Personally appeared the above-named Greg Shinberg, Manager of Sheridan Street LLC and acknowledged the foregoing Agreement to be his free act and deed in his said capacity and the free act and deed of Sheridan Street LLC.

/

Notary Public

O:\OFFICE\PENNY\CONTRACT \rezone\sheridanstreet0907062.doc

1



COMcheck Software Version 3.4.2 Envelope Compliance Certificate

2001 IECC

Report Date: 09/08/07 Data filename: T:\00_TFH~1\0507_S~1.LLC\Comcheck\SHERID~1.CCK

Section 1: Project Information

Project Title: Sheridan Heights

Construction Site: 135 Sheridan Street Portland, ME 04101 Owner/Agent: Sheridan Street LLC 477 Congress Street Portland, ME 04101

Portland, Maine

New Construction

15 7378

268

21%

Designer/Contractor: TFH Architects 100 Commercial Street Portland, ME 04101

Section 2: General Information

Building Location (for weather data): Climate Zone: Heating Degree Days (base 65 degrees F): Cooling Degree Days (base 65 degrees F): Project Type: Vertical Glazing / Wall Area Pct.:

> Floor Area 38570

Building Type Other

Section 3: Requirements Checklist

Envelope PASSES: Design 0.1% better than code

Climate-Specific Requirements:

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof 1: All-Wood Joist/Rafter/Truss	9160	38.0	0.0	0.028	0.053
Skylight (4 total): Metal Frame with Thermal Break:Double Pane with Low-E, Clear, SHGC 0.65	35			0.340	0 .05 3
Exterior Wall: Wood Frame, Any Spacing	16450	19.0	0.0	0.068	0.075
Window 1: Wood Frame:Double Pane with Low-E, Clear, SHGC 0.32	3285			0.310	0.526
Door 1: Glass, Clear, SHGC 0.34	583			0.310	0.526
Exterior Wall: Solid Concrete or Masonry > 8*, Furring: None	1805		0.0	0.431	0.075
Door 2: Solid	147			0.140	0.122
Floor 1: Slab-On-Grade:Unheated, Horizontal 4 ft.	9110		0.0		

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

Air Leakage, Component Certification, and Vapor Retarder Requirements:

- 1. All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.
- 2. Windows, doors, and skylights certified as meeting leakage requirements.
- 3. Component R-values & U-factors labeled as certified.
- 4. Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.

5. Stair, elevator shaft vents, and other dampers integral to the building envelope are equipped with motorized dampers.

Sheridan Heights

6. Cargo doors and loading dock doors are weather sealed.

- 7. Recessed lighting fixtures are: (i) Type IC rated and sealed or gasketed; or (ii) installed inside an appropriate air-tight assembly with a 0.5 inch clearance from combustible materials and with 3 inches clearance from insulation material.
- 8. Building entrence doors have a vestibule and equipped with closing devices. Exceptions:

Building entrances with revolving doors.

- Doors that open directly from a space less than 3000 sq. ft. in area.
- 9. Vapor retarder installed.

Section 4: Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 2001 IECC, Chapter 8, requirements in COMcheck Version 3.4.2 and to comply with the manufactory requirements in the Requirements Cflecklist.







90.1 (2004) Standard

Report Date: 08/31/07 Data filename: C:\Program Files\Check\COMcheck\Sheridan.cck

Section 1: Project Information

Project Title: Sheridan Heights

Construction Site: 135 Sheridan Street Portland, ME 04101

1

Owner/Agent: Sheridan Street, LLC

Section 2: General Information

Building Location (for weather data):	Portland, Maine
Heating Degree Days (base 65 degrees F):	7378
Cooling Degree Days (base 50 degrees F):	1943
Project Type:	New Construction

Section 3: Mechanical Systems List

Quantity System Type & Description

- HVAC System 1: Heating: Unit Heater, Gas, Heating Capacity >=65 <225 kBtu/h / Cooling: Packaged Terminal Unit, Capacity 7000 Btu/h, Air-Cooled Condenser
- 0 HVAC System 2: Heating: Duct Furnace, Gas, Heating Capacity >=225 kBtu/h / Single Zone
- 1 HVAC System 3: Heating: Unit Heater, Gas, Heating Capacity <65 kBtu/h
- 1 Plant 1: Heating: Hot Water Boller, Capacity <300 kBtu/h, Gas
- 1 Storage Water Heater 1: Electric Storage Water Heater, Capacity: 50 gallons

Section 4: Requirements Checklist

Requirements Specific To: HVAC System 1 :

1. Equipment minimum efficiency: Packaged Terminal DX Unit: 11.0 EER

Requirements Specific To: HVAC System 2 :

1. Equipment minimum efficiency; Duct Furnece (Gas): 80% Ec

Requirements Specific To: HVAC System 3 :

1. Equipment minimum efficiency: Unit Heater (Gas): 80% Ec

Requirements Specific To: Plant 1 :

1. Newly purchased heating equipment meets the heating efficiency requirements

, Requirements Specific To: Storage Water Heater 1 :

- 1. Hot water system sized per manufacturer's sizing guide
- 2. Electric Water Heater efficiency >= 0.86 EF, 267 SL, Btu/h (if > 12 kW)
- 3. First 8 ft of outlet piping is insulated
- 4. Hot water storage temperature adjustable down to 120 degrees F or lower
- 5. Heat traps provided on inlet and outlet of storage tanks

Generic Requirements: Must be met by all systems to which the requirement is applicable:



Designer/Contractor:

99594935999

- 1. Load calculations per 2001 ASHRAE Fundamentals
- 2. Thermostatic controls has 5 degrees F deadband
 - Exception: Thermostats requiring manual changeover between heating and cooling

3. Automatic Controls: Setback to 55 degrees F (heal) and 85 degrees F (cool); 7-day clock, 2-hour occupant override, 10-hour backup

- Exception: Continuously operating zones
- . Hot water pipe insulation: 1 in. for pipes <=1.5 in. and 2 in. for pipes >1.5 in. Chilled water/refrigerant/brine pipe insulation: 1 in. for pipes <=1.5 in, and 1.5 in. for pipes >1.5 in. Steam pipe insulation: 1.5 in. for pipes <=1.5 in. and 3 in. for pipes >1.5 in.
 - Exception: Piping within HVAC equipment
 - Exception: Fluid temperatures between 55 and 105 degrees F
 - Exception: Fluid not heated or cooled
 - Exception: Runouts <4 ft in length
- Piping, insulated to 1/2 in, if nominal diameter of pipe is <1.5 in.; Larger pipe insulated to 1 in, thickness
- 6, Lavatory faucet outlet temperatures in public restrooms limited to 110 degrees F (43 degrees C)
- Load calculations per acceptable engineering standards and handbooks
- Where separate thermostate are used for heating and cooling, acceptable measures are used to prevent simultaneous heating and coolina
- 9. Motorized, automatic shutoff dampers required on exhaust and outdoor air supply openings
 - Exception: Gravity dampers acceptable in buildings <3 stories
 - Exception: Gravity dampers acceptable in systems with outside or exhaust air flow rates less than 300 cfm where dampers are Interlocked with fan
- 10. Stair and elevator shaft vents are equipped with motorized dampers SPECIFICS Louver Meers 11. Acceptable measures used to prevent simultaneous humidification and dehumidification ISC 2007
 - Exception: Desiccant systems and systems for uses requiring specific humidity levels (approval required)
 - 12. Automatic controls for freeze protection systems present
- NP 13. Automatic ventilation controls (e.g., CO2 controls) or exhaust air heat recovery present for high design occupancy areas (>100 person/1000 ft2) with >3.000 cfm cutelide air con-tilperson/1000 ft2) with >3,000 cfm outside air capacities
 - 14. Duct, plenum, and piping insulation surfaces suitably protected from weather, moisture, or likely damage
 - 15. Duct Sealing: Pressure sensitive tape is not used as the primary sealant Longitudinal and transverse seams for ducts in unconditioned spaces Longitudinal and transverse seams and duct wall penetrations for ducts outside the building Transverse seams on buried ducts
 - 16.R-8 for supply air ducts located outside the building, R-6 for supply air ducts In ventilated attics and in unvented attic above insulated ceiling, R-1.9 for supply air ducts in unvented attic with roof insulation, R-3.5 for supply air ducts in unconditioned and underground spaces R-3.5 for return air ducts located outside the building, in ventilated attics and in unvented attic above insulated ceiling
- 17 Humidistat controls prevent reheating, recooling, and mixing of mechanically heated air with mechanically cooled air
- 抗 18. Exhaust air heat recovery included for systems 5,000 cfm or greater with more than 70% outside air fraction or specifically exempled
- 19. Kitchen hoods >5,000 cfm provided with 50% makeup air that is uncooled and heated to no more than 60 degrees F unless specifically exempted
- 💦 20. Buildings with fume hood systems must have variable air volume hood design, exhaust heat recovery, or separate makeup air supply meeting the following: a) 75% make up air quantity, and /or b) within 2 degrees F of room temperature and/or c) no humidification d) no simultaneous heating and cooling

