Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 12/18/17

489 Congress Street - Fit-up
Portland, ME

Code Analysis

Category	IBC 2015 Reference	IBC 2015 Code Requirements	NFPA 101 - 2009 Reference	NFPA 101 - 2009 Code Requirements	Proposed
Use Group	**304.1**	Use B-Business	**3.3.178.3**	Business Occupancy	Business: Office Space
Building Construction	**Tables 601 & 602**	Type III (B) - Common unprotected	**NFPA 220**	Construction Type III (200) - Unprotected	
	Primary Struct. Frame 0HR	Load bearing brick exterior walls and interior elements (some heavy timber columns)			
	NR	Foundation - Unknown			
	Bearing 2HR	Exterior - 12-24 inch brick.			
	Non-Bearing 1HR	Exterior - 12-24 inch brick.			
	Non-Bearing 0HR	Interior walls - Wood stud with GWB surfacing			New walls: Wood frame with GWB
	Floor & Secondary Members 0HR	Existing Floors - assuming 2x wood framing at 16" or 12" c/c with plaster or GWB finish			
	Roof Construction & Secondary Members 0HR	Existing roof - assuming 2x wood framing at 16" or 12" c/c with plaster or GWB finish and suspended GWB and ACT ceilings			
Height & Area Limitations	**Table 506**	57,000 SF Per Floor			4,453 SF
	Table 504	4 Stories / 75' (sprinklered)			3 stories / unknown existing height
Area Modifications	**506.3**	Street Frontage Increase - not used			
Maximum allowable area	**506.3**	57,000 SF Per Floor - No increases used			
					13,759 SF Estimated Total "Building Area"
Fire ratings - Exterior	**Table 602**	Exterior walls <5' = 2 hr			2 Hour
		Exterior walls 5<X<10' = 2 hr			2 Hour
		Exterior walls 10'-30' from adjacent structures - 1 Hr			2 Hour
Fire Ratings - Interior	**Table 1020.1**	Exit access corridors - 0 Hour (with sprinkler system)	**38.3.6**	Exit Access Corridors need not be rated if occupied by a single tenant/sprinklered	NA - none
	713.4	Shaft eclosures - 1 hr			3-story stairs *estimated* 1-hour
	Table 601	Int. nonloadbearing walls - 0 Hour			0 Hour
	Table 601	Floor Construction - 0 Hour	**38.3.7**	Subdivision of Building Spaces: NR	0 Hour
	Table 601	Roof construction - 0 Hour			0 Hour
			38.3.2 > 8.7	No high hazard areas, no cooking equipment	No applicable conditions
	1011.7.3	Enclosures under stairs shall be 1 hour fire rated construction			Under-stair areas are not under tenant control
Fire Door and Fire Shutter Fire Protection Ratings	**Table 716.5**	1 Hour shafts: 60 Minute Doors	**Table 8.3.4.2**	1hr Elevator Hoistways = 1hr doors	Existing non-compliant conditions - see plans
				1hr stairs = 1hr doors / windows not permitted	
Fire Window Assembly Fire Protections Ratings	**Table 716.5**	1 Hour shafts: Fire rated glazing meeting NFPA 252 per 716.5.6	**Table 8.3.4.2**	1 hr stairs = windows not permitted	Existing wired glass in doors and metal framed sidelights to remain

