



Chandler · Arizona
Where Values Make The Difference

Residential Plan Review Checklist

Applicant Information

Project:		
Address:		
Contact Person:		Phone No.:

ADOPTED CODES (with City Amendments):
2012 International Residential Code (IRC)
2012 International Building Code (IBC)

Submittal Requirements:

- A plot plan is required; please show all setbacks and lot dimensions.
- Provide the following information on the top/cover sheet:
 - Square footage of:
 - Livable area
 - Garage
 - Porches
 - Patio covers
 - Other covered areas (identify use)
- Identify proposed construction from existing structure(s).
- Plan review fees are due at the time of submittal, and are based on valuation of your project. For more information please contact a Construction Permit Representative at 480-782-3000.

- _____ 1. Provide calculations and sealed drawing by Arizona Registered Engineer or Architect on:
 - _____ Full structural analysis, including framing, lateral and foundation.
 - _____ Lateral analysis only (include floor/roof diaphragms)
- _____ 2. Provide truss drawings or truss design review waiver [A copy of this forms is available online at <http://udm.chandleraz.gov/> open section 5, scroll to appendices select # 30] for each required set of plans sealed and signed by an engineer licensed in Arizona. Plans must be complete and readable. *IRC Section R802.10.2*
- _____ 3. Key truss drawings to plans.
- _____ 4. Provide manufacturer's specification sheets on TJI's or other prefabricated components for each required set of plans.
- _____ 5. Attic access is required on both sides of any vaulted areas. Minimum size 22" x 30" with 30" clear height entry. *Reference IRC Section R807*
- _____ 6. Trusses, joists and rafters are required to be solidly blocked at bearing points. *Reference IRC Sec R802*

_____ 7. Conventionally framed rafters to have not less than 1½" bearing on wood or metal and not less than 3" on masonry or concrete. Collar or rafter ties are required at 48" O.C. *Reference IRC Sec R 802.6*

Note on plans:

_____ 8. Fireblocking is required in the following locations:

- a) Concealed spaces of stud walls and partitions including furred spaces at ceiling and floor levels.
- b) Horizontally at intervals not exceeding 10'.
- c) All interconnections between concealed vertical and horizontal spaces such as occur at drop ceilings, soffits and cove ceilings.
- d) Between stair stringers in top and bottom of run and between studs along and in line with the stringers.
- e) Opening around pipes, ducts, vents and chimneys with noncombustible materials (such as unfaced fiberglass insulation). *Items a) through e), reference IRC Section R602.8*
- f) At openings between attic spaces and chimney chases for factory built chimneys.

_____ 9. Provide City of Chandler ultra low-flow fixture requirements on the plans (1.6 gallon water closet flush, 2.5 gallon-per-minute all faucets and shower heads). *Reference IRC Section P2903.2*

_____ 10. Provide attic ventilation calculations, including enclosed rafter spaces on flat roofs and patio covers/porches for all necessary elevations. *Reference IRC Section R806*

_____ 11. Basements and bedrooms are required to have at least one 5.7 square foot opening directly to outside with a minimum opening height of 24" and minimum opening width of 20". *Reference IRC Section R 310.1*

_____ 12. Handrail and guardrail balusters are required to be spaced so a sphere 4" in diameter will not pass through. *Reference IRC Section R312.2*

_____ 13. Stair landings are to be equal in width to the stair width (minimum 36"). The minimum dimension in the direction of travel shall be 36". *Reference IRC Section R311.5.4*

_____ 14. Provide window areas equal to 8% of floor area. *Reference IRC Section R303.1*

_____ 15. Provide openable window or door area equal to 4% of floor area. *Reference IRC Section R303.1*

_____ 16. All glass in shower enclosures or other hazardous areas shall be safety glass/tempered glass. *Reference Section R308.4*

_____ 17. Provide water supply isometric, developed length, height above meter and lowest available pressure. *Reference IRC Section R 105.3*

_____ 18. If any subdivision this residence can be installed in has natural gas available, gas piping must be shown as an option on the plans. Include size of appliances & lengths of piping on a piping diagram. *Reference IRC Section R105.3*

_____ 19. Underground gas piping systems shall be isolated from above ground systems by an approved isolation fitting installed at least 6" above grade. *Reference IRC Section R105.3*

