# Section 11.4. Alternative Compliance Measures for the Conversion of Existing Buildings

### 11.4.1. Application

#### 11.4.1.1. Alternative Compliance Measures for Existing Conditions

- 1) The alternative compliance measures for conversions in this Section apply to existing conditions only and do not apply to new work, which must conform to the requirements for new *construction* in this By-law.
- **2)** Except as required by this Section, the alternative compliance measures in Section 11.3. may be applied to existing conditions for conversions.
- **3)** Except as required by this Section, where a *building* is a *heritage building*, the measures in Section 11.5 may be applied to existing conditions for conversions.

# 11.4.2. Conversion of an Existing Residential Building Containing Not More Than Two Principal Dwelling Units into a Community Care Facility, Group Residence or Child Care Facility

#### 11.4.2.1. General Requirements

- **1)** An existing residential *building* containing not more than two principal *dwelling units* may be converted or partially converted into a *community care facility, group residence* or *child care facility* provided
  - a) the occupant load does not exceed
    - i) 10 residents in a community care facility,
    - ii) 6 residents in a group residence, or
    - iii) 8 children in a child care facility,
  - b) the community care facility or group residence is
    - i) separated from the residential portions of the *building* containing not more than one principal *dwelling* unit by a fire separation with a fire resistance rating of 1 h,
    - ii) separated from the residential portions of the *building* containing not more than two principal *dwelling* units by a *fire separation* with a *fire resistance rating* of 2 h,
    - iii) completely sprinklered, and
    - iv) equipped with a fire alarm system, emergency lights and *smoke* and *heat detectors* installed throughout the *building*.
  - c) the *child care facility* conforms with Clauses 3.1.2.8.(1)(a) and (b),
  - d) firefighter access conforms with this By-law,
  - e) the building area is no more than 300 m<sup>2</sup>,
  - f) all unsafe conditions are corrected to the satisfaction of the Chief Building Official, and
  - g) the *building* shall be upgraded to conform to upgrade design levels F2, S2, N2, A2 as defined in the Upgrade Mechanism Model in note A-11.2.1.2.

#### 11.4.2.2. Alternative Compliance Measures

- 1) The alternative compliance measures contained in Sentences (2) to (11) inclusive may be applied to the conversion or partial conversion of an existing residential *building* containing not more than two principal *dwelling* units into a community care facility, group residence or child care facility.
- **2)** For the purposes of determining *building height*, a residential *building* containing not more than one principal *dwelling unit* constructed pursuant to a *building permit* issued prior to July 01, 1994 which is four *storeys* or less in height may be considered as 3 *storeys* in *building height*.
  - 3) Existing exterior wood-frame walls may be retained instead of required noncombustible construction, provided
  - a) a minimum 45 min fire-resistance rating is provided, and
  - b) all voids are filled with mineral wool or fibreglass batts.

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- **4)** *Combustible* exterior cladding materials may be used instead of required *noncombustible* cladding provided the cladding
  - a) has a flame-spread rating of no more than 25,
  - b) is underlaid with a minimum layer of 12.7 mm exterior gypsum board sheathing, and
  - c) is composed of
    - i) aluminum panels,
    - ii) fire-retardant treated wood panels,
    - iii) fire-retardant treated cedar shakes or shingles, or
    - iv) vinyl siding.
- **5)** Where exterior walls and openings are required by Subsections 3.2.3. or 9.10.14. to have exposure protection, existing openings need only conform to Article 11.3.3.4.
- **6)** If one interior *exit* stair is no less than 900 mm wide, a second interior *exit* stair which is no less than 750 mm wide may be permitted.
  - 7) The flame-spread rating of the existing interior finish of a means of egress shall not exceed 150.
  - 8) Ducts passing through fire separations need not be equipped with fire dampers if
  - a) the duct opening is less than 150 cm<sup>2</sup> in cross-sectional area, or
  - b) the duct work is constructed entirely of sheet steel and the duct opening is no more than 1 000 cm<sup>2</sup> in cross-sectional area.
- **9)** Manual stations are not required if the fire alarm system and the sprinkler water flow alarm are designed in accordance with Article 3.2.4.7.
- **10)** An existing exterior wall opening adjacent to an exterior *exit* stair or fire escape need not conform to Article 3.2.3.13. if the opening is glazed with wired or tempered glass in an aluminum or wood frame.
  - **11)** A single *exit* from a *dwelling unit* need not conform to Sentence 3.3.4.3.(3) if
    - a) the exit serves only one dwelling unit, and
  - b) the vertical floor elevation from the uppermost floor level to the adjacent ground level does not exceed 6 m.

