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Institute of Engineering Professionals

SUBMISSION: BUILDING CODE UPDATE 2021

Engineering New Zealand (formerly IPENZ) is New Zealand's professional home for engineers. We are New Zealand's strongest and most influential voice on engineering issues, with more than 20,000 members who want to help shape the public policy agenda and engineer better lives for New Zealanders.

This submission responds to the Ministry of Business, Innovation & Employment's (MBIE)'s 6 April 2021 *Building Code update 2021* consultation document.

This submission is short and focused. Across Government, the volume of current consultation is considerable, with many consultations having the potential to significantly impact engineers and the industries they work within. When MBIE's Building Code update 2021 was released we requested feedback from members and technical groups. This submission summarises the feedback received.

BUILDING CODE UPDATE 2021

The Building Code update 2021 focuses on the energy efficiency of buildings, proposing to increase minimum insulation levels. It also proposes introducing a new Verification Method H1/VM3 to establish a baseline and standardise procedures to help designers/BCAs demonstrate and verify compliance with Clause H1.3.6 of the Code. Finally, MBIE also proposes introducing new acceptable solutions and verification methods for G7 Natural Light to further support the suitable development of higher-density housing.

We are generally supportive of increasing minimum insulation levels and improving guidance to designers. However, we have concerns that these proposals may not make homes warmer or drier. We consider MBIE's proposed transition period of up to 36 months is too long, and that this should happen sooner rather than later. New Zealand standards should be at (or above) international standards. We share New Zealand Green Building Council's concerns that these proposals do not align with the Building for Climate Change proposals from 2020. An extended roll out of MBIE's Building for Climate Change proposals has the potential to result in confusing and contradictory updates to the Building Code.

We have significant concerns that MBIE's update does not address the full picture of energy efficiency in homes and misses the opportunity to ensure homes are built to the requirements of the Healthy Homes Residential Act 2017. MBIE's document outlines possible benefits to be gained by increasing insulation

levels, but does not address issues caused by increasing insulation, for example condensation risk and the need to remove moist or foul air from homes.

The update also does not address the need to increase home heating requirements or to improve the airtightness of buildings. Nor does it address thermal bridging requirements. These considerations impact on any positive impacts of increased insulation.

Another matter not addressed in this update is the risk of homes overheating, particularly with the impact of our changing climate.

Finally, we note that the update focuses on small-scale dwellings alone. Requirements for high density buildings and larger residential developments (such as medium density housing), are not addressed in the proposals, although MBIE mention they will have different requirements.

MBIE's Building for Climate Change recommendations

It is our view that MBIE's 2021 Building Code update does not align with MBIE's 2020 Building for Climate Change recommendations. There is no proposed requirement for operational efficiency to be considered at the consent stage. Also, the kWh/m²/year metric does not appear in the H1 update, despite this being the core premise of the 2020 Building for Climate Change work. We consider this a missed opportunity.

BUILDING CODE OPERATING PROTOCOLS – REFERENCING STANDARDS AND THE INTRODUCTION OF A TIER FRAMEWORK

MBIE is also asking for feedback on the introduction of two new "[operating protocols](#)". These protocols seek to clarify MBIE's management of the standards referenced in the Building Code. The first protocol is entitled "Referencing standards in the Building Code system" and intends to provide guidance on the use of standards and the criteria for referencing a standard. The second protocol is entitled "Tier framework to support standards in the Building Code system" and proposes to introduce a framework for MBIE's maintenance and updates of existing standards.

We are supportive of MBIE providing transparency on its processes relating to standards. It is our view that further work is needed to develop an overall strategy for the management of standards. It is imperative that the costs to industry (both in terms of time and money) of maintaining standards are incorporated in the funding model.

The Structural Engineering Society New Zealand (SESOC) has also submitted to MBIE on its Building Code operating protocols. We are supportive of SESOC's submission.

CONCLUSION

Thank you for the opportunity to provide feedback on the *Building Code update 2021*. Wherever possible, we encourage MBIE to take a wider view of energy efficiency in buildings and use the annual Building Code update to drive its Building for Climate Change work. We also encourage MBIE's ongoing focus on updating its standards processes.

If there are technical queries we can assist with as the updates are finalised, please do not hesitate to contact us.

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