**City of Oceanside**
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***Applicable Code: 2010 California Code of Regulations (CCR) Title 24 (This handout focused on part 2.5 the CRC)***

# ***Residential Plan Review Checklist and Sample Corrections***

*Residential Room Additions/Alterations*

*Please note: This handout is a courtesy of typical requirements and may not be all inclusive or may list items that do not apply to your proposed project.*

## ADMINISTRATIVE

1. The following clearances or approvals may be required before a building permit can be issued:
    a. Planning Division Zoning requirements.
    b. City of Oceanside Fire Department Approval.
    c. Engineering Division Grading or Minor Grading Permit, or grading permit exemption.
    d. School District fees (for additions of over 500 sq. ft.).

2. Complete a "Certification of Construction Valuation" form; available at Building Division counter or on the City website. http://www.ci.oceanside.ca.us/pdf/building_construction_Valuation_Cert.pdf

3. All sheets of the final plans shall bear the signature of the person who prepared the plans.

4. All sheets of the final plans, and front sheet of the structural calculations, documents and reports prepared by a civil or structural or architect shall bear the signature and stamp of the professional engineer or architect, date of signing, and the expiration date of the registration.

5. Provide a statement on the title sheet of the plans that the proposed project shall comply with the 2010 Triennial Edition of California Code of Regulations (CCR), Title 24; see "Applicable Codes and Regulations for 2010" (CCR) handout.
http://www.ci.oceanside.ca.us/pdf/Building_ApplicableCodesandRegulations_2010.pdf

   There are 12 parts to Title 24 and the applicable parts for most Building Division permit applications are listed below.

   - Part 2: The 2010 California Building Code (CBC) is based on the 2009 IBC, but includes numerous State of California amendments.
   - Part 2.5: The 2010 California Residential Code (CRC) is based on the 2009 IRC, but includes numerous State of California amendments and does not include the electrical, energy, mechanical, or, plumbing portions of the IRC, and instead parts 3 through 6 of Title 24 as listed below apply.
   - Part 3: The 2010 California Electrical Code (CEC) is based on the 2008 NEC with State of California amendments.
   - Part 4: The 2010 California Mechanical Code (CMC) is based on the 2009 UMC with State of California amendments.
   - Part 5: The 2010 California Plumbing Code (CPC) is based on the 2009 UPC with State of California amendments.
   - Part 6: The 2010 California Energy Code is currently based on the 2008 Building Energy Efficiency Standards; please visit the California Energy Commission website at http://www.energy.ca.gov/title24/2008standards/index.html where the Standards, Compliance Manuals, and additional information can be downloaded for free. The Energy Code is often mistakenly referred to as Title 24, but as seen here it is only part 6 of Title 24.
   - Part 9: The 2010 California Fire Code (CFC) is based on the 2009 IFC with State of California amendments.

   Part 11: The 2010 California Green Building Standards Code (CALGreen Code) This Part is known as the California Green Building Standards Code, and it is intended that it shall also be known as the CALGreen Code.

6. Provide a Building Code Data Legend on the title or cover sheet of plans (first sheet of plans). Include the following code information for the building proposed if not already shown on the plans:
    a. Occupancy and group R3 and U if it applies.
    b. Type of Construction: V-B (most typical) or V-A
    c. Site area square footage details.
    d. Existing floor area square footage details.
    e. New floor area square footage details.
    f. Roof area square footage details.
    g. Deck area square footage details.
    h. The Seismic Design Category (SDC) is "D"* when using the 2010 CBC and "D2"* when using the 2010 CRC *[Default Value for the 2010 CBC or the 2010 CRC - for non-engineered Structures that may not require an Engineered Design or a Soils Report see Procedure PC-26 (2010 CCR) for Soil report requirements] http://www.ci.oceanside.ca.us/pdf/Building_PC-26.pdf

7. Incomplete submittal. Provide the following construction documents, calculations and/or drawings with each set of plans: (items that may be required listed below)

    a. Three complete sets of plans
    b. Soils report
    c. Title 24 Energy Analysis
    d. Vicinity Map
    e. Drawing Index
    f. Roof Plan.
    g. Floor Plan
    h. Foundation Plan
    i. Construction Section(s).
    j. Floor Framing
    k. Roof Framing.
    l. Elevations all changed sides
    m. Architectural Details.
    n. Structural Calculations.
    o. Structural Details.
    p. Demolition Plan.
    q. Fire Sprinkler Drawings.
    r. Shoring plan
    s. Sewage ejector details
    t. Existing PV system layout

