



REGIONAL DISTRICT of Fraser-Fort George

Main Office: 155 George Street, Prince George, BC V2L 1P8
 Telephone: (250) 960-4400 / Fax: (250) 563-7520
 Toll Free: 1-800-667-1959 / www.rdffg.ca

REPORT FOR CONSIDERATION

TO: Chair and Directors

File No.: FIR 1.0

FROM: Melanie Perrin, Senior Manager of Public Safety Services

DATE: February 5, 2025

SUBJECT: Salmon Valley Volunteer Fire Department Outbuilding Construction
 SUMMARY: Purpose: Consider BC Building Code Post Disaster Designation Exemption

Attachments:

Province of BC Information Bulletin dated April 2, 2024 regarding 2024 Editions of the BC Building, Plumbing, and Fire Codes

Previous Reports:

None

RECOMMENDATION(S):

1. THAT the report dated February 5, 2025 regarding “Salmon Valley Volunteer Fire Department Outbuilding Construction” be received for information.
2. THAT the Board approves the exemption of the Salmon Valley Volunteer Fire Department outbuilding from the post disaster designation as outlined in the British Columbia Building Code.

ENTITLEMENT	HOW VOTE COUNTED
All 1 Director/1 vote	Majority
All 1 Director/1 vote	Majority

ISSUE(S):

On April 2, 2024, changes were made to the British Columbia Building Code (BCBC) regarding the definition of a post-disaster building. The intent of this change is to provide the authority having jurisdiction (AHJ) the ability to determine the application of this designation as it relates to the specific use of the building, rather than simply by whether or not the type of building or facility was on the list contained within the BCBC. Post-disaster construction requirements involve additional registered professionals to be included in the design of the building, resulting in increased building design costs and increased construction costs.

The Salmon Valley Volunteer Fire Department is proposing to construct an outbuilding as a storage facility for the fire department that will not house any frontline fire response apparatus or equipment. The Board is being asked to consider exempting the Fire Department outbuilding from the post-disaster designation, as provided in the BCBC.

RELEVANT POLICIES:

British Columbia Building Code

- regulates how new construction, building alterations, repairs and demolitions are done in BC. This code sets minimum requirements for safety, health, accessibility, fire and structural protection of buildings and energy and water efficiency.

STRATEGIC PRIORITIES ALIGNMENT:

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> Indigenous and Intergovernmental Partnerships | <input checked="" type="checkbox"/> Organizational Strength and Adaptability | <input checked="" type="checkbox"/> Quality Community Services | <input type="checkbox"/> Environmental Stewardship and Climate Action |
| <input type="checkbox"/> Awareness and Engagement | <input type="checkbox"/> Statutory or Routine Business | | |

SERVICE RELEVANCE:

The Salmon Valley Fire Protection service was established in 1977 and provides fire protection to the community of Salmon Valley and the Wright Creek Road area.

FINANCIAL CONSIDERATION(S):

The Salmon Valley Volunteer Fire Department included \$200,000 in its 2025 proposed budget to support the construction of a storage outbuilding. If the outbuilding were to be designated a post-disaster building, then the design and construction costs could very likely exceed the budgeted amount, and the project would need to be re-considered.

OTHER CONSIDERATION(S):

The British Columbia Building Code requires specific design and construction post disaster standards for various public facilities including:

- hospitals, emergency treatment facilities and blood banks,
- water treatment facilities,
- water and sewage pumping stations,
- sewage treatment facilities, and
- buildings of the following types, unless exempted from this designation by the authority having jurisdiction:
 - emergency response facilities, and
 - fire, rescue, and police stations and housing for vehicles, aircraft or boats used for such purposes.

Note A-1.4.1.2(1) Post-disaster Building

There may be circumstances where the authority having jurisdiction would choose to exempt certain types of buildings or parts thereof from being designated as post-disaster buildings. Such is the case in the following examples: a volunteer paramedic's residence where an ambulance is stored, or a police station in a shopping mall or in a residential complex.

