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Maine Human Rights Act (ANSI A117.1 - Use the Fair Housing Guidelines)
2. Applicability. This section applies to multifamily housing accommodations constructed for first occupancy after March 13, 1991.
3. Standards. Facilities subject to this section must meet the following standards.
A. Doors designed to allow passage into and within all premises within those accommodations must be sufficiently wide to allow passage by a person in a wheelchair.
B. A route accessible to a person in a wheelchair into and through the dwelling unit must exist.
C. Light switches, electrical outlets, thermostats and other environmental controls must be in locations accessible to a person in a wheelchair.
D. Bathroom walls must have reinforcements to accommodate the installation of grab bars.
E. Kitchens and bathrooms must be accessible to and usable by a person in a wheelchair.

Zoning:
Building, height of: The vertical measurement from grade, or the predevelopment grade on the islands, to the highest point of the roof beams in flat roofs

Building Area Information
Building Footprint: 1,676 SF
Building Area: 7,961 SF

NFPA Code Overview
Use: New Residential Apartment Building
Construction: No minimum requirement
Sprinkler: NFPA 13R
Occupancy: 31 Occupants

IBC Code Overview
Use: R-2, S-1
Construction: Type VA
Sprinkler: NFPA 13R
Occupancy: 31 in R-2 + 5 in S-2 = 36 Occupants

4

IBC - Detail Code Review
Use and Occupancy Classification:
310.1 Residential Group R-2 (Apartments)
311.2 Storage S-1

420.2 Fire Partitions Separating Dwelling Units (709)
420.3 Floor Assemblies Separating Dwelling Units (712)

503	R-2 VA	7,000sf	3 stories	50' tall
	S-1 VA	14,000sf	3 stories	50' tall

504.2 Where a building is equipped throughout with an approved automatic sprinkler system, the maximum building height is increased by 20 feet, and the maximum number of stories is increased by one.
508.4 S-1 and R occupancies shall be separated by 2-HR when sprinkled w/ NFPA 13R

601 Type VA - No fire-resistance rating requirements for building elements

Primary Structural Frame	1hr
Exterior Bearing walls	1hr
Interior Bearing walls	1hr
Nonbearing Exterior	See table 602
Nonbearing Interior	0hr
Floor Construction	1hr
Roof Construction	1hr

602	Separation distance	5'≤X<10'	VA 1-hr exterior wall SW & NE building side (rated from both sides)
		10'≤X<30'	VA 1-hr (inside only)
		X≥30	VA No rating required

704.2 Columns in basement shall be individually wrapped to provide 1hr rating
704.3 Dropped LVLs in basement shall be individually wrapped to provide 1hr rating
704.4 Secondary member in ceiling and walls may be protected as part of ceiling and wall assemblies in wood frame construction
705.2.2 Projections (including balconies) may be of any material
705.5 When exterior walls are required to be rated:
X<10' Rated for exposure from both sides
X>10' Rated from inside
705.8 Exterior wall openings limited by table 705.8 (see table on elevation sheets)
705.11.4 Parapet not required on any exterior walls
707.3.1 Fire Barrier required for shaft enclosure
707.5 Fire barriers: From TOP of floor to bottom of decking above (cont. thru concealed)
707.5.1 Fire Barrier supporting construction shall have same rating
708.1 Shaft enclosures shall be constructed of fire barriers and horizontal assemblies.
708.2 Shaft enclosure is required stair
708.4 Shaft Enclosure: 2 hour when connecting four or more stories
709.1 Fire partitions required to separate dwelling units
709.3 Fire partitions shall be not less than 1-hr

709.4 Fire partition continuity: from TOP of floor to bottom of decking above or to bottom of ceiling assembly (with fireblocking or draftstopping)
712.3 Horizontal Assembly = Dwelling unit and sleeping unit separation in buildings of Type VA construction shall have a fire-resistance rating of not less than 1 hour in buildings equipped with an automatic sprinkler system.
712.4 Supporting construction of horz. assembly between units is required to be rated in VA
713 All Rated vertical and horizontal assemblies shall be complete assemblies in that any penetrations shall be treated as in accordance with this section.
714 All Rated vertical and horizontal assemblies shall be complete assemblies in that any joints shall be treated as in accordance with this section.
715 All Rated vertical and horizontal assemblies shall be complete assemblies in that any openings shall be treated as in accordance with this section.
715.4 Doors in 2-hour stair shaft shall have a rating of 1-1/2 hour
716 All Rated vertical and horizontal assemblies shall be complete assemblies in that any ducts and air transfers shall be treated as in accordance with this section.
716.6.2 Ducts and air transfer openings penetrating a rated ceiling membrane must be installed with a listed ceiling radiation damper
717 Fire blocking and draft-stopping shall be installed in concealed spaces in accordance with this section.

