2013 – Commercial Building Plan Check Correction List

COMMERCIAL STANDARD CORRECTION LIST

GENERAL

1. Show the correct address of the building on application to correspond with plans.

2. All sheets of plans and cover sheet of any calculations must be wet signed and dated by person responsible for their preparation, who is licensed in California.

3. Submit a review letter by soils engineer and incorporate any requirements and recommendations into the plans.

4. A geological report/soil report is required. [CBC 1803.2]

5. Provide a Building Code Analysis on the title sheet. Include the following code information for each building proposed: Description of use, Occupancy, whether separated or un-separated, number of stories, type of construction, sprinklers, floor area, height, and allowable floor area.

6. The current design codes have changed. Please submit design and plans based on the 2013 CBC, CPC, CMC,CEC California Green Building Standard Code and California Energy Code.

7. Delete notes and details that do not apply to this project.

8. Grading permit may be / is required. Plans and permit for grading must be processed and issued separately from and prior to this building permit.

9. Provide an accurate and complete listing of required special inspections pursuant CBC 1705 specific to this project. This should appear in prominent position on the cover sheet of the plan. Alternatively, provide a clear note in a prominent position on the cover sheet which states what sheet of the plans the list of special inspections specific to this project may be found. Please be aware extensive changes in the required special inspections.

10. If this project is required to have structural observation pursuant CBC 1704.5 provide a prominent note on the cover sheet of the plans stating same. List the stages at which the architect or engineer of record is to perform structural observation, what is to be observed, when structural observation reports are to be submitted to the Building Official, and any other documentation or observation requirements. Alternatively to noting this on the cover sheet, place a note in a prominent position on the cover sheet which states what sheet of the plans this information may be found.

11. At the time of permit issuance, an additional set of plans including the site plan, floor plans, or other drawings, sufficient to describe the project shall be provided to the Building Department, to be filed with the County Assessor's office.

12. Health Department review and approval is required for food preparation and public pools.

13. Fire Department review and approval is required for A, E, H, I, L, R occupancies and high rises.

ARCHITECTURAL

1. A complete plot plan showing: Lot dimension, yard setbacks, street name(s), north arrow, existing building(s) to remain, distance between buildings and location of private sewage disposal system is required.

2. Indicate detail and section reference as to their appropriate location on plan views.

3. Provide existing and proposed contours, spot elevations to indicate general site slope and drainage pattern.

4. Specify finish floor elevation of first floor.

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

6. On Title Sheet, show justification to exceed the basic allowable floor area listed in Table 503.

7. On Title Sheet, show justification to exceed the number of stories or building height listed in Table 503.

8. When sprinkler increases are applied for an additional 20 feet in height or for an additional story in accordance with 504.2, sprinklers may not also be used for an area increase in 506.3 for Group A, E, H, I, L,R Occupancies and high-rises.

9. Specify on Floor Plans uses of all rooms or areas.

10. Provide a note on the plans indicating if any hazardous materials will be stored and/or used within the building, which will exceed the quantities listed in CBC Tables 307.1(1) and 307.1(2).

11. Provide separate Floor Plans identifying hazardous material quantities, types and locations prepared by a qualified person in accordance with 414.1.3 CBC.

12. The percentage of maximum allowable quantities of hazardous materials per control area for each floor and the total number of control areas shall comply with CBC Table 414.2.2.

13. On Site Plan dimension distances from building(s) to all property lines, street center lines, and adjacent existing or proposed structures on the site.

14. Show the size, use, occupancy, and type of construction of all existing buildings on the site.

15. On Site Plan show all interior assumed lot lines, any designated flood plains, open space easements or development restricted areas.

16. On Site Plan, clearly delineate any frontage used to justify allowable area increases per CBC 506.2.

17. Note on plans: “Frontage used for allowable area increases per CBC Section 506.2 shall be permanently maintained”.

18. The maximum area of exterior wall openings shall not exceed that allowed in CBC Table 705.8.

19. Exterior walls less than ft. to property line or assumed property line shall have a 30" parapet per CBC 705.11 Table 602, and Table 705.8.

20. Where protected and unprotected openings occur in the exterior wall in any story the total area shall comply with the unity formula (7-2) in CBC 705.8.4.

21. Fire-resistive exterior wall construction shall be maintained through crawl spaces, floor framing, and attic spaces in accordance with 706.6.

22. Fire Barrier continuity must be detailed in accordance with 707.5 CBC.

23. Fire Partition continuity must be detailed in accordance with 709.4 CBC.

24. Projections located where openings are required to be protected shall be non-combustible, heavy timber, or one hour construction. CBC 705.2.

25. Projections may not extend into yards more than permitted by CBC 705.2.

26. When two or more buildings are on the same property and they are not analyzed to comply as one building, the building shall have an assumed property line between them for determining wall and opening protection, and roof cover requirements or treated as a single building per CBC 705.3.

27. When a new building is constructed adjacent to an existing building, show the required wall and opening protection requirements for the existing building will be maintained. CBC 503.1.2, Table 508.4, Table 705.8 and 705.3.

