



Consultation submission form Insulation requirements in housing and other buildings

Amending Acceptable Solutions H1/AS1 and H1/AS2 and
Verification Methods H1/VM1 and H1/VM2

5 December 2024



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Seeking feedback

How to submit this form

This form is used to give feedback on the proposed changes to insulation and energy efficiency requirements.

When completing this submission form, it helps if you add comments and reasons explaining your choices. Your feedback is valuable as it informs decisions about insulation and energy efficiency proposals for the Building Code.

MBIE needs your feedback on the H1 insulation settings review by 5:00 pm on Friday, 28 February 2025.

- Email: building@mbie.govt.nz, with subject line Building Code consultation H1 insulation settings
- Post:
Building Code consultation H1 insulation settings
Building System Performance
Ministry of Business, Innovation and Employment
PO Box 1473
Wellington 6140

Next steps

Your feedback on this document will be collated and analysed along with all the other responses.

Following consideration of the submissions, MBIE will make decisions on the proposals to amend the acceptable solutions and verification methods for compliance with the Building Code.

Use of information

Release of information on MBIE website

MBIE may publish copies or excerpts of submissions. MBIE will consider you have consented to this when you submitted your feedback unless you clearly specify otherwise in your submission.

If your submission contains any information that is confidential or you otherwise wish us not to publish, please:

- state this at the start of your submission, with any confidential information clearly marked within the feedback text
- provide a separate version, with your confidential information removed, for publication on the MBIE website.

Release of information under the Official Information Act

Once submitted, your feedback becomes official information and can be requested under the Official Information Act 1982 (OIA).

An OIA request asks for information to be made available unless there are sufficient grounds for withholding it. If some or all of your submission falls within the scope of any request for information received by MBIE, they cannot guarantee that your feedback will not be made public. Any decision to withhold information requested under the OIA is reviewable by the Ombudsman.

[Get help from the ombudsman](#) – Ombudsman New Zealand

If you do not want your submission feedback released as part of an OIA request, please say so in your submission feedback together with the reasons why (for example, privacy or commercial sensitivity).

MBIE will take your reasons into account when responding to OIA requests.

Seeking feedback

Personal information

[The Privacy Act 2020](#) contains principles on how various agencies, including MBIE, collect, use, and disclose information provided by individuals.

Any personal information you supply to MBIE in the course of providing your submission feedback is only:

- used for the purpose of assisting in the development of advice in relation to this consultation, or
- for contacting you about your submission.

MBIE may also use your personal information for other reasons permitted under the Privacy Act 2020 (for example, with your consent, for a directly related purpose, or where the law permits or requires it).

Please state clearly in your submission feedback if you do not want your name, or other personal information, included in any summary of submissions that MBIE may publish.

MBIE will only keep your personal information for as long as it is needed for the purposes for which the information may lawfully be used.

Where any information provided (which may include personal information) constitutes public records, it will be kept to the extent required by the [Public Records Act 2005](#).

MBIE may also be required to disclose information under the Official Information Act 1982, to a Parliamentary Select Committee or Parliament in response to a Parliamentary Question.

You have rights of access to, and correction of, your personal information. For more information, go to the MBIE website www.mbie.govt.nz.

Your information

MBIE would appreciate it if you would provide some information about yourself. This helps MBIE understand the impact their proposals may have on different occupational groups. Any information you provide will be stored securely.

A. About you

Name:

New Zealand Institute of Building Surveyors

Email address:

president@buildingsurveyors.co.nz

B. Can MBIE contact you if they 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 add the name of your company or organisation.

[Please add name here]

D. Select your role or the best way to describe your organisation:

Architect

Designer (please specify below)

BCA/Building Consent Officer

Engineer (please specify below)

Builder or tradesperson (please specify below)

Residential building owner

Building product manufacturer or supplier
(please specify the type of product below)

Other (please specify below)

Building resident, occupant or user (please
specify below)

Prefer not to say

Commercial building owner

Not-for-profit, industry organisation with circa 250 members from the construction and property sector. Key focus of NZIBS is improvement in the built environment with key interest in performance of building envelopes and building systems.

Your information

E. Personal information

The Privacy Act 2020 applies to feedback provided in all submissions.

- Please tick the box if you do **not** want your name or other personal information included in any information that MBIE may publish.

