Reviewed for Code Compliance
Inspections Division
Portland, Maine
Date: 10/11/16

AREAS USED TO CALCULATE OCCUPANCY

Code Summary	BRGR Bar
Project address:	11 Brown St, Portland ME
Project type:	Interior Renovation, Restaurant
Square Foot	3,500 SF
Building code:	NFPA 101 2009
	IBC 2009
	Maine Human Rights Commission

NFPA	ALLOWED BY CODE	CODE REF.	PAGE	AS DRAWN
Occupancy	Existing Assembly	3.3.168.2 & 6.1.2	101-41	
Separation	Assembly to Apartment Bldg = 2 Hour	Table 6.1.14.4.1(b)	101-45	**1 HR**
	Assembly to Apartment Bldg = 1 Hour with Sprinklers			**1 HR**
Exit Access Corridor	Occupant load > 30 = 1 Hour exit access corridors	7.1.3.1	101-44	**1 HR**
Exits	1 Hour Fire Resistance for 3 Stories or less Structural elements that support exit components & penetrate or are installed within a rated wall assembly protected per 7.1.3.2.1 (1) & (2)	7.1.3.2.1 (1) 7.1.3.2.1 (5)	101-44	**1 HR**
Headroom	Headroom in means of egress = 7'-6" min Headroom in spaces = 7'-6" min (1/3 max may be 6'-8") Headroom in stairs = 6'-8" min	7.1.5.1 7.1.5.2 7.1.5.3	101-46	**> 7'-6" at all points**
Door Openings	Door leaf in means of egress min width = 32" minimum	7.2.1.2.3.2	101-48	**32" min all doors**
Existing Stairs	Min Width = 36" (< 2,000 occupants) Max height of risers = 8" Min tread depth = 9" Min headroom = 6'-8"	Table 7.2.2.2.1.1 (b)	101-55	
Guards & Handrails	Stairs & ramps handrails both sides Handrail within 30" of all portions of egress width Handrails continue full length of stairs, continuous on inside face Handrail continue 12" horz beyond top riser & slope 1 tread beyond bottom riser Guards = 42" min	7.2.2.4.1.1 7.2.2.4.1.2 (1) 7.2.2.4.4 7.2.2.4.4.10 7.2.2.4.5.2	101-56 101-57	
Ramps	Ramps in means of egress = 44" W, 1:12 slope, 30" max rise	Table 7.2.5.2 (a)	101-63	
Occupant Load	Assembly Use: Less Concentrated Use, without Fixed Seating	Table 7.3.1.2	101-70	**1,375 SF / 15 = 92 Public Occupants**
	Kitchens			**782 SF / 100 = 8 Kitchen Occupants Total**
# Means of Egress	2 means of egress except as under Chapter 11 -> 43	7.4.1	101-72	**2 Means of Egress Provided**
	Existing Assembly			
	Electrical Room # of means of egress per NFPA 70, A 110.26ID	7.4.2.1	101-72	
Number of Exits	Existing Assembly Occupancies	13.2.4 = Per 7.4	101-130	
	Assembly < 600 Occupants = 2 separate means of egress	13.2.4.2	101-130	**2 Means of Egress provided**
Arrangement of Means of Egress	Common Path of Travel = 20-0 Max unlimited occupants	13.2.5.1.2	101-130	**14' Max**
	Common Path of Travel = 75-0 Max < 50 occupants	13.2.5.1.2	101-130	
	Dead end corridors < 50' w/ sprinkler	13.2.5.6.2	101-250	**14' Max**
	Access through Hazardous Areas: egress not permitted through kitchens	13.2.5.2	101-131	
Exit Access Travel Distance	Assembly: With sprinkler - 250' max from any point to nearest exit	13.2.6.2	101-134	**60' Max**
Commercial Cooking Equipment	Protected per NFPA 96, Standard for Commercial Cooking Operations	13.3.2.2	101-135	

