HAMILTON CITY COUNCIL STAFF SUBMISSION

Building Code Update 2022: Plumbing and Drainage; Structural Stability of Hollow-Core Floors; Protection from Fire - Consultation Documents (2 May 2022)

Ministry of Business, Innovation and Employment





Improving the Wellbeing of Hamiltonians

Hamilton City Council is focused on improving the wellbeing of Hamiltonians through delivering to our five priorities of shaping:

- A city that's easy to live in
- A city where our people thrive
- A central city where our people love to be
- A fun city with lots to do
- A green city

The topic of this submission is aligned to the priority 'A city where our people thrive'.

Council Approval and Reference

This submission was approved by Hamilton City Council's Chief Executive on 6 July 2022.

Hamilton City Council Reference D-4260037 - Submission # 693.

It should be noted that the following submission is from staff at Hamilton City Council and does not necessarily represent the views of the Council itself.

Introduction

- 1. Hamilton City Council staff would like to thank the Ministry of Business, Innovation and Employment for the opportunity to make a submission to the following 2 May 2022 **Building Code Update 2022**Consultation Documents:
 - Plumbing and Drainage
 - Structural Stability of Hollow-Core floors
 - Protection from Fire
- 2. The response/feedback from Hamilton City Council staff is outlined in the Ministry of Business, Innovation and Employment's official submission form copy attached.

Further Information and Opportunity to Discuss Our Submission

- 3. Should the Ministry of Business, Innovation and Employment require clarification of the submission from Hamilton City Council staff, or additional information, please contact **Alister Arcus** (Principal Building Advisor City Growth) on 07 838 6881 or email <u>alister.arcus@hcc.govt.nz</u> in the first instance.
- 4. Hamilton City Council staff would welcome the opportunity to discuss the content of this submission in more detail with the Ministry of Business, Innovation and Employment.

Yours faithfully

Lance Vervoort CHIEF EXECUTIVE

LVA

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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: | Alister Arcus | | |
|--|-------------------------------|--|--|
| Email address: | alister.arcus@hcc.govt.nz | | |
| B. Are you hap _l ⊠ Yes | oy for MBIE to contact yo | ou if we have questions about your submission? | |
| C. Are you making this submission on behalf of a business or organisation?☑ Yes | | | |
| | e title of your company/organ | | |
| Hamilton City Coun | cil | | |
| D. The best way | y to describe your role is: | | |
| ☐ Architect | | ☐ Engineer (please specify below) | |
| ☑ BCA/Building Consent Officer | | ☐ Residential building owner | |
| \square Builder or tradesperson (please specify below) | | \square Commercial building owner | |
| \square Building product manufacturer or supplier (please specify the type of product below) | | \square Other (please specify below) | |
| ☐ Designer (please sp | ecify below) | ☐ Prefer not to say | |
| Please specify here. | | | |
| | | | |

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 | o 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 amending Acceptable Solution G12/AS1 as proposed to limit the allowable lead content in plumbing products? | | | |
|---|---|--|--|
| | \square Yes, I support it \square No, I don't support it \square Not sure/no preference sthere anything you would like to tell us about the reason(s) for your choice? | | |
| | Almost all scientific evidence confirms that lead is poisonous and should be eliminated from the building environment, so this is fully supported. Plumbosolvent drinking water is not uncommon in New Zealand, so reducing lead content in plumbing products will reduce health risks to consumers and better align New Zealand with Australia and North American best practice. | | |
| | Our question is how do we police the installation of plumbing fixtures from overseas? We are seeing whole plumbing systems (shower installations and the like) being imported and installed in buildings, with little or no information as to how they are compliant. Are these types of imports going to be restricted? | | |

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.

This will add extra time for the Building Inspector, to both assess plans during the consent processing stage (will likely be added to the specifications) and on-site carrying out inspections. How will the Building Inspector be able to identify that these fixtures are compliant? Will there be an identification mark on products, such as we see with safety glass?

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?

Education from both MBIE and the industry who supply the fixtures as to how they are implementing this and what identifications will be provided, so that Building Inspectors are able to easily identify.

| | and what identifications will be provided, so that Building Inspectors are able to easily identify. |
|----|--|
| | 4. Do you agree with the proposed transition time of 34 months for these proposed new equirements 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 |
| ls | there anything you would like to tell us about the reason(s) for your choice? |
| | This seems an excessive amount of time to implement this, although we understand the coordination with the changes in Australia. |

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:

- > 50°C for most buildings
- > 45°C for institutions such as schools, hospitals and care homes
- ightarrow 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 |
| \square 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?

