



PREVENTION MANUAL

FIRE ALARM SYSTEMS

407.8 FIRE ALARM CONTROL UNIT REPLACEMENT

EFFECTIVE: OCTOBER 14, 2013

SCOPE

Fire alarm control unit replacement.

PURPOSE

The purpose of this policy is to clarify the Department's requirements related to fire alarm control unit replacement.

BACKGROUND

As noted in California State Fire Marshal Code Interpretation 12-001, when replacing a fire alarm control unit in an existing building due to obsolescence or the addition of access required notification appliances, the new control unit is required to be only code compliant and listed compatible with other existing components such as smoke detectors, heat detectors, etc. The intent is that only the replacement FACU, newly installed devices and appliances comply with the current edition of the code and referenced standard.

The existing fire alarm system and components shall conform to the codes and standards in effect at the time those components were originally installed.

In every case, the authority having jurisdiction shall be consulted prior to the replacement of any fire alarm control unit or system modification. Complete documentation shall be provided in accordance with NFPA 72, the California Fire Code and any local requirements.

REQUIREMENTS

Based upon this interpretation, the Department has determined where only the FACU is being replaced; the Department requires the following documents:

Provide an 8-1/2"x11" sheet with the current CSFM listing for the new FACU to be installed.

Provide 8-1/2"x11" manufacturer's specification sheets for the new FACU.

Provide three copies of a single, standard fire alarm plan sheet. This sheet shall have the following information on the sheet:

1. Building address, name, and UBC occupancy classification.
2. Whether the system is required by the California Building Code/California Fire Code(s) or if it is voluntarily installed at the owner's initiative.
3. Whether the system is or is not in compliance with the ADA.
4. Provide 24-hour standby and 5-minute system alarm battery demand calculations.
5. Provide line voltage drop calculation for most electronically remote circuit (only if longest circuit is over 300 feet).
6. The wiring pathway designations and survivability level in accordance with N.F.P.A. 72.
7. Provide a site plan for the building. (A "site plan" shows the layout of the building relative to public streets and private drives.)
8. Floor plan(s) of the building showing the the location of the new FACU.
9. A one line riser diagram for the system.
10. Each plan sheet must be stamped and have a wet signature from a State of California licensed C-10 contractor or licensed Electrical Engineer.
11. A statement of compatibility, "Designer has verified new fire alarm control unit is backward compatible with all existing fire alarm equipment."

Once these documents have been submitted, the standard fire alarm review, permitting and field inspection procedures will be utilized. No work is to commence without an approved permit being issued.

NOTE

If any component other than the FACU is being replaced a full set of fire alarm drawings are required. These requirements apply to both required and voluntary systems.