

MEDICAL OFFICE BUILDING

CONGRESS ST. PORTLAND, ME

DATE OF ISSUE

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LOCATION MAP

NOT TO SCALE



ARCHETYPE
Architects

DRAWING LIST

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CIVIL

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CODE SUMMARY

- Applicable Codes**
- MUBEC - Maine Uniform Building and Energy Code
 - 2015 International Building Code - IBC (except chapters 11 and 30)
 - 2015 IECC: International Energy Conservation Code
 - NFPA 101 Life Safety - 2015

- Accessibility Codes**
- State of Maine Human Rights Act
 - ADAAG Americans with Disabilities Act
 - ICC ANSI 117.1 Accessible and Usable Buildings and Facilities

PROJECT SUMMARY:

Two-story office building with a basement.

Square Footages:

8,064 sq. ft.

CODE SUMMARY:

Chapter 3 - Use and Occupancy Classification Mixed Use

Business Group B Office

Chapter 5 - General Building Heights and Areas

Table 504.4 Allowable Heights and Areas

Business Group B
Type 5B (Sprinkled) - 3 stories (2 Proposed)

Table 506.2 Allowable Areas

Business Group B
Type 5B (SM - Sprinkled) - 27,000 sf. (8,064 sf. Proposed)

Chapter 6 - Types of Construction

Table 601 - Fire Resistance Ratings for Building Elements

Building Element	Type 5B
Primary Structural Frame	0 hour
Bearing Walls	0 hour
Exterior Walls	0 hours
Interior Walls	0 hour
Non-Bearing Walls and Partitions, Exterior	(See Table 602)
Non-Bearing Walls and Partitions, Interior	0 hour
Floor Construction and Secondary Members	0 hour
Roof Construction and Secondary Members	0 hour

713.4 Fire-resistance rating
Shaft enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more, and not less than 1 hour where connecting less than four stories.

718.2 Concealed Spaces

- In combustible construction fireblocking shall be installed to cut off concealed draft openings and form a barrier between floors, between a top story and roof or attic space. Fireblocking required at:
- Mineral wool allowed in double stud walls
 - Vertically at floors and ceilings
 - Horizontal spacing not exceeding 10 feet
 - Connections between horizontal and vertical spaces (soffits, dropped ceilings, etc.)
 - Stairways at top and bottom of run between stringers
 - Piping, vents, etc.

718.2.1.5 Double Stud Walls Batts or blankets of mineral or glass fiber insulation shall be allowed as fire blocking in walls constructed using parallel rows of studs or staggered studs.

718.2.2 Concealed Wall Spaces Fire blocking shall be provided in concealed spaces of stud walls and partitions, including furred spaces, and parallel rows of studs or staggered studs as follows:

- Vertically at ceiling and floor levels
- Horizontally at intervals not exceeding 10'.

Chapter 8 - Interior Finishes

Table 803.11 Interior Wall and Ceiling Finish Requirements

By Occupancy - Sprinklered

Group	Exit Enclosures	Corridors	Rooms and Enclosed Spaces
B	Class B	Class C	Class C

Chapter 9 - Fire Protection Systems

903.3.1.1 NFPA 13 Sprinkler Systems
The building will be equipped throughout with an automatic sprinkler system in accordance with NFPA 13.

903.4 Sprinkler system supervision and alarms
Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

905.3.1 Standpipes NOT required where the highest floor is less than 30 feet above the lowest level of fire department vehicle access.

906 Portable Fire Extinguishers - Required in Group A, B, M, R-2, and S occupancies: provided in accordance with NFPA 10

- Exception: In Group A and B occupancies extinguishers only required on each floor.

907 Fire Alarm and Detection Systems

907.2.2 Group B
A manual fire alarm system shall be installed in Group B occupancies where one of the following conditions exists:

- The combined Group B occupant load of all floors is 500 or more.
- The Group B occupant load is more than 100 persons above or below the lowest level of exit discharge.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

912.2 Location
With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. The location of fire department connections shall be approved by the fire chief.

