

## FIRE SAFETY PLAN FOR CONSTRUCTION, DEMOLITION AND RENOVATION TEMPLATE 2023

Email Plan to: <a href="mailto:fireprevention@kelowna.ca">fire Prevention Officer at 250-469-8801</a>



To streamline the process between the construction stage of the building and the occupancy stage of the building, the following conditions and/or provisions must be met. Prior to final occupancy being granted the following will be required:

- 1. A copy of the CAN/ULC S561 Fire alarm monitoring certificate to be mounted by dialer.
- 2. Fire Alarm Owners ULC Certificate to be mounted by the panel.
- 3. A ULC S1001 Certificate must be provided within 2 months of occupancy (if there are multiple life safety devices such as Fire alarm, Sprinkler system, generator, and elevators. \*This would not be a requirement for a building with only a fire alarm and a sprinkler.) An engagement letter must be provided by the coordinating professional acknowledging this requirement prior to occupancy.
- 4. A recessed fire department lockbox from knoxbox.com. The box should be mounted by the primary entrance at the 1.5 meter (5 foot) -1.9 meter (6.25 foot) and visible to responding crews. It is recommended to install in visible location as to deter theft and vandalism. Lockboxes must be purchased from knoxbox.com. High Buildings conforming to 3.2.6 require a model 4400 box while all other buildings require a model 3200.
- 5. A full set of keys (not including suite doors). High buildings, conforming to 3.2.6 require <u>two full sets</u> of keys. The following keys are required where applicable:
  - a. All fire alarm control panels and telephone boxes
  - b. All common floor areas,
  - c. All service rooms
  - d. All roofs access
  - e. All gates on access routes
- 6. An approved fire safety plan which must include:
  - a. A building code analysis
  - b. A summary of an alternative solutions
  - c. A list of emergency contact persons for the occupied building (not contractors)
  - d. A clean set of auto cad drawings for pre-plan create
  - e. The S1001 integrated system test
  - f. Smoke control measure used in high rise buildings and applicable testing requirements
- 7. If this building is classified as a high building and has been constructed in conformance with 3.2.6 of the Building Code, a full communications test will be required to ensure compliancy with Schedule D of Bylaw 10760.
- 8. Sprinkler riser to be labelled with lamoid signage
- 9. Smoke evacuation stairwell shall be labelled with contrasting signage.
- 10. Sprinkler valves-no higher than 7 feet
- 11. Hydraulic Data Plates to be <u>stamped</u> metal. Engraved or felt pen not accepted.
- 12. Spare heads and wrench as per NFPA 25
- 13. Copy of the NFPA 25
- 14. Compliancy with any requirements listed in The Fire Life Safety Bylaw 10760.

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## **Fire Safety Planning for Construction and Demolition Sites**

The purpose of this template is to provide the construction and demolition industry with an easy-to-follow checklist to assist them in meeting the fire safety requirements of British Columbia's Building and Fire Codes and the requirements of the City of Kelowna Fire Department. The goal is to prevent fires in and around construction and demolition sites and reduce the fire risk to life and property.

This bulletin only covers provincial building and fire code requirements. Specifically:

- British Columbia Building Code, Division B, Section 8.1 makes reference to the British Columbia Fire Code (BCFC), Division B, Section 5.6 which applies to buildings, parts of buildings, and associated areas undergoing construction or demolition operations, including renovations.
- BCFC, Division B, Section 5.6.1.3 (1) states: "...prior to the commencement of construction, alteration or demolition operations, a fire safety plan shall be prepared for the site..."

The owner or owner's authorized agent is responsible for carrying out the provisions of the BCFC, which includes establishing a work site fire safety plan to ensure that:

- Fire hazards will be controlled.
- Emergency responders will be notified of a fire emergency.
- Emergency responders will not be delayed in carrying out their duties.
- Firefighting operations will be managed effectively, without unnecessary delays.
- Designated supervisory staff will be appointed and organized to respond to fire emergencies.
- Instructions including schematic diagrams describing the type, location and operation of building fire emergency systems will be established.
- Building facilities, systems, equipment, and devices will be properly inspected and maintained.

The fire safety plan not only reflects the unique characteristics of building, operation and construction techniques (including the construction/demolition trades), but also considers the available firefighting infrastructure. For this reason, the fire safety plan must be prepared by the owner or owner's authorized agent in cooperation with the local fire department and other applicable regulatory authorities.

Prior to commencing any work at a site, it's important for the owner or authorized agent of the owner to:

- ensure they are also in compliance with the laws, regulations, and requirements of the BCBC, the BCFC, local government and other regulatory authorities; and
- contact the local fire department and other regulatory authorities such as the British Columbia Safety Authority and WorkSafeBC.



