



PLAN SUBMITTAL REQUIREMENTS

FIRE ALARM and SPRINKLER MONITORING SYSTEMS

The San Ramon Valley Fire Protection District developed this Plan Submittal Guideline Standard to be used as a guide for submitting plans for Fire Alarm and Sprinkler Monitoring systems.

REQUIRED DOCUMENT SUBMITTAL

1. Working plans shall be drawn to an indicated scale (not smaller than 1/8" = 1'), on sheets of uniform size. The following must be included in the plans.
 - a. Jobsite address and parcel number
 - b. Business name
 - c. Name, address, and phone number of owner
 - d. Name, address, phone number, and stamp/signature of project designer/architect and or engineer
 - e. Editions of state and local governing codes
 - f. Point of compass
 - g. Symbol list
 - h. Occupancy Classification
 - i. Sheet Index
 - j. The location of doors, partitions, non-rated walls, and rated walls. If not full height, indicate the height of all the walls and the ceiling
 - k. The location of all equipment, devices, and appliances including fire alarm panel, annunciators, fire sprinkler control and test valves, fire smoke dampers, air handler units, magnetic door holders and end of line devices
 - l. Device mounting heights for fire alarm initiating and notification devices
 - m. The candela rating of each strobe
 - n. Use of each room or space (room description)
 - o. Equipment List
 - i. 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.
 - ii. Legend shall be provided and the symbols used shall match the legend. Strike out any "typical" symbols and/or details which do not pertain.
 - iii. Provide wiring schedule

- p. Name List for Initiating Devices
 - i. Provide a list of all initiating devices and proposed device name as it will be programmed into the alarm panel.
 - q. Sequence of Operation
 - i. A 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
 - r. Riser Diagram
 - i. Single line wiring diagram (riser diagram) that shows the interconnection of each device and equipment of the whole system
 - ii. Candela rating of each strobe.
 - iii. Number of conductors in each wiring segment and the type and size of wire or conductor to be used.
 - iv. The class and type for initiating, signaling line and notification device circuits.
 - v. The circuit number or identification of each initiating/notification and signaling line circuit.
 - s. Calculations
 - i. Secondary power calculation
 - ii. Voltage drop calculation
2. Manufacturer's specification sheets for all devices, equipment, and materials to be used including the transponder to the supervising station
 3. CSFM listing number sheets for all devices and equipment requiring listing

PLACE THE FOLLOWING NOTES VERBATIM ON THE PLAN

1. One set of SRVFPD approved fire alarm plans shall always be retained at the job site. After final inspection, approved shop drawings and maintenance instructions shall be properly stored in the Document Box located at the main panel.
2. Written records and reports of the alarm system testing frequencies and results, shall be available for review on the premises for the SRVFPD inspector during fire inspections.
3. Testing and service personnel shall be qualified and experienced per NFPA 72, 10.5.3.
4. Any future modifications to the system after this final SRVFPD inspection shall cause a new plan to be drafted and submitted by the tenant or building owner. The modification shall not be started until the new plans are approved by SRVFPD.
5. The system shall be designed and installed in accordance with 2022 NFPA 72, 2022 California Fire Code.
6. SRVFPD inspection required for this project.
7. The scope of work shall be tested by the installer prior to the SRVFPD inspection to determine the system properly functions as approved on the plans.
8. When the Fire Alarm Control Unit (FACU) panel is in a room accessed through a door, a permanent sign shall be provided on the door indicating, "Fire Alarm Control Unit" or equivalent. When there are sub-panels, door signs shall also indicate where the main FACU panel is located.
9. A 24-hour emergency response phone number shall be permanently posted at the control panel.

10. The circuit breaker power disconnect shall only be accessible to authorized personnel and shall be identified as "FIRE ALARM" (NFPA 72, 10.6.5.2). The electrical panel with the fire alarm circuit shall be in a secure room, or a circuit breaker locking device shall be installed (NFPA 72, 10.6.5.4).
11. Storage batteries shall be marked with the month and year of manufacture (NFPA 72, 10.6.10).
12. The batteries shall be able to run the system in stand-by mode for 24 hours without building power in a non-alarm condition, and then immediately be able to operate all devices for 5 minutes (15 minutes is required for voice evacuation systems) (NFPA 72, 10.6.7.2.1).
13. If a 24 hour battery test was not required, SRVFPD could require shut down of the AC power to verify trouble signals.
14. Batteries shall be fully charged under normal conditions and after a power loss recharge (NFPA 72, 10.6.10.3).
15. A battery charger failure shall be detected as a trouble signal (NFPA 72, 10.6.10.6.1).
16. An alarm signal shall occur within 10 seconds after initiating device activations (NFPA 72, 10.11.1). The alarm signals shall be audibly distinctive from all other different types of audible systems or alarms (NFPA 72, 10.10.1).
17. All audible alarm notification signals shall be a three-pulse temporal pattern (NFPA 72, 18.4.2.1).
18. Audible alarm sound pressure levels shall be provided as specified by CFC 907.5.2.1.
19. When more than two visual notification appliances are located within the same room or area, they shall be synchronized (NFPA 72, 18.5.5.7.2).
20. Manual pull station key(s) should be placed in the document box.
21. When tied to the main fire alarm panel, duct detector activations shall only cause a supervisory signal to the central supervising station.
22. Inspection, testing, and maintenance shall be performed and maintained per Chapter 14 of NFPA 72 and the manufacturer's specifications.
23. Where a building fire alarm is installed, automatic fire-extinguishing systems shall be monitored to the central supervising station by the building fire alarm in accordance with NFPA 72 and CFC 904.3.5.
24. Elevator recall shall operate per the signals found in sequence of operations on this plan (NFPA 72, 21.3).
25. All fire alarm systems undergoing a change in central supervising station companies are required to be immediately tested in the presence of SRVFPD. This is to verify that new company is appropriately receiving necessary signals, transmitting emergency 911 communications, and that devices dedicated for supervisory and trouble signals do not cause an emergency response.
26. New fire alarm systems shall be UL-Certified. A Certificate of Completion and other documentation as listed in NFPA 72 shall be provided for all new fire alarm system installations. It is the responsibility of the building owner or owner's representative to obtain and maintain a current and valid Certificate.
27. The UL Certificate shall be posted in a durable transparent cover within three feet of the fire alarm control panel within 45 days of the final acceptance test/inspection.

SUBMITTAL PROCESS

Submit plans electronically. Visit firedepartment.org/submitplans