Consultation submission form

Building Code update 2022

Plumbing and drainage

Structural stability of hollow-core floors

Protection from fire

# Contents

[Contents 2](#_Toc101336597)

[How to submit this form 3](#_Toc101336598)

[Submitter information 4](#_Toc101336599)

[Plumbing and drainage 6](#_Toc101336600)

[Proposal 1. Lead in plumbing products 6](#_Toc101336601)

[Proposal 2. Water temperatures 8](#_Toc101336602)

[Proposal 3. Protection of potable water 10](#_Toc101336603)

[Proposal 4. AS/NZS 3500 Plumbing and drainage standards 12](#_Toc101336604)

[Proposal 5. Water supply system components 15](#_Toc101336605)

[Proposal 6. Plumbing and drainage system material standards 18](#_Toc101336606)

[Proposal 7. Resolving conflicts and editorial changes 20](#_Toc101336607)

[Structural stability of hollow-core floors 21](#_Toc101336608)

[Protection from fire 23](#_Toc101336609)

[Proposal 1. Protection from fire for residential homes 23](#_Toc101336610)

[Proposal 2. Fire safety system standards 26](#_Toc101336611)

# 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.

# 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.

1. About you

|  |  |
| --- | --- |
| Name: |  |

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| --- | --- |
| Email address: |  |

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

Yes  No

1. 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.

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1. 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  Other (please specify below)   
(please specify the type of product below)

Designer (please specify below)  Prefer not to say

Please specify here.

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1. Privacy information

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|  | The Privacy Act 2020 applies to submissions. Please tick the box if you do **not** 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](http://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] |

1. Confidential information

|  |  |
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|  | 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.

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# Plumbing and drainage

# Proposal 1. Lead in plumbing products

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| 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 amending Acceptable Solution G12/AS1 as proposed to limit the allowable lead content in plumbing products?

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?

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**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.

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**1-3.** What support would you or your business would need to implement the proposed change if introduced?

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**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?

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**Plumbing and drainage**

# Proposal 2. Water temperatures

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| 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:

› 50°C for most buildings

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

› 40°C for early childhood centres to align with Ministry of Education requirements.

☐ Yes, these temperatures are about right

☐ No, these temperatures should be even lower

☐ No, the temperatures should remain as is  
(status quo at 55°C for most buildings and 45°C for institutions and early childhood education centres)

☐ Not sure/no preference

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

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**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.

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**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

☐ 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?

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**Plumbing and drainage**

# Proposal 3. Protection of potable water

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| 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?

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**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.

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**3-3.** 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?

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**Plumbing and drainage**

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

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| 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/NZS 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

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| 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?

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**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 tell us about the reason(s) for your choice?

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**4-3.** Are there any additional modifications to the referencing of the AS/NZS 3500: 2021 Plumbing and drainage standards that we should consider?

Yes  No  Not sure/no preference

If there are modifications that you think should be included, please tell us below.

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**4-4.** 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.

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**4-5.** 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?

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**Plumbing and drainage**

# Proposal 5. Water supply system components

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| 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?

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| --- | --- |
| Expansion vessels | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Seismic restraint of water heaters | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Accessible taps | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Wet-back water heaters | Yes, I support it  No, I don’t support it  Not sure/no preference |
| UV resistant pipework insulation material | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Cleaning and disinfection of water storage tanks | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Water supply pipework installation standards | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Minimum and maximum water pressures | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Relief valve drain discharge locations and tundish drain sizing | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Minimum pipework cover below ground | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Flushing of water supply systems | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Unintentional heating of cold 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?

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**5-2.** Do you support the proposed amendment to Verification Method G12/VM1 to cite the Plumbing engineering services design guides loading unit method for determining maximum simultaneous flow rates for sizing water supply pipework?

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?

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**5-3.** 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.

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**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

☐ 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?

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**Plumbing and drainage**

# Proposal 6. Plumbing and drainage system material standards

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| 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?

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| --- | --- |
| 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 document.

If there are standards you don’t support, please tell us which standards those are and any reason(s) for your choice.

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**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.

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**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?

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**Plumbing and drainage**

# Proposal 7. Resolving conflicts and editorial changes

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| 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:  Yes, I support it  No, I don’t support it  Not sure/no preference

G12/AS1:  Yes, I support it  No, I don’t support it  Not sure/no preference

G12/AS2:  Yes, I support it  No, I don’t support it  Not sure/no preference

G13/AS1:  Yes, I support it  No, I don’t support it  Not sure/no preference

G13/AS2:  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?

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# Structural stability of hollow-core floors

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| 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?

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?

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**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.

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**1-3.** 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?

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**1-4.** Do you agree with the proposed transition time of 1 year for the new requirements to take effect?

☐ 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?

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# Protection from fire

# Proposal 1. Protection from fire for residential homes

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| 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 Acceptable Solution C/AS1 with the changes proposed to the following parts of the document?

|  |  |
| --- | --- |
| Part 1. General | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Part 2. Firecells, fire safety systems and fire resistance ratings | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Part 3. Means of escape | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Part 4. Control of internal fire and smoke spread | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Part 5. Control of external fire spread | Yes, I support it  No, I don’t support it  Not sure/no preference |
| Part 7. Prevention of fire occurring | Yes, I support it  No, I don’t support it  Not sure/no preference |
| References, definitions, and appendices | 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?

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**1-2.** Do you think the proposed Acceptable Solution C/AS1 covers all important aspects for protection from fire for risk group SH?

Yes  No  Not sure/no preference

If there are additional aspects of this document that you think should be included, please tell us.

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**1-3.** 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.

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**1-4.** What support would you or your business need to implement the proposed changes if introduced?

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**1-5.** 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 (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?

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**Protection from fire**

# Proposal 2. Fire safety system standards

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| 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

**2-1.** Do you support the amendments to Acceptable Solutions C/AS1 and C/AS2 and Verification 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?

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**2-2.** Are there any additional modifications to the referencing of the fire safety system standards that we should consider?

Yes  No  Not sure/no preference

If there are modifications that you think should be included, please tell us below.

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**2-3.** Do you support amending Acceptable Solution F7/AS1 and referring to C/AS1 and C/AS2 for requirements for warning 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?

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**2-4.** Do you support the amendments to Acceptable Solution C/AS2 for the following topics?

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| --- | --- |
| 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?

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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?

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| 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?

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**2-6.** 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.

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**2-7.** Do you agree with the proposed transition time of 12 months for the new requirements 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?

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**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.

If you have any other comments, please leave your feedback below:

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