

**FLOOR PLAN NOTES:**

All construction shall be in conformance with all applicable provisions of the IRC and CBC, and latest addition adopted by the governing agency and local ordinances.

**CODES APPLIED TO THIS PROJECT:**

- 2009 International Residential Code for the 2010 California Residential Code CRC, Part 2.5
- 2008 National Electrical Code for the 2010 California Electrical Code CEC, Part 3;
- 2009 Uniform Mechanical Code for the 2010 California Mechanical Code CMC, Part 4;
- 2009 Uniform Plumbing Code for the 2010 California Plumbing Code CPC, Part 5;
- 2008 Building Efficiency Standards (residential and nonresidential)
- 2009 International Fire Code for the 2010 California Fire Code CFC, Part 9; and
- 2009 International Existing Building Code for the 2010 California Existing Building Code, Part 10;
- The 2010 California Administrative Code, Part 1;
- The 2010 California Green Building Standards (CALGreen) Code, Part 11;
- The 2010 California Referenced Standards Code, Part 12.

**ACCESSSES:**

Provide 18" x 24" min. foundation access to all under floor areas. Foundation access must be within 20' of all plumbing cleanouts. Provide 22" x 30" min. attic access into all attic areas.

**DOORS, WINDOWS AND SKYLIGHTS:**

All doors separating conditioned and unconditioned space shall be solid core and weather-stripped. Manufactured doors and windows shall be certified and labeled indicating that meet infiltration standards. Doors between garage and living area shall be 1 1/2", solid core, and have self-closing hinges.

All windows at living area to be dual glazed, frames per mfg. Specs. Where windows are provided as a means of escape or rescue in sleeping rooms, they shall have a finished sill height not more than 44" above the finished floor. Glass doors, French doors, adjacent panels, and all glazed openings within 24" of the adjacent floor shall be of glass approved for impact hazard. All skylights at living areas to be dual glazed laminated safety glass. Provide 2nd minimum curb assembly.

Window Emergency Escape: Provide minimum one operable window in all bedrooms without exterior exit doors to comply with the emergency escape requirements listed below:

- Minimum 5.7 s.f. clear operable area.
- Minimum clear operable height of 24 inches.
- Minimum clear operable width of 20 inches.
- Maximum sill height of 44" above finish floor.

**STAIRS, HANDRAIL, & GUARDRAIL:**

Stairway width shall be 36" minimum. Stairs to have 7-5/8" maximum rise and 19" minimum run. If the tread is less than 11", a nosing projection of .75" minimum and 1.25" maximum must be provided. Stairway riser heights shall vary no more than 3/8" max. (CRC R 311.7)

Headroom at stairways shall be 6'-0" minimum as measured vertically from a plane parallel and tangent to the stairway tread nosing. Stairway handrails shall be 34" to 38" above tread nosing. Stairway handrails must be provided on all stair runs greater than three risers or two treads. Handrails that project from the wall shall have a space of no less than 1-1/2" between handrail and wall. Openings on all handrails and guardrails shall not exceed 4" in width. Guardrails shall be 42" high minimum.

**GYPSUM BOARD:**

Provide 1/2" gypsum board at all walls unless noted otherwise. Provide 5/8" gypsum board at all ceilings framed at 24" o.c. unless noted otherwise. Provide cement boards or fibercement concrete tile base at all tile tubs or showers up to 78" min. above drain inlet. Provide 5/8" type "X" gypsum board at all walls of garage adjacent to living area. Cover wall from stud/sill to roof plywood for 1 hour fire protection. Provide 5/8" type "X" gypsum board at all storage areas under stairs.

**ONE HOUR CEILING/FLOOR ABOVE GARAGE:**

Shall be as follows: 1/2" T&G plywood over plywood truss joists at 16" o.c. Below truss joist framing at garage ceiling shall be two layers of 1/2" type "X" gypsum board applied to bottom chord. The first layer must be attached with 1 3/8" type "B" screws 12" o.c. in the field and 6" o.c. at the edges. The second layer must be finished with joint tape and compound.

**FIRE PROTECTION NOTES:**

All fireplaces must one of the following:  
 U.S. EPA Phase II-certified fireplace insert or stove,  
 Pellet-fueled wood burning heater,  
 Masonry heater (not an open hearth wood burning fireplace), or  
 Dedicated gaseous-fueled fireplace installed per manufacturer's specifications. All chimneys attached to or constructed within buildings shall terminate with 19 gauge wire or 24 gauge stainless steel spark arrester. The top of the spark arrester shall be a minimum of 2'-0" above any point of the roof within a 10'-0" horizontal plane.

Boxing of flues for the prevention of insulation coming in contact with chimney type flues which require airspace for their approval, all appliance flues passing through the attic shall have built around them at the top of the finished ceiling an open box. The box shall be at least 12" in height and have a minimum clearance of 2" from the flue at all points.

Columns and posts, supporting a second story above the garage shall be protected with a one hour assembly covered by 1/2" plywood or a minimum of 26 gauge metal 36" up from the finished floor.

Firestopping shall be provided in the following locations:

- In concealed spaces of stud walls and partitions including furrowed spaces, at the ceiling and floor levels and at 10' intervals both horizontal and vertical.
- At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings, and cove ceilings.
- In concealed spaces between stair stringers at the top and bottom of the run of stairs if the walls under the stairs are unfinished.
- In openings around vents, pipes, ducts, chimneys, fireplaces, and similar openings which afford passage for fire at ceiling and floor levels, with non-combustible materials.
- At openings between attic spaces and chimney spaces for factory built chimneys.

All insulation materials shall have a flame spread rating not to exceed 25 and smoke density not to exceed 450.

**MECHANICAL NOTES:**

Fan or other exhaust systems exhausting air from conditioned space to the outside shall be provided with back draft dampers to prevent air leakage.

Provide pan drain line, min. 4" dia., slope 1/4" per foot to exterior of bldg., screen vent opening.

Thermostatically controlled heating or cooling systems shall have an automatic thermostat with a clock mechanism which the building occupant can manually program to automatically set back the thermostat set points for at least two periods within 24 hours.

Provide seismic anchorage of appliances per UMC in form of anchor straps, 1" x 16 gauge minimum as per CRC.

Provide smooth metal duct for dryer exhaust to outside of building (not to underfloor area). Vent shall not exceed 14 feet in length unless approved by mfg. Listing or vent sizing calculations are provided.

Provide outside combustion air at furnaces. Provide 1 square inch minimum for each 4000 b.t.u./hour input per opening. Approximately one half of the combustion air opening area shall be located within the upper 12" of the enclosure and approximately one half of the opening shall be located within the lower 12" of the enclosure. The minimum free area of both the lower and upper combustion air openings shall not be less than 100 square inches per each appliance. All air ducts penetrating separation walls or ceiling between garage and living area to be 26 gauge, per CRC.

**LIGHT FIXTURES:**

Lamps used in luminaires for general lighting in kitchens and bathrooms shall have an efficiency of not less than 40 lumens per watt (L.A. fluorescent). Luminaires, which are the only lighting in a kitchen or bathroom will be considered general lighting. Lighting to be used only for specific visual tasks or as a decorative effect are exempt from this requirement. Such exempt lighting includes luminaires that are meant to light only a specific task area such as a kitchen counter, sink, dining table, or bathroom mirror.

Light fixtures in closets must be 18" from all rods and shelves, or be recessed and shall be listed and installed according to C.E.C. 410-8. Clothes closet lamps shall be enclosed in incandescent type.

Light fixtures over tubs and showers shall meet N.E.C. requirements for hazardous locations and shall be labeled "suitable for damp locations" as per C.E.C. 410-4 (a). If not labeled for damp locations install at least 7'-6" above high water line of tub or locate lights five feet outside of tub as measured from the side wall of the tub.

**SMOKE ALARMS:**

Smoke alarms are to be located in all sleeping rooms and at a point centrally located in the corridor or area giving access to each separate sleeping area. Provide a smoke alarm at each floor.

Smoke alarms shall be provided in dwelling units where the ceiling height of a room open to the hallway serving the bedrooms exceeds that of the hallway by 24" or more, smoke alarms shall be installed in the hallway and in the adjacent room.

Smoke alarms shall be 110v and receive primary source of power from the house current. Smoke alarms shall have battery back-up and be interconnected so as to sound in unison when activated.

**CARBON MONOXIDE (CO) ALARMS:**

New construction CO alarms shall be installed in dwelling units and in sleeping units within which fuel-burning appliances are installed and in dwelling units that have attached garages. CRC R315.1

Existing construction: CO alarms shall be installed where a permit is required for alterations, repairs or additions exceeding \$1,000, existing dwellings or sleeping units that have attached garages or fuel-burning appliances. CRC R315.2

CO alarms shall be listed as complying with UL 2034, UL 2075 and installed in accordance with CRC and the current edition of NFPA 720 and manufacturer's installation instructions. CRC R315.3

CO alarms shall be installed in the following locations:  
 Outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedrooms (a).

On every level of a dwelling unit including basements  
 CO alarms must receive their primary power from a commercial source and be equipped with a battery back-up alarm wiring shall be directly connected to the permanent building wiring without a disconnecting switch other than that required for over current protection. CRC R315.4

- Exceptions
- May be solely battery operated where no commercial power supply exist.
  - May be solely battery operated where repairs or alterations do not result in the removal of wall and ceiling finishes or there is no access by means of attic, basement or crawl space.
- Where more than one CO alarm is required the alarm shall be interconnected. CRC R315.1.2  
 Exception: Interconnection is not required where repairs or alterations do not result in the removal of wall and ceiling finishes, there is no access by means of attic, basement or crawl space and no previous method for interconnection existed.

