



City of Arcata, California

Building Division

# Plan Review Worksheet

Item No.	Comment
	Architect and/or Engineer to date, stamp, sign, and show registration number and expiration date on all sheets (Engineer on all structural and calculations' sheets).
	Submit a complete plot plan showing side yards, lot dimensions and distances between all buildings. Show north arrow. CBC 106.3.3
	Specify contractor name, licenses number and expiration date on application.
	Specify contractor's worker's compensation number and expiration date on application.
	Specify contractor's business licenses certificate on application.
	A separate permit is required for (grading) (demolition).
	The address of the building and the name and address of the owner(s) and person(s) preparing the plans are required on the first sheet of the plans.
	Show elevations for all floors, top of roof, natural and finish grade around perimeter of building.
	<p><b>ARCHITECTURAL AND STRUCTURAL COMMENTS</b></p> <p>All walls less than 3 feet from property line for single family and 5 feet for multi-family shall have 1-hour exterior protection with no openings. CBC Table No. 5-A</p>
	Roof, floor, natural and finished grade elevations shall be shown on the plans.
	Specify 5/8" Type "X" gypboard from foundation to roof sheathing at separation wall between garage and residence (garage side only). CBC 302.4 Ex.3
	Specify 5/8" Type "X" gypsum board on all walls and ceiling of garage where living areas are above. Note to wrap all beams and supporting members. CBC 302.4 Ex.3 and 302.2
	Specify 1-3/8" minimum solid core or 20-minute door with self-closer at separation wall between garage and residence. CBC 302.4 Ex.3
	Specify all air ducts penetrating separation wall or ceiling between garage and living area shall be 26 Ga. minimum. CBC 302.4 Ex.4
	A property line shall be assumed between buildings on the same property (court walls) to determine wall and opening protection requirements. CBC 310.3 Show assumed property line on plans if buildings are on the same parcel.
	Private garages shall not open directly into a room used for sleeping purposes. CBC 312.4
	Walls and floors separating dwelling units in the same building shall not be less than 1-hour fire-resistive construction, and shall meet STC sound rating for noise abatement control. Provide details of wall and floor assembly(s), indicating fire and noise test listings. CBC 310.2.2

	Openings to an unimproved under floor space located on fire-protected exterior walls must be protected with 1 3/8" thick, solid, self-closing doors or panels with a 20 min. rating. This does not apply to R-3 or U. Occupancies. CBC 712
	Fire block construction shall be defined on the plans in the following location(s). Material should comply with CBC 708.2.2.
	A draft stop is required in the following location(s). _____ Draft stopping materials should not be less than 1/2" gypsum board, 3/8" wood structural panel or 3/8" Type 2-M particle board. Such draft stops shall be installed so that the area of the concealed space does not exceed 1,000 sq. ft. The area shall be divided into approximately equal areas. CBC 708.3
	Provide a minimum ceiling height of ____ in the following rooms. CBC 310.6.1
	Every dwelling unit shall have at least one room with a minimum floor area of 120 sq. ft. Other habitable rooms, except kitchens, shall have an area of not less than 70 sq. ft. CBC 310.6.2
	The attic access shall not be less than 22 x 30 inches and shall be located in a corridor, hallway or other readily accessible location. 30" minimum unobstructed headroom in the attic space shall be provided above the access. CBC 1505.1
	Specify type, size and locations of ventilation for attic and enclosed rafter spaces. CBC 1505.3
	Specify minimum 3' wide door as required exit. CBC 1003.1.3
	Plans should indicate the floor or landing on each side of exterior doors is not more than 1" lower than the threshold of the doorway. In R-3 and individual units of R-1, 7 1/2" (it used to be 8") is allowed provided door does not swing over landing. CBC 1003.3.1.6.2a Ex. 1
	Landings should have a width not less than the width of the stairway or the width of the door, whichever is greater. CBC 1003.3.3.5
	The length of the landing measured in the direction of travel should not be less than 36" in R-3 or individual units of R-1. 44" is required elsewhere. CBC 1003.3.3.5
	Corridors shall have a minimum width of 36". CBC 1004.3.4.2
	Stairways shall have a minimum width of 36". CBC 1003.3.3.1
	Specify rise and run of stairway on plan, 7" max. rise and 11" min. run shall be used for occupant load of 10 or more. CBC 3306 (c) 8" max. rise and 9" min. run may be used for stairways serving an occupant load of less than 10. CBC 1003.3.3.3 Ex. 1
	Specify 6" min. tread dimensions for "Winding Stair". See other requirements. CBC 1003.3.3.8.2
	Show 36" minimum landing at stairway. CBC 1003.3.3.5
	Specify handrail(s) at stairways with four or more risers. Specify a 1 1/4" -2" grippable cross-section, height of 34'-38" above nosing, and intermediates spaced so that a 4" sphere cannot pass through. CBC 1003.3.3.6

