

ONTARIO FIRE CODE

FIRE SAFETY MAINTENANCE & EMERGENCY PLANNING REGULATIONS

PREPARED BY

CrownFire

Your safety is our business!

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To assist owners and occupants this pamphlet lists the fire safety equipment maintenance requirements that are found in the Ontario Fire Code for all existing buildings.

EXCERPTS FROM THE ONTARIO FIRE CODE

Article 1.1.1.1.

Unless otherwise specified the owner is responsible for the carrying out the provisions of this code.

Article 1.1.1.2.

Where tests, repairs or alterations are made to fire protection installations, including the sprinkler and standpipe systems, a procedure of notification shall be established, and the procedure shall include notifying the fire department and the building occupants where necessary for safety in the event of a fire emergency.

Article 1.1.2.1.

A written record shall be kept of all tests and corrective measures for a period of two years after they are made, and the record shall be made available upon request to the Fire Chief Official.

Article 6.3.2. Check, Inspect and Test

The owner shall ensure that annual tests or inspections and service of fire alarm systems is performed by certified persons.

DEFINITIONS:

Check means visual observation to ensure the device or systems is in place and is not obviously damaged or obstructed.

Inspect means physical examination to determine that the device or system will apparently perform in accordance with its intended function.

Test means operation of device or system to ensure that it will perform in accordance with its intended function.

Owner means any person, firm or corporation controlling the property under consideration.

Chief Fire Official means the municipal Fire Chief or a member of the Fire Department designated by him or, where there is no fire department, such assistance to the Fire Marshall as the Fire Marshall may designate for the municipality or territory without municipal organization.

Supervisory Staff means those occupants of a building who have some delegated responsibility for the fire safety of other occupants under the fire safety plan and may also refer to the local fire department where it assumes these responsibilities.

FIRE SAFETY MAINTENANCE REQUIREMENTS DAILY

1. **Check** Exit signs to ensure they are in a clean and legible condition 2.7.3.1.
2. **Check** Exit lights to ensure they are in illuminated and in good repair 2.7.3.2.
3. **Check** Torches, regulators and welding equipment for defects 5.17.2.6.
4. **Check** Fire alarm system AC power lamp and trouble light. 6.3.2.1.
5. **Check** Central alarm and control facility 6.3.2.2.
6. **Check** Tank Heating equipment, enclosure and water temperature for fire protection water tanks during freezing weather 6.6.2.2. & 6.6.2.3. & 6.6.2.4.
7. **Check** Temperature of fire pump rooms during freezing weather 6.6.3.2.

WEEKLY

1. **Check** hoods, filters and ducts in ventilation systems subject to accumulation of combustible deposits. 2.6.1.4.
2. **Check** that sprinkler system control valves are open. 6.5.3.1.
3. **Check** that dry pipe sprinkler system air pressure is being maintained. 6.5.3.3.
4. **Inspect** valves controlling fire protection water supplies. 6.6.1.2.
5. **Check** the water level and air pressure for fire protection system pressure tanks 6.6.2.12.
6. **Inspect** relief valves on air and water supply lines of fire protection system pressure tanks 6.6.2.13.
7. **Check** water level in fire pump reservoirs 6.6.3.1.
8. **Inspect** and operate all fire pumps* 6.6.3.3. & 6.6.3.4.

Check all components of emergency generator system and operate the generator set under at least 50% of the rated load for 30 minutes * 6.7.1.1.

Test maintain emergency power system as per CSA-C282. 6.7.1.2. to 6.7.1.5.

MONTHLY

1. **Inspect** all doors in fire separations 2.2.3.4.
2. **Inspect** and test emergency lighting system, batteries, units and lamps.* 2.7.3.3.
3. **Conduct** fire alarm drills for supervisory staff in day care centers

- and health care facilities 2.8.3.2.
- 4. **Test** all, welding and cutting equipment.* 2.8.3.2.
- 5. **Inspect** all portable fire extinguishers (as per N.F.P.A. 10-1990) 6.2.7.2.
- 6. **Test** the fire alarm system and check all components including standby power batteries.* 6.3.2.1.
- 7. **Test** the voice communication system.* 6.3.2.3.
- 8. **Inspect** all fire hose cabinets. 6.4.2.1.
- 9. **Test** the sprinkler alarm.* 6.5.5.2.
- 10. **Inspect** the water level in gravity fire. 6.6.2.8.

EVERY 2 MONTHS

- 1. **Test** sprinkler system central station connections.* 6.5.5.7.

EVERY 3 MONTHS

- 1. Conduct a fire alarm drill for supervisory staff in all highrise buildings. 2.8.3.2.
- 2. **Test** all fire safety devices in high buildings as defined by subsection 3.2.6. of the Building Code. 7.2.1.1.
- 3. **Test** fire fighter's elevator for proper operation 7.2.2.1.
- 4. **Inspect** the priming water level for dry pipe systems 6.5.4.3.

