MASONS
Designed Smart, Built Tough.

PrimeTherm ERS PIR Insulation Board

Rigid Lightweight Board Insulation Solutions

TECHNICAL PRODUCT GUIDE | VOLUME 3

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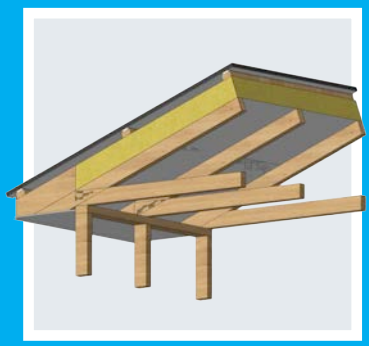

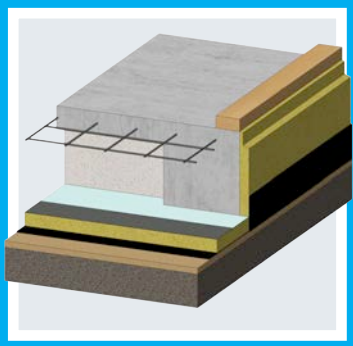

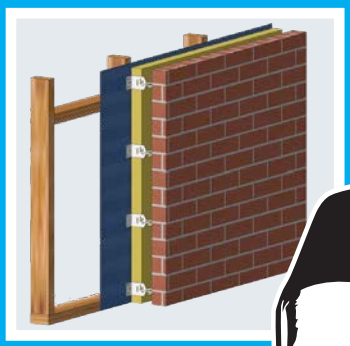

Rigid Insulation Solutions for Superior Thermal Performance.

FOIL FACED | GLASS FIBRE FACED | UN-FACED (RAW)

PrimeTherm ERS PIR Insulation Board delivers high-performance thermal efficiency in a rigid, lightweight board designed for modern construction.

Manufactured from polyisocyanurate (PIR), PrimeTherm ERS offers outstanding insulation with minimal thickness, achieving higher R-Values often without the need of increasing structure depth just to accommodate the insulation. The closed-cell structure provides excellent moisture resistance, compressive strength, and long-term dimensional stability, ensuring reliable performance across all building types.

Suitable for roof, ceiling, wall, and concrete floor applications, PrimeTherm ERS helps meet and exceed NZ Building Code Clause H1 requirements for warmer, drier, and more energy-efficient buildings.

Easy to install, the PrimeTherm ERS range combines strength, efficiency, and sustainability, giving building designers and builders confidence with their projects.

INSULATION

PIR (Polyisocyanurate) insulation boards are widely recognised as a premium choice for thermal performance, offering unmatched efficiency and reliability in a variety of construction applications. Their closed-cell structure provides excellent thermal resistance ensuring long-lasting performance. The high-quality characteristics of PIR has earned it a strong reputation among architects, builders, and engineers worldwide as a dependable and high-performance insulation solution.

EXCEPTIONAL MOISTURE RESISTANCE

PIR insulation boards feature a closed-cell structure that resists water absorption, maintaining thermal performance even in damp or humid conditions. This moisture resistance reduces the risk of mould, degradation, and structural issues, providing long-term durability and reliable insulation.

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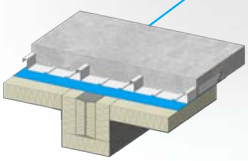

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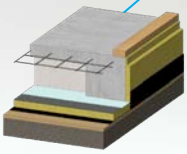

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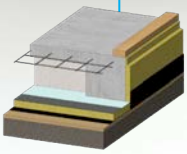

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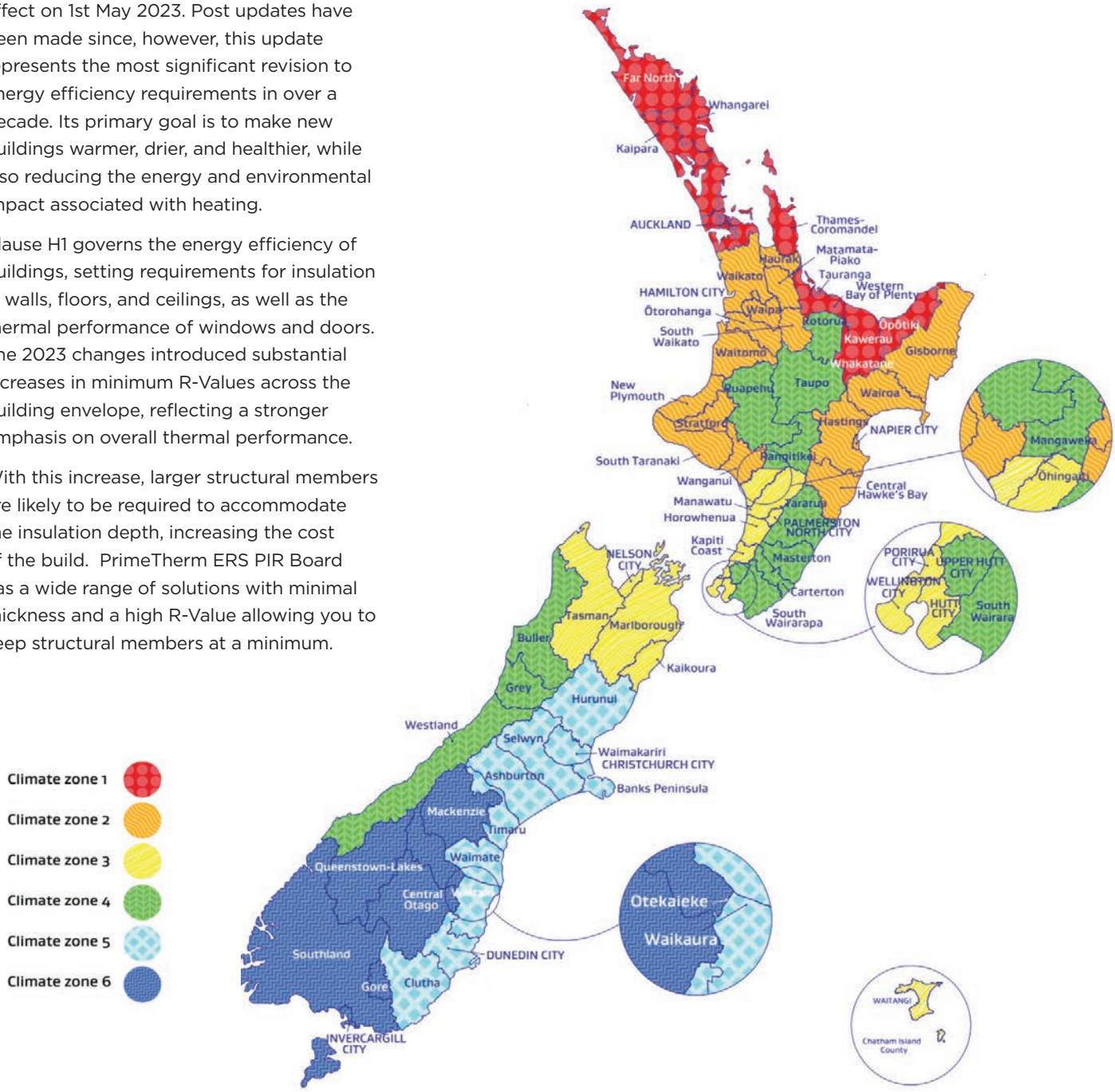
Clause H1, NZBC

In line with the New Zealand Building Code, Clause H1 was updated and came into effect on 1st May 2023. Post updates have been made since, however, this update represents the most significant revision to energy efficiency requirements in over a decade. Its primary goal is to make new buildings warmer, drier, and healthier, while also reducing the energy and environmental impact associated with heating.

Clause H1 governs the energy efficiency of buildings, setting requirements for insulation in walls, floors, and ceilings, as well as the thermal performance of windows and doors. The 2023 changes introduced substantial increases in minimum R-Values across the building envelope, reflecting a stronger emphasis on overall thermal performance.

With this increase, larger structural members are likely to be required to accommodate the insulation depth, increasing the cost of the build. PrimeTherm ERS PIR Board has a wide range of solutions with minimal thickness and a high R-Value allowing you to keep structural members at a minimum.