8. Completely DIMENSION all of the rooms.

9. Identify all rooms on the plans.

10. Remove alternate or multiple choice design(s) or elements from the plan.

11. Show the North arrow on the plans. Different orientations are presented on other pages.

12. Provide a project description with a complete and detailed scope of work on the cover sheet.

13. Note on the cover sheet: "Destructive removal of work performed without permits may be required for inspection(s)"

14. Provide a legend for existing walls to remain, to be demolished and for new walls. Provide significantly different wall line designations for each type. The use of line weight variations only is not an approved method.

15. Provide and show on the plans, house street number visible and legible from street. (Minimum4"High x 1" Wide) CRC R319

16. Deferred submittals, other than fire sprinklers and structural trusses shall have ***PRIOR APPROVAL*** of the Building Official.

17. The architect or engineer of record shall list all deferred submittals on cover sheet and note on the plan: "Deferred submittals to be reviewed by project architect or engineer of record and certified prior to submittal for plan review".

18. The architect or engineer of record shall list, on the cover sheet, all Special and/or Deputy Inspections required. Note on the cover sheet, "Deputy Inspectors are required to be registered with the City of Oceanside"; see Procedure PC-20 Special Inspections. http://www.ci.oceanside.ca.us/pdf/Building_PC-20.pdf

19. Submit engineering calculations for vertical and lateral loads prepared by a registered Civil, Structural Engineer or Architect. Additional Structural Corrections may apply.

20. Add a note on the cover sheet: "Separate permit(s) is/are required for accessory building, patio covers, , swimming pool, retaining wall, demolition, etc."

21. Delete, Omit or mark as "Reference Only", all grading plans, landscape plans, details, and notes not applicable to this project.

## SITE PLAN CORRECTIONS

22. Provide fully dimensioned site plan drawn to scale. Show, location, size and use of all structures on the lot and show dimensions between property lines and structure walls or posts. Identify property lines, set back requirements, lot dimensions, distances from building to property lines and property line to street centerlines.

23. Show existing and proposed contours/spot elevations to indicate general site slope and drainage pattern(s). Indicate the destination of the drainage. A separate encroachment permit is required for work in the City Right of Way and curb cuts.

24. Provide a note on site plan: "Finish grade within 10 feet of the new structure/addition shall be sloped a minimum 2% away from the building for drainage purposes."

25. Show all finish floor elevations and finished grade elevations; provide elevations of any grade level changes of 2 feet or more.

26. On site plan delineate all projecting elements, and show distance to property line, or adjacent structures.

27. Note on the site plan: "Additions, remodels or renovations of a single family home with an existing pool require the suction outlet of the existing pool, spa, or toddler pool to be upgraded so as to be equipped with an approved anti-entrapment cover meeting the current standards of the **ASTM** or **ASME** per section 115920 HSC.

28. Note on the site plan: **"The discharge of pollutants to any storm drainage system is prohibited. No solid waste, petroleum byproducts, soil particulate, construction waste materials, or wastewater generated on construction sites or by construction activities shall be placed, conveyed or discharged into the street, gutter or storm drain system."**

## GREEN BUILDING STANDARDS

29. Detail the construction Storm Water Management provisions of CGBS section 4.106 on the site plan; or Note that the “North County Storm Water Program” will be followed; hand outs available at Building Division Counter and on website.

30. Detail on the plumbing plan, the water efficiency and conservation requirements of CGBS section 4.303 including:
    a. Indoor water use shall be reduced by at least 20% using one of the following methods: (effective date of 07/01/2011)
        i. Water saving fixtures or flow restrictors.
        ii. A 20% reduction in baseline water use shall be documented on the plan.
        iii. When using the calculation method specified in sec. 4.303.2, multiple shower heads shall not exceed the maximum flow rates.
    b. Plumbing fixtures and fittings shall comply with the specified performance requirements of section 4.303.3.

31. Note on the plumbing plan: “Automatic irrigation systems installed as part of the project shall be weather based” per CGBS section 4.304.

