COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY DIVISION

TITLE 26, LOS ANGELES COUNTY BUILDING CODE

ONE & TWO FAMILY DWELLING

CORRECTION SHEET

Building Address	*City or Locality*	*District No.*	*Plan Check No*
Architect/Engineer/Drafter	*Telephone No.*	*Owner*	*Telephone No.*
Applicant	*Telephone No.*		

Residence and Garage	**No. Of Story**	**Floor Areas (sq. Ft.):** Res./Gar	**Valuation ($)**	**Fire Zone**	**Climate Zone**
□ (Attached) □ (Detached)					

BEFORE APPROVAL FOR CODE COMPLIANCE OR OF A BUILDING PERMIT, THE PLANS AND APPLICATION FOR THIS CONSTRUCTION REQUIRE THE INFORMATION REVISIONS, AND/OR CORRECTIONS INDICATED BY THE CIRCLED ITEMS BELOW. THE APPROVAL OF PLANS AND SPECIFICATIONS DOES NOT PERMIT THE VIOLATIONS OF ANY SECTION OF THE BUILDING CODE, OR OTHER COUNTY ORDINANCE, OR STATE LAW.

Note: Numbers in parenthesis refer to code sections of the 2002 Editions of the Los Angeles County Building Code ( ), (T=Table), Plumbing Code (P.C.), Mechanical Code (M.C.), Electrical Code (E.C.), Building Code Manual (B.C.M.), or National Design Specification for Wood Construction, 1991 Edition (NDS).

INSTRUCTIONS

A. Corrections with circled item numbers apply to this plan check.

B. To the right of the circled corrections, please indicate the sheet number and detail or note number on the plans where the corrections are made. Resubmit marked originals and **two corrected sets of plans**, calculations and this correction sheet. Separate sheet for response may be used.

C. The plan check engineer will be available for conference and telephone calls only between the hours of_____ and _____ on the following days: _____. Appointments are recommended. See page 4 of this correction sheet for the name, phone number and office of the plan check engineer.

APPLICATION

Application will expire on _____/_____/_____. Permit needs to be obtained prior to expiration date.

Building Elements	Area	Unit $	$ Value

1. Valuation is low. It should be $_____. Correct the application and pay a supplemental plan check fee of $_____ **at the time of resubmittal.** (107.2)
2. Separate permit(s) is / are required for accessory building, swimming pool, retaining wall, bridge not involving buildings, demolition, _____(106.1)
3. Show / correct address of the building on the permit application. (106.3.1)
4. A Certificate of Workers' Compensation insurance must be presented to the local Building and Safety Division office before a permit can be issued.

REFERRALS

All agency approvals are required prior to issuance of building permit. (See Agency Referral sheet for additional details)

5. Approval is required by the City of_____ for _____. (106.5.1)
6. Fire Department approval letter is required. (106.5.1)
7. Approval of the Geology Section of the Geotechnical and Materials Engineering Division, Department of Public Works, is required. (110.2)
8. A geological report / soils report is required. (111)
9. Approval of the Drainage Section of the Building & Safety Division, Department of Public Works is required.
10. Rough grading approval is required before building permit can be issued. (Appendix Chapter 3317.6)
11. Health Department approval is required for the size and location of a private sewage disposal system. (106.5.1)
12. Sanitation District clearance is required (Payment of sewer connection fee). (106.5.1)
13. Coastal Commission approval is required for structures located within 5 miles of the coastline. (106.5.1)
14. A clearance from _____ Water Agency is required (Form 195). (106.5.1)
15. A fee receipt is required from _____School District. (106.5.1)
16. A fee receipt is required from County of Los Angeles Public Library.
17. Submit to Mechanical section for energy calculations using computer method (Title 24). (106.5.1)
18. _____

ZONING/PLANNING REQUIREMENTS (Title 22, L .A. County Code)

19. Approval from the Regional Planning Department is required for:
    a. Residential use in_____ zone / establishing the property as a legal building site / a land use zone that is not in compliance with the General Plan.
    b. Residential use on a lot less than 5,000 sq. ft.
20. Locate the building to comply with _____ ft. front yard, _____ ft. side yard and _____ ft. rear yard setback lines.
21. Provide a garage or carport for two automobiles with paved driveway (3½ in. concrete or 1½ in. asphalt on 4 in. base). Minimum required area is 8½ x 18 feet per parking space.