## 11.4.3. Conversion of a Portion of a Suite into an Ancillary Residential Unit

#### 11.4.3.1. Alternative Compliance Measures

- **1)** Except as required in Sentences (2) and (3), where an *existing building* containing not more than two principal *dwelling units* is altered to create an *ancillary residential suite*, the *existing building* shall conform to the requirements of Section 9.37, except as permitted by Table 11.4.3.1., provided the *building* was constructed under a *building permit* issued on or prior to June 22, 2004. (See Note A-11.4.3.1.(1).)
- **2)** Where the *alteration* in Sentence (1) includes an *addition*, the *addition* shall conform to the requirements of this By-law.
- **3)** Where an *existing building* was constructed with a *building permit* issued on or after June 22, 2004, the *existing building* and the *alteration* shall conform to Part 9.37 of Division B.
- **4)** Notwithstanding the requirements of Sentence 9.34.1.1.(1), circuits and receptacles in the *ancillary residential suite* shall have a minimum of
  - a) two kitchen counter duplex receptacles
    - i) supplied by two appliance circuits, and
    - ii) wired on single circuits or a split circuit,
  - b) two duplex receptacles located on different walls in each bedroom, and
  - c) three duplex receptacles located on different walls in the living area.
  - **5)** Notwithstanding the requirements of Sentence 9.34.1.1. (1)
  - a) where a single existing panel board is located in a common area within the *building* accessible to all occupants of the *building*, the panel board may supply electrical loads for both the principal dwelling and the *ancillary residential suite*,
  - b) any electrical range and equipment loads provided for the ancillary residential suite shall be calculated with

demand factors in conformance with Sentence 9.34.1.1.(2), and

c) general circuit branch wiring may be interconnected between outlets located in the principal dwelling and the *ancillary residential suite*.

Table 11.4.3.1.

Fire Safety Requirements for Ancillary Residential Unit Conversions

Forming Part of Article 11.4.3.1.

Item	Item Details	Alternative Compliance Measure	Rev. 12683
Spatial Separation	Existing windows and doors	Original openings may remain and new openings to conform to Part 9.	
	New windows in existing openings	Where new windows are provided in existing openings required to be protected by Subsections 3.2.3. or 9.10.14., existing openings may be protected in conformance with Article 11.3.3.4.	Rev. 1299
Fire Containment within a Principal Dwelling Unit	Separation between a principal dwelling unit and its contained ancillary residential units	Existing lath and plaster in good condition or 13 mm gypsum wall board on wood studs at maximum 450 mm on centre may be used where the interior wall finish is in place prior to the construction of an ancillary residential suite. Where possible, New walls are to be 16 mm (5/8") type 'X' GWB or 12.5 mm (½") Type 'C' GWB on wood or steel studs at maximum 600 mm on centre. The stud cavity is to be filled with minimum 90 mm (3 ½") mineral wool insulation. Caulk joints where floor and ceiling meet wall GWB.  Use resilient acoustic channels where possible.	Rev. 1299
	Ducts common to both units through <i>suite</i> separations	Fire dampers not required if sheet metal ducting extends a minimum of 1800 mm (6'-0") beyond the suite separation and the opening is firecaulked.  Acoustic insulation is to be used inside the common duct extending a minimum of 1500 mm (60") from either side of the suite separation.	
	Plumbing and sprinkler plastic piping that penetrate <i>fire</i> separations	Shall be tightly fitted, cast in place, or caulked as per product listing.	Rev. 1268
	Suite entry doors between the principal dwelling unit and its contained ancillary residential unit	Existing solid core doors and frames with or without wired glass in good condition. Doors to be provided with positive latching hardware and self-closing devices.	
Resistance to Forced Entry	Solid Blocking	Solid blocking may be omitted for doors described in Sentence 9.7.5.2.(9) where the interior wall finish adjacent the door is in place prior to the construction of an ancillary residential unit.	Rev. 1268; 1299;
Exits	Egress from each dwelling unit	In combination with the Egress Windows requirement of Sentence 9.9.10.1., at least one conforming exit is required from the principal dwelling and one from the ancillary residential suite.	
	Windows and doors adjacent to exits	No requirements where the <i>suite</i> is <i>sprinklered</i> , provided with a <i>closure</i> or provided with intervening construction extending out by at least 600 mm.	Rev. 1268
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Fire Department Access	Access Path	Existing path designated for fire department is permitted to be minimum 860 mm.	
Fire Department Access  Flame Spread Rating	Access Path  Exits		

## Table 11.4.3.1. (continued) Fire Safety Requirements for Ancillary Residential Suite Conversions Forming Part of Article 11.4.3.1.

