



## DELTA FIRE & EMERGENCY SERVICES

### FORMAT AND GUIDELINES FOR FIRE SAFETY PLANS AT CONSTRUCTION SITES

A Construction Fire Safety Plan is required for all buildings or portions of buildings and associated areas under construction, renovation or demolition. The Construction Fire Safety Plan is required in accordance with the B.C. Building Code 2006 (Div B, Section 8.1) & the B.C. Fire Code 2006 (Div B, Section 5.6).

Prior to construction, alteration or demolition, a minimum of two (2) copies of the Construction Fire Safety Plan shall be prepared by the owner, registered coordinating professional or designate and be submitted to the Delta Fire & Emergency Services for review and approval. **It is strongly recommended that the Construction Fire Safety Plan be designed, developed and submitted by a qualified and experienced fire safety planner.** A fee of \$100.00 plus HST, must accompany one digital and one hard copy of the plans as per Delta Fire Bylaw 5855. Once approved, the digital copy of the plan will be kept by the Fire Department and hard copy will be returned to the applicant and posted in the site construction office. Construction sites may be subject to inspection by the Fire Department.

All Construction Fire Safety Plans shall include written procedures for, and descriptions of:

- The designation and organization of site personnel who will carry out the fire safety duties. Names and telephone/cell numbers or 24-hour emergency contact persons, shall be listed.
- The emergency procedures to be used in the case of fire, including:
  - Sounding of fire alarm
  - Notifying of the fire department
  - Instructing site personnel on the procedures to be followed when the alarm sounds
  - Firefighting procedures
- The posting of site address numbers which are visible from the street.
- The control of fire hazards in and around the building including, but not limited to:
  - Hot works operation: Cutting and welding operations including grinding, brazing and soldering. A fire watch must be assigned during a hot works operation and for 60 minutes after its completion. A final inspection of the hot works area is required 4 hours after completion.
  - Smoking,
  - Safe storage of combustible refuse,
  - Safe storage of flammable and combustible liquids or other hazardous materials,
  - Safe use and storage of propane or other fuelled heating systems.

- The installation, inspection, testing and maintenance of fire fighting and life safety equipment, such as, but not limited to:
  - Fire alarm or acceptable equivalent,
  - Sprinkler or standpipe systems,
  - Acceptable levels of emergency lighting,
  - Acceptable fire-rated separations
  - Acceptable routes of emergency access.
  - Records of all inspections, tests and maintenance shall be kept on site for review by the Fire Department.
- In addition to extinguishers required by the BC Fire Code, portable extinguishers shall be provided:
  - Adjacent to cutting or welding operations,
  - In areas where combustibles are stored
  - Near or on any internal combustion engines,
  - Adjacent to areas where flammable liquids or gasses are stored or handled,
  - Adjacent to temporary oil-fired or gas-fired equipment, and
  - Adjacent to bitumen heating equipment.
- The extinguishers required shall have a minimum rating of
  - 2-A,10B:C on movable equipment, and
  - 4-A,40B:C in all other locations
- The maintenance or modifications of exit facilities to ensure rapid egress of building occupants.
- The progressive installation of an acceptable working standpipe system in buildings requiring a standpipe system. The standpipe system may be provided temporarily as dry, with the sole source of water being provided by an intact and accessible temporary or permanent fire department connection located in consultation with the Fire Department.
- Amendments to the Construction Fire Safety Plan so as to be in phase with the progress of construction.
- Acceptable levels of protection for portions of the building under construction, which are proposed to be occupied or used for display purposes. The Fire Safety Plan shall also indicate the temporary and/or permanent equipment provided to maintain the acceptable equivalent level of life and property safety intended for occupancy.
- The training of supervisory staff and other occupants in their responsibilities for fire safety.

- Procedures to ensure unobstructed access to fire protection equipment, such as fire hydrants, fire department connections, fire hose stations (NFPA-14) and portable fire extinguishers (NFPA-10), and procedures to ensure clear access routes onto the building site for fire department vehicles.
- Where a construction or demolition site is fenced so as to prevent general entry, provisions shall be made for access by fire department equipment and personnel.
- Guard Service should be provided on major projects or where required by the authority having jurisdiction. The requirements for guard service should be based on, but not limited to, the hazards of the site, the size of the risk, the difficulty of the fire-fighting situation, the exposure risk, and the physical security of the site. It is recommended that areas in buildings should be patrolled at all times when the construction, alteration or demolition operations are not in progress by a competent guard. Guard rounds should include all parts of the buildings and outside areas where hazardous equipment or materials are located. Rounds should be conducted every ½ hour for 2 hours after suspension of work for the day and every hour thereafter during the night and nonworking days and should include tours of all accessible work areas.

#### **Site and Floor Plans:**

Site and floor plans shall be provided, indicating:

- Emergency access points to the construction site and building(s).
- The location of special keys or devices required to access the site or building.
- The location of functioning fire department connection(s), fire alarm panel(s) or annunciator(s).
- Approved areas used for the storage of hazardous materials and portable fire extinguishers.
- The location, area or phase of the construction or alterations in relation to the existing building.
- General floor plans, showing layout, stairs, elevators, shafts, roof access points, etc.

#### **Additional Required Information**

During any phase of construction where the effectiveness of an exit or access to exit facility, fire alarm, sprinkler or standpipe system, fire fighting water supply or emergency access route is affected, the Construction Fire Safety Plan shall identify written procedures, practices or changes to the level of protection taken to offset the limitations. This shall include narrative details and schematic floor plans of the proposed egress route(s), existing and temporary illuminated exit signs, existing and temporary emergency lighting, existing and additional supplementary fire detection devices, limits of occupant loads or activities to suit available exit facilities, etc. Any limitations imposed on existing life or property safety systems shall receive prior written approval from the Fire Protection Services Office before implementation. The Construction Fire Safety

Plan will require periodic and specific revision to offset various phases in the construction process.

Where an existing building is undergoing addition, alteration or renovation and the existing fire department emergency access, sprinkler, standpipe, fire pump or fire fighting water supply, fire alarm system, emergency power supply, exiting system or firewalls are reduced in any way, **written authorization** of the Fire Department is required. Such permission will be contingent upon:

- Acceptable completion of the “*Authorization for Shut Down of Life/Property Safety Systems*” form, available at [www.deltafire.ca/Forms.htm](http://www.deltafire.ca/Forms.htm)
- Acceptable completion of a new or revised Construction Fire Safety Plan or portion thereof for the affected area(s),
- A site inspection by the Fire Department will be required in each individual case, before final approval or authorization is given, and
- The “*Authorization for Shut Down of Life/Property Safety Systems*” form shall be posted in the affected work area site or a location acceptable to the Fire Protection Liaison Officer.

Implementing the provisions of the Construction Fire Safety Plan will be the responsibility of the owner or designate and the supervising contractor(s). For further information or discussion of acceptable equivalent levels of safety please contact the Delta Fire & Emergency Services Fire Protection Services Office, Monday to Friday, between the hours of 8:00 a.m. to 5:00 p.m. @ 604 946-8541.

For further information on required guidelines, please visit the Office of the Fire Commissioner @ [www.pssg.gov.bc.ca/firecom/info/pdf/firesafeplan.pdf](http://www.pssg.gov.bc.ca/firecom/info/pdf/firesafeplan.pdf)