PORT COQUITLAM FIRE & EMERGENCY SERVICES
PLAN REVIEW INFORMATION

FIRE DEPARTMENT PLAN REVIEW COMMENTS

During the building permit application stage, the Fire Department (FD) provides the following comments to all applicants. This is done to ensure that the common FD requirements related to all new construction, can be addressed as early as possible in the development of a new project.

GENERAL

The fire department would like to encourage the Site Superintendent to contact the Fire Protective Services Division early in the construction phase in order to establish a working relationship between FD and Developer. The Fire Protective Services Division can be reached at 604-927-5288 or FPS@portcoquitlam.ca.

PORT COQUITLAM FIRE & EMERGENCY SERVICES INFORMATION FOR DEVELOPERS

https://www.portcoquitlam.ca/services/public-safety/fire/fire-safety-information-developers

PORT COQUITLAM FIRE & EMERGENCY SERVICES BYLAW NO. 4395, 2025

https://www.portcoquitlam.ca/media/file/4395-fire-and-emergency-services-bylawpdf

IN-BUILDING EMERGENCY RESPONDER COMMUNICATIONS ENHANCEMENT SYSTEMS.

A Letter of Intent is to be submitted with the Building Permit application outlining the intent to conduct radio coverage testing when the construction of the building is substantially complete, when all interior and exterior doors and windows have been installed as per City of Port Coquitlam Emergency Services Radio Bylaw No. 4210, 2021. https://www.portcoquitlam.ca/sites/default/files/2024-10/4210%20-%20Emergency%20Services%20Radio%20Bylaw.pdf

RADIO BYLAW LETTER OF INTENT TEMPLATE:

https://www.portcoquitlam.ca/media/file/fps49-radio-bylaw-letter-intent-buildersdocx

FIRE LIMIT AREAS AND SPRINKLER REGULATIONS AS PER BUILDING & PLUMBING BYLAW NO. 3710. PART 22

https://www.portcoquitlam.ca/sites/default/files/2024-10/3710%20-%20Building%20%26%20Plumbing%20Bylaw.pdf

CONSTRUCTION FIRE SAFETY PLAN AND FIRE SAFETY PLAN

A Construction Fire Safety Plan (C-FSP) and Pre-Incident Plan (PIP) is to be submitted to the Fire Department before construction starts.

Prior to final occupancy being granted by the Building Official, a Fire Safety Plan (FSP), Pre-Incident Plan and Vital Information Form must be produced by a professional fire safety planner. These documents are to be submitted to the FD. Submissions are to be made to FPS@portcoquitlam.ca

Additional information on Construction Fire Safety Plans, Fire Safety Plans, Pre-Incident Plans and Vital Information forms can be found on the City of Port Coquitlam website:
https://www.portcoquitlam.ca/services/public-safety/fire/fire-safety-information-developers

FIRE PROTECTION DURING CONSTRUCTION AND DEMOLITION

The following information is a general reminder to developers and builders of the legislative requirements related to construction and demolition sites. This is not a comprehensive list of applicable codes.

SEE BCFC SECTION 5.6. CONSTRUCTION AND DEMOLITION SITES

The BC Fire Code states that "Measures shall be taken to mitigate fire spread to adjacent buildings and facilities that would be exposed to fire originating from buildings, parts of buildings, facilities and associated areas undergoing construction, alteration or demolition operations" (BCFC 5.6.1.2. (1)). The degree of application of Section 5.6. is determined in advance in conjunction with the authority having jurisdiction (Fire Department). The application of Section 5.6 varies depending on the project. During the plan review process, if required, Port Coquitlam Fire & Emergency Services mandates that a registered professional submit a report assessing the protection of adjacent buildings during construction. These reports typically use radiant heat flux calculations and thermal radiation analysis software to quantify heat transfer risks. These reports must be submitted to FPS@portcoquitlam.ca prior to construction beginning.

Prior to construction proceeding above grade, a water supply must be connected to the fire suppression system. The water supply must be capable of supplying full water demand to the system as designed by the sprinkler engineer. The standpipe, complete with Fire Department Connection, shall meet BCFC 5.6.1.6.

As per BC Fire Code 5.6.1.6 Standpipe Systems will be installed progressively in conformance with BCBC 3.2.5. The Standpipes must be wet unless there is a threat of freezing as per A-5.6.1.6.

TOWER CRANES

The setup and de-mobilization of a tower crane in Port Coquitlam will require city approval. Please contact the Building Department for more information 604-927-5444.

