



## FIRE ALARM SYSTEMS PERMIT APPLICATION, PLAN SUBMITTAL, DESIGN, INSTALLATION AND INSPECTION REQUIREMENTS

Effective Date: March 31, 2008

### 1.0 PERMITS

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- 1.1 To acquire an installation permit for a fire alarm (F/A) system, submit the following to the San Jose Fire Department's Bureau of Fire Prevention (BFP) located at 200 E. Santa Clara St., Development Services, San Jose, California:
- 1.1.1 A completed Fire Protection and Special Systems Installation Permit – provide all required information and make sure the permit card (manila card) is legible.
  - 1.1.2 A copy of the San Jose Fire Department Plan Check Comments – this may be obtained from the architect or general contractor.
  - 1.1.3 A copy of any approved “variance” or “alternate methods” that is relevant to the F/A system – check with the architect or general contractor if a “variance” or “alternate methods” was submitted to and approved by the City of San Jose.
  - 1.1.4 A minimum of three sets of shop quality plans and one submittal packet for the proposed F/A system – one set of plans shall be retained by the BFP.
- Note: Refer to the handout on “Fire Sprinkler System Monitoring” for requirements on fire sprinkler monitoring systems.**
- 1.2 Permits are required for any of the following work:
- 1.2.1 Installation of a new F/A system
  - 1.2.2 Any alteration to an existing F/A system
  - 1.2.3 Addition to an existing F/A system.
  - 1.2.4 Demolition of a part or of a whole F/A system.
- 1.3 See Fee Schedule for permit fees.
- 1.4 Permit fees will be collected when plans are approved.
- 1.5 The permit applicant shall be the installing contractor. All installing contractors shall have a California Electrical (C-10) Contractor's License, a valid worker's compensation certificate, and a San Jose business license. When the design and plans are produced by a party other than contractor, the plans shall be stamped by a Professional Engineer.
- 1.6 Installation, alteration, or demolition of a system shall not commence prior to the approval of plans and the issuance of a permit.



- 1.7 The entire permit card and a San Jose Fire Department approved set of plans shall be kept at the project site until final approval of the permit, after which they shall remain in the possession of the owner.

## 2.0 PLANS

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### 2.1 General Requirements for All Fire Alarm Projects

- 2.1.1 Plans and attachments shall be clearly labeled and legible.
- 2.1.2 Plans and all revisions to the plans shall be dated. If utilizing an existing drawing or portion of a drawing, the area of work shall be highlighted and clouded with an appropriate symbol (delta). Provide a revision list with a symbol, date, description, and initials.
- 2.1.3 When making alterations, additions, or deletions to an existing system, all existing devices and equipment shall be shown and properly identified on the floor plan and system riser (single-line) diagram.
- 2.1.4 Plans shall include a title sheet, an equipment list, a written sequence of operation or functional matrix, a floor plan, a system riser diagram, and secondary power & voltage drop calculations (see paragraphs 2.2 through 2.7).
- 2.1.5 Attachments shall include the manufacturer's specification sheets and California State Fire Marshall (CSFM) listing sheets for all equipment and devices requiring listing. See paragraph 2.8.

**Note: Failure to provide any of the information required in sections 2.1 through 2.8 will result in the plans being disapproved.**

### 2.2 Title Sheet

- 2.2.1 The front sheet shall contain the following information:
- (a) Project name and address of the project.
  - (b) The designer's full name (no initials, pseudonyms, acronyms, or aliases) and signature. The designer of record shall be responsible for the entire system being worked on.
  - (c) Business name, address, and California Contractor's License number of the installing contractor. If the designer of the F/A system is not the installing contractor, the following shall be clearly indicated/printed on the plans:
    - (i) **DESIGNED BY** - followed by the designer's business name, address, designer of record's full name and signature.
    - (ii) **INSTALLING CONTRACTOR** - followed by the installing contractor's business name, address and California Contractor's License number.
  - (d) Type of NFPA 72 system provided, i.e., local, auxiliary, remote station, proprietary or central station service. *(Note: Central Station Service shall provide all the services and comply with all the requirements delineated in section 8.2.2 of NFPA 72, 2002 edition. A protected premise, reporting to a listed central station alone, does not meet the requirements of NFPA 72. Systems that report to a listed central station but do not provide all the services or meet the requirements required in section 8.4.2 of NFPA 72 shall be classified as a Remote Supervising Station System.)*

