

## Datasheet Temper Temper Therm Glasswool Thermal & Acoustic Insulation

TemperTherm Glasswool is a resin-bonded Thermal & Acoustic insulation material made using up to 90% recycled glass. It is designed for use in framed walls, ceilings, and mid-floor applications in both residential and commercial construction. Our Glasswool is available in blanket and segment form.

	Nominal Thickness	Standard Widths	Material Density	Thermal Conductivity (À 50/90)	Eco <sup>o</sup> Choice Aotearoa	BRANZ Appraise
TEMPERTHERM GLASSWOOL 90mm WALL, MI	D-FLOOR & HD C	EILING BLAN	(ETS			
R2.2 Thermal & Acoustic HD Segments	70mm	580mm	24Kg/m3	0.0320 W/mK		
R1.8 Thermal & Acoustic Blanket*	75mm	1,200mm	12Kg/m3	0.0380 W/mK	<b>~</b>	<b>~</b>
R2.2 Thermal & Acoustic Blanket*	90mm	1,200mm	12Kg/m3	0.0399 W/mK	<b>~</b>	<b>*</b>
R2.4 Thermal & Acoustic Blanket	90mm	1,200mm	18Kg/m3	0.0375 W/mK	<b>~</b>	<b>~</b>
R2.6 Thermal & Acoustic Blanket	90mm	1,200mm	24Kg/m3	0.0338 W/mK	<b>~</b>	<b>~</b>
R2.8 Thermal & Acoustic Blanket	90mm	1,200mm	32Kg/m3	0.0317W/mK	<b>~</b>	<b>~</b>
Approved for GIB Noise Control Systems						
TEMPERTHERM GLASSWOOL MASONARY WA	LL & SERVICE CA	VITY BLANKE	т			
R1.0 Masonry & Service Cavity Blanket	40mm	1,200mm	13Kg/m3	0.0405 W/mK	<b>~</b>	~
R1.3 Masonry & Service Cavity Blanket	50mm	1,200mm	16Kg/m3	0.0385 W/mK	<b>*</b>	<b>~</b>
TEMPERTHERM GLASSWOOL 140mm WALL, M	IID-FLOOR & SKI	LLION ROOF				
R3.2 115mm Wall-Mid-Floor-Skillion Segments	115mm	430mm	22Kg/m3	0.0354 W/mK	<b>~</b>	<b>~</b>
R3.2140mm Wall-Mid-Floor-Skillion Blanket	140mm	1,200mm	11Kg/m3	0.0425 W/mK	<b>~</b>	~
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R3.6140mm Wall-Mid-Floor-Skillion Blanket	140mm	1,200mm	16Kg/m3	0.0386 W/mK		•
	140mm	1,200mm	24Kg/m3	0.0386 W/mK	<b>*</b>	<b>~</b>
R3.6 140mm Wall-Mid-Floor-Skillion Blanket R4.0 140mm Wall-Mid-Floor-Skillion Blanket R4.4 140mm Wall-Mid-Floor-Skillion Blanket					<b>*</b>	<b>*</b>



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TEMPERTHERM GLASSWOOL CEILING	SEGMENTS					
R3.6 Ceiling Segments	175mm	430mm	8Kg/m3	0.0478 W/mK	<b>~</b>	<b>~</b>
R4.1 Ceiling Segments	195mm	430mm	8Kg/m3	0.0468 W/mK	<b>~</b>	<b>~</b>
R5.2 Ceiling Segments	230mm	430mm	10Kg/m3	0.0423 W/mK	<b>~</b>	<b>~</b>
R6.3 Ceiling Segments	260mm	430mm	12Kg/m3	0.0412 W/mK		
R7.0 Ceiling Segments	275mm	430mm	14Kg/m3			
R7.3 Ceiling Segments	275mm	430mm	16Kg/m3	0.0365 W/mK	<b>~</b>	<b>~</b>
TEMPERTHERM GLASSWOOL CEILING B	BLANKETS					
R3.3 Ceiling Blanket	145mm	1,200mm	12Kg/m3	0.0417 W/mK	<b>~</b>	<b>~</b>
R3.6 Ceiling Blanket	155mm	1,200mm	12Kg/m3	0.0410 W/mK	<b>~</b>	<b>~</b>

#### **KEY FEATURES**

- Manufactured using up to 90% recycled glass
- Resin bonded for enhanced durability
- Cost effective, flexible, and easy to install
- High R-values, up to R7.3 single layer, supporting compliance to NZBC H1 Energy Efficiency requirements
- Select products are BRANZ Appraised & Eco Choice Aotearoa Certified.
- 50 Year Durability Warranty.

#### NZBC COMPLIANCE

Tempertherm Glasswool is designed for the thermal and acoustic insulation of buildings in accordance with the New Zealand Building Code (NZBC)  $H1\,Energy\,Efficiency\,and\,G6\,Acoustic\,Design\,requirements.\,When\,installed\,in\,accordance\,with\,the\,manufacturer's\,instructions\,and\,the\,provisions$ of the BRANZ Appraisal, TemperTherm Glasswool will perform for a minimum of 50 years, meeting the durability clause of NZBC B2.3.1(a) & (b). Tempertherm Glasswool meets the relevant clauses of NZBC E3 Internal Moisture, F2 Hazardous Buildings Materials, and will support buildings to meet H1 Energy Efficiency H1.3.1(a) & H1.3.2 E

TemperTherm Glasswool Insulation 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.



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#### **ENVIRONMENTAL**

TemperTherm Insulation is proud to carry Eco Choice Aotearoa Certification for selected Glasswool Insulation products.

Eco Choice Aotearoa provides a credible and independent standard to guide people who want to purchase and use products that are proven to be better for the environment. At the foundation of Eco Choice Aotearoa are the technical specifications it develops, setting the most stringent, up to date standards for environmental compliance in business. New Zealand companies who meet or exceed these specification are permitted to display the ECA mark, widely recognised by New Zealanders as a badge of environmental leadership.

Eco Choice Aotearoa is interntionally recognised as Level-A Eco-Label, and operates to internationally recognised standards and principles as a member of GEN, the Global Ecolabelling Network, which links a world of environmentally preferable products and services.

NZGBC GreenStar & HomeStar

TemperTherm Glasswool Insulation can support a buildings ability to meet the GreenStar & HomeStar accreditation. The specification and use of TemperTherm Glasswool Insulation can support available 'points' for insulation materials. For specification or technical support, please contact our Technical Team on 07 282 1184 or email support@tempertherm.co.nz.

#### ΒΡΔΝΖ ΔΡΡΡΔΙSΔΙ

Selected TemperTherm Glasswool Insulation products are BRANZ Appraised (Appraisal 1151).

A BRANZ Appraisal is a robust, in-depth and independent evaluation of a building product or system to assess it's fitness for purpose and compliance with Building Code performance requirements.

#### **ACOUSTIC PERFORMANCE**

TemperTherm Glasswool 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 contact our Technical Team on 07 282 1184 or email support@tempertherm.co.nz.

Independent verification for substitution in GIB® Noise Control® systems

GIB® Noise Control® Systems manual states that any substitutions of insulation infill must be independently verified to confirm the noise control performance of the system will be maintained. Marshall Day Acoustics have assessed TemperTherm Glasswool R1.8 75mm & R2.2 90mm Thermal & Acoustic Blankets and have verified these two products as suitable substitutions.

(REF: 20220540 GE (PIL Glasswool Testing and Verification).

#### **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.~Installation~instructions~are~available~on~our~website.

Drained Cavity Wall Construction

Drained cavity wall construction with stud spacings greater than 450mm requires stud straps to prevent insulation bulging into the cavity. Straps must run at 300mm centres over the wall underlay. Refer NZBC E2/AS1, 9.1.8.5 Wall Framing behind Cavities.

Double-Layer Ceiling Installations

For higher R-Value ceiling installations we recommend a 'double-layer' installation to reduce thermal bridging.

The bottom layer of insulation should be same thickness as the bottom chord, ideally high-density, and installed between the trusses. The second (top) layer should be installed tight around the trusses with joins off-set to the bottom layer of insulation. This will ensure a full cover of insulation and reduce heat-loss through the timber.



## Temper Therm Glasswool Thermals Thermal & Acoustic Insulation

#### MATERIAL SAFETY DATASHEET

TemperTherm Glasswool 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.

#### 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.

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