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**The Royal Australasian College of  
Physicians submission to the Ministry of  
Housing and Urban Development**

October 2018

## Introduction

The Royal Australasian College of Physicians (RACP) welcomes the opportunity to submit feedback on the Ministry of Housing and Urban Development's (HUD) Healthy Homes Standards (the Standards).

The RACP works across more than 40 medical specialties to educate, innovate, and advocate for excellence in health and medical care. Working with our senior members, the RACP trains the next generation of specialists, while playing a lead role in developing world best practice models of care. We also draw on the skills of our members to develop policies that promote a healthier society. By working together, our members advance the interest of our profession, our patients and the broader community.

Our submission focuses on reducing the health impacts experienced by people living in rental homes of poor condition and quality.

The RACP's key points are:

- Housing is a social determinant which impacts people's health and wellbeing
- The Standards should focus on the potential to improve health outcomes
- While the Standards will go some way to improve health outcomes, and introduce a minimum requirement for rental properties in New Zealand, some factors influencing tenant behaviour are outside the scope of this activity.

## Healthy Homes Standards

The RACP welcomes the renewed interest and energy from the government and a cross-section of government agencies including MBIE in the social determinants of health – those are the conditions in which we are born, grow, live, work and age, and include housing<sup>1</sup>. Housing is a key determinant of health because it is a critical living environment: we eat, sleep, care for dependents, socialise, study, play and relax at home. For people who spend a higher proportion of time at home, including infants and children under five years of age, older people, and disabled people, the quality of housing has a greater impact on health and wellbeing<sup>2</sup>.

The objective of the Standards is to establish minimum Standards to allow New Zealand tenants to live in warm and dry rental homes. The proposed Standards identify heating, insulation, ventilation, moisture ingress, drainage and draught-stopping as five key domains where a Standard could be set and implemented to ensure rental properties in New Zealand meet minimum Standards and enable people and their whānau to live in a warm, dry home.

The discussion document on the proposed Standards acknowledges that New Zealand's rental housing stock is, overall, in poorer condition than owner-occupied housing stock and more likely to be inhabited by populations which experience greater health impacts from poor housing conditions<sup>3</sup>.

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<sup>1</sup> World Health Organization. Commission on Social Determinants of Health – final report. [Internet]. Geneva: World Health Organization; 2008. Available from [http://www.who.int/social\\_determinants/thecommission/finalreport/en/](http://www.who.int/social_determinants/thecommission/finalreport/en/). Accessed 8 October 2018.

<sup>2</sup> World Health Organization European Centre for Environment and Health. Environmental burden of disease associated with inadequate housing: methods for quantifying health impacts of selected housing risks in the WHO European region. [Internet]. Denmark: WHO Regional Office for Europe; 2011. Available from <http://www.euro.who.int/en/health-topics/environment-and-health/Housing-and-health/publications/2011/environmental-burden-of-disease-associated-with-inadequate-housing.-summary-report>. Accessed on 11 October 2018.

<sup>3</sup> Ministry of Business, Innovation & Employment. Healthy Homes Standards. Wellington: Ministry of Business, Innovation & Employment; 2018.

Housing stock in poor condition is more likely to have a detrimental effect on other social determinants of inhabitants, including employment and education. In addition, the document notes that existing data and information of the quality and condition of rental housing stock is limited. The introduction of a measurable Standard for rental properties could enhance the data captured in large surveys, including the Census and General Social Survey, rather than relying on representational, but smaller, samples through independent or government-commissioned research.

## RACP position

The RACP supports the objective of the Standards, which is in line with the RACP's **Make it the Norm** campaign (the "Campaign"), which advocates for health equity through the social determinants of health<sup>4</sup>.

Our campaign calls for policymakers to make health equity the norm to improve health outcomes for the most vulnerable people in our communities. We call for immediate actions including:

- **Making Healthy Housing the norm** by introducing a regulation to mandate a Warrant of Fitness and Health for residential dwellings,
- **Making Good Work the norm**<sup>5</sup> by promoting the Living Wage to support the health and wellness of employees and their whānau, and
- **Making Whānau Well-being the norm** by taking a child-centred approach to all legislation, policy, and regulation<sup>6</sup>.

