

**Building Code Summary**

Building Area Information	
First Floor	2315 SF
Second Floor	2271 SF
Third Floor	2271 SF
TOTAL	6857 SF

**2009 IBC Code Overview**

	Existing	Proposed
Use	R-2	R-2
Sprinkled	No	No
Occupancy Load	31	31
Construction Type	VB	VB
Number of exits per occupancy	Varies	1

**NFPA 101 Code Overview**

	Existing	Proposed
Use	Apartment	Apartment
Sprinkled	No	No
Fire Alarm	No	Yes
Supervised	-	Yes
Occupancy Load	31	31
Construction Type	IIIB	IIIB
Number of exits per occupancy	Varies	1

**MAINE HUMAN RIGHTS ACT**

BUILDING IS EXISTING AND ACCESSIBILITY REGULATIONS OF MHRA DO NOT APPLY  
 COST OF RENOVATION IS LESS THAN 75% OF BUILDING REPLACEMENT COST

**IEBC 2009 - Classification of Work Method**

404.1 Level 2 Alteration - Comply with Chapter 6 and 7  
 405.1 Level 3 alteration does not apply because the work area does not exceed 50% of the aggregate area of the building.

**Floor by floor area calculations:**

First floor:	
Total area of the floor	:2085 sft
Total work area on the floor (as indicated in the drawings)	: 692 sft
% of work area in first floor: $(692/2085) \times 100 = 33.19\%$	<50%
Second floor:	
Total area of the floor	:2044 sft
Total work area on the floor (as indicated in the drawings)	: 792 sft
% of work area in second floor: $(792/2044) \times 100 = 38.74\%$	<50%
Third floor:	
Total area of the floor	:2044 sft
Total work area on the floor (as indicated in the drawings)	:186.40 sft
% of work area in third floor: $(186.40/2044) \times 100 = 9.11\%$	<50%

Total Building area	: 6173 Sft
Total work area of the building	: 1670 Sft
% of work area of the entire building	: $(1670/6173) \times 100 = 27.05\%$

601.2 Conformance – An existing building shall not be altered to become less safe.

Exception: Where the current level of safety is proposed to be reduced, the portion altered shall conform with IBC.

602.1 Elements and Materials - Comply with Chp 8 of IBC

603.1 Fire Protection - Maintain level of fire protection

604.1 Egress - Maintain level of protection for means of egress

605.1 Accessible means of egress are not required to be provided in existing buildings.

605.1.13 Max height of doorway threshold: 3/4 inch.

701.3 Compliance - New construction shall comply with requirements of IBC.

703.2.1 Existing vertical openings: All existing interior vertical openings connecting two or more floors shall be enclosed with approved assemblies having a fire-resistance rating of not less than 1-hr w/ approved opening protectives.

Exceptions:

1. Where vertical opening enclosures are not required by IBC.

2. In Group R-2 occupancies, a min. 30-min enclosure shall be provided to protect all vertical openings not exceeding three stories.

703.4 Interior finishes comply with IBC.

704.4.3 Smoke Alarms - Individual sleeping units and dwelling units in any work area in Group R shall be provided with smoke alarms in accordance with IFC.

705.2 Egress – The means of egress shall comply with this section.

Exception #2 - Egress conforming to requirements under code in which building was constructed shall be considered compliant if in the opinion of code official they do not constitute a distinct hazard to life.

705.3.1 - Minimum Exits - Based on accordance with IBC.

705.3.1.2 Where more than one exit is required, an existing or newly constructed fire escape shall be accepted as providing one of the required means of egress.

705.4.3 In any work area, all doors opening onto an exit passageway at grade or an exit stairwell shall be self-closing or automatic closing.

705.11 - Guards - If existing guards are judged to be in danger of collapsing shall be provided with guards.

**IBC 2009**

420.2 Separation Walls - Walls between dwelling units comply with 709.  
 420.3 Horizontal Separation - Floor assemblies separating units comply with 712.

709.3 Fire partitions shall have a fire-resistance rating of not less than 1-hour.  
 712.3 Horizontal assemblies separating dwelling units in same building shall be a min of 1 hour rated construction.

Table 803.9 R-2 (nonsprinklered) = Exit enclosure Class B materials  
 Corridors Class B materials  
 Rooms Class C materials

1004.1.1 Residential Areas 6173 SF 200 gross 31 occupants

**2009 NFPA 101**

3.3.32.5 Existing Building

6.1.8.1.5 Residential Occupancy – Apartment Building  
 6.2.2.3 Ordinary Hazard Contents

7.1.3.2.1 Stairs connecting 3 or fewer stories shall have a 1-hour fire rating.

7.1.5.1 Min headroom in existing buildings: 7'-0"

7.2.1.2.3.2 Egress door min clear width: 32"

7.2.1.4 Door swing and force to open shall comply with this section

7.2.1.5 Door locks, latches and alarms shall comply with this section

7.2.2.2.1.1(b) Min. clear width: 36 in.

Max riser height: 8"

Min Tread depth: 9"

Min headroom: 6'-8"

7.2.2.2.4.3 Existing winders shall be permitted to be continued in use, provided that they have a tread depth of not less than 6 in and a tread depth of not less than 9 in at a point 12 in from the narrowest edge.

7.2.2.3.2.3 Min landing depth: stair width

7.2.2.2.1.2 Min stair width clear of all obstructions, except projection not more than 4 1/2 in at or below handrail height on each side is: 36" (for occupancy under 50)

7.2.2.4.1.2 For existing stairs, handrails shall:

a. Shall be provided within 44 inches of all portions of required egress width

b. Stairs shall not have their egress capacity adjusted to a higher occupant load than permitted by the capacity factor if the stair's clear width between handles exceeds 60 in.

7.2.2.4.1.6 Existing stairs shall be permitted to have a handrail on only one side.

7.2.2.4.4.1 Handrail height: 36"

7.2.2.4.4.2 Existing required handrails shall be not less than 30 in, and not more than 38 in above the surface of the tread.

7.2.2.4.5.2 Existing guards on existing stairs shall be permitted not less than 30 inches high.

7.2.2.4.4.6 Handrail shape: 1 1/2" circular cross section

7.2.2.4.4.9 Handrails shall return to wall or newel post

7.2.2.4.4.10 Handrails shall extend 12" at top of stair and one tread length at bottom

7.2.2.4.5.3 Open guards shall not allow the passage of a 4" sphere

7.2.2.5.4 Stairway identification shall comply with this section.

7.2.8 Fire escape stairs shall conform with this section.

**Occupancy Load**

Residential Areas 6173SF 200 gross 31 occupants

Min Egress width: 36"

In existing buildings egress width: 28"

7.8 Egress Illumination shall be in accordance with this section.

7.9 Emergency Lighting shall be in accordance with this section.

7.10 Marking for means of egress shall comply with this section.

9.6 Fire detection, alarm, and communication system shall comply with this section.

10.2 Interior finishes shall comply with this section.

31.1.1.1 Option 1, buildings without fire suppression or detection systems.

31.1.5 Ordinary hazard content classification.

31.1.6 No minimum construction requirements.

31.2.1.2 Means of escape within the dwelling unit shall comply with the provision of Section 24.2 for one-and two-family dwellings.

31.2.2.3.4 Winders complying with 7.2.2.2.4 shall be permitted.

31.2.4.1 Every dwelling unit shall have access to not less than two separate exits remotely located from each other.

31.2.5.3.1 No common path shall exceed 35 ft in buildings not protected with an automatic sprinkler system. Travel within a dwelling unit shall not be included with calculating the common path of travel.

31.2.5.4 Dead-end corridors shall not exceed 50 ft.

31.2.6.1 Travel distance within a dwelling unit to a corridor door shall not exceed:  
 (1) For buildings using Option 1, 75 ft.

The travel distance from a dwelling unit entrance door to the nearest exceed shall not exceed:

(1) For buildings using Option 1, 100 ft.

31.2.6.3 Travel distance to exits shall not exceed 200 ft for exterior ways of exit access.

31.3.1.1.1 Vertical openings shall be enclosed or protected in accordance with section 8.6.  
 31.3.1.2 No floor below the exit of discharge used only for storage, heating equipment, or purposes other than residential occupancy and open to the building shall have unprotected openings to floors used for residential purposes.

31.3.3.2 Interior wall and ceiling finishes:

(1) Exit enclosures (Class A or B)

(2) Lobbies and corridors (Class A or B)

(3) Other Spaces (Class A, B, or C)

31.3.3.3 In buildings utilizing option 1, newly installed interior floor finish in exits and access corridors shall be not less than Class II.

31.3.4.5.1 Smoke alarms shall be installed outside of every sleeping area in the immediate vicinity of the bedrooms.

31.3.4.5.3 Smoke alarms shall be installed in every sleeping area.

31.3.5.13 Portable fire extinguishers shall be provided in hazardous areas.

31.3.6.1 Exit access corridor walls shall consist of fire barriers having a min. 1/2-hr rating.  
 31.3.6.2.1 Doors that open onto exit access corridors, shall have not less than a 20-minute fire protection rating.

31.3.6.2.3 Doors that open onto exit access corridors shall be self-closing and self-latching.  
 31.3.6.4 Transoms, louvers, or transfer grilles shall be prohibited in walls or doors of exit access corridors.

31.3.7 Smoke partitions

43.1.2.1 Chapter 31 shall apply

43.2.2.1.3 Modification

43.4.2 Capacity means of egress: Determined by Section 7.3  
 43.4.3 New interior finish materials shall meet requirements for new construction.  
 43.5.1.3 Newly constructed elements shall comply with the requirements of other sections of this code applicable to new construction.

**NOTE: HIGHLIGHTED ITEMS ARE NOT MET, BUT IT IS TECHNICALLY INFEASIBLE TO CORRECT THE STAIR DIMENSIONS**