CBHCC
Canadian Board for Harmonized Construction Codes

Standing Codes Coordination Committee

AGENDA PACKAGE

October 15, 2025

2030-04
Virtual
WebEx

CANADIAN BOARD FOR HARMONIZED CONSTRUCTION CODES

National Research Council Canada

2030-04 Meeting of the Standing Codes Coordination Committee

Date: 15 October 2025

Time: 12:00 PM ET

Mode: Tele/Web-Conference

Tele/Web-Conference Information

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AGENDA

Item	SUBJECT	Reference
04.1	Opening Remarks	
04.2	Approval of Agenda	
04.3	Record of Discussion of Previous Meeting(s)	
04.4	Actions Arising	
04.5	Bottom-up Work	
04.6	Round Table Discussion	
04.7	Coordination	
04.8	Other Business	
04.9	Upcoming Dates	
04.10	Adjournment	

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CANADIAN BOARD FOR HARMONIZED CONSTRUCTION CODES

National Research Council Canada

2030-04 Meeting of the Standing Codes Coordination Committee

Agenda Item Summary Sheet

04.1. Opening Remarks

Action Requested: Decision ☐ Guidance ☐ Information ☒

Summary

The following items will be covered under this agenda item:

- Welcome and the Chair's opening remarks
- All comments should be made through the Chair.
- Housekeeping
    - Please remember to mute your phone/computer audio when not speaking during the meeting.
    - In discussion, Chair will look for members first then observers second.
- Agreement with 'Conduct of attendees at meeting'
- Declaration of conflicts of interest, if any, in advance of the meeting

In this Agenda Package

1. Abbreviations for Agendas
2. Conduct of attendees at the meeting
3. Resource Sheet

Desired Outcome

This is provided for information and adherence.

ABBREVIATIONS

(see also NBC Division A Subsection 1.4.2. and Division B Article 1.3.2.1.)

ACHCC	Advisory Council for Harmonized Construction Code
AEB	Alteration of Existing Buildings
AHJ	Authority Having Jurisdiction
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
CA	Committee Action
CBHCC	Canadian Board for Harmonized Construction Codes
CCBFC	Canadian Commission on Building and Fire Codes
CCCME	Canadian Commission on Construction Materials Evaluation
CCMC	Canadian Construction Materials Centre
CCR	Code Change Request
CDS	Code Development System
CHBA	Canadian Home Builders' Association
COI	Conflict of Interest
CRC	Construction Research Centre
CSA	Canadian Standards Association
CTHCCP	Canadian Table for Harmonized Construction Codes Policy
ECCC	Environment and Climate Change Canada
EOI	Expression of Interest
FPT	Federal/Provincial/Territorial
GHGe	Greenhouse Gas emissions
HCDS	Harmonized Code Development System
IA	Impact Analysis
ISO	International Organization for Standardization
LEED	Leadership in Energy and Environmental Design
MOU	Memorandum of Understanding
NBC	National Building Code of Canada
NECB	National Energy Code of Canada for Buildings
NFBC	National Farm Building Code of Canada
NFC	National Fire Code of Canada
NMC	National Model Codes
NMCC	National Model Codes Committee
NMCC-Access	NMCC on Accessibility
NMCC-AEB	NMCC on Harmonization of Alteration of Existing Buildings
NMCC-CCA	NMCC on Climate Change Adaptation
NMCC-CD	NMCC on Climatic Data
NMCC-FLS	NMCC on Fire and Life Safety
NMCC-Hrmzn	NMCC on Harmonization
NMCC-HS	NMCC on Housing Supply

NMCC-IndE	NMCC on Indoor Environment
NMCC-Miti	NMCC on Climate Change Mitigation
NMCC-PBS	NMCC on Performance-Based Solutions
NMCC-RefDocs	NMCC on Referenced Documents
NMCC-SD	NMCC on Seismic Design
NPC	National Plumbing Code of Canada
NRC	National Research Council Canada
NRCan	Natural Resources Canada
OPs	Operating Procedures
ORD	Other Recognized Documents
PCA	Possible Committee Action
PCF	Proposed Change Form
PR	Public Review
PSPC	Public Services and Procurement Canada
P/T	Provincial/Territorial
SCC	Standards Council of Canada
SCCC	Standing Codes Coordination Committee
SDO	Standards Development Organization
TA	Technical Advisor
TG	Task Group
ToR	Terms of Reference
ULC	Underwriters Laboratories of Canada
WG	Working Group

Conduct of attendees at meeting

Chair to confirm agreement by all attendees at the beginning of every meeting

The Canadian Board for Harmonized Construction Codes' (CBHCC) Operating Procedures (OPs) outline the procedural rules for our meeting.

Conduct of participants

As a participant in the meeting of the Standing Codes Coordination Committee (SCCC), you agree to the code of conduct as outlined in the OPs.

This means—among other things—that you

- act with respect towards all contributors in the Harmonized Code Development System (HCDS);
- follow the principles of consensus-building;
- when suggesting information for consideration, identify yourself and whether you represent an organization, your role in the meeting, the source of any information to be shared and your relationship to the information;
- do not use audio or visual recording equipment during the meeting; and
- participate in the discussion only through the chair.

This also means that the committee chair has the discretion to:

- determine who will be heard;
- request that a person leave the meeting when the individual has become disruptive or if the person fails to identify themselves when asked; and
- modify the agenda to address the circumstances of the disruption.

Conflict of interest

Conflict of interest is a situation, whether real, apparent, or potential, in which a participant has private interests that could influence their participation within the HCDS or in which the participant could use their role in the HCDS for personal gain.

As a participant in the meeting, you must declare any known real, apparent, or potential, conflicts of interest. Subject to National Model Codes Committee agreement, members who have a conflict of interest may participate in National Model Codes Committee and Task Group discussions as observers.

The chair will facilitate fair and balanced discussion of all matters. Members who have a conflict of interest are not permitted to chair discussions related to matters for which they have a conflict.

Resource Sheet for Standing Codes Coordination Committee

Item	Link/email
Canadian Board for Harmonized Construction Codes	
Website	https://cbhcc-cchcc.ca/en/
Teamwork - Observers Public Space	• https://cnrc.teamwork.com/app/tasklists/3364577/list
Harmonized Code Development System Operating Procedures (OPs)	• https://cbhcc-cchcc.ca/en/operating-procedures-for-the-harmonized-code-development-process/ • https://cbhcc-cchcc.ca/en/operating-procedures-for-development-committees/
• Orientation on OPs	https://cnrc.teamwork.com/app/files/10694274
• Orientation on Consensus	https://cnrc.teamwork.com/app/files/10689385
National Model Codes Documents	
National Model Code Documents	https://nrc-publications.canada.ca/eng/search/?q=NRCCode
Standing Codes Coordination Committee (SCCC)	
Teamwork	https://cnrc.teamwork.com/app/tasklists/3388374/list
Terms of Reference	https://cbhcc-cchcc.ca/en/code-development-committees-task-groups/nmcc-on-standing-codes-coordinating-committee/
National Model Codes Committees (NMCCs)	
Teamwork	https://cnrc.teamwork.com/app/tasklists/3364577/list
Terms of Reference	https://cbhcc-cchcc.ca/en/code-development-committees-task-groups/
Codes Canada	
CBHCC Secretary	CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca
Ye Carrier | Technical Advisor | SCCC	Ye.Carrier@nrc-cnrc.gc.ca
Greg Fairthorne | Manager | Regulatory Solutions	Greg.Fairthorne@nrc-cnrc.gc.ca

Public review schedule for 2030 Code cycle*

Public Review	Deadline for PCFs	Comment Period	Remarks
Spring 2026	December 15, 2025	March 23 – May 18, 2026	
Fall 2026	June 26, 2026	October 26 – December 21, 2026	
Spring 2027	October 29, 2026	March 22 – May 17, 2027	
Fall 2027	June 25, 2027	March 22 – May 17, 2027	
Spring 2028	October 29, 2027	March 20 – May 15, 2028	Last PR for new PCFs
Fall 2028	June 23, 2028	October 23 – December 18, 2028	Resubmitted PCFs only
Spring 2029	October 27, 2028	March 19 – May 14, 2029	Resubmitted PCFs only
Fall 2029	June 22, 2029	October 22 – December 17, 2029	Referenced document updates only
* Subject to CBHCC approval			

04.3. Record of Discussion of Previous Meeting(s)

Action Requested: Decision ☒ Guidance ☐ Information ☐

Summary

Written records of discussion of previous meeting(s) are prepared and distributed to committee members for review and approval.

The Standing Codes Coordination Committee (SCCC) is presented with the Record of Discussion of the 2030-03 meeting for approval.

In this Agenda Package

- SCCC 2030-03 Record of Discussion – DRAFT

Desired Outcome

Approve the 2030-03 meeting records of discussion as presented or revised.

2030-03 Meeting of the Standing Codes Coordination Committee

Attendance

Members	Attendance
Tammy Harper (Chair)	Y
Byron Bennett	Y
Christopher Dare	Y
Dylan Aster	N
John Buck	Y
Marianne Brown	Y
Modusser Tufail	Y
Mojtaba Heidari	Y
Rick Cheung	Y
Andrew Pride (NMCC-Miti)	Y
Andrew Spurrell (NMCC-IndE)	Y
David Kayll (NMCC-CCA)	Y
Jean-François Côte (NMCC-RefDocs)	Y
Jesse Ouellette (NMCC-Hrmzn)	Y
Jon Galsworthy (NMCC-CD)	N
Laverne Dalgleish (NMCC-AEB)	N
Peter Senez (NMCC-FLS)	Y
Rick Gratton (NMCC-HS)	Y
Robert Dupuis (NMCC-Access)	Y
Tuna Onur (NMCC-SD)	Y
William Kuffner (NMCC-PBS)	Y

Observers	Attendance
Amy Roberts (FGIA)	Y
Céline Hertz (NGTC)	Y
Damian Oliveira (CWC)	Y
Erin Gorman (Tactix GR)	Y
Frank Lohmann (CHBA) (arrived ~1:00pm)	Y
Jack Mantyla (CHBA)	Y
Joe Hayden (BHMA)	Y
Margaret Webb (Chair, CGSB - Canadian Glass Committee)	Y
Rodney McPhee (Canadian Wood Council)	Y
Simon Decoste (ADS Pipe)	Y
Suzanne Scott (Westlake Pipe and Fittings)	Y
Terry Kowal (CHBA BC)	Y
Terry Whitehead (Canadian Gas Association)	Y

Codes Canada	Attendance
Andre Laroche	Y
Greg Fairthorne	Y
Brigitte Potvin	Y
Corey Carson	Y
Haemi Pollett	Y
Jitender Singh	Y
Julia Dalphy	Y
Kevin Wu	Y
Morched Zeghal	Y
Nick Gazo	Y
Nick Yu	Y
Tiam Maeiyat	Y
Tracy Wise	Y
Vicki Komisar	Y

03.1 Opening Remarks

The meeting was put to order at 12:07 pm ET.

The alternate Chair (M. Brown) welcomed members and observers, and a roll call was taken with the attendees.

The Chair reviewed the Conduct of Attendees at Meeting and confirmed agreement of all participants.

03.2 Approval Agenda

The agenda was approved as presented.

03.3 Record of Discussion of Previous Meeting(s)

The committee approved the Record of Discussion of the 2030-02 Meeting as presented.

A comment raised awareness that the Record of Discussion indicated they would be shared with observers for review. The commenter recommended that this approach be pursued with all technical committees hosting meetings in public.

03.4 Actions Arising

The committee reviewed the actions arising list and noted that all actions from previous meetings are completed. It was noted that the impact analysis guidelines were included in the agenda package for information.

03.5 Bottom-up Work

The committee reviewed the memo from the Canadian Board for Harmonized Construction Codes (CBHCC) and directed the Working Group on Bottom-up Work (WG-BUW) to finalize their recommendations before the next meeting.

Discussions:

It was clarified that the goal is to identify opportunities to simplify the enforcement of the Codes, and address regulatory challenges across the provinces and territories.

The committee received an update from the Chair of WG-BUW. WG members were reminded to provide their recommendations in time for the next WG-BUW meeting on October 6.

Regarding the timeline and resources:

- A concern was raised about the tight timeline for WG-BUW, SCCC and CHBCC meetings in October. Members were reminded to familiarize with the topics and be prepared to speak at the next meeting, especially for the higher priorities on the list.
- Another concern was raised about whether the National Model Codes Committees (NMCCs) feel that topics can be addressed within their scopes, as well as whether the NRC resources are available to manage the workload of the identified BUW topics. It was responded that the WG was asked to identify 5 high priority topics and that the NRC would likely have the capacity to support the workload. It was added that if the issue is a matter of industry hardship that can be resolved with low efforts, it could warrant a higher ranking on the priority list.
- It was asked if there will be a future opportunity to identify BUW from the Code Change Requests (CCRs) that have not yet been triaged. The Chair replied that the SCCC recommendation provided by October 17 would be based on the CCRs triaged to date. More CCRs will be triaged by the CBHCC and forwarded to SCCC in the future.

Regarding the process:

- It was noted that there will be a secondary review of SCCC recommendations at the CBHCC level, which will provide an opportunity to align with provincial and territorial priorities.
- It was noted that the anticipated 5 priority topics are for the entire system rather than per NMCC. It was unknown at this point how the topics would be addressed (i.e., WG, Task Group (TG), NMCC) as this would also depend on the topics.
- It was suggested that a channel be made available for NMCC Chairs to recommend additional bottom-up work to the CBHCC.
- It was asked how CCRs triaged as minor tasks would be addressed. It was responded that CCRs triaged as minor tasks are grouped separately and are not handled by the SCCC through bottom-up work. They can be advanced through minor task WGs (i.e., Codes Canada Technical Advisors (TAs) reaching out to experts).
- It was further clarified that if a CCR has been triaged as a minor task, then it is outside the NMCCs' mandates. The developed PCF would not go to an NMCC; instead, it will go to the CBHCC for consideration. If a CCR is related to an NMCC's mandate, then it would not be triaged as a minor task.

Regarding the prioritization of topics:

- It was asked if the WG-BUW has established criteria on how they evaluate the various CCRs. It was responded that the WG's criteria have not been shared yet, but they will be when the WG reports its recommendations to the SCCC. With the recent direction in the memo, the WG will also address issues related to regulation and enforcement.

- Concerns were raised about the outstanding work on energy efficiency requirements related to Canadian General Standards Board (CGSB), which was presented to the prior SC-HSB (Standing Committee on Housing and Small Buildings). Natural Resources Canada (NRCan) has also submitted a CCR on this matter. This is one example of issues related to regulatory challenges and should be considered a high priority.

03.6 Cross-Committee Coordination

Each Chair of the NMCCs (or relevant Technical Advisor if the Chair was absent) presented their committee's terms of reference (ToR) in preparation of the upcoming review of proposed changes (PCFs) for the first Public Review (spring 2026).

Highlights and Discussions:

- It was highlighted that the CBHCC has revised the second bullet of NMCC-Accessibility's mandate by clarifying that the development of future technical requirements would apply to 100% of dwelling units where a barrier-free path of travel is already required to the unit entrance. This mandate is different from (lower than) the previous work on visitability to be published in NBC 2025.
- It was highlighted that the CBHCC revised the NMCC-Climate Change Mitigation (NMCC-Miti)'s mandate to provide performance requirements for on-site renewable energy systems, if voluntarily installed by the building owner, as well as attribute related energy savings and operational GHGe reduction.
- Regarding the NMCC-Miti's mandate, it was asked if small building validation would only be done for non-residential buildings. It was responded that the current scope focuses on existing gaps, including those in Section 9.36. (e.g., MURBs with 30% of the building allocated to common space).
- It was noted that Standard Development Organizations (SDOs) are responsible for submitting updates to the portal when a new edition of a referenced document becomes available.
- It was noted that regarding the NMCC-Seismic Design (SD)'s mandate, there may be a need to discuss NBC Part 9 work and if any update is necessary, CBHCC approval would be required.
- It was asked, regarding the NMCC-Fire and Life Safety (FLS)'s mandate on energy storage systems, how coordination with the Canadian Electrical Code (CEC) will take place. It was responded that the issue is on the NMCC/TG's radar with respect to incorporating construction requirements from the CEC into the National Model Codes. The issue has been raised to the code development system and would be addressed by the TG to resolve the confusion and challenges for the industry.
- Regarding the NMCC-Referenced Documents (RefDocs), it was asked if SDOs can sit on the NMCC as ex-officio. It was responded that the omission was intentional, to avoid the perception of conflicts of interest. That said, several SDOs have been present at NMCC meetings as observers and they were encouraged to participate in Codes work. It was also noted that an individual from the Standards Council of Canada is a member of the NMCC-RefDocs. These connections should help make SDOs aware of their role in code development system. People who have a vested interest in having their standard updated should remind the SDOs to submit a request through the portal.

- It was asked how the new LEED rating works along with the energy code. It was noted that LEED is a voluntary certification and it is on them to make sure there are no conflicts with regulations (Codes) - the TGs are aware of the LEED rating system in general.

03.7 Other Business

No discussion.

03.8 Upcoming Dates

The SCCC announced that a round-table discussion session is planned to take place at the SCCC 2030-04 meeting on October 15, 2025. The Chair reminded members to review past lists of topics to help with the bottom-up discussions at the next meeting.

A concern was raised about the meeting schedules of the SCCC and NMCC-Miti regarding the coordination of several PCFs for the first Public Review.

Discussions:

- An observer made some recommendations on prioritizing some topics.
    - The topic of firewalls, which was added to the NMCC-Performance-Based Solutions (PBS) mandate, may disqualify from the bottom-up list. However, there were new CCRs submitted from the Canadian Wood Council (CWC) that may or may not fall within the NMCC-PBS's mandate.
    - Regarding generic solutions for fire-resistance ratings of wall assemblies, there are 10 years of data and CCRs in the system for mid-rise buildings and 12-storey encapsulated mass timber construction (EMTC), which intend to update Appendix D as design solutions/options for light-frame assemblies. The data in National Building Code of Canada (NBC) 2015 was out of date, data in NBC 2020 was updated. Now some provisions in Part 9 are inconsistent with Appendix D. This could be a potential priority for bottom-up work.
- The WG-BUW acknowledged the comments for consideration. It was noted that the agenda package for the next SCCC meeting would be provided as far in advance as possible so that members and observers would have more time to review it prior to the meeting. There will also be an opportunity during the meeting to discuss the WG-BUW's recommendations and potentially modify the list.
- It was asked if it was possible to have an in-person meeting to go through the PCFs since it could be a big discussion. It was noted that an in-person meeting is unlikely considering the tight timeline.
- Observers were encouraged to provide comments on the bottom-up list of topics (rather than specific CCRs) at the October 15 meeting.
- It was asked where to find the CCR files relevant to the bottom-up topics as the previous agenda packages did not provide the actual CCR number. It was noted that all the triaged CCRs so far have been posted on Teamwork for observers.

ACTION: Staff to provide CCR numbers for bottom-up topics based on CCRs for observers.

03.9 Adjournment

Meeting adjourned at 2:33 pm ET.

04.4. Actions Arising

Action Requested: Decision ☐ Guidance ☐ Information ☒

Summary

The SCCC reviews the actions arising list at each meeting to ensure progress on the actions agreed upon during a meeting. The actions arising list summarizes all the actions the SCCC has agreed to in previous meeting(s). The actions are ordered by meeting minutes reference. The list indicates who was assigned for the actions and statuses.

The statuses shown are set at the time the agenda package for this meeting was prepared. The completed action items will be removed from the list at the next meeting.

In this Agenda Package

- Action Arising List – Updated

Desired Outcome

Review the Actions Arising List.

Meeting	Action	Assignment	Status
2030-03.8	Provide CCR numbers for bottom-up topics based on CCRs for observers	Codes Canada	Complete

CANADIAN BOARD FOR HARMONIZED CONSTRUCTION CODES

National Research Council Canada

2030-04 Meeting of the Standing Codes Coordination Committee

Agenda Item Summary Sheet

04.5. Bottom-up Work

Action Requested: Decision ☐ Guidance ☒ Information ☒

Summary

The Canadian Board for Harmonized Construction Codes (CBHCC) is tasked with developing the work plan for the 2030 code cycle, aligning it with the strategic priorities set by the Canadian Table for Harmonized Construction Code Policy (CTHCCP). In addition to addressing these strategic priorities, a segment of the work plan is dedicated to handling "bottom-up" requests from the code user community.

Bottom-up work refers to tasks not currently included in the work plan and outside the existing mandate of a national model codes committee (NMCC). Sources of bottom-up work could include:

1. code change requests (CCRs) received before June 30, 2024 that do not align with strategic priorities or the NMCC mandate,
2. previously approved tasks from the standing committee (SC, technical committees from the previous code cycle) work plans that were not completed, or
3. topics raised by participants – such as SCCC members, NMCC chairs, industry representatives, regulators, builders, professionals, and the general public – during discussions at SCCC meetings.

The SCCC is responsible for providing input to the CBHCC on bottom-up work. Ideally, this process results in a shortlist of bottom-up work for the CBHCC to consider adding to the work plan.

At the 2030-02 meeting, the SCCC struck a Working Group on Bottom-up Work (WG-BUW) to "review the Codes Canada's recommendation on the ranking of the potential bottom-up topics, provide a new ranking (high/medium/low) if disagree, and submit no more than 5 highest ranked topics to SCCC for consideration."

At the 2030-03 meeting, the SCCC received a memo from the CBHCC, "*requesting that the SCCC provide a recommendation on bottom-up considerations for the 2030 work plan no later than October 17, 2025.*" And asked the SCCC to "*identify any items in the recommendation that help address regulatory or implementation challenges, including opportunities for flexible design options.*" The SCCC asked the WG-BUW to consider the CBHCC's requests and provide their recommendations by the next meeting.

The Chair of the WG-BUW provides a summary of the WG's considerations and submits WG's final recommendations to the SCCC at this meeting.

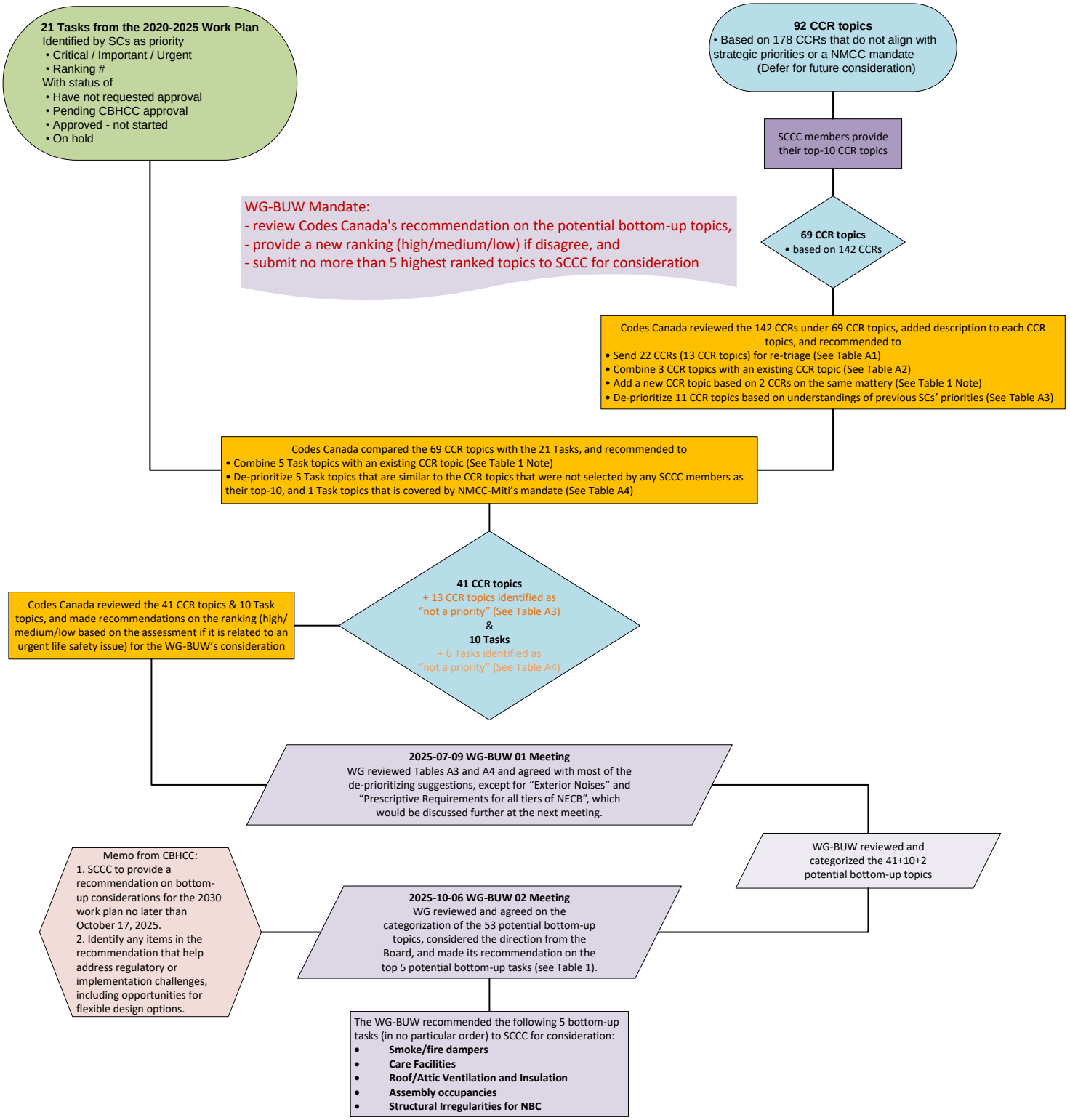
2030-04 Meeting of the Standing Codes Coordination Committee

In this Agenda Package

- WG-BUW's recommendation package:
    1. Flowchart: BUW Assessing Process
    2. Table 1. WG-BUW Categorization and Recommendation
    3. Table A1. CCR Topics for Re-triage
    4. Table A2. CCR Topics that Combined into another Topic
    5. Table A3. De-prioritized CCR Topics
    6. Table A4. De-prioritized Tasks from Previous SC Work Plans

Desired Outcome

SCCC accepts WG-BUW's recommendation on the bottom-up work.


