

Code Review

Apartments at 89 Anderson St

	IBC 2009		NFPA 101 2009	
4 floors above grade	502.1			
Sprinklers		NFPA 13		NFPA 13
Fire Alarm		Monitored Fire Alarm Required		Monitored Fire Alarm Required
Smoke and CO Detectors		Smoke and CO detectors required		Smoke and CO detectors required
Occupant Load	T 1004.1.1	Floor 1 = 1000 sf Restaurant space 1 (15gsf/oc) = 67 425 Kitchen (200 gsf/oc) = 3 Floor 1 = 596 sf Mercantile space 2 (30 gsf/oc) = 20 Floor 1 = 385 sf Mercantile space 2 (30 gsf/oc) = 13 Floor 1 = 8,980 sf Parking (200 gsf/oc) = 45 Floor 2 = 13,333 sf Residential (200 gsf/oc) = 67 Floor 3 = 13,333 sf Residential (200 gsf/oc) = 67 Floor 4 = 13,333 sf Residential (200 gsf/oc) = 67 Total Building Occupant Load = 349	7.3.1.2	1000 sf Restaurant space 1 (15gsf/oc) = 67 425 Kitchen (200 gsf/oc) = 3 Floor 1 = 596 sf Mercantile space 2 (30 gsf/oc) = 20 Floor 1 = 385 sf Mercantile space 2 (30 gsf/oc) = 13 Floor 1 = 8,980 sf Parking (200 gsf/oc) = 45 Floor 2 = 13,333 sf Residential (200 gsf/oc) = 67 Floor 3 = 13,333 sf Residential (200 gsf/oc) = 67 Floor 4 = 13,333 sf Residential (200 gsf/oc) = 67 Total Building Occupant Load = 349
Use Group(s)	309.1 304.1 3031 311.3 310.1	Floor 1 - Mercantile (M) Floor 1 - (B) Business Floor 1 - (A-2) Restaurant Floor 1 - Parking (S2) Floors 2, 3, 4 - Apartments (R2)	6.1.10 38.1 12.1 6.1.13.1 6.1.8.1.5	Mercantile Business Assembly (<300) Restaurant Storage (Vehicles) Apartment Building
Horizontal Separation	509.2	3 hr separation, Type 1A construction below separation		
Floor 1 - Const. Type	T 503	1A - non-combustible protected		I (332) non-combustible protected
Building Area	T 503	Unlimited Area per floor		
Building Elements	T 601	3 hr Structural Frame	30.1.6	No Minimum Construction requirements

		T 602	3 hr Bearing Walls Exterior		
		T 601	3 hr Bearing Walls Interior		
		T 601	0 hr Non-Bearing Walls Interior		
		T 602	1 hr Non-Bearing Walls Exterior (sep. dist 10' <= 30')		
		T602	2hr Non-Bearing Walls Exterior (sep. dist 0' < 10')		
		T 602	0 hr Non-Bearing Walls Exterior (sep. dist >30')		
Floor 2,3,4 Const. Type		T 503	5B - combustible unprotected		V (000) combustible unprotected
Building Height		T 503 and 504.2	Sprinkler increase = 3 stories and 60' max.		
			The proposed building is 3 stories (on top of the 1 story podium)		
			The Proposed building height is 45'		
Building Area		T 503 and 506.3	Sprinkler Increase = 14,000 sf max per floor		
			Table 503 allows 7,000 sf max floor plate, utilizing 506.3		
			7,000 x 2 - 14,000 sf max per floor the project has a maximum floor plate of 13,333 sf		
Building Elements		T 601	0 hr Structural Frame	30.1.6	No Minimum Construction requirements
		T 602	0 hr Bearing Walls Exterior (sep. dist >= 10')		
			The building is 10'-3" from the Northern Property Line		
			The building is 25'-2" from the centerline of Everett Street		
			The building is 25'-4" from the centerline of Anderson Street		
			The building is 26'-5" from the centerline of Fox Street		
		T 602	1 hr Bearing Walls Exterior (sep. dist <10')		
		T 601	0 hr Bearing Walls Interior		
		T 601	0 hr Non-Bearing Walls Interior		
		T 602	0 hr Non-Bearing Walls Exterior (sep. dist >= 10')		
			The building is 10'-3" from the Northern Property Line		
			The building is 25'-2" from the centerline of Everett Street		
			The building is 25'-4" from the centerline of Anderson Street		
			The building is 26'-5" from the centerline of Fox Street		
		T 602	1 hr Non-Bearing Walls Exterior (sep. dist <10')		
		705.5	Exterior Wall with >10' sep. needs rating only from inside		
		T 601	0 hr Floor Construction (1hr between units)		
		T 601	0 hr Roof Construction		

