

Consultation submission form Building Code update 2022

Plumbing and drainage
Structural stability of hollow-core floors
Protection from fire

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How to submit this form

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

- > Plumbing and drainage
- > Structural stability of hollow core floors
- > Protection from fire

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 1 July 2022 by:

- > email: buildingfeedback@mbie.govt.nz, with subject line Building Code consultation 2022
- 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.

About you

A.

Submitter information

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.

Name:	Catherine Richards	
Email address:	Catherine.richards@masterb	uilder.org.nz
✓ YesC. Are you ma✓ Yes	king this submission on be	ou if we have questions about your submission? No Phalf of a business or organisation? No
If yes, please tell us t	he title of your company/orgar	nisation.
Registered Master E	Builders Association (RMBA)	
D. The best wa	ay to describe your role is:	
☐ Architect		☐ Engineer (please specify below)
☐ BCA/Building Cons	sent Officer	☐ Residential building owner
☐ Builder or tradesp	erson (please specify below)	☐ Commercial building owner
= :	manufacturer or supplier rpe of product below)	☑ Other (please specify below)
☐ Designer (please s	specify below)	☐ Prefer not to say
Please specify here.		
Building membersh	ip organisation	

Submitter information

E.	Privacy information
	The Privacy Act 2020 applies to submissions. Please tick the box if you do <u>not</u> wish your name or other personal information to be included in any information about submissions that MBIE may publish.
	MBIE may upload submissions or a summary of submissions received to MBIE's website at www.mbie.govt.nz . If you do not want your submission or a summary of your submission to be placed on our website, please tick the box and type an explanation below:
I do	not want my submission placed on MBIE's website because [insert reasoning here]
F.	Confidential information
	I would like my submission (or identifiable parts of my submission) to be kept confidential and have stated my reasons and ground under section 9 of the Official Information Act that I believe apply, for consideration by MBIE.
If you	have ticked this box, please tell us what parts of your submission are to be kept confidential.

Plumbing and drainage Proposal 1. Lead in plumbing products

We are proposing to limit the allowable lead content in plumbing products which contain copper alloys and are intended for use in contact with drinking water to not more than 0.25%. These new requirements are proposed for inclusion in the acceptable solutions for Building Code clause G12 Water supplies. The transition period is proposed to end on 1 September 2025 to provide plumbing product manufacturers and suppliers time to make the necessary changes.

Questions for the consultation

1-1. Do you support amendir allowable lead content in plu	ng Acceptable Solution G12/AS Imbing products?	1 as proposed to limit the
☐ Yes, I support it Is there anything you would like to	\square No, I don't support it tell us about the reason(s) for your α	☐ Not sure/no preference choice?
	u expect on you or your busine inancial, environmental, health and v	ss from the proposed change? wellbeing, or other areas.

Plumbing and drainage Proposal 1. Lead in plumbing products

1-3. What support would you or your business would need to implement the proposed change if introduced?
1-4. Do you agree with the proposed transition time of 34 months for these proposed new requirements to take effect on 1 September 2025? ☐ Yes, it is about right ☐ No, it should be longer (4 years or more) ☐ No, it should be shorter (less than 34 months) ☐ Not sure/no preference
Is there anything you would like to tell us about the reason(s) for your choice?

Plumbing and drainage Proposal 2. Water temperatures

We are proposing to reduce the maximum temperature of hot water at the tap to reduce the risk of scalding injuries to New Zealanders. The maximum allowable temperature for most buildings is proposed to be reduced from 55°C to 50°C. For early childhood centres, the maximum allowable temperature is proposed to be reduced from 45°C to 40°C to align with Ministry of Education requirements. The proposed changes would only apply to new plumbing fixtures used for personal hygiene, such as hand basins, baths and showers.

These changes are proposed to be introduced into Building Code Acceptable Solution G12/AS1, along with additional temperature control devices and pressure requirements which will improve alignment with the AS/NZS 3500 plumbing and drainage standards.

Questions for the consultation

2-1. Do you support amending Acceptable Solution G12/AS1 to help reduce the number of hot water scalding injuries in New Zealand by reducing maximum hot water delivery temperatures for some buildings?