21 Tasks from the 2020-2025 Work Plan
Identified by SCs as priority
• Critical / Important / Urgent
• Ranking #
With status of
• Have not requested approval
• Pending CBHCC approval
• Approved - not started
• On hold
92 CCR topics
• Based on 178 CCRs that do not align with strategic priorities or a NMCC mandate (Defer for future consideration)
SCCC members provide their top-10 CCR topics
WG-BUW Mandate:
- review Codes Canada's recommendation on the potential bottom-up topics,
- provide a new ranking (high/medium/low) if disagree, and
- submit no more than 5 highest ranked topics to SCCC for consideration
69 CCR topics
• based on 142 CCRs
Codes Canada reviewed the 142 CCRs under 69 CCR topics, added description to each CCR topics, and recommended to
• Send 22 CCRs (13 CCR topics) for re-triage (See Table A1)
• Combine 3 CCR topics with an existing CCR topic (See Table A2)
• Add a new CCR topic based on 2 CCRs on the same mattery (See Table 1 Note)
• De-prioritize 11 CCR topics based on understandings of previous SCs' priorities (See Table A3)
Codes Canada compared the 69 CCR topics with the 21 Tasks, and recommended to
• Combine 5 Task topics with an existing CCR topic (See Table 1 Note)
• De-prioritize 5 Task topics that are similar to the CCR topics that were not selected by any SCCC members as their top-10, and 1 Task topics that is covered by NMCC-Miti's mandate (See Table A4)
41 CCR topics
+ 13 CCR topics identified as "not a priority" (See Table A3)
&
10 Tasks
+ 6 Tasks identified as "not a priority" (See Table A4)
Codes Canada reviewed the 41 CCR topics & 10 Task topics, and made recommendations on the ranking (high/medium/low based on the assessment if it is related to an urgent life safety issue) for the WG-BUW's consideration
2025-07-09 WG-BUW 01 Meeting
WG reviewed Tables A3 and A4 and agreed with most of the de-prioritizing suggestions, except for "Exterior Noises" and "Prescriptive Requirements for all tiers of NECB", which would be discussed further at the next meeting.
WG-BUW reviewed and categorized the 41+10+2 potential bottom-up topics
Memo from CBHCC:
1. SCCC to provide a recommendation on bottom-up considerations for the 2030 work plan no later than October 17, 2025.
2. Identify any items in the recommendation that help address regulatory or implementation challenges, including opportunities for flexible design options.
2025-10-06 WG-BUW 02 Meeting
WG reviewed and agreed on the categorization of the 53 potential bottom-up topics, considered the direction from the Board, and made its recommendation on the top 5 potential bottom-up tasks (see Table 1).
The WG-BUW recommended the following 5 bottom-up tasks (in no particular order) to SCCC for consideration:
• Smoke/fire dampers
• Care Facilities
• Roof/Attic Ventilation and Insulation
• Assembly occupancies
• Structural Irregularities for NBC

WG-BUW's top 5 recommendations

Instructions for Categorization:

Column G: Estimated Effort (choose 1 of 4)
- High
- Medium
- Low
- Not Sure

Column H: Choose 1 of 5 Options
- **Clarification** –There is no intended change to the code language, but rather an appendix note is appropriate.
- **Code Change** – The CCR is already in the code, but it needs modification.
- **Gap** – Choose this if it is new item in the Code that is not already regulated. Assume at least medium effort for any of this type.
- **Objective** – Choose this if an Objective statement of the code needs to change. Any objective change will require policy discussion and should therefore be considered to have a high amount of effort.
- **None of the Above**

Column I: Choose 1 of 4 Options
- **Industry Hardship** –Industry is restricted if the CCR or topic is not addressed.
- **AHJ Request** – Topic or CCR was submitted by an AHJ and they have requested clarification or improvement of an existing code requirement.
- **Emerging Technology** – New product that is being used in construction and the Code needs to catch up.
- **None of the above**

Column J: Choose 1 of 3 Options
- Yes
- No
- Not sure

Column K: Notes
- Use this box to make notes if you think 1 or some of the CCRs in a topic are especially important to address. They are likely to stay grouped in the topic, but hopefully the time assigned to a topic might be reduced based on suggestions.

				WG-BUW Categorization						
	Topics	Note	Description	Est. Effort	CCR Type Qualifier 1	CCR Type Qualifier 2	Life Safety Related?	Note for Categorization	WG Ranking	Rational
1	Smoke/fire dampers	Combined w task "Smoke Dampers"	This topic includes a variety of suggestions pertaining to the defined terms, application, installation, locations, and relaxations for smoke and fire dampers.	Low	Clarification	Industry hardship	No	1846 - Damper harmonization with Ontario 2215 - clairification re terminology, improved understanding and effectiveness 2137 - Reject. Code is clear 1950 - may have merit. 1869 - May have merit.	high	Suggest to focus on CCRs 1846 and 2215, maybe work on 1950 and 1869. Harmonization issue that leads industry hardship.
2	Care Facilities		This topic includes: - the introduction of the requirements for care facility in Part 3 into Part 9, and - the introducuction of a new definition for sleeping room applicable to care and treatment occupancies.	Medium	Code Change	None of above	Yes	1947 - definition of sleeping room to include emergency rooms. These buildings are sprinklered and have fire alarm systems, and 24 hour staff. Could consider classifying all Care as Part 3.	high	High effort (CCR 1947) without life and safety concerns. CCR 417 should be focused, which related to a situation that a residential homes are being turned into care facilities.
3	Roof/Attic Ventilation and Insulation		This topic includes a variety of suggestions pertaining to roof/attic ventilation and insulation. Subjects to be addressed are: - erosion/scouring of loose atttic insulation due to wind, - Clarification of the intent of attic ventilation, and - Clarification of unvented attic space.	Medium	Code Change	Industry hardship	No	1785 - Do not need venting in new construction with proper air tightness; 1484 - include language for roofs that do not need ventilation	high	Industry hardship and regulatory issue
4	Assembly occupancies		This topic includes a suggestion to clarify the application of "take out" restaurants with limited seating capacity for 4-16 people versus an assembly occupancy classification.	Low	Clarification	AHJ Request	No	review of this would address Group E vs A2 and improve consistency of interpretation	high	Clarification for regulators, low effort
5	Structural Irregularities for NBC		1) Update design requirements in the NBC to ensure that irregular buildings, which are becoming increasingly more common and more severe, do not increase the risk beyond current level of acceptable risk and meet the performance objectives of NBC. 2) Develop design requirements for emerging type of structural irregularities to mitigate any increase in the risk beyond the current level of acceptable risk in the NBC	Medium	Gap in the Codes	Emerging technology (e.g., LIB, PV, etc.) or materials	Yes		high	
6	Concrete and Rebar materials		This topic includes: - all concrete in accordance with the NBC requirements (Parts 3 and 9) should be produced and delivered by a cement plant holding a compliance certificate issued by BNQ, - requirements in the NBC for the compressive strength of concrete are aligned with those in CSA A23.1., - the replacement of steel with fiberglass rebar for reinforced concrete, and - referencing CSA S807-2019, "Specification for fibre-reinforced polymers" for specifications of FRP reinforcement used in concrete.	Low	Code Change	Emerging technology (e.g., LIB, PV, etc.) or materials	No	1991, 2065 - might have merit for harmonization, not aware of related problems 2081 - fibre glass rebar is being used more frequently and code doesn't recognize	high	Emerging technology without much regulation. Suggest to include CCR 1862 (currently categorized under topic "miscellaneous structural") to address with CCR 2081.
7	Miscellaneous Structural		This topic includes: - the exemption of the reference to the ASTM E1300, "Standard Practice for Determining Load Resistance of Glass in Buildings" for the design of glass balustrades (guards), - changes the order of the Articles specifying the rain load on roofs, - moving Articles 4.1.6.5. to 4.1.6.12. from the NBC back into the Structural Commentaries (User's Guide: NBC 2015: Part 4 of Division B), - replacing the terminology "tributary width" in Part 9 with "supported joist length", - delete Clause 9.4.1.1.(1)(b) to clarify the structural design requirements and application limitations, - delete the clarification provided in Clauses 4.1.2.1.(b) to (d) on the typical types of load, - expanding the definition for High Importance Category building with specific classification of occupancies that include vulnerable people, - introducing a requirement to assess the buoyancy, B, in the calculation of the load combinations, - identification of the need to introduce requirement for the design of segmental retaining walls with a reference to the NCMA, "Design Manual for Segmental Retaining Walls.", - addition of a provision for parapet design that could support the load prescribed in the current Safety Code for a temporary guard on the roof, and - various deifnition revisions.					This list should be reviewed by structural committee. Some might be simple and straighforward, while others will take extensive time.	high	Suggest to focus on CCR 1573 (low effort), 1472 (industry hardship and low effort), 2154 (gap in the Codes), 1849 (gap in the Codes), 1582 (emerging technology).
8	Protection of foam plastics		This topic includes a suggestion to clarify the type the concealed spaces exempt from the protection of foam plastics, on the basis that the current wording leads to inconsistent interpretations by AHJs.	Low	Clarification	AHJ Request	Yes		high	Regulatory issue (not consistent applied)
9	Braced Wall Panels		This topic includes: - revision of the spectral acceleration upper and lower limits set for spacing and dimensions of braced wall bands and braced wall panels for seismic and wind loads, - clarification of the application where exterior walls of the upper most storey are set back from the exterior wall of the storey below, - clarification of the applicable requirements for floor system not terminating at an exterior wall for adequate bracing to resist lateral loads, and - limiting the notching and drilling of lateral braced panels to run ducting systems.	Not sure	Clarification	AHJ Request		Could ask CWC to review these for consideration.	high	Suggest to focus on CCRs 1808 and 1799. CCRs were submitted by AHJs. May cause un-safe construction.
10	Smoke/Heat/CO Detectors	Combined w task "Fire Alarm and Detection Systems"	This topic includes suggestions pertaining to detection and alarm systems for heat and carbon monoxide (CO), as well as considering detectors in storage garages and interconnection with smoke alarms.	Medium	Gap in the Codes	AHJ Request	Not sure	1451, 2122 - property damage related, common location of fire in dwellings 2202, 2205 - add co detectors vs alarms	Medium	Suggest to focus on CCRs 1451 and 2122. More property protection than Life safety related, and would be done with not too much effort.

				WG-BUW Categorization						
	Topics	Note	Description	Est. Effort	CCR Type Qualifier 1	CCR Type Qualifier 2	Life Safety Related?	Note for Categorization	WG Ranking	Rational
11	HVAC systems		This tasks could - consider default position for air intake dampers upon failure. - consider supplemental exhaust requirement for areas with excessive moisture in homes (e.g. saunas and pools). - alternative joints for ductwork.			Industry hardship	Not sure	1930 - Emergenging technology and industry hardship 1959 - Might have merit. Low effort. 2002 - Should be reviewed by NMCC with knowledge.	Medium	Some CCRs are straight forward and low effort that should be addressed.
12	Spatial separation		This topic includes suggestions for the spatial seperation of Part 9 buildings, pertaining to glazed openings in the exposing building face, and the construction of soffits.		None of above	None of above	No	1100 - 2016 CCR. Staff analysis suggests the issue doesn't exist. Reject 1413 - overly onerous. Working group reviewed previously. Reject.	Medium	Suggest to send CCR 1413 to the relavant NMCCs on fire life safety. Suggest to close CCR 1100 as the issue might already be addressed.
13	Sprinkler Systems		This topic includes a variety of suggestions pertaining to design temperatures, reliability of plastic components, domestic water system supply, back-up water supply, fixed-glass wall systems, and optional sprinklering in some Part 9 buildings.						Medium	CCR 1027 was rejected by SC-FP.
14	Farm Buildings – Small Buildings		This task will review and update the provisions for small farm buildings based on the National Farm Building Code (NFBC 1995), and develop related commentary material.						Medium	High effort, requires collective effort of many NMCCs. Policy discussion may be required.
15	Flashing Materials		Update the list of materials permitted for use as flashing in masonry construction in NBC.	Low	Code Change	Emerging technology (e.g., LIB, PV, etc.) or materials	No	Suggest to re-triage as "minor task"	Medium	Suggest to re-triage as "minor task" to be address during this Code cycle.
16	Interceptors		Expansion of requirements for grease interceptors to all interceptors.					NPC.	Medium	Request from AHJs
17	Miscellaneous plumbing		This topic is to - add new defined terms or revise terms for different types of fixtures or traps - consider changes to drainage system requirements - review maximum length of hot water distribution system		Clarification	AHJ Request		Send to appropriate NMCC	Medium	Request from AHJs
18	Stairs/Ramps/Handrails/Guards		This topic includes a variety of suggestions pertaining to open risers, spiral staircases, tread thickness, glass in guards, additional locations for guards, and referencing CSA A500, "Building guards". As well, address outstanding issues mainly falling within Part 9 application.	High	Clarification	AHJ Request	Not sure	871 - requirements are in Part 9 now. Reject., 1585, 1988 - relates to problems with standards and appropriate references, medium effort, not code 1616 - might have merit, low effort 1999 - request to lower requirements related to spiral staircases reject. 2009 - might have merit. infrequent situation. 2142 - if this is deemed necessary, better to eliminate permission for open risers 215 2006 Change that has been completed. 966 - Has this been completed? 1232 - Reviewed many times. No industry or homebuilder support at this time. 1243 - Completed in 2025 NBC. 1248 - Has merit.	Low	Some work has been done in previous Code cycles, e.g., CCR 1232 has led to PCF 1578 draft, no further decision was made by SC-HSB.
19	Commissioning of Energy Using System	Combined w task "Commissioning of Building Systems"	Commissioning requirements for energy using systems in new and alterations of existing buildings.	Not sure	Gap in the Codes			Send to approriate NMCC for final decision to Board.	Low	Might be already fixed in the 2025 Codes with a new Part on AEB.
20	Firestops		This topic includes a variety of suggestions pertaining to firestopping requirements, including: horizontal service spaces, continuity at locations abutting exterior facades, and assessing compliance (inspections).	Not sure			Not sure	1863 1861 1860 more onerous inspections requested by industry rep. Not usually a code jurisdiction unless to accept a Standard. 1795 May have merit. Send to appropriate NMCC. 718 - May have merit. Send to appropriate NMCC.	Low	Promoting inspection and qualification is outside the scope of Codes.
21	Industrial occupancies		This topic includes a suggestion to clarify the defined term low-hazard industrial occupancy by referring to combustible content as not more than 50 kg/m2 "and" (instead of "or") 1200 MJ/m2 of floor area.	Low	Clarification		No		Low	
22	Tents/Air Supported Structures	Combined w task "Fabric-Covered Buildings"	The topic includes a suggestion to add requirements for tents and air-supported structures to address some fire and life safety concerns. It will determine what protection is required, if any, to address the fire protection needs for pre-engineered metal or fabric-covered buildings.	High	None of above		No		low	Not a common issue.
23	Combustible piping		This topic includes a suggestion to allow combustible piping to be used as duct work, and another suggestion to clarify its acceptable level of performance when concealed in a wall or concrete floor slab.					2074 - May not be an issue. Was previously recommended to be rejected. 1253 - why? Is this an idustry hardship?	Low	WG-BUW does not see the needs
24	Component Additive Method (CAM) Update		This task will reaffirm or update the Component Additive Method (CAM) outlined in Section D-2.3. in light of changes in construction material specifications, construction practices and standards and new research performed.	Low	Clarification	Industry hardship		87 - Confirm if this is still relevant. It was 2005 request 466 - latest comment was to reject as this has been addressed. 1526 - May have merit	low	Some issues (CCRs) under this task have been worked on already,
25	Condensation control		Better control condensation in houses. Also review NBC Table 9.7.3.3. considering condensation index and differentiating between different types of fenestration					No suggested CCR. Window standard was introduced recently.	low	
26	Cooking equipment		Review requirements for cooktops installed in Part 3 and Part 9 buildings						Low	
27	Elevator car dimensions		This topic includes a suggestion to relax the application of elevator car dimensions requirements in cases where elevators are installed optionally (i.e. for convenience) in locations not otherwise mandated by the Code.						Low	
28	Elevators	Combined w task "Harmonization with CSA B44 (Standard on Elevators)"	This topic includes a suggestion to remove inconsistencies between the application of CSA B44.1:19/ASME A17.5, "Elevator and escalator electrical equipment", and the NBC, review the standard for possible conflicts with the NBC, and consider requiring contiguous numbering of storeys.						Low	
29	Fuel-fired appliances		This topic includes a suggestion to harmonize the requirements for fuel-fired appliances located in service room in Part 9 as in Part 3.	Low	Code Change	Industry hardship		Part 9 is more onerous than Part 3. Should be addressed	Low	
30	Hallways		This code change request suggests defining "hallway" in the Code to help eliminate confusion and inconsistency among code users.					Low priority.	Low	
31	Miscellaneous seismic		The code change request adds the seismic restraint exemptions in Sentence 4.1.8.18.(2) of NBC for elements of structures and non-structural components and equipment.	High	Code Change	Industry hardship	no		Low	
32	Occupancy combinations		This topic includes a suggestion to introduce a relaxation for occupancy combination classified as Group F-2 and residential occupancy in Article 3.1.3.2. of NBC.	high	Code Change				Low	Not a common issue.

				WG-BUW Categorization						
	Topics	Note	Description	Est. Effort	CCR Type Qualifier 1	CCR Type Qualifier 2	Life Safety Related?	Note for Categorization	WG Ranking	Rational
33	Qualified Firestop Contractors	NEW, Re-group CCRs on similar issues	This topic introduces the a reference to the "ULC Qualified Firestop Contractor Program" and the "CAN/ULC Qualified Fireproofing Contractor Program".					previously responded	Low	Outside the scope of Codes
34	Self-Service Storage Buildings (SSSB)		The remaining work (i.e. phase 2) of this task will clarify the construction requirements for this multi-storey SSSBs based on the specific hazards associated with the storage of various goods.	Medium	Gap in the Codes	None of above	No	See 3.10 of OBC. Harmonization?	Low	
35	Wall Finishes		This code change requests to clarify the requirement of Waterproof wall finish height for free-standing bathtubs.						Low	
36	Fire Separation/FRR/Flame Spread		This topic includes a variety of suggestions pertaining to the seperation of storage garage from a dwelling unit; seperations in car dealerships; performance of finger-jointed studs and triple leaf wall constructions; continuity of ceiling membranes; clarifying the intent of Table 9.23.17.2.-B; and assessing compliance.	Low	442 - Code Change, 765 - Clarification	Industry hardship	Yes	442-fs single family garage, 2159 - additional wall assembly in Part 9 table that is common; 1865 - additional requirment for inspection of fire stop assembly; 1864 - qualified fireproofing contractor program 442 - yes, medium effort. 765 yes, low effort . The rest in this topic no. 1865 is miscategorized. Unrelated to fire separation. Move to miscellaneous structural. Low effort.	Low hanging fruit	Suggest to only focus only on CCRs 442 and 765 if this topic is picked.
37	Cistern for potable water		Add requirements for cisterns holding potable water.	Low	Code Change	AHJ Request	Not sure		Low hanging fruit	Regulatory request
38	Dryer as Fixtures		The CCR requests that non-vented combination washer/dryers be considered as fixtures in the NPC.						Low hanging fruit	
39	Fiber-Cement Cladding Materials		Introduces a reference to the ASTM C1186, "Standard Specification for Flat Fiber-Cement Sheets."		Gap in the Codes	Industry hardship			Low hanging fruit	Suggest to send to NMCC-RefDoc.
40	Exterior Noise		As with other items related to sound, the issue of transmission of exterior noise into the interior of buildings needs to be addressed	High	Objective of the Codes (policy discussion)	AHJ Request	No		Future work	Policy discussion required.
41	Prescriptive Requirements for all Tiers of NECB		Develop prescriptive requirements for all energy tiers of the NECB	High					Future work	
42	RdRo factors and Seismic Force Resisting Systems in Table 4.1.8.9.		Develop a unified approach and validate the values of ductility related force modification factor (Rd) and the overstrength-related force modification factor (Ro) for existing SFRS in the NBC. Evaluate the possibility of adopting a unified approach for all materials and examine the potential of using it to determine ductility and overstrength factors in NBC.	Medium	Code Change	Industry hardship	no		Future work	Suggest to send to NMCC-SD (currently outside its mandate)
43	Reliability-Based Geotechnical Design		Review/Update geotechnical provisions in Part 4 of the NBC. Develop related commentary material.			Emerging technology (e.g., LIB, PV, etc.) or materials			Future work	Suggest to send to NMCC-SD and PSD (potential item for future Code cycle)
44	Buildings or Parts Thereof in Subsection 3.1.5.		This task will clarify the intent and application of Subsection 3.1.5. for noncombustible construction, which are intended to be applied to either the entire building or parts of buildings.					Confirm if this is still an issue with CWC. Original request was submitted in 2008.		**ACTION: confirm with CWC if this issue still exists** **Response:** the latest provisions in the NBC are still unclear as to how (or whether) to deal with the 'part of a building required to be noncombustible' aspect and whether it invokes (or not) all or certain provisions of 3.1.5. to that 'part' otherwise required to be noncombustible construction.
45	Exits		This topic includes suggestions to relax select requirements pertaining to exits through lobbies. CCR 1958 focuses on large building projects with multiple lobbies and exits; One of the focuses is on mailrooms located off of lobbies.	Low	Code Change	Industry hardship	No	This is a common alternative solution issue. Code should be reviewed to see if it is overly restrictive.	Future work	
46	Floor drains		Mandate floor drains in bathrooms, kitchens and laundry rooms of MURB units.	Low	Code Change	Emerging technology (e.g., LIB, PV, etc.) or materials	No	with more and more Murbs being built this is a good suggestion	Future work	Suggest to send to relavant NMCCs (maybe NMCC-IndE)
47	Interpretation of "Suite"		This topic includes a suggestion to revise the defined term for suite to assist in consistent interpretation throughout the country, specifically when considering a building used and operated under a single tenancy (one major occupancy).	High	Clarification		No		Future work	Important item for people.
48	Roofing		The request for change identifies an incorrect reference to a existing clause and suggests reference to a different clause, requiring editorial revision for testing water vapour permeance, along with an addition to include extruded/expanded polystyrene in the list of acceptable material types.	Low		AHJ Request	No	Could make building more resilient in the face of climate change.	Future work	potential item for future Code cycle
49	Secondary suites		This request for change creates a new Section in Part 9 compiling all the applicable requirements for secondary suites.	high	Code Change				Future work	Policy driven issue.
50	Means of Egress in Assembly Occupancies		The remaining work (i.e. phase 2) of this task will finish review requirements in Subsection 3.3.2. that deal with the means of egress of assembly occupancies with fixed seats, specifically as they relate to requirements on handrails in aisles.						Unknown	Outside the scope of any NMCC's mandate at this moment.
51	Plastic Insulating Sheathing – Cladding Connections and Wind Resistance		Investigate • Attachment of cladding or furring through foam plastic insulating sheathing to control fastener bending and deflection in Part 9 buildings • Wind-resistance of foam plastic sheathing products to minimize wind-related damages in both Part 3 and Part 9 buildings	Medium	Gap in the Codes	Emerging technology (e.g., LIB, PV, etc.) or materials	No	Plastic Insulation Sheathing Task Group?	Unknown	Could be sent to relavant NMCCs on building envelope.
52	Elements of Structures and Structural Components		Update design requirements for elements of structures and structural components in the NBC to address identified problems such as lack of clarity, alignment with modern procedures reflected in other international building codes but not yet implemented in the NBC.						Unknown	Forward to relavant NMCCs.
53	3D printed homes		The topic includes a suggestion to add acceptable solutions for 3D printed components to Part 9 of Division B.	High	Gap in the Codes	Emerging technology (e.g., LIB, PV, etc.) or materials	No		Unknown	More research is required before including in the Codes. Potential policy discussion.

	CCR Topics	Description
1	Backwater valves	Editorial clarification for backwater valves. CCR is complete in second printing of 2020 NPC.
2	Emergency Master Key	This topics includes a suggestion to require a master key to be located in a lock box located in the lobby of multi-storey buildings for quick access to all floors for emergency personal to perform their duty.
3	Energy efficiency	CCR 1859 is on energy efficiency of laboratory fans. CCR 1789 is on reconsideration of using FDWR in NECB. CCR 1881 is on air-sealing of penetrations through the air barrier. These CCRs could be considered as small tasks within NMCC-Miti. They are not explicitly related to each other.
4	Energy recovery systems	CCR 2004 requests clarification of requirements for heat recovery from ventilation systems in NECB
5	Hazardous materials	This topic includes a suggestion to clarifiy conformity requirements for containers and portable tanks by adding more specificity into the language used in the provision, and a suggestion to add provisions for reporting the loss of containment events.
6	Special fire suppression systems	This topic includes a suggestion to reference NFPA 2001, "Standard on Clean Agent Fire Extinguishing Systems" for the design and installation of other special fire suppression systems.
7	Spray-applied polyurethane	This topic includes a suggestion to reference CAN/ULC-715.1, "Standard for Safety Thermal Insulation - Spray Applied Rigid Polyurethane Foam, High Density - Material Specification" in the Codes.
8	Voice communication systems	This topic includes a suggestion to clarify what "audible" and "intelligible" mean, so that they can be measured.
9	Access to utilities	This topic includes a suggestion to incorporate requirements to make it mandatory that utilities (e.g., AV cables) are able to be easily upgraded and accessed within the building.
10	Commercial building nuisance issues	This request for change suggests the inherent right to "quiet enjoyment "of the dwelling without exterior disturbances from commercial property developments.
11	Division C - Qualified Professionals	This topic includes administrative requirements to clarify persons qualified to carry out design in accordance with Part 4 of Division B and, separately, to identify persons qualified to carry out energy performance calculations.
12	Mass notification systems	This topic includes a suggestion to introduce a new requirement to the codes regarding mass notification systems in accordance with ULC-S524 and ULC-S576.
13	Waste water management	This topic includes a suggestion to expand the defined term private sewage disposal system to include any on-site waste water management system.

	CCR Topics	Description	Action
1	Roof/attic insulation	The CCR aims to address issues with erosion/scouring of loose-fill insulation in attic/roof spaces caused by wind movement through vented soffits by covering the loose-fill insulation with material	Combined into "Roof/Attic Ventilation and Insulation"
2	Floor numbering (related to Elevators)	This topic includes a suggestion to require contiguous numbering of floors on the basis of public safety (such as communication during an emergency response).	Combined into "Elevators"
3	Windows, doors and skylights	Review of NBC Table 9.7.3.3. considering condensation index and differentiating between different types of fenestration	Combined into "Condensation control"

	CCR Topics	Description
1	Egress Windows	This topic includes a suggestion to set a maximum sill height for basement egress windows at 1000 mm, to align the requirement for egress windows on other floors.
2	Plumbing facilities	Add provision of waste bins inside lavatories
3	Waste water energy recovery	Add requirements for wastewater energy transfer retention vessels
4	Gypsum Board	This topic includes suggestions related to acceptable performance and ease of enforcement for gypsum board/panel products.
5	Industrial wind turbines	This topic includes a suggestion to introduce requirements for all industrial wind turbines to be protected with an automatic clean agent fire detection system.
6	Insulating slabs on ground	Make continuous sub-slab insulation mandatory to reduce energy waste, on the basis that the majority of building sites in Canada are affected by constantly moving ground water (which is a factor in heat loss).
7	Interior lighting controls	Remove manual controls where automatic motion sensors are required in NECB.
8	Linen and refuse chutes	The topic includes suggestions to reference the following standards for requirements related to linen and refuse chutes: NFPA-82, "Standard on Incinerators and Waste and Linen Handling Systems and Equipment", and CSA B651 "Accessible Design for the Built Environment".
9	Piping Valves	CCR 1174 suggests that a standard for building services piping valves be referenced, but does not provide a suggestion on the standard.
10	Washroom terminology	CCR 1814 requests to change the term "water closet" to "toilet"
11	Water system designs	CCR 1870 requests mandatory use of greywater recycling systems.
12	Sound Transmission	This topic includes: - allowing precast concrete hollowcore slabs with the mass per unit area less than 300 kg/m2 - adding minimal requirements for acoustical performance in all new schools and extensions to existing schools - expanding the library of available data to include more wall / floor junctions and specifically data for floors with concrete poured directly onto the CLT floor
13	Roof Anchors	This topic includes suggestions to - place anchors every 1 m2 on all Part 9 roof tops to avoid falls - add requirements for anchorage points on buildings exceeding 3 storeys - introduce requirements to provide a roof anchorage location in buildings for the purposes of building maintenance, such as window cleaning, re-roofing, hoisting equipment, or fire-fighting services

A4	SC Tasks	Description	Rationale
1	Airborne Sound	Expand the scope of airborne sound transmission requirements beyond dwelling units	"Sound transmission" topic related
2	Exterior Noise	As with other items related to sound, the issue of transmission of exterior noise into the interior of buildings needs to be addressed	"Sound transmission" topic related
3	Firewalls	This task will review the design of high challenge firewalls, analytical determination of fire resistance and the maintaining of integrity of fire barriers.	"Fire wall" topic related
4	Impact Sound	Address and develop requirements for impact sound insulation for both Part 3 and Part 9 buildings to mitigate health risks associated with both direct and indirect means of transmission and to close one of most important gaps in the current noice protection.	"Sound transmission" topic related
5	Low Frequency Equipment Noise	This could be addressed together with impact sound	"Sound transmission" topic related
6	Prescriptive Requirements for all Tiers of NECB	Develop prescriptive requirements for all energy tiers of the NECB	Might already covered by NMCC-Miti mandate

Note: one vote received on CCR topic "sound tranmission" after Codes Canada recommended this list. WG-BUW reviewed this list and agreed with Codes Canada's suggestion.