- (e) The supervising station facility and UL number.
  - (f) Occupancy group(s) of building or area as defined by the California Building Code. Number of stories building height construction type.
  - (g) Scope of work and why the system is being installed, i.e., required by the California Building Code or California Fire Code, required due to a variance, or voluntary. If the scope of work is the demolition of an existing F/A system, justification for removal shall be provided.
  - (h) Description of annunciation zone assignments. For addressable devices, provide device addresses.
  - (i) Indicate if the building does not have an automatic sprinkler system.
  - (j) A note stating that the design and installation complies with NFPA 72 (2002 edition), the International Electric Code (2007 edition), the California Fire Code (1998 edition), the California Building Code (2007 edition), the San Jose Fire Department Ordinances and Standards.
  - (k) All other pertinent notes.
- 2.2.2 A key plan of the building and/or complex indicating the street location and the area of work within the building shall be provided.
- 2.2.3 State the required performance objective of heat/smoke installation per NFPA 72 5.6.1.1, 5.7.1.1.
- 2.2.4 WHE elevations are in scope of work. The approved San Jose Fire Department sequence of operation shall be on plans.

## 2.3 Equipment List

- 2.3.1 Provide the model number, manufacturer's name, description, quantity, CSFM listing number, and symbols to be used (legend) for each device, equipment, and conductors proposed to be installed (*Note: The Fire Department reserves the right to disallow any listed product due to past performance*).
- 2.3.2 The symbols used on the plans shall match the legend. Strike out any "typical" symbols that do not pertain.
- 2.4 Sequence of Operation – a written description or matrix chart shall be provided to define the events that occur when various initiating devices are activated. The description shall include details relating to annunciation, evacuation warning, remote signaling, and activation of fire safety control functions, as applicable. Also provide programming description/label for each initiation, monitoring, and control device.
- 2.5 Floor Plan – the following shall be clearly indicated:
- 2.5.1 Scale used and a graphical representation of the scale. The minimum scale for fire alarm plans is  $3/32" = 1'-0"$ . Metric scale shall not be accepted.
  - 2.5.2 The locations of partitions, non-rated walls, and rated walls. If not full height, indicate the heights of the wall and the ceiling.
  - 2.5.3 The location of all equipment, devices, and appliances (including fire sprinkler control and test valves, fire smoke dampers, air handler units, magnetic door holders, etc.) and end-of-line devices.
  - 2.5.4 The candela rating of each strobe.

- 2.5.5 Use of each room or space.
- 2.5.6 Type of ceiling or roof construction, i.e., smooth, solid joist construction, beam construction, and/or sloped ceiling.
- 2.5.7 A scaled cross-section or elevation-plan if automatic detectors are to be installed.

## **2.6 Riser Diagram – provide the following:**

- 2.6.1 Single-line wiring diagram (riser diagram) that shows the interconnection of each device and equipment of the whole system.
- 2.6.2 Candela rating of each strobe.
- 2.6.3 Number of conductors in each wiring segment and the type and size of wire or conductor to be used.
- 2.6.4 The class and style for initiating, signaling line and notification device circuits. As well as circuit number or identification.

## **2.7 Calculations**

- 2.7.1 Secondary power calculation - provide calculations to verify that standby batteries or other approved secondary power source, has 60 hours of battery backup or 24 hours with UL certification.
- 2.7.2 Voltage drop calculation - calculations shall be provided to verify that the voltage drop in the alarm notification circuits do not exceed **10 percent**. Provide voltage drop calculations for each circuit.

