



Lunch & Learn

Navigating Product Evaluation Reports

12pm July 17th, 2025

Presenter: Tim Warner

Email: twarner@boabc.org



Disclaimer

Information presented today does not directly represent the opinions of the Building Officials Association of BC (BOABC). This presentation is conceptual and for informal educational purposes only. The presenter and Association takes no responsibility for application of any concepts or interpretations in this presentation to specific projects. The slides must not be considered complete or exhaustive. Code provisions have been generally represented and may not reflect all exceptions.



Land Acknowledgement



Welcome!

Today's Session:

- Canadian Building Regulatory System Overview
 - Where do Standards fit in?
 - Where do Evaluation Reports fit in?
 - Examples
 - Resources

Canadian Building Regulatory System

Overview

Government of Canada

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

Province of British Columbia

Construction Standards and Digital Solutions

Local Government, Municipality or Regional District

Canadian Building Regulatory System

Overview

Government of Canada

Canadian Building Regulatory System

Overview

Government of Canada

National Research Council of Canada

The primary national agency of the Government of Canada dedicated to science and technology research and development.

Canadian Building Regulatory System

Overview

Government of Canada

National Research Council of Canada

Codes Canada

The NRC's Codes Canada group acts as the secretariat providing technical, policy, and administrative support, including publishing the National Model Codes

Canadian Building Regulatory System

Overview

Government of Canada

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

CBHCC develops the National Model Codes with Provincial and Territorial representation

Canadian Building Regulatory System

Overview

Government of Canada

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

Province of British Columbia

The Province adopts the NBC, with local adaptations to create the BCBC, enacted through a Ministerial Order as regulation under the Building Act

Canadian Building Regulatory System

Overview

Government of Canada

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

Province of British Columbia

Construction Standards and Digital Solutions

Construction Standards manages code development, code access, bulletins, technical guides etc.

Canadian Building Regulatory System

Overview

Government of Canada

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

Province of British Columbia

Construction Standards and Digital Solutions

Local Government, Municipality or Regional District

Establish jurisdiction for administration
and enforcement of building codes.

Canadian Building Regulatory System

Overview

Government of Canada

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

Province of British Columbia

Construction Standards and Digital Solutions

Local Government, Municipality or Regional District

Canadian Building Regulatory System

Overview

Government of Canada

How do Standards fit in?

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

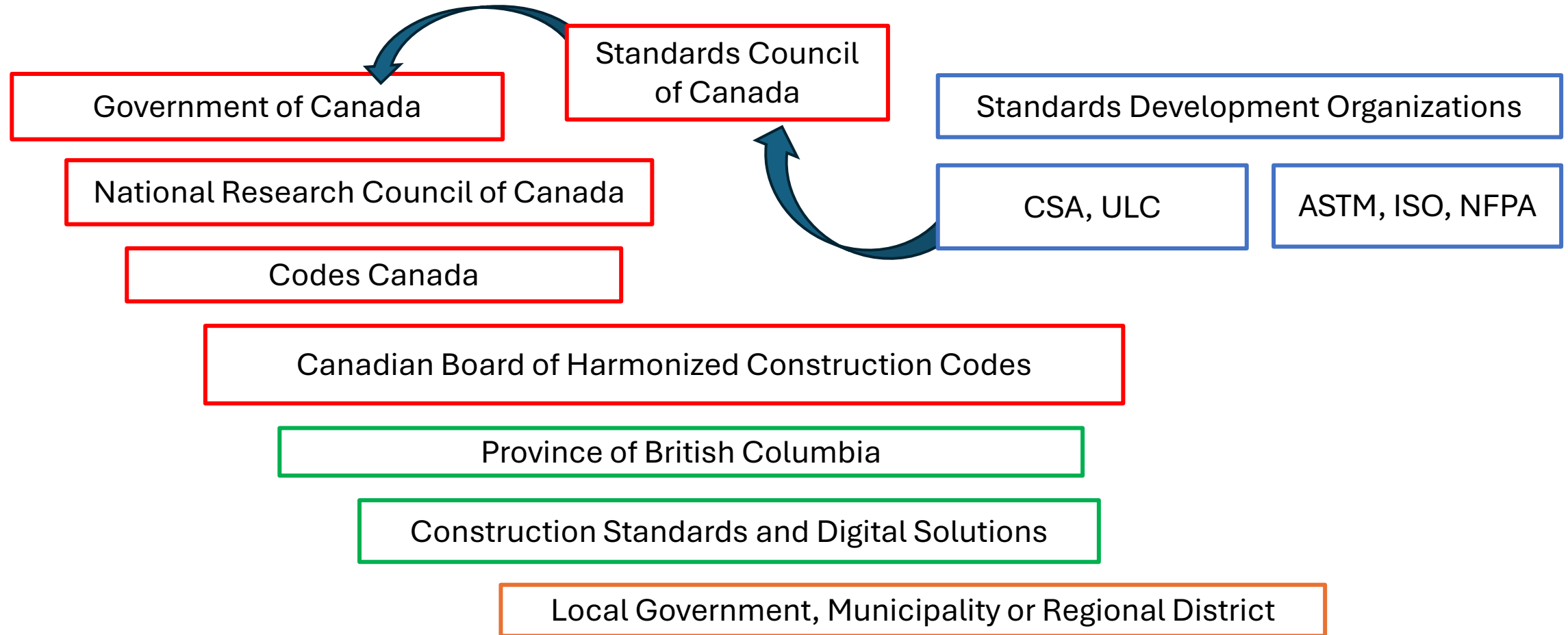
Province of British Columbia

Construction Standards and Digital Solutions

Local Government, Municipality or Regional District

Canadian Building Regulatory System

Overview



Canadian Building Regulatory System

Overview

Government of Canada

How do Evaluation Reports fit in?

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

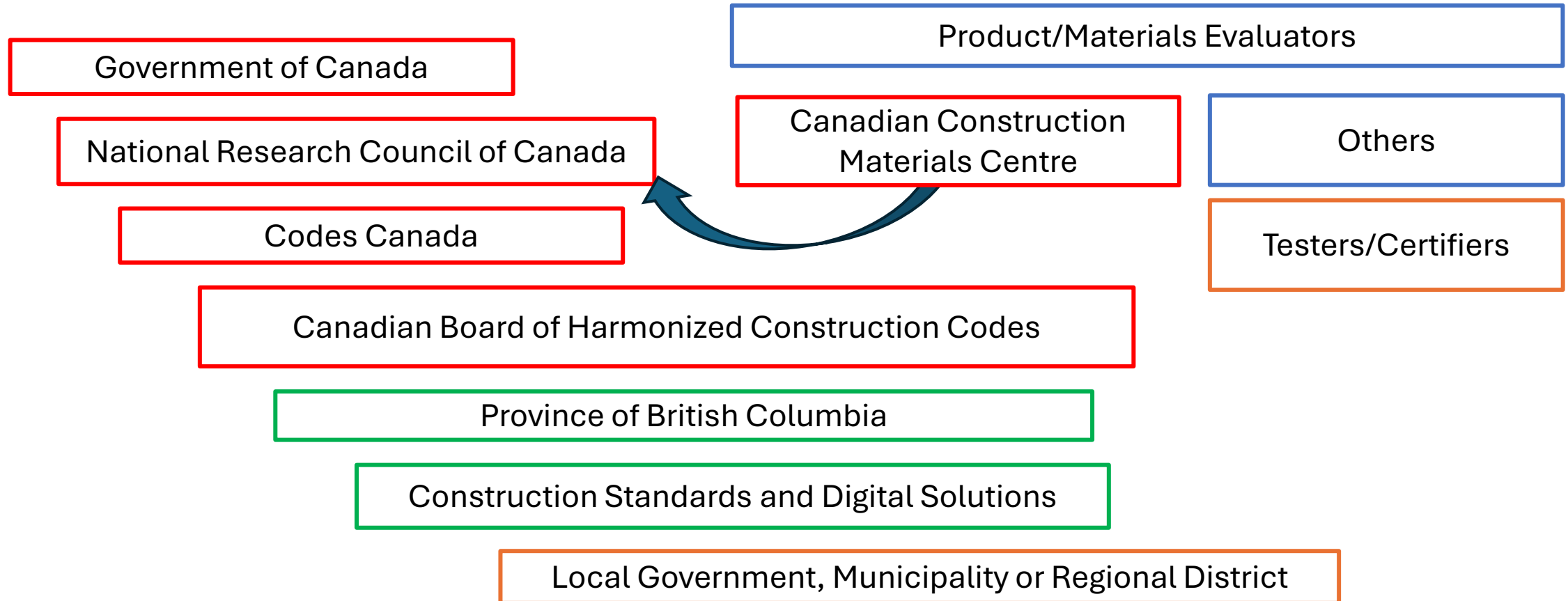
Province of British Columbia

Construction Standards and Digital Solutions

Local Government, Municipality or Regional District

Canadian Building Regulatory System

Overview



Canadian Building Regulatory System

Overview

Government of Canada

Where do Building Officials fit in?

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

Province of British Columbia

Construction Standards and Digital Solutions

Local Government, Municipality or Regional District

Canadian Building Regulatory System

Overview

Government of Canada

Where do Building Officials fit in?

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

Province of British Columbia

Construction Standards and Digital Solutions

Local Government, Municipality or Regional District

YOU

Canadian Building Regulatory System

Overview

Canadian Building Regulatory System

YOU



List of Demands:

