

**Asylum - Code Review**

121 Center Street  
Portland, Maine 04101

**Applicable Codes:**

City of Portland, Maine Code of Ordinances  
1999 NFPA 70 - National Electrical Code w/Portland Amendments (Sec. 6-32)  
1993 BOCA National Mechanical Code w/Portland Amendments (Sec. 6-36)  
2009 NFPA 101 - Life Safety Code w/Portland Amendments (Sec. 10-1)  
2009 NFPA 1 - Fire Code w/Portland Amendments (Sec. 10-16)

<http://www.portlandmaine.gov/131/City-Code>

**Maine Uniform Building and Energy Code (MUBEC)**

2009 International Building Code (IBC)  
2009 International Existing Building Code (IEBC)  
2009 International Energy Conservation Code (IECC)  
2009 Uniform Plumbing Code  
2007 ASHRAE 62.1 - Ventilation for Acceptable Indoor Air Quality  
2007 ASHRAE 90.1 - Energy Standard for Buildings except Low Rise Residential Buildings w/out addenda

**CODE REVIEW SUMMARY:**

**PORTLAND ZONING ORDINANCE REVIEW:**

ITEM #	ITEM	SECTION	REQUIREMENT	PROPOSED COMPLIANCE
	Zoning	Zone B3 - Downtown Business	Historic District PAD overlay zone	Part of the zone listed as: Free Street, north side, from Congress Square to Temple Street
	Minimum Lot Size	14-220.A	None	
	Minimum Street Frontage	14-220.B	15 Feet	
	Street wall build-to line	14-220.C	structures must be located within 5 feet of the property line along street frontages	
	Minimum Yard Dimension	14-220.D	None	
	Minimum Lot Width	14-220.E	none	
	Maximum length of undifferentiated black wall along a public street	14-220.F	15 feet - PAD overlay Zone 30' - All other zones	
	Maximum Lot Coverage	14-220.G	100%	
	Minimum Building Height	14-220.H	35 feet minimum within 50 feet of street frontage	Exception 4 allows for lower buildings as part of an addition

	Maximum Building Height	14-220.I (and Downtown Height Overlay Map)	150 feet maximum plus 40 feet additional height for building cap 90 feet maximum street wall height	
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**CODE REVIEW BY SECTION: IBC vs. NFPA 101**

ITEM #	ITEM	MUBEC / 2009 IBC	2009 NFPA 101 - Life Safety Code	PROPOSED COMPLIANCE
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**1.0 USE AND OCCUPANCY**

Primary Use	303	Assembly Group A-2	Chapter 12 + 13	Assembly Occupancy
Hazard Classification			39.1.5	

**2.0 CONSTRUCTION TYPE & GENERAL BUILDING HEIGHT AND AREA LIMITATIONS**

ITEM #	ITEM	MUBEC / 2009 IBC	2009 NFPA 101 - Life Safety Code	PROPOSED COMPLIANCE
	Construction Type	Table 503 and 506.3	Type IIB	Table A.8.2.1.2 Type III (200)
	Area Limitation	Table 503 and 504.1	9,500 SF per Story w/ Sprinkler increase up to 19,000 SF per Story (with more than 1 story above grade)	Basement Area = 9,984 SF (IBC) / 9,886 SF (NFPA) First Floor Area = 10,743 SF (IBC) / 10,642 (NFPA) Balcony = 3,732 (IBC) / 3,732 (NFPA)
	Story Limitation	Table 503 and 504.1	2 Stories w/ Sprinkler increase up to 3 stories	Building to be 2 stories above grade and 1 story below grade
	Height Limitation	Table 503 and 504.1	55 Feet w/ Sprinkler increase up to 75 Feet	Building to be 47' - 6" Above Grade at Highest Portion (plus mechanical equipment)

