



# BOABC – 2024 BCBC Lunch and Learn Single Egress Stairs – Part 01

September 19, 2024

Hosted by: Ken Kunka, AScT BCQ

Special Guest – Robert Heikkila of Jensen Hughes

Promoting Building Safety and Professionalism



# Overview

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

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.



# Rules of the Room



- 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](mailto:kkunka@boabc.org)



# Aug 22– Drainage and Storm Water

## Recap – Part 7 & 9 (Plumbing Code)

- Defined and undefined terms
- Foundation Drainage vs. Storm Drainage
- Unrestricted matters – Bldg Act
- There appears to be a lot of latitude for local governments to initiate requirements not regulated in the Code = a lot of inconsistency.
- On-site water management challenges will increase and likely require more engineering for infill and steep lot developments
- **Polls Questions**


### 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:

<https://boabc.org/lunch-learn-webinars/>



# August 22 – Poll Question Results



## Poll Questions


**Poll Question #1**  
**What is your level of BOABC Qualification?**

- Level 01 Building – 16%
- Level 02 Building – 11%
- Level 03 Building – 29%
- Level 01 Plumbing – 22%
- Level 02 Plumbing – 17%
- Other – 4%

**Poll Question #2**  
**What region are you from?**

- Lower Mainland – 40%
- South Central Interior – 21%
- Kootenay – 6%
- Northwest – 6%
- Central North Interior – 2%
- Vancouver Island North – 19%
- Vancouver Island South – 5%

POLL QUESTION




## POLL QUESTION - Materials

What is the most common drain tile and drain pipe foundation drainage materials? Material Standards.

- ASTM C4, "Standard Specification for Clay Drain Tile and Perforated Clay Drain Tile" – 1%
- ASTM C412M, "Standard Specification for Concrete Drain Tile" – 0%
- ASTM C444M, "Standard Specification for Perforated Concrete Pipe" – 1%
- ASTM C700, "Standard Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated" – 0%
- BNQ 3624-115, "Polyethylene (PE) Pipe and Fittings for Soil and Foundation Drainage," – 33%
- CSA B182.1, "Plastic drain and sewer pipe and pipe fittings" or – 64%
- CAN/CSA-G401, "Corrugated steel pipe products." – 1%

What does "big ol' fat" under??


POLL QUESTION - Multiple Answers



## POLL QUESTION - What is a Drywell?


There is no defined term for a drywell within the BCBC or NPCC

- A – 17%
- B – 8%
- both? – 75%



What is a Dry Well?

POLL QUESTION



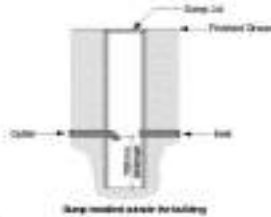
## POLL QUESTION - SUMPS

Other than for a drainage layer or non-gravity system, does your community require a Sump prior to entering a:


- Storm Sewer – 55%
- Drywell – roof – 2%
- Drywell – Fdn – 2%
- Unknown – 42%

Is this by:

- Code interpretation – Policy? – 15%
- Bylaw? – 41%
- Not sure – 44%



POLL QUESTION - Two questions



## POLL QUESTION - Minimum required

Part 9 Buildings - AHJ

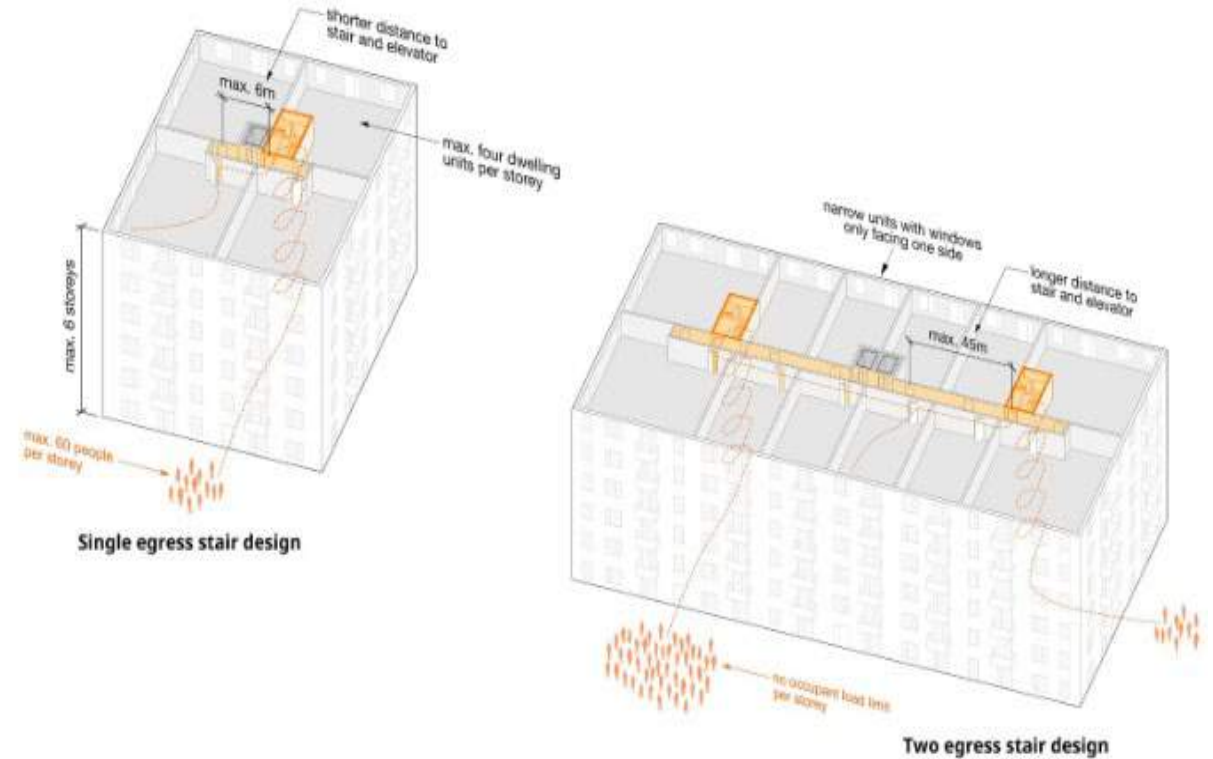
- Does your local government require roof drains/gutters and downspouts for all buildings?
  - Yes – 42%
  - Depends – 7%
  - No – 45%
  - Not sure – 6%
- Can leaders go to splash pads?
  - Yes – all – 48%
  - Depends – 31%
  - No – 13%
  - Not sure – 7%
- Does your LG have a requirement for when an Engineer would be required for "simple" part 9 buildings when it comes to drainage systems?
  - Yes – bylaw – 36%
  - Yes – policy – 17%
  - No – 29%
  - Not sure – 18%



# Sept 19 – Single Egress Stairs

## Today's Session

- What's New Update and Training
- Appeals and Technical Bulletins
- Single Egress Stairways
  - Background
  - Development layout
  - Jensen Hughes Report (July 2024)
  - 2024 Code Changes
- Part 02 outline - suggestions



Contributed by: LGA Architectural Partners





# Poll Questions

## Poll Question #1

### What is your level of BOABC Qualification?

- Level 01 Building – 17%
- Level 02 Building – 8%
- Level 03 Building – 43%
- Level 01 Plumbing – 15%
- Level 02 Plumbing – 6%
- Other – 11%

## Poll Question #2

### What region are you from?

- Lower Mainland – 50%
- South Central Interior – 23%
- Kootenay – 1%
- Northwest – 2%
- Central North Interior – 3%
- Vancouver Island North – 10%
- Vancouver Island South – 10%



# Heads Up – 2025 Conference

[Home](#) / [News](#) / Save the Date: 2025 BOABC Conference – Kelowna, BC

## Save the Date: 2025 BOABC Conference – Kelowna, BC

2025 BOABC Conference

May 11 to 14, 2025

**Delta Hotels Grand Okanagan Resort**  
Kelowna, BC

Mark the dates in your calendar! The annual Association conference is bringing building and plumbing officials, staff from municipal and provincial governments, engineers, architects, representatives from industry associations, and other stakeholders together in Kelowna for learning opportunities and networking. The event is typically attended by 200 delegates from across B.C. and provides an excellent opportunity to showcase your organization if you choose to participate in the tradeshow or become an event sponsor.

Information and details to follow in the coming months.

**Get it in your 2025 Budget!**





# 2024 Education Summit



## WELCOME to the EDUCATION SUMMIT 2024!

Canadian Home Builders' Association of BC (CHBA BC) Education and Building Officials' Association of BC (BOABC) are pleased to present the 2nd annual Education Summit for builders and building officials in BC.

- When? **October 23 – 24, 2024**
- Where? **Sheraton Richmond Airport Hotel, Richmond, BC**

*This Summit is your chance to learn about building code advancements, earn continuing professional development points, and connect with experts in the industry!*



# What's New – Adaptable Extension

The screenshot shows the BC Gov News website interface. At the top, there is a search bar and navigation links for Home, Ministries, Sectors, Connect, Subscribe, and News Archive. The article is categorized under 'Housing'. The main headline is 'B.C. grants in-stream protections to projects underway'. Below the headline, there are share icons and a 'PRINT' button. The article text states: 'The Province is granting in-stream protections for housing projects that are underway in relation to new 2024 building code changes for adaptable dwellings, and earthquake designs. BC Building Code 2024 came into effect on March 8, 2024. At that time, the new earthquake-design and adaptable-dwelling provisions were moved to March 10, 2025, to allow more transition time for local governments, design professionals and developers to implement the new requirements. Further review of the transition timeline identified the potential for construction delays, additional costs and impact on the feasibility of in-stream projects if buildings designed to the 2018 BC Building Code earthquake-design and adaptable-dwelling provisions needed to be redesigned to meet 2024 requirements.'

