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**MAINE STATE BUILDING CODE SUMMARY**

Project: Bay House  
Middle Street  
Portland, ME

Date: 14 March 2013

Only the items specific to the referenced project are addressed here.

ME State Building Code - International Building Code 2009					
Relevant Allowable Heights and Areas			Allowable and Provided Items		
Use Group	Type of Construction		Stories	Height	Area
Section 503 Heights and Areas					
S2	Type IB		11	160 ft	79,000 sf
M	Type IA		UL	UL	UL
R2	Type VA		3	50 ft	12,000 sf
Section 504.2 Building Height Modification w/ NFPA 13 Sprinkler					
S2	Type IB		12	180 ft	
M	Type IA		UL	UL	
R2	Type VA		4	70 ft	
Section 506 Building Area Modification w/ NFPA 13 Sprinkler and frontage					
S2	Type IB				Not Needed
M	Type IA				Not Needed
R2	Type VA	Building 1			45,000 sf
R2	Type VA	Building 2			40,800 sf
506.4 Total Building Area Building 1					135,000 sf
506.4 Total Building Area Building 2					122,400 sf

<b>Notes</b>					
NFPA 13 Sprinkler System Details		Provided by Others			
Fire Alarm System Details		Provided by Others			
Emergency Lighting System		Provided by Others			
Mechanical & Electrical Systems		Provided by Others			
<b>Building Summary</b>		<b>Garage/Retail Level Floor 1</b>		<b>Building 1 Floors 2 -5</b>	<b>Building 2 Floors 2-5</b>
<b>Use Groups</b>		Mercantile (M) / Storage 2 (S2)		Residential 2 (R2)	Residential 2 (R2)
<b>Construction Types</b>		IA	IB	VA	VA
<b>Buildings Heights &amp; Areas</b>					
Stories		1		4	4
Height		9 ft ±		57.75 ft ±	57.75 ft ±
Floor Areas					
1 <sup>ST</sup> Floor		45,614 sf			
2 <sup>ND</sup> Floor				16,100 sf	16,987 sf
3 <sup>RD</sup> Floor				16,100 sf	16,987 sf
4 <sup>TH</sup> Floor				16,100 sf	16,987 sf
5 <sup>TH</sup> Floor				15,962 sf	16,842 sf
Total Building Area		45,614 sf		64,262 sf	67,803 sf
<b>Section 506 Area Modifications</b>					
Frontage Calculations 506.2		Not Needed			
Total Perimeter				588.67 ft	658.10 ft
Total Frontage > 30 ft wide				588.67 ft	429.35 ft
Increase Frontage=[F/P-0.25] W/30				75%	40%
NFPA 13 Sprinkler Increase		300%		200%	200%
Allowable Building Area $A_a = \{A_t + [A_t \times I_f] + [A_t \times I_s]\}$		316,000 sf		45,000 sf	40,800 sf
Allowable Building Area ( $A_a \times 3$ )		948,000 sf		135,000 sf	122,400 sf

<b>Separate Buildings are based on Sections 509.2 and 509.4</b>		Approved Portland Building Department Waiver			
S2 to M	3 Hours				
M to R2	3 hours				
S2 to R2	2 hours				
<b>Table 601 Fire Resistant Ratings</b>		M / IA	S2 / IB	R2 / VA	R2 / VA
Primary Structural Frame		3 hrs	2 hrs	1 hr	1 hr
Exterior Bearing Walls		3 hrs	2 hrs	1 hr	1 hr
Interior Bearing Walls		NA	NA	1 hr	1 hr
Interior Nonbearing Walls		0 hrs	0 hrs	0 hrs	0 hrs
Floor Construction & Secondary Members		2 hrs	2 hrs	1 hr	1 hr
Roof Construction & Secondary Members		NA	NA	1 hr	1 hr
<b>Section 603</b>		Wood Blocking & Wood Trim Permitted			

<b>ITEMS COMMON TO ALL USE GROUPS</b>	
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	<b>Provided Compliance w/ IBC</b>
<b>Chapter 7</b>	
Column Protection	
1 <sup>ST</sup> Floor M / IA	3 hour fire rated
1 <sup>ST</sup> Floor S2/ IB	2 hour fire rated
Protection of Primary Structural Frame	
1 <sup>ST</sup> Floor M / IA	3 hour fire rated
1 <sup>ST</sup> Floor S2/ IB	2 hour fire rated
Protection of Secondary Members	
1 <sup>ST</sup> Floor M / IA	> 2 hour fire rated
1 <sup>ST</sup> Floor S2/ IB	2 hour fire rated
Sprayed Fire-Resistant Material (SFRM)	
1 <sup>ST</sup> Floor M / IA	3 hour fire rated columns & beams
1 <sup>ST</sup> Floor S2/ IB	2 hour fire rated columns & beams
Projections on Exterior Walls	
Along Alley at North Wall, 1/3 x 60" = 20"	17"