Section 5: Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 90.1 (2004) Standard requirements in COMcheck Version 3.4.2 and to comply with the mandatory requirements in the

Requirements Check Name - Title

Section 6: Post Construction Compliance Statement

HVAC record drawings of the actual installation and performance data for each equipment provided to the owner within 90 days П after system acceptance.

HVAC O&M documents for all mechanical equipment and system provided to the owner within 90 days after system acceptance

Written HVAC balancing report provided to the owner.

.....

2010000000000

Sep 06 07 07:52a

207-797-0869

p.2



90.1 (2004) Standard

Report Date: 09/05/07 Data filename: Untitled.cck

Section 1: Project Information

Project Title: Sheridan Heights

Construction Site: 135 Sheridan Street Portland, ME 04101 Owner/Agent: Shinberg Consulting LLC Sheridan Sheat LLC 477 Congress Street 5th Floor Portland, ME 04101 Designer/Contractor: Scott Teas TFH Architects 100 Commercial Street Pontand, ME 04101 207-775-6141

Section 2: General Information

Building Use Description by: Activity Type Project Type: New Construction

Activity Type(s) Multifamily Living Units Floor Area 18000

Section 3: Requirements Checklist

Interior Lighting:

1. Total actual watts must be less than or equal to total allowed watts.
 Allowed Watts Actual Watts Compiles
 NMA 12;662 18304 - MO

(3) 2. Exit signs 5 Watts or less per side.

Exterior Lighting:

g 3. Comply with Sections 9.4.4 and 9.4.5 of 90.1-2004 and attach documentation.

Controls, Switching, and Wiring:

2 4. Independent manual or occupancy sensing controls for each space (remote switch with indicator allowed for safety or security).

p/A D 5. Occupant sensing control in class rooms, conference/meeting rooms, and employee lunch and break rooms.

Exceptions:

Spaces with multi-scene control; shop classrooms, laboratory classrooms, and preschool through 12th grade classrooms.

 Automatic shutoff control for tighting in >5000 sq.ft buildings by time-of-day device, occupant sensor, or other automatic control. Exceptions:

24 hour operation lighting; patient care areas; where auto shuroff would endanger safety or security.

- DIA . 7. Mester switch at entry to hotel/motel guest room.
- 🚓 🗂 8. Separate control device for diaplay/accent lighting, casa lighting, task lighting, nonvisual lighting, lighting for sale, and
 - demonstration lighting.
 - B 9. Photocel/astronomical time switch on exterior lights. Exceptions:

Covered vehicle entrance/exit areas requiring lighting for safety, security and eye adaptation.

. 10. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).

Exceptions:

Page 1 of 3

207-797-0869

p.3

Electronic high-frequency ballasts;

Luminaires not on same switch;

Recessed luminuires 10 fL apart or surface/pendant not continuous;

Luminaires on emergency circuits.

Voltage Drop:

11. Feeder conductors have been designed for a maximum voltage drop of 2 percent.

12. Branch circuit conductors have been designed for a maximum voltage drop of 3 percent.

Page 2 of 3



90.1 (2004) Standard

Report Date: Data filename: Untitled.cck

Sep 06 07 07:53a

Section 1: Allowed Lighting Power Calculation

A	B	c	D
Area Category	Floor Area	Allowed Watts / ft2	Allowed Watts (B x C)
Multifamily Living Units	18000	0,9	12600
	To	tal Allowed Walts =	12600

Section 2: Actual Lighting Power Calculation

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fbtture	C # of Fixtures	D Fixtur o Watt.	(C X D)
Multifamily Living Units (18009 sq.ft.)				
Linear Fluorescent 1: GGE: 48° T8 32W (Super T8) / Electronic	1	14	32	448
Compact Fluorescent 1: S: Twin Tube 13W / Electronic	2	30	26	780
Linear Fluorescent 2: UT: 48" T8 32W / Electronic	1	13	32	416
Incandescent 1: 18": Incandescent 100W	3	2	300	600
Incandescent 2: 24": Incandescent 100W	5	5	500	2500
Linear Fluorescent 3: SH8: 96" T8 ES 60W / Electronic	1	26	60	1560
Incandescent 3: C: Incandescent 100W	3	40	300	12000
		Total Actu	al Watts =	18304

Section 3: Compliance Calculation

If the Total Allowed Watts minus the Total Actual Watts is greater than or equal to zero, the building complies.

Total Allowed Watts =	12600	
Total Actual Watts =		
Project Compliance =	-12054	-5704

Lighting TBD: Invalid building use type

Page 3 of 3

Richard Lo

а натур, на подумар сооттуру с тоторудах с отрудахо – то отруг отторуду отранструду отранструдуют сооторуду от сооторуду с тоторудуют сооторудуют с тоторудуют с тоторудии с тоторудуют с тоторудущ

From: Richard Lo

Sent: Tuesday, September 11, 2007 2:08 PM

To: 'Mlke Nugent'

Cc: 'Greg Shinberg'

Subject: Sheridan Heights - COM check report

Hi Mike,

I have attached here PDF copies of the COM check certificates for your consideration as part of the building permit application for Sheridan Heights. A hard copy of these certificates have been sent to you at City Hall:

Sheridan Heights COM check Envelope certificate – 2007.09.09 Sheridan Heights COM check Lighting & Power certificate – 2007.09.05 Sheridan Heights COM check Mechanical certificate – 2007.08.31

As I will be out of the office over the next few weeks, please contact Ryan Senator if you have any questions regarding the project over the next few weeks.

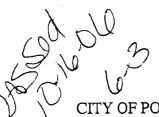
Regards

Richard

Richard Lo TFH Architects 100 Commercial Street, Portland Maine 04101

E: rtl@tfharchitects.com. F: 207-773-0194 T: 207-775-6141





JAMES L COHEN (MAYOR)(5) JILLC. DUSON (A/L) JAMES F. CLOUTIER(A/L) NICHOLAS M. MAVODONES (A/L) EDWARD J. SUSLOVIC (A/L)

CITY OF PORTLAND IN THE CITY COUNCIL

nder 62-06/07 21-13 10-04-06 25 16 10-16-11-

WILLIAM R. GORHAM (1) KAREN A. GERAGHTY (2) DONNA J. CARR (3) CHERYL A. LEEMAN (4)

ORDER AUTHORIZING AMENDMENT TO CITY CODE SEC. 14-49 (ZONING MAP AMENDMENT) RE: CONDITIONAL REZONING FOR 121-135 SHERIDAN STREET

ORDERED, that the Zoning Map of the City of Portland, dated December 2000 as amended and on file in the Department of Planning & Development, and incorporated by reference into the Zoning Ordinance by Sec. 14-49 of the Portland City Code, is hereby amended to reflect a conditional rezoning as detailed below:

Sheridan Street LLC Sheridan Street, Portland, Maine

This contract made this _____ day of ______, 2006 by SHERIDAN STREET LLC, a Maine Limited Liability Corporation having a place of business at One Longfellow Square, Portland, Maine (hereinafter "Developer").