Projects are identified as underway or in-stream if:

- a **development-permit application and drawings** have been submitted to a local authority in relation to the building **before March 8, 2024**; or
- a **rezoning application and drawings** have been submitted to a local authority in relation to the building **before March 8, 2024**; or
- **drawings have been prepared for the building by a registered professional before March 8, 2024.**

**In all cases, a building permit application must be submitted before March 8, 2027.**



# 2024 BC Code – Technical Bulletins B24-10

**NEW – Development Permit Applications**

**NEW – Rezoning Applications**

**New – Drawings Prepared:**

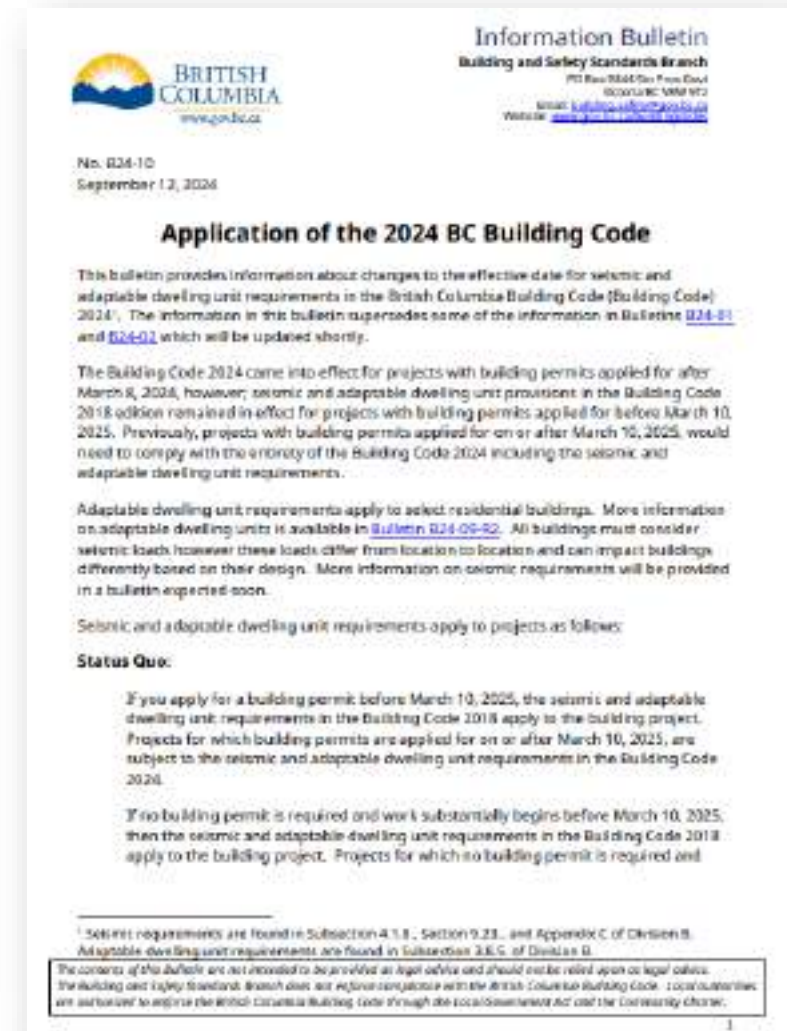
Projects for which drawings were prepared before March 8, 2024, have a new option to extend the application of the seismic and adaptable dwelling unit requirements in the Building Code 2018 provided the following criteria is met:

Drawings must:

- contain information on the number of dwelling units, OR information on the dimensions of dwelling units, OR information on the dimensions of structural components or assemblies,
- be prepared by, or prepared under the supervision of, a registered professional or a registrant of the Applied Science Technologists & Technicians of BC, AND
- **have been prepared before March 8, 2024**

These drawings may not have been submitted to a local authority if there was no application in advance of a building permit application, however the date of these drawings would be used to determine that they were complete before March 8, 2024. If these three criteria are met, then seismic and adaptable dwelling unit requirements in the Building Code 2018 apply to the project; **HOWEVER, a building permit for the project must be applied for before March 8, 2027, AND work must continue to completion without interruption, other than work stoppages considered reasonable to industry.** If these three criteria are met but the building permit is applied for on or after March 8, 2027, then the seismic and adaptable dwelling unit requirements in the Building Code 2024 apply to the project.

**How will this impact your permit review and records management process?**







# What's New – House Designs

[Home](#) / [News](#) / [Update: Standardized Housing Designs & Single Exit Stair Buildings](#)

## Update: Standardized Housing Designs & Single Exit Stair Buildings

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### Standardized Housing Designs

The Province has commissioned standardized, customizable residential designs and a companion catalogue for people building small-scale, multi-unit housing on lots previously zoned for single-family homes and duplexes. The digital designs are free to the public and can be used by builders, designers, and homeowners to build accessory dwelling units, duplexes, triplexes, quadplexes, and townhomes. Local governments can also choose to fast track approval of the designs to expedite permitting and development.

### Single Exit Stair Buildings

Code changes allowing the design and construction of single exit stair buildings came into effect on August 27, 2024.

An information bulletin will be published soon and will explain the new single exit stair code requirements. Please check the [Technical Bulletins – Province of British Columbia \(gov.bc.ca\)](#) webpage.

To find out more you may visit the [provincial website](#).

**NOT PRE-APPROVED DESIGNS**



# What's New – House Designs

## Building Block Customization

The component-based system is designed as a kit of parts that can be mixed and matched to suit the user's needs. To start, modularized units, or "Building Blocks," are created by selecting elements from the system as desired. The system is composed of interchangeable floor plans that can be layered two or three stories high, and includes options for garages and increased number of bedrooms. The blocks also offer options for variety of roof shapes. Finally, the Building Block can be personalized with cladding and roofing material selections as well as optional solar shading devices.

### Step 1. BASE

Choose a ground floor plan:



Plan 10 - no garage



Plan 11 - garage

### Step 2. ADD

Add one or two upper floor plans to:



Plan 2A - 2 bedrooms



Plan 2B - bedroom + stairs

### Step 3. ROOF

Choose a roof shape:



Pitched 1



Pitched 2



Pitched 3



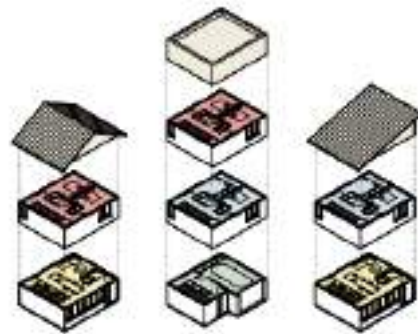
Flat

Standardized Design Catalogue

7 | Standardized Design Catalogue

## Building Block Customization

### Possible Combination Examples



#### Example A:

Pitched 1 Roof  
+ Plan 2A  
+ Plan 1A

#### Example B:

Flat Roof  
+ Plan 2A  
+ Plan 2B  
+ Plan 11

#### Example C:

Pitched 3 Roof  
+ Plan 2B  
+ Plan 1A

Standardized Design Catalogue





# 2024 BC Code Appeals - Interpretations

BC Code Appeals – binding      Interpretations – not binding

## Building and Plumbing Code Interpretations 2024

Search:

Code Edition	Interpretation Number	Title	Date Approved	File
2024	24-0034	Balcony Access in Adaptable Suites	21/05/2024	<a href="#">Download</a>
NEW 2024	24-0032	Tactile Walking Surface Indicators	16/07/2024	<a href="#">Download</a>
NEW 2024	24-0030	Illumination of Exterior Path of Travel	16/07/2024	<a href="#">Download</a>
NEW 2024	24-0028	Egress from Multi-Level Dwelling Units	16/07/2024	<a href="#">Download</a>
2024	24-0025	Lever Handles for Faucets in Adaptable Suites	21/05/2024	<a href="#">Download</a>
NEW 2024	24-0024	Plumbing Systems for Showers in Adaptable Suites	16/07/2024	<a href="#">Download</a>
2024	24-0023	Future Conversion of Adaptable Suites	21/05/2024	<a href="#">Download</a>
2024	24-0022	Adaptable Bathrooms	21/05/2024	<a href="#">Download</a>
2024	24-0021	Adaptable Bedrooms	21/05/2024	<a href="#">Download</a>
NEW 2024	24-0020	Double Header Joist around Floor Opening	16/07/2024	<a href="#">Download</a>
NEW 2024	24-0016	Accessory Building	16/07/2024	<a href="#">Download</a>
NEW 2024	24-0015	Measurement of Clear Floor Space Width at a Door	16/07/2024	<a href="#">Download</a>
2024	24-0013	Accessible Ramp, Landing and Walkway Curb Protection	18/06/2024	<a href="#">Download</a>
2024	24-0012	Future Visible Signal Devices in Ensuite Bathrooms	18/06/2024	<a href="#">Download</a>
NEW 2024	24-0010	Climbable Objects and Steps Near Guards	16/07/2024	<a href="#">Download</a>
2024	24-0009	Landing at Top of Mezzanine Stair	18/06/2024	<a href="#">Download</a>
NEW 2024	24-0008	Unsupported Height of Foundation Wall	16/07/2024	<a href="#">Download</a>
2024	24-0007	Cooling System in a Dwelling Unit	19/03/2024	<a href="#">Download</a>
NEW 2024	24-0006	Application of Tables in 9.36.2.6, 9.36.2.7 and 9.36.2.8.	16/07/2024	<a href="#">Download</a>
2024	24-0005	Encroachment of Clear Transfer Space for the Change Room Accessible Bench	18/06/2024	<a href="#">Download</a>
2024	24-0004	Spatial Separation Between Dwelling Units with Storage Garage	21/05/2024	<a href="#">Download</a>





# BOABC Forum – Member Question

## CSA-Z240MH Step Code Compliance?

I'm getting push-back from Z240MH manufacturers.  
Is there anyone out there asking for the Pre-construction Step Code Compliance report?

### Responses

- Div A 1.1.1.1.(2)(g) limits the application of BCBC to site prep, service connections, and appliance installation only.
- The confusion seems to rest in the difference between an A277 (Modular) and Z240 (Mobile Home). As both buildings fall under the CSA A277 umbrella, both are inherently modular in construction methods (made in a factory). The CSA Z240 is third party certified beyond other modular made buildings (A277's). The Building Official does not need to further certify a Z240 as it is 'exempt from the Code' that Building Official's rely on to 'certify' or inspect and approve other types of buildings. The Z240 buildings do contain important information on the Manufactured Home Specification Nameplate label (ground snow/roof design loads, etc) that need to be verified before the RBO can issue an occupancy certificate. (A.C)

- **Consensuses** is that Step Code compliance and even the requirement for cooling (26C) is exempt for CSA-Z240MH units.

