

Proposed Changes to the British Columbia Building Code 2024

Title: Canadian Construction Materials Centre (CCMC) Evaluation Report

Subject/description: Proposal to accept products that have been demonstrated to meet the alternative solution criteria of CCMC evaluations as acceptable solutions.

Applicable Code references: Article 1.2.1.1. of Division A and Article 2.2.2.1. of Division C

Problem

In British Columbia, innovative products that are not addressed by the acceptable solutions in Division B of the Building Code can be accepted by an authority having jurisdiction through an alternative solution process. The British Columbia Building Code (Building Code) 2024 does not offer explicit recognition to products that have been evaluated as an alternative solution. The CCMC evaluation process is intended to fulfill the alternative solution process but without explicit recognition in the Building Code, the alternative solution process is often repeated for products with a CCMC Evaluation Report. Because alternative solutions are project-specific, this can be repeated many times over for a single product.

CCMC Technical Guides are developed for products through a comprehensive and impartial evidence-based process and the technical requirements they contain are meant to be regarded as equivalencies to the technical requirements of Building Codes. The CCMC Evaluation Report documenting conformance to a CCMC Technical Guide is intended to save costs and time of repetitious alternative solution applications, yet the Building Code does not discuss this in Section 1.2. (Compliance) of Division A.

Justification

The CCMC is a construction code compliance service for innovative products on behalf of provinces and territories, and which is supported by the Government of Canada. The CCMC consults with regulators so that regional code variations are addressed in evaluations. The CCMC follows a comprehensive process which includes:

- building code analysis
- literature review including standards and test methods
- expert consultation
- benchmark testing
- product testing research and analysis
- ongoing plant inspection and surveillance

- official CCMC mark for use on products and
- online registry of product assessments

The CCMC has a public safety mandate and the requirements developed are to meet or exceed the minimum requirements of the Building Code.

A CCMC Evaluation Report represents an acceptable level of assurance of performance of an innovative product. This code change proposal strives to accept these reports without qualification to the greatest extent possible within British Columbia.

More information on the CCMC can be found by visiting

<https://nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre>.

Proposed Change

In this document:

Black text represents 2020 National Model Code content adopted in the British Columbia Building Code 2024

Blue text represents unique-to-British Columbia content adopted in the British Columbia Building Code 2024

Green text represents proposed unique-to-British Columbia content

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Division A

1.2.1.1. Compliance with this Code

1) Compliance with this Code shall be achieved by

a) complying with

- i) the applicable acceptable solutions in Division B (see Note A-1.2.1.1.(1)(a)(i)), or
- ii) a [Canadian Construction Materials Centre Technical Guide as described in a Canadian Construction and Materials Centre Evaluation Report \(see Note A-1.2.1.1.\(1\)\(a\)\(i\)\), or](#)

b) *except as required by Sentence (3), using alternative solutions, accepted by the authority having jurisdiction under Section 2.3. of Division C, 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)).*

2) For the purposes of compliance with this Code as required in Clause 1.2.1.1.(1)(b), 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.

3) An alternative solution shall not be used in place of an acceptable solution if the acceptable solution expressly requires conformance to a provincial enactment other than Book I (General) or Book II (Plumbing Systems) of the British Columbia Building Code.

A-1.2.1.1.(1)(a)(i) Code Compliance via Acceptable Solutions. If a building design (e.g. material, component, assembly or system) can be shown to meet all provisions of the applicable acceptable solutions in Division B (e.g. it complies with the applicable provisions of a referenced standard), it is deemed to have satisfied the objectives and functional statements linked to those provisions and thus to have complied with that part of the Code. In fact, if it can be determined that a design meets all the applicable acceptable solutions in Division B, there is no need to consult the objectives and functional statements in Division A to determine its compliance.

A-1.2.1.1.(1)(a)(i) Canadian Construction Materials Centre Technical Guides. If a building design (e.g. material, component, assembly or system) can be shown to meet all provisions of a Canadian Construction and Materials Centre (CCMC) Technical Guide, it is deemed to have satisfied the intent of the Code. Demonstration of meeting the provisions of a CCMC Technical Guide must be documented in a CCMC Evaluation Report which should be provided as described in Sentence 2.2.2.1.(1) of Division C.

Division C

2.2.2.1. General Information Required

4) The applicable Canadian Construction Materials Centre Evaluation Report shall be provided as documentation to demonstrate compliance as described in Subclause 1.2.1.1.(1)(a)(ii) of Division A.

Impact analysis and cost implications

There are costs associated with developing a CCMC Technical Guide however there is no obligation for manufacturers of innovative products to obtain a CCMC Evaluation Report. For manufacturers that do obtain a CCMC Evaluation Report demonstrating conformance to a CCMC Technical Guide, it can be a hardship to have products then have to also be considered through an alternative solution process for each individual project thereafter. Recognizing these products as acceptable for use in the Building Code provides assurances to the authority having jurisdiction that the evaluations are deemed

acceptable and will eliminate the need for any time or costs associated with an alternative solution process.

Enforcement implications

Can be enforced through the existing enforcement regimes. CCMC Evaluation Reports are available in .pdf format for download and also published online in bilingual, web accessible and digitally connectable format. Report holders are provided with an official CCMC evaluation mark that includes a unique number (i.e. 1234-R) that may be applied to construction products and literature. It is proposed that Evaluation Reports be required documentation as part of the administration of the Building Code. As for any product, the Evaluation Report can have criteria or reference to the manufacturer's installation guide on how to correctly use/install the product so that it performs as required. Enforcement authorities may wish to incorporate any conditions and limitations stated within the Evaluation Report into their enforcement regime as appropriate and applicable.

Who is affected

Manufacturers, designers and regulators

Objective-based analysis of new or changed provisions

No attributions proposed to be assigned.