## FIRE ALARM PLAN SUBMITTAL/SYSTEM INSTALLATION MANUAL

Please review and familiarize yourself with all requirements listed in this document prior to your submittal.

Your compliance with these requirements will enable us complete the review process faster and more efficiently with less chance of rejection due to improper or missing information.



# THIS DOCUMENT TOOK EFFECT ON 6/1/2010.THE REQUIREMENTS ARE SET FORTH IN THE FOLLOWING CODE SECTIONS:

#### New York State Fire Code

#### §SF105.1 Permits

A city, town, village or county that is responsible for administration and enforcement of this code shall determine local permit requirements in accordance with the applicable provisions of local law.

#### §901.2 NYSFC Permits

The code enforcement official shall have the authority to require construction documents and calculations for all fire protection systems and to require permits be issued for the installation, rehabilitation or modification of any fire protection system. Construction documents for fire protection systems shall be submitted for review and approval prior to system installation.

#### Code of the Village of Lake Grove

#### § 89-17 Permits Required.

A permit shall be obtained from the Fire Marshal for the installation or modification of any automatic fire alarm systems, automatic sprinkler or water spray systems or any other special fire extinguishing or fire-detection systems which may be required under this chapter.

WORKING WITHOUT APPROVED PLANS AND A PERMIT IS A CRIME

## Conformance to codes

All fire alarm system installations shall conform to Chapter 89 of the Code of the Incorporated Village of Lake Grove, the current edition of the New York State Fire Code, the current referenced edition of NFPA 70-National Electrical Code, the current referenced edition of NFPA 72-National Fire Alarm and Signaling Code, the current referenced edition of NFPA 720-Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment, the current referenced edition of NFPA 110-Standard for Emergency and Standby Power Systems, the current referenced edition of NFPA 111-Standard on Stored Electrical Energy and Standby Power Systems, the current referenced edition of NFPA 1221, standard for the Installation, Maintenance and Use of Emergency Services Communications Systems and any/all other rules, regulations or ordinances whether or not they are specified herein.

Plans shall be provided when:

- Required by law or ordinance
- A change of use for a particular premise occurs.
- Renovation of the premise.
- Any fire alarm, fire and smoke detection system and or carbon monoxide detection system is renovated, improved or changed.
- Central Station monitoring is changed.

## **SECTION 1**

All fire alarm plan submittals **<u>SHALL</u>** comply with the following or they will be rejected:

- All fire alarm system installations shall conform to Chapter 89 of the Code of the Incorporated Village of Lake Grove, the New York State Fire Code, the referenced edition of National Electrical Code, the current referenced edition of NFPA 72 and any/all other rules, regulations or ordinances whether or not they are specified herein. All plans submitted shall bear the stamp/seal of a New York State licensed design professional.
- 2. Plans shall be submitted by a company licensed by the State of New York as Per General Business Law Article 6D. Proof of a valid license is to be submitted with the application.

- Fire alarm system designer is to be listed on the plans and proof of their qualification is to be provided in accordance with <u>BOTH</u> subsections 1 and 2 of NFPA 72-2007 4.3.2.2.
- 4. As per NFPA 72-2007 4.3.3 (1) and (2), Installation personnel shall be qualified or shall be supervised by persons who are qualified and experienced in the installation, inspection, and testing of the fire alarm systems. This office requires that this individual shall be at least NICET (or equivalent) Level II certified in the field of fire alarm systems and be factory trained on the control equipment being installed.
- 5. The intended location and use of the structure involved shall be indicated.
- 6. Business name, numerical street address and nearest intersection of building shall be indicated.
- 7. Main entrance location shall be labeled as such.
- 8. Compass point showing building layout shall be drawn.
- 9. Plans submitted for review shall deal directly with the type of installation proposed. Where a proposed installation governed by this office is part of a proposed major construction project, a separate plan shall be generated for the proposed installation in lieu of extraction from other plans indicating partial information. (i.e.: architectural, plumbing or electrical drawings.)
- 10. Provide cross sectional elevation of the building showing ceiling heights and spaces above suspended ceilings etc. Indicate all conditions which would impact detector spacing and location. Refer to NFPA-72 Chapter 5 for criteria. State the type of ceiling being installed (suspended, sheetrock, open joist etc...)
- 11. Name address and telephone number of person drawing plans and an original stamp of same.
- 12. 2 sets of stamped fire alarm plans. All plans shall be stamped by a licensed Professional Engineer or a Registered Architect as required by the New York State Department of Education Law.

