11 February 2016

Ministry of Business, Innovation and Employment
Construction and Housing Markets Branch
15 Stout Street
PO Box 1473
Wellington 6140

By email: TenanciesSubmissions@mbie.govt.nz.

SUBMISSION on –
Proposed Residential Tenancies Regulations for insulation and smoke alarms

1. Introduction

Thank you for the opportunity to make a submission on the proposed Residential Tenancies Regulations for insulation and smoke alarms. This submission is from Consumer NZ, New Zealand's leading consumer organisation. It has an acknowledged and respected reputation for independence and fairness as a provider of impartial and comprehensive consumer information and advice.

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2. Overview

Our answers to the questions in the Discussion Document are set out in Appendix A below.

If you require any further information please do not hesitate to contact me.

Yours sincerely

Sue Chetwin
Chief Executive

APPENDIX A

1. How many smoke alarms should be required and who needs to provide them?

1A. If smoke alarms are required in all rental properties, do you support the minimum requirement of one alarm within 3 metres of each bedroom (and in a multi-level unit, there must be a working smoke alarm on each level)? If you don't support the proposal, what minimum requirement would you propose and why?

In our view, the proposed minimum requirement does not go far enough.

We support the New Zealand Fire Service's recommended practice of placing a smoke alarm in every bedroom, hallway and living area, on every level in the house.[1] But we recognise this is not always practical.

We suggest at minimum an alarm be required in every bedroom and hallway. If the house has levels without bedrooms an alarm should be installed in the living room and upstairs in the stairwell. Studies show an alarm placed above a stairwell is likely to activate before one fitted downstairs, even when the fire is downstairs.[2]

Requiring an alarm only within three metres of every bedroom introduces ambiguity into the regulations and could have a negative impact on compliance and the effectiveness of the alarms in a fire.

This ambiguity arises from the various possible interpretations of the requirement. For example, is three metres the distance from the door to the alarm? Is it measured directly, or on a flat plane?

In setting requirements for the placement of alarms, the following issues also need to be considered:

- In homes where the bedroom door forms a good seal with the frame and floor, the smoke from a fire in a bedroom may not reach the alarm in the hallway before fire engulfs the room to the extent that egress becomes difficult or impossible.
- Similarly, an open or poorly-sealed window could draw smoke away from the doorway preventing a hallway alarm from activating in time.
- Heavy and/or insulated bedroom doors, irregularly shaped hallways, large bedrooms and well-insulated homes may significantly attenuate sound levels from a hallway alarm before they reach bedrooms.
- Relying on a single alarm means there is no backup inherent in the home's alarm system. If the smoke alarm fails or is incorrectly installed, the whole system fails. Requiring a smoke alarm in every living area and bedroom as well as in the hallway greatly improves the overall reliability of a home's fire protection.

All of the above could be resolved by requiring an alarm in every bedroom, rather than in the hallway within three metres of every bedroom. This clear directive is easier for tenants

[1] New Zealand Fire Service. *Smoke alarms installation,* retrieved on 9 February 2016 from http://www.fire.org.nz/Fire-Safety/Safety-Devices/Pages/Smoke-alarms-installation.html

[2] Consumer NZ. *Smoke alarms and batteries,* retrieved on 9 February 2016 from https://www.consumer.org.nz/products/smoke-alarms-and-batteries/overview

to understand and verify, which is of critical importance if the new regulations are to be self-enforced.

We also believe a smoke alarm should be fitted in every living area. Tenants rely disproportionately on un-flued LPG heaters to heat living areas, which have a much higher risk of causing a fire than other forms of heating.[3]

2. What kind of alarm?

2A. Do you agree with the proposal to require long life alarms that ensure lives and properties are protected more consistently? If not, what would you propose and why?

We strongly support a requirement for long life (10 year) photoelectric alarms.

However, we oppose the second part of this proposal, which only requires photoelectric alarms to be installed where there are no existing alarms, or where alarms need to be replaced.

Instead, we think landlords should be required to replace any existing ionization alarms, functional or not, with photoelectric or dual-sensor models. In our regular testing of smoke alarms, we consistently find ionisation models inadequate at detecting smouldering fires.[4] This failing is potentially fatal.

We are concerned the discussion document fails to acknowledge the variation in performance of long-life photoelectric alarms which meet the AS 3786:1993 standard. Our tests show there is significant variation in the time taken for different models of photoelectric alarms to detect flaming and smoldering fires.

As such, we think the government should consider a scheme whereby smoke alarms are rated and recommended to landlords based on their battery life and fire detection performance, and products which exhibit sub-par performance are identified and removed from the market where they don't meet minimum standards.