Fire safety planning and risk management assessments of the site done prior to, during and after building construction/demolition is completed, are essential to prepare for and manage fire hazards. Planning and assessment will identify and lead to methods and processes that will minimize or contain potential fire hazards. All site safety activities should be coordinated through the planning and assessment process.

BCFC provisions are included in the fire safety plan and are applied depending on the project's scope and conditions of the site, e.g. the size and type of the building and its proximity to adjacent buildings.

The British Columbia Building Code 2018, Division B, Section 8.1 reference the British Columbia Fire Code (BCFC) 2018, Division B, Section 5.6 which applies to buildings, parts of buildings, and associated areas undergoing construction or demolition operations, including renovations. This Construction Fire Safety plan shall be submitted to and reviewed by the Kelowna Fire Department prior to the commencement of any construction operations.

As per BC Fire Code, Division C, 2.2.1.1 "The owner or owner's authorized agent is responsible for carrying out the provisions of the BC Fire Code", which includes establishing a work site fire safety plan.

Building/Property Owner:	
Phone Number(s):	
Email:	
Project Contractor	
Primary Contact Person:	
Phone Number(s):	
Email:	

## EMERGENCY CONTACT INFORMATION <u>DO NOT</u> USE THE SAME CONTACT PHONE NUMBERS

Person responsible for Fire Safety	
24 hr. Emergency Phone Number:	
Email address:	
Alternate contact person:	
24 hr. Emergency Phone Number:	



Please	check	all applicable boxes or if it is not applicable identify as NA. Do not leave boxes unmarked.
		Fire hazards will be controlled in and around the building(s).
		Emergency responders will be notified of an emergency.
		Emergency responders will not be delayed in carrying out their duties safely.
		Designated supervisory staff will be appointed and organized to respond to fire emergencies and to alert all site staff.
		Staff will be instructed on confining, controlling, and extinguishing a fire.
		Instructions including schematic diagrams describing the type, location and operation of building fire emergency systems will be established.
		Building facilities, systems, equipment, and devices will be properly inspected and maintained.
1.	Emerg	ency procedures and information needed to plan for an emergency.
		ns of alerting site personnel of a fire will be provided. Such means shall be capable of being heard throughout
		uilding or facility. Special means may be required for high-rise or multiple structures.
	_	nate and backup person responsible to sound alarm (horn)
	•	nate person identified responsible to notify fire department
		personnel will be instructed on procedures following the initiation of an alarm.
		outes will be clear and visible throughout the site. At least one exit not less than 1.1-meter wide will ways accessible and usable.
		ildings being demolished, at least one stairway not less than 1.1-meter wide will be always tained in usable condition.
	The r	muster point (meeting place) will be identified. Site personnel will be educated on its location.
	Perso	onnel will be assigned to meet the fire department to give location of fire or injury.
2.	Traini	ng of site personnel on evacuation procedures
	Site c	prientation will be provided.
	Regul	ar meetings will include fire safety component.
3.	Assign	ned site personnel must be responsible to install and maintain fire safety duties:
		olling combustibles on the site and around the buildings.
		ving excess pallets, garbage/waste material and other combustibles on a regular basis.
	Maint	caining separation of combustibles from open flames.
	Maint	taining unobstructed access routes for fire department apparatus and to fire hydrants.
	_	nating and maintaining at least one exit from every floor.
	Mahia	los /dolivory trucks will not obstruct fire department access to the site or to adjacent buildings



	Signs shall identify areas where "no smoking is permitted".  Fire Department
	Smoking shall only be permitted 3 meters from building or part of building under construction for all multi- floor C and D occupancies 6 floors or less.
4.	Site Identification
	The civic address sign will be provided and visible from the street. Signage shall on written on contrasting background. (ie. Black on white)
	Signage will be provided on each floor in the primary exit each identifying the floor level and the site address for all multi floor C and D occupancies.
5.	Firefighting services-Hydrants, Siamese Connection, Sprinkler, Access Route"
	No combustible materials will be on site prior to adequate water supply being provided.
	No combustible construction will occur prior to adequate firefighting water being provided.
	Hydrants will be installed, tested, numbered, and activated <u>prior</u> to the start of construction.
	New hydrant information will be submitted to the City of Kelowna prior to construction.
	Hydrants will be clearly identified and will be always visible.  Firefighter access routes to the building will be provided and maintained.
	Where standpipes are required to be installed in a building under construction, the system shall be installed
	progressively, in conformance with the BC Building Code. The standpipe shall not be more than one floor
	below the highest forms.
	Where a building equipped with a standpipe system is being demolished, the standpipe system will be
	maintained in operable condition below two floors below the area being demolished. Fire Department to
	be consulted.
	Exterior signage will be provided identifying the fire department connection location. The letters "FDC" shall
	be posted on signage not less than 48 inches by 48 inches. Signage will be posted in close proximity to the connection and will be visible form the street.
	Firefighting services (standpipes, hydrants) will be maintained and accessible.
	Submitted drawings provided to the fire department will show the location of firefighting systems as
	they become operational?
6.	Fire Extinguishers:
	Movable equipment (i.e. zoom boom, forklift) will be provided with a minimum 2-A:30-B:C extinguisher.
	Areas throughout the site shall be provided with 4-A:40-B:C extinguishers.
	Extinguishers shall be adjacent to all hot works operations.
	Extinguishers will have received annual service.
	Extinguisher will be located so that the travel distance per floor will not exceed 75 feet.

