

Proposed Change 2318

Code Reference(s):	NBC25 Div.A 1.2.1.1. (first printing) NBC25 Div.C 2.2.2.1. (first printing) NPC25 Div.A 1.2.1.1. (first printing) NPC25 Div.C 2.2.2. (first printing) NECB25 Div.A 1.2.1.1. (first printing) NECB25 Div.C 2.2.3.1. (first printing)
Subject:	Conformity Assessment
Title:	Acceptance of CCMC Code Conformity Assessments
Description:	This proposed change introduces provisions in Divisions A and C for the acceptance of Code conformity assessments issued by the Canadian Construction Materials Centre.
Related Code Change Request(s):	CCR 1223

This change could potentially affect the following topic areas:

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| ☒ 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

The inconsistent recognition of conformity assessment mechanisms creates barriers to the cross-provincial movement of construction products. To provide authorities having jurisdiction (AHJs) with a clear procedure for the acceptance of recognized conformity assessment mechanisms, explicit recognition is required to be introduced in the National Model Codes and aligned with current provincial approaches in British Columbia, Alberta, Ontario, Québec and Nova Scotia.

Justification

There is an opportunity to modernize the conformity assessment system by developing consistent conformity assessment mechanisms in Canada. To support this effort, the National Model Codes could explicitly recognize products that have been evaluated to meet Code requirements. This proposed change introduces greater coordination of mutual recognition of conformity assessments across jurisdictions through consistent recognition and coordination of conformity assessments performed by the Canadian Construction Materials Centre (CCMC). See the First Ministers' Announcement: [First Ministers' Joint Statement | Prime Minister of Canada](#).

Following the commitments made by the Canadian Table for Harmonized Construction Codes Policy, this proposed change introduces acceptance of Code conformity assessment mechanisms within the body of the National Model Codes, in addition to where previously mentioned in the preface. This introduction of provisions in Divisions A (for compliance) and C (for administration provisions) would enable AHJs to accept submission of a Code conformity assessment issued by CCMC.

The CCMC is a construction code compliance service on behalf of the provinces and territories, which is provided by the National Research Council. The CCMC follows a comprehensive process aligned with ISO/IEC 17065, which includes building code analysis, consultation, benchmark testing, product testing and ongoing plant inspection and surveillance. CCMC-evaluated products are listed on an online registry and marked with the CCMC official mark and unique number.

This proposed change provides an option for conformity assessment to demonstrate Code compliance. Future proposed changes could include additional options that recognize the certification of products, processes and services by other conformity assessment bodies that are accredited by the Standards Council of Canada.

PROPOSED CHANGE

NBC25 Div.A 1.2.1.1. (first printing)

[1.2.1.1.] 1.2.1.1. Compliance with this Code

- [1] 1)** Compliance with this Code shall be achieved by
- [a] a) complying with the applicable acceptable solutions in Division B (see Note A-1.2.1.1.(1)(a)), ~~or~~
 - [b] --) complying with a conformity assessment issued by the Canadian Construction Materials Centre (see Note A-1.2.1.1.(1)(b)-2030), or
 - [c] b) using alternative solutions that will achieve at least the minimum level of performance required by Division B in the areas defined by the objectives and functional statements attributed to the applicable acceptable solutions (see ~~Note A-1.2.1.1.(1)(b)~~Note A-1.2.1.1.(1)(c)).
- [2] 2)** For the purposes of compliance with this Code as required in

~~Clause 1.2.1.1.(1)(b)~~ Clause 1.2.1.1.(1)(c), the objectives and functional statements attributed to the acceptable solutions in Division B shall be the objectives and functional statements referred to in Subsection 1.1.2. of Division B.

Note A-1.2.1.1.(1)(b)-2030 CCMC Conformity Assessments.

If a building design (e.g. material, component, assembly or system) can be shown to meet all the requirements of a conformity assessment issued by the Canadian Construction Materials Centre (CCMC), that design is deemed to have satisfied the intent of the Code. Demonstration of meeting the CCMC assessment criteria assures the authority having jurisdiction that the building design (e.g. construction product or system) has been evaluated, in accordance with the applicable standard or Code, using performance testing and analysis that also includes the ongoing manufacturing quality management system and surveillance. The corresponding evaluation report should be provided to the authority having jurisdiction, as described in Sentence 2.2.2.1.(4) of Division C.