28. Structural elements in exterior walls required to be fire-resistive construction shall have fire-resistive protection equal to or greater than that required for an exterior bearing wall. CBC Table 602.
29. In fire resistive exterior wall construction, the fire resistive construction shall be maintained passing through attic and other similar areas.

30. Type of construction because of occupancy at floor must conform to CBC Table 503.

31. For buildings with mixed occupancies, the allowable area per story shall be based on the most restrictive provisions for each occupancy when the mixed occupancies are treated according to CBC 508.3 (unseparated). If treated per CBC 508.4. (separated) the maximum total building area shall be such that the sum of the ratios for each of the actual to allowable are does not exceed 1.

32. Unless considered a separate story, the floor area of a mezzanine shall be considered a part of the story in which it is located. CBC 505.1

33. Clearly show the maximum height of the building as defined in CBC 502.1

34. Clearly show if the lower level is a basement based on the definitions in CBC 502.1.

35. Provide details, notes and specifications for the fire protection of building elements as required for the type of construction. CBC Table 601 and Section 602.

36. Clearly label and identify on plans fire-resistive corridors, exit enclosures, exit passageways, horizontal exits, occupancy separation walls and floors, fire resistive shafts, and fire walls, along with their fire-resistive ratings.

37. Detail furred or dropped ceilings as noncombustible construction or fire retardant treated wood (if allowed) per Section 803.

38. Indicate interior finish compliance with 803.1 flame spread provisions.

39. On site plan and floor plans, clearly show location of all firewalls as defined in CBC 706.

40. Construct a Firewall (sometimes party wall) at property lines or when separating a building into two or more separate areas per 706.1 CBC.

41. No openings are allowed in the Party Wall per 706.1.1 when a wall is constructed on or near a property line.

42. Firewall/Party Wall ratings must comply with Table 706.4. Future occupancy changes may impact the required rating. Consider future intended use.

43. Provide detail of making and identifications for firewalls and smoke barriers per Sec 706.3

44. Fire Walls in other than Type V construction must be non-combustible per 706.3.

45. Party Walls/Firewalls must be structurally independent of collapse under fire per 706.2.

46. Firewalls which are not party walls per 716.5 require openings to comply with 706.8.

47. Firewalls terminating at exterior walls must comply with 706.5.1.

48. Provide the design and details for a shaft as required by CBC 713.2.

49. Openings into shaft enclosure shall be protected with smoke and fire dampers per CBC 717.3

50. An Elevator Lobby is required in accordance with 713.14.1 when serving over two floors in Group A, E, H, I, L, R-1, R-2 and R-2.1 Occupancies and high-rise buildings.

51. Elevators must open into lobbies that separate the elevator shaft enclosure doors from each floor by fire partitions equal to the fire resistance rating of the corridor and the required opening protection. CBC 713.14.1.

52. Specify the fire rating of 1 or 2 hours for the shaft in accordance with CBC 713.4 and detail envelop continuity as required by CBC 713.5 and 713.7.

53. Detail water heater vents inside fire-resistive wall construction, or within fire resistive shafts.

54. Draft stop floor ceiling assemblies per CBC 718.3.2 for R occupancies and 718.3.3 for all others.

55. In fire resistive walls, detail through penetrations and membrane penetrations per CBC 714.3.

56. In fire resistive floors and ceilings detail fire resistive penetrations per CBC 714.4.

57. A hr. fire barrier is required between occupancy and the occupancy. CBC 508.4, Table 508.4 and 707.3.9.

58. Provide a Fire Barrier in accordance with 707 CBC for the:

a. Shaft enclosure per 713.2.
b. Exit enclosure per 1022.2.
c. Exit passageway per 1023.3.
d. Horizontal exit per 1025.1.
e. Atrium per 404.6.
f. Incidental use area at the _____ per Table 509
g. Control areas per 414.2.4.
h. Occupancy separation per 508.4.
i. Fire area separation per 707.3.10.

59. The proposed project is located within a Wildland-Urban Interface Fire Area as defined in Section 702A. Provide material and construction details showing compliance with Chapter 7A [CBC]

60. The fire barrier or horizontal assembly, or both, separating a single occupancy into different fire areas shall have a fire resistance rating of not less than that indicated in Table 707.3.10.

61. Provide hr. door assemblies in hr. fire barrier. CBC 707.6 and Table 716.5.

62. Glazing and openings in fire barriers shall be limited to 25% of the wall area, no larger than 156 square feet with unless tested to match wall rating. CBC 707.6.

