

BOABC – 2024 BCBC, Bylaws & Regulations for Registered Professional

March 21, 2024 Hosted by: Ken Kunka, BCQ

Promoting Building Safety and Professionalism



Information presented today does not directly represent the opinions of the Building Officials Association of BC.

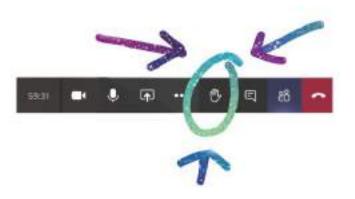
This presentation is conceptual and for informal educational purposes only. The presenters and association takes no responsibility for application of any concepts or interpretations in this presentation to specific projects.

(it may ask more questions than provide answers)

The slides must not be considered complete or exhaustive. Code provisions have been generally represented and may not reflect all exceptions.

Presenting from Summerland, on the ancestorial and unceded territory of the Syilx People in the Okanagan Nation.





- Registration will be tracked
- Presentation is not recorded but PowerPoint will be posted
- Please use raise hand icon if you have a question or comment
- PUT IT in the CHAT
- Please mute your microphone
- You may need to turn off your camera
- Please follow up by email if you have specific question or example to share with the membership.
  - kkunka@boabc.org



### Poll Question #1

## What is your level of BOABC Qualification?

- Level 01 Building 16%
- Level 02 Building 14%
- Level 03 Building 34%
- Level 01 Plumbing 23%
- Level 02 Plumbing 9%
- Other 4%

### Poll Question #2

### What region are you from?

- Lower Mainland 51%
- South Central Interior 19%
- Kootenay 8%
- Northwest 1%
- Central North Interior 3%
- Vancouver Island North 12%
- Vancouver Island South 7%



## March 21 – Reg. Professionals

### Today

- What's New Update and Training
- Interpretations and Appeals
- New Code overview
- Registered Professionals
  - Authority Registered Professionals
    - Code Division A, B, C
    - Industry Regulations/Acts
    - Bylaws
  - New Code Structural Part 4 & 9\* time permitting

### Lunch and Learns

CPD Eligibility: 1 point/presentation (Category A4). You will need to self report this point. Initial next to the presentation and then save it as a pdf to upload as proof. Previous Lunch and Learns can be found: <u>https://boabc.org/cpd-opportunity-</u> <u>lunch-learn-webinars/</u>



## What's New at the Association

#### What's New

www.boabc.org

CPD Opportunity – CASA Educational Seminar Series

Canadian Automatic Sprinkler Association

Learn More >

Lunch & Learn – March 21, 2024 CPD Opportunity – Local Government Compliance and Enforcement Association (LGCEA) Conference

2024 BOABC Conference Registration is Now Open





## WHATS NEW -NFPA Standards

Home / Continuing Professional Development / CPD Opportunity - CASA Educational Seminar Series

### **CPD Opportunity – CASA Educational Seminar Series**

CASA will once again be offering a series of Live Virtual Educational Seminars in 2024. The seminars will review a series of Fire Sprinkler / Fire Protection related subjects in accordance with the appropriate NFPA Standards, National Building Code & National Fire Code requirements. The Live Virtual seminars will help educate and offer best practices to the attendees on where to find the appropriate information in the referenced NFPA Standard, as well as how best to interpret and understand the intent of the many clauses found in the NFPA Standards and National Building Code & National Fire Code. The seminars will be presented in a virtual format via Zoom Video Conferencing, and all attendee's will be provided with an attendee workbook.

#### Cost:

- Member rate: \$175 plus GST
- NON-member rate: \$265 plus GST

#### CPD eligibility:

- · 4 points for a 4-hour webinar
- 5 points for a 5-hour webinar

These points qualify under Category A4 and will need to be self-reported.

Session times and details:

- Tuesday April 23, 2024 Update on 2019 Version of NFPA 13, NFPA 13R, NFPA 13D, from 11:00am 3:00pm EST; Click here to register
- Tuesday May 7, 2024 Inspection, Testing & Maintenance of Fire Sprinklers Overview of NEPA 25, from 11:00am 4:00pm EST: Click here to register
- Tuesday July 9, 2024 Overview of NFPA 24 -Installation of Private Fire Service Mains and Their Appurtenances, from 11:00am 3:00pm EST: Click here to register
- Tuesday July 30, 2024 Overview of Proper Acceptance Testing / Commissioning of Sprinkler Systems/Standpipes/Fire Pumps, from 11:00am 4:00pm EST: Click here to register
- Tuesday October 8, 2024 Update and Best Practices on AFFF Foam, from 11:00am 4:00pm EST: Click here to register
- Tuesday November 5, 2024 Sprinkler System Plan Review, from 11:00am 4:00pm EST: Click here to register
- Tuesday November 19, 2024 Pumps for Fire Protection Seminar -Overview of NFPA 20, from 11:00am 4:00pm EST: Click here to register
- Tuesday December 10, 2024 Standpipe Systems for Fire Protection -Overview of NFPA 14, from 11:00am 4:00pm EST: Click here to register



### 2024 Code Update – Div B - Part 01

### Section 1.3. Referenced Documents and Organizations Please note! NFPA 13 – Version changes

- NFPA-13 from 2013 to 2019 Registered Professional Design
- NFPA-13R from 2013 to 2019 Registered Professional Design
- NFPA-13D from 2013 to 2016 Registered Professional Design Not Required
  - What qualifications are required to design?

## WHATS NEW – Change for Ken



OFFICIA,

10 L

BUILDING

Follow on LinkedIn for updates Contact <u>ken.flywheel@gmail.com</u> <u>kkunka@boabc.org</u> After 30 years as a Building Official and 13 years as the Building and Permitting Manager – City of Penticton – moving on to the next phase of my career.

