

Insulating Your Home

Insulation is essential to keep your home warm in winter and cool in summer. A well insulated home is up to 10°C warmer in winter and up to 7°C cooler in summer and can save as much as \$300 per year in reduced energy costs. When you use less energy in your home, you reduce greenhouse gas emissions and help conserve our precious energy resources.



Types Of Insulation And How They Work

There are two types of insulation products that work in different ways:

- Bulk insulation works by trapping pockets of still air within its structure. This air provides a barrier or resistance to heat flow.
- Reflective insulation works by a combination of reflecting large amounts of heat away from its polished metallic surface and/or by reducing the radiant heat being emitted from the surface.

Where To Insulate

Insulation should be installed in the roof, ceiling, external walls and under suspended floors. Existing homes can easily have insulation installed in the ceiling and under timber floors if crawl space is available. Walls can be insulated during recladding or replastering.

Which insulation should I use?

- **Batts** - glass fibre, rock wool, sheep wool and polyester - suitable for use in ceilings, framed walls and under timber floors.
- **Blankets** - foil backed glass fibre, polyester and rock wool - suitable for use under metal roofs.
- **Boards** - expanded or extruded polystyrene (may have foil attached) - suitable for use in cathedral or raked ceilings, under timber floors and suspended concrete floors, around concrete slab edges, and within framed and full masonry walls.
- **Loose fills** - cellulose fibre, sheep wool and granulated rock wool - suitable for use in ceilings, must be professionally installed.
- **Reflective** - reflective foil, concertina foil batts, sarking and multi-cell reflective foils - suitable for use directly under roof, in ceilings, framed walls and under timber floors.

How Is The Performance Of Insulation Measured?

When choosing bulk insulation, the most important factor to consider is its R-value.

The R-value is a measure of a material's resistance to heat flow, and therefore its performance. The higher the R-value, the greater the resistance to heat transfer, and the greater the energy savings.

Products with reflective surfaces often use an expression of emissivity - the lower the better.

Emissivity is the amount of heat being emitted from a surface.

		Walls
		Central Heating only

