

IBC Brief Summary
Area Table for Existing Building

Basement	650sf
First Floor	935sf
Second Floor	960sf
Third Floor	604sf
Roof Deck	317sf
TOTAL	3466sf

IBC Brief Summary
Area Table for Addition

Garage	425sf
First Floor	392sf
Second Floor	425sf
Roof Deck	373sf
TOTAL	1615sf

Unit 1	824sf
Unit2	1,704sf
Unit3	817sf

Use
Sprinkler System
Occupancy Load

Construction Type
Number of exits

IBC
R-2, U
NFPA 13R
Unit 1=4
Unit 2=8
Unit 3 = 4
Basement=3
Garage = 1
VB
3

IBEC - Classification of Work Method

405.1 Level 3 Alteration - Comply with Chapter 6, 7 and 8

407.1 Additions - Comply with Chapter 10

601.2 Conformance - Building shall not be altered to become less safe.
602 - Elements and Materials - Comply with Chp 8 of IBC
603 - Fire Protection - Maintain level of fire protection
604 - Egress - Maintain level of protection for means of egress

701.3 Compliance - New construction shall comply with requirements of IBC

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

IBC 709.3 - Fire partitions shall have a fire-resistance rating of not less than 1-hour

IBC 712.3 - Horizontal assemblies separating dwelling units in same building shall be a min of 1 hour rated construction.

703.2.1 - 1 hour assemblies for vertical openings

703.4 - Comply with IBC
IBC Table 803.9
R-2 = Exit enclosure Class C materials
Corridors Class C materials
Rooms Class C materials

703.5 - Guards - installed where required by IBC

704.4.1.6 R-2 A fire alarm system shall be installed in work areas of R-2 apartment buildings as required by IFC for existing R-2 occupancies

704.4.3 Smoke Alarms - Individual sleeping units and dwelling units in any work area in R-3 shall be provided with smoke alarms in accordable with IFC

705.9 - Handrails - Provided with handrails for full length of the run of steps on at least one side.
705.10 - Guards - If existing guards are judged to be in danger of collapsing shall be provided with guards.

801.2 Compliance - Comply with Chp 6 & 7 including 703, 704, 705

803.1 - In accordance with 703.2.1

803.3 - Interior Finishes to comply with 703.4

804.1 - Automatic Sprinkler System - Provided when required by 704.2

804.2 - Fire Alarm and Detection System - Comply with 704.4.1 and 704.4.3

804.2.1 - Manual Fire Alarm Systems - Where required by IBC IBC 907.2.9.1 Manual fire alarm system - Not required due to automatic sprinkler system
804.2.2 - Automatic Fire Detection - Where required by IBC

805.1 - Means of Egress - Comply with 705

806.1 Accessibility - Comply with 605 and 706
605.1 Comply with Chp 11 of IBC
IBC 1103.2.2 Existing Buildings - Comply with 3411
3411.6 Alterations - Check Chp 10
1007.1 - Accessible means of egress not required in alterations to existing buildings.

807.1 Structural
807.2 New Structural Elements - Comply with 707.2
707.2 - Comply with IBC
807.3 Existing Structural Elements - Comply with 707.4
707.4 - Can not reduce capacity of existing gravity carrying elements

808.1 Energy Conservation - Alterations shall conform to the energy requirements of the ECC or IRC as they relate to new construction only

1001.1 An addition to a building or structure shall comply with the International Codes adopted for new construction without requiring the existing building or structure to comply with any requirements of those codes or of these provisions, except as required by this chapter.

IBC - Detail Code Review

Use and Occupancy Classification:

310.1 Residential Group R-2 (Apartments)

406.1.1 Group U

508.2 Accessory occupancies

508.2.1 Accessory occupancies shall not occupy more than 10 percent of the building area of the story in which they are located.

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

602 Separation distance $5' \leq X < 10'$ VB 1-HR exterior wall (rated from both sides)
 $10' \leq X < 30'$ VB 1-HR (inside only)
 $X \geq 30'$ VB No rating required

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

708.6 Exterior Walls: Exterior walls shall comply with req. of Section 705 for exterior Walls.

709.4 Fire partition continuity: from TOP of floor to bottom of decking above or to bottom of ceiling assembly (with fireblocking or draftstopping)

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 1-hour stair shaft shall have a rating of 1 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.

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

906.1 Fire extinguisher REQUIRED

907.2.11.2 Interconnected Smoke Alarms Required:
Outside each sleeping area and in each sleeping room

1003.2 Min egress ceiling height: 7'-6"

1004.1.1 Occupancy Load for Residential: 200 gross at 4,000 SF is 20 occupants
Occupancy Load for Storage: 300 gross at 425 SF is 1 occupants

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"

1016.1 Exit Access travel Distance: 250' (for sprinkled 13R R-2)

1018.2 Corridor Min Width: 36" (for occ under 50)

1022.8 Floor identification signs shall comply with this section

1023.2 Min exit passageway width: 36" for less than 50 occupants

1029.1 Sleeping rooms below the fourth story shall have emergency escape and rescue openings

1029.2 Min area: 5.75SF
Min height: 24"
Min width: 20"

1029.3 Max height above floor: 44"

1100 Chapter does not apply in the State of Maine

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.

NFPA

3.3.5 Addition
3.3.32.5 Existing Building

6.1.8.1.5 Residential Occupancy - Apartment Building
6.1-13.1 Storage Occupancy (basement)
6.1-14.4 Separated Occupancies
6.1-14.4.1 2HR separation between Apartment and Storage

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"
7.2.2.3.2.3 Min landing depth: stair width
7.2.2.2.1.2 Min stair width: 36" (for occupancy under 50)
7.2.2.4.1.1 Handrail height: 36"
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
7.2.2.4.5.2 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.
7.3.1.2 Occupancy Load
Residential 200 gross

TOTAL OCCUPANT LOAD Unit 1=4
Unit 2=8
Unit 3 = 4

7.3.4 Min Egress width: 36"
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 New Apartment Buildings
30.2.2.1.2 In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with 30.3.5, exit enclosures shall have a minimum 1-hour fire resistance rating, and doors shall have a minimum 1-hour fire protection rating.
30.2.4.2 Dwelling units shall be permitted to have access to a single exit, provided that one of the following conditions is met
3)The dwelling unit has direct access to an interior stair that serves only that unit and is separated from all other portions of the building by fire barriers having a minimum 1-hour fire resistance rating, with no opening therein
30.2.6.2 Travel distance within a dwelling unit (apartment) to a corridor door shall not exceed 125ft in buildings protected throughout by an approved sprinkler system

31 Existing Apartment Buildings
31.2.2.1.2 In buildings using Option 4, exit enclosures shall have a minimum 1-hour fire resistance rating, and doors shall have a minimum 1-hour fire protection rating.
31.2.4.2 Dwelling units shall be permitted to have access to a single exit, provided that one of the following conditions is met:
3.The dwelling unit has direct access to an interior stair that serves only that unit and is separated from all other portions of the building by fire barriers having a minimum 1-hour fire resistance rating, with no opening therein.
31.2.6 Travel distance within a dwelling unit (apartment) to a corridor door shall not exceed the following limits
2. For buildings using Option 2 or Option 4, 125 ft

39.2.1.4 Floor levels below the street floor used for storage shall have means of egress in accordance with Chapter 42

43.1.1 Classification of Rehabilitation Work Categories
5. Change of use or occupancy
6. Addition
43.7.1 Change of use
43.7.2.1 Where a change of occupancy classification creates other than an assembly occupancy, and the change occurs within the same hazard classification category or to an occupancy classification of a lesser hazard classification category, the building shall meet both of the following:
1. Requirements of the applicable existing occupancy chapters for the occupancy created by the change= Chp 31
2. Requirements for automatic sprinkler and detection, alarm, and communications systems and requirements for hazardous areas applicable to new construction for the occupancy created by the change = Chp 30

43.8 Additions
43.8.1.1 Where an addition, as defined in 43.2.2.1.7, is made to a building, both of the following criteria shall be met:
1.The addition shall comply with other sections of this Code applicable to new construction for the occupancy.
2.The existing portion of the building shall comply with the requirements of this Code applicable to existing buildings for the occupancy.

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

Bild Architecture
PO Box 8235
Portland, ME
04104
207.408.0168
evan@bildarchitecture.com



PROJECT NO. **16035**
PROJECT NAME **44 QUEBEC**
PORTLAND, ME

REVISIONS

1	
2	
3	
4	
5	

PERMITTING DRAWINGS

DRAWN BY **EMW**
SHEET TITLE **CODE REVIEW**

ISSUE DATE **2.22.17**
SHEET SCALE **1/4" = 1'-0"**