SUPPLEMENTAL CORRECTIONS

22. Refer to the attached sheets for:
    a. "Residential Plan General Notes" requirements.
    b. "Fire Zone 4" requirements.
    c. "Best Management Practice for Construction Activity" (BMPFCA) requirements. (Incorporate on plans)
    d. Security requirements.
23. The address of the building, and the name and address of the owner(s), and person(s) preparing the plans are required on the first sheet of the plans. (106.4.3)
24. A complete plot plan showing:

    Lot dimensions / yard setbacks / street name(s) / north arrow / existing building to remain / distance between buildings / location of private sewage disposal system including expansion areas / utilities / easements / _____ is required. (106.4.3)
25. Delete notes and details that do not apply to this project. (106.4.3)
26. Indicate detail and section references as to their appropriate location on plan views. (106.4.3)
27. Maintain 5 ft. clearance between septic tank and seepage pit and minimum clearances to buildings and property lines of 5 feet for the septic tank and 8 feet for the seepage pit. (P.C. Appendix K table K-1)
28. Provide existing and proposed contours / spot elevations to indicate general site slope and drainage pattern. (106.4.3)
29. Specify finish floor elevation of first floor. (106.4.3)
30. Grading permit may be / is required. Plans and permit for grading may be processed and issued separately prior to building permit. In order to make a final determination, contact the grading section of Building and Safety Division, Department of Public Works. A grading permit is required for the following (106.4.3 and 3306.2). Also see Item no. 10.
    a. All cuts exceeding 2 feet in depth (except for footings, basements and retaining walls.) Note: the placement of excess material from such excavations may require a grading permit.
    b. All fills:
        i. Intended to support structures.
        ii. That obstruct or divert a drainage course.
        iii. On natural slopes exceeding 5 : 1 (Horiz. : Vert.) greater than 1 foot in depth.
        iv. Whose depth exceeds 3 feet at its deepest point.
        v. At least 20 cubic yards on any one lot.

    The grading of access roads or pads for exploratory excavations is not exempt from these requirements.

BUILDING SITING

31. Exterior walls of dwellings, guest houses, detached garages/carports closer than 3 feet (914 mm) to property lines shall be of one-hour fire-resistive construction with no openings and shall have 30 inch (762 mm) parapets when the building floor area exceeds 1,000 square feet (93 m^2) on any floor. (T 5-A and 709.4)
32. Buildings adjacent to ascending or descending slopes shall maintain setback according to the requirements of Section 1806.5. (See attached sketch sheet)
33. Projections, including eaves, shall be of one-hour fire-resistive construction, heavy timber or of noncombustible material if they project into the 3 foot (914 mm) setback area from the property line. (705, T 5-A)
34. Eaves over required windows shall be at least 30 inches (762 mm) from the side or rear property lines. (1204)
35. Exterior stairway is not permitted closer than 3 feet (914 mm) from property line. (T-5A, 1006.2.1)

ROOF COVERING

36. For roof covering specify:
    a. Roof slope(s) of all areas on the roof plan. (1506.1)
    b. Manufacturer and type of built-up roof. (1507.1)
    c. Type / manufacturer and I.C.B.O. / UL number of shingle / tile roof. (1507.1)
    d. Wood shingles and shakes shall be Class _____ rated. (1502)
    e. Any mineral aggregate surfaced built-up roof shall have at least 3 layers of felt and 400 lbs/roofing square of gravel or 300 lbs. / roofing square of slag. (1507.6 and T-15F)
37. Roof slope is not adequate for _____ type of roof covering specified. (T 15-B-1 through T 15-D-2)
38. Show sizes / locations of the roof/deck drains and overflows. Use UPC Appendix D and 3"/hr for a 15-minute duration to size drain overflow. Scuppers shall have a minimum opening of 4", a minimum area three times that of roof drains and located not more than 2" above the low point of the roof. (1506, BCM 1506 Article 1)
39. Specify minimum 1/4 inch per foot roof slope for drainage or design to support accumulated water (1506, 1611.7 and 2316.2 item 22)
40. Specify approved weatherproof walking surface material at decks and balconies. (2306.12)