Note A-1.2.1.1.(1)(~~b~~c) Code Compliance via Alternative Solutions.

Where a design differs from the acceptable solutions in Division B, then it should be treated as an “alternative solution.” A proponent of an alternative solution must demonstrate that the alternative solution addresses the same issues as the applicable acceptable solutions in Division B and their attributed objectives and functional statements. However, because the objectives and functional statements are entirely qualitative, demonstrating compliance with them in isolation is not possible. Therefore, ~~Clause 1.2.1.1.(1)(b)~~ Clause 1.2.1.1.(1)(c) identifies the principle that Division B establishes the quantitative performance targets that alternative solutions must meet. In many cases, these targets are not defined very precisely by the acceptable solutions—certainly far less precisely than would be the case with a true performance code, which would have quantitative performance targets and prescribed methods of performance measurement for all aspects of building performance. Nevertheless, ~~Clause 1.2.1.1.(1)(b)~~ Clause 1.2.1.1.(1)(c) makes it clear that an effort must be made to demonstrate that an alternative solution will perform as well as a design that would satisfy the applicable acceptable solutions in Division B—not “well enough” but “as well as.”

In this sense, it is Division B that defines the boundaries between acceptable risks and the “unacceptable” risks referred to in the statements of the Code's objectives, i.e. the risk remaining once the applicable acceptable solutions in Division B have been implemented represents the residual level of risk deemed to be acceptable by the broad base of Canadians who have taken part in the consensus process used to develop the Code.

NBC25 Div.C 2.2.2.1. (first printing)

[2.2.2.1.] 2.2.2.1. General Information Required

- [1] 1)** Sufficient information shall be provided to show that the proposed work will conform to this Code and whether or not it may affect adjacent

property.

- [2] 2)** Plans shall be drawn to scale and shall indicate the nature and extent of the work or proposed *occupancy* in sufficient detail to establish that, when completed, the work and the proposed *occupancy* will conform to this Code.
- [3] 3)** When proposed work is changed during construction, information on the changes shall comply with the requirements of this Section for proposed work.
- [4] --)** When compliance with this Code is based on an evaluation report issued by the Canadian Construction Materials Centre, the report shall be provided to demonstrate compliance in accordance with Clause 1.2.1.1.(1)(b)-2030 of Division A.

NPC25 Div.A 1.2.1.1. (first printing)

[1.2.1.1.] 1.2.1.1. Compliance with this Code

- [1] 1)** Compliance with this Code shall be achieved by
 - [a] a) complying with the applicable acceptable solutions in Division B (see Note A-1.2.1.1.(1)(a)), ~~or~~
 - [b] --)** complying with a conformity assessment issued by the Canadian Construction Materials Centre (see Note A-1.2.1.1.(1)(b)-2030), or
 - [c] b) using alternative solutions that will achieve at least the minimum level of performance required by Division B in the areas defined by the objectives and functional statements attributed to the applicable acceptable solutions (see ~~Note A-1.2.1.1.(1)(b)~~Note A-1.2.1.1.(1)(c)).
- [2] 2)** For the purposes of compliance with this Code as required in ~~Clause 1.2.1.1.(1)(b)~~Clause 1.2.1.1.(1)(c), the objectives and functional statements attributed to the acceptable solutions in Division B shall be the objectives and functional statements referred to in Subsection 1.1.2. of Division B.

Note A-1.2.1.1.(1)(b)-2030 CCMC Conformity Assessments.

If a building design (e.g. material, component, assembly or system) can be shown to meet all the requirements of a conformity assessment issued by the Canadian Construction Materials Centre (CCMC), that design is deemed to have satisfied the intent of the Code. Demonstration of meeting the CCMC assessment criteria assures the authority having jurisdiction that the building design (e.g. construction product or system) has been evaluated, in accordance with the applicable standard or Code, using performance testing and analysis that also includes the ongoing manufacturing quality management system and surveillance. The corresponding evaluation report should be provided to the authority having jurisdiction, as described in Sentence 2.2.2.1.(2) of Division C.