The proposed hot water delivery temperatures are:

☐ No, the temperatures should remain as is

> 40°C for early childhood centres to align with Ministry of Education requirements.
☐ Yes, these temperatures are about right
\square No, these temperatures should be even lower

> 45°C for institutions such as schools, hospitals and care homes

(status quo at 55°C for most buildings and 45°C for institutions and early childhood education centres)

Not	sure	/no	prefe	rence
NO.	Juic	' 1 1 0	DICIC	

> 50°C for most buildings

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

Plumbing and drainage Proposal 2. Water temperatures

2-2. What impacts would you expect on you or your business from the proposed changes? These impacts may be economic/financial, environmental, health and wellbeing, or other areas.
2-3. Do you agree with the proposed transition time of 12 months for the proposed changes to take effect?
☐ Yes, it is about right
\square No, it should be longer (24 months or more)
\square No, it should be shorter (less than 12 months)
☐ Not sure/no preference
Is there anything you would like to tell us about the reason(s) for your choice?

Plumbing and drainage Proposal 3. Protection of potable water

We are proposing to update Acceptable Solution G12/AS1 to improve the requirements to protect potable water from backflow contamination. Backflow occurs when the flow of water within a pipe is reversed, which can draw contaminants into a potable water supply. It can create a health risk to occupants in buildings and to entire public water supply networks. The proposed changes will improve clarity around when backflow prevention is required, what type of backflow prevention devices are suitable and how these devices should be installed and tested.

Questions for the consultation

3-1. Do you support the proposed amendments to Acceptable Solution G12/AS1 for the protection of potable water?
☐ 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?
3-2. What impacts would you expect on you or your business from the proposed changes? These impacts may be economic/financial, environmental, health and wellbeing, or other areas.

Plumbing and drainage Proposal 3. Protection of potable water

3-3. Do you agree with the proposed transition time of 12 months for the proposed change to take effect? Yes, it is about right	ges
☐ No, it should be longer (24 months or more)	
☐ No, it should be shorter (less than 12 months)	
☐ Not sure/no preference	
Is there anything you would like to tell us about the reason(s) for your choice?	

Plumbing and drainage Proposal 4. AS/NZS 3500 Plumbing and drainage standards

We are proposing to cite the 2021 editions of the AS/NZS 3500 Plumbing and drainage standards as acceptable solutions for complying with Building Code clauses E1 Surface Water, G12 Water Supplies and G13 Foul Water. This follows a three-year revision project to improve these standards. These standards play an integral part in setting out design and installation requirements for plumbing and drainage systems in New Zealand. We are also proposing to cite AS/NZS 3500: 2021 Part 1 and Part 4 under a new Acceptable Solution G12/AS3, which will provide consistency between the status of these standards under the Building Code.

Questions for the consultation

4-1. Do you support amending the Acceptable Solutions for E1, G12, and G13 to cite the
following AS/NZS 3500: 2021 Plumbing and drainage standards as proposed?
> AS/N7S 3500.1: 2021 – Water Services

AS/NZS 3500.2: 2021 – Sanitary plumbing and drainage	
AS/NZS 3500.3: 2021 – Stormwater drainage	
AS/NZS 3500.4: 2021 – Heated Water Systems	
AS/NZS 3500.1: 2021 – Water Services	☐ Yes, I support it☐ No, I don't support it☐ Not sure/no preference
AS/NZS 3500.2: 2021 – Sanitary plumbing and drainage	☐ Yes, I support it☐ No, I don't support it☐ Not sure/no preference
AS/NZS 3500.3: 2021 – Stormwater drainage	☐ Yes, I support it☐ No, I don't support it☐ Not sure/no preference
AS/NZS 3500.4: 2021 – Heated Water Systems	☐ 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?	

Plumbing and drainage Proposal 4. AS/NZS 3500 Plumbing and drainage standards

4-2. Do you support issuing the new G12/AS3 as proposed to cite AS/NZS 3500.1: 2021 – Water services and AS/NZS 3500.4: 2021 – Heated water services?				
☐ Yes, I support it	☐ No, I don't support it	☐ Not sure/no preference		
Is there anything you would like to	o tell us about the reason(s) for your	choice?		
	I modifications to the referenc dards that we should consider?	_		
☐ Yes	□ No	☐ Not sure/no preference		
If there are modifications that you	u think should be included, please tel	l us below.		
-	u expect on you or your busine financial, environmental, health and	ess from the proposed changes? wellbeing, or other areas.		

