

Section 2.2. Administration

2.2.1. Administration

2.2.1.1. Conformance with Administrative Requirements

- 1) This Code is made pursuant to Section 3 of the Building Act.

2.2.1.2. Structural Design

- 1) For design carried out in accordance with Part 4 of Division B, the *designer* shall be a *registered professional* skilled in the work concerned. (See Note A-2.2.1.2.(1).)

2.2.2. Information Required for Proposed Work

2.2.2.1. General Information Required

- 1) Sufficient information shall be provided to show that the proposed work will conform to this Code and whether or not it may affect adjacent property.
- 2) Plans shall be drawn to scale and shall indicate
 - a) the nature and extent of the work or proposed *occupancy* in sufficient detail to establish that, when completed, the work and the proposed *occupancy* will conform to this Code,
 - b) the applicable edition of the Code,
 - c) whether the *building* is designed under Part 3 or Part 9,
 - d) the *major occupancy* classifications of the *building*,
 - e) the *building area* and *building height*,
 - f) the number of *streets* the *building* faces,
 - g) the *accessible* entrances, work areas and washrooms,
 - h) the *accessible* facilities particular to the *occupancies*, and
 - i) the energy compliance path to which the building conforms, and, where a building conforms to Subsection 9.36.6. or 10.2.3. of Division B, the Step to which it conforms.
- 3) When proposed work is changed during construction, information on the changes shall comply with the requirements of this Section for proposed work.

2.2.2.2. Site Plans

- 1) Site plans shall be referenced to an up-to-date survey and, when required to prove compliance with this Code, a copy of the survey shall be provided.
- 2) Site plans shall show
 - a) by dimensions from property lines, the location of the proposed *building*,
 - b) the similarly dimensioned location of every adjacent existing *building* on the property,
 - c) existing and finished ground levels to an established datum at or adjacent to the site,
 - d) the access routes for firefighting, and
 - e) the *accessible* paths of travel to the building from
 - i) the sidewalk, roadway or street, and
 - ii) if provided, exterior parking stalls for persons with disabilities and exterior passenger-loading zones.

2.2.3. Fire Protection Components

2.2.3.1. Information Required for Fire Protection Components

- 1) Information shall be submitted to show the major components of fire protection including
 - a) the division of the *building* by *firewalls*,
 - b) the *building area*,
 - c) the degree of *fire separation* of *storeys*, shafts and special rooms or areas, including the location and rating of *closures* in *fire separations*,
 - d) the source of information for *fire-resistance ratings* of elements of construction (to be indicated on large-scale sections),
 - e) the location of *exits*, and
 - f) fire detection, suppression and alarm systems.

2.2.3.2. Plans of Sprinkler Systems

- 1) Before a sprinkler system is installed or altered, plans showing full details of the proposed sprinkler system and essential details of the *building* in which it is to be installed shall be drawn to an indicated scale.

2.2.4. Structural and Foundation Drawings and Calculations

2.2.4.1. Application

- 1) This Subsection applies only to *buildings* covered in Part 4 of Division B. (See Article 1.3.3.2. of Division A.)

2.2.4.2. Professional Seal and Signature of Designer

- 1) Structural drawings and related documents submitted with the application to build shall be dated and shall bear the authorized professional seal and signature of the *designer* as defined in Sentence 2.2.1.2.(1).

2.2.4.3. Information Required on Structural Drawings

- 1) Structural drawings and related documents submitted with the application to build shall indicate, in addition to those items specified in Article 2.2.4.6. and in Part 4 of Division B applicable to the specific material,
 - a) the name and address of the person responsible for the structural design,
 - b) the date of issue of the Code and standards to which the design conforms,
 - c) the dimensions, location and size of all structural members in sufficient detail to enable the design to be checked,
 - d) sufficient detail to enable the *dead loads* to be determined, and
 - e) all effects and loads, other than *dead loads*, used for the design of the structural members and exterior cladding.

2.2.4.4. Drawings of Parts or Components

- 1) Structural drawings of parts or components including *guards* designed by a person other than the *designer* of the *building* shall be dated and shall bear the authorized professional seal and signature of the *designer* of such parts or components.