There is anecdotal evidence that even at 55 degrees there is a risk of scalding, so a reduction to 50 degrees seems to be a sensible decision. There is a need to ensure that the temperature at the hot water storage device is kept to at least 60 degrees to prevent legionella.

Plumbing and drainage Proposal 2. Water temperatures

| -2. What impacts would you expect on you or your business from the proposed changes? hese impacts may be economic/financial, environmental, health and wellbeing, or other areas. |
|---|
| Minimal, we currently check for maximum water temperatures as part of our inspection regime, so changing to a new maximum will not impact much. |
| |
| 2-3. Do you agree with the proposed transition time of 12 months for the proposed changes o 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 |
| s 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.

| C | Questions for the consultation | |
|--|---|--|
| | -1. Do you support the proposed amendments to Acceptable Solution G12/AS1 for the rotection of potable water? | |
| | Yes, I support it | |
| | Clarity and updating information around the provision of backflow is desirable, with some more examples to reduce arguments between designers and compliance officers. Additionally, increased clarity on hazard ratings with examples is supported. | |
| | There is a lack of consistency in the country regarding the protection of the network utility operator, and 3.4.6 is a start in requiring protection of the networks supply. Hamilton City Council has a bylaw that requires all non-residential properties have a means of protecting the network's water supply. This is administered through the building consent process. We would like this to be a considered in this Code clause change. | |
| | We strongly support the inclusion of backflow containment to protect main supply water. It needs to be noted that some suppliers install boundary devices upstream of the point of supply, so requiring an additional device within the boundary may be overly onerous. | |
| | There is uncertainty on what will be considered best practice under the new water entities, but the Building Code could guide this and provide territorial authorities with increased confidence that their communities are being supplied safe drinking water under the Water Services Act. | |
| 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 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? | | | |
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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/NZS 3500.1: 2021 – Wate | r Services | |
|--|----------------------------------|--|---|
| | > AS/NZS 3500.2: 2021 – Sanita | ary plumbing and drainage | |
| | > AS/NZS 3500.3: 2021 – Storm | nwater drainage | |
| | > AS/NZS 3500.4: 2021 – Heate | ed Water Systems | |
| | AS/NZS 3500.1: 2021 – Water S | 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 – Stormw | rater 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 |
| ls | there anything you would like to | o tell us about the reason(s) for your | choice? |
| Updating the citing of standards is an appropriate way to recognise these changes and also makes it east to allow designers to use these as acceptable solutions that are deemed to comply, rather than alternations which can be harder to get across the line. | | | |
| | | the new G12/AS3 as proposed [:] 3500.4: 2021 – Heated water se | |
| \triangleright | Yes, I support it | ☐ No, I don't support it | ☐ Not sure/no preference |
| ls | there anything you would like to | o tell us about the reason(s) for your | choice? |
| | | | |

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

| Plumbing and drainage standards that we should consider? | | | | |
|--|--|--|--|--|
| ☐ Yes | ⊠ No | \Box Not sure/no preference | | |
| If there are modification | ations that you think should be includ | ed, please tell us below. | | |
| | | | | |
| • | 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. | | | |
| Education for Bu | ilding Control staff to understand the | new changes. | | |
| to take effect? | · | time of 12 months for the proposed changes | | |
| ✓ Yes, it is abou | ut rignt 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 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 to 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 pipeworks 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 | | oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference |
| Seismic restraint of | water heaters | oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference |
| Accessible taps | | oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference |
| Wet-back water hea | aters | oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference |
| UV resistant pipewo material | ork insulation | oximes Yes, I support it $oximes$ No, I don't support it $oximes$ Not sure/no preference |
| Cleaning and disinfe water storage tanks | | oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference |
| Water supply pipew installation standard | | oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference |
| Minimum and maxir pressures | mum water | oximes Yes, I support it $oximes$ No, I don't support it $oximes$ Not sure/no preference |
| Relief valve drain dis | _ | oximes Yes, I support it $oximes$ No, I don't support it $oximes$ Not sure/no preference |
| Minimum pipework ground | cover below | oximes Yes, I support it $oximes$ No, I don't support it $oximes$ Not sure/no preference |
| Flushing of water su | ipply systems | oxtimes Yes, I support it $oxtimes$ No, I don't support it $oxtimes$ Not sure/no preference |
| Unintentional heating water | ng of cold | oximes Yes, I support it $oximes$ No, I don't support it $oximes$ Not sure/no preference |
| Is there anything you v | vould like to tel | I 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 Plumbing engineering services design guides loading unit me simultaneous flow rates for sizing water supply pipework? | - | |
|--|----------------------------------|--|
| | \square Not sure/no preference | |
| Is there anything you would like to tell us about the reason(s) for your ch | noice? | |
| | | |
| | | |
| 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. | | |
| Negligible impact. | | |
| | | |
| | | |
| 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) | | |
| ☐ 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?

