

BC Codes 2024 – Adaptable Dwelling Units and Earthquake Design Requirements Engagement Session

The main objective of the engagement session is to explore the questions below to define the scope of space impacts and identify mitigation opportunities. By providing the questions in advance, the aim is to increase the ability of participants to have a fulsome discussion at the session.

- 1) Can you provide real-life examples of space impacts from implementing adaptable dwellings and earthquake design provisions in your projects?
- 2) What are the specific limitations with design options that are unresolvable? For adaptability requirements? For seismic requirements?
- 3) Do you have ideas on how to address the space impacts, for adaptability requirements, and for seismic requirements?

The session will enable participants to:

- Clarify and address misconceptions;
- Share and learn from real life experiences of one another in implementing the new provisions;
- Discuss lessons learned in the implementation of the new provisions;
- Work as a group to identify possible mitigation opportunities for government to consider; and
- Foster cross-organization collaboration

Background

- On December 5, 2023, the Province adopted the BC Building and Fire Codes except for adaptable dwellings and earthquake design requirements which take effect March 10, 2025.
- This phased implementation responds to industry's concerns that a short implementation timeline would cause significant design changes and cause housing projects to be delayed

or cancelled. Therefore, the Province introduced a one-year transition period for changes that are most impactful on sellable and useable floor space in residential buildings.

- During public consultation relating to the BC Codes 2024, building industry associations raised concerns about the costs relating to the adaptable dwelling units and earthquake design provisions. Specifically regarding:
 - cost impacts relating to adaptability provisions such as requiring more elevators in small scale multi-unit residential buildings and requiring that all apartments in all buildings meet adaptability requirements, and
 - increased seismic risk in some parts of the province would mean that some simple buildings or single-family homes would require engineers to design the seismic safety of the building, dramatically increasing costs.
- Cost impacts of the new earthquake design changes are estimated by a National Building Code committee study to be between 1-5% of total project cost. Feedback from the builder and developer community identified that these changes are in addition to potentially larger incremental costs from development cost changes (DCCs) and permitting fees charged by local governments.
- In response, BC Codes 2024 were changed prior to adoption to mitigate costs as follows:
 - Requirements for more elevators in small buildings were dropped, and adaptability provisions were changed from 100% of all units to only those units on the ground floor or accessible by elevator, if voluntarily installed. While this reduces the cost by no longer requiring elevator access and reducing the number of adaptable units, it also means that fewer new units will be adaptable and supportive of occupants with disabilities or mobility needs.
 - Changes to the code's earthquake design provisions were made to early adopt 'prescriptive requirements' for smaller buildings and single-family homes, reducing the need for engineers to contribute to their designs. This reduces costs, but the development industry has lingering concerns about the requirements because prescriptive requirements are not always flexible for specific needs of specific locations, the use of alternatives may require training for building designers, and local governments may still require engineers to sign off on designs.

Rationale

Earthquake design provisions in the BC Codes 2024 responds to new data on seismic risk in British Columbia, including the discovery of a new seismic fault under Victoria. The changes require increased strength in certain buildings in certain parts of the province depending on

construction methods and location. Some buildings in some parts of the province saw a reduction in requirements with reduced earthquake risk.

Adaptable dwelling provisions in the BC Codes 2024 provide a measure of accessibility (e.g., wider doorways) and enable a home that is designed in compliance with the code to be renovated later to be more accessible to occupants who have disabilities. These provisions can reduce the cost of renovations later and enable people to age in place or live in their homes longer as their needs change.

Adaptable dwelling units are shown on architectural drawings to be able to be renovated to suit a variety of occupants needs without costly and intrusive reconstruction of the building's systems (such as but not limited to structural, fire, and plumbing). For example, it is anticipated that kitchen renovations may occur over the lifecycle of the unit, so it is not required that the kitchen initially constructed be the same as the kitchen layout demonstrated on architectural drawings for the purposes of demonstrating the potential.

For further details, refer to attached **Information Bulletin - Adaptable Dwelling Units**
Frequently Asked Questions

Resources:

[Bulletin B24-01](#) provides information on the effective date for these new requirements. Information on the technical changes to the accessibility and adaptable dwelling unit requirements will be further discussed in separate bulletins, soon to be released.

Code users are encouraged to [sign up for BC Codes updates](#) and check often for new [technical bulletins](#).

More information on accessibility, adaptability, including reports on public engagements can be found on the Building Codes & Standards' [website](#).

The Building and Safety Standard Branch continues to collaborate with industry partners to provide educational materials to support code users to effectively and efficiently implement the new requirements.