Flywheel Building Solutions - current

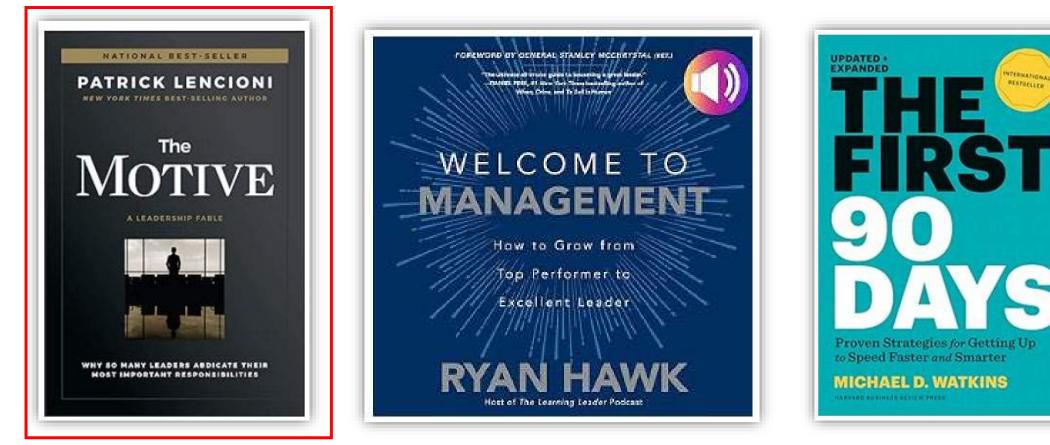
- Design and Consulting
- BOABC L&L

### May/June 2024 - expanding

- Research and Development Bulletins and Technical guides
- Code Coaching Teams and One:One
- Leadership and Enforcement Coaching



## **Recommendations-Leadership**



I would recommend reading and or listening to these books if you are interested or asked to be a supervisor, manager or leader (each step is different!!). Do it for the right reasons.



## Recommendations-Team/Self Development



Leaders are Readers – look into these and hopefully your local government has internal training opportunities. LGMA (MATI) and the Justice Institute have excellent courses.

Just make sure your boss also reads them, so that you are on the same page!



## 2024 NEW Code - Code Updates

If you attended the in-person training at the River Rock in November, you are not required to register for the online code update courses.





#### Training requirements for qualified officials:

- · Building: qualified building officials must complete the building code update training only
- · Plumbing: qualified plumbing officials must complete the plumbing code update training only
- Building & Plumbing: anyone who is dual qualified as both a building and plumbing official must complete building and
  plumbing code update training

Building (includes Energy) & Plumbing - Pre-register	\$375 plus GST
Building Only (includes Energy) - Pre-register	\$325 plus GST
Plumbing Only - Register now	\$125 plus GST
Energy Only - Register now	\$125 plus GST

#### Get the word out – Open to non-members



2024 BOABC Conference Registration is Now Open



Learn More +

## **BOABC 2024 Conference**

### 2024 Conference



The 2024 Conference for the Association will be taking place May 26 to 29, 2024 at the River Rock Casino Resort.

www.boabc.org

### May 26 to 29



## BOABC 2024 AGM

of British Columbia





f in

About 🔻 Membership 🖛 Qualification 👻 Certification 🁻 Exams 🍷 Education & Interpretations 🖛 2024 Conference Contact Us

Homo /News /Call for Nominations - BOABC 2024 AGM

#### Call for Nominations – BOABC 2024 AGM

The BOABC Annual General Meeting, will be held at 9:00 am on Tuesday, June 25, 2024. Unlike past years, the AGM is not being held at the Annual Conference in May. Instead, the AGM will be held online.

Pursuant to section 7(4) of the bylaws, formal notice of the AGM will be distributed to all members at least 30 days before the June 25, 2024, meeting date. The notice will include a registration link for the online meeting and agenda documents for members to review ahead of time.

The Governance and Nominating Committee is calling for nominations of candidates to serve on the BOABC Executive Committee.

- Positions Open for Nomination
- Call for Nominationa Form

If you have any motions to put forward, please complete the Call for Motions form.

Completed and signed nomination and motion forms must be submitted by 3:00 pm on Friday, April 12, 2024, to be considered at the 2024 AGM.

www.boabc.org

### AGM – June 25th

Learn More >



## MHABC Conference-Penticton

There is a 50% discount at the moment for the next 10 individuals to register from BOABC for a 2-day pass.

Enter the following promo code on our website (case sensitive): 24MODULARFORBC



### Modular for BC Roadmap to Housing Solutions

April 29, 30 & May 1, Penticton Lakeside Resort

Modular For BC- the roadmap to housing solutions. Enjoy expert speakers, actionable sessions, government networking opportunities, updates on provincial changes affecting the province.

REGISTER NOW

### April 29, 30, May 01



## 2024 BC Code Appeals - Interpretations

### **BC Code Appeals - binding**



### Interpretations – not binding



#### www.boabc.org

#### **Radon – Habitable space over garages**

	CODE INTERPRETATION CO committee with members representin AIBC, EGBC, BOABC	
File No: 18-0300	INTERPRETATION	Page 1 of 1
Interpretation Date:	February 13, 2024	
Building Code Edition:	BC Building Code 2018	
Subject:	Radon Rough-in Requirement for F Over Garage	labitable Space
Keyworda	Radon, Rough-in	8
Building Code Reference(s):	9.134.1.(1)(a), 9.134.2.(1), 9.134.2	(2), 9.10.9.16.(4)(a)
	portions of a dwelling unit, located above	
such as a garage, that has a floor below the floor-on-ground?	-on-ground, is a rough-in for a radion extra	citon system required
Interpretation:		
No.		
barrier system and the ground is d depreseurization system, dwelling	ept as permitted by Sentence (4), unless t tesigned to be accessible for the future in units and buildings containing reaidential don extraction system conforming to Articl	dallation of a subfloor occupancies shall be
would provide the space necessar detected in the building. In the situ	pace, such as a garage which incorporate ty to install mitigating features about the p attorn where the unconditioned space is a 9.16.(4)(a) would also be required to tep	getage an air barrier
Part Shek	è	
Patrick Shek, Pare, cp. sec. Come	mittee Chair	
Case Harpolates Convertise The Matting an prima ellings with respect to datapendations of mergenization of the BC Builting Costs. These vi-	(and according, with reservices representing ABC, PORC and in KANY Size Lock Market, President TKC and the Dity of Va the BC Schelerg Costs. The present of the recording to even incode not be seen chele as the Other in respective of interpretation costs with the local Addroch Having Antidett	Anoxide partnegate in the controller's is an incompany a officer precision will a wight and requirements based on the -