CANADIAN BOARD FOR HARMONIZED CONSTRUCTION CODES

National Research Council Canada

2030-04 Meeting of the Standing Codes Coordination Committee

Agenda Item Summary Sheet

04.6. Round Table Discussion

Action Requested: Decision ☐ Guidance ☒ Information ☒

Summary

One of SCCC's mandates is to "provide input to identify potential bottom-up tasks for consideration by the CBHCC for addition to the work plan".

The SCCC bases its recommendation of the potential bottom-up topics on

1. Code Change Requests (CCRs) received before June 30, 2024 that do not align with strategic priorities or a NMCC mandate, and have been triaged by the CBHCC (with a decision to "defer for future consideration"),
2. Prioritized tasks from previous Standing Committee (SC) work plans, and
3. Topics raised at SCCC meeting.

In order to **fill the gap** and provide an opportunity for SCCC meeting participants to suggest **additional** potential bottom-up topics, a round-table discussion session is scheduled at this meeting.

The meeting participants are advised to review

1. Agenda item 2030-01.5.3. for the list of CCR topics (92) and
2. Agenda item 2030-02.5.2. for the list of tasks (20) from the previous SC's work plans

Note: the full list of potential bottom-up topics based on CCRs and tasks from the previous SC work plans can also be found in the "WG-BUW's recommendation package" in agenda item 2030-04.5..

before suggesting any **additional** bottom-up topics that are not covered by the two lists above.

Desired Outcome

Meeting participants to make suggestions on the bottom-up work.

04.6.1. Risk of Grenfell Tower Fire in Canada

Action Requested: Decision ☒ Guidance ☐ Information ☒

Summary

The National Model Codes Committee on Fire and Life Safety (NMCC-FLS) reviewed the report from the formal Standing Committee on Fire Protection (SC-FP) on the risk of Grenfell Tower fire in Canada at its kick-off meeting held on March 3–5, 2025 in Ottawa, ON.

The report aimed to identify vulnerabilities in Canadian buildings. It focused on how much these issues exist and how they can be addressed using Canadian codes.

In view of the findings in the report, the NMCC-FLS agreed to

- Share their interest on the topic with the CBHCC;
- Monitor opportunities to become involved.

The Code Development System group talked about submitting a request to the SCCC. They suggested the SCCC to prioritize the activities mentioned above by the NMCC-FLS as a bottom-up task.

The report found seven opportunities for the NMCC-FLS to explore further. If approved, the NMCC-FLS could establish a working group to monitor and engage in fulfilling those opportunities.

Recent History

In January 2021, the Canadian Commission on Building and Fire Codes (CCBFC)'s Executive Committee (EC) requested that the SC-FP monitor the investigation of the Grenfell Tower fire. In June 2021, the SC-FP accepted an interim summary report, Interim Summary Report to the SC-FP from the WG on Fire Events – Risk on Grenfell Tower Fire in Canada, which was based largely on the Grenfell Tower Inquiry's Phase 1 Report. The interim report was submitted to the EC.

In fall 2024, the Grenfell Tower Inquiry's Phase 2 Report was published. In light of it, the CBHCC informed the SC-FP chair that it would be receptive to receiving and reviewing an updated report on whether a fire like the Grenfell Tower fire could occur in Canada given the current codes requirements.

The SC-FP's updated report, *Summary Report to the CBHCC from the Standing Committee on Fire Protection: Risk of Grenfell Tower Fire in Canada*, was submitted to the CBHCC for consideration on December 3, 2024.

The SC-FP recommended the CBHCC to:

- Pursue the opportunities outlined in the updated report,
- Maintain a development group to continue monitoring significant fire events worldwide, and
- Encourage all persons and organizations involved in building construction, alteration, ownership and fire response to review the conclusions of the Grenfell Tower Inquiry's Phase 2 Report for opportunities to improve their processes in Canada.

In this Agenda Package

- Summary Report to the CBHCC from the Standing Committee on Fire Protection: Risk of Grenfell Tower Fire in Canada

Desired Outcome

SCCC to consider "Risk of Grenfell Tower Fire in Canada" as a potential bottom-up task.

Summary Report to the CBHCC from the Standing Committee on Fire Protection: Risk of Grenfell Tower Fire in Canada

Updated November 2024

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1. Issue

A number of major fire losses involving exterior cladding systems have occurred world-wide. The most significant in terms of loss of life was the June 14, 2017 Grenfell Tower fire. Other fire events have resulted in loss of life, injuries, major damage, and significant dollar loss. The Standing Committee on Fire Protection (SC-FP) was asked to review the conditions associated with the major fire event at the Grenfell Tower and comment on the potential for a similar event to occur in Canada.

A working group (Working Group – Fire Events (WG-FE)) was established in January 2021 to study available reports and report to the SC-FP (See Section 2 below for WG-FE members). In particular, the WG-FE reviewed the construction details of the Grenfell Tower, the factors contributing to the major fire and significant and tragic loss of life and analyzed the mechanism by which the NBC would apply to a similar energy retrofit on an existing unsprinklered residential high building. An Interim summary report to the former CCBFC Executive Committee from the SC-FP, '*Risk of Grenfell Tower Fire in Canada*' was issued in May 2021. That report presented the summary of the SC-FP analysis and identified areas for further work and investigation. That report is based largely on the *Grenfell Tower Phase 1 Report, Public Inquiry into the Fire at Grenfell Tower on 14 June 2017* (Grenfell Tower Phase 1 Report) issued October 2019. The Grenfell Tower Phase 1 Report focused on the event of June 14, 2017 to establish relevant facts.

The Grenfell Tower Phase 2 inquiry was paused in March 2020 due to the global pandemic, but hearings resumed May 17, 2021 to examine the circumstances and causes of the disaster in detail. Following the official release, in September 2024, of the *Grenfell Tower Inquiry: Phase 2 Report, 'Report of the Public Inquiry into the Fire at Grenfell Tower on 14 June 2017*' (Grenfell Tower Phase 2 Report), the SC-FP reinitiated the WG-FE with new membership to review the Phase 2 report and issue an update to the original Interim Summary Report. The original mandate remained applicable. This report has been updated to reflect the findings of the Grenfell Tower Phase 2 Report to the extent relevant to the WG-FE mandate.

2. Working Group Members

WG-FE Phase 1: Jim Burns, Tony Crimi, John Gales, Mark Heiderich, Gurjot Manku, Judy Jeske (Lead)

WG-FE Phase 2: Keith Calder, Tony Crimi, Rodney McPhee, Judy Jeske (Lead)

3. Description of Grenfell Tower and June 14, 2017 Fire

3.1. Fire Event

The 24-storey residential building had undergone recent renovations. The renovation included window replacement, insulation was added to the exterior walls and the building was newly clad with aluminum composite material (ACM) panels. The renovation also included the addition of a decorative crown made of polyethylene materials at the top of the building.

The ACM panels were composed of a low-density polyethylene core between two thin aluminum sheets. The principal new wall insulation was a fire-retardant treated polyisocyanurate (PIR) foam of varying thickness. The PIR foam insulation was fastened to the existing exterior wall. There was a cavity of varying thickness/depth from 50 mm up to 140 mm between the PIR foam insulation and ACM panels.

The inclusion of the new insulation and ACM panels on the exterior wall increased the thickness of the exterior wall assembly. This resulted in the position of window glazing and framing being moved outward toward the exterior surface of the new cladding. The windows no longer sat flush with the concrete frame of the building but were flush with the exterior face of the new cladding. The new windows were smaller than the original windows resulting in gaps around the perimeter of the openings. These gaps were covered with a roofing membrane - ethylene propylene diene monomer rubber (EPDM). Unplasticized poly vinyl chloride (uPVC) frames and finishing were installed around each of the windows.

The fire originated in a major kitchen appliance located in a 4th floor suite of the building. The hot gases from the fire rose to the ceiling and began spreading outward to the walls, creating a hot upper layer. The hot gases impinged on the uPVC window jamb of the kitchen window, causing it to deform and collapse. This provided an opening into the cavity between the insulation and the ACM panels allowing flames and hot gases to enter.

The ACM panels and PIR foam insulation were a source of fuel on the exterior of the building. One of the principal mechanisms of fire spread was the melting and dripping of burning polyethylene from the crown, spandrel and column panels which ignited fires lower down. These fires then travelled back up the building façade.

As the fire was spreading on the exterior of the building, interior compartmentation was lost. The fire spread from the exterior of the building into the building and between interior compartments due to:

a) window failure because of the intensity of heat and fire leap-frogging from the exterior to the interior,

b) extractor fan units installed in the exterior wall of the kitchens deformed and became dislodged, and

c) fire doors within the building failed.

A full communicating fire alarm system was not required because effective compartmentation was assumed.

A “Stay-Put” strategy was in place and initially reinforced by first responders. As well, there may have been gaps in Fire Department training and standard operating procedures for fires of this type and scale.

It is also acknowledged that parts of the construction may have been of poor quality. Cavity barriers (fire blocking) may not have been installed at all in some areas or installed with silicone. Cladding rails that were installed vertically pierced the ends of the horizontal cavity barriers creating voids within the cavity for heat and gases to pass behind the ACM cladding system. Gaps as large as 140 mm were found.

It is also noted that the building was not protected by a system of automatic sprinklers. In addition, the building was designed with a single exit stairwell. Stairwell landings and lobbies were not clearly marked with the relevant floor numbers, creating confusion.

Other contributing factors may have included a lack of or failure of emergency power for elevators and possibly the smoke extraction systems.

The implications of this fire event are significant and far-reaching in terms of reduced confidence in the UK construction industry and the costs and impacts to the insurance industry are staggering.

3.2. Major Factors Contributing to the Fire Event and Large Loss of Life

The major building construction and fire safety operational factors contributing to this major fire event and large loss of life are considered to be the following:

- Combustible ACM panel with polyethylene core
- 50 to 140 mm wide cavity within the exterior wall without appropriate cavity barriers (fire blocking)
- uPVC window frames and finishing details
- Fire retardant treated PIR foam insulation
- Lack of sprinkler protection
- Lack and loss of integrity of interior fire compartmentation
- Single exit stairwell
- Lack of stairwell identification
- "Stay Put" procedures for occupants

As part of the continued inquiry, the Grenfell Tower Phase 2 Report followed up on two matters outstanding from the Grenfell Tower Phase 1 report with respect to fire development, including the respective contributions to the fire made by the ACM panels and the polyisocyanurate and phenolic insulation boards within the wall cavity. Testing concluded that the unmodified polyethylene foam in the cores of the ACM panels was the "…principal factor leading to fire growth…" and that the other insulation within the wall cavity was a "…decisive factor in promoting the growth of the fire." In addition, further study and discussion reaffirmed that the original conclusions as to the means by which the fire had extended beyond the suite of fire origin to the exterior wall assembly were valid, i.e. that the finishing details of the window opening were inadequate to restrict fire spread to the exterior wall cavity.

It is noted that the Grenfell Tower Phase 2 Report concluded that design processes, UK enforcement practices, UK requirements for testing and certification as well as their application to the recent renovation at Grenfell Tower were also contributing factors to the fire event. With the exception of long-term Code development strategies being considered in Canada, the study of UK Codes, as well as design, construction and enforcement practices, procedures and implementation was outside the scope of this study for this report.

4. Application of the NBC to Existing Buildings Undergoing Alterations

The NBC applies to design, construction, and occupancy of all new buildings as well as the alteration of existing buildings. However, the extent to which the NBC is applicable in the event of an alteration is based on the scope of the proposed modifications.

The greater the scope of the modification, the greater the application of the NBC. Generally, features which are not within the scope of a building renovation project need not be upgraded to conform to the current NBC. However, building spaces, systems, elements, and features that are new, reconstructed, or modified within an existing building that is undergoing a renovation are generally required to meet the NBC. In addition, existing building spaces, systems, elements, and features which are affected by the renovation activity may be required to be upgraded where the renovation results in a negative impact on the existing element.

Ultimately, the application of the NBC to a building undergoing an alteration requires careful analysis of the performance of the building as a whole. When considering the application of the NBC, care must be taken to consider the context of the individual Code provisions so that there are no unintended consequences of narrowly applying individual Code provisions to an existing building.

In the case of an existing high building of residential occupancy, built originally without sprinkler protection as permitted by the Code that applied at the time of construction, the scope of an energy retrofit or cladding upgrade may not invoke the installation of sprinklers throughout the building even though a building of that size and occupancy would require sprinklers if newly constructed. In applying the latest Code to the scope of alterations, in some cases the NBC prescribes sprinklers as a condition of certain building features (i.e., combustible cladding or combustible materials in an exterior wall assembly per Articles 3.1.5.5. or 3.1.5.6.). In other cases, the NBC does not associate combustible materials with mandatory sprinkler protection but rather links the requirements to the conditions that apply to buildings prescribed (required?) to be noncombustible construction. However, the requirement for the building to be noncombustible if new is similar to the requirement for the building to be sprinklered if new. The difference is that the original building may have been required to be noncombustible construction (depending on date of construction) but not required to be sprinklered. In effect, modern Code

requirements are predicated on new construction over a certain size being sprinklered and, yet there are no guidelines or protocols or prompts to invoke sprinkler protection for buildings undergoing renovation regardless of the building size, occupancy or scope of renovation.

5. Key Differences Between As-Found Grenfell Tower and NBC

See Note

Contributing Factors	NBC 2020 Requirement	Notes
ACM panel with combustible polyethylene core	Noncombustible material (See Article 3.1.5.1)	Article 3.1.5.5. permits combustible cladding systems tested to CAN/ULC-S134 only for sprinklered buildings higher than 3 storeys
50 to 140 mm deep cavity without appropriate fire blocking	A single 25 mm deep air space without fire blocking, or fire blocking at every floor level, every ceiling level where ceiling forms part of an assembly required to have a fire resistance rating, and so that maximum horizontal dimension is not more than 20 metres and maximum vertical dimension is not more than 3 metres. (See Article 3.1.11.2)	Other options to exempt fire blocking apply such as filling the wall space with insulation or limited to noncombustible materials exposed within the wall space
uPVC window frames and finishing details	Combustible window sashes and frames permitted provided windows are vertically non-contiguous between storeys. (See Sentence 3.1.5.4.(5))	Changes accepted for NBC 2020 removed earlier provisions that limited windows to not more than 40% of the exterior wall per compartment, with each window installed as a separate unit and separated by not less than 1 metre vertically.
Fire retardant treated PIR foam insulation	Interior fire protection (See Article 3.1.5.15): • Permitted with thermal barrier protection on interior face to adjacent space in the building Exterior fire protection (See Articles 3.1.5.5., 3.1.5.6. and 3.2.3.8.): • Not permitted when spatial separation provisions limit area of unprotected openings (UPOs) to 10% or less. • Permitted for buildings which are sprinklered throughout with concrete or masonry cladding (25 mm), or • exterior wall assembly is tested to CAN/ULC-S134	Potential misinterpretation between permission under NBC 3.1.5.15 in conjunction with 3.2.3.8. and conditions of 3.1.5.6.
Lack of sprinkler protection	New construction required to be sprinklered (See Article 3.2.2.47) Sprinklers required for use of combustible cladding and combustible materials in the exterior wall assembly (See Articles 3.1.5.5 and 3.1.5.6)	

Lack and loss of integrity of interior fire compartmentation	Continuity and integrity of fire separations required to be maintained (See Subsection 3.1.8.)	
Single exit stairwell	Two exit stairwells required (See Article 3.4.2.1.)	
Lack of stairwell identification	Stairwell and floor level identification required (See Article 3.4.6.19.)	
"Stay Put" procedures for occupants	Permitted for 2 stage fire alarm system upon notification to designated persons (See Article 3.2.4.4.)	Commonly implemented for high buildings as part of Fire Safety Plans with approval of local Fire Service

Note: Existing buildings undergoing alteration would be subject to analysis to determine the extent to which the National Codes apply.

6. Opportunities for Further Study and Investigation by SC-FP

The following elements of the National Codes are recommended for further study by the SC-FP in the context of the application of the National Codes:

1. Application of the NBC to existing unsprinklered buildings undergoing energy retrofit/cladding upgrades (i.e., building as a whole)
    - Potential to identify and make recommendations to the CBHCC (or SCCC) for modifications to Note to Division A Article 1.1.1.1. as applies to existing buildings undergoing renovations
    - Analysis of provisions which could be applied without invoking the installation of sprinklers throughout the building and any unintended consequences of these provisions.
2. Analysis of the reference to two different test standards for exterior walls; in particular CAN/ULC-S134 per Articles 3.1.5.5. and 3.1.5.6. and CAN/ULC-S101 per Article 3.2.3.8. (Already flagged to be addressed by future recommended Task Group).
3. Re-examination of the key Articles associated with exterior wall construction is recommended with respect to the hazard of fire growth and spread associated with exterior walls to determine whether the application of these Articles can be simplified while maintaining the existing level of performance. See the Appendix to this report for a full list of implicated Articles.
4. Consideration of the impact of melting and dripping of exterior wall materials through the development of performance criteria for tests.
5. Analysis of application of exception provisions within Subsection 3.1.5. as applies to the permission to use combustible insulation in a building that is required to be noncombustible; in particular the two permissive provisions in NBC Subsection 3.1.5. to use combustible/foamed plastic insulation in exterior walls with interior protection per Articles 3.1.5.14 and 3.1.5.15 versus permission with conditions for exterior protection per Articles 3.1.5.5. and 3.1.5.6.
6. In conjunction with SC-UE, investigation and consideration for conditions or limitations for the use of "Stay Put" instructions in Emergency Evacuation Procedures and by Fire Departments as part of fire ground operations, including consideration to establish detailed requirements for Personal Emergency Evacuation Plans for vulnerable persons. In addition, consider establishing more robust provisions associated with Fire Safety Plans and Emergency Evacuation Plans to ensure relevant and accurate design information can inform Fire Department response and staging in the event of a fire.
7. Review, revision and development of tools to facilitate the appropriate application of the requirements of the NBC. This may include notes, intent statements, commentaries, etc.

7. Conclusions

Notwithstanding the items identified for further study in Section 6 above, the SC-FP is of the opinion that the NBC generally provides sufficient provisions to limit the probability of a fire event similar to that which occurred at the Grenfell Tower in London, UK on June 14, 2017. This opinion assumes that design and construction of new

buildings and the alteration, reconstruction, demolition, removal, relocation and occupancy of all existing buildings conforms to the NBC and that good design and construction practices are applied. It also assumes that assembly testing, as mandated by the NBC, and the general practice of product certification in the market place is applied.

This conclusion is based on:

- the extent of contributing factors that resulted in the significant fire and large loss of life including
    - ACM combustible cladding panels, Incomplete fire blocking within the 50 to 140 mm wide cavity between insulation and back of ACM cladding system,
    - combustible insulation without adequate stay in place exterior cladding,
    - melting and dripping of burning polyethylene from the crown, spandrel and column panels which ignited fires lower down,
    - inappropriate window detailing and window installation materials,
    - lack of sprinkler protection,
    - lack and loss of integrity of interior fire compartmentation,
    - single exit, etc. in addition to operational and fire department response procedures.
- NBC provisions that prohibit the installation of combustible cladding/wall elements on unsprinklered buildings required to be of noncombustible construction when more than 3 storeys in building height or exhibit conformance to CAN/ULC-S134 fire test criteria;
- the NBC permits only a 25 mm air space without a grid of fire blocking in concealed spaces;
- the installation of foamed plastic insulation (whether treated with a fire retardant or not) would require the installation of a “stay-in-place” noncombustible cladding, cladding conforming to CAN/ULC-S134 (sprinklered building only) or 25 mm thickness of masonry or concrete;
- the building, if new, would require sprinkler protection, a minimum of 2 fire separated and remote exit stairwells, and a full fire alarm.

It is noted that the CCBFC/PTPACC Task Group on Alterations to Existing Buildings made recommendations to address the holistic issue of how to apply the Codes to buildings undergoing alterations and further work is expected to be undertaken to address those recommendations. Ongoing work at CBHCC proposes to introduce the first set of provisions into the 2025 NBC to be applicable to existing buildings undergoing alterations, but will be limited to energy upgrades, and otherwise invokes the current NBC. Note A-1.1.1.1. remains applicable for buildings undergoing alterations. It is understood that future work intends the development of fire protection provisions to be applicable to existing buildings undergoing alterations.

Also of note is that, in 2021, the SC-FP proposed to strike a Task Group to consider PCF 1685 to revise NBC Article 3.2.3.8. to incorporate the intent to protect against fire spread on and in exterior walls containing foamed plastics in buildings. This work has not yet begun.

Nevertheless, there may be potential for the current National Codes to be refined with respect to the following:

- Application of the NBC to existing buildings undergoing alterations similar to those which were implemented at Grenfell Tower, in particular to exterior wall modifications on existing unsprinklered buildings given that the NBC would otherwise require sprinklers for new construction
- Revision to testing requirements for exterior walls with combustible components based on a review of the fire hazards associated with exterior wall construction and configuration
- Coordination between the two permissive provisions in NBC Subsection 3.1.5. to use combustible/foamed plastic insulation with interior protection per Articles 3.1.5.14 and 3.1.5.15 versus permission with condition for exterior protection per Articles 3.1.5.5. and 3.1.5.6. It is recommended that this coordination be based on a review of the fire hazards associated with exterior wall construction and configuration
- Conditions or limitations for Stay Put instructions where clarification of Code intent for 2 stage fire alarm system operation may be needed
- New and updated supporting documentation to assist Code users

It is our recommendation that CBHCC National Model Code Committee on Fire and Life Safety proceed with further study of these items.

It is noted that the Grenfell Tower Phase 2 report identified significant procedural, organizational, and other failures linked directly to the major losses at Grenfell Tower. Although outside the scope of this study, it is strongly recommended that persons and organizations involved either directly or indirectly in building construction, alteration, ownership, and fire response review the conclusions of the Grenfell Tower Phase 2 report for opportunities to improve processes in Canada.

It is also recommended that the CBHCC endorse the continuing study of major fire events from around the world in order to analyze lessons learned and assess the opportunity to improve the National Codes of Canada from the findings of those studies.

Prepared by:

Standing Committee – Fire Protection, November 2024

8. Appendix

Fire hazard associated with exterior walls is currently addressed by separate Articles as a function of building characteristics. These include (significant Articles underlined):

1. Article 3.1.4.8., "Exterior Cladding"
2. Article 3.1.5.4., "Combustible Windows, Glazing and Skylights"
3. Article 3.1.5.5., "Combustible Cladding on Exterior Walls"
4. Article 3.1.5.6., "Combustible Components in Exterior Walls"
5. Article 3.1.5.14., "Combustible Insulation"
6. Article 3.1.5.15., "Foamed Plastic Insulation"
7. Article 3.1.5.24., "Decorative Wood Cladding"
8. Article 3.1.6.8., "Combustible Window Sashes and Frames"
9. Article 3.1.6.9., "Exterior Cladding"
10. Article 3.1.6.10., "Combustible Components in Exterior Walls"
11. Article 3.2.3.7., "Construction of Exposing Building Face"
12. Article 3.2.3.8., "Protection of Exterior Building Face"

Exterior wall fire hazard is also implicated by the following Articles:

1. Article 3.1.5.1., "Noncombustible Materials"
2. Article 3.1.5.2., "Minor Combustible Components"
3. Article 3.1.5.7., "Factory-Assembled Panels"
4. Article 3.2.3.9., "Protection of Structural Members"
5. Article 3.2.3.16., "Protection of Soffits"
6. Article 3.2.3.17., "Canopy Protection for Vertically Separated Openings"

These Articles were developed at different times to address specific hazards of fire growth and spread associated with exterior walls. The disparate and overlapping nature of these Articles significantly complicates their application to building design and construction.

04.7. Coordination

Action Requested: Decision ☒ Guidance ☐ Information ☐

Summary

In accordance with the SCCC's mandate, it is responsible to

- provide a forum for development committees to share updates on proposed changes being developed,
- identify and discuss overlaps and/or connections in committees' work, or impacts on other Codes or parts of Codes related to the proposed changes being developed.

The SCCC is presented with proposed changes (PCFs) developed by NMCCs for coordination.

Note: SCCC's mandate is to identify if there is any overlap of NMCCs' mandate in PCFs, NOT to comment on the merit or the technical matters of the PCFs. The technical discussion of PCFs should be held at the developing NMCC/TG meetings.

In this Agenda Package

PCFs developed by NMCC on

- Accessibility: 1644, 1778, 2054
- Fire and Life Safety: 1684, 1781, 2038

Desired Outcome

SCCC to confirm there is no overlap of NMCCs' mandate in PCFs.

Submit a comment

Proposed Change 1644

Code Reference(s):	**NBC20 Div.B 3.3.1.8.(2) (first printing)** **NBC20 Div.B 3.8. (first printing)** **NBC20 Div.B 9.9.5.3.(1) (first printing)** **NBC20 Div.B 9.8.7.3.(1) (first printing)** **NBC20 Div.B 9.8.7.3.(2) (first printing)** **NBC20 Div.B 9.9.11.5.(1) (first printing)**
Subject:	Accessibility — Low-Cost and No-Cost Items
Title:	Replace "Visually Impaired Persons" by "People with low or no vision"
Description:	This proposed change revises the term "visually impaired persons" to "people with low or no vision" in Part 3 and Part 9.
Related Code Change Request(s):	CCR 1528
Related Proposed Change(s):	PCF 1342, PCF 1778

This change could potentially affect the following topic areas:

- ☐ Division A
- ☐ Division C
- ☐ Building operations
- ☑ Small Buildings
- ☐ Fire Protection
- ☑ Accessibility
- ☐ Building Envelope
- ☐ Heating, Ventilating and Air Conditioning
- ☑ Division B
- ☑ Design and Construction
- ☑ Housing
- ☑ Large Buildings
- ☑ Occupant safety in use
- ☐ Structural Requirements
- ☐ Energy Efficiency
- ☐ Plumbing
- ☐ Construction and Demolition Sites

NMCC recommendation: proceed to public review

Problem

The term "visually impaired persons" and “vision loss” are outdated and should be updated to "people with low or no vision" in the NBC (note that other Codes do not use these terms).

A common terminology should be used to harmonize the applicable requirements for people who are blind or have low vision to reflect current acceptable wording. This may also help support consistent interpretation of code requirements by building officials and designers.

Justification

Revising the terminology used in the current edition of the NBC for "visually impaired persons" to "people with low or no vision" is editorial in nature meaning that it affects its clarity and understanding but not its meaning, intent or application.

The proposed changes also harmonize the terminology with some other standards and guidelines. Using a single terminology simplifies the interpretation of applicable requirements, thus, improves the safety of people traveling in corridors, ramps or stairs or other building areas. The intent of the proposed terminology is to focus on the functional aspect of vision and the related need for building code requirements (ex: need for tactile information, increased lighting, etc.), without associating the terminology to a person's identity, nature of vision level, permanence of a condition (disability, temporary injury, misplaced eyewear), etc.

It is acknowledged that, while the Codes try to promote consistent language, people's experiences and terminology preferences around vision are subjective and varied.

PROPOSED CHANGE

[3.3.1.8.] 3.3.1.8. Headroom and Protruding Objects

[1] 2) Except as permitted by Sentence (3) and except for paths of travel in *service rooms* and *dwelling units*, protruding *building* elements located within 1 980 mm of the floor shall not project more than 100 mm horizontally into paths of travel in a manner that would create a hazard. (See Note A-3.3.1.8.(2) and (3).)