F. Publishing information

- MBIE may upload submissions, parts of submissions, or a summary of submissions received to its website. If you do **not** want part or all of your submission uploaded, please tick the box, and say what you do not want uploaded and why below.

If you have ticked this box, please tell us what part(s) of your submission you do not want uploaded on MBIE's website and why.

No comment.

G. Official information

The Official Information Act 1982 applies to all submissions received by MBIE.

- If you would like your submission (or parts of your submission) kept confidential please tick the box and **state** your reasons and ground(s) under sections 6, 7 and/or 9 of the Official Information Act that you believe apply, for consideration by MBIE.

If you have ticked this box, please tell us what parts of your submission you would like to be kept confidential, your reasons for this, and any grounds under the Official Information Act that you believe apply.

No comment.

Insulation in housing and small buildings

This section covers housing and small buildings. The proposals relate to ways to amend the acceptable solutions and verification methods for energy efficiency to

- Optimise insulation to better balance upfront building costs and longer-term benefits
- Improve the consistency and certainty of compliance and consenting

Optimising insulation to better balance upfront building costs and longer-term benefits

Questions for the consultation

Topic	Questions	Response
1	The schedule method may lead to higher upfront costs and less cost-effective construction than the more flexible calculation and modelling methods	
1-1	Do you support amending Acceptable Solution H1/AS1 as proposed to remove the schedule method?	<input type="checkbox"/> Yes, I support it <input checked="" type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
1-2	Please explain your views: Remove the calculation method over a period. NZIBS supports the removal of the Schedule Method of H1 requirements for compliance but would also support the phased removal of the calculation method over a period. NZIBS is of the view that the modelling method would result in build cost savings, which would offset the cost of the modelling, as this process allows designers to consider and evaluate actual insulation requirements taking into consideration key building format factors such as orientation, building eaves and glazing percentage. This analysis, if modelled, would result in reduce insulation levels and build costs offsetting the reported modelling costing. We understand the NZGBC, NZ Construction Industry Council, BRANZ, the NZ Institute of Architects and Architectural Designers of NZ propose a 20-month timeframe for the sector to phase out the calculation method. The NZIBS would agree that this timeline is acceptable noting that software is available in the marketplace currently and increase use of the modelling will provide increase	

Insulation in housing and small buildings

Topic	Questions	Response
	<p>market competition for this software and should reduce this element of cost.</p> <p>The NZIBS members are acutely aware of the issues of poor design and consideration for performance and consider the first stated purpose of the Building Act as critical and essential. The first stated purpose is to “ensure people who use buildings can do so safely and without endangering their health.” The vast majority of use is internal and thus the internal environment should be comfortable, dry, and free from contaminants, like mould. Our members experience that NZ families are experiencing high temperatures in modern homes, cold and mouldy environments in buildings that are no more than 15-20yrs old are concerned that these issues lead to unhealthy homes. These are all indicators that better design of our building environment is essential, and that requires better design tools.</p> <p>When looking at the tools the new H1 will provide the calculation method suffers from some similar base issues that are recognised with the schedule method. These are best summarised as follows:</p> <ul style="list-style-type: none"> a. It does not account for critical factors of orientation, window size, thermal bridging, and airtightness on energy demand. b. It does not account for cooling requirements or overheating control needs related to the above factors and that our environment is changing. Auckland is expected to have a significant increase in the number of hot days over the coming 100 years, and this future proofing is not considered. This will lead to another round of problem buildings, like the poor durability of those buildings in the late 90’s & 2000’s. We need to build resilient into our building stock. b. It does not provide detailed information for potential building owners or occupiers on relative energy use. This is commonplace in Europe and developed countries and we should be looking to consider this approach to help drive an improved building stock. 	

