RESIDENTIAL PLAN REVIEW CHECKLIST

The Residential Plan Review checklist is a general guide of plan review items checked for compliance. All projects are unique and subject to their own specific requirements.

**General Items / Site / Zoning Review**

**General Items**
- Applicable codes listed

**Project Data**
- Owner of Project
- Address / Legal Description / Assessor’s Parcel Number
- Project Description (Scope of Work)
- Floor square footage areas

**Site Plan**
- Zoning District
- Property line dimensions
- Recorded easements & letters of encroachment (if required)
- Location on property per zoning ordinance (setbacks; legal non-conforming?)
- Lot coverage calculations (if applicable)
- Location on property per building code (Fire-resistant construction)
- Parking - required spaces; parking surface; driveway width (zoning)
- Fences – maximum height (zoning)
- Finish floor elevation & grading
- Location of ground-mounted HVAC equipment (vs. exit path)
- Check special zoning stipulations
- Typical site plan for master plans showing minimum setbacks

**Architectural / Life Safety Review (2009 IRC)**

**Floor Plan**
- Overall dimensions – match site plan
- Room names – declare room use (declare existing room areas adjacent to additions – identify emergency escape and rescue locations)

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• Room sizes / dimensions / minimums
• Ceiling heights
• Show landings at exterior door locations; dimensions
• Exterior door – minimum one – 3’0” x 6’8”
• Hallways – minimum 3’0” clear width
• Natural light & ventilation in habitable rooms
• Artificial light & ventilation substitution
• Safety glazing locations
• Guardrails – 36” minimum height; 4” sphere rule
• Fireplaces – type/fuel
• Slope patio slabs to drain away from house (direction arrow on plans)

Bedrooms
• Emergency escape and rescue openings
• Egress shall not lead through other bedrooms, bathrooms, or travel through a garage
• Exterior window fall prevention requirements on multi-story buildings

Bathrooms
• Safety glazing – windows & shower enclosures
• Natural light & ventilation or exhaust fan

Laundry Room
• Appliances labeled (energy source)
• Clothes dryer exhaust vent

Garage
• Dwelling/Garage fire separation – walls & ceiling
• Platform for appliances with ignition source
• Appliance protection against impact

Stairway
• Minimum width
• Headroom
• Tread / Riser dimensions
• Landings
• Handrails; continuity, height, profile
• Winder tread dimensions (if applicable)

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Basements

- Rescue openings
- Window wells / ladders / grates
- Window wells shall not be located below emergency escape and rescue openings above.

Exterior Elevations

- Do they match the floor plan and roof plan configurations?
- Heights of buildings (zoning/structural)
- Roof slope
- Roof materials specified
- Wall finishes specified / weather barrier
- Attic vents & attic ventilation calculations
- Roof / wall flashing detail (Pan flashing, Step flashing, L-flashing, etc.) dependent on roof covering type used

Structural Review (2009 IRC)

Roof & Floor Framing Plans

- Does roof framing plan match (coincide) with floor plan, roof plan, & elevations?
- Roof slopes / directions – to edges, drains or scuppers
- Roof slopes – proper for type of roofing materials
- Roof & floor sheathing
- Framing members specified – trusses, rafters, beams, headers, posts?
- Do openings match (coincide) with floor plan – doors, windows, etc.?
- Provide a header schedule
- Check roof rafter sizes
- Check ceiling joists sizes
- Check floor joists sizes
- Check beam sizes
- Posts provided at beam & girder truss bearing locations
- Beam/header/girder truss-to-post connections (when deemed necessary)

Roof & Floor Truss Diagrams

- Do truss plans match (coincide) with roof & floor framing plans?
- Truss diagrams: sealed by structural engineer
- Check loads, truss length, roof slope

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• Check bearing points & locations (Reactions)
• Check bearing width required
• Special load cases (concentrated loads such as AC Air-handler)
• Space for attic HVAC unit & access walkway

Wall Details
• Stud size/spacing/height
• Interior finish
• Exterior finish / Weather barrier
• Stucco system
• Weep screed
• Veneer – stone, brick
• Insulation (2009 IECC)

Lateral Design / Shear Wall Plan
• Empirical design per 2009 IRC or provide engineering
• Exterior braced wall lines & panels
• Portal framing
• Continuous sheathing

Foundation Plan
• Concrete strength specified
• Does foundation plan match (coincide) with floor plan & dimensions?
• Special conditions shown (i.e. steps, recessed areas, etc.)
• Footings shown at all exterior walls
• Footings shown at interior bearing walls
• Spot footings at post locations
• Minimum footing depth shall be 20” (12” below grade plus 8” finish floor to finish grade)
• Shear wall locations – anchors – hold-downs (at garage wing walls if applicable)
• Slab thickness specified
• Are details keyed for all critical conditions?

Foundation Details
• Foundation types – T-Footing vs. monolithic
• Minimum width required
• Minimum depth required
• Minimum reinforcement
• Spot footing sizes (if applicable)
• Foundation ventilation (if applicable)
• Sole plates – height above natural grade, anchorage, and treatment
• Anchor bolts – minimum ½” diameter by 10” long with 7” embedment and maximum 6’0” o.c. spacing
• When connecting slabs, provide ½” dowels, 18” long, spaced 24” o.c. into existing slab and embed 6” minimum or continuous turndown footing.
• Post-tension foundations must be designed by an engineer registered in the state of Texas. Post-tension foundations shall be provided as per soils report.

**Mechanical Review (2009 IRC)**

**Mechanical Plan**
- Location of HVAC equipment shown
- Attic HVAC unit – access opening / access walkway / working platform
- Space in trusses for attic HVAC unit & access walkway
- Attic appliance access – Minimum 22”x30”
- Return air locations
- Exhaust fans at bathrooms
- Provide Manual D, J, & S load calculations

**Plumbing Review (2009 IRC)**

**Plumbing Plan**
- Location of fixtures / clearances
- List of plumbing materials shall comply with the freeze ordinance (reference the City of El Paso Municipal Code)
- Installation of cellular-core pipe and asbestos-cement pipe prohibited (reference the City of El Paso Municipal Code)
- Raised platform in garage & protection

**Electrical Review (2008 NEC)**

**Electrical Plan**
- Tamper proof receptacles
- Arc-fault protected receptacles
- Receptacles at kitchen island and peninsula countertops
- Receptacle within 3 feet of each bath lavatory

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• Exterior receptacles at front & rear of house (weatherproof & GFCI)
• Receptacles in garage – minimum (1) (GFCI)
• Receptacle within 25 feet of outdoor HVAC equipment (weatherproof & GFCI)
• Switch-controlled light (or receptacle) in every habitable room
• Switch-controlled light in basements, utility rooms and garage
• Light fixture at stairs and switches at both levels
• Switch-controlled light at each exterior door at grade
• Clearances to light fixtures in clothes closets
• Switched light at attic HVAC equipment
• Smoke alarms in bedrooms, halls & basements
• Carbon-monoxide detectors immediately outside bedroom areas
• GFCI for whirlpool tub with access panel

For projects exceeding 2500 square feet of livable area

Service Load Calculations
• Calculations for main panel & all sub-panels
• Include all appliances
• Include all HVAC loads
• Include special use loads (i.e. swimming pools, sewage ejectors, etc.)

Electrical Riser Diagram
• Rating of main panel & sub-panels
• Grounding electrode
• Bonding to water pipes
• Feeder wire sizes & types, conduit sizes & types
• Service feeder sizes & types

Energy Efficiency

• 2009 IECC (Energy Compliance Report) documentation

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