

Section 1.4. Terms and Abbreviations

1.4.1. Definitions of Words and Phrases

1.4.1.1. Non-defined Terms

- 1) Words and phrases used in this By-law that are not included in the list of definitions in Article 1.4.1.2. 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 this By-law, they shall be the objectives and functional statements described in Parts 2 and 3.
- 3) Where acceptable solutions are referred to in this By-law, they shall be the provisions stated in Parts 3 to 10, and 12 of Division B.
- 4) Where alternative solutions are referred to in this By-law, they shall be the alternative solutions mentioned in Clause 1.2.1.1.(1)(b).

1.4.1.2. Defined Terms

- 1) The words and terms in italics in this By-law shall have the following meanings:

Acceptable means acceptable to the *Chief Building Official*.

Accepted means accepted by the *Chief Building Official*.

Access or *Accessible* means an area and its facilities, or both, as required by this By-law, which is easy to approach, enter, exit, operate, participate in, pass to and from, and use safely and independently by *persons with disabilities*. (See Note A-1.4.1.2.(1).)

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*.

Adaptable dwelling unit means a *dwelling unit* designed and constructed to facilitate future modification to provide *access*.

Addition means an alteration to any building which will increase the total aggregate floor area or the building height (in storeys).

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

Air barrier system means the assembly installed to provide a continuous barrier to the movement of air.

Air space parcel has the meaning assigned to it by the Land Title Act of British Columbia.

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.

Alteration means a change or extension to any matter or thing or to any *occupancy* regulated by this By-law.

Ancillary residential building meaning a *building* entirely of *residential occupancy*, constructed on the same parcel and smaller than the primary *residential building* and containing not more than one *dwelling unit* and its subsidiary uses, such as a laneway house

Ancillary residential unit means a self-contained *dwelling unit* that:

- with its primary dwelling unit constitute a single real estate entity,
- is smaller than the principal dwelling unit, and
- is located in:
 - a building of only residential occupancy, or
 - that portion of a building which is row housing and is completely separated from all other parts of the building by a continuous vertical fire separation that has a fire-resistance rating of no less than 1 h.

Apparent sound transmission class (ASTC) means a single number rating of the airborne sound attenuation of *building* assemblies separating two adjoining spaces, taking into account both the direct and flanking sound transmission paths. (See Note A-1.4.1.2.(1).) (See also Note A-9.11. of Division B.)

Appliance means a device to convert fuel, including electricity, 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 By-law.

Apprentice means a regularly indentured apprentice under the provisions of the Industry Training Authority Act of British Columbia.

Approved (as used in Book II) means *accepted*.

Area of refuge means a space that facilitates a safe delay in egress, is sufficiently protected from fire conditions developing in the *floor area*, and provides direct access to an exit or firefighters' elevator.

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

Artist Live/Work Studio means an Artist Studio and a Residential Unit associated with and forming an integral part of an Artist Studio, as defined in the Zoning and Development By-law.

Artist studio — Class A means Artist studio-Class A as defined in the Zoning and Development By-law.

Artist studio — Class B means Artist studio-Class B as defined in the Zoning and Development By-law.

Arts and culture indoor event means an event of an artistic or cultural nature, including but not limited to visual, performing, media, literary, craft or interdisciplinary arts, for a maximum of 250 persons, with or without liquor service, which occurs no more than three days per month in a *building* or portion of a *building* not approved for *assembly occupancy*.

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.

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

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.

Braced wall band means an imaginary continuous straight band extending vertically and horizontally through the *building* or part of the *building*, within which *braced wall panels* are constructed.

Braced wall panel means a portion of a wood-frame wall where bracing, sheathing, cladding or interior finish is designed and installed to provide the required resistance to lateral loads due to wind or earthquake.

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*, including any *float home* or *marina* and any retaining structures greater than 1.2 m in height.

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 energy use means non site-renewable energy used for space heating, cooking and/or operation of *buildings* intended for human *occupancy*.