DESIGN REQUIREMENTS

41. Floors and walls separating dwelling units in the same building shall not be of less than one-hour fire-resistive construction. (310.2.2)
42. Habitable rooms, other than kitchens, shall contain at least 70 square feet (6.5 m^2) of floor area. A minimum room area of _____sq. ft. is required for _____. (310.6.2)
43. Habitable rooms other than a kitchen shall not be less than 7 feet (2134 mm) in any dimension. (310.6.3)
44. Show that ceiling height for habitable rooms is 7 ft. 6 in. (2286 mm) minimum. (310.6.1)
45. Show that ceiling height for kitchens, halls, bathrooms, and toilet compartment is 7 feet (2134 mm) minimum. (310.6.1)
46. Exterior glazed openings (including skylights) of habitable rooms must be minimum 1/10 of the room floor area with a minimum of 10 square feet (0.93 m^2). This requirement appears to be deficient in_____ _____. (1203.2)
47. In order to consider any room as a portion of an adjoining room, at least half of the common wall area shall be open and unobstructed and shall provide an opening of not less than 1/10 the floor area of the interior room or 25 sq. ft. (2.3 m^2), whichever is greater. Show that the common wall between _____ and _____ complies with the above requirement.(1203.1)
48. Porch over required windows at _____ must have a minimum clear height of 7 feet (2134 mm) with longer side at least 65% open and unobstructed. (1203.1)
49. Openable ventilation area of habitable rooms must be 1/20 of the room floor area with a minimum of 5 square feet (0.465 m^2). (1203.3)
50. In lieu of exterior openings for habitable rooms, a mechanical ventilating system capable of providing two air changes per hour with a minimum of 15 cu. ft. per minute (7 L/s) of outside air per occupant shall be provided. Show size of unit and location of registers. (1203.3)
51. In bathrooms, water closet compartments, and similar rooms, 1/20 of room floor area is required to be openable with a minimum of 1.5 sq. ft. (0.14 m^2). It appears to be deficient in _____ (1203.3)
52. Provide mechanical ventilation capable of providing five air changes per hour in bathrooms containing tubs or showers and similar rooms, if required openable windows are not provided (ductless fans are not acceptable in rooms containing tubs or showers). The point of discharge shall be at least 3 feet (914 mm) from any opening. (1203.3)
53. Dimension on the plans the 30 inch (762 mm) clear width for water closet compartment and 24 inch (610 mm) clearance in front of water closet for _____ bathroom. (2904)
54. Wall covering of showers or tubs within showers shall be of cement plaster, tile, or approved equal, to a height of not less than 70 inches (1778 mm) above drain inlet. Materials other than structural elements shall be moisture resistant. Glass enclosure doors and panels must be labeled Category II. Swing door outward. Net area of shower receptor shall be not less than 1,024 sq. in. of floor area, and encompass 30 inch (762 mm) diameter circle. (807.1.3, 2406.4, 2407, UBC STD.24-2, T 24-C and P.C. 412.7)
55. In every bedroom and basement, provide one openable escape window meeting all of the following: (310.4)
    a. An openable area of not less than 5.7 sq. ft. (0.530 m^2).
    b. A minimum clear height of 24" (610 mm).
    c. A minimum clear width of 20" (508 mm).
    d. A sill height not over 44" (1118 mm) above the floor).
56. Show location(s) of hard-wired smoke alarm with a battery back up in each sleeping room and at a point centrally located in the corridor or area giving access to each sleeping area: a smoke alarm shall be located at each story and basement, on the upper level of split level stories and both levels if sleeping area is on lower level; a smoke alarm shall be located in close proximity to the stairway when sleeping rooms are on the upper level. Where the ceiling height of a room open to the hallway serving the bedrooms exceeds that of the hallway by 24 (610 mm) inches or more, smoke alarms shall be installed in the hallway and near the high point of the adjoining room.(Battery operated smoke alarm permitted in existing construction only). (310.9.1)
57. Show location of 22" x 30" (559 mm x 762 mm) attic access with 30 inch (762 mm) minimum headroom. (1505.1)
58. Provide full height cross section through showing framing, interior / exterior sheathing, plate heights, insulation, foundation, finish grade, etc. (106.4.3)
59. Show how dwelling is provided with comfort heating facilities capable of maintaining a room temperature of 70 F. (310.11)
60. The residence shall conform to the State Energy Conservation Standards based on the new regulations which went into effect June 1, 2001. Submit forms and calculations for review and blueprint the final 'CF-1R' form on the plans. (TITLE 24, C.C.R)