Plumbing and drainage Proposal 4. AS/NZS 3500 Plumbing and drainage standards

4-5. Do you agree with the proposed transition time of 12 months for the proposed changes to take effect?
\square Yes, it is about right
\square No, it should be longer (24 months or more)
\square No, it should be shorter (less than 12 months)
☐ Not sure/no preference
Is there anything you would like to tell us about the reason(s) for your choice?

Plumbing and drainage Proposal 5. Water supply system components

We are proposing 12 improvements to Acceptable Solution G12/AS1 to fill in gaps in this compliance pathway, address issues raised by building consent authorities and industry bodies, and provide more ways for building water supply systems to comply with the Building Code.

We are also proposing to introduce a 'deemed to comply' pathway for use by plumbing system designers to calculate the design flow rates for sizing water supply pipework in multiple types of buildings within Verification Method G12/VM1.

Questions for the consultation

5-1. Do you support the amendments to Acceptable Solution G12/AS2 for the following topics?

topics?	
Expansion vessels	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
Seismic restraint of water heaters	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
Accessible taps	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
Wet-back water heaters	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
UV resistant pipework insulation material	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
Cleaning and disinfection of water storage tanks	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
Water supply pipework installation standards	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
Minimum and maximum water pressures	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
Relief valve drain discharge locations and tundish drain sizing	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
Minimum pipework cover below ground	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
Flushing of water supply systems	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
Unintentional heating of cold water	\square Yes, I support it \square No, I don't support it \square Not sure/no preference
s there anything you would like to te	ell us about the reason(s) for your choice?

Plumbing and drainage Proposal 5. Water supply system components

5-2. Do you support the proposed amendment to Verification Method G12/VM1 to Plumbing engineering services design guides loading unit method for determining resimultaneous flow rates for sizing water supply pipework?	
5-3. What impacts would you expect on you or your business from the proposed character impacts may be economic/financial, environmental, health and wellbeing, or other areas.	ianges?

Plumbing and drainage Proposal 5. Water supply system components

5-4. Do you agree with the proposed transition time of 12 months for the proposed changes to take effect?
☐ Yes, it is about right
\square No, it should be longer (24 months or more)
\square No, it should be shorter (less than 12 months)
\square Not sure/no preference
Is there anything you would like to tell us about the reason(s) for your choice?

Plumbing and drainage Proposal 6. Plumbing and drainage system material standards

We are proposing to cite the latest manufacturing standards for plumbing and drainage system components. These proposed changes form part of regular maintenance updates to address outdated product manufacturing standard citations. In total, there are 12 new or amended standards proposed for Acceptable Solution E1/AS1, 22 for G12/AS1 and G12/AS2, and 12 for G13/AS1 and G13/AS2.

Questions for the consultation

6-1. Do you support the amendments to the following to include the proposed referenced standards and documents for manufacturing plumbing and drainage system components?

Acceptable Solutions E1/AS1 and E1/AS2 for surface water drainage system materials	☐ Yes, I support it☐ No, I don't support it☐ Not sure/no preference
Acceptable Solutions G12/AS1 and G12/AS2 for water supply system materials	☐ Yes, I support it☐ No, I don't support it☐ Not sure/no preference
Acceptable Solutions G13/AS1 and G13/AS2 for sanitary plumbing and foul water drainage system materials	☐ Yes, I support it☐ No, I don't support it☐ Not sure/no preference
The list of standards is provided in the appendices to the consultation docume If there are standards you don't support, please tell us which standards those a choice.	

Plumbing and drainage Proposal 6. Plumbing and drainage system material standards

6-2. What impacts would you expect on you or your business from the proposed changes? These impacts may be economic/financial, environmental, health and wellbeing, or other areas.			
6-3. 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 (less than 12 months) Not sure/no preference			
Is there anything you would like to tell us about the reason(s) for your choice?			

