

**City of Lebanon Fire Department
Fire Prevention Rules and Regulations
August 5, 2015**



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This document, as referenced by the City of Lebanon Fire Prevention Ordinance, outlines the accepted practices related to the installation and maintenance of fire protection equipment and systems within the City of Lebanon. This document also clarifies the rules and responsibilities pertaining to fire protection system technician permitting through registration with the Fire Department. Any person servicing any type of fire protection system that is connected to a fire alarm system that is monitored shall be required to register as a fire protection system technician.

Section 1: Fire Protection System Technician Rules

- 1.1 The following procedures will be followed for alarm disconnects, service, maintenance and installation:
- 1.1.1 No one will be allowed access into an active master box except Lebanon Fire Department personnel. [72-14(A)]
 - 1.1.2 All persons working on a fire protection system at a building with a reporting fire alarm system shall have be registered with the Fire Department as a fire protection system technician. (exception, one and two-family homes). Fire protection system technician registration can be obtained at the Lebanon Fire Department, 12 South Park Street, Lebanon, New Hampshire 03766. [72-14(B)]
 - 1.1.3 The Fire Chief, at his/her discretion, shall determine cases in which fire protection system technician privileges are renewed, suspended for cause, revoked for cause, or re-instated. [72-14(B(2))]
Examples of incidents that may require punitive action being taken by the Fire Chief against a registered fire protection systems technician include, but are not limited to:
 - 1. Transmission of a false fire alarm signal caused by the action of the alarm technician;
 - 2. Leaving a protected property disconnected from the reporting feature of a required alarm system without notifying the Dispatch Center;
 - 3. Failure of the technician to notify the Dispatch Center prior to performing an action on a required alarm system;
 - 4. Unauthorized accessing of the interior of a Gamewell Fire Alarm Box or unauthorized manipulation of the municipal fire alarm cable.The Fire Chief, at his/her discretion shall also determine, in the future, any and all additional credentialing requirements of new fire protection system technician registered with the Fire Department.
 - 1.1.4 Failure to abide by these requirements may subject the fire protection system technician to fines as prescribed by the City of Lebanon Code and may also result in suspension or revocation of fire protection system technician privileges in the City of Lebanon as outlined at the end of this section.

- 1.1.5 Access to the fire alarm panel for maintenance shall be limited to persons approved by the Lebanon Fire Department. Permission to have access to the fire alarm panel is provisional and is subject to periodic review. Keys to fire alarm control panels shall not be left in unsecured locations. Each party granted permission to access fire alarm panels will be issued an identification number by the Lebanon Fire Department, Fire Prevention Bureau, and issued copies of the current City of Lebanon Fire Prevention Rules and Regulations regarding fire alarm systems.
- 1.1.6 It shall be the responsibility of the fire protection system technician to notify the Dispatch Center before any service is done on an alarm/sprinkler system or other fire protection system monitored by a fire alarm system. It shall also be the fire protection system technician's responsibility to notify the Dispatch Center when work is completed and the system is restored to normal function, or if the fire alarm system is unable to be restored to a normal operating condition.
- 1.1.7 Twenty four (24) hour notice shall be given to the Lebanon Fire Department by an alarm/sprinkler company prior to having a master box plugged out. [72-14(D)]
- 1.1.8 Transmitting an alarm condition from a protected property while in the performance of routine service work is allowed only with prior approval from the Dispatch. If allowed to transmit an alarm condition, the fire protection system technician shall be in direct communication with the Dispatch Center prior to, and during the alarm transmission. It shall be understood that sending of multiple alarm signals to the Dispatch Center shall only be done in a manner that does not overtax dispatch personnel or tie up the alarm receiving equipment at the Dispatch Center.
- 1.1.9 Any false alarms received without prior knowledge of the Dispatch Center and Lebanon Fire Department are subject to fines per the City of Lebanon Alarm Ordinance Chapter 11. See City of Lebanon Ordinance Chapter 11 for further information.
- 1.1.10 Fire protection system technicians working on NFPA 13 or 13R type sprinkler systems, or any required fire alarm or fire protection systems in the City shall immediately (within 4 hours) notify the Dispatch Center and the Lebanon Fire Department any time they encounter operational impairments of a required fire protection system that they are inspecting, servicing, or performing work on.
- 1.1.11 The Lebanon Fire Department will not perform routine functions on fire alarm systems, such as zone plug outs except under emergency conditions. When called to an alarm activation, the Lebanon Fire Department will secure the alarm system and, before clearing the scene, will turn the responsibility of the alarm, with the exception of the master box, over to the property owner or alarm/sprinkler company representative. [72-14(F)]
- 1.1.12 Upon any alarm activation, false alarm, or actual emergency, the following procedures shall be followed:

