CITY OF DINUBA
RESIDENTIAL PLANS REVIEW LIST

DATE:

PROJECT NAME:
ADDRESS: _____
CONTRACTOR: _____
OCCUPANCY: _____
TYPE OF CONST:_____
ARCHITECT: _____
ENGINEER: _____
DESIGNER: _____
PLANS EXAMINER:

THIS PLAN CHECK LIST IS A GENERAL REVIEW FOR COMPLIANCE WITH THE 2016 EDITION OF THE CA RESIDENTIAL, CA ELECTRICAL, CA PLUMBING, CA MECHANICAL, CA GREEN BLDG STD. AND ENERGY CODES. PHOTOVOLTAIC CODES.

RESIDENTIAL BUILDINGS CONSTRUCTED AFTER **January 1, 2010** ARE REQUIRED TO HAVE FIRE SPRINKLERS.

ADDITIONS TO THOSE BUILDINGS ALSO REQUIRED TO HAVE FIRE-SPRINKLERS

CLOUD ALL REVISIONS ON THE PLAN.
PLANS WILL NOT BE BACKCHECKED OVER THE COUNTER.

Standard Plan Submittal Requirements

Plans shall be drawn to scale upon substantial paper be of sufficient clarity and shall include the following:

[ ] Site Plan [ ] Foundation Plan [ ] Floor Roof Framing Plan
[ ] Building Sections [ ] Plumbing Plan [ ] Electrical Plan [ ] Mechanical Plan
[ ] Building Elevations [ ] Connection Details

ALL TWO STORY BUILDING SHALL BE ENGINEERED.

[ ] Provide construction notes: such as general, foundation, framing, roof framing and roofing, electrical, mechanical etc. These notes will give additional information for construction to these items.
[ ] Scope of work; describe work to be done.

If the noted items listed above do not apply to your project, then they are not required.

NOTICE

LANDSCAPE IMPROVEMENTS OVER 500SQFT WILL TRIGGER THE REQUIREMENTS OF CALIFORNIA MWELO ORDINANCE THE APPLICANT IS DIRECTED TO INCORPORATE THE REQUIREMENTS OF MWELO IN THE LANDSCAPE DESIGN PACKAGE AND OBTAIN A PERMIT FOR THE INSTALLATION OF THE IRRIGATION SYSTEM.

Note on the cover sheet regarding fire sprinklers?

1. Note on the cover sheet of the plans if this residence is currently equipped with Residential Fire Sprinkler System. –2016 CRC R106.1.

Plans at job note provided?

2. Cover note to read “These plans and related documents must be available at the job site during any inspection activity.” -- 2016 CRC R106.1.1

3. **APN’s provided on the cover sheet?**

4. Provide the APN’s for each option on the cover sheet of the plans. 2016 CRC R106.1.1

Address posted?

5. Cover note to read: "Street address and number shall be posted prior to the first inspection." -- Address numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of ½ inch. –2016 CRC R106.1.1, R319.

Flood hazard note?

6. Cover note to read "Projects located in the flood hazard area shall have a finished floor elevation of not less that 1" above the 100-year flood level." Note the flood plain for this project on the cover sheet. -- 2016 CRC R106.1.1 & 2016 CRC R106.1.4

Job address provided?

7. Provide the job address on the cover sheet. 2016 CRC R106.1.1

APN provided?

8. Provide the Assessor's Parcel Number on the cover sheet. -- 2016 CRC R106.1.1

Building footage provided?

9. Provide the building area on the cover sheet. Include all possible options in a formatted schedule(s). -- 2016 CRC R106.1.1

Is a sheet count provided for the plans and all attachments?

10. Provide a sheet count in the format of a schedule of all sheets of the plans and of all individual attachments on the cover sheet. Break down the number of pages of the plans, truss drawings, T-24, structural and any other attachments on the cover sheet. 2016 CRC R106.1.1

Index provided?

11. Provide an accurate index on the cover sheet. -- 2016 CRC R106.1.1

Occupancy class listed?

12. List the Occupancy class on the cover sheet. –2016 CRC R106.1.1

Construction Type listed?

13. List the Construction Type on the cover sheet. -- 2016 CRC R106.1.1

Stamp provided?

14. Provide all sheets to be stamped by an Architect or Engineer licensed to practice in the State of California. -- Cal Bus & Prof. Code 5537 Last Updated July 19, 2016. --

Architect signature provided?

15. Provide all applicable sheets to be stamped by a licensed Architect. -- Cal Bus & Prof. Code 5537 Last Updated July 19, 2016. --

Engineer's signature provided?

16. Provide all applicable sheets to be stamped by a licensed Engineer. -- Cal Bus & Prof. Code 5537 Last Updated July 19, 2016. **Draftsperson's signature provided?**
17. Provide the Draftsperson's signature on all sheets that do not require an Architects or Engineer's signature, i.e. Truss layouts, solar, etc… -- 2016 CRC R106.1.1

Owner's information provided?

18. Provide the owner's name, address, zip code, and phone number. -- 2016 CRC R106.1.1

Construction Waste Management Plan on the cover sheet?

19. Provide a construction waste management plan for this project that complies with 1 – 5 of the 2013 Cal. Green Code, sec. 4.408.2 on the cover sheet of the plans. – 2016 Cal. Green 4.408.2 and the Dinuba Municipal Code Chapter 14.64

Builder's information provided?

20. Provide the builder's name, address, zip code, phone number, and State of California contractor's license number. -- 2016 CRC R106.1.1

Architect's information provided?

21. Provide the Architects name, address, zip code, and phone number. -- 2016 CRC R106.1.1

Engineer's information provided?

22. Provide the engineer's name, address, zip code, and phone number. -- 2016 CRC R106.1.1

Draftsperson's information provided?

23. Provide the Draftsperson's name, address, zip code, and phone number. -- 2016 CRC R106.1.1

DOCUMENTS

Copies of all documents?

24. Provide 2 copies of all required documents at time of resubmittal. -- 2016 CRC R106.1

Sub-contractors list returned?

25. Return a complete sub-contractors list. -- 2016 CRC R106.1

Assessor's floor plan provided?

26. Provide an additional floor plan for the Tulare County Assessor's office,. -- 2016 CRC R106.1

School fees paid?

27. Provide this division with a receipt from the Clovis Unified School District showing that all fees have been paid. -- 2016 CRC R106.1.1

Lateral analysis provided?

28. Provide an Engineer's lateral analysis for this structure. --2016 CRC R106.1

Truss drawings provided?

29. Provide manufacturer's truss drawings. -- 2016 CRC R106.1 & 2016 CRC R502.11.4

T24 documents provided?

30. Provide Title 24 Energy Compliance Summary. -- CCR Title 24 §100 (a) 1,2,3 & 2016 CRC R106.1

Is a plot plan provided?

31. Provide a completed City of Clovis Plot Plan form. -- 2016 CRC R106.2

Is a Certificate from the San Joaquin Valley Air Pollution Control District provided for Demolition Work?

32. Provide a certificate from the San Joaquin Valley Air Pollution Control District for any demolition/renovation work being performed on this project. Additional information may be obtained by contacting the San Joaquin Valley Air Pollution Control district @ 559-230-6000

Is a soils report provided for this project?

33. Provide a soils report for this project from a licensed professional. 2016 CRC R106.1

SINGLE FAMILY DWELLING/FLOOR PLAN

North arrow shown on floor plan?

34. Show the north arrow on the floor plan. – 2016 CRC R106.1

Complete floor plans for each floor included?

35. Provide a complete floor plan for each floor. 2016 CRC R106.1

Are the size and type of all windows and doors shown?

36. Plans must show the size and type of all windows and doors. Specify the operation of all windows, i.e., fixed, slider, single hung etc.… -- 2016 CRC R106.1.1

Sill height noted?

37. Note that the sill height is not to exceed 44” from the bottom of the clear opening in sleeping rooms. – 2016 CRC R310.2.2

Less than 24” sill height at window sill @ upper floor?

38. Any operable window with a sill that is located less than 24” above the finished floor and more than 72” above finished grade or other surface below at the exterior, must be protected by a guard or, have fixed glass. The guard may not have openings that a sphere 4” in diameter can pass through. 2016 CRC R312.2

Is there a cross-section for each condition?

39. Include a cross-section for each condition. -- 2016 CRC R106.1.1

Is sheetrock nailing noted on the floor plan?

40. Note on the floor plan that a sheetrock nailing inspection is required. – 2016 CRC R109.1.4.2 & 2016 CBC 110.3.5

Is the ceiling height for all rooms noted on the floor plan?

41. Specify the ceiling height in each room of the residence on the floor plan. Include all rooms in the residence, garage, porch & patio. -- 2016 CRC R106.1.1

Are all walls less than 5 feet to a property line 1hr fire rated?

42. Any part of the exterior walls that are less than 5’ are required to be of 1 hour construction, unless the residence is provided with fire sprinklers, then the 1 hour construction is required at less than 3’. – 2016 CRC Table R302.1(1), (for existing, non-sprinklered R-3/U occupancies) & CRC Table R302.1(2) (for new R-3/U occupancies.)

Water closet/bidet compartments have 30" width and 24" clear in front of the water closet?

43. Note that water closet or bidet compartments must have 30" width and 24" clear in front of the fixture. Note that the water closet or bidet shall not be set closer than 15” from it’s center to any side wall or obstruction. Dimension the space on the floor plan. – 2016 CPC 402.5

Is 1024 Sq. In. & 2 minimum 30" dia. Circle provided at the shower?

