### PROVINCE OF BRITISH COLUMBIA

# REGULATION OF THE MINISTER OF FORESTS AND RANGE AND MINISTER RESPONSIBLE FOR HOUSING

### Local Government Act

Ministerial Order No.

M 166

I, Rich Coleman, Minister of Forests and Range and Minister Responsible for Housing, order that, effective December 15, 2006, the following regulation is made:

### BRITISH COLUMBIA BUILDING CODE REGULATION

### Application of B.C. Reg. 295/98

- B.C. Reg. 295/98, the British Columbia Building Code Regulation, applies only to the construction or alteration of a building for which
  - (a) a building permit described in Part 21 of the *Local Government Act* or Part 3 of the *Community Charter* is applied for before the effective date of this order,
  - (b) the building permit applied for is issued and work commences and continues to completion without interruption, other than work stoppages considered reasonable in the building industry, and
  - (c) all work is carried out in conformity with B.C. Reg. 295/98.

### **British Columbia Building Code established**

The National Building Code of Canada 2005, with the changes set out in the attached Schedule incorporated into it, are together adopted and establish the British Columbia Building Code.

### **Application of British Columbia Building Code**

3 The British Columbia Building Code enacted by section 2 applies except insofar as B.C. Reg. 295/98 applies under section 1 of this order.

July 13, 2006

Minister of Forests and Range and Minister Responsible for Housing

	(This part is for administrative purposes only and is not part of the Order.)	
Authority under whicl	h Order is made:	
Act and section:-	Local Government Act, R.S.B.C. 1996, c. 323, s. 692	
Other (specify):-	MO 293/98	

July 6, 2006 685/2006/27

### **SCHEDULE**

### DIVISION A

# 1 Replace 1.1.1.1. with the following:

# 1.1.1.1. Application of this Code

- 1) This Code applies to any one or more of the following:
- a) the design and construction of a new building,
- b) the occupancy of any building,
- c) the change in occupancy of any building,
- d) an alteration of any building,
- e) an addition to any building,
- f) the demolition of any building,
- g) the reconstruction of any building that has been damaged by fire, earthquake or other cause,
- h) the correction of an unsafe condition in or about any building,
- i) all parts of any building affected by a change in occupancy,
- j) the work necessary to ensure safety in parts of a building
  - i) that remain after a demolition,
  - ii) that are affected by, but that are not directly involved in alterations, or
  - iii) that are affected by, but not directly involved in additions,
- k) the installation, replacement, or alteration of materials or equipment regulated by this Code,
- 1) the work necessary to ensure safety in a relocated building during and after relocation,
- m) safety during construction of a building, including protection of the public,
- n) the design, installation, extension, alteration, renewal or repair of plumbing systems, and
- o) the alteration, rehabilitation and change of occupancy of heritage buildings.
- 2) This Code does not apply to;
- a) sewage, water, electrical, telephone, rail or similar public infrastructure systems located in a street or a public transit right of way,
- b) utility towers and poles, television and radio or other communication aerials and towers, except for loads resulting from those located on or attached to *buildings*,
- c) mechanical or other equipment and appliances not specifically regulated in these regulations,
- d) flood control and hydro electric dams and structures,
- e) accessory buildings less than 10 m<sup>2</sup> in building area that do not create a hazard,
- f) temporary *buildings* such as construction site offices, seasonal storage *buildings*, special events facilities, emergency facilities, and such similar structures as authorized by the *authority having jurisdiction*,
- g) factory built housing and components certified by a Standards Council of Canada accredited agency, prior to placement on the site, as complying with Canadian Standards Association Standard A277, "Procedure for Certification of Factory Built Houses," or CAN/CSA-Z240 MH Series, "Mobile Homes," but this exemption does not extend to on site preparations (foundations, basements, mountings), interconnection of modules, connection to services and installation of appliances, and
- h) those areas that are specifically exempted from provincial building regulations or by federal statutes or regulations.

- 2 Renumber Sentences (2) and (3) to (3) and (4) and delete "(See Appendix A)" at end of former Sentence (2).
- 3 Add the following after 1.1.1.1.(4):
- **5)** The Alternate Compliance Methods for Heritage Buildings in Table A-1.1.1.1 in Appendix A may be substituted for requirements contained elsewhere in this Code.

# 1.1.1.2. Application to Existing Buildings

1) Where a *building* is altered, rehabilitated, renovated or repaired, or there is a change in *occupancy*, the level of life safety and *building* performance shall not be decreased below a level that already exists. (See Appendix A.)

# 1.1.1.3. Responsibility of Owner

1) Neither the granting of a *building* permit nor the approval of the relevant drawings and specifications nor inspections made by the *authority having jurisdiction* shall in any way relieve the *owner* of such *building* from full responsibility for carrying out the work or having the work carried out in full accordance with the requirements of the British Columbia Building Code.

### 4 Replace 1.4.1.2. with the following:

### 1.4.1.2. Defined Terms

1) The words and terms in italics in this Code have the following meanings:

Access or accessible means that a person with disabilities is, without assistance, able to approach, enter, pass to and from, and make use of an area and its *facilities*, or either of them.

Access to exit means that part of a means of egress within a floor area that provides access to an exit serving the floor area.

Additional circuit vent means a vent pipe that is installed between a circuit vent and a relief vent to provide additional air circulation.

Adfreezing means the adhesion of soil to a foundation unit resulting from the freezing of soil water. (Also referred to as "frost grip")

Air admittance valve means a one way valve designed to allow air to enter the drainage system when the pressure in the plumbing system is less than atmospheric pressure. (See Appendix Note A-7.2.10.16.(1) in Division B.)

Air barrier system means the assembly installed to provide a continuous barrier to the movement of air. Air break means the unobstructed vertical distance between the lowest point of an *indirectly connected* soil-or-waste pipe and the flood level rim of the fixture into which it discharges. (See Appendix Note A-7.3.3.11.(2) in Division B.)

Air gap means the unobstructed vertical distance through air between the lowest point of a water supply outlet and the *flood level rim* of the *fixture* or device into which the outlet discharges. (See Appendix Note A-7.6.2.9.(2) in Division B.)

Air-supported structure means a structure consisting of a pliable membrane which achieves and maintains its shape and support by internal air pressure.

Alarm signal means an audible signal transmitted throughout a zone or zones or throughout a building to advise occupants that a fire emergency exists.

Alert signal means an audible signal to advise designated persons of a fire emergency.

Alloyed zinc means an alloy of zinc having the corrosion resistance and physical properties of an alloy containing 0.15% titanium, 0.74% copper and 99.11% zinc, and so tempered as to be capable of being formed into the shape required for a watertight joint.

Alteration means a change or extension to any matter or thing or to any occupancy regulated by this Code.

Appliance means a device to convert fuel into energy and includes all components, controls, wiring and piping required to be part of the device by the applicable standard referred to in this Code.

Artesian groundwater means a confined body of water under pressure in the ground.

Assembly occupancy means the occupancy or the use of a building, or part thereof, by a gathering of persons for civic, political, travel, religious, social, educational, recreational or like purposes, or for the consumption of food or drink.

Attic or roof space means the space between the roof and the ceiling of the top storey or between a dwarf wall and a sloping roof.

Authority having jurisdiction means the governmental body responsible for the enforcement of any part of this Code or the official or agency designated by that body to exercise such a function.

Notwithstanding this definition, the Chief Inspector of Mines has the sole responsibility for administration and enforcement in respect to all *buildings*, structures and site services used at a mine, as defined in the Mines Act.

Auxiliary water supply means any water supply on or available to the premises other than the primary potable water supply. (See Appendix A.)

Backflow means a flowing back or reversal of the normal direction of the flow.

Backflow preventer means a device or a method that prevents backflow. (See Figure A-1.4.1.2.(1)-A in Appendix A.)

Back pressure means pressure higher than the supply pressure.

*Back-siphonage* means *backflow* caused by a negative pressure in the supply system. (See Figure A-1.4.1.2.(1)-B in Appendix A.)

Back-siphonage preventer (or vacuum breaker) means a device or a method that prevents back-siphonage. (See Figure A-1.4.1.2.(1)-C in Appendix A.)

Backwater valve means a check valve designed for use in a gravity drainage system.

Basement means a storey or storeys of a building located below the first storey.

Bathroom group means a group of plumbing fixtures installed in the same room, consisting of one domestic-type lavatory, one water closet and either one bathtub (with or without a shower) or one one-head shower.

Bearing surface means the contact surface between a foundation unit and the soil or rock upon which it bears.

Boiler means an appliance intended to supply hot water or steam for space heating, processing or power purposes.

Branch means a soil-or-waste pipe connected at its upstream end to the junction of 2 or more soil-or-waste pipes or to a soil-or-waste stack, and connected at its downstream end to another branch, a sump, a soil-or-waste stack or a building drain. (See Figure A-1.4.1.2.(1)-F in Appendix A.)

Branch vent means a vent pipe that is connected at its lower end to the junction of 2 or more vent pipes, and at its upper end, either to another branch vent or to a stack vent, vent stack or header, or terminates in open air. (See Figure A-1.4.1.2.(1)-D in Appendix A.)

Breeching means a flue pipe or chamber for receiving flue gases from one or more flue connections and for discharging these gases through a single flue connection.

Building means any structure used or intended for supporting or sheltering any use or occupancy.

Building area means the greatest horizontal area of a building above grade within the outside surface of exterior walls or within the outside surface of exterior walls and the centre line of *firewalls*.

Building drain means the lowest horizontal piping, including any vertical offset, that conducts sewage, clear-water waste or storm water by gravity to a building sewer. (See Figure 1.4.1.2.(1)-F in Appendix A.)

Building height (in storeys) means the number of storeys contained between the roof and the floor of the first storey.

Building of new construction means a new building constructed as a separate entity, or an addition to an existing building where the addition has no internal pedestrian connection with the existing building. (See Subsection 3.8.4.)

Building sewer means a pipe that is connected to a building drain 1 m outside a wall of a building and that leads to a public sewer or private sewage disposal system.

Building trap means a trap that is installed in a building drain or building sewer to prevent circulation of air between a drainage system and a public sewer. (See Appendix Note A-7.4.5.4.(1) in Division B.) Business and personal services occupancy means the occupancy or use of a building or part thereof for the transaction of business or the rendering or receiving of professional or personal services. Caisson (see Pile).

Care or detention occupancy means the occupancy or use of a building or part thereof by persons who require special care or treatment because of cognitive or physical limitations or by persons who are restrained from, or are incapable of, self preservation because of security measures not under their control.

Cavity wall means a construction of masonry units laid with a cavity between the wythes. The wythes are tied together with metal ties or bonding units, and are relied on to act together in resisting lateral loads.

Check valve means a valve that permits flow in one direction but prevents a return flow.

Chimney means a primarily vertical shaft enclosing at least one *flue* for conducting *flue* gases to the outdoors.

Chimney liner means a conduit containing a chimney flue used as a lining of a masonry or concrete chimney.

Circuit vent means a vent pipe that serves a number of fixtures and connects to the fixture drain of the most upstream fixture.

Class 1 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the water service pipe to the sprinkler/standpipe system's outlets, is directly connected to the public water supply main only, has no pumps or reservoirs, and in which the sprinkler drains discharge to the atmosphere, to dry wells or to other safe outlets.

Class 2 fire sprinkler/standpipe system means Class 1 fire sprinkler/standpipe system that includes a booster pump in its connection to the public water supply main.

Class 3 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the water service pipe to the sprinkler/standpipe system's outlets, is directly connected to the public water supply main as well as to one or more of the following storage facilities, which are filled from the public water supply main only: elevated water storage, fire pumps supplying water from above aboveground covered reservoirs, or pressure tanks. The water in this sprinkler/standpipe system must be maintained in potable condition. (See Appendix A.)

Class 4 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the water service pipe to the sprinkler/standpipe system's outlets and is directly connected to the public water supply main (similar to Class 1 and Class 2 fire sprinkler/standpipe systems) and to an auxiliary water supply dedicated to fire department use that is located within 520 m of a pumper connection.

Class 5 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the water service pipe to the sprinkler/standpipe system's outlets and is directly connected to the public water supply main and also interconnected with an auxiliary water supply.

Class 6 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the water service pipe to the sprinkler/standpipe system's outlets and acts as a combined industrial water supply and fire protection system supplied from the public water supply main only, with or without gravity storage or pump suction tanks.

Cleanout means an access provided in drainage and venting systems to provide for cleaning and inspection services.

Clear-water waste means waste water with impurity levels that will not be harmful to health and may include cooling water and condensate drainage from refrigeration and air conditioning equipment and cooled condensate from steam heating systems, but does not include storm water. (See Appendix A.) Closure means a device or assembly for closing an opening through a fire separation or an exterior wall, such as a door, a shutter, wired glass or glass block, and includes all components such as hardware, closing devices, frames and anchors.

Combined building drain means a building drain that is intended to conduct sewage and storm water. Combined building sewer means a building sewer that is intended to conduct sewage and storm water. Combined sewer means a sewer that is intended to conduct sewage and storm water.

Combustible means that a material fails to meet the acceptance criteria of CAN4-S114, "Determination of Non-Combustibility in Building Materials."

Combustible construction means that type of construction that does not meet the requirements for noncombustible construction.

Combustible liquid means a liquid having a flash point at or above 37.8°C and below 93.3°C.

Conditioned space means any space within a building the temperature of which is controlled to limit variation in response to the exterior ambient temperature by the provision, either directly or indirectly, of heating or cooling over substantial portions of the year.

Constructor means a person who contracts with an *owner* or his authorized agent to undertake a project, and includes an *owner* who contracts with more than one person for the work on a project or undertakes the work on a project or any part thereof.

Contained use area means a supervised area containing one or more rooms in which occupant movement is restricted to a single room by security measures not under the control of the occupant. Continuous vent means a vent pipe that is an extension of a vertical section of a branch or fixture drain. (See Figure A-1.4.1.2.(1)-E in Appendix A.)

Coordinating registered professional means a registered professional retained pursuant to Clause 2.2.7.2.(1)(a) of Division C to coordinate all design work and *field reviews* of the registered professionals required for the project.

Critical level means the level of submergence at which the back-siphonage preventer ceases to prevent back-siphonage.

Dead end means a pipe that terminates with a closed fitting.

Dead load means the weight of all permanent structural and non-structural components of a building. Deep foundation means a foundation unit that provides support for a building by transferring loads either by end-bearing to a soil or rock at considerable depth below the building, or by adhesion or friction, or both, in the soil or rock in which it is placed. Piles are the most common type of deep foundation.

Designer means the person responsible for the design.

Developed length means the length along the centre line of the pipe and fittings. (See Appendix Note A-7.5.6.3.(1) in Division B.)

Direct-vented (as applied to a fuel-fired space- or water-heating appliance) means an appliance and its venting system in which all the combustion air is supplied directly from the outdoors and products of combustion are vented directly to the outdoors via independent, totally enclosed passageways connected directly to the appliance.

Directly connected means physically connected in such a way that water or gas cannot escape from the connection.

Drainage system means an assembly of pipes, fittings, fixtures, traps and appurtenances that is used to convey sewage, clear-water waste or storm water to a public sewer or a private sewage disposal system, but does not include subsoil drainage pipes. (See Figure A-1.4.1.2.(1)-F in Appendix A.) Dual vent means a vent pipe that serves 2 fixtures and connects at the junction of the trap arms. (See Figure A-1.4.1.2.(1)-F in Appendix A.)

Dwelling unit means a suite operated as a housekeeping unit, used or intended to be used as a domicile by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities. Emergency floor drain means a fixture for the purpose of overflow protection that does not receive regular discharge from other fixtures, other than from a trap primer. (See Appendix A.) Excavation means the space created by the removal of soil, rock or fill for the purposes of construction. Exhaust duct means a duct through which air is conveyed from a room or space to the outdoors. Exit means that part of a means of egress, including doorways, that leads from the floor area it serves, to a separate building, an open public thoroughfare, or an exterior open space protected from fire exposure from the building and having access to an open public thoroughfare. (See Appendix A.) Exit level means the level of an exit stairway at which an exterior exit door or exit passageway leads to the exterior.

Exit storey (as applying to Subsection 3.2.6. of Division B) means a storey having an exterior exit door. Exposing building face means that part of the exterior wall of a building which faces one direction and is located between ground level and the ceiling of its top storey or, where a building is divided into fire compartments, the exterior wall of a fire compartment which faces one direction.

Facility means something that is built, installed, or provided to serve a particular purpose.

Factory-built chimney means a chimney consisting entirely of factory-made parts, each designed to be assembled with the other without requiring fabrication on site.

Farm building means a building or part thereof which does not contain a residential occupancy and which is associated with and located on land devoted to the practice of farming, and used essentially for the housing of equipment or livestock, or the production, storage or processing of agricultural and horticultural produce or feeds. (See Appendix A.)

Field review means a review of the work

- a) at a project site of a development to which a building permit relates, and
- b) where applicable, at fabrication locations where *building* components are fabricated for use at the project site

that a *registered professional* in his or her professional discretion considers necessary to ascertain whether the work substantially complies in all material respects with the plans and supporting documents prepared by the *registered professional* for which the *building* permit is issued. *Fill* means *soil*, *rock*, rubble, industrial waste such as slag, organic material or a combination of these that is transported and placed on the natural surface of a soil or rock or organic terrain. It may or may not be compacted.

Fire compartment means an enclosed space in a building that is separated from all other parts of the building by enclosing construction providing a fire separation having a required fire-resistance rating. Fire damper means a closure which consists of a damper installed in an air distribution system or in a wall or floor assembly, which is normally held open but is designed to close automatically in the event of a fire in order to maintain the integrity of the fire separation.

Fire detector means a device which detects a fire condition and automatically initiates an electrical signal to actuate an alert signal or alarm signal and includes heat detectors and smoke detectors. Fire load (as applying to an occupancy) means the combustible contents of a room or floor area expressed in terms of the average weight of combustible materials per unit area, from which the

potential heat liberation may be calculated based on the calorific value of the materials, and includes the furnishings, finished floor, wall and ceiling finishes, trim and temporary and movable partitions. *Fire-protection rating* means the time in minutes or hours that a *closure* will withstand the passage of flame when exposed to fire under specified conditions of test and performance criteria, or as otherwise prescribed in this Code.

Fire-resistance rating means the time in minutes or hours that a material or assembly of materials will withstand the passage of flame and the transmission of heat when exposed to fire under specified conditions of test and performance criteria, or as determined by extension or interpretation of information derived there from as prescribed in this Code. (See Appendix Note D-1.2.1.(2) of Division B)

Fire-retardant treated wood means wood or a wood product that has had its surface-burning characteristics, such as flame spread, rate of fuel contribution and density of smoke developed, reduced by impregnation with fire-retardant chemicals.

Fire separation means a construction assembly that acts as a barrier against the spread of fire. (See Appendix A.)

Fire service pipe means a pipe that conveys water from a public water main or private water source to the inside of a building for the purpose of supplying the fire sprinkler or standpipe system.

Fire stop flap means a device intended for use in horizontal assemblies required to have a fire-resistance rating and incorporating protective ceiling membranes, which operates to close off a duct opening through the membrane in the event of a fire.

Firewall means a type of fire separation of noncombustible construction which subdivides a building or separates adjoining buildings to resist the spread of fire and which has a fire-resistance rating as prescribed in this Code and has structural stability to remain intact under fire conditions for the required fire-rated time.

First storey means the uppermost storey having its floor level not more than 2 m above grade. Fixture means a receptacle, appliance, apparatus or other device that discharges sewage or clear-water waste, and includes a floor drain.

Fixture drain means the pipe that connects a *trap* serving a *fixture* to another part of a *drainage system*. Fixture outlet pipe means a pipe that connects the waste opening of a *fixture* to the trap serving the *fixture*. (See Figure A-1.4.1.2.(1)-H in Appendix A.)

Fixture unit (as applying to drainage systems) means the unit of measure based on the rate of discharge, time of operation and frequency of use of a fixture that expresses the hydraulic load that is imposed by that fixture on the drainage system.

Fixture unit (as applying to water distribution systems) means the unit of measure based on the rate of supply, time of operation and frequency of use of a fixture or outlet that expresses the hydraulic load that is imposed by that fixture or outlet on the supply system.

Flame-spread rating means an index or classification indicating the extent of spread-of-flame on the surface of a material or an assembly of materials as determined in a standard fire test as prescribed in this Code.

