

# McCain RESIDENCE

## 45 Summer St. Portland Maine 04102

Drawing List	Building Information
A1 Cover Sheet/General Notes	Basement 526 sf
A2 Building Elevations	Garage 336 sf
A3 Floor Plans	First Floor 526 sf
A4 Floor Plans	Second Floor 867 sf
A4 Sections and Details	Third Floor 867 sf
	Building Height 30'-0"

### Code Requirements

- R101.2 Scope  
Single Family Residence
- R301.2.3 Snow Loads  
The ground and roof snow load for this region is 60#/sf&42#/sf.
- R301.2.4 Floodplain Construction  
The site of this building is not located in a floodplain
- R301.5 Live Load  
The building has been designed to support the live loads from table 301.5
- R301.6 Roof Load  
This building has been designed to support the snow loads of 42#/sf
- R310 Emergency Escape and Rescue Openings  
Every living room and sleeping room in this residence has been designed with an emergency escape window or door as required.

**R311 Means of Egress**  
The means of egress for this residence have been designed to meet the requirements of this section

**R311.2.2 Under Stair Protection**  
The accessible space beneath the stairs will be sheathed with min ½" GWB.

**R311.3 Hallways**  
Holloways are a min. 36" wide  
Stairways are a min. 36" wide

**R311.5 Stairways**  
Riser heights are a max. 7-3/4"  
Treads are a min. 10" wide  
The landing width is at least as wide as the stairway and is a min. 36" wide in the direction of travel.

**R311.3.6 Handrails**  
Handrails will be installed on a least one wall of each stairway and shall be 34" to 38" high as measured above the nosing.

**R312 Guards**  
Guards at porches, open sides of stairs and balconies shall be 42" high and no opening in the rail are more than 4"

**R502 Wood Floor and Roof Trusses**  
By: Aroostook trusses or similar

**Fire Sprinkler**  
An automatic residential fire sprinkler system will be installed in the house. A state-licensed sprinkler contractor, with permitting through the Office of State Fire Marshall, will install a system that meets the National Fire Protection Association 13D standard

**Heating System**  
The house will have either a modulating condensing boiler, direct vent natural gas, or two mini-split electric heat pumps, with a roof-mounted photovoltaic system of 20 panels, which would add 3 psf dead load.

**R302.5.1 Opening Protection**  
The doors opening between the garage and (a) the entry hall and (b) the storage room will be 20-minute, fire-rated steel doors, self closing.

**R308 Safety Glazing**  
Each pane of glazing installed in hazardous locations as defined in Section R308.4 will have a manufacturer's designation specifying who applied the designation, designating the type of glass and the safety glazing standard with which it complies.

**R403.1.6 Anchor Bolts**  
All pressure treated sill plates will have 1/2" anchor bolts spaced a maximum of 6' on center, extending at least 7" into concrete. There will be a minimum of two bolts per plate section, with one bolt not more than 12" or less than seven bolt diameters from each end of the plate section.

**R403. R405. R506 Concrete Foundations**  
All exterior walls will be supported on continuous solid concrete footings of sufficient design to accommodate all loads according to Section R301, and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings will be supported on undisturbed natural soils or engineered fill. Foundation walls will be waterproofed from the top of the footing to the finished grade. Washed gravel or crushed stone and perforated pipe will be installed at the area to be protected, and will be discharge by gravity into an approved drainage system. The gravel will extend 12" beyond the outside edge of the footing, and 6" above the top of the footing, covered with an approved filter membrane material. The foundation walls will be waterproofed from the top of the footing to the finished grade with a 60 mil solvent-free liquid-applied synthetic rubber.

**R502.2 Deck Construction**  
The rear 4x8' balcony will be constructed in accordance with provisions of Section R302. Based on the recommendations of Board Panel the balcony will be freestanding and independent of the house itself.

**R905 Roof Covering**  
Roof will be covered with Duro-Last thermoplastic vinyl roof membrane or equivalent in accordance with provisions of this section and the manufacturer's installation instructions.