| If there are standards you don't support, please tell us which standards those are and any reason(s) for your choice. 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. Negligible impact. 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 | | | |
|---|--|----------------------------------|--|
| materials Acceptable Solutions G13/AS1 and G13/AS2 for sanitary plumbing and foul water drainage system materials 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. 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. Negligible impact. 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 | · | \square No, I don't support it | |
| water drainage system materials No, I don't support it Not sure/no preference Not sure/no | | ☐ No, I don't support it | |
| If there are standards you don't support, please tell us which standards those are and any reason(s) for your choice. 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. Negligible impact. 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 | • | ☐ No, I don't support it | |
| These impacts may be economic/financial, environmental, health and wellbeing, or other areas. Negligible impact. 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 | 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. | | |
| These impacts may be economic/financial, environmental, health and wellbeing, or other areas. Negligible impact. 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 | | | |
| 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 | | | |
| 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 | Negligible impact. | | |
| Is there anything you would like to tell us about the reason(s) for your choice? | 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) | s for the proposed changes | |
| | 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: | ⊠ No, I don't support it | ⋈ Not sure/no preference |
| G12/AS2: | ⋈ No, I don't support it | □ Not sure/no preference |
| G13/AS1: | ⋈ No, I don't support it | ☑ Not sure/no preference |
| G13/AS2: | ⋈ 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?

Clarity and removing errors/confusions in arguments.

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. Do you support amending Verification Method B1/VM1 Paragraph 3.1.1 as proposed to nake the design of hollow-core floor supports an alternative solution? |
|----|---|
| | Yes, I support it |
| | Our understanding is that the use of hollow core has tailed off significantly in recent times as engineers have already turned away from it, so the impacts (both wider for industry, and for you as BCA) shouldn't be major. |
| | -2. What impacts would you expect on you or your business from the proposed change? nese impacts may be economic/financial, environmental, health and wellbeing, or other areas. |
| | It will be challenging for the BCAs receiving consent applications for hollow core as Alternative Solutions, in terms of being satisfied on reasonable grounds that the specific solution complies. While the expectation stated in the proposal that additional testing would be required will further discourage most engineers and owners, some will still try (without doing appropriate testing). We imagine the basic requirement to satisfy a BCA would be a PS2, but it would need to be from not just any Chartered Professional Engineer – ideally one with expertise in relation to the seismic performance of precast concrete floor systems. |
| | -3. Is there any support that you or your business would need to implement the proposed hanges if introduced? |
| × | ☐ Yes ☐ No ☐ Not sure/no preference |
| ls | there anything you would like to tell us about the reason(s) for your choice? |
| | Is a national panel required for say buildings greater than 2 storeys? |
| | -4. Do you agree with the proposed transition time of 1 year for the new requirements to ake 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 |
| ls | 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 Acceptable Solution C/AS1 with the changes proposed 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 | oximes Yes, I support it $oximes$ No, I don't support it $oximes$ 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 | oximes Yes, I support it $oximes$ No, I don't support it $oximes$ 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?

There are some useful changes to expand the risk group and to bring this up to date with current building design such as 3 level residential buildings and home-based activities to account for work from home options, with clarification on employment of non-residences.

Interconnected type 1 smoke detectors are a good move, especially with the wide use of Wi-Fi systems currently that are easier to install and relatively inexpensive.

60-minute fire ratings are considered a reasonable upgrade, given that most intertenancy wall systems will default to a 60-minute system in order to accommodate a minimum acoustic requirement.

Clarity in means of escape is welcomed, including external escape separation distances, property protection distance changes, good diagrams to clarify the requirements and making some of the actual designs easier to obtain compliance e.g.: 5.4.1.1 for single story duplexes with higher sections of external wall within 5m of a unit boundary will not require vertical fire protection.