63. All structural elements supporting a fire barrier must have the same fire resistive ratings as the required occupancy separation. CBC 707.5.1

64. Provide a Fire Partition in accordance with 708.1 for:

a. walls separating dwelling units.
b. walls separating sleeping units in R-1 hotels, R-2's and I-1's.
c. walls between mall tenant spaces.
d. the corridor per 1018.1
e. the elevator lobby per 713.14.1. CBC

65. Openings protectives in firewalls must comply with 716.5 and Table 716.5. CBC

66. Penetrations in fire partitions must comply with 716. CBC

67. Fire-Resistant Joint Systems shall be tested in accordance with Section 715.3 CBC

68. Ducts penetrating Fire Partitions must comply with 717.5.4 CBC.

69. A smoke barrier complying with 709 is required in accordance with 407.4, 408.6.

70. Doors in smoke partitions in I-occupancy corridors must comply with 1018.1 per 710.5

71. A smoke tight assembly must be provided for I-3 occupancies in accordance with 408.8 CBC.

72. A smoke tight assembly must be provided for corridors in I-2 occupancies per 407.3.

73. Combination smoke and fire dampers shall be required where a fire and smoke barrier or wall is required. CBC 717

74. Address the specific occupancy related provisions for the _____-occupancy areas in accordance with Section 401.1 CBC.

75. For mixed use occupancy, where a building contains more than one occupancy group, the building or portion there of shall comply with the applicable provisions of Section 508, and Table 508.4 CBC

76. Provide fire separation for incidental accessory occupancy in the _____ in accordance with 509 and Table 509 CBC.

77. Provide medical gas storage room per 415.9.2 (Gas Room).

78. A class roof covering is required CBC 1505.1 and Table 1505.1.

79. For roof covering specify: CBC 1505.1
A.Manufacturer and ICC/UL/SFM number.
B.Roof slope(s) of all areas on the roof plan.
C.Note on Plans: “Installation of roofing shall be in accordance with manufacturer’s specifications.”

80. Roof slope is not adequate for type of roof covering specified. CBC 1507.1

81. Show sizes/locations of the roof/deck drains and overflows. [CBC 1503.4 and CPC 1108]

82. Specify minimum ¼ inch per foot roof slope for drainage along flow lines or design to support accumulated water. [CBC 1611.3]

83. Specify approved weatherproof walking surface material at decks and balconies.

84. Provide specifications for roofing material and application. Chapter 15.

85. Roof drainage shall not flow over public property, or adjacent properties.

86. Provide a minimum 20" x 30" attic access. CBC 1209.2

87. Provide and detail access to equipment on roof per CMC 904.10.3.

88. Provide attic ventilation per CBC 1203.2.

89. Draft stop attics and mansards per CBC 718.4.

90. Provide smoke and heat venting in F-1 or S-1 occupancies with undivided floor areas greater than 50,000 sq. Ft [CBC 910.2.1] with exceptions. Skylights do not meet vent standards unless specifically tested and labeled.

91. Provide detail of skylights to show compliance with CBC Chapter 2606 and Section 2610.1, or show on plans ICC or other approval number.

92. Plastic skylights shall be separated from each other by not less than 4 feet. [CBC 2610.6]

93. Where exterior wall openings are required to be protected in accordance with Section 705, a skylight shall not be installed within 6 feet of such exterior wall. CBC 2610.7.

94. Provide fire sprinklers for this project in accordance with 903.2 _____ CBC.

95. Additional sprinkler provisions apply for this project based on Table 903.2.11.6 CBC.

96. Fire sprinklers are required for any story or basement greater than 1,500 sq ft, where there is not provided at least 20 sq ft of opening entirely above grade in each 50 lineal feet or fraction thereof of exterior wall on at least one side or two sides when opposite wall is more than 75 feet from such openings CBC 903.2.11.1.

97. Provide sprinklers at rubbish and linen chutes and terminating rooms. CBC 903.2.11.2

98. Provide sprinklers throughout buildings with a floor level having more than 30 occupants or more that is located 55 feet above the lowest level of fire department access. CBC 903.2.11.3

99. The area increases per CBC 506.3 shall not apply for: a. Group H-1, 2 or 3 occupancies.
b. Where fire rating substitution of Table 601, Note d is used.
c. Group L occupancies.

100.A building equipped with a non NFPA 13 sprinkler system, i.e.: 13R or 13D, the area increases per CBC 506.3 do not apply.

101.Provide a Class Standpipe per CBC 905. Show hose cabinet locations or outlets on each floor plan and roof plan.

102.Provide a fire alarm system in accordance with 907.2. ___ for the ___ occupancy area.

103.Elevators shall comply to the requirements of CBC Chapter 30 and 11B-206.6. State amendments require a gurney-size elevator for any number of stories.

104.Note on plans or finish schedule: “Wall, floor and ceiling shall not exceed the flame spread classifications in CBC Table 803.9".

105.Detail furred or dropped finishes at fire resistive walls or ceilings as required by CBC 602.1, 603.1 and 805.1.

106.Lateral bracing for suspended ceiling must be provided. Where ceiling is not supporting interior partitions, ceiling bracing shall be provided by four No. 12 gauge wires secured to the main runner within 2 inches of the cross runner intersection and splayed 90 degrees from each other at an angle not exceeding 45 degrees from the plane of the ceiling. A strut (adequate to resist the vertical component from lateral loads) fastened to the main runner shall be extended to and fastened to the structural members of the roof or floor above. These horizontal restraint points shall be placed 12 feet o.c. in both directions with the first point within 6 feet of each wall. Attachment of restraint wires to the structure above shall be adequate for the load imposed. Otherwise, provide a structural design in conformance with CBC 803.11 and 1613.1.

