

# natural wool

## Underfloor Insulation

Terra  
Lana

Natural Wool Insulation

Terra Lana underfloor insulation is a wool/polyester laminate specifically designed for the underfloor insulation of new and existing suspended floors. Its layered composition means it is semi rigid, ensuring no air gap between the insulation and the floor (gaps dramatically reduce the effectiveness of the insulation).



### Applications

New and existing suspended floors.

### Composition

Terra Lana underfloor insulation is designed to completely fill the underfloor cavity with each of the 3 carefully engineered insulation layers performing a specific purpose:

- A high loft polyester layer ensures a close fit to the underside of the floor minimising air movement.
- A bonded wool mid-layer provides thermal/ acoustic insulation and regulates moisture movement.
- A stronger polyester outer surface protects the insulating layers, providing rigidity to support friction fit and strength for stapling to ensure the insulation cannot be dislodged.

This unique construction provides a semi rigid product which has superior insulation properties and is easy to install.

It is faster to install than closed cell foam insulation because it does not require precise cutting for a perfect friction fit. Bear this in mind when you are calculating the total cost of installation. Variances in joist spacing are easily accommodated, something that is difficult with rigid insulation which has to be cut perfectly as gaps dramatically reduce the insulation's effectiveness.

### Natural Benefits

**Air Conditioner** Absorbs and desorbs moisture thus helping to prevent condensation and mould.

**Safer** Non-irritant, non-allergenic, non-toxic and odourless. Contains no harmful substances. Requires no protective clothing or masks to install.

**Flame Retardant** Difficult to ignite then smoulders, tending to self extinguish.

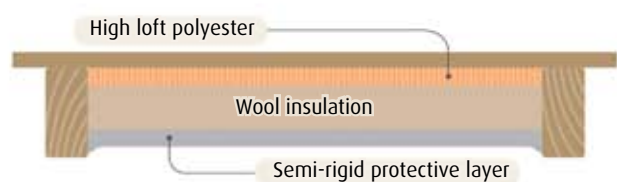
**Durable** Maintains its loft and therefore its thermal insulation ability for the lifetime of the dwelling. By contrast, thermal insulation made from fibreglass tends to slump over time, thus reducing its effectiveness.

**Filter** Capable of absorbing close to 100% of the formaldehyde commonly found in most new buildings. Fibreglass does not do this as effectively.

**Noise Barrier** Absorbs noise from outside and within the premises.

**Degradable** Breaks down quickly and safely when composted.

**Energy Efficient** Takes seven times less energy to manufacture than equivalent fibreglass products.



Terra Lana - naturally better.

## Product Table

Product Code	R Value	Acoustic Rating	Dimensions (mm)*	Recovered Thickness (mm)	Pieces per Bale	Area per Bale (Sqm)	Coverage (Sqm)	Bale Weight (Kg)
TLUFL460	1.8	N/A	4m x 460	100	2	3.7	4.0	4.7
TLUFL580	1.8		4m x 580	100	2	4.6	4.8	6.0
TLUFL920	1.8		4m x 920	100	1	3.7	Appox 4**	6.0

\* Special width cuts available on request.

\*\* Depends on joist width. TLUF 920 is best used with non standard joist widths. The roll can be ripped across and fit more easily than standard widths.

### Durability

When used, installed and maintained in accordance with BRANZ Appraisal 682 (2010) and the Terra Lana Installation Guide, Terra Lana wool insulation will meet the provisions of NZBC B2.3.1 (a), (b) and (c) 50, 15 and 5 years respectively.

### Insect Resistance

Terra Lana wool insulation is manufactured from recycled and new wools that are treated for insect resistance. Bioassay tests by AgResearch give satisfactory insect resistance to *Tineola Bisselliella* (common clothes moth).

### Installation

Can be ripped and fit using bare hands without cutting tools.

### Shelf Life

Terra Lana Wool Insulation is compression packed into clear polyethylene bags. Due to the physical and chemical properties of the wool fibre and thermal bonding fibre, it has the ability to recover to its design thickness over time. However, the longer the period and degree of compression, the longer the recovery. Thus Terra Lana natural wool insulation should not be stored in it's compressed state for prolonged periods (>12 months).

### Independently Tested

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

### Terra Lana Products Ltd

Terra Lana Products Ltd specialises in the manufacture of building and eco-textile products based on wool, one of New Zealand's most abundant, naturally sustainable resources.

All products are designed to make best use of wool's environmentally friendly qualities and the company is committed to minimising it's own impact on the planet.



## Terra Lana - naturally better.

Terra Lana Products Ltd  
55 Francella St, P.O. Box 19755, Christchurch, New Zealand  
Phone: (03) 982 0211 Freephone: 0800 485 262  
Fax: (03) 982 0212 Email: [info@terralana.co.nz](mailto:info@terralana.co.nz)

[www.terralana.co.nz](http://www.terralana.co.nz)

Terra  
Lana

Natural Wool Insulation