Building Envelope Professional means a *registered professional* who is:

- a member or licensee of the Architectural Institute of British Columbia, or
- a member or licensee of the Association of Professional Engineers and Geoscientists of British Columbia qualified by virtue of training or experience to provide building enclosure services.

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

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 means the provision of services other than *treatment* by or through care facility management to residents who require these services because of cognitive, physical or behavioural limitations.

Care occupancy means the *occupancy* or use of a *building* or part thereof where *care* is provided to residents. (See Note A-1.4.1.2.(1).)

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.

Certified Professional means a Certified Professional as defined in the Certification of Professionals By-law.

Chief Building Official means the *City Building Inspector*, and any person authorized to act on behalf of the *City Building Inspector*.

Child Care Facility means a care facility within the meaning of the Child Care Licensing Regulation of the Community Care and Assisted Living Act.

Children means persons under the age of 13 years.

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*.

City means the City of Vancouver.

City Building Inspector means the person appointed as such by City Council pursuant to the provisions of the Vancouver Charter.

City Engineer means the person appointed as such by City Council pursuant to the provisions of the Vancouver Charter.

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 Book II, Division A, Note A-1.4.1.2.(1).)

Closure means a device or assembly for closing an opening through a *fire separation* or an exterior wall, such as a door, a shutter, a damper, wired glass or glass block, and includes all components such as hardware, closing devices, frames and anchors.

Combustible means that a material fails to meet the acceptance criteria of CAN/ULC-S114, “Test for Determination of Non-Combustibility in Building Materials.”

Combustible construction means that type of construction that does not meet the requirements for *noncombustible construction* or *encapsulated mass timber construction*.

Combustible dusts means dusts and particles that are ignitable and liable to produce an explosion.

Combustible fibres means finely divided, combustible vegetable or animal fibres and thin sheets or flakes of such materials which, in a loose, unbaled condition, present a flash fire hazard, including cotton, wool, hemp, sisal, jute, kapok, paper and cloth.

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

Community Care Facility means Community Care Facility as defined in the Zoning & Development By-law.

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.

Construction means, with respect to a *building*: erection, repair, *alteration*, enlargement, *addition*, *demolition*, *deconstruction*, removal and excavation.

Construction Safety Officer means a person who has been trained specifically to understand and apply safe *construction* practice as it relates to the worksite and as it affects the public, neighbouring properties and utilities, and who has been retained by the *owner*, or the *owner's* principal *contractor* or *project* manager, to coordinate all sub trade supervisors relating to *construction* safety at the *project* site.

Construction Safety Plan means a plan containing *construction* procedures and fire safety measures designed to protect workers on a project, neighbouring private property, public property, and members of the general public.

Constructor or Contractor means a person who contracts with an owner or an authorized agent of an *owner* 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.

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Contractor (see **constructor**)

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.

Container means a metal transportable structure designed for the storage and transport of goods, the typical dimensions of which are 2.44 m in width, 2.59 m in height, and 6.1 m in length.

Cooktop means a cooking surface having one or more burners or heating elements.

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

Dangerous goods means products, materials or substances that are

- (a) regulated by TC SOR/2008-34, “Transportation of Dangerous Goods Regulations (TDGR)” (See Table 3.2.7.1. of Division B of the **Fire By-law**), or
- (b) classified as controlled products under HC SOR/2015-17, “Hazardous Products Regulations” (See Note A-Table 3.2.7.1. of Division B of the **Fire By-law**).

(See Note A-1.4.1.2.(1).)

Dead load means the weight of all permanent structural and non-structural components of a *building*.

Deconstruction means demolition by systematic disassembly of a building resulting in the reuse, recycling or recovery of not less than 75% of all building materials, excluding materials which are hazardous or banned from landfill.

Deep foundation means a *foundation unit* that provides support for a *building* by transferring loads either by end-bearing to *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*.

Demolition means the action or process of demolishing a *building*, and includes *deconstruction*.

Designated flood means a flood which may occur in any given year, of such magnitude as to equal a flood having a 200 year return period.