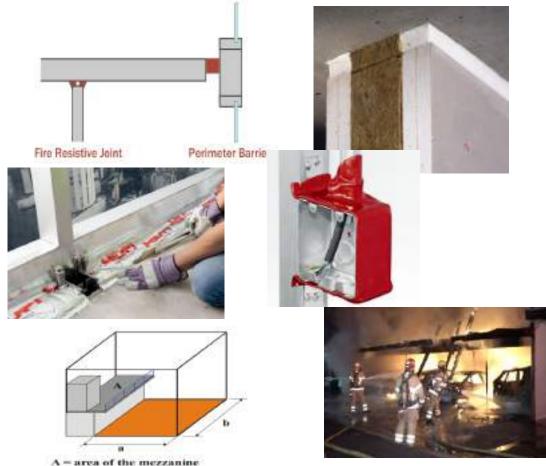


## Next Lunch and Learn – April

### Fire Protection – 3D Illustrated walk-thru

- 3.1.9. Penetrations in Fire Separations and Fire-Rated Assemblies
- 9.10. Mezzanines, Fire & Smoke Separations, Penetrations and Misc.

Please forward questions or bulletins to Ken Kunka at <u>kkunka@boabc.org</u>.



Images used with permission from Hilti Canada and Archtoolbox

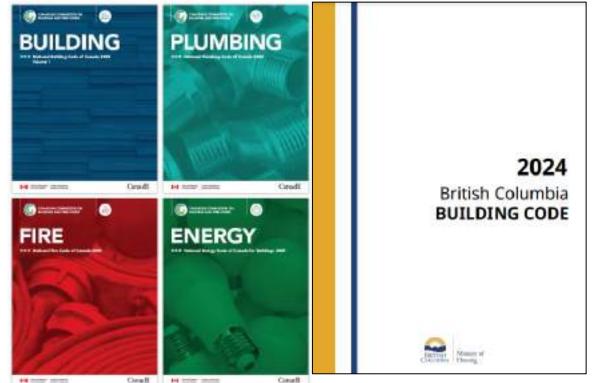


## 2024 Building Code Updates - UPDATE

2024 BC Building Code updates

(Harmonization) 2023

- Not fully harmonized (2025 NBC in the works)
- Still some Unique-to-B.C.
  - Secondary suites
  - Low Occupant Load Assembly





## 2024 BC Building Code New Format

- Matches look of NBC
- FREE! Online Only
- Updated March 8<sup>th</sup> more hyperlinks and Introduction section
- 1886 pages!
- Overall static document
- Volume 02 Part 9 Only
- Further upgrades coming and maybe even A.I. ?

#### **Table of Contents** Volume 1 Preface **Division A Compliance, Objectives and Functional Statements** Part 1 Compliance Part 2 Objectives Part 3 Functional Statements **Division B Acceptable Solutions** Part 1 General Part 2 Reserved Part 3 Fire Protection, Occupant Safety and Accessibility Part 4 Structural Design Part 5 Environmental Separation Part 6 Heating, Ventilating and Air-conditioning Part 7 Plumbing Services Part 8 Safety Measures at Construction and Demolition Sites Part 10 Energy Efficiency Appendix C Climatic and Seismic Information for Building Design in Canada Appendix D Fire-Performance Ratings **Division C Administrative Provisions** Part 1 General Part 2 Administrative Provisions Index **Conversion Factors** Volume 2 **Division B Acceptable Solutions** Part 9 Housing and Small Buildings Index **Conversion Factors**



#### 9.10.2.5. Group A, Division 2, Low Occupant Load

 This Part may apply to a Group A, Division 2 assembly occupancy that is permitted by Article 3.1.2.7. to be classified as a Group D, business and personal services occupancy, provided the building in which the assembly occupancy is located complies with Sentence 1.3.3.3.(1) of Division A. (See Note A-3.1.2.7.)

Left margin indicates unique to BC code item or change.

## 2024 BCBC Marked Changes

#### 2018 BCBC

9.10.14.	Spatial	Se	paration	Between	Buildings

#### 9.10.14.1. Application

1) This Subsection applies to huilding other than those to which Subsection 9.10.15. applies.

Right margin lines indicates change from

NBC

1

#### 9.10.14.2. Area and Location of Exposing Building Face

- 1) Except as permitted by Sentence (2), the area of an exposing building fair shall be
- a) taken as the exterior wall area facing in one direction on any side of a huilding, and

#### 2024 BCBC

- 9.10.14. Spatial Separation Between Buildings
- 9.10.14.1. Application

 This Subsection applies to buildings other than those to which Subsection 9.10.15. applies.

 This Subsection does not apply to detached carports conforming to Section 9.35. that serve not more than one duviling unit or a house with a secondary suite.

