



CHELMSFORD FIRE DEPARTMENT
FIRE PREVENTION OFFICE

50 Billerica Road – Chelmsford, MA 01824
(978) 251-4288

"Smoke Detectors Save Lives"



CONSTRUCTION SITE SAFETY AND FIRE PROTECTION REQUIREMENTS

Revision v3

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All persons performing construction work in the Town of Chelmsford are advised that the Chelmsford Fire Department requires compliance with 527 CMR 1 Ch. 16 and NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations.

1. General Requirements

- 1.1. Contractors must refer to Chelmsford Fire Prevention Commercial Plan submittal guidelines.
- 1.2. Job sites and construction, alteration, and demolition operations must comply with NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*, 527 CMR 1.00, *Massachusetts Comprehensive Fire Safety Guide*, and this guide.
- 1.3. A plan for a fire safety program shall be developed prior to the start of construction operations. Essential items to be emphasized shall include
 - 1.3.1. Good housekeeping
 - 1.3.2. On-site security
 - 1.3.3. Installation of new fire protection systems as construction progresses
 - 1.3.4. Preservation of existing systems during demolition for as long as possible
 - 1.3.5. Organization and training of an on-site fire brigade
 - 1.3.6. Development of a pre-fire plan with the Fire Prevention Office
 - 1.3.7. Rapid communication
 - 1.3.8. Consideration of special hazards resulting from previous occupancies
 - 1.3.9. Protection of existing structures and equipment from exposure fires resulting from construction, alteration, or demolition operations.
- 1.4. No smoking shall be permitted in any building under construction or within 50 feet of any building under construction.

2. Required Permits

- 2.1. Permits obtained through the Chelmsford Fire Prevention Office are required for the following:
 - 2.1.1. Torch applied roofing operations
 - 2.1.2. Placement of a tar kettle on a roof
 - 2.1.3. Use of salamanders and temporary heating equipment
 - 2.1.4. Hot work, including welding, cutting, and grinding operations
 - 2.1.5. Installation/Modification of any fire protection system
- 2.2. Permits must be obtained at least two days prior to the placement of a tar kettle on a roof.
- 2.3. The Chelmsford Fire Department reserves the right to require a paid firefighter detail for situations involving but not necessarily limited to hot work.
- 2.4. VIOLATION OF ANY PROVISION OF NFPA 241, 527 CMR 1.00, OR THIS GUIDE SHALL BE SUBJECT TO FINES OF UP TO \$1000 PER MGL Ch. 148A

3. Egress and Site Access

- 3.1. Adequate escape facilities for construction workers or occupants shall be provided for and maintained at all times
- 3.2. Fire department access roads provided in accordance with 527 CMR 1.00 Ch. 18.2.3 shall be provided at the start of a project and shall be maintained throughout construction

4. Hazard Mitigation

4.1. Temporary Heating Equipment

4.1.1. All temporary heating equipment shall be listed and shall be installed, maintained, and used in accordance with manufacturer's instructions. All exhaust vents for temporary heaters shall be maintained at least 18 inches from combustibles.

4.1.2. Tarps, canvas, or similar coverings shall be securely fastened to prevent ignition of the covering from any source of heat and to prevent contact with any temporary heater.

4.1.3. Where more than 42 lbs. capacity of LP gas is to be on site at any one time, a permit for the storage of LP gas shall be required. In no case shall more than one days' supply of fuel be stored inside the building in the vicinity of the temporary heating equipment.

4.2. Carbon monoxide testing and air quality monitoring shall be provided for.

4.2.1. Work in confined spaces shall require monitoring for oxygen levels.

4.2.2. Mechanical ventilation shall be provided for all spaces where natural ventilation is insufficient to provide at minimum 16% oxygen by volume.

4.3. Housekeeping and Waste Disposal

4.3.1. Trash and combustible waste shall be removed from the structure and its immediate vicinity at the end of each work shift or more frequently as is required to maintain a safe operation.