Note A-1.2.1.1.(1)(b) Code Compliance via Alternative Solutions.

Where a design differs from the acceptable solutions in Division B, then it should be treated as an “alternative solution.” A proponent of an alternative solution must demonstrate that the alternative solution addresses the same issues as the applicable acceptable solutions in Division B and their attributed objectives and functional statements. However, because the objectives and functional statements are entirely qualitative, demonstrating compliance with them in isolation is not possible. Therefore, ~~Clause 1.2.1.1.(1)(b)~~ Clause 1.2.1.1.(1)(c) identifies the principle that Division B establishes the quantitative performance targets that alternative solutions must meet. In many cases, these targets are not defined very precisely by the acceptable solutions—certainly far less precisely than would be the case with a true performance code, which would have quantitative performance targets and prescribed methods of performance measurement for all aspects of building performance. Nevertheless, ~~Clause 1.2.1.1.(1)(b)~~ Clause 1.2.1.1.(1)(c) makes it clear that an effort must be made to demonstrate that an alternative solution will perform as well as a design that would satisfy the applicable acceptable solutions in Division B—not “well enough” but “as well as.”

In this sense, it is Division B that defines the boundaries between acceptable risks and the “unacceptable” risks referred to in the statements of the Code's objectives, i.e., the risk remaining once the applicable acceptable solutions in Division B have been implemented represents the residual level of risk deemed to be acceptable by the broad base of Canadians who have taken part in the consensus process used to develop the Code.

NPC25 Div.C 2.2.2. (first printing)**[2.2.2.] 2.2.2. Plumbing Drawings and Related Documents****[2.2.2.1.] 2.2.2.1. Information Required on Plumbing Drawings and Related Documents**

- [1] 1)** Plumbing drawings and related documents submitted with the application for a plumbing permit shall show
- [a] a) the location and *nominal pipe size* of every *building drain* and of every *trap* and *cleanout* fitting that is on a *building drain*,
 - [b] b) the location and *nominal pipe size* of every *sanitary drainage pipe*, *trap* and *vent pipe*, and
 - [c] c) a layout of the *potable water distribution system*, including *nominal pipe sizes* and valves.

[2] --) When compliance with this Code is based on an evaluation report issued by the Canadian Construction Materials Centre, the report shall be provided to demonstrate compliance in accordance with Clause 1.2.1.1.(1)(b)-2030 of Division A.

NECB25 Div.A 1.2.1.1. (first printing)**[1.2.1.1.] 1.2.1.1. Compliance with this Code**

- [1] 1)** Compliance with this Code shall be achieved by
- [a] a) complying with the applicable acceptable solutions in Division B

(see Note A-1.2.1.1.(1)(a)), ~~or~~

[b] --) complying with a conformity assessment issued by the Canadian Construction Materials Centre (see Note A-1.2.1.1.(1)(b)-2030), or

[c] b) using alternative solutions that will achieve at least the minimum level of performance required by Division B in the areas defined by the objective and functional statements attributed to the applicable acceptable solutions (see ~~Note A-1.2.1.1.(1)(b)~~Note A-1.2.1.1.(1)(c)).

[2] 2) For the purposes of compliance with this Code as required in ~~Clause (1)(b)~~Clause (1)(c), the objective and functional statements attributed to the acceptable solutions in Division B shall be the objective and functional statements referred to in Subsection 1.1.3. of Division B.

Note A-1.2.1.1.(1)(b)-2030 CCMC Conformity Assessments.

If a building design (e.g. material, component, assembly or system) can be shown to meet all the requirements of a conformity assessment issued by the Canadian Construction Materials Centre (CCMC), that design is deemed to have satisfied the intent of the Code. Demonstration of meeting the CCMC assessment criteria assures the authority having jurisdiction that the building design (e.g. construction product or system) has been evaluated, in accordance with the applicable standard or Code, using performance testing and analysis that also includes the ongoing manufacturing quality management system and surveillance. The corresponding evaluation report should be provided to the authority having jurisdiction, as described in Sentence 2.2.3.1.(3)-2030 of Division C.