**3.0 BUILDING SEPARATION & EXPOSURE PROTECTION**

Exterior Walls - Load Bearing & Non-load Bearing	Tables 601, 602	Distance 5 ft x 10-feet = 1 Hour	NFPA 220, Table 4.1.1	1hr Wall required adjacent to parking structure
Exterior Openings	Table 705.8	Unprotected, Sprinklers, > 30-feet = Not Required Unprotected, Sprinklers, 8' - 10' = 25%		Exterior Openings - No Limit on Center and Free Street, 25% adjacent to parking garage

**4.0 FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS**

Primary Structural Frames	Table 601	0 hr	Table A.8.2.1.2	0 hr
Exterior Bearing Wall	Table 601	2 hr	Table A.8.2.1.2	2 hr
Interior Bearing Wall	Table 601	0 hr	Table A.8.2.1.2	0 hr
Non-bearing Exterior Walls	Table 601	0 hr	Table A.8.2.1.2	0 hr
Non-bearing Interior Walls	Table 601	0 hr	Table A.8.2.1.2	0 hr
Floor Construction and Secondary Members	Table 601	0 hr	Table A.8.2.1.2	0 hr
Roof Construction and Secondary Members	Table 601	0 hr	Table A.8.2.1.2	0 hr

**4.0 FIRE AND SMOKE PROTECTION FEATURES**

ITEM #	ITEM	MUBEC / 2009 IBC	2009 NFPA 101 - Life Safety Code	PROPOSED COMPLIANCE
	Automatic Sprinkler Systems	903.2.1.5	Sprinkler system required for group A-2 Occupancy	Automatic Sprinkler provided
	Corridor Construction	1018.1	No fire/smoke rating required with Sprinkler System	
	Exit Enclosure	1022.1	1 Hour connecting 3 stories or less 2 Hours connecting 4 stories or more	7.1.3.2 1 Hour connecting 3 stories or less 2 Hours connecting 4 stories or more
	Convenience Openings in Vertical Openings			8.6.8.2 Where permitted by Chapters 11 through 43, unenclosed vertical openings not concealed within the building construction shall be permitted as follows: 1. Such openings shall connect not more than two adjacent stories (one floor pierced only) 2. Such openings shall be separated from unprotected vertical openings serving other floors by a barrier complying with 8.6.5 3. Such openings shall be separated from corridors 4. In new construction, the convenience opening shall be separated from the corridor referenced in 8.6.8.2 by a smoke partition, unless Ch. 11 + 43 require the corridor to have a fire resistance rating 5. Such openings shall not serve as a required means of egress

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	Protection of Vertical Openings		9.8.3.1.1.3	Unprotected vertical openings shall be permitted in buildings complying with all of the following: a. Where protected throughout by an approved automatic sprinkler system b. Where no unprotected vertical opening serves as any part of any required means of egress c. Where required exists consist of exit doors that discharge directly to the finished ground level in accordance with 7.2.1

**5.0 MEANS OF EGRESS**

Occupant Load	Table 1004.1.1		7.3.1.2 / 39.1.7	See Attached Chart. Total Occupant Load = 1,418
Egress Width per Occupant	1005.1	3" per person Stairways 2" per Person Horizontal	7.3.3.1	.3" per person Stairways .2" per Person Horizontal
Minimum Door Widths	1008.1.1	32" Minimum Clear Width	7.2.1.2.3 / 38.2.2.3	32" Minimum Clear Width
Common Path of Travel	1014.3 / 1029.8	75 feet with Sprinkler System / 30 Feet in Assembly	39.2.5.3.1	
Travel Distance	Table 1016.1 / 1029.7	250 Feet with Sprinkler System	12.2.6.2	250 feet with sprinkler system
Corridor Width	1018.2	44" min when occupancy > 50 36" min when occupancy < 50	39.2.3.2	44" min when occupancy > 50
Dead End Corridors	1018.4	20 Feet with Sprinkler System	39.2.5.2	50 Feet max
Minimum Number of Exits per Story	Table 1021.1	Min 2 exits from Basement (L-500) Min 3 exits from 1st floor (501-1,000) Min 2 exits from Balcony (L-500)	7.4.1.2 / 39.2.4.1.2	Min. 2 exits
Exit Separation			7.5.1.3.3	separation distance between two exits > 1/3 the length of maximum overall diagonal dimension w/ sprinkler system
Exit Discharge	1027.1	Exits shall discharge directly to the exterior. Combination of exceptions 1 and 2 shall not exceed 50%		
	1027.1.1	max 50% exits may egress through areas on the level of discharge if: - exit is readily visible - level of discharge separated from below with rated construction - automatic sprinkler system		
	1027.1.2	max 50% can egress through vestibule if: - separated from below with rated construction - 10' deep max, 30' wide max - rated enclosure - only used for means of egress		

