

Office of the Fire Marshal

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

Effective Date: January 2014

1.0 PERMITS

- 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, fire alarm system equipment list, fire alarm components cut sheets/data sheets, California State Fire Marshal (CSFM) listing documentation and one submittal packet for the proposed F/A system one set of plans and associated documents 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 Plan check fees will be collected when plans are submitted. 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. The plans shall be stamped and wet signed.
- 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

- 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 Marshal (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:
 - 2.2.1.1 Project name and address of the project.
 - 2.2.1.2 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.
 - 2.2.1.3 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:
 - 2.2.1.3.1 **DESIGNED BY** followed by the designer's business name, address, designer of record's full name and signature.
 - 2.2.1.3.2 **INSTALLING CONTRACTOR** followed by the installing contractor's business name, address and California Contractor's License number.
 - 2.2.1.4 Type of supervising station service as per NFPA 72 (See pages 10-12):
 - 2.2.1.4.1 Central Station Service
 - 2.2.1.4.2 Proprietary Supervising Station Service

Note: Remote Supervising Station Service & Remote Supervising Station Fire Alarm Systems are not allowed.

- 2.2.1.5 The name and address of the supervising station facility and UL number.
 - 2.2.1.5.1 The supervising station shall be UL listed for central station service. The UL listing shall be UUFX.

- 2.2.1.5.2 Clearly indicate the contract arrangement between the protected premises and the listed Central Station and/or the listed local service company if all the services indicated in Section 26.3.2 of NFPA 72 are not provided by the same entity.
- 2.2.1.5.3 The prime contractor shall post the UL Certificate for the fire alarm system conspicuously within three-feet of the fire alarm panel at the protected premises.
- 2.2.1.6 Occupancy group(s) of building or area as defined by the California Building Code.
- 2.2.1.7 Number of basements, number of stories above basement, building height, total building area, and building construction type.
- 2.2.1.8 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.
- 2.2.1.9 For new construction, the extent of detector coverage (Complete coverage, Partial or Selective coverage, Non-required coverage) should be indicated.
- 2.2.1.10 Description of annunciation zone assignments being shown. The zones shall match all other Life Safety Systems (e.g.: Fire Sprinkler; Clean Air Fire Extinguishing: Pre Action; etc. systems). For addressable devices, provide device addresses.
- 2.2.1.11 Indicate if the building is protected with an automatic sprinkler system or not.
- 2.2.1.12 A note stating that the design and installation complies with NFPA 72 (2013 edition), the California Electric Code (2013 edition), the California Fire Code (2013 edition), the California Building Code (2013 edition), the San Jose Fire Department Ordinances and Standards.
- 2.2.1.13 A clear site map and/or vicinity map.
- 2.2.1.14 All other pertinent notes.
- 2.2.1.15 Battery Standby Requirement Beginning January 1 2017, all new fire alarm systems and dedicated function fire alarm systems (such as sprinkler monitoring systems, etc.) serving the protected premises shall be UL Certified with 24-hours battery standby. Beginning January 1 2017, the 60-hours battery standby will no longer be permitted for new systems in lieu of UL Certification for the system.
 - 2.2.1.15.1.1 Tenant Improvement or Market Ready projects are exempt from the UL Certificate requirement if the 60-hours battery standby is maintained as previously approved.
 - 2.2.1.15.1.2 Tenant Improvement projects that include replacement of only the fire alarm control unit and/or power supplies are exempt from the UL Certificate requirement if the 60-hours battery standby is maintained as previously approved.
 - 2.2.1.15.1.3 One-for-one replacement projects that include replacement of any devices, appliances, fire control unit, and/or power supplies are exempt from the UL Certificate requirement if the 60-hours battery standby is maintained as previously approved.

- 2.2.1.15.1.4 It is not the intent to require a UL Certificate for previously approved fire alarm systems with 60-hours battery standby (or secondary power supply consisting of an automatic-starting, engine driven generator and 4-hours/24-hours storage batteries).
- 2.2.1.15.1.5 The designer has a choice to provide a UL Certificate with 24-hours battery standby for previously approved systems that have 60-hours battery standby with approval from the AHJ.
- 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 Performance-based designs should include documentation of the performance objectives, applicable scenarios, all calculations, modeling files & results and all other technical substantiation used to determine the design criteria and life safety performance per NFPA 72 Section 17.3.