Flammable liquid means a liquid having a flash point below 37.8°C and having a vapour pressure not more than 275.8 kPa (absolute) at 37.8°C as determined by ASTM D 323, "Vapor Pressure of Petroleum Products (Reid Method)."

Flash point means the minimum temperature at which a liquid within a container gives off vapour in sufficient concentration to form an ignitable mixture with air near the surface of the liquid.

Flood level rim means the top edge at which water can overflow from a fixture or device. (See Figure A-1.4.1.2.(1)-B in Appendix A.)

Floor area means the space on any storey of a building between exterior walls and required firewalls, including the space occupied by interior walls and partitions, but not including exits, vertical service spaces, and their enclosing assemblies.

Flow control roof drain means a roof drain that restricts the flow of storm water into the storm drainage system.

Flue means an enclosed passageway for conveying flue gases.

Flue collar means the portion of a fuel-fired appliance designed for the attachment of the flue pipe or breeching.

Flue pipe means the pipe connecting the flue collar of an appliance to a chimney.

Forced-air furnace means a furnace equipped with a fan that provides the primary means for the circulation of air.

Foundation means a system or arrangement of foundation units through which the loads from a building are transferred to supporting soil or rock.

Foundation unit means one of the structural members of the foundation of a building such as a footing, raft or pile.

Fresh air inlet means a vent pipe that is installed in conjunction with a building trap and terminates outdoors. (See Appendix Note A-2.4.5.4.(1) in Division B.)

Frost action means the phenomenon that occurs when water in *soil* is subjected to freezing which, because of the water/ice phase change or ice lens growth, results in a total volume increase or the build-up of expansive forces under confined conditions or both, and the subsequent thawing that leads to loss of *soil* strength and increased compressibility.

Furnace means a space-heating appliance using warm air as the heating medium and usually having provision for the attachment of ducts.

Gas vent means that portion of a venting system designed to convey vent gases to the outdoors from the vent connector of a gas-fired appliance or directly from the appliance when a vent connector is not used.

*Grade* (as applying to the determination of *building height*) means the lowest of the average levels of finished ground adjoining each exterior wall of a *building*, except that localized depressions such as for vehicle or pedestrian entrances need not be considered in the determination of average levels of finished ground. (See *First storey*.)

Groundwater means a free standing body of water in the ground.

Groundwater level (groundwater table) means the top surface of a free standing body of water in the ground.

Guard means a protective barrier around openings in floors or at the open sides of stairs, landings, balconies, mezzanines, galleries, raised walkways or other locations to prevent accidental falls from one level to another. Such barrier may or may not have openings through it.

Heat detector means a fire detector designed to operate at a predetermined temperature or rate of temperature rise.

Heavy timber construction means that type of combustible construction in which a degree of fire safety is attained by placing limitations on the sizes of wood structural members and on thickness and composition of wood floors and roofs and by the avoidance of concealed spaces under floors and roofs. Heritage building is a building which is legally protected or officially recognized as a heritage property by the Provincial or a local government. (See Appendix A.)

High hazard industrial occupancy (Group F, Division 1) means an industrial occupancy containing sufficient quantities of highly combustible and flammable or explosive materials which, because of their inherent characteristics, constitute a special fire hazard.

Horizontal exit means an exit from one building to another by means of a doorway, vestibule, walkway, bridge or balcony.

Horizontal service space means a space such as an attic, duct, ceiling, roof or crawl space oriented essentially in a horizontal plane, concealed and generally inaccessible, through which building service facilities such as pipes, ducts and wiring may pass.

Impeded egress zone means a supervised area in which occupants have free movement but require the release, by security personnel, of security doors at the boundary before they are able to leave the area, but does not include a *contained use area*.

*Indirect service water heater* means a *service water heater* that derives its heat from a heating medium such as warm air, steam or hot water.

*Indirectly connected* means not directly connected. (See Appendix Note A-7.3.3.11.(2) in Division B.) *Individual vent* means a *vent pipe* that serves one *fixture*.

*Industrial occupancy* means the *occupancy* or use of a *building* or part thereof for the assembling, fabricating, manufacturing, processing, repairing or storing of goods and materials.

*Interceptor* means a receptacle that is installed to prevent oil, grease, sand or other materials from passing into a *drainage system*.

Interconnected floor space means superimposed floor areas or parts of floor areas in which floor assemblies that are required to be fire separations are penetrated by openings that are not provided with closures.

Leader means a pipe that is installed to carry storm water from a roof to a storm building drain or sewer or other place of disposal.

Limiting distance means the distance from an exposing building face to a property line, the centre line of a street, lane or public thoroughfare, or to an imaginary line between 2 buildings or fire compartments on the same property, measured at right angles to the exposing building face. Live load means a variable load due to the intended use and occupancy that is to be assumed in the design of the structural members of a building. It includes loads due to cranes and the pressure of

Loadbearing (as applying to a building element) means subjected to or designed to carry loads in addition to its own dead load, excepting a wall element subjected only to wind or earthquake loads in addition to its own dead load.

Low hazard industrial occupancy (Group F, Division 3) means an industrial occupancy in which the combustible content is not more than 50 kg/m<sup>2</sup> or 1 200 MJ/m<sup>2</sup> of floor area.

*Major occupancy* means the principal *occupancy* for which a *building* or part thereof is used or intended to be used, and shall be deemed to include the subsidiary *occupancies* which are an integral part of the principal *occupancy*. The *major occupancy* classifications used in this Code are as follows:

- A1 Assembly occupancies intended for the production and viewing of the performing arts
- A2 Assembly occupancies not elsewhere classified in Group A
- A3 Assembly occupancies of the arena type
- A4 Assembly occupancies in which the occupants are gathered in the open air
- B1 Care and detention occupancies in which persons are under restraint or are incapable of self-preservation because of security measures not under their control
- B2 Care and detention occupancies in which persons having cognitive or physical limitations require special care or treatment
- C Residential occupancies

liquids in containers.

- D Business and personal service occupancies
- E Mercantile occupancies
- F1 *High-hazard industrial occupancies*
- F2 Medium-hazard industrial occupancies
- F3 *Low-hazard industrial occupancies*

Masonry or concrete chimney means a chimney of brick, stone, concrete or masonry units constructed on site.

Means of egress means a continuous path of travel provided for the escape of persons from any point in a building or contained open space to a separate building, an open public thoroughfare, or an exterior

open space protected from fire exposure from the *building* and having access to an open public thoroughfare. *Means of egress* includes *exits* and *access to exits*.

Medium hazard industrial occupancy (Group F, Division 2) means an industrial occupancy in which the combustible content is more than 50 kg/m2 or 1 200 MJ/m2 of floor area and not classified as high hazard industrial occupancy.

*Mercantile occupancy* means the *occupancy* or use of a *building* or part thereof for the displaying or selling of retail goods, wares or merchandise.

Mezzanine means an intermediate floor assembly between the floor and ceiling of any room or storey and includes an interior balcony.

*Nominally horizontal* means at an angle of less than 45° with the horizontal. (See Figure A-1.4.1.2.(1)-J in Appendix A.)

*Nominally vertical* means at an angle of not more than 45° with the vertical. (See Figure A-1.4.1.2.(1)-J in Appendix A.)

Noncombustible means that a material meets the acceptance criteria of CAN4-S114, "Determination of Non-Combustibility in Building Materials."

Noncombustible construction means that type of construction in which a degree of fire safety is attained by the use of *noncombustible* materials for structural members and other *building* assemblies. Occupancy means the use or intended use of a *building* or part thereof for the shelter or support of persons, animals or property.

Occupant load means the number of persons for which a building or part thereof is designed. Offset means the piping that connects the ends of 2 pipes that are parallel. (See Figure A-1.4.1.2.(1)-K in Appendix A.)

Offset relief vent means a relief vent that provides additional air circulation upstream and downstream of an offset in a soil-or-waste stack. (See Appendix Note A-7.5.4.4.(1) of Division B.)

*Open air storey* means a *storey* in which at least 25% of the total area of its perimeter walls is open to the outdoors in a manner that will provide cross ventilation to the entire *storey*.

Owner means any person, firm or corporation controlling the property under consideration during that period of application of Sentence 1.1.2.1.(1) of Division B of this Code.

Partition means an interior wall 1 storey or part-storey in height that is not loadbearing.

Party wall means a wall jointly owned and jointly used by 2 parties under easement agreement or by right in law, and erected at or upon a line separating 2 parcels of land each of which is, or is capable of being, a separate real-estate entity.

Persons with disabilities means a person who has a loss, or a reduction, of functional ability and activity and includes a person in a wheelchair and a person with a sensory disability.

Perched groundwater means a free standing body of water in the ground extending to a limited depth. Pile means a slender deep foundation unit, made of materials such as wood, steel or concrete or combination thereof, that is either premanufactured and placed by driving, jacking, jetting or screwing, or cast-in-place in a hole formed by driving, excavating or boring. (Cast-in-place bored piles are often referred to as caissons in Canada)

Plenum means a chamber forming part of an air duct system.

Plumbing contractor means a person, corporation or firm that undertakes to construct, extend, alter, renew or repair any part of a plumbing system.

Plumbing system means a drainage system, a venting system and a water system or parts thereof. Post-disaster building means means a building that is essential to the provision of services in the event of a disaster, and includes

- hospitals, emergency treatment facilities and blood banks,
- telephone exchanges,
- power generating stations and electrical substations,

- control centres for air, land and marine transportation,
- public water treatment and storage facilities, and pumping stations,
- sewage treatment facilities and buildings having critical national defence functions, and
- buildings of the following types, unless exempted from this designation by the authority having jurisdiction:
  - emergency response facilities,
  - fire, rescue and police stations and housing for vehicles, aircraft or boats used for such purposes, and
  - communications facilities, including radio and television stations.

### (See Appendix A.)

Potable means safe for human consumption.

Private sewage disposal system means a privately owned plant for the treatment and disposal of sewage (such as a septic tank with an absorption field).

*Private use* (as applying to the classification of plumbing *fixtures*) means *fixtures* in residences and apartments, in private bathrooms of hotels, and in similar installations in other *buildings* for one family or an individual.

Private water supply system means an assembly of pipes, fittings, valves, equipment and appurtenances that supplies water from a private source to a water distribution system.

Protected floor space means that part of a floor area protected from the effects of fire and used as part of a means of egress from an interconnected floor space.

Public corridor means a corridor that provides access to exit from more than one suite. (See Appendix A.)

Public use (as applying to the classification of plumbing fixtures) means fixtures in general washrooms of schools, gymnasiums, hotels, bars, public comfort stations and other installations where fixtures are installed so that their use is unrestricted.

Public way means a sidewalk, street, highway, square or other open space to which the public has access, as of right or by invitation, expressed or implied.

*Range* means a cooking *appliance* equipped with a cooking surface and one or more ovens. *Registered professional* means

- a) a person who is registered or licensed to practise as an architect under the Architects Act, or
- b) a person who is registered or licensed to practise as a professional engineer under the Engineers and Geoscientists Act.

Relief vent means a vent pipe that is used in conjunction with a circuit vent to provide additional air circulation between a drainage system and a venting system.

Repair garage means a building or part thereof where facilities are provided for the repair or servicing of motor vehicles.

Residential full flow-through fire sprinkler/standpipe system means an assembly of pipes and fittings installed in a one- or two-family dwelling that conveys water from the water service pipe to the sprinkler/standpipe system's outlets and is fully integrated into the potable water system to ensure regular flow of water through all parts of both systems.

Residential occupancy means the occupancy or use of a building or part thereof by persons for whom sleeping accommodation is provided but who are not harboured or detained to receive medical care or treatment or are not involuntarily detained.

Residential partial flow-through fire sprinkler/standpipe system means an assembly of pipes and fittings installed in a one- or two-family dwelling that conveys water from the water service pipe to the sprinkler/standpipe system's outlets and in which flow, during inactive periods of the sprinkler/standpipe system, occurs only through the main header to the water closet located at the farthest point of the two systems.

Return duct means a duct for conveying air from a space being heated, ventilated or air-conditioned back to the heating, ventilating or air-conditioning appliance.

Riser means a water distribution pipe that extends through at least one full storey.

Rock means that portion of the earth's crust which is consolidated, coherent and relatively hard and is a naturally formed, solidly bonded, mass of mineral matter which cannot readily be broken by hand.

Roof drain means a fitting or device that is installed in the roof to permit storm water to discharge into a leader.

Roof gutter means an exterior channel installed at the base of a sloped roof to convey storm water.

Sanitary building drain means a building drain that conducts sewage to a building sewer from the most upstream soil-or-waste stack, branch or fixture drain serving a water closet.

Sanitary building sewer means a building sewer that conducts sewage.

Sanitary drainage system means a drainage system that conducts sewage.

Sanitary sewer means a sewer that conducts sewage.

Secondary suite means an additional dwelling unit

- a) having a total floor space of not more than 90 m<sup>2</sup> in area,
- b) having a floor space less than 40% of the habitable floor space of the building,
- c) located within a building of residential occupancy containing only one other dwelling unit, and
- d) located in and part of a building which is a single real estate entity.

(See Appendix A-9.36.1.1.)

Sensory disability includes visual and hearing impairments.

Service room means a room provided in a building to contain equipment associated with building services. (See Appendix A.)

Service space means space provided in a building to facilitate or conceal the installation of building service facilities such as chutes, ducts, pipes, shafts or wires.

Service water heater means a device for heating water for plumbing services.

Sewage means any liquid waste other than clear-water waste or storm water.

Shallow foundation means a foundation unit which derives its support from soil or rock located close to the lowest part of the building which it supports.

Size means the nominal diameter by which a pipe, fitting, trap or other similar item is commercially designated.

Smoke alarm means a combined smoke detector and audible alarm device designed to sound an alarm within the room or suite in which it is located upon the detection of smoke within that room or suite.

Smoke detector means a fire detector designed to operate when the concentration of airborne combustion products exceeds a pre-determined level.

*Soil* means that portion of the earth's crust which is fragmentary, or such that some individual particles of a dried sample may be readily separated by agitation in water; it includes boulders, cobbles, gravel, sand, silt, clay and organic matter.

Soil-or-waste pipe or waste pipe means a pipe in a sanitary drainage system.

Soil-or-waste stack means a vertical soil-or-waste pipe that passes through one or more storeys, and includes any offset that is part of the stack.

Space heater means a space-heating appliance for heating the room or space within which it is located, without the use of ducts.

Space-heating appliance means an appliance intended for the supplying of heat to a room or space directly, such as a space heater, fireplace or unit heater, or to rooms or spaces of a building through a heating system such as a central furnace or boiler.

Sprinklered (as applying to a building or part thereof) means that the building or part thereof is equipped with a system of automatic sprinklers.

Stack vent means a vent pipe that connects the top of a soil-or-waste stack to a vent header or outside air. (See Figure A-1.4.1.2.(1)-F in Appendix A.)

Stage means a space designed primarily for theatrical performances with provision for quick change scenery and overhead lighting, including environmental control for a wide range of lighting and sound effects and which is traditionally, but not necessarily, separated from the audience by a proscenium wall and curtain opening.

Storage garage means a building or part thereof intended for the storage or parking of motor vehicles and which contains no provision for the repair or servicing of such vehicles. (See Appendix A.)

Storage-type service water heater means a service water heater with an integral hot water storage tank. Storey means that portion of a building which is situated between the top of any floor and the top of the floor next above it, and if there is no floor above it, that portion between the top of such floor and the ceiling above it.

Storey (as applying to plumbing) means the interval between 2 successive floor levels, including *mezzanine* floors that contain plumbing *fixtures*, or between a floor level and roof.

Storm building drain means a building drain that conveys storm water and is connected at its upstream end to a leader, sump or catch basin, and at its downstream end to a building sewer or a designated storm water disposal location.

Storm building sewer means a building sewer that conveys storm water.

Storm drainage system means a drainage system that conveys storm water.

Storm sewer means a sewer that conveys storm water.

Storm water means water that is discharged from a surface as a result of rainfall or snowfall.

Stove means an appliance intended for cooking and space heating.

Street means any highway, road, boulevard, square or other improved thoroughfare 9 m or more in width, which has been dedicated or deeded for public use, and is accessible to fire department vehicles and equipment.

Subsoil drainage pipe means a pipe that is installed underground to intercept and convey subsurface water.

Subsurface investigation means the appraisal of the general subsurface conditions at a *building* site by analysis of information gained by such methods as geological surveys, in situ testing, sampling, visual inspection, laboratory testing of samples of the subsurface materials and groundwater observations and measurements.

Suite means a single room or series of rooms of complementary use, operated under a single tenancy, and includes *dwelling units*, individual guest rooms in motels, hotels, boarding houses, rooming houses and dormitories as well as individual stores and individual or complementary rooms for *business and personal services occupancies*. (See Appendix A.)

Supply duct means a duct for conveying air from a heating, ventilating or air-conditioning appliance to a space to be heated, ventilated or air-conditioned.

Theatre means a place of public assembly intended for the production and viewing of the performing arts or the screening and viewing of motion pictures, and consisting of an auditorium with permanently fixed seats intended solely for a viewing audience.

Trap means a fitting or device that is designed to hold a liquid seal that will prevent the passage of gas but will not materially affect the flow of a liquid.

Trap arm means that portion of a fixture drain between the trap weir and the vent pipe fitting. (See Appendix Note A-7.5.6.3.(1) in Division B.)

Trap dip means the lowest part of the upper interior surface of a trap.

*Trap seal* depth means the vertical distance between the *trap dip* and the *trap weir*. (See Appendix Note A-7.2.3.1.(1) and (3) in Division B.)

Trap standard means the trap for a fixture that is integral with the support for the fixture.

*Trap weir* means the highest part of the lower interior surface of a trap. (See Appendix Note A-7.2.3.1.(1) and (3) in Division B.)

Unit heater means a suspended space heater with an integral air circulating fan.

Unprotected opening (as applying to exposing building face) means a doorway, window or opening other than one equipped with a closure having the required fire-protection rating, or any part of a wall forming part of the exposing building face that has a fire-resistance rating less than required for the exposing building face.

*Unsafe condition* means any condition that could cause undue hazard to life, limb or health of any person authorized or expected to be on or about the premises.

Vacuum breaker (see back-siphonage preventer).

Vapour barrier means the elements installed to control the diffusion of water vapour.

Vent connector (as applying to heating or cooling systems) means the part of a venting system that conducts the *flue* gases or vent gases from the *flue collar* of a gas appliance to the chimney or gas vent, and may include a draft control device.

Vent header means a vent pipe that connects any combination of stack vents or vent stacks to outside air. (See Figure A-1.4.1.2.(1) in Appendix A.)

Vent pipe means a pipe that is part of a venting system.

Vent stack means a vent pipe that is connected at its upper end to a vent header or that terminates in outside air and is connected at its lower end to the soil-or-waste stack at or below the lowest soil-or-waste pipe connection. (See Figure A-1.4.1.2.(1)-G in Appendix A.)

Venting system means an assembly of pipes and fittings that connects a drainage system with outside air for circulation of air and the protection of trap seals in the drainage system. (See Figure A-1.4.1.2.(1)-G in Appendix A.)

Vertical service space means a shaft oriented essentially vertically that is provided in a building to facilitate the installation of building services including mechanical, electrical and plumbing installations and facilities such as elevators, refuse chutes and linen chutes.

Walkway means a covered or roofed pedestrian thoroughfare used to connect 2 or more buildings. Waste pipe (see soil-or-waste pipe).

Water distribution system means an assembly of pipes, fittings, valves and appurtenances that conveys water from the water service pipe or private water supply system to water supply outlets, fixtures, appliances and devices.

Water service pipe means a pipe that conveys water from a public water main or private water source to the inside of the building.

Water system means a private water supply system, a water service pipe, a water distribution system or parts thereof.

Wet vent means a soil-or-waste pipe that also serves as a vent pipe and extends from the most downstream wet-vented fixture connection to the most upstream fixture connection. (See Appendix Note A-2.5.8.1.(2) of Division B.)

Yoke vent means a vent pipe that is connected at its lower end to a soil-or-waste stack and at its upper end to a vent stack or to a branch vent connected to a vent stack. (See Appendix Note A-2.5.4.3. of Division B.)

### 5 Replace 1.4.2.1. with the following:

# 1.4.2. Symbols and Other Abbreviations

# 1.4.2.1. Symbols and Other Abbreviations

1) The symbols and other abbreviations in this Code shall have the meanings assigned to them in this Article and Article 1.3.2.1. of Division B.