**R603 Headers**  
Refer to table R603.6 for the required size of opening headers

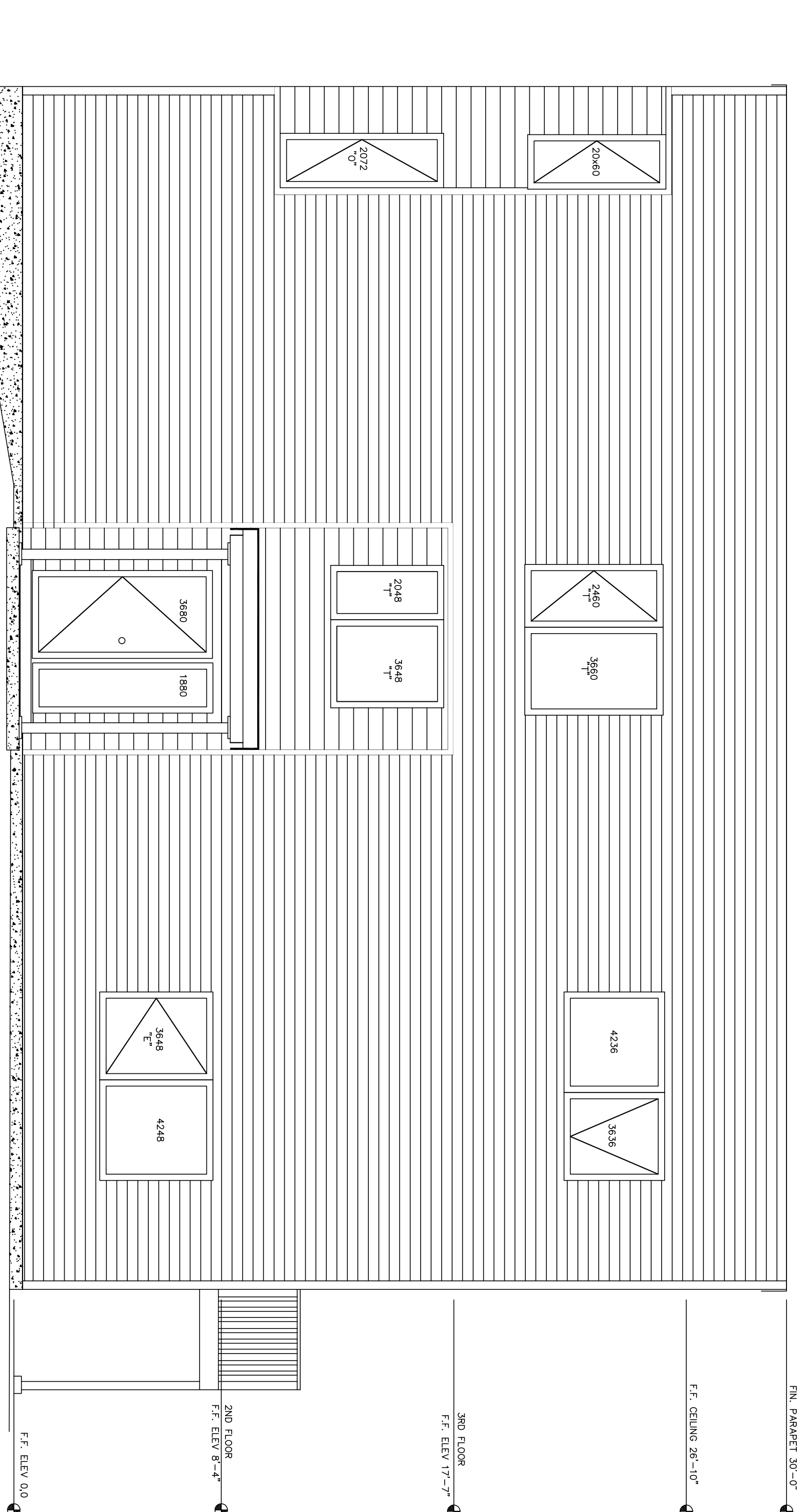
**R602 Wood Fastening**  
Refer to table R602.3 for wood fastener requirements

**R313 Smoke Alarms**  
Smoke alarms shall be installed:  
in each sleeping room  
outside each sleeping area.  
On each additional story, including the basement  
Carbon Monoxide monitors shall be installed in each area giving access to bedrooms.

Alarms shall be installed per NFPA 72

**R315 Flame Spread and Smoke Density**  
Finishes shall have a flame spread classification of no greater than 200 and a smoke-developed index of no greater than 450.

**Chapter 11 Energy Efficiency**  
Roofs shall have a min. rating of R-38 (R60 ACTUAL)  
Exterior walls shall have a min. rating of R-21(R-34)  
Floors above garage spaces shall have a min. rating of R-21(R-54)  
Floors above basement spaces shall have a min. rating of R-21  
Windows shall have a U-factor of 0.35 (0.21)



**NOTE:**  
The house will use structural insulated panels (SIPs) for roof and exterior walls, manufactured and engineered by Foard Panel of West Chesterfield, NH, or a comparable manufacturer. For applications falling within the parameters of the IRC Section R613, the stamp of a licensed engineer is not required for code approval in jurisdictions that have adopted the IRC. The acceptance of SIPs into the IRC recognizes structural insulated panels as equal to other building systems in the Residential Code. All floors will be designed and constructed in accordance with R503.2.1.1 Sheathing requirements and R602.3 fastener requirements. Roof and exterior wall construction design, construction and fasteners will follow IRC R613 and other guidelines specific to SIPs.

**NOTE:**  
THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR LOCAL CODE COMPLIANCE. ALL DIMENSIONS AND NOTES ARE BASED ON THE CLIENT'S PROVIDED INFORMATION. NO CLAIMS OR WARRANTIES ARE MADE BY THE ARCHITECT OR ENGINEER FOR THE ACCURACY OF THE INFORMATION PROVIDED BY THE CLIENT. THE ARCHITECT AND ENGINEER ARE NOT RESPONSIBLE FOR ANY CONSTRUCTION DEFICIENCIES OR DAMAGES TO THE CLIENT OR THIRD PARTIES. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL BUILDING DEPARTMENT. THE ARCHITECT AND ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR ANY DEFICIENCIES OR DAMAGES TO THE CLIENT OR THIRD PARTIES AND/OR REVISIONS MADE TO PLANS BY CLIENT AND/OR CONTRACTOR.

McCain Residence  
45 Summer St.  
Portland, Maine 04102

**ACADWORX**  
ARCHITECTURAL DRAFTING SERVICES  
54 ROCKY HILL TRAIL, WINCHAM, MAINE 04092  
P. 207-878-8511 C. 207-415-5065

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2.	
REVS:	
CODE:	
TOWN:	Portland
DATE:	04-10-13
SCALE:	AS NOTED
DESIGNED:	SSA
DRAWN:	SSA
TITLE:	COVER SHEET GENERAL NOTES
FILE:	
SHEET:	A-1