	Provide guardrail(s) at location(s) which are more than 30" above grade. Specify a minimum height of 36" (R-3 and individual units of R-1 only, 42" elsewhere), with intermediate rails spaced such that a sphere 4" in diameter cannot pass through. CBC 509
	Design railings and its components for a 20 pound-per-foot horizontal force applied at top. Detail connections CBC Table 16-B
	Exterior stairs and exit balconies shall be positively anchored to the primary structure at not over 8 feet on center or shall be designed for lateral forces. The use of toenail or nails subject to withdrawal is not acceptable. CBC 2320.13 [2517(i)]
	Specify 5/8" Type "X" gypboard at walls and soffit of enclosed usable space under stairs. CBC 1003.3.3.9
	Specify 6'-8" minimum headroom at stairway, measured from nosing. CBC 1003.3.3.4
	Provide spark arrestor for the chimney(s). CBC 3102.3.8
	Show dimensions for hearth extension at side and front of firebox opening. CBC 3102.7.12
	Provide details of construction for masonry fireplace and chimney. Specify anchorage and show cleanout location. CBC 3102.7
	Specify make, model number, and I.C.B.O. Evaluation Report number of metal fireplace(s) on plan. CBC 3102.5.1 (May be submitted prior to installation.)
	Show chimney termination at 2' minimum above any part of the building within 10'. CBC Table 31-B
	Specify two layers of grade D paper under stucco where it occurs over plywood sheathing. CBC 2506.4
	Provide minimum 26 Ga. galvanized weep screed at foundation plate line at least 4" above grade, for stucco applications. CBC 2506.5
	Specify attachment of masonry veneer (anchored or adhered). If anchored, note joint reinforcement and anchor tie size, type and spacing; if adhered specify an approved method. CBC 1403
	Provide a window schedule. Show type and size of each.
	Provide natural ventilation by means of an opening with an area of not less than one-twentieth of the floor area and a minimum of 5 sq. ft. in the following rooms. CBC 1203.3
	Provide natural light source with an area of not less than one-tenth of the floor area and a minimum of 10 sq. ft. in the following rooms. CBC 1203.2
	Provide means of emergency escape from bedroom(s). The escape opening shall have a minimum net clear opening of 5.7 sq. in. The minimum net clear opening height shall be 24". The minimum width shall be 20". All escape windows shall have a finished sill height not more than 44" above the floor and must open directly to street, public alley, yard or exit court. CBC 310.4
	Glazing in fixed or operable panels adjacent to door where the nearest exposed edge of the glazing is within a 24" arc of either vertical edge of the door or within 18" of walking surface shall be safety glazed. CBC 2406.4
	Glazing in walls enclosing stairway landings or within 5' of the bottom & top of stairways where the bottom edge is less than 60" above a walking surface shall be safety glazed. CBC 2406.4 (10)

	Glazing within 5 feet of a spa water's edge. CBC 2406.4 (9.2)
	Doors and panels of shower and bathtub enclosures and adjacent wall openings within 60" above a standing surface and drain inlet shall be fully tempered, laminated safety glass or approved plastic and shall comply with CBC 2406.4.
	Specify glazing material for skylights. Note screen (or other) protection as required CBC 2409.3 for home made skylights. Show I.C.B.O. evaluation report number , if it is a manufactured product.
	Overhang shall not project beyond a point 1/3 the distance from an assumed or real property line where fire-resistive protection of exterior wall openings is first required or more than 12" into areas where openings are prohibited. CBC 503.2.1
	Eaves over required windows shall not be less than 30" from the side or real property lines. CBC Section 1204
	Provide weather resistive barrier on all exterior walls. CBC 1402A.1
	Specify ground contact treatment for all wood in contact with the earth or embedded in concrete or masonry. CBC 2306.2
	Specify 18" minimum from earth to bottom of floor joists and 12" to bottom of girders. CBC 2306.3
	Locate 18"x 24" crawl space access on foundation plan within 20' of any cleanout. CBC 2306.3 and CPC 707.10
	Specify P.T. or Foundation Redwood sill at foundation. CBC 2306.4 Specify P.T.D.F. or Foundation Redwood on all structural portions of deck. CBC 2306.12
	Foundation plate or sills shall be bolted to the foundation with not less than 5/8" bolts ( <i>it used to be 1/2"</i> ) embedded at least 7' into concrete. Spaced within 12" of each end and at least every 6'. CBC 1806.6
	Plate washers shall be a minimum of 2" x 2" by 3/16" thick. CBC 18.6.6.1 (2)
	Specify type, sizes, and locations for crawl space cross-ventilation on foundation plan and/or elevation. CBC 2306.7
	Interior stud bearing walls may be supported by isolated footings provided the footing width and length be twice the width of the required footing and not spaced more than 6' on center. CBC Table 18-I-C Footnote 3
	Foundation must meet requirements of CBC 2306.3 and Table 18-I-C for width, height and depth. <b>Depth is measured from top of undisturbed soil.</b>
	Where post and beam or girder construction is used a positive connection shall be provided to ensure against uplift and lateral displacement. This will included approved post bases and straps or brackets at post beam/girder connection. Decks are a common location. CBC 2314
	Show concrete pedestal projecting 6" minimum above earth and 8" minimum above earth in exposed locations. CBC 2306.5
	Girders must be designed to support the load specified in the code. A 4x6 spanning a max. of 6', spaced not more than 8 feet on center and supporting loads from a single floor, is all that is acceptable from the code without being designed. CBC 2320.7

	Header/Beam is undersized for it application. Have an engineer submit calculations or change the _____ to a _____, _____ to a _____.
	Need floor framing detail showing requirements set forth in Table 23. Include the size, grade, length and spacing of joists & girders.
	Need ceiling framing detail showing requirements set forth in Table 23. Include the size, grade, length and spacing of joists and beams.
	Need roof framing detail showing requirements set forth in Table 23. Include the size, grade, length and spacing of the rafters, or supply engineered truss calculations from the truss manufacture.
	Cripple walls exceeding 4' in height shall be framed of studs having the size required for an additional story. CBC 2320.5.3
	Lumber roof decks shall have solid sheathing. Spaced sheathing is no longer acceptable. CBC 2320.5.5
	Show connection between the following structural members. _____
	<b>ENGINEERING COMMENTS</b>  Retaining walls (including foundations) shall be designed to resist the lateral pressure of the retained material in accordance with accepted engineering practice. CBC 1611.6
	This building is considered unusual in shape because the <b>exterior braced wall panels in the following locations are not in one plane vertically from the foundation to the uppermost story.</b> This would be a cantilever or a floor setback. Follow the requirements found in the exceptions or have the section engineered. CBC 2320.5.4.1
	This building is considered unusual in shape because the <b>following section of floor or roof is not laterally supported by braced wall lines on all edges.</b> Engineering is required. CBC 2320.5.4.2
	This building is considered unusual in shape because the <b>end of the following braced wall panel extends more than 1 foot over an opening in the wall below.</b> Follow the exception or have the section engineered. CBC 2320.5.4.3
	This building is considered unusual in shape because the <b>following opening in the floor or roof exceeds the lesser of 12 feet or 50 percent of the least floor or roof dimension.</b> Engineering is required. CBC 2320.5.4.4
	This building is considered unusual in shape because the <b>construction of the floor in the following location is vertically offset such that the framing members on either side of the offset cannot be lapped or tied together in an approved manner.</b> Follow the exception or have the section engineered. CBC 2320.5.4.5
	This building is considered unusual in shape because the <b>braced walls lines do not occur in two perpendicular directions.</b> Engineering is required. CBC 2320.5.4.6
	This building shall be provided with exterior <b>and interior</b> braced wall lines. Spacing shall not exceed (25 feet) (34 feet) on center in both the longitudinal and transverse directions in each story. CBC 2320.5.1

