



## RESIDENTIAL PLAN REVIEW CHECKLIST

STAFF USE ONLY		
PERMIT #:	PARCEL #:	DATE:
ADDRESS:		
EFFECTIVE CODE: INTERNATIONAL RESIDENTIAL CODE (IRC/IBC) 2018		
<a href="#"><u>SPECIAL INSPECTION CERTIFICATE</u></a> REQUIRED	GEOTECHNICAL – SOIL STRUCTURAL	

GENERAL		
	In areas likely to have expansive, compressible, shifting, or other unknown soils characteristics, the building official shall require a soil test to determine the soil's characteristics at a particular location. The test shall be made by an approved agency using an approved method. Soils Report Required for all construction containing livable area.	<b>IRC Section:</b> R401.4
	<b><u>Provide Site Plans and Construction Plans, max. size of 24 inches x 36 inches.</u></b> The building plans should be drawn to a scale of $\frac{1}{4}$ inch = 1', however a scale of $\frac{3}{16}$ inch = 1' may be accepted. Indicate the scale and the direction of North on each page/sheet.	<b>IRC Section:</b> R106
	Indicate the location of any yard lines, including electric run, the water meter size and location or well location, water service supply size, sewer or septic system location with size of line and any gas lines and meter location.	<b>IRC Sections:</b> P2901, P3001 G2415
	Swimming pools and spas are to be by separate permit. Notate on plan if shown.	Requirement
	Provide a square footage summary for each of the following: <i>Livable, garage, covered patios and porches, accessory buildings, decks.</i>	<b>IRC Section:</b> 106.1
	Plans shall list the current adopted building codes in force as applicable to the project.	<b>IRC Section:</b> R106.1.1
	Is a fire hydrant located within 400 feet of the property? Show hydrant location and provide lineal foot measurement to property.	<b>2018 IFC Section:</b> C102

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## FOUNDATION

	Footings details (interior and exterior) shall be located on the foundation sheet or the detail sheet and shall be cross-referenced to the foundation plans. Specify depth and size of all footings and pads. Show all reinforcing steel (vertical and horizontal).	<b>IRC Section:</b> R401
	Foundation plates and sills shall be bolted to the foundation with minimum $\frac{1}{2}$ inch bolts at 6 feet or less o.c. and embedded a minimum 7 inches into the foundation. Add note or otherwise indicate on plans.	<b>IRC Section:</b> R403.1.6
	All plates (interior and exterior, load bearing and non-load bearing) shall be pressure treated or foundation grade redwood. Add note or otherwise indicate on plans.	<b>IRC Section:</b> R403.1.6
	All wood columns shall be pressure treated unless supported on a 1-inch pedestal. Add note or otherwise indicate on plans.	<b>IRC Section:</b> R317.1.4
	Footings shall be on undisturbed soil or approved fill. Add note or otherwise indicate on plans.	<b>IRC Section:</b> R403
	Concrete and masonry foundation walls shall extend above the adjacent, finished grade a minimum of 6 inches.	<b>IRC Section:</b> R404.1.6
	Required holdowns, as specified on lateral design or as required for all alternate braced wall panels, shall be shown on the foundation plan.	<b>IRC Section:</b> R602.10
	The area of the garage or carport floor used for parking shall be sloped toward a drain or the main vehicle entry door.	<b>IRC Sections:</b> R309.1 R309.2

