

PART 3 OF A  
THREE-PART SERIES  
**WARM  
DRY and  
COZY**

# TAKE HEATING TO HEART

Good insulation is at the heart of any warm and dry home, writes **Carolyn Brooke** in the third of her three-part series on cozy homes

**INSULATION TO A** house is like a woollen jersey to a person; it helps keep heat in and makes you warm and cozy on cold winter days. For home heating to be efficient, adequate insulation needs to be in place otherwise the warmth just escapes.

Insulated rental properties are more common than they were four years ago thanks to the Government's Warm Up New Zealand – Heat Smart funding programme. Aside from happier and healthier tenants, benefits to landlords in insulating a property include increasing its appeal to tenants and attracting better rents and longer-term tenancies.

While funding under the current scheme ends next month, the good news is that assistance for insulating rentals will still be available for some landlords. The Government has allocated \$100 million over three years to the Warm Up New Zealand – Healthy Homes programme, which will target lower income households and families, especially where there are children and high health needs. Full details of the new scheme, which will also be administered by Energy Efficiency Conservation Authority (EECA), are yet to be released but it will involve collaboration with community organisations, trusts and other third parties to make about 46,000 homes warmer and drier.

Projects will not be available in all parts of the country and recipients will need to have a Community Service Card as well as meet other criteria. It will be free for eligible households but landlords may be required to contribute.

EECA's residential general manager Robert Linterman says tenants are more aware of insulation and the importance of having a warm and dry home, with reports of up to 80% of tenants now asking about insulation and heating against up to 20% two years ago.

"Landlords clearly see the benefits," Robert says. "The programme has been a game changer for New Zealand and has created strong awareness about the benefits of insulation and most people now understand insulated houses are warmer and healthier."

Aside from being easier and cheaper to heat, insulated homes help reduce respiratory illnesses and diseases caused by cold and damp housing like rheumatic fever. About 30,000 rental properties are among the 230,000 homes that have benefited from the scheme so far.

"Tenants are more likely to stay longer in houses that are warmer and more comfortable. If you look at property sales and rental listings you will also see insulation is increasingly promoted as a selling point."

When assessing your property's insulation needs, you must first check the state of any existing insulation. To do this, have a look in the roof space using the hatch and a step ladder. Insulation should not be less than 12cm thick and should cover the whole ceiling without gaps. If insulation is damaged or is damp then you may need to replace it rather than just adding to it. Likewise, look underneath the house at the state of any existing insulation.

When insulating your property, you can choose between blanket and biscuit insulation of wool, polyester, fibreglass or mineral fibre materials. The average cost of ceiling and under-floor insulation under the current scheme is \$2,077 after the subsidy.

Mark Trafford of Maintain to Profit says people should get three quotes, two from the scheme and one independent of it. He also suggests looking for insulation specials during summer time when demand is lower.

"I have heard of some cases where people are getting cheaper prices than those who aren't part of the scheme because the providers need the work."

Quotes will vary, mainly because of the price of the different products each service provider uses so make sure you are comparing like for like.

About 70% of the rental properties Mark sees have no insulation or ventilation system in place and suffer from cold or damp problems.

"This is an area where we strongly suggest that you do spend money," he says.

"With Government grants available

### TENANTS ARE MORE LIKELY TO STAY LONGER IN HOUSES THAT ARE WARMER AND MORE COMFORTABLE

there is no excuse when renovating not to include this in your budget. Simple ceiling insulation or under floor insulation on wooden floorboards or a Smartvent or DVS or similar system makes a huge difference to a property.”

He's seen new painted properties in Auckland become mouldy in as little as three weeks due to having no insulation or ventilation system.

#### WINDOWS

Double glazing windows reduces heat loss, outside noise and window condensation. Double glazing doesn't come cheap and is not very common in New Zealand especially in rental properties. But good thermal backed curtains are easy and relatively cheap and will reduce heat lost through window glass.



#### FLOORS

Aside from under-floor insulation, a good thick underlay and carpet will help keep heat in. When considering floor coverings for your rentals, don't just look at price but look at quality and thickness also. If current underlay is in good condition then you may not need to replace it, just opt for a good carpet. Alternatively existing carpet may act as underlay in some circumstances.

### NEW BUILDS

Thankfully now, all new homes are insulated as it's much easier to have insulation done properly at the outset than to fix later. If you're designing a new home, make the most use of the sun as possible. Heat from the sun is free and is the most environmentally-friendly home heating option available. You'll need large north-facing windows to allow the sun to shine in during the day, a large thermal mass such as a concrete floor to store the heat and insulation so the heat isn't lost too quickly. You'll probably still need other heat sources for the coldest days.

#### DRAUGHTS

A draughty house is harder to keep warm but thankfully the problems are usually fairly cheap and easy to fix. Some simple tricks for finding draughts include looking for curtain movement on a cold, windy day or use a damp hand or a candle to trace the source of your draughts.

Doors and windows. Check door and window hinges and latches and if loose then tighten them. If doors or windows don't fit snugly in the frames then look at repairing them. You can fit draught excluders for gaps under doors and use brush strips for external doors.

Damaged rubber seals around aluminum joinery can easily be replaced. Weather stripping can be used to seal gaps around doors or windows or seal behind trims with paintable sealant. Weather stripping is cheap to buy and easy to install and can be purchased from hardware stores.

There is a range of self-adhesive seals available, depending on the size and shape of the gaps. Just make sure you choose the right seal for the job.

#### SHOULD CHIMNEYS AND FIREPLACES

Gaps in the ceiling around the chimney can be closed with a non-combustible sealant. Unused fireplaces should be blocked – a rubbish bag filled with shredded newspapers can do the trick but make sure it's made very obvious so one tries to use the fireplace.

Ceilings and floors. Make sure the ceiling hatch is fitted correctly and close gaps between floorboards with silicon-based or latex sealant. Make sure it's correctly fitted and use weather stripping to seal it. Repair any holes in the floor and seal skirting boards.

#### LIGHTS AND APPLIANCES

Check for gaps around electrical wiring and plumbing and if any then close using silicone sealants (for smaller gaps) or polyurethane foam (for bigger gaps). Look behind kitchen and bathroom cabinetry and inside wardrobes and hot water

### EXTRA ASSISTANCE

You may be able to have the cost of insulating your rental property added to the mortgage to be paid back with interest over the term of your mortgage. Some banks will also waive associated fees. Contact a local insulation service provider and get a quote. Take the quote to your bank and discuss the options for adding it on to your existing mortgage.

EECA is also working with local councils to allow ratepayers to pay insulation and heating costs over a period of time as part of their rates bill. Contact your council directly for more details. With Auckland Council, you can apply for up to \$5,000 financial to get your property retrofitted. To be eligible your house must be built before 2000 and you must be up to date with your rate payments and have a good payment history.

Also in Auckland, the Maungakiekie-Tamaki Local Board is launching a pilot project that will involve some funding for landlords that may include insulation, clean heating or a tenants' kit made up of items like a fire extinguishers, draft strips and curtains.

cupboards. Ideally your rental property has a bathroom extractor fan and kitchen rangehood and if so check attached backdraught shutters are working properly.

Air leakage can happen through some recessed downlights. It's probably best to replace older ones. Until mid-2012, most styles of downlights could not be sealed or covered in case of being a fire hazard, so holes were required in insulation to create a safety barrier preventing this. Surface mounted or suspended light fittings allow you to plug the holes in the ceiling and can be insulated right over.

The benefits to landlords in insulating properties are extensive. Not just in terms of tenant wellbeing, but also in improving the property's overall performance as a rental. Insulation also helps the property look after itself as it's easier to heat and likely to be drier with fewer damp and mould problems. Insulation can also help improve the value of a property and is a selling point.

Insulation ups the ante across the board and with proposals around a possible rental BWF perhaps it's a case of jumping now instead of being pushed later. ■