Safe

Fair

Transparent

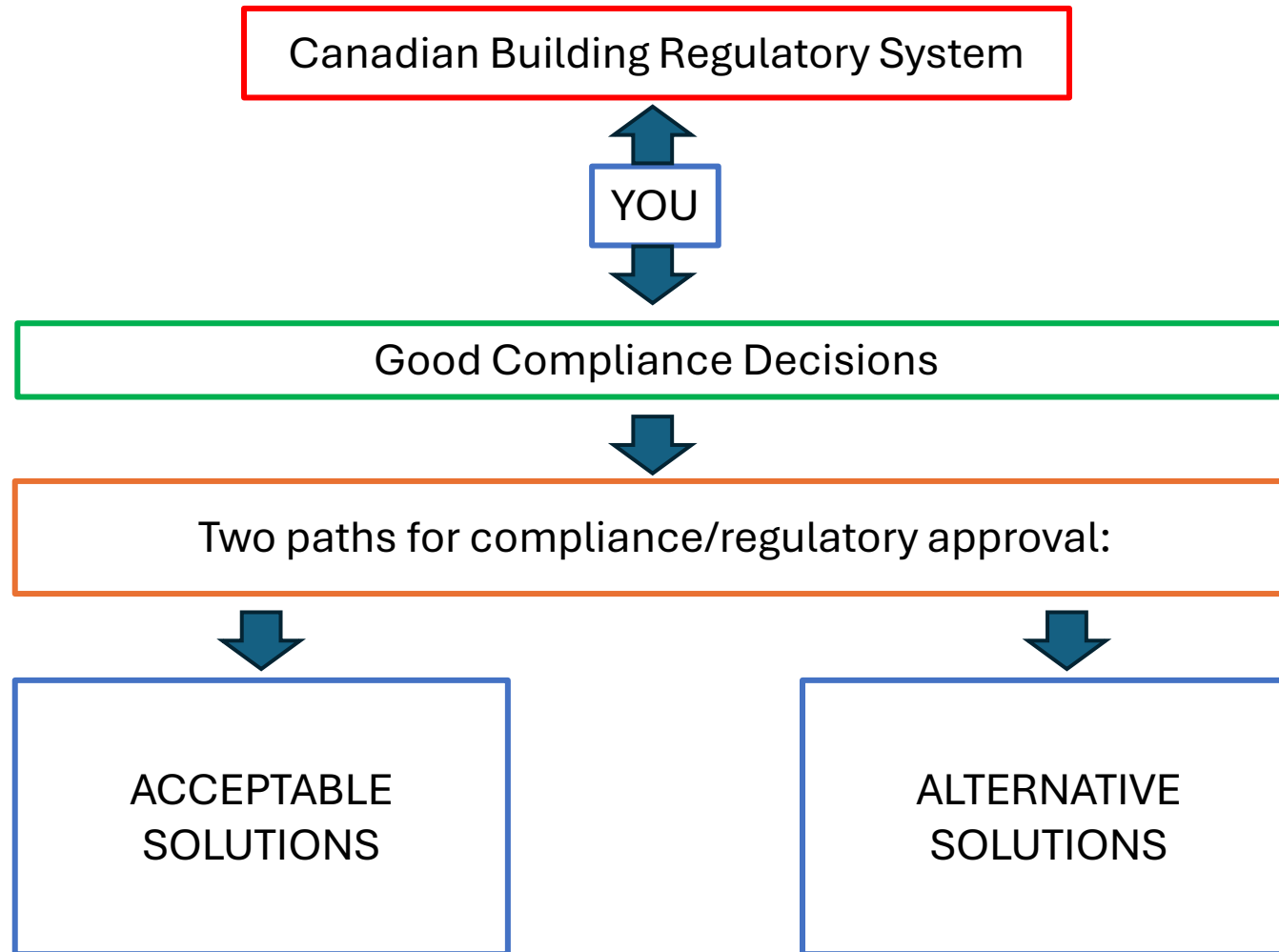
Innovative

Democratic

Representative

Canadian Building Regulatory System

Compliance Decisions



Canadian Building Regulatory System

Compliance Decisions

Section 1.2. Compliance

1.2.1. Compliance with this Code

1.2.1.1. Compliance with this Code

- 1)** Compliance with this Code shall be achieved by
 - a) complying with the applicable acceptable solutions in Division B (see Note A-1.2.1.1.(1)(a)), 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)).

Canadian Building Regulatory System

Compliance Decisions

A-1.2.1.1.(1)(a) 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

1-30 Division A

British Columbia Building Codes 2024

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.

Canadian Building Regulatory System

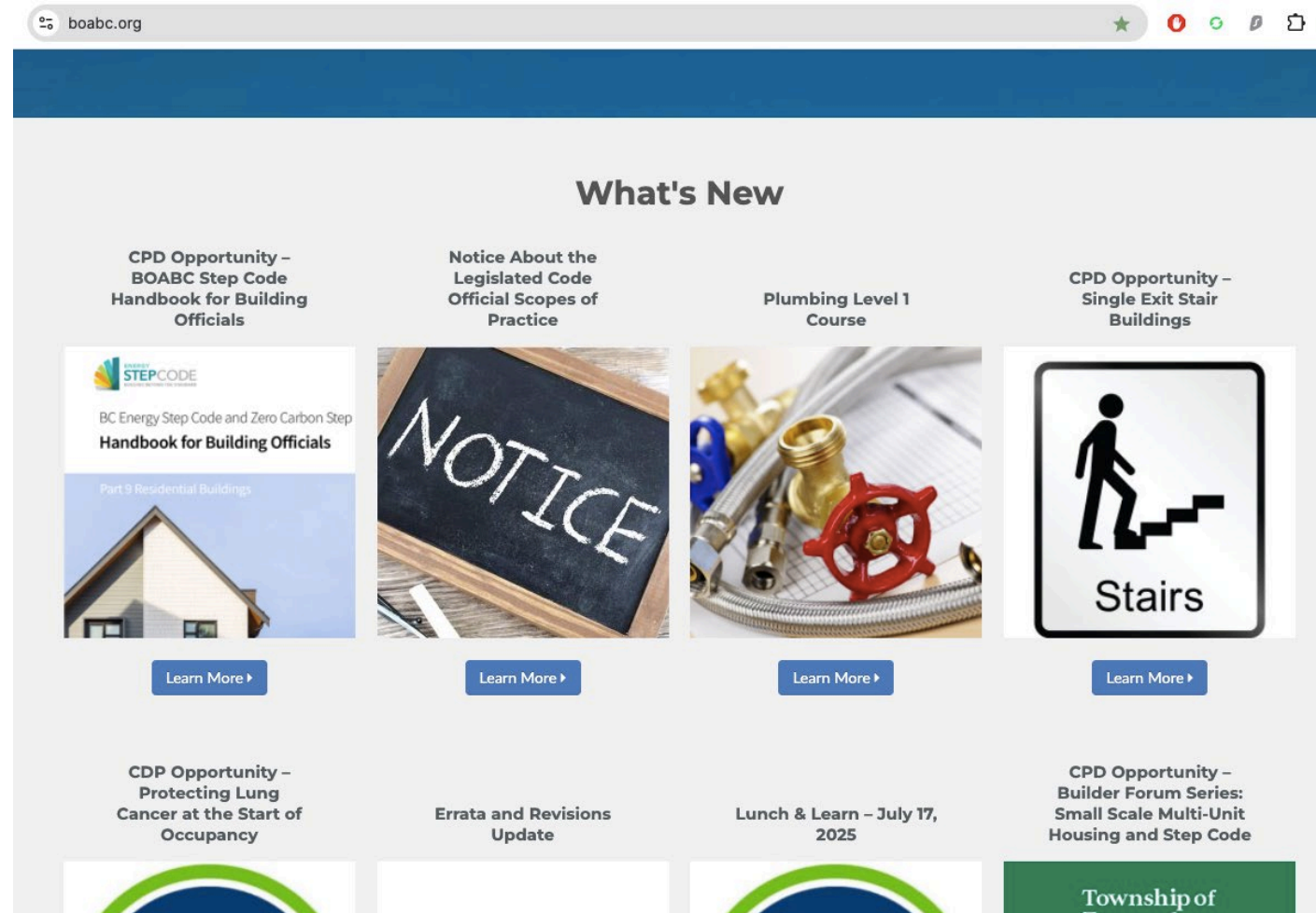
Compliance Decisions

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) 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) 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.

Canadian Building Regulatory System

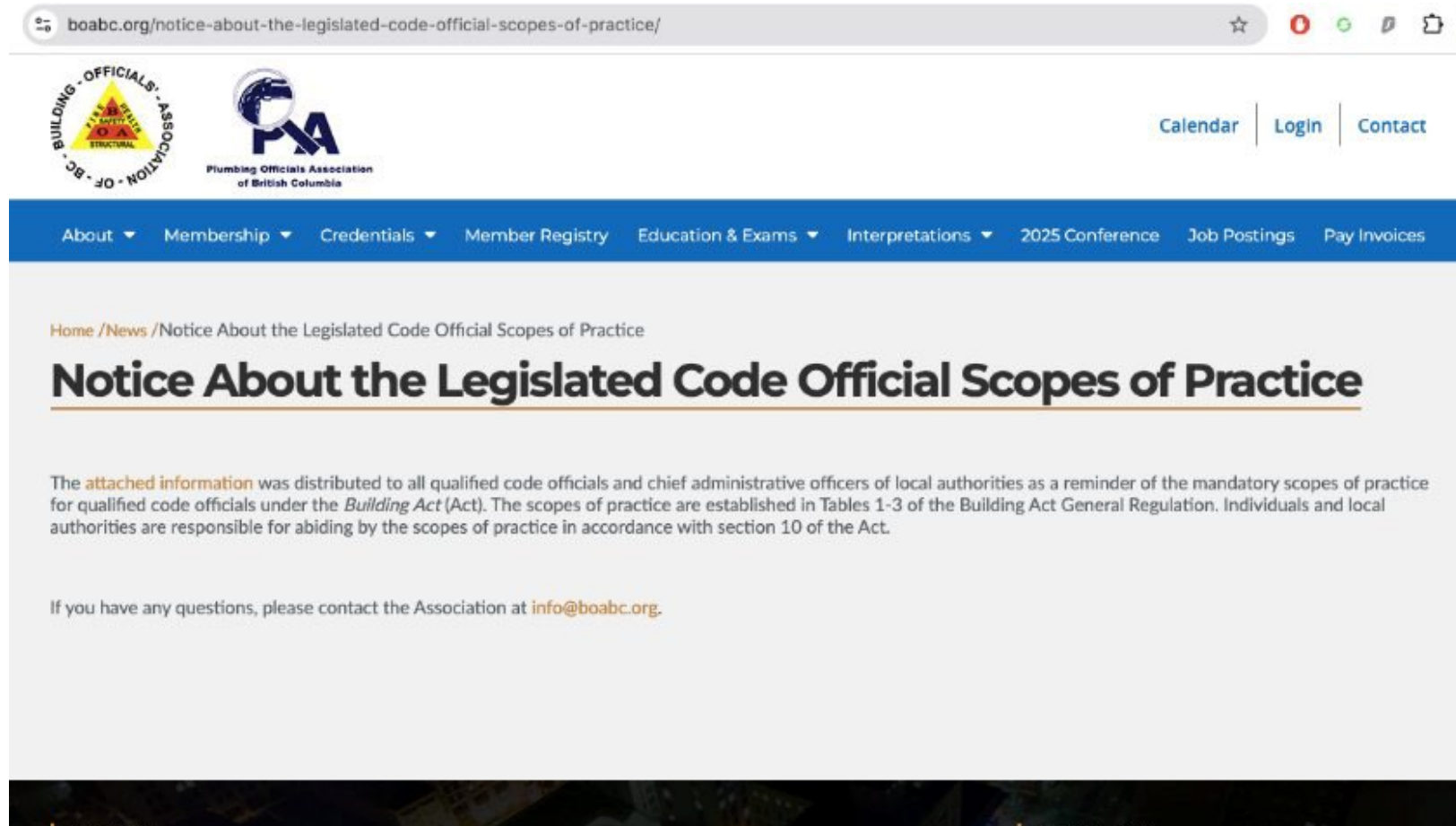
Compliance Decisions



<https://boabc.org/wp-content/uploads/2025/07/Code-Official-Scopes-of-Practice-Notice-July-2025.pdf>

Canadian Building Regulatory System

Compliance Decisions



<https://boabc.org/wp-content/uploads/2025/07/Code-Official-Scopes-of-Practice-Notice-July-2025.pdf>

Canadian Building Regulatory System

Alternative Solutions



<https://boabc.org/wp-content/uploads/2024/06/Alternative-Solutions-Peer-Review-Ryce-and-Harmsworth.pdf>

