ONLINE WEBINAR

2024 Ontario Building Code: What's In and What's Out

April 24, 2024 9:30 – 11:00 AM (ET)

In Partnership with:







Including Speakers from:



Presented by:





Housekeeping – Rules of Engagement

- Have questions? Please place them ONLY in Q&A.
- Due to the number of participants, it might not be possible to answer all questions today.
- Be considerate, thoughtful, and respectful in the CHAT.
- The BKC Admin team is ready to help with tech concerns or general inquiries.
- This webinar will be recorded and available after the presentation.
- Please complete SURVEY MONKEY following presentation!
- Links and presentation materials all will be sent out to attendees following the webinar.
- Closed Captioning is enabled if you require a live transcript while the hosts are speaking. It's between Record and Reactions at the bottom of most screens.











Where are you from?

What is your occupation?

Are you a member of a Home Builders' Association?

Are you a member of the Ontario Building Officials

Association?

AGENDA

Traditional Acknowledgement
Introductions
2024 Ontario Building Code: Next Edition
Question & Answer with Expert Panel













Joanne Van Panhuis Senior Advisor, Residential Sales

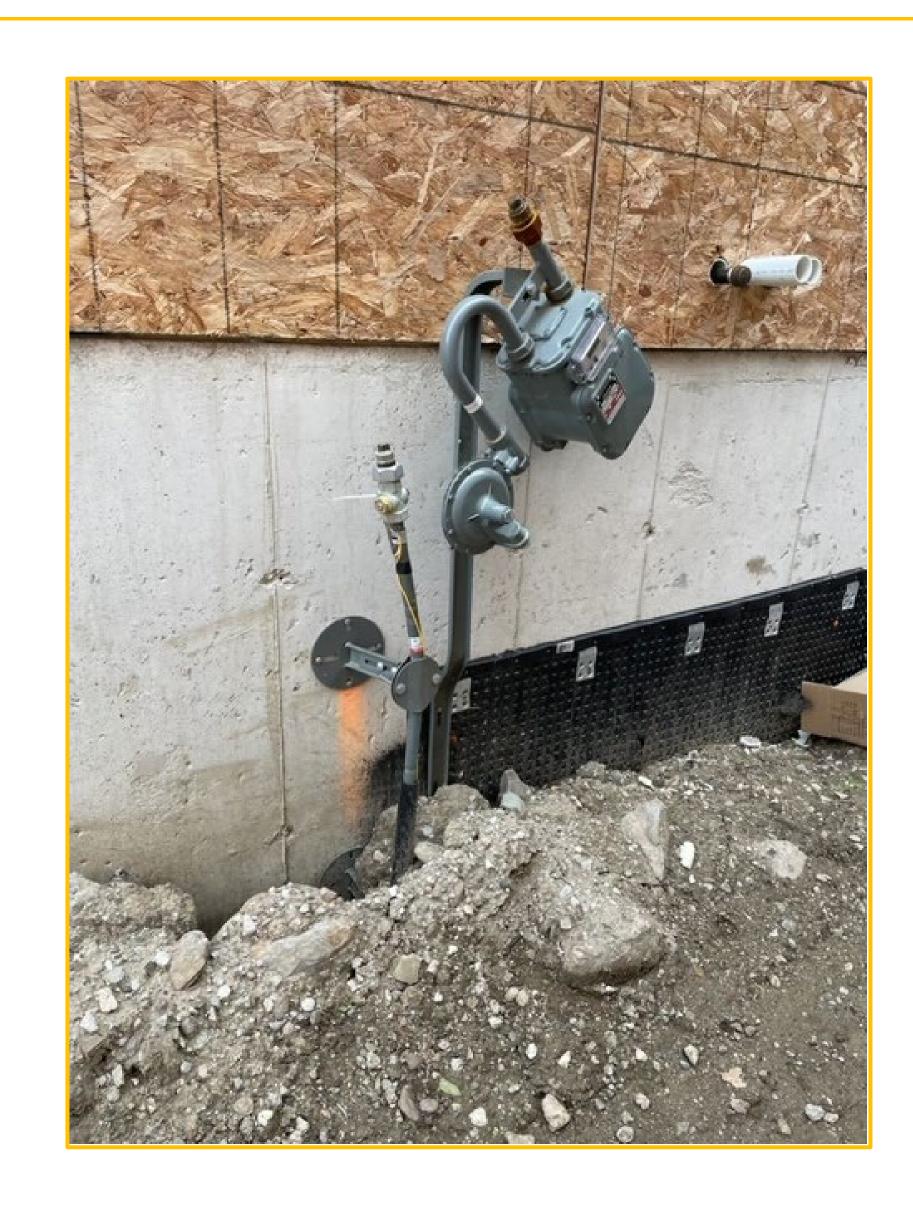


Traditional Acknowledgement



What to do if you damage a natural gas line











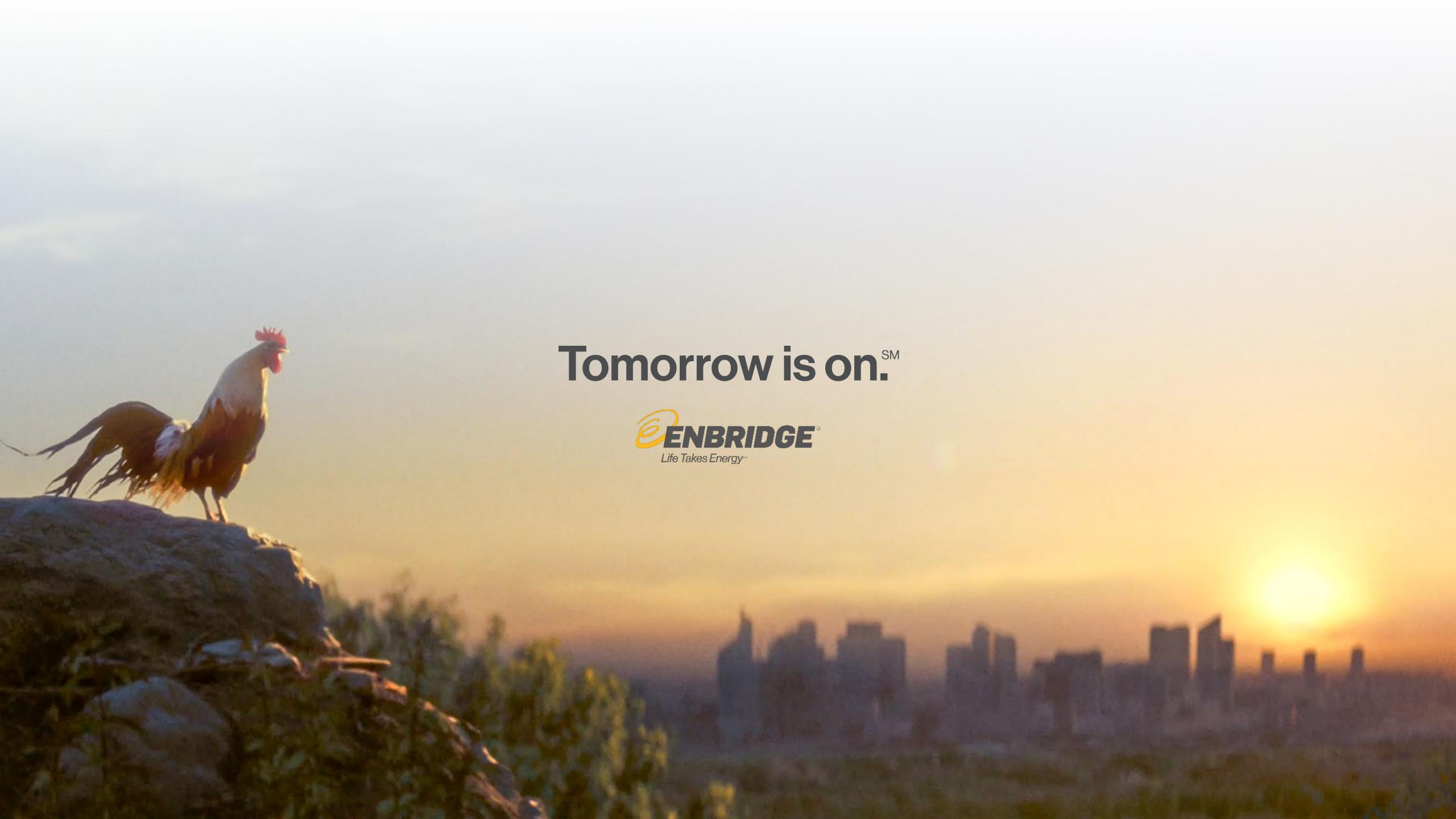
Clear everyone from the area.