32. Note on the plans: “Annular spaces around pipes, electric cables, conduits, or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method” per CGBS section 4.406

33. Note on the plans: At the time of final inspection, an operation and maintenance manual, acceptable to the enforcing agency shall be provided to the building occupant or owner per section CGBS 4.410.

34. Note on the mechanical plan: “Installed gas fireplace(s) shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with US EPA Phase II emission limits” where applicable per CGBS 4.503

35. Note on the mechanical plan: “Duct openings and other related air distribution components opening shall be covered during construction” per section CGBS 4.504.1.

36. Note on the mechanical plan: “Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits” per CGBS section 4.504
    a. Paint, stains and other coatings shall be compliant with VOC limits.
    b. Aerosol paints and coatings shall be compliant with product weighted MIR limits for ROC and other toxic compounds.
    c. Documentation shall be provided to verify compliant VOC limit finish materials have been used.
    d. Carpet and carpet systems shall be compliant with VOC limits.
    e. 50% of the floor area receiving resilient floorings shall comply with the VOC emission limits defined in the Collaborative for High Performance Schools (CHPS) low-emitting materials list or be certified under the Resilient Floor Covering Institute (RFCI) Floor Score program.
    f. Particleboard, Medium density fiberboard (MDF) and hardwood plywood used in interior finish systems shall comply with low formaldehyde emission standards.

37. Provide and show on the plan the Interior Moisture Control elements per CGBS section 4.505, including:
    a. Vapor retarder and capillary break is required to be installed at the slab on grade foundations; Concrete slab shall have the following:
        i. Four (4) inch thick slab with #3 grade 40 steel reinforcing bars at 18" on center each way at mid slab. Concrete to have an f’c = 2500 psi minimum.
        ii. Slab to rest over a minimum 6 mil thick vapor barrier underlain by at least 4 inches thick base of ½” or larger clean aggregate. 2010 CALGreen Section 4.505.2.1 Capillary Break

b. Moisture content of building materials used in walls and floor framing is to be checked for the minimum requirements before enclosure.

38. Note on the mechanical plan: “Bathroom exhaust fans which exhaust directly from bathrooms shall comply with CGBS 4.506 and shall include the following:
    a. Be Energy Star compliant.
    b. Unless functioning as a component of a whole house ventilation system fans must be controlled by a humidistat which shall be readily accessible. Humidity controls shall be capable of adjustment between a relative humidity of 50% to 80%.”

**SPECIAL REQUIREMENTS**

39. All buildings structures, and lands located within Special Fire Protection Area/Very High Fire Hazard Severity Zones shall be in accordance with chapter 7A section 702A. Oceanside Fire Department review is required

40. Fire Pits meet the description of a Recreational Fire per the 2010 CA Fire Code section 302, which states they have a total fuel area of 3 feet or less in diameter and 2 feet or less in height for pleasure, religious, ceremonial, cooking, warmth or similar purposes. 2010 CA Fire Code section 307.4.2 Recreational Fires shall not be conducted within 25 feet of a structure or combustible material. Conditions which could cause a fire to spread within 25 feet of a structure shall be eliminated prior to ignition.

**FIRE SPRINKLERS**

41. Note the following on the cover sheet and indicate which condition applies; “The existing building is/is not protected by an automatic sprinkler system”

**ENERGY CODE (CCR) Title 24 Part 6: REQUIREMENTS**

42. The Energy Analysis prescribes HERS testing. Show this requirement on the cover sheet and list the required installation certification and field verification forms required.

43. The HERS Energy Analysis requires registration with the Energy Commission. Provide the Analysis registration information.

44. Provide the CF-6R and the MF-1R as part of the plans.

45. Incorporate all the requirements of the energy analysis on the architectural plan (sectional).

46. Both the Building Designer and Document Author shall sign the plan.

47. Alterations that involve opening the framed cavity of the wall, ceiling or floor shall meet the mandatory measures minimum insulation requirements.
    a. Walls = R-13,
    b. Ceilings = R-30,
    c. Floors = R-19, or
    d. Per the performance energy analysis.

48. Provide a window schedule on the plan detailing the size, egress requirements, temper glass requirements, total glazing areas, U-factor and SHGC of each window.