WHEREAS, DEVELOPER owns property at 121-135 Sheridan Street, Portland, Maine; and

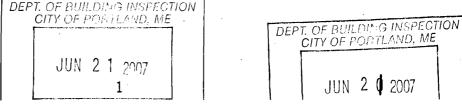
WHEREAS, DEVELOPER filed a request for a Conditional Rezoning with the City of Portland ("City") to modify an existing R-6 zone to accommodate housing with reduced parking; and

WHEREAS, the at121-135 Sheridan Street property is more specifically described and shown on the Portland Assessors Map, Parcels 13-K-2 and 13-K-17 (the "Property"): and

WHEREAS, the Portland Planning Board determined the rezoning would provide needed housing in the City and would not negatively impact the surrounding residential community; and

WHEREAS, the Portland Planning Board, pursuant to 30-A M.R.S.A. §4352(8), and after notice and hearing and due deliberations, recommended the rezoning of the Property, subject, however, to certain conditions; and

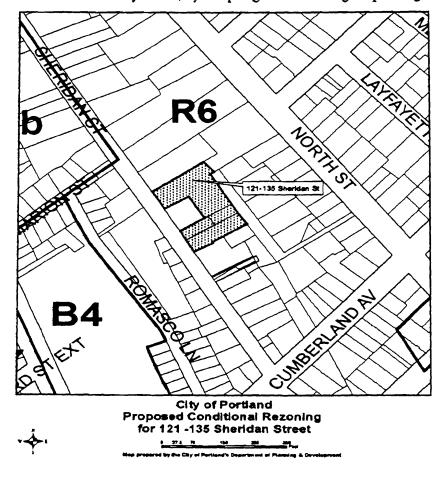
WHEREAS, the City, by and through its City Council, has determined that the rezoning, necessary because of the unusual nature of the development, with conditions and restrictions, would be pursuant to and consistent with the City's Comprehensive Plan and would not unreasonably interfere with the existing and permitted uses within the underlying R-6 zone; and DEPT OF BUILDING INSPECTION



WHEREAS, the DEVELOPER has agreed to enter into this contract, with its concomitant terms and conditions, which shall hereinafter bind DEVELOPER its successors and assigns; and

NOW, THEREFORE, in consideration of the rezoning of the Property, DEVELOPER contracts to be bound by the following terms and conditions:

1. The CITY shall amend the Zoning Map of the City of Portland, dated December 2000, as amended and on file in the Department of Planning and Development, and incorporated by reference into the Zoning Ordinance by §14-49 of the Portland City Code, by adopting the following map change.



WK

2. The use of the Property shall consist of a building containing a maximum of
 7 twenty one (21) unit residential units located at the rear of the site (the
 7 "Residential Condominium") with at least twenty-nine (29) on-site parking spaces
 for the use of the Residential Condominium; and an existing single family.
 Needs 2 pkg gc

Family House") with two 2 on-site parking spaces for the use of the Single Family House (hereinafter collectively, the "Development").

1

13-K-17

>>13-K-17

- 3. The Property will be developed substantially in accordance with the Site Layout Plan (the "Site Plan"), Attachment 1, by MRLD, LLC dated ______ and the conceptual elevations (the "Elevations"), Attachment 2, by TFH Architects dated ______, 2006.
- 4. The Planning Board shall review and approve the Site Plan according to the site plan and subdivision provisions of the Portland Land Use Code and nothing herein shall prevent the Planning Board from imposing conditions otherwise required to bring this development into compliance with those subdivision and site plan standards.
- 5. The underlying zoning requirements of the R-6 zone are modified as follows:
 - a. The maximum density shall be no greater than twenty one (21) residential units to be located on the lot within the Residential Condominium shown on Attachment 1 and the existing Single Family House located at the front of the lot as shown on Attachment 1; and
 - b. A minimum of thirty one (31) on-site parking spaces (29 shown for the Residential Condominium and 2 shown for the Single Family House) shall be provided and each unit shall be designated at least one (1) on-site parking space; and
 - c. For the Residential Condominium, the front yard setback shall be five (5) feet to the terrace wall as shown on Attachment ____; the northerly side yard setback shall be graduated from 3 feet along Sheridan Street to 14'5" feet at the rear of the site with a deck within 2' of the property line and the southerly side yard setback shall range from three (3) to five (5) feet at the location of the surface parking all as more particularly shown on Attachment ____. The rear yard setback range shall be approximately 16' to 17'9".
 - d. The maximum lot coverage shall be no greater than 43.3% on the lot containing the Residential Condominium as shown on Attachment 1; the maximum lot coverage on the lot containing the Single Family House shall be maintained in accordance with the requirements of the R-6 zone.
 - e. The open space ration shall be no less than 25.2% of the land area of the lot containing the Residential Condominium as shown on Attachment 1; the open space ratio for the lot containing the Single Family House shall be no less than required under the R-6 zone.

Otherwise, the provisions of §14-139 through 14-140 (the R-6 Zone) of the Portland City Code shall apply to this development. Alterations and

improvements may be made to the Single Family House in accordance with the provisions of the R-6 Zone, but no change in use or the number of residential units in excess of one may be made to the Single Family House, except that home occupations shall be permitted therein in accordance with the provisions of the R-6 Zone. The conveyance of any property interest in the single family house shall contain a restriction on the residential use of the property to no more than one residential unit.

- 6. The **DEVELOPER** shall undertake the following:
 - a. The **DEVELOPER** shall deed to the City an easement for public access over the driveway shown on Attachment 1 for purposes of public pedestrian passage and access to the community gardens. The final location of the easement to be determined by the City and a deed executed at time of site plan approval; and
 - b. The installation of utilities stubs (water and electric) from the building to the boundaries of the adjacent City Owned property as shown on Attachment 3; and
 - c. The payment of a monetary contribution in the amount of \$23,000.00 to be allocated as follows: \$5,000 toward the implementation of the improvement project at the Washington Avenue/Walnut Street intersection; \$18,000 to be placed in an established Parks and Recreation fund to contribute to the cost of providing community improvements, such as trails, community gardens, park improvements, etc. in the vicinity of the development.
- 7. (The initial sale price of two of the twenty-one (21) units in the Residential Condominium will not exceed a total cost of \$200,000 (Two-Hundred Thousand Dollars) and there shall be an income and equity limitation for any future sale of those units to ensure affordability. The equity and income limitations will be determined by the City Department of Planning and Development in consultation with the applicant.
- 8. In order to preserve affordability of a least two (2) of the units in the Residential Condominium at least two units in the Residential Condominium shall be not more than 850 square feet, and shall not contain more than one bedroom, and shall be located generally in the eastern wing of the building and such units shall be subject to a restriction to be contained in the condominium documents that prohibits combining such units with any other unit in the condominium.
- 9. In the event the development described herein is not commenced within two (2) years from the date of this rezoning, or an additional one year if, in the sole discretion of the City Planning Department, it deems such extension to be