Call 911 if you smell or hear gas escaping.



Call the Enbridge
Gas emergency
line
1-866-763-5427





Mansoor Mahmood, Director, Building Services
Cengiz Kahramanoglu, Code Development and Advisory Services
James Ross, Manager, Building Code Policy Development



Jonathan DeWeerd, Director of Education



Miyoko Oikawa, Senior Manager, Stakeholder Liaison and Technical Services



Siloni Waraich, Chief Research Officer















Training / Education Career / Job Board Membership

Supporting the Building Industry

- Overview & Technical Training Courses
- New Training Courses
- Provincial Roadshow
- Bridging Courses
- Technical Forms



The Ontario Home Builders' Association (OHBA) is the voice of the residential construction industry in Ontario, representing 4,000 member companies organized into 27 chapter associations across the province.

OHBA collects, analyzes, and distributes information to its members and the general public; promotes innovation and professionalism within the industry; promotes affordability and choice in housing; and provides group benefit plans and other membership services.

OHBA TECHNICAL SERVICES

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NEW - OHBA Ontario Building Code Hub

Offering OHBA Member Updates, Education/Events + Resources www.ohba.ca/2024OBC









Designated by the Government of Ontario in February 2021, the Home Construction Regulatory Authority regulates and licenses the people and companies who build and sell new homes in Ontario.

The HCRA recently launched its Research & Education Program, with the goals of:



Supporting builder and homeowner education



Promoting best practices and cost-effective techniques



Collaborating with partners to facilitate licensee education



Launching a Resource Hub as a one-stop-shop for builders

Next Edition of the Ontario Building Code What's In, What's Out

Mansoor Mahmood, Director, Building Services

Cengiz Kahramanoglu, Code Development and Advisory Services

James Ross, Manager, Building Code Policy Development

The Building Code and its Periodic Editions

Code Development in Ontario

- Ontario's Building Code was first published approximately 50 years ago, and since that time seven full new editions of the Building Code have been released and over 120 interim amendments have been made.
- To keep pace with innovation, new technology and emerging design and building practices, new editions of Ontario's Building Code are released on a regular basis. While there have been a number of interim amendments, the current 2012 version of the Code is now 10 years old, having come into effect in January 2014.
- The Ministry of Municipal Affairs and housing has now filed the regulation for the new edition of the Ontario Building Code (the 2024 edition) on **April 10, 2024**.
- The new Code will come into effect on **January 1, 2025**. The Transition period will be explained later in this presentation.

New Edition of the Building Code: Key Analysis Criteria

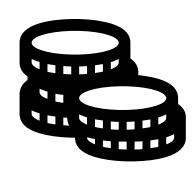
The following five criteria were considered during the proposal development process for the new edition of the Building Code:



1. Housing Supply and Innovation - The new edition of the Building Code has been developed to increase housing supply and promote innovation.