Note A-1.2.1.1.(1)(~~b~~c) Code Compliance via Alternative Solutions.

Where a design differs from the acceptable solutions in Division B, then it should be treated as an “alternative solution.” A proponent of an alternative solution must demonstrate that the alternative solution addresses the same issues as the applicable acceptable solutions in Division B and their attributed objective and functional statements. However, because the objective and functional statements are entirely qualitative, demonstrating compliance with them in isolation is not possible. Therefore, ~~Clause 1.2.1.1.(1)(b)~~Clause 1.2.1.1.(1)(c) identifies the principle that Division B establishes the quantitative performance targets that alternative solutions must meet. In many cases, these targets are not defined very precisely by the acceptable solutions—certainly far less precisely than would be the case with a true performance code, which would have quantitative performance targets and prescribed methods of performance measurement for all aspects of building performance. Nevertheless, ~~Clause 1.2.1.1.(1)(b)~~Clause 1.2.1.1.(1)(c) makes it clear that an effort must be made to demonstrate that an alternative solution will perform as well as a design that would satisfy the applicable acceptable solutions in Division B—not “well enough” but “as well as.”

In this sense, it is Division B that defines the boundaries between acceptable situations and the “unacceptable” situations referred to in the statements of the Code's objectives, i.e. the consequence remaining once the applicable acceptable solutions in

Division B have been implemented represents the residual consequence deemed to be acceptable by the broad base of Canadians who have taken part in the consensus process used to develop the Code.

NECB25 Div.C 2.2.3.1. (first printing)**[2.2.3.1.] 2.2.3.1. General Information Required**

- [1] 1)** Sufficient information shall be provided to show that the proposed *alteration* will conform to this Code and whether or not it will affect adjacent property. (See Note A-2.2.2.1.(1).)
- [2] 2)** Plans shall be drawn to scale and shall indicate the nature and scope of the proposed *alteration* and proposed *occupancy* in sufficient detail to establish that, when completed, the proposed *alteration* and the proposed *occupancy* will conform to this Code.
- [3] --)** When compliance with this Code is based on an evaluation report issued by the Canadian Construction Materials Centre, the report shall be provided to demonstrate compliance in accordance with Clause 1.2.1.1.(1)(b)-2030 of Division A.
- [4] 3)** If the proposed *alteration* is changed during construction, information on the changes shall comply with the requirements of this Section for *alteration* work.

Impact analysis

This proposed change introduces a clear path for national acceptance of the conformity assessment mechanisms that were previously only referenced in the preface of the National Model Codes. Manufacturers of products that currently have CCMC assessments would benefit from clarity about compliance and improved market access across Canada. While product assessment would remain an optional compliance pathway for manufactured products with this proposed change, costs for product manufacturers pursuing product certification would be balanced by the reduced effort involved to achieve product acceptance (see "Enforcement implications" below). Costs related to product assessments vary by product category, intended uses and functions, and testing requirements. Assessment costs are available on the CCMC website at: <https://nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre>.

Enforcement implications

The National Model Codes currently only describe conformity assessment mechanisms in the preface. This proposed change would provide the administrative means for AHJs to consistently accept conformity assessment opinions. Acceptance of conformity assessments would reduce the burden related to alternative solutions on product

manufacturers, builders and AHJs. For AHJs, specifically, this proposed change would reduce the time spent approving the use of construction products, especially when innovative. Relying on assessments performed by the CCMC, a service provided by the National Research Council, would assure AHJs that a construction product demonstrates performance through initial testing, as well as ongoing manufacturing quality management systems.

Who is affected

In addition to authorities having jurisdiction, product manufacturers, designers and builders, this proposed change may affect a wide range of stakeholders involved in design, specification, manufacture, approval and construction, including specifiers, building owners, contractors and building officials.

For Code users and authorities having jurisdiction, the addition of this new compliance option would accelerate the approval process.

Contractors, inspectors and designers would benefit from clearer direction on product conformance, which would support consistent interpretation and improved compliance efficiency.