

INFORMATION BULLETIN

137

November 2022

# How to Obtain a Permit for Fire Alarm Systems

This Information Bulletin covers the procedures for obtaining a permit to install a fire alarm system and applies to both required and voluntary systems. All fire alarm systems shall be designed and installed in accordance with the California Fire Code (CFC), California Electrical Code (CEC), and the National Fire Alarm and Signaling Code (NFPA 72) as amended by

Chapter 80 of the CFC.

# I. Submittal Requirements

The following plans and documents shall be provided when applying for a fire alarm permit.

## A. Forms/Documents

Provide completed copies of the following forms.

- 1. Fire Permit Worksheet located on page 4 of Information Bulletin 506, Fire Permit Fees.
- 2. Project Contacts Information Form, DS-345.

### B. Plans

- 1. Panel Replacements For Fire Alarm Control Unit (FACU) replacement, see the requirements listed in Item 3 below and Technical Bulletin FIRE-9-2, Requirements for Fire Alarm Control Panels for additional information.
- 2. Tenant Improvements (TIs) Provide a Fire Alarm Affidavit Form or Fire Alam Plans as required below:
  - a. Projects involving the replacement, movement, or addition of up to four (4) initiating devices and/or ten (10) notification appliances in an existing system will not require submittal of fire alarm plans provided that the design meets the conditions specified in Sections II and III of Form DS-163, Affidavit for Fire Alarm Alterations or Tenant Improvements (TIs). An Architect, Electrical or Fire Protection Engineer, Class B General Contractor or C-10 Fire Alarm Contractor may complete Form DS-163, as specified in the form. Provide a completed copy of the affidavit form at the time of submittal.
  - For all other TI projects, plans must be provided. See the requirements listed in Item 3 below for additional information.
- 3. All Other Fire Alarm Systems Provide fire alarm plans containing the following information, as applicable:
  - a. All information required in California Fire Code (CFC) and NFPA 72.
  - b. For deferred submittals, the associated building permit number(s).
  - c. Stamp and signature by the designer of record (installing contractor or California licensed Fire Protection or Electrical Engineer). The designer's name and license number must be clearly provided on the plans. The designer of record must be responsible for the entire project design.
  - d. Tenant/owner information.
  - e. Scope of work including area of work, purpose of work, phasing, and type of fire alarm system.
  - f. Occupancy classification for each use.
  - g. Symbol legend for each component with description of each component, make/model, mounting criteria, and California State Fire Marshal (CSFM) listing numbers.
  - h. Monitoring station information.
  - i. Wiring and conduit schedule including the circuit zone designations, circuit types, type and size of wire/cable, type and size of conduit for each circuit.
  - j. Survivability requirements.
  - k. Voice intelligibility requirements.
  - I. Mounting heights for all panels, devices and appliances.

- m. Point to point wiring connections for all alarm equipment and fire safety functions.
- n. Elevator recall and shunt trip, control power supervision.
- o. Locations of air handler units and smoke/fire dampers and the methods used to initiate shutdown.
- p. Riser diagram with a graphic illustration of the alarm zones and circuit types, the location of EOL's and resistance values, fire alarm panels, symbols for all devices/ appliances, AHUs and duct detectors.
- q. For high-rise structures, show connections between the emergency/ standby power switchboards and all alarm panels.
- r. High-Rise Buildings Zoning Annunciator Panel graphic design.
- s. Sequence of operations for the subject building. If smoke control is provided, a separate sequence of operations for smoke control functions is required.
- t. Firefighter's smoke control panel graphic design.

### C. Calculations

Provide the following calculations per NFPA 72 for all fire alarm submittals:

- 1. Battery calculations for the FACU and each sub-panel with a battery backup.
- 2. Voltage drop calculations for all notification circuits in the FACU and each sub-panel. Account for each notification appliance's voltage draw and provide total draw and drop for each circuit.

# D. Manufacturer's Data Sheets

Provide one copy of manufacturers' data sheets for all portions of the fire alarm system including, but not limited to:

- 1. Initiating devices (i.e. smoke detectors, manual pull stations, duct detectors).
- 2. Notification appliances (i.e. strobes, horns, speakers, etc.) with specific current draws highlighted.
- 3. Booster panels and extender panels.
- 4. Fire alarm control units (new or existing).

Where multiple devices/appliances are listed on the data sheet, the specified device/appliance must be highlighted. Manufacturer's Data Sheets must include current California State Fire Marshal (CSFM) listing numbers or provide CSFM listing sheets.

# **II. Options For Review Process**

The following review options are available for Fire Alarm projects. Submit these projects electronically through the online portal, selecting <u>Fire Permit</u>. Select **Deferred Fire Submittal** for projects that are deferred to Accela projects (PRJ-xxxxxxxx). Select the **Fire Permit** record for standalone fire permits and permits deferred to PTS projects (PTS-0xxxxx). Failure to identify that your project is deferred to a building permit, or the correct building permit, will delay review and issuance of your project.

## A. Rapid Review

The following types of projects can be reviewed as a Rapid Review project:

- 1. Tenant improvements no larger than 10,000 square feet for occupancy classifications Group B, M, F and S.
- 2. FACU upgrades/replacements only, no new appliances or devices added.
- 3. Sprinkler monitoring.
- 4. Fire Alarm Affidavit (DS-163).

### B. Submitted Review

All other projects must be submitted for plan review. Options for service include Standard and Express Plan Check.

### III. Fees

The following fees are required to be paid prior to review unless otherwise indicated below. Fire Alarm fees will be charged based upon Information Bulletin 506, Fire Permit Fees. For your convenience, DSD offers on-line payments

through our website. Payment may also be made in person by cash, check, ATM card, Visa or MasterCard. Checks shall be in the exact amount, drawn on US banks, and made payable to the "City Treasurer."

Please note that plan check fees and other administrative fees are non-refundable. See Refund Policy noted within Refund Application Form DS-721 for additional refund information.

Express Plan Check is available for Fire Permits upon payment of an Express Plan Check administrative fee plus 1.5 times the regular plan check fee. The Express fee includes rechecks. Express Plan Check provides review times 40% - 50% faster than standard review times.

# **IV.** Inspections

See Information Bulletin 120, Project Inspections, for information regarding project inspections for fire alarm systems. Note that a Fire Alarm Final is required for all buildings with fire alarm systems regardless of the number of fire alarm devices or appliances added or relocated.

### **Reference Table**

- California Fire Code (CFC)
- California Electric Code (CEC)
- National Fire Protection Association (NFPA) National Fire Alarm and Signaling Code (NFPA 72)
- Project Inspections (<u>Information Bulletin 120</u>)
- Fire Permit Fees (Information Bulletin 506)
- Project Contacts Information Form (<u>DS-345</u>)
- Requirements for Fire Alarm Control Panels (Technical Bulletin FIRE-9-2)
- Affidavit for Fire Alarm Alterations or Tenant Improvements (Tis) Form (DS-163)
- Refund Application Form (DS-721)