- 13. If, due to the scope of the work proposed, the plans are not required to be stamped, the plans shall be drawn utilizing accepted engineering practices and procedures. All line work and lettering shall be clear and legible.
- 14. 2 sets of device cut-sheets. Manufacturer's specification, technical and installation sheets for all components of proposed systems shall be included in the plan submission. Exact copies will be accepted. All component parts shall be tested and approved/listed by a nationally recognized testing laboratory for the function intended.
- 15. If component parts from different manufacturers are to be mixed in any system, then a manufacturer's statement of compatibility of said parts shall be included in the submission.
- 16. If a submitted cut sheet shows multiple devices and options, the exact device to be used is to be circled, highlighted or called out.
- 17. Pull stations-the method of reset must be clearly indicated on the plans (what key, size Allen wrench, type of screwdriver etc.)
- 18. Wire-Specifications for wire used in the installation shall include NYS Department of State Toxicity Numbers.
- 19. Application is to be completed in its entirety. If there are any blank or illegible sections the application will be rejected.
- 20. You must indicate the method of communication from the FACU to the central station in your submittal document.
- 21. Electronic copy of plans and cut-sheets submitted in PDF form. The Pdf can be emailed to <u>lakegrovefm@gmail.com</u> a memory stick containing same can be included with the submittal.
- 22. Fee of \$400.00. Note that \$200.00 of this is for the plans review and \$200.00 is for the final inspection. If either of these fails, you are required to repay the related portion of the fee. All checks are to be made out to the Incorporated Village of Lake Grove.
- 23. Submittals must include the appropriate prepaid mailer so we can return the plans to you. If you fail to include the mailer, the plans will be left at village hall and will have to be picked up.

24. Letter from central station stating the following:

- "We are aware that the responding fire department for this account is the (fill in the appropriate fire department name)".
- "We are aware that the only acceptable telephone number to contact the (fill in the appropriate fire department name) is (Contact this office for the proper phone number)".
- "We are aware that we are not permitted to change this information without written permission from the Lake Grove Fire Marshals Office and that failure to comply with this will result in legal action against us and our subscriber".
- "We will promptly report all trouble signals, failures to test and alarm activations on this account to the Lake Grove Fire Marshals Office via email at Lakegrovefiremarshal@gmail.com
- If we are terminating the subscribers monitoring for any reason, we will notify the Lake Grove Fire Marshals Office in writing at least 15 days prior to the actual termination"
- "If the subscriber requests termination of monitoring, we will notify the Lake Grove Fire Marshals Office in writing at least 15 days prior to terminating central station monitoring of the subscribers system."
- 25. The Incorporated Village of Lake Grove will not approve the installation and use of any panel that requires codes, keys or special knowledge to operate or reset.
- 26. Carbon monoxide detection system shall be either a stand alone system or integrated into a fire alarm system. NOTE: If a fire alarm system is not capable of annunciating BOTH a Temporal 3 AND a Temporal 4 pattern, then that system cannot be used for fire and carbon monoxide detection.
- 27. Fire detection equipment shall not be integrated into a burglar alarm system.
- 28. Must notate that the strobes will remain flashing on system silence.

- 29. Must notate that any/all remote annunciator's will be incapable of controlling the fire alarm and will be for zone/device identification only.
- 30. All pull stations located in public areas or areas where they are subject to impact damage are to be fitted with protective sounding covers.
- 31. Must notate that any/all keys and or tools required to reset all components of the fire alarm system will be left on site. (This includes panel keys, proper size Allen keys or proper type of screwdriver(s) necessary to reset pull stations).
- 32. For all plan revisions, the revision number, date and revision description shall be noted on the plans. All revisions will be called out and readily visible. No hand drawn additions to the plans will be accepted.
- 33. Plans shall be drawn to an established scale. Care is to be taken to insure that plans are reproduced on a 1:1 scale so as to avoid any distortions or variations. NO plans will be accepted with a scale less than 1/8"=1"0".
- 34. All plans shall have an area of at least forty (40) square inches available for approval stamps. This area shall be a clearly defined quadrangle with no side less than six inches in length.
- 35. Where details are required to be shown, they shall be shown as a drawing detail and not as a note indicating compliance. Riser diagrams shall be shown on a separate sheet.
- 36. A legend explaining the symbols being used to identify devices and components on plans. NOTE: This legend is to be on each page of the plans including the riser diagram.
- 37. Licensed contractor name, address, contact person and 24 hour telephone number in case of emergency or problem.
- 38. Sprinkler system water flow and tamper switches shall be zoned separately.
- **39.** Pull stations will be zoned separately.

40. All detectors located in concealed areas and spaces shall have remote indicating lights mounted in a clearly visible area as close as possible to the location of the detector.

# REMINDER: ANY PLANS FOUND TO BE SUBMITTED WITHOUT THE ABOVE LISTED ITEMS 1-40 WILL BE REJECTED.

#### SECTION 2

Additional requirements:

**A.** Provide on a separate sheet, battery calculations including 24 hour stand-by, five minute alarm time and 20 percent deterioration factor. Show minimum requirements and size of batteries to be installed to meet or exceed these requirements.

**B.** Location of any automatic extinguishing systems shall be shown on plans and riser diagrams. All systems of this type must be tied into the fire alarm system and zoned separately.

**C.** Detection zones shall be per floor with no zone encompassing an area larger than 10,000 square feet.

**D.** For addressable and analog systems you must provide a detailed list of address verbiage for approval.

**E.** Fire pumps shall be monitored at the fire alarm and central station for "pump running", "phase reversal" and "power available status".

**F.** In a building fully protected with smoke and heat detectors, the duct detection will be on a supervisory zone which will not result in the notification of the fire department.

**G.** Stereo shunt is to be installed that will shut down all music systems in the establishment. Music system will not reset until fire alarm system is reset.

**H.** Weather proof horn strobe to be installed on the exterior of the building facing the street.

I. Fire alarm control panel (FACP) or a remote annunciator shall be installed at the main entrance in a manner where it is readily visible and readable from the exterior of the building. This remote annunciator will not be capable of controlling any function of the fire alarm system and will be for annunciation only.

**J.** Circuit breaker and panel number as well as the central station account number are to be noted on the inside of the FACP door.

**K.** Indicate the type and location of alarm transmitting equipment. All transmitting equipment shall have two telephone lines available and be listed for commercial fire applications.

L. Indicate amount, location and type(s) of manual pull stations, smoke detectors, heat detectors, duct detectors and/or any other alarm initiating device(s). If locations of said devices are dictated by specific distance requirements, indicate compliance with said distances.

**M.** All smoke detectors to be used are to be equipped with a steady red indicator light that illuminates upon activation. Light must remain illuminated until panel is reset.

N. Indicate the amount and type(s) of initiating device circuits.

**O.** Indicate the amount and type(s) of indicating appliances and circuits.

**P.** Indicate number, type and location of supervisory initiating devices and circuits.

**Q.** Indicate the amount, type and location of any other circuits, devices, controls and connections.

**R**. 24 hour emergency service telephone number for fire alarm contractor is to be conspicuously posted on the fire alarm panel. Alarm contractor must be available for 24 hour service on this system.

**S.** 24 hour central station contact number is to be conspicuously posted on the fire alarm panel.

**T.** Complete and immediate fan shut down is required upon activation of any part of the installed system.

U. Restart of the fans shall be independent of the fire alarm reset.

**V.** All spaces located on the plans shall be labeled as to their use and shall show entry and exit points.

**W.** All spaces located on the plans shall be labeled with dimension or square footage.

**X.** All non-coded fire alarm systems installed after 7/96 shall sound a temporal 3 pattern

**Y.** One copy of the plans submitted as well as the electronic copy shall be retained on file by the Incorporated Village of Lake Grove Fire Marshals Office.

**Z.** A second copy will be stamped and returned as "Fire Marshals Inspectional Copy". This copy shall remain on the job site throughout the installation and until such time as the system is tested and approved by the Lake Grove Fire Marshal.

**AA.** In situations where the FACP is in a public area, the tube can be installed near the electrical panel.

- If the proposed work is not started and completed within 12 months of the plan approval, then the approval is revoked. At that point new plans and fees must be submitted.
- Any request to discuss plans or submittals shall be made to this office in advance. The Fire Marshal responsible for reviewing the plans shall be contacted and a meeting date/time will be set. Plans will not be reviewed immediately upon receipt at the Village of Lake Grove and although plans will be reviewed as quickly as possible, a period of 15-20 working days should be expected for a review.
- The contractors request for final inspection and approval must be made in writing and include all necessary paperwork (see requirements listed below) submitted to the Fire Marshals Office prior to witnessing of said test.
  - 1. Completed fire alarm system Record of Completion which can be obtained online.
  - 2. Affidavit of compliance. Must be on official letterhead and state that the fire alarm system has been installed as per the approved plans and is in full compliance with all applicable codes rules and regulations.

Affidavit must also state that only class A circuits were used and that all work was performed by the applicant and his direct employees.

NOTE: If your submittal is only for a central station update or change, you need only submit a completed application, the proposed date of the change, the reason for the change, the old central station name, letter complying with item 2 above and the \$200.00 fee.

# SECTION 3

## **INVESTIGATION & PENALTY FEES**

Any work done without approved plans and/or a proper permit is subject to the amount of the original permit fee plus an investigation fee and a penalty fee. The minimum charge for the investigation fee is 100% of the original permit fee. The minimum charge for the penalty fee is 100% of the original permit fee.

If work is found to have commenced without approved plans and/or a proper permit, this office reserves the right to shut down any/all portions of the entire project deemed necessary to inspect, investigate and confirm that work has been done. If any portion of the work performed is not clearly visible or readily accessible, you will be ordered to demolish, disassemble or remove any and all obstructions regardless of the cost incurred. Failure to comply will result in the suspension/revocation of any Building or other permits related to the site.

As working without approved plans and/or a proper permit is a crime under New York State Law, in addition to any/all fines, this office can and will take whatever legal means we deem appropriate against you including the issuance of summons and or arrest.

For further information call 516-807-6412 during regular business hours which are Monday-Friday 8:00AM to 5:00PM. Please note that the Fire Marshal does not answer the phone while out in the field. For a faster response send an email to lakegrovefm@gmail.com.

You have two options for plan submittal:

#### **US Postal Service:**

Incorporated Village of Lake Grove Office of the Fire Marshal Post Office Box 708 Lake Grove, NY 11755

#### In Person or via Fed-Ex, UPS etc:

Incorporated Village of Lake Grove

Office of the Fire Marshal 980 Hawkins Avenue Lake Grove, NY 11755