MAP OF NEW ZEALAND CLIMATE ZONES



Building element	Climate zone					
	1	2	3	4	5	6
Roof	R6.6					
Windows	R0.46				R0.50	
Wall	R2.0			R2.0		
Slab-on-ground floors	R1.5		R1.5		R1.6	R1.7
Other floors	R2.5		R2.8		R3.0	

PrimeTherm ERS PIR board

PrimeTherm ERS is Polyisocyanurate Rigid Insulation Foam commonly called PIR Board. It has a high thermal resistance for its relative thickness.

Available in three facing options: Un-Faced, (sometimes called Lamination Board or Raw), Glass Fibre (Mortar Paper) or Aluminium Foil.

PIR board is available in various densities and with differing levels of fire retardancy (FR).

B2 Grade has a moderate to low FR. The choice of facing makes a considerable difference in resisting flame. B2 grade is widely used in New Zealand offering the best compromise between R-Values and FR.

B1 Grade (available by indent order) has higher FR. R-Values may be reduced due to density and FR additives.

PrimeTherm ERS PIR board has many high-performance insulation applications in buildings including under slab, slab edge, warm roof, ceilings, masonry, in-frame wall insulation and exterior wall insulation.

Warranty	15 years
Durability	15-50 years minimum - When installed in accordance with Masons installation instructions, specific uses and building application.

FIRE CLASSIFICATION

Core classification: GB 8624-2012 B2 (normal flammability). Approximate EN 13501-1 equivalence: Class E. In NZ, this equates to a Group 3–4 material. Boards must be concealed behind Group-rated linings (e.g. plasterboard Group 1-S, fibre-cement) for interior use. Not permitted as exposed linings.

PrimeTherm ERS Aluminium Foil Facer tested to AS/NZS 1530.3.1999 Ignite-ability, Flame propagation and heat release Index's - 0. Smoke developed index - 1

WVTR (WATER VAPOUR TRANSMISSION RATE)

Aluminum Foil Faced PIR board is not permeable to water vapour. Glass Fibre and Un-Faced PIR board are permeable. Ability to transfer water vapour is limited. WVTR circa 350 (μp/m^2.s).

DIMENSIONAL STABILITY

Less than 1% change at tested temperatures and RH.

MECHANICAL PROPERTIES & THERMAL PERFORMANCE – R-VALUES

This table presents declared thermal resistance values calculated in accordance with ISO 10456 and aligned with AS/NZS 4859.1 requirements. Values are based on declared thermal conductivity at 15°C and represent long-term in-service performance.

Board Thickness mm	FR Class	Sizes mm	Initial R-Value (ref only)	Declared R-Value Diffusion Tight Foil Faced	Declared R-Value Diffusion Open Glass Fibre Faced or Un-Faced	Density kg/m3	Compressive Strength KPA** Glass Fibre Faced or Un-Faced	Compressive Strength KPA** Foil Faced
10†	B2		0.45	0.38	0.32	60	158	160
20†	B2		0.90	0.76	0.64	60	158	160
22† Pre shaped slab edge	B2	2400 x 380	1.0		0.70	60	158	160
22† Pre shaped slab edge	B2	2400 x 300	1.0		0.70	60	158	160
22† Pre shaped slab edge	B2	2400 x 270	1.0		0.70	60	158	160
25	B2	2400 x 1200	1.10	0.96	0.80	60	158	160
30	B2		1.35	1.15	0.96	60	158	160
40†	B2	2400 x 1200	1.80	1.50	1.25	44	158	160
50	B2	2400 x 1200	2.25	1.90	1.60	44	158	160
80	B2	2400 x 1200	3.60	3.05	2.55	42	158	160
90	B2	2400 x 1200	4.05	3.45	2.90	42	158	160
90	B2	2700 x 500	4.05	3.45	2.90	42	158	160
100	B2	2400 x 1200	4.50	3.80	3.20	41	158	160
120	B2	2400 x 1200	5.45	4.60	3.85	40	158	160
140†	B2	2400 x 1200	6.35	5.35	4.50	40	158	160
150†	B2		6.80	5.75	4.80	40	158	160

Masons stock several sizes of Foil Faced boards. Glass Fibre Faced boards are stocked in limited sizes. Un-faced (Raw) is by order from the factory.

Large projects will require pre-order and manufacturing. Other combinations of facings and/or FR grades are available for indent order. See your Masons representative for more information.

What is the declared R-Value? R-Value is a measure of thermal resistance. Building designers should use the Declared R-Value in building design for an accurate thermal modelling of the building performance over time. ***Insist your PIR board supplier is supplying the Declared R-Value in accordance with EN 13165 and/or AS/NZS4859.1:2018 Section 4 Clause 4.2.***

• Declared values are based on aged thermal conductivity (λ50/90) determined using the statistical method of ISO 10456, with ageing increments applied in accordance with EN 13165:2012 (Amd 2:2016).

• In accordance with AS/NZS 4859.1 Clause 2.3.3.6, the highest thermal conductivity within the product group (25mm product) has been adopted for interpolation to ensure conservative declared values.

• † Values marked are extrapolated by Masons NZ Ltd using the same interpolation methodology.

• Initial R-Values use λ = 0.022 W/m·K and are provided for reference only (non-compliance values) are post production as advised by the manufacturer's data sheet.

** Compressive strength - based on samples tested. Manufactured compressive strength may be greater for a given thickness or facing. Check with Masons.

PIR BOARD FIXINGS

A

Use	Masons code	Central hole / outside diameter	Washer diameter	Description	Quantity
WOOD FIXING WASHER ONLY Polypropylene multi purpose washer with cap	PB-NF46191PGIALLO	6 mm/60 mm	60mm	Easier 60mmØ washer with 6mmØ hole	100pcs
	PB-NF46190PGRIGIO	8 mm/60 mm	60mm	Easier 60mmØ washer with 8mmØ hole	100pcs

B

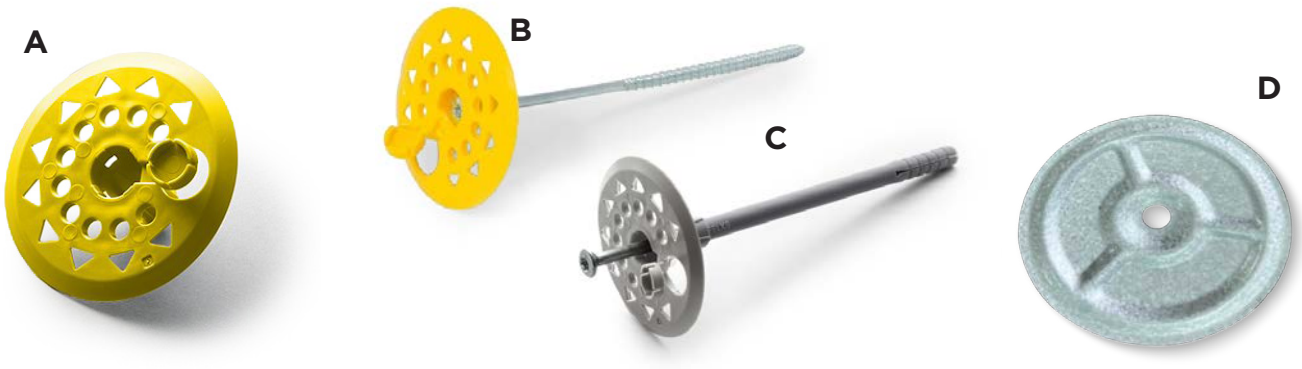
Use	Masons code	Screw diameter / length	Min. Anchoring depth	Maximum PIR thickness to be fixed	Head external diameter	Description	Quantity
WOOD FIXING WASHER & SCREW Polypropylene multi purpose washer and cap with screw	PB-NF46162	M6 x 100mm	30mm	70mm	60mm	Pp anchor w/cert screw for wood	100pcs
	PB-NF46163	M6 x 120mm	30mm	90mm	60mm	Pp anchor w/cert screw for wood 60x120	100pcs
	PB-NF46164	M6 x140mm	30mm	110mm	60mm	Pp anchor w/cert wood 60x140mm	100pcs
	PB-NF46165	M6 x 160mmx	30mm	130mm	60mm	Pp anchor w/cert wood 60x160	100pcs

