

Code Review - NFPA 101 2009

Chapter 43 - Building Rehabilitation

Section 43.1.2.1 - Because this structure is undergoing "Modifications" (see 43.2.2.1.3 for definition), it shall comply with both Chapter 31 (Existing Apartment Buildings) and Chapter 43.5 (Modifications).

Note: Per the commentary in this section, Chapter 31 (Existing Apartment Buildings) applies to the entire structure, not just the renovations.

Section 43.2.2.1.3 - This section provides a definition of "Modifications", which is considered the reconfiguration of any space; the addition, relocation, or elimination of any door or window; the addition or elimination of load bearing elements; the reconfiguration or extension of any system; or the installation of any kind of equipment.. It is this category of Modifications that will be utilized for this project.

Section 43.4 - The renovation work (except for interior finishes) must be in compliance with Chapter 31 for Existing Apartment Buildings. Interior finishes must comply with Section 43.4.3. Furthermore, the building must also comply with the requirements of Chapter 31.

Section 43.4.2 - The capacity of means of egress per Section 7.3 shall be sufficient for the occupant load.

Occupant Load per Table 7.3.1.2 : 1 person per 200 square feet.

Section 43.4.3 - New interior finishes shall meet the requirements for new construction.

Section 43.5.1.1 - The modifications will comply with section 43.4 (see above) and Section 43.5

Section 43.5.1.2 - This is not an Historic Building

Section 43.5.1.3 - This work will comply with all sections for New Construction.

Chapter 31 - Existing Apartment Buildings

Section 31.1.1.1 - The structure shall comply with one of the four options for fire protection as described in this section. Of the four options that are available, Option 4 is the option that is being considered for this project. This option consists of installing a sprinkler system throughout the structure.

Section 31.1.2.1 - Multiple occupancies shall be in accordance with 6.1.14.

6.1.14.2.3 - Due to a portion of the first floor (Units 1 and 2) being used for Mercantile, this building will be a Multiple Occupancy and further defined as a Separated Occupancy.

6.1.14.4.1 - Per the Table in this section, the separation between the Residential Apartment Building and the Mercantile shall be 2 hours. Note: This will be reduced to a 1-hour rating with a sprinkler system per Section 6.1.14.4.3. This may be further reduced per Section 31.1.2.3.

Section 31.1.2.2 - The dwelling units do not have their sole means of egress passing through the Mercantile occupancy.

Section 31.1.2.3 - Dwelling units may be located above a non-residential use (Mercantile) if the dwelling units and its exits are separated from the non-residential use by a 1-hour rating, or the non-residential use is sprinkled (also see 6.1.14.4.1). Note: Subsection 3 does not apply as there are more than 2 dwelling units above the Mercantile space.

Section 31.1.5 - For purposes of designing an automatic sprinkler system, the contents shall be classified as an "Ordinary" hazard.

Section 31.1.7 - Occupant load shall be determined per Table 7.3.1.2.

Table 7.3.1.2 - Occupant load for apartment buildings shall be 1 person per 200 s.f.

Occupant load for mercantile shall be 1 person per 30 s.f.

Section 31.2.1.1 - Means of egress from the dwelling units to the outside of the building shall comply with Chapter 7 of this code.

Section 31.2.1.2 - Means of escape within the dwelling unit shall comply with Section 24.2.

24.2.2.1.1 - Dwelling units of two rooms or more must have a primary means of escape and a secondary means of escape from every sleeping room and living area (i.e. egress windows).

24.2.2.1.2(2) - A secondary means of escape is not required if the dwelling unit is protected with an automatic sprinkler system.

Section 31.2.2.1.2 - In buildings using Option 4 (automatic sprinkler system throughout), exit enclosures shall be 1-hour rated, with 1-hour fire doors.

Section 31.2.2.2.2.1 - No door in any means of egress shall be locked against egress when the building is occupied.

Section 31.2.2.2.5 - No re-entry provisions are expected.

Section 31.2.2.3.1 - The existing stairs shall have the dimensional criteria per Table 7.2.2.2.1.1(b). The existing stairs do not appear to meet these dimensional criteria (also see 31.2.2.3.4 for Winder Stairs). However, existing noncomplying stairs as approved by the AHJ do not have to meet these criteria per 7.2.2.1.2(2).

Section 31.2.2.3.4 - Winder stairs per 7.2.2.2.4 are permitted. Existing winder stairs shall be permitted to remain in use per Section 7.2.2.2.4.3, provided they have a tread depth of not less than 6" and a tread depth of 9" at a point 12" away from the narrowest edge.

Section 31.2.2.5 - There are no horizontal exits anticipated in this project.

Section 31.2.2.6 - There are no ramps anticipated in this project.

Section 31.2.2.7 - There are no exit passageways anticipated in this project.

Section 31.2.2.8 - There are no escalators in this project.

Section 31.2.2.9 - There are no fire escape stairs in this project.

Section 31.2.2.10 - There are no fire escape ladders in this project.

Section 31.2.2.11 - There are no alternating tread devices in this project.

Section 31.2.2.12 - There are no areas of refuge in this project.

Section 31.2.3.2 - Street floor exits shall be sufficient for the occupant load of the street floor plus the required capacity of the stairs that discharge onto the street floor.

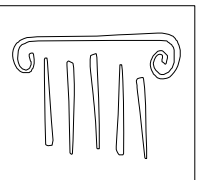
Note: The total occupant load of the top three floors of the work area is 24 (8 per floor). The occupant load of the ground floor Unit 1 is 26 for a total load of 52. Even if all occupants exited out one door, the required width would only be required to be 10 1/2" per Table 7.3.3.1.

Section 31.2.4.1 - Every dwelling unit shall have two separate exits remotely located from each other. Note: The dimensional distance of 1/2 of the diagonal between exits does not have to be met per Section 7.5.1.3.5.

Section 31.2.5.3.1 - The common path of travel (without a sprinkler system) shall be 35 feet. Note: The travel within a dwelling unit is not included.

Section 31.2.5.3.2 - The common path of travel (with a sprinkler system) shall be 50 feet. Note: The travel within a dwelling unit is not included.

Section 31.2.5.4 - Dead-end corridors shall not exceed 50 feet.



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REVISIONS		
#	DATE	DESCRIPTION
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Date Issued MAY 21, 2014

Project Number 13118

Drawing Scale

SHEET NAME

CODE REVIEW

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Checked By LAS

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