The objective of the Standards is to establish minimum Standards to allow New Zealand tenants to live in warm and dry rental homes. The government has a responsibility to ensure people have access to adequate housing under multiple international treaties, including the International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of the Child, and the Convention on the Rights of Persons with Disabilities<sup>7 8 9</sup>. The RACP sees the implementation of the Standards

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<sup>4</sup> The Royal Australasian College of Physicians. Make it the Norm: Equity Through the Social Determinants of Health. Wellington; Sydney: The Royal Australasian College of Physicians; 2017. Available from <https://www.racp.edu.au/fellows/resources/new-zealand-resources/new-zealand-election-statement-2017>. Accessed on 8 October 2018.

<sup>5</sup> The Royal Australasian College of Physicians' Australasian Faculty of Occupational and Environmental Medicine defines 'good work' as engaging, fair, respectful, and balances job demands, autonomy and job security. Good work accepts the importance of culture and traditional beliefs. It is characterised by safe and healthy work practices and it strikes a balance between the interests of individuals, employers and society. It requires effective change management, clear and realistic performance indicators, matches the work to the individual and uses transparent productivity metrics. The Royal Australasian College of Physicians Australasian Faculty of Occupational and Environmental Medicine. Realising the health benefits of good work. Consensus Statement [Internet]; 2013; Updated 2017; Available from: <https://www.racp.edu.au/advocacy/division-faculty-and-chapter-priorities/faculty-of-occupational-environmental-medicine/health-benefits-of-good-work>. Accessed 8 October 2018.

<sup>6</sup> The Royal Australasian College of Physicians. Make it the Norm: Equity Through the Social Determinants of Health. Wellington: The Royal Australasian College of Physicians; 2017.

<sup>7</sup> United Nations Human Rights Office of the High Commissioner. International Covenant on Economic, Social and Cultural Rights. [Internet]. Geneva: United Nations Human Rights Office of the High Commissioner; 1966. Available from <https://www.ohchr.org/en/professionalinterest/pages/cescr.aspx>. Accessed on 8 October 2018.

<sup>8</sup> United Nations Convention on the Rights of the Child. Working methods for the participation of children in the reporting process of the Committee on the Rights of the Child. [Internet]. Geneva: United Nations Convention on the Rights of the Child; 2014. Available from [https://www.ohchr.org/\\_layouts/15/WopiFrame.aspx?sourcedoc=/Documents/HRBodies/CRC/CRC-C-66-2.doc&action=default&DefaultItemOpen=1](https://www.ohchr.org/_layouts/15/WopiFrame.aspx?sourcedoc=/Documents/HRBodies/CRC/CRC-C-66-2.doc&action=default&DefaultItemOpen=1). Accessed on 8 October 2018.

<sup>9</sup> United Nations – Disability. Article 28 – Adequate standard of living and social protection. [Internet]. New York: United Nations – Disability; 2018. Available from <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-28-adequate-standard-of-living-and-social-protection.html>. Accessed on 8 October 2018.

as a positive step towards building healthier communities, which in turn will lead to healthier whānau and healthier generations.

## Heating standard

Homes that are warm are more pleasant for inhabitants to live in, and act as protective rather than risk factors for influencing health outcomes. The New Zealand Energy Efficiency Conservation Authority (EECA) cites the World Health Organization's (WHO) criteria for recommended indoor air temperatures for optimal health: between 18 and 21 degrees Celsius<sup>2 10</sup>. For people who spend a lot of time indoors at home, such as infants, young children and older people, as well as people who have compromised immune systems, the WHO recommendations are higher, at 21-24 degrees Celsius<sup>2</sup>.