Fire Resistance Rating	
Along Alley at North Wall, 1 <sup>ST</sup> Floor	> 1 hour rated from both sides
Along Alley at North Wall, Upper Floors	1 hour rated from both sides
All Other Exterior Walls	1 hour rated from inside
Openings in Exterior Wall	
Along Alley at North Wall	
Opening/Wall Area limited to $\leq 25\%$	
1 <sup>ST</sup> Floor	0% of openings
2 <sup>ND</sup> Floor	214.02sf/1172.7sf = 18.25% of wall
3 <sup>RD</sup> Floor	214.02sf/1172.7sf = 18.25% of wall
4 <sup>TH</sup> Floor	197.16sf/1172.7sf = 16.81% of wall
5 <sup>TH</sup> Floor	197.16sf/1172.7sf = 16.81% of wall
Fire Barriers	3 & 2 hour rated
Shaft Enclosures	2 hour fire rated
Fire Partitions	1 hour fire rated
Horizontal Assemblies	3, 2 and 1 hour fire rated
Penetrations	3, 2 and 1 hour fire rated
Fire-Resistant Joint Systems	2 & 3 hour rated
Opening Protectives	
Corridor Walls 1 Hour	20 min fire rated
Fire Barriers 2 Hour	1 1/2 hour fire rated
Fire Rated Door Hardware	Closer & Latchset
Wired Glass	< 100 sf & < 33" high & < 10"
Concealed Spaces	
Fireblocking	Wood blocking
Draftstopping	Sprinklered
Thermal-and-Sound-Insulating Material	Concealed, certified cellulose & < flame spread 25
<b>Chapter 8</b>	
Interior Wall and Ceiling Finishes	Class A
Interior Floor Finishes	> Class II
Trim and Incidental Finish	< 10%
<b>Chapter 9</b>	
Portable Fire Extinguishers	4A:60B:C fire extinguishers
<b>Chapter 10</b>	
Ceiling Height	> 7'-6" in all means of egress

Occupant Load	
Building 1 Retail Space	95
Building 2 Retail Space	96
Parking Garage	146 (actual much less, only 80 spaces)
Storage/Mechanical	20
Building 1 Residential per Floor	80
Building 2 Residential per Floor	84
Egress Width, Worst Case	
Stairways $.3 \times 83 = 24.9''$	$> 25''$
Other Egress Components $.2 \times 83 = 16.6''$	$> 17''$
Accessible Means of Egress	2 interior exit stairways
Level of Exit Discharge	Floor 1 & Floor 2 through courtyard
Accessible Egress Stairways	2 w/ sprinkler
Doors	$> 32''$ clear width
Doors within Dwelling Units	$> 78''$ high
Door Swing	Swing type
Power-Operated Doors	Provided
Access-controlled Egress Doors	Provided
Door Arrangement @ Vestibules	$> 7'$ apart
Electrical Room Doors	2 w/ panic hardware, swing out
Stairways Width	$> 36''$ & $> 44''$
Stairways Headroom	$> 80''$
Nosing	$\leq 1''$
Stairway Landings	$> 44''$
Vertical Rise	$< 12'$
Stairway to Roof	1 in each building
Stairway to Roof	Alternating tread device
Roof Access	Roof hatch $> 16$ sf
Ramp Slope	$< 1:12$
Ramp Cross Slope	$< 1:48$
Ramp Vertical Rise	$< 30''$
Ramp Width	$> 44''$ & $> 36''$ clear width
Ramp headroom	$> 80''$
Ramp Landing	$\geq 60''$ wide & $\geq 60''$ long
Egress Door Tactile Signage	@ each Exit door
Handrails Height	$> 34''$ & $< 38''$
Handrail Diameter	$> 1 \frac{1}{4}''$ OD & $< 2''$ OD
Handrail Top Extension	12'' Horiz & Return to Wall
Stair Handrail Bottom Extension	11'' Sloped & Return to Wall
Ramp Handrail Bottom Extension	12'' Horiz & Return to Wall

Guard Height	> 42"
Baluster Opening	< 4"
Exit Access Common Path of Travel	
Retail (M Use) if divided into 3 spaces	< 75'
Storage/Garage (S2 Use)	< 100'
Dwelling Units	< 125' with sprinkler
Exit Access Doorway from Dwelling Units	1 w/ ≤ 20 occupants
Exit Access Travel Distance	
S2 Use	< 400'
M & R Use	< 250'
Corridors Fire Resistance Rating	
S Use	0 hour fire rating w/ sprinkler
R Use	> 0.5 hour fire rating w/ sprinkler
Corridor Width, Common Area	> 44"
Corridor Width, within Dwelling Unit	> 36"
Corridor Dead Ends	< 50' w/ sprinkler
Exits	≥ 2 for all stories
Exit Enclosure Fire Resistance Rating	2 hour fire rating
Exterior Exit Ramp Fire Resistance Rating	> 1 hour fire rating
Exit Discharge Area on Level of Discharge	Provided w/ sprinkler
Egress Courts	> 44" wide & > 7' high
Emergency Escape & Rescue	Exception w/ sprinkler
<b>Chapter 12</b>	
Court	> 8' wide & bound by public way
Sound Transmission Class	> 50 for all assemblies
Impact Insulation Class	> 50 for all horizontal assemblies
Habitable Space Widths	> 7'
Habitable Space Heights	> 7'-6"
Dwelling unit Room Area	> one room > 120 sf & others > 70 sf
Efficiency Dwelling Unit Room Area	> 220 sf
Showers	Tile to height > 70"

<b>IECC 2009</b>	
Building Envelope Requirements	Provided through prescriptive items
Air Leakage	Comply w/ standards indicated
Outdoor Air Intake	Energy dampers in hoistways
Vestibules	Doors w/ closers
<b>Chapter 14</b>	
Exterior Window Sills	> 24" AFF
Exterior Side of Exterior Walls	Noncombustible fiber cement
Balconies	Sprinkler protection
<b>Chapter 15</b>	
Roofing Fire Classification	> Class B
<b>Chapter 17</b>	
Statement of Special Inspection	Contained in Contract Documents
<b>Chapter 24</b>	
Safety Glazing	panels of sliding doors, patio swing doors, shower doors, swing doors, all windows in stair enclosures, and in windows within 24" of either vertical edge of a door.
<b>Chapter 30</b>	
Accommodate Ambulance Stretcher	Car sized for 24"x84" stretcher
Hoistway Venting	≥ 3 sf opening
<b>Chapter 32</b>	
Encroachment below 8'	Awning > 7' above grade
Encroachment > 15' above grade	Not limited