



DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS

Public Safety Services



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GOVERNOR

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STATE FIRE MARSHAL

INTERPRETIVE MEMORANDUM 2007 - 02

To: Licensed Architects
Licensed Engineers
Licensed Sprinkler Contractors
Licensed Fire Alarm Contractors
Licensed Fire Suppression Contractors
Felicia Cooper, Deputy State Fire Marshal Administrator
Stephen Gogreve, Manager of Inspections
Pat Aronstein, Manager of Inspections
Gail Lorio, Supervisor of Health Care Inspections
Plan Review Staff

From: Don Zeringue, Chief Architect

Date: June 15, 2007

RE: Processing of Non-Required Fire Suppression Systems

Compliance with the Life Safety Code - NFPA 101, 2003 edition and the International Building Code (IBC), 2006 edition - are requirements of state law, in particular LA R.S. 40:1574, LAC 55:V 103 and Act 12 of the 2005 First Extraordinary Session. While many different types of building occupancies, sizes, construction types, etc., require fire suppression systems, some buildings are exempt from mandatory requirement for fire suppression protection.

For example, some industrial and storage occupancies are not required to be protected with a fire suppression system. Some office occupancies are not required to be protected. These are only a few examples and they are generic in nature.

NFPA 101 and IBC typically govern when a fire suppression system – typically a building sprinkler system - is required for a given construction work scope. When required, both codes reference the following codes for compliance:

- | | |
|----------|--|
| NFPA 13 | Standard for the Installation of Sprinkler Systems |
| NFPA 13R | Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height |

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NFPA 13D Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes

In other words, NFPA 101 and IBC dictate when a fire suppression system is required and NFPA 13, 13R and 13D describe minimum system requirements – how to design, install and maintain a building sprinkler system.

Most buildings are protected by sprinkler systems supplied by a reliable water source, such as a connection to underground municipal water pipe, connection to a private water tank, with or without a fire pump, depending on the sprinkler system's hydraulic demand. However, NFPA 101:9.7.3 and IBC:904 acknowledge the option of substitute fire suppression systems for entire buildings, specialized rooms, etc. Here is a typical example:

A building is required to be fire suppression protected per NFPA 101 and/or IBC. The designer elects a NFPA 13 system for the building but opts to substitute a NFPA 2001 Clean Agent system for computer room and computer floor area. The designer also opts to substitute a NFPA 17 Dry Chemical system for an electrical room. Because the code permits these types of substitution, the building is still considered to be "fully protected".

When a suppression system substitution is allowed by code, those substitutions must comply with applicable codes, such as:

NFPA 11	Standard for Low-, Medium-, and High-Expansion Foam
NFPA 12	Standard on Carbon Dioxide Extinguishing Systems
NFPA 17	Standard for Dry Chemical Extinguishing Systems
NFPA 17A	Standard for Wet Chemical Extinguishing Systems
NFPA 2001	Standard on Clean Agent Fire Extinguishing Systems

As noted above, some building projects are exempted by NFPA 101 and/or IBC from the requirements for a fire suppression system. Although a fire suppression system may be code exempt, a building owner may elect to provide a suppression system, due to mandate by insurance underwriter, insurance reduction incentive by insurance underwriter, etc.

It is an observation of this office that a proposed fire suppression system, which is not required by NFPA 101 and/or IBC, substantially exceeds the minimum requirements of the codes. In essence, these systems are referred by this office as "non-required fire suppression systems".

Although this office fully supports and encourages any type of life safety enhancement above the minimum requirements of the codes, the following policies shall be practiced by this office:

Required Fire Suppression Systems

1. The status of a proposed fire suppression system shall be designated during this office's NFPA 101 or 101/IBC review. The review letter will indicate if a suppression system appears to be required by code(s) and will reference the applicable code section(s). If a suppression system is mandated by code for any reason – occupancy type, size, height, excessive travel distance, construction type, etc., then the suppression system will be denoted in the NFPA 101 or 101/IBC review letter as a required system.
2. If a sprinkler system is accepted by this office as an appeal equivalency determination, or if a sprinkler system is mandated for an existing building as a determination from this office's Inspection Department, then the sprinkler system shall be deemed as a required system, regardless of the minimum requirements of the codes.
3. All required sprinkler systems shall be submitted to this office in a conventional manner, complete with shop drawings or contract documents, hydraulic calculations or pre-engineered/listed performance criteria and applicable manufacturer's literature of system assembly pieces, denoting listing status, performance criteria, etc.

Non-required Fire Suppression Systems

1. If this office's NFPA 101 or 101/IBC review determines that a fire suppression system appears to exceed the minimum requirements of the code(s), then the system shall be deemed a non-required fire suppression system. All non-required systems shall be processed via a sprinkler system or special suppression system exemption request. The exemption request form must indicate the associated NFPA 101 or 101/IBC project number. If an architectural review is not applicable – such as the work scope being limited to suppression an inspection report, etc. The applicant must also demonstrate that the suppression system is non-required, per NFPA 101 or 101/IBC.
2. Fire suppression systems required by a building owner's insurance underwriter may not be a code required system. If a suppression system is deemed non-required by this office, then the system shall be processed via a sprinkler system or special suppression system exemption request.

JCC/jcc