Canadian Building Regulatory System

Codes Overview

National Building Code

Model Codes (no force)
Developed by CBHBC
Published by NRC through Codes Canada

Provincial Building Code

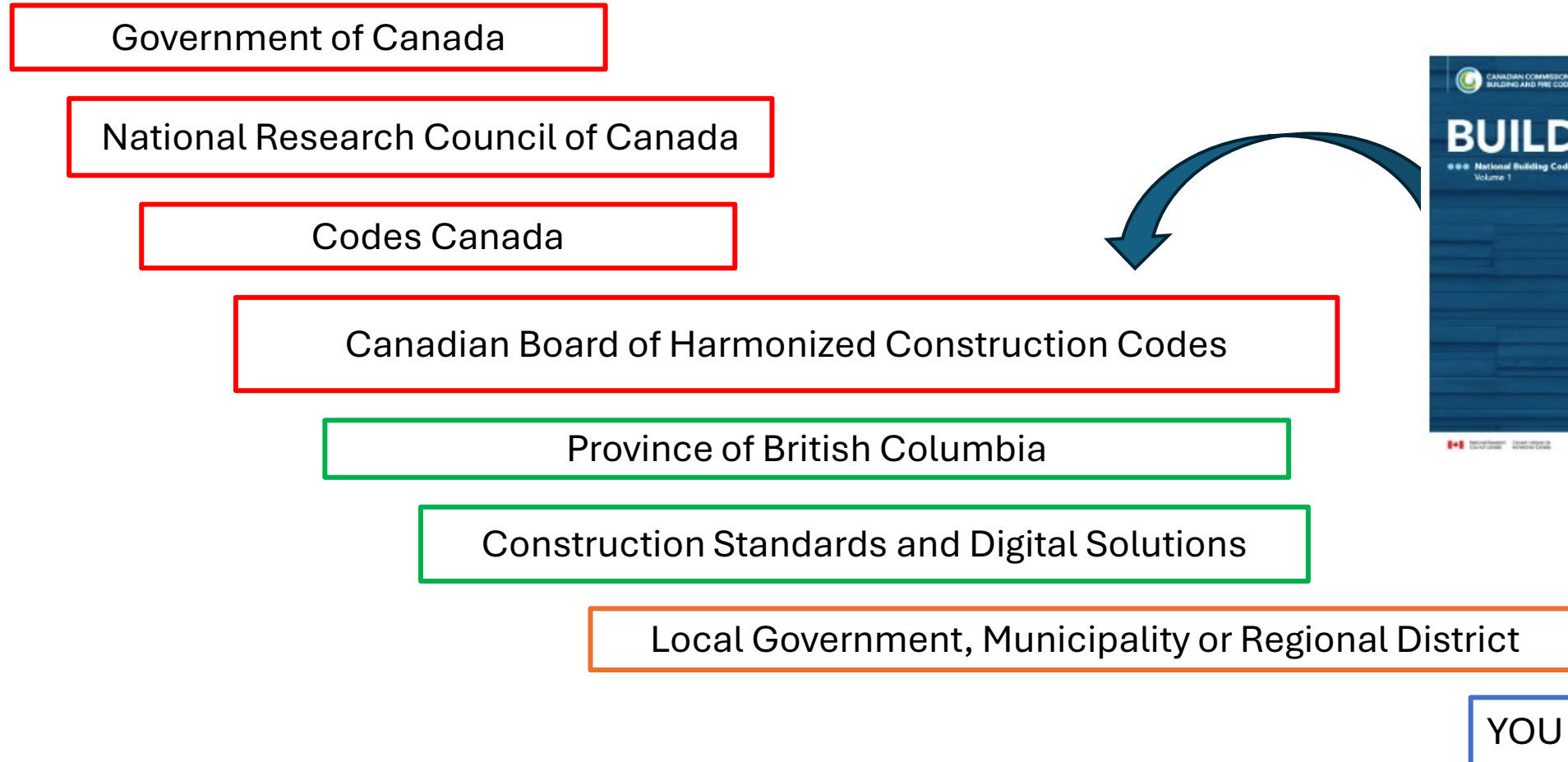
Adopted by Province or Territory, with local variances such as;
[B] 9.23.13. (early adoption)
Low A2, Group D
Administered by Construction Standards and Digital Solutions

Local Enforcement

AHJ
Approvals
Building Bylaw
Local Government or Regional District

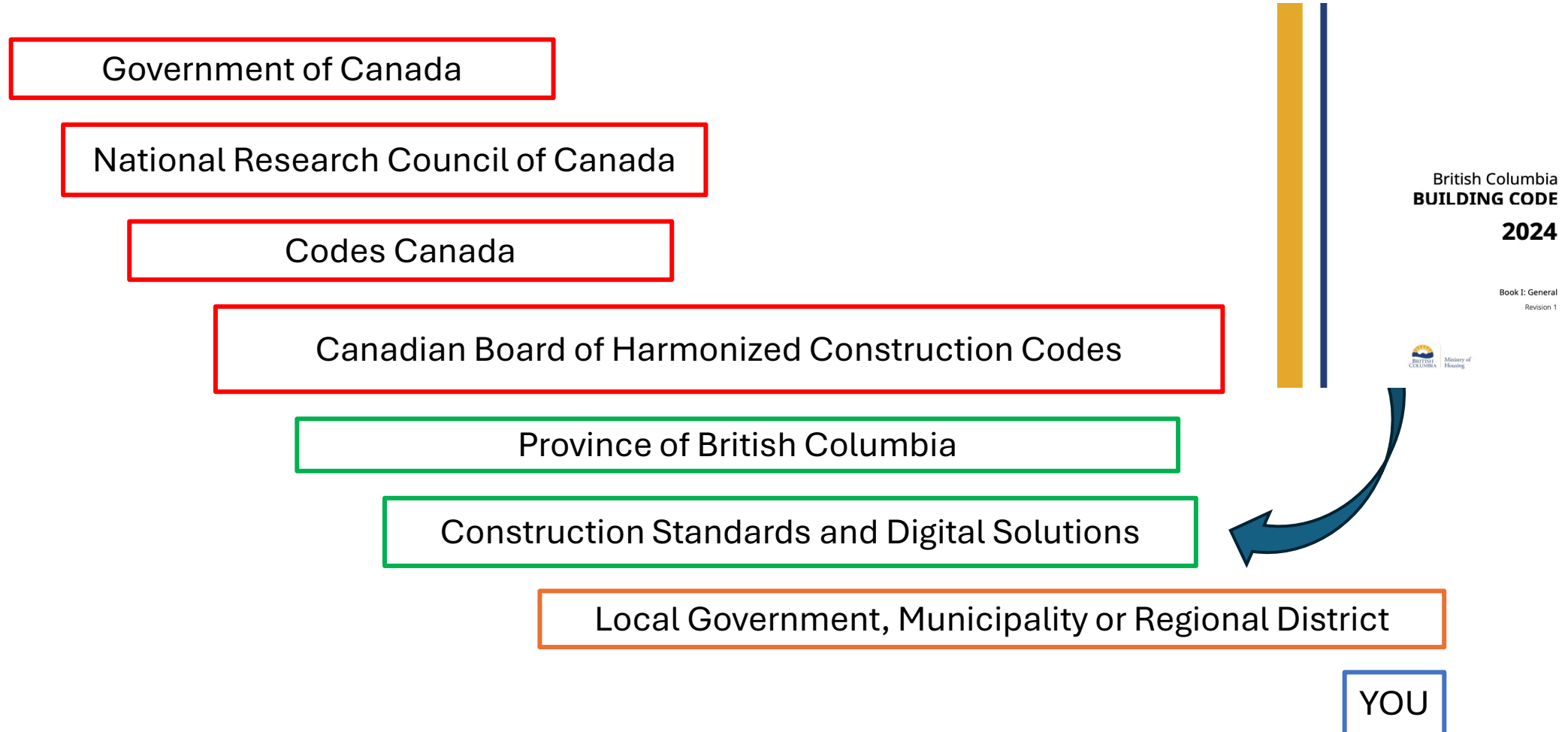
Canadian Building Regulatory System

Codes Overview



Canadian Building Regulatory System

Codes Overview



Canadian Building Regulatory System

Overview

Government of Canada

National Research Council of Canada

Codes Canada

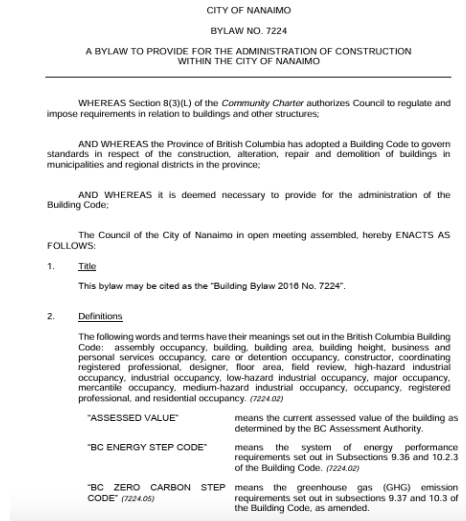
Canadian Board of Harmonized Construction Codes

Province of British Columbia

Construction Standards and Digital Solutions

Local Government, Municipality or Regional District

YOU



Canadian Building Regulatory System

What about Standards?