Designated flood plain means those lands in the *City* which are hereby designated, for the purposes of section 306(1)(cc) of the Vancouver Charter, as flood plains susceptible to flooding and subject to *flood construction level requirements*, and those lands so designated include:

- (a) lands located in the proximity to the *natural boundary* of the Burrard Inlet, English Bay, False Creek and the Fraser River, which are located within the areas shown shaded or crosshatched on the maps attached to this By-law as Diagrams A1 and A2. (See Figure A-1.4.1.2.(1)-C for Diagram A1: Burrard Inlet, English Bay, False Creek and Fraser River flood plains and Figure A-1.4.1.2.(1)-D for Diagram A2: Burrard Inlet, English Bay, False Creek and Fraser River flood plain, wave effect zone.); and
- (b) lands located in the areas shown crosshatched on the map attached to this By-law as Diagram B. (See Figure A-1.4.1.2.(1)-E for Diagram B: Still Creek flood plain and *flood construction levels*.)

Designated Structural Engineer (Struct. Eng.) means a person who is registered or licensed to practice as a professional engineer under the Engineers and Geoscientists **Regulations pursuant to the Professional Governance Act** of British Columbia, and a person who is designated by the Association of Professional Engineers and Geoscientists of British Columbia as a Designated Structural Engineer.

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Designer means the person responsible for the design.

Detention occupancy means the *occupancy* by persons who are restrained from or are incapable of evacuating to a safe location without the assistance of another person because of security measures not under their control.

Distillery means a *process plant* where *distilled beverage alcohols* are produced, concentrated or otherwise processed, and includes facilities on the same site where the concentrated products may be blended, mixed, stored or packaged.

Distilled beverage alcohol means a beverage that is produced by fermentation and contains more than 20% by volume of water-miscible alcohol.

Direct-vented (as applying 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 the products of combustion are vented directly to the outdoors via independent, totally enclosed passageways connected directly to the *appliance*.

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 Book II, Division A, Figure A-1.4.1.2.(1)-F in Note A-1.4.1.2.(1).)

Dwelling unit means a *suite* operated as a housekeeping unit, used or intended to be used by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities.

Encapsulated mass timber construction means that type of construction in which a degree of fire safety is attained by the use of encapsulated mass timber elements with an *encapsulation rating* and minimum dimensions for structural members and other *building assemblies*.

Encapsulation rating means the time in minutes that a material or assembly of materials will delay the ignition and combustion of encapsulated mass timber elements when it is exposed to fire under specified conditions of test and performance criteria, or as otherwise prescribed by this By-law.

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.

Existing building means a *building* lawfully constructed and completed under a permit before submission of the current permit application.

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 Note A-1.4.1.2.(1).)

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* that 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* that faces one direction.

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 that does not contain a *residential occupancy* and that 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 Note A-1.4.1.2.(1).)

Field review means a review of the work

- at a *building* site, and
- where applicable, at locations where *building* components are fabricated for use at the *building* 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 a *registered professional*.

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 *soil or rock or organic terrain*. It may or may not be compacted.

Fire block means a material, component or system that restricts the spread of fire within a concealed space or from a concealed space to an adjacent space.

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* consisting of a damper that is installed in an air distribution system or a wall or floor assembly and that is normally held open but 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 that 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 By-law.

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 therefrom as prescribed in this By-law. (See D-1.2.1.(2) in Appendix D 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 Note A-1.4.1.2.(1).)

Fire stop means a system consisting of a material, component and means of support used to fill gaps between *fire separations* or between *fire separations* and other assemblies, or used around items that wholly or partially penetrate a *fire separation*.

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* that subdivides a *building* or separates adjoining *buildings* to resist the spread of fire and that has a *fire-resistance rating* as prescribed in this By-law 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 (as applying to plumbing) means a receptacle, appliance, apparatus or other device that discharges *sewage* or *clear-water waste*, and includes a *floor drain*.

Fixture outlet pipe means a pipe that connects the waste opening of a *fixture* to the *trap* serving the *fixture*. (See Book II, Division A, Figure A-1.4.1.2.(1)-H in Note A-1.4.1.2.(1).)

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 By-law.