However, it's important to note that it's normal for there to be significant variation in product performance over and above mandatory minimum performance standards, and any recommendation scheme should be voluntary and intended to give landlords/tenants guidance on the best performing alarms. Our smoke alarms test would be a sound basis for this and we welcome further discussion as to how this could be implemented.

3. What is the benchmark for requiring residential rental properties to insulate?

3A. Do you agree with the proposal to allow rental houses with insulation that is in good repair, but does not meet the current Building Code requirements for new builds, to meet the 1978 standards? If not, what minimum level of insulation would you propose and why?

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[3] Cowan, V., Burrough, L., & Ryan, V. (2010). *Unflued Gas Heater Fact Bank*. Auckland: Beacon Pathway, retrieved on 9 February 2016 from http://beaconpathway.co.nz/images/uploads/Unflued_gas_heater_fact_bank.pdf

[4] Consumer NZ. *Smoke alarms and batteries,* retrieved on 9 February 2016 from https://www.consumer.org.nz/products/smoke-alarms-and-batteries/overview

We disagree with this proposal, and believe houses with ceiling and underfloor insulation that does not comply with current Building Code requirements should meet the same standard (for ceiling and underfloor) as new builds, irrespective of whether the insulation is in good repair.

The discussion paper suggests houses with wall, ceiling and underfloor insulation meeting the 1978 requirement can have better energy retention than houses with only the ceiling and underfloor insulated to the current Building Code Benchmark.

The paper goes on to claim it may be more effective if the landlord invests in a high efficiency fixed form of heating instead of increasing levels of underfloor and ceiling insulation from 1978 levels to the current standard.

While both assertions will be correct in many, if not most cases, we believe all homes in New Zealand should be required to meet the same standards, not just those homes owned by responsible/well-informed landlords.

The proposal for a landlord to compensate for an overall insulation level below current requirements by installing more fixed heating capacity passes undue costs onto the tenant, whose energy bills are likely to be higher than if insulation levels were brought-up to standard. We believe a fixed, efficient form of heating is complementary, not supplementary to insulation which meets current building code requirements, and reaffirm our support for a comprehensive rental housing warrant of fitness which requires a fixed form of heating of sufficient output for the area of the home and its insulation level.[5] [6]

3B. Do you agree with the proposal to require houses with insulation that is incomplete, damaged, damp or degraded to be retrofitted?

We support this proposal, but would like to see it extended to require landlords to take action if ceiling insulation has been compromised by non-IC/CA rated downlights, especially halogen fittings.

Fittings designed for halogen lamps may have required a substantial cutting from the insulation around the fitting to mitigate the risk of the insulation catching fire.[7] We believe fittings which have compromised ceiling insulation in this way should be required to be replaced by CA- or IC-rated fittings which do not compromise the thermal performance of the insulation to the same extent as older fittings.

3C. As a landlord/tenant – do you understand the proposed requirements and would you feel confident checking that your rental property or the property you rent meets them?

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[5] E., Hansen, R., & Howden-Chapman , P. *Results from a Rental Housing Warrant of Fitness Pre-Test.* University of Otago, Wellington (2014), retrieved on 9 February 2016 from http://static.stuff.co.nz/files/Rental-Housing-WOF.pdf

[6] Consumer NZ. *Housing WOFs,* retrieved 9 February 2016 fromhttps://www.consumer.org.nz/articles/housing-wofs

[7] Lighting Council New Zealand. *New Domestic Downlight Standards.* Retrieved 9 February 2016 from http://nzei.co.nz/wp-content/uploads/Downlight-FAQs-V6.pdf

We have concerns about the proposal for the regulations to be self-enforcing, i.e. for tenants to be required to verify the quality of the insulation and smoke alarms installation. Please see question 6B for details.

4. Which houses should be exempt?

4A. Are there properties that would be exempt under these proposed changes that should be included in the requirements?

We acknowledge the high cost and disruptiveness of retrofitting insulation to some properties, for example those with bitumen membrane flat roofs, and houses with exposed beam skillion ceilings.

However, we think landlords of exempt properties should be required to compensate for this lack of insulation by installing a fixed, efficient form of heating. This means a heat pump, wood-burner, central heating system, wood pellet burner or similar. The heater should have a heat output (kW) in excess of the acceptable heating output for spaces of various sizes and average R-values as outlined in Clause G5 of the New Zealand Building Code.[8]

Furthermore, if a landlord re-roofs a property where insulation was deemed not practicable to install, the landlord should be required to take the opportunity to fit ceiling insulation while the roofing work is undertaken.

4B. Are there other properties that should be excluded from the requirements? Why?

We do not think any other properties should be excluded from the requirements.

5A. Do you support the proposal to require that when new insulation must be installed, it should match the current installation standard required for new builds or alterations under the Building Code? If not, what standard do you think should be required?

