

BUILDING EVALUATION SUMMARY (Table 3408.7)

Existing use group _____ Proposed use group _____
 Year building was constructed _____
 Type of construction _____ Height in feet _____
 Percentage of open perimeter _____
 Completely suppressed: Yes _____ No _____
 Compartmentation: Yes _____ No _____
 Fire resistance rating of vertical opening enclosures: _____
 Type of HVAC system _____
 Automatic fire detection: Yes _____ No _____
 Fire alarm system: Yes _____ No _____
 Smoke control: Yes _____ No _____
 Adequate exit routes: Yes _____ No _____
 Maximum exit access travel distance: _____
 Means of egress emergency lighting: Yes _____ No _____
 Safety parameters: _____
 Fire safety (FS) _____
 Means of egress (ME) _____
 General _____

3408.6.1 Building height	****
3408.6.2 Building area	****
3408.6.3 Compartmentation	****
3408.6.4 Tenant and dwelling unit separation	****
3408.6.5 Corridor walls	****
3408.6.6 Vertical openings	****
3408.6.7 HVAC systems	****
3408.6.8 Automatic fire detection	****
3408.6.9 Fire alarm system	****
3408.6.10 Smoke control	****
3408.6.11 Means of egress	****
3408.6.12 Dead ends	****
3408.6.13 Max. exit access travel distance	****
3408.6.14 Elevator control	****
3408.6.15 Means of egress emergency lighting	****
3408.6.16 Mixed use groups	****
3408.6.17 Sprinklers	****
3408.6.18 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
S-MFS ≥ 0	(FS)	(MFS)	=	
E-MME ≥ 0	(ME)	(MME)	=	
S-MGS ≥ 0	(GS)	(MGS)	=	
FS = Fire Safety		MFS = Mandatory Fire Safety		
ME = Means of Egress		MME = Mandatory Means of Egress		
GS = General Safety		MGS = Mandatory General Safety		

BOCA®
 NATIONAL BUILDING CODE/1999
 PLAN REVIEW RECORD

Valuation: 4,540,000 Review # 040 288
 Fee: 49,881.00 Date: 7/12/04
 JURISDICTION: PORTLAND
 BUILDING LOCATION: 267 OCEAN AVE.
 BUILDING DESCRIPTION: 16000 SQ FT ADDITION

REVIEWED BY: *Clay Cuyler*
 EDUCATION & ASSEMBLY

Numeral 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

No.	DESCRIPTION	Code Section
11404	NEED UC LISTING OF FIREWALL	
	NEED CONVEYOR ASSESSMENT	
	PURSUANT TO 707.6	
	UNASSIGNED AREA	
	PROTECTION SCREEN ASSEMBLY?	
	OR ASSEMBLY? (BASE ROW)	
	410.1 GROUND FLOOR PAN OCCUPANT LOAD	
	100%	
	WILL GYM BE USED FOR GYMNASIUM ASSEMBLY	



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ROOFS AND ROOF STRUCTURES (Chapter 15)

Performance requirements (1505.0) ✓ Low-slope roof coverings (1507.5v)
 Fire classification (1506.0) ✓ Flashing (1508.0)
 Steep-slope roof coverings (1507.5f) N/A Roof structures (1510.0)

NOTES: N.R. — Not required
 N.A. — 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)

Uniformly distributed floor live loads (1603.2, 1606.0)

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) _____

Attic load (1606.2.2, 1606.2.3) _____

Partition loads (1606.2.4) _____

Concentrated loads (1606.3) _____

Impact loads (1606.6) _____

Misc. loads (1606.4, 1606.8, 1606.9, 1607.5, 1612.0) _____

STRUCTURAL DESIGN CALCULATIONS

Submitted for all structural members (107.7) ✓

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

USE OR OCCUPANCY CLASSIFICATION (302.0-313.0)

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

ADDITION SEPARATE BY ZHR
GENERAL BUILDING LIMITATIONS (Chapters 5 & 6)
FRANK

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.