44. Note that a minimum 30" dia. Circle is provided at the shower floor. Note that the minimum floor area of the shower compartment is 1024square inches. 2016 CPC 408.6

Is the garage a conforming two or three car garage?

45. The garage must be 20'x22' clear. These dimensions are required to be clear, inside/inside with no obstructions. CMC 9.32.040 & Table 3-12

Is the garage floor sloped to drain?

46. The garage floor is required to slope to a drain or the floor must slope to the primary vehicle entry door. 2016 CRC R309.1

47. **Is a door shown from the garage into a sleeping room?**
A door is not permitted from the garage into a sleeping room. 2016 CRC R302.5.1

Is a 7 foot ceiling height provided in all areas requiring it?

48. Provide a minimum ceiling height of 7' in the area(s) specified on the floor plan(s). – 2016 CRC R305.1

Are all glazed areas in hazardous locations (2016 CRC R308) glazed with safety material?

49. Glazing in a hazardous location is required to be glazed with safety material. – 2016 CRC R308

Do all habitable rooms have 8% of the floor area in natural light?

50. This area requires glazed opening(s) having an area equal to 8% or more of the floor area. – 2016 CRC R303.1

Do all habitable rooms have 4% of the floor area in operable exterior openings?

51. This area requires operable exterior opening(s) having an area equal to 4% or more of the floor area. – 2016 CRC R303.1

If a bath does not have an exterior window, is a mechanical system provided?

52. A bathroom is required to have an openable window or a mechanical ventilation system. When there is a bathtub or shower, such system shall be connected directly to the outside. – 2016 CRC R303.3

If an interior room is considered as a portion of an adjoining room, is the correct size opening provided for light and ventilation sharing?

53. A room must have light and ventilation directly to the exterior, or share light and ventilation with another room. To share, 1/2 of the area of the common wall must be open and unobstructed. – 2016 CRC 303.2

Do all rooms used for sleeping and basements have an egress opening?

54. The sleeping areas require an exterior opening for emergency escape or rescue. The minimum opening width is 20”, the minimum opening height is 24” and the required openable area is 5.7 sq.ft. The sleeping areas located on the first floor may be 5 sq.ft. with the same opening dimensions. 2016 CRC R310.2.1, R310.1.2 & R310.1.3

Is the factory-built fireplace an approved unit?

55. The factory-built, gas appliance fireplace(s) must be an approved unit. Include the manufacture's name, model number, and ICC, AGA, or U.L. approval information for each appliance. – 2016 CMC 912.2 (2)

Is a 6” square fresh air intake provided for the gas appliance fireplace at an exterior wall?

56. Provide a 6” square fresh air intake for the gas appliance fireplace. – 2016 CEC 150.0 (e) B

Is a 2 inch clearance provided around the fireplace and chimney?

57. The minimum clearance from the fireplace and chimney to combustible materials is 2 inches. – 2016 CRC R1003.18

Is the hearth the correct size?

58. The size of the hearth does not meet the minimum requirements. – 2016 CRC R1001.9 & R1001.10

Cooktop clearances noted on the floor plan?

59. Note that the vertical clearance above the cooktop to combustibles is 30” unprotected, or 24” protected, and the horizontal dimension is required to be per the permanent marking listed on the unit. 2016 CMC 921.3.2 & 921.4.3

Is the garage separated from the dwelling & its attic?

60. The garage and its attic must be separated from the dwelling by ½” sheetrock on the garage side. The sheetrock is required to extend to the roof sheathing -- 2016 CRC R302.6 & Table R302.6

Is a Draftstop Required at the floor framing?

61. A draftstop is required for the floor framing of this residence. The enclosed space must not exceed 1000 s.f. Specify the location of the draftstop & draftstop material. Clearly show the draftstop on the floor framing plan. – 2016 CRC R302.12

Is there a 1 3/8 thick solid core or 20 minute self closing door between the dwelling and the garage?

62. The door between the garage and the dwelling is required to be a 1 3/8 inch thick solid core or 20 minute self closing door. –2016 CRC R302.5.1

Do the corridors have the minimum required width of 36 inches?

63. The minimum width of a corridor is 36 inches. –2016 CRC R311.6

If there is enclosed usable space under stairs, are walls and ceiling protected with ½" sheetrock.

64. The enclosed usable space under the stairs is required to be protected by ½" sheetrock. – 2016 CRC R302.7

EXTERIOR ELEVATION/SECTION DETAILS, Provide elevation north, south, east west.

Exterior walls of the residence less than 3' from the property line?

65. All exterior walls of the residence that are less than 5', but more than 3' from the property lines are required to be 1 hour construction. This applies to both sides of the wall. Provide a section of the framing at the affected walls and specify all materials in the detail that show how compliance is provided. 2016 CRC Table R302.1 (1), Table R302.1 (2) and 2016 & 2016 CBC Table 602, footnote h.

Are all heights above surrounding grade shown for exterior elevations?

66. Show the height of the building above the **adjacent finished grade**. – 2016 CRC R106.1.1

Does the chimney extend 2 feet above the roofing?

67. The chimney is required to extend 2 feet above any roofing within 10 feet, but not less than 3' above the highest point where the chimney passes through the roof. – 2016 CRC R1003.9

Are all materials for exterior elevations specified?

68. Specify all materials for exterior elevations. –2016 CRC R106.1.1

Is the O.H. length noted on the roof framing and exterior elevation sheets?

69. Note the overhang length on the exterior elevation and on the roof framing plan. –2016 CRC R106.1.1 & Table R302.1(1) for existing, Non-Sprinklered dwellings & Table R302.1 (2) for Sprinklered dwellings

Roof coverings detailed?

70. Provide a complete list of materials used for the roof covering. Specify the roof class and ICC number for the tile roof material. – 2016 CRC R106.1.1

Flashing and counter flashing of chimney, parapets, roof to wall connections specified?

71. Show all flashing and counter flashing and crickets for chimneys, parapets, and roof to wall connections. Provide details. –2016 CRC R903.2.1 & R903.2.2

Building paper shown?

72. Specify building paper to be applied to exterior walls under wood siding. – 2016 CRC R703.2

2 Layers of Graded D Building paper shown over Wood Sheathing?

73. Note that 2 layers of Grade D building paper is required to be installed over wood sheathing. 2016 CRC R703.7.3

Masonry veneer ties shown?

74. Specify masonry veneer ties & wire. – 2016 CRC R703.8

Lath and plaster specified?

75. Specify lath and plaster to comply with 2016 CRC 703.7. Note on plans the thickness, wire gauge and makeup and "provide weep screeds to Chapter 7 requirements". Foam type backing for stucco requires waterproof backing. Submit specs and ICC report# for 2 coat stucco system. – 2016 CRC R106.1.1 & R703.7

Is exposed foam protected in the attic at gable end conditions and unfinished garages?

76. Show exposed foam to be protected in the attic at gable end conditions and unfinished garages. 2016 CRC R316.4 & R316.5.3

INTERIOR ELEVATIONS

Are interior wall and ceiling finishes specified?

77. Specify all interior wall and ceiling finishes. – 2016 CRC R106.1.1

Water resistant gypsum board specified?

78. Indicate that wall surface behind ceramic tile or other finish wall materials subject to water splash are constructed of materials not adversely affected by water. Note the use of fiber-cement, fiber-mat reinforced cement or glass mat gypsum backers on the floor plan. Note that water resistant gypsum board is no longer permitted to be used in these locations. – 2016 CRC R702.4.2 & Table R702.4.2

STAIRS

Stairway plan and details provided?

79. Provide a complete stairway plan and details. – 2016 CRC R106.1.1

Section detail w/ 6'8" headroom provided?

80. Provide a section detail at the stairs showing the required headroom clearance at stairs. The minimum headroom vertically from a line intersecting the nosing of the stairs is 6 feet 8 inches. – 2016 CRC R311.7.2

Do stairs have the minimum required 44" or 36" (49 occupants or less) width?

81. Dimension the stairs to provide the required minimum width of 44 inches or 36 inches (**49 occupants or less**). –2016 CRC R3117.1.

82. **Note that a 6" dia. sphere cannot pass through?**
Show in the guardrail detail that a 6" diameter sphere cannot pass through where the triangular area, formed by the riser, tread and bottom element of the guardrail meets. 2016 CRC R312.1.3 Exception #1

Is there a handrail along the stairway?

83. A handrail is required along a stairway. It is required to be 34 to 38 inches above the nosing of the steps and if the side is open, the maximum size of an opening in the railing at the stairway is 4-3/8 inches. –2016 CRC R311.7.8 & R312.1.3 exc. #2

Do residential stairs comply with rise (7-3/4" max.) and the run (10" min.) requirements?

84. The maximum rise of a step is 7-3/4" inches and the minimum run is 10 inches. Show this in the stair details. – 2016 CRC R311.7.5.1 & R311.7.5.2

Residential guardrail 42" high where step is 30 inches or more provided?

85. A 42 inch high guardrail is required where step is greater than 30 inches to floor or grade below. The horizontal spacing between vertical members shall be a maximum of 4". – 2016 CRC R312.1.1 R312.1.2 & R312.1.3

Guardrail height at stairway?

86. The guardrail height at the stairway may be 34"-38" when the top rail of the guardrail also serves as the handrail. The horizontal spacing between vertical members shall be a maximum of 4-3/8 inches. 2016 CRC R312.1.2 & R312.1.3 exception #2.

Guardrail, handrail or balcony railing designed to resist a 200 lb. concentrated load.

