gorilla Pro Expanding Foam Click & Fix
- **Masons Aluminium foil tape**
 - **Mechanical fixings (as required).** Insulated fixings are recommended to reduce thermal bridging
 - **Safety gear** (gloves, mask, eye protection)

HANDLING AND STORAGE

PrimeTherm ERS boards should be stored undercover, in a clean, dry area protected from damage. If the product becomes wet, simply allow the product to dry before installing. Wetting and drying will not affect product performance as it is a closed-cell water barrier that does not absorb moisture.



INSTALLATION INSTRUCTIONS

- **Health and Safety:** Refer to the Masons PrimeTherm ERS MSDS for detailed safety instructions

ENVIRONMENTAL DATA

See PrimeTherm ERS MSDS. Contain off-cuts in bags to ensure product is not blown away or can enter waterways. See Masons PrimeTherm ERS MSDS for more information.

MAINTENANCE REQUIREMENTS

PrimeTherm ERS WarmCeiling does not require regular maintenance. Damaged, dented, fractured product must be replaced.

- During renovations or wall access, inspect for damage or moisture ingress.
- Replace or reseal batts if disturbed.

PRODUCT IDENTIFIER

A label is supplied on each sheet and pack and contains Masons PrimeTherm ERS PIR Board.