- 1.1.12.1 Complete evacuation by all occupants of the building (or fire, smoke zone if appropriate).
- 1.1.12.2 One person shall be designated to call the Lebanon Fire Department (9-1-1) to confirm that there is a fire alarm activation. At a minimum, the following information shall be given to the Dispatcher:
1. Name.
 2. Location (Street Address)
 3. Nature of the emergency
 4. Telephone number where they are calling from.
- 1.1.12.3 One person shall be designated to meet Fire Department personnel, usually at the front of the building.
- 1.1.12.4 No one shall re-enter the building until such time as the Fire Department has determined it is safe to do so.
- 1.1.12.5 In the event of an alarm activation, including accidental transmission of alarm, no one, other than Lebanon Fire Department personnel, shall silence the fire alarm system. No person shall in any way shut off any sprinkler valve, silence any alarm signal, or reset any alarm panel after an alarm has been transmitted to the Lebanon Dispatch Center.

1.2 Penalties for Violations of the Fire Protection Systems Technician Rules

- 1.2.1 Upon the first violation of these provisions within a 24 month time, the authorized technician and their employer shall receive a written warning of the offense and the employer shall be fined \$25.00.
- 1.2.2 Upon two (2) violations of these provisions within a 24 month time, the authorized technician shall have their privileges to work on fire alarm systems within the City suspended for a period of not less than 30 calendar days and not more than 45 calendar days and the employer shall be fined \$75.00.
- 1.2.3 Upon three (3) violations of these provisions within a 24 month time frame, the authorized technician shall have their privileges suspended for a period of not less than 90 days and the employer shall be fined \$150.00. The authorized technician shall not be reinstated without written proof that the technician has received training on the proper use of fire alarm systems within the City.
- 1.2.4 Upon four (4) or more violations of these provisions, the authorized technician shall have their privileges indefinitely revoked until the technician meets with the Fire Prevention Bureau and Fire Administration, and provides written documentation of proficiency in their trade and use of a fire alarm panel.

Section 2: Fire Alarm Systems

- 2.1.1 General Requirements. (Section shall not apply to fire alarm systems in one and two-family dwellings, or for non required system installations)
- 2.1.2 All new fire alarm systems shall be installed in accordance with these rules and the latest Edition of NFPA 70 and NFPA 72.
- 2.1.3 All equipment shall be listed by Underwriter's Laboratory or Factory Mutual. Manufacturer specification sheets shall be submitted for approval prior to installation. If a mixing of manufacturers devices and components is to occur, then a statement of compatibility from the manufacturer of the fire alarm control panel shall be required. A statement of compatibility is required for all systems connecting two or more hard wired smoke detectors from different manufacturers.
- 2.1.4 All fire alarm systems installed in the City of Lebanon shall have a Fire Alarm Construction Permit Application from the Lebanon Fire Department and an electrical permit from the Lebanon Codes Department before work may begin. This includes the replacement of a fire alarm control panel. All submissions shall include: the proper fees; a floor plan drawn to scale showing all alarm devices; panel and annunciator locations; a one line wiring diagram; a list of alarm points if addressable; a legend detailing all symbols used in the plans; battery calculations; annunciator detail showing zone labeling; master box and point of municipal connection (if applicable). The Fire Department will not issue a permit until all of the necessary documentation is supplied. A minimum of one (1) full set of submission materials shall be submitted to the Lebanon Fire Department, Fire Prevention Bureau for review.
- 2.1.5 All fire alarm equipment shall be keyed alike. The City of Lebanon Fire Department accepts the "PK 625", "CAT 45", "CAT 30", "306B", and "A135" key types for fire alarm equipment. The fire alarm control panel and/or annunciator shall be marked with the key type.
- 2.1.6 Manual pull stations shall be of a type approved by the Lebanon Fire Department. Pull stations shall be reset-able by means of a common screwdriver or a key, the same as the panel key, and not need any frangible disc, glass rod or other element in order to reset. This is not intended to rule out the use of glass rods, etc., to deter false alarms. For duct detectors an "A135" key is allowed.
- 2.1.7 A separate AC (alternating current) circuit disconnect shall be provided for the fire alarm system with a breaker lock installed.
- 2.1.8 Keys to fire alarms shall not be available to unauthorized persons.
- 2.1.9 Smoke detectors shall be provided with an alarm light or similar indicator which indicates activation of the individual detector. Detectors of this type shall be carefully installed following the manufacturers specifications and NFPA requirements in order to reduce accidental alarms.