IBC	ALLOWED BY CODE	CODE REF.	PAGE	AS DRAWN
Occupancy Type	ASSEMBLY: A-2	302	23	**A-2**
Allowable Building Height	Type VB = 40', VA = 50', III B = 55', III A = 65'	Table 503	80	**NA**
Allowable Stories	Type VB = 1 Story, VA = 2 Story, III B = 2 stories, III A = 3 stories	Table 503	80	**NA**
Allowable Area	Type VB = 6,000 SF, VA = 11,500 SF, III B = 9,500 SF, III A = 14,000	Table 503	80	**NA**
Allowable Height Increase	Maximum stories = +1, Max height = +20'	Section 504.2	80	
Req'd Separation of Occupancies	A & R: Sprinklered = 1 Hour	Table 508.4	86	**1 HR**
	A & R: Non-Sprinklered = 2 Hour			
Req'd Construction Type	Type VA	Table 601	89	
	Primary Structural Frame: 1 Hour			**1 HR Fire Resistance Rating (FRR)**
	Bearing Walls, Exterior & Interior: 1 Hour			**1 HR FRR**
	Non-bearing walls & partitions: 0 Hour			
	Floor Construction & Secondary Members: 1 Hour			**1 HR FRR**
	Roof Construction & Secondary Members: 1 Hour			**1 HR FRR**
	Exception d: Sprinklers may be substituted for 1 hour rating if no floor area or height increase taken. 1 Hour exterior wall rating must be maintained.			**Not taken**
Fire Separation Distance	*Occupancy A, B, E Type VA:*	Table 602	90	**NA**
	X < 5 = 1 Hour			**NA**
	5 < X < 10 = 1 Hour			**NA**
	10 < X < 30 = 1 Hour			**NA**
Fire Protection: Exterior Walls	Cornices, eave overhangs: 1/2 distance to lot line where all openings are permitted to be to be unprotected or automatic sprinkler system per Section 705.8.2	705.2.2	97	
	Type V: Projections shall be of any Approved material	705.2.2	97	**In Compliance**
	Exterior Walls: Fire separation > 10-0 rated from inside. Fire separation < 10-0 rated from both sides.	705.5	97	
Maximum Area of Exterior Openings	5-0 to 10-0: Unprotected & sprinklered = 25%	Table 705.8	99	**NA**
	10-0 to 15-0: Unprotected & sprinklered = 45%			**NA**
	15-0 to 20-0: Unprotected & sprinklered = 75%			**NA**
	20-0 & greater: Unprotected & sprinklered = No Limit			**NA**
	Parapets: Not Required if wall is permitted to have 25% unprotected openings.	705.11.6	101	**NA**
Fire Door Ratings	Shaft, Exit fire barriers: 1 hr Wall = 1 hr Door Assembly	Table 715.4	114	**NA**
	Other fire barriers: 1 hr Wall = 3/4 hr Door Assembly.			**3/4 HR Door Assembly**
Interior Finishes	A-2: Exit Enclosures/Passageway & Corridors Finishes: Class B	Table 803.9	177	**Class B Finishes where required**
	A-2: Rooms & Enclosed Spaces Finishes: Class C	Table 803.9	177	**Class C Finishes where required**
Sprinklers	Fire > 5,000 SF or Occ Load > 100 or above Exit Discharge	903.2.1.1	185	**Sprinklered**
Standpipes	Required Occupant Load > 1,000	905.3.1	190	**NA**
Fire Alarms & Detection Systems	Manual fire alarm per 907.5 only for Occ Load > 300+	907.2.1	195	**NA**
	Manual fire alarm not required if Sprinklered	907.2.1 (Ex 1)	195	**Sprinklered**
Occupant Load				
Group A-2	15 net SF per Occupant	Table 1004.1.1	220	**1,375 SF / 15 = 92 Assembly Occupants**
Kitchens, Commercial	200 gross SF per occupant			**1,220 SF / 200 = 6 Kitchen Occupants**
Egress Width	Stairways: 92 / 2 * 0.3" = 14" Other egress: 92 / 2 * 0.2" = 9"	1005.1 1005.1	221 221	**44" Minimum** **44" Minimum**
Means of Egress Illumination	Illuminated at all times exceptAisle accessways	1006.1 (Ex 3)	221	
Accessible Means of Egress	Accessible Means of Egress not required in alterations to existing buildings	1007.1	221	**NA**
Door Width	Minimum 32" Clear	1008.1.1	224	**36" Egress Doors**
Stairways	Stairway Width: Minimum 44" (36" < 50 occupant load)	1009.1 (Ex 1)	230	**36" Minimum Kitchen**
	Headroom stair & landing: 80" clear	1009.2	230	**80" Clear maintained**
	Max. stair riser = 7", min. stair tread = 11"	1009.4.2	231	**NA**
	Landings top & bottom, min depth = stair width	1009.5	231	
	Max Stair Flight Vertical Rise = 12'-0"	1009.7	232	**10'-0" existing**
Exit & Exit Access Doorways	1 Exits: Occupancy >49. 2 Exits: Occupancy > 49	Table 1015.1	239	**2 Exits**
	Exit Separation > 1/2 maximum diagonal distance Non-Sprinklered	1015.2.1 (Ex 2)	239	**1/3 Max Diagonal Distance = 23'-0"**
	Exit Separation > 1/3 maximum diagonal distance Sprinklered		241	**Exit Separation Dist = 56'-0" = Acceptable**
	Exit Access Travel Distance: 250' with Sprinkler	Table 1016.1		**60'-0" Max Distance Provided**
	Width 44" min, width 36" if occupancy < 50	1018.2	242	**60" Min**
	Corridor Width: 44" Minimum	1018.4	242	**60" Min**
Number of Exits & Continuity	Group A-2: Occupant Load 1 - 500 = 2 Exits Minimum	Table 1021.1	243	**2 Exits Provided**