1 in 2 ...... slope of 1 vertical to 2 horizontal 1 in 50 .... slope of 1 vertical to 50 horizontal ABS ...... acylonitrile-butadiene-styrene AL ..... aluminum Cm ..... centimetre(s) cm<sup>2</sup> ..... square centimetre(s) CPVC ..... chlorinated polyvinyl chloride ٥ .... degree(s) °C ..... degree(s) Celsius dB(A) ...... A-weighted sound level diam ...... diameter DWV ..... drain, waste and vent gram(s) g ..... ga ...... gauge h ..... hour(s) Hz ..... hertz inch(es) In. ..... Inc. ..... Incorporated J ..... joule(s) kilogram(s) Kg .....  $kg/m^2 \dots$ kilogram(s) per square metre kN ..... kilonewton(s) kPa ..... kilopascal(s) kW ...... kilowatt(s) L ..... litre(s) L/s ..... litre(s) per second Lx ..... lux m ..... metre(s)  $m^2 \dots$ square metre(s) M ..... metric nomenclature for reinforcing bars max. ..... maximum minimum min. ...... min ...... minute(s) MJ ..... megajoule(s) millimetre(s) mm ..... MPa ..... megapascal(s) N ..... newton n/a ...... not applicable ng ...... nanogram(s) number(s) No. ..... nom. ...... nominal on centre o.c. ...... OSB ...... oriented strandboard PE ..... polyethylene PEX .... crosslinked polyethylene PP-R ..... polypropylene PVC ..... polyvinyl chloride S ..... second(s) temperature temp. .....

T&G ...... tongue and groove W ...... watt(s)
Wt ...... weight
% ...... percent

# 6 Replace 1.5.1.1.(1) with the following:

- 1) The provisions of documents referenced in this Code, and of any documents referenced within those documents, apply only to the extent that they relate to
  - a) buildings,
  - b) plumbing systems, and
  - c) the objectives and functional statements attributed to the applicable acceptable solutions in Division B where the documents are referenced.

(See Appendix A)

### 7 Replace 2.1.1.1.(1) with the following:

1) This Part applies to all *buildings* and *plumbing systems* covered in this Code. (See Article 1.1.1.1.)

### 8 Replace 2.1.1.2.(1)(a) with the following:

a) to all buildings and plumbing systems covered in this Code (see Article 1.1.1.1.), and

# 9 Replace 2.1.1.2.(2) with the following:

2) Objective OS4, Resistance to Unwanted Entry, applies only to dwelling units.

### 10 Replace 2.1.1.2.(4) with the following:

- 4) Objective OH5, Hazardous Substances Containment, applies only to the extent defined in
- a) this Code in relation to plumbing systems, and
- b) the British Columbia Fire Code.

# 11 Replace 2.1.1.2.(5) with the following:

- **5)** Objective OA, Accessibility (including Objective OA1, Accessible Path of Travel, and OA2, Accessible Facilities), does not apply to
  - a) in Group C, dwelling units, row houses, boarding houses and lodging houses,
  - b) in Group C, apartment *buildings* and condominiums except to the extent described in Article 3.8.2.27.,
  - c) in Group E, shops and stores with a total retail floor space of less than 50 m<sup>2</sup> (See A-3.8.2.1.(2)(e) in Division B),
  - d) Group F Division 1 occupancies, and
  - e) buildings that are not intended to be occupied on a daily or full-time basis, including automatic telephone exchanges, pump houses and substations.

### 12 In 2.2.1.1., Objectives, replace the term Barrier-Free with the word Accessible.

### 13 Replace 3.1.1.2.(3) with the following:

- 3) Functional Statements F73 and F74 do not apply to
- a) in Group C, dwelling units, row houses, boarding houses and lodging houses,
- b) in Group C, apartment *buildings* and condominiums except to the extent described in Article 3.8.2.27.,
- c) in Group E, shops and stores with a total retail floor space of less than 50 m<sup>2</sup> (See A3.8.2.1.(2)(e) in Division B),
- d) Group F Division 1 occupancies, and
- e) buildings that are not intended to be occupied on a daily or full-time basis, including automatic telephone exchanges, pump houses and substations.

### **DIVISION B**

# 14 Add the following after Sentence 1.3.1.2.(1):

# 1.3.1.3. Priority of the British Columbia Building Code

1) In case of conflict between the provisions of this Code and those of a referenced document, the provisions of this Code shall govern.

### 15 Add the following to Table 1.3.1.2.:

CSA	CAN/CSA-A277-01	Procedure for Certification of Factory-Built Houses	1.1.2.2.(1)			
CSA	CAN/CSA-Z240 MH Series	Mobile Homes	1.1.2.2.(1)			
16 Delete the following from Table 1.3.1.2.:						
CSA	B51-03	Boiler, Pressure Vessel, and Pressure Piping Code	6.2.1.4.(1) 9.31.6.2.(2) 9.33.5.2.(1)			
CSA	B52-99	Mechanical Refrigeration Code	6.2.1.4.(1) 9.33.5.2.(1)			
CSA	CAN/CSA-B149.1-00	Natural Gas and Propane Installation Code	6.2.1.4.(1) 9.10.22.1.(1) 9.31.6.2.(2) 9.33.5.2.(1)			
CSA	C22.1-02	Canadian Electrical Code, Part I	3.6.1.2.(1) 3.6.2.1.(6) 3.6.2.7.(1) 6.2.1.4.(1) 9.31.6.2.(2) 9.33.5.2.(1) 9.34.1.1.(1)			

### 17 Combine Table 1.3.1.2. of the National Plumbing Code with Table 1.3.1.2 of this code.

### 18 Add the following to Sentence 1.3.2.1.(1)

TECA Thermal Environmental Comfort Association (6004 Lois Street, Powell River, British Columbia V8A 4T7; www.teca.ca)

# 19 Replace the title of 3.1.2.5. with the following:

# 3.1.2.5. Convalescent, Children's Custodial and Residential Care Homes

# 20 Replace 3.2.1.1.(3) with the following:

- **3)** Except as required by Sentence (5), a *mezzanine* need not be considered as a *storey* in calculating the *building height* provided
  - a) not less than 60% of the horizontal plane separating the *mezzanine* from the room or floor space in which it is located is open, and
  - b) except as permitted in Sentences (7) and 3.3.2.12.(3), the space above the *mezzanine* is used as an open area without *partitions* or subdividing walls higher than 1 070 mm above the *mezzanine* floor.

(See Appendix A)

### 21 Replace 3.2.1.1.(7) with the following:

7) The space above a *mezzanine* conforming to Sentence (3) is permitted to include an enclosed space whose area does not exceed 10% of the horizontal plane separating the *mezzanine* from the room or floor space in which the *mezzanine* is located provided the enclosed space does not obstruct visual communication between the open space above the *mezzanine* and the room in which it is located. (See A-3.2.1.1.(3) in Appendix A.)

# 22 Insert the following after 3.2.4.19.(1):

- **2)** Except as provided in Sentence (5), to assist persons with a hearing impairment, a visual warning system conforming to Sentences (3) and (4) shall be installed in locations described in Articles 3.8.2.27. to 3.8.2.31.
- **3)** The visual warning system required by Sentence (2) shall consist of strobe lights supervised, activated and powered by means of the fire alarm system (supervised by the fire alarm system means up to, but not including, the strobe lights), and be connected to, activated by, and powered by, the sounding of the *smoke alarm* and
  - a) have a luminous intensity of not less than 2 candelas and produce between 1 and 3 flashes per second,
  - b) have a clear or white translucent lens,
  - c) have the word "FIRE" clearly visible on the lens or attached nameplate,
  - d) be installed in each bedroom, room closed off from the living area by a door except a bathroom, and living area or hallway serving the living area, and
  - e) be located to maximize effectiveness either
    - i) on a ceiling, or
    - ii) on a wall not more than 100 mm below the ceiling.
- **4)** When the strobe lights described in Sentences (3) and (6) are activated by the *smoke alarm*, a separate small indicator light shall be activated and shall be located either immediately adjacent to the strobe lights and clearly identified as "SMOKE," or on the *smoke alarm*, or immediately adjacent to the *smoke alarm*.

- **5)** When a fire alarm system is not provided in *occupancies* required by Subsection 3.8.2. to have a warning system, *smoke alarms* required by Sentence 3.2.4.20.(1) and Article 9.10.19.1. in such *occupancies* shall be provided with strobe lights, in locations described in Articles 3.8.2.27. to 3.8.2.31., and shall
  - a) be connected to, and activated by, the sounding of the smoke alarm,
  - b) have a luminous intensity of not less than 2 candelas and produce between 1 and 3 flashes per second,
  - c) have a clear or white translucent lens,
  - d) have the word "SMOKE" clearly visible on the lens or attached nameplate,
  - e) be installed in each bedroom, room closed off from the living area by a door except a bathroom, and living area or hallway serving the living area, and
  - f) be located not less than 2100 mm above the floor on a wall or ceiling in a location that will maximize effectiveness.
  - 6) The special outlet boxes with cover plates required by Sentence 3.8.2.27.(3) shall
  - a) be designed and wired specifically to allow strobe lights conforming to Clause (5)(a) above
    - i) to operate as required by Sentence (3) for a fire alarm system where a fire alarm system is provided, and
    - ii) to be connected to, and activated by, the sounding of the *smoke alarm* (see also Sentence (4)),
  - b) be permanently identified as "FIRE Strobe Light Connection Only,"
  - c) be installed in each bedroom, room closed off from the living area by a door except a bathroom, and living area or hallway serving the living area, and
  - d) be located not less than 2100 mm above the floor on a wall or ceiling in a location that will maximize effectiveness.
- 7) For the purpose of providing power to the strobe lights that may be connected to the outlets described in Sentence (6), it shall be assumed that the total special outlets for at least 20 per cent of the building's dwelling units are in use.

### 23 Add the following after 3.2.5.7.(1):

**2)** *Buildings* which are sprinklered throughout with a sprinkler system conforming to Article 3.2.5.13. or have a standpipe system conforming to Articles 3.2.5.9.to 3.2.5.11. need not comply with Sentence (1).

### 24 Replace 3.2.5.17.(1) with the following:

- 1) Portable extinguishers shall be provided and installed in accordance with the British Columbia Fire Code.
- 25 Replace all the text after 3.3.1.7. with the word Reserved.

### 26 Insert the following after 3.3.1.13.(9):

- 10) Door assemblies providing access shall
- a) conform to Clauses (1)(a) and (b),
- b) have a clear and level area

- i) when the door swing is towards this area, not less than 1 500 mm long by a width equal to the door assembly width plus not less than 600 mm clear space beside the latching jamb of the door,
- ii) when the door swing is away from this area, not less than 1 200 mm long by a width equal to the door assembly width plus not less than 300 mm clear space beside the latching jamb of the door,
- iii) for power operated sliding or power operated doors swinging away from the area, not less than 1 100 mm long by the width of the door assembly, and
- iv) for power operated doors swinging into the area, not less than 1 100 mm long plus the arc of the door swing by the width of the door assembly,
- c) be operable by devices which do not require tight grasping, or twisting of the wrist, as the only means of operation,
- d) operate when a force of not more than 38 N for exterior doors and not more than 22 N for interior doors is applied at the handle, push plate or latch-releasing device, except for locations where greater pressures are required to ensure proper *building* function, and
- e) if equipped with a closer, have a closing period of not less than 3 seconds measured from the door in an open position of 70° to the doorway to a point 75 mm from the closed position measured from the leading edge of the latch side of the door.

(See Appendix A-3.8)

- 11) In doorways, where thresholds are not flush with the floor, the difference in level shall be not more than 13 mm and shall be beyeled.
- **12)** Doors which are installed in series shall be separated by a space not less than 1 200 mm plus the width of any door swinging into the separating space. (See also Clauses 3.2.8.5.(1)(a) and 3.3.5.7.(3)(a))
- 27 Insert the following after 3.3.4.7.:

# 3.3.4.8. Resistance to Forced Entry

- 1) Dwelling units shall conform to the applicable requirements of Subsections 9.6.8. and 9.7.6.
- 28 Replace 3.4.6.1.(1)(b) with the following:
  - b) if accessible to the public, shall have either a colour contrast or a distinctive pattern, readily apparent from both directions of travel, to demarcate the leading edge of the tread and the leading edge of the landing, as well as the beginning and end of a ramp.
- 29 Change the note in parenthesis after 3.4.6.6. Ramp Slope to the following:

(See also Article 3.8.3.3.)

30 Replace 3.4.6.7. with the following:

# 3.4.6.7. Treads, Risers and Tactile Warning

- 1) Except as permitted for *dwelling units* and by Sentence 3.4.7.5.(1) for fire escapes, steps for stairs shall
  - a) have a run of not less than 280 mm between successive steps.

- b) have a rise between successive treads not less than 125 mm and not more than 180 mm,
- c) have a closed riser, and
- d) have a riser with a rakeback of not more than 38 mm, or
- e) have the underside of the nosing with an angle of not less than 60 degrees from the horizontal.
- 2) Treads and risers in every *exit* stair, except a fire escape stair, shall have uniform run and rise in any one flight, and shall not alter significantly in run and rise in successive flights in any stair system. (See Appendix A).
  - 3) The leading edge of a stair tread shall
  - a) except as permitted in Sentence (6), have either a radius or a bevel between 6 mm and 10 mm in horizontal dimension,
  - b) have no abrupt angles on the underside, and
  - c) not project more than 38 mm.
- **4)** The front edge of stair treads in exits and public *access to exits* shall be at right angles to the direction of *exit* travel.
- **5)** Except for stairs within or serving *dwelling units*, *exit* stairs not normally used for access purposes and fire escapes, stairs shall be provided with tactile warning strips conforming to Article 3.8.3.11.
- 6) If resilient material is used to cover the leading edge of a stair tread, the minimum radius or bevel required by Clause (3)(a) is permitted to be reduced to 3 mm.

### 31 Replace 3.5.2.1.(1) with the following:

1) The design, construction, installation and *alteration* of every elevator, escalator and dumbwaiter shall conform to the Elevating Devices Safety Regulation. (See Appendix A.)

### 32 Replace 3.5.2.1.(2) with the following:

**2)** Before being placed in service, every elevator, escalator or dumbwaiter installation, including safety and control devices, shall be inspected and tested in accordance with the Elevating Devices Safety Regulation.

### 33 Replace 3.6.1.2.(1) with the following:

1) The installation of electrical wiring and electrical equipment shall conform to the requirements of the Electrical Safety Regulation.

### 34 Replace 3.6.2.1 (6) with the following:

**6)** Sentence (5) shall apply to a room that contains electrical equipment that is required to be located in a *service room* by the Electrical Safety Regulation.

# 35 Replace 3.6.2.7.(1) with the following:

1) An electrical equipment vault shall conform to Sentences (2) to (8) if the vault is required by the Electrical Safety Regulation.

# 36 Insert the following after 3.7.2.9.:

# 3.7.2.10. Accessible Washrooms

(See Appendix A-3.8)

- 1) Where washrooms, baths or showers are required by Subsection 3.8.2. to be accessible, they shall
- a) be designed to provide maneuvering space up to each type of fixture required to be usable by persons in wheelchairs, and
- b) except as permitted in Sentence (12), conform to Sentences (2) to (11).
- 2) At least one toilet compartment shall
- a) be not less than 1 500 mm wide by not less than 1 500 mm deep,
- b) have a clearance of not less than 1 700 mm between the outside of the stall and the face of an inswinging washroom door and 1 400 mm between the outside of the stall and any wall mounted fixture,
- c) have a door opening out, with a clear opening width of not less than 800 mm,
- d) have a graspable pull on the inside face of the door at least 140 mm long located with the midpoint between 200 mm and 300 mm from the hinge edge of the door and between 800 mm and 1 000 mm above the finished floor,
- e) be provided with graspable pull on the outside at least 140 mm long near the latch side of the door,
- f) be capable of being latched from the inside with a closed fist, and
- g) be equipped with a coat hook mounted not more than 1 200 mm above the floor on a side wall and projecting not more than 50 mm from the wall.
- 3) Water closets in toilet compartments described in Sentence (2) shall
- a) be located with the center line of the fixture between 420 mm and 480 mm from the side wall carrying the grab bar and at least 1 020 mm from any obstruction on the non grab bar side,
- b) have the seat at 430 mm to 480 mm above the floor,
- c) have a toilet seat that is not the spring-up type,
- d) have accessible hand-operated flushing controls,
- e) where tank-type water closets are provided, have tank lids bolted down, and
- f) where tank-type water closets are not used, have a toilet seat cover that rests against the grab bar referenced in Clause 3.7.2.10.(4)(b) at an angle of between 95° and 110° to provide back support.
- 4) Toilet compartments described in Sentence (2) shall
- a) have grab bars that are
  - i) not less than 30 mm or more than 40 mm in diameter,
  - ii) installed with a clearance between 35 mm and 45 mm from the wall.
  - iii) designed and installed to withstand a load of not less than 1.3 kN, and
  - iv) not less than 900 mm long, mounted horizontally between 840 mm and 920 mm above the finished floor, with the mid-point of the length in line with the front edge of the water closet and which at its mid-point may angle upward not more than 60° from the horizontal forward of the water closet, and
- b) where tank-type water closets are not used, have a second bar not less than 600 mm long, mounted on the wall behind and centered over the water closet with the center line between 815 mm and 865 mm above the finished floor.
- 5) At least one wash basin shall

- a) be located
  - i) with its centre line not less than 460 mm from a side wall,
  - ii) with its rim not more than 865 mm above the finished floor,
  - iii) with a vertical clearance of not less than 735 mm under the front edge,
  - iv) with a clear area centered under the wash basin not less than 760 mm wide and reducing to not less than 685 mm high at a point 250 mm back from the front face of the apron, and
  - v) with a further clear space 250 mm above the floor to a point 500 mm back from the front face of the apron,
- b) have a clear floor space centered in front of the wash basin not less than 800 mm wide and 1 100 mm deep exclusive of space under the wash basin,
- c) have pipes insulated where they may constitute a burn hazard to persons in wheelchairs,
- d) have faucets conforming to Sentence 3.7.2.3.(4),
- e) have a soap dispenser located close to the wash basin, not more than 1 200 mm above the finished floor and *accessible* to persons in wheelchairs, and
- f) have a towel dispenser or other hand-drying equipment located close to the wash basin, not more than 1 200 mm above the finished floor in an area *accessible* to persons in wheelchairs.
- **6)** Where urinals are provided in place of required water closets as described in Sentence 3.7.2.2.(5), at least one shall
  - a) be either wall-mounted with the opening of the basin between 490 mm and 510 mm above the finished floor, or floor-mounted with the rim level with the finished floor, with no step being permitted in front of either type of urinal,
  - b) have a clear width of approach of 800 mm centered on the urinal, and
  - c) be provided on each side with vertical grab bars not less than 300 mm long mounted not more than 380 mm from the centre line of the urinal with their mid-point 1 000 mm above the floor.
- 7) Where mirrors are provided, at least one shall be mounted with its bottom edge not more than 1 000 mm above the finished floor, or shall be tilted to be usable by persons in wheelchairs.
- 8) At least one of each washroom accessory shall be of a type, and be installed so as to be usable by persons in wheelchairs, with no user function more than 1 100 mm from the finished floor.
  - 9) A universal toilet room shall have
  - a) a floor space of not less than 3.7 m<sup>2</sup> with no dimension less than 1 700 mm when the door swings out and 4.0 m<sup>2</sup> with no dimension less than 1 800 mm when the door swings in,
  - b) fixtures located to provide maximum maneuverability for persons in wheelchairs,
  - c) a water closet that conforms to Sentence (3), with grab bars conforming to Clauses (4)(a) and (b),
  - d) a wash basin conforming to Sentence (5),
  - e) at least one mirror conforming to Sentence (7),
  - f) washroom accessories conforming to Sentence (8),
  - g) a lock on the entrance door that is operable with one hand and can be unlocked from the outside in case of emergency, and
  - h) on an outward swinging door a pull conforming to Clause (2)(d).