- 2.1.10 All fire alarm equipment and detection devices shall be installed in accordance with the most recent Edition of the NFPA 70 and NFPA 72 Standards.
- 2.1.11 All evacuation signals shall be horns of vibrating, mechanical, or electronic type, listed for the intended use of, and be acceptable to the Lebanon Fire Department.
- 2.1.12 Unless the protected property's fire alarm system is monitored for trouble and supervisory conditions, the activation of system duct smoke detectors shall cause an alarm condition and activate the buildings warning devices.
- 2.1.13 Detectors or devices located above ceilings to include, but not be limited to: water flow switches; tamper switches and duct detectors shall have their location identified by signage on ceiling in close proximity to device. If provided, all remote test/reset switches for duct smoke detectors shall be located in a readily visible location, no greater than 6 feet from the finished floor.
- 2.1.14 Trip wires from the fire alarm control panel to the master box shall be continuous with no splices.
- 2.1.15 All new fire alarm wiring shall be at a minimum MC type cable with red trace. All junction boxes, pull boxes, etc, shall have a red cover installed.
- 2.1.16 Notification and/or initiation devices and annunciators added to an existing system shall be compatible with existing devices and the fire alarm control panel and shall provide the same audible sound as the existing audible devices.
- 2.1.17 All buildings that have multiple tenant access shall be zoned by each tenant space. Individual spaces shall be identified by a method acceptable to the Fire Department.
- 2.1.18 Manual pull stations shall be provided at each required exit from the building for each alarm system that is connected to the Dispatch Center.
- 2.1.19 All dwelling units in multi-family and assisted living buildings that are protected with a fire alarm system shall have a mini-horn/strobe unit installed within the dwelling unit.
- 2.1.120 Smoke Alarms. Single and multiple station smoke alarms shall be installed and maintained in accordance with City of Lebanon Ordinance 72 and state law.
- 2.1.20.1 Wiring Method. Smoke alarms shall be wired to a commonly used electric circuit of the dwelling unit or guestroom, such as a hall or bathroom lighting circuit. Smoke alarms in common spaces shall be wired to a circuit used for common space lighting. The electric panel shall be clearly labeled as to which circuit the smoke alarms are on. Smoke alarms shall not be wired into a sole, independent circuit breaker. All smoke alarms shall be wired ahead of any switch on the circuit. Smoke alarms shall not be powered solely through a power cord.

2.2 Fire Alarm Control Panel Requirements

- 2.2.1 Fire alarm control panel (FACP) location shall be approved. Alarm display height shall be between fifty-four to sixty-six inches (54"-66"). If the FACP is located in a separate or concealed space, a sign shall be provided on the entrance door(s) or near the concealed space. Such signs shall be RED with WHITE lettering at least two (2") inch in height and shall read "Fire Alarm System".
- 2.2.2 If the FACP is not clearly visible from the outside of the main entrance of the building, an approved annunciator shall be installed.
- 2.2.3 All alarm activating devices shall be connected to a listed and approved fire alarm panel.
- 2.2.4 All fire alarm control panels (FACP)'s shall be stand-alone systems. Combination control panels or other building control or security functions shall not be allowed in the same fire alarm control panel.
- 2.2.5 All addressable systems using alphanumeric displays shall be, at minimum, eighty (80) character Liquid Crystal Display (LCD) with at least forty (40) characters of usable text. Systems that display only a code or number for an alarm or trouble shall not be accepted.
- 2.2.6 All fire alarm systems shall be at least twenty-four (24) volt.
- 2.2.7 Every fire alarm control panel shall have a manual switch or dedicated push button that is plainly marked to disconnect the master box from the fire alarm control panel. When activated, this switch shall sound a supervisory alarm signal on the fire alarm control panel. Access codes, or the removal of wires or modules shall not be allowed as an acceptable method of disconnection.
- 2.2.8 Each zone in a zoned fire alarm system shall have an individual zone disconnect switch. Each zone shall be clearly labeled both outside and inside of the panel.
- 2.2.9 Panels and remote annunciators shall have zone labels permanently affixed. Stick-on tape labels are not acceptable. Wording of labels to be approved by the Lebanon Fire Department.
- 2.2.10 All fire alarm control panels in healthcare and educational occupancies shall have a drill switch to permit fire drills without transmitting an alarm. Drill switches shall be clearly labeled "Fire Drill". This switch shall sound the alarm signal and activate the strobes.
- 2.2.11 All fire alarm control panels shall have surge protection.
- 2.2.12 Fire alarm control panels shall not be located inside of dwelling units, (exception: single and two family structures).