MODIFICATIONS TO TABLE 503

% of Allowable tabular area (Table 503) 100%
 % Reduction for height (Table 506.4) 0%
 % Increase for open perimeter (506.2) +108%
 % Increase for automatic sprinklers (506.3) +20%
 Total percentage factor 408%
 Conversion factor 408/100 = 4 (Total percentage factor/100%)

Open perimeter (506.2) 135 North 102 East 155 South 102 West
 Open perimeter = 392 ft. Perimeter 494 ft.
 % Open perimeter = $\frac{392}{494} \times 100\%$
 % Tab. area increase = $\frac{1.79 \times 100\%}{2 \times (\% \text{ Open perim.})} = \frac{1.79 \times 100\%}{2 \times 25\%} = 108\%$

CASE 1 — SINGLE USE OR NONSEPARATED MIXED USE GROUPS (313.1.1)

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 16,400 ft.² Actual building height 33 feet 2 stories
 Adjusted floor area* 33600 ft.² Allowable building height 50 feet 3 stories

*Adjusted floor area = actual floor area/conversion factor

Permitted types of construction _____ per of construction assumed for review (602.3) 2C

OCCUPANT NEEDS (Chapters 10, 11, 12)

MEANS OF EGRESS (Chapter 10)

OCCUPANT LOAD (1008.0 and Table 1008.1.2)		CAPACITY OF EGRESS COMPONENTS (1009.0 and Table 1009.2)	
Location	Floor Area + Sq.ft./person = load	Egress width (inch/occupant)	Doors/ramps/corridors
1st Floor Gym	1008.1.6 + 1008.1.6 = 2016.2	20	5
Locker Rooms	1100		

Location	Stairways	Doors/ramps/corridors
LOBBY	OK	
STAIRS	OK	
FRONT	OK	
BACK	OK	

Location	Required	Provided
OK		
1st	2	2
BASE	2	2

ATRIUMS

Automatic sprinkler system (404.2)	
Occupancy (404.3)	
Smoke control (404.4)	
Enclosures (404.5)	
Fire alarm system (404.6)	
Travel distance (404.7)	

OTHER SPECIAL USE AND OCCUPANCY

Underground structures (405.0)	
Open parking structures (406.0)	
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)	Exterior walls	Interior elements	Roof
None	Fire wall		

CONSTRUCTION DOCUMENTS (703.0)

Fire tests (704.0)	North	East	South	West
30 + Fire				

Fire separation distance	Loadbearing	Nonloadbearing
0	0	0

Exterior opening protectives (705.3, 706.0)	Continuity of exterior walls (705.6)
NEED	

FIRE SEPARATION ASSEMBLIES

Exit enclosures (709.0, 710.0, 1014.11)	1HR
Other shafts (709.0, 710.0)	1HR
Mixed use and fire area separations (313.1.2)	2HR
Other separation assemblies (302.1.1, Table 602)	CIRCULAR - 3

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

FIRE PARTITIONS	
Exit access corridors (711.0, 1011.4)	0 - SPRINKLED
Tenant separations (711.0)	None
Dwelling unit separations (711.0)	
Guestroom separations (711.0)	

OTHER FIRERESISTANT CONSTRUCTION

Fire and party walls (707.0 and Table 707.1)	2HR
Smoke barriers (712.0)	None
Nonloadbearing partitions (Table 602)	0
Interior loadbearing walls, columns, girders, trusses (716.0)	0
Supporting construction (716.0)	0
Floor construction (713.0, 1006.3.1)	0
Roof construction (713.0, 715.0)	0
Penetrations (714.0)	Y
Opening protectives (717.0, 719.0, 720.0)	Y
Fire dampers (718.0)	Y
Fireblocking/draftstopping (721.0)	Y
Thermal and sound-insulating materials (723.0)	Y