A Rescue Service Agreement with Port Coquitlam Fire and Emergency Services must be entered into before a tower crane becomes operational. An Application for this service is made through THARRP (Technical High Angle Rescue Rope Program) which is administered by the BC Safety Construction Alliance (BCSCA)

Visit: https://tharrp.bccsa-services.ca/ to create an account with the BC Safety Construction Alliance or email your enquiry to info@bccsa.ca to start the application process. After setting up your BCSCA account and submitting your application, a member from the Port Coquitlam Fire & Emergency Services will contact you to schedule a site visit.

FIRE DEPARTMENT ARCHITECTURAL DRAWING SET

A Fire Department-Specific site plan drawing is required in the Code Compliance drawing set. This drawing is to include:

- Fire truck access route with weight considerations and turning radiuses noted
- Rollover curbs for all fire truck access routes to be noted
- Existing and proposed fire hydrant locations
- Dimensioned distance between hydrant(s) and fire department connections
- All proposed FDC locations
- Travel distances to all entrances from the primary access point
- Clearly identify the FD response point
- Fire Alarm Annunciator Panel and Fire Alarm Control Panel locations
- Proposed FD 3” lock cylinder location
- Proposed Fire Safety Plan & Operations Box location
- No Parking Fire Lane locations
- Proposed designations i.e. Stair A, Stair B etc.
- All entrances and exits from underground parking areas
- Outline distances to the furthest unit from each standpipe connection

FIRE DEPARTMENT BUILDING ACCESS/KEYS

To assist developers and property owners in being able to create key sets for the fire fighters the following guidelines apply.

A Fire Department lockbox (lock cylinder) must be located in a manner acceptable to the Fire Department. It shall contain a set or sets of keys or devices required to be used in an emergency to access the building. It shall be installed on the exterior wall of the building in proximity to the principal entrance.

A number of locksmith companies have been approved to install and maintain these lockboxes/lock cylinders for buildings. It is the responsibility of the developer or property owner to make the arrangements with the locksmith for installation and regular maintenance of these cylinders. The only access to these cylinders once installed, is by the Port Coquitlam Fire Department and the approved locksmith companies.

FD lockboxes are required to be 3 inches in diameter, with some exceptions allowing for 1 ½-inch diameter lockboxes. Additional FD lockboxes may be requested at the FD’s discretion. FD lockboxes are to be placed between 36” and 40” above the grade not lower or higher. Alternatives to a cylinder may be accepted but require FD approval.

FD lockboxes require coring into a minimum of 8" of rebar-free concrete. All new FD lockbox must be protected from water ingress either by placement under an overhang or by a silicon or caulking sealed rain hood and must be within 5m of the main entrance and must be installed as per the manufacturer's instructions at the correct angle for drainage, and orientation. All FD lockboxes are to be sealed at the concrete interface with waterproof mastic type sealant.

The primary keys needed by the Port Coquitlam Fire Department are listed below. Keys or devices provided, shall be affixed to a key ring or rings, and identified with colored tags indicating their function. Where feasible, opt for a master key system to minimize the number of keys.

FD Key Access Requirements – Checklist (Access to private residential areas not required) Front Door / Fire Alarm Panel / Fire Safety Plan Box / Elevator Keys / FF Phone Box / Mag Lock Reset Key / Master Key / Digital Keypad Codes / Stairwell Doors / Storage Garage Overhead Gate Clicker – Code / Storage Garage Man Doors / Electrical Room / Electrical Closets and all Electrical Cabinets within / Sprinkler Room / Boiler Room / Storage Rooms / Garbage Room / HVAC Room / Elevator Machine Room / Generator Room / Roof / Utility - Maintenance - Janitor Rooms / Gas Meter Cages / Recreation & Meeting Rooms / Exterior Gate Hasp Locks

Note on Elevator Keys: Firefighters will likely need to leave the elevator key in the elevator cab. Therefore, these keys must be on a separate detachable key ring that allows firefighters to unclip and leave them in the elevator. For buildings with multiple elevators, a separate set of keys for each elevator is required. During an actual fire, all elevators may be used to transport equipment, so additional keys may be necessary.

While only one key set is required for a building, having additional key sets will assist firefighters in their investigations and emergency operations. This is especially important when multiple floors are affected by an alarm.

The Fire Department is not responsible for the final audit of locksets and keys. Occupancy will not be recommended until all key and FOB access issues are resolved to the Fire Department's satisfaction.