Note A-3.3.1.8.(2) and (3) Protruding Building Elements in Paths of Travel.

The term "protruding building elements" refers to elements regulated by this Code that are permanently affixed to the building and protrude into the path of travel.

The sweep of a cane used by people with low or no vision ~~with vision loss~~ normally detects protruding building elements that are within 680 mm of the floor. Any protruding element above this height would not normally be detected and can, therefore, create a hazard if it projects more than 100 mm into the path of travel.

[3.8.] 3.8. Accessibility

(See Note A-3.8.)

[3.8.1.] 3.8.1. Scope

[3.8.1.1.] 3.8.1.1. Scope

[3.8.2.] 3.8.2. Application

[3.8.2.1.] 3.8.2.1. Exceptions

[3.8.2.2.] 3.8.2.2. Entrances

[3.8.2.3.] 3.8.2.3. Areas Requiring a Barrier-Free Path of Travel

[3.8.2.4.] 3.8.2.4. Access to Storeys Served by Escalators and Moving Walks

[3.8.2.5.] 3.8.2.5. Exterior Barrier-Free Paths of Travel to Building Entrances and Exterior Passenger-Loading Zones

[3.8.2.6.] 3.8.2.6. Controls

[3.8.2.7.] 3.8.2.7. Power Door Operators

[3.8.2.8.] 3.8.2.8. Plumbing Facilities

[3.8.2.9.] 3.8.2.9. Assistive Listening Systems

[3.8.2.10.] 3.8.2.10. Signs and Indicators

[3.8.2.11.] 3.8.2.11. Counters

[3.8.2.12.] 3.8.2.12. Telephones

[3.8.3.] 3.8.3. Design

[3.8.3.1.] 3.8.3.1. Design Standards

[3.8.3.2.] 3.8.3.2. Barrier-Free Path of Travel

[3.8.3.3.] 3.8.3.3. Exterior Walks

[3.8.3.4.] 3.8.3.4. Exterior Passenger-Loading Zones

[3.8.3.5.] 3.8.3.5. Ramps

[3.8.3.6.] 3.8.3.6. Doorways and Doors

[3.8.3.7.] 3.8.3.7. Passenger-Elevating Devices

[3.8.3.8.] 3.8.3.8. Controls

[3.8.3.9.] 3.8.3.9. Accessible Signs

[3.8.3.10.] 3.8.3.10. Drinking Fountains

[3.8.3.11.] 3.8.3.11. Water-Bottle Filling Stations

[3.8.3.12.] 3.8.3.12. Accessible Water-Closet Stalls

[3.8.3.13.] 3.8.3.13. Universal Washrooms

[3.8.3.14.] 3.8.3.14. Water Closets

[3.8.3.15.] 3.8.3.15. Water-Closet Stalls and Urinals for Persons with Limited Mobility

[3.8.3.16.] 3.8.3.16. Lavatories and Mirrors

[3.8.3.17.] 3.8.3.17. Showers

[3.8.3.18.] 3.8.3.18. Accessible Bathtubs

[3.8.3.19.] 3.8.3.19. Assistive Listening Systems

[3.8.3.20.] 3.8.3.20. Counters

[3.8.3.21.] 3.8.3.21. Telephones

[3.8.3.22.] 3.8.3.22. Spaces in Seating Area

Note A-3.8. Barrier-Free Design Principles.

This Section contains minimum requirements for the design of buildings that accommodate people with diverse abilities, across their lifespan, including, but not limited to, people who use wheelchairs or other assistive mobility devices (e.g., walking aids, canes, crutches, braces, prosthetics), people with personal care providers, people with low or no vision, people with low or no hearing (See PCF 1778) ~~with hearing or vision loss~~, and people with service animals, so they can access and use buildings.

Examples of basic accessibility requirements of the Code are as follows:

- a clear floor space of at least 800 mm by 1 350 mm,
- a 1 000 mm clear width allowing a 90° turn,
- a 2 100 mm diameter clear floor space allowing a 180° turn in one motion, and
- a 1 700 mm diameter clear floor space allowing a 180° turn in multiple motions.

Note A-3.8.2.3. Access to Rooms and Facilities.

If barrier-free access is required into suites or rooms in Subsection 3.8.2., it is intended that access be provided, with some exceptions identified in Sentence 3.8.2.3.(2), throughout each room or suite. Some examples of where barrier-free access is required

are as follows:

- within each suite (subject to Clauses 3.8.2.3.(2)(k) and (l)),
- within rooms or areas that serve the public or are designated for use by visitors, including areas in assembly occupancies with fixed seats, display areas and merchandising departments,
- within rooms or areas for student use in assembly occupancies,
- within general work areas, including office areas,
- within general use or general service areas, including shared laundry areas in residential occupancies, recreational areas, cafeterias, lounge rooms, lunch rooms and infirmaries,
- within sleeping rooms in hospitals and nursing homes with treatment,
- (if installed), into at least one passenger elevator or elevating device conforming to Articles 3.5.2.1. and 3.8.3.7.,
- into washrooms described in Sentences 3.8.2.8.(1) to (4),
- to any facility required by this Section to be designed to accommodate persons with physical disabilities,
- onto every balcony provided in conformance with Clause 3.3.1.7.(1)(c), and
- to service counters used by the general public (examples include ticket counters, refreshment stands, drinking fountains, cafeteria counters, checkout counters and bank service counters).

The permission to waive a barrier-free path of travel for wheelchair access to certain specified areas of a building is not intended to waive accessibility requirements for persons whose physical disabilities do not require special provision for access to raised or sunken levels. People with low or no vision, or people with low or no hearing (see also PCF 1778) ~~Persons with visual or hearing disabilities~~ that do not require the use of a wheelchair can be expected to move throughout a building.

Seating booths and banquettes in restaurants and bars are considered furniture, which is beyond the scope of the Code. However, various types of seating should be considered to ensure the availability of barrier-free options.

The concept of wheelchair accessibility does not extend to building service facilities, nor to all floor levels within a storey, e.g., mezzanines not served by an elevator. Mezzanines that are accessible by an elevator are therefore not excluded.

Note A-3.8.2.10.(4) Directional Signage.

The NBC requires that directional signs be provided in a number of situations. Although they are only required to provide visual information, tactile directional signs should also be provided where practicable.

In some buildings, it may be necessary to supplement signs that provide visual and tactile information with visual displays, such as information displays and electronic interactive displays (e.g., wayfinding, exhibits and self-serve points-of-sale). Visual displays are common in motion picture theatres, law courts, exhibition halls, passenger stations/depots, museums, conference facilities, shops, stores and markets.

Wherever practicable, visual displays should be designed so that they are accessible to all people. In order to be accessible to people with low or no vision, visually displayed information should also be audibly communicated, either electronically or orally. Where

touch screens are installed, an alternative means of accessing the information should be provided, for example by providing tactile buttons on an interactive display or by ensuring an attendant is always available to assist customers or visitors. Visual displays should also be accessible to people who use mobility devices. The degree of operability should accommodate people using a wide range of mobility devices (e.g., wheelchairs, scooters, walkers, canes) and people with a wide range of arm and hand mobility. Approach side, mounting height above the finished floor, amount of knee space, types of controls and the ability to reach them are particularly important considerations.

Note A-3.8.3.2.(3) Surfaces in a Barrier-free Path of Travel.

Floor finishes, including walk-off matts and carpet, should be selected, installed and securely fixed to provide a firm and stable surface so that people, including those who use mobility aids, can easily travel over them without tripping or expending undue energy. Other than very high-density, short-pile carpeting, most carpeting does not meet these criteria.

Furthermore, where the path of travel is exposed to intense light conditions, such as daylight or directional lighting, a low-glare or matte floor surface should be selected, as glare from floor surfaces can influence all users' perception, particularly those with low or no vision~~with vision loss~~. For the same reasons, heavily patterned flooring should also be avoided.

Note A-3.8.3.6.(6) and (7) Doors with Power Operators.

Doors equipped with a power operator actuated by a pressure plate identified with the International Symbol of Access or, where security is required, by a key, card or radio transmitter, and that can otherwise be opened manually, meet the intent of the requirement. The location of these actuating devices should ensure that a wheelchair will not interfere with the operation of the door once it is actuated. Swinging doors equipped with power operators which are actuated automatically and open into passing pedestrian traffic should be provided with a guard or other device designed to prevent pedestrians from stepping in the swing area of the door. These guards or devices should be detectable by people with low or no vision ~~blind persons~~. For example, inverted U-shaped guards should have an additional rail at a height not more than 680 mm so that it is detectable by the long cane. These doors should also have a device (mat or other sensor) on the swing side to prevent the door from opening if someone is standing in the swing area.

[9.9.5.3.] 9.9.5.3. Obstructions in Public Corridors

[1] 1) Except as permitted in Sentence (2), obstructions located within 1 980 mm of the floor shall not project horizontally more than 100 mm into *exit* passageways, corridors used by the public or *public corridors* in a manner that would create a hazard for people~~visually impaired persons~~ travelling adjacent to walls.

[9.8.7.3.] 9.8.7.3. Termination of Handrails

[1] 1) Handrails shall be terminated in a manner that will not obstruct pedestrian travel or create a hazard. (See Note A-9.8.7.3.(1).)

Note A-9.8.7.3.(1) Termination of Handrails.

Handrails are required to be installed so as not to obstruct pedestrian travel. To achieve this end, the rail should not extend so far into a hallway as to reduce the clear width of the hallway to less than the required width. Where the stair terminates in a room or other space, likely paths of travel through that room or space should be assessed to ensure that any projection of the handrail beyond the end of the stair will not interfere with pedestrian travel. As extensions of handrails beyond the first and last riser are not required in dwelling units (see Sentence 9.8.7.3.(2)) and as occupants of dwellings are generally familiar with their surroundings, the design of dwellings would not generally be affected by this requirement.

Handrails are also required to terminate in a manner that will not create a safety hazard to people with low or no vision ~~visually impaired persons~~, children whose head may be at the same height as the end of the rail, or persons wearing loose clothing or carrying items that might catch on the end of the rail. One approach to reducing potential hazards is returning the handrail to a wall, floor or post. Again, within dwelling units, where occupants are generally familiar with their surroundings, returning the handrail to a wall, floor or post may not be necessary. For example, where the handrail is fastened to a wall and does not project past the wall into a hallway or other space, a reasonable degree of safety is assumed to be provided; other alternatives may provide an equivalent level of protection.

[9.8.7.3.] 9.8.7.3. Termination of Handrails

[1] 2) Except for stairs and *ramps* serving only one *dwelling unit* or a house with a *secondary suite* including their common spaces, at least one handrail at the sides of a stair or *ramp* shall extend horizontally not less than 300 mm beyond the top and bottom of each *flight* or *ramp*. (See Note A-9.8.7.3.(2).)

Note A-9.8.7.3.(2) Handrail Extensions.

As noted in Note A-9.8.7.2., the guidance and support provided by handrails is particularly important at the beginning and end of ramps and flights of stairs and at changes in direction. The extended handrail provides guidance and allows users to steady themselves upon entering or leaving a ramp or flight of stairs. Such extensions are particularly useful to ~~visually impaired persons~~people with low or no vision, and ~~persons~~people with physical disabilities or who are encumbered in their use of the stairs or ramp.

[9.9.11.5.] 9.9.11.5. Floor Numbering

[1] 1) Arabic numerals indicating the assigned floor number shall be

[a] a) mounted permanently on the stair side of the wall at the latch side of doors to *exit* stair shafts,

[b] b) not less than 60 mm high, raised approximately 0.8 mm above the

surface,

[c] c) located 1 500 mm from the finished floor and not more than 300 mm from the door, and

[d] d) contrasting in colour with the surface on which they are applied (see Note A-9.9.11.5.(1)(d)).

Note A-9.9.11.5.(1)(d) Colour Contrast.

The identification of floors and other signs intended to facilitate orientation for ~~persons with vision loss~~people with low or no vision should offer maximum colour contrast to be effective. For this reason, it is recommended that white on black or black on white be used, as this combination produces the best legibility. It is also recommended that the sign surfaces be processed to prevent glare.

Impact analysis

The revision of terminology is an editorial change that does not change building costs. However, it will reflect more accepted terminology and support consistent application of code requirements. It is intended to help with the understanding and interpretation of Code provisions, and harmonize with terminology that is commonly accepted in the industry.

Enforcement implications

The revision of terminology is an editorial change that supports consistent application of code requirements by building officials and designers.

Who is affected

Building officials, owners and designers will use a common terminology that would support consistent application of accessibility requirements as well as reflect more modern/accepted terminology.

PROCESS

Use and Egress — Draft — (2020-02-04)

Use and Egress — Review — (2024-06-04)

It was noted that terminology should avoid negative language ("loss", "impaired"). It was suggested that people who are blind, people with low or no vision, people who are partially sighted, without sight" may be more appropriate. People who are blind could be considered to still have vision.

Regarding the use of "people" vs. "persons", it was noted that "people" is more humanizing while "persons" is considered more of a technical term.

It was noted that ASC has developed a plain language standard that is out for public review, and it may be worth checking that standard, since the federal government may eventually align with it.

It was noted that other instances of similar wording in the codes may need to be updated ("people with vision loss" to something else). The SC-UE agreed to further work on this PCF and do more research on the right terminology to use.

ACTION: *Continue development of the PCF and look for most appropriate wording.*

Draft — (2025-02-27)

Staff updated the PCF based on recommendations from SC-UE.

NMCC on Accessibility — Review — Recommended for Public Review (2025-05-16)

It was noted that the title of the PCF was not updated from an older draft.

ACTION: Update the title of the PCF

It was noted that "blind" doesn't necessarily mean no vision at all – in legal terms, "legally blind" does not imply total blindness. It was noted that there is some overlap between "blind" and "low vision"

It was noted that the French version of the PCF may need some consideration.

ACTION: Review the French translation of this PCF (EOI for WG: P. Dionne, B. Helal)

It was noted that there is a technical translation committee that would look at this. The WG from the NMCC-Accessibility could provide some feedback for the translation committee's consideration.

It was also noted that the translation team could be asked to share the French version of the PCF prior to public review.

ACTION: Ask the Translation team to let the NMCC review the French version when it is ready.

General consensus on proposed change (pending public review):

- Update PCF title
- Have a WG meet to discuss French terminology equivalents

The National Model Codes Committee on Accessibility **reached consensus** that the proposed changes related to PCF 1644 as revised during the 2030-02 Meeting be recommended to the Canadian Board for Harmonized Construction Codes for publication in the next edition of the National Building Code pending public review

Following the discussion of the complementary PCF 1778 on hearing, the PCF was revised to replace the language of "blind or low vision" with "low or no vision".

General consensus on proposed change (pending public review):

- Replace the wording with "low or no vision" instead of "blind or low vision" to align with PCF 1778
- Update PCF justification to reflect recommended wording

The National Model Codes Committee on Accessibility **reached consensus** that the proposed changes related to PCF 1644 as re-revised during the 2030-02 Meeting be recommended to the Canadian Board for Harmonized Construction Codes for publication in the next edition of the National Building Code pending public review

OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISIONS

[3.3.1.8.] 3.3.1.8. ([1] 2) [F30,F73-OS3.1]

[3.8.1.1.] 3.8.1.1. ([1] 1) no attributions

[3.8.1.1.] 3.8.1.1. ([2] 2) no attributions

[3.8.2.1.] 3.8.2.1. ([1] 1) no attributions

[3.8.2.2.] 3.8.2.2. ([1] 1) [F73-OA1]

[3.8.2.2.] 3.8.2.2. ([2] 2) no attributions

[3.8.2.2.] 3.8.2.2. ([3] 3) no attributions

[3.8.2.2.] 3.8.2.2. ([4] 4) [F73-OA1]

[3.8.2.3.] 3.8.2.3. ([1] 1) [F73-OA1]

[3.8.2.3.] 3.8.2.3. ([2] 2) no attributions

[3.8.2.3.] 3.8.2.3. ([3] 3) [F74-OA2]

[3.8.2.3.] 3.8.2.3. ([4] 4) [F74-OA2]

[3.8.2.3.] 3.8.2.3. ([5] 5) [F74-OA2]

[3.8.2.3.] 3.8.2.3. ([5] 5) [F10-OS3.7] Applies to portion of Code text: "... each row of seats served by two aisles shall have one adaptable seat conforming to Subsection 3.8.3. located adjacent to one of the aisles."

[3.8.2.3.] 3.8.2.3. ([6] 6) [F74-OA2]

[3.8.2.4.] 3.8.2.4. ([1] 1) [F73-OA1]

[3.8.2.4.] 3.8.2.4. ([2] 2) [F73-OA1]

[3.8.2.5.] 3.8.2.5. ([1] 1) [F73-OA1]

[3.8.2.5.] 3.8.2.5. ([2] 2) [F73-OA1]

[3.8.2.5.] 3.8.2.5. ([3] 3) no attributions

[3.8.2.6.] 3.8.2.6. ([1] 1) no attributions

[3.8.2.7.] 3.8.2.7. ([1] 1) [F73-OA1]

[3.8.2.7.] 3.8.2.7. ([2] 2) no attributions

[3.8.2.7.] 3.8.2.7. ([3] 3) no attributions

[3.8.2.8.] 3.8.2.8. ([1] 1) [F74-OA2]

[3.8.2.8.] 3.8.2.8. ([1] 1) [F72-OH2.1] [F71-OH2.3]

[3.8.2.8.] 3.8.2.8. ([2] 2) [F74-OA2]

[3.8.2.8.] 3.8.2.8. ([2] 2) [F72-OH2.1] [F71-OH2.3]

[3.8.2.8.] 3.8.2.8. ([2] 2) no attributions

[3.8.2.8.] 3.8.2.8. ([3] 3) no attributions

[3.8.2.8.] 3.8.2.8. ([4] 4) [F72-OH2.1]

[3.8.2.8.] 3.8.2.8. ([4] 4) [F73-OA1]

[3.8.2.8.] 3.8.2.8. ([5] 5) no attributions

[3.8.2.8.] 3.8.2.8. ([6] 6) no attributions

[3.8.2.8.] 3.8.2.8. ([7] 7) no attributions

[3.8.2.8.] 3.8.2.8. ([8] 8) no attributions

[3.8.2.8.] 3.8.2.8. ([9] 9) no attributions

[3.8.2.8.] 3.8.2.8. ([10] 10) no attributions

[3.8.2.8.] 3.8.2.8. ([11] 11) no attributions

[3.8.2.8.] 3.8.2.8. ([12] 12) no attributions

[3.8.2.8.] 3.8.2.8. ([13] 13) [F74-OA2]

[3.8.2.8.] 3.8.2.8. ([13] 13) no attributions

[3.8.2.8.] 3.8.2.8. ([14] 14) no attributions

[3.8.2.8.] 3.8.2.8. ([15] 15) no attributions

[3.8.2.8.] 3.8.2.8. ([15] 15) [F74-OA2]

[3.8.2.9.] 3.8.2.9. ([1] 1) no attributions

[3.8.2.9.] 3.8.2.9. ([2] 2) [F74-OA2]

[3.8.2.10.] 3.8.2.10. ([1] 1) [F74-OA2]

[3.8.2.10.] 3.8.2.10. ([1] 1) no attributions

[3.8.2.10.] 3.8.2.10. ([2] 2) [F74-OA2]

[3.8.2.10.] 3.8.2.10. ([3] 3) [F74-OA2]

[3.8.2.10.] 3.8.2.10. ([3] 3) no attributions

[3.8.2.10.] 3.8.2.10. ([4] 4) [F74-OA2]

[3.8.2.10.] 3.8.2.10. ([4] 4) no attributions

[3.8.2.11.] 3.8.2.11. ([1] 1) [F74-OA2]

[3.8.2.11.] 3.8.2.11. ([1] 1) no attributions

[3.8.2.12.] 3.8.2.12. ([1] 1) [F74-OA2]

[3.8.2.12.] 3.8.2.12. ([1] 1) no attributions

[3.8.3.1.] 3.8.3.1. ([1] 1) no attributions

[3.8.3.2.] 3.8.3.2. ([1] 1) [F73-OA1]

[3.8.3.2.] 3.8.3.2. ([2] 2) no attributions

[3.8.3.2.] 3.8.3.2. ([3] 3) ([a] a),([b] b) [F30-OS3.1]

[3.8.3.2.] 3.8.3.2. ([3] 3) ([a] a),([b] b) [F73-OA1]

[3.8.3.2.] 3.8.3.2. ([3] 3) ([c] c),([d] d) [F73-OA1]

[3.8.3.2.] 3.8.3.2. ([3] 3) ([e] e),([f] f) [F73-OA1]

[3.8.3.2.] 3.8.3.2. ([3] 3) ([e] e),([f] f) [F30-OS3.1]

[3.8.3.2.] 3.8.3.2. ([3] 3) ([c] c),([d] d) [F30-OS3.1]

[3.8.3.2.] 3.8.3.2. ([4] 4) no attributions

[3.8.3.2.] 3.8.3.2. ([5] 5) [F73-OA1]

[3.8.3.2.] 3.8.3.2. ([6] 6) [F73-OA1]

[3.8.3.3.] 3.8.3.3. ([1] 1) ([a] a) [F73-OA1]

[3.8.3.3.] 3.8.3.3. ([1] 1) ([a] a) [F30-OS3.1]

[3.8.3.3.] 3.8.3.3. ([1] 1) ([b] b) [F73-OA1]

[3.8.3.3.] 3.8.3.3. ([1] 1) ([c] c)

[3.8.3.3.] 3.8.3.3. ([1] 1) ([d] d) [F30-OS3.1]

[3.8.3.4.] 3.8.3.4. ([1] 1) ([a] a) [F74-OA2]

[3.8.3.4.] 3.8.3.4. ([1] 1) ([b] b) [F73-OA1]

[3.8.3.4.] 3.8.3.4. ([1] 1) ([c] c) [F74-OA2]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([b] b),([e] e) [F73-OA1]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([d] d) [F30-OS3.1]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([c] c) [F73-OA1]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([d] d) [F73-OA1]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([e] e),([f] f)

[3.8.3.5.] 3.8.3.5. ([1] 1) ([b] b),([e] e) [F30-OS3.1]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([a] a)

[3.8.3.5.] 3.8.3.5. ([1] 1) ([c] c) [F30-OS3.1]

[3.8.3.5.] 3.8.3.5. ([2] 2) no attributions

[3.8.3.5.] 3.8.3.5. ([3] 3) no attributions

[3.8.3.5.] 3.8.3.5. ([4] 4) ([a] a) [F73-OA1]

[3.8.3.5.] 3.8.3.5. ([4] 4) ([b] b),([c] c) [F30-OS3.1]

[3.8.3.5.] 3.8.3.5. ([5] 5) [F30-OS3.1]

[3.8.3.6.] 3.8.3.6. ([1] 1) no attributions

[3.8.3.6.] 3.8.3.6. ([2] 2) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([3] 3) [F74-OA2]

[3.8.3.6.] 3.8.3.6. ([3] 3) [F30-OS3.1]

[3.8.3.6.] 3.8.3.6. ([4] 4) [F74-OA2]

[3.8.3.6.] 3.8.3.6. ([4] 4) [F10-OS3.7]

[3.8.3.6.] 3.8.3.6. ([5] 5) [F74-OA2]

[3.8.3.6.] 3.8.3.6. ([5] 5) [F10-OS3.7]

[3.8.3.6.] 3.8.3.6. ([6] 6) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([7] 7) [F30-OS3.1]

[3.8.3.6.] 3.8.3.6. ([8] 8) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([9] 9) no attributions

[3.8.3.6.] 3.8.3.6. ([10] 10) [F30-OS3.1]

[3.8.3.6.] 3.8.3.6. ([10] 10) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([10] 10) no attributions

[3.8.3.6.] 3.8.3.6. ([11] 11) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([12] 12) [F30-OS3.1]

[3.8.3.6.] 3.8.3.6. ([12] 12) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([13] 13) no attributions

[3.8.3.6.] 3.8.3.6. ([14] 14) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([15] 15) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([16] 16) no attributions

[3.8.3.6.] 3.8.3.6. ([17] 17) [F74-OA2]

[3.8.3.6.] 3.8.3.6. ([17] 17) [F10-OS3.7]

[3.8.3.7.] 3.8.3.7. ([1] 1) [F73-OA1]

[3.8.3.7.] 3.8.3.7. ([1] 1) [F74-OA2]

[3.8.3.7.] 3.8.3.7. ([1] 1) [F30-OS3.1] [F10-OS3.7]

[3.8.3.8.] 3.8.3.8. ([1] 1) [F74-OA2]

[3.8.3.8.] 3.8.3.8. ([1] 1) [F10-OS3.7]

[3.8.3.9.] 3.8.3.9. ([1] 1) no attributions

[3.8.3.9.] 3.8.3.9. ([1] 1) [F74-OA2]

[3.8.3.9.] 3.8.3.9. ([1] 1) [F73-OA1]

[3.8.3.9.] 3.8.3.9. ([2] 2) [F74-OA2]

[3.8.3.9.] 3.8.3.9. ([2] 2) [F73-OA1]

[3.8.3.9.] 3.8.3.9. ([3] 3) [F74-OA2]

[3.8.3.9.] 3.8.3.9. ([3] 3) [F73-OA1]

[3.8.3.10.] 3.8.3.10. ([1] 1) [F74-OA2]

[3.8.3.10.] 3.8.3.10. ([2] 2) [F74-OA2]

[3.8.3.11.] 3.8.3.11. ([1] 1) [F74-OA2]

[3.8.3.11.] 3.8.3.11. ([2] 2) [F74-OA2]

[3.8.3.12.] 3.8.3.12. ([1] 1) [F74-OA2]

[3.8.3.12.] 3.8.3.12. ([1] 1) [F72-OH2.1]

[3.8.3.12.] 3.8.3.12. ([1] 1) ([d] d)([i] i) [F74-OA2]

[3.8.3.12.] 3.8.3.12. ([1] 1) ([f] f),([g] g) [F30,F20-OS3.1]

[3.8.3.12.] 3.8.3.12. ([1] 1) ([f] f) and ([g] g)

[3.8.3.12.] 3.8.3.12. ([1] 1) ([h] h) [F30-OS3.1] Applies to portion of Code text: "… be equipped with a coat hook … projecting not more than 50 mm from the wall …"

[3.8.3.12.] 3.8.3.12. ([1] 1) no attributions

[3.8.3.13.] 3.8.3.13. ([1] 1) [F74-OA2]

[3.8.3.13.] 3.8.3.13. ([1] 1) ([b] b) [F10-OS3.7]

[3.8.3.13.] 3.8.3.13. ([1] 1) ([c] c)

[3.8.3.13.] 3.8.3.13. ([1] 1) ([d] d)

[3.8.3.13.] 3.8.3.13. ([1] 1) ([f] f)

[3.8.3.13.] 3.8.3.13. ([1] 1) ([g] g) [F30-OS3.1] Applies to the requirement for a coat hook.

[3.8.3.13.] 3.8.3.13. ([1] 1) ([i] i) [F74-OA2] Applies to the requirement for a shelf.

