

Winnipeg Fire Department Fire Prevention Branch

Fire Safety Plan for Construction, Renovation and Demolition Sites

Manitoba Fire Code 2010

Manitoba Fire Code Division B, Section 5.6.1.1:

This Section applies to Fire Safety for buildings, parts of buildings, facilities, adjacent buildings or facilities, and associated areas undergoing construction, alteration or demolition operations.

Manitoba Fire Code Division B, Section 5.6.1.3.(1): Prior to the commencement of construction, alteration or demolition operations, a Fire Safety Plan shall be prepared for the site.

The Winnipeg Fire Department, as the local authority having jurisdiction, requires fire safety plans to be submitted and approved prior to the start of the construction of the approved permit <u>of any combustible structure that is regulated by Part 3 of the Manitoba Building</u> <u>Code (MBC) four stories, or greater, in height.</u> The submitted fire safety plan shall include an expected start date.

This requirement does not relieve the builder of the requirement for a fire safety plan for all other construction, alteration or demolition operations as set out in the Manitoba Fire Code.

The Construction Site Fire Safety Plan

Fire safety plan will be site specific and may be reviewed at any time by the authority having jurisdiction (Winnipeg Fire Department, Fire Prevention Branch).

The owner, developer or contractor responsible for a construction or demolition site is required to develop an acceptable fire safety plan.

The fire safety plan should be reviewed and updated as the construction site progresses. The Contractor, as a representative of the owner, is responsible for the fire safety plan until occupancy.

A Fire Safety Plan:

- Shall be maintained on site throughout construction or demolition, including renovations for all projects.
- > Shall conform to the requirements of the Manitoba Fire Code.

This information is being provided for the construction industry as an aid in preventing injury and fires in and around construction sites and to address life and property fire safety issues.

Keeping in mind it is the **sole responsibility of the owner** or representatives of the owner to:

- > Be aware of all regulations within the jurisdiction.
- Carry out or make provisions to adhere to the various codes and standards applicable to their project or business.

For more information and to submit your Fire Safety Plan contact:

Winnipeg Fire Department Fire Prevention Branch 2nd Floor, 185 King Street Winnipeg, MB R3B 1J1 (204)986-8200 FireInspections@winnipeg.ca

A Fire Safety Plan should include, but is not limited to, the following information:

General information

- > Permit number.
- ➢ Building name.
- ➢ Site address.
- Description of project.

Emergency after hours contact information

Site Security

- Construction site security is necessary to prevent arson related fires. Work sites frequently attract trespassers. Arson is a frequent cause of construction site fires.
- Site security personnel should be trained in the provisions of the fire safety plan. They should have clear instructions regarding what to do in the event of an emergency.

Emergency Procedures to be used in the event of an emergency

A building under construction without functional fire protection equipment is at its most vulnerable stage; therefore, it is imperative to initiate emergency response at the earliest possible opportunity.

- What are your provisions for initiating emergency evacuation procedures on this site, and how will you notify emergency responders (e.g., sounding of air horn 3 blasts, activating fire alarm, calling 911, etc.). Provide a list of instructions for site personnel to follow when an alarm is sounded.
- Exit routes are provided with clearly identified signage to indicate egress from floor areas/building.
- > Specify designated gathering location (muster point).
- Maintain a list of personnel on site, updated and current you should know who is on site.

- > Person assigned to meet the Winnipeg Fire Department and give information such as:
 - Where is the fire or injury located on site?
 - Is everyone on site accounted for?
- > Directions and training for confining, controlling and extinguishing a minor fire.

Training of site personnel on evacuation procedures

- > Site orientation (familiarize on-site personnel and visitors on emergency procedures).
- > Regular site fire safety meetings incorporated into regular safety meetings.
- > Simulated fire drills, as applicable and warranted.
- > Include a "fire watch" if applicable.

Make provisions for fire prevention activities specific to your site such as:

- Control of combustibles on the site and around the buildings, including removal of excess garbage materials on a regular basis and general housekeeping.
- Maintain separation of combustibles from open flame devices. Ensure that combustible hoarding is secured to prevent contact with the heaters.
- Maintain clear, unobstructed access for Winnipeg Fire Department apparatus to building(s) and to fire fighting services such as hydrants and fire department connections, i.e., sprinkler and/or standpipes.
- Parking of vehicles or delivery trucks, directed so as not to obstruct Winnipeg Fire Department access to the site and buildings.
- Maintenance and operation of exits from every floor.
- Smoking shall not be permitted in areas where conditions are hazardous or potential of ignition exists.
- The end of day fire inspection of the entire project to identify and rectify any fire safety hazard, prior to the building being unoccupied for the night. This is in addition to any other fire hazard inspections required.

Fire Fighting Services – unobstructed hydrant, siamese, sprinkler, temporary access route, standpipe

Firefighting services that are installed, tested and activated at the start of construction. These must be maintained and accessible for fire fighters at all times.

- > Hydrants (maintain 2 meter access around hydrants).
- > Standpipes (existing and new are required to be installed or removed progressively).
- > Siamese connections with clear signage.
- Emergency access routes.

The site is properly addressed, and the sign is visible and legible to the emergency crews.

Road access for firefighting is required in accordance with MFC 5.6.1.4. This road must be designed to support the potential loads imposed by firefighting equipment (38, 500 kg) and have a clear width not less than 6 meters.

Make provision for supplying and installing Fire Extinguishers

As construction proceeds, the required number of fire extinguishers changes. The need for additional fire extinguishers must be monitored on an ongoing basis and provision made for their acquisition and installation.

- > Ensure sufficient numbers and sizes.
- > Ensure they are all currently serviced and tagged.
- > Mounted in visible and accessible locations. Proper signage where required.

Hot Works

Ensure all hot works activities are conducted in compliance with section 5.2 of the Manitoba Fire Code.

Flammable and combustible liquids and compressed gas storage.

The fire safety plan should make provision for the use and storage of flammable and combustible liquids and compressed gases.

- > Compressed LPG Gases must be handled and stored in compliance with:
 - CAN/CSA- B149.1. "Natural Gas and Propane Installation Code"
 - CAN/CSA- B149.2, "Propane Storage and Handling Code"
 - The Manitoba Fire Code.
- Flammable liquids must be stored and handled in compliance with Parts 4 and 5 of the Manitoba Fire Code.
- Refueling of gasoline powered tools and equipment shall be conducted in a designated area away from combustible materials, egress routes and the structure.

Site and Building Diagrams

- Diagram of site.
- Diagram of each floor area.

Please note on diagrams:

- Muster point(s).
- Location of nearest hydrant(s).
- Location of fire protection equipment.
- Exit paths.
- Location of compressed gases for heating.
- Location of flammable liquid storage.

The listed information is provided only as a guideline to assist in the development of your fire safety plan.

Excellent construction site fire safety information can be found in:

- <u>Construction Site Fire Safety</u>, April 2015, Canadian Wood Council and the University of the Fraser Valley.
- Fire Safety During Construction for Five and Six Story Wood Buildings in Ontario: A Best Practice Guideline, May 2016, Province of Ontario.