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

| 1-2. Do you think the proposed Acceptable Solution C/AS1 covers all important aspects for protection from fire for risk group SH? | | | | |
|--|---|-------------------|---|--|
| \boxtimes | ⊠ Yes □ I | No [| □ Not sure/no preference | |
| If there are additional aspects of this document that you think should be included, please tell us. | | | | |
| | distance is longer, g | given the hypot | avel distance down a stair as the plan measurement means the actual enuse slope of the stairs. Perhaps this section of the measurement could t x 1.5 to recognise the extra actual travel distance. | |
| 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. | | | | |
| | Negligible impact. | | | |
| | L- 4. What support ntroduced? | t would you o | or your business need to implement the proposed changes if | |
| | Education to updat | te the changes t | o our Building Control staff for both processing and inspections. | |
| | L- 5. Do you agree o take effect? ☑ Yes, it is about | · | posed transition time of 12 months for the proposed changes | |
| | ☐ No, it should be | _ | s or more) | |
| | \square No, it should be | e shorter (less t | han 1 year) | |
| | ☐ Not sure/no pre | | | |
| ls t | s there anything you | would like to te | ell us about the reason(s) for your choice? | |
| | | | | |
| | | | | |

Protection from fire Proposal 2. Fire safety system standards

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 Solution erification Method C/VM2 to reference the following stand | |
|-------------|--|---|
| | 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 |
| ls | there anything you would like to tell us about the reason(s) for your ch | noice? |
| | Citing new versions of standards to reduce the requirement to conside alternative solutions. | er designs to updated standards as |
| | -2. Are there any additional modifications to the referencin andards that we should consider? | ng of the fire safety system |
| \boxtimes | Yes \square No | ☐ Not sure/no preference |
| lf | there are modifications that you think should be included, please tell u | us below. |
| | Can there be clarity as to whether fire designs that specify newer stan | ndards, that have yet to be cited, are |

required to be sent to FENZ under the gazette notice? There have been some instances where this has been a requirement of IANZ audits and there are inconsistencies between BCAs in sending files off. There is

also anecdotal evidence that FENZ believe that this is not required.

Protection from fire Proposal 2. Fire safety system standards

| 2-3. Do you support amending Acceptable Solution F7/AS1 and referring to C/AS1 and C/AS2 for requirements for warning systems? | | | |
|---|--|--|---|
| \boxtimes | Yes, I support it | \square No, I don't support it | \square Not sure/no preference |
| ls ' | there anything you would like to | o tell us about the reason(s) for you | ır choice? |
| | | | |
| 2- | 4. Do you support the ame | endments to Acceptable Solut | tion 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 la | andline phone | ☑ Yes, I support it☑ No, I don't support it☑ Not sure/no preference |
| | Removing restrictions for sprin | klers 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? | | | |
| | | ails to support the requirements of s a more comprehensive coverage | smoke alarms, as well as a recognition of smoke alarms/sprinklers. |
| 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 er | rors 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 ir | nformative figure | ☑ Yes, I support it☐ No, I don't support it☐ Not sure/no preference |
| | Aligning with the proposed cha | nges to Acceptable Solution C/AS1 | ✓ Yes, I support it☐ No, I don't support it☐ Not sure/no preference |
| ls ' | Is there anything you would like to tell us about the reason(s) for your choice? | | |
| | Upskilling and training to imple | ment the changes will be required. | |

Protection from fire Proposal 2. Fire safety system standards

| | 6. What impacts would you expect on you or your business from the proposed changes? ese impacts may be economic/financial, environmental, health and wellbeing, or other areas. |
|------|---|
| ı | Negligible impact. |
| | |
| | 7. Do you agree with the proposed transition time of 12 months for the new requirements 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 |
| ls t | here anything you would like to tell us about the reason(s) for your choice? |
| | |
| | |

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:

Other Matters: Cross-Connections

Hamilton City Council staff wish to highlight the ongoing challenges which are being faced with regards to cross-connections of the wastewater and stormwater network. Cross-connections have been highlighted as occurring as a result of human error during design or construction of a development. Such examples of human error during this process includes:

- Mislabelling stormwater and wastewater services during design and consenting.
- Incorrect logging of wastewater and stormwater network during construction.
- Inability to easily identify the stormwater and wastewater network during a visual inspection.

There are several risks associated with not addressing cross-connections. These centre around the impacts on both citizen and staff health and safety, ongoing environmental degradation and diminishing of the mana of waterbodies. Furthermore, cross-connections inhibit the ability of Central Government to meet climate change targets, its legislative requirements related to freshwater, and achieving the objective of sustainable development. Council staff note that these risks are also being faced by other Territorial Authorities.

It is accepted that cross-connections cannot be addressed by the changes proposed to the Building Code alone, however Council staff consider that the issue of cross-connections should be highlighted and elevated. Future changes to the Building Act to strengthen the ability of Territorial Authorities to manage cross-connections should be considered. In addition, future changes to the Building Code should also be considered alongside any future attempts of centralisation of infrastructure standards.