[3.8.3.13.] 3.8.3.13. ([1] 1) [F72-OH2.1] [F71-OH2.3]

[3.8.3.13.] 3.8.3.13. ([1] 1) ([b] b) [F74-OA2] Applies to portion of Code text: "… a door ... capable of being locked from the inside …"

[3.8.3.13.] 3.8.3.13. ([2] 2) [F72-OH2.1] [F71-OH2.3]

[3.8.3.14.] 3.8.3.14. ([1] 1) [F74-OA2]

[3.8.3.14.] 3.8.3.14. ([1] 1) [F72-OH2.1]

[3.8.3.15.] 3.8.3.15. ([1] 1) [F74-OA2]

[3.8.3.15.] 3.8.3.15. ([1] 1) ([d] d) [F30-OS3.1]

[3.8.3.15.] 3.8.3.15. ([1] 1) ([a] a)

[3.8.3.15.] 3.8.3.15. ([2] 2) [F74-OA2]

[3.8.3.15.] 3.8.3.15. ([2] 2) ([f] f) [F30-OS3.1]

[3.8.3.15.] 3.8.3.15. ([2] 2) ([c] c)

[3.8.3.16.] 3.8.3.16. ([1] 1) [F74-OA2]

[3.8.3.16.] 3.8.3.16. ([1] 1) [F71-OH2.3]

[3.8.3.16.] 3.8.3.16. ([1] 1) ([f] f) [F31-OS3.2]

[3.8.3.16.] 3.8.3.16. ([2] 2) [F74-OA2]

[3.8.3.17.] 3.8.3.17. ([1] 1) [F74-OA2]

[3.8.3.17.] **3.8.3.17. ([1] 1) ([d] d),([e] e) [F30-OS3.1]**

[3.8.3.17.] **3.8.3.17. ([1] 1) ([f] f) [F30-OS3.1]**

[3.8.3.17.] **3.8.3.17. ([1] 1) ([h] h) [F31-OS3.2]**

[3.8.3.17.] **3.8.3.17. ([2] 2) [F74-OA2]**

[3.8.3.17.] **3.8.3.17. ([2] 2) [F71-OH2.3]**

[3.8.3.17.] **3.8.3.17. ([2] 2) ([a] a) [F73-OA1]**

[3.8.3.17.] **3.8.3.17. ([2] 2) ([b] b) [F10-OS3.7]**

[3.8.3.17.] **3.8.3.17. ([2] 2) ([b] b) [F74-OA2]**

[3.8.3.17.] **3.8.3.17. ([2] 2) ([g] g) [F74-OA2]**

[3.8.3.18.] **3.8.3.18. ([1] 1) [F74-OA2]**

[3.8.3.19.] **3.8.3.19. ([1] 1) [F74-OA2]**

[3.8.3.19.] **3.8.3.19. ([1] 1) [F11-OS3.7]**

[3.8.3.19.] **3.8.3.19. ([2] 2) [F74-OA2]**

[3.8.3.20.] **3.8.3.20. ([1] 1) [F74-OA2]**

[3.8.3.21.] **3.8.3.21. ([1] 1) [F74-OA2]**

[3.8.3.21.] **3.8.3.21. ([2] 2) [F74-OA2]**

[3.8.3.22.] **3.8.3.22. ([1] 1) [F74-OA2]**

[3.8.3.22.] **3.8.3.22. ([1] 1) [F30-OS3.1]** Applies to portion of Code text: "… level … level and have removable seats, …"

[3.8.3.22.] **3.8.3.22. ([1] 1) ([d] d) [F10-OS3.7]** Applies to portion of Code text: "… without infringing on egress from any row of seating or any aisle requirements …"

[3.8.3.22.] **3.8.3.22. ([2] 2) [F74-OA2]**

[3.8.3.22.] **3.8.3.22. ([2] 2) [F30-OS3.1]** Applies to portion of Code text: "… level, ..."

[3.8.3.22.] **3.8.3.22. ([3] 3) ([a] a) [F10-OS3.7]** Applies to portion of Code text: "… without infringing on egress from any row of seating or any aisle requirements …"

[3.8.3.22.] **3.8.3.22. ([3] 3) [F74-OA2]**

[3.8.3.22.] **3.8.3.22. ([4] 4) [F10-OS3.7]**

[9.9.5.3.] **9.9.5.3. ([1] 1) [F30-OS3.1]**

[9.8.7.3.] **9.8.7.3. ([1] 1) [F30-OS3.1] [F10-OS3.7]**

[9.8.7.3.] **9.8.7.3. ([1] 2) [F30-OS3.1] [F10-OS3.7]**

[9.9.11.5.] 9.9.11.5. ([1] 1) [F10-OS3.7]

[9.9.11.5.] 9.9.11.5. ([1] 1) [F73-OA1]

Submit a comment

Proposed Change 1778

Code Reference(s):	**NBC20 Div.B 3.2.4.19. (first printing)** **NBC20 Div.B 3.8. (first printing)**
Subject:	Accessibility — Low-Cost and No-Cost Items
Title:	Replace "Hearing Impairment" by "People with low or no hearing"
Description:	This proposed change revises the term "hearing impaired" to "People with low or no hearing" in Part 3.
Related Code Change Request(s):	CCR 1528
Related Proposed Change(s):	PCF 1342, PCF 1644

This change could potentially affect the following topic areas:

- ☐ Division A
- ☐ Division C
- ☐ Building operations
- ☑ Small Buildings
- ☐ Fire Protection
- ☑ Accessibility
- ☐ Building Envelope
- ☐ Heating, Ventilating and Air Conditioning
- ☑ Division B
- ☑ Design and Construction
- ☑ Housing
- ☑ Large Buildings
- ☑ Occupant safety in use
- ☐ Structural Requirements
- ☐ Energy Efficiency
- ☐ Plumbing
- ☐ Construction and Demolition Sites

NMCC recommendation: Proceed to public review

Problem

The term "hearing impaired" is outdated and should be updated to "people with low or no hearing". This revision will harmonize the terminology used when referring to building code requirements related to hearing levels.

This would support consistent interpretation of code requirements by building officials and designers and would reflect more modern accepted terminology.

Justification

Revising the terminology used in the current edition of the NBC for "people with a hearing impairment" is editorial in nature, meaning that it affects its clarity and understanding but not its meaning, intent or application.

Using a consistent terminology supports consistent interpretation of applicable requirements.

The Canadian Association of the Deaf and the Canadian Hard of Hearing Association list terms like “people who are deaf” (medical), “Deaf” (sociological), “hard of hearing” (covers a range of hearing levels) and “people with hearing loss", and qualify them based on levels of hearing, types of communication styles that people use, etc. Terms referencing “impairment” are considered unacceptable. While some resources note that “hearing loss” is acceptable, others suggest it may have negative connotations.

The CSA/ASC B651 standard uses “people who are deaf, deafened or hard of hearing”, or “people who are hard of hearing”. The CSA/ASC B652 standard uses the term “low or no hearing”.

The intent of the proposed terminology, "people with low or no hearing", is to focus on the functional aspect of hearing and the related need for building code requirements (ex: need for visible signals), without associating the terminology to a person’s identity, nature of hearing level, permanence of a condition (ex: disability, temporary injury/illness), etc.

It is acknowledged that, while the Codes try to promote consistent language, people’s hearing experience and terminology preferences are subjective and varied.

PROPOSED CHANGE

[3.2.4.19.] 3.2.4.19. Visible Signals

[1] 1) Where a fire alarm system is installed, visible signal devices shall be provided in addition to *alarm signal* devices

a) in *buildings* or portions thereof intended for use primarily by ~~persons with~~ ~~a hearing impairment~~people with low or no hearing,

b) in *assembly occupancies* in which music and other sounds associated with performances could exceed 100 dBA,

c) in any *floor area* in which the ambient noise level is more than 87 dBA,

d) in any *floor area* in which the occupants

i) use ear protection devices,

ii) are located in an audiometric booth, or

iii) are located in sound-insulating enclosures,

e) in *public corridors* serving a Group B, C, D or E *major occupancy*,

[f] f) in corridors used by the public serving a Group A *major occupancy*,

[g] g) in not less than 10% of the *suites* of *residential occupancy* in a hotel or motel (see Note A-3.2.4.19.(1)(g)), and

[h] h) in washrooms, except those located within

[i] i) *suites* of *residential occupancy*,

[ii] ii) *suites* of *care occupancy*, or

[iii] iii) patients' sleeping rooms.

[2] 2) Visible signal devices are permitted to be installed in lieu of audible signal devices in the compartments referred to in Article 3.3.3.6.

[3] 3) Visible signal devices required by Sentence (1) shall be installed so that the signal from at least one device is visible throughout the *floor area* or portion thereof in which they are installed. (See Note A-3.2.4.19.(3).)

Note A-3.2.4.19.(1)(g) Visible Alarm Signals in Hotels and Motels.

Visible signal devices should be installed in a combination of regular suites and designated accessible suites in hotels and motels so that ~~people who are deaf or hard of hearing~~people with low or no hearing can safely occupy either type of suite.

Visible signal devices are not required to be installed in all the rooms of the suite. The signal should be visible from any room in the suite, which can be accomplished by installing glazing panels between the rooms or additional visible signal devices.

In addition, CAN/ULC-S524, "Standard for Installation of Fire Alarm Systems", requires that high-intensity strobes be used in sleeping rooms.

[3.8.] 3.8. Accessibility

(See Note A-3.8.)

[3.8.1.] 3.8.1. Scope

[3.8.1.1.] 3.8.1.1. Scope

[3.8.2.] 3.8.2. Application

[3.8.2.1.] 3.8.2.1. Exceptions

[3.8.2.2.] 3.8.2.2. Entrances

[3.8.2.3.] 3.8.2.3. Areas Requiring a Barrier-Free Path of Travel

[3.8.2.4.] 3.8.2.4. Access to Storeys Served by Escalators and Moving Walks

[3.8.2.5.] 3.8.2.5. Exterior Barrier-Free Paths of Travel to Building Entrances and Exterior Passenger-Loading Zones

[3.8.2.6.] 3.8.2.6. Controls

[3.8.2.7.] 3.8.2.7. Power Door Operators

[3.8.2.8.] 3.8.2.8. Plumbing Facilities

[3.8.2.9.] 3.8.2.9. Assistive Listening Systems

[3.8.2.10.] 3.8.2.10. Signs and Indicators

[3.8.2.11.] 3.8.2.11. Counters

[3.8.2.12.] 3.8.2.12. Telephones

[3.8.3.] 3.8.3. Design

[3.8.3.1.] 3.8.3.1. Design Standards

[3.8.3.2.] 3.8.3.2. Barrier-Free Path of Travel

[3.8.3.3.] 3.8.3.3. Exterior Walks

[3.8.3.4.] 3.8.3.4. Exterior Passenger-Loading Zones

[3.8.3.5.] 3.8.3.5. Ramps

[3.8.3.6.] 3.8.3.6. Doorways and Doors

[3.8.3.7.] 3.8.3.7. Passenger-Elevating Devices

[3.8.3.8.] 3.8.3.8. Controls

[3.8.3.9.] 3.8.3.9. Accessible Signs

[3.8.3.10.] 3.8.3.10. Drinking Fountains

[3.8.3.11.] 3.8.3.11. Water-Bottle Filling Stations

[3.8.3.12.] 3.8.3.12. Accessible Water-Closet Stalls

[3.8.3.13.] 3.8.3.13. Universal Washrooms

[3.8.3.14.] 3.8.3.14. Water Closets

[3.8.3.15.] 3.8.3.15. Water-Closet Stalls and Urinals for Persons with Limited Mobility

[3.8.3.16.] 3.8.3.16. Lavatories and Mirrors

[3.8.3.17.] 3.8.3.17. Showers

[3.8.3.18.] 3.8.3.18. Accessible Bathtubs

[3.8.3.19.] 3.8.3.19. Assistive Listening Systems

[3.8.3.20.] 3.8.3.20. Counters

[3.8.3.21.] 3.8.3.21. Telephones

[3.8.3.22.] 3.8.3.22. Spaces in Seating Area

Note A-3.8. Barrier-Free Design Principles.

This Section contains minimum requirements for the design of buildings that accommodate people with diverse abilities, across their lifespan, including, but not limited to, people who use wheelchairs or other assistive mobility devices (e.g., walking aids, canes, crutches, braces, prosthetics), people with personal care providers, ~~people with hearing or vision loss~~people with low or no hearing, people with low or no vision (See PCF 1644) , and people with service animals, so they can access and use buildings.

Examples of basic accessibility requirements of the Code are as follows:

- a clear floor space of at least 800 mm by 1 350 mm,
- a 1 000 mm clear width allowing a 90° turn,
- a 2 100 mm diameter clear floor space allowing a 180° turn in one motion, and
- a 1 700 mm diameter clear floor space allowing a 180° turn in multiple motions.

Note A-3.8.2.3. Access to Rooms and Facilities.

If barrier-free access is required into suites or rooms in Subsection 3.8.2., it is intended that access be provided, with some exceptions identified in Sentence 3.8.2.3.(2),

throughout each room or suite. Some examples of where barrier-free access is required are as follows:

- within each suite (subject to Clauses 3.8.2.3.(2)(k) and (l)),
- within rooms or areas that serve the public or are designated for use by visitors, including areas in assembly occupancies with fixed seats, display areas and merchandising departments,
- within rooms or areas for student use in assembly occupancies,
- within general work areas, including office areas,
- within general use or general service areas, including shared laundry areas in residential occupancies, recreational areas, cafeterias, lounge rooms, lunch rooms and infirmaries,
- within sleeping rooms in hospitals and nursing homes with treatment,
- (if installed), into at least one passenger elevator or elevating device conforming to Articles 3.5.2.1. and 3.8.3.7.,
- into washrooms described in Sentences 3.8.2.8.(1) to (4),
- to any facility required by this Section to be designed to accommodate persons with physical disabilities,
- onto every balcony provided in conformance with Clause 3.3.1.7.(1)(c), and
- to service counters used by the general public (examples include ticket counters, refreshment stands, drinking fountains, cafeteria counters, checkout counters and bank service counters).

The permission to waive a barrier-free path of travel for wheelchair access to certain specified areas of a building is not intended to waive accessibility requirements for persons who~~se physical disabilities~~ do not require special provision for access to raised or sunken levels. ~~Persons with visual or hearing disabilities~~ People with low or no vision (see also PCF 1644), or people with low or no hearing that do not require the use of a wheelchair can be expected to move throughout a building.

Seating booths and banquettes in restaurants and bars are considered furniture, which is beyond the scope of the Code. However, various types of seating should be considered to ensure the availability of barrier-free options.

The concept of wheelchair accessibility does not extend to building service facilities, nor to all floor levels within a storey, e.g., mezzanines not served by an elevator. Mezzanines that are accessible by an elevator are therefore not excluded.

Note A-3.8.3.9.(3) Accessibility Signs.

The International Symbol of Access shown in Figure A-3.8.3.9.(3)-A indicates to people~~persons~~ with physical disabilities that they will have reasonable freedom of movement within a building so signed. The symbol is usually white on a blue background; where these colours do not stand out, the sign can be set on a white background. An arrow can be added to indicate direction or the location of an accessible space or facility.

Figure [A-3.8.3.9.(3)-A] A-3.8.3.9.(3)-A
Signs indicating accessible facilities

The International Symbol of Access for Hearing Loss shown in Figure A-3.8.3.9.(3)-B, which indicates accessibility for people with low or no hearing ~~persons with hearing loss~~, should be used to indicate the availability of variable volume controls on telephones, assistive listening systems, and text telephones (TT). These latter devices may also be referred to as teletypewriters (TTY) or telecommunications devices for the deaf (TDD).

Figure [A-3.8.3.9.(3)-B] A-3.8.3.9.(3)-B
Signs for assistive listening facilities

Note A-3.8.3.19. Assistive Listening Systems.

Examples of assistive listening systems include FM, infrared and induction loop systems. However, the technology in this field is advancing rapidly; as such, other types of assistive listening systems could be considered in the design of a space. In choosing the most appropriate system, a number of factors must be taken into account including cost, installation and maintenance requirements, suitability for the intended user or audience, ease of operation, and the need for privacy. Information on designers

and suppliers of such systems can be obtained from the Canadian Hearing Society. The intent of Article 3.8.3.19. is to provide clear communication where information, goods or services are provided to the public.

Wireless sound transmission systems, including FM, infrared and magnetic induction loop systems, improve sound reception for ~~persons who are hard of hearing~~people with low or no hearing by providing amplification that can be adjusted by each user while blocking out unwanted background noise. Some of these systems transmit a signal that is picked up by a special receiver (FM, infrared) available for use by ~~a person who is hard of hearing~~people with low or no hearing , whether or not a hearing aid is used. None of the systems interfere with the listening enjoyment of others.

The transmitter can be connected into an existing public address (P.A.) system amplifier or used independently with microphones. The induction loop system (see Figure A-3.8.3.19.-C) requires users with a hearing aid or cochlear implant to be in the area circumscribed by the loop; though installation of the loop is relatively simple, the installer should be knowledgeable about these systems if proper functioning is to be achieved. FM and infrared systems can be designed to broadcast signals that cover the entire room and thus do not restrict seating to any one area. Figures A-3.8.3.19.-A and A-3.8.3.19.-B show the general configuration of FM and infrared systems. Although portable systems (FM systems, in particular) are available, these are best suited to small audiences. Generally, the systems installed in church halls, auditoria, theatres and similar places of assembly are not easily portable, as they are installed in a fixed location by a sound technician and form an integral part of the P.A. system of the room or building.

Hard-wired systems (where a connection is provided at a particular seat in an auditorium, for example) might meet this requirement when adequate provisions are made to accommodate persons with hearing aids.

Figure [A-3.8.3.19.-A] A-3.8.3.19.-A
FM sound transmission system

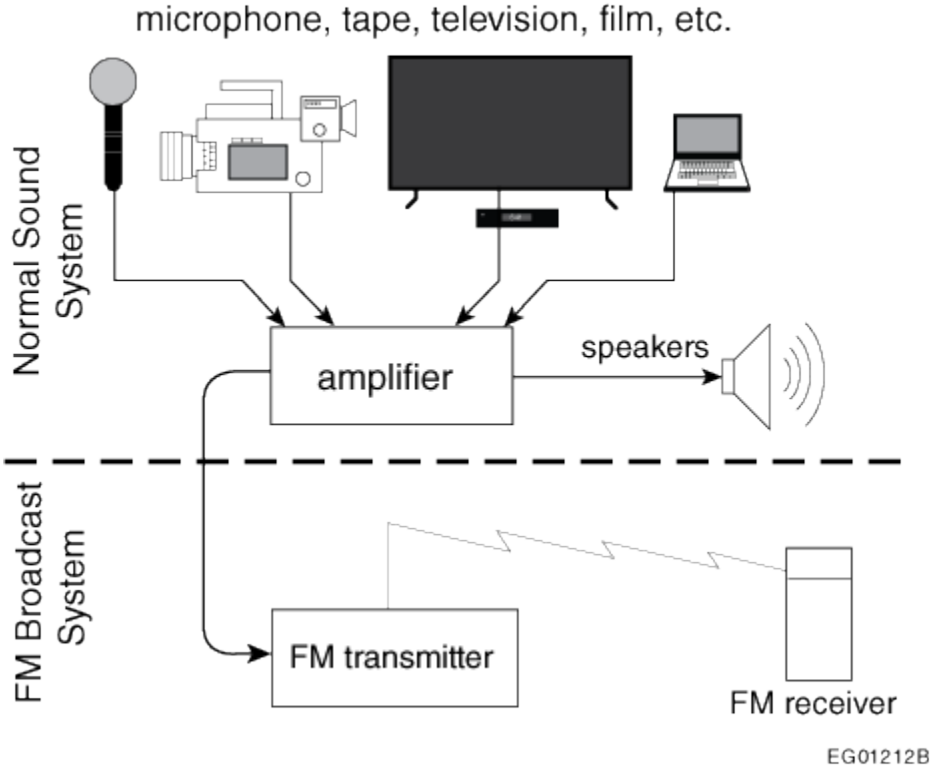


Figure [A-3.8.3.19.-B] A-3.8.3.19.-B
Infrared sound transmission system

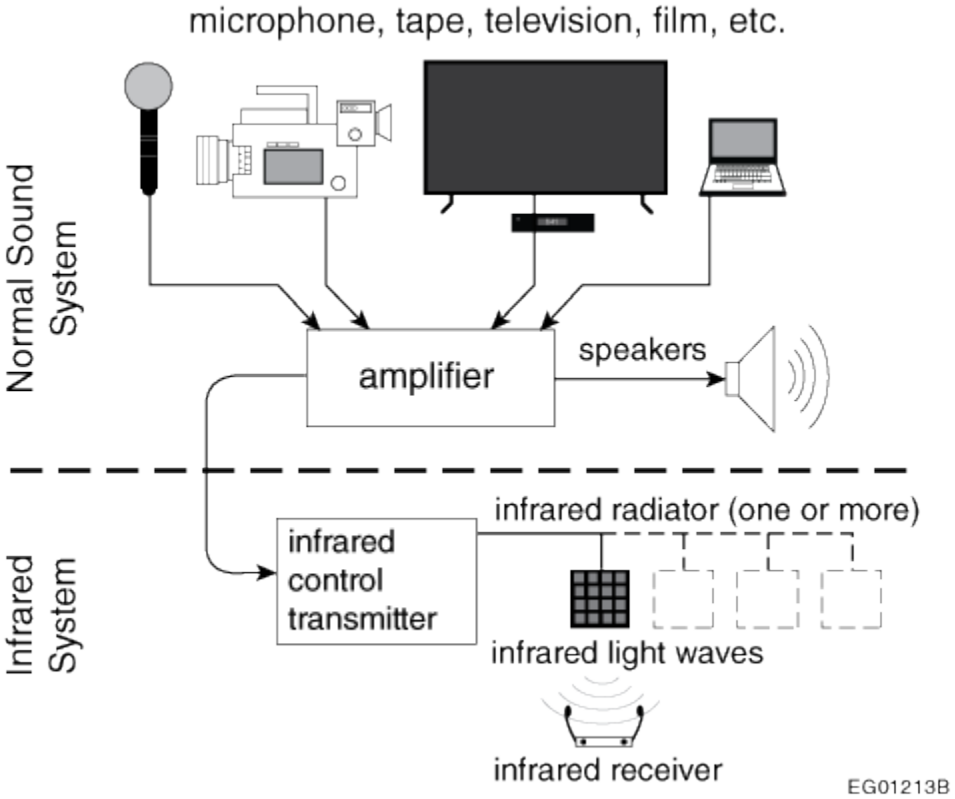
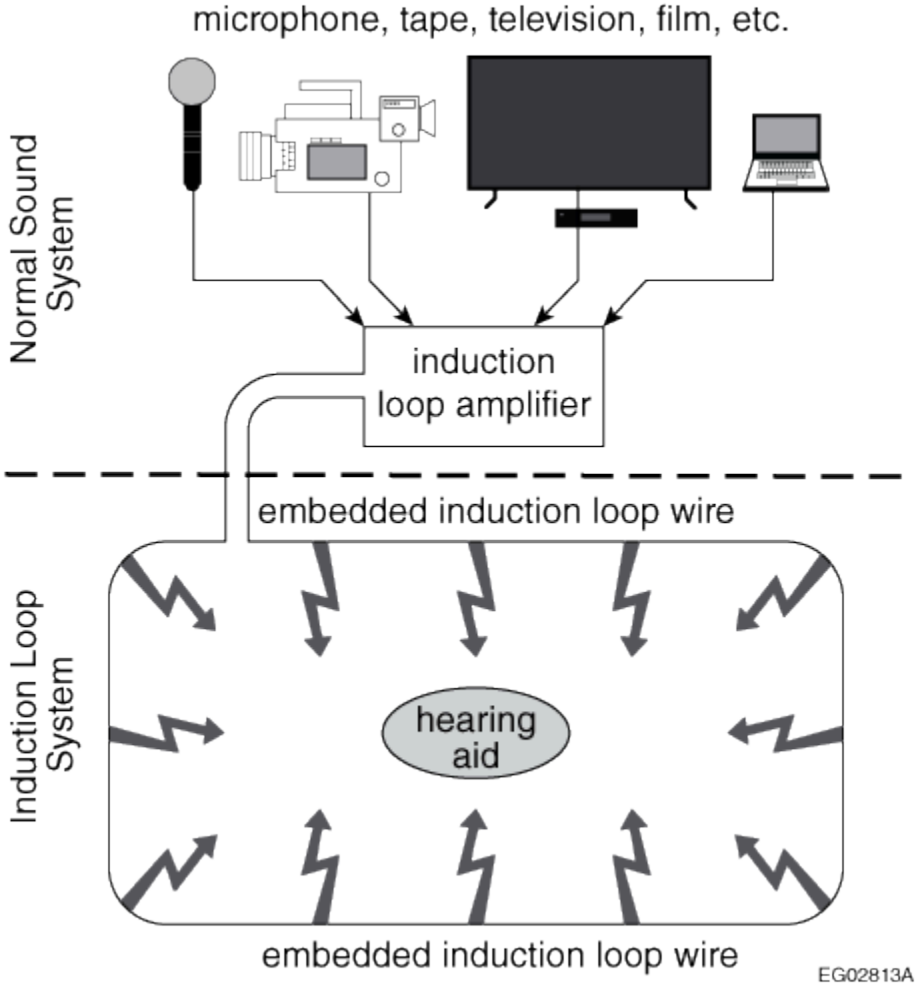


Figure [A-3.8.3.19.-C] A-3.8.3.19.-C
Induction loop sound transmission system



Impact analysis

The revision of terminology is an editorial change that does not change building costs. The intent is to support understanding and interpretation of Code provisions, and update the terminology to what is used also used in the industry.

Enforcement implications

The revision of terminology is an editorial change that supports consistent application of code requirements by building officials and designers.

Who is affected

Building officials, owners and designers will use a common terminology that would support consistent application of accessibility requirements as well as reflect more modern/accepted terminology.

PROCESS

Use and Egress — Draft — (2022-08-10)

This PCF was drafted by staff. It has not been reviewed by the TG-Accessibility yet.

Use and Egress — Review — Further Review (2024-06-04)

It was noted that "persons" would be replaced with "people". It was also noted that the proposed language was consistent with terminology from the Canadian Hard of Hearing Society (hard of hearing, hearing loss, Deaf).

It was suggested that "low or no hearing" be used in lieu of the proposed language used. It was raised that this would also align with the "low or no vision" suggestion.

It was suggested that the language should echo terminology from accessibility stakeholder groups' recommendation(s). It was also noted that persons who identify as being Deaf describe their community with a capital D, which should be reflected in the language.

It was noted that the context in the NBC is important. This example is in the context of visible signals - this impacts a person who may not have assistive technologies to address hearing.

The SC-UE agreed to change "hearing impairment" to "people who are Deaf or hard of hearing".

ACTION: *Further develop PCF 1778 to use "Deaf or hard of hearing" consistently throughout Part 3 of the NBC.*

Draft — (2025-02-27)

Continued staff development of PCF based on feedback from SC-UE

NMCC on Accessibility — Review — Recommended for Public Review (2025-05-16)

It was asked why "deafened" was not used as it can qualify how some people communicate based on deafness.

It was noted that there are various standards who have various definitions. It was noted that the preferred term is "deaf or hard of hearing", as it does not give indication of culture or communication preferences. Terms like Deaf can be more related to community and identity. Using "deaf" instead of "Deaf" or other terms could create issues for some people, but not with others, or exclude groups inadvertently. It was noted that using "or" vs "and" could also have implications in code language.

It was noted that it may be difficult to maintain consistency with every standard, and it may make more sense to target consistency within the NBC (rather than standards that don't always align with each other).

It was noted that, relating to PCF 1644, "Blind" is also a cultural term and was not incorporated into the complementary PCF.

It was recommended to focus on the functional aspects of disabilities directly relevant to code requirements and their intents, to be relevant to designers, builders who are installing various building elements. For example, the visual element of a fire alarm signal is for those who cannot (adequately) hear the signal otherwise.

It was suggested to say "no or low hearing" in general alignment with PCF 1644. There was support for this option because it does not imply community belonging/identity and is more related to the function of hearing as it relates to building features. It was also noted that this was why CSA B652 had decided to use "low or no hearing". It was noted that this language also includes people who do not identify as having a disability, regardless of hearing level.

