

Guidelines for Fire Safety Plans at Construction or Demolition Sites

Sun Peaks Fire Rescue

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Guidelines for Fire Safety Plans at Construction or Demolition Sites

Construction, renovation, and demolition involve many hazardous processes and safety risks. The BC Building Code and the BC Fire Code provide minimum requirements to ensure that during these processes safety of life and property are a priority.

The following is a guideline provided by Sun Peaks Fire Rescue for Owners or Contractors performing construction, alteration or demolition of every building, including any incomplete or abandoned buildings. Division B Part 8 of the 2012 BC Building Code requires fire safety measures as described in Division B Section 5.6 of the BC Fire Code. The Sun Peaks Mountain Resort Municipality's Fire & Life Safety Bylaw NO. 0007 should also be reviewed.

The degree to which these requirements are required should be determined in advance as part of the fire safety plan, taking into consideration such issues as the size of the project, the site conditions and the hazardous processes involved. Consultation with Sun Peaks Fire Rescue is recommended in order to ensure that all requirements are being met.

The following is a list of minimum requirements for all construction/renovation or demolition projects:

Protection of Adjacent Buildings:

1. Protection shall be provided for adjacent buildings or facilities that would be exposed to fire originating from the building or associated areas undergoing construction, alteration or demolition operations.

Preparation of a Fire Safety Plan prior to commencement which includes:

- 1. Designation and organization of site personnel to carry out fire safety duties including a fire watch if applicable.
- 2. In the event of fire:
 - i. Initiating a fire warning.
 - ii. Notifying the fire department.
 - iii. Instructing site personnel on the procedures to be followed once the warning has been initiated.
 - iv. Confining, controlling and extinguishing the fire.
- 3. Measures for controlling fire hazards in and around the building
- 4. Maintenance procedure for firefighting measures required by BCFC Section 5.6.
- 5. Where construction, alteration or demolition operations occur in an existing building that is required to have a fire safety plan conforming to BCFC Section 2.8, the fire safety plan shall take into account the changes occurring to the building.

Access for Fire Fighting:

1. Unobstructed access to fire hydrants, portable extinguishers and to fire department connections for standpipe and sprinkler systems shall be maintained.

- 2. A means shall be provided to allow firefighters to perform their duties on all levels of the building.
- 3. Provisions shall be made for the use of existing elevators, hoists or lifts to assist firefighting personnel in reaching all levels of the building.
- 4. Access routes for fire department vehicles shall be provided and maintained to construction and demolition sites.
- 5. Where a construction or demolition site is fenced so as to prevent general entry, provision shall be made for access by fire department equipment and personnel.

Portable Extinguishers:

- 1. In addition to other requirements of the BC Fire Code, portable extinguishers shall be provided in unobstructed and easily accessible locations in areas.
 - a. Where hot work operations are carried out
 - b. Where combustibles are stored
 - c. Near or on any internal combustion engines,
 - d. Where flammable liquids and combustible liquids or gases are stored or handled and
 - e. Where temporary fuel-fired equipment is used.
- 2. The extinguishers required shall have a minimum rating of
 - a. 2-A,10B:C on movable equipment, and
 - b. 4-A,40B:C in all other locations

Standpipe Systems:

- 1. Where a standpipe system is to be installed in a building under construction, the system shall be installed progressively in conformance with the BC Building Code.
- 2. Where a building being demolished floor by floor is equipped with a standpipe system, the system, together with the fire department connections and vales, shall be maintained in operable condition on all stories below the one being demolished, except for the storey immediately below it. (Take into consideration freezing conditions and consult with the fire department if variance is required.)

Provision for Means of Egress:

- 1. In areas of a building where construction, alterations or demolition operations are taking place, at least one exit shall be accessible and usable at all times.
- 2. In buildings being demolished, at least one stairway shall be maintained in usable condition at all times.

Fire Warning:

1. A means shall be provided to alert site personnel of a fire and such means shall be capable of being heard throughout the building or facility.

Building Service at Demolition Sites:

- 1. Except for water supplies for fire fighting, building services shall be shut off and gas and fuel lines shall be capped in a building being demolished.
- 2. Temporary electrical installations shall be installed in conformance with the BC Safety Standards Act and pursuant regulations.

Ignition Sources:

- 1. Devices capable of producing ignition, internal combustion engines, temporary heating equipment and associated devices shall be kept at a safe distance from combustible material so as not to cause ignition
- 2. The clearance between combustible materials and temporary heating equipment, including flues, shall be in conformance with the BC Building Code and in conformance with the minimum clearances shown on certified heating equipment.

Fuel Supply, Tanks, Piping and Reservoir Installation:

1. Fuel supplies for heating equipment and internal combustion engines shall conform to CAN/CSA B139-M or the B.C. Gas Safety Regulation.

Fire Separations in Partly Occupied Buildings:

1. Where part of a building continues to be occupied, the occupied part shall be separated from the part being demolished or constructed by a fire separation having a fire resistance rating of not less than 1 hour.

Protection During Shutdown:

- 1. Where a fire protection system is provided, it shall remain operational throughout the construction, alteration or demolition area where reasonably practical.
- 2. When a portion of a fire protection system is temporarily shut down, alternative measures shall be taken to ensure that protection is maintained.

Fire Watch:

- 1. A watch, with tours at intervals of not more than 1 hour shall be provided throughout demolition sites when there are occupants in the portion of the building not being demolished.
- 2. Except where a building is provided with a fire alarm system or similar equipment, a watch, with tours at intervals of not more than 1 hour shall be provided when a portion of the building is occupied while construction operations are taking place.
- 3. Facilities shall be provided to enable the watcher to communicate with the fire department and ensure a fire warning is sounded to notify occupants.

Smoking:

- 1. Smoking shall not be permitted in areas where conditions are such as to make smoking a fire or explosion hazard.
- 2. An area where smoking is not permitted shall be identified by signs,
- 3. Where smoking is permitted, an adequate number of ashtrays shall be provided.

Storage and Use of Dangerous Goods:

- 1. Combustible and Flammable Liquid storage and use shall meet the requirements of the BC Fire Code.
- 2. Dangerous goods shall be stored and used in conformance with BC Fire Code.

Disposal of Combustible Refuse:

1. Combustible refuse in sufficient quantities to constitute a fire hazard shall be moved to a safe location.

Temporary Enclosures:

1. Fabrics and films used to temporarily enclose buildings shall be securely fastened to prevent them from being blown against heaters or other ignition sources.

Hot Surface Applications:

1. Roofing operations and other surface applications that involve heat sources and hot processes shall be considered hot works and shall conform to the requirements of the BC Fire Code Section 5.2.

Excavation:

1. Before any excavation begins ensure that all services are shut off, capped and labeled with the cooperation of the service companies involved.

For information please call
Sun Peaks Fire Rescue at 250-578-8985

In case of an emergency CALL 911