Plumbing and drainage Proposal 7. Resolving conflicts and editorial changes

We are proposing to amend Acceptable Solutions E1/AS1, G12/AS1, G12/AS2, G13/AS1 and G13/AS2 to make editorial changes and align requirements between compliance pathways for plumbing and drainage systems. Editorial changes may include obvious errors in the text, typos, spelling mistakes, incorrect cross-references, changes in the formatting, minor clarifications of text with minor to no impact, or other items related to current document drafting practices.

Questions for the consultation

7-1. Do you support the following amendments to the acceptable solutions to address the				
editorial changes and align plumbing and drainage requirements as proposed?				
E1/AS1:	☐ No, I don't support it	☐ Not sure/no preference		
G12/AS1: ☐ Yes, I support it	☐ No, I don't support it	\square Not sure/no preference		
G12/AS2: ☐ Yes, I support it	☐ No, I don't support it	\square Not sure/no preference		
G13/AS1: ☐ Yes, I support it	\square No, I don't support it	\square Not sure/no preference		
G13/AS2: ☐ Yes, I support it	☐ No, I don't support it	\square Not sure/no preference		
Is there anything you would like to tell us al	bout the reason(s) for your choice?			

Structural stability of hollow-core floors

We are proposing changes to the compliance pathway for hollow-core floors to make new buildings safer in the event of earthquakes. The proposed change will include the removal of a deemed to comply solution for the support of hollow-core floors from Verification Method B1/VM1.

Questions for the consultation			
1-1. Do you support amending Verification Method B1/VM1 Paragraph 3.1.1 as proposed to make the design of hollow-core floor supports an alternative solution?			
\boxtimes Yes, I support it \square No, I don't support it \square Not sure/no preference Is there anything you would like to tell us about the reason(s) for your choice?			
Yes, it is good that amendments to the building code are being made to reflect research done on hollow of flooring following the 2016 Kaikoura earthquakes.	ore		
1-2. What impacts would you expect on you or your business from the proposed change? These impacts may be economic/financial, environmental, health and wellbeing, or other areas.			
We do expect the proposed changes to hollow core flooring in the short term to impact how different are of the building sector work together. BCAs, builders and designers will need to work together on understanding and implementing acceptable solutions. Again, this will be a short-term issue, however courause further delays to the consenting process which is already under pressure.			

Structural stability of hollow-core floors

1-3. Is there any support that you or your business would need to implement the proposed changes if introduced?			
⊠ Yes	□ No	\square Not sure/no preference	
Is there anything you would like to tell us a	bout the reason(s) for your choice?		
We would recommend clear guidance and confusion and misinterpretation of the up		those in the industry to limit	
1-4. Do you agree with the proposed transition time of 1 year for the new requirements to take effect? X Yes, it is about right No, it should be longer (2 years or more) No, it should be shorter (less than 1 year) Not sure/no preference Is there anything you would like to tell us about the reason(s) for your choice?			

Protection from fire Proposal 1. Protection from fire for residential homes

We are proposing to increase the scope of C/AS1 to include additional types of low-rise multi-unit homes, with accompanying changes to address the associated fire risks. This proposal considered fire safety settings for all building types proposed to be covered by C/AS1 and takes into account previous feedback on the document, the latest standard for smoke alarms, and international practices for residential fire safety.

Questions for the consultation

1-1.	Do you support issuing the new Acc	eptable Solution C/	AS1 with the o	changes proposed
to th	ne following parts of the document?			

to the following parts of the document?				
	Part 1. General	oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference		
	Part 2. Firecells, fire safety systems and fire resistance ratings	oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference		
	Part 3. Means of escape	oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference		
	Part 4. Control of internal fire and smoke spread	oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference		
	Part 5. Control of external fire spread	oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference		
	Part 7. Prevention of fire occurring	oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference		
	References, definitions, and appendices	oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference		
Is there anything you would like to tell us about the reason(s) for your choice?				
RMBA supports the changes being made to fire protections for residential homes. However, we do wish to raise attention to this section in Part 3: <i>In practice, the difference in cost between a 30 minutes and 60 minutes fire resistance rating for plasterboard has been estimated at approximately 40% higher.</i>				
	We are in a volatile market at this time, heading towards a bust in the boom-bust cycle.			
	We have seen significant issues with	n the supply of materials in the last 12 months, including plasterboard.		