2.2.4.5. Design Calculations and Analysis

- 1) The calculations and analysis made in the design of the structural members, including parts and components, of a *building* shall be available for inspection upon request.

2.2.4.6. Information Required on Foundation Drawings

- 1) *Foundation* drawings submitted with the application to build or excavate shall be provided to indicate
 - a) the type and condition of the *soil* or *rock*, as well as the *groundwater* conditions, as determined by the *subsurface investigation*,
 - b) the factored bearing pressures on the *soil* or *rock*, the factored loads when applicable and the design loads applied to *foundation units*, and
 - c) the earth pressures and other loads applied to the supporting structures of supported *excavations*.
- 2) When required, evidence that justifies the information on the drawings shall be submitted with the application to excavate or build.

2.2.4.7. Altered Conditions

- 1) Where conditions as described under Sentences 4.2.2.4.(1) and (2) of Division B are encountered, or where *foundation units* or their locations are altered, this information shall be recorded on appropriate drawings or new “as constructed” drawings.

2.2.5. Drawings and Specifications for Environmental Separators and Other Assemblies Exposed to the Exterior**2.2.5.1. Application**

- 1) This Subsection applies to building materials, components and assemblies to which Part 5 of Division B applies. (See Article 1.3.3.2. of Division A.)

2.2.5.2. Information Required on Drawings and Specifications

- 1) Information shown on drawings and in specifications shall be clear and legible, and shall contain sufficient details to demonstrate conformance with this Code. (See Note A-2.2.6.2.(1).)

2.2.6. Heating, Ventilating and Air-conditioning Drawings and Specifications**2.2.6.1. Application**

- 1) This Subsection applies only to *buildings* covered in Part 6 of Division B. (See Article 1.3.3.2. of Division A.)

2.2.6.2. Information Required on Drawings

- 1) The information shown on architectural drawings and on drawings for heating, ventilating and air-conditioning systems shall be clear and legible and shall contain all necessary details to demonstrate conformance with this Code. (See Note A-2.2.6.2.(1).)

2.2.7. Professional Design and Review

(See Note A-2.2.7.)

2.2.7.1. Application

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

- ii) geotechnical conditions at *building* sites that are not within the scope of Part 9 of Division B,
- iii) sprinkler systems designed to NFPA 13, “Installation of Sprinkler Systems”, and
- iv) standpipe and hose systems designed to NFPA 14, “Installation of Standpipe and Hose Systems”.

2.2.7.2. Owner Responsibilities

- 1) Before the construction of or the *alteration* to a *building*, the owner shall
 - a) retain a *coordinating registered professional* to coordinate all design work and *field reviews* of the *registered professionals of record* required for the project in order to ascertain that (see Note A-2.2.7.2.(1)(a))
 - i) the design will substantially comply with the British Columbia Building Code and other applicable enactments respecting safety, and
 - ii) the construction of the project will substantially comply with the British Columbia Building Code and other applicable enactments respecting safety, not including the construction safety aspects, and
 - b) if a *building* permit is required, deliver to the *authority having jurisdiction* letters in the forms set out in Schedules A and B. (See the end of Division C and Note A-2.2.7.2.(1)(b).)
- 2) If an occupancy permit or final inspection from an *authority having jurisdiction* is required and before an owner occupies or receives permission to occupy the *building*, the owner or *coordinating registered professional* shall deliver to that authority letters in the forms set out in Schedules C-A and C-B (See the end of Division C and Note A-2.2.7.2.(2).)

2.2.7.3. Registered Professional Responsibilities

(See Note A-2.2.7.3.)

- 1) A *registered professional of record* who signs a letter, the form of which is set out in a Schedule to this Subsection, and an owner who signs or has an agent sign a letter the form of which is set out in a Schedule to this Subsection, shall comply with this Subsection and the provisions of the letter that apply to the person signing.
- 2) A *registered professional of record* or *coordinating registered professional* who is responsible for a *field review* shall keep a record of the *field review* and of any corrective action taken as a result of the *field review* and shall make the record available to the *authority having jurisdiction* on the request of that authority.
- 3) A *registered professional of record* who is retained to undertake design work and *field reviews* and who is required to provide letters pursuant to Clause 2.2.7.2.(1)(b) shall
 - a) place his or her professional seal or stamp on the plans submitted by him or her in support of the application for a *building* permit, after ascertaining that they substantially comply with the British Columbia Building Code and other applicable enactments respecting safety,
 - b) provide to the *authority having jurisdiction* a letter in the form of Schedule C-B (see the end of Division C) after ascertaining that the components of the project for which the *registered professional of record* is responsible are constructed so as to substantially comply, in all material respects, with
 - i) the plans and supporting documents prepared by the *registered professional of record*, and
 - ii) the requirements of the British Columbia Building Code and other applicable enactments respecting safety, not including construction safety aspects.