within 15 0 f

ESURGAN						
		Ce	ertificate o	f Desig	gn Appl	ication
From Design	ier:	TF	n Archite	ECTS /	DRICE	STRUCTUREL EN LINEERS
C C			4003		07.24	. 02
Date:	-		44701040	1 Iman	Imen	<u> </u>
Job Name:	-		anadum	17-24	<u>HP</u>	
Address of C	onstruction: _	_	35 GRE	21/22	SIDE	T JUL 2 LOW ME TON
						JUL 2 METON
			2003 Interna	tional Buil	ding Code	AL TOT
	Constru	ction	n project was design	ed to the build	ding code crite	ria listed below:
	18-	, '	2003		RZ/4	
Building Code		-	Use Group Clas	sification (s) _		
Type of Const	ruction	51	×			
Will the Structu	re have a Fire supp	ressio	on system in Accorda	nce with Section	n 903.3.1 of the	2003 IRC
Is the Structure	mixed use?	62	If yes, separated o	r non separated	or non separate	d (section 302.3)
Supervisory alar	m System?	6	Geotechnical/Soil	s report require	ed? (See Section	1802.2)
Stavesting 1 Dec	ign Calculations				ASCE 7.0	Live load reduction
	5		al members (106 t 106	11)	N/A	Roof <i>live</i> loads (1603.1.2, 1607.11)
M	_ Submitted for all st	ructur	ral members (106.1 – 106.)	[])	35 PSF	Roof snow loads (1603.7.3, 1608)
	on Construction I					Ground snow load, Pg (1608.2)
Uniformly distrib Floor Area U	uted floor live loads (se Lo	7603.11 ads S			35 PSF	If $P_g > 10$ psf, flat-roof snow load p_f
TYDIAN EI	h				1.0	If $P_g > 10$ psf, snow exposure factor, C_f
GF CORIDO	<u> </u>		PSF PSF		1.0	If $P_g > 10$ psf, snow load importance factor, T_{ij}
MECH, ERVIP.			PSF		1.0	Roof thermal factor, $G(1608.4)$
STORAGE		0	PSF		N/A	Sloped roof snowload, 7,(1608.4)
Wind loads (16			<u></u>		<u> </u>	
1609.1.1	_ Design option utilized	(1609.	1.1. 1609.6)		LIGHT FRAME O	Seismic design category (1616.3) HEAR WILL M Basic seismic force resisting system (1617.6.2)
100 MPH	_ Basic wind speed (1809				6.5 = R	Response modification coefficient, _{R/} and
10	_ Building category and					deflection amplification factor _{Cl} (1617.6.2)
<u> </u>	_ Wind exposure catego		ole 1604.5, 1609.5) " 09.4)		* E. L. F *	
-	aurgal pressure coeffici	ent (AS	SCE 7)		71.4 K	Analysis procedure (1616.6, 1617.5) Design base shear (1617.4, 16175.5.1)
JO PSF TYP.	Component and cladding	pressu	res (1609.1.1, 1609.6.2.2)		Flood loads (1	- 0
27 751	_ Main force wind pressure	•	•		_N/A	
Earth design d	ata (1603.1.5, 1614-	-			_N/A	_ Flood Hazard area (1612.3) _ Elevation of structure
<u>KJUL 7.UC</u>	Design option utilized				Other loads	
545=0.38 51=1	Seismic use group ("C Spectral response coef		-		NA	_ Concentrated loads (1607.4)
_D	Spectral response coef	ucient	s, als a adi (1015.1)		N/A	Partition loads (1607.5)
	- CIC CIRON (1013.1.3)					Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404
						UN CE ON BOOK & ROD POUNDS MAK

CONDENSING UN IB ON ROOF = 300 POUNDS MAX, PACKAGED ROOF TOP UN IT = 1,000 POUNDS MAK,

070981 13K	CU2 (
NOTES: N.R. — Not required N.A. — Not applicable $SI = R$	CO2 10AN HELEHTS
SPEC BOX (ADMINISTRATI	ON (Chapter 1)
Complete construction documents (106.1, 106.2)	Signed/sealed construction documents (106.1. State laws vary)
BUILDING PLANNING	G (Chapters 3, 4, 5, 6)
OCCUPANCY CLASSIF	FICATION (302.0-312.0)
Surgle Occupancy (302 1)	Incidental use areas (302.1.1)
Mixed Occupancy (302.3)	Accessory use areas (302.2)
BAS BENERAL BUILDING LIMI	TATIONS (Chapters 5 & 6)
Apply Case 1 to determine the allowable height and area an single occupancy or nonseparated mixed occupancies. Appl permitted types of construction for a building containing sep	
AREA MODIFICATIO	ONS TO TABLE 503
 o of Allowable tabular area. At (Table 503) o Increase for frontage (1/506.2) o Increase for automatic sprinklers. Is (506.3) Total percentage factor Conversion factor Total percentage factor Total percentage factor Total percentage factor CASE SINGLE OCCUPANCY OF 	Frontage (506.2) North East South West Total Frontage (F) Width of open space (W) = (506.2) (506.2) (10) (10) (506.2) (10) (
Using Table 503, identify the allowable height and area of the mixed occupancies. Construction types that provide an allowa area and allowable heights (as modified by Section 504) equal	single occupancy or the most restrictive of the nonseparated building
DETERMINE CONSTRUCTION TYPE	CHECK ALLOWABLE AREA (506.4)
Actual building area <u>76</u> , 757	Allowable area per floor (A_a)
Adjusted building area - Conversion factor	$\frac{3}{2} \times 1200 = 5600 \text{ H}^2$
Actual building height feet stories	Total floor area (all stories) 41, 736 ft ²
Allowable building height 60 feet 4 stories	Allowable floor area (all stories)
Permitted types of construction 54 4 UP	$\frac{3600}{\text{Allowable area per floor}} \times \frac{3600}{\text{number of stores}} = \frac{108100}{\text{ft}^2}$
Type of construction assumed 5.7	(A ₂) (maximum 3) Compliance verified (Single Occ. or Nonsep.)

HIGH-RISE BUILDINGS (403)

OTHER SPECIAL USE AND OCCUPANCY Automatic sprinkler system (403.2) Underground structures (405) Fire-resistance rating reduction (403.3) Motor vehicle related occupancies Automatic fire detection (403.5) (406, 508) Emergency voice/alarm systems Group I-2 (407) (403.6) Group I-3 (408) Fire department communication (403.7) Fire command center (403.8) Motion picture projection rooms (409) Elevators (403.9) Stages and platforms (410) Standby power (403.10) Special amusement buildings (411) Emergency power (403.11) Aircraft-related occupancies (412) Stairway doors (403.12) Combustible storage (413) Smokeproof exit (403.13) ATRIUMS (404) Hazardous materials (307.9, 414) Atrium use (404.2) Groups H-1, H-2, H-3, H-4, and H-5 (415)Automatic sprinkler system (404.3) Smoke control (404.4) Application of flammable finishes (416) Enclosure (404.5) Drying rooms (417) Standby power (404.6) Organic coatings manufacturing (418) Interior finish (404.7) Travel distance (404.8)

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

FIRE-RESISTANCE-RATED CONSTRUCTION (Tables 601 & 602 and Chapter 7)

-7-

Note: Entry in 1 indicates required rating in hours. NC indicates noncombustible construction required.

Construction classification (602)

COMBUSTIBILITY (602.2, 602.3, 602.4, 602.5, 603)

M ||R|

Exterior walls

Interior elements

Roof

FIRE-RESISTANCE RATINGS AND FIRE TESTS (703)

Ratings / Combustibility (703.2, 703.4) NONE

Alternative methods (703.3, 718, 720, 721)

BUILDING ELEN	MENTS (Table 601)
1_/	Structural frame (714)
	Interior bearing walls NECD
U U	Interior nonbearing walls
11	Floor construction (711)
<u>[]</u>	Roof construction (711)
EXTERIOR WAL	LS (507, Table 602, 704, 706.6)
	North East South West
Fire separation distance	4/ 14 3.5 14
Bearing	
Nonbearing	
SEI	E WAINER REGULSTS

A	
EXTERIOR WALLS (continued)	OTHER FIRE RESISTANT CONSTRUCTION
Opening protection (704.8, 704.12,	NOM Fire walls (705)
$\frac{1}{10000000000000000000000000000000000$	// Fire partitions (708)
(704.9, 704.10)	□ Smoke barriers (709)
Parapets (704.11)	NONR Smoke partitions (710)
FIRE BARRIERS (706)	Penetrations (712) NLLD
	Fire resistant joint systems (713) WCCD
Horizontal exits (706.3.4)	Opening protectives (715)
	Dampers (716)
Mixed occupancy and fire area separations (706.3.6, 706.3.7)	Concealed spaces (717)
SHAFTS (707)	Thermal and sound-insulating materials
<i>NONE</i> Exceptions (707.2)	(719)
Construction (707.3 - 707.14)	
INTERIOR FINIS	SHES (Chapter 8)
Smoke development (803.1)	Floor finish (804)
Flame spread (803.1)	Decorations and trim (805)
Non-textile finish (803.2)	
FIRE PROTEC	TION (Chapter 9)
AUTOMATIC SPRINKLER SYSTEMS (903) (Where required)	Additional required systems (Table 903.2.13)
Assembly (A-1, A-2, A-3, A-4, A-5) (903.2.1)	International Fire Code (IFC 903.2.13)
Educational (E) <i>(903.2.2)</i>	AUTOMATIC SPRINKLER SYSTEMS* (903) (Design)
Factory/Industrial (F-1) (903.2.3)	Shop drawings (106.1.1.1)
High-hazard (H-1, H-2, H-3, H-4, H-5) <i>(903.2.4)</i>	NFPA 13 system (903.3.1.1) 𝓜𝑘𝔅𝔅𝔅)
Institutional (I-1, I-2, I-3, I-4)	NFPA 13R system (903.3.1.2)
(407.5, 903.2.5)	NFPA 13D system (903.3.1.3)
Mercantile (M) (903.2.6)	Quick-response and residential heads (903.3.2)
Residential (R) (903.2.7)	Actuation (903.3.4)
Storage/Repair garage (S-1) (903.2.8)	Water suply (903.3.5)
Parking garages (903.2.9)	Hose connections (903.3.6, 903.3.7)
Windowless story (903.2.10.1) Rubbish and linen chutes (903.2.10.2)	Sprinkler monitoring and alarms
Buildings over 55 ft. high (903.2.10.3)	(903.4, 907.13)
Incidental use areas (302.1.1)	* Also see Fire Code Sprinkler Plan Review Record

ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING SYSTEMS (904)		Single/multiple station smoke alarms (907.2.10)
Installation (904.3)	NA	High rise buildings (907.2.12)
ŴŴ Wet-chemical systems (904.5)	<u>l</u>	Atriums (907.2.13)
Dry-chemical systems (904.6)		Other buildings/areas
Foam systems (904.7)		(907.2.11, 907.2.14 - 907.2.23)
Carbon dioxide systems (904.8)	FIRE ALARM A (Design)	AND DETECTION SYSTEMS (907)
Halon systems (904.9)		Residential smoke alarm power source
Clean-agent systems (904.10)		(907.2.10.2) A.E.C.D
Commercial cooking systems (904.2.1, 904.11)		Residential smoke alarm interconnection (907.2.10.3)
STANDPIPE SYSTEMS (905)		Location/Power supply/Wiring (907.3 - 907.5)
() * N D (7) () Installation standards (905.2)		Activation/Presignal/Zones
Building height (905.3.1)		(907.6 - 907.8)
Group A (905.3.2)		Alarm notification appliances (907.9)
Covered malls (905.3.3)		Detectors (907.10 - 907.12)
Stages <i>(905.3.4)</i>	<u> </u>	Monitoring (907.14)
Underground buildings (905.3.5)	EMERGENCY	ALARM SYSTEMS (908)
Helistops/heliports (905.3.6)	Nº IT	Detection system applicable
Hose connections and locations (905.1, 905.4, 905.5, 905.6)	SMOKECONT	(908.1 - 908.6) ROL SYSTEMS (909)
Cabinets (905.7)	NA	Where required (402.9, 404.4, 405.5,
Dry standpipes (905.8)		408.8, 410.3.7.2, 1019.1.8, 1024.6.2.1)
Valve supervision (905.9)		Design requirements (909.1 - 909.4)
PORTABLE FIRE EXTINGUISHERS (906)		Smoke barriers (909.5)
Pik PPU Required locations - IFC (906.1)		Pressurization method (909.6)
FIRE ALARM AND DETECTION SYSTEMS (907) (Where required)		Airflow method (909.7)
MFPA Construction documents (907.1.1)		Exhaust method (909.8)
/ Assembly (A-1, A-2, A-3, A-4, A-5)		Equipment/Power (909.10, 909.11)
(907.2.1)		Detection and control (909.12 - 909.18)
Business (B) (907.2.2)		Smokeproof enclosures (909.20)
Educational (E) (907.2.3)		Underground buildings (909.21)
Factory (F-1. F-2) (907.2.4)	SMOKE AND H	IEAT VENTS (910)
High-hazard (H-1, H-2, H-3, H-4, H-5) (907.2.5)	MR	Requirements (910.1 - 910.3)
Institutional (I-1, I-2, I-3, I-4) (907.2.6)		Mechanical alternative (910.4)
Mercantile (M) (907.2.7)		
Residential (R-1, R-2) (907.2.8, 907.2.9)		ND CENTER (911)
v		Features (911.1)

OCCUPANT NEEDS (Chapters 10, 11, 12)

MEANS OF EGRESS (Chapter 10)

OCCUPANT LOAD (1004.1.2 and Table 1004.1.2)

Occt.

load

 \mathcal{A}

n

C

Other

Total

39

3

occt. loads

 ∂

Sq.ft./

person

٦

Floor

Area

Location

157

VISAGE

20

1

CAPACITY OF EGRESS COMPONENTS (1005.1 and Table 1005.1)

Egress width (inch/occupant)