C

Use	Masons code	Screw diameter / Length	PIR board thickness Flush washer	PIR board thickness with washer counter sunk 20mm into the board	Head external diameter	Installation method	Description	Quantity
MASONRY FIXING Polypropylene washer, nylon anchor and cap with screw	PB-NF46801A	8 x 100mm	60mm	80mm	60mm	Drill hole, insert anchor & screw to expand both with hammer and screw	100mm wall anchor 8mm	100pcs
	PB-NF46802A	8 x 120mm	80mm	100mm	60mm	Drill hole, insert anchor & screw to expand both with hammer and screw	120mm wall anchor 8mm	100pcs
	PB-NF46803A	8 x 135mm	Min. 40 of embedment depth required	120mm	60mm	Drill hole, insert anchor & screw to expand both with hammer and screw	135mm wall anchor 8mm	100pcs

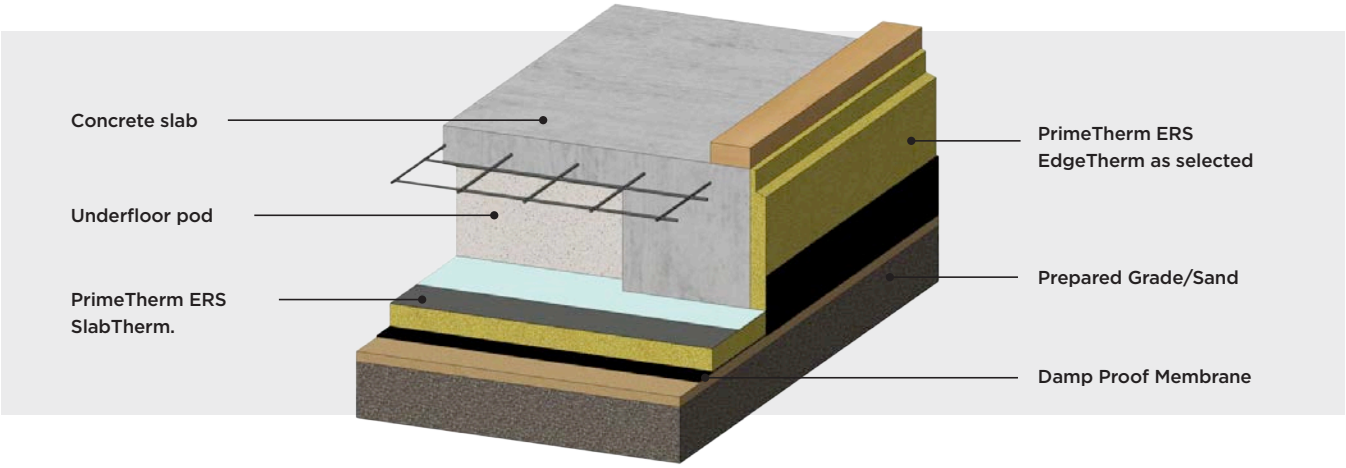
D

Use	Masons code	Diameter	Thickness	Description	Quantity
Multi Purpose Galvalume steel load spreading washer for PIR board	PB-STEELPLATE	71mm	0.6mm	Galvanised steel plate 71mm x 0.6 x 4mm	500pcs



PrimeTherm ERS SlabTherm

Concrete Underslab Insulation



THE PRODUCT

PrimeTherm ERS SlabTherm combines strength and efficiency, in one advanced insulation solution. Designed for residential and commercial concrete slab applications in New Zealand conditions, increasing thermal performance by protecting the concrete slab from heat-loss. Improves energy efficiency to decrease heating and cooling costs over the life of the building, reducing the need for in-slab heating. SlabTherm ensures comfort by contributing to a warm, dry and healthy space.

Combined with PrimeTherm ERS EdgeTherm, the R-Value of a 100m^2 floor slab with an area / perimeter ratio of 2.5, and subject to project specific detailing, should well exceed the minimum R-Values required for Climate Zones 1-6.

1. THERMAL BREAK FROM GROUND

- Reduces heat loss into the ground.
- Helps meet NZ Building Code H1 requirements.

2. LONG-TERM DURABILITY

- Rot-proof and chemically stable—PIR will not degrade over time when properly installed.
- Low maintenance and high performance over the life of the building.
- Maintains insulation performance over time.

3. IMPROVES INDOOR COMFORT

- Prevents cold floors and improves internal temperature stability.
- Especially beneficial for ground-floor commercial spaces, offices, and public facilities.

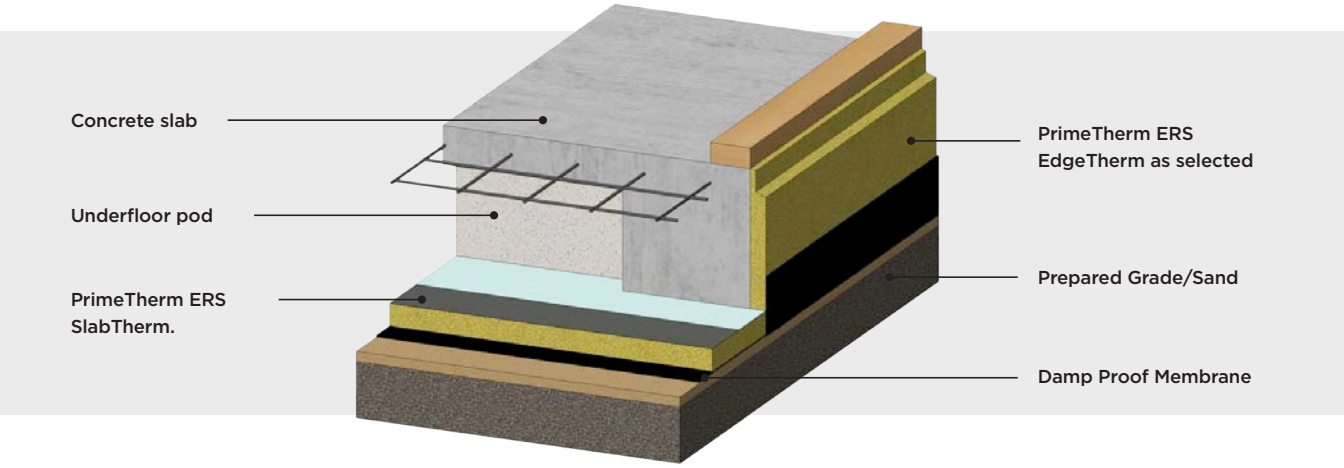
PRODUCT SELECTION:

Refer to page 4 of this document.

N.B. These applications are intended as an overview; exact technical details are provided in the Design and Installation Guide.

PrimeTherm ERS EdgeTherm

Concrete Slab Edge Insulation



THE PRODUCT

PrimeTherm ERS EdgeTherm is designed for New Zealand conditions, increasing thermal performance by protecting the concrete slab from heat-loss. Improves energy efficiency to decrease heating and cooling costs over the life of the building, reducing the need for in-slab heating. EdgeTherm ensures comfort by contributing to a warm, dry and healthy space. It is presented as a post pour option and comes with a glass fibre finish ready for plastering.

Combined with PrimeTherm ERS SlabTherm 50mm, the R-Value of a 100m^2 floor slab with an area / perimeter ratio of 2.5, and subject to project specific detailing, should well exceed the minimum R-Values required for Climate Zones 1-6.

In keeping with the PIR Board industry in NZ and common available slab edge design calculators, Masons suggests using an input value of R 1.0 for Masons Slab Edge.

ADDITIONAL COMPONENTS

Soudal Gorilla Grab Adhesive

1. THERMAL EFFICIENCY

- Reduces heat loss through the edges of the concrete slab.
- Helps meet NZ Building Code H1 requirements.
- Contributes to a healthier, drier indoor space.

2. EASE OF INSTALLATION

- Lightweight and easy to handle.

3. DURABILITY & PERFORMANCE

- Rot-proof and chemically stable – PIR will not degrade over time when properly installed.
- Low maintenance and high performance over the life of the building.

4. IMPROVES INDOOR COMFORT

- Helps prevent cold floors and improves internal temperature stability.

PRODUCT SELECTION:

Refer to page 4 of this document.

N.B. These applications are intended as an overview; exact technical details are provided in the Design and Installation Guide.