### 10) Baths shall

a) have a clear floor area in front of the bath not less than 1 500 mm long by 800 mm out from the bath, with fixtures being permitted to project into such clear area provided that *access* to the bath controls from a wheelchair is not restricted,

- b) have faucets conforming to the requirements of Clause (5)(d),
- c) have shower selector controls that meet the requirements for faucets described in Clause (b),
- d) have a water supply that is controlled by a pressure-equalizing valve or by an automatic thermostatically-controlled valve,
- e) to permit lateral transfer from a wheelchair, have a removable seat which is
  - i) designed to remain stable during use,
  - ii) wide enough to give stability to the user,
  - iii) capable of carrying a load of not less than 1.33 kN, and
  - iv) manufactured so as to be impervious to water and of such a design as to be easily cleaned,
- f) have a telephone-type shower located at the same end of the bath as the controls, where a shower is provided,
- g) have an integral slip-resistant bottom,
- h) not have shower doors, (see Appendix A.)
- i) have fully-recessed soap holders within reach from the seated position, and
- j) have grab bars that
  - i) are not less than 600 mm by 900 mm by 90° mounted with the center line of the 600 mm vertical section located between 275 mm and 325 mm away from the controls end of the bath and 900 mm horizontal section located with the center line 150 mm to 300 mm above the rim of the bath, and
  - ii) conform to Subclasses (4)(a)(i)(ii) and (iii).

# 11) Shower compartments shall

- a) be not less than 1 500 mm wide by 900 mm deep with not less than 1 500 mm wide entrance,
- b) have a clear floor area in front of the entrance to the shower not less than the width of the shower by 900 mm deep, with fixtures being permitted to project into the clear area provided that access to and from the shower compartment is not restricted,
- c) have faucets that
  - i) conform to the requirements of Clause (5)(d), and
  - ii) are located so as to be usable from the seated position.
- d) to permit lateral transfer from a wheelchair, be provided with a portable or wall-mounted folding seat, which is
  - i) located between 430 mm and 480 mm above the finished shower floor on a side wall,
  - ii) 40 mm to 60 mm less than shower compartment depth by between 430 mm and 530 mm wide,
  - iii) capable of carrying a minimum load of 1.33 kN, and
  - iv) manufactured so as to be impervious to water and of such a design as to be easily cleaned,
- e) have a telephone-type shower, located so as to be within reach from the seated position,
- f) have a water supply that is controlled by a pressure-equalizing valve or by an automatic thermostatically controlled valve,
- g) not have shower doors, (see A-3.7.2.10.(10)(h) in Appendix A.)
- h) have thresholds that do not exceed 13 mm in height and are beveled,
- i) have fully-recessed soap holders within reach from the seated position, and
- i) have grab bars that
  - i) are not less than 750 mm by 900 mm by 90° set horizontally with the center line of the grab bar between 700 mm and 800 mm above the shower floor, with the 900 mm length located on the side wall opposite the entrance, and
  - ii) conform to Subclauses (4)(a)(i), (ii) and (iii).

**12)** In *occupancies* or parts of *occupancies* used predominantly by children, and in patient areas in Group B, Division 2 *occupancies*, it is permissible to locate fixtures and grab bars differently than described in Sentences (2) to (11) to accommodate the special needs of children, patients and care providers.

### 37 Replace Section 3.8 with the following:

# **Section 3.8. Building Requirements for Persons with Disabilities** (See Appendix A.)

### 3.8.1. **General**

# 3.8.1.1. Application

- 1) This Section applies to the design and construction of *buildings* and *occupancies* to make them *accessible* by *persons with disabilities*.
- 2) The requirements of this Section take precedence over other requirements contained in this Part and in Part 9.
- **3)** Access shall be provided to alterations, additions and changes in occupancy to the extent required in Subsection 3.8.4.

# 3.8.1.2. Openings through Firewalls

1) Where there are openings through a *firewall*, other than those for piping, tubing, wiring and conduit, the requirements of this Section shall apply to the *floor areas* on both sides of the *firewall* as if they were in the same *building*.

# 3.8.2. Classification Requirements

# 3.8.2.1. Application and Exemptions

- 1) Except as provided in Sentence (2), access shall be provided to all storeys of buildings of new construction.
  - 2) This Subsection does not apply to
  - a) the *storey* next above or below the *accessible storey* in a *building* not more than two *storeys* in *building height* provided the *storeys* next above or below the *accessible storey* 
    - i) are less than 600 m<sup>2</sup> in floor area,
    - ii) do not contain facilities integral to the principle function of the accessible storey, and
    - iii) do not contain an assembly occupancy with an area more than 100 m<sup>2</sup> (See Appendix A).
  - b) the *storey* next above or below the *accessible storey* in a *suite* of not more than two *storeys*, where the *accessible storey* is the *first storey* or *basement*, provided the *storeys* next above or below the *accessible storey* 
    - i) are less than 600 m<sup>2</sup> in area.
    - ii) do not contain facilities integral with the principle function of the accessible storey, and
    - iii) do not contain an assembly occupancy with an area more than 100 m<sup>2</sup>,

- c) in Group C, dwelling units, row houses, boarding houses and lodging houses,
- d) in Group C, apartment *buildings* and condominiums except to the extent described in Article 3.8.2.27.,
- e) in Group E, shops and stores with a total retail floor space of less than 50 m<sup>2</sup> (See Appendix A), and
- f) Group F Division 1 occupancies.

# 3.8.2.2. Design Requirements

1) To meet the requirements of Articles 3.8.2.3. to 3.8.2.39., the design requirements of Subsection 3.8.3. shall form an integral part of this Subsection.

# 3.8.2.3. Specific Requirements

- 1) Except where stated otherwise *buildings* and *occupancies* to which this Subsection applies shall, in addition to the requirements listed for specific *occupancies*, have
  - a) access from the street to at least one main entrance conforming to Article 3.8.3.5.,
  - b) where off-street parking is provided for *persons with disabilities*, *access* from the parking area to an entrance conforming to Article 3.8.3.5. which serves the parking area unless the entrance in Clause (a) is located so as to conveniently serve both the parking area and the *street*,
  - c) access to all areas where work functions can reasonably be expected to be *performed by persons* with disabilities.
  - d) accessible washrooms conforming to Sentence (2), and
  - e) on each *floor area* to which *access* is required, egress conforming to Article 3.8.3.19.
  - 2) In buildings and occupancies where water closets are required
  - a) at least one universal toilet room shall be provided which conforms to Sentence 3.7.2.10.(9), and
  - b) where the *occupant load* of the *building* or *occupancy* exceeds 150, other public washrooms in *floor areas* required to be *accessible* shall conform to Sentences 3.7.2.10.(2) to (8). (See Appendix A.)

# **Assembly Occupancies**

# 3.8.2.4. Assembly Occupancies, Division 1

1) In assembly occupancies, all auditoria and theatres with an area of more than 100 m<sup>2</sup> shall have an assistive listening system conforming to Article 3.8.3.20.

# 3.8.2.5. Theatres, Studios and Opera Houses

- 1) In Group A, Division 1 occupancies, access shall be provided to
- a) a ticket office,
- b) each type of refreshment facility,
- c) each type of public facility, and
- d) viewing positions conforming to Article 3.8.3.15. in the numbers required by Table 3.8.2.5.

# Table 3.8.2.5.

Forming part of Sentence 3.8.2.5.(1)

Seating Capacity of Occupancy <sup>(1)</sup>	Number of Viewing Positions Required	
Up to 100	2	
101 to 200	3	
201 to 350	4	
351 and over	4 plus 1 for each additional 1000 seats	
	or part thereof	

### Note to Table 3.8.2.5.:

(1) See Sentence 3.8.3.15.(2)

# Assembly Occupancies, Division 2

# 3.8.2.6. Art Galleries, Exhibition Halls, Libraries and Museums

1) In art galleries, exhibition halls, libraries and museums, *access* shall be provided to all areas to which the public is admitted.

# 3.8.2.7. Bowling Alleys

- 1) In bowling alleys, access shall be provided to
- a) viewing positions conforming to Article 3.8.3.15.,
- b) each type of refreshment facility, and
- c) all bowling lanes.

### 3.8.2.8. Amusement Arcades and Billiard Halls

- 1) In amusement arcades and billiard halls, access shall be provided to
- a) each type of recreational facility, and
- b) each type of refreshment facility.

### 3.8.2.9. Churches

1) In churches, similar places of worship and auxiliary halls, *access* shall be provided to viewing positions conforming to Article 3.8.3.15., where fixed seating is installed.

# 3.8.2.10. Clubs, Non-residential

- 1) In non-residential clubs, access shall be provided to
- a) every type of membership facility, and
- b) at least one bath or shower, conforming to Sentence 3.7.2.10.(10) or (11), where one or more baths or showers are provided.

# 3.8.2.11. Community, Dance and Lecture Halls

- 1) In community halls, dance halls and lecture halls, access shall be provided to
- a) each type of public facility, and
- b) viewing positions conforming to Article 3.8.3.15., where fixed seating is installed.

### 3.8.2.12. Courthouses

- 1) In courthouses, access shall be provided to
- a) each public facility,
- b) interview rooms, and
- c) at least one holding room.

# **3.8.2.13. Gymnasiums**

- 1) In gymnasiums, access shall be provided to
- a) every type of public facility,
- b) viewing positions conforming to Article 3.8.3.15., where fixed seating is installed, and
- c) at least one changing room for each sex, where changing rooms are provided.
- **2)** Changing rooms in Clause (1) (c) shall each have at least one shower conforming to Sentence 3.7.2.10.(11), where showers are provided.

### 3.8.2.14. Restaurants

- 1) In restaurants,
- a) access shall be provided to all public facilities, and
- b) each area providing seating shall be capable of providing clear space equivalent to not less than 1 per cent of such seating for use by persons in wheelchairs which is
  - i) located so as to provide viewing of any entertainment areas, and
  - ii) located not to infringe on any aisle requirements.

# **3.8.2.15.** Lodge Rooms

1) In lodge rooms, *access* shall be provided to all *storeys*, except those *storeys* containing only mechanical and storage areas.

# 3.8.2.16. Passenger Terminals

1) In passenger terminals *access* shall be provided to all areas to which the public is admitted.

# 3.8.2.17. Schools and Colleges, Non-residential

- 1) Non-residential schools and colleges need not comply with Sentence 3.8.2.3.(1) but shall have
- a) at least one entrance to each administrative, educational, and recreational building which
  - i) conforms to Article 3.8.3.5., and
  - ii) is accessible from adjacent parking stalls conforming to Article 3.8.3.4., and
- b) from within each building, access to
  - i) all educational and recreational facilities,
  - ii) each type of refreshment facility,
  - iii) offices.
  - iv) lockers,
  - v) areas where work functions can reasonably be expected to be performed by *persons with disabilities*,
  - vi) viewing positions conforming to Article 3.8.3.15., where fixed seating is installed,

- vii) where washrooms are required, *accessible* washrooms conforming to Sentence 3.8.2.3.(2), and
- viii) at least one bath or shower, conforming to Sentence 3.7.2.10.(10) or (11) where one or more baths or showers are provided.
- **2)** In addition to the washroom *facilities* required by Subclause (1)(b)(vii), an *accessible* toilet room conforming to Sentence 3.7.2.10.(9) shall be provided in each principal *building* at a non-residential school or college.
- **3)** In addition to the requirements of Sentence (1), every *floor area* which is required to be *accessible* shall conform to Article 3.8.3.19.

# 3.8.2.18. Undertaking Premises

1) In undertaking premises, where seating is installed in the chapel, *access* shall be provided to viewing positions conforming to Article 3.8.3.15.

# **Assembly Occupancies, Division 3**

### 3.8.2.19. Arenas and Ice Rinks

- 1) In arenas and ice rinks, access shall be provided to
- a) each type of public facility,
- b) at least one changing room for each sex, where changing rooms are provided, and
- c) viewing positions conforming to Article 3.8.3.15. in the numbers required by Table 3.8.2.19., where fixed seating is installed.

# **Table 3.8.2.19.** Forming part of Sentence 3.8.2.19.(1)

Seating Capacity	Number of Viewing Positions	
of Arena, Ice Rink		
Up to 500	3	
501 to 1,000	6	
1 001 and over	6 plus 2 for each additional	
	1 000 seats or part thereof	

**2)** Changing rooms in Clause (b) shall each have at least one shower conforming to Sentence 3.7.2.10.(11), where showers are provided.

# 3.8.2.20. Swimming Pools

1) Swimming pools shall conform with the requirements of Article 3.8.2.13.

# **Assembly Occupancies, Division 4**

### 3.8.2.21. Bleachers

- 1) Where bleachers are erected as other than temporary structures they need not comply with Sentence 3.8.2.3.(1), but shall have *access* provided to
  - a) viewing positions adjacent to such structures conforming to Article 3.8.3.15. in the numbers required by Table 3.8.2.19., and
  - b) washroom facilities conforming to Sentence 3.8.2.3.(2), where washroom facilities are provided.

# 3.8.2.22. Grandstands, and Stadiums

- 1) In grandstands and stadiums, access shall be provided to
- a) at least one refreshment facility,
- b) offices,
- c) at least one changing room for each sex, where changing rooms are provided, and
- d) viewing positions conforming to Article 3.8.3.15. in the numbers required by Table 3.8.2.19.
- 2) Changing rooms in Clause (1)(c) shall each have at least one shower conforming to Sentence 3.7.2.10.(11), where showers are provided.
- **3)** Where general seating areas are partially or totally covered, viewing positions required by Clause (1)(d) shall be covered.

# 3.8.2.23. Drive-in Theatres

- 1) Drive-in theatres need not comply with Sentence 3.8.2.3.(1), but access shall be provided to,
- a) all public refreshment facilities, and
- b) washroom facilities conforming to Sentence 3.8.2.3.(2).

# **Care and Detention Occupancies Division 1**

# 3.8.2.24. Jails

- 1) Jails, penitentiaries, prisons and reformatories need not comply with Sentence 3.8.2.3.(1), but shall have
  - a) access from the street to at least one main entrance conforming to Article 3.8.3.5.,
  - b) where off-street parking is provided for *persons with disabilities*, *access* from the parking area to an additional entrance conforming to Article 3.8.3.5. unless the entrance in Clause (a) is located so as to conveniently serve both the parking area and the *street*,
  - c) access to areas where visitors are admitted, and
  - d) access to visitors washrooms, conforming to Sentence 3.8.2.3.(2), where visitors washrooms are provided.

# 3.8.2.25. Psychiatric Hospitals and Police Stations

- 1) Psychiatric hospitals with or without detention quarters, and police stations with detention quarters, need not comply with Sentence 3.8.2.3.(1), but shall have
  - a) access from the street to at least one main entrance conforming to Article 3.8.3.5.,

- b) where off-street parking is provided for *persons with disabilities*, *access* from the parking area to an additional entrance conforming to Article 3.8.3.5. unless the entrance in Clause (a) is located so as to conveniently serve both the parking area and the *street*,
- c) access to areas where work functions can reasonably be expected to be performed by persons with disabilities,
- d) accessible public washrooms conforming to Sentence 3.8.2.3.(2) serving each area to which persons with disabilities are provided access, and
- e) access to each type of facility.

# Care and Detention Occupancies, Division 2

### 3.8.2.26. Care Facilities

1) All *occupancies* in Group B, Division 2 shall comply at least with the requirements of Article 3.8.2.25. (See also Sentence 3.7.2.10.(12).)

# **Residential Occupancies**

# 3.8.2.27. Apartment Buildings and Condominiums

- 1) Apartment and condominium *buildings* need not comply with Sentence 3.8.2.3.(1), except that *access* shall be provided
  - a) from the street to the main entrance conforming to Article 3.8.3.5.,
  - b) from a private parking area to an entrance conforming to Article 3.8.3.5., and
  - c) where an elevator is provided, from the main entrance in Clause (a), or from the entrance in Clause (b), to an elevator conforming to Sentence 3.5.2.1.(3).
- **2)** At the main entrance to an apartment or condominium *building*, the intercom system shall be installed with no user functions more than 1 375 mm above the finished paved area.
- **3)** Each *dwelling unit* in an apartment or condominium *building* designed primarily for senior citizens shall be provided with special outlet boxes and cover plates as described in Sentence 3.2.4.19.(6). (See also Sentence 3.2.4.19.(7))

# 3.8.2.28. Clubs, Residential

- 1) In residential clubs, the requirements of Article 3.8.2.10. shall apply, and
- a) where sleeping accommodation for 10 or more persons is provided in single or double rooms, at least one such room shall conform to Article 3.8.3.14., and
- b) a sleeping room other than that required in Clause (a) shall be provided with a visual warning system conforming to Sentence 3.2.4.19.(2).

# 3.8.2.29. Schools and Colleges, Residential

- 1) Residential schools and colleges need not comply with Sentence 3.8.2.3.(1), except that the requirements of Article 3.8.2.17. shall apply, and
  - a) access shall be provided to at least one bed space conforming to Clauses 3.8.3.14.(1)(a) and (b), for every 40 bed spaces or part thereof, and

- b) a bed space other than that required in Clause (a) shall be provided with a visual warning system conforming to Sentence 3.2.4.19.(2).
- **2)** A bathroom provided to serve a bed space described in Clause (1)(a) shall conform to Clause 3.8.3.14.(1)(h).

### 3.8.2.30. Dormitories

- 1) In dormitories, access shall be provided to
- a) each type of facility,
- b) at least one bed space conforming to Clauses 3.8.3.14.(1)(a) and (b), for every 40 bed spaces or part thereof, and
- c) at least one bath or shower conforming to Sentences 3.7.4.8.(10) or (11) where one or more baths or showers are provided.
- 2) A bed space other than that required in Clause (1)(b) shall be provided with a visual warning system conforming to Sentence 3.2.4.19.(2).
- **3)** A bathroom provided to serve a bed space described in Clause (1)(b) shall conform to Clause 3.8.3.14.(1)(h).

### 3.8.2.31. Hotels and Motels

- 1) In hotels and motels, access shall be provided to
- a) every type of public facility, including those located outside the building,
- b) all storeys to which the public is admitted, and
- c) one sleeping unit conforming to Article 3.8.3.14. for every 40 sleeping units or part thereof.
- 2) At least one sleeping unit, other than those required in Clause (1)(c), for every 20 sleeping units or part thereof shall be provided with a visual warning system conforming to Sentence 3.2.4.19.(2).
- **3)** Accessible washrooms required by Clause 3.8.2.3.(1)(d) need only be those provided for public use.

# **Business and Personal Service Occupancies**

# 3.8.2.32. Business and Personal Service Occupancies

- 1) In a Group D *occupancy* with multiple *suites*, at least one *accessible* washroom, conforming to Sentence 3.8.2.3.(2), shall either
  - a) be available to all suites, or
  - b) be provided in each *suite* not having *access* to a washroom described in Clause (a).
- **2)** In offices, dental offices, medical offices, fire stations, police stations without detention quarters, radio stations, telephone exchanges and small tool and appliance rental and service premises, *access* shall be provided to areas to which the public is admitted.

### 3.8.2.33. Banks

- 1) In banks and financial institutions, access shall be provided to
- a) every type of public facility,
- b) at least one teller location conforming to Article 3.8.3.18., and
- c) automated teller machines, night deposit boxes and similar services, where provided, which shall be installed to be usable by persons in wheelchairs.

### 3.8.2.34. Barbers and Hairdressers

1) Where one or more hairdressing sinks are provided in barber shops, hairdressing shops and beauty parlours, *access* shall be provided to at least one hairdressing sink which shall be usable by persons in wheelchairs.

# 3.8.2.35. Laundry and Dry-cleaning, Self-service

1) In self-service laundry and dry-cleaning premises, *access* shall be provided to at least one of each type of equipment installed for public use.

# **Mercantile Occupancies**

# 3.8.2.36. Mercantile Occupancies

- 1) In a Group E *occupancy* with multiple *suites*, at least one *accessible* washroom, conforming to Sentence 3.8.2.3.(2), shall either
  - a) be available to all suites, or
  - b) be provided in each *suite* not having *access* to a washroom described in Clause (a).
- **2)** In Group E *buildings*, *access* shall be provided to all public *facilities* and to all areas to which the public is admitted. (See Appendix A.)

### **Industrial Occupancies, Division 1**

# 3.8.2.37. High Hazard Occupancies

1) Occupancies in Group F, Division 1 need not conform to the requirements of this Subsection.

# Industrial Occupancies, Divisions 2 and 3

# 3.8.2.38. Industrial Occupancies, Service Stations and Parking Garages

- **1)** Except as provided in Sentences (2) and (3), in Group F, Division 2 and 3 occupancies, *access* shall be provided to all areas to which the public is admitted.
- **2)** Service stations need not comply with Sentence 3.8.2.3.(1) except that for service stations with washrooms, regardless of service station floor area, the washrooms shall conform to Sentence 3.8.2.3.(2).