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Revised 05/08/25

FLOOR PLAN		
	Label and dimension all rooms and spaces.	<b>IRC Section:</b> R304
	Reference ceiling height of all rooms and areas. $\frac{5}{8}$ inch gypsum board or $\frac{1}{2}$ inch sag-resistant gypsum board is required on lids (ceilings) if support is 24 inches o.c. and water-based treatment is used.	<b>IRC Sections:</b> R304 & 305 Table R702.3.5
	There shall be a floor or landing on each side of each exterior door. The width of the landing shall not be less than the door served with a minimum dimension of 36 inches measured in the direction of travel. May be $7\frac{3}{4}$ inches lower than threshold if the door does not swing over the landing.	<b>IRC Section:</b> R311.3
	An attic access shall be provided to attic areas that exceed 30 square foot and have a vertical height of 30 inches or greater. It shall not be less than 22 inches by 30 inches with 30 inches minimum unobstructed headroom in the attic space at some point above the access opening.	<b>IRC Section:</b> R807.1
	Openings between the garage and residence shall be equipped with solid wood doors not less than $1\frac{3}{8}$ inch thick solid or honeycomb steel doors not less than $1\frac{3}{8}$ inch or shall be 20-minute fire-rated doors and shall be maintained self-closing and self-latching.	<b>IRC Section:</b> R302.51
	The garage shall be separated from the residence by not less than $\frac{1}{2}$ inch gypsum board applied to the garage side. Garage beneath habitable rooms shall be separated from all habitable rooms above by not less than $\frac{5}{8}$ inch Type X gypsum board.	<b>IRC Section:</b> R702.3 Table R302.6
	Appliances having an ignition source shall be elevated such that the source of ignition is not less than 18 inches above the floor in garages. <b>Exception: Listed flammable Vapor ignition resistant appliances.</b>	<b>IRC Section:</b> M1307.3
	A gas or liquid fuel fireplace shall have dampers that remain permanently open. The installation of a permanent gas or electric log insert will be required; a gas or electrical stub out for future installation of a log will not be acceptable.	<b>A.R.S.</b> 9-500.16 G2432.2
	All habitable rooms shall be provided with aggregate glazing area of not less than 8 percent of the floor area of such rooms. The minimum openable area to the outdoors shall not be less than 4 percent of the floor area being ventilated.	<b>IRC Section:</b> R303.1
	Every grade floor sleeping room with habitable space shall have a least one window (min. 5 sf clear opening), min. opening width of 20 inches, min. opening height of 24 inches and a sill height shall not be more than 44 inches; or provide exterior door for emergency egress. 2 <sup>nd</sup> floor and above require 5.7 sq. ft. and	<b>IRC Sections:</b> R310.1 R310.2

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	basement window wells require 9 sq. ft.	
	There shall be a floor or landing at the top and bottom of each stairway. The width of each landing shall not be less than the stairway served. Every landing shall have a minimum dimension of 36 inches measured in the direction of travel.	<b>IRC Section:</b> R311.7.6
	The maximum riser height shall be $7 \frac{3}{4}$ inches and minimum tread depth shall be 10 inches. The minimum headroom shall not be less than 6 feet 8 inches measured vertically from the slope plane adjoining the tread nosing or from the floor surface of the landing or platform.	<b>IRC Sections:</b> R311.7.2 R311.7.5
	Four or more stair risers shall have at least one handrail continuous the full length of the stairs and have min. and max. heights of 34 inches and 38 inches, respectively. The handgrip portion shall have a circular cross section of $1 \frac{1}{4}$ inches minimum to $2 \frac{5}{8}$ inches maximum inch.	<b>IRC Section:</b> R311.7.7.3
	The min height of guards located more than 30 inches above the floor shall be not less than 36 inches except at the sides of stairs where the min. height is 34 inches. Openings in guards shall have intermediate rails or ornamental closures that do not allow passage of a sphere $4 \frac{3}{8}$ inch in diameter on open sides of stairs and 4 inches at all other locations.	<b>IRC Section:</b> R312
	The following shall be considered specific hazardous locations for the purpose of safety glazing: Glazing shall be suitable for hazardous locations.	<b>IRC Section:</b> R308.4

<b>ELEVATIONS</b>		
	Provide height dimensions for roofline, headers, top plate, and finished floor.	<b>IRC Section:</b> R106
	Surface drainage shall be diverted so as to not cause a hazard. Lots shall be graded so as to drain surface water away from foundation walls a minimum of 6 inches within the first 10 feet.	<b>IRC Section:</b> R401.3
	Provide exterior wall covering including anchoring method and water-resistant barrier (ICC-ESR report, if applicable). Stucco systems may require a moisture barrier and a weep screed. (The word "weep" implies that the moisture leaves through the bottom of the screed.)	<b>IRC Section:</b> R703

