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Date:

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 03/10/14

Memo Report

From: W. Mark Cummings, P.E.

To: Mr. Tim Biron; R.B. Allen Co., Inc.

Subject: Code Review; ICW Proposed Fire Alarm System Alterations at 1 City Center (1st Fl), Portland, ME

As requested, Fire Risk Management, Inc. (FRM) has performed a review of the proposed fire detection/alarm/notification system that is to be installed within the renovated portion of the 1st floor of the building located at 1 City Center in Portland, ME. The focus for this review is confined to the portion of the 1st floor that is being renovated. No other building information was provided beyond that area.

Background

A portion of the 1st floor of the building located at 1 City Center is being renovated to accept a new office (chiropractic) space. As a result, the existing fire detection/alarm/notification system is being modified to support the new space configuration for this area.

This building is a high rise building and it is assumed that it is fully protected with an automatic fire sprinkler system. The specific age of the building is unknown and therefore the specific "codes of record" for this building are not known. The code editions that are currently adopted by the City of Portland were used as references for this renovation, which is typical for alterations of this nature and scope.

Discussion

The primary codes used as reference for this review are the Life Safety Code®, NFPA 101, for a "Business" occupancy, and the National Fire Alarm Code®, NFPA 72. Additionally, the applicable sections of the City's Code of Ordinances (Ch. 10) and the Fire Department Rules and Regulations were also used to support this review.

In general, the review indicates that the proposed modifications to the building's fire alarm system will be code compliant. In fact, it appears that this proposed design will exceed the requirements of NFPA 72; as pertaining to the types and numbers of devices installed. Specifically, this design includes the installation of smoke detectors throughout all corridors. As outlined above, it is assumed that this building is fully protected with an automatic fire sprinkler system and it would be unnecessary to install smoke detection within these areas.

The operational matrix included with the submittal should be updated to reflect the same information as the narrative section. Specifically, the matrix should reflect that operation of the pressure switches and duct smoke detectors will be displayed on remote annunciator panels and will alert at the central monitoring station.

The battery calculations provided with the submittal documents indicates that the battery "provided" can accommodate the additional devices being added to the circuit. Since the cut sheets do not include a battery, it is assumed that the battery is "existing" and has been verified.

Summary and Recommendations

A review has been completed of the design documents that outline the planned renovations of the fire alarm system on the 8th floor of the building at 1 City Center in Portland, ME. Although the design modification

appears to be compliant with all code requirements, it is recommended that the need for sı
the corridors be verified as needed/desired and that the operational matrix be updated to ma
If you have any questions regarding what has been outlined above, please don't hesitate to

W. Mark Cummings, P.
Principal Engineer

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