**September 23 L&L – application and inspection guides CSA A277 & Z240MH – Gord Rattray**



# BOABC - Sept 23 Lunch and Learn



Recommending reading/research before L&L:

- Building Code
- Div A – 1.1.1.1.(3)
  - A-1.1.1.1.(3)
- BOABC Interpretations
- Building Bylaw – Zoning
  - Mobile Home park bylaw
- CSA Z240MH
  - Z240.10.1:19 – Site prep...
- CSA A277 (2016)

Feature ————— No-fee online training

New online CSA Group training, available at no fee, aims to help the industry and regulators better understand the benefits and processes of modular construction. This can facilitate smoother delivery, certification, and approval of modular construction projects and contribute to broader adoption of this alternative method.

*Modular Construction Projects  
– Delivery, Certification,  
Approvals Processes*

[Start learning](#)

September 23 L&L – application and inspection guides CSA A277 & Z240MH – Gord Rattray

# Single Egress Stairs

The 2023-built Capitol Hill Community Houses is an example of a six-storey multi-family residential building with a single egress staircase. (Habitat For Humanity)



# Code Change

[Home](#) / [News](#) / [Update: Standardized Housing Designs & Single Exit Stair Buildings](#)

## Update: Standardized Housing Designs & Single Exit Stair Buildings

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### Standardized Housing Designs

The Province has commissioned standardized, customizable residential designs and a companion catalogue for people building small-scale, multi-unit housing on lots previously zoned for single-family homes and duplexes. The digital designs are free to the public and can be used by builders, designers, and homeowners to build accessory dwelling units, duplexes, triplexes, quadplexes, and townhomes. Local governments can also choose to fast track approval of the designs to expedite permitting and development.

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An information bulletin will be published soon and will explain the new single exit stair code requirements. Please check the [Technical Bulletins - Province of British Columbia \(gov.bc.ca\)](#) webpage.

To find out more you may visit the [provincial website](#).



# POLL QUESTION – Alternate Solution

**Has your local government reviewed a request for a Single Egress Stairway under an alternative Solution?**

- Yes – 8%
- No – 61%
- Unknown – 31%

# Background

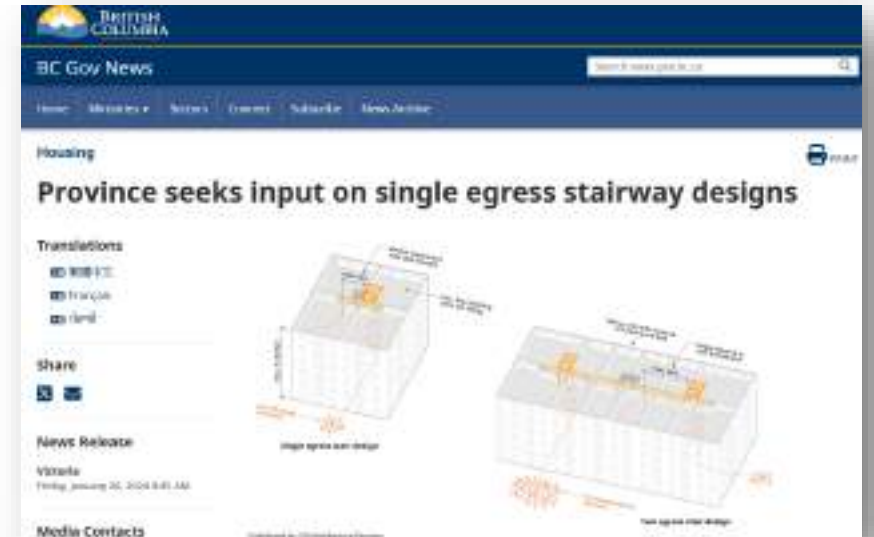
Over the last decade there has been increased debate on the pros and cons of Single Egress (SE) stairways. With the Province adopting the British Columbia Building and Fire Codes (BC Codes 2024) – it initiated harmonization with the NBC to provide people with a greater level of building safety and accessibility but also to make new buildings more cost-effective and efficient.

The research into SE stairways was part of the Province's Homes for People action plan. Announced in spring 2023, the plan builds on historic action to deliver housing since 2017 and sets out further actions to deliver the homes people need faster, while creating more vibrant communities throughout B.C.

*"We're leaving no stone unturned in our work to deliver more homes faster for people," said Ravi Kahlon, Minister of Housing. "This work will focus on developing an understanding of if and how this innovation can be incorporated into building and fire codes in a way that maintains and enhances safety, supports access and egress, while providing more homes for people in B.C."*



[New action plan delivers more homes for people, faster | BC Gov News](#)



[Province seeks input on single egress stairway designs | BC Gov News](#)



# Background

Recent Industry advocacy for single egress stairs  
(Point Access Block) in Canada/BC.



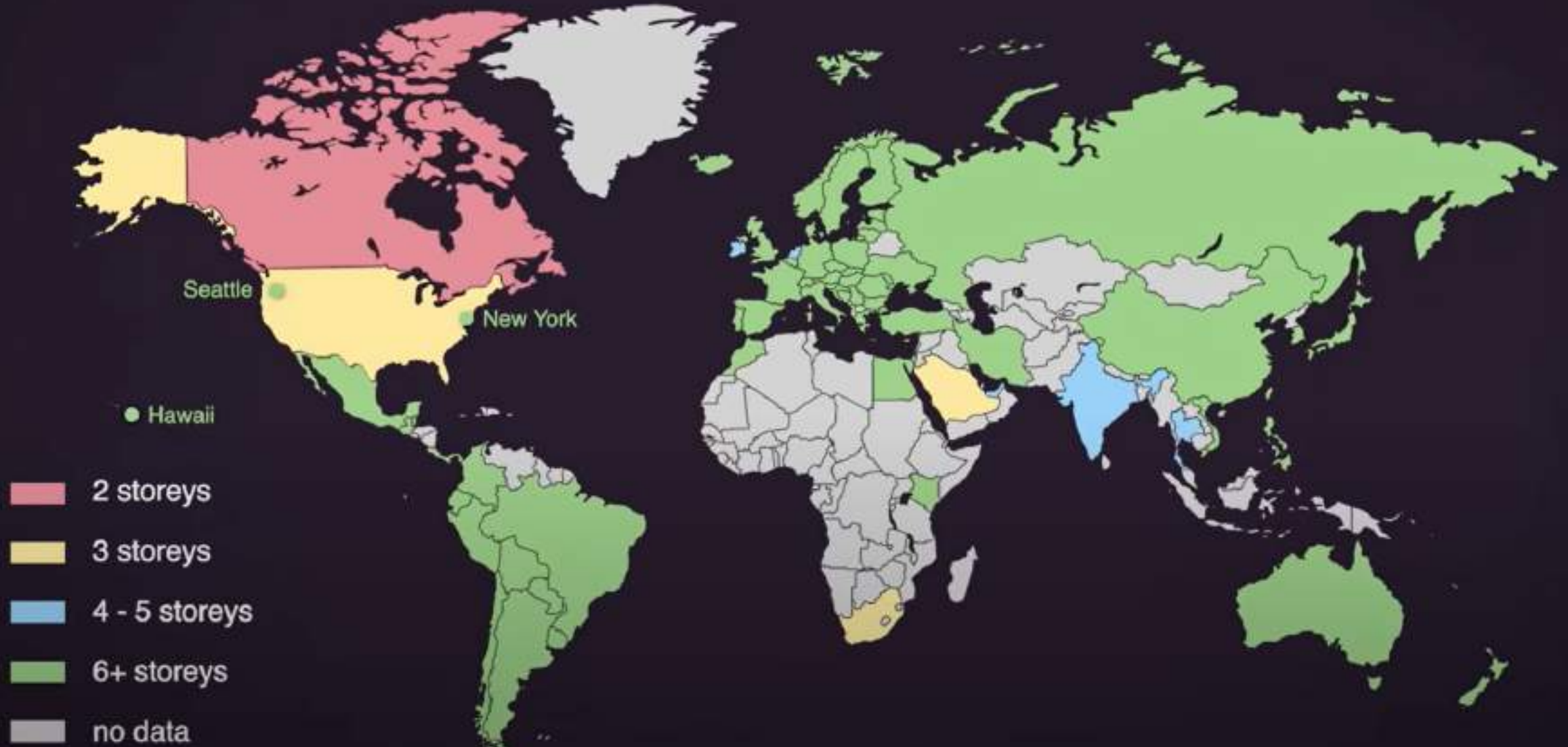
[Why North America Can't Build Nice Apartments \(because of one rule\) \(youtube.com\)](https://www.youtube.com/watch?v=...)

..back in the day when building codes were being developed – one of your biggest threats to your life in the city was dying in a fire or maybe contracting tuberculosis....



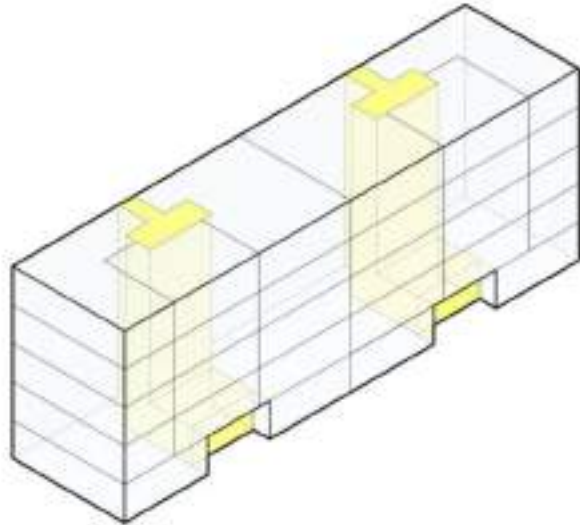
[Single-exit stairways should be allowed in more BC buildings: housing minister \(citynews.ca\)](https://www.citynews.ca/news/...)

# Above what height does an apartment require 2 staircases?



# Background (2021) Vancouver – Point Access Blocks

Final Report – Prepared by Larch Lab  
for the City of Vancouver, 28  
December 2021



The report touches on the qualitative aspects of point access blocks, and how they can lead to more climate resilient housing than double loaded corridors. They are also incredibly compact, which makes them ideal for cost optimized Passivhaus buildings. We've also included a few case studies ranging in size from three stories to seven, as well as an analysis of the really incredible Vienna House by PUBLIC. Architecture + Communication, currently in planning.

[City of Vancouver report on Point Access Blocks - larch lab](#)

## City of Vancouver report on Point Access Blocks

Larch Lab prepared a report on Point Access Blocks (single stair buildings) for Vancouver, B.C. – to help unlock more livable, affordable, low carbon, small lot development.