87. Show guardrail, stair handrail or balcony railing is designed to resist a single concentrated load of 200lbs. Provide details and connection. – 2016 CRC Table R301.5

Note to indicate that the difference between the largest and smallest riser shall not exceed 3/8".

88. Provide a note stating that the difference between the largest and smallest riser shall not exceed 3/8". – 2016 CRC R311.7.5.1

Note to indicate that the difference between the largest and smallest run shall not exceed 3/8".

89. Provide a note stating that the difference between the largest and smallest run shall not exceed 3/8". – 2016 CRC R311.7.5.2

Winding stair tread have minimum run of 6" w/minimum width and required tread depth at a point 12" from the edge?

90. Show winding stair tread to have a minimum tread depth of 6" min. Winding stairs shall have a minimum width and required tread depth at a point 12" from the edge. – 2016 CRC R311.7.5.2.1

STRUCTURAL/LATERAL ANALYSIS

Review the analysis and make the changes?

91. Review the pages of the engineer's analysis and make the necessary changes to the plans. 2016 CRC R106.1.1

Are all design loads shown on the calculations?

92. Show all design loads (snow, wind, seismic, live, dead, etc.) used in the design of this building in the calculations. – 2016 CRC 106.1.1

Architectural sections keyed to structural details for clarity?

93. Key all connections shown on architectural sections to structural sections for clarity. Show all hard ware and number of fasteners. Specify all hardware and number of fasteners at all connections. – 2016 CRC R106.1.1

Are all beams adequate to support the loading on it?

94. Show calculations for all beams. 2016 CRC R106.1.1

Are engineering calculations provided for all glu-lam beams?

95. Provide Engineering calculations for Glulam Beams. – 2016 CRC R106.1.1

Sheetrock nailing for braced wall panels noted?

96. Note on the floor plan that a nailing inspection is required for all sheetrock shearwall and braced wall panels. – 2016 CRC R109.1.4.2

FOUNDATION

Is a foundation design included in the plans?

97. Provide a complete foundation design for this building based on the soil for this site. Provide a complete foundation plan(s) for each option provided in the plans. –2016 CRC 106.1.1

Are flopped plans provided for all foundation options?

98. Provide complete flopped foundation plan(s) for each possible option in the plans. A partial foundation plan(s) is not permitted. 2016 CRC R106.1.1

99. Note/show 0.229 inch x3”x3” plate washers on the foundation plan and foundation details. The plate washer may be slotted 3/16” larger than the bolt dia. & a slot length not more than 1-3/4”. Note that a standard cut washer is required to be placed between the plate washer and the nut. 2016 CRC R403.1.6.1 & R602.11.1

Note for the non-conforming 3 car garage on the foundation?

100. Note on the foundation plan that this three car garage is non-conforming and the required sideyard setbacks may not be relaxed. 2016 CRC R106.1.1

Is the height of the finished floor for the slab noted to be 15.65” above the center line of the street or 1.3’ above top of curb?

101. Note on the foundation plan that the finished floor for the structure must be 15.65” above the center line of the street or 1.3’ above top of curb. 2016 CRC R106.1.1

Identify property lines at time of foundation inspection?

102. Note on the foundation plan(s); Locate and expose all property corners and string the side yard property lines prior to the foundation inspection. . – 2016 CRC R106.1.1

Are 14" long anchor bolts noted on the foundation plan for garage stemwalls?

103. Note the use of 14" long anchor bolts at the garage stemwalls. 2016 CRC R106.1.1

Holdowns, special anchor bolting installed at time of inspection noted?

104. **Note** on the foundation plan that all holdowns, special anchor bolting requirements and straps that are applicable to the building be in place at time of foundation inspection. – 2016 CRC R106.1.1

Holdowns, special anchor bolting dimensioned on the foundation plan?

105. Dimension all holdowns, special anchor bolting requirements and straps that are applicable to the building directly on the foundation plan. – 2016 CRC R106.1.1

Structure anchored to the foundation with the correct bolts?

106. The structure is required to be anchored to the foundation with 1/2 inch anchor bolts. The bolts must be into the concrete 7 inches (15 inches into masonry) and spaced a maximum of 6 feet apart, not less than 4" or more than 12" from ends & splices. – 2016 CRC R403.1.6 & R403.1.6.1

Anchor bolt located in the middle 1/3 of the plate?

107. Note on the foundation plan & in the foundation details that all anchor bolts are required to be installed in the middle 1/3 of the plate.

Location of UFER ground indicated on the foundation plan?

108. Indicate the location of the UFER ground on the foundation plan. – 2016 NEC 250.52 (A) (3) & 2016 CRC 106.1.1

Concrete F'c specified from engineer's calculations?

109. Specify the concrete F'c from the engineer's calculations. – 2016 CRC 106.1.1

F'c concrete specified?

110. Specify that concrete shall have a minimum strength of 2500 psi in 28 days. –2016 CRC R402.2 & Table R402.2

Are bearing wall footings dimensioned?

111. Dimension all bearing wall footings. – 2016 CRC R106.1.1

Foundation plan show the location of all footings: exterior, interior and piers?

112. The foundation plan must show the location of all interior and exterior footings and piers. – 2016 CRC R106.1.1

Foundation grade redwood or PTDF specified for sills on concrete in contact with the ground?

113. Specify foundation grade redwood or pressure-treated wood for sills on concrete in direct contact with the ground. – 2016 CRC R317.1.2

Termite Protection Noted?

114. Note on the foundation plan how termite protection is provided. --2016 CRC R318.1

Wood to earth separation 8” minimum?

115. Note on the foundation plan and/or in the foundation details that 8” wood to earth separation is required. 2016 CRC R317.1 (2)

Minimum slab thickness shown?

116. Show 3 1/2" minimum thickness for slab floors. 2016 CRC R506.1

Vapor Retarder Note Provided?

117. Note that a minimum 6 mil polyethylene vapor retarder is required between the slab and the base course. Revise the foundation details to reflect the location of the vapor retarder. The vapor retarder must be shown directly below the 3-1/2” concrete slab. – 2016 CRC R506.2.3 & R506.2.3.1

Water drained away from building 6” for a minimum of 10’?

118. Note that surface water will be drained away from the building for at least the first 10' with a minimum grade of 6”. Where this requirement cannot be met because the distance between the structure and the property line is less than 10’, an alternate method is required. Identify alternate method of drainage, such as landscape drains & inlets not to exceed 15’ at side yards. –2016 CRC R401.3

ACCESS TO CRAWL SPACE

Is an access (18 X 24 minimum) provided to all crawl space areas?

119. Show access is required to the crawl space area. The minimum size is 18 inches by 24 inches. – 2016 CRC R408.4

Crawl space ventilated?

120. The crawl space area is required to be ventilated. Provide the under floor ventilation calculations. 1 square foot for each 150 square feet of under floor area. Show all vent locations and provide adequate cross ventilation. – 2016 CRC R408.1

ROOF/FLOOR FRAMING

Is a roof framing plan provided?

121. Provide a COMPLETE roof framing plan. – 2016 CRC R106.1.1
Provide engineered floor joist engineering.

Are flopped plans provided for all roof framing plan options?

122. Provide complete flopped roof framing plan(s) for each possible option in the plans. A partial roof framing plan(s) is not permitted. 2016 CRC R106.1.1

Is a floor framing plan provided?

123. Provide a COMPLETE 1st and 2nd floor framing plans showing all hold-downs, structural straps and tie-downs, provide type and manufacturer.. – 2016 CRC R106.1.1

Is floor draftstopping provided?

124. Draftstopping for open floor trusses is required. The draftstop is required to limit the areas to less than 1000 sq. ft. The draftstop shall divide the areas into approximately equal areas. Specify the draftstop location on the floor framing plan and specify the material used for the draftstop. 2016 CRC R302.12

Are manufacturer's details included for any trusses on building?

125. Provide truss details by the truss manufacturer's engineer. (reg. in this state). – 2016 CRC R502.11

Do all beams have support to the foundation?

126. Show support for all beams to the foundation. – 2016 CRC R106.1.1

Do all bearing walls have support to the foundation?

127. Show bearing wall support to the foundation. -- 2016 CRC R106.1.1

Are all rafters within the maximum allowed span?

128. The rafters are over the maximum allowed span. – 2016 CRC Tables R802.5.1(1) through R802.5.1(3)

Are rafters shown framed opposite of each other?

129. Show all roof rafters to be framed opposite of each other. –2016 CRC R802.3

Are rafter ties shown?

130. Show rafter ties with spacing not to exceed 4 feet on center. -- 2016 CRC R802.3.1

Ridge size shown?

131. Show the size of the ridge. – 2016 CRC R802.3

Are double ceiling Joists located under any attic mounted mechanical equipment?

132. Show double ceiling Joists to be located under any attic mounted mechanical equipment. 2016 CRC R106.1.1

Framing at openings detailed?

133. Detail framing at openings in the roof to comply. -- -- 2016 CRC R802.9

Stud below each truss noted on the roof framing plan?

134. Provide a stud below each truss as indicated on the roof framing plan. See the Engineer's Analysis for example. – 2016 CRC R602.3.3

2"x6" studs @ 24" oc shown aligned with truss, rafter or joists above?

135. Provide a stud below each truss, rafter or joist where studs are spaced 24" oc. -- 2016 CRC R602.3.3

Purlin detail and location shown?

136. Show the location of all purlins and provide construction detail. – 2016 CRC R802.5.1

Are all floor joists within the maximum allowed span?