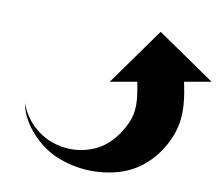
2. Health and Safety – A core principle of the Building Code is to ensure minimum levels of health and safety for building occupants and the general public.



3. Cost – Affordability (i.e., construction cost) is a critical criterion upon which every proposed Building Code change is evaluated.



4. Reduce Red tape – By harmonizing with the National Construction Codes, Ontario can reduce construction barriers and regulatory burden.

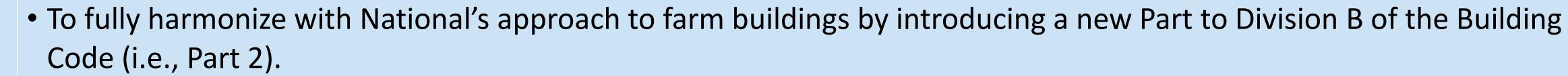


5. Better Buildings - The new edition presents opportunities to improve building performance, through enhanced accessibility, reduced operating costs, and improved occupant comfort.

New Edition – Communications and Issues Management Items

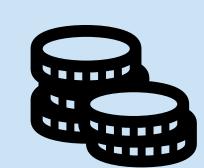


1. Farm Buildings





oThe new Part would divide farm buildings into Large Farm Buildings (i.e., with a building area of 600 m² or greater, 3 storeys building height or higher, or with "no human occupancy"), and Small Farm Buildings (i.e., buildings not categorized as Large Farm Buildings).

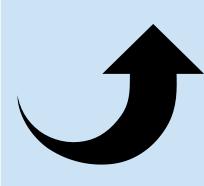


- The currently used National Farm Building Code (NFBC), with new climatic data, and Ontario's Supplementary Standard SB-11 would continue to apply to small farm buildings in Ontario.
- oThe proposed changes for large farm buildings would establish new major building occupancies and introduce general technical requirements including fire protection and occupant safety requirements, structural design requirements heating, ventilation and air conditioning (HVAC) requirements.



2. Septics (Ontario only changes)

- Septic Tanks to update CSA B66 "Prefabricated Septic Tanks and Sewage Holding Tanks".
- Filter Beds to clarify the use of distribution piping within filter beds.
- Dispersal Beds to distinguish the materials used for the "mantles" in Type A Dispersal Beds.



New Edition – Housing Supply, Accessibility and Health and Safety



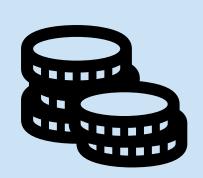
3. Two Unit Houses/Secondary Suites

• To harmonize Ontario's two-unit house provisions with National's requirements for secondary suites, **except** for National's limitations around minimum suite sizes. Ontario should maintain its flexibility on suite sizes to support the government's housing objectives and minimize costs.



4. Large Buildings (Accessibility)

• To harmonize with the 2020 National Building Code accessibility requirements where they enhance current Ontario Building Code requirements.

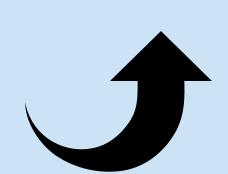


5. Carbon Monoxide

- •To harmonize with National carbon monoxide (CO) alarm requirements by expanding the requirements to Care Occupancies (e.g., long term care etc.).
- •To expand the application of CO alarm requirements further to additional spaces in residential occupancies and to some commercial establishments in response to the Office of the Fire Marshal's request (Ontario only proposal).



6. Radon

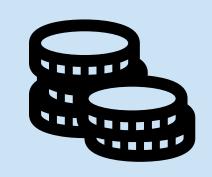


- To harmonize with the National Building Code on mitigating the effects of radon in buildings across Ontario.
- Ontario would adopt a proactive approach to address soil gas/radon by requiring new houses to have a rough-in for a subfloor depressurization system if subsequently required.
- The changes would include corresponding revisions to reference Supplementary Standard SB-9 and a new Appendix note to clarify that buildings occupied for a few hours a day may not be required to implement soil gas protection methods.