The RACP is encouraged to see that the Standards have referenced the WHO minimum temperature of 18 degrees Celsius, and notes that the average winter temperatures for New Zealand living rooms and bedrooms (across all housing tenures) are between 2 and 5.5 degrees cooler than the WHO-endorsed minimum. Different temperatures are associated with different health risks, for example:

- Temperatures lower than 16 degrees Celsius appear to impact respiratory function
- Temperatures below 12 degrees Celsius place strain on the cardiovascular system
- Temperatures below 6 degrees Celsius risk people developing hypothermia<sup>11</sup>.

### Location: where in the rental home should landlords be required to provide heating?

The RACP supports **Option Two** "In the living room and bedrooms" as the most comprehensive option for tenants' heating needs from a health outcomes perspective. Option One, which states that landlords should provide heating in the living room only, introduces a potential risk for overcrowded sleeping arrangements. There are many examples reported in the media and other commentary of families sleeping together in the living room because it has a fixed heating appliance like a heat pump, or due to the costs associated with heating multiple bedrooms<sup>12 13 14</sup>.

Overcrowded living conditions – including overcrowded sleeping arrangements – can increase the risk of infections, including respiratory tract infections, skin and soft tissue infections, can increase risk of Rheumatic fever, and can exacerbate existing chronic health conditions such as asthma and bronchiectasis<sup>15</sup>.

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<sup>10</sup> EECA Energywise. 3 Essentials for a healthy home. [Internet]. Wellington: EECA Energywise; 2018. Available from <https://www.energywise.govt.nz/at-home/3-essentials/>. Accessed on 8 October 2018.

<sup>11</sup> Mendell M, Mirer M, Cheung K, Douwes J, Torben S, Bønløkke J et al. Health affect associated with dampness and mould. In World Health Organization Guidelines for Indoor Air Quality: Dampness and mould. [Internet]. 2009; Geneva, Switzerland: World Health Organization. Available from <http://www.who.int/indoorair/publications/7989289041683/en/>. Accessed on 8 October 2018.

<sup>12</sup> Harrowell C. Auckland Housing NZ tenant says her cold home is making her daughter sick. [Internet]. Wellington: Harrowell C; 2018. Available from <https://www.stuff.co.nz/auckland/local-news/manukau-courier/107061095/auckland-housing-nz-tenant-says-her-cold-home-is-making-her-daughter-sick>. Accessed on 8 October 2018.

<sup>13</sup> Lynch K. Redundant dad desperate for warmth. [Internet]. Wellington: Lynch K; 2009. Available from <http://www.stuff.co.nz/national/2466417/Redundant-dad-desperate-for-warmth>. Accessed on 8 October 2018.

<sup>14</sup> Newport P. The other housing crisis. [Internet]. Auckland: Newport P; 2013. Available from <https://thespinoff.co.nz/society/03-07-2017/the-other-housing-crisis/>. Accessed on 8 October 2018.

<sup>15</sup> Baker MG, McDonald A, Zhang J, Howden-Chapman P. Household crowding in New Zealand: a systematic review and burden of disease estimate. [Internet]. [cited 2017 July 10] Wellington: He Kainga Oranga/Housing and Health Research Programme, University of Otago; 2013. Available from <http://www.healthyhousing.org.nz/publications/>. Accessed on 8 October 2018.

## Indoor temperature: what achievable indoor temperature should heating devices be sized for?

The RACP supports **Option Two**, which states that heaters provided by landlords must be capable of achieving **at least 20°C** in rooms applicable to the heating standard.

The RACP notes however, that while heating devices supplied by landlords may can achieve the recommended temperature of 20°C, devices will only be efficient and effective if the spaces and dwellings they are utilised in have an effective thermal envelope including appropriate and correctly installed insulation. As stated above, New Zealand housing stock is generally older and in poorer condition: insulation in new houses became compulsory in 1978, but there was no requirement to retrofit houses built in the decades prior, which comprised (and continues to make up) the bulk of housing in New Zealand<sup>16</sup>.

Although heating devices would be capable of meeting the recommended temperature of 20°C, devices supplied by landlords does not guarantee that tenants have the income available to run them. A lack of effective insulation in residential dwellings will compound energy poverty for many people in New Zealand: while a heating device such as a heat pump is present in the property, the existing insulation may not allow for warmth to remain inside the home, meaning the device will be operating sub-optimally, and at increasing expense.

