

Consultation submission form

Building Code update 2021

Building Code operating protocols



How to submit this form

How to submit this form

This form is used to provide feedback on proposals found within the consultation documents:

- › Building Code update 2021 – Issuing and amending acceptable solutions and verification methods
- › Building Code operating protocols – Referencing standards and a tier framework to support standards in the Building Code system

When completing this submission form, please provide comments and reasons explaining your choices. Your feedback provides valuable information and informs decisions about the proposals.

You can submit this form by 5pm, Friday 28 May 2021 by:

- › email: buildingfeedback@mbie.govt.nz, with subject line Building Code consultation 2021
- › post to: Ministry of Business, Innovation and Employment, 15 Stout Street, Wellington 6011
or: Ministry of Business, Innovation and Employment, PO Box 1473, Wellington 6140

Your feedback will contribute to further development of the Building Code. It will also become official information, which means it may be requested under the Official Information Act 1982 (OIA).

The OIA specifies that information is to be made available upon request unless there are sufficient grounds for withholding it. If we receive a request, we cannot guarantee that feedback you provide us will not be made public. Any decision to withhold information requested under the OIA is reviewable by the Ombudsman.

Submitter information

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MBIE would appreciate if you would provide some information about yourself. If you choose to provide information in the “About you” section below it will be used to help MBIE understand the impact of our proposals on different occupational groups. Any information you provide will be stored securely.

A. About you

Name: Nick Collins

Email address: nick@metals.org.nz

B. Are you happy for MBIE to contact you if we have questions about your submission?

Yes No

C. Are you making this submission on behalf of a business or organisation??

Yes No

If yes, please tell us the title of your company/organisation.

Metals New Zealand in association with the National Association of Steel Framed Housing Inc (NASH)

D. The best way to describe your role is:

- Architect Engineer (please specify below)
- BCA/Building Consent Officer Residential building owner
- Builder or tradesperson (please specify below) Commercial building owner
- Building product manufacturer or supplier (please specify the type of product below) Other (please specify below)
- Designer (please specify below) Prefer not to say

Please specify here.

Industry member organisations

Proposal 1. Energy efficiency for housing and small buildings

To make buildings warmer, drier, healthier and more energy efficient, we are considering options to increase the minimum insulation levels for roof, windows, walls and floors for new housing and small buildings. The options for minimum insulation levels vary across the country so that homes in the coldest parts of New Zealand will need more insulation than those in the warmest parts. As part of this, we are proposing to issue new editions of Acceptable Solution H1/AS1 and Verification Method H1/VM1 for housing and small buildings.

Questions for the consultation

1-1. Which option do you prefer? (Please select one)

- Status quo
- Option 1. Halfway to international standards
- Option 2. Comparable to international standards
- Option 3. Going further than international standards

Is there anything you would like to tell us about the reason(s) for your choice?

Metals New Zealand, in partnership with the National Association of Steel Framed Housing Inc (NASH) acknowledges that the MBIE consultation processes are improving.

This detailed consultation document supported by webinar enables stakeholders to grasp the intent and detail. Proposed changes are significant and it would have helped if MBIE had circulated widely the research commissioned from BRANZ to support proposed changes.

NASH has embarked on an R & D programme to deliver better performing light steel framed homes. Our approach has been to take a systems approach to wall / roof frame systems, through the lens of Building for Climate Change across the relevant code clauses.

NASH supports an approach to significantly improve energy efficiency of New Zealand homes. However we would make the following comments:

MBIE's Building for Climate Change programme focused on embodied and operational energy / carbon. Operational energy / carbon discussion document focused on delivering an energy / emission outcome measured in kilograms of CO₂ equivalent per square meter per annum, kg CO₂-e/(m².a). By contrast the Building Code consultation is prescriptive in R values. Missing is how what is proposed (international standards) will deliver to operational energy / carbon.

Also missing from this discussion is the relationship in the house between temperature with relative humidity and air change.

Building orientation is mentioned in the supporting BRANZ report. Suggesting that energy use is minimally affected by orientation ignores the impact of good passive solar design combined with thermal mass which significantly reduces energy demand for heating.

Absence of measures to reduce overheating. Climate Change will result in significant increase in temperatures, which along with higher levels of insulation potentially will increase overheating in our homes, resulting in additional energy use for cooling. With single, stand alone homes, correctly designed eaves provide shading to western aspect. In medium density housing eaves are a rarity, so we need to be addressing the potential for overheating. The risk of overheating is mentioned in BRANZ report, particularly with respect to apartments, but the MBIE consultation document is silent on this issue.

1-2. For your preferred option, how quickly should this change come into effect?

(Please select one)

12 months 24 months 36 months or more Not sure/No preference

Is there anything you would like to tell us about the reason(s) for your choice?

The review of H1 is long overdue. In the current building boom it is tempting to suggest that 12 months will maximise the number of homes built to internationally comparable standards. However the change proposed is significant and coupled with Building for Climate Change programme the sector needs time to design / test solutions to deliver to international standards.

Then there will need to be learning programmes for designers, engineers and subtrades to ensure new solutions are designed and installed appropriately.

24 months is the minimum time required to introduce changes.

1-3. If there are factors we should consider to progressively phase in your preferred option, please tell us below.

These factors may include material availability or affordability, regional differences in the requirements, different building typologies or other considerations.

Factors to consider with the phasing in of changes include

Design/ development and testing of new systems/solutions

Availability of materials

Learning programmes for designers and sub trades

Added supply chain stress and cost implications for material / suppliers who will need to develop / stock a broader range of solutions to meet differing requirements of increased performance levels across the six climate zones, across framing, windows, and insulation.

Likely increase in imported products along with potential for carbon leakage as overseas manufacturers aren't burdened with ETS tax – further disadvantaging local material manufacturers.

1-4. Do you support issuing the new editions of H1/AS1 and H1/VM1 as proposed?

H1/AS1: Yes, I support it No, I don't support it Not sure/no preference

H1/VM1: Yes, I support it No, I don't support it Not sure/no preference

Is there anything you would like to tell us about the reason(s) for your choice?

1-5. What impacts would you expect on you or your business from the proposed options? These impacts may be economic/financial, environmental, health and wellbeing, or other areas.

Proposed levels of wall insulation will require the review of NASH Acceptable Solutions, along with

The development and testing of design solutions for 150mm framing solutions.

Design of wall structures to incorporate triple glazed windows which are estimated to be 50% heavier than double glazed units

Design documentation for architects and engineers

Learning programmes for stakeholders.

Fabricators servicing the market in proposed climate zones 4, 5 & 6 will need to invest in new fabricating equipment and additional factory space at significant cost.

1-6. Is there any support that you or your business would need to implement the proposed changes if introduced?

Yes No Not sure/no preference

Is there anything you would like to tell us about the reason(s) for your choice?

NASH will require significant additional funding for

R & D

Supporting technical literature and e-learning resources.

Proposal 4. Natural light for higher-density housing

We are proposing to issue new acceptable solutions and verification methods for G7 Natural Light to adopt new compliance pathways for higher-density housing. The new pathways are more suitable for these types of buildings. As a consequence of the change, the scope of the existing documents are proposed to be limited.

Questions

4-1. Do you support issuing the new G7/AS1, G7/AS2, G7/VM2 as proposed?

G7/AS1: Yes, I support it No, I don't support it Not sure/no preference

G7/AS2: Yes, I support it No, I don't support it Not sure/no preference

G7/VM2: Yes, I support it No, I don't support it Not sure/no preference

Is there anything you would like to tell us about the reason(s) for your choice?

How will this impact upon proposed H1 changes, particularly in terrace housing?

4-2. What approach do you think we should take for G7/VM1?

It should be revoked It should remain as is
 It should be amended Not sure/no preference

Is there anything you would like to tell us about the reason(s) for your choice?

4-3. What impacts would you expect on you or your business from the new editions of G7/AS1, G7/AS2, G7/VM1, and G7/VM2?

These impacts may be economic/financial, environmental, health and wellbeing, or other areas.

4-4. Do you agree with the proposed transition time of 12 months for the new G7/AS1, G7/AS2, G7/VM1, and G7/VM2 to take effect?

Yes, it is about right No, it should be shorter (less than 12 months)
 No, it should be longer (24 months or more) Not sure/no preference

Is there anything you would like to tell us about the reason(s) for your choice?

24 months should align with H1. Changes in natural light could impact H1.