Government of Canada

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

Province of British Columbia

Construction Standards and Digital Solutions

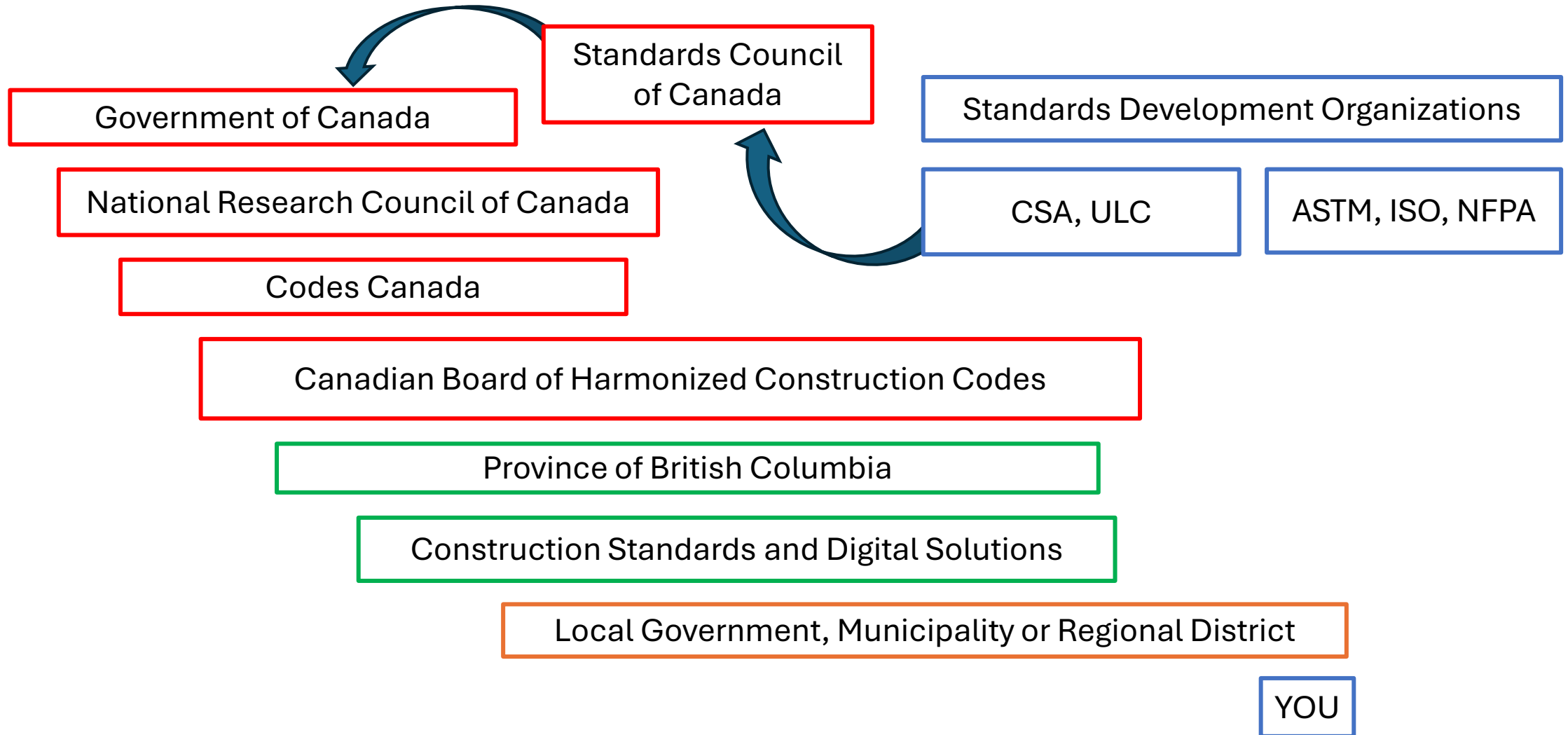
Local Government, Municipality or Regional District

What about Standards?

YOU

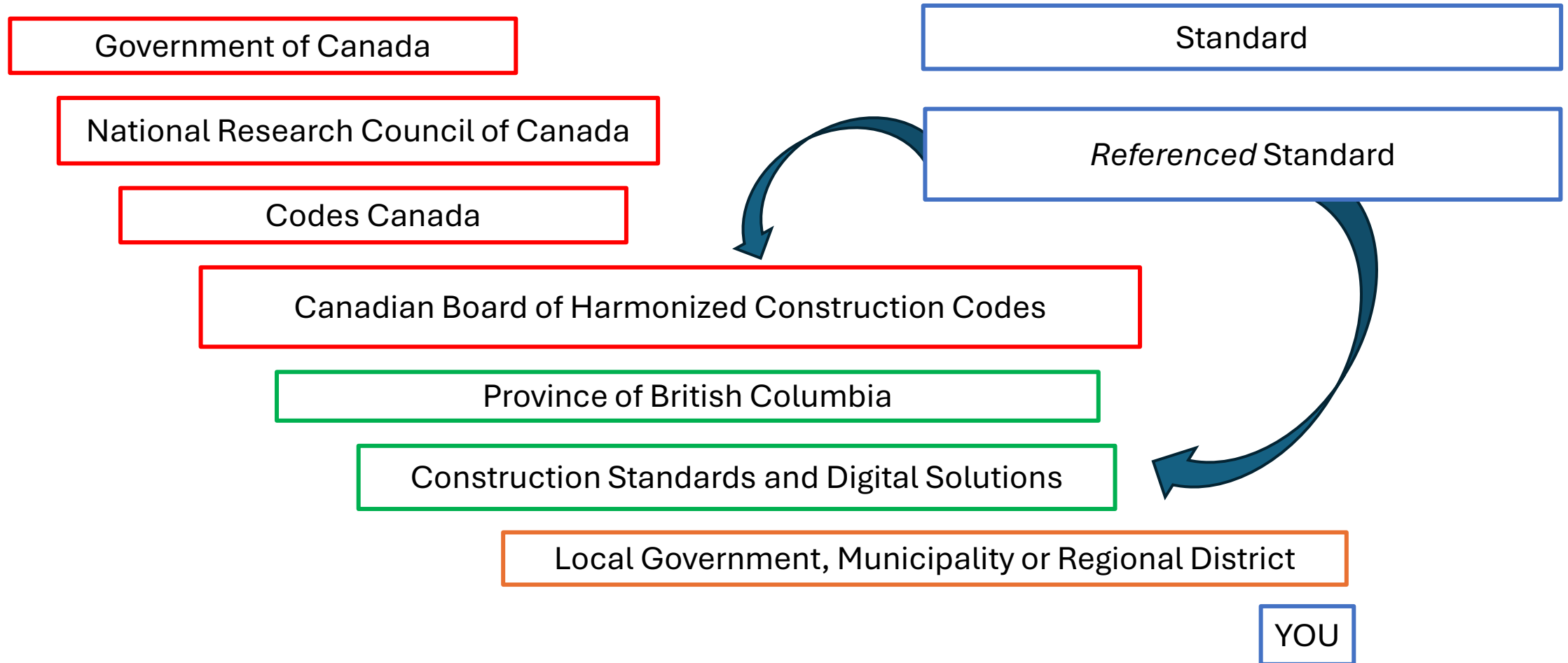
Standards

Standard Development and Accreditation



Standards

Voluntary and Reference Standards



Standards

Standards in the Code

9.25.2.2. Insulation Materials

- 1) Except as required in Sentence (2), thermal insulation shall conform to the requirements of
- a) ASTM C726, "Standard Specification for Mineral Wool Roof Insulation Board"
 - b) CAN/CGSB-51.25-M, "Thermal Insulation, Phenolic, Faced"
 - c) CGSB 51-GP-27M, "Thermal Insulation, Polystyrene, Loose Fill"
 - d) CAN/ULC-S701.1, "Standard for Thermal Insulation, Polystyrene Boards"

9-232 Division B

British Columbia Building Codes 2024

- e) CAN/ULC-S702.1, "Standard for Mineral Fibre Thermal Insulation for Buildings, Part 1: Material Specification,"
- f) CAN/ULC-S703, "Standard for Cellulose Fibre Insulation (CFI) for Buildings"
- g) CAN/ULC-S704.1, "Standard for Thermal Insulation, Polyurethane and Polyisocyanurate, Boards, Faced,"
- h) CAN/ULC-S705.1, "Standard for Thermal Insulation – Spray Applied Rigid Polyurethane Foam, Medium Density – Material Specification" or
- i) CAN/ULC-S706.1, "Standard for Wood Fibre Insulating Boards for Buildings."



Section 1.3. Referenced Documents and Organizations

1.3.1. Referenced Documents

1.3.1.1. Effective Date

1) Unless otherwise specified herein, the documents referenced in this Code shall include all amendments, revisions, reaffirmations, reapprovals, addenda and supplements effective to 15 July 2019.

1.3.1.2. Applicable Editions

1) Where documents are referenced in this Code, they shall be the editions designated in Table 1.3.1.2.

Table 1.3.1.2.
Documents Referenced in Book I (General) of the British Columbia Building Code ⁽¹⁾ (2)
Forming Part of Sentence 1.3.1.2.(1)

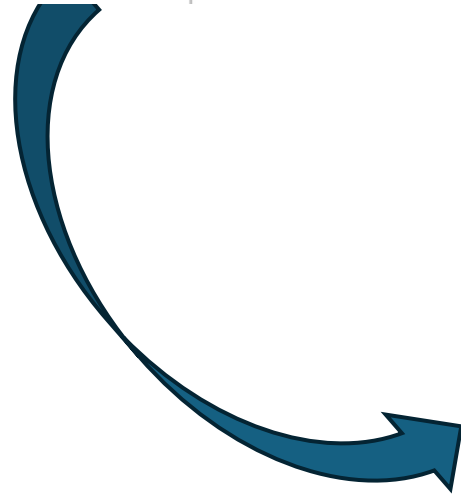
Issuing Agency	Document Number ⁽³⁾	Title of Document	Code Reference
AAMA	501-05	Methods of Test for Exterior Walls	A-5.9.3.
AAMA	501.1-05	Standard Test Method for Water Penetration of Windows, Curtain Walls and Doors Using Dynamic Pressure	A-5.9.3.
AAMA	501.2-09	Quality Assurance and Diagnostic Water Leakage Field Check of Installed Storefronts, Curtain Walls, and Sloped Glazing Systems	A-5.9.3.
AAMA	501.4-09	Recommended Static Test Method for Evaluating Curtain Wall and Storefront Systems Subjected to Seismic and Wind-Induced Inter-Story Drifts	A-5.9.3.
AAMA	501.5-07	Test Method for Thermal Cycling of Exterior Walls	A-5.9.3. A-5.9.3.3.(1)
AAMA	501.6-09	Recommended Dynamic Test Method for Determining the Seismic Drift Causing Glass Fallout from a Wall System	A-4.1.8.18.(14) and (15) A-5.9.3.
AAMA	1304-02	Voluntary Specification for Forced Entry Resistance of Side-Hinged Door Systems	9.7.5.2.(2)
ACGIH	28th Edition	Industrial Ventilation: A Manual of Recommended Practice for Design	6.2.1.1.(1) A-6.3.1.5.
ACI	355.2-19	Qualification of Post-Installed Mechanical Anchors in Concrete (ACI 355.2-19) and Commentary	4.1.8.18.(7)

Standards

Standards in the Code

Table 1.3.1.2. (continued)

Issuing Agency	Document Number ⁽³⁾	Title of Document	Code Reference
ULC	CAN/ULC-S702.1-14	Standard for Mineral Fibre Thermal Insulation for Buildings, Part 1: Material Specification	3.1.6.3.(4) Table 5.9.1.1. A-5.9.1.1.(1) 9.10.9.8.(3) 9.10.3.1.(3) Table 9.23.17.2.-A 9.25.2.2.(1) Table A-9.36.2.4.(1)-D



Members access Contact us Français Search

SCC CCN Standards Accreditation Get involved Areas of work Resources About us

Home / Standards Search /

CAN/ULC-S702.1:2021

STANDARD FOR MINERAL FIBRE THERMAL INSULATION FOR BUILDINGS, PART 1: MATERIAL SPECIFICATION

1.1 This Standard specifies the physical property requirements and test methods to determine the properties for mineral fibre thermal insulation for buildings, manufactured in the form of faced or unfaced batts, rolls, boards, and loose-fill intended for use in unconfined spaces with slopes not exceeding 4.5:12, whether

SDO: ULC Language: English
ICS Codes: 91.120.10 Status: Standard
Publish date: 2021-11-29 Standard Number: CAN/ULC-S702.1:2021

<https://scc-ccn.ca/>

Canadian Building Regulatory System

Standards Labelling

Comfortbatt®
Thermal Batt Insulation

Technical Data Sheet
Batt Insulation 07210*
Blanket Insulation 07 21 16**

ROCKWOOL Comfortbatt® is a stone wool batt insulation designed for thermal resistance in wood and steel framing.


