

# INSULATION

## A well-insulated, and ventilated, home will save on energy costs and provide a more comfortable place to live

**Good insulation, which is installed correctly, will help keep your home warmer in colder months (or cooler in hotter months) and saves money on your energy costs. Warm indoor temperatures, along with adequate ventilation, make for a drier and healthier place to live. Furthermore, good insulation will increase the capital value of your property and can additionally reduce noise levels.**

In an un-insulated home most of the heat loss (42% average) is through the ceiling. Other areas of heat loss are through the floor (20%) and walls (24%). The rest can be lost through windows and drafts under doors etc. Even older insulated homes can suffer high energy costs if insulation is poorly installed or inadequate quantities have been used. Properly insulating your home will decrease this heat flow by providing an effective resistance to the flow of heat thus reducing your energy costs. Some industry estimations suggest the amount of energy used to heat a home can be reduced by 30%, on average after good insulation is installed.

**The New Zealand Government recently proposed changes to the Residential Tenancy Act** which is strengthening the requirements for landlords to ensure properties are adequately insulated. The new law will require retrofitting of ceiling and underfloor insulation in rental homes over the next four years. This applies from 1 July 2016 for social housing that is heavily subsidised by Government, and from 1 July 2019 for other rental housing. (There will be exemptions).

There will also be a new requirement from 1 July 2016 for all landlords to state in tenancy agreements the level of ceiling, underfloor and wall insulation to help better inform tenants.

If you are not sure about how effective your insulation is you should contact a local insulation company and they will do a 'free, no obligation' assessment of your property. Alternatively you can check yourself. For ceilings check the insulation is ideally over 75mm thick and is evenly spread around the whole area. If not, the insulation is unlikely to be working effectively and it will be worthwhile getting a top-up. (Note, special care is required around down lights due to risk of fire)

### Choosing Insulation R-Values

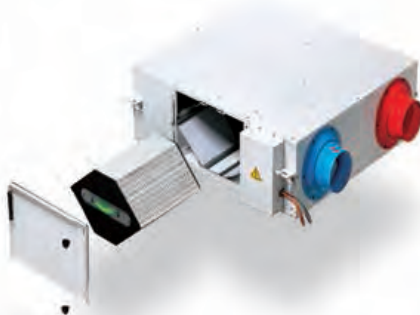
An insulating material's resistance to conductive heat flow is rated in terms of its thermal resistance, known as its R-value. The higher the R-value, the greater the insulating effectiveness of the product. The amount of insulation or R-value you'll need depends on your climate, type of heating and cooling system, and the part of the house you plan to insulate. There are minimum code requirements for insulation in new homes or additions. It is worth spending a little more to exceed these insulation requirements to get an even more energy efficient home and lower long term energy bills.

### Types of Insulation

Choosing the best insulation for your home, from the many types of insulation (including glasswool, polyester, polystyrene, sheep wools, mineral wools etc.), on the market can be a

challenge. You'll need to know where you want or need to install the insulation, and what R-value you want the installation to achieve.

The most popular insulation material in New Zealand and many parts of the world is Glasswool. Glasswool is manufactured mainly from recycled glass which is originally derived from natural materials often found in sand. Glass wools are non-combustible which means they do not catch fire even when exposed to flame. They have been used for over 50 years and are a safe use of insulation. Another common insulation material is polyester which is an easy to handle material made partly from recycled plastic bottles.



### Ventilation

The problem with a lot of New Zealand homes during the cooler months is we keep windows and doors closed to keep the warmth in. While this will save on our energy costs, it causes the air to become stale, damp and polluted. Good ventilation, as stated in the Building Code, requires at least a third of the air volume inside the home to be replaced every hour when inhabited. This can be achieved by opening windows and doors however this means the loss of a lot of warm air. A far more effective way to get fresh air into your home in the colder months is to use a good Balanced Air Ventilation system, with true heat recovery technology. These systems effectively capture the heat from outgoing stale moist air and transfer to fresh dryer incoming air, from outside the house, significantly reducing heating costs and improving family's health and comfort.

To determine Insulation and Ventilation options for your property give Premier Insulation a call on 0800 467 855 or visit [www.premierinsulation.co.nz](http://www.premierinsulation.co.nz) and [www.premierair.co.nz](http://www.premierair.co.nz) ■

## THE PREMIER INSULATION PROMISE

**3**  
HOURS

We'll respond to every insulation enquiry within 3 hours, 9am - 5pm Monday to Friday

**3**  
DAYS

We'll visit and quote within 3 working days of your initial enquiry

**8**  
DAYS

We'll complete within 8 working days from when you say yes to the quote



[premierinsulation.co.nz](http://premierinsulation.co.nz) | 0800 467 855

[homeprize.co.nz](http://homeprize.co.nz)

ENTER TO WIN A HOME PRIZE PACKAGE OF YOUR DREAMS