803.9 R-2: Exit enclosures, corridors, rooms and enclosed spaces required to have Class C finishes.
S-1: Exit enclosures, corridors, rooms and enclosed spaces required to have Class C finishes.
901.6.1 Automatic sprinkler system shall be monitored by a supervising station (NFPA 72)
901.6.2 Fire alarm system shall be monitored by a supervising station
903.2.8 Sprinkler System is required for Group R
903.3.1.2 NFPA 13R is permitted up to and including 4 stories
905.3.1 Class III standpipe system shall be installed
906.1 Fire extinguisher REQUIRED
907.2.9.1 Manual pull station fire alarm system is required as building is four stories.
907.2.11.2 Interconnected Smoke Alarms Required:
Outside each sleeping area, in each sleeping room and in each story within a dwelling unit

4

1003.2 Min egress ceiling height: 7'-6"
1003.5 Exception 1: A single step (under 7") allowed at exterior doors in R-2 that are not required to be accessible doors.
1004.1.1 Occupancy Load for Residential: 200 gross at 6,285 SF is 31 occupants
Occupancy Load for Storage: 300 gross at 1,781 SF is 5 occupants

4

1005.3 Door swing shall not reduce the required egress width more than half
1006.1 Stair must be illuminated at all times
1007.3 Sprinkler precludes need for wider stair or area of refuge
1008.1.1 Min Door size: 32" clear (36" door)
1008.1.5 Same floor elevation on either side of doors
1008.1.6 Landing not less than width of door
1008.1.8 48" plus door swing between doors in succession
1009.1 Min stair width 36" (for occ. less than 50)
1009.2 Min head clearance 80" (6'-8")
1009.4 7" rise max, and 11" run min
1009.5 Landing width no more than stair width
1009.6 Stair construction can be of any material permitted by construction type
1012.2 Handrails between 34"-38"
1012.6 Railing extensions must be 12" at top of stairs and 11" at bottom.
1013.2 Min Guard Height: 42"
1014.3 NFPA 101 Table A7.6
Sprinkled Apartments common Path Limit: 50'
NFPA 101 30.2.5.3.2: "Travel within a dwelling unit shall not be included when determining the common path of travel
1015.1 One exit is permitting from dwelling units at occupant load for individual units is under 20 and building is sprinkled 13R.
1016.1 Exit Access travel Distance: 250' (for sprinkled 13R R-2)
1018.2 Corridor Min Width: 36" (for occ under 50)
1021.2 Three-story R-2 building is permitted to have one exit if under 4-units per floors, under 50' travel distance to exit, sprinkled 13R, and provided with emergency escape openings.
Basement S-1 can have one exit is 29 occupants and 100 feet travel distance
1022.1 2-hour exit enclosure required when connecting 4-stories
Stairway from basement not enclosed. Under 10 occupants and not open to story above
1022.8 Floor identification signs shall comply with this section
1023.2 Min exit passageway width: 36" for less than 50 occupants
1023.3 Exits passageway min rating: 1-hr (or rating of connected enclosure if greater: 2-hr)
Constructed of fire barriers and horizontal assemblies.
1029.1 Sleeping rooms below the fourth story shall have emergency escape and rescue openings
1029.2 Min area: 5.7SF
Min height: 24"
Min width: 20"
1029.3 Max height about floor: 44"

1100 Chapter does not apply in the State of Maine

1207 Sound transmission between dwelling units
Walls: STC-50 (45 field tested)
Ceilings: IIC-50 (45 field tested)

2406.4 Safety Glazing: all swinging doors, fixed and sliding panels of sliding door assemblies, glazing in an individual fixed or operable panel adjacent to a door where the nearest exposed edge of the glazing is within a 24 inch arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 inches above the walking surface, glazing with exposed area of an individual pane greater than 9 square feet, and glazing w/ exposed bottom edge less than 18 inches above floor.

IECC

301.1 Climate Zone 6A

402.1.1	Element:	Required:	Provided:
	Fenestration U-Factor	0.35 max	0.17
	Ceiling R-Value	49 min	71
	Wood Frame R-Value	20 min	32.6
	Floor R-Value	30 min	51
	Slab R-Value	10 min	10

NFPA 10

NFPA 106.2.1.1 Each floor shall have a single (2) unit Class .

NFPA 101

3.3.32.5 New Building

6.1.8.1.5 Residential Occupancy - Apartment Building (Chapter 30)
6.1.13 Storage (Chapter 42)
6.1.14.4.1 Required Separation - 2hr between Apt Bldg & Storage
6.1.14.4.3 1 hour separation required in sprinkled building
6.2.2.3 Ordinary Hazard Contents

7.1.3.2.1 Stairs connecting four or more stories shall have a minimum of 2 hour rating
7.1.5.1 Min headroom: 7'-6"
7.1.6.3 Cross Slope limited to 1:48
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 Max riser height: 7"
Min Tread depth: 11"
Min headroom: 6'-8"
7.2.2.2.1.2 Min stair width: 36" (for occupancy under 50)
7.2.2.3.2.3 Min landing depth: stair width
7.2.2.4.4.1 Handrail height: 36"
7.2.2.4.4.6 Handrail shape: 1 ½" 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
7.2.2.4.5.2 Min guard height: 42"
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.
7.2.6.3 Stair discharge shall have a 2-hr fire resistance rating.
7.2.12.1.1 Sprinkler precludes need for area of refuge in stair
7.3.1.2 Occupancy Load

Residential Apartment:	200 gross at 6,285sf is	31 occupants
Storage:	NA	0
Total:		31 occupants

4

7.3.3.1 0.3 Occ. per in. for Stairs
7.3.4 Min Egress width: 36"
7.4.1.1 See 30.2.4.4 and 42.2.41
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.

30.1.6 No minimum construction requirements
30.2.1.1 Means of Egress shall comply with Chapter 7 and Chapter 30
30.2.4.4 Single stair permitted from building given
- 4 stories
- Less than 4 units/floor
- Two exits from basement
- No distance from unit door to stair
- 2-hr rated stair
- Self-closing doors
- No corridors
- 1 hr rating between units

30.2.5	Common Path Limit:	50'
30.2.5.4.2	Dead-End Limit:	50'
30.2.6.2	Max Travel Distance within unit (sprinkled):	125'
30.2.6.3.2	Max Travel Distance from unit door to exit (sprinkled):	200'

30.3.4 Fire detection and alarm system shall comply with this section.
30.3.4.5 Smoke alarms shall be installed:
In every sleeping area
Outside every sleeping area
At least one on each level
30.3.5.2 Sprinkler system NFPA 13R permitted for four or fewer stories.
30.3.6.1.2 Corridor walls (sprinkled): ½ hour
30.3.7.2 Dwelling unit separation (sprinkled): ½ hour

42.1.6 No minimum construction requirements
42.2.4.1 Single means of egress allowed within common path of travel limit.
42.2.5 Dead End Corridor: 100'
Common Path of Travel: 100'
42.2.6 Maximum Travel Distance: 400'
42.2.3.2 Storage area walls and ceilings shall be Class A, Class V or Class C

CITY OF PORTLAND, MAINE — RESURGAM

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 10/27/17

bi ARCHITECTURE

LICENSED ARCHITECT 2/24/17 EVAN A. CARROLL No. 3687 STATE OF MAINE

PROJECT NO. 16035
PROJECT NAME 7 CUMBERLAND PORTLAND, ME

REVISIONS
1 03-15-2017
2 05-12-2017
3 07-01-2017
4 08-07-2017
5

PERMIT SET
NOT FOR CONSTRUCTION

DRAWN BY EAC
SHEET TITLE CODE SUMMARY

ISSUE DATE 2/24/17
SHEET SCALE NTS

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103