

Requirements for Fire Alarm Control Panels

TECHNICAL BULLETIN

FIRE-9-2

CITY OF SAN DIEGO DEVELOPMENT SERVICES 1222 FIRST AVENUE, MS-401 SAN DIEGO, CA 92101-4101

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The purpose of this technical bulletin is to describe the requirements for fire alarm control panels. Fire alarm control panel installations shall comply with all the requirements of the 2013 California Building Code (CBC), 2013 California Fire Code (CFC), 2013 California Electrical Code (CEC), and the 2013 National Fire Alarm and Signaling Code (NFPA 72). In addition to these requirements, fire alarm control panels shall also comply with the requirements of this technical bulletin.

I. NEW FIRE ALARM CONTROL PANELS A. Panel Location

In other than high-rise buildings, the fire alarm control panel shall be located either in the main lobby at the entrance to the building or in a room such as a utility closet, electrical room or telephone room. The panel shall be protected against unauthorized access. If located in a room, the room shall be labeled according to Section 509 of the CFC. Working clearances shall comply with Section 110.26 of the CEC.

In high-rise buildings, the fire alarm control panel shall be located in the fire command center as required by Section 911 of the CBC.

B. Remote Annunciators

When the fire alarm control panel will not be installed in the main lobby, a remote annunciator panel shall be provided inside the building at the main entrance.

C. Sites with Multiple Buildings

Each individual building equipped with a fire alarm system shall have its own fire alarm control panel. The panels shall be permitted to be interconnected so that only one panel communicates with the supervising station. The signals sent to the supervising station must clearly identify the building in alarm so that firefighters are able to respond directly to the building in alarm. Per Section 23.8.2.9 of NFPA 72, silence and reset capabilities shall only be permitted at the panel of the building in which the signal originated.

Situations where multiple buildings on a site will share one fire alarm control panel may be approved under certain conditions. These situations will be reviewed on a case-by-case basis by the Life Safety Plan Review Section of the Development Services Department and may be subject to additional requirements.

Documents Referenced in this Technical Bulletin

- 2013 California Building Code, (CBC)
- 2013 California Fire Code. (CFC)
- 2013 California Electrical Code, (CEC)
- 2013 National Fire Alarm and Signaling Code, (NFPA 72)
- FPB Policy D-09-04, Disrupted Service –Fire Protection Systems
- Information Bulletin 137, How to Obtain a Permit for Fire Alarm Systems
- Information Bulletin 501, Fee Schedule for Construction Permits Structures

D. Communications Methods

Communications methods which comply with Chapter 26 of NFPA 72 and are listed by the California State Fire Marshal shall be permitted. Such methods include but are not limited to digital alarm communicator transmitters (DACTs), cellular communicators, and transmitters using Internet Protocol (IP).

Per section 26.6.3.2.1.4 of NFPA 72, when using a DACT, only one phone line may be used along with another method approved by Section 26.6.3.2.1.4.

If IP communicators are used, they shall be installed in such a manner that will not allow the loss of communication with the supervising station when maintenance to the server is being performed.

E. Disable Buttons

"Hot" buttons on fire alarm control panels shall not be programmed to disable notification appliances or any other life/safety functions being controlled by the panel.

F. Combination Fire and Burglar Alarm Panels

Combination fire and burglar alarm systems shall not be permitted. Combination panels listed by the California State Fire Marshal for commercial fire alarm use are permitted provided that they are only used for fire alarm purposes.

II. REPLACEMENT OF EXISTING FIRE ALARM CONTROL PANELS

All fire alarm control panel upgrades and replacements shall require a permit and will have inspec-

tions from the Development Services Department. Please refer to Information Bulletin 137 for information on How to Obtain a Permit for Fire Alarm Systems.

Any situation where the fire alarm system will be placed out of service will need to comply with FBP Policy D-09-04. Please contact the City of San Diego Fire Prevention Bureau at (619) 533-4400 for any questions regarding FBP Policy D-09-04.

The replacement or upgrade of a fire alarm control panel will require the new fire alarm control panel comply with current code requirements. The status of the remainder of the fire alarm system shall be determined according to the scenarios listed below.

A. Panel Failure

Replacement of a fire alarm control panel due to catastrophic failure will not require the existing fire alarm system be upgraded to comply with current code requirements. Any devices or appliances that need to be replaced due to the upgrade will be permitted to be replaced on a one-for-one basis in their existing locations. This is provided that the devices and appliances are installed in accordance with their listings and codes in effect when the system was installed.

B. Model Discontinued and No Longer Supported by the Manufacturer

A fire alarm control panel that has been discontinued and is no longer supported by the manufacturer shall be permitted to be upgraded to the next model which has replaced it. Any devices or appliances that need to be replaced due to the upgrade will be permitted to be replaced on a one-for-one basis in their existing locations. This is provided that the devices and appliances are installed in accordance with their listings and codes in effect when the system was installed.

C. Voluntary Replacement of a Fire Alarm Control Panel

Replacing a fully functional control panel with a new panel from a different manufacturer will require the existing core areas of the building be upgraded to meet current code requirements. Core areas include lobbies, public bathrooms, and common corridors.

D. Tenant Improvements

When a fire alarm control panel is not able to support new devices or appliances required for a building tenant improvement, the new panel and all new work associated with the tenant improvement shall comply with current code requirements. In addition, core areas of the building must also be brought up to compliance with current code requirements. Core areas include lobbies, public bathrooms, and common corridors.

E. Accessibility Upgrades

Replacement of a fire alarm control panel in order to support ADA upgrades will not require the existing fire alarm system be upgraded to comply with current code requirements. All new fire alarm work associated with the ADA upgrades shall comply with current codes. Any existing devices or appliances which are not associated with the ADA upgrade will be permitted to be replaced on a one for-one basis in the existing locations. This is provided the devices and appliances are installed in accordance with their listings and codes in effect when the system was installed.

F. Fire Fighter's Smoke Control Panels

All replacements of Fire Fighter's Smoke Control Panels will require approval from the Development Services Department's Senior Fire Protection Engineer. A meeting with the fire alarm reviewer and the Senior Fire Protection Engineer may be required to discuss the design of the panel.

G. Other Scenarios

When a fire alarm control panel replacement is proposed that does not meet one of the scenarios A-F above, contact the Life Safety Plan Review Section of the Development Services Department to discuss the proposed system prior to any submissions.

III. FEES

Fees for fire alarm control panel replacements will be charged using the tenant improvement plan check and inspection fees plus the administrative fees outlined in Table 501C of Information Bulletin 501 (Fee Schedule Construction Permits – Structures).

The plan check fees will be based on the quantity of new devices being installed. The inspection fees will be based on the quantity of new devices installed plus the quantity of existing devices that are a part of the fire alarm systems.

IV. INSPECTIONS

All projects that include the installation of a new fire alarm control panel will require a 100% test of the fire alarm system during final inspection.