## **2.8 Attachments**

- 2.8.1 Manufacturer's specification sheets for all devices, equipment, and materials to be used shall be submitted, including the transponder to the supervising station. Highlight on the cut sheet which device or equipment is being used, the listing information, and the application per listing.
- 2.8.2 Submit copies of the CSFM listing number sheets for all devices and equipment requiring listing.

## **3.0 DESIGN AND INSTALLATION**

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- 3.1 F/A systems shall be designed and installed in accordance with NFPA 72 (2002 edition), the International Electrical Code (2007 edition), the California Fire Code (2007 edition), the California Building Code (2007 edition), and the San Jose Fire Department ordinances, policies, and standards. Other standards contain design/installation criteria for specific life safety related equipment. These other standards are referred to in NFPA 72.
- 3.2 Refer to the fire and building codes to determine when a F/A system is required. The attached Table on "FIRE ALARM SYSTEMS – Required Installations" (FA001A) may be used as a guide.
- 3.3 An approved central, proprietary or remote service, which gives audible and visual signals at a constantly attended location, shall monitor F/A systems.

- 3.4 There shall be no more than one F/A system in a building. Likewise, there shall be no more than one supervising station providing service to a building, and each building shall be provided with a dedicated Fire Alarm panel.
- 3.5 Combination fire/burglar systems shall not be allowed. Wireless dispatching and monitoring shall not be approved.
- 3.6 Central Station Service shall provide all the services and comply with all the requirements delineated in section 8.2.2 of NFPA 72, 2002 edition. If any of the requirements for a central station service per NFPA 72 is not met, the F/A system is not a Central Station Service and by default must meet the requirements for a Remote Station Service and shall have 60 hours battery backup.
- 3.7 Manual fire alarm boxes shall be UL 38 Listed. The box shall be mounted such that the operable part is not less than 3-1/2 feet and not more than 4-1/2 feet above the finished floor level. Boxes shall be readily accessible and unobstructed (boxes shall not be obstructed by doors in either the fully open or closed position). . “Readily accessible” means capable of being reached quickly for operation, renewal, or inspections, without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, chairs, etc
- 3.8 Each installed detector shall be accessible for periodic maintenance and testing. “Accessible” means admitting close approach - not guarded by locked doors, elevation, or other effective means.
- 3.8.1 Spot-type heat detectors shall be located on the ceiling not less than 4 inches from a sidewall or on the sidewall between 4 and 12 inches from the ceiling to the top of the detector. Line-type heat detectors shall be located on the ceiling or on the sidewall not more than 20 inches from the ceiling. For smooth ceilings up to 10 feet high, the installed spacing shall not exceed their listed spacing. There shall be a detector located within a distance of one-half the listed spacing, measured perpendicular to the walls or partitions extending to within 18 inches of the ceiling. All points in the ceiling shall be within 0.7 times the listed spacing from a detector. For other than smooth ceilings up to 10 feet high, follow strictly the requirements for spacing delineated in section 5.6.5 of NFPA 72.
- 3.8.2 Spot type smoke detectors shall be located on the ceiling not less than 4 inches from a sidewall or on the sidewall between 4 and 12 inches from the ceiling to the top of the detector. For smooth ceilings, spacing of 30 feet between detectors or the manufacturer’s documented instructions shall be followed. All points in the ceiling shall be within 0.7 times the selected spacing. For other than smooth ceilings, follow strictly the requirements delineated in section 5.7.3 of NFPA 72.
- 3.8.3 Each sampling port of an air sampling type smoke detector shall be treated as a spot-type smoke detector for the purpose of location and spacing. Maximum air sample transport time from the farthest sampling point shall not exceed 120 seconds. Air sampling system piping shall be conspicuously identified as “SMOKE DETECTOR SAMPLING TUBE. DO NOT DISTURB” as follows:
- (a) At changes in direction or branches of piping
  - (b) At each side of penetration of walls
  - (c) At intervals on piping at a maximum of 20 feet interval.