9.10.14.2. Area and Location of Exposing Building Face



# 2024 BCBC TOUR

	irces and industry / Construction industry / Building Codes & Standards / BC Codes / BC Codes 2024
ORE TOPICS	BC Codes 2024
Codes	+ Last updated on March 8, 2024
BC Codes 2024	
BC Codes 2018	BC Codes 2024 are now in effect, except for adaptable dwellings and earthquake changes
Errata & Revisions	which take effect March 10, 2025.
Technical Bulletins	An updated version of the BC Codes 2024 is now available, offering code users new interactive
Code Interpretations	features.
Other Code Resources	New technical bulletins for the 2024 BC Building Code are now available.
Letters of Assurance	
BC Public Review	
National Model Codes	On this page



# 2024 BCBC, Bylaws & Regulations for Registered Professional



## **Professional Governance Act**

All Registered Professionals fall under the Professional Governance Act

- Engineers and Geoscientists Regulation
- Architects Regulation
  - \*Applied Science
     Technologists and
     Technicians
     Regulation

https://professionalgovernancebc.ca/about/profe ssional-governance-act/



## 2024 Code – Architects - Part 09

https://boabc.org/wp-content/uploads/2024/01/Descriptive-Information-Guide.pdf

### **Architects for Part 9 buildings**

NOTE – Architects regulation requires an Architect where there are more than 4 dwelling units and more than 470sqm of total floor area for commercial

space, etc

OFFICIAL

-10

BUILDING



Note – A2 Low Occupancy allowance under Article 3.1.2.7. to be classified as Group D (unique to BC)

#### **Application of Part 9**

1) Part 9 of Division B applies to all *buildings* described in Article 1.1.1.1. of 3 storeys or less in *building height*, having a *building area* not exceeding 600 m<sup>2</sup>, and used for *major occupancies* classified as

- a) reserved
- b) Group C, residential occupancies (see Note A-9.1.1.1.(1) of Division B),
- c) Group D, business and personal services occupancies,
- d) Group E, mercantile occupancies, or
- e) Group F, Divisions 2 and 3, medium- and low-hazard industrial occupancies.

BCBC - Building area means the greatest horizontal area of a building above grade within the outside surface of exterior walls or within the outside surface of exterior walls and the center line of firewalls.



## Requirements – Part 9 - Arch

Poll Question #3

An Architect has been retained to design a "simple" Part 9 home. What are they required to submit?

- Sealed drawings 21%
- Letters of Assurance 2%
- Both 27%
- Neither 50%

**POLL QUESTIONS** 



## 2024 BC Building Code – Reg. Prof.

2024 BCBC makes (Crtl+F) approximately 57 references to **Registered Professional(s)** 

### Division C is the main reference for when a R.P is required.

Did you know there are no page # in the Code.

### **Conformity Assessment**

The NBC establishes minimum measures, which are set out within its own text or within referenced standards. However, the NBC does not set out who is responsible for assessing conformity to the measures or how those with this responsibility might carry it out. This responsibility is usually established by the governing legislation of the adopting provinces and territories. Provincial or territorial authorities should be consulted to determine who is responsible for conformity assessment within their jurisdiction.

In British Columbia, local authorities are authorized to, by bylaw, regulate construction and to enforce the requirements of the BCBC.

Those persons responsible for ensuring that materials, appliances, systems and equipment meet the requirements of this Code have several means available to assist them, ranging from on-site inspection to the use of certification services provided by accredited third-party organizations. Test reports or mill certificates provided by manufacturers or suppliers can also assist in the acceptance of products. Engineering reports may be required for more complex products.

Requirements for Registered Professionals are located in Division C of the BCBC

https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-andstandards/revisions-and-mo/bcbc\_2024.pdf



## 2024 BC Building Code – Defined Terms.

**Coordinating registered professional** means a registered professional retained under Clause 2.2.7.2.(1)(a) of Division C to coordinate all design work and field reviews of the registered professionals who are required for a project. (*this was not in the first version of the 2024BCBC*)

**Owner** means any person, firm or corporation controlling the property under consideration during that period of the application of Sentence 1.1.1.1.(1) of this Code. *(was not in the 2018 BCBC)* 

#### **Registered professional means**

• a person who is registered as an Architect with the Architectural Institute of British Columbia under the Professional Governance Act, or

• a person who is registered as a professional engineer or professional licensee engineering with the Association of Professional Engineers and Geoscientists of the Province of British Columbia under the Professional Governance Act.

**Registered professional of record** means a registered professional retained to undertake design work and field review in accordance with Subsection 2.2.7. of Division C.

https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-andstandards/revisions-and-mo/bcbc\_2024.pdf



## 2024 BC Building Code – Field Reviews

Field review means a review of the work

- at a building site, and
- where applicable, at locations where *building* components are fabricated for use at the *building* site

that a *registered professiona* in thier professional discretion considers necessary to ascertain whether the work substantially complies in all n aterial respects with the plans and supporting documents prepared by a *registered professional*.

Does EGBC and AIBC provide guidance for "substantially complies & professional discretion"?

https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-andstandards/revisions-and-mo/bcbc\_2024.pdf



### **Poll Question #4 – Field Reviews**

Are you finding it difficult to obtain field reviews in a timely manner?

- Yes 60%
- No 37%

# Put in the chat, which is the most problematic discipline to collect.





### 2024 Code – Reg Prof – Div C (Part 9)

#### 2.2.7. Professional Design and Review

(See Note A-2.2.7.)

#### 2.2.7.1. Application

- **1)** The requirements of this Subsection apply to
- a) buildings within the scope of Part 3 of Division B,
- b) *buildings* within the scope of Part 9 of Division B that are designed with common egress systems for the occupants and require the use of *firewalls* according to Article 1.3.3.4. of Division A, and
- c) the following, in respect of *buildings* within the scope of Part 9 of Division B other than *buildings* described in Clause (b),
  - i) structural components that are not within the scope of Part 9 of Division B (See Note A-2.2.7.1.(1)(c)(i).),
  - ii) geotechnical conditions at *building* sites that are not within the scope of Part 9 of Division B,

British Columbia Building Codes 2024

Division C 2-9

Who makes the call when other R.P's are required for a project? (Elec, Mech, etc) Building Official, Architect, CRP?



