



Architecture
Land Planning
Interior Design
3D Visualization

Building and Life Safety Code Review

**Alterations to:
Rite Aid Store #3277
290 Congress Street
Portland, Maine**

Date: November 22, 2013, by Randy Kangas, Associate
Project # 13-111

Jurisdiction:

City of Portland, Maine

Applicable Code(s) including but not limited to the following:

MUBEC – State of Maine Building Code
2009 International Existing Building Code
2009 International Building Code
NFPA Life Safety 101, 2007
City of Portland Code, Chapter 10, Fire Prevention and Protection

Building Code Review:

Project Description:

Alterations to an existing Mercantile Occupancy

Type of Construction: 2B per IBC 602.2

Use and Occupancy Classification:

Use 'M' Mercantile per IBC 309.1. and NFPA Life Safety Code Section 37.1

Gross Areas

First Floor Building Gross floor area = 13,666 S.F. Gross Floor Area.

First Floor Work Area for alterations = 107 S.F. (See plans)

Ratio of Total Building floor area (13,666 S.F.) to Total Work Area (107 S.F.) = 0.008%

NOTE: THE RITE AID TENANT SPACE IS PROTECTED THROUGHOUT BY AN AUTOMATIC SPRINKLER SYSTEM.

Classification of Work: Alterations Level 2 per IEBC Section 404

Reconfiguration of Space.

Alterations Level 2 shall comply with IEBC 2009 Chapter 6 and 7

(Section numbers noted below are from IEBC unless noted otherwise)

IEBC Chapter 6 – Alterations Level 1

602 - Building Elements and Materials (All sections comply, see Architectural plans)

602.1 Interior Finishes – New wall and ceiling finishes shall comply with IBC Chapter 8 and NFPA Life Safety 101 Code Section 10.2

602.2 Interior Floor Finish – New interior floor finishes and carpet shall comply with IBC Section 804.

602.3 Interior trim – New trim materials shall comply with IBC Section 806.

603 – Fire Protection

603.1 Alterations shall be done in a manner that maintains the level of fire protection provided. (See Section 704 below)

606 – Structural

Installation of new rooftop equipment (if applicable) shall comply with gravity load requirements of the IBC.

607 – Energy Efficiency

Alterations and new construction components shall comply with the requirements of the IECC without requiring the entire existing building to comply.

IEBC Chapter 7 Alterations Level 2

702 – Special Use and Occupancy

Not applicable

703 – Building Elements and Materials

703.2.2 Supplemental shaft and floor opening enclosure and 703.2.3 Supplemental stairway enclosure requirements – Not applicable (work area less than 50% of floor area)

703.3 Smoke barriers – Not applicable (Not group I-2)

703.4 Interior finish – Wall and ceiling finishes at exits and corridors shall comply with IBC and NFPA Life Safety 101.

703.5 Guards – No conditions requiring Guards exists.

704 – Fire Protection

Complies.

704.4 Fire Alarm and Detection. Required per 704.4, not per NFPA Life Safety 101 Code Section 37.3.4. Rite Aid to add new Monitored Fire Alarm System. Alarm Contractor to meet with Portland Fire Department to confirm Requirements.

705 – Means of Egress

Not applicable – Scope of this section is limited to work areas that include exits or corridors that are shared by more than one tenant.

706 – Accessibility

Complies

707 – Structural

No additions or modifications to existing structural systems or components are proposed.

708 – Electrical

New Work to comply with Section 708.1.

709 – Mechanical

(See Architectural plans for requirements for reconfigured spaces)

710 – Plumbing

Not applicable.

711 – Energy Efficiency

Alterations and new construction components shall comply with the requirements of the IECC without requiring the entire existing to comply.

EGRESS REQUIREMENTS (PER IBC CHAPTER 10)

CEILING HEIGHT FOR MEANS OF EGRESS SHALL BE 7'-6" (PER IBC 1003.2)

OCCUPANT LOAD (PER IBC 1004.1.1)

MERCANTILE - 1 OCCUPANT PER 30 GROSS SF.
10,323 SF / 30 = 344 PERSONS

BUSINESS AREAS – 1 OCCUPANT PER 100 GROSS SF.
887 SF / 100 = 9 PERSONS

STORAGE AREAS - 1 OCCUPANT PER 300 GROSS SF.
2,456 SF / 300 = 8 PERSONS

TOTAL OCCUPANTS – 362 PERSONS.

EGRESS WIDTH (PER IBC 1005.1)
EXISTING STAIRWAYS. NOT APPLICABLE.

EGRESS ILLUMINATION (PER IBC 1006)
MEANS OF EGRESS ILLUMINATION SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 1006)

ACCESSIBLE MEANS OF EGRESS (PER IBC 1007)
NOT REQUIRED PER 1007.1, EXCEPTION #1 FOR ALTERATIONS TO EXISTING BUILDINGS. COMPLIES.

DOORS (PER IBC 1008)
EXISTING EXIT DOORS TO REMAIN AT FIRST FLOOR, (COMPLIES, SEE ARCHITECTURAL PLANS)

STAIRWAYS (PER IBC 1009)
NOT APPLICABLE.