Separations					
		508.4	M and R-2 = 1 hr	6.1.14.4.1	Mercantile and Apartment = 1hr with sprinkler
		508.4	M and S-2 = 1 hr	6.1.14.4.1	Mercantile and Storage (ord.) = 1hr with sprink.
		508.4	M and B = 0 hr	6.1.14.4.1	Mercantile and Business = 1hr with sprinkler
		508.4	M and A-2 = 1 hr	6.1.14.4.1	Mercantile and Assembly = 1hr with sprinkler
		508.4	A-2 and S-2 = 1 hr	6.1.14.4.1	Storage (ord.) and Assembly = 1hr with sprinkler
		508.4	S2 and R2 = 1 hr	6.1.14.4.1	Storage (ord.) and Apartment = 1hr with sprink.
		708.4	2 hr Elevator Shaft >= 4 stories	8.6.5	2 hr >= 4 stories
		708.4	1 hr Elevator Shaft < 4 stories	8.6.5	1 hr < 4 stories
		708	2 hr Mechanical Shaft >= 4 stories		
		708	1 hr Mechanical Shaft < 4 stories		
		1022.1	2 hr Stair Shaft >= 4 stories		
		1022.1	1 hr Stair Shaft < 4 stories		
		709.1	1 hr Between Dwelling Units		
		1018.1	1/2 hr Corridor	30.3.6.1.2	1/2 hr corridor
		508.2.5	1 hr Boiler Room	30.3.2.1.1	1 hr Boiler Room
		508.2.5	1 hr Trash Room	30.3.2.1.1	1 hr Trash Room
		508.2.5	1 hr Storage Room	30.3.2.1.1	1 hr Storage Room
		508.2.5	1 hr Laundry Room	30.3.2.1.1	1 hr Laundry Room
		3006.4	2 hr Elevator Machine Room		
		715.4	90 minute Stairwell Doors (2hr shaft)		
		715.4	20 minute Apartment Entry Doors (1/2 hr corridor wall)	30.3.6.2.1	20 minute Apartment Entry Doors
Distances and Exits		1021.1	2 Exits required	7.4.1.1	2 Means of Egress required
		1016.1	250' Travel Distance to exits with Sprinklers	30.2.6.3.2	200' Travel distance from apt. door to exit
			Proposed building has maximum 99' travel distance to exits		
		1014	125' Common Path of Travel	30.2.5.3.2	50' Common Path of Travel
			Proposed building has maximum 37'-5-3/4" common path		
		1018.4	50' Dead End	30.2.5.4.2	50' Dead End
			Proposed building has maximum 37'-5-3/4" dead end		
				30.2.6.2	125' Travel Distance within Dwelling to Corridor
Unprotected Openings		T 705.8	15% when exterior wall sep. dist. is 3'>5'		
		T 705.8	45% when exterior wall sep. dist. is 10'>15'		
			North wall has 8.1% unprotected openings		
		T 705.8	75% when exterior wall sep. dist. is 15'>20'		
		T 705.8	Unlimited when exterior wall sep. dist. is 25'>30'		

			All other elevations are allowed to have unlimited unprotected openings		
		T 705.8	Unlimited when exterior wall sep. dist. is >30'		
Elevator Lobby		708.14.1.4	Not required as Sprinkled with 13		
Elevator as MoE		1007.2.1.1	Not req. as bldg. is not 4 stories above the level of exit discharge		
Egress Windows		1029.1.1	Not Required as Sprinkled with NFPA13		
Egress Stairs		1009.1	Occ. Load >50 = 44" min width	24.2.5.4	36" min. stair width
		1009.1	Occ. Load <=50 = 36" min width	7.2.2.2.1.2(B)	44" min. over 50 occ.
		1003.3	Handrails can protrude into stair 4.5" max	7.2.2.2.1.2	Handrails can protrude into stair 4.5" max
		1005.2	Door Swings may not reduce egress width by > 1/2		
		1009.2	80" min headroom	7.2.2.2.1.1(a)	6'-8" min. headroom
		1009.3	7" max. riser	7.2.2.2.1.1(a)	7" max. riser
		1009.3	11" min Tread depth	7.2.2.2.1.1(a)	11" min. tread
		1009.6	12' max. total rise between floors or landings	7.2.2.2.1.1(a)	12' max. height between landings
Ramps		1010.2	1:12 (8%) Max slope	7.2.5.2(a)	1:12 max. slope
		1010.6	60" long landings at top and bottom		
		1010.6	2% max slope of landings	7.2.5.2(a)	1:48 max. cross slope
		1010.8	>6" rise must have handrails on both sides of ramp		
Egress Corridors		1018.2	44" min. when Occ. > 50		
		1018.2	36" min. when Occ. <= 50		
		1018.2	24" min. at service corridors to mechanical equipment		
Sound		1207.2	STC > 50 at walls and floors/ceilings		
		1207.3	IIC > 50 at walls and floors/ceilings		
Energy IECC 2006 Zone 6		T 402.1.1	0.35 Fenestration U-Factor		
			R-49 Ceiling		
			Proposed Ceiling is R-52		
Residential			R-20 or 13+5c Framed wall		
			Proposed exterior wall is R-29.4		
			R-30 Floor		
			Proposed Floor over garage is R-38		

			R-19 or 15c Basement wall		
			Proposed basement wall is R-20		
			R-10 to 4ft Slab		
			Proposed Slab is R-10		
Commercial	T 402.1.1	0.35 Fenestration U-Factor			
		R-20c Ceiling entirely above deck			
		R-38 Ceiling at Attic and other			
		R-13+7.5c Metal Framed wall			
		R-30 Floor			
		R-7.5c Basement wall			
		R-10 to 4ft Slab			
		U 0.45 Storefront			
		U 0.80 Entrance Door			
		U 0.55 Other			
Accessibility		Fair Housing Act Applies			
		All units are designed to meet the Fair Housing Act			
		Ch 11 of IBC 2009 does not apply as State of ME did not adopt it as part of MUBEC			
		Maine Human Rights Act Applies			
		All units are designed to meet the Maine Human Rights Act			
		Retail Spaces must meet ADA 2010			
		All common spaces and retail areas are designed to meet ADA 2010			
		The residential units do not need to meet ADA as the project has no Public Funding			

