



BUILDINGS 2020-012 BULLETIN TECHNICAL

ISSUANCE DATE
June 16, 2020

SUPERSEDES
Buildings Bulletin 2017-009



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PURPOSE: This document clarifies requirements for standpipe and sprinkler systems in existing buildings undergoing alterations, including compartmentation requirements and FDNY notifications.

RELATED CODE/ZONING SECTION(S): LL 5/73 NFPA 13 AC 27-339 FC 2604.1.8
LL 26/04 NFPA 72 FC 901.7

SUBJECT(S): Existing building, alterations, temporary sprinklers; Existing building, alterations, compartmentation; Existing building, alterations, standpipe systems; Automatic sprinkler system, temporary; Existing building, alterations, fire alarm system; Fire Department, Letter of No Objection; Temporary core sprinkler protection; Temporary sprinkler loop; Standpipe system.

I. ALTERATIONS AFFECTING SPRINKLER SYSTEM AND/OR FLOOR COMPARTMENTATION

A. Background

In an existing, sprinklered building, where alterations are proposed to a floor on which the sprinkler system is to be temporarily disconnected for the alterations, Temporary Core Sprinkler Protection (TCSP) is required to serve as a temporary fire protection measure: 1) at the elevator openings; 2) at the entrances to the exit stairways; and 3) along the egress paths, including corridors, connecting all required exits and elevator lobbies. TCSP is required to protect the means of egress and the elevator shafts from fire intrusion and, as a secondary measure, to act as a fire alarm (the sprinkler heads act as heat detectors). In addition, TCSP also protects the floor's occupants (e.g. construction workers) in case of a fire by providing safe egress from the floor under alteration. TCSP shall be connected to a fire alarm system in the building. In buildings that do not have a fire alarm system, TCSP shall be connected to a local annunciation and notification system. TCSP shall comply with and shall be placed in accordance with applicable requirements of the code-referenced NFPA 13. TCSP shall provide the same responses as other sprinkler systems in the building, such as elevator recall, sprinkler system notification, and alarms, etc.

B. Existing Building: Alterations on Partially Occupied Floors

If a floor is partially occupied during an alteration in a fully sprinklered existing building, TCSP – as described in Part I of this bulletin shall not be required if the temporary compartmented work area, with compartmentation of not less than 1-hour rating, is not greater than 52,000 ft² (NFPA 13 section 8.2.1). However, the entire floor's sprinkler system shall remain intact, except that sprinkler heads in the work area may be removed provided that all of the following conditions are met:

1. Sprinkler heads shall be placed on both sides of all entrances to and exits from the work area.
2. Heat detectors shall be placed on the construction side of the entrance doors to the temporary compartmented work area. Heat detectors shall be in compliance with NFPA 72 for the occupancy in

which they are placed and shall be connected to the fire alarm system in the building. Where there is no fire alarm system, heat detectors shall be connected to a local annunciation and notification system.

3. Where the work area is near the stairwell on a floor, no sprinkler heads shall be placed inside the stairwell.
4. All required exits shall be maintained for the duration of the construction, including those from the work area.

Application for a permanent replacement sprinkler system shall be made within 60 days of application for removal of temporary sprinklers. (See Part G, Figure 1 below)

C. Existing Building: Alterations on Unoccupied Floors

If an entire floor is unoccupied during an alteration in a fully sprinklered existing building, TCSP shall be provided. The floor along the path of exit access shall be free of debris and all passenger elevators shall be locked out from stopping on the floor undergoing alterations. The sprinkler piping shall be located at an appropriate height above the floor to clear any future ductwork, and sprinkler heads shall comply with and shall be placed in accordance with the applicable requirements of the Code-referenced NFPA 13. The fire alarm system on the floor under alteration shall remain functional. Smoke detectors may be removed from the floor but the pull stations and all other fire alarm notification appliances shall remain to the maximum extent possible. (See Part G, Figure 2 below)

D. Scope of Work with Duration of One Year or More

In an existing fully sprinklered building, if the proposed work will take one year or more to complete, the entire floor(s) undergoing alterations shall be sprinklered in accordance with New York City Building Code.