107.Provide a section view of all new interior partitions, including:
A. Type, size and spacing of studs. Provide gauge and ICC number for metal studs.
B. Method of attaching top and bottom plates to structure. (NOTE: Top of partition must be secured to roof or floor framing, unless suspended ceiling has been designed for lateral load of partition.
C. Wall sheathing material and details of attachment (size and spacing of fasteners).
D. Height of partition and suspended ceiling and distance from ceiling to structure above.

108.Glazing within 24" of a doorway and less than 60 inches above a walkway shall be safety glazing. CBC 2406.4.2.

109.Provide damp proofing details for basement or other walls below finish grade in accordance with 1805 CBC.

110.Fasteners for preservative treated and fire treated wood shall be of hot dipped zinc coated galvanized steel, silicon bronze or copper. The coating weights for zinc coated fasteners shall be in accordance with ASTM A 153. CBC 2304.9.5.

111.Show location of project on seismic maps to identify seismic design coefficients to be used. You may also chose to use http://earthquake.usgs.gov/research/hazmaps/design and print out the design values and submit a copy with your resubmittal.

112.Provide structural details and calculations for light pole footings.

113.Provide structural details and calculations for equipment and components per:

ASCE 7-Sections 6.5.15.1 and 13.6.
a. For seismic/wind connections.
b. For gravity support.
114.Provide 3 x 3 x .229" plate washers. CBC 2308.12.8 for Seismic Design Category D & E.

115.The soils report requires foundation excavations to be reviewed by soils engineer. Note on the foundation plan "Prior to requesting a Building Department foundation inspection, the soils engineer shall inspect and approve the foundation excavations".

116.Soil bearing pressure is limited to 1500 lbs/sq ft unless soil is classified per CBC 1806.2, or a soils report recommends otherwise. CBC Table 1806.2

117.Call out minimum thickness of 3 ½ inch concrete or grade floor slabs, reinforcement and moisture barrier on foundation plan.

118.Call out anchor bolt size and spacing on foundation plan. Provide 5/8" diameter imbedded 7" minimum at 6' o.c. maximum spacing. (2308.6 and 2308.12.9). If an engineer's report justifies that it is not in Seismic Design Category E, ½" bolts may be used. Show 8" min distance from grade to wood sill, framing and sheathing. CBC 2304.11.2.2

119.Specify size, spacing , ICC number and manufacturer of power driven pins. (Not permitted on perimeter footings.)

120. If required by structural calculations, show size, location and embedment length of hold down anchors on foundation plan.

121.Show continuous reinforcement in footings with #4 T & B or by an exception in accordance with 1905.1.8 CBC.

122.Note on plan that holddown hardware must be secured in place prior to foundation inspection.

123.Detail the shear transfer connections which transfer lateral forces from horizontal diaphragms through intermediate elements and shearwalls to the foundation. CBC 2305.1.

124.Provide complete details and specifications for the installation of glass block. CBC 2110

125.Air moving systems in excess of a combined volume of 2000 cfm are required to be equipped with an automatic shutoff interlocked with a smoke detector located in the supply ducting of air moving system. CMC 203 and 608.1

126.Air for combustion, ventilation, and dilution of flue gases for gas utilization equipment installed in buildings shall be obtained by application of one of the methods covered in CMC 701. Provide calculations to justify compliance.

127.At restrooms, provide hard non-absorbent wall and floor finishes per CBC1210.2.

128.Provide separate toilet facilities for men and women. CPC 422.2 with exceptions.

129.Toilet rooms may not open directly to food preparation facilities for service to the public in accordance with CBC 1210.4.

130.Provide plumbing fixtures count analysis per CPC Table 4-1.

131.Show elevations of finish floor and nearest upstream manhole. Show that finish floor is above upstream manhole or provide backwater valve per CPC 710 Note that fixtures above such elevation shall not discharge through the backwater valve.

132.Provide and detail grease interceptor as required by CPC 1014.1. Show location per CPC 1014.3.4 and sizing per CPC 1014.3.6 and Table 1014.3.6.

133.Provide condensate line as required by CPC 814 collected and discharged to an approved plumbing fixture or disposal area.

EGRESS

1. Submit an exit plan that labels and clearly shows compliance with all required egress features such as, but not limited to, common path of travel, required number of exits, occupant load, required width, continuity, travel distance, etc. [CBC 1001.1]

2. In a two story building two exits or more are required when occupant load exceeds 29 or, common path of egress travel exceeds 75 feet. CBC 1021.1, CBC Table 1021.2(2).

3. The number of exits shall comply with CBC Table 1021.1.

4. Rooms with a common path of egress travel exceeding that allowed in CBC 1014.3 shall have two separate and distinct means of egress.

5. When two exits are required from a building or area they shall be separated by (one-half/one-third if sprinklered throughout) the diagonal dimension of the building or area served. [CBC 1015.2.1]

6. Exit width shall be not less than permitted by CBC 1005.1. The net dimension (Clear width) shall be used in determining exit width.