Stairways / 2

Other egress components _____

CAPACITY

Location	Stairways	Other egress components
ALC	2-44"	DORS 36 4
ABOYE)	DINCHES
157.	R	E CUIRED 44
<u>baay</u> d	NR	DERS SE 72INCHES COMMENTER JUL SHERN
	SAL	
	- P	cut y Strown 36
		36 () × 1
1576A	RAGE 1	14 - 20025 CK CX
IST L'	2175 (CK
	````	

TORAGE OK.

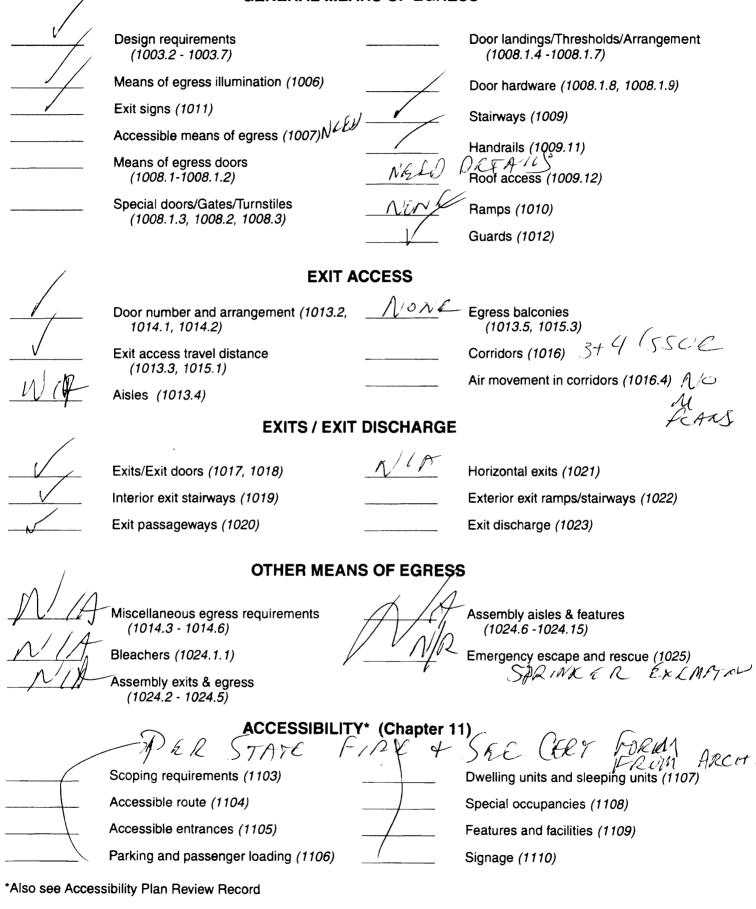
NUMBER OF EXITS (1018.1, 1018.2)

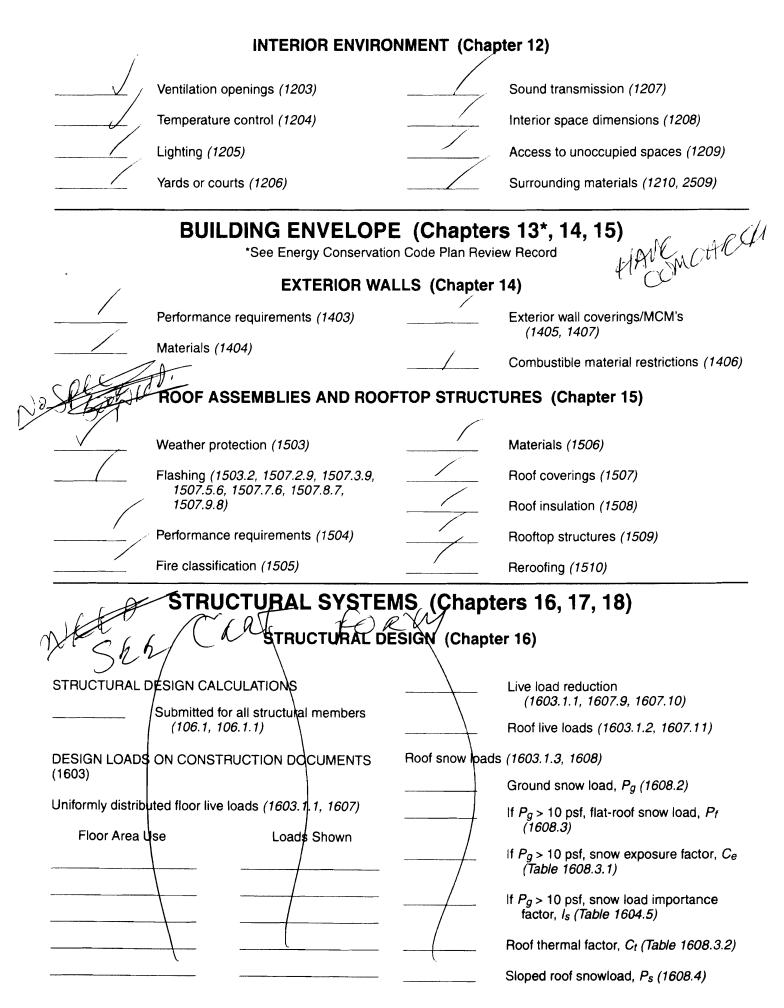
2ND

-	Location	Required	Shown
_	i	2	2
-	2	ð	2
-	3	5	2
-	4	2	2
_			
_			

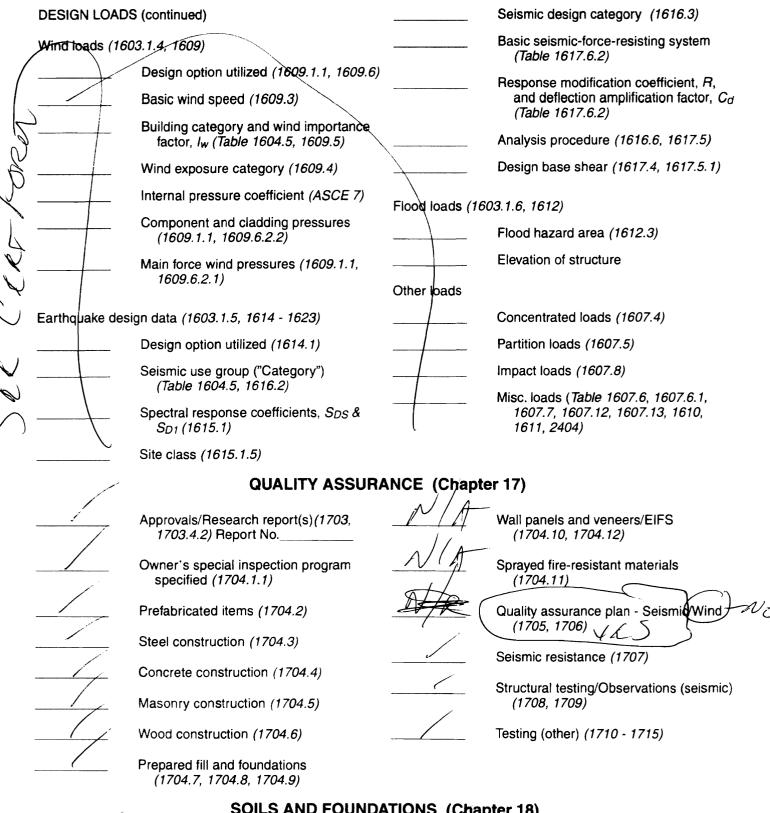
MEANS OF EGRESS (continued)

GENERAL MEANS OF EGRESS





-12-



SOILS AND FOUNDATIONS (Chapter 18)

Soils investigations/Reports (1802.1, 1802.6)

Soil classification (1802.3)

Excavation, grading and fill (1803)

Load-bearing values (1804)

Footings and foundations (1805)

Retaining walls (1806)

Dampproofing and waterproofing (1807)

Foundations (other types) (1808 - 1812)

-13-

STRUCTURAL MATERIALS (Chapters 19, 21, 22, 23)

CONCRETE (Chapter 19)

MASONRY (Chapter 21)

STEEL (Chapter 22

Plain and reinforced concrete design/construction standard specified (1901.2, 1908)

Construction documents (1901.4)

Minimum concrete strength (Table 1904.2.2[2])

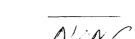
Design method, construction standard specified (2101.2)

Construction documents (2101.3)

Construction materials (2103)

Steel cable structures (2207)

Mortar type (2103.7)



tion specified (2104.3, 2104.4) Seismic design (2106)

Cold weather and hot weather construc-

Glass unit masonry (2110) MARKEN Fireplaces/Heaters/Chimneys (2111, 2112, 2113)



Structural steel design/construction standard specified (2205)

Open-web steel joist design/construction standard specified (2206)

Cold-formed steel design/construction standard specified (2209)

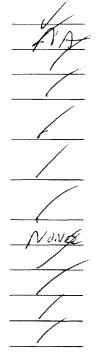
Light framed cold-formed steel design/ construction standard specified (2210)

Wind/seismic design of light-framed, cold-formed steel shear walls (2211)

Steel storage racks (2208) Ò

 \mathcal{O} (Design method option used (2301.2)

MATERIAL STANDARDS / CONSTRUCTION REQUIREMENTS (2303 - 2306)



Lumber (2303.1.1)

Wood I-joists (2303.1.2)

Glue laminated timbers (2303.1.3)

Wood structural panels (2303.1.4, 2304.6, 2304.7)

Fiber-, hard-, & particle-, boards (2303.1.5 - 2303.1.7)

Decay and termite protection (2303.1.8, 2304.11)

Structural composite lumber (2303.1.9)

Fire-retardant-treated wood (2303.2)

Hardwood plywood (2303.3)

Metal plate connected trusses (2303.4)

Joist hangers and connectors (2303.5)

Fasteners and fastening (2303.6, 2304.9, Table 2304.9.1)

WOOD (Chapter 23)



⁻ Heavy timber construction (2304.10)

Shear walls and diaphragms (2305, 2306)

CONVENTIONAL LIGHT-FRAME CONSTRUCTION (2308)

Limitations satisfied (2308.2)

Wind/Seismic requirements (2308.2.1, 2308.2.2, 2308.11, 2308.12)

Braced walls (2308.3, 2308.9.3)

Foundation anchorage (2308.3.3, 2308.6)

Floor joists (Tables 2308.8[1], 2308.8[2])

Wall studs (Table 2308.9.1)

Girders (Tables 2308.9.5, 2308.9.6)

Ceiling joists (Tables 2308.10.2[1], 2308.10.2[2])

Roof rafters (Tables 2308.10.3.[1] - 2308.10.3[6])

Roof uplift (2308.10.1)

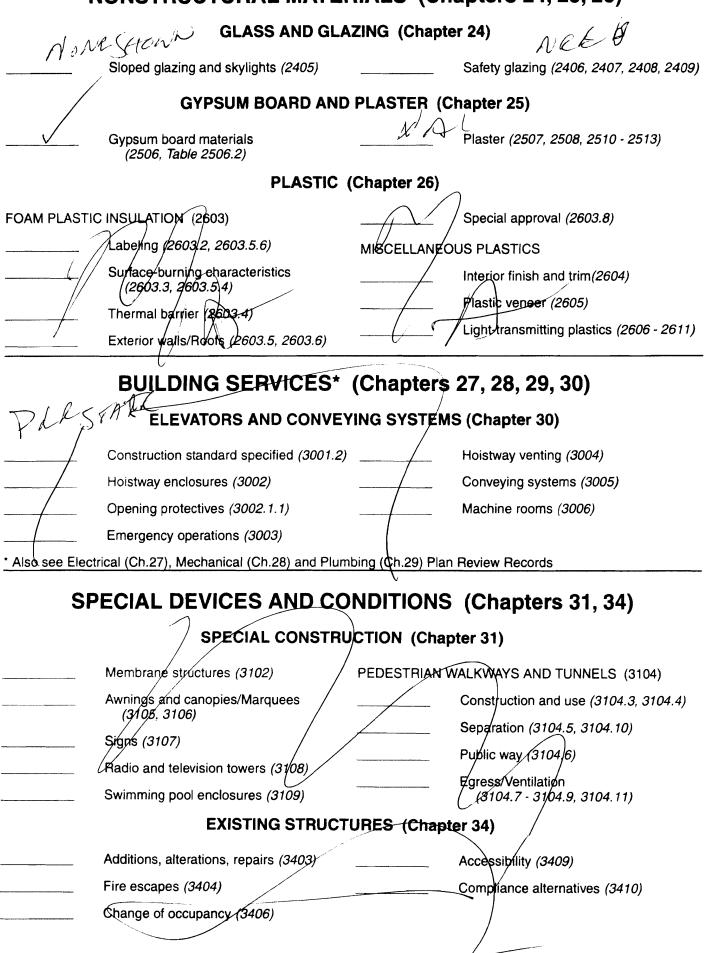
specified (1905.12,1905.13) Seismic design (1910)

Hot weather and cold weather curing

NED

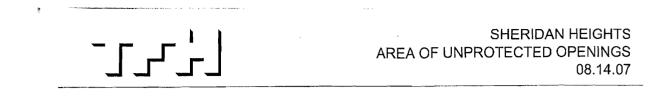
Slab provisions (1911)

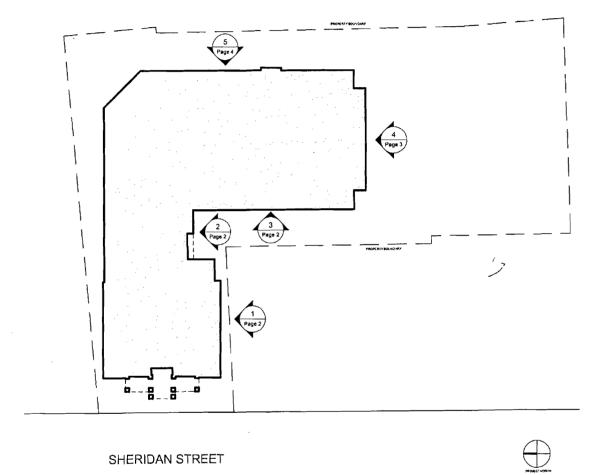
NONSTRUCTURAL MATERIALS (Chapters 24, 25, 26)



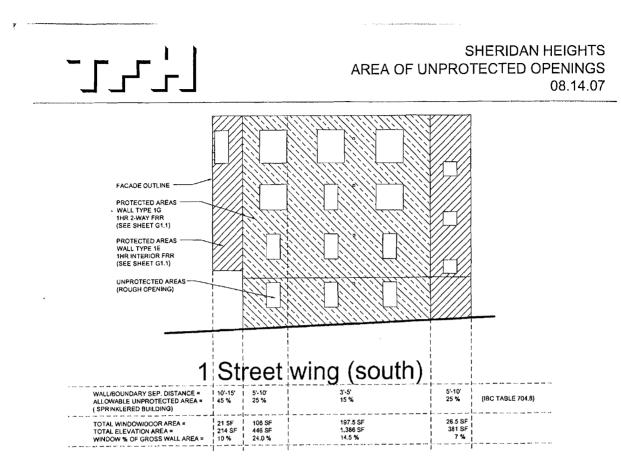
-15-

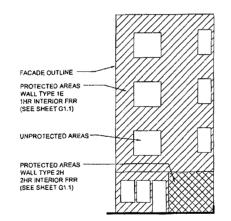
Page 1





KEY PLAN Page 1





2 Street wing (south)

