



**7A** PORCH FOUNDATION PLAN  
SCALE 1/2" = 1' 0"

**7B** PORCH FRAMING PLAN  
SCALE 1/2" = 1' 0"

**7C** PORCH ROOF FRAMING PLAN  
SCALE 1/2" = 1' 0"

**CAST-IN-PLACE CONCRETE**

1. ALL CONCRETE WORK AND REINFORCING BAR DETAILS SHALL CONFORM TO THE LATEST ACI STANDARDS, ACI 301 AND 318.
2. FOUNDATION CONCRETE SHALL BE AIR-ENTRAINED, (5 TO 7%), AND HAVE A 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
3. PLACE NO CONCRETE WITHOUT REVIEW AND APPROVAL OF THE REINFORCING AND EMBEDDED ITEMS BY THE TOWN OR BY THE ENGINEER.
4. ALL CONCRETE MATERIALS, REINFORCEMENT, AND FORMS SHALL BE FREE OF FROST OR DEBRIS.
5. CONSOLIDATE ALL CONCRETE WITH A VIBRATOR OR OTHER MEANS RECOMMENDED BY ACI 301.
6. PROVIDE DIAGONAL REINFORCING BARS AROUND INSIDE CORNERS OF ALL OPENINGS IN CONCRETE.
7. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:  
CONCRETE CAST AGAINST EARTH 3 INCHES  
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER 1 1/2 INCHES <#6 BARS  
2 INCHES #6 OR GREATER
8. BACKFILL BOTH SIDES OF EXCAVATED SUPPLEMENTAL FOOTINGS SIMULTANEOUSLY TO PREVENT UNEVEN LATERAL LOADING.

**ROUGH CARPENTRY MATERIALS**

1. DIFFERING TIMBER MATERIALS ARE SPECIFIED AT VARIOUS LOCATIONS. MATERIAL GRADES SHALL CONFORM TO THE FOLLOWING SPECIES AND GRADES:  
  

<u>WALLS:</u>	S-P-F S STUD
<u>PRESSURE-TREATED TIMBER:</u>	SOUTHERN YELLOW PINE NO. 2 GRADING
<u>COMPOSITE LUMBER:</u>	VERSA-LAM BY BOISE-CASCADE, Fb=3,100 psi, E=2000ksi.
<u>LUMBER SHEATHING:</u>	ADVANTEK SHEATHING

ALL LUMBER AND TIMBER FRAMING MATERIAL SHALL BE STORED IN A PROTECTED, DRY AREA OFF OF THE GROUND AND GROUND FLOOR SURFACES. STORE MATERIAL OUT OF DIRECT SUNLIGHT TO PREVENT DIFFERENTIAL DRYING AND WARPING.
2. TIMBER FRAMING SCREWS SHALL BE MANUFACTURED BY FASTENMASTER, (413) 789 0252. TIMBER FRAMING SCREWS INCLUDE THE FOLLOWING TYPES AS INDICATED ON DRAWINGS:  
TIMBERLOK  
HEADLOK  
TRUSSLOK  
INSTALL ALL FASTENMASTER FASTENERS IN PRE-DRILLED HOLES, USING 1/8" PILOT BIT. AS AN ALTERNATE, PROPERLY COATED GRK RUGGED STRUCTURAL SCREWS, PROPERLY COATED, MAY BE USED.
3. JOIST HANGERS SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE, INC. ALL HANGERS SHALL BE Zmax PROTECTED, ATTACHED WITH Zmax 10d x 1 1/2" HANGER NAILS INSTALLED IN PREDRILLED HOLES AS REQUIRED OR DIRECTED BY ENGINEER.

**STRUCTURAL DESIGN CRITERIA**

1. MAINE UNIFORM BUILDING AND ENERGY CODE, 2009 EDITION, INCLUDING CONSIDERATION OF ASCE 7-05, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES".
- FLOOR LIVE LOADS: 100 psf STRENGTHENED FIRST FLOOR AREAS
- WIND LOAD: PER IBC SECTION 1609.0/ASCE 7-02 CHAPTER 6
- |                                |           |
|--------------------------------|-----------|
| BASIC WIND SPEED, (3 SEC GUST) | 1090 mph  |
| IMPORTANCE FACTOR Iw           | 1.10      |
| EXPOSURE CATEGORY              | C         |
| BUILDING CLASSIFICATION        | II        |
| VELOCITY PRESSURE COEF. Kz     | 0.70      |
| TOPOGRAPHIC PRESSURE COEF Kzt  | 1.03      |
| DIRECTIONALITY FACTOR, Kd      | 0.85      |
| VELOCITY PRESSURE qz           | 25.32 psf |
| CIC PRESSURE                   | -56 psf   |
- SNOW LOAD: PER ASCE 7-05, CHAPTER 7:  
GROUND SNOW LOAD Pg 60 PSF (FIGURE 7-1)  
EXPOSURE FACTOR Ce 1.0 (TABLE 7-2)  
THERMAL FACTOR Ct 1.2 (UNHEATED, TABLE 7-3)  
IMPORTANCE FACTOR Is 1.0 (CATEGORY II, TABLE 7-4)
- FLAT ROOF SNOW LOAD 50.4 PSF  
DRIFTED SNOW LOADS AND DRIFT PER SECTION 7.6 OF ASCE 7-05

**STRUCTURAL DESIGN CRITERIA (CONTINUED)**

- SEISMIC LOAD: IBC SECTION 1615.0; EARTHQUAKE DATA PER SECTION 1616.3:
- |   |               |
|---|---------------|
| SEISMIC USE GROUP                                 | II            |
| OCCUPANCY IMPORTANCE FACTOR, Ie                   | 1.0           |
| SHORT-PERIOD ACCELERATION Ss                      | 0.32g         |
| 1.0 SECOND ACCELERATION S1                        | 0.10g         |
| SITE CLASSIFICATION SOIL TYPE                     | D             |
| MAXIMUM CONSIDERED EQ. ACCEL. PARAMETER Fa        | 1.53          |
| MAXIMUM CONSIDERED EQ. ACCEL. PARAMETER Fv        | 2.40          |
| SHORT PERIOD ACCELERATION (ASCE 9.4.1.2.4-1, Sms) | 0.49g         |
| 1.0 SECOND ACCELERATION (ASCE 9.4.1.2.4-2, Sm1)   | 0.192g        |
| SHORT PERIOD DESIGN SPECTRAL RESPONSE ACC.        | 0.326g, SDC B |
| 1.0 SECOND DESIGN SPECTRAL RESPONSE ACC.          | 0.128g, SDC B |

ENGINEER OF RECORD  
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OFFICE ADDITION  
61 INDIA STREET  
PORTLAND, ME

Drawing:  
**PROPOSED PORCH  
RECONSTRUCTION PLANS**

Scale: 1/4" = 1'-0"

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**A7.001**