It was recommended to update PCF 1644 to say "low or no vision" to align the two.

On the suggested edit around "physical disabilities", it was suggested to remove it for now as it could be part of a larger discussion. There are also questions about international symbols to use. These are on the plate of the TG-Accessibility in Buildings to discuss.

Some weblinks were shared during the discussion:

https://edaud.org/wordpress/wp-content/uploads/2023/10/RecommendedTerminology2023.pdf

https://cad-asc.ca/our-work/terminology/

ACTION: note to review intent statements for low/no vision/hearing, along with existing action for "independently" vs "without the assistance of another person".

General consensus on proposed change (pending public review):

- Replace the wording with "low or no hearing" instead
- Update PCF justification to reflect recommended wording
- Remove proposed edit around "physical disability"

The National Model Codes Committee on Accessibility **reached consensus** that the proposed changes related to PCF 1778 as revised during the 2030-02 Meeting be recommended to the Canadian Board for Harmonized Construction Codes for publication in the next edition of the National Building Code pending public review

OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISIONS

[3.2.4.19.] 3.2.4.19. ([1] 1) [F11-OS1.5]

[3.2.4.19.] 3.2.4.19. ([2] 2) no attributions

[3.2.4.19.] 3.2.4.19. ([3] 3) [F11-OS1.5]

[3.8.1.1.] 3.8.1.1. ([1] 1) no attributions

[3.8.1.1.] 3.8.1.1. ([2] 2) no attributions

[3.8.2.1.] 3.8.2.1. ([1] 1) no attributions

[3.8.2.2.] 3.8.2.2. ([1] 1) [F73-OA1]

[3.8.2.2.] 3.8.2.2. ([2] 2) no attributions

[3.8.2.2.] 3.8.2.2. ([3] 3) no attributions

[3.8.2.2.] 3.8.2.2. ([4] 4) [F73-OA1]

[3.8.2.3.] 3.8.2.3. ([1] 1) [F73-OA1]

[3.8.2.3.] 3.8.2.3. ([2] 2) no attributions

[3.8.2.3.] 3.8.2.3. ([3] 3) [F74-OA2]

[3.8.2.3.] 3.8.2.3. ([4] 4) [F74-OA2]

[3.8.2.3.] 3.8.2.3. ([5] 5) [F74-OA2]

[3.8.2.3.] 3.8.2.3. ([5] 5) [F10-OS3.7] Applies to portion of Code text: "... each row of seats served by two aisles shall have one adaptable seat conforming to Subsection 3.8.3. located adjacent to one of the aisles."

[3.8.2.3.] 3.8.2.3. ([6] 6) [F74-OA2]

[3.8.2.4.] 3.8.2.4. ([1] 1) [F73-OA1]

[3.8.2.4.] 3.8.2.4. ([2] 2) [F73-OA1]

[3.8.2.5.] 3.8.2.5. ([1] 1) [F73-OA1]

[3.8.2.5.] 3.8.2.5. ([2] 2) [F73-OA1]

[3.8.2.5.] 3.8.2.5. ([3] 3) no attributions

[3.8.2.6.] 3.8.2.6. ([1] 1) no attributions

[3.8.2.7.] 3.8.2.7. ([1] 1) [F73-OA1]

[3.8.2.7.] 3.8.2.7. ([2] 2) no attributions

[3.8.2.7.] 3.8.2.7. ([3] 3) no attributions

[3.8.2.8.] 3.8.2.8. ([1] 1) [F74-OA2]

[3.8.2.8.] 3.8.2.8. ([1] 1) [F72-OH2.1] [F71-OH2.3]

[3.8.2.8.] 3.8.2.8. ([2] 2) [F74-OA2]

[3.8.2.8.] 3.8.2.8. ([2] 2) [F72-OH2.1] [F71-OH2.3]

[3.8.2.8.] 3.8.2.8. ([2] 2) no attributions

[3.8.2.8.] 3.8.2.8. ([3] 3) no attributions

[3.8.2.8.] 3.8.2.8. ([4] 4) [F72-OH2.1]

[3.8.2.8.] 3.8.2.8. ([4] 4) [F73-OA1]

[3.8.2.8.] 3.8.2.8. ([5] 5) no attributions

[3.8.2.8.] 3.8.2.8. ([6] 6) no attributions

[3.8.2.8.] 3.8.2.8. ([7] 7) no attributions

[3.8.2.8.] 3.8.2.8. ([8] 8) no attributions

[3.8.2.8.] 3.8.2.8. ([9] 9) no attributions

[3.8.2.8.] 3.8.2.8. ([10] 10) no attributions

[3.8.2.8.] 3.8.2.8. ([11] 11) no attributions

[3.8.2.8.] 3.8.2.8. ([12] 12) no attributions

[3.8.2.8.] 3.8.2.8. ([13] 13) [F74-OA2]

[3.8.2.8.] 3.8.2.8. ([13] 13) no attributions

[3.8.2.8.] 3.8.2.8. ([14] 14) no attributions

[3.8.2.8.] 3.8.2.8. ([15] 15) no attributions

[3.8.2.8.] 3.8.2.8. ([15] 15) [F74-OA2]

[3.8.2.9.] 3.8.2.9. ([1] 1) no attributions

[3.8.2.9.] 3.8.2.9. ([2] 2) [F74-OA2]

[3.8.2.10.] 3.8.2.10. ([1] 1) [F74-OA2]

[3.8.2.10.] 3.8.2.10. ([1] 1) no attributions

[3.8.2.10.] 3.8.2.10. ([2] 2) [F74-OA2]

[3.8.2.10.] 3.8.2.10. ([3] 3) [F74-OA2]

[3.8.2.10.] 3.8.2.10. ([3] 3) no attributions

[3.8.2.10.] 3.8.2.10. ([4] 4) [F74-OA2]

[3.8.2.10.] 3.8.2.10. ([4] 4) no attributions

[3.8.2.11.] 3.8.2.11. ([1] 1) [F74-OA2]

[3.8.2.11.] 3.8.2.11. ([1] 1) no attributions

[3.8.2.12.] 3.8.2.12. ([1] 1) [F74-OA2]

[3.8.2.12.] 3.8.2.12. ([1] 1) no attributions

[3.8.3.1.] 3.8.3.1. ([1] 1) no attributions

[3.8.3.2.] 3.8.3.2. ([1] 1) [F73-OA1]

[3.8.3.2.] 3.8.3.2. ([2] 2) no attributions

[3.8.3.2.] 3.8.3.2. ([3] 3) ([a] a),([b] b) [F30-OS3.1]

[3.8.3.2.] 3.8.3.2. ([3] 3) ([a] a),([b] b) [F73-OA1]

[3.8.3.2.] 3.8.3.2. ([3] 3) ([c] c),([d] d) [F73-OA1]

[3.8.3.2.] 3.8.3.2. ([3] 3) ([e] e),([f] f) [F73-OA1]

[3.8.3.2.] 3.8.3.2. ([3] 3) ([e] e),([f] f) [F30-OS3.1]

[3.8.3.2.] 3.8.3.2. ([3] 3) ([c] c),([d] d) [F30-OS3.1]

[3.8.3.2.] 3.8.3.2. ([4] 4) no attributions

[3.8.3.2.] 3.8.3.2. ([5] 5) [F73-OA1]

[3.8.3.2.] 3.8.3.2. ([6] 6) [F73-OA1]

[3.8.3.3.] 3.8.3.3. ([1] 1) ([a] a) [F73-OA1]

[3.8.3.3.] 3.8.3.3. ([1] 1) ([a] a) [F30-OS3.1]

[3.8.3.3.] 3.8.3.3. ([1] 1) ([b] b) [F73-OA1]

[3.8.3.3.] 3.8.3.3. ([1] 1) ([c] c)

[3.8.3.3.] 3.8.3.3. ([1] 1) ([d] d) [F30-OS3.1]

[3.8.3.4.] 3.8.3.4. ([1] 1) ([a] a) [F74-OA2]

[3.8.3.4.] 3.8.3.4. ([1] 1) ([b] b) [F73-OA1]

[3.8.3.4.] 3.8.3.4. ([1] 1) ([c] c) [F74-OA2]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([b] b),([e] e) [F73-OA1]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([d] d) [F30-OS3.1]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([c] c) [F73-OA1]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([d] d) [F73-OA1]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([e] e),([f] f)

[3.8.3.5.] 3.8.3.5. ([1] 1) ([b] b),([e] e) [F30-OS3.1]

[3.8.3.5.] 3.8.3.5. ([1] 1) ([a] a)

[3.8.3.5.] 3.8.3.5. ([1] 1) ([c] c) [F30-OS3.1]

[3.8.3.5.] 3.8.3.5. ([2] 2) no attributions

[3.8.3.5.] 3.8.3.5. ([3] 3) no attributions

[3.8.3.5.] 3.8.3.5. ([4] 4) ([a] a) [F73-OA1]

[3.8.3.5.] 3.8.3.5. ([4] 4) ([b] b),([c] c) [F30-OS3.1]

[3.8.3.5.] 3.8.3.5. ([5] 5) [F30-OS3.1]

[3.8.3.6.] 3.8.3.6. ([1] 1) no attributions

[3.8.3.6.] 3.8.3.6. ([2] 2) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([3] 3) [F74-OA2]

[3.8.3.6.] 3.8.3.6. ([3] 3) [F30-OS3.1]

[3.8.3.6.] 3.8.3.6. ([4] 4) [F74-OA2]

[3.8.3.6.] 3.8.3.6. ([4] 4) [F10-OS3.7]

[3.8.3.6.] 3.8.3.6. ([5] 5) [F74-OA2]

[3.8.3.6.] 3.8.3.6. ([5] 5) [F10-OS3.7]

[3.8.3.6.] 3.8.3.6. ([6] 6) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([7] 7) [F30-OS3.1]

[3.8.3.6.] 3.8.3.6. ([8] 8) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([9] 9) no attributions

[3.8.3.6.] 3.8.3.6. ([10] 10) [F30-OS3.1]

[3.8.3.6.] 3.8.3.6. ([10] 10) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([10] 10) no attributions

[3.8.3.6.] 3.8.3.6. ([11] 11) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([12] 12) [F30-OS3.1]

[3.8.3.6.] 3.8.3.6. ([12] 12) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([13] 13) no attributions

[3.8.3.6.] 3.8.3.6. ([14] 14) [F73-OA1]

[3.8.3.6.] 3.8.3.6. ([15] 15) [F73-OA1]

[3.8.3.6.] **3.8.3.6. ([16] 16) no attributions**

[3.8.3.6.] **3.8.3.6. ([17] 17) [F74-OA2]**

[3.8.3.6.] **3.8.3.6. ([17] 17) [F10-OS3.7]**

[3.8.3.7.] **3.8.3.7. ([1] 1) [F73-OA1]**

[3.8.3.7.] **3.8.3.7. ([1] 1) [F74-OA2]**

[3.8.3.7.] **3.8.3.7. ([1] 1) [F30-OS3.1] [F10-OS3.7]**

[3.8.3.8.] **3.8.3.8. ([1] 1) [F74-OA2]**

[3.8.3.8.] **3.8.3.8. ([1] 1) [F10-OS3.7]**

[3.8.3.9.] **3.8.3.9. ([1] 1) no attributions**

[3.8.3.9.] **3.8.3.9. ([1] 1) [F74-OA2]**

[3.8.3.9.] **3.8.3.9. ([1] 1) [F73-OA1]**

[3.8.3.9.] **3.8.3.9. ([2] 2) [F74-OA2]**

[3.8.3.9.] **3.8.3.9. ([2] 2) [F73-OA1]**

[3.8.3.9.] **3.8.3.9. ([3] 3) [F74-OA2]**

[3.8.3.9.] **3.8.3.9. ([3] 3) [F73-OA1]**

[3.8.3.10.] **3.8.3.10. ([1] 1) [F74-OA2]**

[3.8.3.10.] **3.8.3.10. ([2] 2) [F74-OA2]**

[3.8.3.11.] **3.8.3.11. ([1] 1) [F74-OA2]**

[3.8.3.11.] **3.8.3.11. ([2] 2) [F74-OA2]**

[3.8.3.12.] **3.8.3.12. ([1] 1) [F74-OA2]**

[3.8.3.12.] **3.8.3.12. ([1] 1) [F72-OH2.1]**

[3.8.3.12.] **3.8.3.12. ([1] 1) ([d] d)([i] i) [F74-OA2]**

[3.8.3.12.] **3.8.3.12. ([1] 1) ([f] f),([g] g) [F30,F20-OS3.1]**

[3.8.3.12.] **3.8.3.12. ([1] 1) ([f] f) and ([g] g)**

[3.8.3.12.] **3.8.3.12. ([1] 1) ([h] h) [F30-OS3.1]** Applies to portion of Code text: "… be equipped with a coat hook … projecting not more than 50 mm from the wall …"

[3.8.3.12.] **3.8.3.12. ([1] 1) no attributions**

[3.8.3.13.] **3.8.3.13. ([1] 1) [F74-OA2]**

[3.8.3.13.] **3.8.3.13. ([1] 1) ([b] b) [F10-OS3.7]**

[3.8.3.13.] **3.8.3.13. ([1] 1) ([c] c)**

[3.8.3.13.] 3.8.3.13. ([1] 1) ([d] d)

[3.8.3.13.] 3.8.3.13. ([1] 1) ([f] f)

[3.8.3.13.] 3.8.3.13. ([1] 1) ([g] g) [F30-OS3.1] Applies to the requirement for a coat hook.

[3.8.3.13.] 3.8.3.13. ([1] 1) ([i] i) [F74-OA2] Applies to the requirement for a shelf.

[3.8.3.13.] 3.8.3.13. ([1] 1) [F72-OH2.1] [F71-OH2.3]

[3.8.3.13.] 3.8.3.13. ([1] 1) ([b] b) [F74-OA2] Applies to portion of Code text: "… a door ... capable of being locked from the inside …"

[3.8.3.13.] 3.8.3.13. ([2] 2) [F72-OH2.1] [F71-OH2.3]

[3.8.3.14.] 3.8.3.14. ([1] 1) [F74-OA2]

[3.8.3.14.] 3.8.3.14. ([1] 1) [F72-OH2.1]

[3.8.3.15.] 3.8.3.15. ([1] 1) [F74-OA2]

[3.8.3.15.] 3.8.3.15. ([1] 1) ([d] d) [F30-OS3.1]

[3.8.3.15.] 3.8.3.15. ([1] 1) ([a] a)

[3.8.3.15.] 3.8.3.15. ([2] 2) [F74-OA2]

[3.8.3.15.] 3.8.3.15. ([2] 2) ([f] f) [F30-OS3.1]

[3.8.3.15.] 3.8.3.15. ([2] 2) ([c] c)

[3.8.3.16.] 3.8.3.16. ([1] 1) [F74-OA2]

[3.8.3.16.] 3.8.3.16. ([1] 1) [F71-OH2.3]

[3.8.3.16.] 3.8.3.16. ([1] 1) ([f] f) [F31-OS3.2]

[3.8.3.16.] 3.8.3.16. ([2] 2) [F74-OA2]

[3.8.3.17.] 3.8.3.17. ([1] 1) [F74-OA2]

[3.8.3.17.] 3.8.3.17. ([1] 1) ([d] d),([e] e) [F30-OS3.1]

[3.8.3.17.] 3.8.3.17. ([1] 1) ([f] f) [F30-OS3.1]

[3.8.3.17.] 3.8.3.17. ([1] 1) ([h] h) [F31-OS3.2]

[3.8.3.17.] 3.8.3.17. ([2] 2) [F74-OA2]

[3.8.3.17.] 3.8.3.17. ([2] 2) [F71-OH2.3]

[3.8.3.17.] 3.8.3.17. ([2] 2) ([a] a) [F73-OA1]

[3.8.3.17.] 3.8.3.17. ([2] 2) ([b] b) [F10-OS3.7]

[3.8.3.17.] 3.8.3.17. ([2] 2) ([b] b) [F74-OA2]

[3.8.3.17.] 3.8.3.17. ([2] 2) ([g] g) [F74-OA2]

[3.8.3.18.] 3.8.3.18. ([1] 1) [F74-OA2]

[3.8.3.19.] 3.8.3.19. ([1] 1) [F74-OA2]

[3.8.3.19.] 3.8.3.19. ([1] 1) [F11-OS3.7]

[3.8.3.19.] 3.8.3.19. ([2] 2) [F74-OA2]

[3.8.3.20.] 3.8.3.20. ([1] 1) [F74-OA2]

[3.8.3.21.] 3.8.3.21. ([1] 1) [F74-OA2]

[3.8.3.21.] 3.8.3.21. ([2] 2) [F74-OA2]

[3.8.3.22.] 3.8.3.22. ([1] 1) [F74-OA2]

[3.8.3.22.] 3.8.3.22. ([1] 1) [F30-OS3.1] Applies to portion of Code text: "… level … level and have removable seats, …"

[3.8.3.22.] 3.8.3.22. ([1] 1) ([d] d) [F10-OS3.7] Applies to portion of Code text: "… without infringing on egress from any row of seating or any aisle requirements …"

[3.8.3.22.] 3.8.3.22. ([2] 2) [F74-OA2]

[3.8.3.22.] 3.8.3.22. ([2] 2) [F30-OS3.1] Applies to portion of Code text: "… level, ..."

[3.8.3.22.] 3.8.3.22. ([3] 3) ([a] a) [F10-OS3.7] Applies to portion of Code text: "… without infringing on egress from any row of seating or any aisle requirements …"

[3.8.3.22.] 3.8.3.22. ([3] 3) [F74-OA2]

[3.8.3.22.] 3.8.3.22. ([4] 4) [F10-OS3.7]

Submit a comment

Proposed Change 2054

Code Reference(s):	**NBC20 Div.B 3.8.3.8.(1) (first printing)**
Subject:	Accessibility
Title:	Clarification of Installation Location for Accessible Controls
Description:	The proposed change clarifies that all operable components for controls should be installed within the prescribed height range.

This change could potentially affect the following topic areas:

- [ ] Division A
- [ ] Division C
- [ ] Building operations
- [x] Small Buildings
- [ ] Fire Protection
- [x] Accessibility
- [ ] Building Envelope
- [ ] Heating, Ventilating and Air Conditioning
- [x] Division B
- [x] Design and Construction
- [ ] Housing
- [x] Large Buildings
- [x] Occupant safety in use
- [ ] Structural Requirements
- [ ] Energy Efficiency
- [ ] Plumbing
- [ ] Construction and Demolition Sites

Problem

Clause 3.8.3.8.(1)(b) of Division B of the National Building Code (NBC) requires that controls (such as light switches or door opening and closing hardware) in buildings required to be barrier-free be installed 400 to 1200 mm above the floor, so that they are accessible from a standing position or while seated in a wheelchair or scooter.

However, the language is unclear as to whether the height range should be interpreted to include all operable components of the control, or if the height range is considered with respect to the centerline or top or bottom of the control. The lack of clarity could result in certain components of controls being installed in locations outside the prescribed height range. This could lead to people not being able to access and use the building's facilities. In some cases, not being able to reach the building controls could also lead to delays notifying an emergency situation, potentially impacting the safety of the occupants who initiated the notification.

Justification

The proposed change clarifies that the prescribed height range for controls in Clause 3.8.3.8.(1)(a) applies to the centerline of the control. This should facilitate enforcement and provides more consistent guidelines for electricians, who may not know the exact device to be installed.

By providing clarity on the application of the prescribed height range for accessible controls, the proposed change is expected to forestall confusion among designers, builders, building officials and other Code users, and allow for a more consistent application of the requirements.

The proposed change also clarifies that the height is measured from the "finished" floor as the inspectors typically check height of element once the floor is finished. It is understood that at the "rough-in"stage, the floor may not be determined/finished yet. A range specified in this Sentence could minimize the impact of the flooring thickness.

The attribution and intent statement are also changed to clarify the intent of the requirement, which is to facilitate the use of the building's facilities by persons with physical or sensory limitations in order to notify emergency responders in a timely manner.

PROPOSED CHANGE

[3.8.3.8.] 3.8.3.8. Controls

[1] 1) Controls described in this Section shall

[a] a) where located in a *storey* where a *barrier-free* path of travel is required and unless otherwise stated,

[i] i) be in or adjacent to the *barrier-free* path of travel,

[ii] ii) be mounted with their centerline between ~~at~~ 400 mm and~~to~~ 1 200 mm above the finished floor, and

[iii] iii) be adjacent to and centred on either the length or the width of a clear floor space of 1 350 mm by 800 mm,

[b] b) be operable

[i] i) with one hand in a closed fist position, without requiring tight grasping, pinching with fingers, or twisting of the wrist, and

[ii] ii) unless otherwise stated, with a force not more than 22 N, and

[c] c) where controls provide a feedback signal to the user, it shall be both audible and visible (see Note A-3.8.3.8.(1)(c)).

Impact analysis

Impact on accessibility

The proposed change may enhance accessibility by requiring that all operable components of building controls are installed in an accessible range, so that occupants can use the building's facilities. The impact is expected to be greater for controls that occupy a large vertical area, where selecting the installation height with respect to the centerline of the controls could result in a larger portion of operable components being installed in an inaccessible range.

Impact on cost and ease of installation

The proposed change is not expected to have significant cost implications as it is a clarification on an existing requirement. However, the proposed change may complicate the installation of certain controls, where installers will need to be familiar with the location of the operable components relative to the mounting screws when installing the control.

Impact on code use

The proposed change is expected to simplify code use and interpretation by providing clarity on how existing installation height requirements for controls should be applied.

Enforcement implications

The proposed change can be enforced using existing methods for evaluating compliance with installation height requirements. The proposed change is expected to simplify enforcement by clarifying how the prescribed accessible height range should be interpreted and applied.

Who is affected

Building officials, whose efforts to interpret the NBC requirements for the accessible height of controls will be simplified

Designers and builders, who would need to be aware of and apply the proposed clarification to their work

Persons with disabilities, who may benefit from clarity that operable components of controls need to be installed in an accessible range where Clause 3.8.3.8.(1)(b) applies.

PROCESS

Use and Egress — Draft — (2024-05-10)

Use and Egress — Review — Further Review (2024-06-05)

The SC-UE received an overview of the PCF clarifying the height of accessible controls based on operability.

Possible wording considerations were raised - "operable user interface" instead of "operable components" (ex: garage mechanism's operating components are up on the ceiling, but the user interface may be elsewhere). Generally speaking, "operable components" were intended to mean "typical hand operation" although it may be from a reaching device. "Operable component" may be too general.

Wording around floors ("finished floor" or just "floor") was discussed. It was noted that the language on the "finished" floor may be problematic. It was noted that while "floor" is more widespread in the codes, "finished floor" accounts for height that might appear after construction.

ACTION: *Review "floor" versus "finished floor" throughout the Code for consistency (as a separate task).*

A minor edit was suggested to add "between 400 and 1200 mm" rather than "at 400 to 1200 mm"

It was suggested to be consistent with the CSA B651 standard (i.e. measure to the centreline).

It was noted that some controls in the NBC (ex: washroom stall door hardware) or in other codes have different ranges.

The SC-UE agreed with a change of wording of the PCF (See Minutes 2020-44).

It was noted that in some cases the height of the device (ex: to refill a product dispenser) may not be at an accessible height.

It was noted that Clause (1)(c)'s structure may need a grammatical revision to flag to editors.

ACTION: *Fix the grammar of Clause 3.8.3.8.(1)(c) - tell editors*

It was agreed that electrical receptacles (see PCF 1957 for wording) could be addressed (in another PCF) in the context of Articles 3.8.2.6. and 3.8.3.8. The Article titles may need revision.

ACTION: *Draft a PCF to add receptacles to Article 3.8.2.6. to complement existing language on controls*

Moved by J. Redmond and **seconded by** B. Everton that the proposed changes related to PCF 2054 as **revised** during the 2020-44 Meeting of the Standing Committee on Use and Egress be recommended to the Canadian Board for Harmonized Construction Codes for publication in the next edition of the National Building Code pending feedback from the Standing Committee on Housing and Small Buildings and public review. **Motion carried.**

NMCC on Accessibility — Review — Recommended for Public Review (2025-05-16)

It was raised that in 3.8.2.6. - the controls are for safety devices and building operations. It was raised that some controls like faucets may not fall within safety or building operation devices.

ACTION: Look at archives for when faucets were added as a control if there is a specific reason for it.

It was noted that there are reasons for pointing lavatories back to Article 3.8.2.6. for dexterity requirements.

It was noted that there is no official definition of "controls" as a term. It was noted that "door hardware" can also create confusion (is it different from "door operating device").

It was suggested that this article could use broader attention than what is in the scope of this PCF.

ACTION: Natalie Tornatora to submit a CCR on Article 3.8.2.6.

ACTION: Flag to TG-A as something to discuss.

Questions were raised on controls that may have several components (ex: keypad + screen) and whether they all need to be within the height range (accessibility for a person in a seated vs standing position). It was noted that the installer needs to know the height for an electrical box for example, but they may not know the overall size or functionality of the device.

It was suggested that reach range research may be useful going forward. Some European codes have illustrations to support reach ranges.

It was noted that the proposed edit in Clause (c) should be removed as the reference is to feedback signal, not controls.

ACTION: Remove edit to Clause (c)

It was noted that adding a specification of "centreline" facilitates enforcement and would help electricians for consistent application. However, it was also noted that depending on the device, the centreline may still be ambiguous – the whole device, the

operable components, etc. The consideration of "operable" was also discussed and the potential to introduce further confusion, or if this language should be in the intent statement instead (ex: "intended for people with limited reach").

It was also raised that reachability may be different for an employee/building operations (refilling a dispenser vs operating the device), but the intent of the Article may be more specific to those operating the device. Note that this is also limited to building services and safety devices, and may not include all kinds of things like vending machines, cup dispensers, etc.

It was also raised that using "finished floor" vs "floor" could likely create questions. Inspectors typically check height of elements once the finished floor is installed, and some jurisdictions allow for a certain tolerance level on measurements. However, at the "rough-in" stage, the flooring selection may not be determined yet. It was noted that the reach range is intended as one that works most of the time. A bit more or less than this range may not be critical.

ACTION: Review Section 3.8 to review "finished floor" vs "floor" for consistency.

General consensus on proposed change (pending public review):

- Remove edits in Clause (c) back to what it was before.
- Strike out "to take action in an emergency" from the intent statement

The National Model Codes Committee on Accessibility **reached consensus** that the proposed changes related to PCF 2054 as revised during the 2030-02 Meeting be recommended to the Canadian Board for Harmonized Construction Codes for publication in the next edition of the National Building Code pending public review.

OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISIONS

[3.8.3.8.] 3.8.3.8. ([1] 1) [F74-OA2]

Intent 1:

To limit the probability that a person using a wheelchair or other assistive mobility device, or a person with limited physical strength or manual dexterity, or joint mobility, or a person with vision loss or hearing losswill not be able to operate essential building controls independently.

[3.8.3.8.] 3.8.3.8. ([1] 1) [~~F10~~,F13-~~OS3.7~~,OA2]

Intent 1:

To limit the probability that a person using a wheelchair or other assistive mobility device, or a person with limited physical strength or manual dexterity, or joint

mobility, will not be able to operate the controls for building services or a fire alarm pull station or other safety device in an emergency situation, which could lead to delays in the operation of such controls and devices, which could lead to delays in notifying emergency responders, which could lead to harm to persons.

Submit a comment

Proposed Change 1684

Code Reference(s):	**NBC20 Div.B 3.2.3.7.(3) (first printing)** **NBC20 Div.B 3.2.3.7.(4) (first printing)**
Subject:	Other — Fire Protection
Title:	Intent statement and attribution revisions for Sentences 3.2.3.7.(3) and (4)
Description:	This proposed change revises the intent statements of Sentences 3.2.3.7.(3) and (4) to clarify their intents and deletes the attributions.