E. Existing Building: Compartmentation Alternative

Where an existing office building one hundred feet or more in height was subject to Local Law 5 of 1973, the building may have been either fully sprinklered or compartmented pursuant to such Local Law. Where the option of full sprinkler system was chosen pursuant to section 27-339(c) (5), such system shall comply with Parts I through III of this bulletin, as applicable. Proposed work that will take one year or more to complete shall comply with Part D of this Bulletin.

If a building was compartmented pursuant to section 27-339(c), and the building is not fully sprinklered, the following shall apply:

1. ALTERATION OF THE ENTIRE FLOOR. On a floor that is compartmented and unoccupied in which the entire floor is undergoing alteration, prior to the removal of the compartmentation, TCSP (as described in Part A above), or permanent core sprinkler protection shall be installed at the elevator openings, entrances to the exit stairways, and along the egress paths, including corridors, connecting all required exits and elevator lobbies. The TCSP may be located in its future, permanent position so that, upon the new build out, new sprinklers can be connected to the TCSP and become permanent. New sprinklers must be installed throughout the entire floor.
2. ALTERATION OF A PARTIAL FLOOR. On a floor that is compartmented in which some areas remain occupied, and only part of the floor is undergoing alteration that involves removing any compartment walls, prior to the removal of the compartmentation, TSCP (as described in Part A

above) shall be in place at the elevator openings, entrances to the exit stairways, and along the new egress paths, including corridors, connecting all required exits and elevator lobbies. Upon the new build out, permanent sprinklers heads must be installed in the newly altered area. The remaining compartmented areas may remain as is to the extent local laws permit. (See Part G Figures 3 and 4 below).

F. DOB/FDNY Permit Application Process

The following procedure shall apply to alterations to an existing building that is fully sprinklered or compartmented where sprinklers are to be temporarily disconnected or compartmentation of unsprinklered spaces is to be removed as described in Part B, C, or E above.

1. FIRE CODE COMPLIANCE. If the alteration work involves taking the sprinkler system out of service, including any removal of the sprinkler system, the owner must comply with the Fire Code out-of-service requirements until the TCSP described in Parts I, II, III and V of this document is installed and operational. A note shall be made on the plan indicating that there will be compliance with the out-of-service sprinkler system requirements as set forth in Fire Code Sections 901.7 and 2604.1.8. For additional information about the out-of-service requirements, see FDNY Fire Code Guide, available on FDNY website.
 - a. *Notification to FDNY.* The owner shall make notification to the FDNY prior to taking the sprinkler system out of service, and then again when the system is restored to service, when required by Fire Code Section 901.7.5.2. Notification to FDNY shall be made by telephoning the non-emergency Fire Department numbers shown below for the borough in which the out-of-service sprinkler system is located. Persons making such notification must be prepared to provide the information required by Fire Code Section 901.7.5.3.
Bronx.....(718) 430-0200
Brooklyn.....(718) 965-8300
Manhattan.....(212) 570-4300
Queens.....(718) 476-6200
Staten Island.....(718) 494-4296
 - b. *Notification to Building Occupants.* The owner shall notify building occupants and other affected parties as set forth in Fire Code Section 901.7.3
 - c. *Fire Watch.* The owner shall maintain a fire watch as required by Fire Code Section 901.7 during the time that the system is out of service.
 - d. *Hot Work Restrictions.* Hot work shall be restricted in areas affected by the out-of-service system as set forth in Fire Code Section 2604.1.8.
2. FDNY LETTER OF NO OBJECTION (*required only when the scope of work involves more than five contiguous floors*). After submitting an application to the DOB, the applicant shall file with FDNY an application for a **Letter of No Objection** (LNO) for the alteration work, including a detailed scope of work, date and time and the duration of disconnection, and temporary fire protection measures to be provided in the affected area. A note shall be made on the plan indicating that there will be compliance with the out-of-service sprinkler system requirements as set forth in Fire Code Sections 901.7 and 2604.1.8. For additional information about the out-of-service requirements, see FDNY Fire Code Guide, available on FDNY website. The LNO issued by the FDNY shall be submitted to DOB.

Questions about the process may be made to cda@fdny.nyc.gov.

3. FIRE ALARM SYSTEM MODIFICATION. Any alterations/additions or modifications to an existing, approved fire alarm system shall be filed with DOB and FDNY for approval.