7. In a single story building two exits or more are required when occupant load exceeds 49 or, common path of egress travel exceeds 75 feet. [CBC 1021.1, CBC 1021.2]

8. Two exits or more are required when occupant load of a room or space exceeds 49 or, common path of egress travel exceeds 75 feet. [CBC 1021.1, CBC 1021.2]

9. Travel distance to reach an exit shall not exceed that allowed in CBC 1016.1. Measure paths at right angles unless diagonal unobstructed path is insured.

10. Two exits or exit access doors of egress shall be provided from boiler, incinerator, or furnace rooms which exceed 500 square feet and any fuel fired equipment exceeding 400,000 BTU input capacity. One exit is permitted to be a fixed ladder or alternating tread device. Exit access doorways shall be separated by a horizontal distance equal to one-half the maximum horizontal dimension of room. [CBC 1015.3]

11. Each leaf of door in the means of egress shall provide 32 inches clear opening and a minimum height of 6'-8", but in no case shall any single door leaf exceed 48 inches. CBC 1008.1.1.

12. Provide specifications for the door hardware to comply with disabled access requirements. (Lever type, push-pull, panic, etc) CBC 11B-309.4.

13. Doors serving an occupant load of 50 or more or hazardous rooms or areas shall swing in the direction of exit travel CBC 1008.1.2.

14. All exit doors and gates from an ___ occupancy shall not be provided with a latch or lock, unless it is panic hardware. CBC 1008.1.10

15. Every assembly area shall have the occupant load posted in a conspicuous place near the main exit of the room. CBC 1004.3

16. Revolving, sliding or overhead doors shall not be used as exit doors. CBC 1008.1.2. See exceptions.

17. Show that power operated doors are capable of being manually opened to permit exit travel in the event of a power failure. [CBC 1008.1.4.2]

18. When additional doors are provided, they shall conform to the provisions for exit doors. [CBC 1008.1]

19. Landings or floor level at doors shall not be less than ½ inch below the threshold. Raised thresholds and floor level changes greater than 1/4 inch at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal. [CBC 1008.1.7]

20. The bottom 10 inches of all doors on the push side except sliding shall have a smooth, uninterrupted surface. [CBC 11B-404.2.10]

21. Corridor width shall be not less than 44 inches. [CBC 1018.2 & Table 1018.2]

22. Doors opening into the path of egress travel shall not reduce the required width to less than one half during the course of swing. When fully open, the door shall not project more than 7" into the required width. [CBC 1005.7.1]

23. Dead end corridors shall not exceed (20/50) ft in length. CBC 1018.4

24. Provide a complete architectural section of one-hour corridor detailing fire-resistive construction of the walls and ceilings. Detail all duct and other penetrations. CBC 708.1 and 1018.1. (716.1, Table 716.3 and 716.5)
25. Doors and their frames opening into a one-hour corridor shall be labeled 20-minute assemblies with tight fitting smoke and draft control assemblies with self or automatic closers. CBC 716.5 and Table 716.5.

26. Provide fire/smoke dampers at duct penetrations of 1 hr corridor walls. CBC 717.5.4.1.

27. Glazed openings into one hour corridors shall be protected per CBC Table 716.5. The size limitation shall comply with NFPA 80 and as provided in Section 716.5.8.1.1 and 716.5.8.1.2

28. Corridor walls may terminate at the ceiling, only if the entire ceiling is an element of one hour floor or roof assembly. CBC 708.4

29. One hour corridors and any enclosed ceilings within them shall not be used as an integral part of the duct system. CBC 1018.5

30. At rooms with exhaust fans adjacent to corridors, show how make up air is provided. Doors opening into corridors cannot be undercut and no louvers provided. CBC 1018.5, Exception 1.

31. Non-rated drop ceilings in rated corridors must be of noncombustible construction.

32. In fully sprinklered office buildings, corridors may lead through enclosed elevators lobbies, provided all areas of the building have access to an exit, without passing through on elevator lobby. [CBC 1018.6. Exception 2]

33. Stairs shall have a minimum width of 44 (36) inches. CBC 1009.4

34. Stair exits from an area of refuge require a minimum of 48 inches between handrails. CBC 1007.7.6.

35. A minimum of 2 areas of refuge with one at an elevator must be provided in accordance with Section 1007.1, 1007.2.1, 1007.4 and 1007.6 CBC since your project is four or more stories above a level of exit discharge.

36. Provide section and details of interior/exterior stairway showing:
A. Maximum rise 7 inches (4" min) and minimum run (tread) of 11 inches. CBC 1009.7.2.
B. Minimum head room of 6 feet 8 inches. CBC 1009.5.
C. Provide details and notes showing framing (stringer) size, bracing, connections, footings.
D. Enclosed usable under stairway requires one-hour construction on enclosed side. CBC 1009.9.3
E. Provide visual striping per CBC 1133B.4.4.