ACCEPTABLE 3" FD LOCKBOX INSTALLATION:

STORAGE GARAGES AND ENCLOSED STORAGE GARAGES

"Enclosed Storage Garage" means a structure built within a common area of a Storage Garage. Enclosed Storage Garages in any multifamily residential development must comply with the Fire Code and Building Code as per Port Coquitlam Fire and Emergency Services Bylaw 4395, 2025, Section 7.16.

The design must not include storage units, cabinets, or shelving, whether combustible or non-combustible, within Storage Garages and Enclosed Storage Garages. Enclosed Storage Garages must be designed to ensure visibility of their contents, allowing for routine visual inspection by the Fire Department without obstruction from a solid door.

'No Storage Permitted Except in Accordance with BCFC and BCBC' signage is to be posted in all Enclosed Storage Garages minimum of 9"x4" in dimension in clear view of the parked vehicle in red text on white background with a red border.

ADDRESSING OF OCCUPANCIES

Addressing for any building or unit should be plainly visible, unobstructed and legible from the front of the structure from a minimum 15 metres distance. Addressing must adhere to Port Coquitlam Fire and Emergency Services Bylaw 4395, 2025, 7.3.

SIGNAGE, LABELS AND GRAPHICS

Shop drawings of all labels, signage, and graphics to be submitted for review and approval by the Fire Department prior to ordering and installation. Metal or rigid plastic is acceptable.

Fire Department Connections (FDCs) must be clearly marked. FDC signage must indicate the portions of the building served and include graphics and wording specifying maximum operating pressures, sprinkler/standpipe zone information, and buildings served. Letters on the designated signs must be at least one (1) inch in height, with red and white contrast for visibility. All FDC signage must be approved by the Fire Department before occupancy. FDCs must have a 4-inch Storz connection set at a 30-degree downward angle, with limited exceptions.

ACCEPTABLE FDC SIGNAGE EXAMPLES:

Stair designations to be Alphabetical. For example, stairs to be designated as such: Stair A, Stair B, Stair C, Stair D etc. Examples of stair designations that will not be accepted: Stair 1, Stair 2, Stair 3, Stair A1, Stair A2, Stair B1, Stair B2 etc.

Levels are to be referred to as such, not as Floors on all signage, labels, and graphics. For example, STAIR A LEVEL 14. Stair labels will be placed on both sides of the doors.

All fire doors are to be identified with a sign, which reads “Fire Door, Keep Closed”

All service room and mechanical room doors to be clearly labelled indicating their purpose: Electrical Room, Water Entry Room, Sprinkler Room, Boiler Room, HVAC Room, Elevator Machine Room, Generator Room etc. ‘No Storage Permitted’ signage is to be posted on all service room and mechanical room doors.

All main electrical disconnect switches to be labelled to allow for immediate identification by firefighters including electric vehicle disconnect switches in electrical room.

All sprinkler system flow switches and tampers to be clearly marked and accessible to authorized persons as per NFPA13 with metal or rigid plastic signs. This includes signage on the valve room door and on access panels for all floor zone, shut-off and control valves.

Complex sites are required to have exterior signage with a site orientation plan that is visible from the primary response point identifying the building components on the site by address. Additional wayfinding signage may be requested by the Fire Department on complex sites.

The entrance to the storage garage(s) (parkade) to be clearly identified. Signage will indicate which parkade level(s) each entrance accesses. Parkade Level marking to be black on white on both sides of pillars on all levels within the storage garage. Minimum every 3rd pillar at a level that is easily detected over the height of a standard parked vehicle.

Load limit signage must be posted at each entrance to elevated structures and in all areas where a fire truck cannot operate. If there are surrounding areas where fire apparatus access is potentially possible, signage must clearly indicate whether the supporting structures can accommodate the heaviest

firefighting apparatus. Additionally, overhead clearance height signage is required where applicable. For vehicle specification information please email FPS@portcoquitlam.ca.

PROVISIONS FOR FIREFIGHTING – FIRE ACCESS AND HYDRANT REQUIREMENTS

The following information is a general reminder for developers and builders of the legislative requirements related to emergency service vehicle access and firefighting capabilities for any site applying for Building Permits. This is not a comprehensive list of applicable codes.

Part 9 Buildings 9.10.20. Firefighting

9.10.20.3. Fire Department Access to Buildings

1) Access for fire department equipment shall be provided to each building by means of a street, private roadway or yard. (See Notes A-9.10.20.3.(1) and A-3.2.5.6.(1).)