FIGURE 1: Alteration on part of an existing, fully sprinklered, partially occupied floor

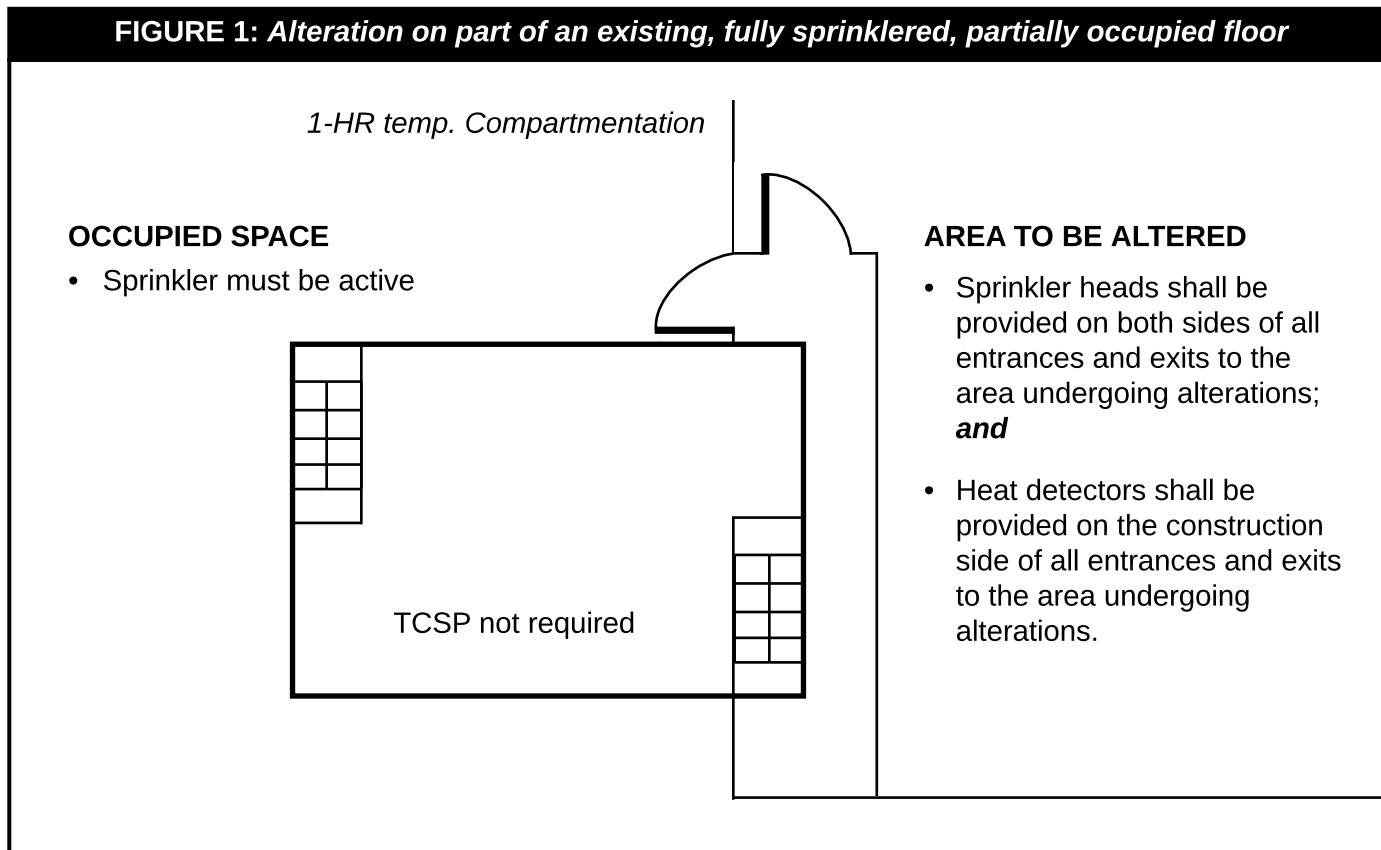


FIGURE 2: Alteration on an entire, an existing fully sprinklered, unoccupied floor