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.

Flight means a series of steps between landings. (See Note A-1.4.1.2.(1).)

Float home means any structure incorporating a floatation system, intended for use or occupancy or being used or occupied for residential purposes, containing one dwelling unit only, and not primarily intended for, or useable in, navigation, but does not include any *water craft* designed or intended for navigation.

Flood construction level means the minimum elevation of the underside of a floor system, or of the top of a concrete slab, of a building which is used or may be used for habitation, business, or for the storage of goods which may be damaged by flood water.

Flood construction level requirements means

(a) on the Burrard Inlet, English Bay, False Creek and Fraser River flood plains:

- (i) for *buildings* located within the areas shown shaded or crosshatched on the map attached to this By-law, the underside of a floor system or the top of a concrete slab of a *buildings* used for habitation, business or storage of goods, shall not be lower than 4.6m Greater Vancouver Regional District datum.

(See Figure A-1.4.1.2.(1)-C for Diagram A1: Burrard Inlet, English Bay, False Creek and Fraser River flood plains); and

- (ii) for *buildings* located in the areas shown shaded or crosshatched on the map attached to this By-law, an additional elevation allowance above 4.6 m may be required for wave run-up, at a level as determined by a Professional Engineer and to the satisfaction of the *Chief Building Official*. (See Figure A-1.4.1.2.(1)-D for Diagram A2: Burrard Inlet, English Bay, False Creek and Fraser River flood plain wave effect zone); and

(b) on the Still Creek flood plain:

- (i) the underside of a floor system or the top of a concrete slab of any *buildings* used for habitation, business or storage of goods shall not be lower than the applicable elevation shown on the map attached to this By-law. (See Figure A-1.4.1.2.(1)-E for Diagram B: Still Creek flood plain and *flood construction levels*.)

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.

Floor drain means a fixture used to receive water from the floor of a *building*.

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*.

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 contractor means a person licensed as a *gas contractor* pursuant to the License By-law, and who is either a *gas fitter* or a person who employs a *gas fitter* on a full time basis.

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.

General Manager, Park Board means the person appointed as such by the Park Board.

General Manager, Real Estate and Facilities Management means the person appointed as such by City Council.

Grade means the lowest of the average levels of finished ground adjoining each exterior wall of a *building*, except that localized depressions need not be considered in the determination of average levels of finished ground. (See *First storey* and Note A-1.4.1.2.(1).)

Greenhouse gases has the meaning attributed to it in section 559 of the Vancouver Charter.

Green roof means a structure constructed on top of a roof, which is designed to support the growth of vegetation and to capture rainwater.

Green roof assembly means the components of a green roof and includes a waterproof barrier which is impervious to root migration, a filtering layer, roof drainage, soil or other growing medium and plants, installed on top of a roof assembly.

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.

Group Residence means Group Residence as defined in the Zoning & Development By-law.

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 a 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.

Heat loss calculation means a calculation according to the methodology of CSA F280-12, “*Determining the required capacity of residential space heating and cooling appliances*”.

Heat pump means equipment that transfers heat from one location to another using a refrigeration cycle. When used for space heating, this equipment may function to provide both heating and cooling.

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 the 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

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government or the City, or a building that in the opinion of the City Building Inspector, has sufficient heritage value or heritage character to justify its conservation. (See Note A-1.1.1.1.(5).)

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.

Industrial flex space means an industrial use which is located in a new building containing Group C major occupancies.

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.

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*.

Journey person plumber means a person, other than an *apprentice*, who holds a certificate issued pursuant to the provisions of the Industry Training Authority Act of British Columbia authorizing the person to engage in the plumbing trade.

Lane means a public thoroughfare or way not more than 10.1 m in width which affords only a secondary means of access to a site, at the side or rear.

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 liquids in containers.

Liveboard vessel means any *water craft* intended primarily for use in navigation and used for residential purposes.

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 carbon energy system means a professionally operated and maintained district-scale or on-site system that supplies heat energy, primarily derived from highly-efficient and renewable sources, in order to provide space heating and conditioned ventilation air for buildings, and may also provide domestic hot water and cooling service.

