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DEPARTMENT OF LICENSES AND INSPECTIONS CODE BULLETIN No. F-1601		CODE OF GENERAL ORDINANCES OF THE CITY OF PHILADELPHIA TITLE 4 — BUILDING CONSTRUCTION AND OCCUPANCY CODE
SUBJECT OF BULLETIN: FIRE PROTECTION SYSTEM IMPAIRMENTS		REFERENCE CODE SECTION(S): F-901.7
ISSUED BY		ISSUE DATE February 4, 2016
NAME(S): Michael E. Fink Anthony J. Sneidar, Jr., Deputy Chief	SIGNATURE(S):	REVISION DATE
TITLE(S): Building Code Official, Department of Licenses and Inspections Fire Code Official, Fire Department		PAGE 1 OF 2

PURPOSE:

The purpose of this Code Bulletin is to establish criteria for the scope of planned fire protection system impairments during alterations, repairs or renovations. The Fire Code addresses system impairments. In an effort to clear up any confusion that may exist, this bulletin addresses the scope and procedures for fire protection when buildings are being altered, repaired or renovated. The intent of this Code Bulletin is to establish a clear and concise level of allowable impairments, under certain conditions, while maintaining the maximum level of fire protection and fire safety requirements during alterations, repairs or renovations when buildings are fully or partially occupied.

DISCUSSION / ISSUE:

The Fire Code, in Section 901.7, requires that where a fire protection system, or portion thereof, is or will be out of service (impaired) for testing, servicing, repairs, modifications or removal, including emergency work, the fire department shall be notified immediately and the fire code official is authorized to require the building to be evacuated or an approved fire watch provided. To ensure compliance with the Fire Code and to provide for the safety of occupants and protection of the building, alternative life safety measures must be established.

The Fire Code Unit has investigated calls regarding both sprinkler and automatic smoke detection systems in buildings being taken out of service. It was found that the majority of these reductions in fire protection were not warranted because the fire protection system being reduced was a planned impairment, and the system was being taken out of service to prevent false alarms and accidents to sprinkler heads. Furthermore, the protection system itself was not being worked on, and therefore the reduction of fire protection was not permitted under the Fire Code.

Given the vast number of reductions in fire protection systems during building alterations and repairs, direction is being given to establish limitations on such fire protection system impairments and the alternative life safety measures needed during such impairments.

DIRECTION:

When alterations, repairs or renovations in an existing building are planned, the following guidance is given to comply with the Fire Code. Fire Department notification shall take place when the shutdown of any fire protection system affects more than one story or more than 30,000 square feet (2700 m2) on one story. All aspects of Section 901.7 of the Fire Code shall be followed.

A. Planned Impairment of Sprinkler:

Sprinkler systems may only be taken out of service when the system itself is undergoing required service or improvements. No more than **2 contiguous floors** of the sprinkler system will be taken out of service at any one time with one of the following fire safety measures established:

- 1) Smoke detection shall remain in service and shall be monitored.
- 2) Dual functioning heat detectors shall be installed. Both fixed temperature and rate-of-rise functions shall be operational and the system shall be monitored.
- 3) A fire watch shall be established. The fire watch requirements are found in the Fire Code in Section 901.7.

B. Planned Impairment Fire Alarm Systems:

Smoke detection and any part of the fire alarm system may only be taken out of service when the system itself is undergoing required service or improvements. On the floors where the smoke detection system is taken out of service, it is limited to 2 contiguous floors and one of the following alternative life safety measures shall be established or maintained:

- 1) Maintain an active sprinkler system with all tamper switches and water flows fully monitored
- 2) Replacement of smoke detectors with fixed heat and rate-of-rise heat detectors. (See Limitation Note below.)
- 3) A fire watch shall be established. The fire watch requirements are found in the Fire Code in Section 901.7.

Procedure Note: When smoke detectors are left in place during work that produces dust or other contaminants, the contractor shall adhere to the manufacturer's recommendations for protection of such smoke detectors. These requirements often include protecting the detectors with molded covers or light weight plastic bags. Whenever covers or light weight plastic bags are used, a written procedure shall be established by the building management's construction company containing rules and regulations to insure compliance as follows:

- a) Proper installation of the covers/bags.
- b) Proper removal of covers/bags whenever the areas are unoccupied, and follow up to verify removal.
- c) Daily maintenance of documentation of involved locations, including contact names.
- d) Designation of appropriate person(s) on the construction team to activate the fire alarm system, and call the Fire Department and building management in the event of a smoke or fire condition.

Limitation Note: heat detectors are not acceptable in elevator lobbies.

C. Testing/Certification of Fire Alarm Systems:

The impairment requirements set forth in this Code Bulletin shall not apply when testing fire alarm systems for periods not to exceed one hour or when performing the annual fire alarm system certification, as long as the testing is performed by a qualified contractor or fire alarm inspector licensed by the City of Philadelphia.