2	The calculation method contains restrictions to the flexibility of roof, wall and floor R-values that can lead to unnecessarily costly and complex construction in some buildings	
2-1	Do you support amending Acceptable Solution H1/AS1 to adjust the minimum possible R-values in the calculation method as proposed?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don’t support it <input type="checkbox"/> Not sure/no preference
2-2	Please explain your views	

Insulation in housing and small buildings

Topic	Questions	Response
3	Where underfloor heating is only used in bathrooms, the minimum R-values for heated floors may cause unreasonable upfront costs	
3-1	Do you support amending Acceptable Solution H1/AS1 and Verification Method H1/VM1 as proposed to reduce upfront costs and improve the cost-effectiveness of insulation by exempting building elements with embedded heating from higher minimum R-values where embedded heating systems are solely used in bathrooms?	<input type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input checked="" type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
3-2	<p>Please explain your views:</p> <p>Underfloor heating systems are in the view of the NZIBS used for comfort and not to meet functional property heating or the heating demand of occupants.</p> <p>These systems tend to be used either sporadically at high energy consumption during use of the room or for prolong hours at a low level irrelevant of the internal environments needs. They tend not to run in conjunction with the heating system for the rest of the house, resulting in higher energy use. Therefore, it is important to ensure this heat is not lost through poorly insulated slabs or floors. This matter would be further elevated and troublesome by the proposed changes of Topic 2 above, which proposes to have no minimum R value for slab-on-ground floors. As an example, a bathroom or kitchen located at the southern side of the dwelling, with no under slab or slab edge insulation, would result in increased energy consumption as heat radiated directly to the outside and was not captured and focused to the interior of the property toward occupiers. We would expect to see occupiers respond unconsciously by increase the duration of use or the thermostat temperature to counter the heat loss.</p>	

SQ1. What impacts from the proposals for topics 1 to 3 do you expect? These may be economic/financial, environmental, health and wellbeing, or other areas.

Removing the schedule method option will have a positive impact on the industry by the short-term reduction of modelling cost, improved building stock, improved internal environments that are considerate to the nature of the building orientation, extent of glazing and extent of glazing. It will increase better design consideration and process. It will improve understanding of energy efficiency within the consultant sector and will have a downstream impact on the public's understanding of what makes an effective and better building. Accurate modelling should also reduce building costs by avoiding potential structural changes (e.g. increase wall framing thickness) to accommodate high amounts of insulation that the calculation method may require.

It will, in the long-term, help to move our aging and somewhat defective building stock towards a more energy modelled and resilient built environment for all of NZ and should improve reliability, efficiency and health outcomes of buildings for occupiers.

Insulation in housing and small buildings

SQ2. Is there any support that you or your business would need to implement the proposed changes for topics 1 to 3 if introduced?

The NZIBS would not need support. Some of the construction and consultancy sector would need support. This could come from existing training programmes that are already established, such as training courses provided by the NZIBS and others.

SQ3. If there are other issues MBIE should consider to better balance upfront building costs and longer-term benefits of insulation in housing and small buildings, please tell us.

As noted in our response to topic 1, the NZIBS would like Acceptable Solution AS1 to move to energy modelling as the primary design tool for H1 requirements and compliance demonstration. The method of focusing on R-values alone is an antiquated process when you look globally at the design and assessment process for thermal requirements. It has and is not providing NZ with a building stock that is fit for current purposes and has integral resilience. The current process of R-values tick box process has no effective way to consider the many aspects of a home's design and how these factors into the consumption of energy, the control of the internal environment and promotion of health of occupants. This means that a new home can have the relatively "high" R-values and is promoted as energy efficient when set against H1 minimum requirements but provide for an uncomfortable and high energy (due to cooling) occupation.

Overall not moving to modelling, in the view of the NZIBS, raises the risk of hundreds of thousands of kiwi families experiencing overheating homes, the opposite of the issues faced by them now in building built over the last 50yrs that are cold and mouldy, and this will result in a process of future retro fitting or modification, like that we have seen with weathertightness, to resolve discomfort and poor living standards.

This issue should be a priority for MBIE, and it should focus and promote requirements for increasing design process, diligence with a clear goal to improve the building stock over the long-term. Our members would consider it critical to undertake a few more hours of additional design consideration work upfront vs the impact of poor design over the life (70 – 100 years) of the building and its running costs or retro fit costs. The investment in good energy modelling will reduce operational costs, optimise building costs, and significantly reduce discomfort and poor built environment outcomes for kiwi families.