## Heating devices: Should landlords only be required to provide heating devices where portable electric heaters are not capable of achieving the required indoor temperature?

Landlords should provide **both** fixed and portable heaters. One factor associated with overcrowding is the availability of a fixed heating device (such as a heat pump or a wood burner) in a common area (like a living room), meaning whānau will tend to sleep together in one heated room, rather than in separate bedrooms which are unheated. Overcrowded sleeping arrangements are also an outcome of fuel poverty, where the heating of one room is found to be more cost-effective for whānau who actively limit electricity use due to high costs. Consequently, whānau will crowd together for warmth. Some of the health outcomes associated with overcrowding are outlined in this submission above, including infectious disease transmission.

Fuel poverty is commonly defined as a household spending more than 10 per cent of income on fuel costs (such as electricity and gas)<sup>17</sup>. Other studies employ alternative measures for fuel poverty: low income households with high energy costs, and households reporting needing to ration or 'go without' power due to the expense. Using these measures, researchers have found even higher rates of energy poverty in New Zealand; between 20 and 25 per cent<sup>18 19</sup>. While the pricing of electricity is out of the scope of this consultation, it is clear from anecdotal reports and the scientific evidence base that the costs of energy in New Zealand mean that whānau struggle to meet their energy and fuel needs.

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<sup>16</sup> White VW, Jones M, Cowan V, Chun S. BRANZ 2015 House Condition Survey: Comparison of house condition by tenure. BRANZ Study Report SR370 [Internet]. Wellington: BRANZ; 2017. Available from [https://www.branz.co.nz/cms\\_show\\_download.php?id=a1eff0a2fd9885ecf878ce475631df7025cf3b8](https://www.branz.co.nz/cms_show_download.php?id=a1eff0a2fd9885ecf878ce475631df7025cf3b8). Accessed 13 October 2018.

<sup>17</sup> Moore R. Definitions of fuel poverty: implications for policy. Energy Policy [Internet] 2012; 49: 19-26. Available from: [http://onpe.org/sites/default/files/pdf/documents/rapports\\_partenaires/definition\\_ep.pdf](http://onpe.org/sites/default/files/pdf/documents/rapports_partenaires/definition_ep.pdf). Accessed 10 October 2018.

<sup>18</sup> Lawson R and Williams J. The nature of fuel poverty in New Zealand. Available from <https://www.otago.ac.nz/centre-sustainability/otago055642.pdf>. Accessed 11 October 2018.

<sup>19</sup> Mckague F, Scott M, Wooliscroft B. Understanding the energy consumption choices and coping mechanisms of fuel poor households in New Zealand. Otago: University of Otago. Available from [https://ourarchive.otago.ac.nz/bitstream/handle/10523/6835/Mckague\\_et%20al\\_2016\\_Understanding%20energy%20consumption%20choices%20NZS2016V031N01\\_106.pdf?sequence=1](https://ourarchive.otago.ac.nz/bitstream/handle/10523/6835/Mckague_et%20al_2016_Understanding%20energy%20consumption%20choices%20NZS2016V031N01_106.pdf?sequence=1). Accessed 10 October 2018.

The RACP notes that the discussion document states “many tenants already own portable plug-in heaters so can easily provide these themselves”. Although this may be true for a number of tenants, it may not be the case for all tenants and all whānau who are renting. The RACP supports an equitable approach to the provision of heating devices where landlords ensure properties have fixed heating options, and offer tenants portable heating devices if tenants are unable to provide their own.

### **Acceptable devices: should we accept particular heating devices where we know they are affordable, efficient and healthy?**

The RACP supports the Standards mandating a range of heating devices which are energy efficient, affordable and healthy. Devices which meet this standard would include newer heat pumps (including ducted systems), wood burners, pellet burners, flued gas heaters, electric heaters. The RACP recommends HUD collaborates with EECA and Consumer NZ to set guidelines on appropriate devices which meet the requirements of the dwellings’ size, climate and environment<sup>20 21</sup>.

