

# City known as the Town of GREENFIELD, MASSACHUSETTS

## DEPARTMENT OF INSPECTIONS AND ENFORCEMENT

### MARK A. SNOW Inspector of Buildings

Town Hall • 14 Court Square • Greenfield, MA 01301 Phone 413-772-1404 • Fax 413-772-1566 MarkS1@greenfield-ma.gov • www.greenfield-ma.gov

#### **INFORMATIONAL GUIDE FOR EXISTING AND NEW FIRE PROTECTION SYSTEMS:**

As result of recent changes (January 1, 2015) to 527 CMR Massachusetts Fire Prevention regulations, this guide has been created to inform property owners, installers/contractors, and registered design professionals of the required permitting, inspections, testing, and maintenance for new and existing fire protection systems.

<u>New and Existing Fire protection systems:</u> are regulated by 780 CMR Massachusetts State Building Code 8<sup>th</sup> edition. All fire protection systems, i.e. fire sprinkler, alternative automatic fire extinguishing system, fire alarm & detection systems shall be designed, installed, and maintained in accordance with 780 CMR, applicable referenced NFPA Standards, and M.G.L. 148.

Permits are required by 780 CMR for the installation of a new fire protection system and modifications performed to an existing fire protection system. Permits will be issued by the Department of Inspections. Fire protection construction documents shall be filed with the Department of Inspections who will transmit a copy of the fire protection construction documents to the Greenfield Fire Department for review. The fire department has ten-working days after receiving the documents to complete its review. Upon the fire department's written request, the building official may grant one or more extensions up to a total review period maximum of 30-days. If the fire department review is not received within the allowed time frame the building official may upon review deem the documents in compliance with 780 CMR. If the head of the local fire department believes such construction documents to be noncompliant with this code or reference standards, he or she shall notify the building official (refer to M.G.L. c. 148, § 28A) in writing citing relevant sections of noncompliance with this code or the section of the referenced standards of Chapter 35: Referenced Standards.

## Existing Fire Protection Systems, i.e. Fire Sprinkler, Alternative Automatic Fire Extinguishing System, Fire Alarm & Detection Systems;

Permits are required from the Department of Inspections for <u>modifications</u> to an existing fire protection system, i.e. fire sprinkler, alternative automatic fire extinguishing system, and fire alarm & detection systems prior to the work beginning. All documents pertaining to the modifications including a fire protection narrative must be included with a completed permit application form for review and approval prior to work beginning. Permit applications are available from our online web site or from our office located at 20 Sanderson Street, Greenfield. <u>Maintenance</u> of existing fire protection systems does not require a permit from the Department of Inspections, though other permits may be required.

• MODIFICATIONS, ALTERATIONS, ADDITIONS OR DELETIONS TO FIRE PROTECTION SYSTEMS. Any changes which affect the performance of the *fire protection system*. Such changes require a building permit and are subject to other permitting requirements pursuant to M.G.L. c. 148, § 27A.



• MAINTENANCE OF FIRE PROTECTION SYSTEMS. Replacement or repair of any component or components of a *fire protection system*, where such does not affect system performance and compatibility. No building permit is required for maintenance. Other permits, however, may be required pursuant to M.G.L. c. 148, § 27A and 527 CMR.

In addition to a permit required from the Department of Inspections for modifications to an existing fire protection system, applicants, installers and design professionals must also,

- Contact Greenfield's Fire Prevention Officer at Greenfield Fire Department, for 527 CMR Massachusetts Fire Prevention regulations, Fire Department inspections and inspection fees,
- Contact the Wiring Inspector when work involves regulations regulated by Massachusetts Electrical code for electrical permit requirements, permit fees and inspections,
- Contact Gas & Plumbing Inspector when work involves regulations regulated by Massachusetts
  Gas fitting and Plumbing codes for gas fitting and plumbing permit requirements, permit fees
  and inspections,
- Contact the Department of Public Works (DPW) for their permitting requirements and fees when work involves Greenfield's public water/utility systems, excavating, or digging.

When installations of fire protection systems are interrupted for repairs or other necessary reasons, the owner, tenant or lessee shall immediately advise the local fire department and shall diligently prosecute the restoration of the protection.

**Inspections:** Both the Building Official and Fire Official must be notified for inspections and the witnessing of tests and flushing's. Copies of the NFPA acceptance tests must be provided to the Building and Fire Officials.

### New Fire Protection Systems, i.e. Fire Sprinkler, Alternative Automatic Fire Extinguishing System, Fire Alarm & Detection Systems;

Permits are required from the Department of Inspections for the installation of all new fire protection systems, per 780 CMR, i.e. fire sprinkler, alternative automatic fire extinguishing system, and fire alarm & detection systems. All construction documents for fire protection systems including a fire protection narrative must be included with a completed permit application form for review and approval prior to work beginning. Permit applications are available from our online web site or from our office located at 20 Sanderson Street, Greenfield.

Document Submittal Process; this process includes three tiers of the minimum document submittal requirements. This process does not preclude the permit applicant from submitting additional documents; for example shop drawings along with the *construction documents* at time of permit application.

Tier One, Construction Documents; Prior to issuance of a building permit, *construction documents* for the fire protection system must be submitted in accordance with section 107.1.2 and a building permit obtained prior to the installation of fire protection systems or modifications, alterations, additions or deletions to an existing fire protection system. The *construction documents* shall contain sufficient information to completely describe each of the fire protection system(s) for which a permit is to be issued.