3) In storage garages access need only be provided to storeys containing the accessible parking required by Article 3.8.3.4. or local bylaws.

### 3.8.2.39. Public Toilets

- 1) Public toilets located in highway rest areas, campgrounds, picnic grounds, parks, recreational vehicle parks, and mobile home parks need not comply with Sentence 3.8.2.3.(1) but shall provide
  - a) access from a roadway to at least one toilet building by means of a path of travel conforming to Article 3.8.3.2., and
  - b) within the toilet building, toilet facilities conforming to Sentence 3.8.2.3.(2).
- **2)** Where permanent bath or shower *facilities* are provided to serve areas described in Sentence (1), at least one bath or shower shall be *accessible* as described in Clause (1)(a) and conforming to Sentence 3.7.2.10.(10) or (11).

# 3.8.3. Design Requirements

# 3.8.3.1. Application

1) This Subsection applies to all *buildings* and parts of *buildings* that are required to be *accessible* under Subsection 3.8.2., and without limitation applies to exterior paths and stairs within property lines from *streets*, parking areas and ancillary areas to at least one main entrance of these *buildings*.

### 3.8.3.2. Paths of Travel

- 1) Walks to at least one main entrance and all ancillary areas that are required to be a *accessible* shall
  - a) be provided by means of a continuous plane not interrupted by steps or abrupt changes in level,
  - b) have a permanent, firm and slip-resistant surface,
  - c) have an uninterrupted width of not less than 1 500 mm, and a gradient not more than 1 in 20,
  - d) have a curb not less than 75 mm high where, in the absence of walls, railings, or other barriers on either or both sides of the walk, the vertical drop from the walk is more than 75 mm,
  - e) not have gratings with openings that will permit the passage of a sphere more than 13 mm in diameter and have all elongated openings oriented approximately perpendicular to the direction of travel,
  - f) have a not less than 1 500 mm wide walk of a different texture to that surrounding it where the line of travel is level and even with adjacent walking surfaces,
  - g) be free from obstructions for the full width of the walk to a height of not less than 1 980 mm, except that handrails are permitted to project not more than 100 mm from either or both sides into the clear area, and
  - h) be designed as a ramp where the gradient of the walk is more than 1 in 20.

# 3.8.3.3. Ramps

- 1) Where ramps are required to provide interior and exterior access, they shall
- a) have an uninterrupted width of not less than 1 500 mm, except as permitted in Sentences (4) and (6), and in Clause (7)(b),
- b) have, where the vertical drop at the side of the ramp is more than 75 mm, either
- i) a curb not less than 75 mm high, or

- ii) walls, railings, or other barriers that extend to within 75 mm of the finished ramp surface,
- c) be free from obstructions for the full width of the ramp to a height of not less than 1 980 mm, except that handrails, excluding those to ramps in Sentence (4) and Clause (7)(b), are permitted to project not more than 100 mm from either or both sides into the clear area,
- d) be provided with an unobstructed, level area not less than 1 500 mm long by the width of the ramp, at the bottom and top ends, and at abrupt changes in direction,
- e) have a level landing not less than 1500 mm long by the width of the ramp at intervals conforming to Table 3.8.3.3., and
- f) have gradients and maximum lengths conforming to Table 3.8.3.3.
- **2)** Except as permitted in Sentences (3) and (5), handrails conforming to Article 3.4.6.4. shall be installed on both sides of ramps.
- **3)** Where ramps described in Sentence (1) have a gradient not more than 1 in 12 and are not more than 2 m long, handrails are required on one side only.
- **4)** Ramps with a gradient more than 1 in 12 shall have an uninterrupted width of 890 mm to 940 mm between handrails.

**Table 3.8.3.3.** Forming Part of Article 3.8.3.3.

Gradient	Maximum Length	Maximum Landing Intervals	Handrails Required <sup>(1)</sup>
over 1 in 20 to 1 in 16	None	12 m	both sides <sup>(2)</sup>
over 1 in 16 to 1 in 12	None	9 m	both sides <sup>(2)</sup>
over 1 in 12 to 1 in 10 <sup>(3</sup>	<sup>3)</sup> 6 m	-	both sides
over 1 in 10 to 1 in 8	600 mm	-	not required

### **Notes to Table 3.8.3.3.:**

- (1) See Sentence 3.8.3.3.(2)
- (2) See Sentence 3.8.3.3.(3)
- (3) See Sentence 3.8.3.3.(4)
  - 5) Handrails are not required to curb cut ramps.
- **6)** A ramp in a passageway up to and including 6 m in width shall be at least 915 mm wide between handrails.
  - 7) Ramps in passageways over 6 m in width shall be either
  - a) one ramp at least 1 500 mm wide, or
  - b) two ramps each at least 915 mm wide between handrails.

# 3.8.3.4. Parking Stalls for Persons with Disabilities

- 1) Where parking is provided, one parking stall for *persons with disabilities* shall be provided for each sleeping unit required to conform to Article 3.8.3.14. and for each viewing position required to conform to Article 3.8.3.15. and shall
  - a) be at least 3 700 mm wide,
  - b) have a firm, slip-resistant and level surface,
  - c) be located close, and be accessible, to an entrance conforming to Article 3.8.3.5., and

- d) be clearly identified as being solely for the use of persons with disabilities.
- **2)** In all other *occupancies*, where more than 50 parking stalls are provided, parking stalls for *persons with disabilities* shall be provided in the ratio of 1 for every 100 or part thereof.

#### 3.8.3.5. Main Entrances

- 1) A building shall have at least one main entrance conforming to Sentences 3.3.1.13.(10) to (12).
- **2)** Where any main entrance does not provide *access*, a sign (see Sentence 3.8.3.12.(3)) shall be installed as far ahead of any wheelchair obstruction as is practical so as to indicate clearly the location of the *accessible* main entrance.
- **3)** Access shall be provided from every accessible main entrance to all parts of the building required to be accessible by Subsection 3.8.2.
- **4)** Power operation, which functions for passage in both directions, shall be provided for all doors in the *accessible* path of travel at the exterior *accessible* entrances to
  - a) a hotel,
  - b) a Group B, Division 2 major occupancy, or
  - c) an assembly occupancy, a business and personal services occupancy or a mercantile occupancy more than 500 m<sup>2</sup> in area. (See Appendix A.)
- **5)** If a walkway or pedestrian bridge connects two accessible storeys in different buildings, the path of travel from one storey to the other storey by means of the walkway or bridge shall be accessible.

#### 3.8.3.6. Interior Passageways

1) In passageways, abrupt changes in floor level shall not exceed 13 mm, except where ramps conforming to Sentences 3.8.3.3.(6) and (7) are provided.

#### 3.8.3.7. Public Aisles

1) The effective width between any two structures or fixtures in public aisles in merchandising establishments and exhibition facilities shall be not less than 1 100 mm.

#### 3.8.3.8. Turnstiles

1) Where turnstiles, controlled checkout lanes or other restricted passageways are constructed to control the flow of pedestrian traffic, at least one such *facility* shall be not less than 800 mm wide and clearly marked for use by persons in wheelchairs.

#### 3.8.3.9. Food Service Lines

- 1) Where permanent food service lines are provided they shall
- a) be not less than 920 mm wide, and
- b) have not less than 920 mm wide entry and egress points.

#### 3.8.3.10. Floor Levels

1) Except for floors and levels specifically excluded in Subsection 3.8.2., floors and levels at different elevations shall be connected by ramps conforming to Article 3.8.3.3., by an elevator conforming to Appendix E of CAN/CSA-B44 "Safety Code for Elevators," by an elevating device for persons with disabilities conforming to CAN/CSA-B355, "Lifts for Persons with Physical Disabilities," or by other means acceptable to the authority having jurisdiction.

#### 3.8.3.11. Tactile Warning Systems

- 1) To assist persons with a visual impairment, tactile warning strips conforming to Sentence (2) shall be provided at the top of a stairway and at intermediate landings intercepted by other paths of travel.
- **2)** A 725 mm to 775 mm wide tactile warning surface shall be provided for the full width of the stair that is
  - a) one tread width back from the top riser,
  - b) slip-resistant,
  - c) durable,
  - d) not more than 3 mm above or below the surrounding floor surface,
  - e) detectable by walking upon as being different from the surrounding flooring, and
  - f) in a contrasting colour to the surrounding flooring. (See Appendix A.)

## 3.8.3.12. Directional Signs

- 1) Except as permitted in Sentence (2), signs conforming to Sentence (3) shall be installed to provide adequate identification of, and direction to,
  - a) an alternate main entrance as required by Sentence 3.8.3.5.(2),
  - b) alternate access routes,
  - c) accessible viewing positions,
  - d) accessible refreshment facilities,
  - e) accessible washrooms and toilet rooms,
  - f) levels of a multi-level parking structure containing parking stalls for persons with disabilities,
  - g) parking stalls conforming to Article 3.8.3.4., and
  - h) accessible checkout lanes.
- **2)** Sentence (1) need not apply to *buildings* or parts of *buildings* where the degree of *accessibility* provided is such as to make these signs unnecessary.
  - 3) Signs required by Sentence (1) shall
  - a) be located so as to be easily read and understood,
  - b) be located so as to be seen by a person in a wheelchair.
  - c) have a glare-free surface,
  - d) for parking spaces be 1 500 mm above the ground measured to the bottom of the sign,
  - e) have characters with a stroke width-to-height ratio of from 1:6 to 1:10 and a character width-to-height ratio of from 3:5 to 1:1 using only Arabic numerals and sans-serif letters,
  - f) have characters and symbols in colours that contrast highly with their backgrounds, and

g) contain the International Symbol of Accessibility for Persons with Disabilities and any additional wording and symbols necessary to convey full understanding.

#### **3.8.3.13.** Door Numbers

- 1) To assist persons with a visual impairment, doors and openings that lead from any public area and through which the public is permitted to pass shall be identified by Arabic numerals or sans-serif letters or both which shall be
  - a) not less than 25 mm high and raised between 0.7 mm and 3 mm with a high stroke width-to-height ratio for ease of reading by touch, and
  - b) located at the side of doors or openings, centered 1 350 mm above the finished floor and within 150 mm of the jamb.
  - 2) The identification of doors and openings shall apply to the following occupancies
  - a) fine arts theatres,
  - b) bowling alleys,
  - c) court houses,
  - d) restaurants,
  - e) passenger terminals,
  - f) hotels and motels,
  - g) offices, including dental and medical offices, and
  - h) such other occupancies, and parts of occupancies, as required by the authority having jurisdiction.

## 3.8.3.14. Sleeping Units

- 1) Where accessible sleeping units are required by Subsection 3.8.2., they shall have
- a) sufficient space to provide a turning area of not less than 1 500 mm diameter on one side of a bed,
- b) sufficient space to provide a clearance of not less than 900 mm to allow for functional use of units by persons in wheelchairs,
- c) an accessible balcony where balconies are provided,
- d) at least one closet that provides
  - i) a clear opening not less than 900 mm wide,
  - ii) clothes hanger rods capable of being lowered to a height of 1 200 mm, and
  - iii) at least one shelf capable of being lowered to a height of 1 200 mm,
- e) accessible light switches, thermostats and other controls that are specifically provided for use by the occupant, located between 900 mm and 1 200 mm above the finished floor,
- f) accessible electrical receptacles located between 455 mm and 1 200 mm above the finished floor,
- g) an accessible razor outlet where a razor outlet is provided, and
- h) a bathroom, where provided as part of a sleeping unit
  - i) conforming to Sentence 3.7.2.10.(3), except that the water closet seat shall be between 355 mm and 405 mm above the finished floor and shall have available a 115 mm high lift seat having openings on each side and the front for personal hygiene,
  - ii) conforming to Clause 3.7.2.10.(4)(a), except that the grab bar need only be not less than 600 mm long with the centre line located 715 mm to 840 mm above the finished floor with the bar projecting 50 mm beyond the front edge of the water closet,
  - iii) conforming to Clause 3.7.2.10.(4)(b),

- iv) conforming to Sentences 3.7.2.10.(5), (7), (8) and (10) only to the extent of providing the same type of *facilities* provided in sleeping units for persons without disabilities, and
- v) having clear floor space not less than 1 500 mm by 1 500 mm which may include the water closet.

#### 3.8.3.15. Viewing Positions

- 1) Each viewing position required by Subsection 3.8.2. shall be
- a) either a level area with removable seating to allow the space to be used by persons in wheelchairs, or
- b) a clear and level area not less than 900 mm wide and either 1 525 mm long to permit side entry of the wheelchair or 1 220 mm long where the wheelchair enters from the front or rear of the space and shall provide a clear view of the event taking place,
- c) arranged so that at least two positions are side by side, and
- d) located so as not to interfere with egress from any row of seating or infringe on any aisle requirements.
- **2)** In motion picture *theatres* viewing positions shall not be located in the front third portion of the seating area.

## 3.8.3.16. Public Telephones

- 1) In each location where more than one public telephone is installed, at least one shall
- a) be provided with unobstructed *access* to within 300 mm of the front of the telephone with such *access* not less than 800 mm wide and 800 mm deep,
- b) have a vertical clearance of not less than 715 mm under a directory shelf,
- c) have the centre of the coin slot not more than 1 200 mm above the finished floor.
- d) have an adjacent shelf at least 250 mm wide by 350 mm deep with a clearance above the shelf of at least 250 mm, (See Appendix A)
- e) have a handset incorporating a hearing aid coupler coil, and
- f) be identified as being usable by persons in wheelchairs and persons with a hearing disability.

## 3.8.3.17. Drinking Fountains

- 1) In each location where a drinking fountain or fountains are installed, one fountain shall
- a) have a spout opening not less than 750 mm nor more than 915 mm above the finished floor, and
- b) have lever or push-bar controls operable by a force of not more than 22 N located either on the front or on both sides.
- 2) Where the drinking fountain is located in an alcove
- a) the alcove shall be not less than 800 mm wide, and
- b) the fountain shall be of the surface-mounted type.

#### 3.8.3.18. Counters

- 1) Every counter more than 2 m long serving the public shall have at least one *accessible* section not less than 760 mm long centered over the knee space required by Sentence (3).
  - 2) An accessible counter surface shall be not more than 865 mm above the floor.

- **3)** Knee space beneath an *accessible* counter intended to be used as a work surface by *persons with disabilities* shall be not less than
  - a) 760 mm wide,
  - b) 685 mm high, and
  - c) 485 mm deep.

## 3.8.3.19. Egress from Floor Areas

- 1) Every floor area that is not sprinklered throughout and that is required to be accessible shall
- a) be served by an elevator
  - i) conforming to Sentences 3.2.6.5.(4) to (6),
  - ii) protected against fire in conformance with Clauses 3.2.6.5.(3)(b) or (c), and
  - iii) in a *building* over 3 *storeys* in *building height*, protected against smoke movement so that the hoistway will not contain more than 1% by volume of contaminated air from a fire floor during a period of 2 h after the start of a fire, assuming an outdoor temperature equal to the January design temperature on a 2.5% basis determined in conformance with Article1.1.3.1.,
- b) be divided into at least 2 zones by *fire separations* conforming to Sentences (2), (3) and (4) so that
  - i) persons with disabilities can be accommodated in each zone, and
  - ii) the travel distance from any point in one zone to a doorway leading to another zone shall be not more than the value for travel distance permitted by Sentence 3.4.2.5.(1) for the *occupancy* classification of the zone,
- c) in the case of *residential occupancies*, be provided with balconies conforming to Sentence (5), except on the *storey* containing the *accessible* entrance,
- d) have an accessible exterior exit at ground level, or
- e) have a ramp conforming to Article 3.8.3.3. leading to ground level. (See Appendix A.)
- **2)** Except as permitted by Sentence (3), the *fire separations* referred to in Clause (1)(b) shall have a *fire-resistance rating* not less than 1 h.
- **3)** The *fire-resistance rating* of the *fire separations* referred to in Clause (1)(b) is permitted to be less than 1 h but not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for
  - a) the floor assembly above the floor area, or
  - b) the floor assembly below the *floor area*, if there is no floor assembly above.
- **4)** A *closure* in a *fire separation* referred to in Clause (1)(b) shall be weatherstripped or otherwise designed and installed to retard the passage of smoke. (See A-3.3.3.5.(6) in Appendix A.)
  - 5) A balcony required by Clause (1)(c) shall
  - a) have direct access from the suite or floor area,
  - b) be not less than 1.5 m deep from the outside face of the exterior wall to the inside edge of the balcony, and
  - c) provide not less than 2 m<sup>2</sup> of balcony space for each accessible sleeping room.

#### 3.8.3.20. Assistive Listening Devices

1) Where assistive listening systems are required they shall be provided throughout the entire seating area except that with an induction loop system only half the seating area need be encompassed. (See Appendix A.)

#### 3.8.3.21. Controls

1) Except as required by Sentence 3.5.2.1.(3) for elevators, controls for the operation of *building* services or safety devices, including electrical switches, thermostats and intercom switches, intended to be operated by the occupant and located in or adjacent to an *accessible* path of travel shall be *accessible* to a person in a wheelchair, operable with one hand, and mounted between 400 mm and 1 200 mm above the floor.

### 3.8.4. Alterations and Additions to Existing Buildings

#### 3.8.4.1. Application

- 1) Except as provided in Sentences (2) and (3), *access* as described in Articles 3.8.4.2. to 3.8.4.8. shall be provided to
  - a) additions to existing *buildings* where such additions have internal pedestrian connections with the existing *buildings*,
  - b) existing parts of buildings described in Clause (a), and
  - c) existing *buildings* where the *occupancy* is changed and existing *buildings* which are altered or renovated, only to the extent described in Article 3.8.4.5.
  - 2) This Subsection does not apply to
  - a) vertical additions of one storey not more than 600 m<sup>2</sup> in floor area regardless of occupancy, and
  - b) horizontal or vertical additions to occupancies described in Clauses 3.8.2.1.(2)(b) to (e).
  - **3)** This Subsection does not apply to *buildings of new construction*.

## 3.8.4.2. Specific Requirements

- 1) Exterior *access* shall be provided to an addition except where *access* to the addition is provided by way of the existing *building*.
  - 2) Walks and ramps for an addition shall conform to Subsection 3.8.3.
- **3)** A main entrance to an addition shall be *accessible* except where the addition is *accessible* by an *accessible* path of travel from an *accessible* main entrance serving the existing *building*.

#### 3.8.4.3. Vertical Additions

- 1) Where there is a vertical addition of one *storey* and of more than 600 m<sup>2</sup> in *floor area*, or of two or more *storeys* regardless of *floor area*,
  - a) access shall be provided to all additional storeys, and
  - b) the additional *storeys* shall conform to Subsections 3.8.2. and 3.8.3.

#### 3.8.4.4. Horizontal Additions

**1)** Where an existing *building* is extended horizontally, the requirements of Subsections 3.8.2. and 3.8.3. shall be applied to the addition except as described in Articles 3.8.4.2., 3.8.4.6., and Sentence 3.8.4.8.(2).

## 3.8.4.5. Alterations and Occupancy Change

- 1) Where an existing *building* is altered or renovated, or where the *occupancy* is changed, *access* shall be provided in conformance with Subsections 3.8.2. and 3.8.3. where
  - a) persons with disabilities could reasonably be expected to be employed in, or could reasonably be expected to use, such an occupancy or building, and
  - b) where providing such access would be practicable.

### 3.8.4.6. Sleeping Units

- 1) Where sleeping units are provided in an addition, the percentage of *accessible* sleeping units required by Subsection 3.8.2. to conform to Article 3.8.3.14. shall be based on the sum of sleeping units in the addition and in the existing *building*.
- **2)** The *accessible* sleeping units required by Sentence (1) may be distributed between the addition and the existing *building*.

#### 3.8.4.7. Existing Facilities

1) Where an addition is required to be *accessible*, facilities located in the existing *building* which are necessary to the operation of the addition shall be *accessible*.

### 3.8.4.8. Egress from Floor Areas

- 1) The egress requirements of Article 3.8.3.19. shall apply to the vertical additions described in Sentence 3.8.4.3.(1).
- **2)** Where an existing *storey* is extended horizontally, the egress requirements of Article 3.8.3.19. shall apply to
  - a) the extended portion of the *storey*, or
  - b) the combined area of the existing storey and the extension.

