



Building Department - Bulletin

Report Date: January 31, 2025
For immediate release

BC Building Code Revisions and New Requirements: Accessibility, Seismic, and GHG Emissions

This Bulletin is intended to inform the RDCK building community of the updated 2024 BC Building Code requirements that have been adopted, and will be enacted on March 10, 2025.

This information bulletin will provide an overview and highlights of the recent changes to the 2024 BC Building Code that will take effect as of March 10, 2025. The affected requirements in Sections 9.5 and 3.8 with focus on building accessibility and *Adaptable Dwelling Units (New code defined term)*, Sections 9.23 and Part 4 focuses on building structural lateral loads seismic and wind design, and Sections 9.37 and 10.3 on operational greenhouse gas emissions (Zero Carbon Step Code).

Accessibility and Adaptable Dwelling Units – BCBC Sections 9.5 and 3.8

The *Adaptable Dwelling Unit* provision mostly impacts larger multi-unit residential buildings and to a much lesser extent small residential buildings. These new requirements for Part 9 houses will require a *dwelling unit* be designed and constructed with some *accessible* features, which accommodate the future modifications to provide more *accessible* features. For example, 3.8.2.1.(2) requires for compliance for (backing for future grab bars) in detached houses, duplexes, houses with secondary suites, triplexes, townhouses, row houses, and boarding houses. For larger Part 9 and Part 3 residential buildings, a new requirement for 100% ADUs in large condominium apartment buildings and first floor dwelling units in new small apartments and condominiums.

Adaptable Dwelling Units (ADU) 9.5.2.1.

9.5.2.1. General

1) Except as provided in Articles 9.5.2.3. and 3.8.2.1., every *building* shall be designed in conformance with Section 3.8.



New- 3.8.2.1.(2) Requirement for compliance for (backing for future grab bars) in detached houses, duplexes, houses with secondary suites, triplexes, townhouses, row houses, and boarding houses.



New 100% ADUs in large condominium apartment buildings and first floor dwelling units in new small apartments and condominiums

New standards for the design and construction of adaptable housing have been added to the BC Building Code. The new standards include wider doorways, accessible entrances, extra reinforcement in bathroom walls to allow grab bars to be installed, and easy to use light switches and door handles.

9.5.2.2. Protection on Floor Areas with an Accessible Path of Travel

1) Where an *accessible* path of travel required in Article 9.5.2.1. is provided to any *storey* above the *first storey*, the requirements in Article 3.3.1.7. shall apply.

3.8.2.1. Exceptions

(See Note A-3.8.2.1.)

1) Except as required by Sentence (2), the requirements of this Section apply to all *buildings* except

- a) detached houses, semi-detached houses, houses with a *secondary suite*, duplexes, triplexes, townhouses, row houses and boarding houses (see Note A-1.4.1.2.(1) of Division A, Secondary Suite),
- b) *buildings* of Group F, Division 1 *major occupancy*, and
- c) *buildings* that are not intended to be occupied on a daily or full-time basis, including automatic telephone exchanges, pumphouses and substations.

2) *Buildings* described in Clause (1)(a) shall comply with Sentence 3.8.5.1.(2).

3.8.5.7. Adaptable Dwelling Unit Bathrooms

1) At least one bathroom in an *adaptable dwelling unit* shall be designed to be adaptable for use by *persons with disabilities* by providing

- a) a clear lateral transfer space adjacent a water closet conforming to Clause 3.8.3.12.(1)(b),
- b) a distance between the centre line of the water closet and the wall on one side of 460 mm to 480 mm,
- c) a plumbing system that accommodates the future installation of a lavatory with a clear space in accordance with Clauses 3.8.3.16.(1)(a) to (f) that does not impede the space for or use of other fixtures described in this Article (see Note A-3.8.5.7.(1)(c) and (d)),
- d) a plumbing system that accommodates the future installation of a

Accessibility Reference Documents:

Province of BC 2020 Accessible Handbook - https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/2020_building_accessibility_handbook.pdf

GHL 2024 Illustrated Guide on Accessibility <https://ghl.ca/wp-content/uploads/2025/01/BCBC-2024-Illustrated-Guide-on-Accessibility-V7-2025-01-27.pdf>

2024 BC Building Code https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc_2024_web_version_20240409.pdf

- i) shower described in Sentence 3.8.3.17.(1) that does not impede the space for or use of other fixtures described in this Article, or
- ii) bathtub described in Sentence 3.8.3.18.(1) that does not impede the space for or use of other fixtures described in this Article (see Note A-3.8.5.7.(1)(c) and (d)), and
- e) walls adjacent the water closet and shower or bathtub location reinforced to accommodate the future installation of grab bars conforming to
 - i) Clauses 3.8.3.12.(1)(f) and (g) for water closets, and
 - ii) Clause 3.8.3.17.(1)(f) for showers or Clauses 3.8.3.18.(1)(f) for bathtubs (see Note A-3.8.5.7.(1)(e)).

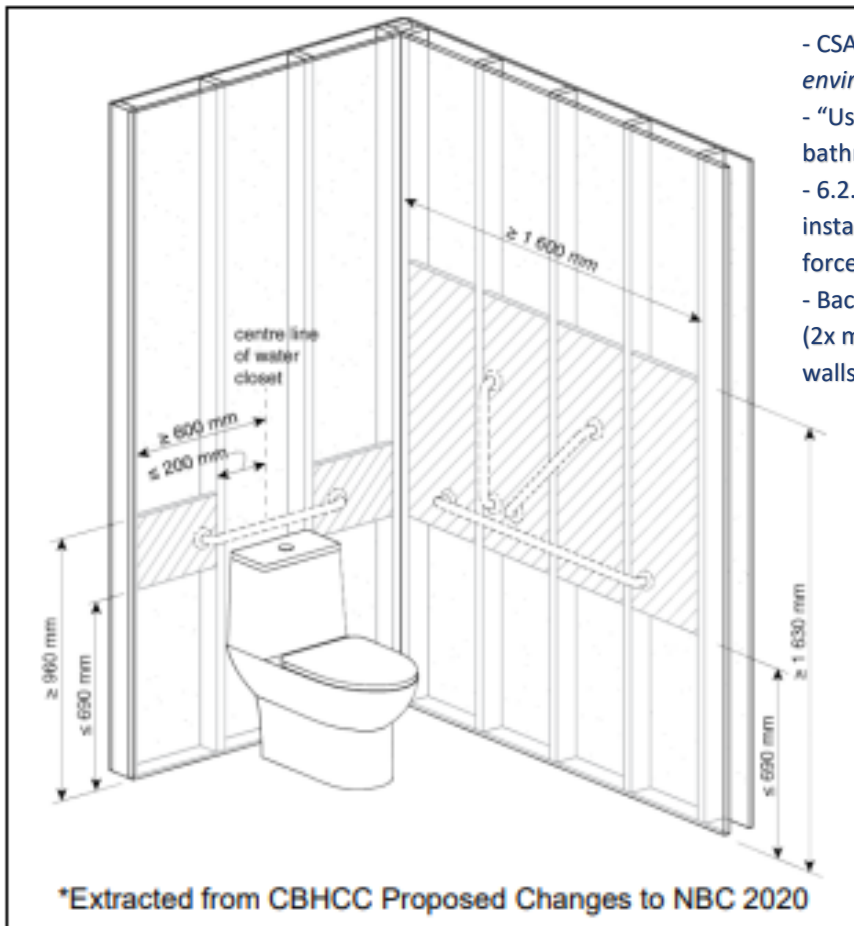
Water Closets 3.8.3.12(f)

be equipped with an L-shaped grab bar that

- i) is mounted on the side wall closest to the water closet,
- ii) has horizontal and vertical components not less than 760 mm long (30") mounted with the horizontal component 750 mm to 850 mm (29.5- 33.5") above the floor and the vertical component 150 mm (6") in front of the water closet

g) be equipped with either one grab bar at least 600 mm long (24") and centred over the water closet, or two grab bars at least 300 mm (12") long and located either side of the flush valve, that

- ii)** are mounted on the rear wall, and
- iii)** are mounted at the same height as the grab bar on the side wall or 100 mm (4") above the top of the attached water tank



3.8.2.1.(2) Grab Bar Reinforcement Example

- CSA B651 Standard "Accessible design for the built environment"
- "Using 19-mm (¾-in.) plywood on all the walls of the bathroom is the most universal solution".
- 6.2.5.2 **Structural Strength** - A grab bar shall be installed to resist a force of at least 1.3 kN (292 LB-force) applied in any direction.
- Backing required in walls at all grab bar locations. (2x material between studs or ¾" plywood to full walls. (Framing Insp)



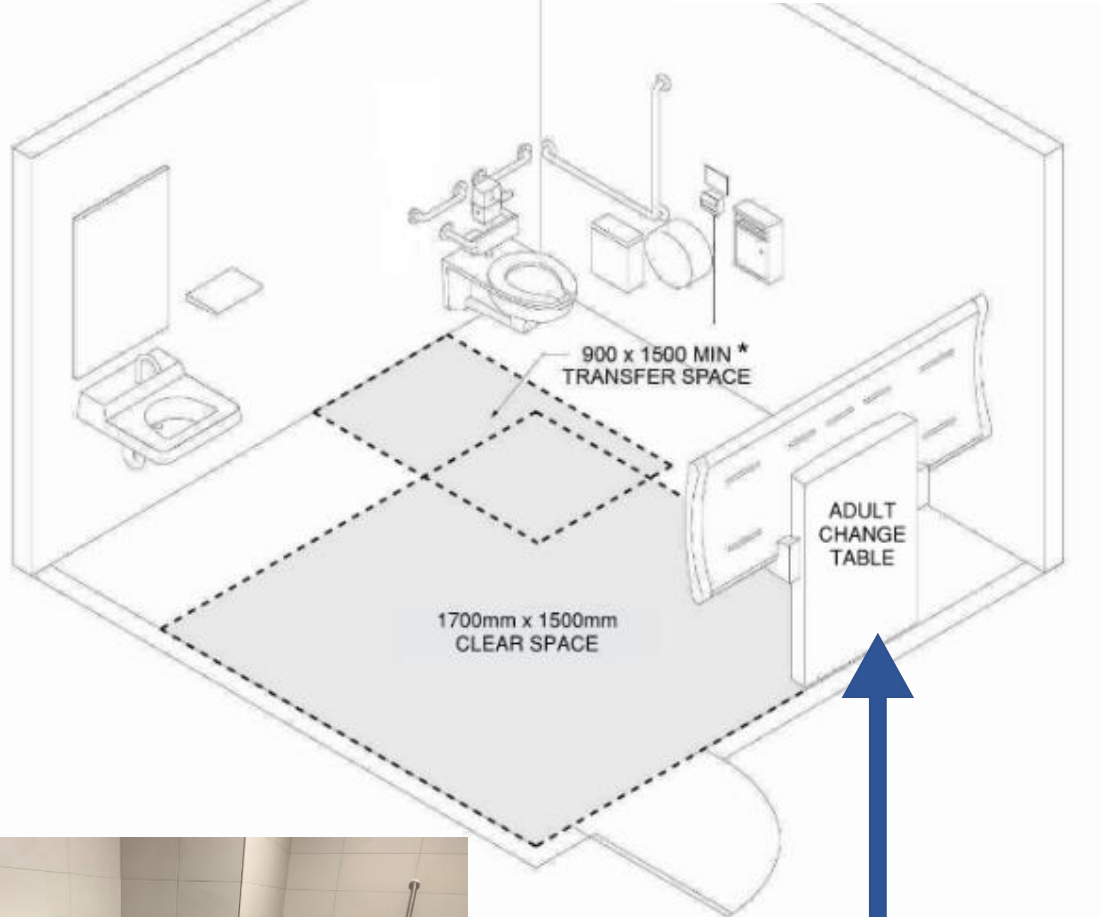
Accessibility Reference Documents:

Province of BC 2020 Accessible Handbook - https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/2020_building_accessibility_handbook.pdf

GHl 2024 Illustrated Guide on Accessibility <https://ghl.ca/wp-content/uploads/2025/01/BCBC-2024-Illustrated-Guide-on-Accessibility-V7-2025-01-27.pdf>

2024 BC Building Code https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc_2024_web_version_20240409.pdf

New- 3.8.2.1.(5) Requirement accessible change space in a universal washroom or on the main entrance storey in a building of A, B-2 or E occupancy. (this is an adult change table, see 3.8.3.13.(2).

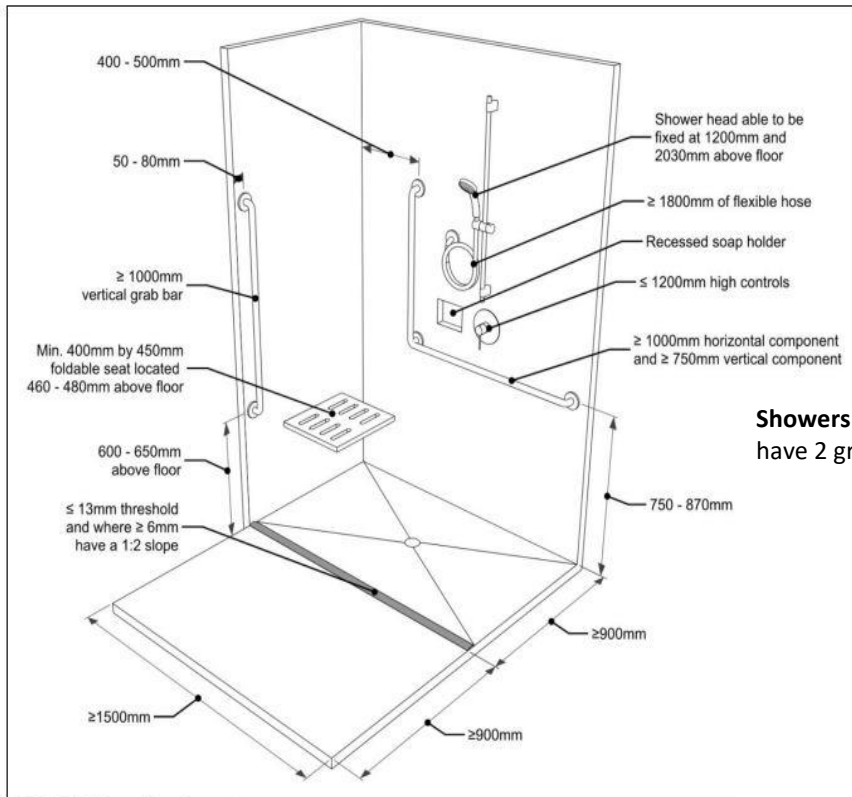


Accessibility Reference Documents:

Province of BC 2020 Accessible Handbook - https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/2020_building_accessibility_handbook.pdf

GHl 2024 Illustrated Guide on Accessibility <https://ghl.ca/wp-content/uploads/2025/01/BCBC-2024-Illustrated-Guide-on-Accessibility-V7-2025-01-27.pdf>

2024 BC Building Code https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc_2024_web_version_20240409.pdf



3.8.3.17.(f) Shower Requirements

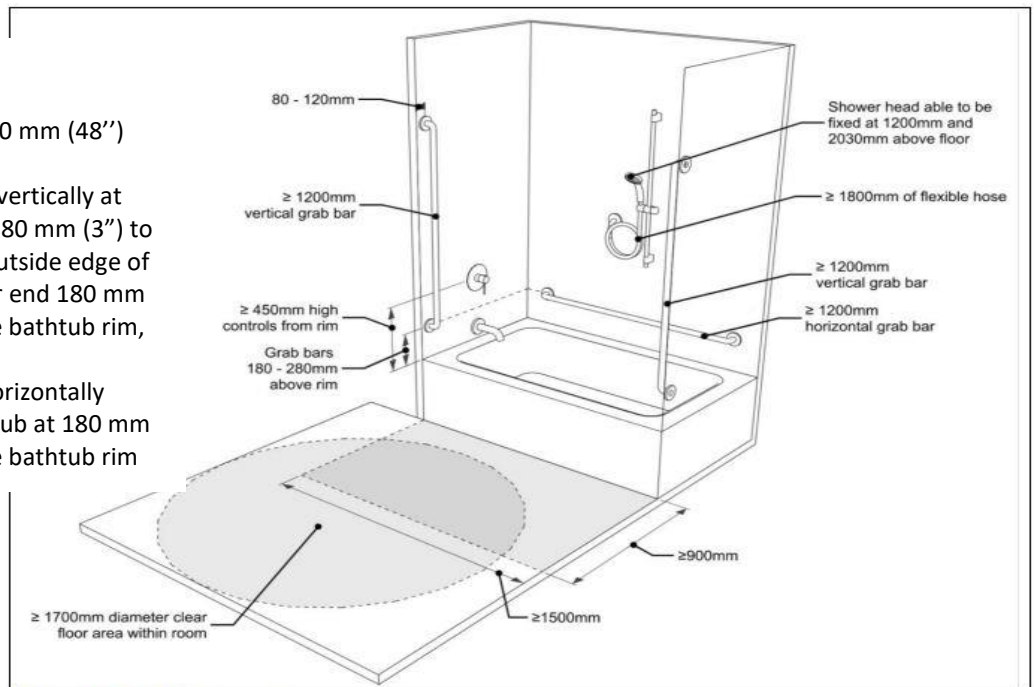
Showers 3.8.3.17(f)
have 2 grab bars

- ii) one of which is not less than 1 000 mm (39") long and located vertically on the side wall 50 mm to 80 mm (2-3") from the adjacent clear floor space, with its lower end 600 mm to 650 mm (24-25.5") above the floor, and,
- iii) one of which is L-shaped and located on the wall opposite the entrance to the shower, with a horizontal member not less than 1 000 mm (39") long mounted 750 mm to 870 mm (29.5-34") above the floor and a vertical member not less than 750 mm (29.5") long mounted 400 mm to 500 mm (16-19.5") from the side wall on which the other vertical grab bar is mounted

Bathtubs 3.8.3.18(f)

have three grab bars

- ii) that are not less than 1 200 mm (48") long,
- iii) two of which are located vertically at each end of the bathtub, set 80 mm (3") to 120 mm (4 ¾") in from the outside edge of the bathtub, with their lower end 180 mm to 280 mm (7-11") above the bathtub rim, and
- iv) one of which is located horizontally along the length of the bathtub at 180 mm to 280 mm (7-11") above the bathtub rim



3.8.3.18. Bathtub Requirements

Accessibility Reference Documents:

Province of BC 2020 Accessible Handbook - https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/2020_building_accessibility_handbook.pdf

GHL 2024 Illustrated Guide on Accessibility <https://ghl.ca/wp-content/uploads/2025/01/BCBC-2024-Illustrated-Guide-on-Accessibility-V7-2025-01-27.pdf>

2024 BC Building Code https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc_2024_web_version_20240409.pdf

Seismic and Wind Loads – BCBC Sections 9.23 and Part 4

On the 10th of March 2025, new requirements for seismic requirements and structural provisions on Part 9 and Part 3 buildings will be enacted into the 2024 Building Code for most areas the Province including the RDCK region. Braced Wall Panels are portions of walls within an imaginary “braced wall band”, where exterior sheathing or interior finishes such as drywall are designed and installed to provide the required resistance to lateral loads due to earthquakes and wind. A Brace wall band is an imaginary continuous straight band extending vertically and horizontally through a building (or part of a building) in which brace wall panels are constructed.

9.4.2.5. Seismic Design Parameter Coming March 10, 2025 ★

- “Braced wall panel – portions of walls where exterior sheathing or interior finish is designed and installed to provide the required resistance to lateral loads due to earthquakes.”
- “Braced wall band – imaginary continuous straight band extending vertically and horizontally through a building (or part of building) in which braced wall panels are constructed”
- Source: BC Housing – Illustrated Guide to Seismic Bracing Requirements