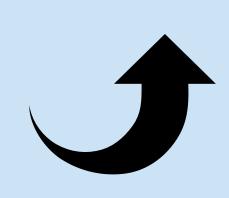
New Edition - Housing Supply, Accessibility and Health and Safety











7. a) Large Buildings (Fire Safety)

- To fully harmonize Ontario's provisions for fire protection systems (standpipe, fire alarms, and fire sprinklers) with National Building Code (NBC) requirements.
 - OStandpipe system design will fully align with the international standard (NFPA 14) for design, construction, installation and testing of a standpipe system. The proposed design approach allows the standpipe riser to be located within the exit stair, provides more coverage for the hose system, and requires higher system demand (min. pressure and flow rate).
 - OBuildings required to be sprinklered must also be equipped with a fire alarm system. For buildings containing superimposed major occupancies (occupancy types stacked vertically within a building), sprinkler coverage would be required on storeys below those storeys already requiring sprinkler protection due to the nature of the occupancy.
- To fully harmonize design approach for mezzanine and interconnected floor space design with National's requirements including changes to exit/egress facilities, fire compartments, smoke control design, combustible contents limitations, and floor area and travel distance limitations.
- To reference the new materials standard used in the construction of plastic signs (Ontario only).

7. b) Large Buildings (Exterior Cladding)

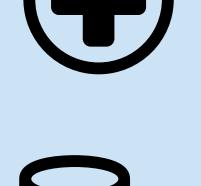
- To harmonize with the National Building Code and address combustible cladding and combustible wall components separately.
 - To remove the 6-storey limitation, which limited building height restrictions for the use of combustible cladding and combustible wall components in a building required to be non-combustible construction (e.g., concrete) provided the exterior wall assembly is still tested to ULC standard for performance under fire conditions.
 - To permit combustible wall components, other than the cladding, to be protected by concrete or masonry cladding.

New Edition - Housing Supply, Accessibility and Health and Safety



8. Structural Design

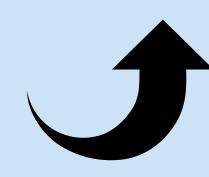
- To fully harmonize with National's recent structural design changes in the following areas:
 - o<u>Earthquake Design:</u> Buildings would be designed to meet the new applicable seismic loads for the geographic locations and site conditions. Furthermore, the web-based seismic data tool, that is now available and specific to each proposed buildings site, would be referenced in the Building Code.
 - o<u>Importance Categories:</u> Revises the descriptions of the types of buildings in the Importance Categories which are the parameters that dictate the required design strength.
 - OSolar panels: Introduces provisions to calculate wind and snow loads for roofs with roof-mounted solar panels, if the building is intended to have solar panel.
 - OCanopies & Parapets: Introduces provisions to calculate wind loads for attached canopies, roof parapets and balcony guards near the tops of buildings.
 - <u>Serviceability</u>: Relocates the information on load combinations for serviceability to the main body of the Code from National's "Structural Commentaries – User's Guide".





9. Structural Design (storage racks)

• Harmonize and Adopt National's new requirements for Structural design of storage racks in Part 4.



New Edition - Housing Supply, Accessibility and Health and Safety



10. Plumbing (Harmonization changes)

Uniformity in terminology:

• To harmonize code terminology to align with construction industry terminology.

Providing flexibility and more choices:

- To allow alternative temperature limiting devices.
- To introduce new acceptable plumbing materials.



Improving health and safety:

- To reduce the maximum water temperature from 49 to 43 °C in health care facilities and seniors' residence facilities.
- To harmonize with National's non-potable (rainwater harvesting/greywater collection) water systems requirements.
- There are also proposed requirements related to backwater valves, floor drains, and ball test (not recommended).