Similarly, the RACP strongly supports EECA and Consumer NZ to identify which devices and products are unsuitable for use as heating devices due to cost, inefficiency and safety concerns, such as unflued gas heaters. Unflued gas heaters add moisture into living spaces, and increases the amount potentially harmful gases (such as nitrogen dioxide) in the air<sup>22</sup>.

## **Insulation standard**

Houses lose a significant amount of heat through the roof (30-35 per cent); windows (21-31 per cent) and the floor (12-14 per cent)<sup>16</sup>. Houses with appropriate levels of insulation are able to be heated more effectively and efficiently. New Zealand research has shown that properly installed insulation can have as much as a 6:1 benefit to cost ratio for the health of people more sensitive to indoor temperatures, like infants, young children and older people<sup>23</sup>.

The RACP strongly supports minimum standards for insulation in rental properties. The 2015 BRANZ Housing Condition Survey found that nearly 750,000 New Zealand homes (47 per cent of all dwellings) had less than the 120mm of insulation in the ceiling cavity<sup>16</sup>. When examining rental properties specifically, 23 per cent of these dwellings had just 70mm of insulation in the ceiling, and 6 per cent of all rentals (more than 27,000 properties) had no insulation at all<sup>16</sup>.

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<sup>20</sup> Energy Efficiency and Conservation Authority. EECA Energywise: types of heater. [Internet]. Wellington: EECA Energywise; 2018. Available from <https://www.energywise.govt.nz/at-home/heating-and-cooling/types-of-heater/>. Accessed 12 October 2018.

<sup>21</sup> Consumer NZ. Home heating. [Internet]. Wellington: Consumer NZ; 2018. Available from <https://www.consumer.org.nz/topics/home-heating>. Accessed 12 October 2018.

<sup>22</sup> Gillespie-Bennett J, Pierse N, Wickens K, Crane J, Nicholls S, Shields D et al. Sources of nitrogen dioxide (NO<sub>2</sub>) in New Zealand homes: findings from a community randomised trial of heater substitutions. *Indoor Air* [Internet] 2008; 18(6): 521-8. Available from <https://www.ncbi.nlm.nih.gov/pubmed/19120502>. Accessed 15 October 2018.

<sup>23</sup> Grimes A, Denne T, Howden-Chapman P, Arnold R, Telfar-Barnard L, Preval N et al. Cost Benefit Analysis of the Warm Up New Zealand: Heat Smart Programme. Wellington: Motu Research; 2012. Available from <https://motu.nz/our-work/urban-and-regional/housing/cost-benefit-analysis-of-the-warm-up-new-zealand-heat-smart-programme/>. Accessed 7 October 2018.



## Minimum level installed: what should be the minimum level of ceiling and underfloor insulation installed in rental homes?

The RACP supports **Option Three** “An even higher minimum standard of ceiling and underfloor insulation, where the minimum standard for both existing and new insulation is akin to the 2008 Building Code”.

We note the findings of Barnard and Preval’s 2018 paper, which conducted a sub-analysis of rental properties by health events and costs by existing insulation status<sup>24</sup>:

- Insulating properties brings some reductions in health costs, particularly for children under 5 years
- Insulating properties leads to mortality cost savings across all tenure types
- There is at least as much value in topping up existing insulation as there is in a complete install.

We support a consistent standard for insulation across all rental properties. Option 3 would bring all rental properties in line with the 2008 Building Code, rather than a mix of the initial 1978 standards, and the 2001 Building Code. We note the findings of Alkema, McDonald and Stokes’ 2018 report on retrofitting properties with insulation, which found that<sup>25</sup>:

- Currently, there is little incentive for landlords to exceed the existing standard
- Exceeding the minimum standards could result in energy savings of \$30-\$160 per annum from marginal extra costs of \$280-400
- The current R-value standards of insulation, which are based on geographic location, may be confusing for consumers, and mean that the potential health benefits from exceeding minimum standards are not gained.

## Degradation levels: What should be the appropriate level that insulation can degrade over time before it needs to be replaced?