_____ 20. Provide mechanical plans. *Reference IRC Section R105.3*

- _____ 21. Interior laundry rooms and bathrooms require mechanical ventilation of 50 CFM intermittent or 20 CFM continuous. *Reference IRC Section R303.3 and M1506*
- _____ 22. Ground/grade mounted air conditioning equipment, water heaters, evaporative coolers and furnaces must be installed on a concrete slab that completely supports the equipment elevated at least 3" above adjoining ground level. *Reference IRC Section M1403.2*
- _____ 23. Provide note that manufacturer's installation instructions and copy of applicable ICC Research Report will be made available to the inspector on a 0" clearance fireplace installation.
- _____ 24. Provide compliance notes on maintaining firewall separation at garage with air handler or furnace in garage:
- No plastic pipe or refrigerant line insulation to penetrate firewall.
 - No supply air or other duct openings in garage without fire dampers, including duct vibration isolators. *Reference IRC Section R309.1.1*
- _____ 25. Provide note on dryer vent limitations, The diameter of the exhaust duct shall be as required by the clothes dryer's listing and the manufacturer's installation instructions. *Reference IRC Section M1501.3*
- _____ 26. Electrical panels, including mechanical equipment disconnects, require 30" wide, 36" deep, 78" high clear working space in front. *Reference IRC Section E3305.2*
- _____ 27. Receptacles serving counter spaces must be spaced so no point of a counter is further than 24" from a receptacle. Island and peninsular counters shall have at least one receptacle outlet. *Reference IRC Section E3801.4*
- _____ 28. All kitchen receptacles serving countertop services shall be GFCI protected. All countertop receptacles within 6' of a wet bar sink shall be GFCI protected. *Reference IRC Section E3802.6&.7*
- _____ 29. At least one wall-switch-controlled lighting outlet shall be installed to provide illumination on the exterior side of each outdoor egress door having grade level egress. *Reference IRC Section E3803.1*
- _____ 30. Ceiling fans or lights installed outdoors or under patio covers must be listed for damp locations. *Reference IRC Section E3903.8*
- _____ 31. Fixtures in clothes closets are required to be 12" from the nearest point of storage space. *Reference IRC Section E3903.11*
- _____ 32. Provide a one line diagram and panel schedule. *Reference IRC Section R105.3*
- _____ 33. Provide hard-wired smoke detectors with battery backup in all previously required locations and centrally located in bedrooms. Maintain manufacturer's recommended distance from ceiling fans and supply and return air openings. *Reference IRC Section R313.1*
- _____ 34. A switch is required at the top and bottom of stairways and each floor level, and lights are to be located so they adequately light the stairs. *Reference IRC Section E3803.3*
- _____ 35. Outside receptacles and garage receptacles are required to be GFCI protected and outside receptacles are required to be weatherproof type. *Reference IRC Section E3902.9*
- _____ 36. A switch, light and 110V convenience outlet is required for mechanical equipment service in attics, underfloor and furred spaces. The light or outlet shall be installed at or near the

equipment. The switch shall be installed at the access opening. *Reference IRC Section M1305.1.3.1*

- _____ 37. Attic or crawl space water heater installations require a switched light, with the switch to be located near the access opening. Water heaters in attics also require a pan with a ¾" drain terminating in an approved location (UPC 511.5). *Reference IRC Section M1305.1.3*
- _____ 38. All branch circuits that supply 125V, single phase, 15- and 20-ampere outlets installed in dwelling unit bedrooms shall be protected by an arc-fault circuit interrupter listed to provide protection of the entire branch circuit. *Reference IRC Section E3802.12*
- _____ 39. All conditioned space shall meet the minimum energy efficiency requirements of Chapter 11 of the 2012 International Residential Code. (Compliance with Chapter 4 of the 2011 International Energy Conservation Code is also acceptable.) Following are the minimum requirements from Table N1102.1 of the 2012 International Residential Code –

■ Windows/Skylights	U-Factor	.75
■ Windows/Skylight	Solar Heat Gain Coefficient	.40
■ Ceiling	R-Value	30
■ Wood Frame Wall	R-Value	13
■ Mass Wall	R-Value	4
■ Floor *	R-Value	13

The building thermal envelope shall be durably sealed to limit infiltration. The following shall be caulked, gasketed, weatherstripped, or otherwise sealed.

- All joints, seams and penetrations.
- Site-built windows, doors and skylights.
- Openings between window and door assemblies and their respective jambs and framing.
- Utility penetrations.
- Dropped ceilings or chases adjacent to the thermal envelope.
- Knee walls.
- Walls and ceilings separating the garage from conditioned spaces.
- Behind tubs and showers on exterior walls.
- Common walls between dwelling units.
- Other sources of infiltration.

Supply and return ducts shall be insulated to a minimum of R-8. Mechanical system piping capable of carrying fluids and circulating hot water systems shall be insulated to a minimum of R-2.

A permanent certificate shall be posted on or in the electrical distribution panel. The certificate shall be completed by the builder or registered design professional. The certificate shall list the predominant R-values of insulation installed in or on ceiling/roof, walls, foundation and ducts outside conditioned spaces; U-factors for fenestration; and the solar heat gain coefficient (SHGC) of fenestration. Where there is more than one value for

each component, the certificate shall list the value covering the largest area. The certificate shall list the type and efficiency of heating, cooling and service water heating equipment.

_____ 40. _____

_____ 41. _____

Applicants:

- Correct plans where correction list has been checked.
- Correct Plans as marked or submit equivalent alternate corrections.
- Plan review time is 20 working days. A Construction Permit Representative will contact you when the review is complete.

Important: Return this plan and the correction list with ____ sets of corrected plans

For City Use		
Plans Examiner:		Date:
Phone Number:		Fax Number: