

TECHNOBOND®

POLYESTER CEILING AND WALL INSULATION



TECHNICAL INFORMATION AND INSTALLATION INSTRUCTIONS

Technobond Polyester Thermal Insulation is a range of polyester fibre insulation for use as thermal and acoustic insulating material in ceilings, roofs and walls of buildings.

Polyester insulation is an easy to use, non-irritant, thermally efficient insulating material for use in residential and light commercial applications.

Technobond Insulation can be used to meet NZBC H1 Energy Efficiency requirements for insulation.



CONTACT YOUR
DUNEDIN BASED
MANUFACTURER FOR
MORE INFO
03 476 4221

FEATURES AND BENEFITS:

- Technobond® is safe and non toxic and easy to handle and use.
- Technobond® does not contain chemicals such as formaldehyde based binders, the fibres are not of a respirable size supporting safer indoor air quality.
- Technobond®, will meet NZBC 15 and 50 year durability requirements, and is not affected by moisture, mould or mildew and will not rot or deteriorate in the intended use situations.
- Technobond® is odour free and is recyclable at the end of its useful life.

BLANKET PRODUCT RANGE:

Product Type	Length (mm)	Nominal Width (mm)	Thickness (mm)	Blankets per pack	Weight of pack (kg)	Area per pack (m ²)
R2.6	9000	580	140	3	24.3	15.66
R2.6	9000	870	140	2	24.3	15.66
R3.2	9000	580	170	3	27.4	15.66
R3.2	9000	870	170	2	27.4	15.66

More information on pricing, installers and other R values options as well as acoustic and under floor insulation can be obtained by contacting Ellis Fibre.

Standards and Information relevant to specification and use of Technobond® Insulation Products:

- *AS/NZS: 4859.1: 2002*
Materials for the thermal insulation of buildings.
- *NZS 4246: 2006*
Energy Efficiency Installing Insulation in Domestic Buildings.
- *NZS 4218: 2004*
Energy efficiency Housing and small building envelope.
- *NZS 4243: 1996*
Energy efficiency Large buildings.
- *BRANZ House Insulation Guide, Third Edition 2007.*
- *BRANZ Appraisal 693 (2010) Technobond Polyester Thermal Insulation.*

The blankets can be used to insulate ceilings and framed cavities in roofs and walls of buildings. The insulation blankets are lavender in colour and are compression packed in clear polythene.

Standard blanket widths are 580mm or 870mm for use in ceilings with framing centers set out at 600mm or 900mm respectively.

The R2.6 and R3.2 blankets can also be made to specific widths for large orders.

Packaging of blankets per bale may be different for special width orders. Length of blankets within packaging remains unchanged at 9 metres.

The material can also be used to fill roof and wall framing cavities with 400mm or 450mm framing set out centres. The material must be carefully cut to size to fit these cavity dimensions.

CEILING INSTALLATION

In all cases the ceiling space should be checked, and potential obstructions removed. Any dampness or mould must be noted and the cause rectified before new insulation is installed. All older insulation that is to be left in place must be dry. Any wet material must be removed and disposed of.

When used in a roof space for the insulation of ceilings, the material can be installed over ceiling battens directly on to the ceiling between the rafters/joists. The insulation should be laid continuously with joins between blankets tight and without gaps. Insulation should be continuous between top plates and a close fit to rafters/joists.

Alternatively the insulation can be laid as a blanket over the rafters as a continuous blanket. This method is often used when older insulation is left in place. Blankets must be butted closely together so that there are no gaps to allow heat convection.

Wherever possible, plumbing and electrical wiring should be above the insulation. Electrical wiring and plumbing should be fixed along the roof framing above the insulation.

To avoid moisture transfer to the insulation, a 25mm gap must be maintained between the insulation and the roof membrane. This must be particularly observed toward the eaves where the roof trusses meet the top plates of the exterior walls. Insulation may need to be reduced in thickness near the eaves to achieve this.

Down lights must not be covered with insulation as there is a risk of overheating of the lights and other materials in the ceiling. A minimum clearance of 100mm between down lights and insulation must be maintained unless the manufacturer of the down light can verify a lesser clearance is appropriate. As a result the thermal performance of ceilings with down lights will be reduced. In general the use of down lights is not recommended when installed in an insulated ceiling.

Compensation for the gaps that must be created around down-lights must be made in order to meet the insulation requirements of clause H1.

WALL INSULATION

The lofted thickness of the insulation must correspond with the depth of the wall cavity to be filled. The insulation should fill the space between the building wrap and the wall lining without being compressed.

Technobond® R3.2 cannot be used within enclosed cavities less than 170 mm in depth and Technobond® R2.6 cannot be used within enclosed cavities less than 140mm in depth.

When used to insulate wall cavities, the insulation must be cut to size for a friction fit in the cavity for example 400mm or 450mm. To achieve a friction fit, segments should be cut approximately 5mm wider than the cavity. Segment should be pushed into place evenly without leaving any unfilled gaps around the edges of the cavity. If several segments are used to fill a cavity they must be carefully butted together without any gaps.

ROOF INSTALLATION

Installation in the framing cavities of an unlined roof or ceiling, is similar to wall installation with material cut to size if necessary. If framing centers are more than 450mm, suitable plastic strapping must be applied to retain the insulation firmly in place within the cavity until interior lining is completed.

NZS 4246: 2006 – Installing Insulation in Residential Buildings; contains clear installation details and instructions. Details for insulation of these elements must be followed.

SAFETY

Technobond® insulation is non toxic and safe to handle. Before installation we recommend reading the Insulation Association of New Zealand booklet on safe practice when installing polyester Insulation by contacting: Site safe at www.sitesafe.org.nz.



Information and advice regarding use and installation of these products can be obtained from the manufacturer:

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