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**6.0 SPECIAL OCCUPANCY REQUIREMENTS**

Electrical Closets w/ transformers > 112.5 kVA	N/A	N/A	NFPA 70, 450.21	1 Hour	No new transformers
Electrical Closets w/ transformers < 112.5 kVA	N/A	N/A	NFPA 70, 450.21	0 Hour	No new transformers
Electrical Switchgear Rooms	N/A	N/A	NFPA 70, 450	2 Hour, or 1 Hour with Automatic Extinguishing System	No no switchgear to be installed
Mechanical Rooms	N/A	N/A	N/A	0 Hour	
Storage Rms	N/A	N/A	13.3.2.1.2.1 / 8.7.1.2	1 Hour or Automatic Extinguishing System and smoke partition	Smoke Partition and AES
Elevator Shafts			8.4 / ASME A17.1		
Elevator Machine Rooms			8.4.5		

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**7.0 STAIRWAYS**

Stairway Width	1009.1	44" Min (36" min. for <50 Occupants)	7.2.2.2.1.2	44" Min (36" min. for <50 Occupants)
Headroom	1009.2	80" min headroom clearance	7.2.2.2.1.1(a)	80" min headroom clearance
Stair Treads and Risers	1009.4	4" min x Riser < 7" max 11" min tread	7.2.2.2.1.1(a)	4" max x Riser < 7" max 11" min tread
Profile	1009.4.5	Risers shall be solid		
Stairway Landing	1009.5	Required at top and bottom. Width and distance in direction of travel equal to or greater than stair width	7.2.2.3.2	Landing size can not decrease in the path of travel. Distance in direction of travel equal to or greater than stair width
Vertical Rise	1009.7	12" max vertical rise between floors or landings	7.2.2.2.1.1(a)	12" max vertical rise between floors or landings
Handrails	1009.12	Handrails required on both sides	7.2.2.4.1.1	Handrails required on both sides
Handrail Height	1012.2	34" min and 36" max above stair tread nosing	7.2.2.4.1.1	34" min and 36" max above stair tread nosing
Handrail Graspability	1012.1.1	Must comply with Type I		
Handrail Extensions	1012.6	must extend 12" beyond top riser and depth of 1 tread beyond bottom riser	7.2.2.4.4.10	must extend 12" beyond top riser and depth of 1 tread beyond bottom riser
Guard Rails	10013.1	Required on landings > 30" high		
Guard Rail Height	1013.2	42" min	7.2.2.4.5.2	42" min
Opening Limitations	1013.3	4" max opening	7.2.2.4.5.3	4" max opening
Enclosure of Stair			7.2.2.5.1.2	Inside stairs, other than those serving as an exit or exit component, shall be protected in accordance with Section 8.5

REV.	DESCRIPTION	DATE
0	DD SUBMISSION	25 MAR 2016

NOT FOR CONSTRUCTION

**WBRC** ARCHITECTS + ENGINEERS  
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**ASYLUM**

PROJECT:  
**CODE REVIEW NOTES**

SHEET TITLE:  
WBRC CAD FILE: C:\Users\jpc@yn.boothedocuments\407110 - ASYLUM DANCE CLUB - ARCH - JPC@yn.boothedocuments

PROJECT No. 4071.10 GRAPHIC SCALE: 1" = 1'

SCALE: PROJECT MANAGER: JRB SHEET No. **G1003**

DRAWN BY: JRB CHECKED BY: JRB