4.3.2. No burning of rubbish or construction debris is permitted.

4.3.3. Trash Chutes:

4.3.3.1. *If a trash chute is provided for as part of the construction process, a trash chute safety plan shall be submitted to and approved by the Fire Prevention Office.*

4.3.3.2. *Not less than one temporary automatic sprinkler head shall be provided within a recess near the top of a combustible trash chute.*

4.3.3.2.1. The sprinkler must be supplied with a minimum ¾" supply.

4.3.3.2.2. The sprinkler head shall be protected against freezing and physical damage.

4.3.4. A metal waste can with a self-closing lid shall be provided for all waste materials, including wood dust and rags.

4.4. Flammable and Combustible Liquids and Flammable Gases

4.4.1. Storage of flammable and combustible liquids shall be in accordance with 527 CMR 1.00 Ch. 66. Storage areas shall be posted with markings in accordance with NFPA 704, *Standard System for the Identification of the Hazards of Materials for Emergency Response*. **STORAGE AREAS MUST BE CONSPICUOUSLY POSTED AS "NO SMOKING" AREAS.**

4.4.2. Storage of flammable gases shall be in accordance with 527 CMR 1.00 Ch. 69 and NFPA 54, *National Fuel Gas Code*.

4.4.3. Open flames and smoking shall be prohibited in flammable and combustible liquid and flammable gas storage areas.

5. Fire Protection

5.1. Fire Protection Manager

5.1.1. The owner shall designate a person who shall be responsible for the fire prevention program and who shall ensure that it is carried out to completion. The Fire Protection Manager shall have the responsibility of establishing a pre-fire plan with the Chelmsford Fire Department.

5.1.2. The pre-fire plan shall be established before construction commences, and shall be updated as necessary.

5.1.3. The manager shall be responsible for ensuring that adequate numbers of fire protection devices are available and in service.

5.1.4. A weekly self-inspection program shall be established. All records are subject to inspection at any time by CFD personnel.

5.2. Pre-Fire Planning

5.2.1. The Pre-Fire Plan shall include at minimum:

- 5.2.1.1. *Provisions for emergency reporting,*
- 5.2.1.2. *Fire department site access,*
- 5.2.1.3. *Location of fire extinguishers on site,*
- 5.2.1.4. *Status of fire protection and detection systems,*
- 5.2.1.5. *Hazardous materials stored on site,*
- 5.2.1.6. *Hazardous processes in use on site,*
- 5.2.1.7. *Construction safety hazards.*

5.3. Site Access

5.3.1. If a site access gate is to remain locked, a Knox padlock keyed to Chelmsford Fire Department specifications shall be installed and interlocked with contractor locks.

5.3.2. A Knox Box shall be required if it is determined by Fire Prevention that access to any part of the building/site will prevent an undue hardship on responding personnel.