Unlocking livable, resilient,  
decarbonized housing  
with Point Access Blocks



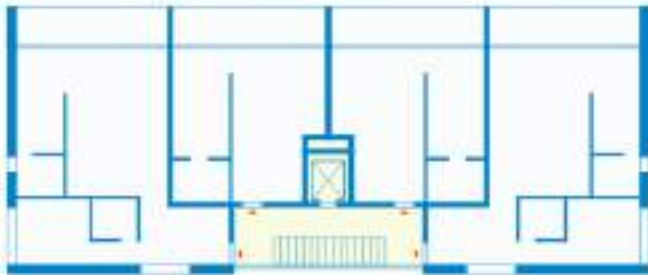
[Eliaison\\_CoV-Point-Access-Blocks-report\\_v1.2.pdf \(larchlab.com\)](#)



# Background (2023) Vancouver – Point Access Blocks

## 01 Introduction

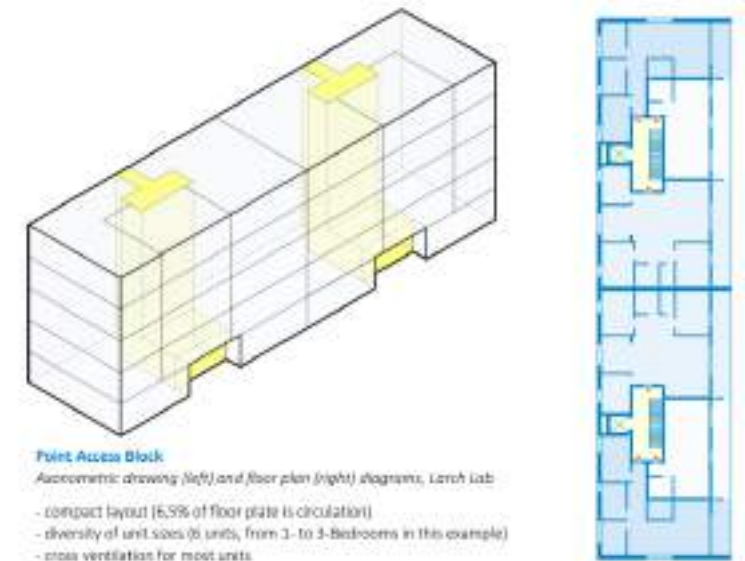
Building and zoning regulations play an oversized role in the development of livable multifamily buildings, and in reducing embodied and operational carbon. Conversely, regulations can add requirements that increase embodied and operational carbon – for no economic, livability, or life safety benefits.



Diagrammatic Point Access Block floor plan, 93% efficient floor plate

Point Access Blocks, compact single stair buildings with units centered around the stairway, are one of the most basic building forms found in post-industrial cities. They provide compact, low-carbon, and livable multifamily housing. This report presents our research on the benefits of Point Access Blocks over other means of vertical access. These benefits include:

- Increased livability
- Lower embodied carbon
- Lower operational carbon
- Lower cost
- Increased compactness
- Ability to cross ventilate
- Accessibility options for low-rise
- Elimination of long corridors
- No decrease in fire safety risk
- Unlocks small lot development

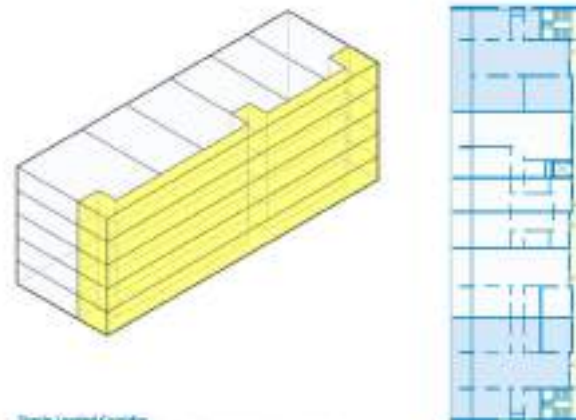


Point Access Block

Axonometric drawing (left) and floor plan (right) diagrams, Lorch Lab

- compact layout (6.5% of floor plate is circulation)
- diversity of unit sizes (6 units, from 1- to 3-bedrooms in this example)
- cross ventilation for most units
- daylight on multiple sides
- bedrooms on quiet side of building

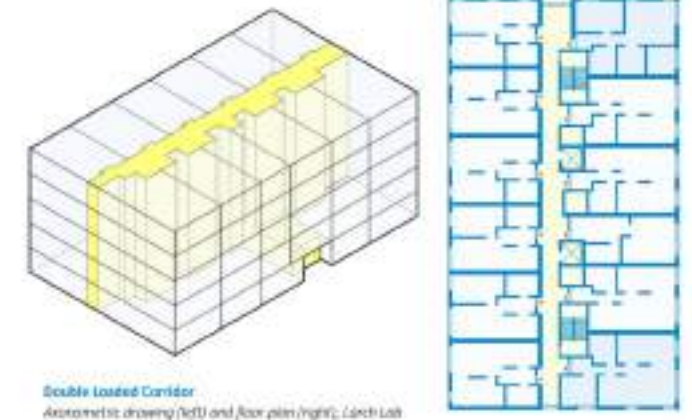
Single Egress



Single Loaded Corridor

Axonometric drawing (left) and floor plan (right) diagrams, Lorch Lab

- less efficient floor plate (14% of floor plate is circulation)
- diversity of unit sizes
- cross ventilation possible
- daylight on multiple sides



Double Loaded Corridor

Axonometric drawing (left) and floor plan (right) diagrams, Lorch Lab

- moderately efficient floor plate (13% of floor plate is circulation)
- primarily small units
- no cross ventilation
- no daylight on multiple sides
- little respite from urban noise

Traditional Exit requirements

# Background (2023) Vancouver Cast Study

The National Building Code (NBC) requires that any multi-unit residential building in Canada over two storeys must be equipped with two separate exit (egress) stairs. The two-egress requirement made sense when the NBC was first developed in the 1940s when wood frame buildings were highly combustible and fire safety features were primitive.

Today, modern firefighting practices, advanced fire alarms, automated sprinklers, fire resistant separations (walls, doors, ceilings) and other innovations have rendered the two-egress model obsolete in low-rise settings. It is now technically possible to create multi-unit wood frame buildings with a single egress that are as - or even more - fire safe than a two-egress building of yesteryear.

[City of Vancouver report on Point Access Blocks - larch lab](#)



## Challenges

- Single-egress units are not necessarily any cheaper to build as the gains made by eliminating the cost of a stairwell are often neutralized by the extra soft costs involved in planning the building (e.g., fire engineering consultant, code consultant) and the costs of specialized fire safety measures.
- Fire departments reflexively oppose single-egress buildings as inherently unsafe. If a fire official rejects a project, they are not required to explain why and there is usually no appeal.
- Having additional density in a neighbourhood could come up against infrastructure limitations, e.g., electrical supply and stormwater drainage.
- NIMBY reactions to denser projects

[https://smallhousing.ca/wp-content/uploads/2024/02/2023-12-21\\_SHBC\\_Single\\_Egress\\_WT\\_Case\\_Study\\_DRAFT.pdf](https://smallhousing.ca/wp-content/uploads/2024/02/2023-12-21_SHBC_Single_Egress_WT_Case_Study_DRAFT.pdf)

## Vancouver – Alternative Solution – 13 Unit SE

Fire Safety Features	Design – Costs and Function
<ul style="list-style-type: none"> <li>• Mechanical Smoke handling system for the stairwell</li> </ul>	<ul style="list-style-type: none"> <li>• Additional 10% to consulting costs or 0.5% the total construction costs.</li> </ul>
<ul style="list-style-type: none"> <li>• Slightly wider than code stairwell</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced design flexibility makes SE for this property financially viable.</li> </ul>
<ul style="list-style-type: none"> <li>• “Enunciator panel” at the entrance of the property helps the fire department find the source of fire.</li> </ul>	<ul style="list-style-type: none"> <li>• Eliminating the second stair wave on construction costs but balanced with extra consulting and features.</li> </ul>
<ul style="list-style-type: none"> <li>• Higher fire separations assemblies (walls, ceilings, floors and doors) around stairs.</li> </ul>	<ul style="list-style-type: none"> <li>• Additional rentable floor space presents provides permanent future income.</li> </ul>
<ul style="list-style-type: none"> <li>• Areas of refuge where someone injured or handicapped can wait for rescue.</li> </ul>	

# Mid Density - Types of Projects

Thinking like a Developer

Return on Investment by  
Developer

- 8-12 Unit project viability
- RMD Zone (Summerland)
- Lot 01 = 1,052.1 sqm
- 30m x 37.5m
- **Dec 21, 2022 \$600,000**