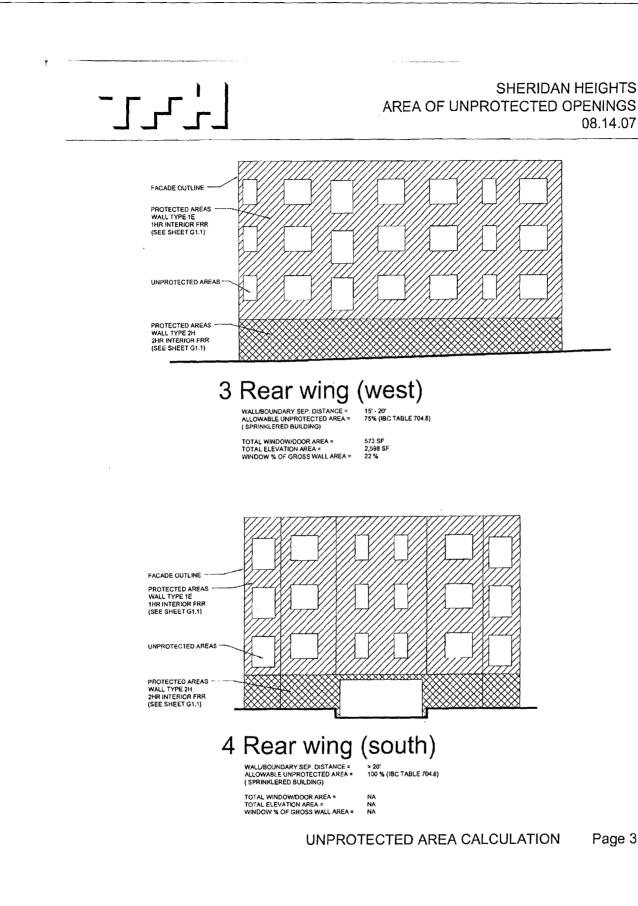
WALL/BOUNDARY SEP. DISTANCE = 10' - 15' ALLOWABLE UNPROTECTED AREA = 45 % (IBC TABLE 704.8) (SPRINKLERED BUILDING)

TOTAL WINDOW/DOOR AREA = TOTAL ELEVATION AREA = WINDOW % OF GROSS WALL AREA =

191

191 913 SF EA = 14.5 %

UNPROTECTED AREA CALCULATION Page 2



Page 3

Sheridan Heights 10.15.07

I've completed the review and have the following questions/ comments or need the following info:

TFH Responses in RED

My reponses are in caps next to the original questions

a) IMPORTANT>> The Building must be completely protected with a Full NFPA 13 System. {Please review the following code excerpts:

[F] 903.2.9 Group S-2.

An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 or where located beneath other groups.

[F] 903.3.1.1 NFPA 13 sprinkler systems. Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in Section 903.3.1.1.1. [F] 903.3.1.1.1 Exempt locations. Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment. 1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard. 2. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the building official. 3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours. 4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.

NFPA 13 sprinkler system will be provided

b) Do we access the building on the East entry if we're in a wheelchair, and is the route entirely accessible??

Accessible access to the building is through the South Entrance to the Elevator Lobby.

1) Is there a spec book for this project, one was not provided with the plans. THIS IS OK!!!

GS to address

19) Need Garage Ventilation specs and plans (M plans for everything!) I'LL NEED TO CHECK THE MECHANICAL CODE TO SEE IF THE MINIMUM CFM IS BEING PROVIDED, I DON'T HAVE A COPY HERE, I'LL CHECK IT AT CITY HALL TOMORROW

GS to address

20) Need a fire separation assembly penetration protection plans for all penetrations. SPEC BOOK SECTION 7841, THANK YOU

21) Need Standpipe details....also sprinkler plans when the time comes! STILL NEED

GS to address

22) No referenced standards for roofing classification, weather protection performance requirements etc...no spec book! SECTION 7 SPEC BOOK THANKS

23) I saw optional skylights, please provide specs and details. PLEASE PROVIDE INFORMATION THAT ESTABLISHES THAT THE WASCO "SPY" MEETS THE STANDARDS SET FORTH IN SECTION 2405

See attached Skylight Specification that refers to ASTM as well as AAMA standards for glazing.

Thanks,

Mike Nugent Consulting Plans Examiner City of Portland 2) The "Page 3" certification form was passed inessentially blank???? need one filled out. GOT IT!!

3) The exterior bearing walls for this project all need to be Rated as it is 5A construction, the same holds true for all interior bearing or shear walls, columns etc. Please provide these details with UL Listings. THIS IS FINE

4) Please confirm that the building will be protected with a full blown NFPA 13 sprinkler system. SEE ABOVE AND REDESIGN

NFPA 13 sprinkler system will be provided

5) No fire blocking or draft stopping (which may be moot if you're using the full 13 system) OK IF NFPA 13 SYSTEM

6) on page G1.1 you show alternatives to 2C which are not rated etc. You need to commit to the shaft wall, no alternatives. IF THE CORRECT ASSEMBLY IS USED IT IS FINE

7)We received the North elevation request for waiver for the % of unprotected openings, you failed to identify the other elevations and their percentages, It looks like they all have limitations as well, please provide all elevations and their percentages THIS IS FINE BECAUSE YOU WILL BE USING A FULL NFPA 13 SYSTEM, OTHERWISE YOU CANNOT CONSIDER THE OPENINGS AS PROTECTED>

