

Maynard Crossing - Building R4 - Maynard, MA

Massachusetts Code Analysis

Applicable Building Code	780 CMR: Massachusetts State Building Code, 9th Edition - 2015 International Building Code with Massachusetts Amendments
Applicable Structural Code	780 CMR: Massachusetts State Building Code, 9th Edition - 2015 International Building Code with Massachusetts Amendments
Applicable Access Codes	521 CMR: Architectural Access Board Rules and Regulations
Applicable Energy Code	Massachusetts Stretch Energy Code: International Energy Conservation Code (IECC) 2015 with Massachusetts Amendments (780 CMR 115.00 - Appendix AA)
Applicable Plumbing Code	248 CMR 10.00 Massachusetts State Plumbing Code
Applicable Mechanical Code	2015 International Mechanical Code (IMC)
Applicable Fire Code	527 CMR 1.00 Massachusetts Comprehensive Fire Safety Code in conjunction w/ NFPA 2015 Fire Code
Applicable Electric Code	527 CMR 12.00 Massachusetts Electrical Code, NFPA 70 w/ Massachusetts Amendments
<b>Project Summary</b>	The proposed subject building is new construction of a 1-story, Mixed Use, Type VB construction. The proposed occupancies are M Mercantile and A-2 Assembly.

<b>Use or Occupancy Classification (Chapter 3)</b>	
<b>Use or Occupancy Classification</b>	M Mercantile, A-2 Assembly
<b>General Building Heights and Areas (Chapter 5)</b>	
<b>Area Limitation and Modification (Table 506.2)</b>	
<b>Allowable Area:</b>	24,000 SF
Occupancy: A-2 Assembly (most restrictive occupancy in building) Type of Construction: VB Sprinklered, Max. 1 Story Above Grade Plane	
<b>Actual Area:</b>	13,872 SF
<b>Construction Type (Chapter 6)</b>	
<b>Construction Type</b>	VB

<b>Construction Requirements (Chapters 6, 7, and 10)</b>	
<b>Structural Frame Including columns, girders, and trusses</b>	Table 601 0 hour
<b>Bearing Exterior Walls</b>	Table 601 0 hour
<b>Exterior Wall Openings</b>	Maximum area of unprotected exterior wall openings (Table 705.8) No limit
<b>Nonbearing Walls and Partitions Exterior</b>	Based on Fire Separation Distance (Table 602) 0 hour
<b>Floor Construction Including supportive beams and joists</b>	Table 601 0 hour
<b>Roof Construction Including supportive beams and joists</b>	Table 601 0 hour
<b>Interior Finishes (Chapter 8)</b>	
<b>Interior Finish Requirements (Table 803.1.1)</b>	Rooms and Enclosed Spaces Class C or Better

<b>Fire Protection Systems (Chapter 9)</b>	
<b>Sprinkler System (903.2.7)</b>	An Automatic sprinkler system shall be provided throughout building, Group M Occupancy; Fire sprinkler required where Fire Area > 12,000 SF, Group A-2 Occupancy; Fire sprinkler required where area > 5,000 SF.
<b>Egress (Chapter 10)</b>	
<b>Length of Exit Access Travel (Table 1017.2)</b>	Occupancy M Occupancy A-2
<b>Minimum Required Egress Width Egress Width per Occupant (1005.1)</b>	Stairways N/A Doors/Other 0.3" 0.2"
<b>Minimum width:</b> - Exit Passageway (1023.2) - Stairway (1009.1) - Egress Door (1006.1.1)	44" 44" 32" Clear
<b>2015 International Energy Conservation Code w/ Massachusetts CMR 780 Chapter 13 Amendments</b>	Climate Zone 5A
<b>Opaque Thermal Envelope Requirements (Table C402.2)</b>	<b>Opaque Thermal Envelope Requirements: Fenestration (Table C402.2)</b>
<b>Roofs</b> Insulation entirely above roof deck Walls, Above Grade Wood framed Slab-on-Grade Floors Unheated slabs Opaque Doors	R-30ci R-13 + R-7.5ci OR R-20 Vertical R-10 for 24" below U-0.37
	<b>Fixed Fenestration</b> U-0.38 <b>Operable Fenestration</b> U-0.45 <b>Entrance Doors</b> U-0.77
<b>Vestibules</b>	All tenant spaces with an area of 3,000 SF or more shall have a vestibule (2015 IECC Section C402.5.7.). Vestibules to be provided in separate tenant fit-out drawings.