7.	Hot Works Operations:	



	Area will be clear of flammable and combustible materials.	Fire Department
	A fire watch will be assigned during a hot works operation and for 60 minutes af	ter its completion.
	A final inspection of the hot works area will be conducted 4 hours after complet	ion.
	Will be performed by trained personnel only.	
	An appropriate rated fire extinguisher will always be present.	
	Appropriate ventilation will be provided.	
	Hot bitumen kettles will have appropriate fire extinguishers, be operated by tra- located away from combustible materials	ned personnel, and will be
8.	Flammable and Combustible Storage:	
	Flammable and combustible liquids will be properly stored & handled as per	BCFC.
	Flammable and combustible liquids <u>will not</u> be stored within an intermodal unless such container(s) has been reviewed by an engineer and vented apprending engineered letter must be provided for such venting.	• • •
	Intermodal shipping containers approved for storage of flammable combust placarded in accordance with BC Fire Code requirements.	tible liquids must be
	Propane cylinders not in use will <u>always</u> be stored and secured outside the b	ouilding.
	Compressed gases will be properly stored, handled and used in and around the	building.
	Compressed Gases will not be stored within 1 meter of an exit.	
	Combustible materials will be stored at least 3 meters from Compressed gas an	d propane.
	Propane will not be stored within 6 meters of flammable/combustible liquids.	
	Propane will not be stored within 3 meters of compressed gases.	
	Stored materials will be secured, vented and protected from vehicular traffic arroute.	d 3 meters from egress
	Containers will have proper signage/placards?	
	An updated list of dangerous goods (MSDS) (WHIMIS) will be maintained.	
9.	Electrical Installations and Petroleum Gases:	
	All electrical installations, storage, and use of liquified petroleum gases will me the Safety Standards Act and their pursuant regulations.	et the requirements of
10	). Security:	
	What kind of on-site security is provided? (locked gate, guard, CCTV etc.)	
	Contact information for security:	
	Site will be accessible 24 hours per day for the fire department.	

	Security personnel have knowledge of their role in the site safety plan.  Kelowna  Fire Department
11	Building Service Shut-Off, Tank Removal and Fire Separations for Demolition Sites:
	Gas and fuel lines will be shut off and capped.  Temporary electrical installations will be installed in conformance with the BC Safety Standards Act and pursuant regulations.  Removal of any piping, tanks or reservoirs shall meet the requirements of the BC Fire Code, applicable Environmental regulations and a permit shall be obtained through the Kelowna Fire Department as per the Fire and Life Safety Bylaw 10760.
12	. Fire Separations in Partly Occupied Buildings
	Where part of a building continues to be occupied, the occupied part will be separated from the part being demolished or constructed by a fire separation having a fire-resistance rating of not less than 1 hour. Except where a fire alarm is operational, a fire watch conducted every hour will be conducted throughout the construction/demolition site where portions of the building are occupied.
13	. Protection of Adjacent Buildings:
	BC Fire Code Div. B 5.6.1.2: "Protection shall be provided for buildings and facilities that could be exposed to a fire originating from this building site, parts of this building site, facilities and associated areas undergoing construction and alteration of demolition operations". The Kelowna Fire Department may require an engineer's report and/or a fuel load analysis to determine whether the new construction complies with BCFC requirements
	This site does not require protection for adjacent buildings  This site could pose a threat to adjacent buildings. Describe protection measures:
14	A clean building site diagram <u>must</u> be provided. Attach diagram at the end of this document. Copies of blueprints will not be accepted. Drawings containing information not directly related to the fire safety of this building (i.e., elevations) will not be accepted.
	A site diagram has been provided. The onsite diagram shall include:  a. Muster point
	b. Hydrant location(s)
	c. Fire protection location
	d. Exit paths
	e. Service rooms
	f. Plans for each floor area

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