Item	Item Details	Alternative compliance measure
Sprinklers		Sprinklers are not required provided the value of the alteration is less than or equal to 50% of the replacement <sup>(1)</sup> value of the <i>existing building</i> .
Heating Systems	Furnace room enclosure	No separation required but provide proper combustion air and required clearances from all equipment. (2)
Smoke Alarms	Entire building	Interconnected <i>smoke alarms</i> to be installed on each <i>storey</i> including basements, in each sleeping room and in a location between the sleeping room and the remainder of the <i>storey</i> and if the sleeping room is served by a hallway, the <i>smoke alarm</i> to be located in the hallway. Installed by permanent connections to an electrical circuit in conformance with Subsection 9.10.19. Division B. Provided with battery backup and manual silencing devices which will silence the alarm in conformance with Article 9.10.19.6. of Division B.  Carbon Monoxide detectors to be provided in accordance with the 9.32.4.2. <sup>(3)</sup>
Stairs and Handrails	Entire building	Existing stairs to comply with Section 9.8, excepting the following dimensions: tread depth 235-355 mm, rise 125-200 mm and run 210-355 mm, unless considered to present an <i>unsafe condition</i> as determined by the <i>Chief Building Official</i> .  All existing stairs to have at least one handrail in conformance with Subsection 9.8.7.
Guardrail Protection	Entire building	Existing <i>guards</i> may be retained provided they are structurally sound, non-climbable and ≥900 mm high.
Existing Headroom	Entire building	May be reduced to 1950 mm over 80% of the <i>suite</i> area and all egress routes.  The minimum clear height under the remaining <i>suite</i> floor area shall be not less than 1 850 mm, except <i>public</i> corridors and exits which shall be not less than 2 000 mm.
	Doorway opening sizes	Other than, exit doors, and doors serving public corridors and exit corridors that serve principle dwelling units in a building containined an ancillary residential units, doorway openings shall be designed to accommodate swing-type and folding doors not less than 1 980 mm high, except doorway openings within an ancillary residential unit which may be reduced to not less than 1 890 mm high.
Unsafe Conditions	Entire building	Any condition within or around the <i>building</i> which could cause undue hazard or risk to persons to be corrected as directed by the <i>Chief Building Official</i> .
Sound Separation	Between the principal dwelling unit and its contained ancillary residential suites	Not required where the interior wall finish is in place prior to the construction of an ancillary residential suite.
		Fill cavity spaces of suite separation with mineral wool in walls and floor assemblies of new construction.

#### Notes to Table 11.4.3.1.:

- (1) See Note A-11.2.1.4.(3)(a).
- (2) The Gas Code places restrictions on locating gas furnaces adjacent to sleeping rooms or bathrooms.

#### (3) See Note A-11.4.3.1.(1) Interconnected Smoke Alarms and Carbon Monoxide Detectors

**6)** For the purposes of determining *building height*, an *existing building* containing not more than two principal *dwelling units* constructed pursuant to a *building permit* issued on or prior to June 22, 2004 which is four *storeys* or less in height may be considered as 3 *storeys* in *building height* where the *project* is limited to the creation of a new *ancillary residential unit*.

## 11.4.4. Enclosure of an Exterior Open Balcony in an Existing Residential Building

#### 11.4.4.1. Alternative Compliance Measures

- 1) An existing open balcony may be converted to an enclosed balcony if
- a) required suite fire separations are provided,
- b) spatial separations conform to this By-law,
- c) travel distances conform to this By-law,
- d) guards conform to this By-law,
- e) exhaust ducts conform to this By-law,
- f) light and natural ventilation are maintained and conform to this By-law,
- g) all new structural work conforms to this By-law,
- h) high building measures (smoke-free refuge areas) are maintained,
- i) the existing door assembly separating the suite from the existing open balcony is maintained, and
- j) the *suite* is upgraded to an *acceptable* level as defined in the Upgrade Mechanism Model in Division B Appendix A.

