

0800 626 668 MAMMOTH.CO.NZ

# HIGH PERFORMANCE INSULATION FOR EXISTING HOMES

**CEILINGS** 

UNDERFLOOR

















# WHY MAMMOTH?



- 1 Mammoth insulation is 100% polyester, the same material used in household duvets and pillows. Red List Free so there are no formaldehyde or pesticides added.
- 2 Mammoth insulation is fully recyclable and uses up to 15,600 recycled bottles per 100 sqm\*.
- Non-itch, non-toxic and safe to handle and easy to install.
  You don't need to wear gloves, goggles and coveralls to handle it.
- **Heat bonded** no glues or binders that can break down over time so it won't settle or slump.
- Moisture, mould and mildew resistant, Mammoth will continue to perform once dried out.
- **6 Friction-fitted segments** for easy high performance underfloor installations.
- **Made in NZ** by a carboNZero certified organisation.
- 8 Ceiling and underfloor products are **BRANZ Appraised**.
- 9 Long lasting with a 50 year warranty.
- 10 Nationwide installer network.

#### WHY INSULATE?

A well-insulated home is a warmer home that saves on energy use and improves the health of New Zealanders. Mammoth® polyester insulation delivers three core benefits:

#### **COMFORT**

Insulation keeps the heat in so your home is warmer in winter and helps keep the heat out in summer so you keep cooler.

#### **HEALTH**

A study by the Wellington School of Medicine<sup>1</sup> confirmed that people who live in insulated homes are healthier<sup>2</sup>.

#### **ENERGY EFFICIENCY**

Most New Zealand homes need heating in winter and by limiting that heat loss you spend less money to be warm.



# NEW R-VALUES AND CLIMATE ZONES

The NZ Building Code for new home construction has been updated and minimum R-values have increased for ceiling and underfloor insulation.

For existing homes the new minimum R-values are not mandatory but are the best guide for the level of insulation needed.

Ideally choose a minimum of R3.6 for ceilings and R1.9 or higher for underfloor.

| CLIMATE ZONE                     | 0    | 2    | 3 | 4    | 5    | 6 |  |
|----------------------------------|------|------|---|------|------|---|--|
| Ceiling                          | R6.6 |      |   |      |      |   |  |
| Underfloor<br>(suspended timber) |      | R2.5 |   | R2.8 | R3.0 |   |  |

<sup>\*</sup> Calculations are based on 500ml PET Bottles (16.2g)

1: Source: BRANZ House Insulation Guide, 4th Edition: P10, Fig1 2: Howden-Chapman, P. et al. "Effect of insulating existing houses on health in equality: Cluster randomised study in the community." British Medical Journal, 2007. P334.460



# CEILING INSULATION

### **REDUCE HEAT LOSS** THROUGH YOUR CEILING

Mammoth has two options for insulating your ceiling depending on the type of roof you have - ceiling blanket or skillion sections.

We all know heat rises and it's estimated that 30-35% of heat loss from an uninsulated house is through the ceiling. So the roof cavity is the best place to start when adding insulation in your home.

Like duvets and pillows, also made from polyester, Mammoth traps the warmth underneath the blanket to keep your home warmer.

A 100 sqm ceiling would take the equivalent of up to 9300\* plastic bottles out of landfill to warm your home for a lifetime.

You can be rest assured that Mammoth insulation contains no chemicals or itchy fibres that can be drawn into your home through ventilation systems, manholes or lighting fixtures.





#### **CEILING BLANKET**

Soft roll form blanket installed in roof cavities to cover the ceiling, including the joists. Can be double layered to achieve higher R-values.



#### **SKILLION SECTIONS**

High-density sections, perfect for homes with very little roof space or renovations for skillion ceilings with no roof space. Calculations are based on 500ml PET Bottles (16.29)

**SPECIFICATIONS** 

BUILDING CODE: **R6.6** (all zones)

| PRODUCT<br>RANGE  | Donos randos 27000<br>Donos randos 27000<br>Do direg Frazierio | BRANZ Appraised<br>Appraisal No. 797 | Density<br>(kg/m³) | Product<br>R-value | Nominal<br>thickness (mm) | Dimensions     | Pieces<br>(per pack) | Total<br>area (m²) |
|-------------------|--|--------------------------------------|--------------------|--------------------|---------------------------|----------------|----------------------|--------------------|
| Ceiling Blanket   | ✓  | ✓                                    | 7.83               | R1.8               | 115                       | 870mm x 11.50m | 2                    | 20                 |
|                   | $\checkmark$   | $\checkmark$                         | 7.57               | R2.9               | 185                       | 870mm x 8.62m  | 2                    | 15                 |
|                   | $\checkmark$   | $\checkmark$                         | 8.00               | R3.2               | 200                       | 870mm x 8.62m  | 2                    | 15                 |
|                   |  | $\checkmark$                         | 8.00               | R3.3               | 210                       | 870mm x 8.62m  | 2                    | 15                 |
|                   | $\checkmark$   | $\checkmark$                         | 8.00               | R3.6               | 225                       | 870mm x 7.47m  | 2                    | 13                 |
|                   | ✓  | ✓                                    | 8.33               | R4.0               | 240                       | 870mm x 5.75m  | 2                    | 10                 |
| Skillion Sections |  | ✓                                    | 32.87              | R2.9               | 115                       | 560mm x 1.20m  | 3                    | 2.02               |
|                   |  | $\checkmark$                         | 32.87              | R2.9               | 115                       | 860mm x 1.20m  | 5                    | 5.16               |
|                   |  | $\checkmark$                         | 15.15              | R3.2               | 165                       | 570mm x 1.20m  | 5                    | 3.42               |
|                   |  | $\checkmark$                         | 15.15              | R3.2               | 165                       | 870mm x 1.20m  | 4                    | 4.18               |
|                   |  |                                      | 19.39              | R3.6               | 165                       | 870mm x 0.57m  | 6                    | 2.98               |