#### 38 The following changes and additions are made to Table 3.9.1.1.:

(a) Add the following rows after 3.2.4.19.(1):

Column 1	Column 2
(3)	[F11-OS1.5]
	(a) [F81-OS1.5]
(4)	[F11-OS1.5]
(5)	[F11-OS1.5]
(6)	[F11,F81-OS1.5]
(7)	[F11,F81-OS1.5]

## (b) In 3.3.1.13.(1) add new row above existing two rows in Column 2 with following entry:

[F73-OS1]

## (c) Add the following rows after 3.3.1.13.(9):

- (10) [F73-OA1] (c) [F73-AO1] [F10-OS3.7] (e) [F73-OA1] [F30-OS3.1]
- (11) [F73-OA1] [F10-OS3.7]
- (12) [F73-OA1] [F30-OS3.1]

#### (d) In 3.4.6.1.(1)(b) add the following after the two existing entries:

[F73-OA]

#### (e) Replace 3.4.6.7.(1) through (6) as follows

- (1) (a),(b) [F10-OS3.7] [F30-OS3.1] (c),(d) and (e) [F74-OA1]
- (2) [F10-OS3.7] [F30-OS3.1]
- (3) [F30-OS3.1]
- (4) [F10-OS3.7] [F30-OS3.1]
- (6) [F30-OS3.1]

#### (f) Add the following after 3.7.2.9.(1)

## 3.7.2.10. Accessible Washrooms

- (1) [F74-OA2]
- (2) [F74-OA2]
  - (g) [F30-OS3.1] Applies to portion of Code text: "...projecting not more than 50 mm from the wall..."
- (3) [F74-OA2]
  - [F72-OH2.1]
- (4) [F74-OA2]
  - [F20,F30-OS3.1]
- (5) [F74-OA2] [F71-OH2.3]
  - (c) [F31-OS3.2]
- (6) [F74-OA2]
  - (a) [F72-OH2.1]
  - (b) [F30-OS3.1]
- (7) [F74-OA2]
- (8) [F74-OA2]
- (9) [F72-OH2.1] [F71-OH2.3] [F74-OA2]