PrimeTherm ERS WarmCeiling

Warm Ceiling Insulation

THE PRODUCT

PrimeTherm ERS WarmCeiling is designed for New Zealand's unique climate and delivers exceptional thermal performance keeping interiors warm in winter and cool in summer. WarmCeiling provides an effective thermal barrier, improving energy efficiency.

This will decrease heating and cooling costs over the life of the building ensuring comfort by contributing to a warm, dry and healthy environment. Lightweight and easy to install, it fits neatly between rafters and ceiling joists and is ideal for new builds, renovations and retrofits.

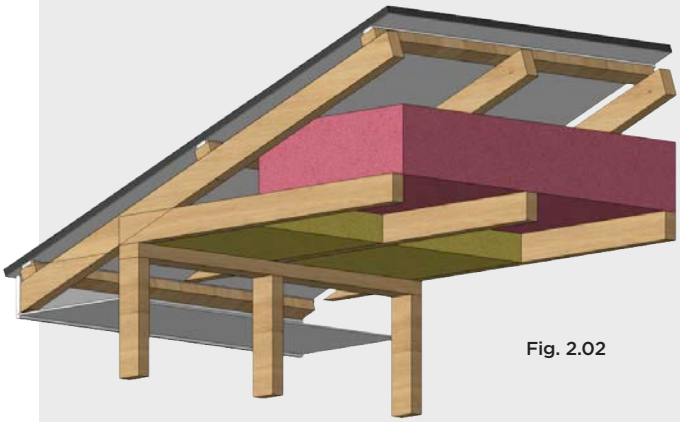


Fig. 2.02

ROOF PERIMETER INSULATION

- 90mm thick PIR installed between bottom chords or ceiling joists should exceed the requirements of R3.3, subject to project specific detailing, for 500mm wide perimeter insulation reducing the need for compressing the insulation around the perimeter.

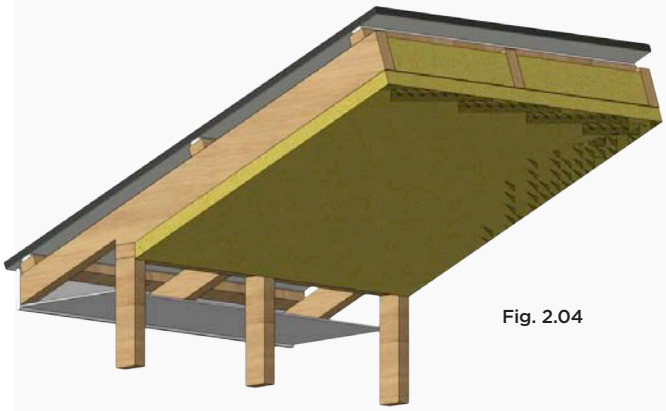


Fig. 2.04

SKILLION ROOF EXAMPLES

- Ceiling battens over PrimeTherm ERS WarmCeiling insulation providing thermal break to rafters with WarmCeiling insulation between.
- Ceiling battens over PrimeTherm ERS WarmCeiling insulation providing thermal break to rafters with loft insulation between.
- Each design option is likely to exceed a construction R-Value of R6.6 and will vary depending on project specific factors assessed in detail by the designer by carrying out a calculated analysis of the roof build up.

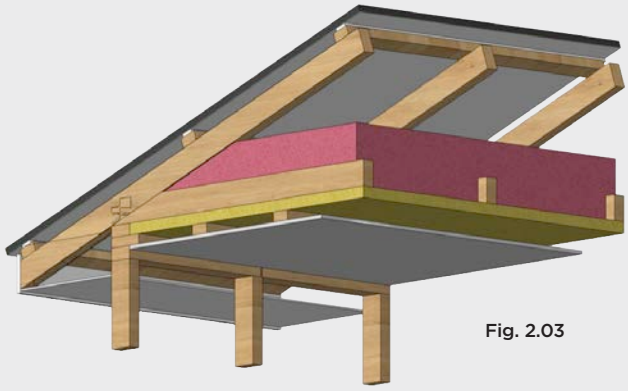


Fig. 2.03

TRUSSED ROOFS – EXAMPLES

- Ceiling battens over PrimeTherm ERS WarmCeiling insulation providing thermal break to bottom chord with loft insulation between.
- Ceiling battens over PrimeTherm ERS WarmCeiling insulation providing thermal break to bottom chord with PIR insulation between.
- Each design option is likely to exceed a construction R-Value of R6.6 and will vary depending on project specific factors assessed in detail by the designer by carrying out a calculated analysis of the roof build up.

THERMAL COMFORT
Year-round comfort and climate balance

DURABLE
Rot-proof and chemically stable

EASY INSTALLATION
Lightweight and easy to install

MOISTURE RESISTANT
Closed-cell structure prevents water absorption

1. THERMAL EFFICIENCY

- Reduces heat loss through the ceiling.
- Helps meet NZ Building Code H1 requirements.
- Contributes to a healthier, warmer, drier indoor space by improving internal temperature stability.

PRODUCT 15 YEARS DURABILITY

2. EASE OF INSTALLATION

- Lightweight and easy to handle.

3. DURABILITY & PERFORMANCE

- Rot-proof and chemically stable – PIR will not degrade over time when properly installed.
- Low maintenance and high performance over the life of the building.

PRODUCT SELECTION:

Refer to page 4 of this document.

Additional components	Masons Code	Length (mm)	Width (mm)
Aluminium Tape	FOILTAPE50mmx50m	5000	50
Aluminium Tape	FOILTAPE80MMX50M	5000	80
Aluminium Tape	FOILTAPE100MMX50M	5000	100

ADDITIONAL COMPONENTS

Masons Aluminium Tape (for Aluminium faced sheets)

Soudal Gorilla Pro Expanding Foam Click & Fix

N.B. These applications are intended as an overview; exact technical details are provided in the Design and Installation Guide.

PrimeTherm ERS WarmRoof

Warm Roof Insulation

PRODUCT 15 YEARS DURABILITY

THE PRODUCT

PrimeTherm ERS WarmRoof – Discover the smarter way to insulate with PIR WarmRoof Insulation – the high performance solution for modern energy efficiency. PrimeTherm ERS WarmRoof provides superior thermal performance in a lightweight, durable board that's easy to install above your roof deck. By keeping the entire structure warm, PrimeTherm ERS WarmRoof reduces heat loss, prevents condensation and helps create a more comfortable living space all year round.

