



TemperTherm

Datasheet

TemperTherm 100% Polyester Masonry Wall & Service Cavity

TemperTherm 100% Polyester Insulation is proudly manufactured in NZ from thermally bonded polyester fibres, for use in framed walls, ceilings, skillion roofs, suspended floors, and mid-floor applications in both residential and commercial construction and contains minimum 45% recycled fibre from post-consumer recycled PET plastic. Our Polyester Insulation is available in a range of widths and performance options and is available in blanket, skillion, and segment forms.

TemperTherm 100% Polyester Masonry & Service Cavity Blanket is designed especially for the thermal and acoustic insulation of strapped and lined masonry walls, and as a secondary insulating layer in high-performance wall and ceilings.

TemperTherm 100% Polyester products provide both thermal and acoustic insulation. Our Masonry & Service Cavity Blanket range utilise specialist low denier, high-volume hollow-core polyester fibres for superior sound absorption.

	Nominal Thickness	Product Format	Standard Widths	Thermal Conductivity (À 50/90)
TEMPERTHERM 100% POLYESTER MASONRY WALL & SERVICE CAVITY INSULATION				
R0.5 Masonry Wall & Service Cavity Blanket	20mm	Roll Form	580mm	
R0.8 Masonry Wall & Service Cavity Blanket*	35mm	Roll Form	580mm	0.0396 W/mK
R1.0 Masonry Wall & Service Cavity Blanket	45mm	Roll Form	580mm	0.0428 W/mK
R1.3 Masonry Wall & Service Cavity Blanket	45mm	Segments	360mm/560mm	0.0345 W/mK

*Compressed R1.0 45mm Masonry Blanket

KEY FEATURES

- Manufactured using 100% polyester fibres and contains a minimum 45% post-consumer recycled PET plastics.
- Moisture and vermin resistant.
- Cost effective, flexible, and easy to install.
- Non-toxic, non-allergenic, non-irritant, soft and safe to touch.
- Proudly Made in NZ.
- 50 Year Durability Warranty.

NZBC COMPLIANCE

TemperTherm Polyester is designed for thermal & acoustic insulation of buildings, when installed in accordance with the manufacturer's instructions, TemperTherm 100% Polyester Insulation will perform for a minimum of 50 years, meeting the durability clause of NZBC B2.3.1(a). Premier Polyester meets the relevant clauses of NZBC E3 Internal Moisture, F2 Hazardous Building Materials and can support a buildings ability to meet NZBC G6 Acoustic Design requirements and will support buildings to meet the H1 Energy Efficiency H1.3.1(a) & H1.3.2.E.

TemperTherm Polyester must be:

- Installed & maintained in a dry, protected environment.
- Installed in a building where provisions of NZBC E2 and E3 are met.
- Installed to the requirements of NZD 4226:2016: Energy Efficiency-Installing Bulk Thermal Insulation in Residential Buildings.

NON-CORROSIVE & NON-HAZARDOUS

Polyester is considered non-corrosive and non-hazardous



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NZBC C1-C6 PROTECTION FROM FIRE

All polyester insulation is classified as combustible insulating materials, and may therefore not be suitable for all applications, as stipulated in NZBC C-Protection from Fire. We recommend you consult a Fire Engineer before specifying Polyester Insulation in buildings other than those described in Risk Group SH.

PIL Group Ltd polyester insulation has been tested to ISO 9705: 1993

Classification:	Group 1-S
Smoke Production Rate:	1.0m ² /s and therefore within the 5.0m ² /s limit
Product Range:	100% Polyester up to 1,800gsm
Report Ref:	BRANZ FC18133-01-2 (June 2024)
Classification:	Group 3
Smoke Production Rate:	1.0m ² /s and therefore within the 5.0m ² /s limit
Product Range:	100% Polyester 1,800gsm up to 4,800gsm, including double-layer install
Report Ref:	BRANZ FC18133-01-2 (June 2024)

IEC60695-11-5 Downlight Fire Standard

PIL Group Ltd Polyester Insulation has been tested and assessed as complying with IEC60695-11-5 Needle Flame Test.

Report Ref: Spectrum Lab Report No. 8616 (Aug 2023).

VOC EMISSIONS

PIL Group polyester insulation has been tested by CETEC Foray Ltd to ISO16000 Part 9:2011 with ISO16000 Part 11: 2011 "Determination of the emission of volatile organic compounds from building products and furnishing - Emission test chamber method" (Emission testing method for Greenguard UL 2818 certification program specification).

Report Reference: V2012043

VOC (C6 to C16) Emission Concentration: 0.007 mg/m³

Formaldehyde Emission Rate: <0.003ppm

All other Target CREL VOCs and their emission rates are well below the maximum allowable concentrations in accordance with Table 27A (revised December 30, 2014) of the standard method.

POLYESTER MOISTURE ABSORPTION

Tempertherm Polyester Insulation does not absorb or wick moisture. Tested at 50°C d 90% Relative Humidity for four days, showed moisture absorption of 0.00% by weight.

Testing was conducted by AWTA in accordance with ASTM C739-97 (Section 12 Modified)

Ref: 23-003634 (Sep 23).

50 YEAR WARRANTY

PIL Group Limited takes pride in offering a 50-year Manufacturer's Durability Warranty for Premier Insulation 100% Polyester Thermal and Acoustic Insulation, when installed in compliance with the manufacturer's installation instructions and NZ4246:Energy Efficiency - Installing insulation in residential buildings.

MATERIAL SAFETY DATASHEET

TemperTherm 100% Polyester Insulation Material Safety Data Sheet is available from our website, or by contacting our Technical Team on 07 282 1184, or email support@tempertherm.co.nz



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ACOUSTIC PERFORMANCE

TemperTherm 100% Polyester insulation will assist sound reduction by reducing the resonating noise inside the construction cavity. Performance will vary with different construction systems. For acoustic design assistance, please get in touch with our team.

INSTALLATION

It is recommended that all insulation be installed in accordance with the manufacturer's instructions and NZS:4246 Energy Efficiency - Installing Insulation in Residential Buildings. Please refer to individual product installation instructions available from our website.

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CUSTOM MANUFACTURING

We offer simple product customisation to support specific project needs. Product width variations will require Minimum Order Quantity of 200m² per variant. Please contact our Technical Team on 07 282 1184, or email support@tempertherm.co.nz for more information.

PACKAGING & RECYCLING

Our TemperTherm Polyester Insulation packaging is recyclable – made from LDPE 4 material.

Please refer to your local recycling centres for recycling options or contact PIL Group for information on our Take Back & Recycling options for plastic packaging and insulation off-cuts.

PROFESSIONALLY SUPPLIED & INSTALLED

TemperTherm Insulation offers a nationwide installer network to help ensure our TemperTherm 100% Polyester Insulation products are installed correctly and perform over the life of the building. Tempertherm Insulation branches are locally owned and operated.

Find your local branch on our website.

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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