



SANTA MONICA FIRE DEPARTMENT

333 Olympic Drive, 2nd Floor
Santa Monica, CA 90401
P: (310) 458-8915 | F:(310) 395-3395
E: smfireprevention@smgov.net

FIRE PREVENTION DIVISION

FIRE ALARM SYSTEM PLAN REVIEW & INSPECTION CHECKLIST

This checklist is a summary of Fire Department clarifications and interpretations of City and State Codes and nationally recognized standards in accordance with the currently adopted edition of the Fire Code. Information contained herein applies to typical circumstances and may not address all situations.

This checklist has been developed to assist the property owners, the business community and authorized agents with the plan review and inspection requirements for fire alarm systems.

GENERAL GUIDELINES

Application, Fire Protection System: Required any time a property owner or authorized agent installs or modifies systems and equipment which is regulated by the CFC, or to cause any such work to be done, shall first make application to Santa Monica Fire and obtain the required permit.

Application Submittal: three sets of plans with all device related documentation ("cut sheets")

Fees: all applicable fees must be paid before approved plans will be released

Permit Entitlements:

- Included in the original permit fee: Plan Review (1), Plan Review Resubmittal (1), Rough Inspection (1) and Final Inspection (1).
- Not Included in Original Permit Fee: Any additional plan review or site inspections other than listed above; all others are provided at an additional fee.

Plan Review & Inspection Timeline:

- Plan Review: Allow 14 working days for plans to be reviewed. Typically, plans are reviewed on Mondays and Fridays.
 - Expedite Plan Review: available for an additional fee
 - Over the Counter: not available
- Inspections: scheduled Tuesday- Thursday for 8am-12pm or 1pm-4pm.
 - Off-Hours: available for an additional fee

Santa Monica Business License: A valid license is required before approved plans will be released.

PLAN REVIEW

The items listed below are the minimum requirements to be included on plans submitted for review. The California Fire Code (CFC) and the Santa Monica Municipal Code (SMMC) prohibit any work without approved plans and a Fire Dept. permit. Unless otherwise noted all code reference are from NFPA 72, The National Fire Alarm Code, as amended by the CBC.

SYSTEM DESIGN CRITERIA

- A. Identify System Classification Used in Determining Design CriteriaNFPA 72 A4.4.4.2.1 (4)
- B. Details on the Type of Occupancy Being ProtectedNFPA 72 4.4.4.2.1(5)

C. Provide Copy of Owner's Manual for System at Time of SubmittalNFPA 72 4.5.2.3(1)

SYSTEM COMPONENTS

- A. Control Panel.....CFC 907.1.1(3)
 - 1. Mfg., Model, Listing InformationCFC 907.1.1(2)
 - 2. Location, Mounting Details, etc.
- B. Fire Alarm System Power Supply - Battery Calc's; Primary/Secondary;CFC 907.1.1(6)(8)
 - 1. Details of Over current Protection.....NFPA 72 4.4.1.4.3
- C. Auxiliary Devices and Functions
- D. Details on ConductorsCFC 907.1.1(7)
 - 1. Type, Mfg., Size, Model NumberCFC 907.1.1(9)
 - 2. Conduit Size, Type, etc.
- E. Remote Annunciator.....SMMC 8.44.110
 - 1. Located Adjacent to Main Entrance
 - 2. Indicates Type of Device by Floor
 - 3. Remote Audible and Visual Trouble Signals

WORKING DRAWINGS AND SUBMITTALS

- A. Written Sequence of Operation.....NFPA 72 A4.5.1.1/CFC 907.1.1(11)
- B. List of Zone Assignments/Addresses (Annunciation)NFPA 72 A4.4.4.2.1 (11)
- C. Supervision of Wiring.....NFPA 72 4.4.7.1
- D. CSFM Listing Sheets and Mfgs. "Cut Sheets"CFC 907.1.1(9)
- E. Wiring Diagrams - Drawn to Scale, Accurate and Easily ReadCFC 907.1.1(2)
 - 1. Point to Point (Terminal to Terminal)
 - 2. Riser Diagram - For Multi-story Buildings
 - 3. Floor Plan Showing Location of Devices; Conduit/Wire Runs, Conduit Size, Number, Size and Type of Conductor; and Addresses for Each Device and/or Zone Number for Circuit
- F. Circuit Details.....NFPA 72 A4.5.1.1/CFC 907.1.1
 - 1. Identify Circuit Designation.....
 - 2. Identify Class of Circuit (A or B)
 - 3. Identify Style of Circuit.....
 - 4. Protection of Class A Circuits (Survivability).....
- G. Voltage Drop Calculations for Notification Appliance Circuits.....NFPA 72 A4.4.4.2.1 (8)/CFC 907.1.1
 - 1. Voltage Drop Calculation - Max. 10%
- H. Contractor Information-Name, Address, Phone, C-10 License #, etc.....NFPA 72 4.5.2.1
- I. Certificate of Completion - Note on DrawingNFPA 72 4.5.2.1
 - 1. "Contractor Shall Provide Certificate of Completion to F.D. Prior to Calling for TestingNFPA 72 4.5.1.3
(Except Part 3). Part 3 to be Completed After Testing."CFC 901.2.1

INSTALLATION & DISTRIBUTION OF DEVICES AND EQUIPMENT

- A. Proper Location, Distribution and Mounting of Manual Fire Alarm BoxCFC 907.4
 - 1. Mfg., Model, Listing InformationNFPA 72 4.3.1
 - 2. Location and Maximum Travel DistanceCFC 907.4.1
 - 3. Mounting Height, Mounting Details and AccessibilityCFC 907.4.2
- B. Location, Distribution and Mounting of Automatic Fire DetectorsNFPA 72 5.7.3
 - 1. Mfg., Model, Listing Information

2. Location and Mounting Details
 3. Compatibility Restrictions and Current Draw
- C. Proper Location, Distribution and Mounting of Notification AppliancesCFC 907.10
1. Mfg., Model, Listing Information - UL 1971 Strobe; NO BellsCFC 907.10/Policy 2-2
 2. Location and Mounting Details.....NFPA 72 7.5.4/CFC 907.10.1
 3. Distribution and Visibility.....NFPA 72 7.5.4/ANSI A117.1
 4. Candela Rating, Audibility and Current DrawNFPA 72 7.5
 5. Visual Alarms in Guest rooms (including restroom).....NFPA 72 7.5.4.4
 6. Notification Appliances Synchronized Operation (2 or more)NFPA 72 7.5.4.1.2(3)
- D. Horn Strobe Installed at Main Entrance - No BellsSMMC 8.44.110
1. Mfg., Model, ListingPolicy 2-2
 2. Location, Mounting Details, Weatherproof, etc.
 3. On Address Side of Building
- E. Automatic Fire Detection in Control Equipment RoomCFC 907.2.18.1
- F. Audible, Trouble, Supervisory Alarm Silence SwitchesNFPA 72 6.8.2.7

SYSTEM OPERATION

- A. Written Operating Instructions
1. System Operation Instructions Installed Adjacent to Control UnitNFPA 72 4.5.2.3
- B. Elevator RecallNFPA 72 6.15.3
2. Smoke Detectors Installed in Lobby, Machine Room to Actuate Recall Function.....NFPA 72 6.15.3.1
- C. Fire Safety Control FunctionsNFPA 72 6.15
1. Heating, Ventilation and Air Conditioning Systems (HVAC).....NFPA 72 6.15.5
 2. Door Release Service.....NFPA 72 5.14.3.3/5.14.6
 3. Smoke Control FunctionsNFPA 72 5.14
- D. Alarm Signal
1. The alarm signal shall be a “Temporal Code 3”.....CFC 907.10.2.1

MONITORING, MAINTENANCE AND SERVICE

- A. Central Station Monitoring of System by Listed Company Required.....NFPA 72 8.2.5.2.1/CFC 903.4
- B. Provide Copy of System Test and Maintenance AgreementNFPA 72 4.5.2.1
- C. Placard Identifying the 24-hour Per Day Service Contact NumberNFPA 72 4.5.2.1

INSPECTION

Please note the following:

- Approved Fire Alarm Permit drawings must be on the job at the time of inspection.
- The contractor that is permitted to perform the work must schedule the inspection. This means the property owner, business owner and General Contractor cannot request an inspection.
- The contractor shall supply all test equipment and operating instructions at the time of any test.
- All systems shall be inspected and fully operational before any portion is covered or concealed.
- Written approval is required before covering or concealing any work performed under this permit. You will be required to uncover any work which has been concealed prior to written approval.
- If the job site fails an inspection each additional inspection will be conducted at a fee.

ROUGH FIRE ALARM SYSTEM INSPECTION

- A. A Fire Alarm Rough Inspection is required to verify device locations and wiring methods, showing conformance with approved drawings, the National Electric Code (NEC), and National Fire Alarm Code (NFPA 72).
- B. All boxes, conduit, and wiring must be installed. Cut-in boxes may be used as long as they are properly installed. Above ceiling wiring must be of an acceptable type and be properly supported. This inspection may be done before or after the walls have been drywalled, but must be done before any ceiling membrane (drywall, acoustical tile, etc.) is installed.
- C. Electrical boxes and conduit for the alarm system installed by the electrical contractor prior to the alarm system permit being issued may be inspected during the general electrical inspection, but only for compliance with the NEC, and such inspection is not a substitute for a fire alarm rough inspection. No fire alarm system wiring, equipment, or devices may be installed before the Fire Alarm Permit is issued.

FINAL FIRE ALARM SYSTEM INSPECTION

- A. At the completion of all alarm system work, a final inspection by the Fire Department must be conducted to verify the operation of the system.
- B. Fire Department must verify proper location and placement of all devices, and absence of any obstructions.