37. Provide connection details of guardrail and/or handrail on open side of landings or stairs adequate to support 20 (50) pounds per lineal foot at a right angle to the top rail. CBC 1607.8.1

38. Design intermediate components of guardrails for a 50 PSF lateral load. CBC 1607.8.1.2

39. Handrails shall satisfy the following: CBC 1012
A. Provide continuous handrail.
B. Handrail shall be 34-38 inches above the nosing of treads.
C. Intermediate balusters shall be spaced so as to prevent the passage of a 4-inch-diameter sphere on open side(s).
D. The handgrip portion of handrail shall comply with CBC 11B-505.7.
E. The handgrip shall extend 12" beyond the top and 12" + tread width beyond bottom tread and return the handrail to newel post or wall. [CBC 11B-505.10.3]

40. Provide 42 inch high protective guardrail for decks, porches, balconies and raised floors, (more than 30 inches above grade or floor below) and open side(s) of stair landings. Openings between balusters/rails shall be less than 4 inches. CBC 1013

41. Guards shall be provided where the roof hatch opening or mechanical equipment is located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere. CBC 1013.7

42. Where elevation changes less than 12 inches occur in the means of egress, sloped surfaces shall be used. CBC 1003.5

43. Ramps greater than 1 in 20 or 5 percent with a rise greater than 6" shall have handrails on both sides. CBC 1010.9

44. Door swinging over landing shall not reduce the width by more than seven inches when fully open. When serving 50 or more, the door in any position shall not reduce the required width to less than one-half. CBC 1008.1.6

45. Provide a barrier from upper stairs, and stairs leading to the basement. CBC 1022.8

46. Stairs shall be enclosed with fire barriers per CBC 1022.1. Enclosure shall conform to the following:
A. 2 hour resistive construction in all buildings over 4 stories one hour for all other buildings less than 4 stories.
B. Only exit doors can open into exit enclosures.
C. Doors opening into exit enclosures shall be protected per CBC 716.
D. Exit enclosures shall include a corridor of the same fire-resistive construction as the enclosure leading to the outside of the building, including openings.
E. Useable space is not allowed under the stairs.
F. Exterior stairs shall be separated from the interior of the building with the same rating required for interior stairs. [CBC 1026.6]

47. In buildings 4 or more stories:
A. One stair must extend to the roof. CBC 1009.16
B. Stairs must have a smoke hatch. CBC 1009.16.1

48. Where an egress court serving a building or portion thereof is less than 10 feet (3048 mm) in width, the egress court walls shall have not less than 1-hour-fire-resistance-rated construction for a distance of 10 feet (3048 mm) above the floor of the court. Openings within such walls shall be protected by opening protectives having a fire protection rating of not less than 3/4 hour. CBC 1027.4 with exceptions

49. Exterior balconies, stairways and ramps shall be located at least 10 feet (3048 mm) from adjacent lot lines and from other buildings on the same lot unless the adjacent building exterior walls and openings are protected in accordance with Section 705 based on fire separation distance. CBC 1026.5.

50. Balconies used for egress purposes shall conform to the same requirements as corridors for width, headroom, dead ends and projections. CBC 1019.1

51. Exterior egress balconies shall be separated from the interior of the building by walls and opening protection as required by corridors. CBC 1019.2 with exceptions

52. Stairs in buildings over 75 (55 feet due to local ordinance which may apply) feet in height shall be in a "Pressurized Enclosure" per CBC 909.20, 1022.10 and 202 high-rise definition.

53. Exitways shall be illuminated with at least one foot candle at the floor level. CBC 1006.2

54. Provide a separate source of power for exit illumination. CBC 1011.6.3

55. Exit signs are required when 2 or more exits are required. Show location of all exit signs. CBC 1011.1

56. Show conformance for low level exit signs and exit path marking in A, E, I, R-1, R-2 and R-2.1 occupancies per CBC 1011.7 and 1011.8 as enforced by the State Fire Marshall.

57. Show two sources of power for exit signs. CBC 1006.3

DISABLED ACCESS

1. Design site to provide complying access from property line to all facilities; and entrances and exterior ground floor exits of all facilities. Accessible paths of travel shall be the most practical direct route feasible and may incorporate pedestrian ramps, curbs ramps, etc... All paths of travel shall comply unless there is an approved exception Section 11B-206.

2. Place a sign at every public entrance and at every major junction along or leading to an accessible path of travel displaying the international symbol of accessibility. Signs shall indicate the direction to accessible facility entrances and comply with Section 11B.216.1.

3. Provide accessible parking per Section 11B-208 in each lot or parking structure where parking is provided for the public or employees.

4. Parking spaces must be located so that the disabled are not compelled to walk or wheel behind parked cars other than their own. CBC Section 11B-502.7.1

5. In buildings with multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located closest to the accessible entrances. CBC Section 11B-208.3.1.

6. Revise the drawings to show van accessible parking spaces loading/unloading aisle on the passenger side. CBC Section 11B-502.3.4.

7. Provide parking space identification in accordance with CBC Section 11B-502.6.4 and 11B-502.8.

8. Detail accessible drinking fountain per CBC 11B-602.1

9. Detail accessible ATM machine per CBC 11B-707.1

10. For accessible restrooms, detail per CBC 1115B.3. A. A clear space measured from the floor to a height of 27 inches (686 mm) above the floor, within the sanitary facility room, of sufficient size to inscribe a circle with a diameter not less than 60 inches (1524 mm in size. Other than the door to the accessible water closet compartment, a door, in any position, may encroach into this space by not more than 12 inches (305 mm).