137. These floor joists are over the maximum allowed span. – 2016 CRC Tables R502.3.1(1) & R502.3.1(2)

Ladder to roof equipment no more than 12' above grade?

138. Provide a permanent access by ladder or other means to roof mounted equipment. Lowest point of access to ladder must terminate no more than 12' above grade. If a permanently attached ladder is used, provide a detail of the ladder construction. Include the rung spacing, width, attachment to the building, side rail extension height of 30", etc. 2016 CMC 304

22” X 30" attic access shown?

139. Show the attic access with minimum dimensions of 22" X 30". Show an attic access at each location where attics are separated and have 30” or more in height from the top of the bottom framing member to the bottom of the top framing member. 2016 CRC R807.1 & 2016 CPC 508.4

Gasketed Attic Access

140. Note that all attic access openings are gasketed to prevent air loss. 2016 CEC 150.0 (a) 2

Skylight dual glazed? ICC # provided?

141. Indicate on the roof framing or floor plan that skylight is to be dual glazed. Specify the manufacturer & ICC Report #. – 2016 CRC R106.1.1

Is the size of all roof framing members specified?

142. Specify the size, species, grade & spacing of all roof framing members. -- 2016 CRC R106.1.1

Is the spacing of all roof framing members specified?

143. Specify the spacing of all roof framing members. -- 2016 CRC R106.1.1

Is the panel span index specified for roof sheeting?

144. Specify the panel span index for roof sheeting. -- 2016 CRC Table R503.2.1.1(1)

Is the grade of material specified for roof sheeting?

145. Specify the grade of materials for all roof sheeting. -- 2016 CRC R106.1.1

Is roof panel edge nailing specified?

146. Specify the roof panel edge nailing. – 2016 CRC Tables R602.3(1) & R602.3(2)

Is roof panel field nailing specified?

147. Specify the roof panel field nailing. -- -2016 CRC Tables R602.3(1) & R602.3(2)

Is roof diaphragm perimeter nailing specified?

148. Specify the roof diaphragm perimeter nailing. – 2016 CRC R106.1.1 & Table R602.3.1

Shear transfers to roof diaphragm detailed?

149. Clearly detail all shear transfers from the walls to the roof diaphragm. Show all hardware and indicate the number of fasteners. – 2016 R106.1

Are all required bracing/purlins shown in the roof structure clearly shown?

150. Show required bracing/purlins in the roof structure. – 2016 CRC R802.5.1

Is roof covering clearly shown?

151. Show all roof coverings to conform. Specify the manufacturer & ICC# for tile roof installations. – 2016 CRC R106.1.1

Is attic ventilation provided, and the location and size of the ventilating openings indicated?

152. Provide attic ventilation. Show location and size of ventilating openings. In order to use the 1/300th method, at least 40% and not more than 50% of the required venting must be shown in the upper portion of the attic area not more than 3' below the ridge & the remainder of the required ventilation must be shown as eave or cornice vents. The calculations must specify the percentage of upper and lower venting. – 2016 CRC 806.2

Attic venting provided for enclosed rafter spaces at the porch/patio with enclosed ceiling/rafter spaces?

153. Enclosed rafter spaces where the ceiling is applied directly to the underside of rafters shall have cross ventilation for each separate space. Provide attic ventilation for each separate attic space. 2016 CRC R806.1, R806.2 & R806.5

Is the framing lumber at least the minimum grade shown in the CRC?

154. Specify all framing lumber to be at least the minimum grade shown in 2016 CRC 1061.1.1

Roof framing plan note for GLULAM?

155. Note on the roof framing plan: "MANUFACTURER'S CERTIFICATION OF GLULAM BEAMS MUST BE PROPERLY IDENTIFIED FOR THE LOCATION & SPECIFIC JOB TO BE PROVIDED AT TIME OF FRAME INSPECTION." -- 2016 CRC R106.1.1

Is weather protection provided for glu-lam's?

156. Laminated timbers. The portions of glue laminated timbers that form the structural supports of a
building or other structure **and** are exposed to weather and not fully protected from moisture by a roof, eave or similar covering shall be pressure treated with preservative or be manufactured from naturally durable or preservative treated wood. 2016 CBC 2304.12.2.4

Are the sizes of the headers for the wall openings specified?

157. Specify sizes of headers for wall openings. –2016 CRC R602.7 & Tables R602.7(1), R602.7(2) & R602.7.3

Fireblocks at the floor, ceiling coves and soffits?

158. Show fireblocking at floor line, ceiling coves and soffits. – 2016 CRC R302.11 & R302.11.1

Ceiling joist spans comply with Tables R802.4 (1) & R802.4 (2)

159. Ceiling joist spans shall comply with 2016 CRC Tables R802.4(1) & R802.4(2)

Coffered or sculptured ceiling member sizes and fasteners shown?

160. Show all coffered or sculptured ceiling member sizes and fasteners. Provide under stacking plan. Provide a framing section that clearly identifies all supporting members & hardware. – 2016 CRC R106.1.1

Rafter spans comply with CRC Tables R802.5.1 (1) through R802.5.1 (8)

161. Rafter spans shall comply with 2016 CRC Tables R802.5.1(1) through R802.5.1(8)

Fill framing detail provided?

162. Provide a detail of the fill framing over the trusses/rafters. Key the roof framing at the fill framing to the detail. – 2016 CRC R106.1.1

Overhangs or patio roof supporting member's sizes shown?

163. Specify the size of members supporting overhangs or patio roofs, i.e., outlookers. Specify the spacing of the outlookers. -- 2016 CRC R106.1.1

Truss framing plan with truss identification number clearly identified on the plans?

164. Provide all trusses to be clearly identified on the roof framing plan. Show spacing and direction of all members. -- 2016 CRC R502.11 & R802.10

Multi-ply truss locations shown?

165. Show the exact location of all multi-ply truss locations on the roof framing plan(s). 2016 CRC R802.10

Are lateral ties for webs from the truss manufacturer's drawings shown on the roof framing plan?

166. Show lateral ties for truss webs or chords from the truss manufacturer's drawings shown on the roof framing plan and clearly indicate how the end of the tie is to be secured to a stable element. Do not confuse this with the Truss Plate Institute publication "Truss handling and erection recommendations". 2016 CRC R802.10

Connections of truss to top plate or truss to truss connections specified and detailed?

167. Specify and detail connection of trusses to top plate and/or truss to truss connections. 2016 CRC R802.11.1.1

Bearing of bottom chord for sloped trusses at the top plate detailed?

168. Detail bearing of bottom chord for sloped trusses at the top plate. 2016 CRC R802.11.1.1

Gable end outrigger details provided?

169. Specify the overhang support at gable end conditions. See the roof framing plan for example -- 2016CRC R106.1.1

Air-conditioning or mechanical equipment located on truss/roof framing plan?

170. Locate all air-conditioning or mechanical equipment on roof framing plan and on the truss manufacturer's drawings. Show all additional loads on supports and total dead loads. Provide truss calc's to reflect additional loads due to mechanical equipment. -- 2016 CRC R106.1.1

Connections of a beams to walls, beams to beams, joist/rafters to beams shown?

171. Show connections of all beams to wall, beam to beam, joist/rafter to beam connections. -- 2016 CRC R106.1.1

WALLS/FRAMING

Is the nailing schedule Table R602.3 (1) & Table 602.3(2) bluelined on the plans?

172. Specify nailing for all conditions in this structure. Provide the nailing schedule's **(CRC Table R602.3 (1) & Table R602.3 (2))** on the plans. – 2016 CRC R106.1.1

Is Table 702.3.5 provided in the plans?

173. Provide Table 702.3.5 for sheetrock nailing in the plans. 2016 CRC R106.1.1 & Table 702.3.5

Fasteners & connectors for preservative treated wood specified on the framing plan?

174. Note at all framing details and in the general framing notes that fasteners & connectors in direct contact with preservative-treated wood shall be of hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper. – 2016 CRC R317.3.1

Is the stud size and spacing correct?

175. The size and spacing of studs are not shown correctly. – 2016 CRC R602.3.1 & Table R602.3(5)

Framing details provided?

176. Provide typical framing details. - 2016 CRC 106.1.1

Is all sill plate fastening shown?

177. Show sill plate fasteners. – 2016 CRC R106.1.1

Unbraced stud height shown?

178. Show the unbraced stud height. – 2016 CRC R106.1.1 & 2016 CBC Table 2305.5.1

Unbraced stud height exceeded?

179. The maximum height for unbraced studs has been exceeded. Provide larger studs or provide bracing that meets the requirements of CBC. –2016 CRC R106.1.1 & Table 2308.9.1

Exterior bracing detailed?

180. Show required exterior braced wall locations. – 2016 CRC R106.1.1 & CRC R602.10

Interior bracing detailed?

181. Show required interior bracing. – 2016 CRC R106.1.1 & CRC R602.10

PLUMBING

Plumbing plans provided?

182. Provide a complete plumbing plan. Include hot & cold water lines & waste lines. Include sizing for each. – 2016 CPC 104.3.1

Water heater location, vents and clearances shown?

183. Show water heater location, vents and clearances. –2016 CPC 104.3.1

Insulation shield at gas vents noted?

184. Note on the plumbing plan; Where a vent passes through an insulated assembly, an approved metal shield shall be installed between the vent & the insulation. The shield is required to extend a minimum of 2” above the insulation. 2016 CPC 509.6.2.7.

Hot water pipe insulation note provided?