EXITS AND STAIRS

61. Regardless of occupant load, a minimum of one exit doorway shall not be less than 3 feet (914 mm) wide and 6 feet 8 inches (2032 mm) in height, and shall be capable of providing an exit opening of 32 inches (813 mm) minimum clear width. (1003.3.1.3)
62. Landings at door shall have a length measured in direction of travel of not less than 36 inches (914 mm). (1003.3.1.7)
63. A door may swing over a landing that is not more than 1 inch (25 mm) below threshold. (1003.3.1.6)
64. Door may open on the top step of a flight of stairs or an exterior landing, provided door does not swing over the top step or exterior landing and the landing is not more than 7½" below the floor level. (1003.3.1.6.2)
65. Occupants on floors above the second floor shall have access to two separate exits. (EXCEPTION: when the area of the 3rd floor within an individual dwelling unit does not exceed 500 sq. ft. (46.45 m^2) only one exit is required from that story). (1004.2.3.2)
66. Provide section and details of interior and exterior stairway showing:
    a. Maximum rise of 8 inches (203 mm) and minimum run (tread) of 9 inches (229mm) when the stairway serving an occupant load of less than 10. (1003.3.3.3)
    b. Minimum width of 36 inches (914 mm). (1003.3.3.2)
    c. Minimum headroom of 6 feet 8 inches (2032 mm). (1003.3.3.4)
    d. Framing (stringer, landing, etc.) size, bracing, connections, and footings. (106.4.3)
    e. Stairways positively anchored to the primary structure without using toe nails or nails subject to withdrawal. (2320.13)
    f. Enclosed usable space under a stairway requires one-hour fire-resistive construction on enclosed side. (1003.3.3.9)
    g. Exterior stairways constructed of wood not less than 2 inches (51 mm) in nominal thickness or noncombustible materials. (606.4.3)
67. Delete diagonal riser at landing unless width of run at narrow end is at least 6 inches (152 mm). (1003.3.3.8.2)
68. Spiral stairways shall not serve as required exit for an area exceeding 400 sq. ft. (37.16 m^2). (1003.3.3.8.3)
69. Submit shop drawings for spiral stairway showing compliance with Section 1003.3.3.8.3.
70. Provide spiral stairway column base connection / footing detail. (106.4.5)
71. Provide connection details of guardrail and/or handrail on open side of stair adequate to support 20 pounds per lineal foot at a right angle to the top rail. (T 16-B)
72. Handrails shall satisfy the following: (1003.3.3.6)
    a. Provide continuous handrails on both sides for stairways with 4 or more risers. Exception: stairways 44 inches (1118 mm) or less in width may have one handrail except that such stairways open on one or both sides shall have handrails provided on the open side or sides.
    b. Handrail shall be 34 to 38 inches (864 to 956 mm) above the nosing of treads.
    c. Openings between intermediate balusters shall preclude the passage of a 4-inch diameter sphere. The triangular openings formed by the riser, tread and bottom element of a handrail shall preclude the passage of a 6-inch diameter sphere. (509.3)
    d. The handgrip portion of handrail shall be not less than 1 1/4 inches (32 mm) nor more than 2 inches (51 mm) in cross sectional dimension.
    e. Return handrail to newel post or wall.
73. Provide 36 inch (914 mm) high (minimum) protective guardrail for decks, porches, balconies and raised floors (when more than 30 inches (762 mm) above grade or floor below), and open side(s) of stair landings. Opening between balusters/ rails shall preclude passage of 4 inch (102 mm) diameter sphere. (509)

VENTILATION

74. Show attic ventilation type, size, and location. The required ventilation area ratio is 1/150 of attic area or 1/300 of attic area if half of the vent area is located more than 3 feet (914 mm) above eave vents with the balance of the required ventilation provided by the eave vents. Openings shall have 1/4 inch (6.4 mm) corrosion resistant metal mesh covering. (Note: Provide manufacturer information on net free area for dormers, rotary vents, etc.). (1505.3)
75. Show underfloor ventilation opening size and locations equal to 1 sq. ft. (0.093 m^2) for each 150 sq. ft. (13.9 m^2) of underfloor area. Openings shall be as close to corners as practicable and shall provide cross ventilation along the length of at least two opposite sides. Openings shall have 1/4 inch (604 mm) corrosion resistant metal mesh covering. (2306.7)
76. Where planter boxes are installed adjacent to wood frame walls, a 2-inch-wide (51 mm) air space shall be provided between the planter and the wall. Flashings shall be installed when the air space is less than 6 inches (152 mm) in width. (2306.8)