49. Rooms containing bathtubs, showers, spas, and similar bathing fixtures shall be mechanically ventilated. Provide and show on the mechanical plan the Bathroom local exhaust ventilation. A minimum rate of 50cfm is required. Detail ducting size and lengths to meet the minimum requirements of ASHRA standard 62.2 and maximum sound rating or 3 Sone for intermittent operation.

50. Provide and show on the mechanical plan the Kitchen local exhaust ventilation. A minimum rate of 100cfm is required. Detail ducting size and lengths to meet the minimum requirements of ASHRA standard 62.2 and maximum sound rating or 3 Sone for intermittent operation.

51. Provide and show on the mechanical plan, the Whole Building Ventilation System summary. Specify the minimum fan flow rate and operational time calculations, detail ducting size and lengths to meet the minimum requirements of ASHRA standard 62.2 and maximum sound rating of 1 Sone for continuous operations.

52. Identify and show the water heater, efficiency and type on the plumbing plan.

53. Note on the plumbing plan the maximum flow rates set by the California Energy Commission:
    a. Water closets 1.6 GPM
    b. Shower heads 2.5 GPM
    c. Laundry Faucets 2.2 GPM
    d. Sink Faucets 2.5 GPM

54. Detail on the electrical plan, all added or replaced lighting in a residential building shall be high efficacy (except Kitchen lighting), or depending on the location of the lighting, be controlled by a dimmer switch or a manual on vacancy sensor.

55. Detail on the electrical plan. When lighting will be added or replaced in the kitchen, all newly installed lights shall be high efficacy until a minimum of 50% of the total rated wattage of permanently installed lighting is high efficacy. Provide a lighting schedule, listing the fixture type and re-lamp wattage, to document this requirement.

56. Detail on the plan the new switching requirements and show high efficacy luminaires shall be switched separately from low efficacy luminaires and exhaust fans.

57. Detail and show on the electrical plan, permanently installed outdoor lighting that will be added or replaced shall be high efficacy. Low efficacy lighting is allowed but only when fixtures are controlled by a motion sensor and one of the following:
    a. A photo control ***or***,
    b. An astronomical time clock ***or,***
    c. An energy management control system (EMCS)

    When meeting the applicable alternatives, detail and show on the plan the alternatives used.

**<u>INTERIOR ENVIROMENT</u>**

58. Habitable rooms shall be provided with natural light by means of exterior glazed openings with an area not less than 8% of the floor area of such rooms. CRC R303.1

59. Detail and show the artificial light shall be provided that is adequate to provide an average illumination of 6 foot-candles over the area of the room at a height of 30” above the floor. CRC R303.1 exception 2.

60. Detail and show, for the purpose of determining light and *ventilation* requirements, any room shall be considered as a portion of an adjoining room when at least one-half of the area of the common wall is

open and unobstructed and provides an opening of not less than one-tenth of the floor area of the interior room but not less than 25 square feet. CRC R303.2

61. Stairways within dwelling units and exterior stairways serving a dwelling unit shall have an illumination level of not less than 1 foot-candle measured at the center of the treads and landings. CRC R303.6

62. Exterior stairways serving a dwelling unit shall have an artificial light source located in the immediate vicinity of the top landing of the stairway. CRC R303.6

63. Stairways providing access to a basement from the outside grade level shall provide an artificial light source located in the immediate vicinity of the bottom landing. CRC R303.6

64. Habitable rooms shall be provided with natural ventilation by means of openable exterior openings with an area of not less than 4% of the floor area of such rooms. The glazed areas need not be openable where the opening is not required by section R310 and an approved mechanical ventilation system capable of producing 0.35 air change per hour in the room is installed or a whole house ventilation system is installed capable of supplying outdoor air of 15 cubic feet per minute per occupant. (Whole house ventilation calculations required) CRC R303.1.

65. Minimum room width in habitable spaces, other than a kitchen, shall be not less than 7 feet in any plan width. CRC R304.4

66. Minimum height of ceilings in habitable rooms is 7 feet. Show ceiling heights of all rooms. CRC R305.1

67. Shower compartments and walls above bathtubs with shower heads installed shall be finished with a smooth, nonabsorbent surface to a height of not less than 72" above the floor. CRC R307.2.