2.3 Remote Annunciators

- 2.3.1 Remote annunciators shall be located at approved locations near the main entrance to the building and shall be predominantly red in color.
- 2.3.2 All annunciators shall be backlit and shall display with such brilliance that they are able to be read in direct sunlight. Annunciators shall be protected from physical damage and the effects of weather elements.
- 2.3.3 Remote annunciators shall have approved key operated switches that silence the audible warning devices and reset the system. The switches shall be supervised. The key shall be the same needed to open the fire alarm control panel or an "A135" key.
- 2.3.4 The remote annunciator shall mirror the main fire alarm control panel and shall be of the same manufacturer.
- 2.3.5 All annunciators shall indicate system trouble conditions both visually and audibly. The audible notification shall be capable of being heard from a distance of not less than twenty (20) feet.
- 2.3.6 Graphic annunciators shall be approved prior to being manufactured by the Lebanon Fire Department.

Section 3: Water Based Fire Protection Systems

3.1 General Requirements

- 3.1.1 All water based fire protection systems shall be installed in compliance with the most recent edition of the International Fire Code and the most recent Edition of the applicable NFPA Standard.
- 3.1.2 All water based fire protection systems shall be maintained to the requirements of the most recent Edition of NFPA 25.
- 3.1.3 All new automatic sprinkler systems shall be designed with a minimum of a 10 psi safety margin.

Exception: (NFPA 13D sprinkler systems for one and two family dwellings)
- 3.1.4 All new NFPA 13 and NFPA 13R sprinkler systems shall have their design based upon a hydrant flow test that is no less than 6 months old. All hydrant flow tests shall be witnessed by the Lebanon Fire Department.
- 3.1.5 For automatic sprinkler systems, a minimum of (3) sets of plans and (2) sets of hydraulic calculations and manufacturers catalog sheets shall be submitted for review. Plans shall be to scale and include the following at a minimum:

1. Name of owner and occupant
 2. Location of building including the street address
 3. Point of compass
 4. Construction and occupancy of each building
 5. Height of building in feet
 6. Water flow test information if new system
 7. An inset showing where in the building the work will take place if plans are for alterations
 8. Name and address of party submitting the plans
- 3.1.6 All work performed on any automatic sprinkler system or standpipe system shall be performed by persons or firms experienced in fire protection and suppression systems.
- 3.1.7 Before any work is performed to install a new sprinkler system or standpipe system, or before any modifications to existing sprinkler systems or standpipe systems are made, complete plans and specifications must be submitted to the Lebanon Fire Prevention Bureau for approval (exception:13D systems for one and two-family dwellings).
- 3.1.8 All automatic sprinkler systems and standpipe systems shall be equipped with a fire department pumper connection (FDC). NFPA 13 systems and standpipe connections shall have a 4 inch storz connection on a 30 degree angle with a cap and chain. NFPA 13R systems shall have 2 ½ inch NH female connections with plugs and chain. The number of FDC connections shall be determined by the sprinkler hydraulic demand. FDC connections shall be installed at locations approved by the Lebanon Fire Department.
- 3.1.9 If major modifications are made to any existing automatic sprinkler system or standpipe system, the system shall be brought into compliance with these regulations.
- 3.1.10 All new NFPA 13 and 13R sprinkler systems shall be connected to an approved automatic fire alarm system.
- 3.1.11 All 2 ½ inch standpipe outlets shall terminate with a 2 ½ by 1 ½ inch reducer and 1 ½ inch cap. 1 ½ inch thread is iron pipe hose thread (NPSH).
- 3.1.12 Pressure reducing valves are only allowed with Fire Department approval. If allowed, the pressure reducing valve shall have features which allow for easy disengagement.
- 3.1.13 Standpipe or fire department hose outlets shall not be installed in any cabinet or closet and shall have no locks or other devices installed on them that would prevent them from being immediately accessible and operable. This requirement shall not apply to systems installed prior to the adoption of this code.
- 3.1.14 Standpipe or fire department hose valves shall have at least six (6) inches of clearance between the valve handle and any wall when the valve is fully opened.
- 3.1.15 Electrical utility rooms in sprinkled buildings shall be protected by sprinklers.

