# Fact sheet



# Keeping the heat in: Overview

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The first step to a warm home is to use the sun's warmth and keep its heat inside the house. This means you will need to spend less on heating your home.

### Using the sun: passive solar design

With smart design which optimises the heat of the sun, you can keep your home at a comfortable temperature throughout most of the year while cutting down on the need for heaters and fans/air conditioning units. This is known as 'passive' heating and cooling ('passive' in this context means no appliances or mechanical heating and cooling are used).

In winter, a well designed home will catch the sun's heat and store it inside your home. In summer, shading will keep the sun out and breeze will keep your home cool.

Read more in Fact sheets 'Passive solar design' and 'Keeping cool'.

## Draught proofing

Draught proofing is probably the simplest and least expensive step you can take to keep the warmth in your existing home. There are a lot of easy things you can do which will keep out draughts and keep your heated air inside.

Read more in Fact sheet "Keeping heat in: Draught proofing'.

#### Insulation, insulation, insulation

Insulation is essential to keep your home warm in winter and cool in summer. It stops your heated air escaping in winter and keeps the heat out in summer. A well-insulated home will cost less to cool and heat, and help to reduce noise levels and condensation.





Heat escapes through the ceiling, floor, walls and windows.

Research is increasingly showing that it is not enough to insulate just one of these – once you have some insulation in your ceiling and under your floor, you should consider insulating your walls. It is definitely worth considering wall insulation during renovations when you may be replacing plasterboard or when you are adding new walls or rooms to your home.

Read more in Fact sheet 'Keeping heat in: Insulation'.

#### Windows

Standard single glazed windows, especially those with aluminium frames, lose a lot of heat. The good news is that there are simple steps you can take to stop heat loss before double glazing. Well-fitted, lined curtains or blinds which sit snug to the wall are a good start. There are also affordable shrink wrap insulation kits which create the same effect as double glazing.

There are increasingly more double glazing options available in New Zealand. Secondary glazing, inserting a second pane of glass, acrylic or plastic sheets in or on to an existing window frame, is an alternative to completely replacing your single glazed windows.

Read more in Fact sheet 'Keeping heat in: Windows'.

For more information:

- See Fact sheets on
  - Passive solar design
  - Keeping cool
  - Keeping heat in: Insulation
  - Keeping heat in: Draught proofing
  - Keeping heat in: Windows