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	Provide attic ventilation calcs for all concealed attic spaces; include required and provided net free ventilation area. Also, indicate the type and location of attic ventilation. The under-floor space between the joists and the earth shall be ventilated and one vent shall be within 3 feet of each corner. <i>Unvented attic assemblies</i> shall be permitted when the attic space is completely within the thermal envelope.	<b>IRC Section:</b> R806 R408.1
	A masonry chimney shall extend at least 2 feet higher (minimum 3 feet at roofline) than any portion of the roof within 10 feet. Factory built chimneys shall be listed and labeled and installed per manufactures installation instructions.	<b>IRC Section</b> Table R1005

<b>STRUCTURAL</b>		
	Specify type of design and construction of all walls and partitions. Wood stud walls shall comply with IRC Section R602, masonry and concrete basement walls shall comply with IRC Section R606 or shall be designed by an Arizona Registrant.	<b>IRC Sections:</b> R404, R602, R606
	Indicate all braced wall lines. Show all required braced wall panels. Specify the method of bracing to be used. <i>A sealed lateral analysis, prepared by an Arizona Registrant, will be required if the bracing does not comply with the conventional provisions.</i>	<b>IRC Section:</b> R602.10
	Provide truss calculations/profile pages with truss layout page(s) or have Arizona Registrant complete <a href="#">Residential Truss Waiver Form</a> . Specify lumber grade, species, and size of members. If not providing truss calculations/profile pages with layout page(s) then a deferred submittal shall be required.	<b>IRC Section:</b> R602
	Provide complete floor (if applicable) and roof framing plans. Specify size and spacing of all framing members. Indicate all post locations and sizes. Structural logs shall bear a grade stamp or have a certificate of grade.	<b>IRC Sections:</b> R106, R802
	Specify all hangers used to hang trusses from girder trusses, walls, or other locations. Trusses and rafters need be connected to top plates to prevent uplift.	<b>IRC Section:</b> R802 Table R602.3(l)
	Indicate the size and span of headers and lintels in all bearing and non-bearing walls. Provide manufacturer's span charts for pre-manufactured steel lintels.	<b>IRC Sections:</b> R602.7 R606.10, Tables R602.7(1)(2)(3)

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<b>PLUMBING</b>		
	Provide a fixture unit calculation for the sizing of the water service line, water meter, or equivalent well service based on the current adopted code.	<b>IRC Section:</b> P2903 Appendix P
	Specify if appliances and equipment are natural gas, electric, propane, or other (specify). Reference location of appliances and equipment.	<b>IRC Sections:</b> G2401, G2431 E3401
	If gas is indicated, provide a schematic indicating BTU rating for each appliance, size, and length of main and all branch lines.	<b>IRC Section:</b> G2413
	Water heaters shall be equipped with a temperature and pressure relief valve. Terminate 6 inches AFF.	<b>IRC Sections:</b> P2804 M1305
	Indicate locations and size of roof drains and scuppers. Where roof drains are required, provide for secondary emergency overflow drains/scuppers.	<b>IRC Section:</b> R903.4.1
	Each hose bibb shall have a backflow preventer installed on the discharge side of a hose threaded outlet. (See also Section P2701.I)	<b>IRC Section:</b> R2902.2
	Appliances located in a garage or carport shall be protected from impact by automobiles by a curb 4 inches high and 3 feet deep, a minimum 3-inch steel pipe bollard installed a minimum of 18 inches below and a minimum of 44 inches above the finished floor in front of the equipment or a wall.	<b>IRC Section:</b> M1307.3.I & M.A.G. Interp.