- 3.1.16 All rooms or areas in which sprinkler or standpipe control valves are located shall be identified by permanently affixed signage approved by the Lebanon Fire Department.

3.2 Wet Type Sprinkler System Requirements

- 3.2.1 All NFPA 13 wet pipe sprinkler systems shall utilize a listed alarm check valve. "Shotgun" valves shall not be permitted.
- 3.2.2 Adjustable pneumatic retard water flow switch set for a minimum of 45 seconds and a maximum of 60 seconds.
- 3.2.3 Low water pressure alarm switch installed on the system side of the alarm check valve. This switch shall be adjustable to transmit an alarm when the water pressure on the system side of the alarm valve drops below 15 pounds plus ½ pound per square foot from switch to highest sprinkler head on the system.
- 3.2.4 On multiple riser systems a means of annunciation on the property shall be provided that meets the approval of the Lebanon Fire Department.
- 3.2.5 In buildings three (3) stories or greater, a floor control assembly shall be provided on each floor level. The floor control assembly shall include a shut off valve that is properly monitored and a water flow switch unless another design arrangement is allowed by the Code Official.

3.3 Dry Type Sprinkler System Requirements

- 3.3.1 A water flow switch shall be provided.
- 3.3.2 A low pressure alarm switch shall be installed which shall be adjustable to transmit a fire alarm when air pressure drops below the tripping pressure of the dry pipe system.
- 3.3.3 On multiple riser systems a means of annunciation on the property shall be provided that meets the approval of the Lebanon Fire Department.
- 3.3.4 Local low air pressure trouble alarm is required. This switch shall be set at 5 psi below the air pressure at which the air compressor starts.

Section 4: Connecting Fire Alarms And Sprinkler Systems

4.1 General Requirements:

- 4.1.1 The following are regulations for connecting private fire alarm and sprinkler systems to the Lebanon Dispatch Center.

(Exception: one and two-family homes and non-mandatory systems)

- 4.1.2 If the protected property is within 2,000 linear feet of the municipal fire alarm telegraph system, an approved master fire alarm box, connected to the municipal system, shall be provided as the proper type of connection.
- 4.1.3 This requirement may be waived by the Fire Chief or his/her designee, if for technical reasons there is insufficient pole space to allow for municipal fire alarm system connection. If said waiver is granted, the installation shall employ an alternate monitoring system as approved by NFPA 72, as adopted. All waiver requests shall be made in writing to the Fire Chief.
- 4.1.4 All connections shall be made in accordance with Chapters 11 and 72 of the City of Lebanon Code.
- 4.1.5 The Lebanon Fire Department reserves the right to disconnect from the fire alarm console at the Lebanon Dispatch Center, or from the master fire alarm box, the wires from any property that does not maintain compliance with these Regulations or is subject to repeated false alarms. If a property is disconnected from the fire alarm console, a representative of the property owner will be notified verbally and a follow up letter will be sent to the property owner within five (5) regular business days from the date disconnection.

4.2 Master Boxes / Auxillary Fire Alarm

- 4.2.1 All master boxes shall be new or reconditioned by a Gamewell approved agency.
- 4.2.2 Master fire alarm boxes, where used, shall be of a type approved by the Lebanon Fire Department.
- 4.2.3 All master boxes shall be submitted to the Lebanon Fire Department, prior to installation, for testing.
- 4.2.4 Master boxes shall be keyed for Gamewell Standard flat key (#25640).
- 4.2.5 Master boxes shall have 1/2 second timing between blows.
- 4.2.6 The Lebanon Fire Department shall designate the type of wire, conduit and point of connection when a master box is to be installed.
- 4.2.7 All flush mounted master boxes shall be of the "weather resistive" style.
- 4.2.8 No City municipal fire alarm wire shall be run inside a building without prior approval from the Lebanon Fire Department. If approved, it shall be 12 gauge CI (circuit integrity) wire without splices between master box and weatherhead. CI wire shall be run in minimum of 1" rigid steel conduit, either red or labeled city municipal fire alarm every 5 feet. All junction and pull elbows shall have red cover and labeled.