Low-hazard industrial occupancy (Group F, Division 3) means an *industrial occupancy* in which the *combustible* content is not more than 50 kg/m² or 1 200 MJ/m² 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* that are an integral part of the principal *occupancy*. The *major occupancy* classifications used in this By-law 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 – *Detention occupancies* in which persons are under restraint or are incapable of self-preservation because of security measures not under their control

B2 – *Treatment occupancies*

B3 – *Care occupancies*

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- C – Residential occupancies
- D – Business and personal services occupancies
- E – Mercantile occupancies
- F1 – High-hazard industrial occupancies
- F2 – Medium-hazard industrial occupancies
- F3 – Low-hazard industrial occupancies

Marina means any structure or installation, including *marina walkways*, which provides moorage space for *water craft*.

Marina walkway means any surface extending over navigable water used to accommodate pedestrian traffic, and used so that *water craft* and *float homes* may lie alongside to receive and discharge cargo and passengers.

Marine toilet means any toilet on or within a *water craft*.

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*.

Mechanically vented (as applying to a fuel-fired space- or water-heating *appliance*) means an *appliance* and its combustion venting system in which the products of combustion are entirely exhausted to the outdoors by a mechanical device, such as a fan, blower or aspirator, upstream or downstream from the combustion zone of the *appliance*, and the portion of the combustion venting system that is downstream of the fan, blower or aspirator is sealed and does not include draft hoods or draft control devices. (See Note A-1.4.1.2.(1).)

Mechanical system means a heating or cooling system and includes all components, controls, wiring and any piping associated with the system.

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 a *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.

Multi-family means a *residential occupancy* with more than two principal *dwelling units*.

Municipal Heat Pump Certification means a certification issued to a person who has completed the Municipal Heat Pump Certification training.

Natural boundary means the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water are so common and usual, and so long continued in all ordinary years, as to mark on the soil of the bed of the body of water a character distinct from that of its banks, in vegetation, as well as in the nature of the soil itself.

Noncombustible means that a material meets the acceptance criteria of CAN/ULC-S114, “Test for 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.

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*.

Operating permit means permission or authorization in writing by the *Chief Building Official* to install or retain existing equipment or systems for which an operating permit is required under this By-law.

Owner means a registered owner, a holder of an agreement for sale and purchase and, in the case of Crown-owned lands, owner shall mean the occupier.

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

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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.

Perched groundwater means a free standing body of water in the ground extending to a limited depth.

Permit means permission or authorization in writing by the *Chief Building Official* to perform work regulated by this By-law and, in the case of an *occupancy permit*, to occupy any *building* or part thereof, but does not include an *operating permit*.

Persons with disabilities means persons who have a permanent or temporary physical, mental, intellectual or sensory impairment which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others. (See Note A-1.4.1.2.(1).)

Pile means a slender *deep foundation unit* made of materials such as wood, steel or concrete or a 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 licensed as a *contractor* pursuant to the License By-law and who is either a *journeyperson plumber* or a person who employs a *journeyperson plumber* on a full time basis.

Plumbing system means a *drainage system*, a *venting system* and a *water system* or parts thereof. (See Book II, Division A, Figure A-1.4.1.2.(1)-L in Note A-1.4.1.2.(1).)

Post-disaster building 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,
- *buildings* having critical national defence functions, and
- *buildings* of the following types, except *buildings* 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 Note A-1.4.1.2.(1).)

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 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*.

Process plant means an *industrial occupancy* where materials, including *flammable liquids*, *combustible liquids*, or gases, are produced or used in a process. (See Table 3.2.7.1. of Division B of the Fire By-law)

Project means any *construction*, *alteration* or *demolition* operation.

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 bike share means a service that provides the general public with an opportunity to rent bicycles through an automated system, on a short term basis for use within the *City* as part of a network comprised of no fewer than 50 *public bike share stations* located on separate sites.

Public bike share station means a bicycle sharing facility where bicycles are stored and from which the general public may rent and return bicycles and other objects or equipment necessary for or appurtenant to the operation of a *public bike share*.