<b>ELECTRICAL</b>		
	Provide a complete electrical plan. Include layout of all equipment, outlets, and lighting. Provide One-line diagram, panel schedule, and electric load calculations.	<b>IRC Sections:</b> R106.I
	Indicate the size (rating) and location of the electric panel, including any sub panel(s).	<b>IRC Sections:</b> E340I
	Provide an approved grounding electrode system. Bond all interior water and gas piping.	<b>IRC Sections:</b> E3607 E3609
	All branch circuits that supply 125-volt, single-phase, 15- and 20-ampere receptacle outlets installed in kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sun rooms, recreations rooms, closets, hallways, laundry areas and similar rooms or areas shall be protected by an arc-fault circuit interrupter(s).	<b>IRC Section:</b> E3902.I6 NEC:210-I2b

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	Receptacles shall be installed so that no point along the floor line in any wall space is more than 6 feet, measured horizontally, from an outlet in that space, including any wall space 2 feet or more in width.	<b>IRC Section:</b> E3901
	In kitchen and dining rooms, at least one receptacle outlet shall be installed at each island or peninsular counter space with a long dimension of 24 inches or greater and a short dimension of 12 inches.	<b>IRC Section:</b> E3901.4
	In kitchen and dining rooms, a receptacle outlet shall be installed at each wall counter space 12 inches or wider so that no point along the wall is more than 24 inches from a receptacle outlet.	<b>IRC Section:</b> E3901.4
	Provide at least one receptacle outlet on the wall within 36 inches of the outside edge of each lavatory basin in bathrooms. All receptacles located in bathrooms shall be GFCI protected.	<b>IRC Sections:</b> E3901.6 E3902.1
	Provide at least one weatherproof receptacle outlet, not more than 6 feet 6 inches above grade and GFCI protected, at the front and back of each dwelling having direct access to grade. All 125-volt, single-phase, 15- and 20-ampere receptacle outlets installed outdoors shall be GFCI protected for personnel.	<b>IRC Sections:</b> E3901.7 E3902.3
	Balconies, decks, and porches that are accessible from the inside shall have one outlet installed within its perimeter.	<b>IRC Section:</b> E3901.7
	Provide a receptacle outlet in hallways 10 feet or more in length.	<b>IRC Section:</b> E3901.10
	All 125-volt, single-phase, 15- and 20-ampere outlets shall be listed tamper-resistant.	<b>IRC Section:</b> E4002.14
	Provide a convenience receptacle outlet for the servicing of appliances (HVAC) within 25 feet of the appliance.	<b>IRC Section:</b> 3901.12
	All 125-volt, single-phase, 15- and 20-ampere receptacles that serve countertop surfaces in kitchens or are located within 6 feet of the outside edge of a bar sink shall be GFCI protected.	<b>IRC Sections:</b> E3902.6 E3902.7
	All 125-volt, single-phase, 15- and 20-ampere receptacles installed in garages and grade level portions of unfinished accessory buildings used for storage or work areas shall be GFCI protected. At least one receptacle is required in the garage and basement, in addition to any required for equipment.	<b>IRC Sections:</b> E3902.2 E3901.9
	At least one wall switched lighting outlet shall be in each habitable room, kitchen and bathroom, hallways, stairways, attached garages and detached garages with electric power.	<b>IRC Sections:</b> E3903.3 E3903.2
	Provide a lighting outlet in all stairways, switched at each floor level, and in storage and equipment spaces.	<b>IRC Sections:</b> E3903.3 E3903.2