	<p>This building shall be provided with exterior <b>and interior</b> braced wall lines. Spacing shall not exceed (25 feet) (34 feet) on center in both the longitudinal and transverse directions in each story. CBC 2320.5.1</p> <p>This building is considered unusual in shape because the <b>exterior braced wall panels in the following locations are not in one plane vertically from the foundation to the uppermost story</b>. This would be a cantilever or a floor setback. Follow the requirements found in the exceptions or have the section engineered. CBC 2320.5.4.1</p>
	<p>Limit height/length ratio of plywood shear wall to 2:1. Provide complete calculations (including deflection) and details where straps are used at openings to reduce the effective height of shear walls. CBC Table 23-II-G</p>
	<p>Note on plans – “All diaphragm and shear wall nailing shall utilize common nails or galvanized box.” CBC Table 23-II-I-1</p>
	<p>Provide a framing nailing schedule on plans for Conventional Light-Frame Construction. CBC Table 23-B-II-B-1</p>
	<p>Place a note adjacent to the foundation plans stating: “Hold-downs shall be re-tightened just prior to covering the wall framing.” CBC 2315-5.6</p>
	<p>Need to meet state energy requirements specified in Title 24 Part 6.</p>
	<p><b>ELECTRICAL COMMENTS</b></p>
	<p>Note on the plans that both cold and hot water pipes must be insulated for a length of five feet from the water heater. California Energy Standards Title 24, Part 6 5.2.3</p>
	<p>Note on the plans the wattage of each fixture in the kitchen, showing the total wattage used. Show which lights are incandescent. The total of all incandescent cannot exceed 50% of the total kitchen lighting.</p>
	<p>Kitchen incandescents must be separately switched from high efficiency lighting.</p>
	<p>Note on plans high efficacy lighting (e.g., fluorescent) in all permanent lighting or controls; high efficacy in kitchen; high efficacy or motions sensor in bathrooms, utility rooms, garages, laundry rooms; high efficacy or combined photo sensor</p> <p>/motion sensor for exterior lights; high efficacy or dimmer in other lighting; airtight can lights. CES 6.1</p> <p><b>MOTION SENSORS ARE ONLY THOSE THAT DO NOT ALLOW THE LIGHT TO BE TURNED ON AUTOMATICALLY AND DO NOT HAVE AN OVERRIDE THAT ALLOWS IT TO REMAIN ON.</b></p>
	<p>All recessed lighting must be “IC rated” for direct insulation contact.</p>
	<p>Note that smoke detectors are to be 110 V powered with battery backup. Each detector shall be heard in every bedroom. Specify their location(s) per section CBC Sec. 310.9.1.4 &amp; 310.9.1.5</p> <ul style="list-style-type: none"> <li>• in every sleeping area</li> <li>• centrally located in the corridor or area giving access to each separate sleeping area</li> <li>• each story</li> <li>• at highest point in these areas</li> </ul>
	<p>Locate electrical service panel on site plan and show amperage size.</p>
	<p>Locate electrical subpanel(s) on floor plan. Panels shall not be located in the vicinity of easily ignitable material(s) such as in a clothes closet, NEC 240-24d, nor in bathrooms. NEC 240-24e new <b>code change</b></p> <p>Panels in firewall shall be relocated or properly protected to maintain firewall separation.</p>
	<p>Electrical service over 200 Amps requires load calculations.</p>
	<p>Closet lighting must be kept at least 12" from the nearest point of storage area. Fluorescent fixtures must be at least 6". Specify on plans. NEC 410-8d</p>