B. Doors shall not swing into the clear floor space required for any fixture.

C. Accessible water closet compartments shall comply with the following:

i. The compartment shall be a minimum of 60 inches (1524 mm) wide.
ii. If the compartment has a side-opening door, a minimum 60-inches-wide (1524 mm) and 60 inches-deep (1524 mm) clear floor space shall be provided in front of the water closet.
iii. If the compartment has an end-opening door (facing the water closet), a minimum 60-inches-wide (1524 mm) and 48-inches-deep (1219 mm) clear floor space shall be provided in front of the water closet. the door shall be located in front of the clear floor space and diagonal to the water closet, with a maximum stile width of 4 inches (102 mm).
iv. The water closet compartment shall be equipped with a door that has an automatic-closing device, and shall have a clear, unobstructed opening width of 32 inches (813 mm) when located at the end and 34 inches (864 mm) when located at the end and 34 inches (864 mm) when located at the side with the door positioned at an angle of 90 degrees from its closed position.
v. Maneuvering space at the compartment door shall comply with Sections 1133B.2.4.2 and 1133B.2.4.3, except that the space immediately in front of a water closet compartment shall not be less than 48 inches (1219 mm) as measured at right angles to the compartment door in its closed position.

D. Where six or more compartments are provided within a multiple-accommodations toilet room, at least one compartment shall comply with CBC 1115B.3, Items 3 and 4 and at least one additional ambulatory accessible compartment shall be 36 inches (914 mm) wide with an outward swinging self-closing door and parallel grab bars complying with Section 1115B.4.1, Item 3.

E. In other than dwelling units, toilet room floors shall have a smooth, hard, nonabsorbent surface such as Portland cement, concrete, ceramic tile or other approved material which extend upward onto the walls at least 5 inches (127 mm). Walls within water closet compartments and walls within 24 inches (610 mm) of the front and sides of urinals shall be similarly finished to a height of 48 inches (1219 mm) and, except for structural elements, the materials used in such walls shall be type which is not adversely affected by moisture.

F. Provide one accessible lavatory in compliance with Section 1115B.4.3.

G. The centerline of the water closet fixture shall be 18 inches (457 mm) from the side wall or partition. On the other side of the water closet, provide a minimum of 28 inches (711 mm) wide clear floor space if the water closet is adjacent to a fixture or a minimum of 32 inches (813 mm) wide clear floor space if the water closet is adjacent to a wall or partition. This clear floor space shall extend from the rear wall to the front of the water closet.

H. A minimum 60 inches (1524 mm) wide and 48 inches (1219 mm) deep clear floor space shall be provided in front of the water closet.

I. The height of accessible water closets shall be a minimum of 17 (432 mm) and a maximum of 19 inches (483 mm) measured to the top of a maximum 2-inch (51 mm) high toilet seat.

J. Grab bars shall extend 24" in front of water closet.

11. Affix an international accessibility symbol on all accessible entrances 11B-216.6 & 11B-703.7.2.1.

12. Provide a level landing on each side of a door extending 60" on direction of door swing and 48" in opposite direction of door swing, measured with door closed. 11B-404.2.4.1.

13. Maneauvering clearance at swing doors and gates shall comply with Section 11B-404.2.4.1. Provide 12" on push side, if the door has both a latch and a closer. Maneuvering clearance at sliding doors, folding doors and doorways without doors shall comply with section 11B-404.2.4.2. Recessed doors and gates shall comply with Section 11B-404.2.4.3.

14. Provide seats/spaces for people using wheelchairs in accordance with Table 11B-221.2.1.1. Specialty seating areas and integration shall comply with Sections 11B-221.2.1.6 & 11B-221.2.2.

15. Where provided, at least one of each type of sales and/or service counter shall comply with Section 11B-904.4 & 11B-227.3

16. Where fitting or dressing rooms are provided for male or female customers, patients, employees, or the general public, 5% but never less than one, of dressing rooms for each type of use in each cluster of dressing rooms shall be accessible in accordance with Section 11B-222 & 11B-803.

17. Detail accessible check stand and show required number per CBC 11B-227.2 and 11B-904.3.

18. Accessible check stands shall always be open to customers with disabilities and shall be identified by a sign clearly visible to those in wheelchairs. The sign shall display the International Symbol of Accessibility in white on a blue background and shall state: “This check stand to be open at all times for customers with disabilities”.

19. At exits and elevators serving a required accessible space but not providing an approved accessible means of egress, signage shall be installed indicating the location of accessible means of egress. Signs shall comply with Section 11B-703.5 as applicable. CBC 1007.10.

20. Provide and detail raised character and Braille exit signage per CBC 1011.4 and 11B-703.1,703.2,703.3 and 703.4.

21. If a walk crosses or adjoins a vehicular way, and the walking surfaces are not separated by curbs, railings or other elements between the pedestrian areas and vehicular areas; detectable warning shall be provided in accordance with Section 11B-247 and 11B-705.