	Performance	Test Standard												
Compliance	Mineral Fibre Thermal Insulation for Buildings, Type 1 Compliant	CAN/ULC S702												
Reaction to Fire	Flame Spread Rating = 0; Smoke Developed Classification = 0 Determination of Non-combustibility of Building Materials - Non-combustible	CAN/ULC S102 CAN/ULC S114												
Density	> 2 lbs/ft³ (>32 kg/m³)	ASTM C167												
Thermal Resistance	<table><tr><th>Wood Stud</th><th>Steel Stud</th></tr><tr><td>R14 (RSI 2.46) - 3.5" thick (89 mm)</td><td>R14 (RSI 2.47) - 3.5" thick (89 mm)</td></tr><tr><td>R22 (RSI 3.87) - 5.5" thick (140 mm)</td><td>R22.5 (RSI 3.96) - 6" thick (152 mm)</td></tr><tr><td>R24 (RSI 4.23) - 5.5" thick (140 mm)</td><td>R24 (RSI 4.23) - 6" thick (152 mm)</td></tr><tr><td>R28 (RSI 4.93) - 7.25" thick (184 mm)</td><td>R32 (RSI 5.37) - 8" thick (203 mm)</td></tr><tr><td>R32 (RSI 5.64) - 8" thick (203 mm)</td><td></td></tr></table>	Wood Stud	Steel Stud	R14 (RSI 2.46) - 3.5" thick (89 mm)	R14 (RSI 2.47) - 3.5" thick (89 mm)	R22 (RSI 3.87) - 5.5" thick (140 mm)	R22.5 (RSI 3.96) - 6" thick (152 mm)	R24 (RSI 4.23) - 5.5" thick (140 mm)	R24 (RSI 4.23) - 6" thick (152 mm)	R28 (RSI 4.93) - 7.25" thick (184 mm)	R32 (RSI 5.37) - 8" thick (203 mm)	R32 (RSI 5.64) - 8" thick (203 mm)		ASTM C518
Wood Stud	Steel Stud													
R14 (RSI 2.46) - 3.5" thick (89 mm)	R14 (RSI 2.47) - 3.5" thick (89 mm)													
R22 (RSI 3.87) - 5.5" thick (140 mm)	R22.5 (RSI 3.96) - 6" thick (152 mm)													
R24 (RSI 4.23) - 5.5" thick (140 mm)	R24 (RSI 4.23) - 6" thick (152 mm)													
R28 (RSI 4.93) - 7.25" thick (184 mm)	R32 (RSI 5.37) - 8" thick (203 mm)													
R32 (RSI 5.64) - 8" thick (203 mm)														
Corrosion Resistance	Corrosiveness to Steel - Passed	ASTM C665												
Reaction to Moisture	Water Vapor Sorption - 0.05 vol% Water Vapor Transmission (3.5 in. thickness evaluated), Desiccant Method - 42 perm (2404 ng/Pa.s.m²) Determination of Fungi Resistance - Passed	ASTM C1104 ASTM E96 ASTM C1338												
Dimensions	Wood Stud 16" (406 mm) on centre: 15.25" x 47" (387 mm x1194 mm) Wood Stud 24" (610 mm) on centre: 23" x 47" (584 mm x 1194 mm) Steel Stud 16" (406 mm) on centre: 16.25" x 48" (413 mm x 1219 mm) Steel Stud 24" (610 mm) on centre: 24.25" x 48" (616 mm x 1219 mm)													



Canadian Building Regulatory System

Finding Standards

store.csagroup.org/ondemand/s/?language=es&_gl=1*ctazci*_gcl_au*OTI0MjkxMzAuMTc1Mjc1MTYyOA..

 CSA Group | CSA Communities | Contact Us | CSA Store

Logout
English / CAD
Wishlist

CONTENT LIBRARY ACCOUNT MANAGEMENT ORDER MANAGEMENT SUPPORT

My Library Search Products

CSA OnDemand™ - Home

Welcome, Tim

CSA OnDemand™ provides 24/7 access to your personalized standards collection from CSA Group.
[Invite users to Register](#)

Subscription Remaining Time.
49 Days
[Manage Renewal](#)

Quick Links

[My Library](#) [CSA Learning](#) [My Wishlist](#) [CSA Advantage™](#) [CSA Store](#)

My Favourites

CSA O86:24	2024
A277-08 (R2013)	2008
CSA Z240.10.1:19	2019

Canadian Building Regulatory System

What about Innovative Products?

Government of Canada

What about Innovative Products?

National Research Council of Canada

Codes Canada

Canadian Board of Harmonized Construction Codes

Province of British Columbia

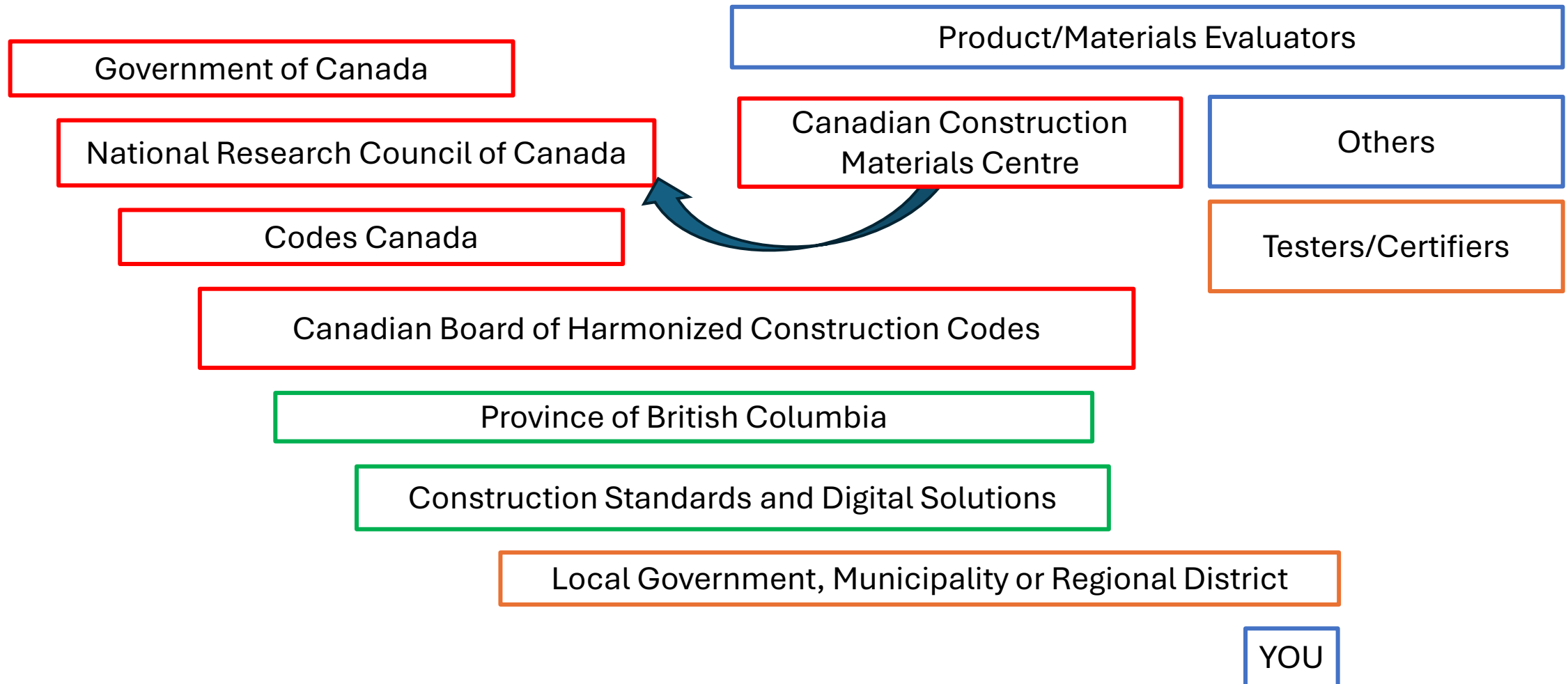
Construction Standards and Digital Solutions

Local Government, Municipality or Regional District

YOU

Canadian Building Regulatory System

What about Innovative Products?



Innovative Products

Approval Process

New (simple) Innovative Product



Can be tested to an existing *referenced* Standard

Cannot be tested to an existing *referenced* Standard (ie non-standard)



Testing Laboratory, Certification

"Evaluation" against the intent of code



Acceptable Solution

Alternative Solution

Innovative Products

Innovative Products Pathways

Testing Laboratory, Certifiers

Intertek
CSA
QAI Laboratories
UL Solutions
CCMC
ICC-ES
SGS Canada
...and more.

"Evaluations"

CCMC
ICC-ES
QAI Laboratories
...and more?

Innovative Products

Evaluation Services

Canadian Construction Materials
Centre
(CCMC)

Operated by the NRC

Issues "Evaluation Reports"

Direct support for Building Officials

Stakeholder engagement through Canadian Commission
on Construction Materials Evaluation

Innovative Products

Evaluation Services

International Code Council –
Evaluation Services
(ICC-ES)

U.S. based non-profit LLC

Internationally represented, more recently in Canada

Issues "Evaluation Service Reports" (ESRs)

Direct support for Building Officials

Transparent, consensus committee involvement

Innovative Products

Evaluation Reports - Examples

CCMC – Tyvek HomeWrap

CCMC – Zip R-Sheathing

ICC-ES – Zip R-Sheathing

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/registry/extranet/lis... ☆

CCMC registry of product assessments

i This registry contains the most up-to-date version of our product assessments. Assessments are considered active as long as they are published here. Assessments that have been withdrawn are no longer in the registry but are available upon request by contacting the CCMC at ccmc@nrc-cnrc.gc.ca or 613-993-6189. **Users should consult the registry to verify an assessment's publication status and version (last modified date) prior to its use.**

► JSON Application Programming Interface (API) alternative format

Filter options

► ⬆️⬆️ Sort by

▼ ⬆️ Applied filters

Clear filters

► ⬆️ Service

► ⬆️ Code

► ⬆️ Standard/Technical

Filter items

Showing 1 to 2 of 2 entries (filtered from 455 total entries) | Show entries

CCMC 12808-R	Active
Company: EIDCA Specialty Products Company (company of DuPont)	
Product:	
• Tyvek® HomeWrap® Breather Type Sheathing Membrane	
Code: NBC 2015, NBC 2020, OBC	
Technical Guide:	
• CCMC-TG-072510.03-15	
• CCMC-TG-072510.03-20	

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/document.html?id=1280... ☆

[CCMC 12808-R] CCMC Canadian code compliance evaluation

CCMC Canadian code compliance evaluation



CCMC number:	12808-R
Status:	Active
Issue date:	1997-05-16
Modified date:	2023-11-08
Evaluation holder:	► EIDCA Specialty Products Company (company of DuPont)
Product name:	Tyvek® HomeWrap® Breather Type Sheathing Membrane
Compliance:	NBC 2015, NBC 2020, OBC
Criteria:	CCMC-TG-072510.03-15, "CCMC Technical Guide for Sheathing Membrane, Breather Type" CCMC-TG-072510.03-20, "CCMC Technical Guide for Sheathing Membrane, Breather Type"

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/document.html?id=1280... ☆ 🔒 🔍 📄 🗑️

[CCMC 12808-R] CCMC Canadian code compliance evaluation

CCMC Canadian code compliance evaluation



CCMC number:	12808-R
Status:	Active
Issue date:	1997-05-16
Modified date:	2023-11-08
Evaluation holder:	► EIDCA Specialty Products Company (company of DuPont)
Product name:	Tyvek® HomeWrap® Breather Type Sheathing Membrane
Compliance:	NBC 2015, NBC 2020, OBC
Criteria:	CCMC-TG-072510.03-15, "CCMC Technical Guide for Sheathing Membrane, Breather Type" CCMC-TG-072510.03-20, "CCMC Technical Guide for Sheathing Membrane, Breather Type"

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report



In most jurisdictions this document is sufficient evidence for approval by Canadian authorities.

