



# Town of Fountain Hills Building Safety Division One and Two Family Residential Plan Submittal Check List

**Fees:** Building Permit A/C -\$0.75/ sq.ft.    NON A/C -\$0.45/ sq.ft.  
**Development Fees:** Single-Family Dwelling Unit - \$1,601.00

Landscape \$420.00

**TABLE R301.2 (1)  
CLIMATE AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD	WIND SPEED (mph, 3-sec. gust)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM				WINTER DESIGN TEMP	ICE SHIELD UNDER-LAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
			Weathering	Frost line depth	Termite	Decay					
0 psf	115	B	Negligible	12"	Moderate to Heavy	None to Slight	34° F.	No	Varies	0	69° F.

## Minimum Plan Submittal Requirements

- Project description.** Identify and describe the work to be included in this permit.
- Address and legal description.** Indicate on the drawings the correct and complete address and legal description.
- Site plan.** Indicate the location of the proposed building on the lot, including distances from property lines and any other building(s) on the lot.
- Square footage summary.** Provide a square footage summary for each of the following: livable, garage, and covered patios, porches, storage and mechanical. If an addition, include existing square footages.
- Plans.** Provide **Two** engineered site plans and **two** sets of construction drawings, with a maximum sheet size of 24" x 36. The preferred scale is 1/4" = 1'-0," but a scale of 3/16" = 1'-0" may be accepted. Indicate the scale and provide a North arrow. Minimum of 30:1 scale on site plans.
- Engineering two copies.** Engineering, such as a lateral analysis for shear, retaining and gravity when required, shall be sealed, signed and dated by an architect or engineer registered in the state of Arizona in accordance with the applicable state statutes.
- Landscape plans, NOI** Notice of intent and **Erosion** control plans required. <http://fh.az.gov/DocumentCenter/View/3490>
- Floor Plan,** Identify all rooms and dimension.
- Special inspection.** If Special inspection is required for this project. Please complete Town forms.
- Manufacturer's installation instructions.** Manufacturer's installation instructions listed appliances, components or specialized systems, may be required to obtain approval.
- Automatic Fire Sprinklers are required.** Submit plans separately. **Note** on house plans Fire Sprinklers are required.
- Provide** Window and Door Schedules and Identify Safety Glazing, Emergency Escape and sill heights.
- Unsupported** glazing requires an engineered design with details.

- Provide** stair details showing, width, headroom, treads, risers, handrails, Guards (guardrails).

**Foundations**

**Chapter 4**

- Soils Report.** Where footings will bear on compacted fill material a report prepared by a soils engineer or civil engineer is required.
- Footing** details, width, thickness, reinforcement.
- Stem wall** type, thickness, height, reinforcement and Holddowns.

**Floors**

**Chapter 5**

- Provide** floor-framing plans showing complete floor system. Specify size and spacing of all framing members. Show all post locations and sizes, holddowns, headers, beams, hangers and ties. Details and notes may be necessary.

**Wall Construction**

**Chapter 6**

- Wall bracing.** Label all prescriptive braced wall lines and alternate braced wall panels on the floor plan.
- Lateral analysis'** is required when the structure does not comply with prescriptive braced wall criteria. The lateral analysis shall be prepared by an Arizona-licensed Architect or Engineer. Transfer the resulting specifications from the analysis to the foundation, framing and floor plans, details, etc.
- Building and Wall Sections.** Show size, height, spacing, insulation, interior and exterior finishes, flashing, Weep screed, Weather-resistive barrier, Stone and masonry veneer.
- Garage-dwelling separation.** Penetration protections

**Roof-Ceiling Construction**

**Chapter 8**

- Truss** calculation may be a deferred submittal if noted on the plans.
- Label** all beams and headers, show all Truss to wall truss to truss and beam connections.
- Provide** details for Uplift resistance.
- Show** Roof drains with secondary drains or scuppers.
- Roof ventilation.** Specify vented or un-vented, if vented provide calculation and details. Show number and locations of all vents. Patios and garages require ventilation.

**Energy Efficiency**

**Chapter 11**

**BUILDING THERMAL ENVELOPE**

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT								
CLIMATE ZONE	FENESTRATION U-Factor	Skylight U-Factor	GLAZED FENESTRATION SHGC	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	SLAB VALUE & DEPTH
<b>2-B</b>	<b>0.40</b>	<b>0.65</b>	<b>0.25</b>	<b>38</b>	<b>13</b>	<b>4/6</b>	<b>13</b>	<b>0</b>

- Plans shall include notes and detail for all Mandatory provisions of Chapter 11 Energy.
- Specify and detail all mandatory items on building sections, floor plans, door and window schedules, electrical, plumbing and mechanical pages, or provide a separate Energy page.

**MANUAL "J" TABLE 1A  
OUTDOOR DESIGN CONDITIONS FOR THE UNITED STATES  
(PHOENIX)**

Elevation Feet	Latitude Degrees North	Winter	Summer					
		Heating 99% Dry Bulb	Cooling 1% Dry Bulb	Coincident Wet Bulb	Design Grains 55% RH	Design Grains 50% RH	Design Grains 45% RH	Daily Range (DR)
<b>1133</b>	<b>33</b>	<b>37</b>	<b>108</b>	<b>75</b>	<b>-21</b>	<b>-14</b>	<b>-8</b>	<b>H</b>

- Provide two copies of Manual-J, Manual-S and Manual-D Calculations. Mechanical Engineers calculations are an approved alternate.
- Provide a mechanical page that incorporates the data from the supporting documents into a duct layout with all ducts and register sizes. Put the exact make and model numbers of HVAC equipment on the plans from Manual-S.
- Provide Whole house mechanical ventilation design details. Note the required CFM and the method of control.

**Fuel Gas**

**Chapter 24**

- Gas pipe sizing.** Provide a gas piping schematic for all gas appliances, including piping type, size, length and Btu hr/ cubic foot rating of all gas-fired equipment.

**Plumbing**

**Chapter 25-32**

- Appliance and fixture locations.** Designate the location of the water heater, furnace, kitchen and laundry appliances and other fixtures.
- Show Sumps, ejectors and Back water valves.** Provide installation specifications from the manufacturer.

**Electrical**

**Chapter 33-42**

- Electrical plan.** Provide an electrical plan indicating the location of receptacles, switches, lights, meter box and size, smoke detectors, carbon monoxide alarms, exhaust fans, GFCI-protected receptacles, AFCI circuits etc.
- Provide** electrical load calculation for all dwelling units include pool, spa, heaters and elevators.
- Provide** an electrical One-Line diagram.
- Lighting** cut sheets for outside fixtures to verify Dark Sky compliance.
- Energy** Specify that no less than 90% of all fixtures will be high efficacy.