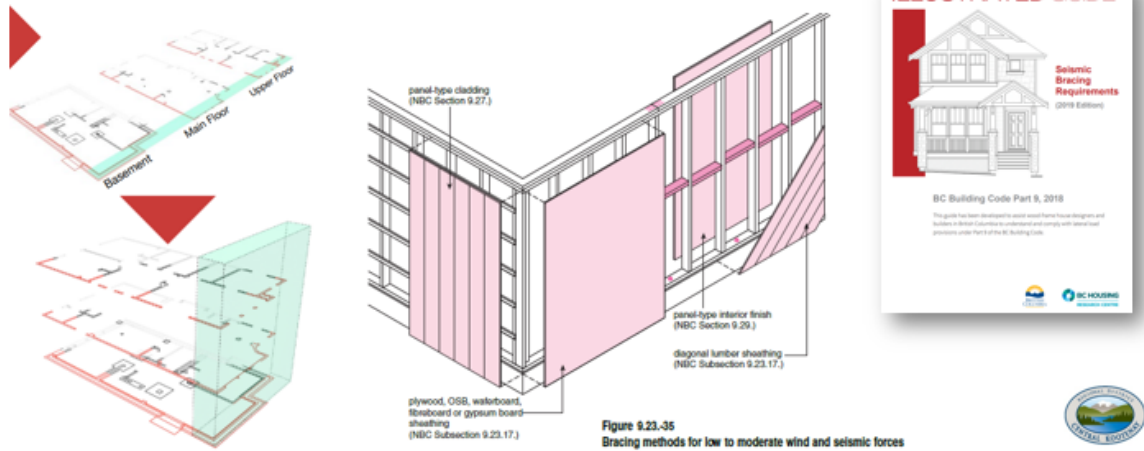


Figure 9.23-35
Bracing methods for low to moderate wind and seismic forces

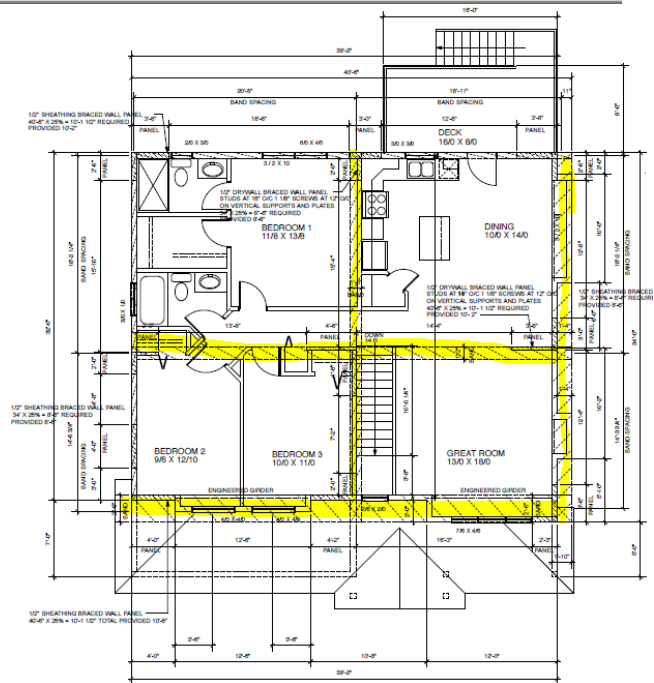


9.23.13. Bracing to Resist Lateral Loads Due to Wind and Earthquake

9

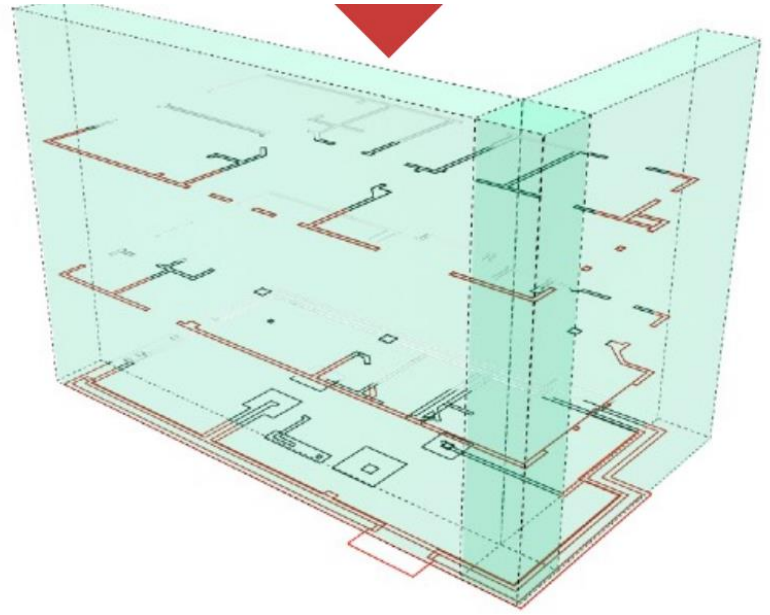
9.23.13.4. Identifying a braced-wall band

- Imaginary continuous band extending vertically and horizontally through a building.



UPPER FLOOR LATERAL LOAD PLAN

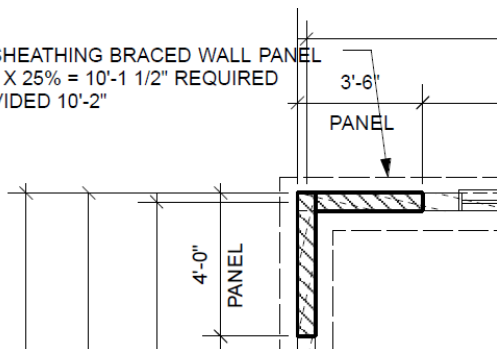
- Braced wall panels are located within the braced wall band.
- Must be located around the perimeter of the building.
- Additional interior braced wall bands can be installed if required.
- Bands can be up to 1.2m wide.
- Spacing maximum of 10.6 m (Table 9.23.13.5)
- Reference: BC Housing – Illustrated Guide to Seismic Bracing Requirements – 2019 Edition



9.23.13.5. Identifying a braced-wall Panel

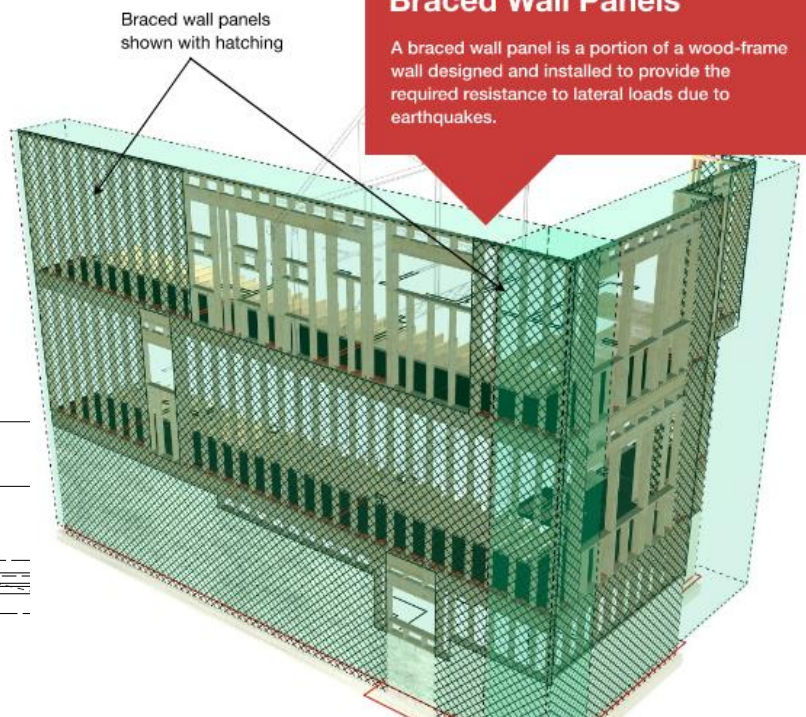
- A portion of a wood framed wall designed and installed to provide resistance to lateral loads.
- Must be sheathed with OSB, plywood, diagonal plank sheathing, or gypsum board.
- conform to the spacing and dimensions given in Table 9.23.13.5. and Article 9.23.13.7.

1/2" SHEATHING BRACED WALL PANEL
40'-6" X 25% = 10'-1 1/2" REQUIRED
PROVIDED 10'-2"



Braced Wall Panels

A braced wall panel is a portion of a wood-frame wall designed and installed to provide the required resistance to lateral loads due to earthquakes.