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 and the fire alarm riser diagram shall match the legend. Strike out any "typical" symbols that do not pertain.
- 2.3.3 Provide the wiring schedule.
- 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 1/8" = 1'-0". Metric scale shall not be accepted.
 - 2.5.2 The locations of doors, 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 (room description).
 - 2.5.6 Type of ceiling or roof construction, i.e., smooth, solid joist construction, beam construction, sloped ceiling, and/or high 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 <u>each</u> 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.
 - 2.6.5 The circuit number or identification of each Initiating/Notification and Signaling Line circuit.

2.7 Calculations

- 2.7.1 Secondary power calculation Provide calculations to verify that standby batteries or other approved secondary power source, has 24-hours battery standby with UL Certification. Also refer to Section 2.2.15 for information on previously approved fire alarm systems with 60-hours battery standby capacity. In addition, the battery calculations should also account for additional battery capacity required for a 20% safety factor and a 5-min alarm duration or 15-min alarm duration if an Emergency/Voice Communications System (EVACS) is installed.
- 2.7.2 Voltage drop calculation In general, calculations shall be provided to verify that the voltage drop in the alarm notification circuits do not exceed 15 percent. Provide voltage drop calculations for each circuit by point-to-point method. To properly execute the voltage drop calculations the battery should be assumed degregaded 15% from 24 volts down to 20.6 volts in accordance with the 9th Edition Standards for fire alarm control panels UL 864. Make sure the voltage at the last device is not below 16 volts, or the highest listed voltage on the circuit, and use the resistance tables in the National Electrical Code to determine the resistance of the wiring.

Note: Field and pre-testing is to be done the on battery(ies) and the most demanding circuits by calculation shall be tested using an approved voltage drop meter with the beginning battery charge being verified and the 4.6 maximum voltage drop across the circuit being verified from the starting battery charge. This is to avoid an undegredaded battery have devices draw the voltage from 24 volts down to 16 which is too much loss across the circuit once the battery degrades over time.

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.

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3.0 DESIGN AND INSTALLATION

- 3.1. F/A systems shall be designed and installed in accordance with NFPA 72 (2013 edition), the California Electrical Code (2013 edition), the California Fire Code (2013 edition), the California Building Code (2013 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 Fire Alarm system is required
- 3.3. **Retroactivity of NFPA 72:** Like most installation standards, NFPA 72 is not intended to be enforced retroactively on existing buildings (see NFPA 72 section 1.4.1). However, we routinely receive questions on how to address new fire alarm systems in existing buildings. SJFD and NFPA 72 do not specifically address this complex issue. Requiring that a fire alarm system in an existing building meet the requirements that NFPA 72 intends for new systems can be difficult, particularly when dealing with notification appliances and minimum sound levels. The need for occupant evacuation, the evacuation capabilities of the occupants, and the cost of the upgrades should be considered when applying the requirements of NFPA 72 to a fire alarm system in an existing building. While it is ultimately up to the F/A system designer to provide a code compliant system, SJFD regulates as follows:
 - 3.3.1. When a new system is required due to change of occupancy or CFC mandate, the premises shall be brought up to current code.
 - 3.3.2. When the existing system is no longer serviceable and hence, must be replaced as a maintenance repair, a new system may be installed in the same configuration to the existing layout and function provided it does not diminish what was the original systems capability. The scope shall be clearly demonstrated on the plans and acceptance testing shall be the same as if the system where new.
 - Note: SJFD to determine when a fire alarm system must be brought into compliance with the current code.
- 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. When Auxiliary Suppression systems (Pre Action; Clean Air Fire Extinguishing; etc.) are installed requiring a listed releasing panel, it is preferable that that building Fire Alarm panel be used and upgraded if necessary. Should an auxiliary releasing panel be proposed and acceptable to SJFD, it must be installed in the same location as the building panel and be tied to the building Fire Alarm panel. An annunciator panel controlling the auxiliary suppression system located at the building Fire Alarm panel shall be required if a releasing panel is approved to be installed other than next to the building Fire Alarm panel.
- 3.6. Combination fire/burglar systems shall not be allowed.
- 3.7. Single communications methods are allowed per NFPA 72, Section 26.6.3.1.5. A system employing IP Technology as a primary method of transmission shall be provided with a secondary method of transmission using another transmission technology such as, a telephone line, radio network, cellular network etc.
- 3.8. **Automatic detection in break rooms** Provide heat detection in break rooms when detection is required. This requirement is applicable to all Tenant Improvement projects.

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- 3.9. **Audibility Coverage** Provide audibility coverage in all occupiable rooms/spaces of the building. For the purposes of this requirement, normally unoccupied spaces such as mechanical rooms, electrical rooms, storage rooms, etc. are considered occupiable rooms (Occupiable rooms/spaces include any room/space equipped with means of egress, light and ventilation facilities). Visible coverage may be provided with approval from AHJ.
- 3.10. **Emergency Communications Systems**: Chapter 24 "Emergency Communication Systems" regulates the installation and use of voice evacuation and mass notification systems as well as other systems such as Two Way Communication and Emergency Responder Radio Coverage. The CFC and CBC primarily in section 907 determines when these systems are required in a building. NFPA 72 tells you how the system should be installed when required by the fire and building codes. Please see the SJFD handout for specific direction concerning Two Way Communication systems and Emergency Responder Radio Coverage.
- 3.11. **Voice Evacuation Systems Used for Other Functions**: When a voice evacuation system is installed in a building, the system can be used for other non-emergency functions. NFPA 72 allows the fire alarm system to be utilized for other ancillary functions such as general paging, background music or other non-emergency functions as long as the fire alarm signal takes precedence over all other signals.
- 3.12. Building Evacuation Strategies: Many people have a "one-size fits-all" approach to fire alarm systems and treat them like the fire alarm system we experienced in school (the alarm sounds loudly and everyone leaves the building in an orderly fashion). However, this practice may not be desirable in all buildings and is not necessarily required.
 - In addition to the public mode / private mode provisions of NFPA 72, another frequently overlooked provision in NFPA 72 is Section 23.8.6.3. This section allows fire alarm signals to be sounded by zone and that the notification should match the evacuation strategy of the facility (see the language below): 23.8.6.3.1 Notification zones shall be consistent with the emergency response or evacuation plan for the protected premises. 23.8.6.3.2 The boundaries of notification zones shall be coincident with building outer walls, building fire or smoke compartment boundaries, floor separations, or other fire safety subdivisions.
- 3.13. Commercial Low Frequency Sounding Devices: NFPA 72, Section 18.4.5.3 contains language requiring audible appliances that produce a low frequency signal in rooms used for sleeping. This includes bedrooms and areas that might reasonably be used for sleeping, such as living rooms. Refer to NFPA 72 A.18.4.5.3. for guidance. The alarm signal in the sleeping area must produce a square wave signal that meets a frequency of 520 Hz ± 10 percent (NFPA 72 section 18.4.5.3). This language will apply to new hotel/motels, apartments and assisted living facilities. It is not intended to apply to hospitals, nursing homes or child care centers where staff is available to assist with evacuation.

3.14. Residential Low Frequency Sounding Devices: NFPA 72, Chapter 29 (Single and Multiple Station Alarms and Household Fire Alarm Systems) contains new language for low frequency smoke alarms in dwelling units where the occupants have mild to severe hearing loss (section 29.3.8.1). This language will be difficult to apply in single family homes. But it is important to keep this section in mind when applying the code requirements for an assisted living facility where the occupants may have mild to severe hearing loss.

Occupants with profound hearing loss (greater than 90 Hz) must be provided with tactile notification appliances (section 29.3.8.2). It is important to differentiate between the Chapter 18 fire alarm system notification requirements and the dwelling unit smoke alarm provisions of chapter 29. Chapter 18 applies to all fire alarm system installations where occupants sleep. Chapter 29 applies to only those occupants with mild to severe hearing loss.