<b>Basic Building Characteristics</b>	
<b>Plan Area (First Floor Footprint)</b>	13,872 Square Feet
<b>Number of Floors</b>	1
<b>Total Square Footage</b>	13,872 Square Feet



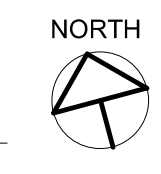
**EGRESS REQUIREMENTS:**  
OCCUPANCY USE: M-MERCANTILE  
OCCUPANT LOAD:  
2,516 SF/60 SF PER PERSON =  
41 PERSONS  
MIN. REQ'D. EGRESS WIDTH:  
41 PERSONS x .2" PER PERSON =  
8.2" MIN.  
(32" MIN. REQUIRED)  
EGRESS WIDTH PROVIDED: 101"  
NUMBER OF EXITS REQUIRED: 2  
NUMBER OF EXITS PROVIDED: 2  
1 @ 67.5"  
1 @ 33.5"

**EGRESS REQUIREMENTS:**  
OCCUPANCY USE: M-MERCANTILE  
OCCUPANT LOAD:  
2,552 SF/60 SF PER PERSON =  
42 PERSONS  
MIN. REQ'D. EGRESS WIDTH:  
42 PERSONS x .2" PER PERSON =  
8.4" MIN.  
(32" MIN. REQUIRED)  
EGRESS WIDTH PROVIDED: 101"  
NUMBER OF EXITS REQUIRED: 2  
NUMBER OF EXITS PROVIDED: 2  
1 @ 67.5"  
1 @ 33.5"

**EGRESS REQUIREMENTS:**  
OCCUPANCY USE: M-MERCANTILE  
OCCUPANT LOAD:  
2,552 SF/60 SF PER PERSON =  
42 PERSONS  
MIN. REQ'D. EGRESS WIDTH:  
42 PERSONS x .2" PER PERSON =  
8.4" MIN.  
(32" MIN. REQUIRED)  
EGRESS WIDTH PROVIDED: 101"  
NUMBER OF EXITS REQUIRED: 2  
NUMBER OF EXITS PROVIDED: 2  
1 @ 67.5"  
1 @ 33.5"

**EGRESS REQUIREMENTS:**  
OCCUPANCY USE: A-2-ASSEMBLY  
OCCUPANT LOAD:  
6,032 SF/15 SF PER PERSON =  
402 PERSONS  
MIN. REQ'D. EGRESS WIDTH:  
402 PERSONS x .2" PER PERSON =  
80.4" MIN.  
EGRESS WIDTH PROVIDED: 197.5"  
NUMBER OF EXITS REQUIRED: 2  
NUMBER OF EXITS PROVIDED: 5  
5 @ 39.5"

1 BUILDING R4 - LIFE SAFETY PLAN  
G4-001 1/8" = 1'-0"



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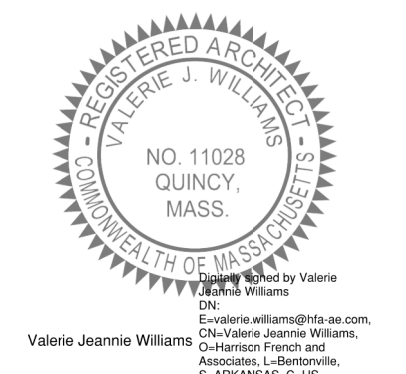
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**CAPITAL GROUP**  
PROPERTIES

**MAYNARD CROSSING**  
129 Parker Street  
Maynard, MA 01754  
**BUILDING R4**  
9 DIGITAL WAY  
JOB NUMBER: 40-167-1000

<b>ISSUE BLOCK</b>		
1	6/7/19	100% CDs
2	8/20/19	100% CDsR
3	8/21/19	Permit Set

CHECKED BY: VW  
DRAWN BY: VM  
DOCUMENT DATE: 8/21/19



**BUILDING R4 - LIFE SAFETY PLAN & CODE SUMMARY**

SHEET:  
**G4-001**