DECISION OPTIONS:

1. Approve recommendations.
 - the Salmon Valley Volunteer Fire Department outbuilding will be exempted from the post-disaster designation requirements and will be constructed as a normal importance building, as defined by the BC Building Code.

Other Options:

- a. Do not approve recommendations
 - the construction of the Salmon Valley Volunteer Fire Department outbuilding will be delayed until such time that the service can secure sufficient funding for the additional costs associated with post-disaster design and construction.

COMMENTS:

While the Salmon Valley Volunteer Fire Department is seeking exemption from the post-disaster designation for this storage outbuilding, Public Safety Administration plans to work closely with the fire department to incorporate some additional recommended design features, where appropriate, that will improve the building's overall resilience to threats such as wildfire.

Respectfully submitted,

"Melanie Perrin"

Melanie Perrin
Senior Manager of Public Safety Services

MP:mz

No. B24-05
April 2, 2024

2024 Editions of the British Columbia Building, Plumbing, and Fire Codes

This bulletin provides information about the 2024 editions of the British Columbia Building, Plumbing, and Fire Codes (BC Codes). This bulletin discusses changes applicable to all BC Codes but is primarily focused on changes in the British Columbia Building Code (Building Code) 2024 from the 2018 edition. More information on the British Columbia Plumbing Code (Plumbing Code) can be found in [Bulletin P24-01](#) and more information about the British Columbia Fire Code (Fire Code) can be found in Bulletin F24-01 soon to be released. The Building Code 2024 and Plumbing Code 2024 apply to projects for which a building permit is applied for on or after March 8, 2024. The Fire Code 2024 became effective March 8, 2024.

Background

The BC Codes 2024 are substantially based on the model National Codes 2020 (includes building, fire, and plumbing), which are developed by the National Research Council with collaboration from provinces and territories. The National Codes are updated approximately every five years. B.C. is committed to harmonizing with the national requirements and will continue to do so for subsequent editions of the BC Codes. Changes to the model National Codes, and subsequently the BC Codes, are processed through the Canadian Board for Harmonized Construction Codes' [Code Change Request webpage](#).

Getting the BC Codes 2024

The **Building Code 2024** is available free [online](#). Print publications will be available for purchase online from [King's Printer](#) later in 2024.

British Columbia will not be producing a consolidated Plumbing Code 2024 or a consolidated Fire Code document. [Bulletin P24-01](#) provides information on how to obtain the **Plumbing Code 2024** and Bulletin F24-01 provides information on how to obtain the **Fire Code 2024**.

Code users are encouraged to [Sign up for BC Codes updates](#) and check often for new [Technical Bulletins](#). Previous versions of the BC Codes are available from [King's Printer](#).

Existing unique-to-B.C. Provisions

This bulletin discusses some noteworthy historical unique-to-B.C. provisions that have either been continued in the BC Codes 2024 or have changed.

The contents of this Bulletin are not intended to be provided as legal advice and should not be relied upon as legal advice. The Building and Safety Standards Branch does not enforce compliance with the British Columbia Building Code. Local authorities are authorized to enforce the British Columbia Building Code through the Local Government Act and the Community Charter.

B.C.'s historical provisions are continued for:

- Energy efficiency following B.C.'s **Energy Step Code**¹,
- Operational emissions following B.C.'s **Zero Carbon Step Code**² which are further described in [Bulletin B23-03](#),
- Alternate compliance methods for **heritage buildings**³ and for alterations to existing buildings to add a **secondary suite**⁴,
- Expanded requirements for **carbon monoxide alarms** in more building types⁵,
- **Roof-top enclosures** and the calculation of building height⁶,
- Small **residential care homes** permitted to be classified as a residential occupancy⁷ (B.C.'s historical provisions for small residential care homes are continued in place of new NBC 2020 provisions for home-type care occupancies which are not adopted),
- **Group A, Division 2, low occupant load occupancies** (not exceeding 30 persons) are permitted to be classified as Group D occupancies⁸ when conditions are met,
- Designing and constructing a **secondary suite**⁹,
- **Ventilation systems** serving single dwelling units¹⁰, and
- All **farm buildings** shall comply with the National Farm Building Code of Canada 1995 (B.C. did not adopt the new NBC 2020 provisions for large farm buildings)¹¹.