912.2.1 Visible location
Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise approved by the fire chief.

Chapter 10 - Means of Egress

1004 Occupant Load

Table 1004.1.2 Maximum Floor Area Allowances per Occupant

Business	100 gross sf
8,064 sf per floor	81 people per floor (x2) = 162 occupants

1005.3.1 Stairway Width
Exception 1 (sprinkled): 81 x 0.2 inch = 16.2 inches (Min. 44 inch per Sec. 1011.1)

1005.3.2 Other Component Widths
Exception 1 (sprinkled): 81 x 0.15 inch = 12.15 inches

1006.2.1 Egress based on occupant load and common path of egress travel distance.

Two exits or exit access doorways from any space shall be provided where the design occupant load or the common path of egress travel distance exceeds the values listed in Table 1006.2.1

1007.1.1 Two Exits or Exit Access Doorways. Exit doors shall be placed not less than 1/3 (exception #2) the length of the maximum overall diagonal dimension.

Fire Area	Max. Diagonal	1/3 Min.	Actual
1-25,100 sf	260'-0"	86'-8"	232'-9"

1017 Exit Access Travel Distance

Table 1017.2 Exit Access Travel Distance
Business Occupancy Max. 300 ft.

1020 Corridors

Table 1020.1 Corridor Fire Resistance Rating

Occupancy	Occupant Load	Fire Rating with Sprinkler System
A, B, E, F, M, S, U	Greater than 30	0 hour

1020.4 Dead Ends: 50' maximum dead end corridor allowed per Exception No. 2 for Group B Occupancies.

NFPA 101 - 2015

6.1.1.1.1 Business Occupancy

NFPA Table A8.2.1.2
Construction type V(000)

38 New Business Occupancy

38.2.5.3.1 Common path of travel shall not exceed 100 ft (30m) in a building protected throughout by an approved, supervised automatic automatic sprinkler system in accordance with 9.7.1.1(1)

38.2.5.2.1 In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1), dead-end corridors shall not exceed 50 ft (15 m).

38.2.6.3 Travel distance shall not exceed 300 ft (91 m) in business occupancies protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.

38.2.9.1 Emergency lighting shall be provided in accordance with Section 7.9 in any building where any one of the following conditions exists:

- The building is three or more stories in height.
- The occupancy is subject to 50 or more occupants above or below the level of exit discharge.
- The occupancy is subject to 300 or more total occupants.

38.3.3.2.1 Interior wall and ceiling finish material complying with Section 10.2 shall be Class A or Class B in exits and in exit access corridors.

38.3.3.2.2 Interior wall and ceiling finishes shall be Class A, Class B, or Class C in areas other than those specified in 38.3.3.2.1.

38.3.4.1 General. A fire alarm system in accordance with Section 9.6 shall be provided in all business occupancies where any one of the following conditions exists:

- The building is three or more stories in height.
- The occupancy is subject to 50 or more occupants above or below the level of exit discharge.
- The occupancy is subject to 300 or more total occupants.

38.3.4.3 Occupant Notification. During all times that the building is occupied (see 7.2.1.1.3), the required fire alarm system, once initiated, shall perform one of the following functions:

- It shall activate a general alarm in accordance with 9.6.3.
- A positive alarm sequence in accordance with 9.6.3.4 shall be permitted.

38.3.4.4 Emergency Forces Notification. Emergency forces notification shall be provided and shall include notifying both of the following:

- Fire department in accordance with 9.6.4
- Approved local emergency organization, if provided

38.3.5 Extinguishment Requirements. Portable fire extinguishers shall be provided in every business occupancy in accordance with Section 9.9.

38.3.6.1 Where access to exits is provided by corridors, such corridors shall be separated from use areas by fire barriers in accordance with Section 8.3 having a minimum 1-hour fire resistance rating, unless one of the following conditions exists:

- (N/A)
- (N/A)
- Within buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)

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