Accessibility Reference Documents:

Province of BC 2020 Accessible Handbook - https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/2020_building_accessibility_handbook.pdf

GHL 2024 Illustrated Guide on Accessibility <https://ghl.ca/wp-content/uploads/2025/01/BCBC-2024-Illustrated-Guide-on-Accessibility-V7-2025-01-27.pdf>

2024 BC Building Code https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc_2024_web_version_20240409.pdf

9.23.13.5. Spacing and Dimensions of Braced Wall Bands and Braced Wall Panels

Table 9.23.13.5.
Spacing and Dimensions of Braced Wall Bands and Braced Wall Panels
 Forming Part of Sentences 9.23.13.4.(1) and 9.23.13.5.(1)

Description	Spacing and Dimensions of Braced Wall Bands and Braced Wall Panels ⁽¹⁾ ⁽²⁾ ⁽³⁾
Maximum distance between centre lines of adjacent <i>braced wall bands</i> measured from the furthest points between centres of the bands	10.6 m
Maximum distance between required <i>braced wall panels</i> measured from the edges of the panels	6.4 m
Maximum distance from the end of a <i>braced wall band</i> to the edge of the closest required <i>braced wall panel</i>	2.4 m
Minimum length of individual wood-sheathed <i>braced wall panels</i> :	
• panel located at the end of a <i>braced wall band</i> where the <i>braced wall panel</i> connects to an intersecting <i>braced wall panel</i>	600 mm
• panel not located at the end of a <i>braced wall band</i> or <i>braced wall panel</i> located at the end of a <i>braced wall band</i> where the <i>braced wall panel</i> does not connect to an intersecting <i>braced wall panel</i>	750 mm
Minimum length of individual <i>braced wall panels</i> sheathed only with gypsum board	1.2 m
Minimum length of individual diagonal-lumber-sheathed <i>braced wall panels</i>	1.2 m
Minimum total length of all <i>braced wall panels</i> in a <i>braced wall band</i>	Per Article 9.23.13.7.

Notes to Table 9.23.13.5.:

- (1) See Note A-Table 9.23.13.5.
- (2) All constructions include support of a roof load in addition to the indicated number of floors.
- (3) See Article 9.23.13.10. for alternative methods of compliance.

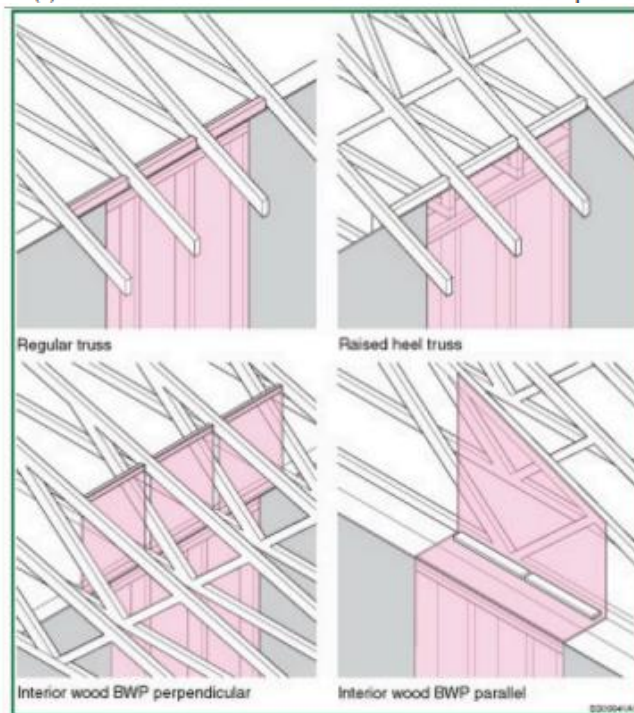


Figure A-9.23.13.5.(3) and (4)

Wood-sheathed braced wall panel to roof framing connection details (Sentence 9.23.13.5.(3)(a) and (b))

2) In basements or crawl spaces where the perimeter foundation walls extend from the footings to the underside of the supported floor, braced wall bands constructed with braced wall panels shall be spaced not more than 9-190 Division B British Columbia Building Codes 2024 9.23.13.6. a) have a total length of braced wall panels not less than the total length in the braced wall band in the storey above, and b) be spaced not more than i) 15 m from the perimeter foundation walls, ii) 15 m from interior foundation walls, and iii) 15 m from adjacent braced wall bands constructed with braced wall panels. (See Note A-9.23.13.5.(2).)

3) Interior or exterior wood-sheathed braced wall panels, other than panels of WSPA framing in the uppermost storey shall a) extend to the roof framing, and b) have their the top plate connected to i) top chords of perpendicular or offset parallel trusses by using blocking panels or other methods of lateral load transfer designed by the roof truss manufacturer, ii) perpendicular or offset parallel joists or rafters by using blocking of the same construction as the braced wall panel below, or iii) rafters, joists or trusses by using methods of lateral load transfer designed in accordance with good engineering practice. (See Note A-9.23.13.5.(3) and (4).)

4) The top plates of braced wall panels described in Sentence (3) shall be fastened in accordance with Table 9.23.3.4. (See Note A-9.23.13.5.(3) and (4).)

Accessibility Reference Documents:

Province of BC 2020 Accessible Handbook - https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/2020_building_accessibility_handbook.pdf

GHL 2024 Illustrated Guide on Accessibility <https://ghl.ca/wp-content/uploads/2025/01/BCBC-2024-Illustrated-Guide-on-Accessibility-V7-2025-01-27.pdf>

2024 BC Building Code https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc_2024_web_version_20240409.pdf

9.23.13.6. Materials in Braced Wall Panels

Materials in Braced Wall Panels

- 1) Required braced wall panels shall be
 - a) sheathed on the exterior side with plywood, OSB, waferboard or diagonal lumber complying with Subsection 9.23.17. fastened in accordance with Sentence 9.23.3.5.(3) and finished on the interior side with gypsum board complying with Subsection 9.29.5., or
 - b) sheathed on the interior side or exterior side with gypsum board complying with Subsection 9.29.5. and fastened in accordance with Sentence 9.23.3.5.(3). (See Note A-9.23.13.6.(1).)
- 2) Except as provided in Sentences (4) and (5), braced wall bands shall be constructed of braced wall panels of the same sheathing material.
- 3) Braced wall panels in basements and crawl spaces shall be sheathed with OSB, plywood, waferboard or diagonal lumber
 - a) at braced wall band spacing intervals of not more than 15 m, and
 - b) under all interior braced wall bands containing wood-sheathed braced wall panels. (See Note A-9.23.13.6.(3).)
- 4) Mixing of braced wall panel framing types is permitted in stacked braced wall bands, provided that wood-sheathed braced wall panels are not above any braced wall bands containing a) gypsum-sheathed braced wall panels, or b) diagonal-lumber-sheathed braced wall panels.
- 5) Mixing of braced wall panel framing types is permitted along a braced wall band within the same storey, provided that
 - a) panels of WSP-A or WSP-B framing type are substituted for panels of a GWB framing type and the total length of all of the braced wall panels is determined based on the GWB framing type, or
 - b) the lengths of the braced wall panels of mixed framing types are based on accepted engineering principles. (See Note A-9.23.13.6.(5).)