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(g) [F10-OS3.7]
(10)
              [F74-OA2]
              (c), (d) [F31-OS3.2]
              (e) [F20-OS2.1]
              (g), (i) [F30-OS3.1]
              (j) [F20,F30-OS3.1]
(11)
              [F74-OA2]
              (d) [F20-OS2.1] [F71-OH2.1]
              (f) [F31-OS3.2]
              (h), (i) [F30-OS3.1]
              (j) [F30-OS3.1] [F20-OS2.1]
    (g) Replace 3.8.1.2. to 3.8.3.17. with the following:
3.8.2.3.
           Specific Requirements
(1)
              [F73-OA1]
              [F74-OA1]
(2)
              [F74-OA2]
3.8.2.5.
           Theatres, Studios and Opera Houses
(1)
              [F74-OA2]
3.8.2.6.
           Art Galleries, Exhibition Halls, Libraries and Museums
(1)
              [F74-OA2]
3.8.2.7.
           Bowling Allies
(1)
              [F74-OA2]
           Amusement Arcades and Billiard Halls
3.8.2.8.
(1)
              [F74-OA2]
3.8.2.9.
           Churches
              [F74-OA2]
(1)
3.8.2.10.
           Clubs, Non-residential
(1)
              [F74-OA2]
3.8.2.11.
           Community, Dance and Lecture Halls
(1)
              [F74-OA2]
3.8.2.12.
           Courthouses
(1)
              [F74-OA2]
3.8.2.13.
           Gymnasiums
(1)
              [F74-OA2]
3.8.2.14.
           Restaurants
(1)
              [F74-OA2]
3.8.2.15.
           Lodge Rooms
(1)
              [F74-OA2]
3.8.2.16.
           Passenger Terminals
(1)
              [F74-OA2]
3.8.2.17.
           Schools and Colleges, Non-residential
(1)
              [F74-OA2]
(2)
              [F74-OA2]
(3)
              [F74-OA2]
3.8.2.18.
           Undertaking Premises
(1)
              [F74-OA2]
3.8.2.19.
           Arenas and Ice Rinks
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(1)
              [F74-OA2]
(2)
              [F74-OA2]
3.8.2.21.
           Bleachers
              [F74-OA2]
(1)
3.8.2.22.
           Grandstands and Stadiums
(1)
              [F74-OA2]
(2)
              [F74-OA2]
(3)
              [F74-OA2]
3.8.2.23.
           Drive-In Theatres
(1)
              [F74-OA2]
3.8.2.24.
           Jails
(1)
              [F74-OA2]
3.8.2.25.
           Psychiatric Hospitals and Police Stations
              [F74-OA2]
(1)
3.8.2.27.
           Apartment Buildings and Condominiums
(1)
              [F74-OA2]
(2)
              [F74-OA2]
(3)
              [F11-OS1.5]
3.8.2.28.
           Clubs, Residential
(1)
              [F11-OS1.5]
3.8.2.29.
           Schools and Colleges, Residential
(1)
              [F74-OA2] [F11-OS1.5]
3.8.2.30.
           Dormitories
(1)
              [F74-OA2]
(2)
              [F11-OS1.5]
(3)
              [F74-OA2]
3.8.2.31.
           Hotels and Motels
(1)
              [F74-OA2]
(2)
              [F11-OS1.5]
3.8.2.32.
           Business and Personal Service
(1)
              [F74-OA2]
(2)
              [F74-OA2]
3.8.2.33.
           Banks
(1)
              [F74-OA2]
3.8.2.34.
           Barbers and Hairdressers
(1)
              [F74-OA2]
3.8.2.35.
           Laundry and Dry-cleaning, Self-service
              [F74-OA2]
(1)
3.8.2.36.
           Mercantile Occupancies
(1)
              [F74-OA2]
(2)
              [F74-OA2]
3.8.2.38.
           Industrial Occupancies, Service Stations and Parking Garages
              [F74-OA2]
(1)
3.8.2.39.
           Public Toilets
(1)
              [F74-OA2]
(2)
              [F74-OA2]
3.8.3.2.
           Paths of Travel
(1)
              [F73-OA1]
              (b),(e),(g) [F30-OS3.1]
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3.8.3.3.
           Ramps
(1)
              [F73-OA1]
              (b), (c) [F30-OS3.1]
(2)
              [F30-OS3.1]
(4)
              [F73-OA1]
(6)
              [F73-OA1]
(7)
              [F73-OA1]
3.8.3.4.
           Parking Stalls for Persons with Disabilities
(1)
              [F74-OA2]
(2)
              [F74-OA2]
3.8.3.5.
           Main Entrances
(1)
              [F73-OA1]
(2)
              [F73-OA1]
(3)
              [F73-OA1]
(4)
              [F73-OA1]
(5)
              [F73-OA1]
3.8.3.6.
           Interior Passageways
(1)
              [F73-OA1] [F30-OS3.1]
3.8.3.7.
           Public Isles
              [F73-OA1]
(1)
3.8.3.8.
           Turnstiles
(1)
              [F73-OA1]
3.8.3.9.
           Food Service Lines
(1)
              [F73-OA1] [F74-OA2]
3.8.3.10.
           Floor Levels
(1)
              [F73-OA1]
3.8.3.11.
           Tactile Warning Systems
(1)
              [F73-OA1]
(2)
              [F73-OA1]
3.8.3.12.
           Directional Signs
(1)
              [F73-OA1] [F74-OA2]
(3)
              [F73-OA1] [F74-OA2]
3.8.3.13.
           Door Numbers
(1)
              [F73-OA1]
(2)
              [F73-OA1]
3.8.3.14.
           Sleeping Units
              [F73-OA1] [F74-OA2]
(1)
3.8.3.15.
           Viewing Positions
(1)
              [F74-OA2]
              (a) [F30-OS3.1]
              (b) [F10-OS3.7]
(2)
              [F74-OA2]
3.8.3.16.
           Public Telephones
              [F74-OA2]
(1)
3.8.3.17.
           Drinking Fountains
(1)
              [F74-OA2]
(2)
              [F74-OA2]
3.8.3.19.
           Egress from Floor Areas
              [F05,F10-OS1.5]
(1)
```

(a) [F06-OS1.5]
[F03-OS1.2] [F06-OS1.5]
[F03-OS1.2] [F06-OS1.5]
(a) [F10,F73-OS1.5]
(b),(c) [F10-OS1.5]
Assistive Listening Devices
[F74-OA2] [F11-OS3.7]
Controls
[F74-OA2] [F10-OS3.7]
Specific Requirements
[F73-OA1]
Existing Facilities
[F74-OA2]

#### 39 Replace 5.6.2.2.(2) with the following:

**2)** Where precipitation can accumulate on sloped or horizontal assemblies, provision shall be made for drainage conforming with Article 7.4.10.4.

#### 40 Replace 6.2.1.4.(1) with the following:

- 1) Except as provided in Articles 6.2.1.5. and 6.2.1.6., the installation of heating and air-conditioning equipment, including mechanical refrigeration equipment, and including provisions for mounting, clearances and air supply, shall conform to the requirements of
  - a) CAN/CSA-B139-M, "Installation Code for Oil Burning Equipment," for the installation of oil burning equipment,
  - b) the "Gas Safety Regulation" for the installation of natural gas and propane burning equipment,
  - c) the "Electrical Safety Regulation,"
  - d) the "Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation" for the installation of boilers, pressure vessels, pressure piping and mechanical refrigeration, and
  - e) CAN/CSA B365-M, "Installation Code for Solid-Fuel Burning Appliances and Equipment."
- 41 Replace Part 7 with Part 2, Division B, of the NPC, with the number 7 replacing the leading 2 in each article number, and with the following changes:
  - (a) add the following after 7.1.3.2.(1):

#### 7.1.4. Qualified Personnel

## 7.1.4.1. Persons Performing Plumbing Work

- 1) Personnel performing installation, alteration or repair on a plumbing system shall
- a) possess a British Columbia tradesman's qualification certification as a plumber,
- b) be an indentured apprentice supervised by a journeyman possessing a British Columbia tradesman's qualification certification as a plumber, or
- c) be the registered owner and occupant or intended occupant of the single family dwelling in which plumbing work will occur, provided evidence can be provided the owner can satisfactorily complete the proposed work.

- (b) in Table 7.2.7.4. replace the P in column 4 (Above-ground) opposite "M hard temper" in column 1 with an N,
- (c) insert the following after 7.3.3.10.(1):
- **2)** For all copper tube installed underground outside a *building* or underground inside a *building* the joints shall be
  - a) flared, or
  - b) brazed using brazing alloy from the American Welding Society AWS-BCuP range.
    - (d) Insert the following after 7.6.3.1.(1):
- **2)** Except as permitted in Sentences 7.6.3.4.(2), (4), and (5), the maximum velocity in copper water pipes shall not exceed
  - a) 1.5 metres/sec for cold water pipes,
  - b) 1.2 metres/sec for hot water distribution systems and recirculating systems with operating temperatures not exceeding 60°C, or
  - c) 0.9 metres/sec for hot *water distribution systems* and recirculating systems with operating temperatures exceeding 60°C.
    - (e) Insert the following after 7.6.3.2.(3):
- **4)** Where *fixtures* for single family dwellings and duplexes are supplied with both hot and cold water, the hydraulic loads for maximum separate demands for *water distribution piping* shall be not less than 100 per cent of the hydraulic load of the *fixture units* given in Table 7.6.3.1. (private use) or Table 7.6.3.2. (private use).
  - (f) Insert the following after 7.6.3.4.(1):
- **2)** For single family dwellings and duplexes, the size of a *water service pipe* that supplies a *fixture* or device shall be determined by Table 7.6.3.4., but shall not be less than 0.75 in.
  - (g) Renumber 7.6.3.4.(2) to 7.6.3.4.(3) and insert the following after it:
- **4)** For single family dwellings and duplexes, the size of a water distribution system shall be determined by Table 7.6.3.4.
  - (h) Renumber 7.6.3.4.(4) to 7.6.3.4.(5).
- 42 Replace 8.1.1.1.(3) with the following:
- 1) Fire safety at construction and demolition sites shall conform to Section 5.8. of the British Columbia Fire Code.
- 43 Replace Subsection 9.5.2. with the following:
- 9.5.2. Access for Persons with Disabilities
- 9.5.2.1. General
  - 1) Every building shall be designed in conformance with Section 3.8.

#### 9.5.2.2. Protection on Accessible Floor Areas

1) Where access is required to any floor area, the requirements in Article 3.8.3.19. shall apply.

#### 44 Replace 9.8.2.1.(2) with the following:

**2)** Except for stairs within or serving a *dwelling unit*, *exit* stairs not normally used for access purposes and fire escapes, stairs shall be provided with tactile warning strips conforming to Article 3.8.3.11.

#### 45 Replace 9.8.4.5. (1) with the following:

- 1) Stairs within dwelling units may contain winders provided
- a) the winders turn through an angle of not more than 90°.
- b) individual treads turn through an angle of 30° with no deviation above or below 30°, or
- c) individual treads turn through an angle of 45° with no deviation above or below 45°, and
- c) the run, measured at a point 200 mm from the narrow end, conforms to the run requirements for a private stair in Table 9.8.4.2., and
- d) the run at the narrow end is not less than 150 mm.

#### 46 Replace 9.8.5.1.(1) and (2) with the following:

- 1) This Subsection applies to pedestrian ramps, except ramps in an accessible path of travel.
- 2) Ramps providing access shall conform to the requirements in Section 3.8.

### 47 Replace 9.8.4.6. with the following:

#### 9.8.4.6. Leading Edge of Treads

- 1) Leading edges of treads that are bevelled or rounded
- a) shall not reduce the required tread depth by more than 15 mm,
- b) shall not, in any case, exceed 25 mm horizontally, and
- c) except for dwelling units,
- i) shall have no abrupt angles on the underside, and
- ii) shall not project more than 38 mm.

(See Appendix A.)

#### 48 Change the title of 9.10.2.2. as follows:

#### 9.10.2.2. Custodial, Convalescent and Residential Care Homes

#### 49 Insert the following after 9.10.2.2.(1)

- **2)** A care facility accepted for residential use pursuant to provincial legislation is permitted to be classified as a *residential occupancy* provided
  - a) the occupants live in a *dwelling unit* used as a single housekeeping unit with sleeping accommodation for not more than 10 persons,
  - b) interconnected *smoke alarms* are installed in each sleeping room in addition to the requirements of Article 9.10.19.2.,

- c) emergency lighting is provided in conformance with Article 9.9.11.3., and
- d) the building is sprinklered throughout.

#### 50 Replace 9.10.4.1.(2) with the following:

- **2)** Except as provided in Sentence 9.10.4.2.(1), a *mezzanine* need not be considered as a *storey* in calculating the *building height* provided
  - a) not less than 60% of the horizontal plane separating the *mezzanine* from the room or floor space in which it is located is open, and
  - b) except from within enclosures described in Sentence (3), the space above the *mezzanine* is used as an open area without *partitions* or subdividing walls higher than 1 070 mm above the *mezzanine* floor.

(See A-3.2.1.1.(3) in Appendix A)

#### 51 Replace 9.10.4.3.(1) with the following:

1) Where a basement is used primarily as a *storage garage*, the basement is permitted to be considered as a separate *building* for the purposes of this Section provided the floor above the basement and the exterior walls of the basement above the adjoining ground level are constructed as *fire separations* of masonry or concrete having *a fire-resistance rating* of not less than 2 h, except as permitted by Sentences 3.2.1.2.(2) and (3).

#### 52 Insert the following after 9.10.9.19.(1)

# 9.10.9.20. Multiple Tenant Self Storage Warehouses

1) Multiple tenant self storage warehouses shall comply with Article 3.3.5.9.

#### 53 Replace 9.10.20.4.(1) with the following:

1) Portable extinguishers shall be installed in all *buildings*, except within *dwelling units*, in conformance with the British Columbia Fire Code.

#### 54 Replace 9.10.21.1.(1) with the following:

1) Except as required in Sentence (2), natural gas and propane *ranges* shall be installed in accordance with the British Columbia "Gas Safety Act Regulation." (See Article 9.34.1.1.)

#### 55 Replace 9.16.2.1.(1) with the following:

1) Except as provided in Sentence (2), not less than 100 mm of coarse clean granular material shall be placed beneath floors-on-ground and where the requirements of Article 9.13.8.2. are employed the granular material shall not contain more than 10% of material that will pass a 4 mm sieve. (See Clause 9.13.4.1.(4)(b), Article 9.13.4.6., and A-9.13.4.6. in Appendix A.)

#### 56 Replace 9.25.2.1. with the following:

#### 9.25.2.1. Required Insulation

- 1) Except as permitted in Sentence (2), buildings of residential occupancy shall be provided with thermal insulation between heated and unheated space, the exterior air or the exterior soil, and heating floor assemblies and heated areas below in conformance to Table 9.25.2.1.
- **2)** Alternatives to the requirements of Table 9.25.2.1. may be determined through the use of energy consumption estimation computer modeling or using other acceptable good engineering principles.
- 58 Insert the following table within Subsection 9.25.2. and in the vicinity of 9.25.2.1.:

Table 9.25.2.1.

Minimum Thermal Resistance of Insulation RSI, m<sup>2</sup> °C/W for Buildings of Residential Occupancy

Forming Part of Article 9.25.2.1.

Value Dequired

	value i	Requirea
Building Assembly	Less than 4500	4500 and Greater
	Celsius Degree Days <sup>(1)</sup>	Celsius Degree Days <sup>(1)</sup>
Attic Spaces	7.0	7.7
Roof Joist Assemblies		
(Cathedral Ceilings/Flat Roofs)	4.9	4.9
Frame Walls <sup>(3)</sup> (including frame crawl space walls)	3.5 <sup>(2)</sup>	3.85
Suspended Floors (Framed)	4.9	4.9
(Concrete Slab)	2.1	2.1
Foundation Walls		
(insulation to 600 mm below grade)	2.1	2.1
Unheated Concrete Slabs on Ground at or above grade		
(insulation around edge of slab <sup>(4)</sup> and 500 mm vertical		
or horizontal from bottom edge of slab)	1.8	2.1
Radiant Heating Slabs on Ground		
(insulation under all slab area and around edge of sla	b <sup>(4)</sup> ) 2.1	2.1
Radiant Heating Suspended Floor Assembly Over Heate	ed Área	
(insulation between heated floor and heated area belo	ow) <sup>(5)</sup> 2.1	2.1

#### **Notes to Table 9.25.2.1.:**

- <sup>(1)</sup> Celsius Degree Days means the degree days below 18°C as described in Appendix C, Climatic Information for Building Design in Canada.
- In areas of 3500 Celsius Degree Days or less, and where the building is heated with natural gas not supplied by the Vancouver Island Natural Gas Pipeline, the minimum insulation required for Frame Walls may be reduced to RSI 2.45.
- (3) Stud/Frame type wall construction. This is not intended to apply to masonry or construction without a cavity.
- (4) The top edge of insulation between the slab edge and foundation wall may be protected with a pressure treated preserved wood filler strip not more than 50 mm thick.
- Not applicable when heating elements or piping are located within a concrete topping on a suspended floor assembly or within an internally heated suspended slab.

#### 58 Insert the following after 9.26.2.1.(1):

**2)** Except where otherwise permitted by the *authority having jurisdiction*, cedar shingles and shakes shall be certified as to grade by an agency accredited by the Standards Council of Canada.

#### 59 Replace 9.31.6.2.(2) with the following:

- **2)** The installation of *service water heaters*, including provisions for mounting, clearances and air supply, shall conform to the requirements of
  - a) CAN/CSA-B139-M, "Installation Code for Oil Burning Equipment," for the installation of oil burning equipment,
  - b) the "Gas Safety Regulation" for the installation of natural gas and propane burning equipment,
  - c) the "Electrical Safety Regulation,"
  - d) the "Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation" for the installation of boilers, pressure vessels, pressure piping and mechanical refrigeration, or
  - e) CAN/CSA B365-M, "Installation Code for Solid-Fuel Burning Appliances and Equipment."

## 60 Replace Section 9.32 with the following:

## Section 9.32. Ventilation

#### 9.32.1. General

## 9.32.1.1. Application

- 1) This Section applies to the ventilation of rooms and spaces in *residential occupancies* by natural ventilation and to self-contained mechanical ventilation systems serving only one *dwelling unit*.
- **2)** Mechanical ventilation systems other than self-contained systems serving single *dwelling units* shall conform to Part 6.
  - 3) A storage garage for more than 5 motor vehicles shall be ventilated in accordance with Part 6.

#### 9.32.1.2. Required Ventilation Provisions

1) Every *dwelling unit* shall incorporate provisions for non-heating-season ventilation in accordance with Subsection 9.32.2. and, if supplied with electrical power, provisions for heating season ventilation in accordance with Subsection 9.32.3.

#### 9.32.2. Non-Heating-Season Ventilation

#### 9.32.2.1. Required Ventilation

- 1) Rooms or spaces in dwelling units shall be ventilated during the non-heating season by
- a) natural ventilation in accordance with Article 9.32.2.2., or
- b) a mechanical ventilation system conforming to Part 6.

- 2) Where a habitable room or space is not provided with natural ventilation as described in Sentence (1), mechanical ventilation shall be provided to exhaust inside air from or to introduce outside air to that room or space at the rate of
  - a) one-half air change per hour if the room or space is mechanically cooled during the non-heating season, or
  - b) one air change per hour if it is not mechanically cooled during the non-heating season.

#### 9.32.2.2. Natural Ventilation

1) The unobstructed openable ventilation area to the outdoors for rooms and spaces in residential *buildings* ventilated by natural means shall conform to Table 9.32.2.2.

Table 9.32.2.2.
Natural Ventilation Area
Forming Part of Sentence 9 32 2 2 (1)

Forming Part of Sentence 9.32.2.2.(1)			
	Minimum		
Location		Unobstructed	
		Area	
Within	Bathrooms or water closet rooms	0.09 m <sup>2</sup>	
dwelling	Unfinished bathroom space	0.2% of the	
unit		floor area	
	Dining rooms, living rooms,	0.28 m <sup>2</sup> per	
	bedrooms, kitchens, combined	room or	
	rooms, dens, recreation rooms	combination	
	and all other finished rooms	room	
	Bathrooms or water closet rooms	0.09 m <sup>2</sup> per	
		water-closet	
	Sleeping rooms	0.14 m <sup>2</sup> per	
Other than		occupant	
within	Laundry rooms, kitchens,	4% of the	
dwelling	recreation rooms	floor area	
unit	Corridors, storage rooms and	2% of the	
	other similar public rooms or	floor area	
	spaces		
	Unfinished basement space not	0.2% of the	
	used on a shared basis	floor area	

- **2)** Where a vestibule opens directly off a living or dining room within a *dwelling unit*, ventilation to the outdoors for such rooms may be through the vestibule.
- **3)** Openings for natural ventilation other than windows shall be constructed to provide protection from the weather and insects.
  - **4)** Screening shall be of rust-proof material.

# **9.32.3. Heating Season (Mechanical) Ventilation** (See Appendix A.)

#### 9.32.3.1. Required Ventilation

- 1) Every dwelling unit that is supplied with electrical power shall be provided with a mechanical ventilation system complying with
  - a) CAN/CSA-F326 "Residential Mechanical Ventilation Systems,"
  - b) a mechanical ventilation system designed in conformance to Part 6, or
  - c) other mechanical ventilation systems as described in this Subsection.

### 9.32.3.2. Design and Installation

1) Aspects of mechanical ventilation systems not specifically described in this Subsection shall be designed, constructed and installed in accordance with good practice such as described in the ASHRAE Handbooks and Standards, HRAI Digest, TECA Ventilation Guideline, Hydronics Institute Manuals and the SMACNA manuals.

## 9.32.3.3. Required Ventilation Capacity

- 1) Every dwelling unit shall be equipped with
  - a) a principal ventilation exhaust fan or ducted central ventilation system providing a minimum ventilation rate complying with Table 9.32.3.3.A., and
  - b) an exhaust fan with a ventilation rate conforming to Table 9.32.3.3.B in every kitchen and bathroom or water-closet room, except that such a fan is not required in the bathroom or water closet room served by the principle ventilation exhaust fan, providing that it conforms to the minimum rates of Table 9.32.3.3.B.
- 2) Where make-up air is required by Article 9.32.3.8. for the principal ventilation exhaust fan, the maximum ventilation rate shall not exceed 55 l/s (110 cfm).

Table 9.32.3.3.A.

Principal Exhaust Fan Ventilation Rate
Forming Part of Clause 9.32.3.3 (1)(a)

Number of Bedrooms <sup>(1)</sup>	Minimum Ventilation Rate	
	l/s	(cfm)
1	15	(30)
2	22	(45)
3	30	(60)
4 or more	35	(75)

Notes to Table 9.32.3.3.A.:

Table 9.32.3.3.B.

Bathroom/Kitchen Exhaust Ventilation Rate
Forming Part of Clause 9.32.3.3 (1)(h)

Room	Exhaust Ra	Exhaust Rate I/s (cfm)		
	Intermittent	Continuous		
Kitchen	40 (80)	N/A		
Bathroom	25 (50)	10 (20)		

<sup>(1)</sup> A bedroom is considered as a room with a window conforming to Article 9.7.1.3., a closet, and an interior closing door.

### 9.32.3.4. Principal Exhaust Fan Control

- 1) The principal ventilation exhaust fan shall
- a) be controlled by an adjustable time control device capable of providing a minimum of two 4-hour operating periods per day, and have a separate manual switch when serving both the principle ventilation exhaust function and a kitchen or bathroom exhaust function, or
- b) be designed to run continuously.

### 9.32.3.5. Principal Exhaust Fan Capacity Rating

- 1) The principal ventilation exhaust fan capacity rating shall be based on air flow performance at 50 Pa external static pressure as determined in accordance with
  - a) HVI 916 "Airflow Test Standard," or
  - b) CAN/CSA-C260-M, "Rating the Performance of Residential Mechanical Ventilating Equipment."

## 9.32.3.6. Principal Exhaust Fan Sound Rating

- 1) Wall and ceiling fans used as a principal ventilation exhaust fan shall not have a sound rating exceeding
  - a) 1.5 Sone when controlled by an adjustable time control device, or
  - b) 1.0 Sone when designed to run continuously.
  - 2) The principal ventilation exhaust fan sound rating shall be determined by
  - a) HVI 915, "Procedure for Loudness Rating of Residential Fan Products," or
  - b) CAN/CSA-C260-M, "Rating the Performance of Residential Mechanical Ventilating Equipment."

# 9.32.3.7. Kitchen/Bathroom Fan Capacity Ratings

- 1) Kitchen and bathroom exhaust fan capacity rating shall be based on air flow performance at 50 Pa external static pressure as determined in accordance with
  - a) HVI 916 "Airflow Test Standard," or
  - b) CAN/CSA-C260-M, "Rating the Performance of Residential Mechanical Ventilating Equipment."

# 9.32.3.8. Required Make-up Air for Principal Exhaust Fan

- 1) Make-up ventilation air shall be provided from the outdoors where
- a) a *dwelling unit* contains a naturally aspirating fuel-fired vented appliance that is subject to back drafting (See Appendix A), or
- b) the *dwelling unit* is located in an area where soil gas is deemed to be a problem and incorporates no soil gas mitigation system.
- 2) Where make-up air is required, it shall
- a) when not connected to a forced air heating duct system be sized in accordance with Table 9.32.3.8. for the rating of the principal exhaust fan installed, or
- b) when connected to the return air duct of a forced air heating appliance,

- i) have an outdoor air supply duct size of 100 mm diameter for smooth duct or 125 mm diameter for insulated flex duct or equivalent area, and
- ii) have the outdoor air supply duct connected not more than 5 m or, unless a flow control device is used, less than 3 m upstream of the return air connection to the furnace cabinet,
- iii) have the furnace air circulating fan interconnected with the principal ventilation exhaust fan, and
- iv) where the winter design temperature is colder than -10°C, have a duct provided with a motorized damper also interconnected with the principal ventilation exhaust fan.
- 3) Where make-up ventilation air is provided as required in Clause 9.32.3.8.(1)(a), in geographic areas where the winter design temperature is warmer than -10°C, it shall be delivered by
  - a) ducting into secondary areas such as a utility or storage room,
  - b) specially designed inlets in the upper sash or high on a wall, or
  - c) other acceptable methods.
- **4)** Where make-up ventilation air is provided as indicated in Clause 9.32.3.8.(1)(a) in geographic areas where the winter design temperature is colder than -10°C, it shall be delivered as described in Sentence (3) with the addition of heat.
- **5)** Systems or ducts designed to provide combustion and/or dilution air for fuel-burning appliances shall not be used to supply make-up air for ventilation systems.

Table 9.32.3.8.

Passive Make-up Air Opening Size
Forming Part of Sentence 9.32.3.8.(2)

Toming Fait of Sentence 9.52.5.6.(2)					
<b>\</b>	Maximum Exhaust		Minimum Make-up Air Duct Size		
Ventilat	Ventilation Rate		nt Area Vent Dia.		Dia.
l/s	(cfm)	cm <sup>2</sup>	(in <sup>2</sup> )	mm	(inØ)
8	17	47	7	80	3
12	25	66	10	90	4
15	32	85	13	100	4
17	36	95	15	110	5
20	42	114	18	120	5
25	53	142	22	130	5
30	63	170	26	150	6
35	74	199	31	160	7
40	84	227	35	170	7
45	95	255	39	180	7
50	105	284	44	190	8
55	116	312	48	200	8
60	126	340	52	210	9

### 9.32.3.9. Exhaust and Make-up Air Ducts

- 1) Exhaust ducts serving wall or ceiling exhaust fans shall be sized in accordance with Table 9.32.3.9.
  - 2) Exhaust ducts shall discharge directly to the outdoors.

- **3)** Where an exhaust duct passes through or is located adjacent to an unheated space, the duct shall be insulated to not less than RSI 0.75.
- **4)** Where a ventilation air supply duct passes through a heated space the duct shall be insulated to not less than RSI 0.75 and provided with an effective vapour barrier.
- 5) Where an exhaust duct exceeds 30 m in total equivalent length, using an equivalent length of 10 m for the exterior hood and 3 m for each 90 degree elbow, the duct shall be increased to the next diameter.
  - **6)** Ductwork for *range* hoods and *range*-top fans shall
  - a) be of *noncombustible*, corrosion-resistant material,
  - b) lead directly to the outdoors with no connections to other exhaust fans or ducts, and
  - c) be equipped with a grease filter at the intake end.

Table 9.32.3.9.

Minimum Exhaust Duct Size
Required for a Wall or Ceiling Exhaust Fan

Forming Part of Article 9.32.3.9.

Maximum Exhaust Fan	Minimum Exhaust Duct Dia, mm (in Ø)		
Ventilation Rate, I/s (cfm)	Smooth Duct	Flexible Duct	
10 (21)	75 (3)	100 (4)	
25 (53)	100 (4)	125 (5)	
45 (95)	125 (5)	150 (6)	
70 (147)	150 (e)	175 (7)	

#### 9.32.3.10. Protection from Weather

1) Outdoor air intakes and exhaust outlets shall be shielded from the weather, birds and rodents with hoods incorporating a screen of corrosion-resistant material with openings of 6 to 12 mm.

#### 9.32.3.11. Exhaust Fan Installation

1) Installation of exhaust fans shall be in accordance with manufacturer's instructions for minimizing noise and vibration transmission and achieving the required sound rating.

### 9.32.3.12. Accessibility

- 1) Ventilation equipment shall be accessible for inspection, maintenance, repair and cleaning.
- **2)** Except where the kitchen exhaust grille is located at least 1.2 m horizontally from the range, kitchen exhaust ducts shall be designed and installed so the entire duct can be cleaned where the duct is not equipped with an intake filter.

#### 9.32.3.13. Ventilation Ducts

1) Except as required by Sentence 9.32.3.9.(6), ventilation air ducts serving general exhaust and supply ventilation air are permitted to be of *combustible* material.