[Learn more about CCMC recognition](#) [Look for the trusted CCMC mark on products to verify compliance.](#)

Expand/Collapse all

View in PDF

► Compliance opinion

► Product information

► Conditions and limitations

► Technical information

► Administrative information

From: [National Research Council Canada](#)

Date modified: 2024-02-29

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report



In most jurisdictions this document is sufficient evidence for approval by Canadian authorities.

[Learn more about CCMC recognition](#) [Look for the trusted CCMC mark on products to verify compliance.](#)

Expand/Collapse all

View in PDF

► Compliance opinion

► Product information

► Conditions and limitations

► Technical information

► Administrative information

From: [National Research Council Canada](#)

Date modified: 2024-02-29

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/document.html?id=1280... ☆

▼ Compliance opinion

It is the opinion of the Canadian Construction Materials Centre that the evaluated product, when used as a breather type sheathing membrane in accordance with the conditions and limitations stated in this evaluation, complies with the following codes:

National Building Code of Canada 2015

Code provision ↑↓	Solution type ↑↓
9.27.3.2. Sheathing Membrane Material Standard	Alternative

National Building Code of Canada 2020

Code provision ↑↓	Solution type ↑↓
9.27.3.2. Sheathing Membrane Material Standard	Alternative

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report

9.27.3.2. Sheathing Membrane Material Standard

- 1)** Sheathing membranes shall conform to the performance requirements of CAN/CGSB-51.32-M, "Sheathing, Membrane, Breather Type."

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report

The above opinion(s) is/are based on the evaluation by the CCMC of technical evidence provided by the evaluation holder, and is bound by the stated [conditions and limitations](#). For the benefit of the user, a summary of the [technical information](#) that forms the basis of this evaluation has been included.

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report


nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/document.html?id=1280...

▼ **Product information**

Product name
Tyvek® HomeWrap® Breather Type Sheathing Membrane

Product description
The product is a white, spun-bonded olefin material that is made by combining continuous fibres of high-density polyethylene into a sheet using a heat and pressure process. The material allows to resist the passage of bulk moisture while maintaining a high degree of moisture vapour permeability.

The product is 0.15 mm thick and is available in rolls ranging in widths from 0.91 m to 2.90 m and lengths from 30.5 m to 60.9 m. The roll material is applied over the exterior sheathing material so that it forms a continuous envelope under the cladding system, around the entire building. The Figure 1 illustrates the application of the product.



The diagram illustrates the application of Tyvek HomeWrap Breather Type Sheathing Membrane. It shows a cross-section of a building's exterior wall. The wall structure consists of vertical studs and horizontal sheathing. A roll of Tyvek HomeWrap is being applied over the exterior sheathing material, forming a continuous envelope under the cladding system. The Tyvek logo and 'HomeWrap' text are visible on the roll.

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report



Figure 1. Installation of Tyvek® HomeWrap® Breather Type Sheathing Membrane

Manufacturing plant

This evaluation is valid only for products produced at the following plant:

Product name	Manufacturing plant
	Richmond, VA, US
Tyvek® HomeWrap® Breather Type Sheathing Membrane	☑

☑ Indicates that the product from this manufacturing facility has been evaluated by the CCMC

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/document.html?id=1280... ☆

▼ Conditions and limitations

The CCMC's compliance opinion is bound by this product being used in accordance with the conditions and limitations set out below.

- The product can be used as a breather-type sheathing membrane under commonly used types of exterior cladding to reduce the risk of water infiltration. The main purpose of the product is to create a continuous envelope around the occupied areas of residential or light commercial construction. Such continuity is achieved by overlapping the membrane per Article 9.27.3.3., Required Sheathing Membrane and Installation, of Division B of the NBC 2015 and NBC 2020 (joints must be lapped not less than 100 mm) or sealing the product either to itself (using CCMC-evaluated contractor sheathing tape), or to other construction materials (using an acoustical sealant). Where a CCMC-evaluated tape is required to provide continuity, its adhesion over the membrane must be validated. The membrane continuity at penetrations is beyond the scope of this evaluation and must be achieved according to the manufacturer's instructions.
- A conforming installation must be:
 - installed with the printed side facing outward;
 - protected from exposure to ultraviolet (UV) radiation from the sun within 60 days;
 - installed according to Article 9.27.3.3.;
 - installed with a minimum 10-mm air space between the sheathing membrane and the cladding, unless the cladding has been deemed to not require an air space (i.e., deemed by the CCMC or by building officials based on past cladding performance); and
 - installed with the material overlapping 100 mm to 150 mm at vertical joints and 100 mm at horizontal joints.

Note: Joints must be taped and sealed around both window and door openings.

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/document.html?id=1280... ☆

based on past cladding performance); and

- installed with the material overlapping 100 mm to 150 mm at vertical joints and 100 mm at horizontal joints.

Note: Joints must be taped and sealed around both window and door openings.

- A concealed air space exceeding 25 mm in width must contain proper fire blocking in accordance with Subsection 9.10.16., Fire Blocks, of Division B of the NBC 2015 and NBC 2020.
- The product must be clearly identified with the phrase “CCMC 12808-R.”

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/document.html?id=1280... ☆

▼ Technical information

This evaluation is based on demonstrated conformance with the following criteria:

Criteria number	Criteria name
CCMC-TG-072510.03-15	CCMC Technical Guide for Sheathing Membrane, Breather Type
CCMC-TG-072510.03-20	CCMC Technical Guide for Sheathing Membrane, Breather Type

The evaluation holder has submitted technical documentation for the CCMC's evaluation. Testing was conducted at laboratories recognized by the CCMC. The corresponding technical evidence for this product is summarized below.

► [Performance requirements](#)

Innovative Products

Tyvek HomeWrap – CCMC Evaluation Report

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/document.html?id=1280... ☆ 🔍 🔄 📄 📁

▼ Administrative information

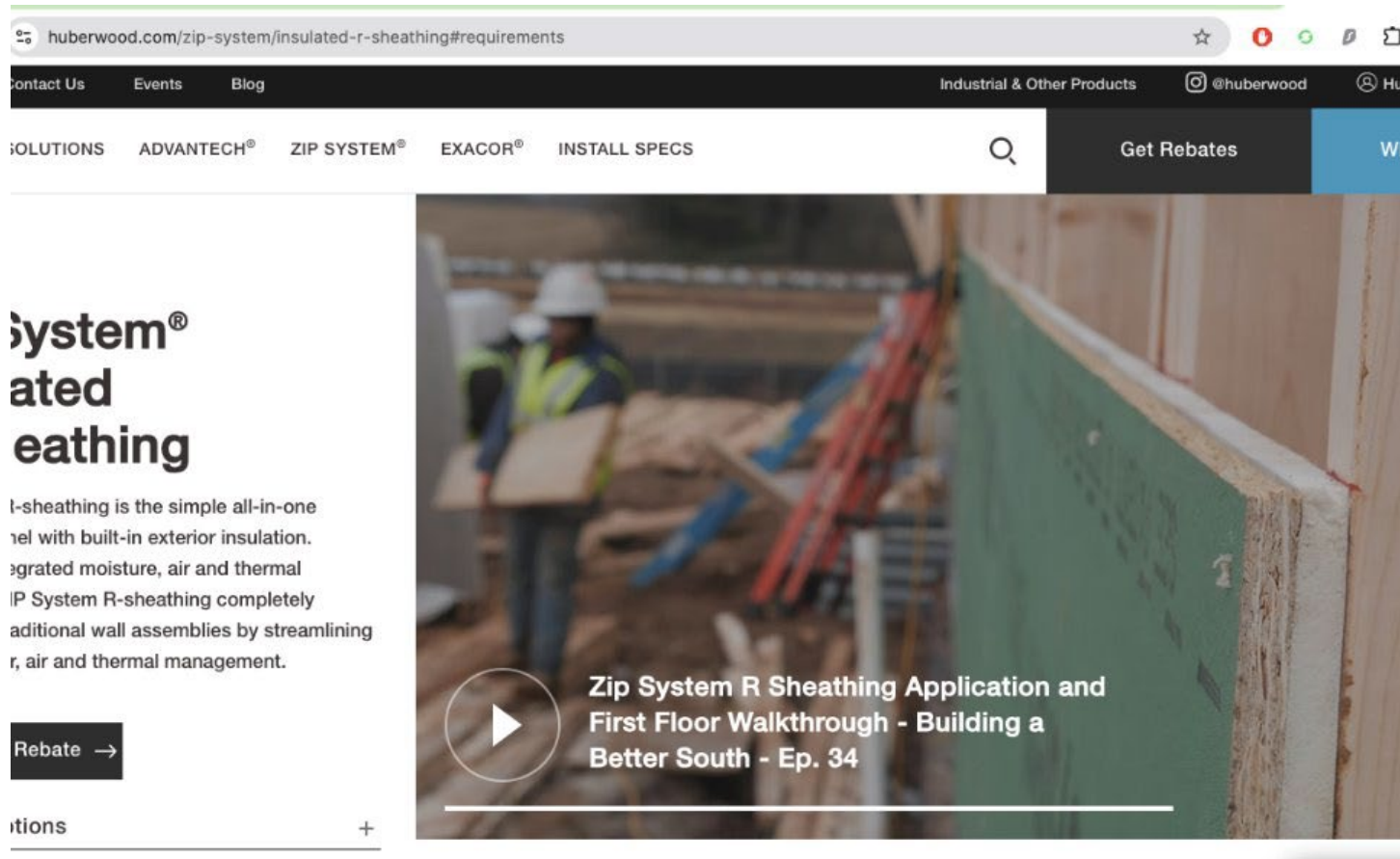
Use of Canadian Construction Materials Centre (CCMC) assessments

This assessment must be read in the context of the entire [CCMC Registry of Product Assessments](#), any applicable building code or by-law requirements, and/or any other regulatory requirements (for example, the [Canada Consumer Product Safety Act](#), the [Canadian Environmental Protection Act](#), etc.).

It is the responsibility of the user to confirm that the assessment they are using is current and has not been withdrawn or superseded by a later version on the [CCMC Registry of Product Assessments](#).