**SMOKE AND CARBON MONOXIDE ALARMS**

68. All new construction, Interior or exterior alterations, repairs, or additions requiring a permit and having a valuation in excess of $1,000, or when one or more sleeping rooms are added or created, the entire dwelling shall be provided with detectors located as required for a new dwelling. Smoke alarms shall be installed in the following locations:
    a. In each sleeping room.
    b. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
    c. On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
    d. When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

    ***Exception:***

    Interconnection is not required in existing dwelling units where repairs 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.

69. All new construction, Interior or exterior alterations, repairs, or additions requiring a permit and having a valuation in excess of $1,000,, an approved carbon monoxide alarm 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 shall be provided with a carbon monoxide alarm in accordance with Section R315.1.

a. Carbon monoxide alarms shall only be required in the specific dwelling unit or sleeping unit for which the permit was obtained. Carbon monoxide alarms required by Sections R315.1 and R315.2 shall be installed in the following locations:
b. Outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedroom(s).
c. On every level of a dwelling unit including basements.
d. Where more than one carbon monoxide alarm is required to be installed within the dwelling unit or within a sleeping unit the alarm shall be interconnected in a manner that activation of one alarm shall activate all of the alarms in the individual unit.

***Exception:***

Interconnection is not required in existing dwelling units where repairs 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.

70. Carbon monoxide alarms combined with smoke alarms shall comply with both sections R314 and section R315, all applicable standards, and requirements for listing and approval by the Office of the State Fire Marshal, for smoke alarms.

**MEANS OF EGRESS**

71. All bedrooms, basements or rooms used for sleeping shall have emergency rescue windows or doors. CRC R310.1:
    a. Minimum net clear opening of 5.7 square feet.
    b. Minimum net clear opening width of 20 inches.
    c. Minimum net clear height of 24 inches.
    d. Windowsill height of not more than 44 inches above the floor.

72. Provide emergency egress from basement shall have a window well. Window wells shall comply with the following:
    a. The clear horizontal dimensions shall allow the window to be fully opened and provide a minimum accessible net clear opening of 9 sq. ft. with a minimum dimension of 36 inches.CRC310.2
    b. Window wells with a vertical depth of more than 44 inches shall be equipped with an approved permanently affixed ladder or stairs. The ladder or stairs shall not encroach into the required dimensions of the window well by more than 6 inches. (CRC R310.2)

73. Provide and show a landing on each side of the door. (Minimum 36” deep x width of door). A door may swing over landing that is not more than 1-1/2” below the threshold. (CRC R311.3) Floor elevation at the required egress door shall not be more than 1-1/2” lower than the top of the threshold. Exception: At doors other than the main egress door, the exterior landing or floor shall not be more than 7-3/4” below the top of the threshold provided the door does not swing over the landing or floor.

74. Doors that provide direct access to the swimming pool shall be provided with an approved pool alarm or approved barrier per “Swimming Pool Requirements” handout; http://www.ci.oceanside.ca.us/pdf/Building_swimmingpool_Spa_requirements.pdf

75. Show stairways and landings per R311.7
    a. Maximum rise of 7-3/4” and minimum run (tread) of 10”.
    b. Minimum width of 36”.
    c. Minimum headroom of 80”.
    d. Handrail shall be 34”-38” above the nosing of treads.
        i. Within individual group R2 & R3 occupancies, guards on the side of stairs shall prevent the passage of a 4-3/8” diameter sphere. CRC R312.3

ii. Guards that also serve as handrails in group R2 & R3 occupancies may have a height between 34" and 38". CRC R312.2
iii. Intermediate balusters shall be spaced such that a sphere 4-3/8" inches in diameter cannot pass through.
iv. Handgrip, cross-section dimension 1 ¼" min.-2" max. Sec. R311.7.7.3

76. Detail and dimension winding stairways, circular stairways and spiral stairways. Submit shop drawings for spiral stairway showing compliance with Section CRC R311.7.9

77. Provide a ***42"*** high protective guardrail for decks, porches, balconies and raised floors (more than 30" above grade or floor below), and open side(s) of stair landings. Openings between balusters/rails shall be less than 4" CRC 312 at the open side of the interior stairs, openings may be a maximum 4-3/8".