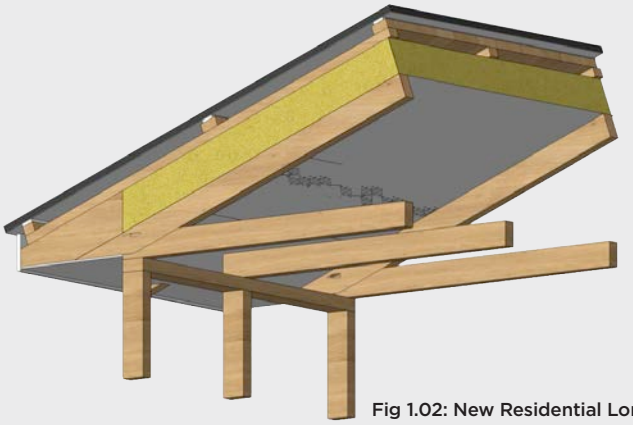


Fig 1.02: New Residential Longrun roofing – Trussed or Skillion

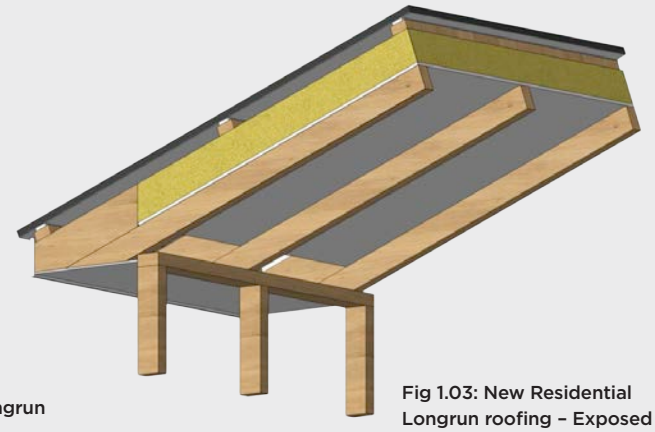


Fig 1.03: New Residential Longrun roofing – Exposed Rafter Skillion roof

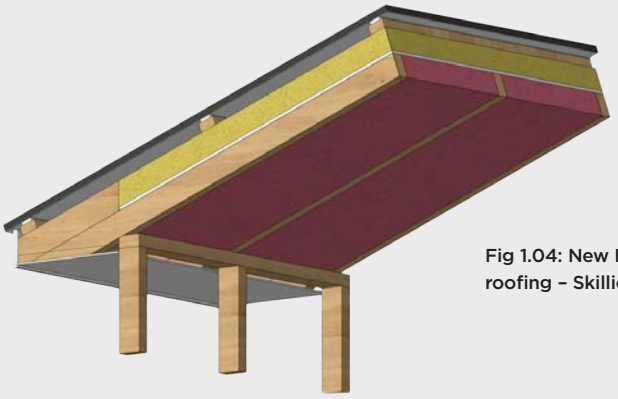
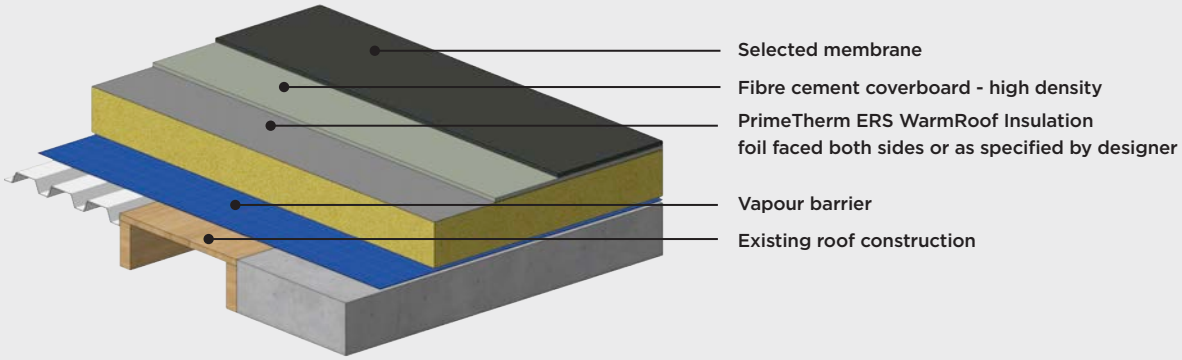


Fig 1.04: New Residential Longrun roofing – Skillion



New Flat Membrane Roof

The examples provided are for illustrative purposes only. Each design option will vary depending on project specific factors and should be assessed in detail by the designer before finalising.

THERMAL COMFORT
Year-round comfort and climate balance

DURABLE
Rot-proof and chemically stable

EASY INSTALLATION
Lightweight and easy to install

MOISTURE RESISTANT
Closed-cell structure prevents water absorption

WHETHER YOU'RE RENOVATING A FLAT ROOF OR BUILDING NEW, PRIMETHERM ERS WARMROOF OFFERS:

1. SUPERIOR ENERGY EFFICIENCY

By keeping the roof structure within the insulated layer, heat loss is minimised and the building maintains a more stable indoor temperature all year round.

2. REDUCED RISK OF CONDENSATION

The warm roof system moves the dew point to the roof deckline, helping to prevent the formation of condensation that can cause dampness and long term damage.

3. COMPLIANCE AND SUSTAINABILITY

Warm roof systems help meet building regulations for thermal performance, reduce carbon emissions and improve overall building sustainability.

N.B. The use of a vapour blocker at ceiling level and, or Masons Passive Roof Ventilation system may be required according to the building type and location.

PRODUCT SELECTION:

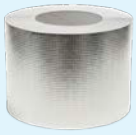
Refer to page 4 of this document.

Torch-on membranes may be used where separated from PIR by a non-combustible cover board and installed in accordance with the membrane manufacturer's requirements.
Direct torching onto PIR is not permitted.

Additional components	Masons Code	Length (mm)	Width (mm)
Aluminium Tape	FOILTAPE50mmx50m	5000	50
Aluminium Tape	FOILTAPE80MMX50M	5000	80
Aluminium Tape	FOILTAPE100MMX50M	5000	100

ADDITIONAL COMPONENTS

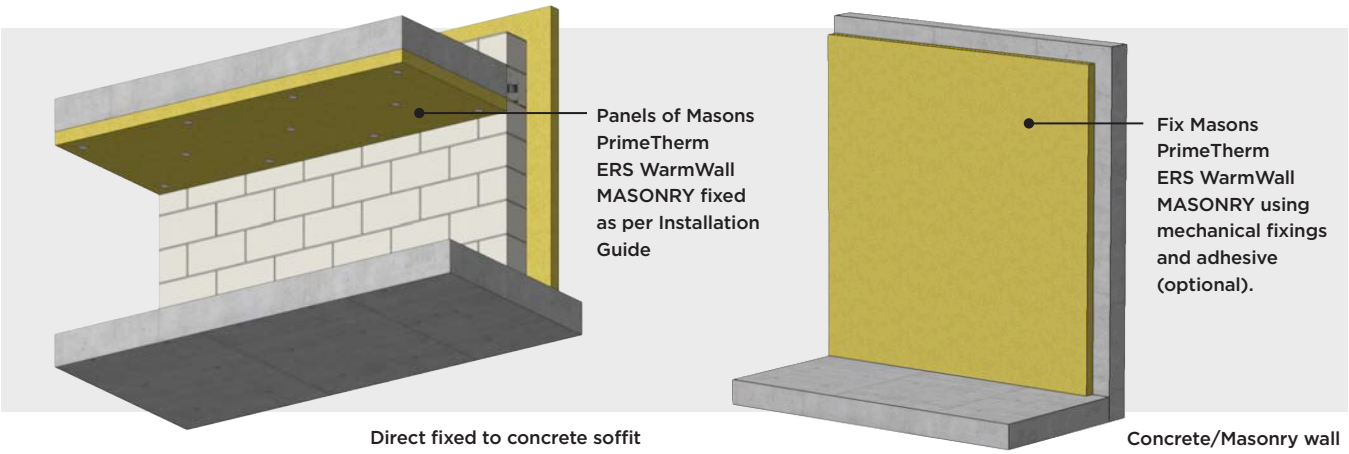
Masons Aluminium tape (for Aluminium faced sheets).



N.B. These applications are intended as an overview; exact technical details are provided in the Design and Installation Guide.

PrimeTherm ERS WarmWall MASONRY

Concrete Masonry Insulation



Direct fixed to concrete soffit

Concrete/Masonry wall

THE PRODUCT

PrimeTherm ERS WarmWall MASONRY is a rigid PIR insulation solution designed for insulating the internal face of concrete and masonry walls and soffits. Manufactured from closed-cell polyisocyanurate (PIR), it provides high thermal resistance in a slim profile, making it ideal for commercial, industrial and multi-residential buildings with exposed concrete or blockwork.

Installed internally, WarmWall MASONRY improves thermal performance without altering external façades, while contributing to warmer, drier and more energy-efficient buildings that meet New Zealand Building Code Clause H1 requirements.