### **Code Update – Div C - Administrative Provisions**

### **Administrative Provisions**

Part 1 – General

Part 2 – Administrative Provisions

- No major changes but reminder of basic design, field review and commissioning requirements "Who Is Responsible for What" "The Owner is ultimately responsible"
- Alternative Solutions outlined
- Letters of Assurance
- Notes Detailed outline of design, field reviews and commissioning for Occupancy of buildings.



## Div C - Letters of Assurance - Changes

New Structural requirement.

OFFICIAL

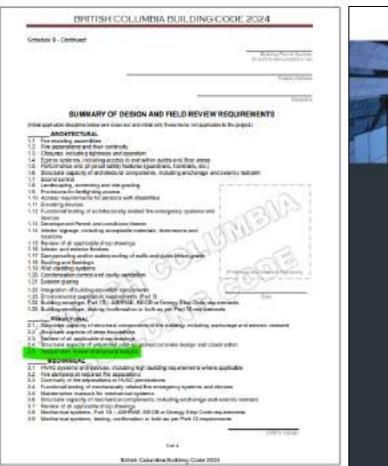
BUILDING

2.5 Independent review of structural designs

Additional line for email address.

Please ensure the 2024 LoA is used for BP applications.

And remember field reviews are required for all disciplines!







#### GUIDE TO THE STANDARD FOR DOCUMENTED INDEPENDENT REVIEW OF STRUCTURAL DESIGNS

ACCOUNTS AND IN THE PARTY OF TH



#### STRUCTURAL

- 2.1 Structural capacity of structural components of the building, including anchorage and seismic restraint
- 2.2 Structural aspects of deep foundations
- 2.3 Beview of all applicable shop drawings
- 2.4 Structural aspects of unbonded post-tensioned concrete design and construction
- 15 Independent review of structural design



## Div C - Letters of Assurance - Changes

### **Modifications to LoA – avoid if possible**

**A-2.2.7. Professional Design and Review.** This Subsection provides for the use of what are generally called Letters of Assurance. The letters themselves, known as Schedules A, B, C-A and C-B and located at the end of Division C, are intended to put on paper the responsibilities of the owner and the various registered professionals in a construction project. The Letters of Assurance do not impose any additional responsibilities on the registered professionals nor are they intended to alter the roles and responsibilities of the authorities having jurisdiction.

The Schedules have been very carefully scrutinized by the Province of British Columbia, Union of BC Municipalities, Building Officials' Association of British Columbia, Architectural Institute of British Columbia, Association of Professional Engineers and Geoscientists of British Columbia and their respective legal counsel. The precise wording in the letters is extremely critical and must not be modified. Any notations on these Schedules which are absolutely necessary to suit a particular project must be clearly and legibly marked in ink on the copies.

### **Industry Guides**



# Guide to the Letters of Assurance!

- Phased projects
- Tenant Alterations
- Part 9

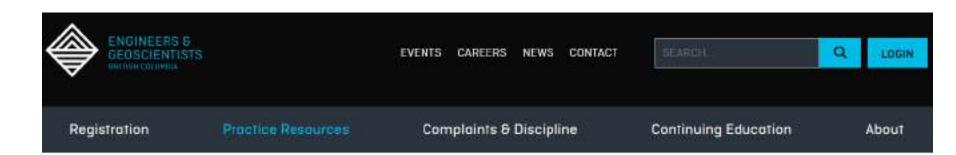
GUIDE TO THE LETTERS OF ASSURANCE IN THE BC BUILDING CODE 2018 AND VANCOUVER BUILDING BY-LAW 2019

VERSION 6.1: February 11, 2022

Building & Safety Standards Branch Office of Housing and Construction Standards Province of British Columbia

NOTE VIDEO - https://apps.egbc.ca/knowledgecentre/cd614723-c31b-414f-9867-890a34ba8234/

### **Industry Guides**



Home 
Practice Resources 
Individual Practice 
Guidelines 
Guidelines

#### Individual Practice

OFFICIAL

, OF

EGBC

50CIA7

BUILDING

38 -

Individual Practice Review

Individual Audit Program

Quality Management Guides

#### Guidelines 8

Advisories

Guidelines 6 Advisories Development Process

### Guidelines & Advisories

As part of its mandate to serve and protect the public interest as it relates to the practice of professional engineering and professional geoscience, Engineers and Geoscientists BC works with experts in their fields to develop professional practice guidance for its registrants. Guidance is published in the form of either professional practice guidelines or practice advisories, depending on the scope and nature of the topic.

Both types of documents assist registrants in meeting their professional obligations under the Professional Governance Act\* and the Engineers and Geoscientists BC Bylaws by establishing expectations and obligations of professional practice in relation to specific professional activities. Registrants are required to stay informed of, be knowledgeable about, and meet the intent of guidance documents that are relevant to their area of practice. For more information on the development process refer to the Guidelines & Advisories Development Process.

\*Note: The Professional Governance Act (PGA) came into force on February 5, 2021 in British Columbia, replacing the Engineers and Geoscientists Act. When professional practice guidelines and practice advisories are revised they will be updated to reference the PGA. However, existing references to the Engineers and Geoscientists Act remain valid and binding.

To find resources for firms, including the latest bulletins about the Permit to Practice Program, visit the Firm Practice page.

### Industry Guides-EGBC

NATURAL HAZARDS

IN BRITISH COLUMBIA



OFFICIAL

.

# **Industry Guides**



### AIBC

OFFICIAL

.

