

# Underfloor Sections

Mammoth® 100% polyester insulation is safe and easy to install. Mammoth Underfloor Sections are designed to be friction fit under the floor of new or existing homes and buildings. They will create a warmer, healthier home or work environment.

## Before you get started

- Mammoth is safe to install - it will not irritate your skin when you touch it - in fact it is made from the same material that you may find in your pillows and duvets.
- For further safety information on installing insulation refer to NZS4246 Appendix B and the HSE Act.

## Recommended tools

- Tape measure and/or digital laser meter.
- Wide blade craft knife with a pack of replaceable blades (Tajima or similar) or a Bahco insulation saw.
- Glow spray paint.
- Multi LED headlamp.
- Ventilated goggles, dust mask and protective clothing (for protection from dirt, dust, and other safety risks).

## Easy to install

- Manufactured in sections (pads), it is easy to install as it is friction-fitted and squeezed to fit snugly between the underfloor joists.
- Mammoth Underfloor sections come in pre-cut sections of varying widths.
- Before installation, measure the distances between the floor joists. We recommend every single bay is measured as joist spacings can vary in a house. This will help in selecting the right width/s to minimise cutting and installation time.

## Cutting Mammoth to fit

- On-site cutting should be kept to a minimum using the recommended knife and blades. Change the blade regularly.
- Avoid cutting Mammoth underfloor insulation against joists or bearers, or near electrical wiring.

## Things to look out for

### Electrical Wires

- Mark the position of services; eg electrical wires and telephone lines as you need to cut the insulation accordingly.
- Where possible fit Mammoth insulation behind electrical wires and pipes.
- Take care not to damage electrical wires or phone lines - treat all wires as live.
- Warning tags should be placed at points where Mammoth underfloor insulation covers electrical wiring.

### Pipes under the floor of existing homes

- Maintain a 100mm gap between the insulation and waste pipes. This will also ensure adequate room for a serviceman requiring access to the pipes.

### Lights

- For lights under the floor maintain a 200mm gap between insulation and the light.

### For Brick Veneer or a building with a Ventilated Cavity in the wall

- Do not block the ventilated cavity with insulation as it will reduce the air circulation and result in moisture in the wall. Only fit Mammoth underfloor sections to the outer edge of the bottom plate, leaving the cavity clear.

### Other Hazards

- Maintain a 50mm clearance for brick/concrete chimneys. For other clearances, refer to NZS4246.

## How to install Mammoth Underfloor Sections

- This product is designed to be friction-fitted between the floor joists. Please use the following products for the following timber floor joist frames.

400mm centre joists =	370mm wide insulation
450mm centre joists =	425mm wide insulation
500mm centre joists =	475mm wide insulation
600mm centre joists =	580mm wide insulation

### R-value

This product will achieve nominal stabilised thickness and R-value within 72 hours after being fitted. However the performance of this product may be reduced if stored for a prolonged period of time in its compression packaging. The total installed R-value of Mammoth insulation depends on the building materials, design and installation, and may be greater, equal or less than the stated R-value of the product.

- Begin by sitting the long edge of the pad against the inside of the joists.
- Fit the section hard up against the floorboards and compress or fold the remainder of the section against the other joists.
- For any framing outside of those listed - you can either cut the product to suit the sections being a minimum of 25mm oversize, or the excess width can be folded down one side of the joist but must not exceed past the bottom of the floor joist (for R1.9 only - R2.8 does not require folding down). Where floor joists are spaced 500mm or greater, additional support may be required to prevent sagging.
- Fit the next pad by butting both ends together without gaps. It should sit firmly in place. There should be no gaps, tucks or creases.
- Continue the process until the underfloor is fully insulated.
- At the end of the installation, check and repair any visible gaps, tucks or folds. Use any offcuts to fill small gaps.

### Double layering

- To achieve a higher R-value, we recommend a double layer of insulation.
- For 190mm floor joists or above, you can double layer. If so we recommend double layering our R1.9 underfloor sections.