	<p>Provide GFI protected outlets at the following locations:</p> <ul style="list-style-type: none"> <li>• bathrooms</li> <li>• garages, and grade-level portions of unfinished accessory buildings used for storage or work areas. NEC 210-8(a)2</li> <li>• exterior (waterproof). NEC 210-8(a)3</li> <li>• crawl spaces. NEC 210-8(a)4</li> <li>• unfinished basement NEC 210-8(a)5</li> <li>• kitchen receptacles installed to serve all counter-top surfaces. NEC 210-8(a)6</li> <li>• wet bars, on counter tops within 6' NEC 210-8(a)7</li> <li>• exterior locations, both front and back NEC 210-52(e)</li> </ul>
	<p>Provide receptacle outlets in the following locations:</p> <ul style="list-style-type: none"> <li>• 12' o.c. max. and within 6' of the end of walls. NEC 210-52(a)</li> <li>• any wall space 2 or more feet wide. NEC 210-52(a)</li> <li>• at each kitchen and dining area counter space wider than 12". Locate so that no point along the counter wall is over 24' from a receptacle. NEC 210-52(a)</li> <li>• in any hallway 10' or more in length. NEC 210-52(h)</li> <li>• bathroom must have at least one 20-amp branch circuit NEC 210-52 (d)</li> </ul>
	Outlet boxes shall not be used as the sole support for ceiling fans. NEC 370-17(c)
	Appliances fastened in place, such as dishwashers, garbage disposals, trash compactors, microwave ovens, etc., shall be supplied by a separate branch circuit rated for the appliance or load served. They shall not be on the two small appliance circuits already required.
	All branch circuits that supply 125-volt, single-phase, 15- and 20-ampere receptacles outlets installed in dwelling unit bedrooms shall be protected by an arc-fault circuit interrupter(s). NEC 210-12 (b)
	GFI protected outlets shall be specified in garages, and grade-level portions of unfinished accessory buildings used for storage or work areas. NEC 210-8(a)2
	GFI protected outlets shall be specified exterior as waterproof. NEC 210-8(a)3
	GFI protected outlets shall be specified in crawl spaces. NEC 210-8(a)4
	GFI protected outlets shall be specified in the unfinished basement NEC 210-8(a)5
	GFI protected outlets shall be specified @ kitchen receptacles installed to serve all counter-top surfaces. NEC 210-8(a)6
	GFI protected outlets shall be specified @ exterior locations, both front and back NEC 210-52(e)
	<p><b>MECHANICAL AND PLUMBING</b></p> <p>Combustion air requirements for gas burning appliances are 50 cubic feet of area per 1000 Btu/h of aggregate input rating of appliances. Specify on plans that this requirement is met, include total Btu/h of each gas appliance. CMC 703.4.1</p>
	Specify size, method, location and source of combustion air for gas burning appliances. CMC 702.1, 703, & 707

	Specify seismic anchorage of FAU and water heater. Water heaters shall be strapped within the upper and lower 1/3 of the unit. Lower strap must be 4" above the controls. CPC Sec. 510.5
	Specify method of protection for FAU and water heater in garage from vehicle impact (e.g., bollard). CPC 510.3
	Specify pressure relief valve with drain to outside at water heaters. CPC 608.5
	Specify smooth metal duct for dryer exhaust extending to outside. CMC 504.3
	Clothes dryers installed within a closet require a minimum opening of 100 sq.in. for makeup air provided by an approved method. CMC 908.2
	Provide a 24" minimum wide door to water heater compartment. CPC 511
	Specify non-removable back flow prevention devices on all exterior hose bibs. CPC 510.1
	Specify shower compartments, regardless of shape, having a minimum interior of 1024 sq. in. and also capable of encompassing a 30" circle. CPC 412.7