

BUILDING EVALUATION SUMMARY (Table 3408.7)

Existing use group _____ Proposed use group _____
 Year building was constructed _____ Number of stories _____ H^o gm in feet _____
 Type of construction _____ Area per floor _____
 Percentage of open perimeter _____ % Percentage of height reduction _____
 Completely suppressed: Yes _____ No _____ Corridor wall rating _____ Yes _____ No _____
 Compartmentation: Yes _____ No _____ Required door closers: Yes _____ No _____
 Fire-resistance rating of vertical opening enclosures _____
 Type of HVAC system _____ serving number of floors _____
 Automatic fire detection: Yes _____ No _____ type and location _____
 Fire alarm system: Yes _____ No _____ type _____
 Smoke control: Yes _____ No _____ type _____
 Adequate exit routes: Yes _____ No _____ Dead ends: Yes _____ No _____
 Maximum exit access travel distance _____ Elevator controls: Yes _____ No _____
 Means of egress emergency lighting: Yes _____ No _____ Mixed use groups: Yes _____ No _____

Safety parameters Fire safety (FS) Means of egress (ME) General safety (GS)

3408.6.1 Building height			
3408.6.2 Building area			
3408.6.3 Compartmentation			
3408.6.4 Tenant and dwelling unit separations			
3408.6.5 Corridor walls			
3408.6.6 HVAC systems			
3408.6.7 Automatic fire detection			
3408.6.8 Fire alarm system			
3408.6.9 Smoke control	****		
3408.6.10 Means of egress	****		
3408.6.11 Max. exit access travel distance	*		
3408.6.12 Elevator control	****		
3408.6.13 Means of egress emergency lighting	****		
3408.6.14 Mixed use groups	****		
3408.6.15 Sprinklers	÷ 2 =		
3408.6.16 Specific occupancy area protection			
Building score — total value			

*** No applicable value to be inserted.

BUILDING SAFETY EVALUATION SCORE (Table 3408.9)

Formula	Table 3408.7	Table 3408.8	Score	Pass	Fail
FS-MFS ≥ 0	(FS)	(MFS)	=		
ME-MME ≥ 0	(ME)	(MME)	=		
GS-MGS ≥ 0	(GS)	(MGS)	=		

FS = Fire Safety
 ME = Means of Egress
 GS = General Safety
 MFS = Mandatory Fire Safety
 MME = Mandatory Means of Egress
 MGS = Mandatory General Safety

BOCA[®]
NATIONAL BUILDING CODE/1999
PLAN REVIEW RECORD

Valuation: To Be Determined Plan Review # 040331
 Fee: Determined Date: 04/15/04

JURISDICTION PORTLAND, MAINE
 (City, County, Township, etc.)

BUILDING LOCATION 85 CENTRAL AVE PEARS DS.

BUILDING DESCRIPTION 12388 SQ FT. 12-RESIDENTIAL UNITS +
Attch'd Building - Wood Frame.

REVIEWED BY Cliff Camp

Numerals indicated in parenthesis are applicable code sections of the 1999 BOCA National Building Code. The plan review accomplished as indicated in this record is limited to those code sections specifically identified herein. This record references commonly applicable code sections. It does not reference all code provisions which may be applicable to specific buildings. This record is designed to be used only by those who are knowledgeable and capable of exercising competent judgement in evaluating construction documents for code compliance.

CORRECTION LIST			Code Section
No.	DESCRIPTION		
1	NEED GEOTECHNICAL REPORT		1804
2	USE GROUPS - MIXED USE? SEPARATED OR NON SEPARATED?		
3	ON PAGE 201-2 BUT BEARING WALLS PAGE 203		
4	AWAY FROM AN OFFICE WINDOWS RATED		



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ROOFS AND ROOF STRUCTURES (Chapter 15)

Performance requirements (1505.0) NA Low-slope roof coverings (1507.5)
 Fire classification (1506.0) A Flashing (1508.0)
 Steep-slope roof coverings (1507.4) NA Roof structures (1510.0)

NOT ES: NR. — Not required
 NA. — Not applicable

ADMINISTRATION (Chapter 1)

Complete construction documents (107.5, 107.6, 107.7) ✓ Signed/sealed construction documents (107.7, 114.1)

STRUCTURAL SYSTEMS (Chapters 16, 17, 18)

STRUCTURAL LOADS (Chapter 16)