Public corridor means a corridor that provides *access to exit* from more than one *suite*. (See Note A-1.4.1.2.(1).)

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.

Pump-out facility means a device or method for the removal of sewage from a holding tank connected to a *marine toilet* or from a self-contained *marine toilet*.

Registered professional means

- a person who is registered or licensed to practise as an architect under the Architects Act, or
- a person who is registered or licensed to practise as a professional engineer under the Engineers and Geoscientists Regulations pursuant to the Professional Governance Act of British Columbia.

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Registered professional of record means a *registered professional* retained to undertake design work and *field reviews* in accordance with Subsection 2.2.7. of Division C.

Re-occupancy permit means permission or authorization in writing by the *Chief Building Official* to re-occupy any *building* or part thereof in respect of which the *Chief Building Official* has issued an order to cease *occupancy* because of an *unsafe condition*.

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

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 for the purpose of receiving *care* or *treatment* and are not involuntarily detained.

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*.

Rim joist means the outermost member in floor framing, other than blocking, be it parallel, perpendicular or on an angle to the floor joists. (See Note A-1.4.1.2.(1).)

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

Row housing means a *building* or *portion of a building* of *residential occupancy* where no *dwelling unit* is located above another *principal dwelling unit* or its *ancillary residential unit*, and there is no common interior or exterior *means of egress*.

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Run means the horizontal distance between two adjacent tread nosings on a stair. (See Figure A-9.8.4.-B in Note A-9.8.4. of Division B.)

Sanitary drainage system means a drainage system that conducts sewage.

Service room means a room provided in a *building* to contain equipment associated with *building* services. (See Note A-1.4.1.2.(1).)

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*.

Sewage sump means an *approved* airtight tank or pit which receives sewage or liquid waste and which is located below the normal grade of the gravity system and must be emptied by mechanical means.

Sewer means an underground drain or conduit to remove waste water and organic refuse.

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

Single room accommodation means a room designated as accommodation pursuant to the Single Room Accommodation By-law.

Small suite means a *suite* classified as a Group A Division 2, Group D, Group E, Group F Division 2 (wholesale showroom) or Group F, Division 3 occupancy where the *occupant load* for the entire *suite* does not exceed 60 persons.

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 predetermined level.

Soil means that portion of the earth's crust that 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.

Solid masonry means a single wythe or multi-wythe construction made of *solid masonry units* or semi-solid, cored, or hollow masonry units, the cells of which may or may not be filled with mortar or grout. In multi-wythe masonry construction, the space between the wythes consists of a mortar-filled collar joint or grout-filled space and the wythes may or may not be constructed of the same masonry materials.

Solid masonry unit means a concrete block or brick unit, a clay brick unit, or calcium silicate brick unit whose net solid area is at least 75% of its gross area. (See Note A-1.4.1.2.(1).)

Sound transmission class (STC) means a single number rating of the airborne sound attenuation of a *building* assembly separating two adjoining spaces, taking into account the direct sound transmission path. (See Note A-1.4.1.2.(1).) (See also Note A-9.11. of Division B.)

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*.

Sprinkler contractor means a person licensed as a *contractor* pursuant to the License By-law and who is either a *sprinkler system installer* or a person who employs a *sprinkler system installer* on a full-time basis.

Sprinkler system means an automatic fire extinguishing system designed to the National Fire Protection Association 13, 13D or 13R standard and all applicable associated sprinkler standards, and which consists of a system of devices and equipment designed to automatically detect a fire and discharge water or another approved fire extinguishing agent in the area of or onto a fire.

Sprinkler system installer means a person who has successfully completed an accredited program as a *Sprinkler System Installer* under the Industry Training Authority Act and Industry Training Regulation of British Columbia.

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

Stage means a space that is 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 that 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 primarily for the storage or parking of motor vehicles and containing no provision for the repair or servicing of such vehicles. (See Note A-1.4.1.2.(1).)

Storage-type service water heater means a *service water heater* with an integral hot water storage tank.

