3.03 Fire Alarm Certification (2016)

Reference: 2016 SFFC, §§ 907.6.5, 907.7.4, 907.8.5; 1103.7; & 1103.7.10

Purpose: To provide information about certificated fire alarm systems and to set forth interpretations, rules and supplemental regulations to carry out the application of the pertinent codes and standards.

A certificated fire alarm system is one for which an acceptable listing organization has issued a serially numbered certificate to the property owner. The certificate is a tool for assuring the reliability of fire alarm systems.

Fire alarm systems shall transmit alarm, supervisory and trouble signals to an approved supervising station in accordance with NFPA 72. The supervising station shall be listed as either UUFX (Central Station) or UUJS (Remote & Proprietary) by Underwriters Laboratories Inc. (UL).

All new fire alarm systems shall be certificated. **EXCEPTIONS**:

- 1. Household fire-warning systems and fire alarm systems in one or two family dwellings or threeunit apartment houses.
- 2. Fire Alarm Control Units, in which the primary function is to monitor a sprinkler system or other *dedicated function* Fire Alarm systems.

I. CERTIFICATED FIRE ALARM SYSTEMS FOR EXISTING BUILDINGS: (SFFC 907.8.6 & 1103.7.10)

- A. The Fire Code Official is authorized to require existing fire alarm systems to be certificated based on severity of life safety hazards or systems determined to be problematic. Occupancies required to retroactively possess UL certificates are as follows:
 - 1. Tourist and residential hotels.

EXCEPTIONS:

- a. Hotels with fewer than 20 guest rooms.
- b. Hotels not more than three stories in height where each guest room has exterior exit access complying with all the following:
 - 1. The long side of the exit balcony, porch, or similar space is at least 50 percent open and is arranged to prevent the accumulation of smoke;
 - 2. At least two remote stairs serve the exterior exit balcony;
 - 3. A permanent, straight path of travel is maintained over the exterior exit balcony;
 - 4. No obstructions by railings, barriers, or gates divide the open space into sections appurtenant to individual rooms or other subdivisions;
 - 5. The exterior exit access has no dead ends greater than 20 ft (6.1 m):
 - 6. The exterior exit access has solid, level floors;
 - 7. Exterior exit access balconies that are more than 30 in. (76cm) above the grade below have guards to prevent falls over the open side.
- 2. Apartment Houses (both rental and condominium)

EXCEPTIONS:

- a. Apartment houses containing fewer than 16 dwelling units.
- b. Apartment houses where each living unit has either its own independent exit or its own independent stairway or ramp discharging at grade.
- 3. Public assembly occupancies with more than 300 occupants.
- 4. Day care facilities with 50 or more occupants, nurseries for children under the age of six, nursing homes, and schools
- II. **PERMITS**: Fire Department approval of a new fire alarm system is a three-step process for a UL certificated system.
 - A. The Fire Department will approve applications for building permits for fire alarm systems requiring

- UL certificates only after receipt of a Notice of Intent to contract with an Authorized Alarm Company for testing and maintenance of the system.
- B. Fire inspectors will not sign off a "Job Card" without a Request for Certificate, receipted and numbered by Underwriters Laboratories.
- C. For new systems or new FACU, the property owner, or his or her agent, must produce a copy of the actual UL Fire Alarm System Certificate to the Bureau of Fire Prevention District Inspector (within six weeks) to obtain the final inspection "sign-off".
- III. **AUTHORIZED ALARM COMPANIES**: Only Authorized Alarm Companies can issue UL Certificates. These companies must meet all of the following criteria:
 - A. Hold a current San Francisco Business Tax Registration Certificate;
 - B. Hold a current C10 license issued by the Contractors' State License Board;
 - C. Hold a current listing by Underwriters Laboratories as a fire alarm service company (UUJS) or as a fire alarm central station (UUFX);
 - D. Show ability to provide acceptable maintenance and service in San Francisco.

IV. UL CERTIFICATES:

The building owner is responsible for obtaining and maintaining a current UL Fire Alarm Certificate for the building fire alarm system. Failure to do so is a violation of the Fire Code. A copy of the Certificate must be on or near the fire alarm system control unit. The certificate must show a concise description of the system components, protection provided, the maximum service call response time, and the minimum testing frequency provided for various system components. The system components, features, extent of protection (area of coverage), and deviations from the standard described on the certificate must be acceptable to the Fire Department. They must reflect the criteria noted in these guidelines and in relevant statutes, ordinances and regulations, as well as in the National Fire Alarm Code.

- V. **TESTING AND MAINTENANCE**: The Authorized Alarm Company issuing a UL Certificate bears the responsibility for periodic system testing, system repair, maintenance and system documentation. A CONTRACT FOR THIS TESTING AND MAINTENANCE IS REQUIRED
 - A. The contract must be with an Authorized Alarm Company, which may subcontract all or any part of the testing and maintenance. The Authorized Alarm Company must respond to service calls within 24 hours. Any necessary repair work is to begin within this period and is to continue until completion. See Table 1 for additional required maintenance response times, depending on the type of fire alarm system.
 - B. Certificated fire alarm systems are to be tested according to the instructions of the equipment manufacturer. The type and frequency of testing must be at least that prescribed by Chapter 14 of NFPA 72, 2016 edition. Any problem with a system that prevents it from working fully must be repaired within 24 hours after the Authorized Alarm Company is aware of the trouble. No portion of a system shall be shunted out, nor shall a system be taken out of service without written approval of the San Francisco Fire Department.

VI. INSPECTIONS AND UL REPORTS:

- A. The Authorized Alarm Company must keep detailed records of all tests. The records must show clearly the individual tests conducted and their results. These records shall be readily available for review by the Fire Department. Any deficiencies identified through the testing shall be corrected immediately.
- B. The Authorized Alarm Company shall allow UL to provide copies of all their fire alarm inspection reports directly to the Fire Department and shall allow Fire Department personnel to accompany UL field staff during inspections of their certificated systems.

- VII. **SYSTEM DOCUMENTATION**: Authorized Alarm Companies shall maintain the following documentation readily available for review
 - A. As-Built Drawings These drawings show the layout of the system. The drawings identify the initiating and notification circuits and the specific devices installed on them. They show the locations of all devices
 - B. Acceptance Test Results These tests exercise all devices on the system and verify correct electrical monitoring and operation of all circuits. They evaluate the standby power capabilities of the system
 - C. Periodic System Tests These are routine tests to assure continuing proper operation of the system.
 - D. Maintenance Records These records include a description of when and how requests for service were received; when the company dispatched service personnel; when they finally repaired the system; details of the problems found; and corrective actions taken. Records of calls to the Fire Department reporting system outages shall be kept.

VIII. CERTIFICATION OF EXISTING SYSTEMS:

- A. Authorized Alarm Companies may take over responsibility for fire alarm systems installed by others. Portions of the system may not have been installed according to current standards, and much of the original documentation may no longer be available. The main concern with these systems is that all portions of the system must operate when needed.
- B. Systems installed according to earlier standards need not be upgraded to current standards. However, they must undergo a system reacceptance test of all components, circuits, system operations and software functions. The Authorized Alarm Company must correct any conditions requiring maintenance, repair or replacement of parts before issuing a UL Certificate.
- C. There is some latitude in the completeness of required documentation of existing systems. As-built drawings may no longer be available. However, drawings are needed identifying the initiating and notification zones and loops, types of devices and their approximate locations, control unit manufacturer and model, general wiring, and standby power capability.

IX. CHANGING ALARM COMPANIES:

Building owners with a current UL Certificate may choose to change to a different Authorized Alarm Company. This will result in cancellation of the old certificate. The Fire Department requires a UL Certificate issued through the new company within 30 days of cancellation of the old certificate. Failure to obtain a new Certificate within this time is a violation of the Fire Code.

X. FAILURE TO MAINTAIN CERTIFICATION:

Building owners who fail to maintain the required UL Certification may be issued a Notice of Violation and be subject to a fine.

XI. CANCELLED CERTIFICATES:

The Authorized Alarm Company shall inform the Fire Department in writing if they cancel a UL Certificate covering a fire alarm system in San Francisco for any reason.