We cannot predict what the supply market will look like when the transition period for these proposed changes is over, however we would encourage MBIE to work with suppliers to make sure they will able to

comply with the changes in the timeframe proposed.

Protection from fire Proposal 1. Protection from fire for residential homes

Protection from fire Proposal 1. Protection from fire for residential homes

1-5. Do you agree with the proposed transition time of 12 months for the proposed changes		
to take effect?		
X Yes, it is about right		
\square No, it should be longer (2 years or more)		
\square No, it should be shorter (less than 1 year)		
\square Not sure/no preference		
Is there anything you would like to tell us about the reason(s) for your choice?		

We are proposing to improve the protection of people and buildings by bringing the requirements for fire safety systems (fire alarms, sprinklers, smoke alarms and smoke control in air-handling systems) in line with the latest industry standards. These changes would ensure the provisions in our compliance pathways for fire safety systems are up-to-date, consistent and clear.

Questions for the consultation

1. Do you support the amendments to Acceptable Solutions C/AS1 and C/AS2 and erification Method C/VM2 to reference the following standards?			
NZS 4512: 2021 Fire detection and alarm systems in buildings	☑ Yes, I support it☐ No, I don't support it☐ Not sure/no preference		
NZS 4514: 2021 Interconnected smoke alarms for houses	☑ Yes, I support it☐ No, I don't support it☐ Not sure/no preference		
NZS 4541: 2020 Automatic fire sprinkler systems	✓ Yes, I support it☐ No, I don't support it☐ Not sure/no preference		
AS 1668.1: 2015 Fire and smoke control in building Amendment 1	✓ 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?			
RMBA supports improved fire and smoke alarm systems in homes. Safety in a and these changes will certainly help homeowners feel secure their investment of the secure the secu			

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2-4. Do you support the amendments to Acceptable Solution C/	AS2 for the following topics?
Domestic smoke alarms	☑ Yes, I support it☐ No, I don't support it☐ Not sure/no preference
Removing requirements for a landline phone	✓ Yes, I support it☐ No, I don't support it☐ Not sure/no preference
Removing restrictions for sprinklers to replace smoke detectors	✓ Yes, I support it☐ No, I don't support it☐ Not sure/no preference
Requiring sprinkler systems to extend into car parks	✓ 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	2?
The removal of a landline connection requirement is positive as we move in technology is being phased out generally. This can also remove costs for clie for this service.	

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2-5. Do you support the editorial changes to Acceptable Solution C/AS2 and Verification Method C/VM2 for the following items?			
Correcting cross referencing errors in Table 2.3	✓ Yes, I support it☐ No, I don't support it☐ Not sure/no preference		
Combining Tables 2.2a, 2.2b, 2.2c and 2.2d into one Table 2.2	✓ Yes, I support it☐ No, I don't support it☐ Not sure/no preference		
Moving process steps into an informative figure	✓ Yes, I support it☐ No, I don't support it☐ Not sure/no preference		
Aligning with the proposed changes to Acceptable Solution C/AS1	✓ 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?			
2-6. What impacts would you expect on you or your business from the proposed change These impacts may be economic/financial, environmental, health and wellbeing, or other areas.			
Streamlining the standards will have a positive effect on building standards, a requirements are in an easy and effective way.	s builders will know what their		

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2-7. Do you agree with the proposed transition time of 12 months for the new requirements			
to take effect?			
X Yes, it is about right			
\square No, it should be longer (24 months or more)			
\square No, it should be shorter (less than 12 months)			
☐ Not sure/no preference			
Is there anything you would like to tell us about the reason(s) for your choice?			

Thank you

Thank you

Thanks for your feedback, we really appreciate your insight because it helps us keep pace with modern construction methods, the needs of New Zealanders and ensure buildings are safe, warm, dry, healthy and durable.

To help us continue to improve our Building Code update programme, we would appreciate any suggestions or comments you may have on what's working and how we can do better.

comments you may have on what's working and how we can do better.			
you have any other comments, please leave your feedback below:			