B.C.'s historical provisions that are updated in the Building Code 2024 include:

- **Definition of post-disaster building** alignment with the Notes of the NBC 2020¹²; authorities having jurisdiction may still exempt certain types of buildings from the category of post-disaster buildings, and the change permits them to apply the category of post-disaster buildings should they consider the building necessary for essential services to the public in the event of a disaster,
- **Definition for registered professional** to align with the *Professional Governance Act*¹³,

¹ See Subsections 9.36.6. and 10.2.3. of Division B.

² See Sections 9.37. and 10.3. of Division B.

³ See Sentence 1.1.1.1.(5) and Table 1.1.1.1.(5) of Division A.

⁴ See Sentence 1.1.1.1.(6) and Table 1.1.1.1.(6) of Division A.

⁵ See Subsection 6.9.3. and Article 9.32.4.2. of Division B.

⁶ See Articles 3.2.1.1., 3.2.2.14., 3.3.1.3., 9.9.7.1., and 9.10.4.4. of Division B.

⁷ See Sentences 3.1.2.5.(2) and 9.10.2.2.(6) of Division B.

⁸ See Articles 3.1.2.7. and 9.10.2.5. of Division B.

⁹ See the definition of "secondary suite" in Article 1.4.1.2. of Division A and Part 9 of Division B.

¹⁰ See Section 9.32. of Division B.

¹¹ See Sentence 1.1.1.1.(4) and the definition of "farm building" in Article 1.4.1.2. of Division A.

¹² See the definition of "post-disaster building" in Article 1.4.1.2. as well as Note A-1.4.1.2. of Division A.

¹³ See the definition of "registered professional" in Article 1.4.1.2. of Division A.

- No minimum requirement for a percentage of the building perimeter of **mid-rise combustible buildings** to face a street¹⁴; requirements for **exterior cladding of mid-rise combustible buildings** are found in Article 3.1.4.8. of Division B and address situations where a building may face only a single street or access route (10 percent of cladding permitted to be combustible on an exterior wall that faces a street or access route),
- Reference to the **Safety Standards Act and its pursuant regulations** to clarify that recognition of enforcement of the Act and its regulations is included,
- **Letters of Assurance** reflecting the new definitions for registered professionals and owners, clarifying independent review of structural design as an applicable item on Schedule B, and providing a field for email addresses,
- **Encapsulated mass timber construction** which was permitted for participating jurisdictions is enabled province-wide and the distance between the first storey floor and the uppermost floor level is increased¹⁵ from 42 metres to 50 metres to account for typical floor-to-floor distances,
- Calculations for **mezzanines** for the purposes of determining building height are adopted from the NBC 2020¹⁶, replacing B.C.'s historical calculations as the outcomes were very similar; mezzanines are permitted to be exempted from consideration as a storey in building height if they occupy not more than 40 percent of the open area of the room and the space above the mezzanine is open,
- Calculations for **street frontage** as a relationship between building perimeter and location required for consideration as facing one street is deleted¹⁷ and replaced by limits and conditions for combustible cladding as a relationship between building face and the distance to a street¹⁸,
- Requirements for **tactile walking surface indicators** are adopted from the NBC 2020¹⁹, replacing B.C.'s historical requirements; locations required to have tactile walking surface indicators are similar to B.C.'s historical requirements, however the design is required to conform to CSA B651-18, "Accessible design for the built environment," which requires truncated domes as opposed to B.C.'s historical strips,
- **Fenestration** (windows, doors, and skylights) provisions to allow greater design options and flexibility which are further described in [Bulletin B24-04](#),
- **Radon rough-ins for subfloor depressurization systems** required in all houses and which is further described in [Bulletin B24-03](#),

¹⁴ Sentence 3.2.2.10.(3) of Division B of the NBC 2020 is "reserved" in the BCBC 2024.

¹⁵ See Sentences 3.2.2.48.(2) and 3.2.2.57.(2) of Division B.

¹⁶ See Articles 3.2.1.1. and 9.10.4.1. of Division B.