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UPC (Uniform Plumbing Code)		CODE REF.	PAGE	PROVIDED
Determine Occupancy Type	"in accordance with the Building Code" 50% male, 50% female	T4-1 Intro	36	
IBC Occupancy	**Assembly** TOTAL: 92 OCCUPANTS, 46 M, 46 F **Kitchen** TOTAL: 6 OCCUPANTS, 3 M, 3 F			See revised floor plans.
Plumbing Fixture Count	**RESTAURANT, PUBS & LOUNGES** **WC** Male 1-50 = **1** Male 51-150 = **2** Female 1-50 = **1** Female 51-150 = **2**	T4-1	38	~~**1 MALE**~~ **1 FEMALE**
	URINAL: 1-150 = **1 minimum** LAVATORY: 1 / 150 M & F = **2**	T4-1	38	**NOT NECESSARY** **1 PER BATHROOM =** ~~**2**~~
	KITCHEN, COMMERCIAL Employees: 1-10, estimated WC: Male 1-10: **1** WC: Female 1-10: **1** LAVATORY: 1 / 10 = **1 total**	By Client		**1 PROVIDED** **1 PROVIDED**
Exception to Occupant Load:	*For each urinal added in excess to the minimum required, one water closet shall be permitted to be deducted. The number of water closets shall not be reduced to less than two-thirds of the minimum requirement.* *The total number of water closets for females shall be equal to the total number of water closets and urinals required for males.* Where *approved* by the *building official*, the actual number of occupants for whom each occupied space, floor or building is designated, although less than those determined by calculation, shall be permitted to be used in the determination of the design *occupant load*.	Table 4-1 Note 5 Table 4-1 Note 14 IBC 1004.1.1	39 39 IBC 220	

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CODE REVIEW FOR BRGR BAR
11 BROWN ST, PORTLAND, ME

BY: KAPLAN THOPMSON ARCHITECTS
DATE: 06/15/2016

C:1