DESIGN LOADS ON CONSTRUCTION DOCUMENTS (1603.1) _____ Internal pressure coefficient: (Table 1609.7[6]) _____
 Fully distributed floor live loads (1603.2, 1609.0) _____ Wind design pressure, P (1609.7) _____
 Floor Area Use Loads Shown _____ Earthquake loads (1603.6, 1610.0) _____
 Peak velocity-related acceleration, A_v (1610.1.3) _____ Peak acceleration, A_a (1610.1.3) _____
 Seismic hazard exposure group (1610.1.5) _____ Seismic performance category (1610.1.7) _____
 Soil-profile type (Table 1610.3.1) _____ Basic structural system and seismic-resisting system (Table 1610.3.3) _____
 Response modification factor, R , and deflection amplification factor, C_d (Table 1610.3.3) _____ Analysis procedure (1610.4, 1610.5) _____
 Other loads _____
 If $P_g > 10$ psf, roof thermal factor (Table 1608.3.2) _____ Attic load (1606.2.2, 1606.2.3) _____
 If $P_g > 10$ psf, snow load importance factor, I (Table 1608.3.3) _____ Distribution loads (1606.4) _____
 Sloped roof snowload, P_s (1608.4) _____ Concentrated loads (1606.3) _____
 Wind loads (1603.5, 1609.0) _____ Impact loads (1606.6) _____
 Basic wind speed (1609.3) _____ Misc. loads (1606.4, 1606.8, 1606.9, 1607.5, 1612.0) _____
 Wind exposure category (1609.4) _____ Wind exposure category (1609.4) _____
 Wind importance factor, I (Table 1609.5) _____ Wind importance factor, I (Table 1609.5) _____
 Submitted for all structural members (107.7) ✓

BUILDING PLANNING (Chapters 3, 4, 5, 6)

USE OR OCCUPANCY CLASSIFICATION (302.0-313.0)

B + R2 Single Use Group _____ Specific occupancy areas (302.1.1)
 _____ Mixed Use Groups _____ Accessory areas (302.1.2)

GENERAL BUILDING LIMITATIONS (Chapters 5 & 6)

Apply Case 1 to determine the allowable height and area and permitted types of construction for a building containing a single use group or nonseparated mixed use groups. Apply Case 2 to determine the allowable height and area and permitted types of construction for a building containing separated mixed use groups.

PERMITTED MODIFICATIONS TO TABLE 503

% of Allowable tabular area (Table 503) 100%
 % Reduction for height (Table 506.4) 0%
 % Increase for open perimeter (506.2) +130%
 % Increase for automatic sprinklers (506.3) +200%
 Total percentage factor = 330%
 Conversion factor $\frac{330}{100} = 3.3$ (Total percentage factor/100%)

Open perimeter (506.2) 198 North 40 East 198 South 100 West
 Open perim. 536 ft. Perimeter 596 ft.
 % Open perimeter = $\frac{8920 - 2520}{(Open\ perim.\ perim.) \times 100\%}$
 % Tab. area increase = $\frac{652 \times 2}{2 \times (Open\ perim.\ -25\%)}$

CASE 1 — SINGLE USE OR NONSEPARATED MIXED USE GROUPS (313.1)

Using Table 503, identify the allowable height and area of the single use group or the most restrictive of the nonseparated mixed use groups. Construction types that provide an allowable tabular area equal to or greater than the adjusted floor area and allowable heights (as modified by Section 504.0) equal to or greater than the actual building height are permitted.

Actual floor area 12,388 ft.² Actual building height 18 feet 1 stories
 Adjusted floor area* 33,600 ft.² Allowable building height 60 feet 4 stories

*Adjusted floor area = actual floor area/conversion factor

Permitted type of construction ALL Type of construction assumed for review (602.2) 5A

OCCUPANT NEEDS (Chapters 10, 11, 12)

MEANS OF EGRESS (Chapter 10)

OCCUPANT LOAD (1008.0 and Table 1008.1.2)

Location	Floor Area	Sq. ft./ person	Occup. load	Other occ. loads	Total
RES. AREA	10,715	54	200		54
HEALTH CENTER	1673	100			17

CAPACITY OF EGRESS COMPONENTS (1009.0 and Table 1009.2)

Egress width (inch/occupant)	Stairways	Doors/ramps/corridors	Doors/ramps
	NONE	36"	
	NONE		4 Doors 36"
	NONE		2-36" Doors

CAPACITY

Location	Stairways	Doors/ramps
RES	NONE	4 Doors 36"
HEALTH CENTER	NONE	2-36" Doors

ATRIUMS

<input checked="" type="checkbox"/>	Automatic sprinkler system (404.2)
<input checked="" type="checkbox"/>	Occupancy (404.3)
<input checked="" type="checkbox"/>	Smoke control (404.4)
<input checked="" type="checkbox"/>	Enclosure (404.5)
<input checked="" type="checkbox"/>	Fire alarm system (404.6)
<input checked="" type="checkbox"/>	Travel distance (404.7)

OTHER SPECIAL USE AND OCCUPANCY

<input checked="" type="checkbox"/>	Underground structures (405.0)
<input checked="" type="checkbox"/>	Open parking structures (406.0)
<input checked="" type="checkbox"/>	Private garages (407.0)

FIRE PROTECTION (Chapters 6, 7, 8, 9)

FIRERESISTANT MATERIALS AND CONSTRUCTION (Chapter 7 and Table 602)

Note: Entry in indicates required rating in hours. NC indicates noncombustible construction required.

COMBUSTIBILITY (603.0, 604.0, 605.0, 606.0)

1 HR	Exterior walls
	Interior elements
1 HR	Roof

CONSTRUCTION DOCUMENTS (703.0)

<input checked="" type="checkbox"/>	Fire tests (704.0)
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EXTERIOR WALLS (507.2, 705.0, 716.6)

Fire separation distance	North	East	South	West
0	33	19	38	29

Loadbearing

<input type="checkbox"/>	Nonloadbearing
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920 STEEL ALL OK EXCEPT EAST
259 ACCORDED
Exterior opening protectives (705.3, 706.0)

Continuity of exterior walls (705.6)

FIRE SEPARATION ASSEMBLIES

<input type="checkbox"/>	Exit enclosures (709.0, 710.0, 1014.11)
<input type="checkbox"/>	Other shafts (709.0, 710.0)
<input type="checkbox"/>	Mixed use and fire area separations (313.1.2)
<input type="checkbox"/>	Other separation assemblies (302.1.1, Table 602)

<input checked="" type="checkbox"/>	Public garages (408.0)
<input checked="" type="checkbox"/>	Use Group I-2 (409.0)
<input checked="" type="checkbox"/>	Use Group I-3 (410.0)
<input checked="" type="checkbox"/>	Stages and platforms (412.0)
<input checked="" type="checkbox"/>	Special amusement buildings (413.0)
<input checked="" type="checkbox"/>	HPM facilities (416.0)
<input checked="" type="checkbox"/>	Hazardous materials (307.8, 417.0)
<input checked="" type="checkbox"/>	Use Groups H-1, H-2, H-3 and H-4 (418.0)
<input checked="" type="checkbox"/>	Swimming pools (421.0)
<input checked="" type="checkbox"/>	Storage racks (422.0)

FIRE PARTITIONS

<input type="checkbox"/>	1 HR	Exit access corridors (711.0, 1011.4)
<input type="checkbox"/>	N/A	Tenant separations (711.0)
<input type="checkbox"/>	1 HR	Dwelling unit separations (711.0)
<input type="checkbox"/>	N/A	Guestroom separations (711.0)

OTHER FIRERESISTANT CONSTRUCTION

<input type="checkbox"/>	N/A	Fire and party walls (707.0 and Table 707.1)
<input type="checkbox"/>	N/A	Smoke barriers (712.0)
<input type="checkbox"/>	N/A	Nonloadbearing partitions (Table 602)
<input type="checkbox"/>	1 HR	Interior loadbearing walls, columns, girders, trusses (716.0)
<input type="checkbox"/>	1 HR	Supporting construction (716.0)
<input type="checkbox"/>	N/A	Floor construction (713.0, 1006.3.1)
<input type="checkbox"/>	1 HR	Roof construction (713.0, 715.0)
<input type="checkbox"/>		Penetrations (714.0) <input checked="" type="checkbox"/> NOT ADDRESSED
<input type="checkbox"/>		Opening protectives (717.0, 719.0, 720.0)
<input type="checkbox"/>		Fire dampers (718.0) <input checked="" type="checkbox"/> NEEDED
<input type="checkbox"/>		Fireblocking/draftstopping (721.0) <input checked="" type="checkbox"/> NEEDED
<input type="checkbox"/>	OK	Thermal and sound-insulating materials (723.0)