

CCMPA Members and Industry Affiliates;

We recently polled CCMPA members to get feedback on the progress of our 2020-2023 Strategic Plan. This feedback clearly showed that you would like more communication around our work with Canadian Codes and Standards together with Gary Sturgeon.

We heard you! Welcome to the first edition of **Codes Quarterly**; your one-stop shop for Block-related summary updates on all things Codes, Standards, and Research.

Below we give an overview of exactly what codes harmonization in Canada means and where it came from. We also dive into a few Frequently Asked Questions (FAQ's) which came from our CCMPA members. Lastly, we relay the message around Carbon mandates cascading top down from Federal levels with alarming speed.

We hope you find this informative and look forward to hearing your feedback! Don't see what you are looking for, or have extra questions? Send them over to Info@ccmpa.ca and we will work to find the answers for you!

Sincerely,

Your CCMPA Board

As a refresher, the typical nature of code cycles in Canada has been:

- CSA is updated first.
- Although not always the case, generally the next update of a particular building code would likely choose to 'adopt' and reflect that latest version of CSA.
- Notable differences existed between various provincial building codes, as well as the National building code. Some provinces would adopt the NBC almost fully as their own. Other provinces ~ such as Ontario, Quebec, BC ~ had notable extensive differences and processes, including differences in degree of modification and customization, timing of adoption, method of adoption, variation in geography of application (province-wide or municipality-specific).

Canadian Code Harmonization with Federal and Provincial Building Codes

We are kicking off our Codes Quarterly mailer at an optimal time with a critical update related to the heart of all things Codes: the building code update cycle and process. There has been a major change in the works for Canadian Codes and Standards since 2017, and after a mild "covid delay" is now taking shape. That evolution? Canada Wide Code Harmonization.

The harmonization of construction codes was acknowledged as a clear gap soon after the Canadian Free Trade Agreement (CFTA) entered into force on July 1st 2017. The objective of the CFTA was aimed at reducing and eliminating barriers to the free movement of persons, goods, services, and investments within Canada and to establish an open, efficient, and stable domestic market. However, to achieve this harmony, further alignment was needed between federal, provincial and municipal levels.

Under CFTA, the harmonization of construction codes was identified as a priority initiative.

Goals and objectives include:

- Greater alignment of technical requirements in provincial codes with the National Construction Codes, and as such, better alignment across provinces.

- Timely and consistent adoption of Construction Codes across Canada so that the same rules are in place at the same time.
- A transformed national code development system, including a new governance structure that will be more responsive to provinces and territories.
- Access to free National Construction Codes across Canada (in digital format).

FAQ: What are the benefits of code harmonization?

Country-wide harmonization at every level of government can drive a reduction in barriers related to trade, product manufacturing, and building design and maintenance. Basically, alignment and harmony within codes at all levels of government helps to drive efficiencies and profitability potential throughout the entire supply chain.

Further, according to the CSA Group “When different [areas] have varying requirements that must be met by the products sold in their jurisdictions, it adds complexity — and costs. Manufacturers of products are faced with the task of designing and testing multiple products for multiple markets, and complying with multiple safety standards in order to sell these products in their desired markets. These added tasks not only increase costs, but they slow down production and time to market.” (<https://www.csagroup.org/article/importance-harmonized-standards-global-marketplace/>)

FAQ: How is this goal manifesting at the provincial level?

All Canadian provinces are committed to this harmonization and demonstrated this by having signed a reconciliation agreement on construction codes under the CFTA.

As an example, here’s an excerpt from an October 2021 communication to kick off the Fall Consultation on the Ontario Building Code:

The next edition of Ontario's Building Code is an important step in the process to support increased harmonization with National Construction Codes. Approximately 60% of Ontario's Code is currently consistent with the National Construction Codes. This proposal includes changes that would further reduce the number of technical variations between Ontario's Building Code and National Construction Codes.

Source: **Proposed Changes for the Next Edition of Ontario's Building Code (Fall Consultation)**

<https://www.ontariocanada.com/registry/view.do?postingId=39287&language=en>

FAQ: At a practical level, what does this mean for upcoming code cycles?

It is currently being communicated that the next CSA update will be in 2024 with an NBC update following in 2025. From there the provinces will have 24 months to update with the approach driving towards ongoing harmonization.

FAQ: What does this mean to CCMPA?

Understanding code cycles and processes is critical to developing effective strategies and tactics to ensure the advantages and value of concrete masonry construction is recognized in Canada’s building code. The new harmonization dynamics will be monitored closely to determine:

- Future influence of NRC federal building science research, testing and building product certification
- Pace of Cross-Canada standardization
- Relative impact of deploying resources of influence at National vs. Provincial code levels

For further reading:

The Federal “Catalyst” is confirmed: Carbon & Specifications

We've seen it before. An item gets into a federal government construction specification, is then picked up in provincial specifications, and then begins appearing in municipal specifications.

As such we know that it is important to pay attention to evolutions of Federal Specifications as an early indicator of what we can expect moving forward in provincial and municipal purchasing.

This update is to give you fair warning that the first Carbon Reduction in public construction specification related to concrete purchasing is up for final “draft review” as follows:

DRAFT: Mandatory Requirement for the disclosure of, and reduction in, the carbon footprint of structural materials

- Applies to Ready-Mix concrete over 100 m³ on Federal projects,
- Takes effect September 1, 2022, (for design start on or after)
- Requires at least a 15% reduction in GWP (Global Warming Potential) from general-use GU cement baseline as defined in the specified industry EPD
- Minimum project budget: \$5 million

Duly noted that this evolution does not involve block. But our combination of experience and foresight force us to realize that this is a strong sign of things to come and highlights the value and timely importance of our industry's current efforts in:

- Our current EPD update project,
- Our leading concrete sector conversion to GU-L across the country,
- Our carbon and energy - marketing efforts to architects / engineers / specifiers / purchasers

These changes are in the context of the “Procurement of Goods and Services” section of the Greening Government Strategy: A Government of Canada Directive being managed by the Treasury Board of Canada Secretariat, as follows:

Materiel

The government will reduce the environmental impact of structural construction materials by:

- *disclosing the amount of embodied carbon ^{Footnote12} in the structural materials of major construction projects by 2022, based on material carbon intensity or a life-cycle analysis*
- *reducing the embodied carbon of the structural materials of major construction projects by 30%, starting in 2025, using recycled and lower-carbon materials, material efficiency and performance-based design standards*
- *conducting whole building (or asset) life-cycle assessments by 2025 at the latest for major buildings and infrastructure projects*

Projects will also minimize the use of harmful materials in construction and renovation, including using low volatile organic compound (VOC) materials in building interiors.

We will continue to stay ahead and keep members' abreast of such sustainability-related specification evolutions.

For further reading:

<https://www.canada.ca/en/treasury-board-secretariat/services/innovation/greening-government/strategy.html>

specific to building materials: <https://www.canada.ca/en/treasury-board-secretariat/services/innovation/greening-government/strategy.html#toc3-5>