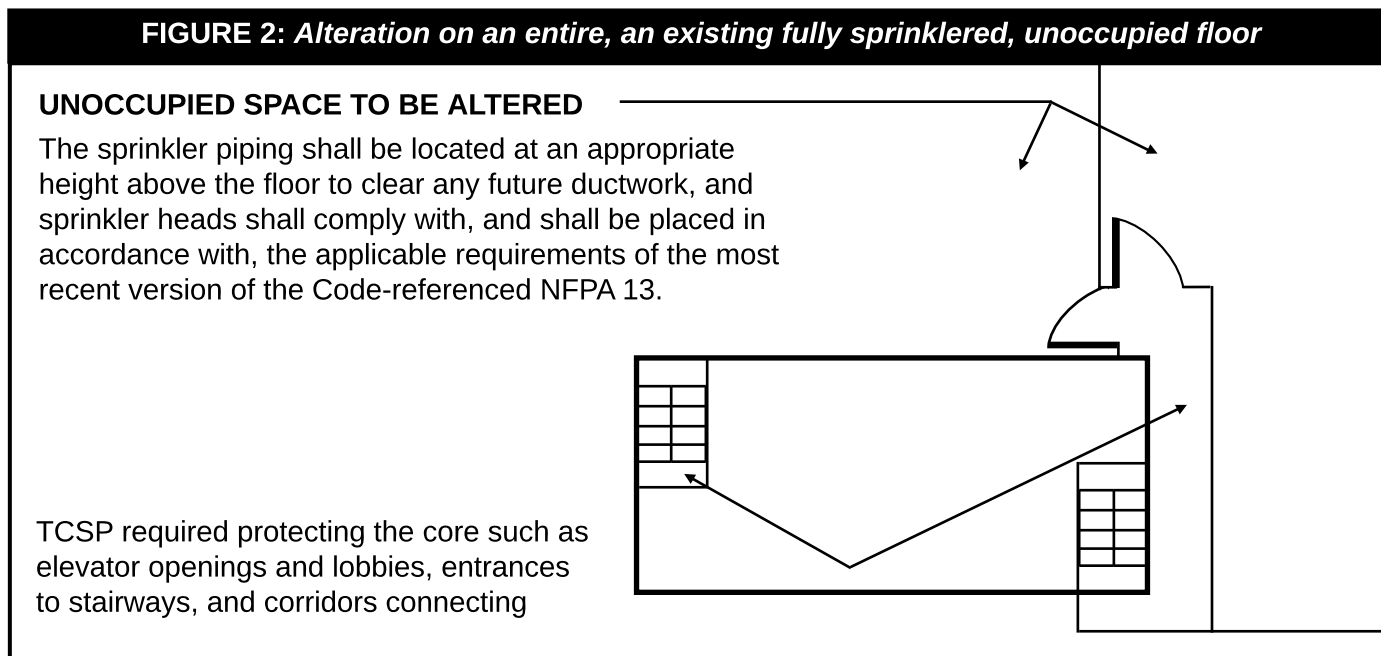


FIGURE 3: Removal of a 1-hour wall on an existing, compartmented