**PLUMBING REQUIREMENTS:**

All plumbing fixtures and fittings shall be certified by the California energy commission. All shower heads, lavatory faucets and sink faucets shall be certified by the manufacturer as complying with applicable California appliance efficiency standards. All toilets shall use 1.28 gallon per flush, typical. All faucets shall have flow control aerators which limit water delivery to no more than 2.2 gallons per minute for sinks and lavatories. Showers to be limited to 2.5 gallons per minute.

All water heaters shall have pressure relief valves. Attach water heater to walls with listed seismic restraint straps at the upper and lower third of heater. Maintain 6" clearance above water heater heater controls. (CPC 508.2).

Provide drain air gap for dishwasher at kitchen sink and anti-siphon valves at all hose bibs.

**ELECTRICAL REQUIREMENTS:**

**OUTLETS, SWITCHES AND CIRCUITRY:**  
 All electrical outlets, switches, and accessories shall be white in color unless noted otherwise.

Mount electrical boxes as per the following heights:  
 12" from finished floor to the bottom of receptacle boxes. (U.N.O.)  
 44" from finished floor to the bottom of boxes in kitchen. (U.N.O.)  
 38" from finished floor to bottom of boxes at vanity. (U.N.O.)  
 44" from finished floor to bottom of boxes for switches. (U.N.O.)  
 Electrical outlets shall be mounted at locations noted on plans and 12" o.c. maximum, 6' maximum from corner, and at any wall 2' in length or greater.

Electrical outlet boxes at rated firewalls to be steel or approved material. All outlets located on opposite sides of rated firewalls shall have minimum 24" horizontal separation.

G.F.I. protected outlets shall be provided within 72" of any water source, at all exterior areas and at garage. Electrical receptacles within 10' of a spa tub shall be G.F.I. protected unless separated by a closable door.

All bedroom outlets to be A.F.C.I. protected.

Provide two 20 amp branch circuits at kitchen with no other outlets on the circuit as per C.E.C. 220-4(b) & 210-52(b). Provide separate 20 amp circuit for gas dryer and 30 amp circuit for electric dryer as per C.E.C. 220-4(c).

Verify locations of electrical panels and subpanels on floor plan or in field with Contractor or Designer.

**SITE PLAN NOTES:**

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE, THE UNIFORM PLUMBING CODE, THE UNIFORM MECHANICAL CODE, AND THE NATIONAL ELECTRICAL CODE; THE LATEST EDITION ADOPTED BY THE LOCAL GOVERNING AGENCY AND/OR APPLICABLE NATIONAL, STATE, AND LOCAL GOVERNING CODES OR ORDINANCES.

**GRADING:**

ALL GRADING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPENDIX J OF THE CALIFORNIA BUILDING CODE, ALL EXCAVATED MATERIAL RESULTING FROM GRADING SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, SEE GRADING NOTES FOR ADDITIONAL REQUIREMENTS. STOCKPILE SOIL FOR REDISTRIBUTION ON SITE AS DIRECTED.

LIMIT SITE GRADING TO THE BUILDING PAD AND SURROUNDING BUILDING ENVELOPE. FINISH GRADING SHALL SLOPE AWAY FROM THE BUILDING TO COMPLY WITH CRC SECTION R401.3. ALL EXCESS EARTH TO BE REMOVED TO AN APPROVED SITE. ALL A.C. PAVING, CONCRETE, SHALL SLOPE AWAY FROM BUILDING AT A MINIMUM SLOPE OF 1/8" PER FOOT.

**UTILITIES:**

VERIFY LOCATION OF ALL UTILITIES, SEWERS, DRAINS, EASEMENTS, BUILDING LOCATIONS, DIMENSIONS, AND OTHER PERTINENT SITE INFORMATION.

**DOWNSPOUTS:**

COLLECT DOWNSPOUTS INTO 4" SOLID PIPE AND DISPERSE AT A MINIMUM OF 5 FEET AWAY FROM BUILDING. (SEE GRADING PLAN)

**Special Inspections:**

All exposed bolts and dowels require special inspection per Chapter 17, 2010 CBC. Provide 48 hour notice prior to installation to allow for inspectors schedule. Note: engineer of record may provide these inspections if approved by owner.

**Stair notes:**

Guardrails at landings/walking surfaces must have 42" tall railing cap with no open area larger than a 4" sphere. Handrails shall be a minimum of 34" tall with no open area larger than 4" sphere per CBC 1013.2. Triangular spaces formed by tread/riser/bottom rail must prevent passage of 6" sphere.