Consistency and certainty of compliance and consenting

Questions for the consultation

Topic	Questions	Response
4	The modelling method includes requirements that are unclear or outdated	
4-1	Do you support amending Verification Method H1/VM1 as proposed to clarify and update requirements for the modelling method?	<input type="checkbox"/> Yes, I support it <input checked="" type="checkbox"/> Yes, with changes

Insulation in housing and small buildings

Topic	Questions	Response
		<input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
4-2	<p>Please explain your views</p> <p>The NZIBS supports the proposed changes to the modelling method. We have consulted with a number of industry stake holders and see the proposed changes should be further bolstered to include:</p> <ul style="list-style-type: none"> • A reduced assumed percentage of glazing in the reference building. This is important as unshaded glazing is an important factor in the reduction of uncontrolled heat gain in summer and leads to higher annual cooling demand. • The modelling process must require homes to separately achieve lower heating and cooling demands. Consumption of energy is an important indicator in effective construction format. • Allow projects to include the benefit of reduced thermal bridging, better airtightness, and heat recovery ventilation (as current the norm in passive house design processes) as this will be an important area of material and component development in the coming years that needs to be considered. • We would like to see the recommendation in H1/VM1 modelling reports on overheating risk to make this transparent to designers and homeowners. 	

5	Thermal bridging from framing in walls is not adequately considered	
5-1	Do you support amending Acceptable Solution H1/AS1 and Verification Method H1/VM1 as proposed to better consider thermal bridging in framed walls?	<input type="checkbox"/> Yes, I support it <input checked="" type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
5-2	<p>Please explain your views</p> <p>The NZIBS supports the consideration that the Building Code should consider the thermal losses that occur through regular thermal bridges such as timber framing. Our concern is that this area / type of thermal bridging is not correctly considered but has historically influenced the long-term durability of the timber frames should a envelop failure occur. The method of proposed consideration is not expected to provide enough of an R-value impact factor. We understand there is a desire to move timber frame wall to R1.6 and leave R2.0 for other all types. This will enable more effective consideration for timber framed walls bridging.</p>	

Insulation in housing and small buildings

Topic	Questions	Response
6	How the areas of roofs, walls and floors should be measured is unclear	
6-1	Do you support amending Acceptable Solution H1/AS1 and Verification Method H1/VM1 as proposed to improve certainty and consistency of compliance by requiring the areas of roofs, walls, and floors to be measured using overall internal dimensions?	<input type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input checked="" type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
6-2	Please explain your views Other building certification schemes such as Passive House and Homestar require the use of external dimensions. The NZIBS feel that changes should drive the industry to move towards established best or better practice. Having the H1/VM1 not aligned with current global best practice will create confusion and could lead to mistakes. We would specifically point to a key potential confusion that would be in the calculation of glazing area against floor areas and the differential the incorrect use of internal and external dimensions would create. This may lead to ineffective buildings that overheat.	

7	NZS 4214 includes ambiguous instructions for determining the R-values of roofs, walls, and some floors	
7-1	Do you support amending Acceptable Solution H1/AS1 and Verification Method H1/VM1 as proposed to improve certainty and consistency of compliance by providing clearer requirements for defining the boundaries of the bridged portion of a building element when calculating its R-value using NZS 4214?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
7-2	Please explain your views	

8	For some mixed-use buildings it is unclear whether H1/AS1 and H1/VM1 can be used, or H1/AS2 and H1/VM2	
8-1	Do you support amending Acceptable Solution H1/AS1 and Verification Method H1/VM1 as proposed to improve certainty and consistency of compliance by providing clearer requirements for determining which compliance pathways can be used for a mixed-use building?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
8-2	Please explain your views	

9	The look-up tables with R-values for slab-on-ground floors do not cater for some common situations	
9-1	Do you support amending Acceptable Solution H1/AS1 as proposed to make it easier for designers and Building Consent Authorities to establish whether a building complies with the H1 energy efficiency	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it

Insulation in housing and small buildings

Topic	Questions	Response
	insulation provisions by enabling the use of the look-up tables for slab-on-ground floor R-values for more situations?	<input type="checkbox"/> Not sure/no preference
9-2	Please explain your views	

10	The look-up table with R-values for vertical windows and doors in housing misses some common glazing types	
10-1	Do you support amending Acceptable Solution H1/AS1 as proposed to make it easier for designers and Building Consent Authorities to establish whether a building complies with the H1 energy efficiency insulation provisions by enabling the use of the look-up table for vertical windows and doors in housing for more common types of glazing?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
10-2	Please explain your views	

11	Acceptable Solution H1/AS1 and Verification Method H1/VM1 include obsolete provisions and definitions, and outdated references to documents and tools	
11-1	Do you support amending Acceptable Solution H1/AS1 and Verification Method H1/VM1 as proposed to make these documents more user-friendly and reduce the risk of misinterpretations that can create uncertainty and inconsistency of compliance?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
11-2	Please explain your views	

SQ4. What impacts from the proposals for topics 4 to 11 do you expect? These may be economic/financial, environmental, health and wellbeing, or other areas.

