



Installation

TemperTherm 100% Polyester Underfloor High Performance & New Build

TemperTherm 100% Polyester Insulation products are proudly manufactured in NZ and are made for NZ conditions. Our entire TemperTherm Polyester range carries a 50 Year Product Durability Warranty.

COMPLIANCE STATEMENTS

The total R-Value of the building system depends on the building materials, design and installation and may be less than, greater than, or equal to the declared R-Value of the product.

The initial performance of the insulation material may be reduced if it is stored for too long in its compressed packaging. Should this product be found to be compressed at installation, it will recover to its nominal thickness and R-Value between 48 Hours and up to one month following installation.

TemperTherm polyester insulation should be removed from its compressed packaging within 6 months from the date of manufacture.

TemperTherm 100% Polyester Insulation will not settle or reduce its performance over time and will meet and exceed the 50 year durability clause of the NZBC (B2.3.1(a)) when installed in accordance with these manufacturer's instructions.

TemperTherm 100% Polyester Insulation is supplied with labelling compliant with AS/NZS4859.1. The nominal thickness, net area, and nominal weight of each pack is recorded on the product bale label.

INSTALLER SAFETY

TemperTherm 100% Polyester Insulation is completely safe to handle. TemperTherm Polyester is non-toxic, non-itchy, and non-allergenic. That means no itchy skin, sore throats, or lung irritation on contact or following installation. Each installation is unique so prior to installing insulation check for hazards that could cause injury.

ELECTRICAL SAFETY

Before installing TemperTherm Polyester Underfloor Blanket we recommend that you locate and identify all wires and cabling in the underfloor area to reduce the risk of electric shock. Insulation should be installed above electrical wiring leaving all cables and wiring clearly visible.

CAUTION: Electric cables and equipment partially or completely surrounded with any bulk thermal insulation may overheat and fail. This applies to wiring installed prior to 1989.

- Beware of damaged, exposed or hanging cables and wires.
- Contact a registered electrician to complete necessary repairs prior to starting the installation.
- Treat all wires as live. Wherever possible isolate power to the work area before commencing work.
- Do not staple within 50mm of any wiring.
- Avoid covering and/or hiding electrical wires and cables.

Refer NZS4246:2016 Energy Efficiency – Installing Insulation in Residential Buildings for required insulation clearances to lighting and electrical appliances.

INSTALLATION TOOLS

We recommend you have;

- Tape measure, and sharp wide-blade knife for cutting insulation
- Head torch or appropriate lighting, coveralls, goggles and face mask if installing from below the floor
- Staple gun with 12-14mm staples.

TRANSPORTATION & STORAGE

TemperTherm Insulation must be stored under cover and in dry conditions. Heavy objects must not be stacked on the packs. The packs should be stored in an orientation that avoids excessive compression of the product.

TemperTherm Insulation is supplied in compressed packaging sleeves in order to increase freighting efficiency. Insulation must be released from the packaging and allowed to re-loft prior to installation. The time to loft will depend upon the length of time the product



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PRODUCT SELECTION

TemperTherm Polyester Underfloor Blanket is designed for use in exposed joist floors. TemperTherm Polyester Underfloor Blanket is available in a range of widths and performance options and can be installed in enclosed, semi-enclosed and open sub-floor spaces. Where wind wash is a concern in exposed open sub-floor spaces we suggest selecting the highest R-Value insulation suitable for the building.

In fully open sub-floor spaces, it is recommended that a suitable lining material is also installed. TemperTherm Underfloor should be slightly wider than the space between the floor joists to ensure a tight friction fit. We recommend the insulation width is 20-30mm less than the floor joist construction centres.

- TemperTherm Polyester Underfloor @ 370mm wide is ideal for floor joists set at 400mm centres.
- TemperTherm Polyester Underfloor @ 420mm wide is ideal for floor joists set at 450mm centres.

We recommend the use of 12-14mm staples. In coastal areas we recommend you use stainless steel staples to eliminate corrosion, as per the NZBC requirements.

INSTALLATION INSTRUCTIONS

All thermal and acoustic insulation should be installed in accordance with NZS4246:2016 Energy Efficiency – Installing Insulation in Residential Buildings. Standards New Zealand has made this Standard freely available for download from their website.

Cutting to Size:

Always cut slightly oversized to ensure a tight friction fit to all surfaces. TemperTherm 100% polyester blankets can be cut by compressing the insulation under a timber off-cut and then cutting through with a sharp wide-blade disposable knife. Heavier and higher-density products can be cut using a specialist insulation saw or knife.

Insulate All Areas:

Insulate all areas of the suspended floor from exterior wall to exterior wall leaving no gaps, except as required for electrical and pipe clearances. Insulation should extend to the outer edge of the bottom plate wherever possible.

TemperTherm Polyester Underfloor is designed to be installed between timber floor joists, and touching the underside of the floor. Insulation can be installed from above; before the floor is laid, or from below; after the floor has been laid.

Installing from above: Fit the insulation blanket between the floor joists, and level with the top of the joists. Pinch insulation at the top of the joist and staple to secure.

Installing from below: Fit the insulation blanket between the floor joists, tight to all surfaces. TemperTherm Polyester Underfloor should be installed touching the underside of the floor but not compressed. Do not staple the insulation directly to the floor as this will compress the insulation thickness and reduce its performance.

The Underfloor blanket should be securely fixed in place by pinching and stapling through the insulation material and into the timber joist each side at 200-300mm intervals. Staple every 50-100mm for the first 200mm of each joist run.

Staple blanket ends to the boundary joist to secure in place and seal the thermal envelope.

When joining the end of one roll to the start of another, simply butt join them together ensuring a neat and tight fit and staple in place.

Double staple to start then staple every 50-100mm for the first 200mm each side of a join.

Clearances: Leave a clear 100mm gap around waste pipes that penetrate through the floor to allow for future service.

Surface mounted luminaires and lamps: Follow specified clearances from the luminaire manufacturer. If manufacturers recommendations are unknown, maintain a minimum clearance of 200mm to the luminaire or lamp.

For other clearances, refer to NZS4246 – Energy Efficiency – Installing Insulation in Residential Buildings.

COMPLETION

At the end of the installation, check and repair any visible gaps. Ensure all electrical wiring or cables have not been damaged. Leave work area tidy and remove unused materials, offcuts and waste from site. Remove the product label from the packaging and staple it near the access point for future inspection.



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SPECIFICATIONS & TECHNICAL SUPPORT

TemperTherm specification documents are available from our website. For specification or technical support please contact our Technical Team on 07 282 1184, or email support@tempertherm.co.nz

TemperTherm

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Declare.



BRANZ Appraised

Appraisal No. 1090
Appraisal No. 1091



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