Storey means that portion of a *building* that 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.

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 a public road, highway, bridge, viaduct, *lane*, and sidewalk, and any other way normally open to the use of the public, but does not include a private right-of-way on private property and, for the purposes only of Part 3 and Part 9 of this By-law, a street which is less than 9 m in width or a *lane* or sidewalk.

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 Note A-1.4.1.2.(1).)

Sump means a receptacle installed between the storm or *combined sewer* and the *building* storm system to intercept the

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flow of debris into the *building* or public *sewer* and to prevent the outflow of *sewer* gas.

Supervisory staff means those occupants of a *building* who have some delegated responsibility for the fire safety of other occupants under the fire safety plan.

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.

Temporary special event means a presentation of an artistic or cultural nature, including but not limited to visual, performing, media, literary, craft or interdisciplinary arts, for a maximum of 250 people, with or without liquor service, which occurs not more than two days per month in a *building* not approved for *assembly occupancy*.

Tapered tread means a tread with non-parallel edges that increases or decreases its *run* uniformly over its width. (See Note A-1.4.1.2.(1).)

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.

Trades safety coordinator means an agent, employee or officer of a company supplying, installing or using materials at a *construction* site who has been trained to understand and apply safe *construction*, installation or *demolition* techniques, as applicable, respecting those materials and their relationship to the worksite, neighbouring property, public utilities and the general public.

Training school means a School-Arts or Self-Improvement, School – Business, or School - Vocational or Trade, as defined in the Zoning & Development By-law.

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.

Treatment means the provision of medical or other health-related intervention to persons, where the administration or lack of administration of these interventions may render them incapable of evacuating to a safe location without the assistance of another person. (See Note A-1.4.1.2.(1).)

Treatment occupancy means the *occupancy* or use of a *building* or part thereof for the provision of *treatment*, and where overnight accommodation is available to facilitate the *treatment*. (See Note A-1.4.1.2.(1).)

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 that required for the *exposing building face*.

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

Unstable liquid means a liquid, including *flammable liquids* and *combustible liquids*, that is chemically reactive to the extent that it will vigorously react or decompose at or near normal temperature and pressure conditions or that is chemically unstable when subjected to impact.

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.

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 Book II, Division A, Figures A-1.4.1.2.(1)-F and A-1.4.1.2.(1)-G in Note A-1.4.1.2.(1).)

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*.

Water craft means any boat, hull, barge, or houseboat which is afloat, whether self-propelled or not, and includes pleasure and commercial craft.

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.

1.4.2. Symbols and Other Abbreviations

1.4.2.1. Symbols and Other Abbreviations

1) The symbols and other abbreviations in this By-law 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

cm. centimetre(s)

CRP coordinating registered professional

° degree(s)

°C degree(s) Celsius

dBA A-weighted sound level

diam diameter

ERV energy recovery ventilator

g gram(s)

GHG greenhouse gas

h hour(s)

HDD heating degree-day(s)

HRV Heat Recovery Ventilator

HVAC heating, ventilating and air-conditioning

Hz hertz

Inc. Incorporated

J joule(s)

K degree(s) Kelvin

kg kilogram(s)

kN kilonewton(s)

kPa kilopascal(s)

kW kilowatt(s)

kWh kilowatt hour(s)

L litre(s)

lx lux

m metre(s)

M metric nomenclature for reinforcing bars

max. maximum

mg milligram(s)

min. minimum

min minute(s)

MJ	megajoule(s)
mm	millimetre(s)
MPa	megapascal(s)
N	newton
n/a	not applicable
ng	nanogram(s)
No.	number(s)
o.c.	on centre
OSB	oriented strandboard
Pa	pascal(s)
PM	particulate matter
ppb	part(s) per billion
ppm	part(s) per million
R	thermal resistance value (imperial unit)
RP	registered professional
RSI	thermal resistance value (metric unit)
s	second(s)
W	watt(s)
%	percent
µg	microgram(s)
µm	micrometre(s)
U-value	overall thermal transmittance
VBBL	Vancouver Building By-law