

## General

NOVAtherm 100% polyester insulation is safe and user friendly. Protective dust masks, safety glasses, knee pads and suitable clothing are recommended to protect against installation hazards. For further safety information refer to NZS 4246 Appendix B and the HSE Act.

### When installing NOVAtherm, be sure to:

- Keep the product dry at all times. Do not use NOVAtherm in situations where the product will come into contact with water or moisture. Allow a minimum gap of 25mm from any building surface that is damp or may become damp during the intended use of the building.
- Avoid compression of the product as it will adversely affect performance. Nominal thickness of the product should be maintained at all times. Butt joints firmly together to prevent loss of thermal performance; a supporting bridge (insulation offcuts) is recommended.
- Use sufficient product so that a snug fit is achieved around the edges. The product is easily torn to required lengths by hand. Cut to adjusted widths using shears or heavy duty scissors.

### Clearances per NZS 4246<sup>1</sup>

- Extractor fans (un-ducted/exposed) – 200mm
- Metal flues – 50mm
- Roofing material – 25mm
- Roofing underlay – 25mm
- Brick/concrete chimneys – 50mm
- Recessed light fittings (downlights)
  - If the manufacturer's specified clearances for downlights are known they shall be followed.
  - If they are not known then the following clearances shall be made:
    - Halogen lamps – 200mm
    - Incandescent lamps – 50mm
  - Where the type of lamp cannot be determined, a minimum clearance of 200mm shall be made between the downlight and insulation material.

<sup>1</sup>. NZS 4246: 2006 Amendment No. 1, correct as at September 2010

## Guidelines for walls

### Hazards in walls

When installing NOVAtherm wall insulation ensure that there are no live electrical wires. As the wall insulation is staple fixed we recommend that the installer follow the Power Off Policy in NZS 4246.

When working near electrical cables and equipment care should be taken to avoid damaging any electrical insulation. Wherever possible NOVAtherm should be laid behind electrical wiring (or pipes). It is important that NOVAtherm is not compressed. This can be achieved by cutting through part of the insulation and placing it around the wires (or pipes).

Refer to a registered electrician or qualified electrical engineer and / or AS/NZ 3000 for further guidance.

### Installation in walls

In addition to the above general information, be sure to:

- Fix the edge of NOVAtherm to the top plate using four staples. Do not staple through the entire thickness of the product as it will cause undue compression and reduce thermal performance.
- Drop, then tear the product to length 5mm greater than required to ensure a good friction fit. Staple to the nog. Repeat the process down the wall.
- Restrict the maximum length of a single drop to 3 metres.

## General guidelines for ceilings

### Hazards in ceilings

The hazards in the ceiling area include but are not limited to: sharp objects such as nails, heat exhaustion, dust inhalation, fragile ceilings and other dangers such as chimneys, downlights, hidden wardrobes, ventilation and air conditioning systems. For further guidance refer to NZS 4246.

### Tools required

Safety approved step ladder or moveable platform for walls, kneeling board for ceilings, lamp or torch, wide blade snap knife, staple gun (for walls and ceilings with pitch above 16°) and an installing stick such as a broom handle.

## Guidelines for specific ceiling types

### High Pitched roof with a pitch greater than 16°

Staple the upper and lower edges of the product to the timber members or battens at 100mm centres. Note: stapling is a hazard and must be carried out in accordance with NZ4246 Appendix B.

### Low Pitched roof

Start at opposite walls and work back to the manhole laying parallel strips. Fill the last strip by tearing appropriate widths and laying them in opposite direction to complete coverage.

Lay the product at right angles to the ceiling joists allowing it to sag into cavities.

### Truss roof

Lay the product in the same direction as the truss.

### Skillion roof with exposed rafters

Use pre-cut widths to ensure a snug fit.

Place product between purlins to provide a minimum air gap between insulation and roofing material of 25mm.

### Skillion roof with lined rafters

Use pre-cut widths to ensure a snug fit.

Insulate between rafters. To avoid slumping, when support is not provided by ceiling joists or battens, use strapping at 300mm centres.

### Installation in ceilings

A minimum clear space of 25mm shall be maintained between the insulation product and either the roof underlay or the roofing (if exposed) to prevent condensation wicking at the point of contact.

Blocking Off: Along the perimeter of the ceiling, open air pockets between the joists/truss chords ends shall be blocked off with NOVAtherm blanket (to the height of the joist).

This product will achieve nominated stabilised thickness and R-Value (if applicable) after 72 hours. The performance of this product may be reduced if stored for too long in its compression packaging. The total R-Value of NOVAtherm and NOVAfloor depends on installation and may be greater or less than the stated R-Value of the product.