floor

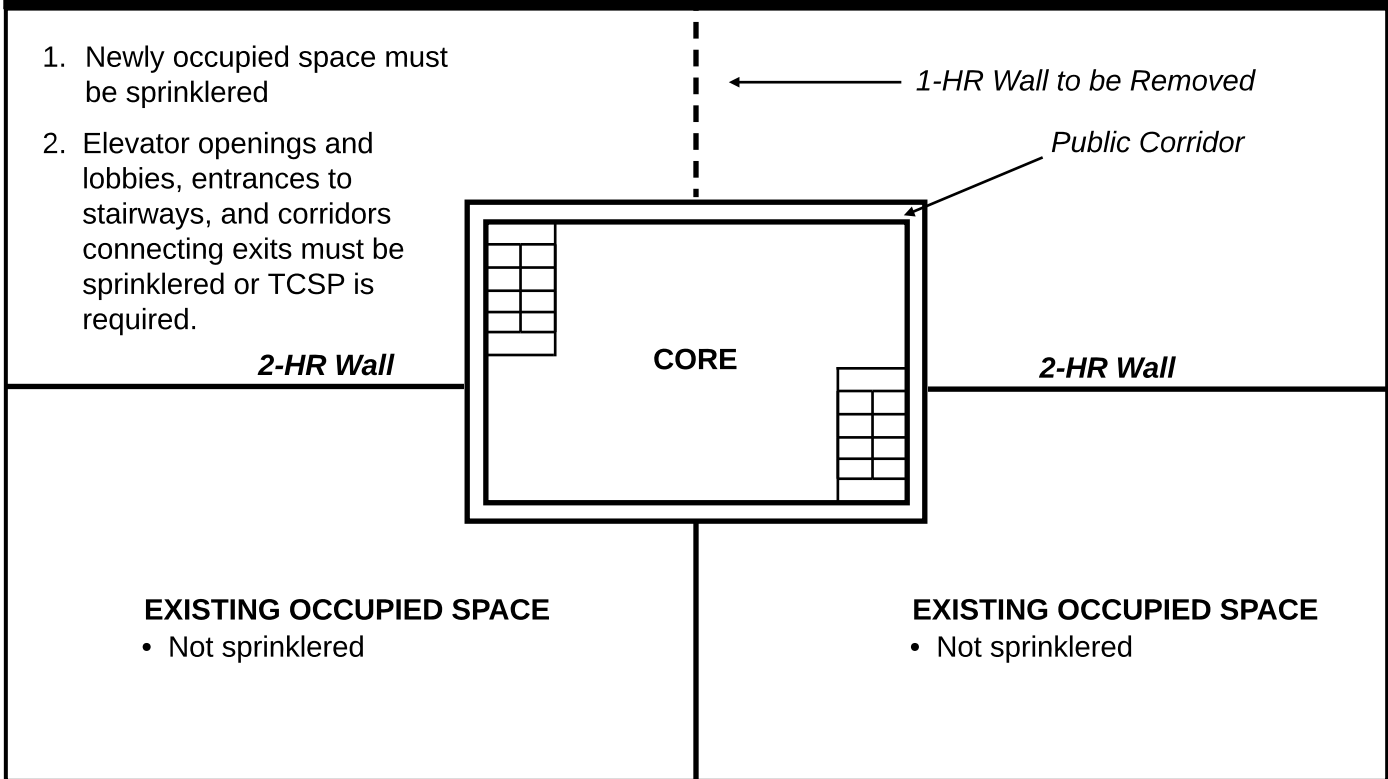
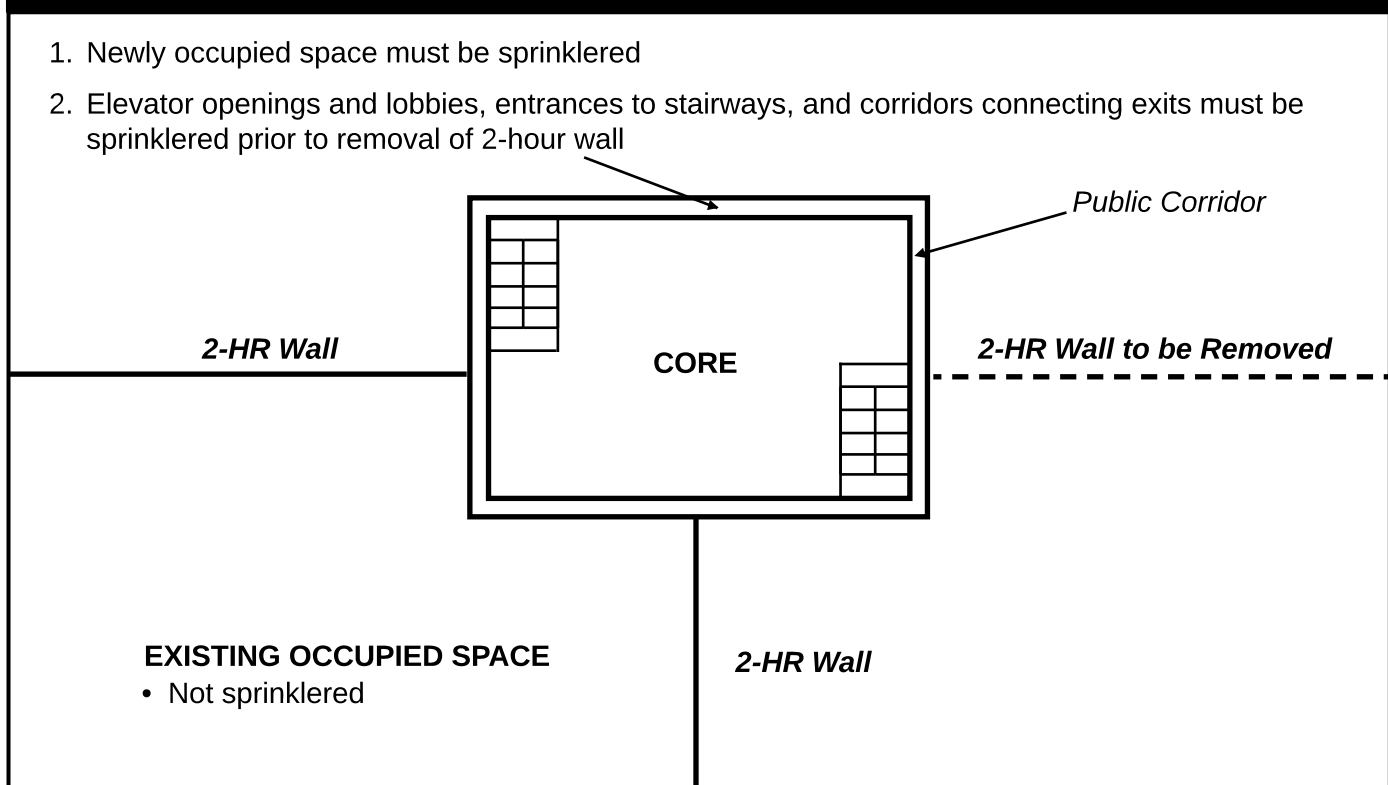


