

FIRE ALARM SYSTEMS

Compliance: All fire alarm systems shall be designed and installed in full compliance with all applicable requirements of the *National Fire Alarm Code* as published by the NFPA. These documents may exceed the minimum requirements of the current *Code*. When the *Facilities Standards* exceed the *Code*, the *Facilities Standards* shall supersede the *Code*.

Siemens Panel: Each new facility is to be equipped with the latest Siemens fire alarm panel model available on the market. Contact Owner in regard to the Capital Project Brand Name Policy. See *Technical Section 28 30 00 – Fire and Smoke Detection System*. Existing facility fire alarm panel upgrade or modifications should take into consideration the age of the equipment, the availability of parts and cost.

Central Communication Capability: Each new fire alarm panel shall be networked such that it communicates with the campus central fire alarm panel, which is located in the Public Safety Building. Direction regarding whether to communicate with the central panel via telephone or via the campus signal system will be provided by the Energy Service Division within F&S via a *Utility Program Statement*.

Master Box: Each facility shall be equipped with a Gamewell Master Box. Contact Owner in regard to the Capital Project Brand Name Policy. The Gamewell Master Box shall be connected to the McCulloh loop which runs throughout the campus when it is available. If this system is not available at a project site, the use of the CITES telecom lines for the 4141 system may be approved. Shop 25 will provide the code wheel number and timing specification for the Master Box.

Fireman's Service: If a new facility is equipped with one or more elevators, the elevator controller(s) shall be equipped with Fire Fighters' Service Requirements.

Retrofit Systems: When a new fire alarm system is retrofitted into an existing building, the following shall be accomplished in conjunction with the installation of the new system:

Interface with Existing System: The new system shall be interfaced with any preexisting system that is left in operation.

Tamper Switches: Tamper switches shall be added to any fire protection system isolation valves that were previously chained and locked in the closed position. Chaining and locking valves is no longer allowed.

Flow Switches: A flow switch shall be installed to monitor flow in each standpipe system. All flow switches that serve sprinkler and stand pipe systems shall be tied into the new fire alarm system.

Fire Pumps: A status switch shall be installed to monitor the operation of each fire pump. Each fire pump status switch shall be tied into the new fire alarm system.

Elevator Controllers: All existing elevators having a travel distance of 25 ft. or more above or below the level that best serves the needs of emergency personnel for fire fighting or rescue purposes shall conform to the Fire Fighters' Service Requirements of ASME/ANSI A17.3 Safety code for existing Elevators and Escalators. Each elevator controller shall be upgraded to incorporate "Fireman's Service" in a manner that satisfies the requirements of *Division 14* of these *Standards*. Elevator upgrades in buildings that are not equipped with the campus standard fire alarm system shall conform to the requirements herein stated. It shall be recognized that the cost effective method of conformance would be to include the installation of an upgraded fire alarm system in the Project.

Early Detection Devices: The installation of early detection devices such as smoke and thermal detectors is encouraged for the purpose of increased safety in buildings not protected throughout by an automatic fire suppression system.

Temporary Protection: Where modifications to existing fire alarm devices or equipment cause Interim Life Safety Measures to remain in place for a period of time exceeding 48 hours, temporary protection shall be provided to the affected area. Temporary protection shall comply with the requirements listed in *Section 28 30*

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00 – Fire Alarm and Smoke Detector Systems. Any project which requires removal or replacement of detection or notification devices shall include a survey by a professional fire alarm engineer or designer.