- 4.2.9 A red globe (globe to be red not bulb) rated for wet area, shall be installed above the master box at a height acceptable to LFD. An incandescent bulb minimum of 25 watt 110 volt clear bulb or 50 watt 250 volt clear bulb or bulb approved by LFD shall be installed.
- 4.2.10 All master boxes shall be mounted at a minimum of 42 inches and a maximum of 54 inches, measured vertically, from the finished grade to the activating handle or lever of the box. All master boxes shall be mounted on the building in a place approved by the Fire Department.
- 4.2.11 All master boxes shall be "local energy trip" type, unless otherwise specified by the Lebanon Fire Department.
- 4.2.12 All wires and cables shall be free from splices.
- 4.2.13 When a master box outside shell is installed it shall be covered to prevent the box from being used for any unintended purpose until such time as the master box is connected to the municipal system.
- 4.2.14 The local energy trip wires may be run with the municipal telegraph lines. Sixteen (16) AWG solid power limited 105 degree C wire is suggested.
- 4.2.15 All pole construction, final connections and associated fees as stated in chapter 72 Article 5 for Fire Prevention fees will be charged to the owner.
- 4.2.16 All pole construction and final connections shall be made by the Lebanon Fire Department.
- 4.2.17 Upon completion of a satisfactory test of the fire alarm system by the Fire Department, the system shall be connected to the municipal fire alarm. No one but the Fire Department shall make these connections. After final connection is made, the municipal line and masterbox shall become the property and responsibility of the Lebanon Fire Department.

4.3 Connections to the Municipal System

- 4.3.1 If the municipal fire alarm telegraph line connection is to be made on the building, the installer shall meet the following requirements:
 - (1) The installer shall run minimum half inch rigid steel conduit from the master box to the connection point (designated by the Fire Department). This conduit shall be securely mounted and shall have a weather head at the connection point.
 - (2) Contractor shall install a utility grade eyebolt or similar approved device next to the weatherhead and properly be secured to support the aerial cable under ice load.

- (3) If connection is less than 100 feet, four (4) insulated 12 AWG THHN/THWN solid conductor wires in four (4) different colors (min. of 1 red and 1 black) shall be run in the conduit to be used to connect the master box to the municipal fire alarm telegraph line or IMSA 20-1, 12 gauge solid, minimum of four (4) conductors.
- (4) If connection is greater than 100 feet than IMSA 20-1, 12 gauge solid, minimum of four (4) conductors shall be used

4.3.2 If the municipal fire alarm telegraph line connection is to be made on a utility pole, the following requirements shall be met:

- (1) The installer shall run two (2") inch conduit or larger from the master box to the utility pole at a minimum depth of 18 inches and all conduit shall have cemented joints. The conduit shall be schedule 80 PVC and contractor shall install long sweep (ell) of rigid steel and one ten foot length of rigid steel at the utility pole.
- (2) For all underground conduit the contractor shall use IMSA 20-1, 12 gauge solid, minimum of four (4) conductors.
- (3) A bonded earth ground shall be run into the master box. This bonded ground shall not be run in the same conduit as the wires that are used to make the connection to the municipal fire alarm telegraph line. The grounding conductor shall be a manufactured telegraph fire alarm box grounding kit or minimum eight (8) gauge solid copper wire if approved by the Lebanon Fire Department. All flush mount master boxes shall use minimum of eight (8) gauge solid copper wire to ground and shall be bonded to an approved location. If copper wire is used, the conductor shall be run in conduit through all concealed locations. At the termination point of the ground wire, the wire and connection shall be tagged "Fire Department Connection - Do Not Remove".

4.4 Digital Alarm Communicator Transmitters (DACT)

- 4.4.1 A DACT shall not be used for transmission of any fire alarm or water flow signal unless no other approved method is available and specific permission is obtained from the Lebanon Fire Department.
- 4.4.2 All DACT systems shall be installed in a workman like manner and in accordance with manufacturer specifications and the requirements of the most recent editions of NFPA 70 and 72.
- 4.4.3 All equipment and devices shall be submitted to and approved by the Lebanon Fire Department prior to installation. Catalog sheets and technical specifications shall be provided for the review process.

- 4.4.4 All DACT account numbers shall be assigned by the Dispatch Center Supervisor. All condition codes shall be approved by said Center and a subscriber information sheet completed and submitted prior to a final system approval test.