ADDITIONAL COMPONENTS

Insulation fixings (masonry anchors with washers)

Adhesive (where specified)

Joint sealing tape (foil or flashing tape)

WHY USE WARMWALL MASONRY

HIGH THERMAL PERFORMANCE

- Reduces heat loss through concrete and masonry walls and soffits
- Helps meet NZBC H1 energy efficiency requirements
- Improves internal temperature stability in thermal mass structures

MOISTURE & CONDENSATION MANAGEMENT

- Closed-cell PIR resists moisture absorption
- Reduces condensation risk on cold internal surfaces
- Contributes to healthier internal environments

VERSATILE INTERNAL APPLICATION

- Suitable for concrete walls, blockwork and soffits
- Can be mechanically fixed, or installed as a combined system of mechanical and adhesive fixing
- Compatible with plasterboard linings where required for fire or aesthetic compliance

TYPICAL APPLICATIONS

- Commercial and industrial buildings
- Schools, community halls and public facilities
- Warehouses and storage buildings
- Office fit-outs with exposed concrete or masonry

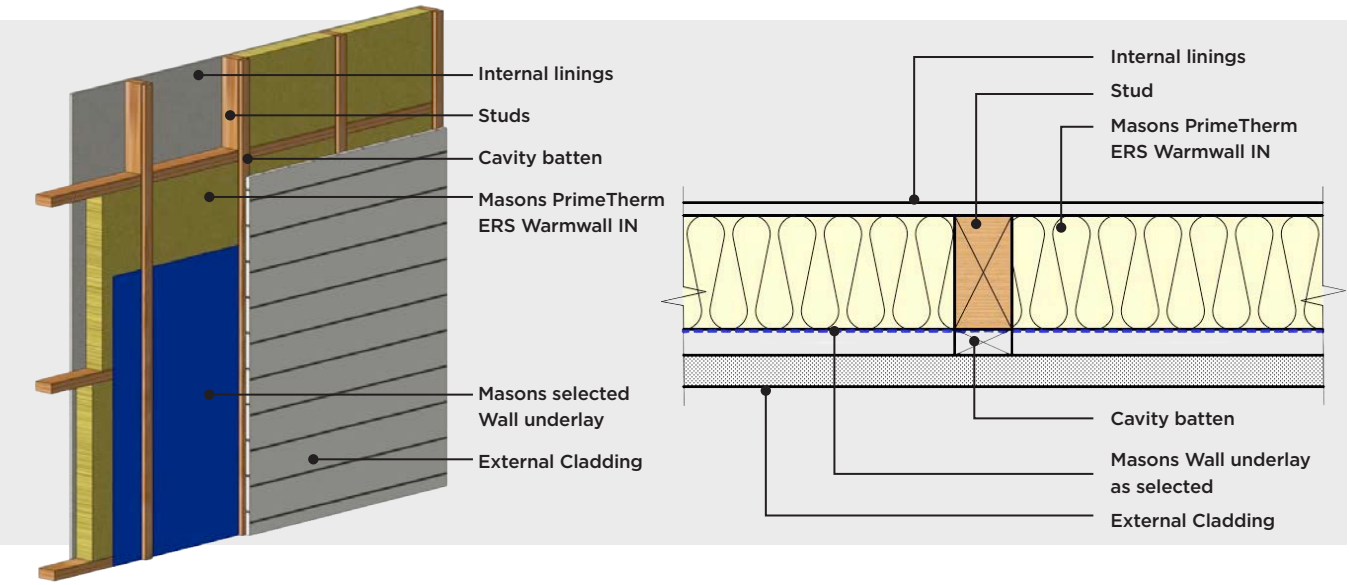
PRODUCT SELECTION – WARMWALL MASONRY

- Available in multiple thicknesses to suit climate zone and project-specific R-Value requirements. Boards are supplied in 2400 x 1200mm sheets with thicknesses typically ranging from 25mm to 150mm.

N.B. These applications are intended as an overview; exact technical details are provided in the Design and Installation Guide.

PrimeTherm ERS WarmWall IN (In-frame)

Warm Wall Interior Insulation



THE PRODUCT

PrimeTherm ERS WarmWall IN is a high-performance PIR insulation board designed to be installed between timber or steel wall framing members. It delivers superior thermal efficiency in a rigid, non-compressible format that maintains performance over time, even in demanding New Zealand conditions.

WarmWall IN is ideal for residential and light commercial framed wall systems, providing high R-Values with minimal wall depth and helping designers meet updated NZBC Clause H1 requirements.

WHY USE WARMWALL IN

MAXIMISED R-VALUE IN LIMITED WALL DEPTH

- High thermal resistance per millimetre
- Reduces the need for deeper framing
- Ideal where space constraints exist

DIMENSIONAL STABILITY & DURABILITY

- Will not sag, slump or compress over time
- Maintains thermal performance for the life of the building
- Resistant to moisture uptake due to closed-cell structure

DESIGNED FOR NZ FRAMED WALLS

- Suitable for timber or steel framing
- Easily cut for a precise friction fit
- Compatible with standard wall underlays and internal linings

TYPICAL APPLICATIONS

- Residential external walls
- Light commercial framed buildings
- New builds and renovations
- Hybrid wall systems where internal insulation is required

PRODUCT SELECTION – WARMWALL IN

- WarmWall IN is available in a range of thicknesses to achieve required wall R-Values when installed in accordance with NZS 4246:2016.

ADDITIONAL COMPONENTS

Wall underlay (as selected)

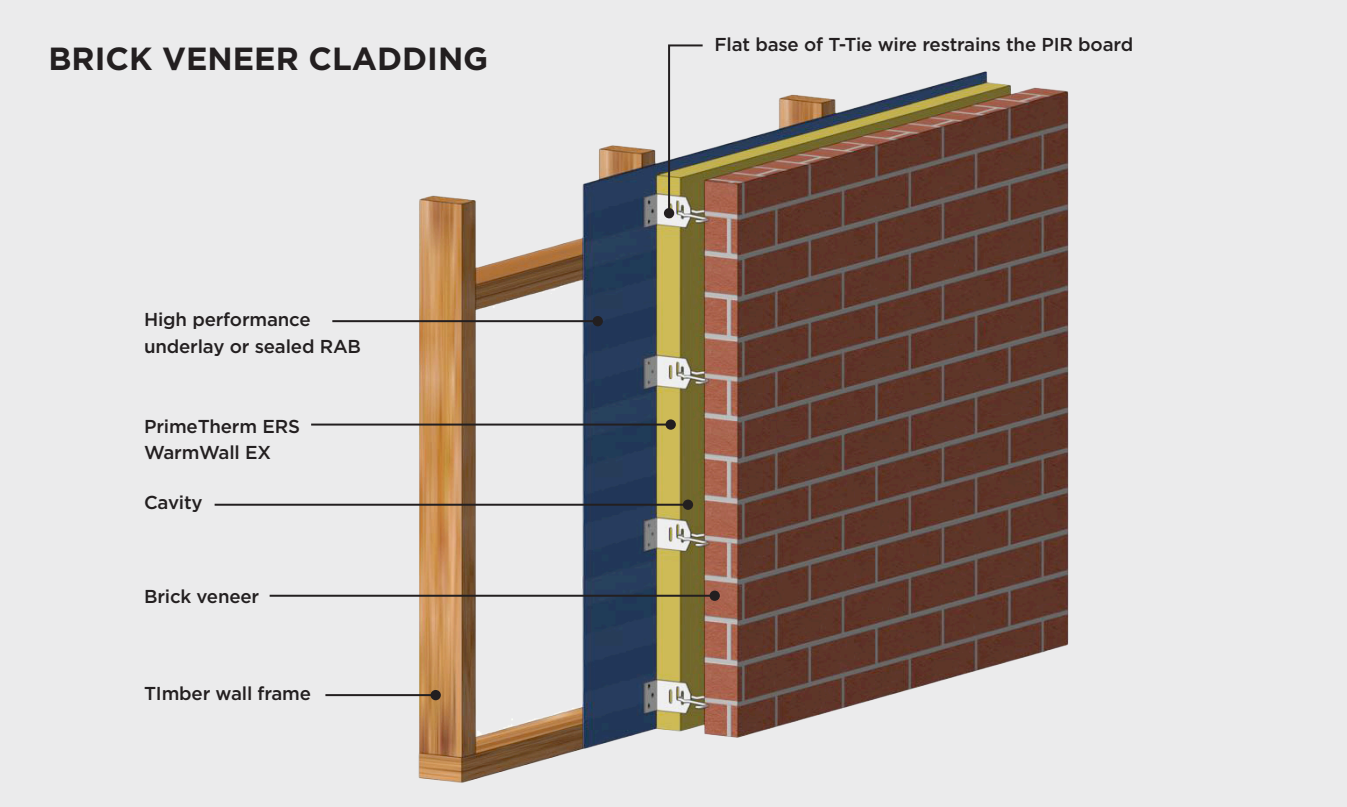
Cavity battens

Foil or joint sealing tape (where required)

N.B. These applications are intended as an overview; exact technical details are provided in the Design and Installation Guide.