2.2.7.4. Termination

- 1) An owner must not terminate the appointment of a *coordinating registered professional* or *registered professional of record* unless
 - a) the owner immediately replaces the *coordinating registered professional* or *registered professional of record*, or
 - b) the owner has complied with Clause (1)(b) and Sentence (2) of Article 2.2.7.2. by delivering letters in the forms set out in Schedule A, B, C-A and C-B, as applicable, to the *authority having jurisdiction*.
- 2) In respect of a project to which this Subsection applies,
 - a) if the *coordinating registered professional* ceases to be retained at any time before the completion of the project, both the owner and the *coordinating registered professional* shall notify the *authority having jurisdiction*, and

- b) if a *registered professional of record* ceases to be retained at any time before the completion of the project, both the *coordinating registered professional* and the *registered professional of record* shall notify the *authority having jurisdiction*.
- 3) Notification under Sentences (1) and (2) shall be made,
 - a) if possible, before the *coordinating registered professional* or *registered professional of record*, as the case may be, ceases to be retained, or
 - b) if advance notice is not possible, as soon as possible.

2.2.7.5. Reserved

2.2.8. Drawings, Specifications and Calculations for Energy Performance Compliance

2.2.8.1. Application

1) This Subsection applies only to houses with or without a *secondary suite* and to *buildings* containing only *dwelling units* and common spaces whose total *floor area* does not exceed 20% of the total *floor area* of the *building* that are modeled in accordance with Subsection 9.36.5. or 9.36.6. of Division B to demonstrate compliance with the energy efficiency objectives of Subsections 9.36.2. to 9.36.4. of Division B. (See Note A-2.2.8.1.(1).) (See also Sentence 9.36.1.2.(1) of Division B and Note A-9.36.1.3.(3) of Division B.)

2.2.8.2. Information Required on Drawings and Specifications

- 1) Except as provided in Sentences (2), (3) and (4), the drawings and specifications for the proposed house shall include
- a) the effective thermal resistance values and respective areas of all opaque *building* envelope assemblies, including all above-ground and below-ground roof/ceiling, wall, and floor assemblies,
 - b) the overall thermal transmittance (U-value), solar heat gain coefficient and respective areas of all fenestration and door components,
 - c) the ratio of total vertical fenestration and door area to gross wall area,
 - d) the performance rating, energy source, and types of all equipment required for space-heating and -cooling and service water heating,
 - e) the design basis for the ventilation rates,
 - f) where a test is used to determine the airtightness of a house, the measured airtightness of the *building* envelope in air changes per hour, and
 - g) any additional features used in the energy model calculations that account for a significant difference in house energy performance.
- 2) The effective thermal resistance values and respective areas of opaque *building* envelope assemblies that cover less than 2% of the total area of their respective assembly type need not be provided in the drawings and specifications required in Sentence (1).
- 3) Where part-load characteristics are used in the modeling of the HVAC equipment, they need not be provided in the drawings and specifications required in Sentence (1).
- 4) The features of the proposed house that differ from those of the reference house shall be detailed in the specifications required in Sentence (1).

