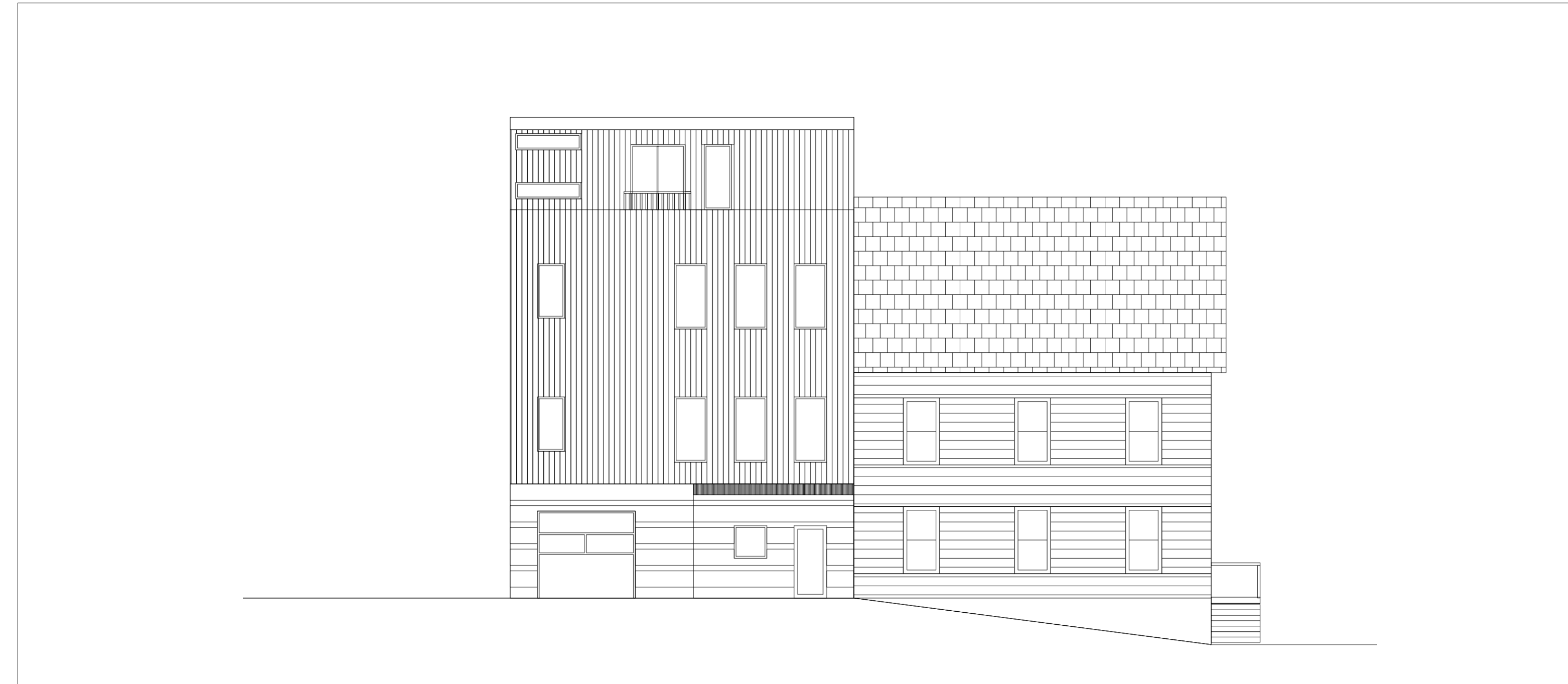


28 Federal Street 2 Family Attached Building

Portland, Maine

IBC Relevant codes	Reference	Discussion or Findings
Use Group	310	Mixed Use R-2 and S-2
Separation Walls	420.2	1 hour Separation Required
Horizontal Separation	420.3	1 hour Separation Required
Construction Type	Table 601	Primary Structural Frame =0 Bearing walls =0 Exterior =0 Interior =0 Nonbearing exterior per table 602 Floor construction and secondary members =0 Roof construction and secondary members =0
Building height and limitations	Table 503	Type V-B = 2 stories, 40' and 7000 sf. Floor area provided is less than allowable
Building Height Increase	504.2	Height =3 stories, 60' maximum height
Mezzanine provided for nit at 3 rd floor	505	See 3 rd floor plan for mezzanine area calculations
Single exit at mezzanine	505.3	Single exit used per 1015.1 exception, R-2 occupancy with sprinkler system accordance with section 903.3.1.2
Mixed use separation	Table 508.4	1 hour separation between R-2 and S-2
Exterior walls	Table 602	South Wall: 1 hour rated
Openings in exterior wall	Table 705.8	10% max opening with fire separation distance of 5' to less than 10' At the south wall elevation
Unlimited opening	705.8.1	Exception 2 is used for north, west, and east elevations based on Table 602, separation distance of 10' to less than 30' =0 hour for V-B.
Fire Barriers	707	Stair enclosure, elevator enclosure continuous wall assembly for height of shaft
Shaft Enclosure	708	Stairs and Elevator: 1 hour rated provided
Shaft Enclosure opening	708.7	Provide self or automatic closing doors
Shaft Enclosure at the top of the shaft	708.12	Stair shaft enclosure separated from stair to mezzanine by 1 hour rated construction
Fire Partitions	709	Provided between dwelling unit
Horizontal Assembly	712.3	1 hour rated floor/ceiling assemblies
Support of Horizontal Assembly	712.4	Exception 2: not required to be rated
Firestopping of penetrations	713	Contractor shall firestop all penetrations as required by IBC section 713
Fire Door Protection	Table 715.4	Shaft enclosure, exit passageway =1 hour Corridor walls as 2 nd floor =1 hour Exterior wall=3/4 hour
Fire Window Assembly	Table 715.5	Exterior wall =3/4 hour
Sprinkler system	903.2.8 903.2.10	Required. Sprinkler design/build by licensed contractor by separate permit
NFPA 13 R	9.3.9.1.2	Group R, 4 stories or less
Standpipe not required	905.3.1	3 story building with 3 rd floor less than 30' above the lowest level of fire department access
Fire extinguisher Required	906.4	Per floor
Manual Fire Alarm System not required	907.2.9.1	Less than 3 stories