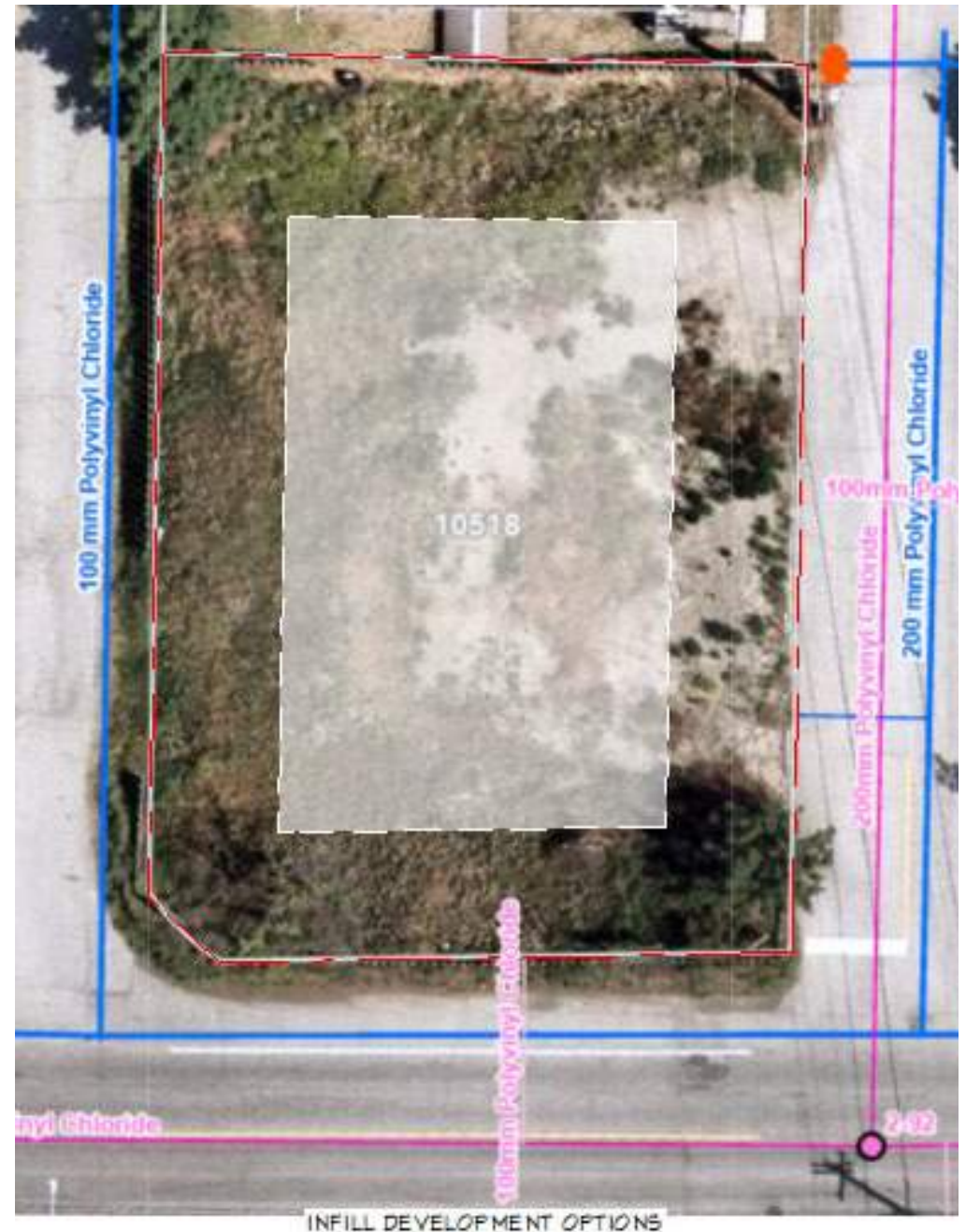




# Mid Density – Case Study

## Local Government Requirements and Limitations

- Existing Infrastructure
    - Required Improvements
  - Fire Department Access – Response time
  - Water Supply – Fire Flows
  - Zoning – Parking - Amenity Space-Landscaping
  - Road widening
  - Development Cost Charges
  - Adaptably requirements
  - Additional Step and Zero Carbon Code
  - Tree Canopy bylaws
  - Other?
- 
- What can be charged?
    - Local - Rental and or sales market



# Mid Density - Types of Projects

## RMD Zone

- (a) Apartment Housing
- (b) Cluster Housing
- (c) Duplex Housing;
- (d) Multi-Unit Housing;
- (e) Townhouse Housing

## 10.4.4 Subdivision Regulations

- (a) Minimum Lot Area 1,100m<sup>2</sup>
- (b) Minimum Lot Width 30.0m
- (c) Minimum Lot Depth 30.0m

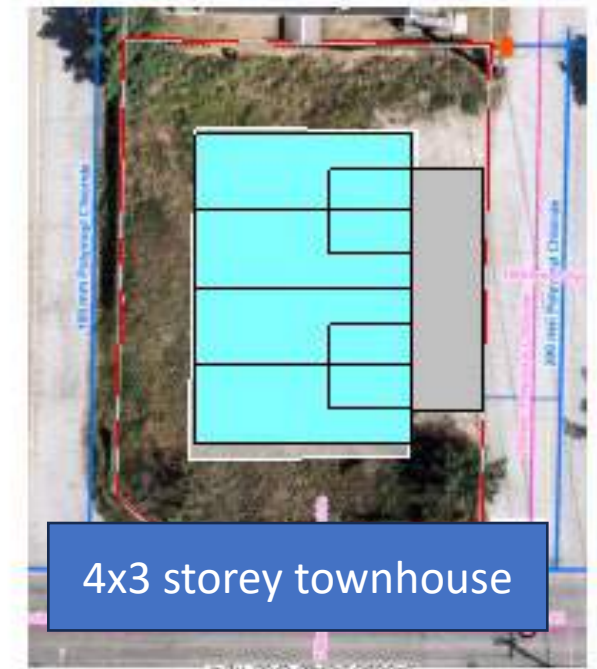
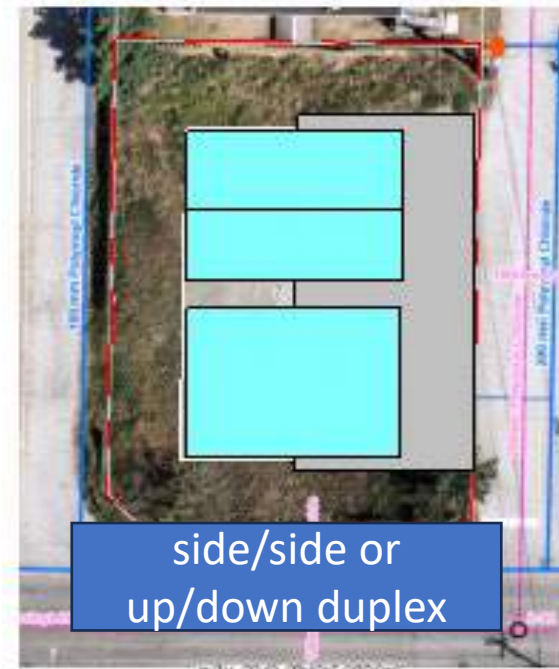
## 10.4.5 Development Regulations

- (a) Maximum Lot Coverage 40 percent
- (b) Maximum Floor Area Ratio 1.6

## 10.4.7 Siting Regulations

- (a) Principal Buildings and Structures
  - (i) Minimum Front Setback 6.0m
  - (ii) Minimum Rear Setback 7.5m
  - (iii) Minimum Side Setback (Interior) 4.0m
  - (iv) Minimum Side Setback (Exterior) 6.0m
  - (v) Maximum Height The lesser of 15 m or 4 Storeys

Architects  
Regulation  
5 or more  
dwelling units





# Background

The journey back single egress exits.

**Recommend to go through these with your Development Services Team and Fire Department**



OPTIONS AND IMPLICATIONS REPORT

## SINGLE EGRESS STAIR BUILDING DESIGNS: POLICY AND TECHNICAL OPTIONS REPORT

*British Columbia*

PREPARED FOR

BC Ministry of Housing  
Building and Safety Standards Branch  
Victoria, BC

Project #: 4B2401790  
Report #: R01  
Date: June 25, 2024  
Revision: 0

  
JENSEN HUGHES

Robert Heikkila, P.Eng., C.P., FEC  
500 – 1901 Rosser Avenue  
Burnaby, BC V5C 6R6  
O: +1 604-684-2384 | F: +1 604-684-2402  
Permit to Practice Number: 1002822

[robert.heikkila@jensenhughes.com](mailto:robert.heikkila@jensenhughes.com)

# Jensen Hughes Report

## Report Outline (highlights for this presentation)

- 1.0 - Introduction – purpose
- 2.0 - Summary
- 3.0 - Historical Background
- 4.0 - Jurisdictional Code requirements for SES Designs in BC
- 5.0 - Risk Assessment
- 6.0 - Technical and Economical Feasibility of SES Building Designs
- 7.0 - Options for Building Code and Fire Code Revisions to enable SES Designs
- 8.0 - Review of Existing Code Changes Request related to SES requirements
- 9.0 - Conclusion
- 10.0 - References
- APPENDIX A ECONOMIC ANALYSIS BY GENERAL CONTRACTOR

# Jensen Hughes Report

## 3.0 Historical Background of Code Requirements for SES Designs in British Columbia

For most of national and provincial Building Code history, the requirements for SES building designs have not been expanded until the **1998 BCBC (based on the 1995 NBCC)** which allowed for an increased maximum building area and travel distance to the exit if the building was sprinklered, but the allowable buildings remained small. **Canada remains as one of the last developed countries with Building Code requirements that limit SES building designs to small buildings [1], with a maximum building height of 2 storeys (other than single-family homes, duplexes, and townhouses which can be up to 3 storeys).**

Table 1 – Summary of Historical Code Requirements for SES Designs in British Columbia

Building Code	Max Building Height (Storeys)	Max Building Area	Required Construction Type	Max Travel Distance to the Exit	Sprinklered	Max Occupant Load per Floor Area
1941 NBC	3	278 m <sup>2</sup> (3,000 ft <sup>2</sup> )	NC	45 m	No	Not applicable
1953 NBC 1960 NBC 1965 NBC	Any if NC 3 if C	93 m <sup>2</sup> (1,000 ft <sup>2</sup> )	Any	22.8 m if C 30.5 m if NC	No	60 persons
1970 NBC 1975 NBC	NP except for Group A:  2	NP except for Group A:  186 m <sup>2</sup> (2,000 ft <sup>2</sup> )	NP except for Group A:  Any	NP except for Group A:  15.2 m (50 ft.)	NP except for Group A:  No	NP except for Group A:  60
1977 NBC	2	70 to 186 m <sup>2</sup> (750 to 2,000 ft <sup>2</sup> )	Any	10.6 to 22.8 m (3 to 75 ft.)	No	60 persons
1980 NBC 1985 BCBC 1992 BCBC	2	75 to 200 m <sup>2</sup>	Any	10 to 25 m	No	60 persons
1998 BCBC 2006 BCBC 2012 BCBC 2018 BCBC 2024 BCBC	2	75 to 200 m <sup>2</sup> , or 100 to 300 m <sup>2</sup> if sprinklered	Any	10 to 25 m, or 25 m if sprinklered	No	60 persons

NP = Not Permitted  
NC = Noncombustible Construction  
Any = Any Construction Permitted  
C = Combustible Construction

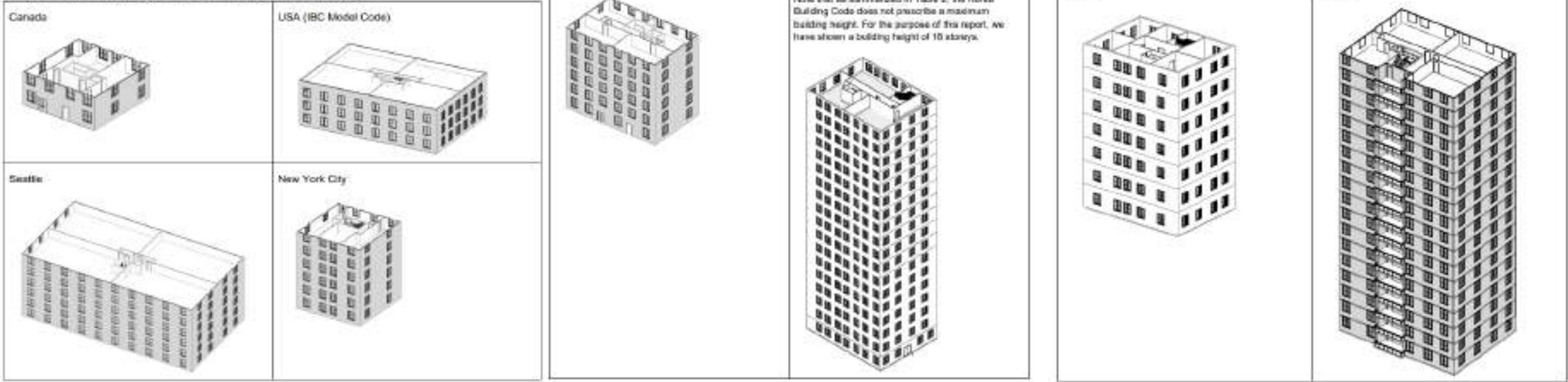
# Jensen Hughes Report

## 4.0 Jurisdictional Code Requirements Permitting SES Designs

Canada is one of the few developed countries with Building Code requirements that limit SES building designs to low-rise buildings [1], with a maximum building height of 2 storeys (other than single-family homes, duplexes, and townhouse).