¹⁷ Sentence 3.2.2.10.(3) of Division B is deleted and shown as "reserved".

¹⁸ See Sentence 3.1.4.8.(2) of Division B.

¹⁹ See Articles 3.3.1.19. and 9.8.1.5. of Division B.

- B.C.'s variation to apply Subsection 9.10.15. of Division B to **spatial separation for accessory buildings** is repealed and the NBC 2020 requirement that spatial separation for accessory buildings shall comply with Subsection 9.10.14. of Division B is adopted,
- **Accessibility** requirements such as for more visible alarms, more universal washrooms, more access to more storeys and spaces, and more accessible sleeping rooms and bed spaces in hotels and motels are updated based on adoption of NBC 2020 requirements and which will be further described in a bulletin expected soon, and
- As of March 10, 2025, large new condominium and apartment buildings will require 100 percent **adaptable dwelling units** and first floor units of smaller apartment buildings must be adaptable, also the design and construction requirements for adaptable dwelling units are revised based on recent anthropometric data; these changes are further described in [Bulletin B24-01](#) with another bulletin expected soon.

New Requirements in the Building Code 2024

This bulletin discusses some noteworthy provisions that are new to the Building Code 2024 either as new unique-to-B.C. variations to the National Building Code of Canada (NBC) 2020, or that are adopted from the NBC 2020 into the Building Code 2024.

New unique-to-B.C. provisions include:

- Protection from **overheating in dwelling units** by requiring one living space in each dwelling unit to be capable of maintaining an indoor upper temperature limit of 26 degrees Celsius to be further described in another bulletin expected soon, and
- Free-standing **steel pallet storage rack** design is permitted to be designed to CSA A344.2-05, "Standard for the design and construction of steel storage racks," provided the design achieves the required level of performance.

New provisions adopted and/or adapted from the NBC 2020 include:

- The term "**owner**" is defined and further clarified by B.C. as the entity controlling the property during the period of design and construction when the Building Code applies, decoupling a current owner from future or retroactive responsibilities,
- Updates to **accessibility** requirements to reduce barriers such as clear path of travel revisions based on recent anthropometric data, providing power-operated doors at all building entrances, more visual and tactile signage, illumination of paths of travel, designated wheelchair spaces and adaptable seating in assembly occupancies, and adult-sized changing tables and spaces in universal washrooms of large occupancies, and many more changes to be further described in a bulletin expected soon,
- Updates to **seismic (earthquake) requirements** come into force March 10, 2025, these changes are further described in [Bulletin B24-02](#) with another bulletin expected soon,

- Changes to the **climatic data** in Table C-2 of Appendix C based on data researched and analyzed by Environment and Climate Change Canada, with a notable example of Degree-Days Below 18°C values for Comox, Courtenay, Hope, Ladysmith, Nanaimo, Parksville, and Qualicum Beach, effectively changing from climate zone 5 to climate zone 4 (as in previous editions, Table C-2 is used when the authority having jurisdiction has not established climatic or seismic values),
- Specific requirements for **self-service storage buildings** in Part 3 of Division B are further described in [Bulletin B24-06](#), and
- Design requirements for **evaporative equipment** used in air duct systems are revised to minimize the growth and transmission of Legionella and other bacteria.

References and editorial updates

The BC Codes 2024 include many updates to newer editions of referenced documents that are not discussed in this bulletin. Updates to editions of referenced documents can be found in Section 1.3. of Division B of each of the Building Code 2024, the Plumbing Code 2024, and the Fire Code 2024.

The organization and numbering of the Building Code 2024 more closely resembles the model National Building Code of Canada 2020 (NBC). Building Code users will find some unique-to-B.C. provisions relocated in order to follow the structure and numbering of NBC provisions. The convention “reserved” is used to preserve the numbering of NBC provisions. (NBC content that is “reserved” is not adopted and does not form part of the BC Codes.)

The BC Codes 2024 include a number of minor editorial changes that are not discussed in this bulletin. These changes are to help inform consistent interpretation and application of the provisions of the Codes and are considered clerical changes rather than technical changes.