The RACP supports **Option Two** “Insulation can settle or degrade by up to and around 10 per cent before it is in an unreasonable condition”. A lower threshold for degradation of insulation (meeting the 2008 Code of 120mm) will mean that a 10 per cent compression or settlement in insulation in the ceiling will still maintain insulation at 2001 levels. Option One, which allows for up to 30 per cent degradation, will have the potential to compromise the health benefits and energy savings enabled by insulation, as noted in the Standards’ discussion document.

The RACP encourages HUD to include a requirement for landlords to check insulation annually, to ensure regular maintenance, check for movement of panels, and take action to address any major issues, such as moisture inundation, which affects the performance of insulation products.

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<sup>24</sup> Barnard L, Preval N. Health Homes Guarantee Standard cost benefit input: Warm Up New Zealand evaluation rental sector sub-analysis: differences in health sector events and costs by existing insulation status. Wellington: He Kainga Oranga Housing and Health Research Programme, University of Otago; 2018. Available from <https://hud.cwp.govt.nz/assets/Healthy-Homes/Otago-University-Cost-benefit-input.pdf>. Accessed 5 October 2018.

<sup>25</sup> Alkema A, McDonald H, Stokes F. BRANZ. [Internet]. BRANZ: Porirua; 2018. Available from [https://www.branz.co.nz/cms\\_show\\_download.php?id=4d7d54e1ceb327075986d1f2b137ebf5089feb7f](https://www.branz.co.nz/cms_show_download.php?id=4d7d54e1ceb327075986d1f2b137ebf5089feb7f). Accessed on 15 October 2018.

## Ventilation standard

Daily activities such as cooking, doing laundry, bathing and showering generate around 8 litres of moisture per day<sup>26</sup>. We note that EECA recommends opening windows daily, for around 10-15 minutes to promote air circulation and reduce mustiness and dampness in the home<sup>27</sup>.

### What is the most appropriate method of ventilation in rental homes?

The RACP supports **Option Three** “Openable windows as for Option Two (living room, dining room, kitchen and bedrooms) and appropriately sized and installed extractor fan(s) in rooms with a shower, bath or indoor cooktop”.

Drying laundered clothing, bedding and other items indoors can generate significant moisture and contribute to dampness, mould and can exacerbate allergies and asthma<sup>11 28</sup>. The 2015 BRANZ Housing Condition Survey revealed that while 49 per cent of households had clothes dryers, an overwhelming majority of these (72 per cent) were not externally vented. Considering a dryer-load can add up to 5kg of moisture to the indoor atmosphere, introducing Standards to require dryers to be externally vented may be an option available to reduce moisture introduced to the indoor environment via clothes drying<sup>16</sup>.

The RACP would support the inclusion of additional recommendations related to controlling moisture that landlords could action, such as providing a dehumidifier, installing a shower dome in the bathroom and ensuring that vented clothes dryers are appropriately ducted to an external vent.

## Moisture ingress and drainage standard

Excessive moisture in and around a property can have significant impact on the health of its residents and can damage furniture and belongings as well as ceiling and wall linings. The recent example of the “swamp house” in Papakura illustrates this well: a house with water pooling beneath it due to an incorrectly connected stormwater system and blocked drains. Moisture rises from the stagnant water and degrades the underfloor insulation, leaving the house cold, damp and mouldy. The condition of the house is correlated to the ongoing respiratory illnesses experienced by the infant children residing in the property<sup>29 30</sup>.

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<sup>26</sup> EECA Energywise. Keeping your home warm and healthy. [Internet]. Wellington: EECA Energywise; 2018. Available from <https://www.energywise.govt.nz/at-home/3-essentials/>. Accessed on 15 October 2018.

<sup>27</sup> EECA Energywise. Ventilation checklist. Wellington: EECA Energywise; 2018. Available from <https://www.energywise.govt.nz/at-home/ventilation/ventilation-checklist/>. Accessed on 15 October 2018.