GARAGE AND CARPORT

77. The following are required for attached garage / carport:
    a. Specify makeup of one-hour fire-resistive construction on the garage side for walls, ceilings, posts and beam of garage adjacent to or supporting the dwelling. (Does not apply to one-story carport). (302.4 and T 3-B)

b. Self-closing, tight-fitting, solid wood 1 3/8 inch thick door or 20 minute labeled door at opening to dwelling. (Does not apply to one-story carport.) (302.4 exec. 3)

c. Delete door from garage into room used for sleeping. (312.4)

d. A garage / carport floor surfaces shall be of noncombustable materials or asphaltic paving materials. The minimum thickness of concrete floor slabs supported directly on the ground shall not be less than 3½ inches (89 mm). (312.5 and 1900.4.4)

e. A garage / carport floor system adequate to support a wheel load of 2,000 lbs. (1607.3.3)

VENEER / FIREPLACE

78. Specify / detail masonry veneer material, thickness, backing, anchorage, footings and support over openings. (1403)

79. For fireplace / chimney specify the following:

a. Chimney shall extend 2 feet above roof wall within 10 feet. (T31-B)

b. Anchor chimney to floor and roof ceiling joists. Reinforce masonry chimney per Section 3102.4.3.

c. Spark arrestor required in Fire Zone 4. (6403.5)

80. For factory built metal fireplace specify: (3102.5)

a. Manufacturer, model and I.C.B.O. / UL number

b. Note on the plans: 'Installation and use shall be in accordance with their listing.'

STRUCTURAL

81. Specify grade and species of framing lumber, treated mud sills, type and grade of plywood, design strength of concrete and glued-laminated timber, ASTM designation of structural steel shapes and masonry units, mix of mortar, grout, and _____. (106.4.3)

82. Light frame construction of unusual shape, size, split-level, or more than 1 story shall be designed to resist lateral forces. Submit design for lateral forces. (2320.1)

83. Structural framing not using Conventional Light-Frame Construction Provisions of Section 2320 requires the plans and calculations to be signed and sealed by an architect or civil/structural engineer licensed in the State of California. (106.4.2)

84. Architect or Engineer of record shall specify the distance to the nearest seismic source. (106.4.2)

85. Cross reference all calculations for joists, beams, shear walls, etc, to framing / floor plans. (106.4.3)

86. Design and details are required for retaining walls over 3 feet high or with surcharge. Engineer's signature is required if wall is surcharged or over 5 feet high. (106.4.2, 106.4.3)

87. Submit structural calculations / design details for _____ _____ (106.4.3)

88. The owner shall designate the Engineer or Architect of Record on the building permit application. (106.4.4.1)

89. The Engineer or Architect of record, shall review and approve truss design for loads, location, and suitability for intended use. (106.4.4.1)

90. Allowable values for structural design shall be per the 2002 Los Angeles County Building Code.

FOUNDATION

91. The foundation plan does not comply with the soil report recommendation for this project. Please review the report and modify design, notes and details as required to show compliance with _____ _____ (106.4.3)

92. The soils report requires foundation excavations to be reviewed by the soils engineer. Note on the foundation plan "Prior to requesting a Building Department foundation inspection, the soils engineer / geotechnical consultant shall inspect and approve the foundation excavations". (106.4.3)

93. Have the consulting soils/geotechnical engineer review and approve the foundation plans. (106.4.3)

94. Soil bearing pressure is limited to 1000 lbs/sq ft. unless soils report recommends otherwise. (1805 and T18-I-A)

95. Call out minimum thickness of 3½ inch concrete slab on grade, reinforcement, and moisture barrier on foundation plan. (1900.4.4)

96. Call out foundation bolt size and spacing on foundation plan. The foundation bolts shall be 5/8 inch diameter with ¼" x 2 ½" x 2 ½" plate washers embedded at least 7 inches into the concrete or masonry foundation spaced not more than 6 feet apart. (1806.6 & T-23-II-L)

