

SANTA ROSA FIRE DEPARTMENT

FIRE PREVENTION BUREAU INSPECTION CHECKLIST

July 1, 2010



FIRE ALARM SYSTEM MODIFICATION

Address:

Permit #:

Inspector:

Date Inspected:

Status:

Inspector:

Date Inspected:

Status:

A-Approved, R-Re-inspection Required

This Checklist outlines general requirements. Information contained herein applies to typical instances and may not address all circumstances.

FILE REVIEW

- | | Y | N | |
|----|--------------------------|--------------------------|------------------------------------------------------------------------|
| 1. | <input type="checkbox"/> | <input type="checkbox"/> | REVIEW FILE – Is there an alternate method application approved |
| 2. | <input type="checkbox"/> | <input type="checkbox"/> | REVIEW PLANS, PLAN NOTES AND FD APPROVAL LETTER |

Reference numbers following worksheet statements represent an NFPA code section unless otherwise specified.

General

- | | | | |
|-----|--------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. | <input type="checkbox"/> | <input type="checkbox"/> | Obtained a copy of the fire alarm installation certification and a Record of Completion from installer, 4.5.2.1. |
| 4. | <input type="checkbox"/> | <input type="checkbox"/> | Approved plans are on site. |
| 5. | <input type="checkbox"/> | <input type="checkbox"/> | Fire alarm control unit (FACU) and remote annunciator (RA) are installed consistent with approved plans, 4.4.6.1.1. and 7.10. |
| 6. | <input type="checkbox"/> | <input type="checkbox"/> | A zone and legend map is provided at the RA or an approved location. |
| 7. | <input type="checkbox"/> | <input type="checkbox"/> | Fire alarm zones are properly identified on the FACU and RA panels. |
| 8. | <input type="checkbox"/> | <input type="checkbox"/> | The fire alarm system power supply is a dedicated 120 AC branch circuit, which is labeled, 4.4.1.4.2.2. |
| 9. | <input type="checkbox"/> | <input type="checkbox"/> | Type and gauge of wire or cable(s) for each circuit are consistent with the plans. |
| 10. | <input type="checkbox"/> | <input type="checkbox"/> | Device location and installation are consistent with the plans. |
| 11. | <input type="checkbox"/> | <input type="checkbox"/> | Pull stations are installed at the proper height and location, 42 in. to 48 in. and within the 200 ft. maximum travel distance, 5.13 and IFC 907.4.1, .2. |
| 12. | <input type="checkbox"/> | <input type="checkbox"/> | A Contractor Sound Pressure Level (dBA) Pretest Room Log is provided and verified with the use of a sound meter during a sound pressure test. |

Operational

- | | | | |
|-----|--------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13. | <input type="checkbox"/> | <input type="checkbox"/> | Fire alarm audible notification devices sound throughout the occupancy providing a sound pressure level at least a minimum of 15 dBA above the average ambient noise level or 5 dba above the |
|-----|--------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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maximum noise level. For bedrooms with closed door provide at least 75 dBA at the pillow, 7.4.4.1, IFC 907.10.2.

- | Y | N | |
|-----|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14. | <input type="checkbox"/> | <input type="checkbox"/> Fire alarm audible devices are a three-pulse temporal pattern unless they were permitted to match existing audible devices, 6.8.6.5.1. |
| 15. | <input type="checkbox"/> | <input type="checkbox"/> Fire alarm visual notification device intensity (cd) ratings and settings, mounting height (80 in. to 96 in.), and location, are consistent with the plans, 7.5.4.1. |
| 16. | <input type="checkbox"/> | <input type="checkbox"/> Emergency voice/ alarm communications systems is tested and documentation is provided documenting the verbal statement(s) is distinguishable and understandable, Table 10.4.2.2.15(b). |
| 17. | <input type="checkbox"/> | <input type="checkbox"/> In sprinklered buildings, the fire alarm notification devices will activate by operation of the sprinkler flow alarm. |
| 18. | <input type="checkbox"/> | <input type="checkbox"/> HVAC duct detectors are supervised by the fire alarm system, detectors are all tested to verify if it can sample the air stream, fans shutdown upon activation and visual and audible status alarm functions, Table 10.4.2.2.14(g). |
| 19. | <input type="checkbox"/> | <input type="checkbox"/> A central, remote or proprietary monitoring service received various signals during system tests. |
| 20. | <input type="checkbox"/> | <input type="checkbox"/> Verify that the correct and distinctive signals are received (alarm, trouble, and supervisory |
| 21. | <input type="checkbox"/> | <input type="checkbox"/> Two monitoring circuits are provided, both circuits send correct signals to monitoring company within 90 seconds, Table 10.4.2.2.16. |
| 22. | <input type="checkbox"/> | <input type="checkbox"/> Verify proper operation of magnetic door-releasing hardware and/or ventilation shutdown. |
| 23. | <input type="checkbox"/> | <input type="checkbox"/> Sprinkler tamper switch activation transmits a trouble signal at the annunciator panel. |
| 24. | <input type="checkbox"/> | <input type="checkbox"/> Fire department communications system, if provided, is operational. |
| 25. | <input type="checkbox"/> | <input type="checkbox"/> For air sampling and flame detectors, test the device in accordance with the manufacturer instructions. |
| 26. | <input type="checkbox"/> | <input type="checkbox"/> Restoreable heat and smoke detectors, and pull stations are tested. |
| 27. | <input type="checkbox"/> | <input type="checkbox"/> Trouble condition is created for each circuit and the FACU responses appropriately. |
| 28. | <input type="checkbox"/> | <input type="checkbox"/> Remote annunciator displays the correct zone and device information. |
| 29. | <input type="checkbox"/> | <input type="checkbox"/> Battery load test: the system is switched to battery operation 24 hours before the test and in the presence of the inspector the notification devices are activated and operate for 5 minutes or 15 minutes for emergency voice alarms. |
| 30. | <input type="checkbox"/> | <input type="checkbox"/> Check battery charger, measure load voltage, and open circuit voltage. |
| 31. | <input type="checkbox"/> | <input type="checkbox"/> Test ground-fault monitoring circuit, if provided. |
| 32. | <input type="checkbox"/> | <input type="checkbox"/> Under primary and secondary power, perform these tests: |
| 33. | <input type="checkbox"/> | <input type="checkbox"/> A. power light on and in normal condition, trouble signal when on secondary power. |
| 34. | <input type="checkbox"/> | <input type="checkbox"/> B. supervisory signals: fire pump power loss or phase reversal, water level/temp, 35.5. |
| 35. | <input type="checkbox"/> | <input type="checkbox"/> pressure switches, control valves, etc.. |
| 36. | <input type="checkbox"/> | <input type="checkbox"/> C. silence switch functions. |

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- | | Y | N | |
|-----|--------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 37. | <input type="checkbox"/> | <input type="checkbox"/> | D. a 2 nd alarm initiating zone overrides silence switch. |
| 38. | <input type="checkbox"/> | <input type="checkbox"/> | E. trouble signals and FACU panel lights operate for each circuit tested; disconnect .wires from devices and primary power supply to simulate trouble conditions. |
| 39. | <input type="checkbox"/> | <input type="checkbox"/> | F. on secondary power, measure standby and alarm current demand. |
| 40. | <input type="checkbox"/> | <input type="checkbox"/> | G. trouble and alarm reset switches operate. |
| 41. | <input type="checkbox"/> | <input type="checkbox"/> | H. emergency voice alarms: the message is clear and distinct. |
| 42. | <input type="checkbox"/> | <input type="checkbox"/> | I. initiating devices tested, audible sound pressure levels, and visuals operate. |
| 43. | <input type="checkbox"/> | <input type="checkbox"/> | J. panel lamp test switch operates: if provided. |
| 44. | <input type="checkbox"/> | <input type="checkbox"/> | K. field zones and device address signals corresponded with panel zones and addresses. |
| 45. | <input type="checkbox"/> | <input type="checkbox"/> | L. elevator(s) recall to designated floor and alternate floor in accordance with the 6.16.3. |
| 46. | <input type="checkbox"/> | <input type="checkbox"/> | Other systems activate fire alarm: kitchen hood suppression system, clean agent, etc. |
| 47. | <input type="checkbox"/> | <input type="checkbox"/> | As-builts are required when system installation is not consistent with the plans. |
| 48. | <input type="checkbox"/> | <input type="checkbox"/> | Circuit loop resistance is within specifications and a test may be required if the system wiring has changed from the plans. |
| 49. | <input type="checkbox"/> | <input type="checkbox"/> | Heat and spot smoke detectors are not within 4 in. of the sidewall, or if on the sidewall, the detector is 4 in. to 12 in. from the ceiling, 5.6.3.1, 5.7.3.2.1. |
| 50. | <input type="checkbox"/> | <input type="checkbox"/> | Visual devices in a room or adjacent space with more than 2 devices within the field of view the flash are synchronized, 7.5.4.1.2(3). Devices in a corridor with more than 2 devices within the field of view and a maximum spacing of 100 ft., are synchronized, 7.5.4.2.5 and 7.5.4.2.7. |
| 51. | <input type="checkbox"/> | <input type="checkbox"/> | Usual devices are wall mounted 80 in. to 96 in. above the floor level unless otherwise permitted by the approved plans and the fire code official, 7.5.4.1. |
| 52. | <input type="checkbox"/> | <input type="checkbox"/> | Supplemental (extra) visual devices are permitted to be mounted less than 80 in. above the floor, 7.7.2. |
| 53. | <input type="checkbox"/> | <input type="checkbox"/> | Ceiling mounted devices are listed for use and spaced in accordance with Table 7.5.4.1.1(b) and the approved plans. |

*Note: additional testing criteria is found in NFPA 72: Chapter 10.