



# PORTLAND FIRE & RESCUE



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## Fire Alarm System Pre-Test and Acceptance Test Checklist (2016 PFC and 2013 NFPA 72)

Date of Inspection: \_\_\_\_\_ Permit Number: \_\_\_\_\_

Business/Bldg Name: \_\_\_\_\_ Address of Project: \_\_\_\_\_

Contractor: \_\_\_\_\_ Contractor's Phone: \_\_\_\_\_

The numbers following checklist comments represent **NFPA code sections** unless otherwise specified.

P = Pass F = Fail NA = Not Applicable

| P                        | F                        | NA                       | General  |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Received fire alarm installation certification and a Record of Completion from installer, 4.5.2.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Approved plan on site.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fire alarm panel and components match approved plans.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | FACP/Annunciator panel location same as plans and a zone/legend map is provided at the remote annunciator.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Zones are properly identified on the panel(s).   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | System has dedicated 120 AC branch circuit and labeling.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Type and gauge of wire or cable(s) match plans.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Device location and wiring are the same as plans and as required by code.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Pull stations are proper height and location, 42" to 54", 200' maximum travel distance.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | A Contractor dB pretest list is provided for spot checking.  |
| P                        | F                        | NA                       | Operational  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fire alarm warning devices are audible throughout the occupancy at least a minimum of 15 dBA's above ambient noise level or 5 dBA's above maximum noise level. 75 dBA throughout Groups R and I-1 occupancies. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fire alarm audibles are a three-pulse temporal pattern.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fire alarm accessibility devices (strobes) are proper cd, height, and location, 80" to 96". Adjustable strobes are set on cd as noted on the plans.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fire alarm warning devices will activate by operation of the sprinkler flow alarm.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | HVAC duct detectors are supervised by the fire alarm system; fans shutdown, visual and audible status alarm functions, and each detector are tested to verify if it can sample the air stream, Table 10.4.2.2. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 24 hour monitoring service agency received signals.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Verify that the correct signal is received: alarm, trouble, and supervisory alarms are to be distinctive signals, 4.4.3.3.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Verify proper operation of magnetic door-releasing hardware and/or ventilation shutdown.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sprinkler tamper switch causes trouble light and buzzer indication at the annunciator panel only (tamper and flow alarm different type signals).   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fire alarm emergency phone jacks, if provided, are operational.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | For air sampling and flame detectors, test device per the manufacturer instructions.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Resettable heat and smoke detectors, and pull stations are tested (5-10% sample of total).   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Trouble condition is caused on each circuit.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Remote annunciator receives the correct information.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Battery stress test: system switched to battery operation for the test;  |

| P                        | F                        | NA                       | Operational   |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Check battery charger, measure load voltage, and open circuit voltage   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Test ground-fault monitoring circuit, if provided.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Under primary and secondary power, these tests are performed:   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | A. power light on and in normal condition, trouble signal when on secondary power   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | B. supervisory signals: fire pumps, water level/temp, pressure switches, control valves   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | C. silence switches   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | D. a 2nd initiating zone overrides silence switch   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | E. trouble signals and panel light operate for each circuit tested, disconnect wires from devices and primary power supply  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | F. on secondary power: measure standby and alarm current demand   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | G. trouble and alarm reset switches operate   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | H. emergency voice alarms: the message is clear and distinct  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | I. initiating devices tested: audibles, and visuals operate   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | J. panel lamp test switch operates, if provided   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | K. field zone/address signals corresponded with panel zones/address   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | L. elevator(s) recall to designated floor and alternate floor per Elevator Code   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Other systems activate fire alarm: kitchen hood suppression system, clean agent, HVAC duct detectors (>2,000cfm), etc.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | As-builts are required when system installation is not the same as the plans.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Loop resistance is within specs, test may be required if system wiring changed from plans.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Time from activating an initiating device to activation of a safety function or notification shall not exceed 10 seconds.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Visual devices are: wall mounted 80" to 96" above the floor, in a room or adjacent space with more than 2 devices within the field of view, the flash is synchronized, 4-4.4.1.1. In a corridor with more than 2 devices within the field of view and a minimum spacing of 55', they are synchronized, 4-4.4.2.3. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Supplemental (extra) visual devices are permitted to be mounted less than 80" above the floor.  |

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

Additional Comments:

| Inspection Date | Approve                  | Disapprove               | FD Inspector |
|-----------------|--------------------------|--------------------------|--------------|
| _____           | <input type="checkbox"/> | <input type="checkbox"/> | _____        |
| _____           | <input type="checkbox"/> | <input type="checkbox"/> | _____        |
| _____           | <input type="checkbox"/> | <input type="checkbox"/> | _____        |