<sup>28</sup> Asthma and Respiratory Foundation NZ. Tips for healthy homes. [Internet]. Wellington: Asthma and Respiratory Foundation NZ; 2018. Available from <https://www.asthmafoundation.org.nz/your-health/healthy-living>. Accessed on 15 October 2018.

<sup>29</sup> Fleming Z. Family paying \$520 a week for ‘third world swamp house’. [Internet] Radio New Zealand; 29 August 2018. Available from <https://www.radionz.co.nz/national/programmes/checkpoint/audio/2018660256/family-paying-520-a-week-for-third-world-swamp-house>. Accessed 15 October 2018.

<sup>30</sup> Smith A. Baby living in ‘swamp house’ still in intensive care. [Internet] Radio New Zealand; 26 September 2018. Available from <https://www.radionz.co.nz/news/national/367293/baby-living-in-swamp-house-still-in-intensive-care>. Accessed 15 October 2018.



## How should landlords protect rental homes against moisture entering the home and inadequate drainage?

The RACP supports **Option Two** “Landlords must ensure efficient drainage and guttering, downpipes and drains at their rental home, and ensure the subfloor has a ground moisture barrier, unless there is already adequate subfloor ventilation.” Houses that are constructed without a subfloor (such as those with a reinforced concrete slab foundation) will have no need for a ground moisture barrier. For clarity the RACP recommends the requirements are clearly articulated in the Standard, namely that Standards for guttering, downpipes and drainage are common to all dwellings, and that subfloor moisture barriers apply where the necessary.

## Draught stopping standard

Homes that are draughty can lessen the effectiveness of building performance interventions, such as retrofitted insulation, and the installation of energy efficient heating options. Draughts are more common in older houses, and the government’s own SmarterHomes website states that commonly “all houses built before 1960, and most houses built before the 1980s will require some form of draught stopping”<sup>31</sup>. Draught stopping could include installing weather stripping around doors and windows, re-grouting windows, installing key hole covers, and using brush strips at the base of external doors.

## What is the appropriate level of draught stopping to create warm and dry New Zealand rental homes?

The RACP supports **Option Two** “landlords must block any unused fireplaces and chimneys and stop any unnecessary gaps or holes which cause noticeable draughts and a colder home, and are 3mm or greater in around windows and doors, ceilings, floors and access hatches”.

Option two includes the stopping of unused fireplaces and chimneys, which can cause significant draughts entering into living areas. As heat pumps become a preferred heating device (present in 19 per cent of homes in 2007, and 38 per cent in 2015), chimneys and fireplaces are becoming less utilised as heating devices<sup>16 32</sup>. Stopping these openings either temporarily or permanently should be specified in the Standard addressing draught stopping.

## Compliance standard

In terms of maximising potential health gains from improving and upgrading rental homes in New Zealand, the RACP supports a single compliance date for all Standards.

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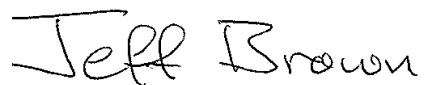
<sup>31</sup> Smarter Homes. Smart Guide: Stopping Draughts. [Internet]. Wellington: Smarter Homes; 2018. Available from <https://www.smarterhomes.org.nz/smart-guides/heating-cooling-and-insulation/stopping-draughts/>. Accessed on 15 October 2018.

<sup>32</sup> French L. Heat pumps rise in popularity. [Internet]. BUILD 104; Feb/Mar 2008. Available from <https://www.buildmagazine.org.nz/issues/show/build-104>. Accessed 15 October 2018.

## Conclusion

The RACP thanks the Ministry of Housing and Urban Development for the opportunity to provide feedback on this consultation and looks forward to the final draft of the Healthy Homes Standards. To discuss this submission further, please contact the NZ Policy and Advocacy Unit at [policy@racp.org.nz](mailto:policy@racp.org.nz).

Nāku noa, nā

A handwritten signature in black ink that reads "Jeff Brown". The signature is written in a cursive, slightly slanted style.

Dr Jeff Brown  
New Zealand President  
**The Royal Australasian College of Physicians**