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		E3903.4
	Provide a wall switch controlled lighting outlet in every habitable room. In other than bathrooms and kitchens a switched wall receptacle may be used.	<b>IRC Section:</b> E3903.2
	Provide interconnected smoke alarms in each sleeping room, outside each sleeping room, on each story, in the hall or adjacent room where the ceiling height of a room open to the hall exceeds the hall by 24 inches. Smoke alarms shall be hard wired with battery backup.	<b>IRC Sections:</b> R314.3 R314.4
	Provide Carbon Monoxide alarms outside each separate sleeping area/bedroom when there is an attached garage or any fuel filed appliances in the dwelling and be interconnected.	<b>IRC Section:</b> R315
	Water heater unit to have a disconnect per NEC 440.14 with working clearance per 620.5 & 110.26(A) and overcurrent protection per 440.21 and article 240 NEC	<b>IRC Section:</b> E4101.5
	Main bonding jumper shall not be installed in the subpanels	<b>IRC Section:</b> E3607.5

<b>MECHANICAL</b>		
	Provide a complete mechanical plan showing the locations of all HVAC equipment.	<b>IRC Section:</b> R106
	Provide exhaust fans to the outside from bathrooms, water closet compartments, and similar rooms if not supplied with natural ventilation.	<b>IRC Section:</b> R303.3
	Provide combustion air for all liquid and solid fuel-burning appliances including size, type, and location of openings.	<b>IRC Section:</b> Chapter 17
	Attics containing appliances shall be provided with an opening and unobstructed 22 inches wide passageway large enough to remove the largest appliance, not more than 20 feet in length. A level service space at least 30 inches deep and 30 inches wide shall be present along the access sides of the appliance.	<b>IRC Section:</b> M1305.1.3
	The clothes dryer exhaust duct shall be at least the diameter of the appliance outlet and shall terminate on the outside of the building. It shall not exceed 35 feet in length (35 feet for gas dryers) with reductions for bends. The duct shall terminate not less than 3 feet from a property line.	<b>IRC Section:</b> M1502
	Exhaust hood system capable of exhausting in excess of 400CFM shall be provided with make-up air rate approx. equal to the exhausting rate.	<b>IRC Section:</b> M1503.6

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<b>ENERGY CODE:</b>		
	Plans shall include: <ul style="list-style-type: none"> <li>• R value and type of insulation (min R-38 Ceiling &amp; R-13 Walls)</li> <li>• Fenestration U-factor (maximum of 0.40)</li> <li>• SHGC calculation (Solar Heat Gain Coefficient, maximum of 0.25)</li> <li>• Air Duct insulation R-value</li> <li>• Types and efficiencies of heating, cooling, and water heating equipment.</li> </ul>	<b>IECC Sections:</b> N1102
	Circulating hot water systems shall be insulated to a minimum value of R-3. Notate or otherwise indicate on plans.	<b>IRC Section:</b> N1103.5
	Heating and cooling systems are properly sized. Provide Manual J and Manual S calculations to determine the size of equipment. Place equipment size on plans.	<b>IRC Section:</b> N1103.7
	Show on Cross Sections where the insulation occurs and that the Building Thermal Envelope is durably sealed to limit infiltration or leakage and is continuous.	<b>IRC Section:</b> N1102.4
	Place a notation on the plans that a pressure test of all ducts, air handlers, and filter boxes must be completed by a 3 <sup>rd</sup> party inspector <i>unless the air handler and the entire duct system is located within the conditioned space</i> . Building framing cavities shall not be used as supply ducts.	<b>IRC Section:</b> N1103
	At least 1 thermostat shall be provided for each separate heating and cooling system. Show on plans.	<b>IRC Section:</b> N1103.1
	Outdoor intake and exhaust shall have either gravity or automatic dampers that close when the system is not running. Notate or otherwise indicate on plans.	<b>IRC Section:</b> N1103.6
	Provide full RES Check Report per IRC/IECC signed by the applicant showing compliance prescriptively, as UA trade-off or a performance path. Other documentation may be submitted for performance path alternative. Information provided in documentation must match construction drawings.	<b>IRC Section:</b> N1101.2, N1101.3, N1101.4, N1101.5

## **RESUBMITTAL INSTRUCTIONS**

**Please read to avoid any delays in your review process.**

- 1. You MUST provide a written response to each review comment with the corresponding page location.**
- 2. You MUST cloud and delta corrections on revised plan sets.**

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