3.15. **R-2** Fire Alarm Visible Notification Capabilities and Interconnection:

- 3.15.1. All dwelling units and sleeping units shall be provided with the capability to support visible alarm notification appliances.
- 3.15.2. A detailed description of the future conversion (addition of audible/visible appliance, relocation/deletion of horns, etc) of an apartment unit to hearing impaired use unit shall be described. Typical floor plans of the units "before" visual appliance conversion and "after" visual appliance conversion shall be provided. The future Fire Alarm Sequence of Operation, battery calculations and voltage drop calculations shall be described in detail.
- 3.15.3. Since the units will need to be pre-wired for future conversion, SJFD inspection shall be required before dry walls are installed. Inspections may be scheduled by calling (408) 535-3555.
- 3.15.4. Upon future conversion visible alarm notification when provided shall be provided throughout the entire premises and shall be interconnected such that any alarm initiated within a unit shall cause all notification appliances within the unit to activate.
- 3.15.5. Activation of any alarm initiating device within a unit shall be transmitted to the buildings monitoring service as a supervisory signal.

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:
 - 3.16.1.1. Electrically-driven pumps
 - 3.16.1.2. Controller has operated into a motor running condition (separate signal)
 - 3.16.1.3. Loss of any phase on the line side of the motor contactor (separate signal)
 - 3.16.1.4. Phase reversal on line side of motor starter (separate signal)
- 3.14.2. Engine-driven pumps
 - 3.14.2.1. Engine running (separate signal)
 - 3.14.2.2. The controller main switch has been turned to "off" or "manual" position (separate signal)
 - 3.14.2.3. 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:
 - 3.17.1.1. Engine running (separate signal)
 - 3.17.1.2. The controller main switch has been turned to "off" or "manual" position (separate signal)
 - 3.17.1.3. Trouble on the controller or engine and low fuel (separate or common signal)
- 3.18. **Supervision of Remote Power Supplies** When multiple remote power supplies are installed at different locations in a building, each remote power supply shall be individually supervised for trouble conditions. If all the power supplies are located in one room, combined supervision of all power supplies is permissible.
- 3.19. **Wiring** General guidance includes but is not limited to the following:
 - 3.19.1. All fire alarm cables shall confirm to the requirements of National Electrical Code (NFPA 70).
 - 3.19.2. Good workmanship shall be apparent in the installation of fire alarm cables/conduits.
 - 3.19.3. Fire alarm cables that are installed exposed shall be run parallel and perpendicular to the surface of the building or exposed structural members and follow the surface contours as much as practical. Fire alarm cables, whether exposed, concealed or in raceways, shall be sufficiently supported using devices intended for the purpose.
 - 3.19.4. Fire alarm cables/conduits shall be firmly secured in place, adequately supported and permanent. UL listed cable/zip ties when used to secure fire alarm cable to building members/structure, shall be of a type designed, intended and appropriate for use and complement the items with which they are used.
 - 3.19.5. Low voltage fire alarm cables (NAC and SLC) shall be adequately separated from high-voltage cables.
 - 3.19.6. Fire alarm raceways (when used/required) shall be firmly and securely fastened to or supported from the building structure or a structural member or embedded in concrete or masonry. Recommended spacing of supports for vertical and horizontal raceways per NECA 1 (Standard for Good Workmanship in Electrical Construction) and/or by manufacturer should be followed.
 - 3.19.7. Painting of fire alarm wires is not a recommended practice but widely encountered. Painted wires prohibit identification of the wiring. Means shall be provided to identify the marking and listing of the painted wires to the satisfaction of the inspector. In addition, provide a letter from manufacturer indicating that the UL Listing of the painted fire alarm cable is still applicable.

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4.0 Inspections

- 4.1. Field inspections shall be scheduled only after a permit has been issued.
- 4.2. 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. Inspections may be scheduled by calling (408) 535-3555.

Note: SJFD prewiring and rough inspections shall be required **before drywall or other obstacles to the inspection are installed** for the following projects.