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	Table 705.8	Area Limitations - <3' from property line,unprotected, sprinklered - not			
		Area Limitations - 3'-5' from property line, unprotected, sprinklered - 15%			
		Area Limitations - 5-10' from property line, unprotected, unsprinklered - 25%			No changes to existing openings
Fire Damper Rating	**Table 717.3.2.1**	45 minutes required			No changes to existing systems - not surveyed
Ducts and Air Transfer Openings	**717.5.1**	Fire Walls - Fire Dampers required			No changes to existing systems
	717.5.1.1	Fire Walls in Horizontal Exits - Smoke Dampers required			No changes to existing systems
	717.5.2.1	Fire Barriers in Horizontal Exits - Smoke Dampers required			No changes to existing systems
	717.5.3	Shaft Enclosures - Fire Dampers and Smoke Dampers required			No changes to existing systems
	717.5.4	Fire Partitions - Ducts penetrating fire partitions shall be equipped with fire dampers.			No changes to existing systems
Interior Flame Spread Index	**Table 803.11**	Required exit enclosures and passageways - B permitted in buildings			No changes to existing systems
			38.3.3.2.1	Walls & ceilings in exits- Class A or B	No changes to existing systems
		Corridors - C	**38.3.3.3.2**	Walls & ceilings in other areas- Class A B or C	No changes to existing systems
		Rooms or enclosed spaces - C			No changes to existing systems
Occupant Load	**Table 1004.1.2**		**Table 7.3.1.2**		
		Business use spaces = 1/100 GSF		Offices = 1/100 SF	
		1st Floor Mixed Occupancy: Not considered		First Floor: Not Considered	
		2nd Floor Office: Not considered		Second Floor: Not Considered	
		3rd Floor Office: 45 OCC		Third Floor: 45 Occupants	
Means of Egress	**1005.3**	Egress width per occupant @ stairways = 0.3" x 45 = 13.5"	**Table 7.3.3.1**	Egress width per occupant @ stairways = 0.3" x 45 = 13.5 "	40" min. clear (32" min. clear between handrails)
		Egress width capacity per occupant @ doors and corridors = .2" x 45 = 9"		Egress width capacity = 0.2" per occupant @ level components & ramps .2 x 45 = 9"	
	1009.1	Exception 1. Stairways serving an Occupant Load of < 50 shall have a width of not less than 36"	**7.2.2.2.1.2**	OCC Load < 50: 36" min clear (allowing 4-1/2" obstructions at or below handrail	
	1010.1.1	Minimum door opening width = 32" clear	**7.2.1.2.3**	Minimum door opening width = 32" clear	Typ. = 36" Doors = 34" net clear opening
	Table 1017.2	Exit access travel ≤ 300'	**38.2.6.2**	Length of travel to an exit < 200'	93' Travel from second floor to exterior +67' = 160'
	1020.4	Dead ends ≤ 50' (Sprinklered)	**38.2.5.2.1**	Dead ends ≤ 50' (sprinklered)	No dead ends proposed
	Tacle 1006.2.1	Common path of travel ≤ 100' (sprinklered)	**38.2.5.3.1**	Common path of travel ≤ 100' (sprinklered)	67' Travel from most remote second floor area to stairs door
	Table 1020.2	Minimum corridor width = 36" clear	**7.3.4.1**	Minimum corridor width = 36" clear	No corridor conditions proposed
	Table 1006.2.1	Single means of egress permitted with less than 49 occupants and 100'	**38.2.4.1**	Minimum number of exits = 2	Two exits provided

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	1007.1.1	Where two exits are required, they shall be separated by 1/3 the length of the diagonal of the area served (sprinkled).	**7.5.1.3.5**	Allows for existing buildings to be exempt from the minimum separation requirement	Existing exits are more than than 1/2 the building distance apart
Emergency Lighting	**1008.2**	Emergency lighting is required	**38.2.9.1**	Emergenct Lighting is required	Provided
	1013.1	Exit Signs are required	**7.10.1.2**	Exit Signs are required except at main exterior exit doors	Illuminated signage exists: Tactile Signage should be added
Fire Suppression Systems	**903.2 > 903.2.7**	No sprinkler system required	**38.3.5.1**	No sprinkler system required	Existing sprinkler system shall be modified to provide complete coverage
Standpipes	**905.3**	Standpipes are not required			No standpipe provided
Fire Alarm Systems	**907.2.2**	Automatic Fire Alarm System is not required - (assumes first floor occupancy of less than 400)	**38.3.4.1**	Fire alarm is required	Existing fire alarm will be retained
Smoke Detetectors	**907.2.2**	There is no requirement for smoke alarms	**38.3.4 > 9.6.2.10**	Smoke alarms not required	No smoke alarms will be provided
Extinguishment requirements	**906**	Portable fire extinguishers shall be installed as per NFPA 10 (IFC 2009)	**38.3.5.3**	Portable fire extinguishers required	Two Fire Extinguishers are installed in the space