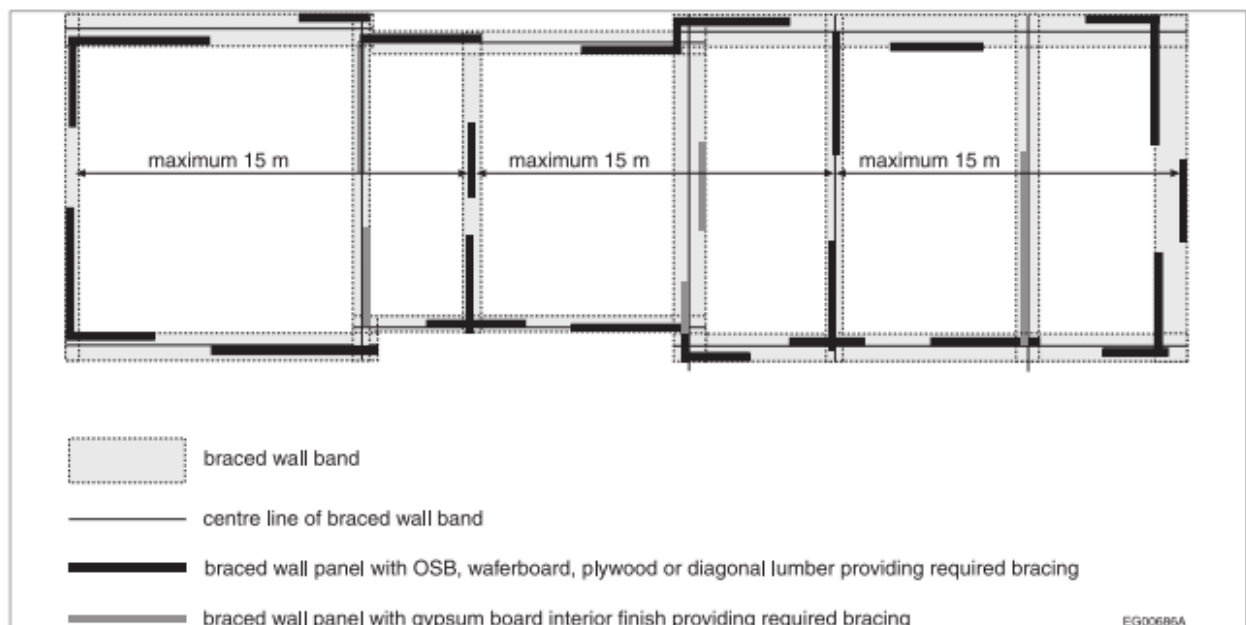


Figure A-9.23.13.6.(3)

Braced wall panels constructed of wood-based material

Accessibility Reference Documents:

Province of BC 2020 Accessible Handbook - https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/2020_building_accessibility_handbook.pdf

GHL 2024 Illustrated Guide on Accessibility <https://ghl.ca/wp-content/uploads/2025/01/BCBC-2024-Illustrated-Guide-on-Accessibility-V7-2025-01-27.pdf>

2024 BC Building Code https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc_2024_web_version_20240409.pdf

9.23.13.7. Braced Wall Panel Length

Table 9.23.13.7-A
Unadjusted Minimum Total Braced Wall Panel Lengths for Wind
Forming Part of Sentence 9.23.13.7.(3)







HWP	Storey	Unadjusted Minimum Total Braced Wall Panel Length for Wind, L_w , m ⁽¹⁾									
		DWB	Diagonal- Lumber-Sheathed Framing Type (with gypsum board on opposite side) ⁽²⁾				Gypsum-Sheathed Framing Type (with gypsum board on only one side) ^{(2) (3)}		Wood-sheathed Framing Type (with gypsum board on opposite side) ⁽²⁾		
			GWB-A	GWB-B	GWB-C	GWB-D	WSP-A	WSP-B	WSP-C	WSP-D	WSP-E
HWP ≤ 0.3		0.65	3.29	1.91	1.42	1.14	1.14	0.60	0.52	0.48	0.43
		1.33	6.75	3.92	2.91	2.35	2.35	1.24	1.08	0.98	0.88
		2.02	10.21	5.93	4.40	3.57	3.57	1.87	1.63	1.49	1.34
0.3 < HWP ≤ 0.4		0.86	4.38	2.54	1.89	1.52	1.52	0.80	0.70	0.64	0.57
		1.78	9.00	5.23	3.88	3.14	3.14	1.65	1.43	1.31	1.18
		2.69	13.61	7.91	5.86	4.75	4.75	2.50	2.17	1.98	1.79

Table 9.23.13.7-B
Adjustment Factors for the Determination of Minimum Total Braced Wall Panel Lengths for Wind
Forming Part of Sentence 9.23.13.7.(3)

Symbol	Description	Storey	Condition	Adjustment Factor
K_{exp} ⁽¹⁾	Wind exposure: apply factor to all storeys in both directions	All storeys All storeys in 1 – storey building All storeys in 2 – storey building All storeys in 3 – storey building	Rough terrain	1.00
			Open terrain	1.29
				1.40
K_{roof} ⁽²⁾	Roof eave-to-ridge height: apply factor separately to each storey	Storey supporting roof only	≤ 1.5 m	0.52
			3.0 m	1.00
			4.5 m	1.58
$K_{wspacing}$ ^{(2) (3) (4)}	Braced wall band spacing: apply factor to all braced wall panels per building plan direction	Any storey	≤ 1.5 m	0.79
			3.0 m	1.00
			4.5 m	1.26
$K_{wnumber}$	Number of parallel braced wall bands: apply factor to all braced wall panels per building plan direction	Any storey	≤ 1.5 m	0.87
			3.0 m	1.00
			4.5 m	1.16
K_{gyp}	Interior gypsum board: apply factor in accordance with whether gypsum board is installed or omitted on interior side of braced wall panels	Any storey	6.0 m	1.31
			6.0 m	1.47
			6.0 m	1.31
K_{sheath}	Intermittent braced wall panels: apply factor in accordance with continuity of sheathing within braced wall band	Any storey	≤ 1.5 m	0.87
			3.0 m	1.00
			4.5 m	1.16
K_{sheath}	Intermittent braced wall panels: apply factor in accordance with continuity of sheathing within braced wall band	Any storey	6.0 m	1.31
			6.0 m	1.47
			6.0 m	1.31
$K_{wspacing}$ ^{(2) (3) (4)}	Braced wall band spacing: apply factor to all braced wall panels per building plan direction	Any storey	3.8 m	0.51
			7.6 m	1.00
			10.6 m	1.35
$K_{wnumber}$	Number of parallel braced wall bands: apply factor to all braced wall panels per building plan direction	Any storey	15 m ⁽⁵⁾	1.86
			2	1.00
			3	1.28
K_{gyp}	Interior gypsum board: apply factor in accordance with whether gypsum board is installed or omitted on interior side of braced wall panels	Any storey	4	1.38
			≥ 5	1.43
			Installed	1.00
K_{gyp}	Interior gypsum board: apply factor in accordance with whether gypsum board is installed or omitted on interior side of braced wall panels	Any storey	Omitted, blocked wall	1.20
			Omitted, unblocked wall	1.40
			Continuously sheathed	1.00
K_{sheath}	Intermittent braced wall panels: apply factor in accordance with continuity of sheathing within braced wall band	Any storey	Intermittently sheathed	1.15

1) Except as provided in Tables 9.23.13.7.-B and 9.23.13.7.-D, all adjustment factors required for the calculation of the minimum total length of braced wall panels in accordance with this Article shall be taken as 1.

2) The minimum total length of all braced wall panels in a braced wall band shall be taken as the greater of L_w determined in Sentence (3) for the appropriate 1-in-50-year hourly wind pressure (HWP) and L_s as determined in Sentence (4) for the appropriate seismic design parameter, S_{max} , where

- a) HWP is not greater than 1.2 kPa, and
- b) S_{max} for Site Class C, is not greater than 2.6.