PrimeTherm ERS WarmWall EX (Exterior)

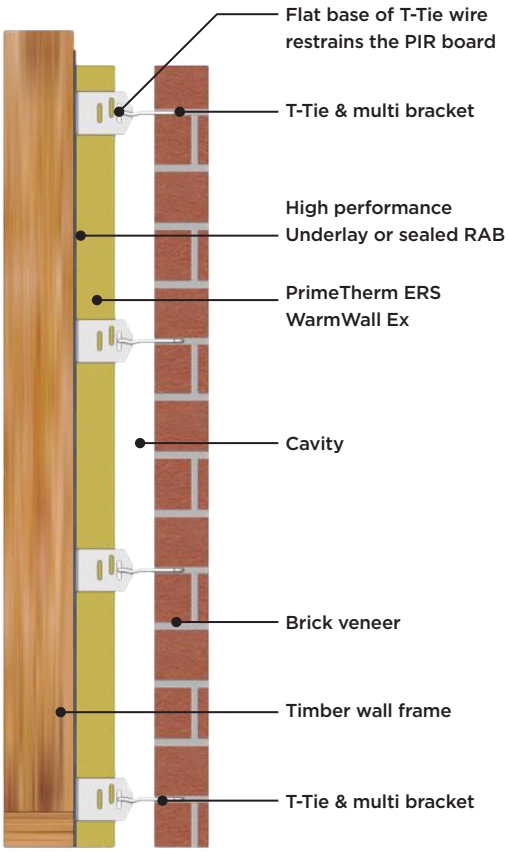
Warm Wall Exterior Insulation



THE PRODUCT

PrimeTherm ERS WarmWall EX is a continuous external wall insulation system designed to be installed to the outside face of wall framing. Using foil-faced PIR insulation boards, WarmWall EX significantly increases wall assembly thermal performance by reducing thermal bridging through framing members.

Installed externally, WarmWall EX forms part of a high-performance wall envelope, improving energy efficiency, condensation control, and long-term building durability.



WHY USE WARMWALL EX

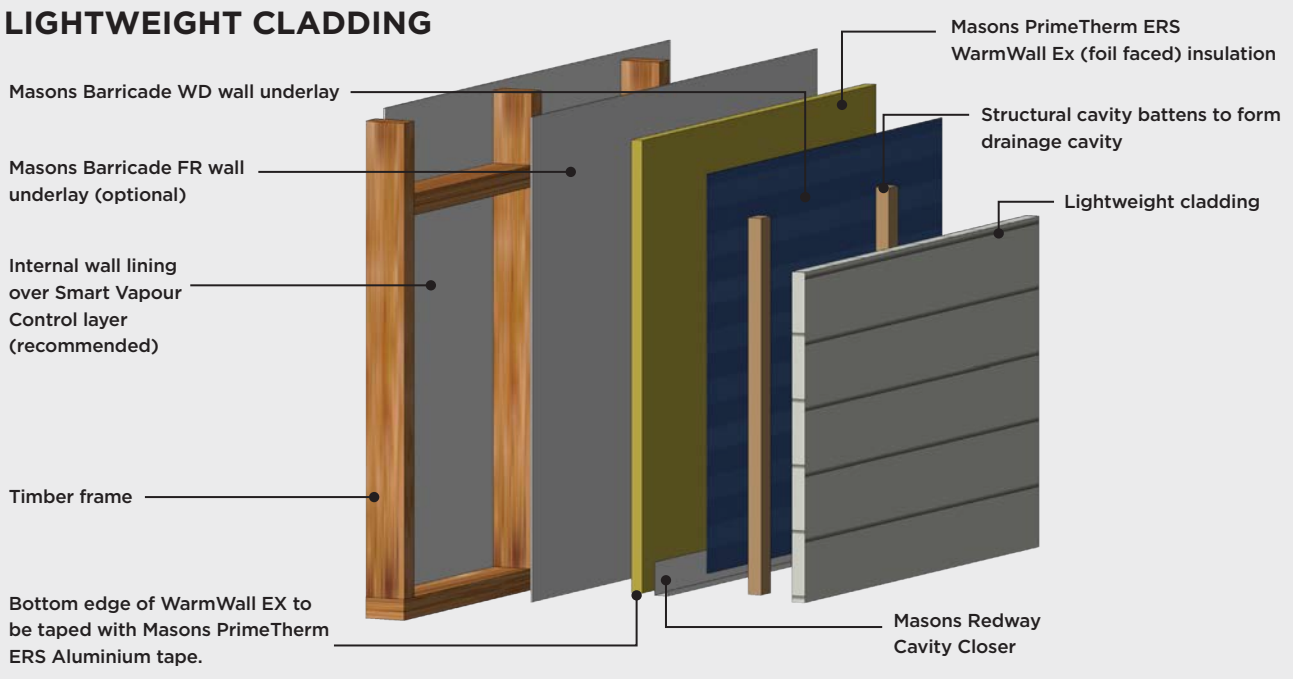
CONTINUOUS THERMAL BARRIER

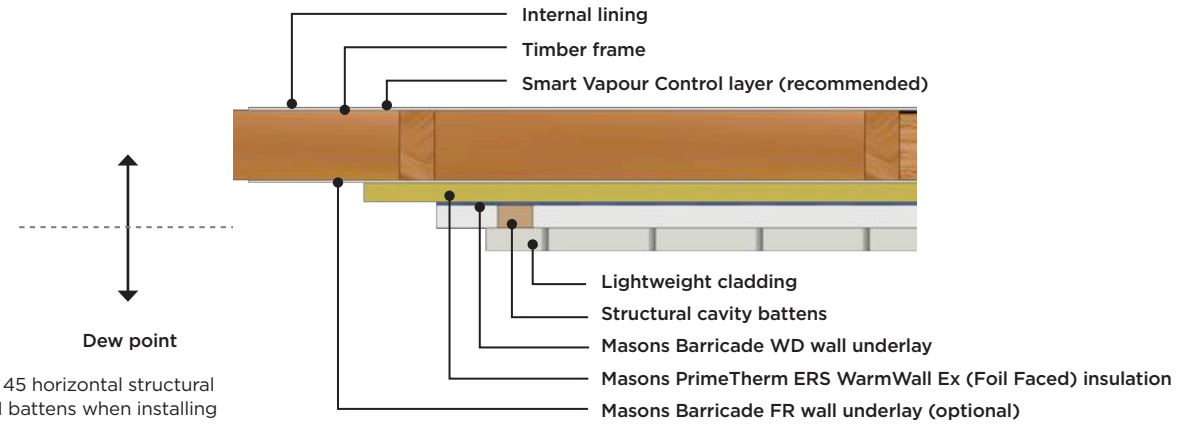
- Minimises thermal bridging through studs
- Significantly improves overall wall construction R-Values
- Helps exceed NZBC Clause H1 requirements

MOISTURE & DEW POINT CONTROL

- Positions insulation outside the framing zone
- Helps keep the dew point safely outside structural elements
- Reduces interstitial condensation risk

LIGHTWEIGHT CLADDING





Note: Use 45 x 45 horizontal structural castellated H3.1 battens when installing vertical cladding.

VERSATILE CLADDING COMPATIBILITY

- Suitable for brick veneer and lightweight cladding systems
- Compatible with cavity battens and proprietary fixing systems
- Enables high-performance wall design without increasing internal wall thickness

TYPICAL APPLICATIONS

- Residential external walls
- Commercial and mixed-use buildings
- Brick veneer construction
- Lightweight cladding systems

PRODUCT SELECTION – WARMWALL EX

- WarmWall EX panels are supplied in 2400 x 1200mm sheets, with thicknesses typically ranging from 50mm to 120mm. System configuration varies depending on cladding type, cavity width and fixing method. Contact Masons for supply of other sizes.

N.B. These applications are intended as an overview; exact technical details are provided in the Design and Installation Guide.