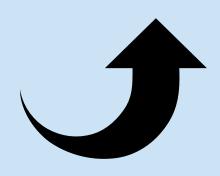
11. Plumbing (Ontario only changes)

- To clarify numerous technical requirements including those for shower heads, domestic water tanks, and grease interceptors.
- To require hot water temperature control devices in childcare centres. This would minimize hot water injuries to children.





- Harmonize with the National's house ventilation requirements and general HVAC requirements, except the carbon monoxide level for repair garages where Ontario's standards are higher which includes:
 - o To further harmonize requirements regarding equipment and design to minimize the growth and transmission of Legionella and other bacteria,
 - To change maximum temperature for exposed piping to 52°C from 70°C.
 - o To update the referenced edition of the Ventilation Standard applicable to large buildings and to further harmonize Ontario's requirements with National's including ventilation of storage and repair garages, and ducts and duct linings.



13. Division A and C Administrative Changes

• To introduce multiple definitions supporting harmonization with the National Building Code and Ontario-only requirements, update existing definitions and to introduce two new functional statements.

Proposals not proceeding in the New Edition

Home-type care (B4) Occupancy - not proceeding

- To harmonize with the National Building Code by including new Home-type Care Occupancy (B4 occupancy) classification
- The B4 occupancy classification added as a new building type in the 2020 National Building Code is intended for smaller house-sized buildings where care is provided for a limited number of occupants.

Guards (Ontario only changes) - not proceeding

• To retain Ontario's existing restrictions around guards but add clarifying appendix notes and/or create a guide on guards for industry, which would potentially provide some additional flexibility around guard design while ensuring child safety.

Energy Efficiency for Houses and Large Buildings- not proceeding

- To adopt the 2020 National Building Code's energy efficiency requirements for houses with modifications, replacing Ontario's current requirements (SB-12)
- Adopt **Tier 3** by establishing a 20-point system based on credits accumulated from energy saving measures as a minimum for prescriptive compliance path and equivalent criteria for a performance path. Only 10 points would be required for small houses.
- To incorporate the newly created proposed changes to the National Code in advance of National's New Edition to allow more cost optimized options.
- To adopt the energy efficiency requirements in the 2020 National Energy Code of Canada for Buildings (NECB) in lieu of Ontario's current Supplementary Standard SB-10.
- To select National's **Tier 1** level for adoption by Ontario for large buildings.

Tornado Resiliency of Houses - not proceeding

- To increase the resiliency of houses and reduce the likelihood of severe damage from tornados.
 - o The proposal, submitted by the City of Barrie, includes changes that would modify current construction practices for how to design houses, and how to construct exterior walls and roofs, and their connection to each other and the foundation walls.

Septics (Ontario only changes) - not proceeding

- Chambers Systems to allow for the use of three "low profile" chambers and to remove the requirement for a distribution pipe in chambers 150 m and longer.
- New Leaching Bed Type to add new requirements related to Combined Treatment and Dispersal Beds units/systems.

Supporting the Sector to Ensure a Smooth Transition

Both comprehensive training for building practitioners and adequate time are vital to ensure a smooth transition to the new edition of the Ontario Building Code that will minimize disruption in the construction industry and will best support housing supply.

Timing and Transition Provisions

- The 2024 Building Code comes into effect on January 1, 2025, with a three-month grace period until March 31, 2025, for applications for which the working drawings were substantially complete before January 1, 2025. The province has also planned a training program to support the sector and keep current projects on track.
 - This approach provides balance and flexibility that allows developers, builders, designers, and other industry professionals, the ability to use either the current 2012 or the 2024 Building Code when submitting a building permit depending on their circumstances during the transition period.
- During the transition period, only one edition of the Building Code, either the 2012 or 2024, could be used in the design and construction of a building.
 - The version of the Building Code that applies at the time of the permit application is the version that will continue to apply to the building throughout the processes of plans review, permit issuance, construction, inspection and occupancy of the building.