78. Glass guards (Guardrail) shall comply with CBC Sections 1607A, 2407 and CRC Section R308 for one of the following construction types:
    a. Glass In-fill Type. (Non-structural glass)
        i. Glazing shall be minimum ¼ inch safety glazing supported on 4 edges per CBC 2406.1.
        ii. Provide design calculations and details for post and rail connections.
    b. Baluster Type. (Structural glass panels)
        i. Show guardrail cap at glass and detail the attachment. A minimum of 3 support panels are required per CBC 2407.1.2
        ii. A safety factor of 4 shall be used in the load design per CBC 2407.1.1
        iii. Glass balusters shall not be installed without an attached handrail or guard. CBC 2407.1.2
        Guard designs with less than 3 baluster panels must be designed as an infill type.

    ***Exception:*** Laminated glass of 2 plies or more, with the Building Official's Approval. (This must have a structural design submitted for approval.)
    ***Note:*** The 2010 CRC does not detail the glass guard requirements thus the 2010 CBC requirements will apply with the residential provisions and exceptions.

**ROOFS**

79. Provide roofing specifications and show on plans the roof pitch, manufacturer, and ICC ES number.
    a. Class A roofing assembly is required for all new construction and re-roofs over 10% of the total roof area. CRC 902.1.1
    b. Class B roofing assembly may be used for additions and re-roofs of less than 10% of the total roof area. CRC 902.1.1

80. Provide minimum 2% slope at flat roof and deck.

81. Dimension the roof deck on roof plans. Roof decks may not exceed 25% of roof area or 300 sq. ft. whichever is less.

82. Provide roof drains and overflow. Over-flow to be piped separately. Show the pipe sizes on the plans.

83. Show the weight of clay or concrete roof tiles on the roof plan. Detail the Cool Roof assembly if required.

84. Dimension the eave overhangs on the roof plan and show the required setback from the property line on the roof plan. Detail the fire resistive construction per Table R302.1 (1) & (2).

85. Show manufacturer and ICC ES number for skylights.

## EXTERIOR WALLS

86. Exterior decks, balconies, and stairways sealed underneath shall be waterproofed. Specify materials and provide ICC ES number.

87. Exterior walls within 5 feet of property line shall be of one-hour fire resistive construction, with protection provided on both sides of the assembly. Detail the fire resistive construction per Table R302.1 (1) & (2) on the plans.

88. No openings are permitted within 3 feet of property line.

89. Openings allowed between 3 feet and 5 feet of the property line are limited to 25% of the wall area. Table R302.1 (1) & (2).

90. Specify on plans, exterior wall covering over weather-resistive barrier. CRC 703

91. Exterior Lath: Note on plans Provide two layers of Grade D paper over all wood base sheathing. CRC R703.6.3

92. Show a weep screed for stucco at the foundation plate line a minimum of 4 inches above earth or 2 inches above paved areas. CRC R703.6.2.1

93. Show an approved veneer detail per CRC R703.7.

## GARAGE AND CARPORT

94. The following are required for attached garage/carport:
    a. Specify makeup of the fire-resistive construction on the garage side for walls, ceilings, posts and beams of garage adjacent to or supporting residential uses. CRC table R302.6
    b. Self-closing, tight-fitting, solid wood 1-3/8” thick door or a 20-minute rated door at openings to dwelling. (CRC R302.5)
    c. Doors from garage not permitted to open into room used for sleeping. CRC R302.5.1
    d. Provide 26 gauge steel duct in garage, if it penetrates 1-hr. separation. CRC R302.5.2

## CONSTRUCTION ELEMENTS

95. Structural corrections are performed on a separate structural review and provided under separate cover where applicable.

96. For factory built metal fireplace specify: Show on plans the manufacturer, model and approval number from a recognized testing agency. CRC R1004.1

97. Note on the mechanical plan, “Unvented gas log heaters shall not be used in a factory built fireplace unless the fireplace system has been specifically tested, listed and labeled for such use” per UL127 and CRC R1004.4

98. Show true cross section of masonry fireplace per CRC R1003:

99. For fireplace chimney, show the following on the plan:

100. Provide and show complete details and specifications for installation of glass block. CBC 2110.

101. Detail how the Elevator(s) and/or platform lift(s) shall comply with ASME A17.1

102. Chute and dumbwaiter shafts in Type V construction shall be protected per CRC Table 302.6 Provide the design and details on plans.