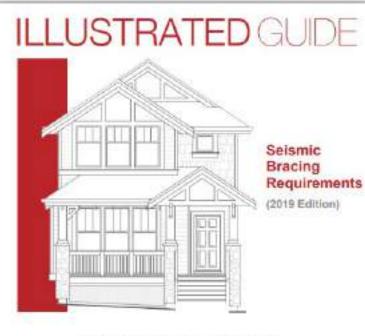
BUILDING

ABCHITECTURAL INSTITUTE OF BRITISH COLUMBIA DESCRIPTIVE MATERIAL

### Architects Regulation: Reserved Practice of Architecture

September 2023

This is an exemptativity guite and share not lake the place of the Anthreste Regulator that, which prevails in of cases

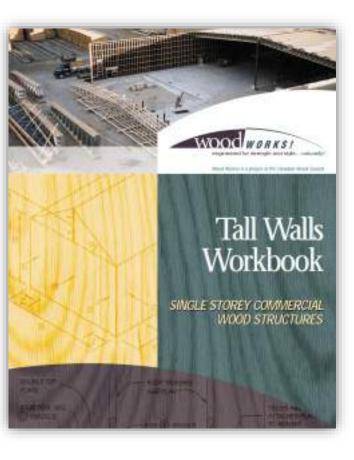




This guide has been developed to essist wood frame house designers and Isultiers in British Columbia to understand and comply with lateral load. provisions under Part 9 of the BC Building Code.

**Update coming?** 







#### DEVELOPMENT SERVICES STREET, GEOTECHNICAL HAZARD ANALYSIS Requirements for generoholical analysis of generotation' hazard areas. Ballotte Hat 28-01 Annual Field ST, 2010 PURPOSE The following information is provided to authors the requirements for geolechnical investigation to address the known geotechnical hapard page -----within the City of Personan. We City ad Presinium remainst all developers and ballines to uname the land that they develop to build up it call-flat the interded us 4. This bulketin place not surface The sequentiality of a qualities benchmark Engineer to take all masonable sleps during their The City of Pestidon has identified specific in the end of Parard areas that need to be considered by the improver all becaul far all development and bainding property. This fighting is to provide combined at the potential might on a preset ...... PROFESSION AND ADDRESS OF A DOMESTIC array different hearth aven. this includes the level of andrehoutgi convergional and the petential for the development to be likeled in carrier years for their gendechnical conditions: REFERENCES & BACKGROUND 1. Building Bylant Ho. 2021-21-Part 3. Part 12 & Part 27. 3. Saladeistan & Development Sylaw No. 2009-81 - Section (0300) - Roads 1. Stope Stability Review for - The City of Participit: Dated Supramber 2022 4 Perfectional Practice Guideline - Dester Inniat Ingineering Services for Building Projects -6280 3. Refeational Practice Guideline: - Lanchilde Assessments in British Columbia - 6080. **IMPLEMENTATION** Pior to the addression of a development application, or Wildow point, the posteriopmi is in review the hazard mapping to determine the tool of quickcheater investigation mapping to address the branch percedure of Nazard. The Gro may not printed any territopowert approvals without the Ecotochrists Plazard www.tigitlorcheing.com/deted. The specific geotechnical Nationhon require invite to be placed in land that may impact some developments to may repare additional civil works to address the based. These brids, at additional works, hand to be pinternatived to ensure the proposated evelopment to talk and what the contribution requirements are

pentictur.ca

Line Design Prop. 27, 2020

EVELOPMENT

...

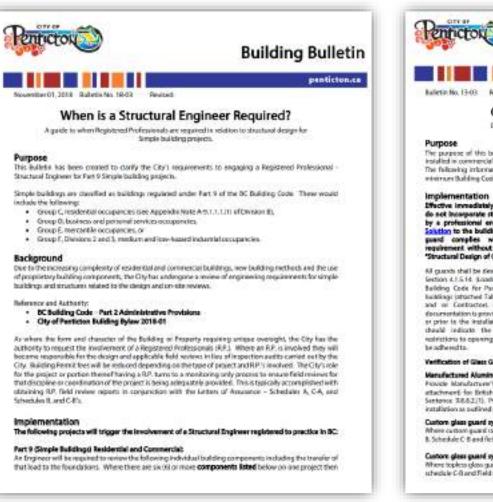
-

\_

Z

741111

# Local Government Bulletins – RPs



**Building Bulletin** penticton.cs Balletin No. 13-03 Revised March 33, 2022 GLASS GUARDRAIL REQUIREMENTS Design requirements related to Part k, 4 & 9 of the BC Building Code The purpose of this builletin is to provide a consistent interpretation of the installation of pless quard rails. installed in commercial and residential applications as outlined in Part 4 and Section 9.8 of the BC Building Code. The following information will provide clarification for typical installation standard requirements to ensure winimum Building Code standards are achieved where glass goard installations are proposed. Difective investigately all glass guards installations that do not incorporate structural top rails shall be reviewed by a professional engineer and submit an Alternative solution to the building official to explain how the glass guard compiles with the structural redundancy requirement without the top rails (CAN/COSB-12.20-M, "Structural Design of Glass for Buildings).

All gaants shall be designed to withstand loads specified in Section 4.1.5.14. Boards on Guards and Handraido of the BC Balleling Code for Part 3 buildings or 9.8.8.2 for Part 9. kuistingi (attached Table 9.5.8.3.), including kauset. Owner: and or Contractors shall be exponsible for ensuring documentation to provided at the time of comit plan review. or prior is the installation of the guards. Parent drawings thould indicate the quantical design. Heights and restrictions to openings as outlined in Section 9.8 must also



Verification of Gines Guard Designs (refer to Sectors and Information)

#### Variafactured Aluminum/wood with glass infill panels:

Provide Manufacturer's quecifications for encour by important decours conformation to Table 98.8.2. (See attachmenti for British Columitia Building Code - Section 9.8.8. Specified Leads for Guards Ferning Part of Sentence 38.82.11. Projects under supervision of a Registered Professional must provide confirmation of installation as putlined within the Letters of Assamnes.