97. Foundation sill bolts require steel plate washers of size and thickness as specified by table 23-II-L. (1806.6.1)

98. Detail (and reference location on foundation plan) typical foundation sections for: perimeter walls, interior bearing walls, depressed slabs, foundation common to dwelling and garage, garage entrance, spread and/or post pads. (106.4.3)

99. Foundations with stem walls shall be reinforced with a minimum of one No. 4 bar at the top of the wall and one No. 4 bar at the bottom of the footing. (1806.7.1)

100. Slabs-on-ground with turn-down footings shall be reinforced with a minimum of one No. 4 bar at the top and one No. 4 bar at the bottom. (1806.7.2)

101. Foundation sections 12/15/ 18 inches wide, 6 / 8 / 10 inches thick and 12 /18 / 24 inches depth below natural ground surface or certified fill grade are required. (T 18-I-C)

102. Provide details for stepped footings when slope of top and/or bottom of footing exceeds 1 :10. (1806.4)

103. Show minimum 18 inch underfloor clearance from grade to bottom of floor joists and minimum 12 inch clearance to bottom of girders. (2306.3)

104. Specify that foundation sills shall be pressure treated or foundation grade Redwood. (2306.4) Foundation cripple walls shall be framed and sheathed per Section 2320.11.5. A cripple wall over 4 feet in height shall be framed of studs having the size required for an additional story.

105. Provide a weep screed for stucco at the foundation plate line a minimum of 4 inches above the earth or 2 inches above paved areas. (2506.5)

106. Show location of underfloor access crawl hole (18 x 24 inches). (2306.3)

107. Foundation and floor slabs on expansive soil shall conform as follows, unless an approved soils report indicates that soil is not expansive by the Expansion Index Test method, or recommends other details: (BCM 1804.1 Art. 1)

a. Continuous footings under exterior walls and interior bearing walls extending below grade 24" and 18" respectively and below foundation wall crawl hole. Piles or piers are permitted without interconnected grade beams to support first floor loads only. Pad footing located under a reinforced slab within the confines of a perimeter footing need not be connected by a grade beam.

b. Four continuous #4 bars, two 4 inches from bottom and two 4 inches from top of foundation.

c. Floor slab 3 ½ inches thick over two layers of a 2-inch fill of sand and a moisture barrier membrane (6 mils thick) sandwiched between the two layers of fill and reinforced with #3 bars at 24 inches on center both ways or welded wire mesh with a cross sectional area of not less than .05 square inches per foot each way (6x6-W2.9xW2.9). Reinforcement to be placed at center of slab.

d. Saturate the soil 18 inches deep before placing the concrete slab.

e. Provide #3 dowels at 24" O.C. bent 2' into slab and 1' into footing. Dowels may be omitted when slab is a "monopour" or designed as an independent "floating slab."

FRAMING

Roof / Ceiling:

108. Specify the size, spacing and direction of rafters. (106.4.3)

109. The _____" x _____" rafters at _____" o.c. over _____ exceed the allowable span for _____ grade. (T 23-IV-R)

110. The size of ridge board, valley, or hip members shall not be less than the cut end depth of the rafter. (2320.12.3)

111. Roof purlins shall not be smaller than the rafter they support. The maximum span for 2x4 / 2x6 inch roof purlins is 4 / 6 ft. respectively. For purlin supports provide struts not smaller than 2x4 inch with an unbraced length not over 8 feet, and not flatter than 45 from the horizontal, to bearing walls or partitions. (2320.12.7)

112. Provide designed ridge beams (4 x min.) for open beam vaulted ceilings, or when ceiling joists or rafter ties are not provided.