103. Safety glazing or tempered glass is required in hazardous locations per CRC Section R308.

**MECHANICAL**

104. Provide and show heating facilities per CRC R303.8.

105. Show source of combustion air to F.A.U. and W/H.

106. Provide and show the termination of environmental air ducts a minimum of 3 feet from the property line and 3 feet from openings into the building. CMC 504.5

107. Provide and show clothes dryer moister exhaust duct. Note on the plans “Min. 4” diameter to the outside, equipped with a back-draft damper. Duct length is limited to 14’ with 2 elbows”. Other lengths or sizes as permitted or required by the manufacturer’s installation instructions and approved by the Building Official. (Submit a request for modifications) CMC 504.3.2.2.

108. Provide and show a minimum of 100 square inches for makeup air when a domestic clothes dryer is installed in a closet designed for the installation. CMC504.3

109. Provide and show how heat-producing appliances in garage will be protected from automobile damage.

110. Provide and show sufficient clearances to provide a working space of 30” in depth, width and height for appliances installed in attics and crawl spaces.

111. Show the location of a minimum 22”x30” attic access opening with a minimum of 30” clear height above. Attics with appliances installed in the attic shall have an opening of at least as large as the equipment with a minimum size of 22” x 30”. CMC904.11.1

**ELECTRICAL**

112. Show on the electrical plan, the amperage and location of electrical service and/or sub-panels and specify if it is a new or existing electric service and/or sub panel.

113. Provide a SDG&E service work order for proposed service change, relocation or replacement. Any work on the utility side of the electrical service will require a work order and disconnect/re-connect. Utility regulations do not allow service changes to be performed “HOT”. Contact SDG&E.

114. Provide and show rated protection for sub panel installed in rated wall.

115. Justify new loads and provide load calculations if the existing service is less than 200 amps. Provide a panel schedule to justify the additional loads and circuits. Room must be available in the panel for the additional circuits. Double lugging of breakers is not approved.

116. Provide a single line drawing and panel schedule for services of 400 amps or more.

117. Show the required 30” minimum clearances around electric service and/or sub-panels.

118. Provide UFER or other approved ground per CEC 250-50. Specify or detail specific requirements on the electrical and foundation plans.

119. Provide and show at least one wall switch-controlled lighting outlet shall be installed in every habitable room, in bathrooms, hallways, stairways, attached garages, and detached garages with electric power, and at outdoor entrances or exits. CEC210.70(A)(1)

120. Provide and show receptacles on walls over 2 feet wide, within 6 feet of openings and so that no point along wall is more than 6 feet from a receptacle. CEC210.52(A)

121. Provide and show at least one outside weatherproof 120-volt receptacle outlet accessible while standing at grade level and located not more than 6-1/2 feet above grade installed at the front and back of dwelling unit. CEC 210-52(e)(1)

122. Note on the electrical plan, outdoor receptacles shall be listed as weather resistant. New per section 406.8.

123. Provide and show at least one outside weatherproof 120-volt receptacle outlet installed within the perimeter of the balcony, deck or porch and located not more than 6-1/2 feet above the finished surface. Exception: areas less than 20 square feet are not required to have a receptacle installed. CEC 210-52(e)(3)

124. Provide and show G.F.C.I. protection to all 120 volt, 15 and 20 amp receptacles installed in bathrooms, garages and accessory buildings, outdoors, crawl spaces, unfinished basements, kitchens, laundry, utility and wet bar outlets located within 6 feet and boathouses. *Exception: A receptacle supplying only a permanently installed fire alarm or burglar alarm* CEC 210-8(a)

125. Provide and show on plans receptacles shall be listed as tamper-resistant for ***all*** 15 and 20 ampere receptacles in dwelling unit family, dining, living, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms and areas per CEC sec 210.12. New section 406.11.

126. Provide and show on plans “ A.F.C.I. protection for ***all*** 15 and 20 ampere branch circuits supplying outlets in dwelling unit family, dining, living, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms and areas per CEC sec 210.12.