185. Note on the plumbing plan that all domestic hot water piping is required to be insulated. Hot water pipe insulation shall have a minimum wall thickness of not less than the diameter of the pipe for a pipe up to 2".

Cleanout for condensate drain noted?

186. Note on the plumbing plan that; Condensate drain lines shall be configured or provided with a cleanout to permit the clearing of blockages and for maintenance without requiring the drain line to be cut. 216 CPC 814.3.1

Location of shower valves & showerhead shown?

187. Show the control valves and showerhead on the side wall of the shower compartment. Clearly show that the showerhead does not discharge at the entrance to the shower compartment. 2016 CPC 408.9

P&T Valve note provided?

188. Indicate that the T and P relief valve having a full sized drain of galv. steel of hard drawn copper to the outside of the bldg with the end of pipe not more than 2' or less than 6" above the grade, pointing downward, the terminal end being unthreaded. –2016 CPC 608.5

Overflow pan for water heater in attic provided?

189. Water heaters located in attics shall be provided with a water tight pan of corrosion resistant material with a minimum lip of 1-1/2" and a minimum 3/4" drain extending to the exterior of the structure. The pan shall extend a minimum of 6" beyond the appliance on all sides. – 2016 CPC 507.4

Is a thermostatic mixing valve noted on the floor plan?

190. Note that at all shower and tub/shower valves must be pressure balance and/or thermostatic mixing types. The device is required to limit the water temperature to a maximum of 120 degrees. –2016 CPC 408.3

Seismic bracing for water heater provided?

191. Show minimum seismic restraint requirements for all water heaters. The water heater is required to be strapped at the upper & lower 1/3 of the tank. 4" minimum shall be maintained between the strap and the water heater controls. – 2016 CPC 507.2

Water heater first hour rating noted on the floor plan?

192. Specify the minimum first hour recovery for the water heater on the floor plan. 2016 CPC 501.1 & Table 501.1. (1)

Minimum plumbing facilities per 2016 CPC Table 422.1?

193. Provide the minimum plumbing facilities specified in Table 422.1. 2016 CPC Table 422.1.

Non-removable type backflow prevention devices on all hose bibbs?

194. Specify Non-Removable Type Backflow Prevention Device required on all hose bibbs. – 2016 CPC 603.5.7

Appliances installed in garages, warehouses subjected to mechanical damage protected?

195. Appliances installed in garages, warehouses or other areas where they may be subjected to mechanical damage shall be suitably guarded against such damage by being installed behind protective barriers or by being elevated or located out of flow of vehicles. -- 2016 CPC 507.13, 507.13.1 & 2016 CMC 305.1.1

Access, working space for mechanical equipment provided?

196. Provide access and working space for mechanical equipment that meets the requirements of 2016 CMC 304.0

Are appliances (electrical outlets and water heaters, etc.) that generate a glow, spark or flame at least 18" above floor level in a garage?

197. Appliances (electrical outlets and water heaters, etc.) generating a glow, spark or flame must be at least 18" above floor level in a garage. –2016 CMC 308.1.1 & 2016 CPC 507.13 & CPC 507.13.1

1.28 gallon low flow water closet shown?

198. Add a note on the plumbing plan that states that all water closets that will be installed will be low flow water closets with a maximum capacity of 1.28 gallons. – 2016 CPC 411.2 & 411.2.4 & 2016 Cal Green Chapter 5, Div. 5.3

Water Heating System

199. 1. Systems using gas or propane water heaters to serve individual dwelling units shall include the following components:

A. A 120V electrical receptacle that is within 3 feet from the water heater and accessible to the water
heater with no obstructions; and
B. A Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the
space where the water heater is installed; and
C. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and
allows natural draining without pump assistance, and
D. A gas supply line with a capacity of at least 200,000 Btu/hr. – 2016 CEC 150(n)

Fuel Gas Piping

200. All plans that include fuel gas systems shall have a fuel gas layout plan showing the maximum developed length of all branches and the appropriate size for the main and all branches based on the total demand. All calculations and sizing shall be based on the table 12-8 of the CPC for steel pipe and 12-19 of the CPC for CSST systems. All piping layout shall show the demand at each outlet. A gas supply line with a capacity of at least 200,000 Btu/hr. is required for the Water heater. – 2016 CEC 150(n) & 2016 CPC Tables 1216.2(1) through 1216.2.(23)

AB1953 Lead Free Compliant note on the plumbing plan?

201. Note on the plumbing plan, that all equipment in the potable water delivery system must meet the California AB1953 Lead Free requirements. This applies to all piping, fixtures and fittings. All of the above noted items are not permitted to exceed 0.25% lead content. For all solder & flux applications the max lead content shall not exceed 0.2%. 2016 CPC 604.2

Is the PEX flush note on the plumbing plan?

202. Clearly identify piping material for water delivery. If PEX is used, a note must be provided on the drawings to state: “At the time of fill, each fixture shall have a removable tag applied stating: ‘*This new plumbing system was first filled and flushed on _____ (date) by _____ (name). The State of California requires that the system be flushed after standing at least one week after the fill date specified above. If this system is used earlier than one week after the fill date, the water must be allowed to run for at least two minutes prior to use for human consumption, This tag may not be removed prior to the completion of the required second flushing, except by the owner or occupant*.’” – 2016 CPC 604.1.2

MECHANICAL

Are mechanical plans and calculations provided?

203. Provide mechanical plans and calculations. Show all register sizes, duct sizes, location of mechanical unit, and duct insulation R-value. – 2016 CMC 104.3.1

HVAC equipment location specified?

204. Specify the location of HVAC equipment on Mechanical Sheet (roof mount, attic, or other). –2016 CMC 104.3.1

Is a level working platform provided?

205. Provide a level working platform for roof mounted equipment where the roof slope is 4/12 or greater. 2016 CMC 304.2

Exhaust fans shown in restrooms?

206. Show exhaust fans in restrooms. Specify minimum 50 CFM for intermittent fans or 25 CFM for continuous exhaust – 2016 CRC R303.3

Exhaust termination's shown more than 10' from any air intakes?

207. Show any exhaust termination to be in excess of 10' from any air intake. – 2016 CMC 502.2.1

Combustion air openings shown?

208. Provide combustion air openings for gas fired appliances within 12" of the floor and ceiling for gas burning equipment. -- 2016 CMC 701.5

Is the dryer vent to the exterior of the building?

209. Provide dryer vent to the exterior of the building. – 2016 CMC 504.4

Dryer vent not to exceed note provided?

210. Provide a NOTE that the dryer vent shall not exceed a combined vertical and horizontal length of 14', including two 90 degree elbows. If the dryer vent run exceeds the max. allowed 14, provide a dryer vent calculation by a licensed Mechanical Engineer. –2016 CMC 504.4.2.1

Is a back-draft damper provided at the dryer vent?

211. Note that a back draft damper is required at the dryer vent. Show the damper in the dryer vent detail. 2016 CMC 504.4

Is a humidistat control noted on the mechanical plan?

212. Note on the mechanical plan that exhaust fans in all bathrooms must vent directly to the exterior. Note that all exhaust fans must be “Energy Star” compliant & note that unless functioning as a component of a whole house ventilation system, fans must be controlled by humidistat which must be readily accessible. Show the location of the humidistat control on the electrical plan and the mechanical plan. Note the humidistat control must be capable of adjustment between a relative humidity range of 50%-80%. 2016 Cal. Green Code 4.506.1

ELECTRICAL

Illuminated address sign note on electrical plan?

213. Clearly show the location of the "Illuminated address sign” on the electrical plan. Address numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of ½ inch. Show the address sign so it is installed to be clearly seen from the street. -- 2016 CRC R106.1.1 & R319.1 & Clovis FD STD. #1.8.

Is a complete electrical plan provided?

214. Provide complete electrical plan and calculations. 2016 CEC 89.111.3 & 2016 CRC R106.1.1

Size of service specified?

215. Specify the size of the main service panel. – 2016 CEC 220.10

Size of sub-panels specified?

216. Specify the size of the sub-panel. 2016 CRC R106.1.1

Size/material of UFER specified?

217. Specify the size and material of the UFER ground. -- 2016 CEC 250.52(A)(3)

UFER shown on the foundation plan?

218. Show the location of the UFER ground on the foundation plan. --2016 CEC 250.52(A)(3)

Size of service grounding conductor to UFER specified?

219. Specify the size of the service grounding conductor to the UFER ground. – 2016 CEC 250.64 & Table 250.66

Size of service grounding conductor for cold water bond specified?

220. Specify the size of the service grounding conductor to the cold water bond. – 2016 CEC 250.104

Are the Electric Vehicle Charging Station notes on the electrical sheet?

221. Effective July, 1st 2015, the following requirements for Residential "Electric Vehicle Charging Stations" shall apply: Note on the Electrical sheet that a minimum 1" ID listed raceway to accommodate a min. 40 amp. dedicated 208/240-volt circuit be installed in the service panel for future electric vehicle charging. The panel must be labeled, "EV CAPABLE". The receptacle or blank at the charging location shall be permanently & visibly marked as "EV CAPABLE". – 2016 Cal. Green Code 4.106.4.1 & 4.106.4.2

Inter-System bonding noted on the electrical plan?

222. Note on the electrical plan that Inter-System Bonding is required for this residence. 2016 CEC 800.100(B) & 820.100

Tamper Resistant Receptacles noted on the electrical plan?

