

	Currently	Changes to	Why was this change needed?
<b>Heating Standard</b>			
<b>Heating formula assumption changes</b>	a ventilation rate of 1.0 air change per hour	a ventilation rate of 0.5 air changes per hour	<p>Since the healthy homes standards were introduced in July 2019, Te Tūāpapa Kura Kāinga - Ministry Of Housing and Urban Development has received feedback from Kāinga Ora, developers, engineers and building scientists that this formula over-estimates the size of heater necessary for certain types of building. These are homes built since around 2008 to the current building code requirements for insulation and glazing and apartments.</p> <p>These types of building are generally more thermally efficient and so are less draughty, lose less heat to neighbouring rooms and do not take as much energy to heat up (the so called 'pick up load'). As a result three assumptions used in the current heating formula, which assume much lower levels of efficiency, are not suitable for these types of buildings.</p>
	a pick up load (the energy initially required to heat the living room to the required temperature of 18°C) of 40W/m <sup>2</sup>	a pick up load of 20 percent of the base heat requirement	
	heat loss of 50 percent from the living room to adjacent internal rooms.	heat loss of 25 percent to adjacent internal rooms.	
	<b>Applies to:</b> The change to the heating formula will <b>only</b> apply to:		
	<p>a) Dwellings built to the current building code requirements for insulation and glazing which applied from 2007 to 2008 onwards, including properties insulated and glazed throughout the thermal envelope to these standards.</p> <p>b) Apartments of at least three storeys and 6 units or more.</p>		
All other types of building will continue to use the current heating formula.			
<b>Provision of a different pathway to show compliance with the policy intention for all dwellings</b>	The required heating capacity must be calculated using the heating formula or the heating tool in every case.	As an alternative to the heating formula/tool a specialist will be able to calculate the heating needs based on criteria including that the heating device or system used will heat to and maintain the home at 18 °C on the coldest day of the year.	<p>There are still situations where the heating formula cannot take specific aspects of a building into consideration.</p> <p>This is particularly the case for dwellings using innovative and energy-efficient technology, such as high performance windows, doors and insulation or mechanical ventilation and heat recovery.</p> <p>Under this alternative pathway a qualified specialist can calculate the heating needs to heat to, and maintain the living room of a rental home at, 18 °C on the coldest day of the year - without the need to use the heating formula.</p> <p>This provides a reasonable period for landlords of these</p>

<p><b>Provision of a grace period</b></p>	<p>90 day compliance period after the commencement of a new or renewed tenancy.</p>	<p>For buildings subject to the new heating formula, the heating compliance date is 9 months after the changes come into effect, meaning landlords in this position will have until 12 February 2023 to comply.</p>	<p>types of building to begin planning their compliance with the new heating standard, and potentially altering plans made for compliance under the old formula. These arrangements will take more time than usual and it is right to factor in additional time for this happen.</p>
<p><b>Increases the transitional ‘top up’ heating allowance</b></p>	<p>Allows a rental home with a required heating capacity of more than 2.4kW but with undersized qualifying heaters installed before 1 July 2019 to use electric heaters to ‘top up’ where the qualifying heaters are short by <b>1.5kW or less</b>.</p>	<p>Allows a rental home with a required heating capacity of more than 2.4kW but with undersized qualifying heaters installed before 1 July 2019 to use electric heaters to ‘top up’ where the qualifying heaters are short by <b>2.4kW or less</b>.</p>	<p>The Energy Efficiency and Conservation Authority has found, through their Warmer Kiwi Homes programme, that there are many heat pumps installed before 1 July 2019 that are undersized relative to the heating formula by more than 1.5kW, often significantly more.</p> <p>This is due to the lack of consistency in the methods used by engineers to calculate heating requirements prior to the introduction of the heating standard. Increasing the top up allowance to 2.4kW recognises this discrepancy</p>
<p><b>Increasing the tolerance for existing insufficient heaters from 80% to 90%</b></p>	<p>The heating standard is deemed to be met where large living room heaters each with a heating capacity of more than 2.4W, were installed prior to 1 July 2019, and do not meet the required heating capacity under the healthy homes standards but are <b>within 90 percent</b> of it.</p>	<p>Relaxes this tolerance so that large living room heaters <b>within 80 percent</b> of the required heating capacity will be deemed to meet the heating standard.</p>	<p>This change avoids penalising landlords who have acted in good faith prior to the healthy homes standards being introduced and installed an undersized heating device in their rental property. It allows homes with living room heaters below the current 90 percent threshold but at or above the 80 percent threshold to avoid the need to ‘top up’ using electric heaters.</p> <p>The 80 percent threshold is only available to homes with large living room heaters (such as heat pumps, wood burners and flued gas heaters) over 2.4kW installed before 1 July 2019 which are within 80 percent of the required heating capacity – for example 2.4kW when the capacity should be 3kW. Once the large heaters are replaced, the home must meet the heating standard in full.</p>

<p><b>Change in regulation 32 “Modified standard if landlord not owner of whole of tenancy building”.</b></p>	<p>Where the landlord cannot fully comply with the healthy homes standards because they don't own the whole tenancy building, they must take all reasonable steps to comply with the standards to the greatest extent reasonably practicable.</p>	<p>Clarifies that, while taking all reasonable steps, the landlord must not install an unacceptable heater and must install at least 1 qualifying heater that has a heating capacity of at least 2kW. If the required heating capacity of the room is greater than 2kW, an electric heater is not an unacceptable heater.</p>	<p>A landlord should not install an unacceptable heater such as an unflued gas heater or open fire. However, in these circumstances, an electric heater is appropriate. Electric heaters larger than 2.4kW (e.g. a 3kW panel heater) are now available in New Zealand.</p>
<p><b>Allow geothermal energy to satisfy the heating standard</b></p>	<p>Geothermal heating systems, which directly provide heat to the living room, and for which the heating capacity is not stated do not satisfy the requirements of the healthy homes heating standard.</p>	<p>Allows geothermal heating systems, which directly provide heat to the living room, and for which the heating capacity cannot be stated, to satisfy the requirements of the healthy homes heating standard.</p>	<p>This is aimed at a relatively small number of homes (around 1,500 to 2,000), primarily in Rotorua, which do not use a heat pump and typically deliver heating to the living room through hot water pumped through either pipes in the floor or radiators.</p> <p>Stakeholders have stated that these systems are known to keep homes extremely warm but may not have a stated kilowatt capacity. Without this, homeowners do not know if their home complies with the heating standard.</p> <p>This approach recognises that tenants in these homes have access to a very low cost heating system and additional heating is unlikely to be needed to meet the policy objectives of the heating standard.</p>
<p><b>Clarify that landlords not required to install alternative moisture barrier</b></p>	<p>A tenancy building does not need to comply with the ground moisture barrier standard if it is not reasonably practicable to install a polythene ground moisture barrier or an alternative ground moisture barrier.</p>	<p>Clarifies that, in circumstances where it isn't reasonably practicable to install a polythene barrier, a landlord won't be required to install an alternative product instead.</p>	<p>The minimum requirement of the moisture ingress and drainage standard is a polythene barrier and landlords are never compelled to install an alternative moisture barrier.</p>

Ventilation standard			
<p><b>Alternative ventilation systems for dwellings built to the current building code to satisfy the standards</b></p>	<p>Continuous mechanical ventilation systems would typically not meet the requirements because they do not meet the minimum exhaust capacities or ducting diameters specified in the current Regulations.</p>	<p>Mechanical ventilation systems that continuously extract from kitchens and bathrooms will meet the Ventilation Standard where they are installed in dwellings that have first received building consent on or after 1 November 2019, provided the mechanical ventilation system was part of the original building consent and continues to meet the requirements of that building consent.</p>	<p>Continuous mechanical ventilation is considered an alternative approach to intermittent ventilation (e.g. extractor fans which are required by the standard) for well insulated, more modern homes and is permitted under the Building Code. However the exhaust capacities of these systems are typically lower than the minimums required by the Ventilation Standard (50 litres per second for a kitchen and 25 litres per second rates for a bathroom) and may not meet minimum ducting diameters (150mm for kitchens and 120mm for bathrooms). Under our changes only systems installed in homes built on or after 1 November 2019, which formed part of the original building consent and continue to meet its requirements, will qualify.</p>
<p><b>Alternative ventilation systems for retrofitted dwellings</b></p>	<p>Continuous mechanical ventilation systems would typically not meet the requirements because they do not meet the minimum exhaust capacities or ducting diameters specified in the current Regulations</p>	<p>Allow retrofitted homes with continuous mechanical ventilation that meet with the following additional criteria will meet the Ventilation Standard:</p> <ul style="list-style-type: none"> <li>• designed to provide ventilation for multiple rooms; and</li> <li>• for a kitchen, has an exhaust capacity of at least 12 l/s; and</li> <li>• for a bathroom, has an exhaust capacity of at least 10 l/s</li> </ul>	<p>This amendment will help Kāinga Ora and other landlords who have extensively retrofitted their rental homes with innovative and effective continuous mechanical ventilation systems</p>