3) For resistance to wind pressure, the minimum total length of braced wall panels in each braced wall band, L_w , shall be determined by applying the adjustment factors provided in Table 9.23.13.7.-B to the unadjusted minimum total braced wall panel length L_{wU} provided in Table 9.23.13.7.-A using the following equation:
 $L_w = L_{wU} K_{exp} K_{roof} K_{wspacing} K_{wnumber} K_{gyp} K_{sheath} \geq BWP_{min}$ where K_{exp} = wind exposure adjustment factor, and = 1 for rough terrain (suburban, urban or wooded terrain extending upwind from the building uninterrupted for at least 1 km), K_{roof} = roof eave-to-ridge height adjustment factor, and = 1 for a roof eave-to-ridge height of 3 m $K_{wspacing}$ = braced wall band spacing adjustment factor for wind (see Sentence (5)), per building plan direction, and = 1 for a braced wall band spacing of 7.6 m $K_{wnumber}$ = number of parallel braced wall bands adjustment factor for wind, per building plan direction, and = 1 for two exterior walls and no intermediate braced wall bands, K_{gyp} = interior gypsum board adjustment factor, and = 1 for braced wall panels with gypsum board installed on the interior side, K_{sheath} = intermittent braced wall panels adjustment factor, and = 1 for continuously sheathed braced wall bands, and BWP_{min} = Minimum length of individual braced wall panels as per Table 9.23.13.5. (See Note A-9.23.13.7.(3) for an alternative procedure to calculate L_w , directly and Note A-9.23.13.7.(4).)

Accessibility Reference Documents:

Province of BC 2020 Accessible Handbook - https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/2020_building_accessibility_handbook.pdf

GHL 2024 Illustrated Guide on Accessibility <https://ghl.ca/wp-content/uploads/2025/01/BCBC-2024-Illustrated-Guide-on-Accessibility-V7-2025-01-27.pdf>

2024 BC Building Code https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc_2024_web_version_20240409.pdf

Steps to Determine Braced Wall Panel Design

1. Use Table 9.23.13.7 A to determine minimum panel length for each story for wind.
2. Use Table 9.23.13.7B to determine wind adjustment factors for wall panel length (“K Values”)
3. Use Table 9.23.13.7 C to determine minimum panel length for each story for seismic.
4. Use Table 9.23.13.7D to determine seismic adjustment factors for wall panel length (“K Values”)
5. Review building plans to ensure each braced wall band allows for a minimum of this length of braced wall panel.
6. Prepare drawing outlining braced wall panel locations.

Example 2 – Mixed sheathing types in all braced wall panels using direct length substitution approach

The exterior walls are constructed with wood sheathing, and qualify as WSP-A braced wall panels. The builder would like to substitute the 1m portion of GWB-B braced wall panel construction with WSP-A exterior braced wall panel. Clause 9.23.13.6.(5)(a) permits a direct substitution, determined using the longest calculated braced wall panel length of all sheathing types in the braced wall band. In this case, the required length of braced wall panel is 8 m of GWB-B or 5.5 m of WSP-A. Therefore in this scenario, 5 m (GWB-B) + 3 m (GWB-B) + 1 m (WSP-A) = 9 m > 8 m, meets the requirement in Clause 9.23.13.6.(5)(a).



Figure A-9.23.13.6.(5) -B

Mixed sheathing types in all braced wall panels using direct length substitution approach

What Does this Mean for Permit Applications and Inspections?

An additional inspection will be required (**PRIOR TO THE INSTALLATION OF EXTERIOR SHEATHING MEMBRANES**). The Building Official will reference the panel design to ensure that nailing, materials and blocking are consistent with construction.

LATERAL BRACING WALL PANEL INSPECTION

Inspection of the nailing of exterior sheathing prior to the installation of sheathing membranes. All nailing and blocking associated with braced wall panels to be completed for this inspection. Edge blocking is required in all panels that support more than just roof loads. The nailing of floor systems to sill plate or top plates will be inspected. Splices in braced wall bands and in walls perpendicular to orthogonal setback walls must be nailed from below to allow for inspection. Wood-based interior braced wall panels to be sheathed. Insulation installation may need to be reviewed in party walls prior to this inspection as it may be covered. Braced wall panel locations to be clearly marked out on the interior and exterior. Interior braced wall panels to be clearly marked so their location can be seen at the Interior Braced Wall Panel Inspection.

Drawings and designs will be required to illustrate compliance with the new requirements. With consideration to the fact that the majority of our region has a heavier snow and wind loading, this will result in complex designs under Part 9.23.13. Permit applications, including Part 9 buildings, will be required to have sealed structural design for braced-wall drawings / specifications. This is request is due to the local snow, seismic and wind loading that with the new requirements will likely result in a complex design.

At the time of permit application, additional sealed design for buildings (including houses) by a Qualified Professional, will be required to be submitted to show specifications and location of the braced wall bands and the panels within them. The sealed designs will be used by staff to review and approve plans, as well as to reference when inspecting construction during the framing inspection. At any time, a Building Official reviewing the file may request additional documentation or review from the Qualified Professional depending on the complexity of the design.

Lateral Bracing Plan Requirements (Sealed Design Required By Registered Professional):

- Lateral bracing plans must be drawn for each floor level and the crawlspace (if required). The drawings must be to scale (1/4"=1'-0") and drawn on a separate sheet or beside the architectural floor plan on the same page.
- Note any exceptions, trade-offs, or additional system considerations used in the design, complete with dimensions. Refer to BCBC 9.23.13.5. (2) to (5) and BCBC 9.23.13.7.
- The length, width and distance between band centerlines is to be dimensioned.
- Braced wall bands must be indicated by light shading or hatching, and braced wall panels by darker shading.
- Indicate the required percentage, minimum length required, and proposed length of braced wall panels in each braced wall band.
- Indicate the distance from the end of the braced wall band to the edge of the first braced wall panel, the length of the braced wall panel, and the distance between braced wall panels in each braced wall band.
- Each braced wall panel is to be labeled as per the type of construction. A legend should be provided to indicate the type of braced wall panel with all the design criteria (refer to 9.23.13.6.).

****Any walls over 3.1 m (10'-2") in height require Part 4 design (Structural Engineer & LOA – Schedule B)**

Accessibility Reference Documents:

Province of BC 2020 Accessible Handbook - https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/2020_building_accessibility_handbook.pdf

GHL 2024 Illustrated Guide on Accessibility <https://ghl.ca/wp-content/uploads/2025/01/BCBC-2024-Illustrated-Guide-on-Accessibility-V7-2025-01-27.pdf>

2024 BC Building Code https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc_2024_web_version_20240409.pdf

Operation GHG Emissions – Zero Carbon Step Code

BCBC Sections 9.37 and 10.3

Revision 5 of the 2024 BC Building Code (BCBC), related to the Zero Carbon Step Code (ZCSC), has been published. **Effective March 10, 2025**, new buildings must meet at least **EL-1 (measure only)** of the Zero Carbon Step Code. This means that applicable buildings following the performance path will be required to measure operational greenhouse gas emissions, and Part 9 applicable buildings following the prescriptive pathway will be required to disclose their operational systems and fuel sources. For details, please refer to the latest [Ministerial Order for Revision 5](#) of the 2024 BCBC.



Smaller Buildings: Section **9.37** *NEW

Larger Buildings: Section **10.3** *NEW

Zero Carbon Step Code Simplified

The prescriptive pathway of the Part 9 GHG emission table, generally outlines the practical changes that are also similar outcomes of the performance metrics for each emission level, in both the Part 9 and Part 10 buildings. The prescriptive compliance approach means that, instead of asking a homebuilder to model and measure their proposed home's carbon emissions, they can disclose the equipment they intend to install in their project.