8)Please provide exterior stair details, railings etc. THIS IS FINE

9)Accessible egress...1007 looks like we need to include the elevator, back up generator? I AGREE THAT THIS BUILDING IS TOO "SHORT" TO REQUIRE IT

10) Please provide compliance information for all doors that protect openings in fire separation assemblies (NFPA 252 or UL 10c as well as UL 1784 (smoke) and the elevator doors as well. YOUR SPEC BOOK DOES NOT INCLUDE THESE REFERENCED STANDARDS, PLEASE PROVIDE COMPLIANCE INFORMATION

Refer to Spec Section 08110-1.3-B which refers to NFPA 252.

I will instruct the contractor that all fire rated doors including the Elevator door will need to meet the requirements above as well.

11) It looks like we have HVAC gear stacked but not protected by a shaft. Please explain. THIS IS STILL NOT CLEAR REGARDING THE TYPE OF HVAC SYSTEM AND IF THERE ARE DAMPERS AND WHERE THEY WILL BE SPECIFICALLY. A NOTE STATING "FIRE DAMPERS WHERE REQUIRED " IS INSUFFICIENT> WE NEED THEM SHOWN ON THE PLANS> I LOOKED AT THE SPEC BOOK AND IT'S STILL NOT CLEAR TO ME WHETHER OR NOT THERE WILL BE THROUGHFLOOR PENETRATIONS OR INDIVIDUAL FORCED HOT AIR SYSTEMS IN EACH UNIT.

GS to address

12) The section of the third and fourth floor corridors that abut the flat roof are not protected and have windows. Please provide a code justification , (If these are bearing they need to be rated anyway --5A constr) IF WE HAVE THIS BREACH IN RATING, AREN'T WE EXPOSED FROM FIRE FROM THE FLAT ROOF AREA?

We resolved this Via Phone with you last week, no extra fire protection required.

13)Safety glass locations aren't clear on A7.0 please provide with the applicable class and testing standard. PLEASE PROVIDE BUILDING ELEVATIONS WITH SAFETY GLAZING LOCATIONS, DON"T WANT TO HAVE TO RETRO FIT THE BUILDING BECAUSE THE LOCATIONS WERE UNCLEAR...BEEN THERE DONE THAT.

Window type 'L' will be revised to be tempered as it occurs in stairwells, and types 'Q' and 'R' are adjacent to doors so they will be tempered.

14) The "M" series plans are not stamped and provide little detail, no damper locations NEED DETAIL!

GS to address

15) What is the plan for heating systems? PLEASE ELABORATE IN DETAIL

16)Need alternating tread specs and hatch details THE HATCH IS ONLY 11.25 SQ FT AND NEEDS TO BE 16 SQ.FT. THE THREADS RISERS ETC ARE FINE . DOES THE HANDRAIL MEET SECTION 1009.11, PLEASE PROVIDE CODE COMPLIANT HANDRAIL INFO?

The hatch size has been revised to a $3^{\,\prime}-0^{\prime\prime}$ x $5^{\,\prime}-6^{\prime\prime}$ (16.5 sqft.) Bilco Type SS-50.

The hatch dimension will increase in dimension away from the edge of roof so the 10'-4'' dimension to edge of roof will be preserved.

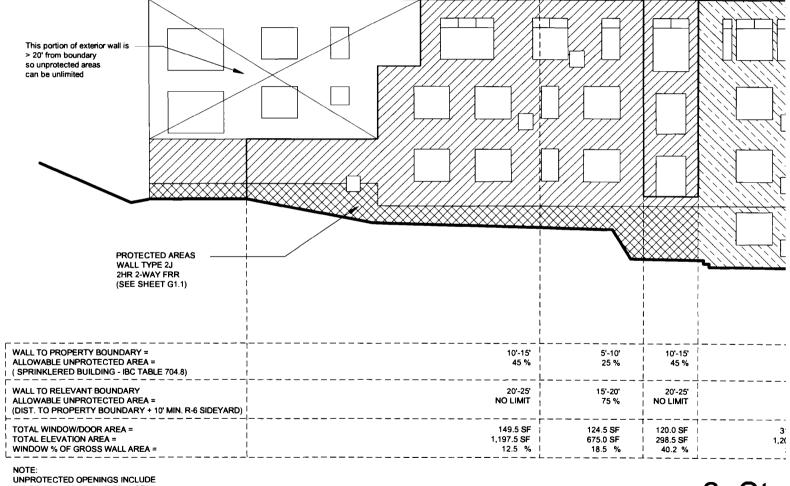
The Handrail provided is 1-1/2" in diameter and is 34 inches above the tread nosing, both of which meet IBC 1009.11

17)Need information that established compliance with applicable smoke and flame spread standards for the interior finishes as shown in Chapter 8. YOU WILL NEED TO ADVISE THE CITY OF THE FINAL CHOICE OF CARPETING AND PROVIDE INFO THAT COMPLIES WITH CHAPTES 8 PRIOR TO INSTALLATION.

GS to address

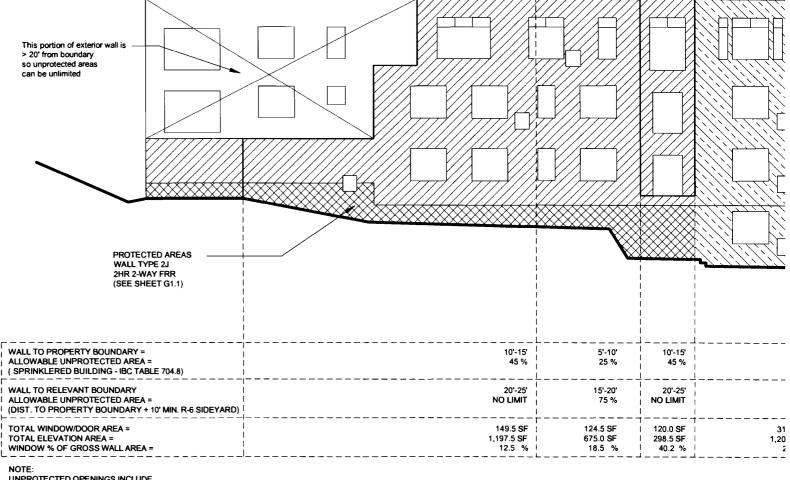
18)Please confirm that a supervisory alarm system in compliance with NFPA 72 will be installed and that a set of plans and separate permit will be submitted. NEED THIS STILL ... DID I MISS IT IN THE SPEC BOOK
SECTION 16700 IS SKIPPED IN MY SPEC BOOK

᠂᠘᠘



WINDOWS, DOORS & AIR TRANSFER OPENINGS (EG. BOILER VENTS) 6. Stre

╘╌┰╌



UNPROTECTED OPENINGS INCLUDE WINDOWS, DOORS & AIR TRANSFER OPENINGS (EG. BOILER VENTS)

6. Stre