RAMPS (PER IBC 1010) NOT APPLICABLE (PROJECT CONTAINS NO RAMPS)

EXIT SIGNS (PER IBC 1011)
EXIT SIGNS SHALL BE PROVIDED PER SECTION 1011 (SEE ELECTRICAL PLANS)

HANDRAILS (PER IBC 1012)
NOT APPLICABLE.

GUARDS (PER IBC 1013)
NOT APPLICABLE.

EXIT ACCESS (PER IBC 1014)
PROPOSED LAYOUT COMPLIES WITH ALL REQUIREMENTS INCLUDING COMMON PATH OF TRAVEL WHICH SHALL BE 75' MAX. PER IBC 1014.3 and 100" MAX per NFPA Life Safety 101 Code Section 37.2.5.3.1

EXIT AND EXIT ACCESS DOORWAYS (PER IBC 1015) COMPLIES

EXIT ACCESS TRAVEL DISTANCE (PER IBC 1016) 250' MAX. (WITH SPRINKLER) and NFPA Life Safety Code 101, COMPLIES

AISLES (PER IBC 1017) 36" MIN., COMPLIES

CORRIDORS (PER IBC 1018)
NO RATING REQUIRED PER TABLE 1018.1 FOR USE 'M' WITH SPRINKLER SYSTEM. WIDTH SHALL BE 44" MIN. PER 1018.2, COMPLIES

DEAD ENDS SHALL NOT EXCEED 50' PER 1018.4, EXCEPTION #2, COMPLIES WITH SPRINKLER SYSTEM.

EGRESS BALCONIES (PER IBC 1019) NOT APPLICABLE

EXITS (PER IBC 1020) COMPLIES
NUMBER OF EXITS PER IBC 1021.1.

Life Safety Code Specific Review:

37.1 – Mercantile.

37.1.4.2.1 – Subclassification of Occupancy – Class “B”.

37.1.6 – Min. Construction Requirements. None. See IBC Code Requirements Listed Above (2B, non-combustible).

37.2 – Means of Egress Requirements. Refers to Chapter 7 of NFPA Life Safety 101.

Chapter 7 Means of Egress

7.1.3.1 – Exit Access Corridors. N/A

7.1.3.2 Exits

7.1.5 Headroom. Conforms. > 7'-6" min.

7.2.2 Stairs. N/A.

7.2.2.6.3.1 Outside Stairs. Conforms.

7.2.5 Ramps. N/A.

7.3.1.2 Occupant Load Factor (No Changes). See IBC Chapter 10 Information Above.

7.3.2 Measurement of Means of Egress.

7.3.4 Min. Width. 36" for New Construction. Conforms.

7.3.4.1.2 Min. Width 28" for Existing Buildings. Conforms.

7.4 Number of Means of Egress. 2 Min., 3 Provided (Existing).

7.5 Arrangement of Means of Egress.

7.5.1.2.1

(1) Path of Travel through Receiving Area to be marked per 7.10.

(2) Doors to Comply with 7.2.1 for Signage.

7.5.1.6 Existing to Remain “As Is”. Path of Travel to be Painted on Floors. See Section 37.2.5.11 Below (Mercantile Use Specific).

7.5.4.2 Conforms for Exit Remoteness.

7.9 Emergency Lighting. Complies.

7.10 Complies for Exit Signage.

Business Use Specific Sections:

37.2.2 Means of Egress. Complies.

37.2.2.3 Stairs. N/A.

37.2.4 Number of Exits, Complies. 3 Provided.

37.2.5.1 Means of Egress Arrangement. Existing Complies.

37.2.5.2 Dead End Corridors 50' Max. Complies.

37.2.5.3.1 Common Path of Travel (Sprinklered). 100' Max. Complies.

37.2.5.4 Aisles. Complies.

37.2.5.7 One-Half of Egress Capacity at Street Entrance. Complies (72" egress width provided).

37.2.5.8 Egress Through Checkouts. None.

37.2.5.10 Wheeled Carts. Complies.

37.2.5.11 Means of Egress through Rear Rooms (Sprinklered).

- (1) Not more than 50% of exit access through Storeroom. Conforms.
- (2) Storerooms not subject to locking. Conforms.
- (3) 44" Main Aisle. To be painted on concrete floor. See Architectural Plans for Paths.
- (4) 44" Main Aisle. Direct, Defined, Continuous, To be Unobstructed. Conforms.

37.2.6 Travel Distance (Sprinklered) 250' Max. Complies.

37.2.8 Illumination of Means of Egress. Complies

37.2.9 Emergency Lighting. Complies. Exit Signs at Rear of Sales Area are wall mounted and will be suspended from Ceiling for better visibility. Noted on Plans.

37.3.3.2.1 Interior Wall Finishes – to comply with Section 10.2.

37.3.4 Detection, Alarm & Communication Systems. Only Required for Class "A" Mercantile. None Existing. Rite Aid to add new Monitored Fire Alarm System. Alarm Contractor to meet with Portland Fire Department to confirm Requirements.