Building Code operating protocols

We are seeking feedback on two draft operating protocols that are intended to provide transparency and certainty around the work MBIE does as the building and construction regulator. The two operating protocols for this consultation are:

- › Referencing standards in the Building Code system
- › Tier framework to support standards in the Building Code system

Questions for the consultation

1. Do you agree with the proposed criteria for referencing a standard in the Building Code system?

These proposed criteria include: alignment to the Building Code, in scope, clear, specific, implementable in New Zealand and available.

Yes, I support them No, I don't support them Not sure/no preference

Is there anything you would like to tell us about the reason(s) for your choice?

Metals New Zealand and NASH strongly believe MBIE needs to have broader engagement with the construction sector re Standards.

The performance and resilience of New Zealand's built environment is dependent upon Standards.

Since Standards were absorbed into MBIE there has been intermittent dialogue with the sector as to the funding of Standards, Standards programme of work and Joint AS/ NZS Standards – at a time when the accumulated funds in Building Levy have been significant.

Standards don't only impact upon the robustness / resilience of our buildings they impact upon the competitiveness of New Zealand manufacturers.

The decoupling of Joint Australia New Zealand Standards due to MBIE unwillingness to fund New Zealand contributions effectively creates

1. A trade barrier in that New Zealand solutions get omitted from the revised Standard (because New Zealand hasn't paid).
2. Significant risk – refer review of AS 1528 (Stainless food tube & fittings). New Zealand businesses contributed time/expertise to the review process but as there were no funds forthcoming from MBIE / New Zealand businesses, this is not a joint standard and New Zealand fittings (which are commonly used in dairy, wine and food processing) were dropped from the Standard, posing significant risk in new installations / repairs.
3. Loss of business for New Zealand manufacturers-
 - Local (New Zealand manufacturers) lose the ability to specify New Zealand fittings on imported equipment, which in turn adds cost on arrival / installation.
 - Exported equipment can't use New Zealand fittings (as there is no standard to specify to end-users).

2. Do you agree with the proposed criteria for deciding the tier status of standards?

Risk severity: Yes, I agree with the criteria No, I don't agree Not sure/no preference

Contribution to the Building Code: Yes, I agree with the criteria No, I don't agree Not sure/no preference

Design focus: Yes, I agree with the criteria No, I don't agree Not sure/no preference

Is there anything you would like to tell us about the reason(s) for your choice?

3. Which standard(s) and their proposed tier status particularly impact you and why?

NASH has funded its own technical solutions and met the costs of developing Acceptable Solutions.

When NASH Standard Part b 2019 and NASH Building Envelope Solutions 2019 were cited as Acceptable Solutions under the Building Code, MBIE insisted that NASH technical documentation should be available free of charge to the sector.

The costs of preparing / maintaining this documentation are met by NASH members who effectively are paying for technical support for the sector, (both members and non-members who build in light steel framing) – hardly a fair, equitable or sustainable funding model moving forwards.

4. Is there anything else you would like to tell us about these protocols for the use of standards in the Building Code system?

The New Zealand building and construction sector is facing unprecedented change – not just in the proposals of the current Building Code review but also with the Building for Climate Change programme and the yet to be seen policy / regulations to address adaptation to climate change.

Constraining Standards programme of work to the current capacity of the Standards team is ludicrous to say the least, it potentially restricts Standards to proven solutions from the past limiting innovation in the sector.

MBIE consultation document states that

there is capacity for the regulator to commission the review/update of four to five NZ standards at any one time, envisaged to be a mixture of Tier 1 and Tier 2 standards. Fewer standards in the Tier 1 grouping relative to Tier 2 will mean that the Tier 1 standards will likely be reviewed more regularly over time, in addition to having the full funding and involvement of the regulator.

The implication is that current staffing capacity needs to set the work programme. Rather than identifying specifically what the need is and then resourcing the Standards team accordingly to meet that need.

Given that some of our past building solutions are currently constrained by material supply, NASH asks the question as to why MBIE should not be funding Standards for light steel framing and other 21st century solutions to New Zealand's building needs?

NASH supports an approach where MBIE partners with the construction sector to develop a sector strategy for Standards development and maintenance, which includes a

- Fair /equitable funding model– MBIE (via building levy) and stakeholder funding, the current burden on industry organisations is not sustainable
- Ongoing transparency re Standards future work programme – this year / next year
- Clear guidelines as to Joint Standards AS/NZS programme of work / funding for New Zealand contributions
- Addressing issues of copyright, where industry stakeholders own copyright.