We support the current Building Code standard being applied for all rental properties (see question 3A for more information).[9]

6. What are the biggest risks of the proposal and how do we mitigate them?

6A. Do you have any comments on the risk of incorrect installation and effects on the rental market?

We are opposed to foil underfloor insulation being permitted under the regulations. EECA advises against foil insulation due to concerns over its safety (risk of electrocution) and

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[8] Department of Building and Housing. *Compliance Document for New Zealand Building Code Clause G5 Interior Environment, retrieved on 9 February 2016 from* http://www.building.govt.nz/userfiles/file/publications/building/compliance-documents/g5-interior-environment-1st-edition-amendment-2.pdf

[9] Department of Building and Housing. *Compliance Document for New Zealand Building Code Clause H1 Energy Efficiency – Third Edition,* retrieved 9 February 2016 fro*m* http://www.building.govt.nz/UserFiles/File/Publications/Building/Compliance-documents/H1-energy-efficiency-3rd-edition-amendment-2.pdf

performance, along with the widespread availability of other products, a view we share.[10] As such, we think the regulations should only allow bulk insulation underfloor.

Bulk insulation products are easier for landlords to install than foil. They also don't have the performance concerns associated with foil products – the performance of underfloor foil depends on it being well-sealed, which can be difficult for an untrained installer (i.e. most landlords) to achieve. [11]

The discussion paper proposes two ways of mitigating the risk from landlords installing conductive foil insulation: 1) That they meet a standard developed and administered by WorkSafe New Zealand; and 2) ensure all electrical circuits where foil is to be installed are protected by Residual Current Devices (RCDs). In our view, both of these are inadequate.

If the regulations are to be self-enforcing (i.e. rely on tenants reporting breaches and taking the matter to the dispute tribunal), then the regulations imply that tenants need to check the quality of the installation, and verify the presence of RCDs on affected circuits. Both of these require expertise far beyond that of the average tenant, and would require tenants to inspect underfloor through an access hatch, and search electrical switchboards for RCDs. Neither of these should be reasonably expected of a tenant under any good regulatory regime.

6B. Are there other risks you think are significant? If so, what are they and how should Government deal with them?

We believe there are a large number of risks inherent in the proposed requirements for insulation and smoke alarms, most of which relate to non-compliance or risks to unqualified installers:

- Incorrect placement and installation of smoke alarms.
- Ionization-type smoke alarms being fitted instead of the required photo-electric or dual-sensor models.
- Incorrect insulation being selected – i.e. insulation with insufficient R-value for the houses framing being employed.
- Incorrect installation of insulation, for instance:
    - Gaps or holes in the insulation.
    - Compression of insulation in narrow roof spaces resulting in a reduction in product R-values.
    - Insulation used which is not fit for purpose – for example, in damp and windy areas insulation needs to be installed which is suitable for these conditions.
    - Electrocution from foil insulation being installed too close to uninsulated electrical cabling and affected electrical circuits not being RCD protected (note that we strongly oppose foil insulation being allowed under the regulations).

All the above risks could be mitigated by requiring the landlord's installation of smoke alarms and insulation to be inspected by a trained assessor.

While we acknowledge this would impose an additional cost to landlords, we note the 2014 housing warrant of fitness trial on private rental properties found the cost of a complete

[10] EECA Energywise. *Types of underfloor insulation,* retrieved 9 February 2016 from https://www.energywise.govt.nz/at-home/insulation/underfloor-insulation/types-of-underfloor-insulation/
[11] Ibid.

WOF inspection was only $200 to $300, including re-inspections.[12] The cost of inspecting only insulation and smoke alarms requires significantly less effort and training than the comprehensive inspection required in the trial, so its cost would be significantly lower.

We do not think this level of cost would have a significant effect on compliance rates or the supply of rental property, especially since it would be incurred, at most, once every ten years, and it is likely to be a good deal less than the initial cost of buying insulation and smoke alarms.

We support the proposal in the discussion paper for MBIE to run an information campaign to promote the smoke alarm and insulation standards, but this is no substitute for professional inspections. No campaign will be able to adequately impart the skills required to undertake a comprehensive inspection of insulation and smoke alarms, and nor should tenants be expected to do this, especially as the inspection would require accessing sub-floor areas and roof cavities, which is impossible for many tenants.

6C. Do you think the proposal reduces the risks enough? If not, how would you reduce them?

See questions 6B and 6C.

[12] Bennett, J., Chilsholm, E., Hansen, R., & Howden-Chapman , P. *Results from a Rental Housing Warrant of Fitness Pre-Test.* University of Otago, Wellington (2014), p6, retrieved on 9 February 2016 from http://static.stuff.co.nz/files/Rental-Housing-WOF.pdf