Table 9.37.1.3.
Greenhouse Gas Emissions
Forming part of Sentence 9.37.1.3.(1)

	Reduction of GHG Emissions by Energy Source of Building Systems
EL-1	N/A
EL-2	Energy sources supplying heating systems have an emissions factor ≤ 0.011 kgCO _{2e} /kWh
EL-3	Energy sources supplying heating and service water heating systems have an emissions factor ≤ 0.011 kgCO _{2e} /kWh
EL-4	Energy sources supplying all building systems, including equipment and appliances, have an emissions factor ≤ 0.011 kgCO _{2e} /kWh

EL-4
ZERO
Carbon Performance

No fossil fuels allowed. Space and water heating and cooking must be zero carbon.

EL-3
STRONG
Carbon Performance

Fossil fuel cooking allowed. Space and water heating systems must be zero carbon.

EL-2
MODERATE
Carbon Performance

Fossil fuel water heating and cooking allowed. Space heating must be zero carbon.

EL-1
MEASURE ONLY

EL-1 (Measure Only), will be required to measure operational greenhouse gas emissions, and Part 9 applicable buildings following the prescriptive pathway will be required to disclose their operational systems and fuel sources.

- EL-2 (Moderate Carbon Performance)**, builders can install fossil-fuel cooking and water heating equipment. But the home's domestic heating system must be decarbonized.
- EL-3 (Strong Carbon Performance)**, the builder must install zero-carbon space and water heating systems. Fossil fuel based cooking equipment is still permitted.
- EL-4 (Zero Carbon Performance)**, all of the home's equipment — space and water heating, and cooking equipment — is required to be zero emissions.

Revision 5 of the 2024 BC Building Code (BCBC), related to the Zero Carbon Step Code (ZCSC), has been published. **Effective March 10, 2025**, new buildings must meet at least **EL-1 (measure only)** of the Zero Carbon Step Code. This means that applicable buildings following the performance path will be required to measure operational greenhouse gas emissions, and Part 9 applicable buildings following the prescriptive pathway will be required disclose their operational systems and fuel sources. For details, please refer to the latest [Ministerial Order for Revision 5](#) of the 2024 BCBC.

Application of Zero Carbon Step Code based on Building Occupancy Type

To determine which part of the Code a building will fall under for both Energy Efficiency and Zero Carbon Step Code requirements, it is based on the type of Occupancy group classification, or use of a building. As you can see here, depending on the type, use, and size of a building, either Part 9 or Part 10 is applicable.



SFD w/ or w/o a Secondary Suite, Row-houses, Buildings containing only dwelling units with common spaces ≤ 20% of building's total floor area, and Duplexes

9.36. / Energy Step Code (ESC)



C – Occupancy:
Residential (apartments, hotels, dormitories)



D – Occupancy:
Personal service (offices)



E – Occupancy:
Mercantile (stores, displaying or selling retail goods)

Refer to Part 10 for ESC and ZCSC target metrics

F3– Occupancy: Low-hazard Industrial (storage garages, workshops)
F2 – Occupancy: Medium-hazard Industrial (service stations, aircraft hangar)

Refer to Part 10 OR NECB

Accessibility Reference Documents:

Province of BC 2020 Accessible Handbook - https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/2020_building_accessibility_handbook.pdf

GHL 2024 Illustrated Guide on Accessibility <https://ghl.ca/wp-content/uploads/2025/01/BCBC-2024-Illustrated-Guide-on-Accessibility-V7-2025-01-27.pdf>

2024 BC Building Code https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc_2024_web_version_20240409.pdf

What Changes for you When Applying for a Building Permit?

Permits applied for on or after March 10, 2025 will be required to illustrate compliance with the new enacted changes.

Accessibility and ADUs – Drawing applications shall be submitted to show the design meeting the new requirements. These new requirements can be reviewed and considered under the integrated design process by the owner and their design team prior to permit application.

Seismic and Wind – Drawings and designs will be required to illustrate compliance with the new requirements. With consideration to the fact that the majority of our region has a heavier snow and wind loading, this will result in complex designs under Part 9.23.13. Permit applications, including Part 9 buildings, will be required to have sealed structural design for braced-wall drawings / specifications. This is request is due to the local snow, seismic and wind loading that with the new requirements will likely result in a complex design.

At the time of permit application, additional sealed design for buildings (including houses) by a Qualified Professional, will be required to be submitted to show specifications and location of the braced wall bands and the panels within them. The sealed designs will be used by staff to review and approve plans, as well as to reference when inspecting construction during the framing inspection. At any time, a Building Official reviewing the file may request additional documentation or review from the Qualified Professional depending on the complexity of the design.

Authority to require design and oversight of the structural aspect of the building is given to the Building Official through Section 10.2 of the RDCK Building Bylaw No. 2200, 2010. See below.

10.2 In addition to the requirements of Subsection 10.1, the following may be required by a building official to be submitted with a building permit application for the construction of a standard building where the project involves two or more buildings, which in the aggregate total more than 1 000 square meters, or two or more buildings that will contain four or more dwelling units, or otherwise where the complexity of the proposed building or structure or siting circumstances warrant:

10.2.5 Letters of assurance in the form referred to in the Building Code, signed by a registered professional;

10.2.6 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.

GHG Emissions and Zero Carbon Step Code – Drawings and Step Code Compliance Reports and Forms are already a requirement to be submitted at the time of application. The software used to produce the models and reports are already equipped to calculate and provide the emission levels and include them in the reports.

The revised checklists have been update to comply with the new energy efficiency changes, as well as the new zero carbon step code. The Pre-construction, mid-construction, and As-built Checklists are summaries provided to the Building Official during the specific phase of a permit to identify and verify performance compliance.

Accessibility Reference Documents:

Province of BC 2020 Accessible Handbook - https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/guides/2020_building_accessibility_handbook.pdf

GHL 2024 Illustrated Guide on Accessibility <https://ghl.ca/wp-content/uploads/2025/01/BCBC-2024-Illustrated-Guide-on-Accessibility-V7-2025-01-27.pdf>

2024 BC Building Code https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/revisions-and-mo/bcbc-revision-3/bcbc-revision-4/bcbc_2024_web_version_20240409.pdf

The most current versions of the checklists and more information about these forms, including training and a user guide, is available on the Energy Step Code website. www.energystepcode.ca

PART 9.36 & 9.37 Compliance Checklist

PART 10.2 & 10.3 Compliance Checklist



For additional reference, also refer to:

1. BSSB Bulletin B24-09-R3 - Adaptable Dwelling Units Frequently Asked Questions
2. BSSB Bulletin B24-10-R - Application of the 2024 BC Building Code
3. <https://www.earthquakescanada.nrcan.gc.ca/hazard-alea/interpolat/nbc2020-cnb2020-en.php>

For further information, please contact:

For media enquiries:

RDCK Building Department
 Nelson Head Office
 Regional District of Central Kootenay
 Tel: 250.352.8155
 Email: buildingdepartment@rdck.bc.ca

Dan Elliott
 Communications Coordinator
 Regional District of Central Kootenay
 Tel: 250.354.3476
 Email: delliott@rdck.bc.ca