This change could potentially affect the following topic areas:

- ☐ Division A
- ☐ Division B
- ☐ Division C
- ☐ Design and Construction
- ☐ Building operations
- ☐ Housing
- ☐ Small Buildings
- ☐ Large Buildings
- ☐ Fire Protection
- ☐ Occupant safety in use
- ☐ Accessibility
- ☐ Structural Requirements
- ☐ Building Envelope
- ☐ Energy Efficiency
- ☐ Heating, Ventilating and Air Conditioning
- ☐ Plumbing
- ☐ Construction and Demolition Sites

Problem

Sentences 3.2.3.7.(1) and (2) both stipulate noncombustible cladding for buildings where the maximum area of unprotected openings is 50% or less.

Sentences 3.2.3.7.(3) and (4) both waive noncombustible cladding, with conditions.

- Sentence (3) – noncombustible cladding is exempted where the maximum area of unprotected openings is more than 10% and exterior wall assembly complies with Article 3.1.5.5.
- Sentence (4) – noncombustible cladding is exempted where maximum area of unprotected openings is between 25% and 50% subject to one of 5 conditions ranging from 5 metre limiting distance to sprinklered compartments to cladding materials or the exterior wall assembly complies with Article 3.1.5.5.

Intent statements of Sentences 3.2.3.7.(3) and (4) both refer to a limitation on the probability of ignition. It has been suggested that there should not be a reference to a limitation on the probability of ignition since the purpose of both Sentences (3) and (4)

is to purposefully allow combustible cladding, which is more likely to allow for spread the fire rather than limit it, as compared to noncombustible cladding. Therefore, the intent statements of Sentences (3) and (4) need to be revised.

Justification

Analysis of intent statement of Sentence 3.2.3.7.(3)

In the case of Sentence 3.2.3.7.(3), all 3 bullets of the current Intent Statement are associated with the condition that applies (i.e., the exterior wall assembly complies with Article 3.1.5.5.) The 3rd bullet, in particular, refers to the limited probability that the cladding will be ignited whereas the first and 2nd bullet refer to the limited risk of fire spread from the subject building to an adjacent building. With respect to the 3rd bullet, since combustible cladding could be ignited, the premise that the conditions imposed by Sentence 3.2.3.7.(3) will limit the probability that the cladding will be ignited is not necessarily valid.

In accordance with the guidelines for writing Intent Statements per the General Rules for the development of Bottom-Up Analysis of National Codes, as an exception provision, the Intent Statement of the referred-to provision is to explain the nature of and reason for the exception.

The relevant Intent Statement Sentence 3.2.3.7.(1) associated with limiting the probability of ignition of the exposing building is as follows:

3.2.3.7.(1) Intent 2: "*To limit the probability that an exposing building face will be ignited and contribute to a fire, which could lead to the spread of fire from the building to an adjacent building during the time required for emergency responders to perform their duties, which could lead to damage to adjacent buildings*."

However, it is noted that Sentence 3.2.3.7.(1) specifically permits combustible cladding under some circumstances and combustible cladding can be ignited and contribute to a fire which could damage an adjacent building.

In comparison to the Intent Statements for Sentence 3.1.5.5.(2) which invokes the requirements of Table 3.2.3.7. for limiting distances permitting not more than 10% unprotected openings, it is noted that the same wording is used in its Intent 2 as for Sentence 3.2.3.7.(1) and (2):

3.1.5.5. Intent 2: "*To limit the probability that an exposing building face will be ignited and contribute to a fire, which could lead to the spread of fire from the building to an adjacent building during the time required for emergency responders to perform their duties, which could lead to damage to adjacent buildings*."

However, as compared to Sentences 3.2.3.7.(1) and (2) which permit combustible cladding in some cases, Sentence 3.1.5.5.(2) specifically precludes combustible cladding and invokes the mandatory noncombustible cladding for conditions where the unprotected openings are limited to not more than 10% of the area of the exposing building face.

The Intent Statement for Sentences 3.2.3.7.(1) and (2) and Sentence 3.1.5.5.(2) include specific phrase "…during the time required for emergency responders to perform their duties…" It is appropriate to include the missing phrase of the Intent Statement from Sentences 3.2.3.7.(1) and (2) into the Intent Statement for Sentence 3.2.3.7.(3) in order to capture that the limitation on probability of ignition is only during the time before firefighters arrive on scene and are actively fighting the fire.

Intent Statements for exception provisions are not written in a consistent manner throughout the NBC but are most commonly written with a structure that follows the following convention: "To exempt XXX from the requirements of YYY, if certain conditions are met, on the basis that ZZZ."

With respect to this exception provision, it is noted that, as an exception, the Functional Statement and Objective attributions are associated with the root requirement (i.e., Sentences 3.2.3.7.(1) and (2)).

Therefore, the Intent Statement of Sentence 3.2.3.7.(3) is revised to a) clarify that it is intended for limiting fire spread to an adjacent building, b) incorporate the the wording of emergency responders found in the associated sentences, and c) remove the attributions (F02, F03-OP3.1) for this exception provision.

Analysis of intent statement of Sentence 3.2.3.7.(4)

Since 3.2.3.7.(4) includes multiple options to waive the requirement for noncombustible cladding, the intent statements are to reflect all options or be specific as to which options apply to each point. Some of the options do not reduce the risk of a fire being ignited (e.g., Clause (a)). In this case, the premise of the 3rd bullet is not valid.

The 3rd bullet is expected to relevant for Clause (b) sprinklered compartments. The provision of sprinklers in the building per Clause (b) is expected to reduce the risk of flash-over conditions thereby reducing the risk that the exterior wall will be ignited by reducing the risk of fire spread through window openings.

Clauses (c) and (d) provide options which include combustible cladding and installation details which do not preclude the cladding from being ignited.

Clause (e) provides the same exemption as applies in Sentence 3.2.3.7.(3). See above discussion points with respect to the Intent Statement to Sentence 3.2.3.7.(3).

It is appropriate to include the missing phrase of the Intent Statement from Sentences 3.2.3.7.(1) and (2) into the Intent Statement for Sentence 3.2.3.7.(4) in order to capture that the limitation on probability of ignition is only during the time before firefighters arrive on scene and are actively fighting the fire. See additional comments in Section 4.2 for Discussion on Intent Statements for Sentence 3.2.3.7.(3).

Therefore, the Intent Statement of Sentence 3.2.3.7.(4) is revised to a) clarify that it is intended for limiting fire spread to an adjacent building, b) incorporate the the wording of emergency responders found in the associated sentences, c) list the conditions on which cladding requirements in Sentences (1) and (2) are exempted, and d) remove the attributions (F02, F03-OP3.1) for this exception provision.

Summary

The recommended modifications to Intent Statements for Sentences 3.2.3.7.(3) and (4) reflect that combustible cladding, as permitted by these provisions, may result in ignition and that the intent is, more correctly, linked to limiting the probability of fire spread from one building to another rather than limit the probability of ignition.

The recommendation to remove the attributions to these exception provisions is based on the application of the attributions from the root requirement (i.e., Sentence 3.2.3.7.(1) and (2)). I.e., exception provisions are not attributed with their own Functional Statement/Objective pairs.

PROPOSED CHANGE

[3.2.3.7.] 3.2.3.7. Construction of Exposing Building Face

[1] 3) Except as provided in Articles 3.1.4.8. and 3.1.6.9., the requirement in Table 3.2.3.7. for *noncombustible* cladding for *buildings* or *fire compartments* where the maximum permitted area of *unprotected openings* is more than 10% of the *exposing building face* is permitted to be waived for exterior wall assemblies that comply with Article 3.1.5.5. or 3.1.5.6.

[3.2.3.7.] 3.2.3.7. Construction of Exposing Building Face

[1] 4) Except as provided in Articles 3.1.4.8. and 3.1.6.9., the requirement in Table 3.2.3.7. for *noncombustible* cladding for *buildings* or *fire compartments* where the maximum permitted area of *unprotected openings* is more than 25% but not more than 50% of the *exposing building face* is permitted to be waived where

[a] a) the *limiting distance* is greater than 5 m,

[b] b) the *building* or *fire compartment* and all *combustible* attic and roof spaces are *sprinklered* throughout,

[c] c) the cladding

[i] i) conforms to Subsections 9.27.6., 9.27.7., 9.27.8., 9.27.9. or 9.27.10.,

[ii] ii) is installed without furring members, or on furring not more than 25 mm thick, over gypsum sheathing at least 12.7 mm thick or over masonry, and

[iii] iii) after conditioning in conformance with ASTM D2898, "Standard Practice for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing", has a *flame-spread rating* not greater than 25 on the exterior face when tested in accordance with Sentence 3.1.12.1.(1),

[d] d) the cladding

[i] i) conforms to Subsection 9.27.12.,

[ii] ii) is installed with or without furring members over gypsum sheathing at least 12.7 mm thick or over masonry,

[iii] iii) has a *flame-spread rating* not greater than 25 when tested in

accordance with Sentence 3.1.12.1.(2), and

[iv] iv) does not exceed 2 mm in thickness, exclusive of fasteners, joints and local reinforcements (see Note A-3.2.3.7.(4)(d)(iv)), or

[e] e) the exterior wall assembly complies with Article 3.1.5.5. or 3.1.5.6.

Impact analysis

The revision to intent statements of Sentences 3.2.3.7.(3) and (4) clarifies the intent of respective requirement and improves clarity of the provision. It will help code users correctly interpret the code provisions and provide appropriate level of protection for buildings. No negative impact or additional cost is anticipated.

Enforcement implications

It is expected that the revision will facilitate the correct interpretation and enforcement of the code requirements. No enforcement implication is anticipated.

Who is affected

Regulators, consultants, building owners, contractors, testing and certification organizations, manufacturers.

PROCESS

Fire Protection — TG/WG Development — (2021-05-07)

The PCF was created based on the recommendations of WG-Fire Events on the intent statements of Sentences 3.2.3.7.(3) and (4), and the recommended editorial revisions during the 2020-07 SC-FP meeting discussion on May 6, 2021.

Fire Protection — Review — Recommended for Public Review (2021-05-13)

The SC-FP received a summary of the WG's report on intent statements to Sentences 3.2.3.7.(3) and (4). It was suggested that the intent statements of Sentences 3.2.3.7.(3) and (4) be modified to meet the intent of the code requirement, and that the intent statements be linked to limiting the probability of fire spread from one building to another.

The SC-FP agreed to delete the reference of ignition of cladding in the intent statements as the exemption provision language is specific to the cladding requirements in Table 3.2.3.7. It was noted that the appropriate location for ignition of cladding on the subject building should be in Article 3.1.5.5. instead of 3.2.3.7.

After discussions on May 6 and 13, 2021, the SC-FP agreed to the WG's recommendations and motioned to send PCF 1684 to public review. Refer to the minutes of 2020-07 SC-FP meeting for details of the meeting discussions.

Staff Note on August 30, 2022: The status was changed to "Editorial Revision/Errata (No Public Review)" because this is a change to the intent statement only.

Staff Note on January 23, 2024 (as discussed with NY): The status was changed back to "Recommended for Public Review" because this is a change to the attributions as well as the intent statements, which Codes Canada management recently decided do need to go to public review after all. Because there was a SC Decision on it previously, this PCF will proceed directly to the next available public review (i.e. the first available public review of the 2025-2030 code cycle (PR1 - Spring 2026)).

OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISIONS

[3.2.3.7.] 3.2.3.7. ([1] 3) ~~[F02,F03-OP3.1]~~

Intent 1:

To exempt cladding from the requirements of Sentences 3.2.3.7.(1) and 3.2.3.7.(2) [specifically "Type of Cladding Required" in Table 3.2.3.7.], if certain conditions are met on the basis that conforming to Article 3.1.5.5. will limit the probability of spread of fire from the subject building to an adjacent building during the time required for emergency responders to perform their duties, which could lead to damage to adjacent buildings.

~~This is to limit the probability that:~~

- ~~fire will spread from the subject building to an adjacent building, which could lead to damage to the adjacent building,~~
- ~~fire will spread from the subject building to an adjacent building through unprotected openings, which could lead to damage to the adjacent building, and~~

- ~~an exposing building face will be ignited and contribute to, or be involved in, a fire, which could lead to the spread of fire from the subject building to an adjacent building, which could lead to damage to the adjacent building.~~

[3.2.3.7.] 3.2.3.7. ([1] 4) ~~[F03,F02-OP3.1]~~

Intent 1:

To exempt cladding from the requirements of Sentences 3.2.3.7.(1) and 3.2.3.7.(2) [specifically "Type of Cladding Required" in Table 3.2.3.7.], if certain conditions are met on the basis that limiting distance, sprinklers, cladding materials and installation, or conforming to Article 3.1.5.5. will limit the probability of spread of fire from the subject building to an adjacent building during the time required for emergency responders to perform their duties, which could lead to damage to adjacent buildings.

~~This is to limit the probability that:~~

- ~~fire will spread from the subject building to an adjacent building, which could lead to damage to the adjacent building,~~
- ~~fire will spread from the subject building to an adjacent building through unprotected openings, which could lead to damage to the adjacent building, and~~
- ~~an exposing building face will be ignited and contribute to, or be involved in, a fire, which could lead to the spread of fire from the subject building to an adjacent building, which could lead to damage to the adjacent building.~~

Submit a comment

Proposed Change 1781

Code Reference(s):	**NBC20 Div.B 3.1.8.3.(2) (first printing)** **NBC20 Div.B 3.1.8.3.(4) (first printing)** **NBC20 Div.B 9.10.9.2.(4) (first printing)**
Subject:	Fire Protection Systems
Title:	Fire Testing Method of Firestop at Perimeter Joints
Description:	This proposed change replaces the fire test method in ASTM E2307, "Standard Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-storey Test Apparatus" by the CAN/ULC-S115, "Standard Method of Fire Tests of Firestop Systems."

This change could potentially affect the following topic areas:

- [ ] Division A
- [ ] Division C
- [ ] Building operations
- [x] Small Buildings
- [x] Fire Protection
- [ ] Accessibility
- [ ] Building Envelope
- [ ] Heating, Ventilating and Air Conditioning
- [x] Division B
- [ ] Design and Construction
- [ ] Housing
- [x] Large Buildings
- [ ] Occupant safety in use
- [ ] Structural Requirements
- [ ] Energy Efficiency
- [ ] Plumbing
- [ ] Construction and Demolition Sites

Problem

The reference to the ASTM E2307, "Standard Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-storey Test Apparatus" in Sentences 3.1.8.3.(4) and 9.10.9.2.(4), and explanatory Note A-3.1.8.3.(2) of Division B of the NBC was required because the fire test method of CAN/ULC-S115-11, "Standard Method of Fire Tests of Firestop Systems" used different criteria to measure the performance of the firestop at perimeter joints.

The way the CAN/ULC-S115-11 standard was written made the pressure differential requirement more severe than the ASTM standard, which was perceived to be beyond the minimum level of performance such testing should achieve, leading to increased

installation costs for builders due to the installation of more stronger firestop systems than originally intended. This could add undue costs to a building reducing the potential for innovative building design and construction.

Justification

Now that both standards are harmonized by updating to the 2023 edition of the CAN/ULC-S115, referencing the ASTM E2307 standard is no longer necessary. The fire test method of the CAN/ULC-S115:2023 standard achieves similar performance for the firestop installed at the perimeter joints as the ASTM E2307 standard does.

Additionally, replacing the ASTM standard by the CAN/ULC one, will simplify compliance for the industry to achieve the required fire-resistance rating of firestops by referencing only one standard. The fire test method of the CAN/ULC-S115 standard is already referenced for assessing the fire-resistance rating of the firestop used to maintain the continuity of a fire separation abutting a fire separation, a floor, a ceiling or a roof (see Sentences 3.1.8.3.(2) and (3)).

The fire test method of the CAN/ULC-S115 standard is also referenced for maintaining the fire-resistance rating of a fire separation with penetrations by firestops as required in Articles 3.1.9.1., 3.1.9.3. and 3.1.9.4.

Using a fire test method, to which the industry is familiar with and already used to test firestops, will reduce testing costs and likely improve harmonization of installation of firestops. It will also facilitate compliance enforcement by the building inspectors. Thus, reducing the likelihood of defective firestops that could allow fire to spread to upper floors through the defective perimeter joints, leading to an uncontrolled fire that could harm people and significantly damage a building.

PROPOSED CHANGE

[3.1.8.3.] 3.1.8.3. Continuity of Fire Separations

[1] 2) Except as provided in Sentence (5), the continuity of a *fire separation* having a *fire-resistance rating* that abuts another *fire separation*, a floor, a ceiling, or a roof shall be maintained by a *firestop* conforming to Sentence (3). (See Note A-3.1.8.3.(2).)

Note A-3.1.8.3.(2) Fire Separation Continuity.

The continuity of a fire separation with a fire-resistance rating is maintained by installing a firestop system at the juncture where it abuts against another fire separation, a floor, a ceiling or a roof assembly. The continuity of a fire separation without a fire-resistance rating that abuts another fire separation is maintained by filling all openings at the juncture of the assemblies with a fire-resistance-rated joint firestop system that will

ensure the integrity of the fire separation at that location.

Test methods for the evaluation of joint systems are described in CAN/ULC-S115, "Standard Method of Fire Tests of Firestop Systems", which covers joint systems between adjacent fire-resistance-rated assemblies and between a fire-resistance-rated floor and a non-fire-resistance-rated exterior wall. ~~ASTM E2307, "Standard Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-storey Test Apparatus", is a test method applicable to joint systems between a fire-resistance-rated floor and a non-fire-resistance-rated exterior wall.~~

Fire-resistance-rated joint firestop systems can be tested and listed as either static or dynamic. Dynamic joint firestop systems are subjected to movement cycling prior to undergoing fire testing at maximum joint extension. This approach ensures that the fire-resistance rating of the joint firestop system will be maintained even after the joint has cycled through its anticipated range of movement over the service life of the building. Most joints between fire-resistance-rated assemblies, other than those between loadbearing elements, experience some movement over the service life of the building.

[3.1.8.3.] 3.1.8.3. Continuity of Fire Separations

[1] 4) Except as provided in Sentence (5), joints located in a horizontal plane between a floor and an exterior wall shall be sealed by a *firestop* that, when subjected to the fire test method in ~~ASTM E2307, "Standard Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-storey Test Apparatus",~~CAN/ULC—S115, "Standard Method of Fire Tests of Firestop Systems," has an F rating not less than the *fire-resistance rating* of the horizontal *fire separation*.

[9.10.9.2.] 9.10.9.2. Continuous Barrier

[1] 4) Except as provided in Sentence (6), joints located in a horizontal plane between a floor and an exterior wall shall be sealed by a *firestop* that, when subjected to the fire test method in ~~ASTM E2307, "Standard Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-storey Test Apparatus",~~CAN/ULC—S115, "Standard Method of Fire Tests of Firestop Systems," has an F rating not less than the *fire-resistance rating* for the horizontal *fire separation*.

Impact analysis

The industry is already familiar with the fire test method of the CAN/ULC-S115 standard. Testing firestops at the perimeter joints should not induce additional costs as their firestops would all be tested to the same standard (instead of requiring a different

standard to test a specific application of firestops). As such, the potential impact would benefits the industry with a decrease in testing costs for testing of firestops to one standard instead of two different ones.

Enforcement implications

These proposed changes are expected to facilitate enforcement of firestops at the perimeter joints as there is no need to comply to two different standards for a fire test method.

Building officials, the industry and contractors should benefit from referring to a single standard that they are already familiar with that is used for firestopping penetrations of fire separations required to have a fire-resistance rating.

Who is affected

Building officials, manufacturers, contractors, building owners.

PROCESS

Fire Protection — Draft — (2024-05-06)

Fire Protection — Review — Recommended for Public Review (2024-06-03)

The SC-FP received an overview of PCF 1781, which was drafted for the SC-FP's consideration in response to an action item recorded at the SC-FP's previous (2020-15) meeting. It replaces existing references to ASTM E2307, "Standard Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-story Test Apparatus" with CAN/ULC-S115, "Standard Method of Fire Tests of Firestop Systems".

It was clarified that the SC-FP can motion the entire PCF and then coordinate with the SC-HSB, for its information, regarding the Part 9 change.

It was asked if this PCF would be held back until the next code cycle. It was clarified that, yes, this is the case because it is too late for new PCFs to be considered for inclusion in the current (2020-2025) cycle. It was noted that the final public review for this cycle (PR7, scheduled for Fall 2024) is reserved for PCFs being sent back to public review (i.e. for further public review) and the end-of-cycle update to the referenced documents. It was clarified that new minor task PCFs can still be developed and

recommended for public review until the end of the current cycle, but will be ported over to the next (2025-2030) code cycle for consideration in a future public review. It was suggested that there is a chance for new PCFs associated with referenced standard updates to be accommodated in the Fall public review, though this is not guaranteed.

A concern was raised that the 2023 edition of CAN/ULC-S115 may not yet be available to code users. It was verified that the updated standard is already available online (via ULSE's website), however its title on the landing page appeared to be incorrect; it was suggested that ULSE could update the landing page to avoid confusion.

It was asked if the PCF would be reducing the fire exposure to tested specimens. It was clarified that the fire exposure time is identical between the two standards in question. The positive pressure changes were noted. It was asked if temperature difference aspects were removed. It was clarified that there is no temperature difference.

It was noted that the ULC and ASTM standards require test specimens to be movement cycled (i.e. representing what might happen in the field, in situ, prior to a fire). It was clarified that the reference to CAN/ULC-S115 is not moving away from ASTM 2307, but also that these standards may have been developed by ASTM before mass timber and very tall buildings were under consideration. It was raised that some structure members and approaches in the standard may not be used in practice for EMTC. It was noted that the standard has provisions for static and dynamic testing.

The following revision was made to the 'Description' field (on the first page of the PCF) to correct a typo:

> "This proposed change replaces the fire test method in ASTM E2307, "Standard Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-storey Test Apparatus" by the CAN/ULC-S~~155~~115, "Standard Method of Fire Tests of Firestop Systems.""

The SC-FP agreed to recommend the approval of PCF 1781 for public review, as revised. It was reiterated that the PCF will also be forwarded to the SC-HSB for information.

Moved by T.Crimi and **seconded** by J. Jeske that the proposed changes related to PCF 1781 as revised during the 2020-16 Meeting of the Standing Committee on Fire Protection be recommended to the Canadian Board for Harmonized Construction Codes for publication in the next edition of the National Building Code pending public review and cross-committee coordination with the SC-HSB. **Motion carried.**

ACTION: Forward PCF 1781 to the SC-HSB for information.

Housing and Small Buildings — Review — (2024-06-19)

It was asked if the perimeter test was the same as the test for going to a horizontal floor in the standard.

It was clarified that the test method being used is the same, and the goal is to remove extra words out of the code that are not needed anymore.

It was noted that the testing would be specific to the type of penetration.

SC-HSB recommendation: The SC-HSB agreed to go back to FP with this question. It was clarified that it is not probable that this would happen this code cycle.

Housing and Small Buildings — Review — Recommended for Public Review (2024-08-14)

The SC was reminded that they had already discussed and reviewed the Part 9 portion of this PCF at the 2020-59 SC-HSB meeting. However, as the minutes did not capture the motion, the SC was again asked to consider motioning on the Part 9 portion of the PCF.

Moved by S. Dueck and **seconded** by T. Krahn that the proposed changes, related to Part 9, within PCF 1781 as presented during the 2020-61 Meeting of the Standing Committee on Housing and Small Buildings be recommended to the Canadian Board for Harmonized Construction Codes for publication in the next edition of the National Building Code pending public review. **Motion Passed.**

Fire Protection — Review — (2024-09-03)

The SC-FP received an overview of the update on PCF 1781.

It was noted that PCF 1781 was revisited by the SC-HSB at its 2020-61 meeting, which took place on August 14. At this meeting, the SC-HSB agreed to recommend the proposed changes pertaining to Part 9 for publication pending public review.

It was clarified that this PCF will be carried over into the 2025-2030 code cycle for consideration in the 2030 National Model Codes. In terms of its next steps as a minor task PCF, it is anticipated to be posted as part of the next available public review (i.e. the first public review of the 2025-2030 code cycle).

OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISIONS

[3.1.8.3.] 3.1.8.3. ([1] 2) [F03-OS1.2]

[3.1.8.3.] 3.1.8.3. ([1] 2) [F03-OP1.2]

[3.1.8.3.] 3.1.8.3. ([1] 4) [F03-OS1.2]

[3.1.8.3.] 3.1.8.3. ([1] 4) [F03-OP1.2]

[9.10.9.2.] 9.10.9.2. ([1] 4) [F03-OS1.2]

[9.10.9.2.] 9.10.9.2. ([1] 4) [F04-OP1.2]

Submit a comment

Proposed Change 2038

Code Reference(s):	**NBC20 Div.B 3.2.5.12. (first printing)**
Subject:	Automatic Sprinkler System
Title:	Application of Automatic Sprinkler Systems and NFPA 13R Standard
Description:	This proposed change clarifies the application of NFPA 13R, "Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies" for mixed occupancies.
Related Code Change Request(s):	CCR 892

This change could potentially affect the following topic areas:

- ☐ Division A
- ☐ Division C
- ☐ Building operations
- ☑ Small Buildings
- ☑ Fire Protection
- ☐ Accessibility
- ☐ Building Envelope
- ☐ Heating, Ventilating and Air Conditioning
- ☑ Division B
- ☑ Design and Construction
- ☑ Housing
- ☑ Large Buildings
- ☐ Occupant safety in use
- ☐ Structural Requirements
- ☐ Energy Efficiency
- ☐ Plumbing
- ☐ Construction and Demolition Sites

Problem

The current requirements of the NBC for sprinkler system design and installation can result in increased costs and difficulties in sprinklering combustible concealed spaces, depending upon the standard applied. According to Clause 3.2.5.12.(2)(a), all storeys of a building may be sprinklered to NFPA 13R, "Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies" in a building with a residential occupancy throughout, and not exceeding 4 storeys in building height. When using NFPA 13R, combustible concealed spaces, including roof spaces, would not require sprinkler protection.

It is understood that the use of the word “throughout” within the context of “a *building* of *residential occupancy* throughout” referred to in Clause 3.2.5.12.(2)(a) implies a building of Group C major occupancy containing no other major occupancies.

From this use of the explicit phrase "*residential occupancy* throughout", it can be inferred that where such a residential building also contains another major occupancy, the entire building would be required to be sprinklered in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems", including any combustible concealed spaces, unless otherwise exempted.

However, the word 'throughout' is used in other Code provisions, but often with a different context and related exemptions:

For instance, with respect to the installation of an automatic sprinkler system, Sentence 3.2.2.18.(1) of Division B clearly requires a building to be sprinklered "throughout" but exemptions are permitted in mixed use cases, and some upper floors may not have to be sprinklered. In that case, the need to sprinkler the upper floor(s) is normally based on the general construction requirements stated in Subsection 3.2.2. for each major occupancy.

Under Subsection 3.2.2 provisions, one may not need to sprinkler the upper floor of a two-storey building containing a residential occupancy, while a commercial occupancy (e.g., retail) present only on the ground floor might be required to be sprinklered, in which case NFPA 13 would be used. But once the upper residential storey is sprinklered, either voluntarily, due to a local bylaw or because of the construction requirements of Subsection 3.2.2., then it also must be sprinklered to NFPA 13.

The use of the term 'throughout' in Clause 3.2.5.12.(2)(a) is considered restrictive as it means throughout the building and would not be looked at only in the context of a residential occupancy located on a particular storey.