To achieve the Building Code of R6.6, double layering may be possible. EECA's Warmer Kiwi Homes programme insulates to the 2008 Building Code which is R2.9 in the North Island and R3.3 in the South Island and the Central Plateau of the North Island.



# UNDERFLOOR INSULATION

### **UNDERFLOOR INSULATION**

## REDUCES DRAUGHTS AND HEAT LOSS

#### Mammoth has underfloor sections or blankets to suit your home.

Adding insulation under your floor if you have enough crawl space is an easy and cost effective way to create a warmer, healthier home. While installing insulation, it's also a good time to install an on-ground moisture barrier to help keep the moisture in the ground and stop air under the floor from getting damp.

Mammoth R1.9 & R2.8 underfloor sections are medium density friction-fitted (compression fitted) for a better fit, pushing hard against the floor joists meaning no gaps, creases, folds or areas where performance is reduced. They are better for underfloors that have no perimeter protection or have base boards, slats or ventilation holes as they are far less likely to be affected by any air movement under the house (known as wind wash). These sections don't require mechanical fixings to hold them in place which is beneficial for both installation speed and removing any risk of electrocution by stapling through wiring.

Blanket insulation is only recommended for underfloors where there is a fully enclosed perimeter to protect it from windwash.





### UNDERFLOOR SECTIONS

Medium density selfsupporting insulation sections that don't need staples or straps.



#### UNDERFLOOR BLANKET

A cost-effective option for suspended wooden floors for use by experienced insulation installers.

#### **SPECIFICATIONS**

#### BUILDING CODE: **R2.5** (zones 1-3), **R2.8** (zone 4), **R3.0** (zones 5-6)

| PRODUCT<br>RANGE    | Linemate neurolate 2010/009<br>Philosopy Medical Confedence (Confedence (Confed | BRANZ Appraised<br>Appraisal No. 802 | Density<br>(kg/m³) | Product<br>R-value | Nominal<br>thickness (mm) | Dimensions     | Pieces<br>(per pack) | Total<br>area (m²) |
|---------------------|---|--------------------------------------|--------------------|--------------------|---------------------------|----------------|----------------------|--------------------|
| Underfloor Blanket  | <b>√</b>  | ✓                                    | 7.5                | R1.5               | 100                       | 450mm x 11.11m | 4                    | 20                 |
|                     | $\checkmark$  | $\checkmark$                         | 7.5                | R1.5               | 100                       | 510mm x 9.80m  | 4                    | 20                 |
|                     | $\checkmark$  | $\checkmark$                         | 7.5                | R1.5               | 100                       | 600mm x 11.11m | 3                    | 20                 |
|                     | $\checkmark$  | $\checkmark$                         | 7.5                | R1.5               | 100                       | 650mm x 10.26m | 3                    | 20                 |
|                     | $\checkmark$  | $\checkmark$                         | 7.83               | R1.8               | 115                       | 450mm x 11.11m | 4                    | 20                 |
|                     | $\checkmark$  | $\checkmark$                         | 7.83               | R1.8               | 115                       | 510mm x 9.80m  | 3                    | 20                 |
|                     | $\checkmark$  | $\checkmark$                         | 7.83               | R1.8               | 115                       | 600mm x 11.11m | 3                    | 20                 |
|                     | ✓   | ✓                                    | 7.83               | R1.8               | 115                       | 650mm x 10.26m | 3                    | 20                 |
| Underfloor Sections | <b>✓</b>  | <b>√</b>                             | 16.67              | R1.9               | 90                        | 370mm x 1.14m  | 16                   | 6.75               |
|                     | $\checkmark$  | $\checkmark$                         | 16.67              | R1.9               | 90                        | 425mm x 1.14m  | 16                   | 7.75               |
|                     | $\checkmark$  | $\checkmark$                         | 16.67              | R1.9               | 90                        | 475mm x 1.14m  | 14                   | 7.58               |
|                     | $\checkmark$  | $\checkmark$                         | 16.67              | R1.9               | 90                        | 580mm x 1.14m  | 12                   | 7.93               |
|                     |   | $\checkmark$                         | 15                 | R2.8               | 140                       | 370mm x 1.14m  | 10                   | 4.21               |
|                     |   | $\checkmark$                         | 15                 | R2.8               | 140                       | 425mm x 1.14m  | 10                   | 4.84               |
|                     |   | $\checkmark$                         | 15                 | R2.8               | 140                       | 475mm x 1.14m  | 10                   | 5.41               |
|                     |   | $\checkmark$                         | 15                 | R2.8               | 140                       | 580mm x 1.14m  | 8                    | 5.28               |



Book your **FREE Home Assessment today** 



www.brightr.co.nz

0800 888 766



registered Correct nZone June 20

Calculations are based on 500ml PET Bottles (16.2g)