4.5 Other Technologies

- 4.5.1 Any new technology used for transmission of fire alarm signals shall be approved by the Lebanon Fire Department.
- 4.5.2 New technology fire alarm systems shall not be remotely manipulated, (i.e. silencing or resetting of alarm conditions).

Section 5: Clean Agent Extinguishing Systems

- 5.1 All clean agent extinguishing systems shall be installed to the requirements of the most recent Edition of NFPA 2001 and the manufacturer's specifications. Warning and instruction signs at entrances to and inside protected areas shall be provided.
- 5.2 Prior to installing a system, plans including specifications of equipment to be installed shall be submitted to the Lebanon Fire Department for approval.
- 5.3 All clean agent extinguishing systems shall have a pre-discharge warning system installed in the protected room/area to alert occupants. Signage shall be provided near warning device(s) indicating the need to evacuate space.
- 5.4 All clean agent extinguishing systems shall also have a system abort button readily visible near an exit from the space/area. The abort switch shall be of a type that requires constant manual pressure to cause abort. In all cases the normal and manual emergency control shall override the abort function. Operation of the abort function shall result in both audible and distinct visual indication of system impairment. The abort switch shall be clearly recognizable for the purpose intended.
- 5.5 All total flooding systems shall have the enclosure examined and tested to locate and then effectively seal any significant air leaks that could result in a failure of the enclosure to hold the specified agent concentration level for the specified holding period.

Section 6: Commercial Kitchen Systems and Cooking Appliances

- 6.1 Only listed and approved cooking appliances shall be installed in commercial properties (exception: brick ovens).
- 6.2 Prior to installing an automatic suppression system for protection of commercial cooking appliances, the installer or designer shall provide the Lebanon Fire Department for review of the following items: Complete drawings of the system installation; including hood(s); exhaust duct(s); appliances; interface fire extinguishing system detectors; piping; nozzles; fuel shut-off devices; agent storage container(s); and manual activation device(s).

- 6.3 If extinguishing system storage containers or gas valves are installed above ceilings, proper signage shall be placed at the ceiling identifying their location.
- 6.4 Prior to placing a commercial grease duct exhaust system in service, a duct work integrity test incorporating either smoke or light shall be witnessed by the Lebanon Fire Department or Lebanon Building Inspector.
- 6.5 Upon activation of the extinguishing system, all make up air and fuel source(s) shall shut off. Exhaust fans shall stay on to assist in dispersing product in the exhaust ductwork.
- 6.6 Prior to placing automatic kitchen extinguishing system into service, the installer shall perform an acceptance test witnessed by the Lebanon Fire Department.
- 6.7 Floor brackets for appliance castors or floor markings shall be utilized in commercial kitchens for relocation of cooking appliances after service or cleaning to ensure proper protection by extinguishing system nozzles.
- 6.8 Automatic kitchen extinguishing systems installed in buildings which have an approved fire alarm system shall be connected to the system.
- 6.9 In buildings which do not have a fire alarm system, the activation of the kitchen extinguishing system shall activate a red strobe light or an electric bell located near the front entrance of the establishment. A sign shall be affixed in direct vicinity to the strobe light which states: HOOD SYSTEM-CALL 911.

Section 7: Fire Extinguishers

- 7.1 Fire extinguishers shall be installed in all occupancies other than one and two-family dwellings. Extinguishers shall be spaced so that an extinguisher is accessible within 75 feet of travel distance from every portion of the protected property.
- 7.2 Unless otherwise required, all fire extinguishers used for the extinguishment of ordinary combustibles shall be rated as a multi-purpose ABC fire extinguisher with a minimum rating of 2A. Pressurized water type extinguishers for the protected property must be approved by the Lebanon Fire Department.
- 7.3 All commercial kitchens shall have a Type K fire extinguisher installed in a readily accessible location within 30 feet of the cooking appliances.
- 7.4 Locking cabinets, or cabinets which require breaking of glass, or other materials to access fire extinguishers are not allowed in buildings not protected by a supervised automatic sprinkler system.
- 7.5 Fire extinguishers with a minimum rating of 40-BC required at fuel dispensing facilities, such as gas stations, shall be installed no further than 25 feet away from fuel pumps.

- 7.6 At least one of the required fire extinguishers in mercantile, business, healthcare and assembly occupancies shall be installed inside the building within 5 feet horizontally of the main entrance.
- 7.7 Electronic monitoring devices of fire extinguishers shall sound a supervisory signal on the fire alarm control panel.