ADDITIONAL COMPONENTS

Stainless steel T-ties and multi-brackets (brick veneer)

Structural cavity battens (lightweight cladding)

Temporary fixings

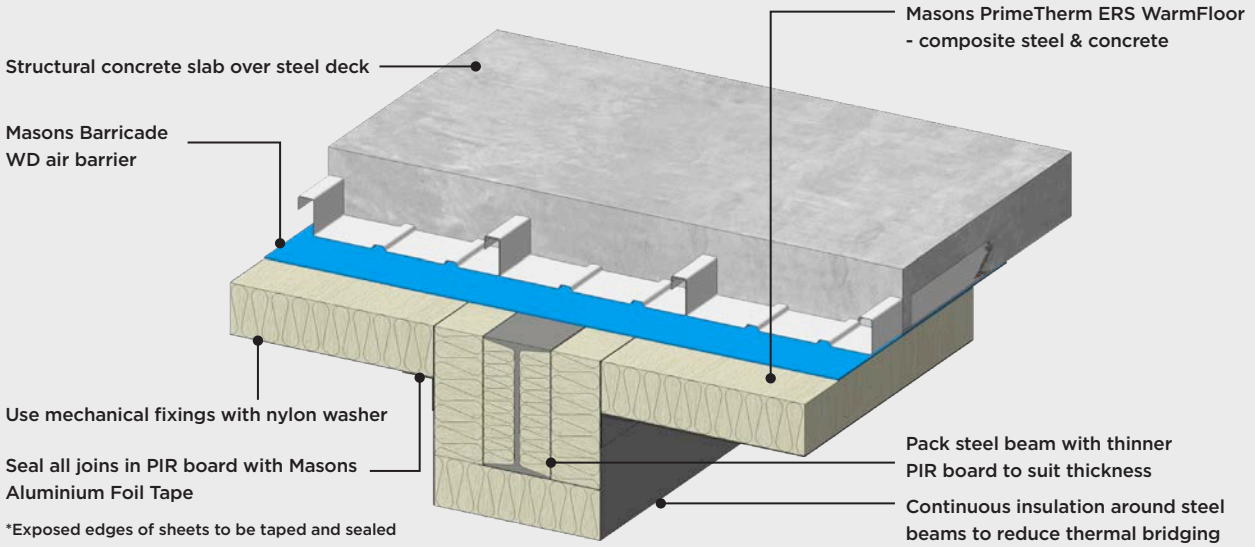
High-performance wall underlay or sealed RAB

Need help obtaining Prime ERS PIR Board?

Contact your Masons representative for help and advice.
Alternatively contact your building materials supplier, insulation specialist, builder or plasterer for quotation and supply of Prime Therm ERS PIR Board.

PrimeTherm ERS WarmFloor – Composite Steel & Concrete

Warm Floor Insulation



THE PRODUCT

Masons PrimeTherm ERS WarmFloor – Composite Steel & Concrete combines high thermal performance and durability in an advanced underfloor insulation solution. Designed for suspended composite steel and concrete floors in New Zealand conditions, it provides continuous thermal insulation beneath the composite steel deck floor slab, helping to reduce heat loss through the floor and improve the overall thermal performance of the building envelope.

By reducing heat loss through suspended concrete floors, it improves energy efficiency, reduces heating and cooling requirements over the life of the building, and contributes to a warmer, more comfortable and energy-efficient internal environment.

WHY USE WARMFLOOR – COMPOSITE STEEL & CONCRETE

CONTINUOUS THERMAL INSULATION

- Reduces heat loss through suspended composite steel and concrete floors.
- Provides continuous insulation beneath the composite steel deck, reducing thermal bridging through the steel deck profile.
- Available in a range of thicknesses
- Helps achieve the thermal requirements of NZBC H1 Energy Efficiency.

LONG-TERM DURABILITY

- Resistant to moisture absorption and maintains its thermal performance when correctly installed and protected.
- Does not rot or decay and requires minimal maintenance.
- Lightweight and durable.

IMPROVES INDOOR COMFORT

- Reduces heat loss through the suspended floor, contributing to warmer floor surfaces and improved indoor temperature stability.
- Helps create a more comfortable internal environment by reducing heat transfer through the floor.
- Assists in reducing the demand for supplementary heating.

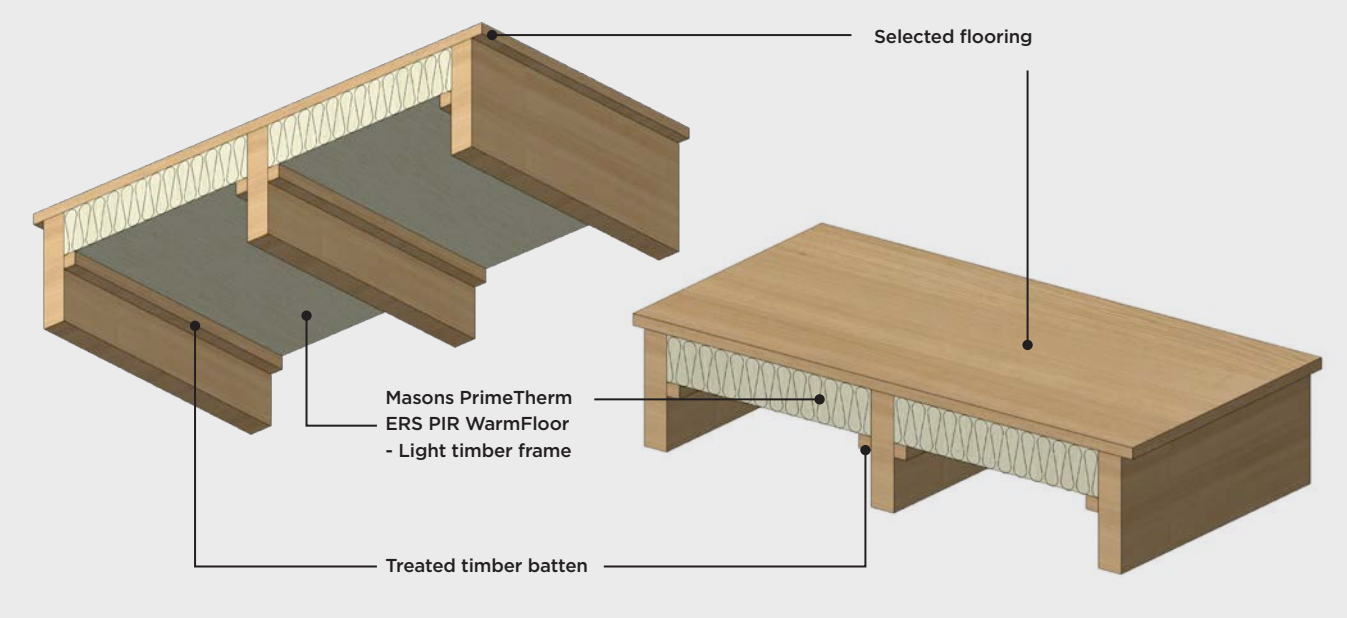
PRODUCT SELECTION:

- Refer to Mechanical Properties & Thermal Resistance – R-Values on page 4 of this document.

N.B. These applications are intended as an overview; Technical Guidance details are provided in the Design and Installation Guide.

PrimeTherm ERS WarmFloor – Light Timber Frame

Warm Floor Insulation



THE PRODUCT

Masons PrimeTherm ERS WarmFloor – Light Timber Frame combines high thermal performance and durability in an advanced underfloor insulation solution. Designed for suspended lightweight timber floors in New Zealand conditions, it provides thermal insulation beneath timber floor decking, helping to reduce heat loss through the floor and improve the overall thermal performance of the building envelope.

By reducing heat loss through suspended timber floors, it improves energy efficiency, reduces heating and cooling requirements over the life of the building, and contributes to a warmer, more comfortable and energy-efficient living environment.

WHY USE WARMFLOOR – LIGHT TIMBER FRAME

THERMAL PERFORMANCE FOR SUSPENDED TIMBER FLOORS

- Reduces heat loss through suspended timber floors.
- Helps meet NZ Building Code H1 requirements.
- Available in a range of thicknesses.
- Two-layer installation with staggered joints can further reduce thermal bridging.

LONG-TERM DURABILITY

- Resistant to moisture absorption and maintains its thermal performance when correctly installed and protected.
- Does not rot or decay and requires minimal maintenance.
- Lightweight and durable.

IMPROVES INDOOR COMFORT

- Reduces heat loss through the floor, contributing to warmer floor surfaces and improved indoor comfort.
- Suitable for residential and other buildings incorporating suspended lightweight timber floors.

PRODUCT SELECTION:

- Refer to Mechanical Properties & Thermal Resistance – R-Values on page 4 of this document.

N.B. These applications are intended as an overview; Technical Guidance details are provided in the Design and Installation Guide.

MASONS

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Visit: **mpb.co.nz**

Phone: **0800 522 533**

Email: **info@mpb.co.nz**

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