223. Note on the electrical plan that in all areas specified in 210.52, all 125-volt, 15 & 20 ampere receptacles shall be listed Tamper-Resistant Receptacles. 2016 CEC 406.12

224. Stair Illumination

Provide stair Illumination and notes per CRC

Working clearances adjacent to subpanels or service equipment maintained?

225. Working clearances around or adjacent to sub panels or service equipment must be maintained per 2016 CEC Table 110.26(A) (1)

Positive means of disconnect adjacent to equipment served provided?

226. Show equipment regulated by the Mechanical Code requiring electrical connections of more than 50 volts shall have a positive means of disconnect adjacent to and in sight from the equipment served. – 2016 CMC 310.1 & 2016 CEC 440.14

Outlet within 25' of mechanical equipment?

227. Provide an electrical outlet within 25' of mechanical equipment & located on the same level for the servicing of the equipment. –2016 CEC 210.63

Are outlets provided at the front and rear of the structure

228. Provide outlets at the front and rear of the structure. 2016 CEC 210.52 (E)(1).

Do double lavatories have a single outlet between them or individual outlets for each?

229. Provide double lavatories to have a single outlet between them or individual outlets for each. 2016 CEC 210.52 (D)

Is the note for the 20 Amp circuit noted on the electrical plan?

230. Note on the electrical plan that a 20 amp circuit is required for dwelling unit bathroom receptacles. No other lighting fixtures or outlets are permitted to be placed on the bathroom circuit. The 20 amp circuit may be shared by more than one bathroom. 2016 CEC 210.11 (C) (3)

Are outlets provided at 12' O.C.?

231. Receptacles are required to be located so that no point in any wall space is more than 6' from a receptacle. -- 2016 CEC 210.52(A)(1)

Is a receptacle provided for each vehicle space in attached or detached garages with power?

232. Show a GFCI, AFCI & Tamper resistant receptacle for each vehicle parking space in the garage. Note that the circuit supplying this receptacle(s) shall not supply outlets outside of garage. 2016 CEC 210.52 (G) (1)

4 Wire feeder note for ranges & dryer noted?

233. Note that a 4 wire feeder is now required at all ranges, dryers, counter-mounted cooking units and ovens. The neutral conductor may no longer be used to ground the frame or J box of the range, oven and dryer. 2016 CEC 250.140

Are outlets in residence/garage separation walls separated accordingly?

234. Note that the outlets in the residence/garage separation wall are separated by a minimum of 24", or note the use of rated boxes at these locations. – 2016 CBC 713.3.2 Exc. 1.1-1.5

Receptacle outlet at each counter space wider than 12" and at the end of counters, located within the top 12" of the counter, in kitchen and dining areas?

235. In kitchen and dining areas, a receptacle outlet shall be installed at each counter space wider that 12" and at the end of counters, located within the top 12" of the counter. –2016 CEC 210.52(3) (C) 1-5.

Arc Fault Circuit Interrupter provided for the protection of all habitable rooms in this residence?

236. Note on the electrical sheet(s) that all 120-volt, single phase, 15 & 20 amp branch circuits supplying outlets installed in dwelling unit kitchen(s), family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways & all similar rooms or areas shall be protected by a listed arc-fault circuit interrupter, combination type, installed to provide protection of the branch circuit. --2016 CEC 210.12(A)

All exterior, garage, bathroom, and kitchen receptacles within 6' from the sink and above the counter have GFI protection?

237. Indicate that all exterior receptacles, garage receptacles, bathroom, kitchen, receptacles within 6' of tub/shower walls & laundry receptacles located within 6' from the sink and above the counter shall have GFCI protection. –2016 CEC 210.8 (A) 1-10

Is the dishwasher circuit noted as GFCI protected?

238. Note/ show on the electrical sheet that the dishwasher is required to be GFCI protected. 2016 CEC 210.8 (D)

Exterior outlets water proof type?

239. All exterior outlets must be a water proof type. –2016 CEC 406.9 (A) (B)

Is Outdoor Lighting Shielded?

240. Note on the electrical sheet that "All exterior lighting be directed downward and shielded to confine the lighting within the boundaries of the subject parcel. Exterior lighting shall not exceed 150 watts & must not be visible from adjacent properties". -- Clovis Municipal Code 9.22.050

CEC Approved LED Lighting?

241. Note on the electrical sheet that "**ALL** LED lighting must be Certified to CEC. If the lighting is not certified, it must be considered as "Low Efficacy Lighting". ALL LED lighting used as "High Efficacy" must have the data provided at the job site for inspection purposes". 2016 CEC Table 150.0-A

At least 1 wall switch controlled lighting outlet in every habitable room, hallways, bathrooms, stairways, attached garages and outdoor entrances?

242. Indicate that at least (1) wall switch controlled lighting outlet shall be installed in every habitable room, in hallways, bathrooms, stairways, attached garages and outdoor entrances. –2016 CEC 210.70 (A), (1)&(2)

High efficacy lighting at all lighting in halls, dining, living room, bedrooms etc.?

243. Show high efficacy lighting in all living rooms, hallways, bedrooms, dining room etc. These rooms may have incandescent lighting provided the lighting is controlled by a manual on occupancy sensor or a dimmer switch. These switches must be identified on the electrical plan. 2016 CEC 150 (k)

Is outdoor lighting high efficacy?

244. Note that all outdoor lighting that is attached to the building or any other building provided with commercial power is required to be high efficacy, (fluorescent). Incandescent lighting may be used, provided the luminaries are controlled by a photo control/motion sensor. 2016 CEC 150 (k) 3

High efficacy lighting for garage, laundry & utility rooms provided?

245. Every bathroom, garage, laundry room and utility rooms is required to have high efficacy lighting & must have at least one luminaire controlled by a vacancy sensor. 2016 CEC 150 (k) 6

High Efficacy Lighting For Bathrooms Provided?

246. Every bathroom shall have at least (1) high efficacy light fixture. All other lighting installed in each bathroom shall be high efficacy or controlled by a vacancy sensor. – 2016 CEC 150 (k) 5.

Is the lighting in kitchens noted as fluorescent?

247. Note the use of fluorescent lighting for the kitchen. At least 50% of the lighting watts in the kitchen must be high efficacy (fluorescent) lighting. The high efficacy luminaries must be switched separately from all other lighting. When using incandescent lighting in the kitchen, form CF-6R-LTG-01 must be provided showing compliance with the lighting wattage requirement. —CAC

Clearance of light fixtures in closets to point of storage shown?

248. Dimension the light fixture in closets to the nearest point of storage, 6” for fluorescent fixtures and 12” for incandescent fixtures. 2016 CEC 410.2

Is it noted 45 lumens per watt?

249. Note on the electrical sheet that the fluorescent lighting is required to be a minimum of 45 lumens per watt. —JA8.4.1

Smoke detectors provided in the access area to all rooms used for sleeping?

250. A smoke detector is required in the access area to all rooms used for sleeping purposes. –2016 CRC R314.3

Smoke detectors provided in all rooms used for sleeping?

251. A smoke detector is required in all rooms used for sleeping purposes. – 2016 CRC R314.3

Upper level rooms used for sleeping equipped with smoke detector in ceiling at stairs?

252. On an upper level where rooms are used for sleeping purposes, a smoke detector is required in the ceiling at the stairs. – 2016 CRC R314.3

Smoke detector on all levels wired to an alarm in the bedroom area(s)

253. Note on the electrical plan; All smoke alarms throughout this residence are required to be interconnected and must be provided with battery back-up. -- 2016 CRC R314.4

Note stating that all smoke detectors are required to be hard wired w/ battery backup/emit signal when low provided?

254. Provide a note stating that all smoke detectors shall be direct wired, interconnected, shall be equipped with a battery backup and shall emit a signal when the battery is low. – 2016 CRC R314.4

Carbon Monoxide Alarms installed in this dwelling?

255. Show at least one Carbon Monoxide Alarm installed on each floor level in the dwelling unit & in the immediate vicinity of each separate sleeping area. Note that all Carbon Monoxide Alarms are required to be inter-connected and equipped with a battery backup. 2016 CRC R315.1 – R315.7

T24/ENERGY

Building components insulated to comply?

256. Show building components to comply with the Energy Conservation Standards of Title 24, Part 6, Art. 2, CAC.

CF-1R & MF-1R forms blue lined on the plans?

257. Provide the CF-1R & MF-1R forms blue lined on the mechanical plan. -- CAC T20-1457

Post a certificate in a conspicuous location note provided?

258. Specify after installing wall, ceiling, or floor insulation, the installer shall post in a conspicuous location in the building a certificate signed by the installer stating that the installation was performed in a accordance with Title 24 requirements. --

Builder to provide occupant w/list of heating, cooling, water heating and lighting systems note provided?

259. Specify that the builder shall provide the original occupant with a list of the heating, cooling, water heating and lighting systems and conservation or solar devices installed in the building and instructions on how to use them efficiently. --CCR Title 20

Is the type and rating of the wall insulation (this includes pony and knee walls) specified?

260. Specify the type and rating of the wall insulation (this includes pony and knee walls -- Section 2-5352(c)1, Title 24, CAC.

Is HERS required inspections noted on the Mechanical plan?

261. Note all hers required testing for this residence on the mechanical plan, i.e., TXV valve, ducts etc…

Is the CF-4R form note provided?

262. Note that form CF-4R is required to be submitted to the Building Department prior to the final inspection.

Is the type and rating of ceiling insulation (this includes flat, vaulted etc.) specified?

263. Specify the type and rating of all ceiling insulation. Include all areas, sloped, flat etc. -- Section 2-5352(c)1, Title 24, CAC.