2) Where access to a building as required in Sentence (1) is provided by means of a roadway or yard, the design and location of such roadway or yard shall take into account connection with public thoroughfares, weight of firefighting equipment, width of roadway, radius of curves, overhead clearance, location of fire hydrants, location of fire department connections and vehicular parking.

Part 3 Buildings 3.2.5 Provisions for Firefighting

3.2.5.1. Access to Above-Grade Storeys

1) Except for storeys below the first storey, direct access for firefighting shall be provided from the outdoors to every storey that is not sprinklered throughout and whose floor level is less than 25 m above grade, by at least one unobstructed window or access panel for each 15 m of wall in each wall required to face a street by Subsection 3.2.2.

2) An opening for access required by Sentence (1) shall
   a) have a sill no higher than 900 mm above the inside floor, and
   b) be not less than 1 100 mm high by not less than
      i) 550 mm wide for a building not designed for the storage or use of dangerous goods, or
      ii) 750 mm wide for a building designed for the storage or use of dangerous goods.

3) Access panels above the first storey shall be readily openable from both inside and outside, or the opening shall be glazed with plain glass.

3.2.5.2. Access to Basements

1) Direct access from at least one street shall be provided from the outdoors in a building that is not sprinklered to each basement having a horizontal dimension more than 25 m.

2) The access required by Sentence (1) is permitted to be provided by
   a) doors, windows or other means that provide an opening not less than 1 100 mm high and 550 mm wide, with a sill no higher than 900 mm above the inside floor, or
   b) an interior stairway immediately accessible from the outdoors.

3.2.5.3. Roof Access

1) On a building more than 3 storeys in building height where the slope of the roof is less than 1 in 4, all main roof areas shall be provided with direct access from the floor areas immediately below, either by
   a) a stairway, or
   b) a hatch not less than 550 mm by 900 mm with a fixed ladder.

3.2.5.4. Access Routes

1) A building which is more than 3 storeys in building height or more than 600 m2 in building area shall be provided with access routes for fire department vehicles
   a) to the building face having a principal entrance, and
   b) to each building face having access openings for firefighting as required by Articles 3.2.5.1. and 3.2.5.2. (See Note A-3.2.5.4.(1).)

3.2.5.5. Location of Access Routes

1) Access routes required by Article 3.2.5.4. shall be located so that the principal entrance and every access opening required by Articles 3.2.5.1. and 3.2.5.2. are located not less than 3 m and not more than 15 m from the closest portion of the access route required for fire department use, measured horizontally from the face of the building.

2) Access routes shall be provided to a building so that
   a) for a building provided with a fire department connection, a fire department pumper vehicle can be located adjacent to the hydrants referred to in Article 3.2.5.15.,
   b) for a building not provided with a fire department connection, a fire department pumper vehicle can be located so that the length of the access route from a hydrant to the vehicle plus the unobstructed path of travel for the firefighter from the vehicle to the building is not more than 90 m, and
   c) the unobstructed path of travel for the firefighter from the vehicle to the building is not more than 45 m.

3) The unobstructed path of travel for the firefighter required by Sentence (2) from the vehicle to the building shall be measured from the vehicle to the fire department connection provided for the building, except that if no fire department connection is provided, the path of travel shall be measured to the principal entrance of the building.

4) If a portion of a building is completely cut off from the remainder of the building so that there is no access to the remainder of the building, the access routes required by Sentence (2) shall be located so that the unobstructed path of travel from the vehicle to one entrance of each portion of the building is not more than 45 m.

3.2.5.6. Access Route Design

1) A portion of a roadway or yard provided as a required access route for fire department use shall
   a) have a clear width not less than 6 m, unless it can be shown that lesser widths are satisfactory,
   b) have a centre-line radius not less than 12 m,
   c) have an overhead clearance not less than 5 m,
   d) have a change of gradient not more than 1 in 12.5 over a minimum distance of 15 m,

e) be designed to support the expected loads imposed by firefighting equipment and be surfaced with concrete, asphalt or other material designed to permit accessibility under all climatic conditions,
f) have turnaround facilities for any dead-end portion of the access route more than 90 m long, and
g) be connected with a public thoroughfare. (See Note A-3.2.5.6.(1).)

2) For buildings conforming to Article 3.2.2.50. or 3.2.2.58., no portion of the access route described in Sentence 3.2.2.10.(3) shall be more than 20 m below the uppermost floor level.

3.2.5.7. Water Supply

1) Every building shall be provided with an adequate water supply for firefighting. (See Note A-3.2.5.7.(1).)