Innovative Products

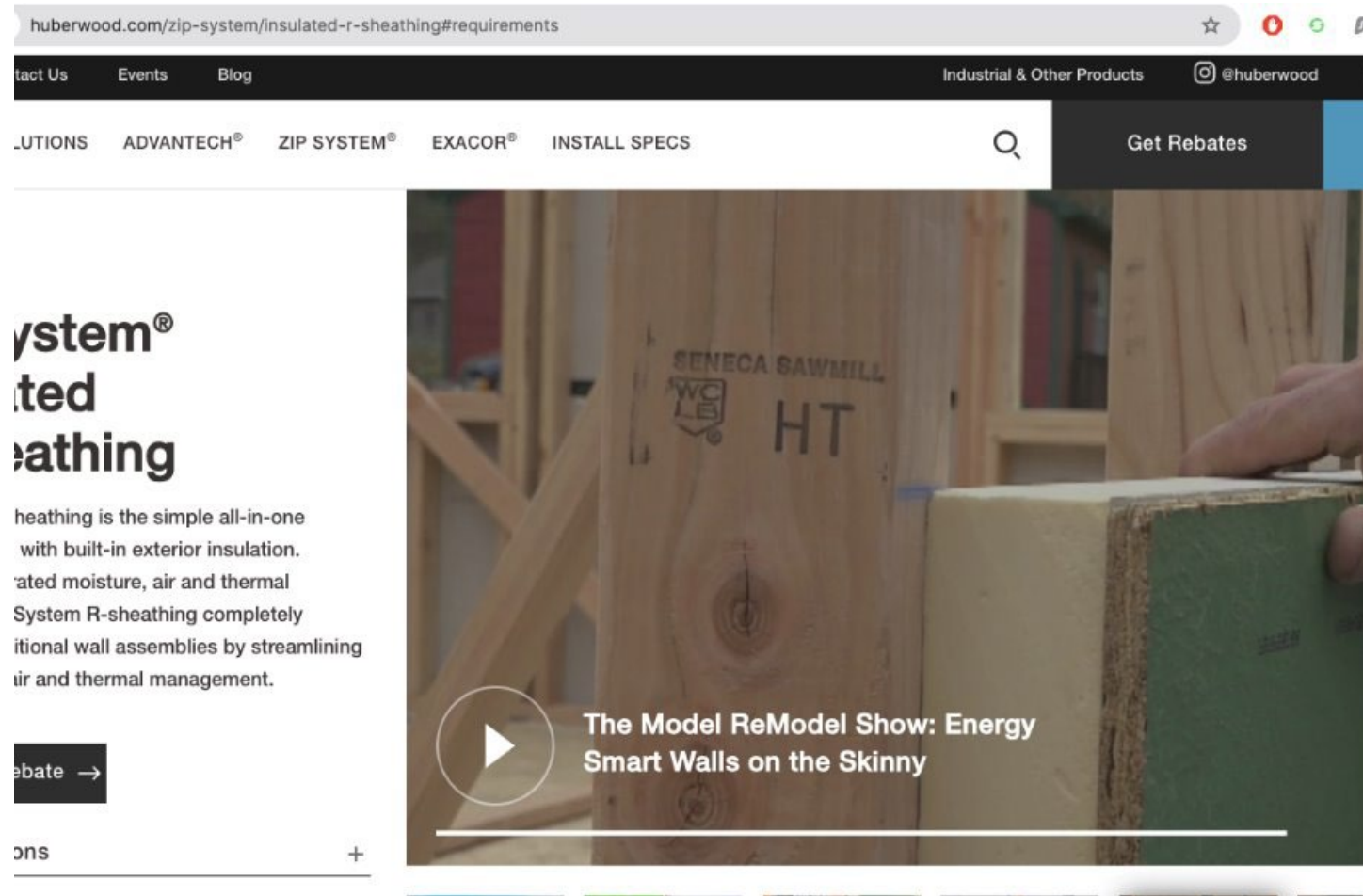
Zip R-Sheathing – CCMC Evaluation Report



The screenshot displays the Huberwood website's product page for Zip System R-sheathing. The browser's address bar shows the URL: huberwood.com/zip-system/insulated-r-sheathing#requirements. The website's navigation bar includes links for 'Contact Us', 'Events', 'Blog', 'Industrial & Other Products', and social media icons for Instagram (@huberwood) and Facebook (Huberwood). Below the navigation bar, a menu lists 'SOLUTIONS', 'ADVANTECH®', 'ZIP SYSTEM®', 'EXACOR®', and 'INSTALL SPECS'. A search icon and a 'Get Rebates' button are also visible. The main content area features a large image of a construction worker in a hard hat and safety vest working on a wall. Overlaid on this image is a video player with a play button icon and the title 'Zip System R Sheathing Application and First Floor Walkthrough - Building a Better South - Ep. 34'. To the left of the image, the text 'Zip System® Insulated R-sheathing' is displayed, followed by a description: 'R-sheathing is the simple all-in-one wall panel with built-in exterior insulation, vapor barrier, and thermal break. Zip System R-sheathing completely streamlines additional wall assemblies by streamlining the exterior wall, air and thermal management.' Below this text is a 'Rebate →' button. At the bottom left, the word 'Applications' is partially visible next to a plus sign icon.

Innovative Products

Zip R-Sheathing – CCMC Evaluation Report



Innovative Products

Zip R-Sheathing – CCMC Evaluation Report

CCMC 14075-R

Active

Company: Huber Engineered Woods LLC

Product:

- ZIP System® R-Sheathing

Code: NBC 2015

Technical Guide:

- CCMC-TG-061613.01-15

MasterFormat®:

- 06 16 00
- 06 16 26
- 09 28 00

Innovative Products

Zip R-Sheathing – CCMC Evaluation Report

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/document.html?id=1407...


[CCMC 14075-R] CCMC Canadian code compliance evaluation



CCMC number:	14075-R
Status:	Active
Issue date:	2017-11-16
Modified date:	2025-02-06
Evaluation holder:	▶ Huber Engineered Woods LLC
Product name:	ZIP System® R-Sheathing
Compliance:	NBC 2015
Criteria:	CCMC-TG-061613.01-15, "CCMC Technical Guide for Insulating Wood Sheathing in Shearwall applications"

Innovative Products

Zip R-Sheathing – CCMC Evaluation Report

 nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/document.html?id=1407... 

Expand/Collapse all

View in PDF

► Compliance opinion

► Product information

► Conditions and limitations

► Technical information

► Administrative information

From: [National Research Council Canada](#)

▼ Compliance opinion

It is the opinion of the Canadian Construction Materials Centre that the evaluated product, when used as insulating wood sheathing panels in lumber stud braced wall panels in accordance with the conditions and limitations stated in this evaluation, complies with the following code:

National Building Code of Canada 2015

Code provision ↑↓	Solution type ↑↓
4.3.1.1. Design Basis for Wood	<u>Alternative</u>
9.23.13. Bracing to Resist Lateral Loads Due to Wind and Earthquake	<u>Alternative</u>
9.23.17.2. Thickness, Rating and Material Standards	<u>Acceptable</u>
9.25.2.2. Insulation Materials	<u>Acceptable</u>

The above opinion(s) is/are based on the evaluation by the CCMC of technical evidence provided by the evaluation holder, and is bound by the stated conditions and limitations. For the benefit of the user, a summary of the technical information that forms the basis of this evaluation has been included.

Innovative Products

Zip R-Sheathing – CCMC Evaluation Report

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/ccmc-publications/document.html?id=1407... ☆ 🔍 🔄 📄 📁

Product name
ZIP System® R-Sheathing

Product description
This evaluation addresses the performance of Huber Engineered Woods LLC's proprietary ZIP System® R-Sheathing as insulating wood sheathing panels in lumber stud braced wall panel applications to resist lateral loads due to wind or earthquake.

Evaluation scope
This proprietary insulating sheathing results in the nail's head being offset a distance from the lumber stud. This leads to a reduction in the lateral resistance of the braced wall. This evaluation provides proprietary design values for high wind and seismic loadings in accordance with Part 4, Structural Design, and alternative solutions for Part 9, Housing and Small Buildings, of Division B of the NBC 2015.

Product
ZIP System® R-Sheathing is a panel product that consists of an 11-mm (7/16-in.) OSB structural sheathing bonded to a sheathing membrane on one side and to a rigid foam insulation material on the other. It is installed with the foam insulation facing the studs; therefore, the nail heads are offset a distance from the lumber stud, separated by the wood-based sheathing and the thickness of the foam insulation. [Figure 1](#) shows a typical installation of ZIP System® R-Sheathing. Note that this evaluation only covers the use of this product as insulating wood sheathing panels; its use for a sheathing membrane function is covered in [CCMC 14019-R](#).

Innovative Products

Zip R-Sheathing – ICC-ES Evaluation Report

The screenshot shows the ICC-ES Reports Directory website. The browser address bar displays `icc-es.org/reports-directory/`. The website header includes the ICC Evaluation Service logo, navigation links for Services, Reports Directory, News, and Meet ICC-ES, and a 'Get Certified' button. On the left, a 'Find Reports' sidebar contains filters for Report Type, Report Number (3373), Product Name (zip), and Product Type. The main content area shows 'Results: 1' and a 'View Legend' link. A toggle for 'Reports Directory' is set to 'On', and the results are 'Arranged by CSI'. A table lists the search results with columns for Report Number, Manufacturer, Product Name, and Codes. The table contains one entry for ESR-3373, manufactured by Huber Engineered Woods, LLC, for ZIP System® R-Sheathing (Insulated Sheathing). The codes listed are 18, 21, 24, IGCC, CBC, FBC, and LABC. A 'Chat with us!' button is visible in the bottom right corner.

Find Reports

Report Type
select report type

Report Number
3373

Product Name
zip

Product Type
select product type

Results: 1
View Legend

Reports Directory Arranged by CSI

10 entries per page

Report Number	Manufacturer	Product Name	Codes
ESR-3373	Huber Engineered Woods, LLC	ZIP System® R-Sheathing (Insulated Sheathing)	18 21 24 IGCC CBC FBC LABC

Showing 1 to 1 of 1 entry

Chat with us!

Innovative Products

Zip R-Sheathing – ICC-ES Evaluation Report

The screenshot displays the ICC-ES website interface. At the top, the navigation bar includes the ICC Evaluation Service logo, links for Services, Reports Directory, News, and Meet ICC-ES, and a prominent 'Get Certified' button. The main content area shows a report titled 'ESR-3373 - HUBER ENGINEER...' with a table of contents. The table lists sections: 'MOISTURE PROTECTION', 'Section: 07 21 00— Thermal Insulation', 'Section: 07 25 00— Water-Resistive Barriers/Weather Barriers', and 'Section: 07 27 00— Air Barriers'. Below the table, the '1.0 EVALUATION SCOPE' section is visible, detailing compliance with codes (IBC, IRC, IECC) and properties evaluated (Structural, Thermal resistance, Air leakage, Weather resistance). A right-hand sidebar contains a list of services (Testing, Product Certification, Inspection, Other Certification) and two buttons: 'Get Certified' and 'Reports Directory'.