Is the type and rating of the floor insulation specified?

264. Specify the type and rating of the floor insulation in the building sections. --Section 2-5352(c)1, Title 24, CAC.

Blown or poured type insulation not to exceed more than 2.5:12 pitch note provided?

265. Specify that blown or poured type insulating material shall only be used in attic spaces where the slope of the ceiling does not exceed more than 2.5:12 pitch. -- CCR Title 24

Heating, ventilating and air conditioning equipment, including efficiency ratings listed and described on the mechanical plan?

266. List and describe all heating, ventilating and air conditioning equipment, including efficiency ratings on the mechanical plan. --Section 2-536, title 24, CAC. UBC 302. Are duct R-values listed on the mechanical sheet List duct R-values on the mechanical sheet. – 2016 CRC 106.1.1

Form CF-1R note provided on the mechanical sheet?

267. Note on the mechanical plan that “after installing the water heating and HVAC equipment, the installer shall post in a conspicuous location, form CF-1R. The form CF-1R shall include all efficiencies for all pieces of equipment that are equal to or greater than what is required by the T-24”.

Note on the electrical sheet that the builder is to provide the homeowner with a luminaire schedule

268. Note on the electrical sheet that the builder must provide the new homeowner with a luminaire schedule that includes a list of lamps installed in the luminaires. 2016 California Residential Manual 6.1.1 (7)

Note that the luminaire schedule is provided for inspection purposes?

269. Note on the electrical sheet that the builder is required to provide the inspector with a completed luminaire schedule for review. 2016 California Residential Manual 6.1.1 (7)

Heating/Cooling Load Calc's for Space Conditioning Equipment Provided?

270.Space-Conditioning Equipment.

1. **Building Cooling and Heating Loads.** Building heating and cooling loads shall be determined using a
method based on any one of the following:
A. The ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; or
B. The SMACNA Residential Comfort System Installation Standards Manual; or
C. The ACCA Manual J.
The cooling and heating loads are two of the criteria that shall be used for equipment sizing and selection.

NOTE: Heating systems are required to have a minimum heating capacity adequate to meet the minimum requirements of the CBC. The furnace output capacity and other specifications are published in the
Commission's directory of certified equipment or other directories approved by the Commission.

2. **Design conditions**. For the purpose of sizing the space-conditioning (HVAC) system, the indoor design temperatures shall be 68°F for heating and 75°F for cooling. Outdoor design conditions shall be selected from Reference Joint Appendix JA2, which is based on data from the ASHRAE Climatic Data for Region X.

3. The outdoor design temperatures for heating shall be no lower than the Heating Winter Median of Extremes values. The outdoor design temperatures for cooling shall be no greater than the 1.0 percent Cooling Dry Bulb and Mean Coincident Wet Bulb values. – 2013 CEC 150 (h)

Solar Ready Home Minimum Requirements

Provide the following notes on the electrical or solar ready plan(s) – 2016 CEC 110.10

1. 200 Amp main service entrance with end fed buss. (California Energy Code Section 110.10(e) 1 and 2 (No center fed buss panels allowed.)
2. Main service panel shall reserve as a minimum, a space for a double pole circuit breaker at the opposite end of the buss from the utility feed point and shall be marked "reserved for solar inverters" (California Energy Code Section 110.10(e) 2 A and B).
3. All buildings that must include a solar zone must also include a plan for connecting a PV and SWH system to the building's electrical and plumbing system. The construction documents shall indicate:
    a. A location for inverters and metering equipment for future solar electric systems. (California Energy Code 110.10(c))
    b. A pathway for routing conduit from the solar zone to the point of interconnection with the electrical service. There is no requirement to install any conduit. (California Energy Code 110.10(c))
        i. One acceptable method would be to run 2 Type NM 10-3 w/g cables run from the service entrance solar reserved breaker spaces to the roof deck area in the attic near the solar ready roof zone terminated in two separate junction boxes and labeled "Photovoltaic circuits".

    c. pathway for routing of plumbing from the solar zone to the water heating system. There is no requirement to install any piping. (California Energy Code 110.10(c))
        ii. One acceptable method of meeting this requirement would be to provide an electrical outlet at the water tank location for a circulation pump and provide two ¾" pipe runs with threaded termination at both ends from the solar reserve area to the water heating equipment area.
4. The solar zones must be clearly indicated on the roof plans for all possible orientations showing the minimum 250 square feet in the 110 to 270 degrees of "true north" orientations. (California Energy Code 110.10(b)1A)
5. For those homes that will be using any of the exceptions from the C.E.C section 110.10 (b) 1-7 it shall be clearly indicated on the plans which exception is to be used for compliance to the Solar Ready requirements.

i. and ii. are only given as examples of ways to comply with the requirements, it is the designers responsibility to provide a plan for compliance with these requirements.

271. Note all hers required testing for this residence on the mechanical plan, i.e., TXV valve, ducts etc…

272. Note that form CF-4R is required to be submitted to the Building Department prior to the final inspection.

Residential Fire Sprinklers

273. Provide a residential fire sprinkler plan for this residence. A complete & separate sprinkler plan is required for each individual floor plan option. 2016 CRC R106.1.1 Fire Sprinkler plans shall be submitted for review AND APPROVED BY THE Dinuba Fire Department prior to issuing a building permit. There are no deferred submittals for Fire Sprinklers plans.

274. Provide a legend on the cover sheet of the fire sprinkler plan that includes each of the different head types for this residence. 2016 CRC 106.1.1

275. Provide “looped” fire sprinkler layout. Clovis Fire Department Standard

276. Note on the fire sprinkler plan that an owner’s manual is required to be provided to the homeowner. 2016 CRC R313.3.7

277. Note on the fire sprinkler plan that all piping in un-insulated areas, such as the attic area over the garage must be covered with insulation. 2016 NFPA 13D 7.7

278. Provide a domestic water line drop from the sprinkler piping to every “Non-Potable” plumbing fixture, i.e., water closets, bathtubs, showers, etc.

279. Note on the fire sprinkler plan that all uninsulated attic areas, such as the garage attic, require that the sprinkler piping be insulated. 2016 NFPA 13D 7.7

280. Note on the fire sprinkler plan that the system used must comply with NFPA 13D, or R313.3, which is considered to be equivalent. 2016 CRC R313

281. Note on the residential Fire Sprinkler Plan that, effective 1/1/10, all piping, fixtures, fittings and sprinkler heads must comply with the lead free requirements of AB1953. Note that all of the above noted items are not permitted to exceed 0.25% lead content. 2016 CPC 604.2

282. Specify the type of residential fire sprinkler system is used for this residence. 2016 CRC R106.1.1

283. Note that the “stand alone” residential fire sprinkler system is not permitted to use anti-freeze. 2016 CRC R313.3.1

284. Provide table R313.3.2.2 on the fire sprinkler plan. 2016 CRC R106.1.1

285. Note on the fire sprinkler plan that modifications are prohibited. Sprinklers that have been painted, caulked, modified or damaged must be replaced. 2016 CRC R313.3.2.6

286. Note on the fire sprinkler plan that a shut off valve is not permitted. 2016 CRC R313.3.3.2

287. Note on the fire sprinkler plan at the main shut off valve, a tag or a sign stating the following is required; “Warning, the water system for this home supplies fire sprinklers that require certain flows and pressures to fight a fire. Devices that restrict the flow or decrease the pressure or automatically shut of the water to the fire sprinkler system, such as water softeners, filtration systems and automatic shut off valves, SHALL NOT be added to this system without a review of the fire sprinkler system by a fire protection specialist. DO NOT REMOVE THIS SIGN” 2016 CRC R313.3.7

288. Provide a spare fire sprinkler head box that includes at least 1 sprinkler head of each type used in this residence. The spare head box is to be located in the laundry room.

289. Show an alternate point of connection for the water service on the opposite side of the residence. 2016 CRC R106.1.1

290. Note the ceiling height of all rooms in the residence that require fire sprinklers, including the garage on the fire sprinkler plan. 2016 CRC R106.1.1

291. Provide the designers signature on the plans and the calc’s. 2016 CRC R106.1.1

2016 California Green Building Standards

Place all of the following comments together on one sheet in the plans.

SITE DEVELOPMENT

General*:* Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

Storm water drainage and retention during construction.

Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff' on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
3. Compliance with a lawfully enacted storm water management ordinance.

4.106.3 Grading and paving. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales
2. Water collection and disposal systems
3. French drains
4. Water retention gardens
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

Exception: Additions and alterations not altering the drainage path.

4.106.4 Electric vehicle (EV) charging for new construction.

New construction shall comply with Sections 4.106.4.1 and 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code,* Article 625.

Exceptions: On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:

1. Where there is no commercial power supply.
2. Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than $400.00 per dwelling unit.

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1” (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and spaces reserved to permit installation of a branch circuit overcurrent protective device.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

4.106.4.2 New multifamily dwellings. Where 17 or more multifamily dwelling units are constructed on a building
site, 3 percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

Note: Construction documents are intended to demonstrate the project's capability and capacity for facilitating
future EV charging. There is no requirement for EV spaces to be constructed or available until EV chargers are provided for all types of parking facilities, but in no case less are installed for use.

4.106.4.2.1 Electric vehicle charging space (EV space) locations. Construction documents shall indicate the location of proposed EV spaces. At least one EV space shall be located in common use areas and available for use by all residents. When EV chargers are installed, EV spaces required by Section 4.106.4.2.2, Item 3, shall comply with at least one of the following options:

1. The EV space shall be located adjacent to an accessible parking space meeting the requirements of the *California Building Code,* Chapter 11A, to allow use of the EV charger from the accessible parking space.
2. The EV space shall be located on an accessible route, as defined in the *California Building Code,* Chapter 2, to the building.