5.3.3. At least one continuous stairway shall be available that serves all floors of the building.

5.4. Fire Protection Devices

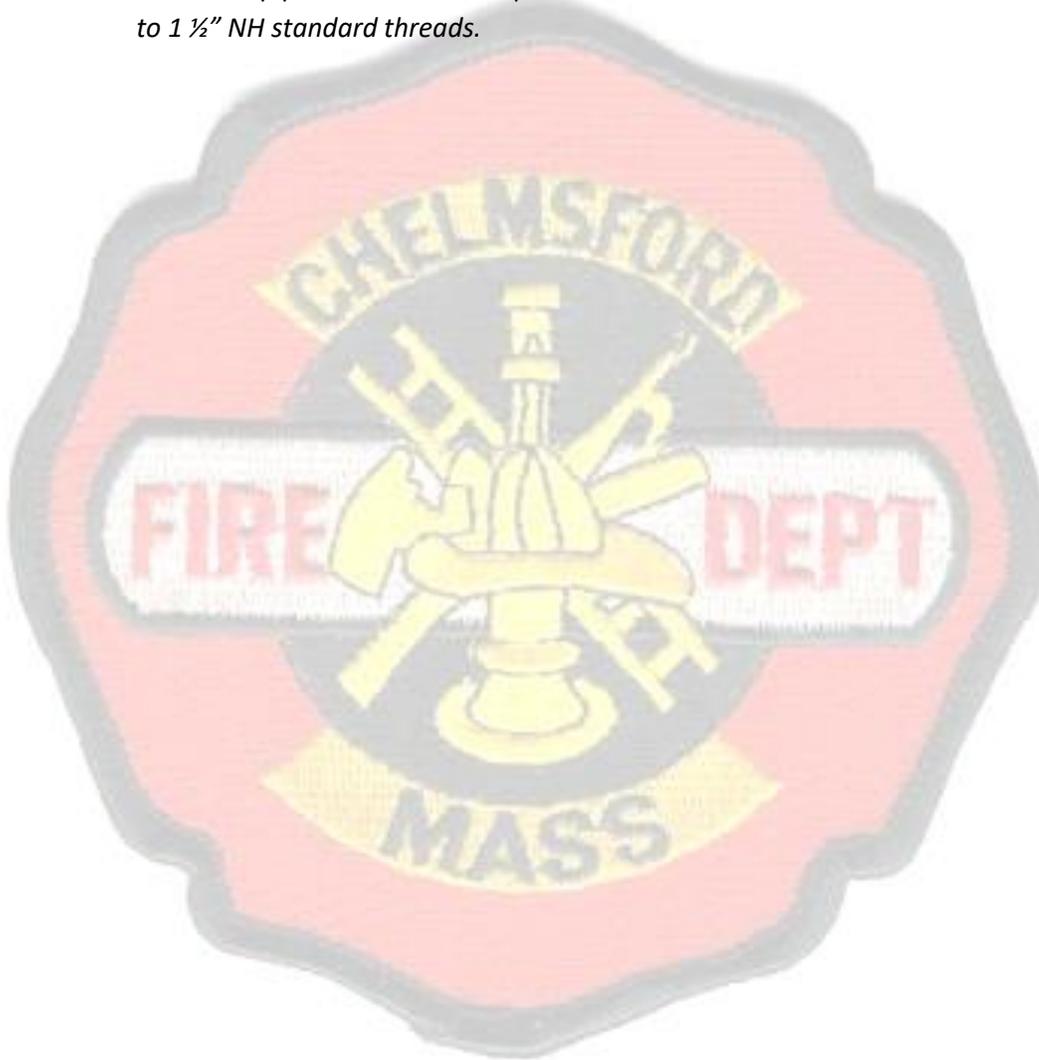
5.4.1. Portable fire extinguishers shall be provided in accordance with NFPA 10 and 527 CMR 1.00 Ch. 13.6.

- 5.4.1.1. *Extinguishers shall be placed in a conspicuous location.*
- 5.4.1.2. *Extinguishers must have a current service tag attached from a licensed Massachusetts fire protection provider.*

5.4.2. Standpipes and Sprinkler systems shall be placed in service as soon as is practical.

- 5.4.2.1. *Standpipes, where required, shall be placed in service as the building is being constructed. Refer to CFD Automatic Sprinkler Requirements*

- 5.4.2.2. *In new buildings and buildings undergoing significant Level III renovation where standpipes are required by the MSBC, a dry, manual, temporary standpipe shall be installed with outlets at one location on every floor.*
- 5.4.2.3. *In lieu of a temporary standpipe, the permanent standpipe may be installed which functions as a temporary standpipe.*
- 5.4.2.4. *The location of all Fire Department Connections, whether permanent or temporary in nature, shall be approved by the Fire Prevention Office.*
- 5.4.2.5. *Standpipes outlets shall be provided with 2 ½" NH thread outlets with reducers to 1 ½" NH standard threads.*





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Acknowledgement of Receipt

I, _____, a representative of

Construction Firm

acknowledge that I have received a copy of the Chelmsford Fire Prevention policy for Construction Site Safety and Fire Protection Requirements.

Signature

Date

Fire Prevention Office

Date