2) Buildings that are sprinklered throughout with a sprinkler system conforming to Article 3.2.5.12. or have a standpipe system conforming to Article 3.2.5.8. to 3.2.5.10. are deemed to comply with Sentence (1).

3.2.5.8. Standpipe Systems

1) Except as permitted by Sentence 3.2.5.9.(4), a standpipe system shall be installed in a building that is
a) more than 3 storeys in building height,
b) more than 14 m high measured between grade and the ceiling of the top storey, or
c) not more than 14 m high measured between grade and the ceiling of the top storey but has a building area exceeding the area shown in Table 3.2.5.8. for the applicable building height unless the building is sprinklered throughout.

Note:

- Private fire hydrants must be painted with the colour coding, Fire Hydrant Yellow; paint code 020A0176-70402.
- As part of the development of the property, the Fire Chief may require an Owner to provide additional fire hydrant(s) and/or FDC's to be located and installed to address Fire Department operational needs.
- As part of the development of the property, the Fire Chief may require an Owner to move the proposed location of new fire hydrants if deemed necessary, for operational considerations.

COMMERCIAL KITCHENS

Commercial cooking equipment, fire suppression, hood, vent and exhaust systems must be installed in accordance with the British Columbia Fire Code and NFPA 96 - "Ventilation Control and Fire Protection of Commercial Cooking Operations."

The Fire Department requires a verification /trip test for all commercial cooking unit suppression systems, coordinated between the building and fire departments. Both the unit's engineer and installer must be present for the test.

SPRAY BOOTHS

Spray booths must be installed in accordance with the British Columbia Fire Code and NFPA 33 – "Standard for Spray Application Using Flammable or Combustible Materials."

The Fire Department requires a verification/trip test for all dry chemical spray booth systems, coordinated between the building and fire departments. Both the unit's engineer and installer must be present for the test.

ELECTRICAL VEHICLE PARKING

Electric vehicles and their charging stations introduce new challenges for emergency response, particularly in fire-related incidents. Due to the dynamic nature of these emergencies, Port Coquitlam Fire & Emergency Services may require additional measures to support firefighting operations. As best engineering practices continue to evolve, these requirements may also change over time.

Examples of potential requirements include:

- Remote emergency shutoff switch for all electric vehicle charging stations.
- Adjusting the layout of electric vehicle (EV) parking to align with best engineering practices, such as positioning EV parking stalls closer to entrances for improved accessibility.

OUTDOOR DINING AREAS

Design to maintain a 1 metre clear exit path at all times within the outdoor dining area and from the main entrance to the sidewalk.

Design to maintain 1 metre of clearance around Fire Alarm Annunciator and Fire Department Connection.

Ensure a fire extinguisher is located inside the closest building entrance.

Combustible canopies, awnings, umbrellas and other materials or decorations must be flame spread rated per the BC Fire Code (CAN/ULC S109). Standards other than CAN/ULC-S109 are not acceptable in BC.

No cooking or food preparation that produces grease-laden vapours is permitted outdoors.

No storage is permitted in the outdoor dining area, including spare propane tanks. If storage of propane is to be considered for approval, CSA B149.2:20 Propane Storage and Handling Code must be complied with.

If a heating devices are to be installed, devices must be installed under permit and incorporate manufacturer's clearances to the building and combustible materials.

OCCUPANCY FINAL INSPECTION

Occupancy final inspections are scheduled through the Port Coquitlam Building Department representative, who coordinates with the Fire Department for the final site inspection. A Fire Department Officer will attend the occupancy inspection and conduct a comprehensive fire inspection of the building. To ensure a smooth final occupancy process, it is highly recommended to consult with the Fire Department before scheduling the inspection.

ADDITIONAL DOCUMENTATION

Prior to the Fire Department recommending occupancy to the Building Inspector, all documentation required is to be provided to the City of Port Coquitlam, including, but not limited to:

- Fire Alarm Verification Report and Certificate
- The ULC monitoring certificate is to be posted by the dialer (CAN/ULC-S5601)
- Sprinklers Contractors' Materials and Test Certificate (as per NFPA 13)
- Sprinkler Engineer Schedule C/B
- E-Comm In-Building Communications System Verification Report
- Fire and Life Safety Integrated System Test Report as per CAN/ULC-S1001
- Emergency Generator Verification Report
- Fire Pump Report

FIRE APPARATUS SPECIFICATIONS

For information on fire apparatus specifications contact the Fire Protective Services Division can be reached at 604-927-5288 or FPS@portcoquitlam.ca.