4.106.4.2.2 Electric vehicle charging space (EV space) dimensions. The EV spaces shall be designed to comply with the following:
1. The minimum length of each EV space shall be 18 feet (5486 mm).
2. The minimum width of each EV space shall be 9 feet (2743 mm).
3. One in every 25 EV spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).
   a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.3 Single EV space required. Install a listed raceway capable of accommodating a 2081240-volt dedicated branch circuit. The raceway shall not be less than trade size 1” (nominal I-inch inside diameter. The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV spaces. Construction documents shall identify the raceway termination point. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent Protective device.

4.106.4.2.4 Multiple EV spaces required. Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EV’s at all required EV spaces at the full rated amperage of the EVSE. Plan design shall he based upon a 40-ampere minimum branch circuit. Raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

4.106.4.2.5 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE in accordance with the *California* Electrical *Code.*
Notes:
1. The California Department of Transportation adopts and publishes the "California Manual on Uniform Traffic Control Devices (California MUTCD)" to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives Number

13-01. Website: http://www.dot.ca.gov/trafficops/policy/l3-01 .pdf
2. See Vehicle Code Section 22511for EV charging space signage in off-street parking facilities and for use of EV charging spaces.
3. The Governor's Office of Planning and Research (OPR) published a "Zero-Emission Vehicle Community Readiness Guidebook" which provides helpful information for local governments, residents and businesses. Website: http://opr.ca.gov/docs/ZEV-Guidebook.pdf.

SECTION 4.303
INDOOR WATER USE

4.303.1 Water conserving plumbing fixtures and fittings. Plumbing fixtures, (water closets & urinals) and fittings (faucets and showerheads) shall comply with the following:

4.303.1.1 Water closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for tank-type toilets.

> **Note:** The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3 Showerheads.

4.303.1.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 2.0 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA Water Sense Specification for Showerheads.

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 2.0 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time.
Note: A hand-held shower shall be considered a showerhead.

4.303.1.4 Faucets.

4.303.1.4.1 Residential lavatory faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of a residential lavatory faucet shall not be less than 0.8 gallons per minute at 20 psi.

4.303.1.4.2 Lavatory faucets in common and public use areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

4.303.1.4.3 Metering faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.25 gallons per cycle.

4.303.1.4.4 Kitchen faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute
at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.
Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

SECTION 4.304
OUTDOOR WATER USE
4.304.1 Outdoor potable water use in landscape areas.
After December 1, 2015, new residential developments with an aggregate landscape area equal to or greater than 500 square feet shall comply with one of the following options:

1. A local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is stringent; or.
2. Projects with aggregate landscape areas less than 2,500 square feet may comply with the MWELO's Appendix D Prescriptive Compliance Option.

Notes:

1. The Model Water Efficient Landscape Ordinance (MWELO) and supporting documents are available at http:www.water.ca.gov/wateruseefficiency/landscapeordinance/
2. A water budget calculator is available at: http://www.water.ca.gov/waterusccfficiency/landscapeordinance

SECTION 4.406
ENHANCED DURABILITY
AND REDUCED MAINTENANCE
4.406.1 Rodent proofing. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

SECTION 4.408
CONSTRUCTION WASTE REDUCTION,
DISPOSAL AND RECYCLING

4.408.1 Construction waste management. Recycle and/or salvage for reuse a minimum of **65** percent of the nonhazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.

Exceptions:
1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

4.408.2 Construction waste management plan. Submit a construction waste management plan in conformance with Items I through *5.* The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.
1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on
the project or salvage for future use or sale.

2. Specify if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed
(single stream).
3. Identify diversion facilities where the construction and demolition waste material will be taken.
4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

4.408.3 Waste Management Company. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.
Note: The owner or contractor may make the determination if the construction and demolition waste materials will
be diverted by a waste management company.

4.408.4 Waste stream reduction alternative [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 pounds per square foot of the building area shall meet the minimum *65* percent construction waste reduction requirement in Section 4.408.1

4.408.4.1 Waste stream reduction alternative. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65-percent construction waste reduction requirement in Section 4.408.1.

4.408.5 Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, Items 1 through 5, Section 4.408.3 or Section 4.408.4.
Notes:
1. Sample forms Sound in "A Guide to the California Green Building Standards Code (Residential)"
located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.
2. Mixed construction and demolition debris (C&D) processor-s can be located at the California Department
of Resources Recycling and Recovery (CalRecycle).

SECTION 4.41 0
BUILDING MAINTENANCE AND OPERATION
4.410.1 Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:
1. Directions to the owner or occupant that the manual shall remain with the building throughout the life
cycle of the structure.

2. Operation and maintenance instructions for the following:
a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic
systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
b. Roof and yard drainage, including gutters and downspouts.
c. Space conditioning systems, including condensers and air filters.
d. Landscape irrigation systems.
e. Water reuse systems.
3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
4. Public transportation and/or carpool options available in the area.
5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
6. Information about water-conserving landscape and irrigation design and controllers which conserve water.

7. Instructions for maintaining gutters and downspout and the importance of diverting water at least 5 feet away from the foundation.
8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
9. Information about state solar energy and incentive programs available.
10. A copy of all special inspection verifications required by the enforcing agency or this code.

4.410.2 Recycling by occupants. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and is identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82
(a)(2)(A) et seq. are not required to comply with the organic waste, and metals, or meet a lawfully enacted recycling ordinance, if more restrictive.
Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are not required to comply with organic waste portion of this section.

FIREPLACES

4.503.1 General. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

SECTION 4.504
POLLUTANT CONTROL

4.504.1 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of water, dust and debris, which may enter the system.

4.504.2 Finish material pollutant control. Finish materials shall comply with this section.

4.504.2.1 Adhesives, sealants and caulks. Adhesives, sealants and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:
1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or
SCAQMD Rule 1 168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2 below.

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations,* Title 17, commencing with Section 94507.

4.504.2.2 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply.
The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in
Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-high Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat- high Gloss VOC limit in Table 4.504.3 shall apply.

4.504.2.3 Aerosol paints and coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds
and ozone depleting substances, in Sections 94522(e)(l) and (f)(l) of *California Code of Regulations,* Title 17,
commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.

4.504.2.4 Verification. Verification of compliance with this section shall he provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:
1. Manufacturer's product specification.
2. Field verification of on-site product containers.

4.504.3 Carpet systems. All carpet installed in the building interior shall meet the testing and product requirements of one of the following:
1. Carpet and Rug Institute's Green Label Plus Program.
2. California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350.)
3. NSF/ANSI 140 at the Gold level.
4. Scientific Certifications Systems Indoor Advantage Gold.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute's Green Label program.

4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

4.504.4 Resilient flooring systems. Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall comply with one or more of the following:
1 Products compliant with the California Department of Public Health, "Standard Method for the Testing and
Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,"

Version I. I, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database.
2. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children & Schools program).
3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.
4. Meet the California Department of Public Health, "Standard Method for the Testing and Evaluation of
Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1,
February 2010 (also known as Specification 01350).

4.504.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite
wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in ARB'S Air Toxics Control Measure for Composite Wood (17 CCR 93 120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5.

4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:
1. Product certifications and specifications.
2. Chain of custody certifications.

3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, *et* seq.).
4. Exterior grade products marked as meeting the PS- I or PS-2 standards of the Engineered Wood Association the Australian ASINZS 2269, European 636 3S, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.

5. Other methods acceptable to the enforcing agency.

SECTION 4.505
Interior Moisture Control

4.505.1 General. Buildings shall meet or exceed the provisions of the *California Building Standards Code.*

4.505.2 Concrete slab foundations. Concrete slab foundations required to have a vapor retarder by the *California*
Building Code, Chapter 19 or concrete slab-on-ground floors required to have a vapor retarder by the *California Residential Code,* Chapter 5, shall also comply with this section.

4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following:
1. A 4-inch-thick (101.6 mm) base of ½ inch (12.7 mm) or larger clean aggregate shall be provided with a vapor retarder in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Other equivalent methods approved by the enforcing agency.
3. A slab design specified by a licensed design professional.

4.505.3 Moisture content of building materials. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19-percent moisture content. Moisture content shall be verified in compliance with the following:
1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
2. Moisture readings shall be taken at a point 2 feet to 4 feet from the grade stamped end methods.

3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.
Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

SECTION 4.506
INDOOR AIR QUALITY AND EXHAUST

4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:

1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.

a. Humidity controls shall be capable of adjustment between a relative humidity range of < 50 percent to
a maximum of 80 percent. A humidity control may utilize manual or automatic means of adjustment.

b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in).

Notes:

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower, or tub/shower combination
2. Lighting integral to bathroom exhaust fans shall comply with the *California Energy Code.*

SECTION 4.507
ENVIRONMENTAL COMFORT

4.507.2 Heating and air-conditioning system design. Heating and air-conditioning systems shall be sized, designed and have their equipment selected using the following methods:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J -2011 *(Residential Load*
Calculation), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D-20 14 *(Residential Duct Systems),*
ASHRAE handbooks or other equivalent design software or methods.
3 Select heating & cooling equipment according to ANSI/ACCA 3 manualS-2014 (Residential Equipment Selection) or other equipment design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the systems function are acceptable.