### 4.2 SCHEMATIC GRAPHIC MODELS OF SELECTED JURISDICTIONAL REQUIREMENTS

Below are schematic graphic models demonstrating, on a high level, a variety of permitted SES building designs in selected jurisdictions based on the information in Table 2. These are intended only to graphically demonstrate the relative sizes some of the different permitted SES buildings.



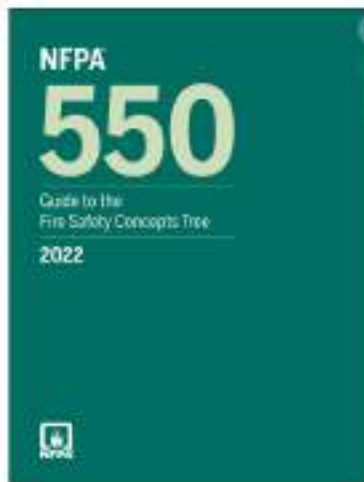


# Jensen Hughes Report

## 5.0 Risk Assessment

### 5.1 FIRE SAFETY CONCEPTS TREE – INTRODUCTION

The **Fire Safety Concepts Tree** as defined by **NFPA 550 - Guide to the Fire Safety Concepts Tree**, provides an overall structure with which to analyze the potential impact of fire safety strategies. It can identify gaps and areas of redundancy in fire protection strategies as an aid in making fire safety decisions. The use of the Fire Safety Concepts Tree should be accompanied by the application of sound fire protection engineering principles.



The Fire Safety Tree reviews the specific design parameters for exits that would have an impact on the safe egress of occupants.

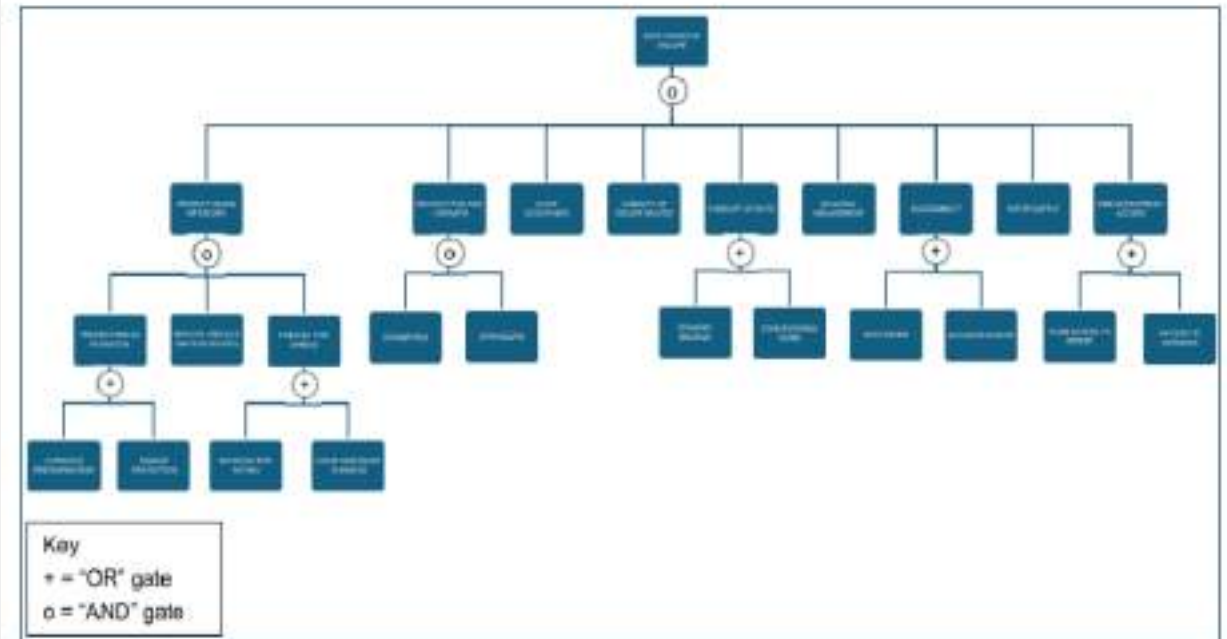


Figure 5-2: Fire Safety Tree – Safe Means of Escape

# Jensen Hughes Report

## 5.0 Risk Assessment

### 5.2 FIRE SAFETY OBJECTIVES

The universal objective for means of escape from fire is to ensure building occupants are provided with:

- effective means of providing warning of fire, and
- adequate visibility in escape routes and
- provided with means of escape to ensure that there is a low probability of occupants being unreasonably delayed or impeded from moving to a place of safety and that those occupants will not suffer injury or illness as a result.

Other objectives may need to be considered for accessibility, safety for emergency personnel, and property protection based on the location of the building or proximity to other external hazards. These objectives may impact the egress requirements.

- Accessible requirements for persons with disabilities,
- Impacts of adjacent or external fire hazards that may affect the exit discharge or exterior exit routes, or firefighter access, and
- Protect firefighters and other emergency personnel undertaking rescue and fire operations.

BCBC 2024 notes the functional statements for the number of exits from a building as

- F05 To retard the effects of fire on emergency egress facilities.
- F06 To retard the effects of fire on facilities for notification, suppression and emergency response.
- F10 To facilitate the timely movement of persons to a safe place in an emergency.
- F12 To facilitate emergency response.

**Excellent tool for Enforcement and Alternative solutions**

Table 5 - Severity Levels

Severity	Description	Score
Negligible	The impact of loss will be so minor that it would have no discernible effect on the means of escape.	1
Marginal	The loss will have an impact on the system which may have minor impacts on the means of escape. Minor personal injury may be involved.	2
Critical	The loss will have a high impact on the system and will cause significant impact on the means of escape. Personal injury and possibly deaths may be involved.	3
Catastrophic	The impact of failure will produce death or multiple deaths or injuries.	4

Based on the probability and severity levels, a risk matrix for each component of the means of escape can be summarized as shown below, adapted from NFPA 551.

Probability	Consequence			
	Negligible	Marginal	Critical	Catastrophic
Frequent				
Probable				
Occasional				
Rare				
Improbable				

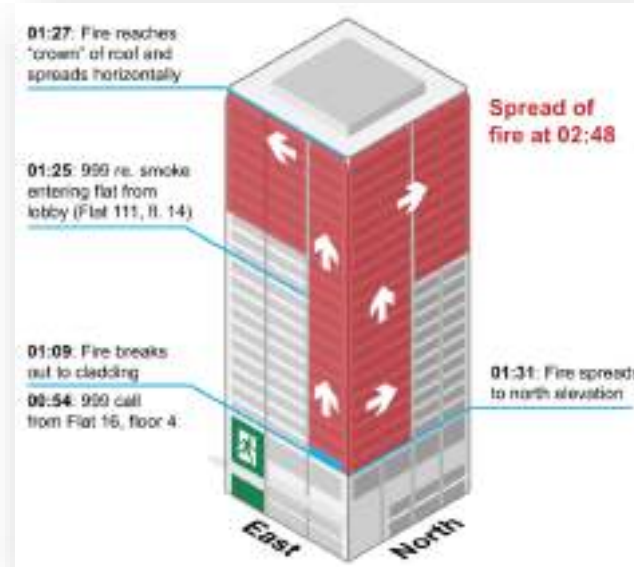
Figure 5-3: Risk Matrix (Typical)

Integrity of egress facilities - Maintenance	The failure of fire rated construction integrity may result from poor maintenance and inspections during the lifetime of the building. For example, damage may occur to fire separations due to regular "wear and tear", vandalism, or water leakage. Failures are expected when some of the more regularly used systems are improperly maintained or not addressed when these systems don't function correctly. Some examples include door closures, door latching, incorrect replacement of finishes, incorrect replacement of hardware. Some of these failures could increase the risk of the failure of the egress facility.	Probable likelihood to occur over the life of the building, based on various studies and fire investigations into failure of compartmentation.	Catastrophic, due to the potential for multiple failures to the means of escape.	10
Maintenance	Fire alarm systems require maintenance, inspections and testing at regular time frames as specified by the applicable standards.	Occasional possibility of poor maintenance.	Critical potential to cause significant impact on means of escape.	8
Maintenance	Sprinkler systems require maintenance, inspections and testing at regular time frames as specified by the applicable standards. The partial or full system could be isolated during maintenance / renovations.	Occasional possibility of poor maintenance or system being isolated for maintenance / renovations.	Critical potential to cause significant impact on means of escape.	9
Building Management	Inspections & maintenance	As indicated in most of the systems above, this is the most critical component in ensuring that facilities and systems perform to the required design and intent, enabling safe passage for occupants during fire emergencies as well as providing safe access for emergency personnel to undertake firefighting & rescue operations.	Probable likelihood to occur over the life of the building based on various studies and fire investigations into failure of compartmentation.	10

The Grenfell Tower fire in London, England in 2017 is an example of a famous fire in a building with a single egress stair. It was an unsprinklered 24-storey building with other fire non-conformities\*

Mainly in response to this disaster, the UK has reduced the maximum allowable height of SES buildings to 18 m, which is approximately 6 storeys. (Jensen Hughes report)

\*including the use of combustible exterior cladding.



REPORT OF SPECIALIST FIELD ON BEHALF OF: DR BARBARA LANE FIRE SAFETY ENGINEERING GRENFELL TOWER INQUIRY



Natalie Oxford - [https://twitter.com/Natalie\\_Oxford/status/874835244989513729/photo/1](https://twitter.com/Natalie_Oxford/status/874835244989513729/photo/1)



# Jensen Hughes Report

## 6.0 Technical and Economic Feasibility of SES Building Designs

### 6.1 ORIGINS OF FIRES

#### 6.1.1 Statistical Analysis of Origins of Fires

The main intent of having two exits is to allow occupants to have an alternate means of egress if one exit is blocked or obstructed. Therefore, part of the approach to analyzing the risk to fire and life safety when removing the requirement for a second exit is investigating the frequency of fires that obstruct public access to exits, i.e. originating from within an exit or within a common egress corridor, or from a suite that then spreads to an egress facility.

In British Columbia, based on the Office of the Fire Commissioner Annual Report 2022 [4] , out of 2,433 residential structure fires reported in 2022 (resulting in 143 injuries and 49 deaths), 623 fires were in apartment buildings. Out of the 2,433 total fires, 59 fires (2.4%) originated from hallways and means of egress. However, it was not clear from the report regarding how many of the 59 fires from hallways and means of egress were attributed to the 623 apartment fires.....

Based on the above observations, it can be inferred that the probability of fires originating in public corridors or exit stairs is relatively low. Instead, emphasis should be placed on mitigation of fire spread beyond the room of origin and on mitigation of human error. These factors are discussed in Section 6.2 of this report.....

#### 6.2.1.1 Smoke Detection and Automatic Sprinkler Systems

As noted in the Annual Reports published by the BC Office of the Fire Commissioner in 2022, 2021, and 2020 [4] [5] [6], in a building with both smoke alarms and sprinkler systems, the percentage of fires spreading beyond the room of origin was 1.8%, 2.4% and 2.7% respectively. In contrast, in a building without smoke alarms and sprinkler system, the percentage of fires spreading beyond the room of origin was 42.6%, 48.8% and 47.2% respectively.

# Jensen Hughes Report

## 6.0 Technical and Economic Feasibility of SES Building Designs

### 6.2 MITIGATING FEATURES AND CONSIDERATIONS IN LIEU OF A SECOND EXIT

6.2.1.1 Smoke Detection and Automatic Sprinkler Systems

6.2.1.2 Smoke Management Systems and/or Smoke Lobby or Area of Refuge

#### 6.2.2 Fire Prevention and Mitigation through Design

6.2.2.1 Noncombustible Construction and Enhanced Fire Separation for the Exit Stair

6.2.2.2 Reduce Potential for Storage in the Exit Stair

6.2.2.3 Require 45 min Fire-Protection Rating for Suite Doors

6.2.2.4 Require Magnetic Hold-Open Devices for Suite Doors

6.2.2.5 Require Exit Stair to Discharge Directly to the Exterior (Exit Lobby Not Permitted)

6.2.2.6 Limitation on Public Corridor Length

6.2.2.7 Limitation on Maximum Travel Distance in a Floor Area

6.2.2.8 Limitation on Type of Building Use

#### 6.2.3 Occupant Egress and Firefighting Access

6.2.3.1 Increase Minimum Width of the Exit Stair

6.2.3.2 Establish a Maximum Occupant Load

6.2.3.3 Shelter-in-Place Policy

6.2.3.4 Elevators as a Means of Egress

6.2.3.5 Firefighting Windows or Access Panels for Buildings Constructed Under Part 9 of the BCBC

6.2.3.6 Fire Department Access to Exit Stair

6.2.3.7 Fire Department Capability

**Recommend to go through these with your Development Services Team and Fire Department**



# Jensen Hughes Report

## Member Question - Hold Opens for Rated Suite Doors with closers?

*Single Egress Stair Building Designs: Policy and Technical Options Report, British Columbia*

*4B2401790*

### *6.2.2.4 Require Magnetic Hold-Open Devices for Suite Doors*

Based on the studies referenced in Section 6.1.1 of this report, it was found that where fire or smoke spread from the suite of fire origin to a public corridor or exit stair, it was frequently due to the suite door being left open. The BC Building Code already requires doors in fire separations to be equipped with a self-closing device and latch. Therefore, it can be expected that suite entry doors would always remain closed unless physically wedged open or otherwise blocked open. This condition may occur for a variety of reasons such as during an occupant's move-in or move-out process, or if occupants wedge open their door for communal purposes (for example, in student residences or single room occupancies). To mitigate this risk, a requirement may be added to install magnetic hold-open devices on suite entry doors that release upon activation of the fire alarm system.

**Hold opens have been incorporated into the Code amendments.  
3.2.10.3. (3) Limits to Smoke Movement**

# Jensen Hughes Report

## 6.0 Technical and Economic Feasibility of SES Building Designs

### 6.2.4 Post-Occupancy Maintenance and Inspection

For a building with a single exit stair, additional emphasis may be placed on post-occupancy maintenance and inspection throughout the life of the building. For example, additional policies could be put in place by strata councils or building owners/managers for regular patrolling of exits and public corridors to ensure that combustible furniture or other items are not being left unattended. See Section 6.2.2.2 of this report for further discussion on the risks of combustible storage within exits.

6.2.4.1 Maintaining Fire Safety Features in Existing Buildings (Owners)

6.2.4.2 Other Legislative Action and Fire Services Act (Regulatory)

*6.2.4.1. Required maintenance is typically the responsibility of the building owner, but some owners do not have the capability or knowledge to maintain a building, and local fire inspectors (Local Assistants to the Fire Commissioner) may not have the resources to adequately monitor each building in their jurisdiction. It may be advisable to adopt practices from other jurisdictions to assist in upkeep of fire protection features.*

6.2.4.2. The [Fire Services Act](#) currently does not legislate the Fire Commissioner to have access into private suites to inspect devices associated with the building's fire and life safety system. However, it is noted that revising the Fire Services Act to allow for access raises privacy concerns. Instead, other legislative action may be considered that relies on strata councils or building owners/managers. For example, the law could require that a strata council have an in-suite fire inspection policy with fines for non-compliance.

**Now – Fire Safety Act (Aug 24)**

# Preventative Measures Options

Fire Safety Act – August 01, 2024

BRITISH COLUMBIA

Home / Public safety and emergency services / Public safety / Fire safety, standards and reporting / Legislation and regulation

**MORE TOPICS**

Fire safety, standards and reporting

Legislation and regulation

Codes and bulletins

Fire Safety Act reference documents

Standards and training

Fire incident reporting

Fire service awards

Local assistant to the fire commissioner

Contact Us

## Legislation and regulations for fire safety

Last updated on August 1, 2024

Fire safety and prevention in B.C. is governed by the following legislation and regulations.

### Legislation

As of August 1, 2024, the [Fire Safety Act](#) has replaced the Fire Services Act. With the Fire Safety Act the Office of the Fire Commissioner will be enabled to:

- Support local governments in the designation of inspectors and investigators
- Implement better processes for fire orders, evacuation orders and the appeal process
- Enable and augment the local authority to evaluate premises either in an emergency or for preventative reasons
- Collaborate with the Ministry of Housing in the adoption of the [BCEFire Code](#)
- Implement and manage a new administrative penalty enforcement framework

<https://www2.gov.bc.ca/gov/content/safety/public-safety/fire-safety/legislation-regulations-codes>

## Fire Safety Act

### Part 4 – Fire Safety Inspections

#### Fire safety inspections

9 A fire inspector may conduct a fire safety inspection for the purpose of determining compliance with this Act and the regulations in the following circumstances:

(a) on receiving a complaint;

(b) if believed advisable by the fire inspector, without receiving a complaint;

(c) on the request of an owner or occupier of premises;

(d) if required by a monitoring entity for the purposes of Part 6 [Compliance Monitoring].

### Part 6 – Compliance Monitoring

#### Risk-based compliance monitoring system

20 (1) A monitoring entity must implement a risk-based compliance monitoring system for **public buildings**,

(a) the purpose of which is to determine if an **owner of a public building** within the boundaries of the **monitoring entity** complies with this Act and the regulations in respect of the **public building**,

(b) that is based on a risk analysis conducted in accordance with the regulations, and

(c) that consists of fire safety inspections and fire safety assessments.

# Act – defined terms

"**fire investigation**" means an investigation within the meaning of section 25 [investigation of fires];

"**fire safety inspection**" means an inspection within the meaning of section 9 [fire safety inspections];

"**monitoring entity**" means the council of a municipality;

"**public building**" means the following:

(a) a building other than a building that is a private dwelling;

(b) a structure

(i) to which the public is ordinarily invited or permitted access, or

(ii) that is used for commercial, industrial or institutional purposes;

(c) a facility, including a storage yard or tank farm.

"**private dwelling**" means the following:

(a) a structure that is occupied as a private residence;

(b) if only part of a structure is occupied as a private residence, that part of the structure;

(c) any other structure located on the parcel of land on which a private residence is located, except for a structure

(i) to which the public is ordinarily invited or permitted access, or

(ii) that is used for commercial, industrial or institutional purposes;

(a) a structure that is occupied as a private residence;

- Is that the individual suite or the residential building?



# Preventative Measures

Maintenance of the life safety systems will be critical to ensuring the long-term safety of occupants in single egress exit buildings.

- Fire Life Safety Bylaw
- Residential Rental Maintenance Bylaw



Examples of Rental Maintenance bylaws

THE CITY OF TERRACE

DISCOVER TERRACE CULTURE & HERITAGE PARKS & RECREATION CITY SERVICES CITY HALL BUSINESS & DEVELOPMENT

BYLAWS

## Standards of Maintenance

DEPARTMENTS

MAYOR & COUNCIL

COUNCIL AGENDAS AND MINUTES

COUNCIL WEBCASTS

PDF Upload: 2017-13\_standards\_of\_maintenance\_bylaw.pdf  
Bylaw No.: 2017

### PART ELEVEN: INSPECTION OF BUILDINGS

#### 11.1 Frequency of inspections delegated

11.1.1 The authority and duty of the Council under the Fire Services Act to establish, revise and implement a regular system of inspections of hotels, public buildings, churches, theatres, halls, or other buildings used as a place of public resort in the City is delegated to the Fire Chief;

- and for this purpose, the Fire Chief is delegated the authority to establish a system of regular inspections which will provide different frequencies of inspection depending on a building's British Columbia Building Code building classification, its use, age and fire risk assessment;
- amend the frequency of inspection schedules from time to time;
- provide one copy of the current frequency of inspection schedule to each person who requests one.

Example – Fire and Life Safety Bylaw



# Jensen Hughes Report

## 7.0 Options for Building Code and Fire Code Revisions to Enable SES Designs

### 7.1.1 Example Sets of Requirements for Different SES Building Designs

As requested, the following sets of requirements are prepared as examples of potential Building Code revisions for the purpose of policy discussions. All of the requirements are from Section 7.1 of this report. These sets of requirements are not intended to be specific recommendations.

#### 7.1.1.1 Example Set 1 – 4-Storey SES Building

- + Require the building to be sprinklered to NFPA 13, regardless of building height and construction type.
- + Require all balconies and decks to be sprinklered, regardless of construction Article and balcony depth.
- + Require the architectural design to limit the potential for excess space within an exit that may be inadvertently used as storage or garbage space throughout the life of the building.
- + Require that suite doors opening into the public corridor to have a minimum fire-protection rating of 45 min as required for closures in a 1 h fire separation (Article 3.1.8.12. for 20 min closures not permitted).
- + Require the exit stair to discharge directly to the exterior (exit lobby not permitted).
- + Require the exit stair discharge door to be located within 15 m of the Fire Department access route.
- + Require a maximum travel distance of 25 m to the exit from any point in the floor area, consistent with current BC Building Code requirements for sprinklered rooms and suites with a single means of egress.
- + Require a maximum dead-end corridor of 6 m, consistent with current BC Building Code requirements for public corridors.
- + Require smoke detectors to be installed in residential suites, instead of smoke alarms, with the smoke detectors sounding an audible alarm only within the applicable suite but with the devices supervised by the fire alarm system.



# New Code - Technical Solutions

## Technical Solutions for Single Exit Stair Building Designs British Columbia Building Code 2024 Revision 3 – CONVENIENCE COPY and Discussion

iv) Group F, Divisions 2 and 3, *medium- and low-hazard industrial occupancies*.

2) Parts 3, 4, 5 and 6 of Division B apply to *buildings designed and constructed in accordance with Subsection 3.2.10. of Division B*.

Code changes

### 1.3.3.3. Application of Part 9

1) *Except as provided in Sentence (2)*, 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*.

2) Part 9 of Division B does not apply to *buildings designed and constructed in accordance with Subsection 3.2.10. of Division B*.

Division A directs which building uses and archetypes follow which acceptable solutions as well as which acceptable solutions are not appropriate. Subsection 3.2.10. of Division B establishes the scope and application for single exit stair residential buildings. It is not appropriate for those buildings to follow Part 9 of Division B.

NOT  
Part 9

## Technical Solutions for Single Exit Stair Building Designs British Columbia Building Code 2024 Revision 3 – CONVENIENCE COPY and Discussion

The technical solutions for British Columbia Building Code 2024 (Building Code) Revision 3 shown in this document were developed based on the [Single Exit Stair Building Designs: Policy and Technical Options Report](#) prepared for the Building and Safety Standards Branch, Ministry of Housing, by Jensen Hughes.

Single exit stair residential buildings are far more than just a residential building with an exit stair removed. Single exit stair residential buildings are limited in height, area, travel distance and occupancy load, and include compensatory measures as well as rely on a high-level of operations and management oversight and a high-level of local fire department capability and capacity to achieve an acceptable level of risk comparable to other new buildings.

A commonly accepted risk control hierarchy lists controls that are most effective to least effective.

Most Effective		
	<b>Elimination</b>	The <a href="#">Building Code</a> cannot eliminate a fire hazard completely.
	<b>Substitution</b>	The <a href="#">Building Code</a> cannot substitute a fire hazard completely.
	<b>Engineering Controls</b>	The <a href="#">Building Code</a> reduces the probability of a fire hazard by applying engineering controls. A second and separate exit stair provides redundancy should one exit stair be obstructed. Fire department personnel can also rely on a second and separate exit stair for intervention in a fire event. The <a href="#">British Columbia Fire Code</a> assigns administrative controls to the owner of the building for the inspection, frequency of inspection, and correction of unsafe conditions. The <a href="#">Fire Services Act and pursuant regulations</a> govern inspections and other administrative controls.
	<b>Administrative Controls</b>	It is not reasonable that all occupants of a building be protected with personal protective equipment, although it is reasonable to expect firefighters to be protected with personal protective equipment when performing their tasks.
Least Effective	<b>Personal Protective Equipment</b>	

The technical solutions in this document are premised on a complement of alternative engineering controls as acceptable solutions in the Building Code and premised on critical administrative controls and firefighting assumptions. Building owners and managers must work closely with the local fire department to ensure a high level of capability and capacity to maintain safety systems and respond in a fire event, as well as the availability of a dependable water supply for firefighting, can be maintained for the life of single exit stair buildings.

The firefighting assumptions described in the Notes to Part 3 of Division B of the Building Code describe circumstances where additional measures may be necessary for certain buildings beyond the general provisions of the Code. These technical solutions for single exit stair buildings

Please review for Part 2 session

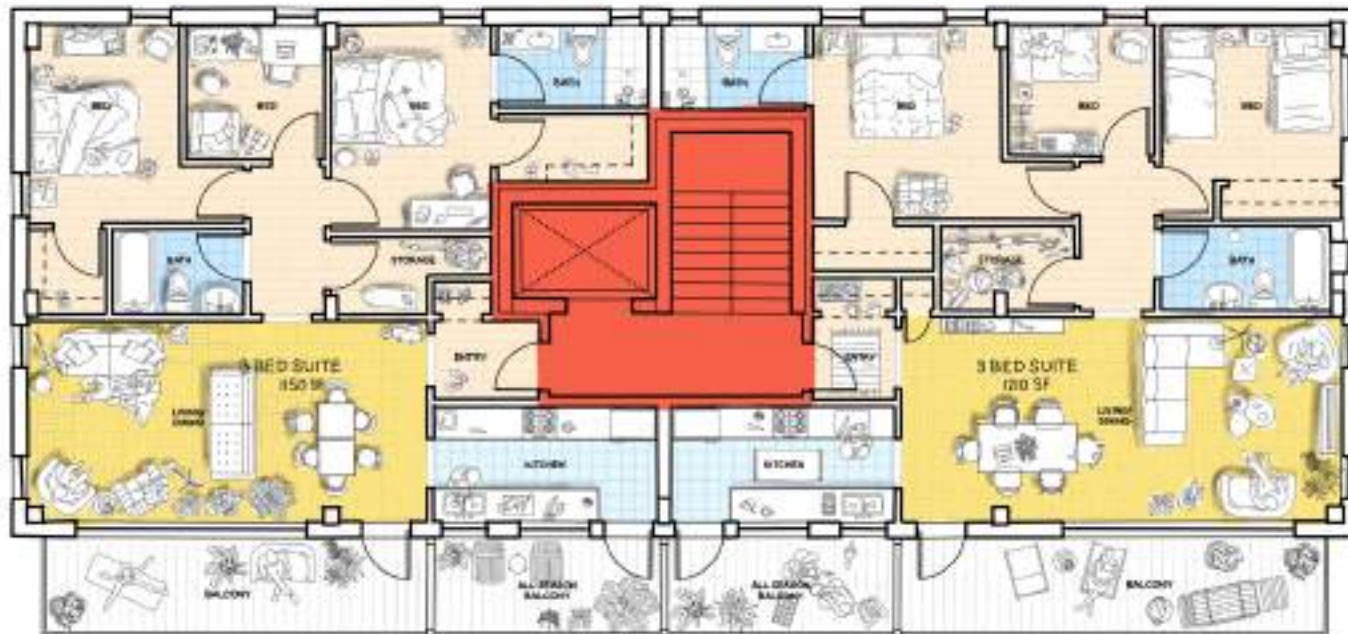
[bcbc revision 3 single exit stair convenience copy 2024-08-28.pdf \(gov.bc.ca\)](#)



# New Code Plan Review

No lot consolidation

No Zoning changes or Variances



## Review for Part 02 – Single Egress Exit Stairs

Drawing provided by Isaac Neufeld (Architect) - Vancouver Building Bylaw



# Local Authority Reminder

The Community Charter authorizes local governments to make statutory laws or bylaws for our municipality regulating construction, noise, signs, lawn watering, land-use, and much more. Council enacts bylaws that are created, interpreted, and administered by several local government departments. The Building-Plumbing Official promotes, facilitates, and enforces general compliance with bylaws that pertain to the health, safety, and welfare of the community.

**A Policy, whether a department or Council/Board approved, is a process outline or clarification that ensures consistency related to an interpretation of code or process. However, a policy cannot regulate construction (MIABC) – it is only done via a bylaw-codes-standards.**





# Next Lunch and Learn – October

**October 19, 2024**

**Single Egress Exit – Part 02**

**Review example drawing, code and reports**



**Please forward any questions or suggestions for the presentation to [kkunka@boabc.org](mailto:kkunka@boabc.org).**



# POLL QUESTION – Presentations

## What would you like to see for future Lunch and Learn sessions (Ken K)?

- More general information on code updates, industry and local gov trends – 16%
- Less general information and more technical on code specific items – 15%
- Good balance right now – general and technical – 37%
- More review of member (forum) questions – 5%
- More visuals to explain code – 22%
- More time to have member discussions during session – 3%
- Sessions related to non-code challenges facing building departments (technology, inter-department referrals, bylaws, policy) – 3%



# Questions - Contact Us



**Session feedback & future topics**  
[kkunka@boabc.org](mailto:kkunka@boabc.org)



**Engagement & Communication Reminder**

- BOABC contacts
- Zone Meetings
- Zone Directors - Mentors
- Member Forum Discussions

### Contact Us

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Your Name (required)

Your Email (required)

Department  
Please Choose

Subject

Your Message

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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 email within two business days.

**Mailing Address**

- ☎ Suite 224  
186 - 8120 No. 2 Road  
Richmond, BC  
V7C 5J8
- ☎ 604-270-9516
- ✉ [info@boabc.org](mailto:info@boabc.org)

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**Webinar survey to follow.**