



FDNY

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Technology Management
Bureau of Fire Prevention

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Related Code Sections: NFPA 72 (2010 edition) Sections 24.4.2 to 24.4.4

Purpose: Provide guidelines when utilizing an approved fire alarm system for a mass notification system in a single or interconnected campus wide buildings

I. Introduction

This bulletin provides guidelines when utilizing an approved fire alarm system for a mass notification system in single or interconnected campus wide buildings. A mass notification system shall be specific to the nature of the anticipated risk of the building(s) and allow communication in the event of such emergency situations such as a non-fire large scale disaster, attack scenario, natural hazards (meteorological, geological, biological), technological, a buildings' Fire Command Center not functioning, and/or Fire Life Safety Director is injured or incapacitated and communicating information immediately in order to facilitate an appropriate response and action is necessary.

The above situations are not all inclusive but reflects general categories considered in the risk analysis. In-building mass notification system will also have the capability to receive notification of fire alarm conditions via a fire alarm remote annunciator.

II. Design Criteria

- A) The voice communication component of the Fire Alarm System(s) shall automatically override the In-Building Mass Notification System and shall always have priority over the In-Building Mass Notification System.
- B) The fire alarm system(s) shall perform the required functionality including automatically transmitting alarm signals without delay to the FDNY via the Central Supervising Station.
- C) The In-Building Mass Notification System shall be designed and capable of making live voice messages to a building(s) occupants. The use of prerecorded messages is prohibited.

- D) The In-Building Mass Notification System interconnecting equipment, devices and wiring connections shall be monitored for integrity of the interconnecting conductors or equivalent path so that the occurrence of any fault condition in the installation conductors or other signaling channels is automatically indicated within 200 seconds at the fire alarm panel.
- E) The In-Building Mass Notification System design shall provide an indication at the Fire Command Center when the In-Building Mass Notification System is active.
- F) The In-Building Mass Notification System design shall provide the capability for the fire alarm system(s) to lockout (override) the In-Building Mass Notification System via FDNY 1620 key switch located at the Fire Command Center (FDNY use only).
- G) The FDNY will require the In-Building Mass Notification System to be staffed by a certified Fire and Life Safety Director who has passed the **On-Site Exam** for one of the buildings of the system. This individual shall be designated as the In-Building Mass Notification Center Operator. He/she will be the only individual permitted to control message initiation over the In-Building Mass Notification System.
- H) The In-Building Mass Notification System shall be manned by an In-Building Mass Notification System Operator 24 hours a day, 7 days a week. The In-Building Mass Notification System Operator shall utilize cameras (CCTV) and consult with the Fire and Life Safety Director(s) in order to share information so that the Fire and Life Safety Director(s) can provide one precise message to building occupants.
- I) The In-Building Mass Notification System design shall ensure adequate speaker audibility with speech intelligibility complying with the requirements of the code at the time of fire alarm filing and approval.
- J) A Mass Notification Tone preceding any voice message will be permitted, however the preceding tone shall be different from the sound heard during the activation of the fire alarm system.
- K) The In-Building Mass Notification Center shall be in a location approved by the Fire Department and shall contain the In-Building Mass Notification System Local Operating Console. The console cover shall be blue in color and labeled **"IN-BUILDING MASS NOTIFICATION SYSTEM FOR AUTHORIZED PERSONNEL USE ONLY"**. It shall consist of paging switches and a microphone to initiate communications for the In-Building Mass Notification System.
- L) The In-Building Mass Notification Center shall be equipped with a fire alarm remote annunciator to monitor the building(s) fire alarm system and two-way voice communication between the fire command center(s) and the Mass Notification Center.
- M) The In-Building Mass Notification System shall maintain a Building Information Card (BIC), Building Profile Card and Floor Plans for each of the building(s) being monitored.
- N) Class and style of circuits and levels of survivability shall be determined by the risk analysis.
- O) The power supply to the In-Building Mass Notification System shall be in accordance with section 760.41 of the New York City Electrical Code.

- P) The In-Building Mass Notification System documents and records shall be accessible in compliance with 2010 NFPA 72 section 24.4.2.7.4.
- Q) The In-Building Mass Notification System shall be inspected, tested and maintained in accordance with the manufacturer's requirements and the inspection, testing, and maintenance requirements of 2010 NFPA 72 Chapter 14, and will be subject to annual testing by the FDNY High Rise Unit.

