



Miami Beach Fire Department
FIRE PREVENTION DIVISION
STANDARDS



TOPIC: **Fire Alarm Systems Upgrades**
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STANDARD NO: NEWC-S14
Revision 0

The purpose of this FPS is to identify when an existing fire alarm system has to be upgraded to a new fire alarm system and when work requires a fire alarm permit. A new fire alarm system has to comply with Miami Dade County Code, Section 14-66 as summarized in FPS NEWC-S13.

All work performed on a fire alarm system must be performed by a State of Florida licensed contractor in accordance with NFPA 72, *The Fire Alarm Code*, and the listing requirements. Some work can be done without a fire alarm permit and some work requires a fire alarm permit issued by the Miami Beach Fire Department.

When are permits required?

A fire alarm permit IS NOT required:

- When the contractor is replacing a damaged initiating device or notification appliance with same kind of device or appliance. For example, a damaged smoke detector can be replaced with the same kind of detector, same voltage demand, and no new wiring without obtaining a permit.

A fire alarm permit IS required:

- When the contractor is replacing the MAIN PANEL with the same kind of panel or a different panel.
- When the contractor changes the sequence of operations or programming essential to the evacuation of the occupants.
- When the contractor relocates, adds, or deletes any component of the fire alarm system.
- When the contractor has to rewire any part of the fire alarm system.
- Any work requiring upgrading to a new system as described below.

When to upgrade to a new fire alarm system?

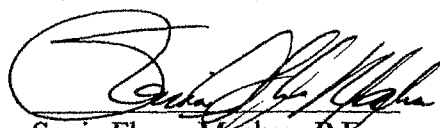
An existing fire alarm system may remain in operation when installed in accordance with the Fire Alarm Code at the time of installation and remains functional, effective, serviceable, and operational. However, existing fire alarm systems would be required to be upgraded to a new fire alarm system in the following cases:

- Any upgrade, renovation, addition, repair, or modernization of any existing Fire Alarm System which includes the replacement of the master control unit with anything other than the same make, and model as the existing master control unit. (Note: replacing a "motherboard" in kind is not considered an upgrade to the system)

- The addition of a fire alarm control panel which will provide or replace any of the function of the existing master control unit, except notification (booster panels), shall be required to have the complete fire alarm system in compliance with all the requirements for new installations.
- The addition of any component that will make the existing system non-compliant. For example, system must be resettable at one main control panel.
- If an upgrade renovation, addition, repair or modernizations are greater than one-half of the entire fire alarm system measured in components or square footage of the building it is protecting.
- Any existing fire alarm system determined by the AHJ to be inoperable for any reason. For example, obsolete parts that cannot be replaced, and system is therefore, not serviceable and inoperable.
- A fire alarm system which has caused more than four nuisance alarms within any three hundred sixty-five (365) days period.
- Existing fire alarm systems not meeting a minimum sound pressure level of at least 15 dBA above the average ambient sound level, or 5 dBA above maximum sound level having a duration of at least sixty seconds, whichever is greater, measured 1.5 meters above the floor in the occupiable area.
- Existing fire alarm systems not meeting the minimum sound level in sleeping rooms or areas with all intervening barriers closed. The minimum sound level is 70 dBA, or 75 dBA for systems installed after 2002.

References:

Florida Fire Prevention Code 2007 Edition
NFPA 72 2002 Edition
Miami-Dade County Code, Chapter 14


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Fire Marshal

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