2.2.8.3. House Performance Compliance Calculation Report

- 1) A house performance compliance calculation report shall be provided in accordance with Sentence (2) for each proposed house design.
- 2) In addition to the drawings and specifications required in Article 2.2.8.2., the house performance compliance calculation report shall include
- a) a project information section containing
 - i) the name or identifier of the project,

- ii) a description of the project,
 - iii) the address of the project,
 - iv) the name and version of the calculation tool,
 - v) the geographic region in which the proposed house is to be built, and
 - vi) the identifier for the climatic data set used for analysis,
 - b) a summary of the characteristics of the *building* envelope, HVAC system and service water heating system reflecting the information provided in Article 2.2.8.2.,
 - c) an energy performance data summary containing
 - i) the annual energy consumption of all energy sources calculated for the proposed house (see Note A-2.2.8.3.(2)(c)(i)), and
 - ii) the house energy target of all energy sources calculated for the reference house,
 - d) where a software program is used to determine compliance,
 - i) the name of the software program(s), and
 - ii) a list of any adaptations made by the user to the software relating to input or output values, and
 - e) a statement that the calculation was performed in compliance with
 - i) Subsection 9.36.5. of Division B,
 - ii) Sentence 9.36.6.3.(3) of Division B,
 - iii) Sentence 9.36.6.4.(2) of Division B, or
 - iv) Sentence 9.36.6.4.(3) of Division B.
- 3)** Where a building complies with Subsection 9.36.6. of Division B, the energy performance data summary in Clause (2)(c) shall also contain
- a) the floor area of conditioned space used for the energy modelling calculations (see Note A-9.36.6.2. of Division B).
 - b) the mechanical energy use intensity,
 - c) the thermal energy demand intensity,
 - d) where applicable, the EnerGuide Rating % lower than EnerGuide Reference House for the *building*,
 - e) for *buildings* conforming to Step 1, the airtightness of the *building* as tested, derived in accordance with Article 9.36.6.5. of Division B, and recorded in air changes per hour at 50 Pa, and
 - f) for *buildings* conforming to any of Steps 2 to 5, the airtightness of the *building* as tested that is accounted for in accordance with Sentence 9.36.6.4.(4) of Division B, and derived in accordance with Article 9.36.6.5., recorded in air changes per hour at 50 Pa.
- 4)** The mechanical energy use intensity in Clause (3)(b), the thermal energy demand intensity in Clause (3)(c), and the EnerGuide Rating % lower than EnerGuide Reference House in Clause (3)(d) shall account for the airtightness referenced in Clause (3)(e) or (f), as applicable.

2.2.9. Drawings, Specifications and Calculations for Subsection 10.2.3.

2.2.9.1. Application

1) This Subsection applies to *buildings* and *major occupancies* in *buildings* to which Subsection 10.2.3. of Division B applies.

2.2.9.2. Information Required

1) For *buildings* and *major occupancies* that are designed and constructed in compliance with Subsection 10.2.3. of Division B, design drawings, specifications, or an energy design report shall indicate

- a) the total energy use intensity as defined by Sentence 10.2.3.2.(1) of Division B,
- b) the energy use intensity of major energy services separately, including
 - i) space heating,
 - ii) space cooling,

- iii) service water heating,
 - iv) lighting, and
 - v) other plug loads,
- c) the thermal energy demand intensity as defined by Sentence 10.2.3.2.(2) of Division B, and
- d) the air leakage rate as derived in accordance with Sentence 10.2.3.4.(3) of Division B, and recorded in $L/(s \cdot m^2)$ at 75 Pa.

2) For buildings and major occupancies that are designed and constructed in compliance with Subsection 10.2.3. of Division B, before an owner occupies or receives permission to occupy the building, an energy report shall indicate

- a) the total energy use intensity as defined by Sentence 10.2.3.2.(1) of Division B,
- b) the energy use intensity of major energy services separately, including
 - i) space heating,
 - ii) space cooling,
 - iii) service water heating,
 - iv) lighting, and
 - v) other plug loads.
- c) the thermal energy demand intensity as defined by Sentence 10.2.3.2.(2) of Division B,
- d) for buildings conforming to Step 1, the air leakage rate as tested, derived in accordance with Article 10.2.3.5. of Division B, and recorded in $L/(s \cdot m^2)$ at 75 Pa, and
- e) for buildings conforming to any of Steps 2 to 4, the air leakage rate as tested that is accounted for in accordance with Sentence 10.2.3.4.(2) of Division B and derived in accordance with Article 10.2.3.5. of Division B, recorded in $L/(s \cdot m^2)$ at 75 Pa.

3) The total energy use intensity in Clause (2)(a) and the thermal energy demand intensity in Clause (2)(c) shall account for the airtightness referenced in Clause (2)(d) or (e), as applicable.