#### Custom glass guard systems (free standing with custom top cap):

Where custom guard rail systems with top cap are propered, submit oraled structural design drawings, Schedule 8. Schedule C-8 and field reports verifying the system design and installation prior to Occupancy Inspection.

#### Custors glass gaard systems (no tap cap):

Where topicss plass guard rail systems are proposed, salimit alternate solution application including Schedule B. schedule C-B and Field reports prior to Occupancy inspection.

Page S of A



# 2024 BCBC TOUR Division C



# Local Building Bylaw Regulations – R.P.

### How does your Building bylaw address Registered Professionals?

Examples from City of Penticton - MIABC model core bylaw template. The Corporation of the City of Penticton

Bylaw No. 2021-21

A Bylaw for the administration of the Building Code and the regulation of construction.

WHEREAS the Council of the City of Penticton may, by bylaw, regulate, prohibit and impose requirements in respect to buildings and structures for the following:

- the provision of access to a building or other structure, or to part of a building or other structure, for a person with disabilities;
- (b) the conservation of energy or water;
- (c) the reduction of greenhouse gas emissions;
- (d) the health, safety or protection of persons or property;

AND WHEREAS the Council of the City of Penticton is enacting this bylaw to regulate construction and administer the British Columbia *Building Code* in Penticton in accordance with the *Community Charter* and the *Building Act*;

AND WHEREAS the Council of the City of Penticton has employed trained building officials for the purpose of this bylaw;

NOW THEREFORE BE IT RESOLVED that the Municipal Council of the City of Penticton, in open meeting assembled, hereby ENACTS AS FOLLOWS:

PART 1. TITLE

Citation

1.1. This bylaw may be cited as "Building Bylaw No. 2021-21".

March 2024 – EL 01 Zero Carbon update



### Poll Question #5 – Bylaw updates

When was the last major revision to your Building Bylaw?

- Recent within 5 yrs 44%
- Not so recent 5 to 10ish yrs 39%
- Can't remember 17%

### **Poll Question #6**

Is your Building Bylaw modelled from the MIABC Core Building Bylaw?

- Yes 51%
- No 30%
- Would like to no time 19%



# Local Building Bylaw Regulations – R.P.

### Responsibilities

(excerpts)

"professional design" means the plans and supporting documents bearing the date, seal or stamp, and signature of a registered professional;

#### PART 11. REGISTERED PROFESSIONAL'S RESPONSIBILITIES

#### **Professional design and Field Review**

- 11.1. The provision by the owner to the City of letters of assurance in accordance with the requirements of the Building Code shall occur prior to
  - the pre-occupancy site review coordinated by the coordinating registered professional or other registered professional for a complex building; or
  - (b) an occupancy inspection for a simple building in circumstances where letters of assurance have been required in accordance with the requirements of the Building Code, in which case the owner must provide the City with letters of assurance in the form of Schedules C-A or C-B, as appropriate, as outlined in the Building Code.
- 11.2. If a registered professional provides letters of assurance in accordance with the **Building Code**, they must also provide proof of professional liability insurance to the **building official**.



### Responsibilities

(excerpts)

### **Permit Application**

# Local Building Bylaw Regulations – R.P.

- 11.4. The **building official** may require any **registered professional** carrying out the **professional design** and field review required under Section 11.1 to 11.3 to provide evidence that they have experience and expertise in respect of the **professional design** and field review of the context and scope required and at the discretion of the **building official**, a peer review may be required prior to the acceptance of any design or field reviews conducted by a **registered professional**.
- 11.5. Any registered professional required by this bylaw to provide letters of assurance shall show proof of professional liability insurance at time of **building permit** application.

### 14.6 Building Permit Application for Complex Buildings

14.6 In addition to the requirements of Section 14.5 of this bylaw, a **building official** may require the following to be submitted with a **permit** application for the **construction** of a **complex building** if the complexity of the proposed **building** or **structure** or siting circumstances warrant

 site servicing and on-site storm water management drawings, including sufficient detail of off-site services to indicate locations at the property line, prepared and sealed by a registered professional, in accordance with the City's Bylaws;

### 14.7 Building Permit Application for Simple Buildings

 (m) include an excavation & storm water management plan design prepared by a registered professional in accordance with the Building Code;



### **Permit Application**

# Local Building Bylaw Regulations – R.P.

- 14.8 In addition to the requirements of Section 14.7 of this part, if a project involves
  - (a) two or more **building**s, the gross floor areas of which in the aggregate total more than 1000m<sup>2</sup>;
  - (b) two or more buildings that will contain four or more dwelling units; or
  - (c) otherwise if the complexity of the proposed building or structure or siting circumstances warrant,
  - (d) a building official may require the following be submitted with a permit application for the construction of each simple building in the project:
    - site servicing drawings, including sufficient detail of off-site services to indicate locations at the property line, prepared and sealed by a registered professional, in accordance with the City's Bylaws;
    - ii) a construction fire safety, material staging and trucking route plan;
    - a section through the site showing grades, **building**s, **structure**s, parking areas and driveways;
    - iv) a roof plan and roof height calculations in geodetic elevations;
    - structural, electrical, plumbing, mechanical or fire suppression drawings prepared and sealed by a registered professional;
    - vi) letters of assurance in the form of Schedule B referenced in the Building Code, signed by a registered professional;
    - vii) any other information required by the building official or the Building Code to establish substantial compliance with this bylaw, the Building Code and other bylaws and enactments relating to the building or structure, and



# Local Building Bylaw Regulations – R.P.

### Inspections for Simple Buildings

Inspections for Simple buildings

- 14.41 Despite the requirement for the **building official**'s acceptance of the **work** outlined in Section 14.48, if a **registered professional** provides letters of assurance, the **City** will rely solely on field reviews undertaken by the **registered professional** and the letters of assurance submitted pursuant to this bylaw as assurance that the aspects of the **construction** referenced by those letters of assurance substantially conform to the design, plans and specifications and that the **construction** complies with the **Building Code**, this bylaw and other applicable enactments respecting safety. Copies of all field reviews must be submitted to the **City**.
- 14.42 Despite Section 14.45 of this part, a **building official** may attend the site from time to time during the course of **construction** to ascertain that the field reviews are taking place and to monitor the field reviews undertaken by the registered professionals.