Justification

The Standing Committee reviewed various articles on sprinklers and the two standards (NFPA 13 and NFPA 13R). **Among various changes,** Targeted justifications are presented as follows:

- Items J1 to J3: Justification for the use of NFPA 13R and NFPA 13 sprinkler systems in mixed-use buildings; and
- Item J4: Justification for the proposed changes to the wording in Clause 3.2.5.12.(2)(a) and Appendix Note A-3.2.5.12.(2) based on discussions in Items J1 to J3

J1) Allowing NFPA 13R Sprinkler System to be Used in Mixed Occupancy Buildings:

The 2019 edition of NFPA 13R incorporated changes to clarify intent and to indicate that the standard is permitted to be used in mixed occupancy buildings. Annex Note A1.1 of the standard states (emphasis is added using **bold font**):

> "*Buildings that contain multiple occupancies (either separated or nonseparated), accessory occupancies, or incidental uses are often subject to special rules that might restrict the use of NFPA 13R.* ***In buildings containing a residential occupancy properly separated from other occupancies, the use of NFPA 13R in the residential occupancy and***

> ***NFPA 13 in the nonresidential occupancy(s) is appropriate.*** *Refer to the adopted building code to determine whether such restrictions are applicable.*"

In the 2019 edition of the NFPA 13R Handbook, the notes to Subsection 1.1.1. further reinforce this point (emphasis is added using **bold font**):

> "*For a building containing multiple occupancies utilizing the "separated" occupancy provisions in accordance with the applicable building code, residential occupancies are within the scope of NFPA 13R provided the building is not more than four stories in height, does not exceed 60 ft (18 m) in height above grade plane, and the residential occupancy is separated from the other occupancies in accordance with the "separated" occupancy requirements of the applicable building code. (For example, see 2018 NFPA 5000, Sections 6.2.2.3 and 6.2.4, and 2018 IBC Section 508.4).* ***In such cases, NFPA 13R can be used in the residential occupancies and NFPA 13 is to be used in the other nonresidential occupancies in the building.***"

Furthermore, the "Closer Look" feature in the "Enhanced Content" [1] to 1.1.1 of the 2022 edition of NFPA 13R also notes that:

> "*NFPA 13R and Residential Mixed Occupancy Buildings*
>
> *Section A.1.1 clarifies that NFPA 13R systems can be used in residential mixed occupancy buildings.*
>
> *[…] For a building containing multiple occupancies utilizing the "separated" occupancy provisions in accordance with the applicable building code, residential occupancies are within the scope of NFPA 13R provided the building is not more than four stories in height, does not exceed 60 ft (18 m) in height above grade plane, and the residential occupancy is separated from the other occupancies in accordance with the "separated" occupancy requirements of the applicable building code. In such cases, NFPA 13R can be used in the residential occupancies and NFPA 13 is to be used in the other nonresidential occupancies in the building.*
>
> *A building containing multiple occupancies utilizing the "nonseparated" occupancy provisions of the applicable building code is not within the scope of NFPA 13R. For such a building, the applicable building code typically requires the use of an NFPA 13 system throughout the building […]*"

Considering the applicable 'model' code for the U.S., the "separated" occupancy provisions in Section 508.4 of the 2018 edition of the International Building Code (IBC) are analogous to the separation of major occupancies provisions in Article 3.1.3.1. of Div. B of the NBC. Therefore, it is understood that provided a residential major occupancy is "separated" from other major occupancies in accordance with Article 3.1.3.1., NFPA 13R would be permitted to be used in the residential portions of a four-storey building.

J2) Allowing Residential Storeys in which NFPA 13R System is Installed to be Located Above or Below the Non-Residential Storeys Sprinklered to NFPA 13:

Where one major occupancy is located above another major occupancy, Sentence 3.2.2.7.(2) allows the fire-resistance rating of the floor assembly between the major occupancies to be determined based on the requirements of Subsection 3.2.2. for the lower major occupancy. As such, Article 3.2.2.7. allows for mixing of Subsection 3.2.2. requirements that can result in structural elements in the lower storeys of the building to have lower fire-resistance ratings compared to those in the upper storeys.

A similar (storey-by-storey) approach should be considered for the sprinkler system design requirements allowing storeys in which NFPA 13R system is installed (i.e., storeys of residential major occupancy fire separated from all other adjoining major occupancies in accordance with Article 3.1.3.1.) to be located above or below the storeys sprinklered to NFPA 13, as illustrated schematically in Figure 1 below for a hypothetical four-storey building containing superimposed major occupancies.

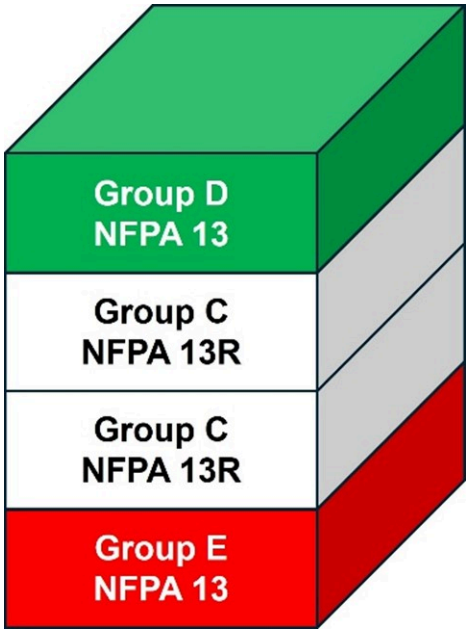


Figure 1. Allowing storeys in which NFPA 13R system is installed to be located above or below the storeys sprinklered to NFPA 13 in a four-storey building

J3) Allowing the 'Mixing' of NFPA 13R and NFPA 13 Systems within the Same Storey:

The 2020 NBC currently references the 2019 edition of NFPA 13R, which speaks to the intent of permitting the NFPA 13R sprinkler system design to be used in a mixed occupancy building. However, neither the Annex Note A1.1 of the standard nor the NFPA 13R-2019 Handbook specifically addresses whether 'mixing' of NFPA 13R and NFPA 13 systems in the same storey is permissible, even when a residential occupancy portion of the storey is fire separated from all other adjoining non-residential occupancies in the same storey.

However, in the 2022 edition of NFPA 13R, the "Closer Look" feature in the "Enhanced Content" [1] to 1.1.1 contains an example illustrating how NFPA 13R and NFPA 13 systems would work in the same mixed occupancy storey:

"Low-Rise Residential Applications and the Appropriate Sprinkler Standards

The types of buildings with low-rise residential occupancies can be essentially broken down to the following […] configurations in regard to NFPA 13R:

[…]

- *Mixed or Multiple Occupancy Buildings. […] For a building containing multiple occupancies utilizing the separated occupancy provisions in accordance with the applicable building code, residential occupancies are within the scope of NFPA 13R, provided the building is not more than four stories in height, does not exceed 60 ft (18 m) in height above grade plane, and are separated from the other occupancies in accordance with the separated occupancy requirements of the applicable building code.*

[…]

Consider the following examples [Staff Note: example text has been cropped for conciseness]*:*

A wood three-story apartment building [9000 ft^2 (836 m^2) per floor] has a 6000 ft^2 (557 m^2) clubhouse (A2 occupancy) located on the first floor. An NFPA 13R system is not appropriate for the assembly occupancy, so an NFPA 13 system is required. Assuming that the clubhouse is separated from the residential occupancy with the appropriate rating, the residential occupancy can be protected with an NFPA 13R system. The building will then have both an NFPA 13 and an NFPA 13R system installed. The assembly occupancy will follow the rules from NFPA 13, including sprinklers in combustible concealed spaces in that occupancy up to the required separation point. NFPA 13R, Section 7.5, does give guidance as to adjacent unprotected combustible concealed spaces."

Note that, regardless of whether a building constructed in accordance with Clause 3.2.5.12.(2)(a) contains a single 'residential-only' or multiple major occupancies, NFPA 13R-2022 6.6.9.4 requires all interior stairways located outside the dwelling unit to be protected in accordance with NFPA 13.

As for buildings with fire separated mixed occupancies that contain both NFPA 13 and NFPA 13R systems, NFPA 13R-2022 provides clear guidance on the application of each standard to some common building elements shared by both residential and non-residential uses. For example, in the case of combustible concealed spaces with no sprinkler protection, NFPA 13R-2022 Section 7.5 does not require an increase in the design area, as found in certain situations in NFPA 13 – however, the "Enhanced Content" [1] feature to Section 7.5 notes that:

"*[…] In buildings with separated mixed occupancies that contain both NFPA 13 and NFPA 13R systems, this (combustible concealed space) exception would apply only to the NFPA 13R occupancy. The separated occupancy*

protected in accordance with NFPA 13 would follow all the rules found in NFPA 13, which could include design area increases for nonsprinklered combustible concealed spaces."

Annex Note A.7.5 of the standard provides further insight by stating that:

"*Where areas are protected in accordance with NFPA 13, NFPA 13 requirements for combustible concealed spaces are applicable.*"

Based on the foregoing, this proposed Code change is to allow the application of NFPA 13R to extend not only to 'residential-only' storeys, but also to residential occupancy portions of a storey, provided it is fire separated from all other adjoining major occupancies and common areas as described in other parts of the Code. Where a storey contains multiple major occupancies, the non-residential major occupancy portion of the storey would need to be sprinklered to NFPA 13.

In line with the approach discussed above in Item J2, such mixed-occupancy storey may be located above or below any 'residential-only' or 'partial-residential' storey sprinklered to NFPA 13R, or any storey sprinklered to NFPA 13, as illustrated schematically in Figure 2 below for a hypothetical four-storey building containing superimposed major occupancies with mixed major occupancy storeys.

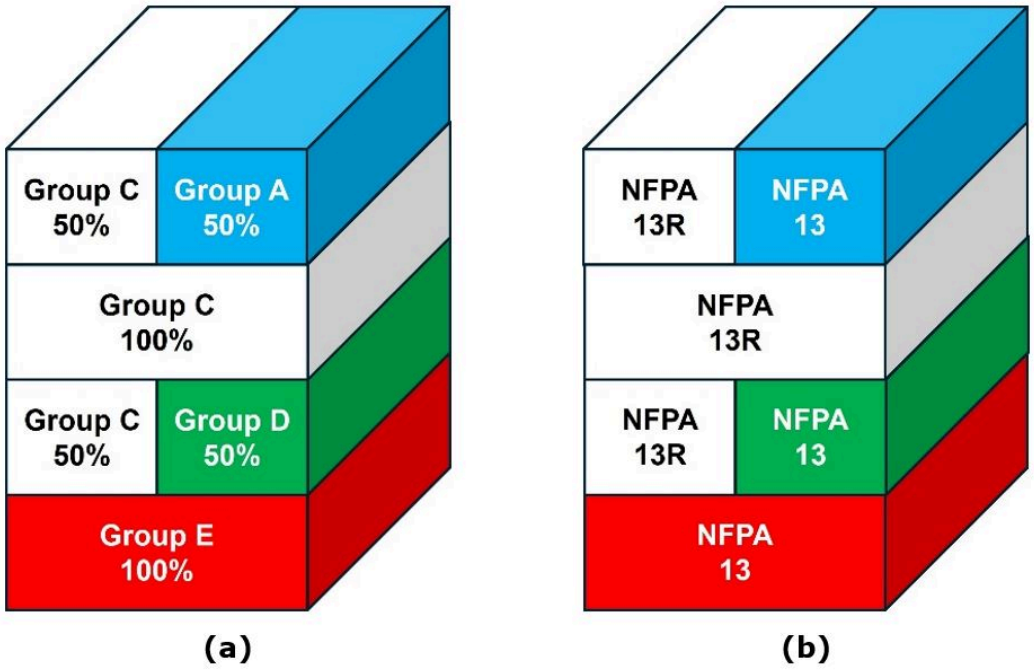


Figure 2. The use of NFPA 13R and NFPA 13 sprinkler systems in non-residential, mixed-use, and residential-only storeys of a four-storey building:

(a) distribution of major occupancies in the building

(b) proposed application of sprinkler systems

J4) Amendments to Clause 3.2.5.12.(2)(a) and Appendix Note A-3.2.5.12.(2):

In line with the approach discussed in Items J1 to J3 above, the need to reference specific Subsection 3.2.2. construction articles in Subclause 3.2.5.12.(2)(a)(i) is no longer warranted as this proposed Code change would allow NFPA 13R to be applied to fire separated residential occupancies in any building up to 4 storeys in building height.

Furthermore, Article 9.10.1.3. "Items under Part 3 Jurisdiction", which is referred to in Subclause 3.2.5.12.(2)(a)(ii), does not contain any building construction-specific provisions (unlike those Articles referenced in Subclause 3.2.5.12.(2)(a)(i)) and Part 9 buildings are limited to a maximum building height of 3 storeys. Since this maximum height is within the subset of "buildings not more than 4 storeys in building height", the need for the separate Subclause 3.2.5.12.(2)(a)(ii) referencing Part 9 is also no longer warranted.

Consistent with the points raised in Items J1 to J4 above, Clause 3.2.5.12.(2)(a) is proposed to be abridged to read concisely, with no subclauses, as shown below:

> "(a) in a residential occupancy, provided the building is not more than 4 storeys in building height"

Similarly, changes are also proposed to Appendix Note A-3.2.5.12.(2) to capture elements of the justification/ NFPA 13R intent and to also streamline the choice of words in the existing text of the note to align with the proposed Code wording in Clause 3.2.5.12.(2)(a).

References

[1] "Enhanced Content", including its accessories "Closer Look" and "FAQ", inter alia, is an interactive digital feature created specifically for NFPA LiNK® subscribers. It reflects expert commentary from NFPA handbooks for select publications that can be viewed in-line with the body of the standard's text. For more information please visit: https://www.nfpa.org/customer-support/will-nfpa-handbooks-be-in-nfpa-link

PROPOSED CHANGE

[3.2.5.12.] 3.2.5.12. Automatic Sprinkler Systems

[1] 1) Except as permitted by Sentences (2) to (4) and (9), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems". (See Note A-3.2.5.12.(1).)

[2] 2) Instead of the requirements of Sentence (1), NFPA 13R, "Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies", is permitted to be used for the design, construction and installation of an automatic sprinkler system installed

[a] a) in a ~~*building* of~~ *residential occupancy* ~~throughout that~~, provided the *building* is not more than 4 *storeys* in *building height*, or

[i] i) ~~is not more than 4 *storeys* in *building height* and conforms to~~

~~Article 3.2.2.47., 3.2.2.49., 3.2.2.51., 3.2.2.52. or~~
~~or 3.2.2.55., or~~

[ii] ii) ~~is not more than 3 *storeys* in *building height* and conforms to Article 9.10.1.3., or~~

[b] b) in a *building* of *care occupancy* with not more than 10 occupants that is not more than 3 *storeys* in *building height* and conforms to one of Articles 3.2.2.42. to 3.2.2.46.

(See Note A-3.2.5.12.(2).)

[3] 3) Instead of the requirements of Sentence (1), NFPA 13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes", is permitted to be used for the design, construction and installation of an automatic sprinkler system installed

[a] a) in a *building* of *residential occupancy* throughout that contains not more than two *dwelling units*,

[b] b) in a *building* of *care occupancy*, provided

[i] i) it contains not more than two *suites* of *care occupancy*,

[ii] ii) it has not more than five residents throughout, and

[iii] iii) a 30-minute water supply demand can be met, and

[c] c) in a *building* of *residential occupancy* throughout that contains more than two *dwelling units*, provided

[i] i) except for a *secondary suite*, no *dwelling unit* is located above another *dwelling unit*,

[ii] ii) all *suites* are separated by a vertical *fire separation* having a *fire-resistance rating* of not less than 1 h that provides continuous protection from the top of the footing to the underside of the roof deck, with any space between the top of the wall and the roof deck tightly filled with mineral wool or *noncombustible* material,

[iii] iii) each *dwelling unit* has its own sprinkler water supply provided in accordance with NFPA 13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes",

[iv] iv) a passive purge sprinkler system design is used as described in NFPA 13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes", and

[v] v) where the sprinkler system is taken into consideration for the reduction of *limiting distance*, all rooms, including closets, bathrooms and attached garages, that adjoin an *exposing building face* are sprinklered, notwithstanding any exemption stated in NFPA 13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes".

(See Note A-3.2.5.12.(2).)

[4] 4) If a *building* contains fewer than 9 sprinklers, the water supply for these

sprinklers is permitted to be supplied from the domestic water system for the *building* provided the required flow for the sprinklers can be met by the domestic system.

[5] 5) If a water supply serves both an automatic sprinkler system and a system serving other equipment, control valves shall be provided so that either system can be shut off independently.

[6] 6) Notwithstanding the requirements of the standards referenced in Sentences (1) and (2) regarding the installation of automatic sprinkler systems, sprinklers shall not be omitted in any room or closet in the *storey* immediately below a roof assembly. (See Note A-3.2.5.12.(6).)

[7] 7) Notwithstanding the requirements of the standards referenced in Sentences (1) and (2) regarding the installation of automatic sprinkler systems, in *buildings* conforming to Article 3.2.2.48., 3.2.2.51., 3.2.2.57. or 3.2.2.60., sprinklers shall be provided for balconies and decks exceeding 610 mm in depth measured perpendicular to the exterior wall. (See Note A-3.2.5.12.(7).)

[8] 8) Sprinklers in elevator machine rooms shall have a temperature rating not less than that required for an intermediate temperature classification and shall be protected against physical damage. (See Note A-3.2.5.12.(8).)

[9] 9) Except as provided in Subsection 3.2.8., closely spaced sprinklers and associated draft stops need not be installed around floor openings in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems".

Note A-3.2.5.12.(2) Sprinklering of Residential Occupancies in Mixed Use Buildings or ~~a~~Above a Storage Garage Considered as a Separate Building.

In a building that contains multiple major occupancies, installation of an automatic sprinkler system within the residential occupancy portion(s) of such a building is within the scope of NFPA 13R, provided the building is not more than four storeys in building height and the residential occupancy is separated from the other major occupancies in accordance with Article 3.1.3.1. In such cases, NFPA 13 is to be used for installation of an automatic sprinkler system in any non-residential major occupancy in the building when otherwise required to be sprinklered.

For the purpose of determining whether NFPA 13R, "Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies", applies to a ~~residential~~ building constructed over a storage garage, it is not intended that a storage garage constructed as a separate building in accordance with Article 3.2.1.2. be considered as a storey when determining the building height of the ~~residential~~subject building. Similarly, this would not preclude the use of NFPA 13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes", for any one- or two-family home constructed above such a storage garage.

Impact analysis

In their November 2020 article, the National Fire Sprinkler Association (NFSA) notes that unlike NFPA 13, NFPA 13R facilitates the installation of the sprinkler system to be more affordable and accessible for residential occupancies [1]. To quote from this article:

> "*NFPA 13R further lowers costs by permitting a potentially lower level of water discharge than NFPA 13, which may result in smaller pipe sizes. NFPA 13 also calls for a greater density and spacing for sprinklers, as well as attic requirements that can significantly drive cost. Attic protection not only adds more sprinklers and piping, but the additional expenses associated with freeze protection, increased hydraulic demand, and water supply.*"

According to the National Multifamily Housing Council in the U.S., as reported in [1], the installation of NFPA 13R systems costs an average of $15 CAD to $30 CAD less per square meter than NFPA 13.

Adopting this proposed change will greatly reduce the capital costs associated with the design and installation of the sprinkler system, while continuing to maintain an acceptable level of fire safety.

References

[1] National Fire Sprinkler Association, "NFPA 13 vs. NFPA 13R in Podium and Mixed-Use Construction" (November 2020); accessed at: https://nfsa.org/2020/11/17/nfpa-13-vs-nfpa-13r-in-podium-and-mixed-use-construction/

Enforcement implications

Enforcement implications are minimal but fewer inspections would be needed for not sprinklered areas.

Who is affected

Designers, contractors and building inspectors will need to assess where more restrictive requirements for the design of an automatic sprinkler system apply where mixed occupancies occur with residential occupancies.

Supporting Document(s)

Schematic of Potential Automatic Sprinkler System Configurations (nfpa13vs.13r.png)
imagefile_figure_1.jpg
imagefile_figure_2ab.jpg

PROCESS

Fire Protection — TG/WG Development — (2024-07-31)

This PCF was drafted by the WG on CCR 892 (’Application of NFPA 13R in buildings with superimposed occupancies’) and entered into the NRC's system by Codes Canada as PCF 2038 for the SC-FP's consideration at its 2020-17 meeting.

Staff note:

viewing this proposal, the Standing Committee on Fire Protection should consider the following:

1. Article 3.2.2.6. of Division B of the NBC states that, except as permitted by Articles 3.2.2.7...., the most restrictive requirements should apply to the entire building with multiple occupancies. This means, in terms of automatic sprinkler system design standard, the NFPA 13 called up by the most restrictive occupancies would be used where NFPA 13R could be used for storeys with residential occupancies.
2. The exception stated in Article 3.2.2.7. clarifies that when one major occupancy is located entirely above another major occupancy, the requirements in Subsection 3.2.2. (thus, include the requirements for automatic sprinkler system design) for each portion of the building containing a major occupancy would apply to that portion as if the entire building were of that major occupancy. In other words, the Code allows the use of different automatic sprinkler system design where superimposed major occupancies are present. In the case of residential occupancies, the use of NFPA 13R standard would be permitted for the design of an automatic sprinkler system on each storeys for such occupancies (up to the building height limit set in Sentence 3.2.5.12.(2)), while the NFPA 13 standard would apply to lower storeys with other major occupancies.

The later interpretation is supported by the Intent (2) of the Intent Statements for Article 3.2.2.7. as follows:

Intent 2:

To override the requirement of Sentence 3.2.2.6.(1) which states that the entire building must be constructed in accordance with the most stringent requirements of each of the different major occupancies in the building.

There could be multiple options to clarify the application for the design of automatic sprinkler systems where residential occupancies are present. One could be to delete the term *throughout* in Clause 3.2.5.12.(2)(a). Another could be to direct Code users to Article 3.2.2.7.

Fire Protection — Review — (2024-09-03)

The SC-FP received an overview of PCF 2038, which clarifies the application of NFPA 13R, "Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies" for mixed occupancies.

It was noted that this PCF was drafted by the WG on CCR 892, in response to an action item from the SC-FP's 2020-16 meeting.

It was raised that the CWC had prepared two additional options for consideration on the use of NFPA 13R. The SC-FP agreed to consider the options as part of its discussion, and an additional file was displayed on-screen and is included as **Appendix C**.

The SC-FP received an overview of the two options. In summary:

- Option 1 is consistent with the WG's recommendation, but allows for the storey protected by NFPA 13R to be located either below or above other storeys that are sprinklered to NFPA 13.
- Option 2 accommodates the Option 1 scenario, and also allows for mixed sprinkler design within a storey (i.e. through a combination of NFPA 13 and NFPA 13R) provided that the Group C portion is separated from other occupancies/spaces in accordance with Code.

Support was expressed for each of the options.

A concern was raised that past feedback on this topic had been controversial.

It was noted that Option 1 would be a more conservative approach, compared to Option 2.

It was suggested that Option 1 may be friendlier on the basis that it is consistent with existing occupancy requirements; it was expressed that the justification for expanding the provision as proposed in Option 2 may not be sufficiently clear.

Regarding minimum requirements for water supply, it was raised that there are differences in duration between NFPA 13 and NFPA 13R. As such, an unintended consequence could be overdesign in residential mixed-use buildings on the basis that the level of protection provided is based on more onerous non-residential requirements.

It was raised that concealed spaces may also not be protected in the same way, and that these are typically considered as part of the occupancy below.

It was noted that the requirements within NFPA 13R relating to balconies and attics have evolved over time; for example, NFPA 13R addresses how to deal with concealed combustible spaces.

It was raised that, when dealing with mixed occupancies on the same storey, it can be challenging to identify common elements. It was felt that Option 1 would be easier to apply and enforce.

It was suggested that a stepwise approach to this proposed change could be to move towards Option 1 at this time, and then considering moving to Option 2 in the future.

The SC-FP agreed that PCF 2038 should be further developed based on the feedback received.

ACTION: Revise PCF 2038 for the SC-FP's further consideration at its next meeting.

Fire Protection — TG/WG Development — (2024-11-18)

In response to the action item from the SC-FP's 2020-17 meeting, the WG on CCR 892 (’Application of NFPA 13R in buildings with superimposed occupancies’) reconvened to further develop PCF 2038 for the SC-FP's consideration at its 2020-18 meeting.

Fire Protection — Review — Recommended for Public Review (2024-11-27)

The SC-FP received an overview of PCF 2038, which clarifies the application of NFPA 13R, "Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies" for mixed occupancies.

It was noted that this PCF was revised by the WG on CCR 892 to address SC-FP's feedback in response to an action item from the SC-FP’s 2020-17 meeting. The WG Lead (A. Harmsworth) explained the nature of the proposed revisions.

No concerns were raised.

Moved by A. Harmsworth and **seconded by** D. Johnson that the proposed changes related to PCF 2038 as presented during the 2020-18 Meeting of the Standing Committee on Fire Protection be recommended to the Canadian Board for Harmonized Construction Codes for publication in the next edition of the National Building Code pending public review. **Motion carried.**

The SC-FP was reminded that new PCFs (such as PCF 2038) will be carried over into the 2025-2030 code cycle for inclusion in the first available public review and consideration in the 2030 National Model Codes.

OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISIONS

[3.2.5.12.] 3.2.5.12. ([1] 1) [F02,F81,F82-OS1.2]

[3.2.5.12.] 3.2.5.12. ([1] 1) [F02,F81,F82-OP1.2]

[3.2.5.12.] 3.2.5.12. ([2] 2) [F02,F81-OS1.2]

[3.2.5.12.] 3.2.5.12. ([2] 2) [F02,F81-OP1.2]

[3.2.5.12.] 3.2.5.12. ([3] 3) [F02,F81-OS1.2]

[3.2.5.12.] 3.2.5.12. ([3] 3) [F02,F81-OP1.2]

[3.2.5.12.] 3.2.5.12. ([4] 4) [F02-OS1.2]

[3.2.5.12.] 3.2.5.12. ([4] 4) [F02-OP1.2]

[3.2.5.12.] 3.2.5.12. ([5] 5) [F81-OS1.2]

[3.2.5.12.] 3.2.5.12. ([5] 5) [F81-OP1.2]

[3.2.5.12.] 3.2.5.12. ([6] 6) [F02-OS1.2]

[3.2.5.12.] 3.2.5.12. ([6] 6) [F02-OP1.2]

[3.2.5.12.] 3.2.5.12. ([7] 7) [F03-OS1.2]

[3.2.5.12.] 3.2.5.12. ([7] 7) [F03-OP1.2]

[3.2.5.12.] 3.2.5.12. ([7] 7) [F03-OP3.1]

[3.2.5.12.] 3.2.5.12. ([8] 8) [F81-OS3.3,OS3.6]

[3.2.5.12.] 3.2.5.12. ([9] 9) no attributions

2030-04 Meeting of the Standing Codes Coordination Committee

Agenda Item Summary Sheet

04.8. Other Business

Action Requested: Decision ☐ Guidance ☐ Information ☐

Summary

This section of the agenda provides SCCC members and observers with an opportunity to raise any other issue for discussion.

Desired Outcome

Raise any relevant other business.

2030-04 Meeting of the Standing Codes Coordination Committee

Agenda Item Summary Sheet

04.9. Upcoming Dates

Action Requested: Decision ☐ Guidance ☐ Information ☒

Summary

The following SCCC meetings have been scheduled:

Meeting No.	**Date and Time**	**Meeting Plan**
2030-05 Day 1	November 21, 12-3 pm ET	Coordination of proposed changes for Public Review 1
2030-05 Day 2 (Placeholder)	November 28, 12-3 pm ET	Coordination of proposed changes for Public Review 1

Desired Outcome

This is provided for information.