Tier Two, Shop Drawings; Prior to installation of fire protection systems, shop drawings, where applicable, shall be submitted to the *building official* and fire official and shall contain, but not be limited to; detailed design layout, equipment specifications, system sequence of operation, and analysis to substantiate the design. Shop drawings shall note the name(s), license number(s) and license expiration date(s) of the contractor(s) installing the fire protection systems.

Exception; for shop drawings of Fire Alarm and Detection Systems see section 907.1.2 for applicable requirements.

Tier Three, Record Drawings; as built plans shall be provided to the building owner for all fire protection and life safety systems that are sealed as reviewed and approved by the *registered design professional* or legally recognized professional performing Construction Control. Where changes to original shop drawings are minor, a list of as-built changes shall be permitted to be submitted where sealed and reviewed and approved by the *registered design professional* or legally recognized professional performing Construction Control.

Acceptance Tests; *Fire protection systems* shall be tested in accordance with the requirements of this code and NFPA Standards and approved testing criteria and operational sequence as submitted in section 901.2.1, Tier One, Item a. When required, the tests shall be conducted in the presence of the *building official* and/or fire official or an approved third party inspection agent.

Certificate of Occupancy; Prior to the issuance of a Certificate of Occupancy and prior to witness of acceptance testing the following documents must be submitted to the building and fire officials, or designees.

- 1. Certification from the *registered design professional*, or other legally recognized professional, responsible for the *construction documents* per section 107.6, stating that the *fire protection systems* have been installed in accordance with applicable codes and standards, in accordance with the approved *construction documents* and that the record drawings indicate any deviations, if any.
- 2. Confirmation by the building owner or the owner's authorized representative that they have received the as-built record drawings.
- 3. Material, Test, Performance, and Completion Certificates, properly executed by the installing contractor in accordance with the applicable NFPA standards.

Note. In *lieu* of witnessing a satisfactory functional test, the *building official* and fire official or designees, may accept a final performance test report from a *registered design professional*, or other legally recognized professional, as an acceptance test.

Said report shall certify that complete and satisfactory functional tests of all *fire protection* systems, in accordance with the applicable codes and standards, and that the approved testing criteria and operational sequence, have been witnessed.

Signs; All signs required to identify fire protection equipment, equipment rooms and equipment locations shall be constructed of durable materials, be permanently installed and be readily visible. Letters and numbers shall contrast with the sign background, shall be at least two inches in height and shall have an appropriate width-to-height ratio to permit the sign to be read easily from a distance of ten feet. The sign and location shall be approved by the local fire department.

Sprinkler Control Valve Room Signs; where sprinkler control valves are located in a separate room or building, a sign shall be provided on the entrance door. The lettering shall be at least 2½ inches (63.5 mm) in height and shall otherwise conform to section 901.7 and shall read "Sprinkler Control Valves."

In addition to a permit required from the Department of Inspections for the installation of a new fire protection system, applicants, installers and registered design professionals must also,

- Contact Greenfield's Fire Prevention Officer at Greenfield Fire Department, for 527 CMR
   Massachusetts Fire Prevention regulations, Fire Department inspections and inspections fee,
- Contact Wiring Inspector when work involves regulations regulated by Massachusetts Electrical code for electrical permit requirements, permit fees and inspections,
- Contact Gas & Plumbing Inspector when work involves regulations regulated by Massachusetts
  Gas fitting and Plumbing codes for gas fitting and plumbing permit requirements, permit fees
  and inspections,
- Contact the Department of Public Works (DPW) when work involves Greenfield's public water/utility systems, excavating, or digging for their permitting requirements, and fees
  - Excavation/digging permit.
  - > Back flow Preventer, Installation of any Fire Protection system or connection to city water system requiring a back flow preventer.
  - > Demolition of any structure serviced by city water or sewer, all utilities must be cut off at the main prior to work beginning. You may request this be done by DPW with a minimum seven (7) day notice.

For your convenience, below are contact numbers for each department/Inspector:

Department of Inspections:

Greenfield Fire Department:

Inspector of Wiring:

Inspector of Gas fitting and Plumbing:

Department of Public Works (DPW): Engineering Superintendent 
(413)772-1404 ext 2105

(413)774-4737 ext 1114

(413)774-3167 ext 115

(413)774-3167 ext 112

(413)772-1528 ext 6103

**Inspections:** Both the Building Official and Fire Official must be notified for inspections and the witnessing of tests and flushing's. Copies of the NFPA acceptance tests must be provided to the Building and Fire Officials

Maintenance. All water based fire protection systems shall be maintained in accordance with NFPA 25 as listed in Chapter 35. All other *fire protection systems* shall be maintained in accordance with the requirements of the applicable reference standards and standards listed in Chapter 35. The owner of every building or structure shall be responsible for the care and maintenance of all *fire protection systems*, including equipment and devices, to ensure the safety and welfare of the occupants. No person shall shut off, disconnect, obstruct, remove or destroy, or cause or permit to be shut off, disconnected, obstructed, removed or destroyed, any part of any sprinkler system, water main, hydrant or other device used for fire protection or carbon monoxide detection and alarm in any building owned, leased or occupied by such person or under his control or supervision, without first procuring a written permit so to do from the head of the fire department of the city or town wherein such building is situated in accordance with M.G.L. c. 148, § 27A.

Created April 2015