FIGURE 4: Removal of a 2-hour wall on an existing, compartmented floor



II. ALTERATIONS AFFECTING STANDPIPE SYSTEM

A. Background

Firefighter operations and firefighter safety rely on an operational standpipe to bring water to a fire. Owners must make the FDNY aware of the removal of any standpipe system from service (even for short periods of time) and of any malfunctioning system so that that FDNY can adjust its firefighting procedures.

B. DOB/ FDNY Permit Application Process

The following procedure shall apply to alterations to a standpipe system in an existing building:

1. **FIRE CODE COMPLIANCE.** If the alteration work involves placing the standpipe system out of service for any length of time, the owner must comply with the Fire Code out-of-service requirements. A note shall be made on the plan indicating that there will be compliance with the out-of-service standpipe system requirements as set forth in Fire Code Section 901.7, including 901.7.7.
 - a. *Notification to FDNY.* The owner shall make notification to the FDNY prior to taking standpipe system out of service, and then again when the system is restored to service. Notification to FDNY shall be made by telephoning the non-emergency Fire Department numbers shown below for the borough in which the out-of-service standpipe system is located. Persons making such notification must be prepared to provide the information required by Fire Code Section 901.7.5.3.

Bronx.....(718) 430-0200
Brooklyn.....(718) 965-8300
Manhattan.....(212) 570-4300
Queens.....(718) 476-6200
Staten Island.....(718) 494-4296
 - b. *Notification to Building Occupants.* The owner shall notify building occupants and other affected parties as set forth in Fire Code Section 901.7.3.
 - c. *Fire Watch.* The owner shall maintain a fire watch during the time that the system is out of service as set forth in Fire Code Sections 901.7 and 901.7.7(3).
 - d. *Hot Work Restrictions.* Hot work shall be prohibited on the construction site during the time that the system is out of service as set forth in Fire Code Section 901.7.7(4.3).

III. LETTER OF NO OBJECTION.

When it is anticipated that the scope of work will require the standpipe system to be taken out of service for more than 24 hours a **Letter of No Objection (LNO)** shall be obtained from the FDNY. After submitting an application to the DOB, the applicant shall file with FDNY an application for a LNO for the alteration work, including a detailed scope of work and the estimated duration of out-of-service condition. A note shall be made on the plan indicating that there will be compliance with the out-of-service standpipe system requirements as set forth in Fire Code Section 901.7, including Section 901.7.7. For additional information about the out-of-service requirements, see FDNY Fire Code Guide, available on FDNY website. The FDNY LNO shall be submitted to DOB.

Questions about the process may be made to cda@fdny.nyc.gov.