ESR-3373 - HUBER ENGINEER... 1 / 9 100% +

MOISTURE PROTECTION			
Section: 07 21 00— Thermal Insulation			
Section: 07 25 00— Water-Resistive Barriers/Weather Barriers			
Section: 07 27 00— Air Barriers			

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2024, 2021 and 2018 [International Building Code® \(IBC\)](#)
- 2024, 2021 and 2018 [International Residential Code® \(IRC\)](#)
- 2024, 2021 and 2018 [International Energy Conservation Code® \(IECC\)](#)

Properties evaluated:

- Structural
- Thermal resistance
- Air leakage
- Weather resistance

Services **Reports Directory** **News** **Meet ICC-ES** **Get Certified**

- Testing
- Product Certification
- Inspection
- Other Certification

Get Certified

Reports Directory

Innovative Products

Zip R-Sheathing – ICC-ES Evaluation Report

The screenshot displays the ICC-ES website with the report listing for ESR-3373. The browser address bar shows icc-es.org/report-listing/esr-3373/. The ICC Evaluation Service logo is in the top left, and navigation links for Services, Reports Directory, News, and Meet ICC-ES are in the top right. The report title is "ESR-3373 - HUBER ENGINEERING...". The page number is 4 / 9, and the zoom level is 100%. The main content area shows two sections:

4.4 Thermal Resistance:
ZIP System® R-Sheathing panels have nominal thermal resistance in accordance with the R-Sheathing Type shown in [Tables 1](#) or [2](#).

4.5 Braced Wall Panels in Accordance with the IRC:
ZIP System® R-Sheathing panels have been evaluated for use in intermittent braced wall panel construction in accordance with IRC Section R602.10.2 when installed in accordance with [Table 1](#). The panels are

Below this, a section header "ESR-3373" is followed by a green badge that says "ICC-ES Most Widely Accepted and Trusted". To the right of this badge is the text "Page 4 of 9". The main text continues:

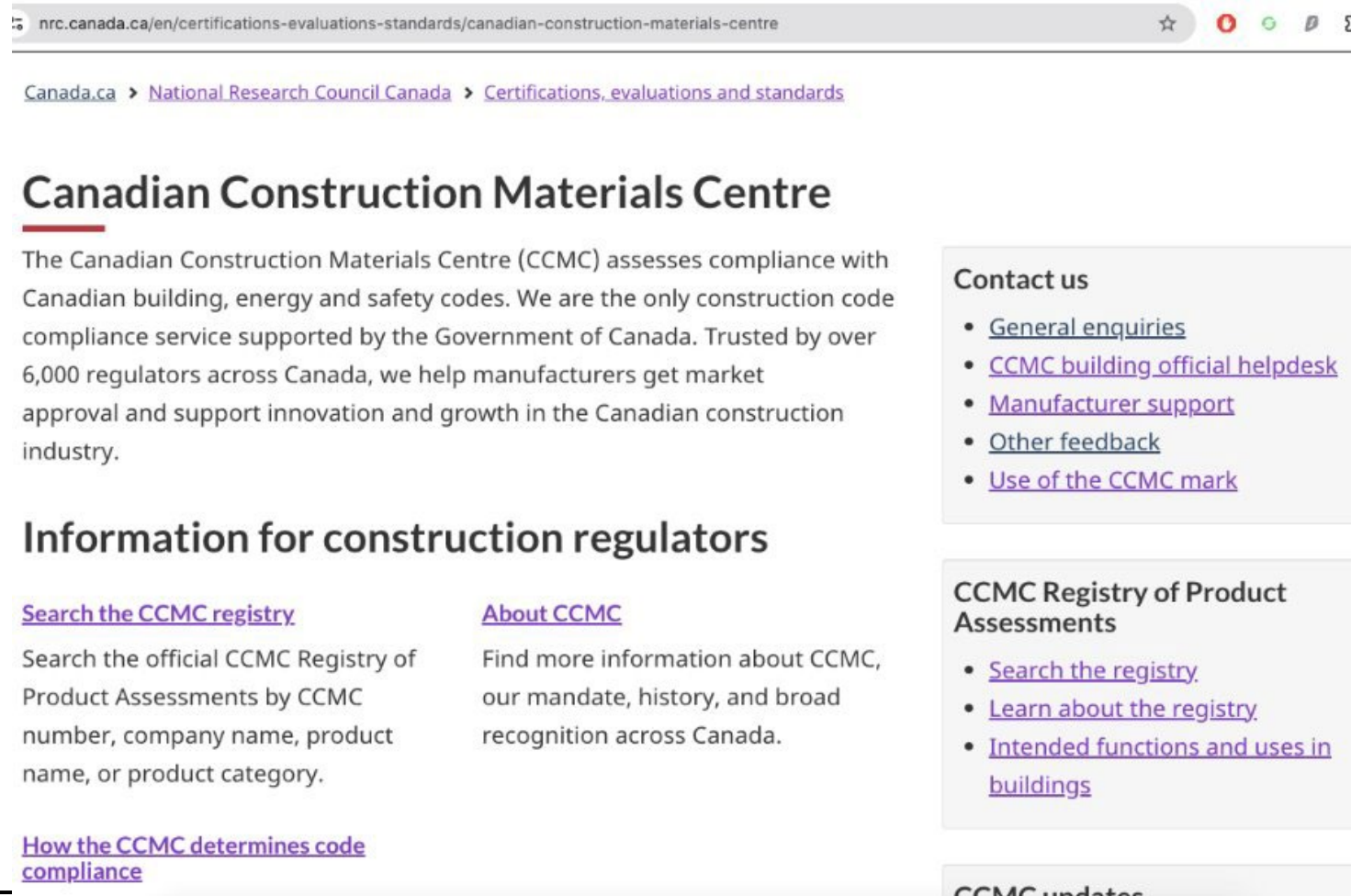
equivalent to wood structural panels used in Bracing Method WSP and may be used with amounts of bracing (lengths) specified in IRC Table R602.10.3(1), entitled "Bracing Requirements Based on Wind Speed." The minimum effective braced wall panel length must be 48 inches (1219 mm) for wall heights up to 10 feet (3048 mm), 4 feet 5 inches (1346 mm) for walls not exceeding 11 feet (3352 mm) in height, and 4 feet 10 inches (1473 mm) for walls not exceeding 12 feet (3658 mm) in height. For prescriptive wall bracing under this section (Section 4.5), use is limited to areas where wind design is not required per IRC Section R301.2.1.1 and in Seismic Design Categories (SDC) A, B, and C (excluding townhouses in SDC C); use of sheathing in other conditions is outside the scope of this report. Holes and notches in wood framing are permitted in accordance with IRC Section R602.6.

4.6 Wood Framed Shear Walls in accordance with the IBC and IRC:

On the right side of the page, there is a vertical sidebar with a list of links: "• Tes", "• Pro", "• Insp", and "• Oth". Below these links are two circular icons, one green and one white with a green border.

Innovative Products

Support for Building Officials



The screenshot shows the homepage of the Canadian Construction Materials Centre (CCMC). The browser address bar displays the URL: nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre. The breadcrumb trail reads: Canada.ca > National Research Council Canada > Certifications, evaluations and standards. The main heading is 'Canadian Construction Materials Centre'. Below it, a paragraph states: 'The Canadian Construction Materials Centre (CCMC) assesses compliance with Canadian building, energy and safety codes. We are the only construction code compliance service supported by the Government of Canada. Trusted by over 6,000 regulators across Canada, we help manufacturers get market approval and support innovation and growth in the Canadian construction industry.' There are three main content areas: 1. 'Information for construction regulators' with links for 'Search the CCMC registry' (describing the official registry search) and 'About CCMC' (providing general information). 2. 'Contact us' with links for 'General enquiries', 'CCMC building official helpdesk', 'Manufacturer support', 'Other feedback', and 'Use of the CCMC mark'. 3. 'CCMC Registry of Product Assessments' with links for 'Search the registry', 'Learn about the registry', and 'Intended functions and uses in buildings'. A 'CCMC updates' section is partially visible at the bottom.

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre

Canada.ca > National Research Council Canada > Certifications, evaluations and standards

Canadian Construction Materials Centre

The Canadian Construction Materials Centre (CCMC) assesses compliance with Canadian building, energy and safety codes. We are the only construction code compliance service supported by the Government of Canada. Trusted by over 6,000 regulators across Canada, we help manufacturers get market approval and support innovation and growth in the Canadian construction industry.

Information for construction regulators

[Search the CCMC registry](#)

Search the official CCMC Registry of Product Assessments by CCMC number, company name, product name, or product category.

[About CCMC](#)

Find more information about CCMC, our mandate, history, and broad recognition across Canada.

Contact us

- [General enquiries](#)
- [CCMC building official helpdesk](#)
- [Manufacturer support](#)
- [Other feedback](#)
- [Use of the CCMC mark](#)

CCMC Registry of Product Assessments

- [Search the registry](#)
- [Learn about the registry](#)
- [Intended functions and uses in buildings](#)

CCMC updates

Innovative Products

Support for Building Officials

nrc.canada.ca/en/certifications-evaluations-standards/canadian-construction-materials-centre/contact-canadian-construction-materials-c... ☆ 🔍 🔄 📄 🗑️

Building official helpdesk

For technical enquiries related to published CCMC code compliance assessments, contact:

Telephone: 613-990-1678

Email: ccmchelpdesk@nrc-cnrc.gc.ca

Enquiries are generally responded to within 1 to 2 business days.

CCMC updates

- [CCMC bulletins](#)
- [CCMC minimum documentation requirements](#)
- [CCMC data acceptance program](#)

Innovative Products

Support for Building Officials



Why Canadian Building Officials Trust ICC-ES

ICC Evaluation Service (ICC-ES) provides national-level certification of construction products to the National Building, Fire, Plumbing and Energy codes for innovative products.

A global non-profit organization with 90+ years of experience in construction product evaluation, we have issued evaluations to more than 5,000 codes and standards in more than 50 countries.

All Evaluation Service Reports (ESRs) are ISO/IEC 17065 compliant certifications to Canadian codes, making ICC-ES one of the most robust options for code compliance available. What sets ICC-ES apart from a traditional certification body is our ICC-ES-developed Acceptance Criteria. These standard-like documents are produced through a rigorous and transparent process that includes public comment



ICC-ES Canada
Building Official
Support



✉ es-canada@icc-es.org

☎ 1-800-423-6587

🌐 icc-es.org/contact-us



Look for
the Mark!

View the
ICC-ES Reports Directory:



icc-es.org/directory

End/Questions:



Tim Warner
Twarner@boabc.org



Canadian Building Regulatory System

Abbreviations

NRC	National Research Council of Canada
NRCan	Natural Resources Canada
CCMC	Canadian Construction Materials Centre
CCCME	Canadian Commission of Construction Materials Evaluation
BSSB	Building Safety Standards Branch
CSDS	Construction Standards and Digital Solutions
SSC	Standards Council of Canada
ICC-ES	International Code Council – Evaluation Services
CBHBC	Canadian Board of Harmonized Building Codes