127. Provide & show at least one receptacle, in addition to those for specific equipment, shall be installed in each basement, in each attached garage and in each detached garage with electrical power. CEC 210-52(g)

128. Provide and show required work light, switch, and receptacle outlets for attics, under floor spaces, utility rooms, and basements where these spaces are used for storage or containing equipment requiring servicing. The lighting outlet shall be provided at or near the equipment requiring servicing. CEC 210.70(3)

129. Provide & show at least one receptacle outlet in bathroom within 36 inches of the outside edge of each sink basin. Outlet shall be located on a wall or partition that is adjacent to the basin or installed on the side or face of the basin cabinet not more than 12” below the countertop. CEC210.52(d)

130. Provide & note on plans “A minimum of (1) 20-amp circuit for bathroom(s) outlet. Such circuit shall have no other outlets. This circuit may serve more than one bathroom” CEC 210-23(a).

131. Provide and show, in the kitchen and dining area, a receptacle shall be provided for each counter space wider than 12” so that no point is more than 24” from an outlet. Countertops separated by range tops, refrigerators or sinks shall be considered as separate countertop spaces. CEC 210-52(C)(1).

132. Provide and show, in the kitchen and dining area, a receptacle shall be provided for island countertop spaces with a long dimension of 24 inches or greater and a short dimension of 12 inches or greater. CEC 210-52(C)(2).

133. Provide and show, in the kitchen and dining area, a receptacle shall be provided for the peninsular countertop spaces with a long dimension of 24 inches or greater and a short dimension of 12 inches or greater. A peninsular countertop is measured from the connecting edge. CEC 210-52(C)(3).

134. Note on the electrical plan, “Provide a minimum of 2 – 20 amp small appliance circuits for the kitchen counter tops. Such circuit shall have no other outlets. Loads shall be balanced.” CEC 210-52(B)(2).

135. Note on the electrical plan, “Provide a minimum of 1 – 20 amp laundry branch circuit. Such circuit shall have no other outlets.” CEC 210-23(a).

**PLUMBING**

136. Detail and show the sleeve and venting requirements for underground gas installed beneath buildings per CPC section 1211.1.6.

137. Detail and show on the plumbing plan, the sewage ejector or sump pump system including the size, manufacturer, model number and electrical requirements.

138. Detail and show on the plumbing plan, the requirements for a back-water valve when floor is located lower than the uphill man hole. CPC section 710.0

139. Provide and show a removable panel to provide access and removal of the whirlpool pump. Access located in the crawl space shall be located no more than 20 feet from the access door, trap door or crawl hole. CPC 414.1

140. Water closets to be 30” (min.) wide with 24” (min.) clear in front of toilet. Dimension on the plans. CPC 407.5

141. Note on plans: 4 water closets (Toilets) require a 4” soils / waste line per CPC table 7-5

142. Show location of the water heater on the plans and/or provide the following information on the plans:
   a. Show combustion air, venting, location, drain pan and line per CPC 508.4.
   b. Water heater burner, pilot light or igniter to be at 18" above garage floor if located in garage. CPC 508.14(1).
   c. Provide a 3” ø steel pipe x 36” embedded in concrete slab for protection of water heater. CPC508.14(2)
   d. Water heaters shall be anchored or strapped to the structure. Provide 1 ½” x 16 gauge straps at top and bottom with 3/8” ø. X 3” long lag bolt at each end. CPC 508.2

143. Note and show on the plumbing plan, water heaters installed in attic spaces or floor ceiling/floor subfloor assemblies where damage may occur from a leaking water heater, a watertight pan of corrosion resistant materials shall be installed beneath the water heater with a minimum ¾" dia. drain to an approved location. CPC 508.4

144. Note and show on the plumbing plan, water heaters located within habitable space require the manufacturer's specifications detailing the combustion air supply and venting. Provide the specification cut sheet.

145. Note and show on the plumbing plan, instantaneous gas water heaters (tankless) located within habitable space require manufacturer's specifications for combustion air supply and venting.

146. Note and show on the plumbing plan, instantaneous gas water heaters (tankless) are not direct replacements for conventional tank type water heaters. Provide and show a dedicated gas line sized per the appliance specifications (provide cut sheet) or provide total dwelling gas load calculation to justify the additional gas load.

**MISC INFORMATION**

147. Please visit the City of Oceanside Building Division website at http://www.ci.oceanside.ca.us/Datarelation.aspx?Content=251 for additional information and handouts.

148. We will list additional information as it becomes available.