We would expect to see more economic and effective construction that is tailored to the current requirements of families in NZ as well and develop a longer-term viewpoint on the requirements of our building stock in the future. We would expect to see better internal environments that would take less energy to heat and cool that would in turn benefit the homeowners wellbeing and financial outcomes.

SQ5. Is there any support that you or your business would need to implement the proposed changes for topics 4 to 11 if introduced?

No further response.

SQ6. If there are other issues MBIE should consider to better support consistency and certainty of compliance and consenting for insulation in housing and small buildings, please tell us.

No further response.

Transition period for residential and small buildings H1/AS1 & H1/VM1

SQ7. Do you agree with the proposed transition time of 12 months for the proposed changes to take effect?

- Yes, it is about right
- No, it should be longer (24 months or more)
- No, it should be shorter (6 months or less)
- Not sure/no preference

Please explain your views.

We refer to our responses above and our clear view that we should move to phase out the calculation method in addition to the schedule method. The NZIBS suggest that there should be a quick move to phase out of the schedule method (say 6ths) as the calculation method is well established.

However, the phase out of the calculation method will take longer to enable effective upskilling and education, but we recognise the protracted change is not effective. We suggest a minimum of 20 months to train the industry not currently modelling in appropriate software. This will take professional organisation, and institutes help educate and inform their members.

Managing overheating and internal moisture in homes

SQ8. If you think MBIE should support building designers with designing homes that safeguard building occupants from high indoor temperatures in summer (overheating) and other potential internal moisture risks, what approach should MBIE take?

Further to our response to Topic 1, the proposed H1 update offers an opportunity consider overheating controls and fold these into the building code. Modelling method is the most effective way to achieve this especially when combined with a need to have a lower cooling demand than the reference building. Single homeowner occupier development could be considered as a carve out of this modelling rule as NZ move to higher density housing, but we would suggest that larger value, size, complexity single home should remain within the modelling requirements.

Insulation in large buildings

This section covers large buildings (other than housing). These are covered by the Acceptable Solution H1/AS2 and Verification Method H1/VM2. The proposals relate to ways to amend the acceptable solutions and verification methods for energy efficiency to

- Optimise insulation to better balance upfront building costs and longer-term benefits.
- Improve the consistency and certainty of compliance and consenting of buildings regarding insulation requirements and energy efficiency.

Optimising insulation to better balance upfront building costs and longer-term benefits

Questions for the consultation

Topic	Questions	Response
12	The schedule method may lead to less cost-effective construction than the more flexible calculation and modelling methods	
12-1	Do you support amending Acceptable Solution H1/AS2 as proposed to remove the schedule method?	<input type="checkbox"/> Yes, I support it <input checked="" type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
12-2	Please explain your views Further to topic 1, we would like to see the calculation method phased out so energy modelling can drive the best potential out of the building stock that is developed, renovated or modified.	

13	The calculation method for large buildings does not provide flexibility for roof, skylight, and floor R-values, limiting opportunities for optimising insulation	
13-1	Do you support amending Acceptable Solution H1/AS2 to allow flexibility for the R-values of all building elements in the calculation method as proposed?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
13-2	Please explain your views	

14	Where underfloor heating is only used in bathrooms, the minimum R-values for heated floors may cause unreasonable upfront costs	
14-1	Do you support amending Acceptable Solution H1/AS2 and Verification Method H1/VM2 as proposed to reduce upfront costs and improve the	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes

Insulation in large buildings

Topic	Questions	Response
	cost-effectiveness of insulation by exempting building elements with embedded heating from higher minimum R-values where embedded heating systems are solely used in bathrooms?	<input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
14-2	Please explain your views	

SQ9. What impacts from the proposals for topics 12 to 14 do you expect? These may be economical/financial, environmental, health and wellbeing, or other areas.

No further response.

SQ10. Is there any support that you or your business would need to implement the proposed changes for topics 12 to 14 if introduced?

No further response.

SQ11. If there are other issues MBIE should consider to better balance upfront building costs and longer-term benefits of insulation in large buildings other than housing, please tell us.

No future response.

Consistency and certainty of compliance and consenting

Questions for the consultation

Topic	Questions	Response
15	The modelling method includes requirements that are unclear or outdated	
15-1	Do you support amending Verification Method H1/VM2 as proposed to clarify and simplify requirements for the modelling method?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
15-2	Please explain your views	

16	The schedule method does not adequately limit heat losses and gains from skylights in large buildings	
16-1	Do you support amending Acceptable Solution H1/AS2 to introduce a limit on the skylight area in the schedule method in H1/AS2 (in case MBIE does not proceed with the proposed removal of the schedule method from H1/AS2)?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
16-2	Please explain your views	

17	Thermal bridging from framing in walls is not adequately considered	
17-1	Do you support amending Acceptable Solution H1/AS2 and Verification Method H1/VM2 as proposed to better consider thermal bridging in framed walls?	<input type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input checked="" type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
17-2	Please explain your views See comments made in subject topic 5 and need to modify the R-value for timber frame walls.	

18	How the areas of roofs, walls and floors should be measured is unclear	
18-1	Do you support amending Acceptable Solution H1/AS2 and Verification Method H1/VM2 as proposed to improve certainty and consistency of compliance by requiring the areas of roofs, walls, and floors to be measured using overall internal dimensions?	<input type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input checked="" type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
18-2	Please explain your views See our comments in Topic 6.	

Insulation in large buildings

Topic	Questions	Response
19	NZS 4214 includes ambiguous instructions for determining the R-values of roofs, walls, and some floors	
19-1	Do you support amending Acceptable Solution H1/AS2 and Verification Method H1/VM2 as proposed to improve certainty and consistency of compliance by providing clearer requirements for defining the boundaries of the bridged portion of a building element when calculating its R-value using NZS 4214?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
19-2	Please explain your views	

20	For some mixed-use buildings it is unclear whether H1/AS1 and H1/VM1 can be used, or H1/AS2 and H1/VM2	
20-1	Do you support amending Acceptable Solution H1/AS2 and Verification Method H1/VM2 as proposed to improve certainty and consistency of compliance by providing clearer requirements for determining which compliance pathways can be used for a mixed-use building?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
20-2	Please explain your views	

21	The look-up tables with R-values for slab-on-ground floors do not cater for some common situations	
21-1	Do you support amending Acceptable Solution H1/AS2 as proposed to make it easier for designers and Building Consent Authorities to establish whether a building complies with the H1 energy efficiency insulation provisions by enabling the use of the look-up tables for slab-on-ground floor R-values for more situations?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
21-2	Please explain your views	

22	Acceptable Solution H1/AS2 and Verification Method H1/VM2 include obsolete provisions and definitions, and outdated references to documents and tools	
22-1	Do you support amending Acceptable Solution H1/AS2 and Verification Method H1/VM2 as proposed to make these documents more user-friendly and reduce the risk of misinterpretations that can create uncertainty and inconsistency of compliance?	<input checked="" type="checkbox"/> Yes, I support it <input type="checkbox"/> Yes, with changes <input type="checkbox"/> No, I don't support it <input type="checkbox"/> Not sure/no preference
22-2	Please explain your views	

SQ12. What impacts from the proposals for topics 15 to 22 do you expect? These may be economical/financial, environmental, health and wellbeing, or other areas.

Insulation in large buildings

No further response.

SQ13. Is there any support that you or your business would need to implement the proposed change if introduced?

No further response.

SQ14. If there are other issues MBIE should consider to better support consistency and certainty of compliance for insulation in large buildings other than housing, please tell us.

No future response.

Transition period for large buildings H1/AS2 & H1/VM2

SQ15. Do you agree with the proposed transition time of 12 months for the proposed changes to take effect?

- Yes, it is about right
- No, it should be longer (24 months or more)
- No, it should be shorter (6 months or less)
- Not sure/no preference

Please explain your views.

See our comments in SQ7

Thank you

Thank you

Thank you for your feedback. MBIE really appreciates your insight because it helps us identify the needs of New Zealanders and your thoughts on energy efficiency and insulation in buildings.

If you have anything else you would like to tell MBIE about energy efficiency in the Building Code, please leave your feedback below.

No further response.