113. Ridge / hip / valley members shall be designed as vertical load carrying members when the roof slope is less than 3:12. Provide calculations. (2320.12.1)

114. Provide manufactured roof truss profiles, layout plan and calculations from truss manufacturer. (106.4.3)

115. Show ceiling joist size, spacing, and direction on plans. (106.4.3)

116. The _____" x._____" ceiling joists at _____" o.c. over _____ exceed the allowable span for _____ grade. (T 23-IV-J-3 & J-4)

117. Rafter ties spaced 4 ft. (max.) on center are required immediately above ceiling joists which are not parallel to the rafters. (2320.12.6)

118. For plywood roof diaphragms, specify thickness, grade, panel span rating, and nailing schedule. (106.4.3) Minimum 8d common nails shall be used. (T23-II-B-2)

119. Show blocking at ends of rafters and trusses at exterior walls, and at supports of floor joists. (2320.12.8 and 2320.8.6)

120. Show draft separation for attic areas between units in a duplex. (708.3.1.2)

Floors:

121. Show size, spacing and direction of floor joists. (106.4.3)

122. Doubled joists are required under parallel bearing partitions. (2320.8.5)

123. The _____" x _____" floor joists at _____" o.c. at _____ exceeds the allowable span for_____ grade. (T-23-IV-J-1 & J-2)

124. The _____" x _____" floor girder / beam under _____ exceeds the allowable stress for _____ grade. (T-4A, N.D.S.)

125. For structural wood panel floor diaphragm specify thickness, grade, T&G edges, panel span rating, nailing schedule, and panel layout pattern. (106.4.3)

Walls:

126. Specify the header size at door, window, and other openings over 4 ft. wide in bearing walls. (2320.11.6)

127. The _____" x _____" header at _____ exceeds the allowable stress for _____ grade. (T 23-4-A N.D.S.)

128. Detail is required for header support at the corner window(s) at _____ (106.4.3)

129. Studs in bearing walls are limited to 10 feet in height unless an approved design is submitted. (T 23-IV-B)

130. Note or detail lateral support for the top of interior non-bearing walls when manufactured trusses are used. (1611.5)

131. Studs supporting two floors, ceiling, and roof must be 3x4 or 2x6 at 16" o.c. (T 23-IV-B)

132. Note the use of full length studs (balloon frame) on exterior walls of rooms with vaulted ceiling. (2320.11.1, T 23 -IV-B)

133. Bracing of exterior / main cross walls of Conventional Framing shall conform with methods and locations as specified in Section 2320.11.3 & Table 23-IV-C-1.

134. Call out for all post sizes. Elements supporting concentrated loads which transfer forces to members below should be shown as "Post Above" on the second story framing plan and foundation plan. Call out for their locations, connection hardware, and provide applicable details.

LATERAL DESIGN

135. The base shear shall be based on either the formulas shown in Section 1630.2.1 or the simplified design base shear of Section 1630.2.3.1.

136. For the Near Source Factors, use Na= _____ and Nv= _____.

137. Indicate on framing plans that fasteners for wood structural panel sheathing on shear walls and diaphragms shall be common nails with full heads unless otherwise approved.

138. The _____ is inadequate to resist lateral forces / uplift wind pressure. Show roof floor diaphragm nailing, wall bracing. shear connections, tie down hardware and hold-down anchors. Submit lateral design. (1615, 1626)

139. Walls braced to resist wind and seismic forces shall not exceed the following height to width ratios: 2 to 1 for wood structural panels; 1 to 1 for gypsum wallboard and portland cement plaster (stucco). (2315.1, T 23-II-I, T 23-II-G, 2513.4 and T 25-I)

140. Wood structural panel shear walls shall meet the story drift limitation of section 1630.10. Conformance shall be determined by testing or calculations. Calculated deflection shall be determined according to UBC Standard 23-2 Section 23.223 and shall be increased by 25% to account for inelastic action and repetitive loading. Total vertical deflection shall be multiplied by the aspect ratio and added to the horizontal deflection. (2315.5.7)

141. Lumber and structural wood panel diaphragms shall not be considered as transmitting lateral forces by rotation except one story, attached or detached residential garages or similar non habitable wood structures provided the diaphragm is not constructed of straight sheathing. (2315.1)

142. Portland cement plaster (stucco), gypsum lath and gypsum wall board shear walls are not permitted below the top level of wood construction in a multilevel building. (T 25-I Note 4)

143. Nominal shear values for shear walls framed with cold formed steel studs other than 20 gauge shall be justified by complete, accurate analysis or tests. (2220.3)

144. If required by structural calculations, show size, location and embedment length of hold-down anchors on foundation plan. Note on the plans "Hold-down hardware must be secured in place prior to foundation inspection." (1630.8)

145. Provide referenced calculations showing the overturning moments in all shear wall segments. (106.4.3)

146. The capacity of hold-down connectors that do not consider cyclic loading of the product shall be reduced to 75% of the allowable earthquake load values. (2315.5.6)