#### 9.32.3.14. Interior Distribution

1) To facilitate ventilation air transfer, interior doors in *dwelling units* shall be undercut a minimum of 12 mm or the rooms shall be provided with a grille of equivalent area.

## 9.32.4. Additional Protection Against Depressurization

## 9.32.4.1. Protection Requirements

- 1) Except as permitted by Sentence (8), additional make-up air for the actual appliance exhaust rate shall be provided for any appliance which discharges air to the exterior at an installed rate exceeding 0.5 air change per hour when it is located within a dwelling unit that
  - a) contains a vented appliance that is subject to back drafting (Naturally Aspirating Fuel Fired Vented Appliance) (See A-9.32.3.8.(1)(a) in Appendix A), or
  - b) is located in an area where soil gas is deemed to be a problem and incorporates no soil gas mitigation system.
- 2) Where additional make-up air is required for appliances described in Sentence (1), it shall be provided by
  - a) supply ducts sized in conformance with Table 9.32.3.8. for requirements of 60 1/s or less, or
  - b) a supply fan rated to deliver outdoor air at the rate of the installed exhaust appliance.
- 3) The supply fan as required in Clause (2)(b) shall be interconnected with the exhaust fan for which make-up air is required.
  - 4) The outdoor air required by Sentence (3) shall be
  - a) tempered to at least 1°C before being introduced to a normally unoccupied area of the dwelling unit, or
  - b) tempered to at least 12°C before being introduced to occupied areas either by passive transfer grille or directly from outside.

#### 9.32.4.2. Carbon Monoxide Alarms

(See Appendix A.)

- 1) This Article applies to every building that contains a residential occupancy and that also contains
- a) a fuel-burning appliance, or
- b) a storage garage.
- 2) Carbon monoxide alarms required by this article shall
- a) conform to CSA 6.19, "Residential Carbon Monoxide Alarming Devices,"
- b) be equipped with an integral alarm which satisfies the audibility requirements of CSA 6.19, "Residential Carbon Monoxide Alarming Devices,"
- c) have no disconnect switch between the overcurrent device and the carbon monoxide alarm, where the carbon monoxide alarm is powered by the *dwelling unit*'s electrical system, and
- d) be mechanically fixed at a height recommended by the manufacturer.
- **3)** Where a fuel-burning *appliance* is installed in a *suite* of *residential occupancy*, a carbon monoxide alarm shall be installed either inside each bedroom, or if outside, within 5 m, measured following corridors and doorways, of each bedroom door.

- **4)** Where a fuel-burning *appliance* is installed in a *service room* that is not in a *suite* of *residential occupancy*, a carbon monoxide alarm shall be
  - a) either inside each bedroom, or if outside, within 5 m, measured following corridors and doorways, of each bedroom door in every *suite* of *residential occupancy* that shares a wall or floor/ceiling assembly with the *service room*, and
  - b) in the service room.
- **5)** Where a *storage garage* is located in a *building* containing a *residential occupancy*, a carbon monoxide alarm shall be installed either inside each bedroom, or if outside, within 5 m, measured following corridors and doorways, of each bedroom door in every *suite* of *residential occupancy* that shares a wall or floor/ceiling assembly with the *storage garage*.

#### 61 Replace 9.33.5.2.(1) with the following:

- 1) Except as provided in Articles 9.33.5.3. and 9.33.5.4., the installation of heating and air-conditioning equipment, including mechanical refrigeration equipment, and including provisions for mounting, clearances and air supply, shall conform to
  - a) CAN/CSA-B139-M, "Installation Code for Oil Burning Equipment," for the installation of oil burning equipment,
  - b) the "Gas Safety Regulation" for the installation of natural gas and propane burning equipment,
  - c) the "Electrical Safety Regulation,"
  - d) the "Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation" for the installation of boilers, pressure vessels, pressure piping and mechanical refrigeration,
  - e) CAN/CSA-B365-M, "Installation Code for Solid-Fuel Burning Appliances and Equipment," or
- f) CAN/CSA-C448-M, "Design and Installation of Earth Energy Systems." (See also Sentence 9.33.5.3.(1).)

#### 62 Replace 9.34.1.1.(1) with the following:

1) Electrical installations, including the service capacity of the installation and the number and distribution of circuits and receptacles, shall meet the requirements of the British Columbia "Electrical Safety Regulation."

63 Insert the following after 9.35.4.3.(1) and renumber Section 9.36. to 9.37.:

# Section 9.36. Secondary Suites

#### 9.36.1. **General**

#### **9.36.1.1.** Application

1) This Section applies to the construction of a *secondary suite* and the *alterations* to an existing building to accommodate a *secondary suite*. (See Appendix A.)

## 9.36.1.2. Construction Requirements

1) The construction of a *secondary suite* or those alterations to an existing *building* to accommodate a *secondary suite* shall conform to the requirements in this Part except as provided in this Section. (See Appendix A.)

## 9.36.2. Specific Requirements

# **9.36.2.1.** Heights of Rooms or Spaces (9.5.3.1.)

- 1) The minimum height of rooms or spaces in a *secondary suite* over the required minimum area as indicated in Table 9.5.3.1. shall be not less than 2.0 m.
- 2) It shall be possible to travel from the required area of one room to the required areas of all other rooms within a *secondary suite* without reduction of the room height as required in Sentence (1).

# **9.36.2.2.** Solid Blocking (9.6.8.9.)

1) Solid blocking may be omitted for doors described in Sentence 9.6.8.9.(1) where the interior wall finish adjacent the door is in place prior to the construction of a *secondary suite*.

# **9.36.2.3.** Exit Stairs (9.8.2.1.)

1) Exit stairs within or serving a *building* which contains a *secondary suite* shall have a minimum width, measured between wall faces or guards, of not less than 860 mm. (See Appendix A.)

# **9.36.2.4.** Dimensions of Landings (9.8.6.3.)

1) Landings for exterior stairs serving both *suites* in a *building* containing a *secondary suite* need not exceed 900 mm in length.

# 9.36.2.5. Handrails and Guards

(9.8.7. and 9.8.8.)

**1)** Handrails and guards shall conform to the requirements of Subsections 9.8.7. and 9.8.8. as if serving only one *dwelling unit*.

# **9.36.2.6. Means of Egress** (9.9.3.)

1) The width of every *public corridor* and *exit* corridor that serves a *building* which contains a *secondary suite* shall be not less than 860 mm. (See Appendix A.)

## 9.36.2.7. Fire Separations for Exits

(9.9.4.2.)

- 1) Except as permitted in Sentence (2), every *exit* other than an *exit* doorway shall be separated from adjacent *floor areas* by a *fire separation* 
  - a) having a fire-resistance rating of 45 minutes, or
  - b) having a *fire-resistance rating* of not less than 30 minutes where the *dwelling units* are equipped with *smoke alarms* as referenced in Article 9.36.2.20.
- **2)** A fire resistance rating is not required for a fire separation which separates an exit from adjacent floor areas where the building is sprinklered.

# **9.36.2.8.** Openings Near Unenclosed Exit Stairs and Ramps (9.9.4.4.)

1) Where an unenclosed exterior *exit* stair or ramp provides the only *means of egress* from a *dwelling unit* in a *building* that contains a *secondary suite* and the stair is exposed to the hazards of fire from unprotected openings in the exterior wall of another *fire compartment*, the openings shall be protected in conformance with Articles 9.10.13.5. to 9.10.13.7. (See Appendix A.)

# 9.36.2.9. Doors in a Means of Egress

(9.9.6.3. and 9.9.6.5.)

- 1) Every *exit* door or door that opens into or is located within a *public corridor* or other facility that provides *access to exit* from a *suite* shall
  - a) be not less than 1980 mm high,
  - b) have a clear opening width of not less than 800 mm, and
  - c) be permitted to swing inward.

# **9.36.2.10.** Travel Limit to Exits or Egress Doors (9.9.9.1.(2))

1) In a building which contains a secondary suite, the travel limit from a floor level in a dwelling unit to an exit or egress door may exceed 1 storey provided the floor level within the dwelling unit is served by an operable window conforming to Sentence 9.9.9.1.(2).

# 9.36.2.11. Shared Egress Facilities

(9.9.9.2., 9.9.9.3.(1))

- 1) Except as provided in Article 9.9.7.3., where an egress door from a *dwelling unit* opens onto a *public corridor* or exterior passageway it shall be possible from the location where the egress door opens onto the public corridor or exterior passageway to go in opposite directions to 2 separate *exits* unless the *dwelling unit* is served by a second and separate *means of egress* or an opening window conforming to Sentence 9.9.9.1.(2).
- **2)** Each *dwelling unit* shall be provided with a second and separate *means of egress* or an opening window conforming to Sentence 9.9.9.1.(2) where the egress door from either *dwelling unit* opens onto
  - a) an exit stairway which serves both suites,
  - b) a public corridor serving both suites and served by a single exit stairway,

- c) an exterior passageway serving both suites and served by a single exit stairway, or
- d) a balcony serving both *suites* and served by a single *exit* stairway.

#### 9.36.2.12. **Exit Signs**

(9.9.10.)

1) Exit signs are not required within a building which contains a secondary suite.

#### 9.36.2.13. Structural Fire Resistance

(9.10.8.10.)

1) Table 9.10.8.1., "Fire-Resistance Ratings for Structural Members and Assemblies" does not apply to a building which contains a secondary suite.

#### 9.36.2.14. **Combustible Water Pipes**

(9.10.9.6.(7))

1) Combustible water distribution piping that has an outside diameter not more than 30 mm is permitted to partly or wholly penetrate fire separations that are required to have a fire-resistance rating without being incorporated in the assembly at the time of testing as required in Sentence 9.10.9.6.(2) provided the piping is sealed in conformance with Sentence 3.1.9.1.(1).

#### 9.36.2.15. Combustible Drain, Waste and Vent Piping (9.10.9.7.)

- 1) Combustible drain, waste and vent piping is permitted to be located within or penetrate a fire separation required to have a fire-resistance rating provided
  - a) except for the permitted penetration in Clause (b), the combustible piping is located within an assembly protected by a membrane of a minimum 12.7 mm gypsum board,
  - b) the permitted penetration through the gypsum board membrane is limited to a size of the diameter of the penetrating pipe, and
  - c) the combustible piping does not penetrate the gypsum board protection membrane on the underside of a horizontal fire separation.
- 2) Combustible drain, waste and vent piping enclosed in an assembly or protected as described in Sentence (1) is permitted on both sides of a *fire separation*. (See Appendix A.)

#### 9.36.2.16. **Separation of Residential Suites**

(9.10.9.14.)

- 1) Dwelling units in a building which contains a secondary suite shall be separated from each other by
  - a) a fire separation in conformance with the requirements of Article 9.10.9.14.,
  - b) a fire separation having a fire-resistance rating of not less than 30 min. where the dwelling units are equipped with smoke alarms in conformance with Article 9.36.2.20., or
  - c) a fire separation having no required fire-resistance rating where the building is sprinklered. (See Appendix A-9.36.2.17.)

### 9.36.2.17. Separation of Public Corridors

(9.10.9.15.)

- **1)** A public corridor serving a building which contains a secondary suite shall be separated from the suites by
  - a) a fire separation in conformance to the requirements of Article 9.10.9.15.,
  - b) a fire separation having a fire-resistance rating of not less than 30 minutes where the dwelling units are equipped with smoke alarms as indicated in Article 9.36.2.22., or
  - c) a fire separation having no required fire-resistance rating where the building is sprinklered. (See Appendix A.)

# 9.36.2.18. Air Ducts and Fire Dampers

(9.10.13.13.)

- 1) Where a heating or ventilation duct systems serves more than one *suite*, the system shall be designed and installed to prevent the circulation of smoke upon a signal from a duct-type *smoke* detector.
- **2)** Ducts penetrating *fire separations* need not be equipped with *fire dampers* in conformance with Article 3.1.8.9. provided they are *noncombustible* with all openings in the duct system serving only one *fire compartment*. (See Appendix A.)

# **9.36.2.19. Exposing Building Face of Houses** (9.10.15.5.)

- 1) Except as required in Article 9.10.15.3., in *buildings* which contain a *secondary suite*, the requirements of Article 9.10.15.5. do not apply provided
  - a) the exposing building face has a fire-resistance rating of not less than 45 min where the limiting distance is less than 1.2 m, and
  - b) where the *limiting distance* is less than 0.6 m the *exposing building face* is clad with *noncombustible* material.
- **2)** Window openings in the *exposing building face* referred to in Sentence (1) shall not be permitted if the *limiting distance* is less than 1.2 m and shall be limited in conformance with the requirements for *unprotected openings* in Article 9.10.14.4. where the *limiting distance* is 1.2 m or greater.

# 9.36.2.20. Smoke Alarms

(9.10.19.)

- **1)** Except as permitted in Sentence (3), an additional *smoke alarm* of photo-electric type conforming to CAN/ULC-S531 "Standard for Smoke Alarms," shall be installed in each *suite*.
- **2)** Smoke alarms required in Sentence (1) shall be wired so that the activation of the additional alarm in one *suite* will cause the additional alarm in the other *suite* to sound.
  - 3) An additional interconnected *smoke alarm* is not required to be installed in each *suite* provided
  - a) the *fire separations* required in Articles 9.36.2.16. and Article 9.36.2.17. have a *fire-resistance* rating of 45 minutes or greater, or
  - b) the building is sprinklered. (See Appendix A.)

## 9.36.2.21. Sound Control

(9.11.)

1) The assemblies separating the residential *suites* need not comply with the sound control requirements of Subsection 9.11.2. (See Appendix A.)

# **9.36.2.22. Attic Space Access** (9.19.2.1.)

1) An attic space access hatchway not less than 500 mm by 700 mm may serve both *suites* in a *building* which contains a *secondary suite*.

# **9.36.2.23.** Garages and Carports (9.35.)

- 1) Section 9.35 is applicable to garages and carports serving a *building* which contains a *secondary* suite.
- 64 Renumber Section 9.36 to 9.37.
- 65 The following changes and additions are to be made to Table 9.37.1.1. (formerly 9.36.1.1.):
  (a) Replace 9.32.1.2. to 9.32.3.13.(12) with the following:

Acceptable	Objectives and Functional Statements	
Solutions		
9.32.1.2. Required		
(1)	[F40,F50,F51,F52-OH1.1]	
	[F51,F52-OH1.2]	
	[F51,F52,F62,F63-OH1.3]	
	[F20,F52,F62,F63,F80-OS2.3]	
	[F20,F52,F62,F63,F80-OP2.3]	
9.32.2.1. Required	d Ventilation	
(1)	[F40,F50,F51,F52-OH1.1]	
	[F51,F52-OH1.2]	
	[F51,F52,F62,F63-OH1.3]	
	[F20,F52,F62,F63,F80-OS2.3]	
	[F20,F52,F62,F63,F80-OP2.3]	
(2)	[F40,F50,F51,F52-OH1.1]	
	[F51,F52-OH1.2]	
	[F51,F52,F62,F63-OH1.3]	
	[F20,F52,F62,F63,F80-OS2.3]	
	[F20,F52,F62,F63,F80-OP2.3]	
9.32.2.2. Natural \	/entilation	
(1)	[F40,F50,F51,F52-OH1.1]	
	[F51,F52-OH1.2]	
	[F51,F52,F62,F63-OH1.3]	
	[F20,F52,F62,F63,F80-OS2.3]	
	[F20,F52,F62,F63,F80-OP2.3]	
(3)	[F42,F61-OS2.3]	
	[F42,F61-OH1.1]	

Acceptable	Objectives and Functional Statements
Solutions	Supposition and Fariotional Statements
	[F42-OH2.5]
(4)	[F42,F80,F81-OH2.5]
9.32.3.1. Required	
(1)	(a) [F40,F50,F51,F52,F81-OH1.1]
	(a) [F51,F52,F53,F81-OH1.2]
	(a) [F51,F52,F62,F63,F81-OH1.3]
	(a) F20,F52,F53,F62,F63,F81-OS2.3]
	(a) [F20,F52,F62,F63,F80-OP2.3]
9.32.3.2. Design an	2
(1)	[F40,F50,F51,F52,F81-OH1.1]
	[F51,F52,F53,F81-OH1.2]
	[F51,F52,F62,F63,F81-OH1.3]
	[F20,F52,F53,F62,F63,F81-OS2.3]
	[F20,F52,F62,F63,F80-OP2.3]
9.32.3.3. Required	
(1)	[F51,F52,F53,F81-OH1.2]
. ,	[F51,F52,F62,F63,F81-OH1.3]
	F20,F52,F53,F62,F63,F81-OS2.3]
	[F20,F52,F62,F63,F80-OP2.3]
(3)	[F40,F50,F51,F52,F53,F81-OH1.1]
` '	[F51,F52,F62,F63,F81-OH1.3]
	[F44,F81-OS3.4]
9.32.3.4. Principal E	
(1)	[F40,F50,F51,F52,F53,F81-OH1.1]
, ,	[F51,F52,F62,F63,F81-OH1.3]
	[F44,F81-OS3.4]
9.32.3.5. Principal E	Exhaust Fan Capacity Rating
(1)	[F40,F50,F51,F52,F53,F81-OH1.1]
	[F51,F52-OH1.2]
	[F51,F52,F62,F63,F81-OH1.3]
	[F44,F81-OS3.4]
	[F53,F63-OS2.3]
	[F53,F63-OP2.3]
9.32.3.6. Principal E	xhaust Fan Sound Rating
(1)	[F40,F50,F51,F52,F53,F81-OH1.1]
	[F51,F52,F62,F63,F81-OH1.3]
	[F44,F81-OS3.4]
(2)	[F81-OH1.1]
	[F81-OH1.2]
	[F81-OS3.4]
9.32.3.7. Kitchen/Bathroom Fan Capacity Ratings	
(1)	[F40,F50,F52,F53-OH1.1]
	[F51,F52-OH1.2]
	[F53,F63,F80-OS2.3]
	[F53,F63,F80-OP2.3]
	[F40,F44,F81-OS3.4]
9.32.3.8. Required I	Make-up Air for Principal Exhaust Fan
(1)	[F40,F50,F53-OH1.1]
•	[F52,F62,F63-OH1.3]
-	

Acceptable	Objectives and Functional Statements		
Solutions			
	[F44-OS3.4]		
	[F53,F63-OS2.3]		
	[F53,F63-OP2.3]		
(2)	[F40,F43,F50,F52,F53,F63-OH1.1]		
	[F53,F63-OS2.3]		
	[F53,F63-OP2.3]		
	[F43,F50,F53-OS3.4]		
	(b)(ii) [F43,F50,F53-OS3.4]		
	(b)(iii) [F43,F53,F63-OH1.1]		
	(b)(iii) [F53,F63-OS2.3]		
	(b)(iii) [F53,F63-OP2.3]		
	(b)(iii) [F43,F50,F53-OS3.4]		
	(b)(iv) [F51-OH1.2]		
(3)	[F50,F51,F81-OH1.1]		
	[F51,F54,F81-OH1.2]		
(4)	[F50,F51,F81-OH1.1]		
	[F51,F81-OH1.2]		
(5)	[F40,F44,F50-OS3.4]		
	[F40,F50,F52-OH1.1]		
9.32.3.9. Exhaust	and Make-up Air Ducts		
(1)	[F40,F50,F52,F53-OH1.1]		
	[F40,F53-OS3.4]		
(2)	[F40,F52,F63-OH1.1]		
	[F52,F63-OS2.3]		
(3)	[F63-OH1.1]		
(-)	[F63,F80-OS2.3]		
(4)	[F63-OH1.1]		
(5)	[F40,F50,F52,F53-OH1.1]		
(-)	[F53-OS3.4]		
9.32.3.10. Protect	I		
(1)	[F61,F80-OS2.3]		
(*)	[F42,F61-OH1.1]		
	[F42,F80-OH2.5]		
9.32.3.11. Exhaus			
(1)	[F81-OH1.1]		
(1)	[F81-OS3.4]		
9.32.3.12. Access			
(1)	[F82-OH1.1]		
(1)	[F82-OH1.2]		
	[F82-OH1.3]		
	[F82-OS2.3]		
	[F82-OS3.4]		
	[F82-OP2.3]		
(2)	[F02,F03,F82-OS1.1]		
(2)	[F02,F03,F82-OS1.1]		
9.32.3.14. Interior			
· · · · · · · · · · · · · · · · · · ·			
(1) 0.32.4.1 Protection	[F40,F50,F52-OH1.1]		
9.32.4.1. Protectio	<del> </del>		
(1)	[F40,F50,F53-OH1.1]		

Acceptable Solutions	Objectives and Functional Statements	
	[F44,F50,F53-OS3.4]	
(2)	[F53-OH1.1]	
	[F44,F50,F53-OS3.4]	
	[F53,F63-OS2.3]	
(3)	[F44,F50,F53,F81-OS3.4]	
	[F53,F81-OH1.1]	
(4)	[F81-OH1.1]	
	[F81-OH1.2]	
	[F81-OS3.4]	
9.32.4.2. Carbor	n Monoxide Alarms	
(2)	[F44,F81-OS3.4]	
(3)	[F44-OS3.4]	
(4)	[F44-OS3.4]	
(5)	[F44-OS3.4]	

#### (b) Add the following row at the end of Table 9.36.1.1.:

9.36. Secondary Suites	
	Functional Statements and Objectives are the same as those for the bracketed Articles and Sentences adjacent to the Section 9.36. Article numbers.

## 66 Replace Division 3 with the following:

# **Division C**

## **Administrative Provisions**

#### Part 1 General

# Section 1.1. Application

## 1.1.1. Application

## 1.1.1.1. Application

1) This Part applies to all buildings covered in this Code. (See Article 1.1.1.1. of Division A.)

### Section 1.2. Terms and Abbreviations

#### 1.2.1. Definitions of Words and Phrases

#### 1.2.1.1. Non-defined Terms

1) Words and phrases used in Division C that are not included in the list of definitions in Article 1.4.1.2. of Division A shall have the meanings that are commonly assigned to them in the context in

which they are used, taking into account the specialized use of terms by the various trades and professions to which the terminology applies.

- **2)** Where objectives and functional statements are referred to in Division C, they shall be the objectives and functional statements described in Parts 2 and 3 of Division A.
- **3)** Where acceptable solutions are referred to in Division C, they shall be the provisions stated in Parts 3 to 9 of Division B.
- 4) Where alternative solutions are referred to in Division C, they shall be the alternative solutions mentioned in Clause 1.2.1.1.(1)(b) of Division A.

#### 1.2.1.2. Defined Terms

1) The words and terms in italics in Division C shall have the meanings assigned to them in Article 1.4.1.2. of Division A.

## 1.2.2. Symbols and Other Abbreviations

## 1.2.2.1. Symbols and Other Abbreviations

1) The symbols and other abbreviations in Division C shall have the meanings assigned to them in Article 1.4.2.1. of Division A.

#### Part 2 Administrative Provisions

## Section 2.1. Application

#### 2.1.1. Application

#### 2.1.1.1. Application

1) This Part applies to all *buildings* covered in this Code. (See Article 1.1.1.1. of Division A.)

#### Section 2.2. Administration

#### 2.2.1. Administration

#### 2.2.1.1. Legislative Authority

1) This Code is made pursuant to Section 692 of the Local Government 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 Appendix A.)

## 2.2.1.3. Personnel Performing Plumbing Work

- 1) Personnel performing the installation or alteration of or repair to a plumbing system shall
- a) possess a British Columbia tradesman's qualification certification as a plumber,
- b) be an indentured apprentice supervised by a journeyman possessing a British Columbia tradesman's qualifications certification as a plumber, or
- c) be the registered owner and occupant or intended occupant of the single family dwelling in which plumbing work will occur, provided that evidence can be provided that the *owner* can satisfactorily complete the proposed work.

(See also Sentence 2.2.6.1.(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 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.
  - 3) The drawings shall indicate
  - a) the applicable edition of the Code,
  - b) whether the building is designed under Part 3 or Part 9,
  - c) the major occupancy classification(s) of the building,
  - d) the building area and building height,
  - e) the number of streets the building faces.
  - f) the accessible entrance(s), work area(s) and washrooms, and
  - g) the accessible facilities particular to the occupancy(s).

#### 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 fire fighting, and
  - e) the accessible paths of travel from the street to the building.

#### 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 allowable bearing pressures on the *soil* or *rock*, the allowable 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. Heating, Ventilating and Air-conditioning Drawings and Specifications

# 2.2.5.1. Application

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

# 2.2.5.2. 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 Appendix A.)

# 2.2.6. Plumbing Drawings and Related Documents

#### 2.2.6.1. Contents

- 1) Plumbing drawings and related documents submitted with the application for a plumbing permit shall show
  - a) the location and size of every building drain and of every trap and cleanout fitting that is on a building drain,
  - b) the size and location of every soil-or-waste pipe, trap and vent pipe, and
  - c) a layout of the potable water distribution system, including pipe sizes and valves.

# 2.2.7. Professional Design and Review

(See Appendix A.)

## 2.2.7.1. Application

- 1) The requirements of this Section apply to an owner who applies for a building permit for
- a) a building that falls within the scope of Part 3 in Division B,
- b) structural components of buildings that fall within the scope of Part 4 in Division B (See Appendix A.), or
- c) a building that is designed with common egress systems for the occupants and requires the use of firewalls according to Article 1.3.3.4. of Division A.

## 2.2.7.2. Owner Responsibilities

- 1) Before an owner obtains a building permit from an authority having jurisdiction, the owner shall
- a) retain a coordinating registered professional to coordinate all design work and field reviews of the registered professionals required for the project in order to ascertain that (See Appendix 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) deliver to the *authority having jurisdiction* letters, in the forms set out in Schedules A, B-1 and B-2. (See the end of Division C.) (See Appendix A.)
- **2)** Before an *owner* obtains an *occupancy* permit or final inspection from an *authority having jurisdiction*, the *owner* shall deliver to that authority letters in the forms set out in Schedules C-A and C-B. (See Appendix A.)

# **2.2.7.3.** Registered Professional Responsibilities (See Appendix A.)

- 1) A registered professional who signs a letter, the form of which is set out in a schedule to this Section, and an owner who signs or has an agent sign a letter the form of which is a set out in a schedule to this Section, shall comply with this Section and the provisions of the letter that apply to the person signing.
- **2)** A registered professional 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 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 the *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* the Schedule C-B (See the end of Division C) after ascertaining that the components of the project for which the *registered professional* is responsible are constructed so as to substantially comply, in all material respects, with

- i) the plans and supporting documents, and
- ii) the requirements of the British Columbia Building Code and other applicable enactments respecting safety, not including construction safety aspects, and
- c) ensure that the *field reviews* that are necessary to comply with Clause (b) are properly completed.

#### 2.2.7.4. Termination

- 1) The owner and the coordinating registered professional shall each notify the authority having jurisdiction of the date the coordinating registered professional ceases to be retained at any time during the project's construction.
- **2)** The *coordinating registered professional* shall notify the *authority having jurisdiction* of the date a *registered professional* ceases to be retained at any time during the project's construction.
- **3)** The *registered professional* shall notify the authority having jurisdiction of the date the *registered professional* ceases to be retained at any time during the project's construction.
- **4)** Notification under Sentences (1), (2) and (3) must be made before the *coordinating registered professional* or the *registered professional* ceases to be retained or, if that is not possible, then as soon as possible.
- **5)** The *owner* must not terminate the appointment of a *coordinating registered professional* or a *registered professional* unless
  - a) the owner immediately replaces the coordinating registered professional or the registered professional, or
  - b) the *owner* has complied with Section 2.2.7.2.(1)(b) and (2) by delivering letters in the forms set out in Schedule A, B-1, B-2, C-A and C-B to the *authority having jurisdiction*.

#### Section 2.3. Alternative Solutions

# 2.3.1. Documentation of Alternative Solutions

(See Appendix A.)

#### 2.3.1.1. Documentation

- 1) When required by the *authority having* jurisdiction, documentation conforming to this Subsection shall be provided by the person requesting the use of an alternative solution to demonstrate that the proposed alternative solution complies with this Code.
  - 2) The documentation referred to in Sentence (1) shall include
  - a) a Code analysis outlining the analytical methods and rationales used to determine that a proposed alternative solution will achieve at least the level of performance required by Clause 1.2.1.1.(1)(b) of Division A, and
  - b) information concerning any special maintenance or operational requirements, including any building component commissioning requirements, that are necessary for the alternative solution to achieve compliance with the Code after the building is constructed.
  - 3) The Code analysis referred to in Clause 2.3.1.1.(2)(a) shall identify the applicable objectives,

functional statements and acceptable solutions, and any assumptions, limiting or restricting factors, testing procedures, engineering studies or *building* performance parameters that will support a Code compliance assessment.

- **4)** The Code analysis referred to in Clause 2.3.1.1.(2)(a) shall include information about the qualifications, experience and background of the person or persons taking responsibility for the design.
- **5)** The information provided under Sentence (3) shall be in sufficient detail to convey the design intent and to support the validity, accuracy, relevance and precision of the Code analysis.
- **6)** Where the design of a *building* includes proposed alternative solutions that involve more than one person taking responsibility for different aspects of the design, the proponent shall identify a single person to co-ordinate the preparation of the design, Code analysis and documentation referred to in this Subsection.