- 3.8.4 Smoke detectors in high air movement areas shall be located and spaced per section 5-7.5.3. of NFPA 72.
- 3.8.5 Smoke detectors shall not be installed until after the construction clean-up of all trades is complete and final.
- 3.8.6 Smoke detectors shall be performance – based designed NFPA 5.3.
- 3.9 An approved smoke detection system that is supervised by an approved central, proprietary, or remote station service shall be provided in areas with stationary lead-acid battery systems having a liquid capacity of more than 100 gallons used for facility standby power, emergency power, or uninterrupted power supplies. When the building has no protective signaling system a local alarm which will give an audible signal at a constantly attended location shall be provided.
- 3.10 In-duct smoke detectors shall be accessible for cleaning and maintenance. The location of in-duct smoke detectors in air duct systems shall be permanently and clearly identified and recorded. Permanent labels or placards outside the first point of access shall be installed to indicate that a detector is accessible from that point. Also, when in-duct smoke detectors are installed in concealed locations, more than 10 feet above the finished floor, or in arrangements where the detector's alarm indicator is not readily visible, the detectors shall be provided with a clearly labeled remote alarm indicators in a readily accessible location. For the information required on labels or placards, contact the SJFD at (408) 535-7750.
- 3.11 Fire/Smoke Dampers – dampers designed to close when presence of smoke is detected shall be powered in the open position, i.e., loss of power will automatically close the damper. Smoke dampers shall be closed by activation of a smoke detector. In buildings with an approved F/A system, the smoke detector shall be connected such that activation of the detector shall cause a supervisory signal to be indicated at both the fire alarm panel and supervising station. Smoke detectors shall be installed in accordance with one of the following applicable methods:
- 3.11.1 Dampers designed to close when presence of smoke is detected shall be powered in the open position, i.e., loss of power will automatically close the damper. Smoke dampers shall be closed by activation of a smoke detector.
- 3.11.2 In buildings with an approved F/A system, the smoke detector shall be connected such that activation of the detector shall cause a supervisory signal to be indicated at both the fire alarm panel and supervising station.
- 3.11.3 In buildings without an approved F/A system, a ground fault, trouble or loss of power to the detector shall cause the interruption of power source to the smoke dampers.
- 3.11.4 Smoke detectors shall be installed in accordance with one of the following applicable methods:
- (a) Where a damper is installed within a duct, a smoke detector shall be installed in the duct within 5 feet of the damper with no air outlets or inlets between the detector and damper. The detector shall be listed for the air velocity, temperature, and humidity anticipated at the point of installation.
  - (b) Where a damper is installed within an unducted opening in a wall, a spot-type detector listed for releasing service shall be installed within 5 feet horizontally of the damper.
  - (c) Where a damper is installed in a ceiling, a spot-type detector listed for releasing service shall be installed on the ceiling within 5 feet horizontally of the damper.

- (d) Where a damper is installed in a corridor wall or ceiling, the damper may be controlled by a smoke-detection system installed in the corridor.
- (e) When a total-coverage smoke-detection system is provided within all areas served by an air moving system, dampers may be controlled by the smoke-detection system.

### **3.12 Air Moving Systems**

- 3.12.1 A duct detector shall be installed on the supply side of air moving systems with capacities exceeding 2,000 cfm. A duct detector shall also be installed on the return side of air moving systems with capacities exceeding 15,000 cfm.
- 3.12.2 The duct detectors, when activated, shall interrupt the power source of the air moving equipment.
- 3.12.3 In buildings with an approved protective signaling system, the duct detector shall be connected to the signaling system such that activation of the duct detector shall cause an alarm signal in highrise buildings, and a supervisory signal in all other buildings to be indicated at a constantly attended location. Protective signaling systems include both F/A systems and automatic sprinkler monitoring systems.
- 3.12.4 In buildings without a signaling system, the activation of the duct detectors shall cause an audible/visual supervisory signal to be indicated at a normally occupied space of the building. A ground fault, trouble, or loss of power to the duct detector shall cause the interruption of power source to the air moving equipment.
- 3.12.5 All air handling units shall be properly labeled.

### **3.13 Door Release**

- 3.13.1 Doors required to be closed in response to smoke flowing in either direction, where the depth of wall section above the door is 24 inches or less, one ceiling-mounted detector is required on one side of the doorway. The detector shall not be more than 5 feet from the doorway. In no case shall the detector be closer than the distance equal to the depth of the wall section above the door or 12 inches, whichever is greater, from the doorway.
- 3.13.2 When the depth of wall section above the door is greater than 24 inches, two ceiling-mounted detectors are required, one on each side of the door. The detectors shall not be more than 5 feet from the doorway. In no case shall the detector be closer than the distance equal to ½ the depth of the wall section above the door measured horizontally to the doorway.
- 3.13.3 Where door release is required to prevent smoke transmission in one direction only, one ceiling-mounted detector is required in the space to which the smoke is to be confined. The detector shall not be closer than 5 feet from the doorway.
- 3.13.4 Ceiling-mounted smoke detectors shall be installed along the centerline of the doorway.
- 3.13.5 In buildings with an approved F/A system, the smoke detector shall be connected such that activation of the detector shall cause an alarm signal to be indicated at both the fire alarm panel and supervising station.
- 3.13.6 In buildings without an approved F/A system, a ground fault, trouble or loss of power to the detector shall cause the doors to close.

3.13.7 Vertically sliding doors shall have an average closing speed of not less than 6 inches/second nor more than 24 inches per second (*Note: San Jose Fire Department requirement is one foot per second*).

3.14 Exit doors shall be openable from the inside without the use of a key or special knowledge or effort. Any device or system intended to effect the locking of exit doors shall not be installed unless a variance allowing their installation is approved. For information, in San Jose, variances that allow the locking of exit doors have been approved in the past with the condition that the exit doors shall unlock when the following occur: (a) the F/A system is activated, (b) loss of primary power, (c) operation of a manual pull station installed next to the exit, and (d) earthquake – doors unlock upon activation of elevator seismic control in multi-story buildings.

### **3.15 Elevators**

3.15.1 Elevators with a vertical travel distance of 25 feet or more shall be provided with an approved listed smoke detector for elevator recall purposes only. The detectors shall be installed in each associated elevator lobby, and machine rooms. Primary and alternate recall shall be provided. NFPA 72 6.15.3 & 6.15.4.

### **3.16 Fire Pumps**

3.16.1 Audible and visual supervisory alarms shall be provided at a **constantly** attended space. These alarms shall indicate the following:

- (a) Electrically-driven pumps
  - Controller has operated into a motor running condition (separate signal)
  - Loss of any phase on the line side of the motor contactor (separate signal)
  - Phase reversal on line side of motor starter (separate signal)
- (b) Engine-driven pumps
  - Engine running (separate signal)
  - The controller main switch has been turned to “off” or “manual” position (separate signal)
  - Trouble on the controller or engine and low fuel (separate or common signal)

### **3.17 Emergency Generators**

3.17.1 Audible and visual supervisory alarms shall be provided at a constantly attended space. These alarms shall indicate the following:

- (a) Engine running (separate signal)
- (b) The controller main switch has been turned to “off” or “manual” position (separate signal)
- (c) Trouble on the controller or engine and low fuel (separate or common signal)

### **3.18 Fire Suppression Systems**

3.18.1 Automatic Fire Sprinkler Systems

- (a) Waterflow alarm-initiating devices shall initiate an alarm signal within 90 seconds of flow of water equal to the flow from a single head of the smallest orifice size installed (*Note: San Jose Fire Department requirement is at around 45 seconds*).
  - (b) Automatic sprinkler system control valves shall initiate an off-normal signal within two revolutions of the hand wheel or one-fifth the travel distance of the valve. Restoration signal shall be initiated only when the valve is back to its normal position. Automatic sprinkler valves include, but are not limited to, post indicating valves (PIV) or open stem and yoke (O, S & Y) valves, floor control valves, standpipe isolation valves, associated fire pump valves, and auxiliary systems control valves.
- 3.18.2 Other automatic fire extinguishing systems, such as pre-action, deluge, foam, wet chemical, FM-200, Inergen, etc., shall be tied-in to the F/A system as required by other standards. The operation of any of these fire-extinguishing systems shall activate the F/A system.

### 3.19 Notification Signals

- 3.19.1 Fire alarm signals, supervisory signals, and trouble signals shall be distinctively and descriptively annunciated.
- 3.19.2 F/A systems shall include both audible and visual alarms. Visual alarm devices shall be located in restrooms, corridors, music practice rooms, band rooms, gymnasiums, multi-purpose rooms, occupational shops, occupied rooms where ambient noise level impairs hearing of the fire alarm, lobbies, meeting rooms, and any other area for common use. "Common Use" is defined as interior and exterior rooms, spaces, or elements that are made available for the use of a restricted group of people (e.g., occupants of a homeless shelter, the occupants of an office building, or the guests of such occupants).
- 3.19.3 When actuated, F/A initiating devices shall activate an alarm signal, which is audible throughout the building. The F/A signal shall be a distinctive sound, i.e., "three-pulse temporal pattern" and shall exceed the prevailing equivalent level in the room or space by 15 decibels (*Note: In dwelling units, the ambient sound level shall be the sound level measured when the air-conditioning unit and television is operating*). Sound levels for each alarm-signaling device shall not exceed 110 decibels.
- 3.19.4 Visible notification appliances shall be spaced in accordance with the manufacturer's specifications and NFPA 72, Figure 7.5.4.1.1 and Tables 7.5.4.1.1(a), 7.5.4.1.1 (b), A7.5.4.1 and A7.5.4.2. In corridors not exceeding 20 feet in width, visible appliances shall be located within 15 feet from the end of the corridor with a separation no greater than 100 feet between appliances. The floor plans shall designate each visible appliance's candela rating (*Note: 15/75 candela strobes will only cover a space of 20' X 20'*).
- 3.19.5 When two or more visible notification appliances are installed in a room or area, they shall flash in synchronization.
- 3.19.6 Wall-mounted audible appliances shall have their tops at not less than 90 inches above the finished floor and not less than 6 inches below the finished ceiling. Combination audible and visible appliances shall be mounted following the requirements for visible appliances.
- 3.19.7 Wall-mounted visible appliances shall have their bottoms at not less than 80 inches and no greater than 96 inches above the finished floor.

- 3.20 Battery Capacity - standby batteries shall be adequate to provide the standby requirements specified by NFPA 72, paragraph 1-5.2.6. The total ampere-hour requirement shall be based on the summation of two calculations, i.e., supervisory non-alarm and alarm-load condition.
- 3.21 Voltage Drop - the maximum voltage drop in any alarm notification circuit shall not exceed **10 percent**.
- 3.22 Power Service - the power service to the fire alarm control unit and all power supply units shall be on a dedicated branch circuit. The circuit and connection shall be mechanically protected. The circuit disconnecting means shall have a red marking, be accessible only to authorized personnel, and be identified as "FIRE ALARM CIRCUIT CONTROL." **The location, panel and circuit number of the circuit disconnecting means shall be permanently identified at the fire alarm control unit and power supply units.**
- 3.23 Non-high rise R Occupancies
- 3.23.1 Branch notification circuits shall be designs in one of the following:
- (i) Class A notification circuits
  - (ii) Each unit shall be provided with dedicated notification circuit.
- 3.23.2 In buildings with mixed occupancy involving residential above commercial occupancy, each occupancy shall be provided with dedicated notification circuits.
- 3.23.3 Riser notification circuits shall be Class A wiring.
- 3.24 Notification circuits containing notification appliances shall not be used to trigger booster power supply panel. End of line resistor shall be installed at last appliance.
- 3.25 Relays used to initiate control functions shall be located within 3 feet of the controlled circuit or appliance.

## **4.0 HIGH RISE**

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- 4.1 Provide multiple panels with processor through building with distributed technology.
- 4.2 All risers shall be Class A wiring: Audio, data and SLC.
- 4.3 High rise notification circuits shall be Class A wiring.
- 4.4 Fire Alarm control panels, or any other control panel, used as the Firefighter smoke control panel shall contain a dedicated processor and be UL 864 and UUKL listed.
- 4.5 Firefighter phone jacks shall be located in stairwell vestibule.
- 4.6 Emergency voice/alarm communication shall be provided with Multi-Channel capability for Automatic and manual voice and tone signals on both a selective and all-call basis and in any combination.
- 4.7 Live voice instructions shall override all previously initiated signals on a channel and shall have priority over any subsequent automatically initiated signals on said channel. The system shall be capable of transmitting evacuations signals on some zones, and at the same time shall provide voice paging to other zones.

- 4.8 Manual controls and visual indication for this system shall be provided at the Fire Command Center.
- 4.9 Separate paging zones and control shall be provided for each of the following: 1) Elevator Groups, 2) Stairways, 3) Corridors/Hallways per Floor, 4) Dwelling Units per Floor, 5) Tenant Areas per Floor, 6) Areas of Refuge.
- 4.10 Air handlers and fire smoke dampers shall be controlled and monitored for status, and their operational status shall be displayed at the Fire Command Center.

## 5.0 INSPECTIONS

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- 5.1 Field inspections shall be scheduled only after a permit has been issued.
  - 5.2 Inspections shall be scheduled by the installing contractor only. When scheduling for inspection, request for sufficient time to complete a thorough inspection of the work performed. Travel time is included in your inspection time.
  - 5.3 Inspections may be scheduled by calling (408) 535-3555. The following information is required: Permit Number. The amount of time required for inspection (including travel time) name, and number of contact person. An inspector will call to schedule the time and date of the inspection.
  - 5.4 Missed inspections or inspections canceled within 24 hours shall be counted against inspection time. The installing contractor shall conduct a complete test of the system and shall complete all parts of the “Record of Completion” (Figure 4-5.2.1 of NFPA 72) **prior** to the San Jose Fire Department (SJFD) inspection date.
  - 5.5 At the time of inspection, the contractor shall hand the following to the SJFD inspector upon his/her arrival:
    - 5.5.1 Approved and stamped plans and complete permit (white, pink, hard card)
    - 5.5.2 A copy of the completed “Record of Completion”.
    - 5.5.3 As-built plans if installation has deviations from the approved plan.
    - 5.5.4 All previous records of inspections.
- Note: If any of the above is not provided, inspection may be called-off and shall be considered a missed inspection.***
- 5.6 There shall be a minimum of two technicians. One technician will be at the F/A control panel while the other will be testing the devices. Two-way radios shall be provided and the technician at the panel shall communicate to the SJFD inspector which devices are activated on the panel.
  - 5.7 Necessary coordination shall be made such that representatives of other contractors whose equipment are involved in the testing are present (i.e., fire/smoke damper, air handlers, elevator, fire pumps, emergency generators, etc.).
  - 5.8 After the successful completion of the tests/inspections, provide the following to the SJFD inspector:
    - 5.8.1 For central station service systems, a copy of the listing organization’s certification that the installation complies with NFPA 72 or a copy of the placard from the listed central station certifying that the installation complies with NFPA 72. Permit shall not be “finaled” without this certificate or placard.
    - 5.8.2 The permit card (for inspector’s signature).

- 5.9 After final completion and acceptance of the project, the contractor shall provide the following to the owner:
- 5.9.1 All literature and instructions provided by the manufacturers describing proper operation and maintenance of all devices and equipment,
  - 5.9.2 A copy of the approved plan and as-built plan, if applicable,
  - 5.9.3 A copy of the Certificate of Completion, and
  - 5.9.4 The signed and finalized permit card.

**DOCUMENT REVISIONS:** This document is subject to revisions. For general information and to verify that you have the most current document, please call (408) 535-7750, and request the current version date.