### **Complex Buildings**

# Monitoring only with specific check-ins

Other other types of permits – House moves, commercial ventilation, fire suppression, etc. with R.P.

# Local Building Bylaw Regulations – R.P.

#### **Complex building Commissioning**

14.48 For work in respect of complex buildings, the owner must

Building Bylaw No. 2021-21

Page 33 of 55

- (a) give at least 48 hours' online or written notice to the City when requesting a preconstruction meeting with the building official prior to the start of construction, and the owner or his or her representative must ensure that the coordinating registered professional, the constructor, as well as representatives of major trades, are in attendance;
- (b) give at least 48 hours' online or written notice to the City when requesting a pre-occupancy coordinated by the coordinating registered professional or other registered professional to have the owner, the constructor, and the registered professionals demonstrate to the building official and City Fire Department the compliance with the health and safety aspects of the work, the coordination and integration of the fire and life safety system, applicable City requirements and other enactments respecting safety and the conservation, GHG emissions and accessibility aspects of the work; and
- (c) cause the coordinating registered professional, at least 48 hours prior to the pre-occupancy coordinated site review coordinated by the coordinating registered professional, to deliver to the building official the Confirmation of Required Documentation described in the prescribed form, complete with all documentation in a hard covered three ring binder and in digital pdf format on a memory stick.



# **Engineers – Retaining and other structures**

### Geotechnical? Structural?

Where does 1.2m come from? Varies across BC.

1.2m to 2.0m

What is required – sealed drawings & Letters of Assurance?

\*When a stand-alone landscaping wall.

What about staggered walls and superimposed loads?

### **Typical Building Bylaw Requirements**

All retaining walls require a building permit when they support ground that is critical to the stability of building foundations. [See BCBC 2018 A-9.3.2.9(4)]

#### CONCRETE RETAINING WALLS

Concrete retaining walls require a building permit and Structural Engineer's certification when they are greater than 1.2 m (4.0 ft) in height.

#### INTERLOCKING BLOCK RETAINING WALLS

Interlocking block retaining walls **require a building permit** and **Geotechnical Engineer's certification** when required by manufacturer's specifications or when they are greater than 1.2 m (4.0 ft) in height, whichever is lower.

### WOOD RETAINING WALLS

All wood retaining walls & cribbing must be pressure-treated and require a building permit and Geotechnical Engineer's certification when:

- they support ground that is critical to the stability of building foundations (regardless of height) [See BCBC 2018 A-9.3.2.9(4).], or,
- they are greater than 1.2 m (4.0 ft) in height.

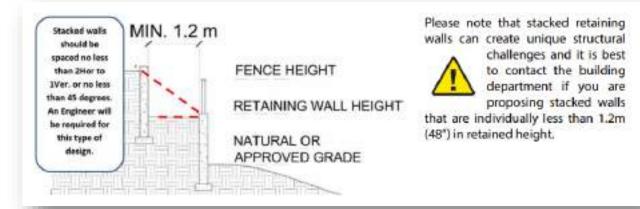


## **Engineers – Retaining and other structures**

### **Staggered Walls**

## Superimposed Loads – Existing structures

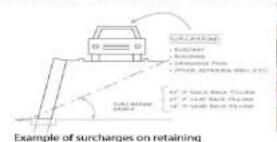
## Geotechnically or Environmentally sensitive areas



#### OTHER CONDITIONS THAT MAY TRIGGER A PERMIT

Please note that Building Permits and Engineering may be required for walls under 1.2m in height where:

- Located within a geotechnical or environmentally sensitive area (Development Permit area) high ٠ hazard or works along steep banks or watercourses,
- . The Building Official determines that the existing site conditions, such as overburden (such a driveway or steep slope) or poor drainage conditions which may create a hazardous condition.





#### WORKS NEAR EXISTING STRUCTURES AND WALLS

It is important to also verify that landscaping projects will not compromise an existing structure or dwelling. Proposed excavations should not be below a depth of a structure/footing projecting from a line at 45 degrees from the base of the footing/structure. (angle of repose -see side picture).







# **Engineers – Retaining and other structures**

### EGBC guide – but more for Civil works

What about other structures – concrete or aluminum panel in ground pools?

- **Engineered drawings?**
- Put it in the Chat



CIVIL AND TRANSPORTATION INFRASTRUCTURE

RETAINING WALL DESIGN

(ERSION L



### **Poll Question #7 – Retaining walls**

A 1.8m retaining wall is being constructed at the rear yard of a property (away from buildings). Should you request:

- Sealed drawings
- Letters of Assurance
- Both
- Not Sure

**POLL QUESTIONS** 



# Part 4 and 9 Solar

Seismic updates - On Hold March 10, 2025



# Next L&L Sessions

April 25, 2024 Fire Protection Fire Separations and Penetrations

• Part 3

• Part 9

May 2024 June thru Dec - 2024 **No Session** Pending **BOABC Conference** 



# **Questions - Contact Us**



#### Contact Us

Home / Contract Us.

Your Name Organized

Your Ernal (required) Department Please Decree

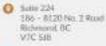
Subject

Your Mexican

#### Get in Touch

Please complete the form. We'll do everything we can to respond to you as quickly as possible. Our goal is to reply to every small within two humbers days.

daili	2.24	16.0	4.1	64.0	د ا	-
YEM 1111	-	JAK,	30	11 N	n	138



604-270-9516

🖸 info@basec.org

Departments.

Membership Services (Qualification, Cartification, Exam etc.) 604-82/0-9518 - Jermiller Schwaartzel