



INFORMATION SHEET

NO. FS-03

DATE: December 6, 2023

CATEGORY: Fire Safety

SUBJECT: Automatic Sprinkler System Requirements for Additions and Alterations in Existing Non-Sprinklered R-3 Occupancies with 4-Stories or Resulting in 4-Stories

PURPOSE: This information sheet is clarifies the automatic sprinkler system requirements triggered by additions and alterations in existing three- and four-story R-3 occupancies of Type-V construction.

REFERENCE: San Francisco Building Code (SFBC), Current Edition
San Francisco Existing Building Code (SFEBC), Current Edition
California Building Code (CBC), Current Edition
SFBC Section 903.2.8 Automatic Sprinkler Systems, Where Required, Group R
CBC Section 202 Definitions
SFEBC Section 502 Additions
SFEBC Section 503 Alterations
CBC Section 503.1.4 Occupied Roofs
CBC Section 504 Building Height and Number of Stories
CBC Section 903.2.8 Automatic Sprinkler Systems, Where Required, Group R
CBC Section 903.3 Automatic Sprinkler Systems, Installation Requirements
CBC Section 1004.7 Occupant Load, Outdoor Areas

DISCUSSION: Projects are differentiated between **additions**, where installation of automatic sprinkler systems throughout the building may be required, and **alterations**, where the automatic sprinkler systems are limited to the area of alteration and may not be required throughout the building.

Additions: Additions, as defined by CBC 202, is “an extension or increase in floor area, number of stories or height of a building or structure.” Where additions are proposed, the entire building shall comply with CBC 504. Reference examples 1 through 4 for additions to R-3 occupancy buildings of Type-V construction where automatic sprinkler systems are required throughout to satisfy the requirements of CBC 504:

1. Vertical additions to existing 3-story, non-sprinklered buildings, resulting in more than three stories.

2. Conversion of unoccupied attics to occupiable space in existing 3-story, non-sprinklered buildings, resulting in more than three stories (converted attics are considered added stories).
3. Horizontal additions to existing 4-story, non-sprinklered buildings.
4. Excavation of basements to create occupiable space in existing 4-story, non-sprinklered, buildings.


Alterations: Alterations, as defined by CBC 202, is “any construction or renovation to an existing structure other than repair or addition.” The areas of alteration shall comply with current code requirements for new construction, including installation of automatic fire sprinklers. However, unaltered portions of the existing building are not required to be upgraded to current code provisions for new construction.

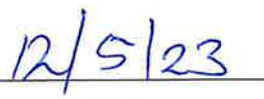
The two examples below illustrate alterations in existing 4-story, R3 occupancies of Type-V construction, where installation of automatic sprinklers throughout the entire building is **not** triggered. Instead, compliance with the current codes for new construction is limited to the area of alteration.

1. Conversion of existing 1st floor unoccupiable space to occupiable space.
2. Conversion of basements to habitable or occupiable space without excavation.

Other Conditions:

1. For understanding of various conditions, including those not listed in this information sheet, see the above referenced building code sections.
2. For existing R-3 occupancies with 3 stories or less, see also DBI Information Sheet EG-03.
3. For new residential decks, including occupiable roofs, see also DBI Information Sheet EG-01.


 Patrick O'Riordan, C.B.O., Director
 Department of Building Inspection


 Date

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