III. **Operating Procedures**

- A) The In-Building Mass Notification System shall be used only for disseminating emergency mass notification voice messages (informational) when the Fire Command Center is not functioning as a result of this scenario and/or the Fire Life and Safety Director is injured, or incapacitated and unable to perform his/her duties.
- B) This notification shall not interfere with the operation and functionality of the FDNY approved fire alarm system(s) or impede or delay the implementation of the respective building(s) FDNY Emergency Action Plan, and Fire Safety and Evacuation Plan.
- C) Upon becoming aware of a non-fire emergency that would threaten the life and safety of the building(s) occupants if immediate action is not taken, the In-Building Mass Notification Center Operator will select the " building all-call" button of the mass notification paging system and after a brief (1-2 second) pre-announcement tone is transmitted over all speakers connected to the mass notification system, the In-Building Mass Notification System Operator will make an announcement about the nature/ location of the event and recommended action for occupants. For example:

"There has been a report of an active shooter, please activate your active shooter response plan based on your location and stand by for further instructions from the building(s) FLSD"

- D) The announcement will conclude with a notice to listen for further instruction from the building(s) FLSD who will begin enacting the building Emergency Action Plan. After the announcement, the In-Building Mass Notification System Operator must immediately communicate with the FLSD(s) to discuss the situation.
- E) The In-Building Mass Notification System Operator will then de-select the single all-call paging button from the In-Building Mass Notification System paging panel. If the In-Building Mass Notification System Operator does not release speaker control in a timely manner, the building's FLSD will maintain the capability to override and make individual building announcements.
- F) During a fire emergency, the Fire Life and Safety Director(s) shall have complete command and control of the building, and the Mass Notification System shall not be used, except to communicate to the Fire Life and Safety Director(s) for information purposes and to the building(s) occupants if the Fire Command Center is not functioning and/or the Fire and Life Safety Director is injured, or incapacitated and unable to perform his/her duties.
- G) The In-Building Mass Notification System shall be used for non-fire emergencies and only if, as a result of the scenario, the Fire Command Center is not functioning and/or the Fire and Life Safety Director(s) are injured, or incapacitated and unable to perform his/her duties and/or a non-fire emergency that would threaten the life and safety of the building occupants if immediate action is not taken.

H) The In-Building Mass Notification System Operator shall maintain a logbook. The logbook shall be divided into three (3) separate sections as set forth below. Each section shall have a sufficient number of pages to allow for entries for at least one (1) year. The following logbook entries are required and shall be made in each instance:

1) Daily entries. The name and Certificate of Fitness number of the certified Fire and Life Safety Director on duty and the time each tour of duty began and ended. These entries shall be set forth in columns in the logbook as follows:

1. date
2. name
3. *certificate of fitness* number
4. *time started*
5. time relieved

2) Inspection, Testing and Maintenance: Entries shall include any inspection, testing or maintenance and the name of the person and company performing such work.

1. date and time
2. name
3. *certificate of fitness* number
4. nature of work performed

3) In-Building Mass Notification transmission:

1. date and time
2. name
3. *Certificate of Fitness* number
4. building(s) involved

IV. **Filing and Inspection Procedures**

A) Apply through the FDNY's online Business Portal. The filing procedure must follow the directions as indicated on the FDNY Business website. Be sure to select Fire Alarm Variance Type on the FDNY Business Portal.

B) The following shall be submitted with your application:

1. A completed Technology Management Fire Alarm Technical Assistance Form – Form TM-4 <https://www1.nyc.gov/site/fdny/business/all-certifications/modification-variances.page>
2. A narrative that describes the scope of work
3. A risk-based analysis for the reason to install a mass notification system in the building(s), and all other supporting documents shall be submitted with your application.

NOTE: The In-Building Mass Notification System will not be approved unless all outstanding building fire alarm system(s) Letters/Notices of Defect and Violation Orders are resolved.

C) Final acceptance by FDNY shall be subject to a joint inspection scheduled by the Bureau of Fire Prevention Technology Management Unit. The joint inspection shall include the following units: Fire Alarm Inspection Unit, High-Rise Unit, EAP Unit, and local Battalion Chief.