EVERY 6 MONTHS

- 1. **Inspect** fire protection systems for commercial cooking equipment.* 2.6.1.13.
- 2. Conduct total evaluation fire alarm drills in schools attended by children (to be conducted 3 times in the spring term and 3 times in the fall term) 2.8.3.2.
- 3. **Test** gate valve supervisory switches and other sprinkler and fire protection system supervisory devices.* 6.5.5.7.
- 4. **Check** and clean crankcase, breathers, governors and linkages on emergency generator sets. 6.7.1.1.
- 5. **Inspect** and maintain special extinguishing systems 6.8.1.1.
- 6. **Inspect** elevators in an elevator shaft that is intended for use as a smoke shaft and ensure they function as designed under an alarm condition.*

ANNUALLY

- 1. **Inspect** all fire dampers and fire stop flaps. 2.2.3.7.
- 2. **Inspect** all chimneys, flues and flue pipes. 2.6.1.5.
- 3. **Inspect** disconnect switches for mechanical air conditioning and ventilation systems. 2.6.1.8.
- 4. Clean chimney spark arrestors. 2.6.3.3.
- 5. Conduct fire alarm drills for supervisory staff in all buildings which have a fire alarm system. 2.8.3.2.
- 6. **Check** smoke alarms shall be maintained in operation condition by the owner. 6.3.3.2.(1)
- 7. Conduct maintenance procedures for fire extinguishers. 6.2.7.1.
- 8. **Test** fire alarm system by qualified personnel acceptable to the Chief Fire Official. (as per CAN/ULC S536 M97).* 6.3.2.1.
- 9. Conduct a complete test of the voice communication system by qualified personnel acceptable to the Chief Fire Official.* 6.3.2.3.
- 10. **Inspect** all standpipe hose valves 6.4.2.4.
- 11. Remove and re-rack all standpipe hose. 6.4.2.5
- 12. **Inspect** all exposed sprinkler system pipe hangers. 6.5.3.2.
- 13. **Check** all sprinkler heads. 6.5.3.5.
- 14. **Inspect** dry pipe water priming level. 6.5.4.3.
- 15. **Inspect** fire department connections 6.5.4.4.
- 16. Conduct sprinkler, system alarm test using the most hydraulically remote test connection.* 6.5.5.3.
- 17. Conduct a dry pipe system trip test.* 6.5.5.4.
- 18. Conduct a main drain flow test of the sprinkler system water supply.* 6.5.5.5.
- 19. **Inspect** fire protection water supply tanks. 6.6.2.1.
- 20. **Inspect** the cathodic protection of steel fire protection water tanks. 6.6.2.7.
- 21. **Inspect** all parts of gravity fire protection water tank. 6.6.2.9.

- 22. Conduct a fire pump flow test. 6.6.3.5.
- 23. **Inspect** and flow test all fire hydrants. 6.6.5.1. & 6.6.5.7.
- 24. Conduct general engine and generator maintenance and engine tune-ups for emergency generator sets. 6.7.1.1.
- 25. **Inspect** closure at the top of smoke shaft. 7.2.3.1.
- 26. **Inspect** controls for air-handling used for venting. 7.2.3.1.
- 27. **Test** Smoke control equipment 7.3.1.1.

EVERY 2 YEARS

- 1. **Check** all steel fire protection tanks for corrosion. 6.6.2.5.
- 2. **Inspect** all fire protection water supply tanks, connected to a non portable water supply, for the accumulation of sediment. 6.6.2.6.
- 3. **Check** valve adjustments and torque heads for emergency generator engines. 6.7.1.1.

EVERY 3 YEARS

- 1. Clean and service injector nozzles and check valve adjustments for emergency generator diesel engines. 6.7.1.1.

EVERY 5 YEARS

- 1. Hydrostatically **test** carbon dioxide and water type extinguishers.* 6.2.7.1.
- 2. Hydrostatically **test** dry standpipe system.* 6.4.3.6.
- 3. **Inspect** fire protection water tank, connected to a portable water supply, for accumulation of sediment. 6.6.2.6.
- 4. **Check** insulation of generator windings. 6.7.1.1.
- 5. **Inspect** closures in vent openings into smoke shafts. 7.2.3.1.

EVERY 6 YEARS

- 1. Replace the extinguishing agent in dry chemical fire extinguishers. 6.2.7.1.

EVERY 12 YEARS

- 1. Hydrostatically **test** dry chemical and vapourising liquid fire extinguishers.* 6.2.7.1.

EVERY 15 YEARS

- 1. **Inspect** dry pipe sprinkler systems for pipe obstruction - flush the system when necessary. 6.5.4.2.

AS REQUIRED

- 1. **Check** doors in fire separations to ensure they are closed. 2.2.3.5.
- 2. **Check** lint traps in laundry equipment. 2.4.1.5.
- 3. Ensure streets, yards and private roadways that are provided for fire department access are kept clear. 2.5.1.5.
- 4. **Check** corridors and ensure they are maintained free of obstruction. 2.7.1.7.
- 5. Clean any combustible dust producing operations. 5.10.1.2.
- 6. Clean residue in spray booths. 5.12.7.2.
- 7. Vacuum clean and dust any dry powder finishing operations. 5.14.6.8.
- 8. **Inspect**, clean and maintain all industrial ovens and associated ductwork. 5.18.5.1.
- 9. **Inspect** sprinkler system auxiliary drains. 6.5.4.1.
- 10. Maintain smoke control equipment in a manner to ensure satisfactory operation. 7.3.1.1.
- 11. **Inspect** and **test** all equipment used in conjunction with smoke control measures.* 7.3.1.2.
- 12. **Inspect** and **test** all equipment used in conjunction with smoke control systems.*

* THESE ARTICLES REQUIRE WRITTEN RECORDS TO BE MAINTAINED (SEE ARTICLE 1.1.2.1.).

NOTE: WHENEVER A DEFECT OF DEFICIENCY IS DISCOVERED IN ANY FIRE SAFETY EQUIPMENT, AS A RESULT OF THESE MAINTENANCE REQUIREMENTS, CORRECTIVE ACTION MUST BE TAKEN IMMEDIATELY, BY THE OWNER, OR HIS AUTHORIZED AGENT.

EMERGENCY PLANNING

The building owner is responsible for preparing a fire safety plan, acceptable to the Chief Fire Official, and appointing supervisory staff to carry out the same in all public assembly buildings and all buildings equipped with a fire alarm.

Section 2.8 of the Ontario Fire Code must be referred to in order to get the exact regulations as it applies to your building.

SECTION 2.8

SUBSECTION 2.8.1. GENERAL

2.8.1.1. The requirements of this Section apply to every building containing a Group A or B occupancy, and to every building required by the Building Code to have a fire alarm system.

2.8.1.2.(1) Supervisory staff shall be instructed in the fire emergency procedures as described in the fire safety plan before they are given any responsibility for fire safety.

(2) It is not necessary that the supervisory staff be in the building on a continuous basis, but they shall be available on notification of a fire emergency to fulfil their obligation as described in the fire safety plan.

SUBSECTION 2.8.2. FIRE SAFETY PLAN

2.8.2.1. (1) A fire safety plan acceptable to the Chief Fire Official which includes the following measures shall be prepared in buildings regulated by Article 2.8.1.1.:

- (a) the emergency procedures to be used in case of fire including sounding the fire alarm, notifying the fire department, provisions for access for firefighting, instructing occupants on procedures to be followed when the fire alarm sounds, evacuating endangered occupants and confining, controlling and extinguishing the fire.
- (b) the appointment and organization of designated supervisory staff to carry out fire safety duties.
- (c) the instruction of supervisory staff and other occupants so that they are aware of their responsibilities for fire safety.
- (d) the holding of fire drills.
- (e) the control of fire hazards in the building.
- (f) the maintenance of building facilities provided for the safety of occupants, and

(g) the provisions of alternative measures for safety of occupants during any shutdown of fire protection equipment and systems or part thereof.

2.8.2.2.: In institutional occupancies, there shall be sufficient supervisory staff to carry out the duties as required in the fire safety plan.

2.8.2.3.: Schematic diagrams acceptable to the Chief Fire Official shall be prepared and maintained showing the type, location and operation of all building fire emergency systems.

2.8.2.4. (1) In buildings within the scope of Subsection 3.2.6. of the building code, the fire safety plan shall, in addition to the requirements of Sentence 2.8.2.1. (1), include:

- (a) the instruction of supervisory staff on the use of the voice communication system.
- (b) the procedures for use of elevators and for evacuation of non-ambulatory occupants.
- (c) the action to be taken by supervisory staff in initiating any smoke control or other fire emergency systems installed in a building in the event of fire until the fire department arrives, and
- (d) the procedures established to facilitate fire department access to the building and fire location within the building.

2.8.2.5.: A record including schematic diagrams of the fire emergency systems installed in buildings within the scope of Subsection 3.2.6. of the Building Code, shall be maintained at the central alarm and control facility, and such records shall include instructions for the supervisory staff and fire department for the operation of the systems.

2.8.2.6.: A copy of the fire emergency procedures and other duties for supervisory staff as laid down in the fire safety plan shall be given to all supervisory staff.

2.8.2.7.: A minimum of 1 copy of the fire safety plan shall be prominently posted and maintained on each floor area.

GUIDELINES FOR THE PREPARATION OF FIRE SAFETY PLANS ARE AVAILABLE FROM THE FIRE PREVENTION OFFICE.