## 11.4.5. Conversion of Space in an Existing Group F Division 2 Building into Artist Live/Work Studios

#### 11.4.5.1. Alternative Compliance Measures

- 1) Artist live/work studios are permitted in an existing building classified as a Group F, Division 2 occupancy if
- a) the building is sprinklered with fast-response heads,
- b) all *suites* are separated from the remainder of the *building* by a *fire separation* with a 1 h *fire resistance rating* and all floors are separated from each other by a *fire separation* with a 1 h *fire resistance rating*, except that a 45 min *fire-resistance rating* or existing lath and plaster in good repair is *acceptable* in a *building* less than 4 *storeys* in *building height*,
- c) the exit systems conform to Section 3.4., except as permitted in Subsections 11.3.5. and 11.3.6.,
- d) all public corridors conform to Article 3.3.1.4., except as permitted in Subsections 11.3.4. and 11.3.6.,
- e) the emergency lighting conforms to Subsection 3.2.7.,
- f) a fire alarm and detection system conforming to Subsection 3.2.4. is installed in the entire building,
- g) if dust or fumes are produced in a studio
  - i) the building complies with the Fire By-law, and
  - ii) the building is heated by hot water, electrical equipment, or elevated gas-fired forced-air heaters,
- h) if flammable or *combustible* liquids or gases are stored or used in a studio, the *building* complies with the Fire By-law and the British Columbia Gas Safety Act,
- i) service rooms and storage rooms located outside of a studio conform to Section 3.6.,
- j) the floor assembly is designed for a minimum live load of 3.6 kPa and the *building* conforms to the structural upgrade level S3 as defined in the upgrade mechanism model within Division B Appendix A,
- k) a studio complies with the sound transmission requirements of Section 5.8.,
- l) light and ventilation for the studio sleeping area complies with Parts 5 and 6,
- m) shared washroom facilities comply with the requirements of the Standards of Maintenance By-law for

- lodging houses, and
- n) the *building* is upgraded to an *acceptable* level as defined in the upgrade mechanism model in Division B Appendix A.
- **2)** For the purpose of determining *occupancy* classification, *artist live/work studios* shall be considered to have an *occupancy* classification as defined in Articles 3.1.3.3. and 3.1.3.4.

### 11.4.6. Conversion of an Existing Hotel to Single Room Accommodation

#### 11.4.6.1. Alternative Compliance Measures

- **1)** Single room accommodation is permitted in an existing building classified as a Group C major occupancy (hotel) if
  - a) all *suites* are separated from the remainder of the *building* by a *fire separation* with a 1 h *fire resistance rating* and all floors are separated from each other by a *fire separation* with a 1 h *fire resistance rating*, except that a 45 min *fire-resistance rating* or existing lath and plaster in good repair is acceptable if the *building* is less than 4 *storeys* in *building height*,
  - b) the exit systems conform to Section 3.4., except as permitted in Subsections 11.3.5. and 11.3.6.,
  - c) all public corridors conform to Article 3.3.1.4., except as permitted in Subsections 11.3.4. and 11.3.6.,
  - d) the emergency lighting conforms to Subsection 3.2.7.,
  - e) a fire alarm and detection system conforming to Subsection 3.2.4. is installed throughout the building,
  - f) the floor assembly is designed for a minimum live load of 2.4 kPa,
  - g) notwithstanding Clause (j), the building conforms to the structural upgrade level S3 as defined in the upgrade mechanism model in Division B Appendix A,
  - h) shared washroom facilities comply with the requirements of the Standards of Maintenance By-law for lodging houses,
  - i) the suites comply with the sound transmission requirements of Section 5.8 of Division B, and
  - j) the *building* is upgraded to an *acceptable* level as defined in the upgrade mechanism model in Division B Appendix A.

## 11.4.7. Conversion of an Existing Non-Strata Building to a Strata Property

#### 11.4.7.1. Alternative Compliance Measures

- **1)** Except as permitted by Sentence (2), an *existing building* or parcel may be converted into 2 or more strata lots, if the entire *building* is
  - a) upgraded to design upgrade levels F4, S4, N4, and A4 as detailed in the upgrade mechanism model in Division B Appendix A, and
  - b) fully sprinklered.
- **2)** An *existing* parcel containing one or more *buildings*, may be converted into 2 or more strata lots, if the *existing buildings* are not otherwise altered, and
  - a) upgraded to comply with the exposure requirements of Subsection 3.2.3., 9.10.14. or 9.10.15. as applicable,
  - b) upgraded to comply with the fire department access path of travel in accordance with Articles 3.2.5.5. and 3.2.5.6.,
  - c) upgraded to design upgrade levels S4 and N4, as detailed in the upgrade mechanism model in Division B Note A-11.2.1.2., and
  - d) fully *sprinklered*.

(See Note A-11.4.7.1.(2).)

#### 11.4.7.2. Alternative Compliance Measures for Energy Upgrades

- 1) An existing residential *building* containing not more than two principal *dwelling units* may be converted into 2 or more strata lots, if the entire *building* is
  - a) upgraded to comply with the domestic hot water heating requirements in Sentence 10.2.2.12.(1), and
  - b) upgraded to comply with electric heating requirements in Sentence 10.2.2.13.(1) and 10.2.2.14.(1).

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