Supporting the Sector to Ensure a Smooth Transition — Cont.

Please take careful note of the following dates in the transition timeline:

- April 10, 2024 Release of the 2024 Building Code
- January 1, 2025 2024 Building Code in effect
- March 31, 2025 deadline for permit applications using the 2012 Building Code, where working drawings were substantially complete before
 January 1, 2025
- April 1, 2025 all permit applications must use the 2024 Building Code

Key Transition Period Dates (December 31, 2024 – March 31, 2025):

April 10, 2024 – December 31, 2024	January 1, 2025	March 31, 2025	April 1, 2025
9 Months	3 Months		
permit applications must be submitted using the 2012	Permit applicants may use the	Last day to submit permit	All permit applications
Building Code until December 31, 2024	new 2024 Building Code	applications using the	must now be submitted
		2012 Building Code where	using the 2024 Building
		working drawings were	Code
		substantially complete	
		before January 1	

Supporting the Sector to Ensure a Smooth Transition — Cont.

Training

- The Ministry of Municipal Affairs and Housing is developing a comprehensive training approach to help the industry understand the new requirements in the 2024 Building Code and to help build capacity in the sector.
- This approach will help facilitate a seamless adjustment to the new Building Code. This aims to ensure adequate time for training building practitioners on the new Building Code.
- The strategy will include high-level and subject specific programs to build capacity that envisions involvement of key stakeholders as partners.
- High-level programs will include all parts of the Building Code.
 - Further, subject specific programs will focus on:
 - 1. Selected new or major changes, such as farm buildings, sprinklers and fire alarm systems, ventilation, secondary suites, etc., and
 - 2. Capacity building on requirements:
 - for houses which are typically the most difficult requirements to comply with and enforce.
- Further details on training sessions will be provided in the coming weeks.

Supporting the Sector to Ensure a Smooth Transition — Cont.

2024 Building Code Format

- The structure of the new Ontario Building Code regulation will change. The regulation will only be one page long (available on E-Laws) and will reference the 2020 National Building Code for the harmonized parts of the Code and the 2024 Ontario Amendment document for the Ontario differences.
- The full-length version of Ontario's Building Code will no longer be available on E-Laws.
- The links to the 2020 National Building Code and the Ontario Amendment document that constitutes the entire new 2024 Ontario's Building Code can be found as follows:
 - The Building Code Regulation on E-laws, click <u>here</u>.
 - The Ontario Amendment document, click <u>here</u>.
 - The National Building Code, click <u>here</u>.
- Production of the Compendium in digital and print versions is underway.
- The Compendium version of the Building Code will be consolidated into a single document, available both in digital and hardcopy formats. These documents will maintain the same look and feel as the current two-volume Compendium of the 2012 Building Code.

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Common Questions

- What are the plans for training and capacity building, and when can we expect this to happen?
- Why does the new Code look the way it does on e-laws?
- When can we expect the full-length digital and Compendium versions of the Building Code to be rolled out?
- Will we still be following the harmonized code cycle, in other words, will we be seeing an update 18-months from the release of the 2025 National Code?











Common Questions Cont'd

- How will projects be able to clearly indicate which version of code they're submitting for permit under to ensure consistency in review and approval?
- Is there the intent to update the SB-10 and SB-12?
- How will MMAH be reviewing the 2025 National PCFs for adoption into Ontario's code?
- What is the best way for members and non-members to engage with associations on building code development?











THANK YOU!



Mansoor Mahmood, Director, Building Services Cengiz Kahramanoglu, Code Development and Advisory Services James Ross, Manager, Building Code Policy Development



Miyoko Oikawa, Senior Manager, Stakeholder Liaison and Technical Services



Jonathan DeWeerd, Director of Education



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COMING SOON

2024 ONTARIO BUILDING CODE: SOIL GAS/RADON MITIGATION

2024 ONTARIO BUILDING CODE: STRUCTURAL CHANGES