Smoke Alarm Provided	907.2.11	Smoke alarm shall be photoelectric and installed per City of Portland Requirements
Occupant Load	Table 1004.1.1	First Floor: S-2 : 365+425=2.6 Second Floor: R-2: 450/200=2.25 S-2: 555/300=1.85 Third Floor: R-2 : 1005+332/200=6.7
Means of Egress Illumination	1006.3	Not required for a single exit
Stairway width	1009.1	3'-0" minimum; 3'-6" provided
Single Means of Egress	1021.2	20 dwelling units per floor with 50' travel distance with sprinkler system
Exit Access Travel Distance	Table 1016.1	250' allowed.; 49' provided
Corridor Ratings	Table 1018.1	1 hour
Exterior wall of exit stair rated	1022.6	Exit enclosure wall on west elevation to be 2 hour rated
2 nd emergent escape and rescue opening required in sleeping rooms by IBC	Table 1021.2	Egress windows required by Laws of the fire service, state of Maine for single exit building. Floor plans at all stories show egress windows at bedrooms
Type B unit	1107.6.2.1.2	Type B units not required for less than 4 dwelling units: See also IEBC 706.5
Sound Transmission	1207.2 1207.3	Minimum STC 50 at all and floor /ceiling separating dwelling units. Minimum IIC 50 at floor/ceiling separating dwelling units.
Interior Dwelling Space Dimensions	1208.2	7'-0" minimum ceiling eight at bathroom and storage room.
IEBC Relevant Code		
Alteration Level II	404	Work area less than 50 % of aggregated area
Sprinkler System	704.2.2	Not Required for work area less than 50% and occupant load less than 30
Fire Alarm	704.4.1.6	Not required per 907.2.9.1 for 3-story building
Smoke Alarm	704.4.3	Smoke alarm provide at dwelling units
Single Exit	705.3.1.1	9) single exit allowed with smoke proof enclosure for R-2 occupancy of any height with less than 4 dwelling units per floor
Type B dwelling units	706.5	Where 4 or more R-2 dwelling or sleeping units are being added, the requirements of Section 1107 of the IBC for Type B units and Chapter 9 of IBC for visible alarm apply only to the quantity of the space being added: 2 dwelling units are added as a new construction



Minimum Insulation Required (per IECC Table 402.1.1)
Climate Zone 6

Windows and doors U Factor	0.35
Ceiling/roof	R-30
Wood framed wall	R-13 Cavity, R-5 continuous
Floor	R-30
Slab	R-10 48" deep

NOTE: provide spray foam insulation to seal all rim locations. Spray foam at rims shall be as follows:

- Maximum 3/4" thick
- Density of foam shall be between 1.5 and 2.0 pcf
- The foam plastic shall have a flame spread index of 25 or less and an accompanying smoke-developed index of 450 or less when tested in accordance with ASTM E 84 or UL 723

NFPA 101 Relevant Codes	Reference	Discussion or Finding
Existing Apartment Building/ New Attached 2 Family		
Dwelling units permitted above non-residential occupancy (parking garage) when non-residential use has sprinkler system	30.1.2.3	The garage shall be be sprinklered in accordance with NFPA 13. The apartment building shall be sprinklered in accordance with NFPA 13R Sprinkler system shall be supervised
Occupant Load: 1 per 200 sf gross 1 per 300 sf for S-2	Table 7.3.1.2	First Floor: S-2 : 365+425=2.6 Second Floor: R-2: 450/200=2.25 S-2: 555/300=1.85 Third Floor: R-2 : 1005+332/200=6.7
2 Means of Escape from bedrooms and living rooms within dwelling units, provided by egress windows	30.2.1.2	NFPA13R Sprinkler eliminates requirement for egress window under 24.2.2.3 note: egress windows required by Laws of the Fire Service, State of Maine for single exit building
Exit Enclosure shall be 1 hour rated with 1 hour rated doors	30.2.2.1.2	Assumes sprinklered building
Single (stair enclosure) exit permitted	30.2.4.4	
Common path of travel: Unit door to stair enclosure	30.2.5.3.2	50' allowed
Dead end Corridor	30.2.5.4.2	35' allowed
Travel Distance to corridor door: within dwelling unit	30.2.6.2	125' allowed
Travel Distance to Exits: Unit door to stair enclosure	30.2.6.3.1	200' allowed
Illumination of Means of Egress	30.2.8	Lighting provided at corridors, exit enclosure, exit passageway, and exit discharge
Emergency Lighting, per requirements of 7.9	30.2.9	not required in building 3 stories or less
Vertical Openings 1 hour rated with 1 hour doors	30.3.1.1.4	
Protections from Hazards	Table 30.3.2.1.1	
Fire Alarm System.	30.3.4.1.2	Not required for apartment buildings less than 4 stories
Smoke Alarms	30.3.4.5	provided at all sleeping rooms and outside each sleeping room. Type and location of units shall be per requirements of the City of Portland

LAWS FOR THE FIRE SERVICE, STATE OF MAINE

any apartment building of 3 stories or less is permitted to have a single exit under the condition that the building is protected throughout by an approved automatic sprinkler system, meets the requirements of the applicable chapter of NFPA 101 and every sleeping room has a 2nd means of escape.

ACCESSIBILITY
This project has been design to comply with the requirements of the Maine Human Rights Act and applicable sections of ANSI ICC A117.1.

Interior Finishes: (NFPA)

Interior Wall and Ceiling Finish:

Interior wall and ceiling finish materials complying with shall be permitted as follows:
Exit Class A
Exit Access Corridors Class A or B
Other spaces Class A, B, or C

Interior floor finish:

Interior floor finish in exit enclosures and exit access corridors shall be not less than Class II.

List of Drawings

Introduction
COV1 Coversheet, code reviews
COV2 Coversheet, summary

Architectural

- A1.1 First Floor Plan
- A1.2 Second Floor Plan
- A1.3 Third Floor Plan
- A1.4 Mezzanine and Roof Plan
- A2.1 West Elevation
- A2.2 East Elevation
- A2.3 South and North Elevations
- A3.1 Section A
- A3.2 Section B
- A4.1 Details- Wall and Floor Types
- A4.2 Details- Stairs and Rails

Site

- X-1 - Existing Conditions Plan & Survey
- C-1 Site Plan
- C-2 Street Parking Diagram

C-3 Demolition Plan

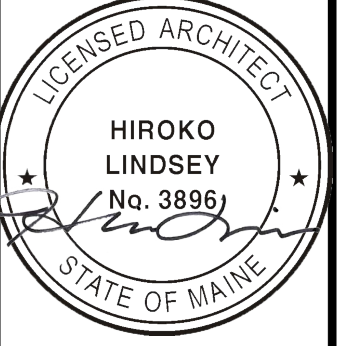
Structural

- S0.0 Structural Notes
- S1.1 Framing Plans
- S2.1 Structural Details

Life Safety

- LS1.1 Life Safety Plan and Travel Distances

Sunny Time Solar
PO Box 15372
Portland, ME
04112-4345
fvchase@yahoo.com



PROJECT NO. **2016**
PROJECT NAME **49 HANCOCK STREET PORTLAND, MAINE**

REVISIONS

1	- 3/29/16
2	- 7/11/16
3	-
4	-
5	-

PERMITTING DOCUMENTS

DRAWN BY **LRC**
SHEET TITLE **COVER**

ISSUE DATE **1/9/15**
SHEET SCALE

COV

1.0