- 4.2.1. In all R-2 Occupancy buildings since the units will need to be pre-wired for future conversion.
- 4.2.2. In all projects that contain Emergency Communications Systems per NFPA 2013 to verify pathway survivability (Examples include In-building fire emergency voice/alarm communications systems, 2-way In-building wired emergency communication systems, 2-way radio communication enhancement systems, Area of refuge emergency communications systems)
- 4.3. Battery Test When Standby & Alarm Battery test is required by SJFD, turn off power supply to the FACU and/or Communicator and/or any remote power supplies, 24 hours (or 60 hours when applicable) prior to the scheduled inspection day. In most cases, the 20% safety factor included in the battery capacities and any additional spare battery capacity should allow for the battery test to be performed at any time on the inspection day. Provide printout from the central station that indicates AC fail/out on the day of SJFD inspection.
- 4.4. Inspections may be scheduled by calling (408) 535-3555. The following information is required:
 - 4.4.1.Permit Number.
 - 4.4.2. The amount of time required for inspection (including travel time).
 - 4.4.3. Name and number of contact person.
- 4.5. Missed inspections or inspections canceled within 48 hours shall be counted against inspection time.
- 4.6. The installing contractor shall conduct a complete test of the system and shall complete all applicable parts of the "System Record of Completion" (Figure 7.8.2(a) through 7.8.2(c) of NFPA 72) **prior** to the San Jose Fire Department (SJFD) inspection date.
- 4.7. A complete pre test report shall be available to the SJFD inspector before the inspection.
- 4.8. At the time of inspection, the contractor shall hand the following to the SJFD inspector upon his/her arrival:
 - 4.8.1. Approved and stamped plans and complete permit (white, pink, hard card).
 - 4.8.2. A completed copy of all applicable portions of the "System Record of Completion".
 - 4.8.3. As-built plans if installation has deviations from the approved plan.
 - 4.8.4. All previous records of inspections.
 - 4.8.5.UL certification for the fire alarm system if the system has 24 hour standby battery back-up.

Note: If any of the above is not provided, the inspection may be called-off and shall be considered a missed inspection.

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- 4.9. During the Inspection by SJFD, 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.
- 4.10. 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.).
- 4.11. After the successful completion of the tests/inspections, provide the following to the SJFD inspector:
 - 4.11.1. 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.
 - 4.11.2. The permit card (for inspector's signature).
- 4.12. After final completion and acceptance of the project, the contractor shall provide the following to the owner:
 - 4.12.1. All literature and instructions provided by the manufacturers describing proper operation and maintenance of all devices and equipment.
 - 4.12.2. A copy of the approved plan and as-built plan, if applicable.
 - 4.12.3. A copy of the Certificate of Completion.
 - 4.12.4. The signed and finaled permit card.

5.0 DOCUMENT REVISIONS

5.1 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.

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Supervising Station Service Examples

26.3.3 – The Prime Contractor is responsible to issue the Certificate for the Premises.

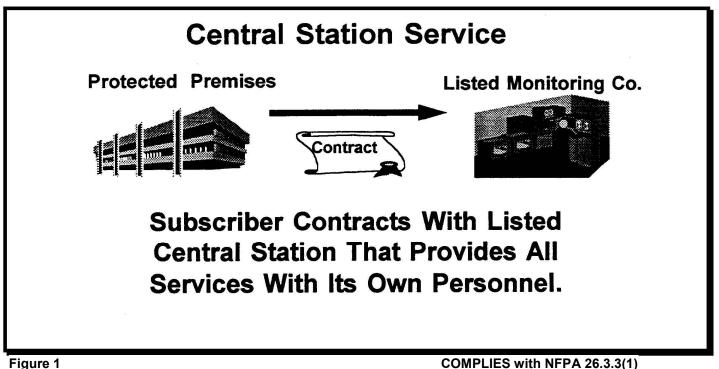


Figure 1 COMPLIES with NFPA 26.3.3(1)
In this example, the company under "UUFX" directly contracts with the subscriber for ALL the NFPA 72 required services.

FULL SERVICE COMPANY

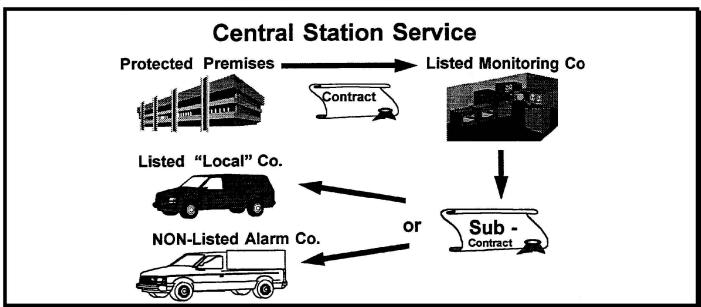


Figure 2 COMPLIES with NFPA 26.3.3(2)

A UL "UUFX listed company is permitted to subcontract with either a UL "UUJS" listed or non listed company.

Supervising Station Service Examples cont...

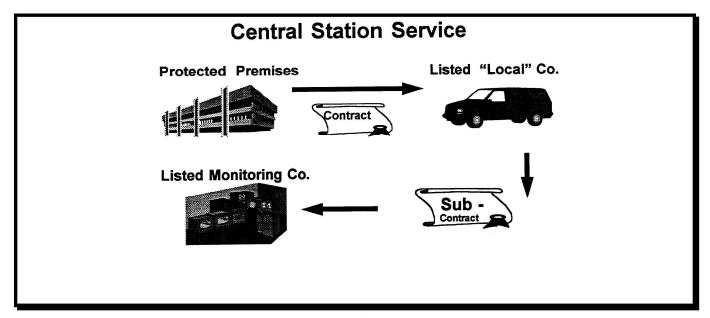


Figure 3

COMPLIES with NFPA 26.3.3(3)

In this example, a UL "UUFX" listed company directly contracts with the subscriber, and then subcontracts the monitoring portion to a UL "UUFX" listed monitoring only Company.

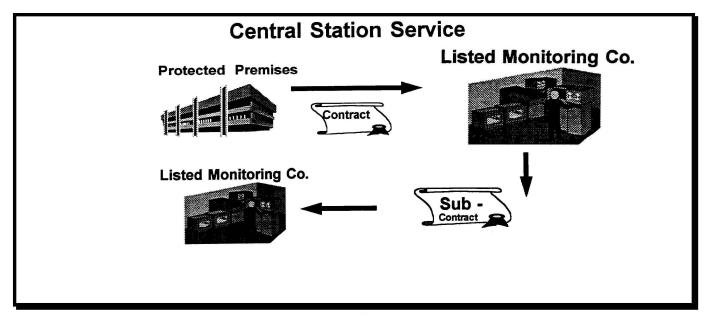


Figure 4

COMPLIES with NFPA 26.3.3(4)

A UL "UUFX listed company is permitted to subcontract with another UL "UUFX" listed company.

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Supervising Station Service UL Certificate Example



Expires: 01/16/2013 Service Center No. Issued: 01/17/2012 Entry No: 5256332

ALARM SYSTEM CERTIFICATE DESCRIPTION FOR Certificate Serial No: FC27879748 CENTRAL STATION - FIRE FIRE

Protected Property 38 PHEASANT RUN **IEST PROPERTY 1**

60047

HAWTHORN WOODS, IL

Alarm Service Company **DUMMY ACCOUNT TEST** 333 PFINGSTEN RD

UL INTERNAL SYSTEM TESTING (NAV2) NORTHBROOK IL 60062-2096

System Description:

Area Covered: Building

Authority Having Jurisdiction: LZFD

Festing and Maintenance Contract date: 01/09/2012 Responding Fire Department: LZFD

SYSTEM DEVIATIONS FROM REFERENCED NFPA STANDARDS

None

utomatic Fire Detection and Alarm Service Coverage is Total 3 - Photoelectric 6 - Smoke Detectors: 3 - Ionization

Sprinkler System Waterflow Alarm and Supervisory Service

Sprinkler System Type: Wet Pipe

1 - Waterflow Switch

Manual Fire Alarm and Guard's Tour Supervisory Service Sprinkler Valve Supervisory Service

Alarm Notification and Annunciation Devices 1 - Manual Fire Alarm Box

3 - Audible/Visual Signals: Type - Strobe **Emergency Voice Alarm Service**

2 - Speakers

Control and Transmitter Unit Acme, 123

Remote Monitoring

UL INTERNAL SYSTEM TESTING (NAV2) File: S25110, Service Center Number: UL Listed Central Station

333 PFINGSTEN RD NORTHBROOK IL 60062-2 DUMMY ACCOUNT TEST

Direct Telephone Line and Direct Telephone Line Alarm Retransmission to Fire Department

Alarm Transmission Method: Digital Alarm Communicator

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