

Terra Lana Drop-in Underfloor Wool Insulation

Product Technical Statement: 112704



BRANZ appraised high performance, semi-rigid, fibrous insulation for suspended floors.

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Level of assurance needed to demonstrate NZ Building Code Compliance

Supporting documentation should include self-assessment and technical information by manufacturer



Terra Lana confirms that this minimum level of assurance has been met or exceeded by the following:

BRANZ Appraisal

[1164](#)



masterspec partner

Company Contact Details



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Technical Statement

Product Description

Ceiling insulation is usually sold in standard width rolls, but can be supplied in nonstandard width rolls or in precut slabs if nonstandard dimensions are required.

Available in a range of length, thicknesses and R-values.

Terra Lana natural wool insulation was developed and tested by the Wool Research Institute of New Zealand (WRONZ, now AgResearch) and is BRANZ appraised (Appraisal 682 : 2010).

Composition

The wool in Terra Lana natural wool blend insulation is a mixture of clean, recycled fibre from textile mills and new sheep's wool. The wool is blended with polyester melt bond fibre and thermally bonded to form a dimensionally stable structure. It varies in colour from light to dark grey and can be supplied in slab or roll form.

Durability

Terra Lana wool wall and ceiling insulation has been BRANZ appraised to last for 50 years.

Insect Resistance

Terra Lana wool insulation is manufactured from new wool and recycled wool and textile fibres that are treated for insect resistance.

Scope of use

Terra Lana Underfloor Insulation has been appraised as a thermal insulating material for suspended timber-framed floors and timber-framed mid-floors in new domestic and commercial buildings.

Terra Lana Underfloor Insulation is suitable for use under floors which have an enclosed perimeter foundation as defined in NZS 4246.

It is also suitable for use where the subfloor area is not enclosed and is subject to wind, such as in open raised floors and pole houses.

New Zealand Building Code (NZBC)

The product will, if employed in accordance with the supplier's installation and maintenance requirements, assist with meeting the following provisions of the building code:

- **Clause B2 Durability:** Performance B2.3.1(a)
- **Clause E3 Internal moisture:** Performance E3.3.1
- **Clause F2 Hazardous building materials:** Performance F2.3.1
- **Clause H1 Energy efficiency :** Performance H1.3.1, H1.3.2E

Notes

This is an Acceptable Solution in terms of New Zealand Building Code Compliance. Terra Lana Wool Insulation thermal resistance (R-value) has been determined by testing to AS/NZS 4859.1 which is an acceptable method.

Supporting Evidence

The product has and can make available the following additional evidence to support the above statements:



BRANZ Appraisal
[1164](#)

Use in Service History

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In-service use. Terra Lana Wool insulation has been in use for the NZ Construction Industry for over 22 years. In 1999 Terra Lana Products Ltd pioneered making insulation and eco-textiles from recycled wool, building on work done by the Wool Research Organisation of New Zealand (WRONZ, now AgResearch). We were the first New Zealand company with wool based insulation products appraised by BRANZ (2012).

Product Criteria

Design requirements

Terra Lana Underfloor Insulation is designed to be installed in new domestic and commercial buildings immediately prior to sheet flooring being installed.

The building envelope must be constructed to ensure the insulation remains dry throughout the life of the building.

Refer to the Manufacturers technical information.

Installation requirements

Refer to the installation instructions supplied by the manufacturer and installed by a suitable qualified person.

Maintenance requirements

Insulation that has become damp during its serviceable life must be removed and the cause of dampness repaired. NZS 4246 gives guidance on thermal insulation maintenance due to water damage.

Warrantees

The Terra Lana warranty applies only to the original purchaser of the product (The Purchaser) to the extent that:

The Product has no manufacturing defects apparent for a period of 50 years, from the date of its original purchase.

Where the building is maintained so that provisions of NZBC Clause E2 and E3 are met, and where the insulation is not crushed or exposed to conditions that will diminish its thermal performance (e.g. moisture), Terra Lana Underfloor Insulation can expect to have a serviceable life of at least 50 years. Support accessories must also be selected according to the required serviceable life.

Company Product Information

Environmental

Terra Lana uses sheep's wool which is a naturally renewable insulation material that does not endanger the health of people and composts safely when disposed of. The majority of the wool used is waste wool from NZ carpet and textile manufacturers which would otherwise be dumped into landfills.

Terra Lana is capable of trapping (within the wool fibres) close to 100% of the formaldehyde commonly found in most new buildings, thereby lessening the effects of 'sick building syndrome'. Terra Lana's embodied energy is 7 times less than fibreglass insulation and 3 times less than polyester insulation.

Relationships



New Zealand Made



Member of New Zealand Green Building Council



Date last validated: **17 November 2022**



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