147. Note on the plans "Hold-down connector bolts into wood framing require approved plate washers;" and "Hold-downs shall be tightened just prior to covering the wall framing." (2315.5.6 & T-23-II-L)

148. Where allowable shear values exceed 300 pounds per foot, foundation sill plates and all framing members receiving edge nailing from abutting panels shall be not less than a single 3 inch nominal or larger member. (T 23-II-I-1 note 3)

149. Detail the shear transfer connections which transfer lateral forces from horizontal diaphragms through intermediate elements and shear walls to the foundation. (106.4.3)

150. Specify on the framing plans the shear wall material and thickness and the size and spacing of fasteners and sole plate nailing. Call out anchor bolt spacing that is compatible with the shear wall capacity. (106.4.3)

151. The maximum allowable shear for 3/8 inch structural panel resisting seismic forces is 200#/ft. (T23-II-I-1)

152. Wood structural panels in shear walls shall be at least 3/8 inch thick and studs spaced no more than 16 inches on center. (2315.3.3)

153. Where any portion of the lateral-load-resisting system is discontinuous, such as for vertical irregularity Type 4 in Table 16-L or plan irregularity Type 4 in Table 16-M, concrete, masonry, steel and wood elements supporting such discontinuous system shall have the design strength to resist the combination loads resulting from the special seismic load combination of Section 1612.4. (Section 1630.8.2, T-16-L and T-16-M)

154. Detail how the interior shear walls or lateral force resisting elements are connected to the roof / floor diaphragm(s). (106.4.3)

155. Provide a drag strut at_____. Show details of strut and top plate connections. (106.4.3)

MECHANICAL/ELECTRICAL/PLUMBING

156. Show location of F.A.U. / Return Air Grill / Water Heater on floor plan.

157. F.AU. is not permitted in attic of prefabricated trusses unless required F.AU. clearances are clearly detailed on the plans.

158. A circulating air supply opening or duct of 2 sq. in. per 1,000 BTU is required for the forced air furnace. Show on plans. (M.C. 906.3)

159. Exhaust duct must be 4 inches in diameter and length is limited to 14 feet with 2 elbows. The duct length shall be reduced by 2 ft. for every elbow in excess of two. (MC.504.3)

160. Show location of the attic furnace and passageway 24 inches wide of solid continuous flooring from scuttle to equipment and it's controls. Length of the passageway shall not exceed 20 ft. (M.C. 908.0)

161. Show how heat producing appliances (water heater / dryer / furnace) in garage will be protected from automobile damage (wheel blocks are not sufficient). (M.C.308.0)

162. Elements of appliances which create a glow, spark, or flame shall be located a minimum of 18" above garage floor. (M.C. 308.0)

163. For open top broiler / barbecue unit, show details of mechanical exhaust system (hood, duct and one-hour shaft), when penetrating ceiling or floor. (M.C. 918.0)

164. Specify total load of new service panel. Electrical code check is required if load exceeds 400 amp, 120/240 V, single phase. Service panel shall not be installed in required shear wall. Show location on site and floor plans. (ECM 82.8)

165. Where the electrical service is located in / on the attached garage and a furred garage wall is the method used to run the non-metallic-sheathed cables to the residence thru the fire wall, provide a detail showing how the penetration will be fire stopped. (E.C. 300.21)

166. The building shall have water closets (toilets) which use no more than 1.6 gallons per flush. (P.C. 402.3)

167. All showers and tub-showers shall have either a pressure balance or a thermostatic mixing valve. (P.C.420.0)

168. New or replacement water heaters shall be strapped to the wall in two places. One in the upper 1/3 of the tank and one in the lower 1/3 of the tank. The lower point shall be a minimum of 4 inches above the controls.(P.C. 510.5)

169. ABS and PVC DWV piping installations shall be limited to structures not exceeding two stories in height. (P.C. 701.1.2.2).

170. Note on plans: "Ducts shall be sized per Chapter 6 of the Mechanical Code."

The attached _____ sheets are a part of these corrections.

Return this sheet with original and revised plans when corrections have been made.

Checked by		**Telephone**		**Office**		**Date**	
Rechecked by		**Telephone**		**Office**		**Date**	
Rechecked and approved by				**Office**		**Date**	