ENERGY

1. T-24 energy calculations used must be by one of the Energy Commission approved computer programs.

Please see www.energy.ca.gov/title24/2005standards/2005_computer_prog_list.html for current versions.

2. Cool Roofs. Prescriptive approach required a “cool roof” in all non residential low-slope applications. Cool roofs have high reflectance, high emittance surfaces, or exceptionally high reflectance and low emittance surfaces. Applies to new roofs and some re-roofing installations [Section10-113, 118(I), 143(a)iA, 149(b)1B]. Cool roofs must be tested and labeled by the CRRC.

3. T-bar ceilings. Placing insulation directly over suspended (T-bar) ceilings is not allowed, except for limited applications. Insulation must be placed at the roof or on hard ceilings. [Section 118(e)].

4. Thermal Breaks for Metal Building Roofs. Prescriptive standards for continuous insulation or thermal breaks between metal roofs and metal framing [Section 143(a)].

5. Skylights for Daylighting in "Big Box" Buildings. Prescriptive requirement for skylights with daylighting controls. Applies to top story of spaces larger than 25,000 square feet with ceilings higher than 15 feet [Section143(c)]. Provide calculations demonstrating compliance.

6. Demand Control Ventilation. Mandatory requirement to include sensors that measure $C0_2$ levels and adjust ventilation rates in spaces with varying occupancy such as conference rooms, dining rooms, lounges and gyms [Section 121(c)].

A. Sensors must be provided in all rooms served by the system that has a design occupancy of $40ft_2$/person or less.
B. Show sensor locations on plans. They must be located between 1 and 6 feet above floor.
C. The ventilation must be maintained that will result in a concentration of CO_2 at or below 600 ppm above ambient level.
D. The CO_2 sensors must be factory certified to have an accuracy of no less than 75 ppm over a five-year period without calibration in the field.

7. Duct efficiency. In unconditioned or indirectly conditioned space, mandatory requirement for R-8 duct insulation [Section 124(a)]. Prescriptive approach requires duct sealing with field verification in new buildings and in existing buildings when space conditioning equipment is to be installed or replaced [Section 144(k)].

8. Efficient Space Conditioning Systems. Prescriptive requirements to improve HVAC system efficiency, including variable speed drives, electronically commutated motors, better controls, and efficient cooling towers. For large systems (greater than or equal to 300 tons in installed capacity), there are limitations on the use of air-cooled chillers. [Section 144].

233. Indoor Lighting. Mandatory requirement lowers the lighting power limits for interior lighting to encourage use of new efficient lighting technology [Section130(c)]

234. Unconditioned Buildings. Prior to 2005, the Standards did not regulate lighting of unconditioned buildings. The updated Standards contain requirements for efficient electric lighting and controls that apply to unconditioned buildings such as warehouses and parking garages. [Section100(e)2C]. Show these areas to comply.

235. New Mandatory and prescriptive requirements apply to general site illumination and specific outdoor lighting applications of nonresidential buildings [Section132, 147]. Applies to areas such as parking lots, pedestrian areas, building entrances, vehicle service stations, areas under canopies, and ornamental lighting.
A. Lighting Power Limits. Establishes outdoor lighting power limits that vary by Lighting Zone or ambient lighting levels. See Standards Table 147-A and B or NCM Table 6-3.
B. Shielding. Lamps larger than 175W must have cutoff luminaires to reduce glare. Luminaires with lamps larger than 60 W must be high efficacy or have motion sensor controls.
C. Bi-Level Controls. Requirements for outdoor lighting controls in some areas, including the capability to reduce lighting levels by 50 percent when not needed.

236. West facing glazing is now limited to no more than 40% of the west wall area. Demonstrate compliance on plans.

237. Demising walls, separating conditioned space from enclosed unconditioned space, must be insulated with a minimum of R-13 insulation.

238. Variable air volume change over systems must be designed to ensure that no zone is shut off for more than 5 minutes per hour and that ventilation rates are increased during the remaining time to compensate.

239. Provide method of manual override for space conditioning system. The building shall be divided into isolation areas not exceeding 25,000 ft^2. [Section 122]

240. Show building orientation with respect to North direction on compass.

241. When taking compliance credit in the energy calculations for _____, please detail and document compliance on plans.

242. Provide an automatic time switch, occupant sensors or other method of manual override of lighting. [Section 119]

243. When skylights are installed provide automatic controls to reduce electric lighting when sufficient daylight is available. When area is over 2500 sf multi level controls must be used.

244. Show compliance with bi-level switching requirements. Section 131(b)

245. Lighting requirements for exterior signs:
A. Internally illuminated signs may have 12 W/sf (only one side of 2 sided sign).
B. Externally illuminated may have 2.3W/sf of sign.

246. If an alteration involves replacing 50% or more of lighting fixtures or wattage th3n all lighting must comply as new.

247. Provide copies of required compliance forms such as LTG, MECH, ENV, OLTG, etc... on plans.

248. Have changes been made to the plans that are not as a result of corrections on this correction list? Please check: Yes No.

If so, provide a brief description and note where on plans the changes occur: