



Date: _____

County of San Diego, Planning & Development Services
**COMMERCIAL TENANT IMPROVEMENT PLAN
CHECK LIST**
BUILDING DIVISION

*** CUSTOMER INFORMATION VERSION ***

Plan check correction list for tenant improvements to commercial properties without any structure work. Total occupant load of the space is less than 50.

The items listed below are commonly omitted from plans submitted for review. Advance preparation by applicants to satisfy these requirements will help expedite the plan review process. Be advised: Just as specific items on this list may not apply to specific projects, this list also does not necessarily include all requirements for all projects; other items may apply. Please use this list as a guide only.

A. GENERAL REQUIREMENTS

1. Each of the items on this list requires correction before a permit will be issued. The approval of plans and specifications does not permit the violation of any section of the building code, county ordinances, or state law. The following list does not necessarily include all errors and omissions. (See the 2019 *California Building Code* 105.4)
2. **Please read your Conditions of Approval list.** We recommend **contacting the fire district early** in the project design stage to determine potential requirements. **Note: All plan approval stamps** -- e.g., this building code review, planning, fire -- **must be applied to the same two sets** to enable permit issuance; coordinate any submittals to the fire district with this in mind to minimize stamp transfers to revised sets. Additionally we recommend you retain all previously reviewed sets until permit issuance.
3. Plans must incorporate the necessary information on printed sheets. Plans in pen or pencil, with crossed out or taped on information, or with white-out will not be accepted.

B. PLAN REQUIREMENTS

1. Specify on plans the project will comply with the following building codes and associated County of San Diego amendments:
 - ☐ 2019 *California Building Code* (CBC)
 - ☐ 2019 *California Green Building Standards Code* (CalGreen)
 - ☐ 2019 *California Electrical Code* (CEC)
 - ☐ 2019 *California Mechanical Code* (CMC)
 - ☐ 2019 *California Plumbing Code* (CPC)
 - ☐ 2019 *California Fire Code* (CFC)
 - ☐ 2019 *California Building Energy Efficiency Standards* (CBEES)
2. On sheet ____ provide an itemized "Scope of Work" describing the work to be performed and identifying the buildings and structures included under this permit.
3. Scope of work on plans does not match scope on permit application. See PDS technician to revise permit application scope.
4. Provide fully dimensioned plot plan drawn to scale and indicating the following:
 - ☐ Lot dimensions with property lines and any easements identified
 - ☐ Size and use of all structures on the lot
 - ☐ Dimensions from structures to property lines (measured at right angles to structures)
 - ☐ Dimensions between structures (measured at right angles to structures)
5. The plans must be prepared using accepted drafting procedures and practice. You must retain the services of a California-licensed engineer or architect to help you prepare your plans and respond to the corrections on this list.
6. Specify on plans floor areas for each proposed or existing building.
7. Provide complete dimensions on floor plans.
8. Name, label, and specify on floor plans the use of each room or space.

9. Specify on plans the CBC occupancy classification for each room or space.
10. Change of occupancy or use requires existing building or space to comply with current code requirements. (California Existing Building Code 407.1)
Exception: Building official may allow changes of use or occupancy without code upgrades if new use is less hazardous than existing use
11. Specify on plans the CBC occupancy classification and use of any existing rooms or spaces adjoining proposed construction.
12. Specify on plans the CBC type of construction for each building.
13. Specify on plans, as applicable, the type of automatic sprinkler system – NFPA 13, NFPA 13R, or NFPA 13D – installed in the building and whether the system is proposed or existing.
14. Specify on plans, as applicable, the type of fire alarm system – manual and/or automatic – installed in the building and whether the system is proposed or existing.
15. Provide itemized material inventory including the following to assess potential hazardous occupancy classification (CBC 307):
 - ☐ Material name
 - ☐ Material category per CBC Table 307.1(1) and/or CBC Table 307.1(2)
 - ☐ Maximum proposed quantity (in pounds, gallons, or cubic feet as applicable) per control area
 - ☐ Maximum allowable quantity per CBC Table 307.1(1) and/or CBC Table 307.1(2) per control area with any increases specified
16. Provide a wall legend identifying new walls, existing walls to remain, and existing walls to be removed.
17. Foundation and framing plans shall be the same orientation as the floor plan.
18. Provide legend/definitions for all symbols, shaded areas, etc., used on plans.
19. Remove all “build per code” and “not for construction” notes from plans.
20. Provide a sheet index coordinated with plans.

C. ALLOWABLE BUILDING HEIGHT

D. ALLOWABLE BUILDING AREA

E. TYPE OF CONSTRUCTION

1. Building elements in type I and type II construction shall be noncombustible. (CBC 602.2)
Exception: Combustible materials allowed per CBC 603.1

F. EXTERIOR WALLS

1. Dimension on the plot plan the location of any assumed imaginary lines between buildings on the same lot. (CBC 705.3)
Exception: Buildings on the same lot considered as single building per item D.**Error! Reference source not found.**
2. Dimension on the plot plan the following fire separation distances (measured at right angles to the building face):
 - ☐ Distances between building exterior walls and adjacent property lines (CBC 202)
Exception: Distance may be measured to centerline of adjacent street, alley, or public way
 - ☐ Distances between building exterior walls and assumed imaginary lines per item F.1 (CBC 705.3)
3. Exterior walls with a fire separation distance of _____ feet shall be minimum _____ hour-rated and constructed per item I.**Error! Reference source not found.** (CBC Table 602)
4. Area of unprotected and/or protected exterior wall openings shall be within CBC Table 705.8 limits.
5. Projections extending beyond an exterior wall (e.g., cornices, eave overhangs, exterior balconies, architectural appendages) shall comply with the following:
Exception: Projections between buildings on the same lot considered as single building per item D.**Error! Reference source not found.**
 - ☐ Minimum distance from line used to determine fire separation distance per item F.2 (CBC Table 705.2):
 - o Fire separation distance of 0 feet to 2 feet: **Projections not allowed**
 - o Fire separation distance of greater than 2 feet to 3 feet: 24 inches

- Fire separation distance of greater than 3 feet to less than 30 feet: 24 inches plus 8 inches for every foot of fire separation distance beyond 3 feet or fraction thereof
- ☐ Projections from type I or type II construction shall be noncombustible materials (CBC 705.2.1)
Exception: Combustible materials allowed by CBC 1406.3 and CBC 1406.4
- ☐ Combustible projections extending within 5 feet of line used to determine fire separation distance per item F.2 shall be minimum 1-hour-rated construction, heavy-timber construction, fire-retardant-treated wood, or as specified by CBC 1406.3 (CBC 705.2.3)
Exception: Type VB construction allowed for combustible projections in R-3 and U occupancies with a fire separation distance of minimum 5 feet

G. OCCUPANCY/USE SEPARATION

1. In buildings containing more than one occupancy, each portion of the building shall comply with **at least one of the following**:
 - ☐ Separated occupancies: Separation between _____ and _____ occupancies requires _____ hour-rated fire barrier and/or horizontal assembly constructed per item I.**Error! Reference source not found.** (CBC Table 508.4, CBC 711.2.4.1)
 - ☐ Nonseparated occupancies: Separation not required between _____ and _____ occupancies where entire nonseparated area complies with most restrictive provisions applicable to each occupancy for **all of the following** (CBC 508.3):
Exception: R occupancies require separation per item G.**Error! Reference source not found.**
Exception: H, I, and L occupancies require separation per CBC Table 508.4
 - Allowable building height area per section C
 - Allowable building area per section D
 - Fire protection per section J
 - ☐ Accessory occupancies: Separation not required between _____ main occupancy and _____ accessory occupancy where aggregate area of accessory occupancy does not exceed 10% of the building area of that story **and** accessory occupancy's allowable area in CBC Table 503
Exception: R occupancies require separation per item G.**Error! Reference source not found.**
Exception: H, I, and L occupancies require separation per CBC Table 508.4
2. Area labeled _____ qualifies as an incidental use per CBC Table 509 and shall comply with the following:
Exception: Incidental use areas within and serving a dwelling unit
 - ☐ Separated from remainder of building with _____ hour-rated fire barrier and/or horizontal assembly constructed per item I.**Error! Reference source not found.** (CBC 509.4, CBC 711.2.4.5)
 - ☐ Protected by automatic sprinkler system
 - ☐ Where CBC Table 509 permits an automatic sprinkler system without a fire barrier, separated from remainder of building by smoke-proof construction meeting **all of the following**:
 - Walls extending from top of foundation or floor assembly below
 - Any air-transfer openings in walls protected with smoke damper per item I.**Error! Reference source not found.**
 - Self- or automatic-closing doors actuated upon detection of smoke
 - No air transfer openings in doors
 - No undercutting of door in excess of clearance allowed per NFPA 80
 - ☐ Shall not exceed 10% of the building area of that story

H. MEANS OF EGRESS

1. Provide egress plan addressing all occupiable spaces and indicating the following (CBC 1004):
 - ☐ Occupant load at individual spaces with CBC Table 1004.1.2 occupant load factor(s) and applicable gross/net floor area specified at each space
Exception: Occupant load for fixed seating areas shall be calculated per CBC 1004.4
 - ☐ Intended egress routes with cumulative occupant load specified at exit doors, corridors, stairways, and intervening rooms
 - ☐ Overall occupant load of building
2. Building requires _____ exits from _____ story. (CBC 1006.3, CBC Table 1006.3.1, CBC Table 1006.3.2(1), CBC Table 1006.3.2(2))
3. Space labeled _____ requires _____ exits. (CBC Table 1006.2.1)
4. Provide complying exits from the following spaces (CBC 1006.2.2):
 - ☐ Boiler, incinerator, and furnace rooms more than 500 square feet with fuel-fired equipment exceeding 400K BTUs:
 - Minimum two exits (one may be fixed ladder or alternating tread device)
 - ☐ Refrigeration machinery rooms more than 1000 square feet
 - Minimum two exits (one may be fixed ladder or alternating tread device)
 - All portions of machinery room within 150 feet of an exit
 - ☐ Refrigerated rooms or spaces more than 1000 square feet
 - Minimum two exits
 - All portions of unsprinklered refrigerated room within 150 feet of an exit
 - Egress allowed through adjoining refrigerated rooms
 - ☐ Day care facilities, rooms, or spaces where care is provided for more than 10 children of age 2 years or less:

- Minimum two exits
5. Dimension between exits or exit-access doors from _____ shall be least one-half the maximum overall diagonal of area served (measured in straight line between exits or exit-access doors). (CBC 1007.1.1)
Exception: Separation may be one-third the maximum overall diagonal in sprinklered buildings
Exception: Where interior exit stairways are interconnected by a 1-hour fire-rated corridor, the required exit separation shall be measured along the shortest line of travel within the corridor
 6. Exit separation required by item H.5 must be maintained to exit discharge. (CBC 1007.1.1)
 7. Exit access travel distance from space labeled _____ exceeds allowable values per CBC Table 1017.2.
 8. Egress from space labeled _____ must offer **two** separate and distinct paths to **two** exits before occupants travel _____ feet. (CBC Table 1006.2.1)
Exception: Assembly seating shall comply with CBC 1029.8
 9. Dimension minimum 44-inch corridor width or as required for occupant load served. (CBC 1005.1, CBC 1020.2)
Exception: Minimum 24-inch corridor width acceptable for access to mechanical, plumbing, or electrical systems or equipment
Exception: Minimum 36-inch corridor width acceptable when serving occupant load less than 50
Exception: Minimum 36-inch corridor width acceptable within a dwelling unit
Exception: Minimum 72-inch corridor width required in E occupancies when serving occupant load of 100 or more
 10. Fire-rated corridors required for the following (CBC Table 1020.1):
Exception: Corridors in E occupancies where each room used for instruction has at least one door opening directly to the exterior and rooms used for assembly have at least one half of the required means of egress opening directly to the exterior
Exception: Corridors contained within a dwelling unit or sleeping unit in an R occupancy
Exception: Corridors in open parking garages
Exception: Corridors in B occupancy spaces requiring only a single means of egress per CBC 1006.2
Exception: Corridors within suites in I-2 or I-2.1 occupancies provided with an automatic sprinkler system throughout and constructed per CBC 407.4.3.5 or CBC 407.4.3.6
 - ☐ Unsprinklered A, B, F, M, S and U occupancies with corridor occupant load greater than 30
 - ☐ A occupancies requiring rated corridors per CBC 1028.3
 - ☐ E occupancies with corridor occupant load greater than 10
 - ☐ Sprinklered R-1, R-2, R-3, R-3.1, and R-4 occupancies with corridor occupant load greater than 10
 - ☐ Sprinklered I and R-2.1 occupancies with corridor occupant load greater than 6
 - ☐ Sprinklered H-4, H-5, and L occupancies with corridor occupant load more than 30
 - ☐ Sprinklered H-1, H-2, and H-3 occupancies
 11. Fire-rated corridors required by item H.10 shall be protected by fire partitions constructed per item I. **Error! Reference source not found.**
Exception: Exterior walls allowed to be non-rated per CBC Table 602 and exterior wall openings allowed to be unprotected per CBC Table 705.8
 12. Fire-rated corridors required by item H.10 shall be continuous from point of entry to exit with no intervening rooms (CBC 1020.6)
Exception: Foyers, lobbies, or reception rooms constructed per item I. **Error! Reference source not found.** as required for corridors shall not be considered as intervening rooms
Exception: Enclosed elevator lobbies allowed by CBC 1016.2, item 1, shall not be considered as intervening rooms
Exception: In fully sprinklered office buildings, corridors may lead through enclosed elevator lobbies if all areas of the building have access to at least one required exit without passing through the elevator lobby
 13. Dimension aisle and aisle accessway width per CBC 1018 from spaces containing seats, tables, furnishings, or displays.
 14. Specify width, height, and operation type of all doors. (CBC 1010)
 15. All egress doors – including those provided in excess of number required – must meet the following (CBC 1005.1, CBC 1010.1, CBC 11B-404.2.7):
 - ☐ Minimum 32-inch clear width (at least one door leaf providing this width at double doors)
 - ☐ Maximum 48-inch door leaf on swinging doors
 - ☐ Minimum 6-foot-8-inch clear height
 - ☐ Hardware minimum 34 inches and maximum 44 inches above finished floor
 16. Exit door _____ from space labeled _____ does not provide adequate clear width to serve occupant load shown on egress plan. (CBC 1005.1)

17. Loss of exit door _____ from space labeled _____ reduces available capacity to less than 50% required capacity. (CBC 1005.5)
18. *Note on plans:* "Egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort." (CBC 1010.1.9)
19. Egress doors shall be side-hinged swinging or pivoted. (CBC 1010.1.2)
Exception: Private garages, office areas, factory areas, and storages areas with an occupant load of 10 or fewer
Exception: Doors within or serving a single dwelling unit in R-2 and R-3 occupancies
Exception: Doors serving bathroom within R-1 sleeping unit
Exception: In other than H occupancies, revolving doors per CBC 1010.1.4.1
Exception: In other than H occupancies, horizontal sliding doors per CBC 1010.1.4.3
Exception: In other than H occupancies, manually operated horizontal-sliding doors acceptable in areas with an occupant load of 10 or less
Exception: Power-operated doors per CBC 1010.1.4.2
20. Exit doors – including those provided in excess of number required – shall swing in direction of egress when serving an occupant load of 50 or more or an H occupancy. (CBC 1010.1.2.1)
21. Door _____ from space labeled _____ reduces required dimension(s) as follows (CBC 1005.7.1, CBC 1010.1.6):
☐ Door in fully open position reduces required width of egress component by more than 7 inches
☐ Door in any position reduces required width of egress component by more than 50%
Exception: Doors within R-2 dwelling units or sleeping units
22. Door at space labeled _____ does not meet egress provisions for the following special doors (CBC 1010.1.4):
☐ Revolving door
☐ Power-operated door
☐ Horizontal-sliding door
☐ Access-controlled door
23. Specify on door schedule panic hardware or fire exit hardware at each door – including those provided in excess of number required – serving the following (CBC 1010.1.10):
☐ Rooms/spaces with an occupant load of 50 or more in the following:
 ☐ A occupancies
 Exception: Main exit of A occupancy meeting provisions of item H.24
 Exception: Electromagnetically locked doors per CBC 1010.1.9.9 in A and E occupancies
 ☐ Assembly areas not classified as A occupancies
 ☐ E, I-2, or I-2.1 occupancies
☐ H occupancies
☐ Electrical rooms with 800-amp or more equipment, width of 6 feet or more, and containing overcurrent devices, switching devices, or control devices
24. Specify on door schedule any locking or latching hardware. Locks or latches only allowed for the following (CBC 1010.1.9.3):
☐ Main doors(s) of the following occupancies/uses may have key-operated locking device(s) where sign posted on egress side adjacent to or on door(s) stating "THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED":
 ☐ B, F, M, and S occupancies
 ☐ Places of religious worship
 ☐ A occupancies with occupant load of 300 or less
☐ Doors from individual dwelling/sleeping units in R occupancies with occupant load of 10 or less
☐ Places of detention or restraint
25. **Interior exit stairways** – i.e., protected egress elements considered as exits – shall comply with the following:
☐ Enclosed within minimum 1-hour-rated fire barrier and/or horizontal assembly constructed per item I. **Error! Reference source not found.** (CBC 1023.2)
Exception: Enclosure fire rating shall be at least equivalent to fire rating of any floor penetrated by enclosure
Exception: Minimum 2-hour rating required when connecting four stories or more (counting basements but not counting mezzanines)
Exception: Exterior walls of interior exit stairways may have fire rating required by item F.3 **but** any non-rated walls exposed to other parts of the building at an angle of less than 180 degrees shall be protected by minimum 1-hour-rated exterior walls and minimum 3/4-hour-rated openings within 10 feet horizontally of non-rated interior exit stairway walls or unprotected openings **and** extending from ground to point minimum 10 feet above topmost landing of stairway or to the roof line, whichever is lower
☐ Used exclusively for egress (CBC 1023.1)
☐ Leading directly to building exterior (CBC 1023.1)
Exception: Maximum 50% of required interior exit stairways may meet exit discharge exceptions of item H.28
Exception: Interior exit stairways extending to building exterior by exit passageway meeting **all of the following:**

- Separated from building – including interior exit stairway – by minimum 1-hour-rated fire barrier and/or horizontal assembly constructed per item I.**Error! Reference source not found.** (CBC 1023.3.1, CBC 1024.3)
Exception: Separation from interior exit stairway not required where there are no other openings into the exit passageway
- Minimum 44-inch unobstructed width (CBC 1024.2)
Exception: Minimum 36-inch unobstructed width acceptable in exit passageways serving an occupant load of less than 50
- Exit passageways on level of exit discharge shall terminate at an exit discharge per item H.28
- Exit passageways on other than level of exit discharge shall terminate at an exit
- Openings in exit passageway limited to those necessary for exit access to exit passageway from normally occupied space and egress from exit passageway
- Elevators may not open into an exit passageway
- Penetrations into and openings through exit passageway are prohibited
Exception: Required exit doors
Exception: Through penetrations – provided they do not communicate between exit passageways – protected per item I.**Error! Reference source not found.** by equipment and ductwork necessary for independent pressurization, sprinkler piping, standpipes, electrical raceway for fire department communication, and electrical raceway serving the exit passageway and terminating at maximum 16-square inch steel box
Exception: Membrane penetrations protected per item I.**Error! Reference source not found.**
- ❑ Openings in interior exit stairways limited to those providing access into or egress from interior exit stairway (CBC 1023.4)
Exception: Unprotected exterior openings
- ❑ Elevators may not open into interior exit stairways (CBC 1023.4)
- ❑ Penetrations into and openings through interior exit stairways are prohibited (CBC 1023.5)
Exception: Required exit doors
Exception: Through penetrations – provided they do not communicate between exit passageways – protected per item I.**Error! Reference source not found.** by equipment and ductwork necessary for independent pressurization, sprinkler piping, standpipes, electrical raceway for fire department communication, and electrical raceway serving the exit passageway and terminating at maximum 16-square inch steel box
Exception: Membrane penetrations protected per item I.**Error! Reference source not found.**
- ❑ Equipment and ductwork serving interior exit stairways/ramps shall comply with one of the following (CBC 1023.6):
 - Located exterior to the building and directly connected to interior exit stairway by ductwork within shaft enclosure constructed per item I.**Error! Reference source not found.**
 - Where located within interior exit stairway, intake air shall be taken directly from outdoors and exhaust air discharged directly to outdoors, or such air shall be conveyed through ducts within shaft enclosure constructed per item I.**Error! Reference source not found.**
 - Where located within building, separated from remainder of building, including other mechanical equipment, by complying shaft enclosure constructed per item I.**Error! Reference source not found.**

26. **Exit access stairways** – i.e., interior stairways that are not required interior exit stairways per item H.25 – shall be located in a shaft enclosure meeting item I.**Error! Reference source not found.** (CBC 1019.3)

Exception: In other than I-2, I-2.1, I-3, and R-2.1 occupancies, exit access stairways serving, or atmospherically communicating between, only two stories may be unenclosed

Exception: In other than I-2, I-2.1, I-3, and R-2.1 occupancies, exit access stairways meeting all of the following:

- ❑ Building equipped with NFPA 13 automatic sprinkler system
- ❑ Area or floor opening between stories does not exceed twice the horizontal projected area of the exit access stairway/ramp
- ❑ Opening protected by draft curtain and closely spaced sprinklers per NFPA 13
- ❑ In other than B and M occupancies, limited to openings that do not connect more than four stories

Exception: Exit access stairways may be unenclosed if serving and contained within a single R-1, R-2, R-2.1, R-3, or R-3.1 occupancy dwelling or sleeping unit and connecting four stories or less

Exception: Exit access stairways may be unenclosed if located within an atrium per CBC 404

Exception: Exit access stairways may be unenclosed if located in an open parking garage and serving only the garage

Exception: Exit access stairways may be unenclosed if located between balcony, gallery, or press box and main assembly floor in occupancies such as theaters, places of religious worship, auditoriums, and sports facilities

Exception: In I-3 occupancies, exit access stairways may be unenclosed if constructed per CBC 408.5

27. Horizontal exits designed as part of means of egress system shall comply with the following:

- ❑ Horizontal exit shall not serve as the only exit from a portion of a building (CBC 1026.1)
- ❑ Where two or more exits required, maximum one-half of the total number of required exits and maximum one-half of the total required exit width shall be via horizontal exits
Exception: Maximum two-thirds of the total number of required exits via horizontal exits acceptable in I-2 occupancies
Exception: All required exits via horizontal exits acceptable in I-3 occupancies with at least 6 square feet of accessible space per occupant provided on each side of horizontal exit for total number of occupants in adjoining compartments
- ❑ Separation between building or refuge areas connected by horizontal exit shall be provided by one of the following (CBC 1026.2):
Exception: No fire rating required at horizontal exit between building and above-grade pedestrian walkway constructed per CBC 3104, provided minimum 20 feet distance between connected buildings
 - Minimum 2-hour-rated fire wall constructed per item I.**Error! Reference source not found.**

- Minimum 2-hour-rated fire barrier and/or horizontal assembly constructed per item I.**Error! Reference source not found.**
 - ❑ Any duct or air-transfer openings protected with **smoke damper** per item I.**Error! Reference source not found.** (CBC 717.5.1.1)
 - ❑ Horizontal exit separation shall extend vertically through all levels of building unless terminating at minimum 2-hour-rated floor assemblies with no unprotected openings (CBC 1026.2)
 - ❑ Horizontal exit assembly shall be continuous from exterior wall to exterior wall to divide completely the floor served (CBC 1026.2)
 - ❑ Horizontal exit shall lead to a refuge area meeting **all of the following** (CBC 1026.4):
 - Adequate to accommodate the original occupant load of refuge area plus the occupant load anticipated from adjoining compartment
 - Anticipated occupant load from adjoining compartment based on capacity of horizontal exit doors entering refuge area
 - Minimum 3 square feet of net floor area for each occupant accommodated
Exception: Larger net floor area per occupant required per CBC 1026.4 in I-2 and I-3 occupancies
 - Minimum 3 square feet of net floor area for each occupant accommodated
 - ❑ Refuge area shall include exits adequate to accommodate original occupant load and need not accommodate occupant load from adjoining compartments (CBC 1026.4)
 - ❑ At least one exit from refuge area shall lead directly to exterior or to an interior exit stairway (CBC 1026.4)
Exception: I-3 occupancies
 - ❑ Refuge area exits shall not require the occupants of an adjoining compartment to return through that compartment (CBC 1026.4)
28. Exits shall discharge per **all of the following** (CBC 1028):
- ❑ Exit discharge shall be at grade or shall provide a direct path of egress travel to grade
 - ❑ Exit discharge shall not reenter building
Exception: Maximum 50% of required interior exit stairways may use the following configurations:
 - Interior exit stairway may egress through area on level of exit discharge if **all of the following** are met:
 - Path of egress from interior exit stairway/ramp to an exterior exit door is free and unobstructed **and** such exit is readily visible and identifiable from the point of termination of the interior exit stairway
 - Entire area of the level of the exit discharge is separate from areas below by construction at least equivalent to fire rating of interior exit stairway
 - Egress path from interior exit stairway – plus all portions of level of exit discharge with access to egress path – protected throughout by NFPA 13 or 13R automatic sprinkler system
Exception: Non-sprinklered areas separated from egress path with construction at least equivalent to fire rating of interior exit stairway/ramp
 - Interior exit stairway may egress through a vestibule if **all of the following** are met:
 - Maximum 10-foot depth from exterior of building
 - Maximum 30-foot length
 - Entire area of vestibule separated from areas below by construction at least equivalent to fire rating of interior exit stairway
 - Vestibule area separated from remainder of level of exit discharge by construction at least equivalent to approved wired glass in steel frames
 - Vestibule area used only for means of egress
 - Vestibule area exits directly to the outside
 - ❑ Capacity of exit discharge shall not be less than required discharge capacity of exits served
 - ❑ Exit discharge shall be sufficiently open to exterior to minimize accumulation of smoke and toxic gases
 - ❑ Egress courts serving as portion of exit discharge shall comply with the following:
 - Minimum 44-inches wide or as otherwise required by CBC 1005.1
 - Minimum 7 feet of unobstructed height for full required width
Exception: Encroachments per CBC 1005.7
 - Any reduction in width shall be gradual and accomplished with minimum 36-inch-high guard creating not more than 30-degree angle with respect to axis of egress court along path of egress travel
 - Where an egress court is less than 10 feet in width, the egress court walls shall be minimum 1-hour fire-rated with 3/4-hour opening protection
Exception: Egress courts serving occupant load of fewer than 10
 - ❑ Exit discharge shall provide a direct and unobstructed access to a public way
Exception: Safe dispersal areas meeting CBC 1028.5 criteria
29. Exterior egress elements shall comply with the following (CBC 1021, CBC 1027):
- ❑ Exterior egress balconies:
 - Satisfy corridor requirements for width, headroom, and dead ends
 - Separated from interior of building by walls and opening protection required for corridors
Exception: Separation not required where balcony served by at least two stairs and dead-end travel condition does not require travel past unprotected opening to reach stair
 - Long side minimum 50% open, with open area above guards distributed to minimize accumulation of smoke/gas
 - Located minimum 10 feet from adjacent lot lines and other buildings on same lot without exterior wall protection
 - ❑ Exterior exit stairways and ramps:

- Open on at least one side, with minimum 35 square feet of aggregate open area adjacent to each floor level and intermediate landing and located minimum 42 inches above floor/landing level
 - Adjoining open areas shall be yards, courts, or public ways
 - Located minimum 10 feet from adjacent lot lines and other buildings on same lot without exterior wall protection
 - Separation from interior of building per CBC 1027.6
30. Provide stairway dimensions complying with the following on floor plans and building sections (CBC 1011):
- ☐ Minimum 44-inch clear width or as required for occupant load served
Exception: Minimum 36-inch clear width acceptable for stairways serving occupant load of less than 50
 - ☐ Minimum 6-foot-8-inch headroom
 - ☐ Landing width equivalent to stairway width
 - ☐ Landing depth equivalent to stairway width (up to 48 inches)
 - ☐ Maximum 12-foot vertical rise between floor levels or landings
31. Door _____ from space labeled _____ reduces required dimension(s) as follows (CBC 1011.6):
- ☐ Door in fully open position projects more than 7 inches into stairway landing
 - ☐ Door in any position reduces required landing width by more than 50%
32. Dimension stairway risers and treads complying with the following (CBC 1011.5.2):
- ☐ Minimum 4-inch and maximum 7-inch riser height
 - ☐ Minimum 11-inch tread depth
33. Winding stairways allowed as means of egress only for the following (CBC 1011.5.3, CBC 1011.9, CBC 1011.10):
- ☐ Curved stairways per the following:
 - Minimum 11-inch tread depth at 12 inches from inside edge and minimum 10-inch tread at any point within stairway clear width
 - Smallest radius at twice required stairway width
 - ☐ Spiral stairways per the following:
 - Serving dwelling units or space not more than 250 square feet with maximum 5 occupants
 - Minimum 26-inch clear width
 - Minimum 6-foot-6-inch headroom
 - Maximum 9-1/2-inch riser height
 - Minimum 7-1/2-inch tread depth at 12 inches from inside edge
34. Detail stairway risers and treads complying with the following (CBC 1011.5.5):
- ☐ Solid risers
Exception: Openings not allowing passage of 4-inch-diameter sphere allowed between treads if stairway does not serve as accessible means of egress
Exception: Open risers acceptable in spiral stairways complying with item H.33
 - ☐ Risers vertical or sloped under tread above at maximum 30 degrees from vertical
 - ☐ Maximum 1-1/4-inch nosings beyond the tread below
 - ☐ Maximum 9/16-inch radius of curvature at nosings
 - ☐ Maximum 9/16-inch beveling of nosings
35. Dimension and detail stairway handrails complying with the following (CBC 1011.11, CBC 1014):
- ☐ Provided on each side of stairway
Exception: Handrails acceptable on one side of spiral stairways
Exception: Aisle stairs per CBC 1029.13
 - ☐ Intermediate handrails provided as needed such that all portions of required stairway width within 30 inches of handrail
 - ☐ Located at uniform height minimum 34 inches and maximum 38 inches vertically above tread nosings
 - ☐ Maximum 4-1/2-inch projection into required stairway width
 - ☐ Continuous for full length of stairway flight
 - ☐ Extending minimum 12 inches horizontally beyond top riser
 - ☐ Sloping for depth of one tread beyond bottom riser (plus horizontal extension if required per CBC 11A or CBC 11B)
Exception: Aisle handrails need only comply with CBC 1029.13
 - ☐ Minimum 1-1/2-inch clearance between handrails and adjacent walls
 - ☐ Grip size and shape per CBC 1014.3
36. Provide coordinated details specifying the following stairway elements designed for CBC Table 1607.1 stair live loads:
- ☐ Stringer sizes
 - ☐ Landing joists and beams
 - ☐ Hangers
37. Walls and soffits within enclosed usable spaces beneath stairways shall be minimum 1-hour rated or required rating of stairway enclosure. (CBC 1011.7.3)
38. Provide guard complying with the following at any open-sided walking surface – including mezzanines, balconies, decks, stairs, ramps, and landings – located more than 30 inches vertically above adjacent floor or grade within 36 inches horizontally

of open-side edge (CBC 1015):

- ☐ Minimum 42-inches high above walking surface
Exception: Minimum 34 inches for guard at open side of stairs in R-3 occupancies and within individual R-2 dwelling units
Exception: Minimum 34 inches and maximum 38 inches for guard also serving as handrail on open side of stairs in R-3 occupancies and within individual R-2 dwelling units
Exception: Assembly seating per CBC 1029.16
- ☐ Openings in guard may not allow passage of 4-inch-diameter sphere
Exception: From 36-inch to 42-inch guard height, openings may not allow passage of 4-3/8-diameter sphere
Exception: Triangular openings formed by riser, tread, and bottom rail of guard may not allow passage of 6-inch-diameter sphere
Exception: In areas not open to the public within I-3, F, H, or S occupancies, openings may not allow passage of 21-inch-diameter sphere
Exception: Within individual dwelling and sleeping units in R-2 and R-3 occupancies, openings may not allow passage of 4-3/8-diameter sphere
Exception: Assembly seating per CBC 1015.4, exception 5

39. Provide guard complying with the following where mechanical equipment or roof hatch opening located within 10 feet of a roof edge or open side of walking surface more than 30 inches above adjacent floor or grade (CBC 1015.6, CBC 1015.7):

- ☐ Minimum 42-inches high above walking surface
- ☐ Openings in guard may not allow passage of 21-inch-diameter sphere

40. Provide coordinated connection details specifying the following for guardrail systems including glass (CBC 1607.8.1, CBC 2407.1):

- ☐ Glass shall be tempered
- ☐ Glass thickness (any structural glass designed with safety of factor of 4 considering CBC 1607.8.1 guardrail loads)
- ☐ Member sizes designed for CBC 1607.8.1 guardrail loads
- ☐ Means of connection (member-to-member and guardrail to supporting structure) for CBC 1607.8.1 guardrail loads

41. In R-1, R-2, and R-3 occupancies, operable windows located more than 72 inches above adjacent finished grade or surface below, the lowest part of the clear window opening shall be minimum 36 inches above the finished floor. (CBC 1015.8)

- Exception:** Windows with openings not allowing passage of 4-inch-diameter sphere when in largest opened position
- Exception:** Windows provided with fall prevention devices or window opening limiting devices meeting ASTM F 2090

42. Indicate on electrical plans illumination along egress paths of minimum 1 foot-candle at walking surface. (CBC 1008.2)

- Exception:** U occupancies
- Exception:** A occupancy aisle accessways
- Exception:** R-1, R-2, R-3, and R-3.1 occupancy dwelling units and sleeping units
- Exception:** R-2.1 and R-4 sleeping units
- Exception:** May be reduced to minimum 0.2 foot-candle in auditoriums, theaters, concert halls, or similar occupancies provided illumination automatically restored upon activation of fire alarm system

43. Indicate on electrical plans emergency power for illumination of the following (CBC 1008.3):

- ☐ Any room or space requiring two or more means of egress
- ☐ Corridors in areas requiring two or more means of egress
- ☐ Exit access stairways and ramps in areas requiring two or more means of egress
- ☐ Interior exit access stairways and ramps in buildings requiring two or more means of egress
- ☐ Interior exit stairways and ramps in buildings requiring two or more means of egress
- ☐ Exit passageways in buildings requiring two or more means of egress
- ☐ Vestibules and areas on the level of discharge used for exit discharge per item H.28 in buildings requiring two or more means of egress
- ☐ Exterior landings for exit doors leading directly to the exit discharge from buildings requiring two or more means of egress
- ☐ Electrical equipment rooms
- ☐ Fire command centers
- ☐ Fire pump rooms
- ☐ Generator rooms
- ☐ Public restrooms with area greater than 300 square feet

44. Indicate on egress plan location of the following signage and coordinate with electrical plans as applicable (CBC 1013):

- ☐ Illuminated exit signs at the following:
 - Exception:** Exit signs not required in rooms or spaces requiring only one exit
 - Exception:** Main exterior exit doors or gates obviously and clearly identifiable as exits
 - Exception:** U occupancies and within individual dwelling or sleeping units in R-1, R-2, R-3, or R-3.1 occupancies
 - o Where path of egress not immediately visible to occupants
 - o At intervening exit doors
 - o Within 100 feet of all points in corridors
- ☐ Tactile signs at the following locations **when illuminated exit signage required or provided:**
 - o At each grade-level exterior exit door
 - o At each exit door leading to grade-level exterior exit door via stair, ramp, exit enclosure, or horizontal exit

- At each exit door from interior room or area required to have illuminated exit sign
- ☐ Floor-level exit signs per CBC 1013.7 in interior corridors of A, E, I, and R-2.1 occupancies and all areas serving guest rooms of R-1 hotel occupancies
- ☐ Path marking per CBC 1013.8 in interior rated corridors of unsprinklered A, R-1, and R-2 occupancies

I. FIRE-RATED AND SMOKE-RESISTANT ASSEMBLIES

1. Please reach out to Mike Casady with follow up questions (858) 694-3063.

J. FIRE PROTECTION SYSTEMS

1. Provide the following automatic sprinkler system per CBC 903 to qualify for code exception/alternative (CBC 908.3):
 - ☐ NFPA 13
 - ☐ NFPA 13R
 - ☐ NFPA 13D
2. Provide standpipe system per CBC 905.
3. Provide the following fire alarm system(s) per CBC 907:
 - ☐ Manual
 - ☐ Automatic

Exception: E occupancies with occupant load of 30 or fewer
4. Provide smoke/heat vents per CBC 910.3 and/or mechanical smoke removal system per CBC 910.4 for the following (CBC 910.2):
 - ☐ Buildings containing high-piled combustible storage
 - ☐ Undivided areas of F-1 or S-1 occupancy exceeding 50,000 s.f.

K. SAFETY GLAZING

1. Specify tempered glass at the following locations requiring safety glazing (CBC 2406.4):
 - ☐ Glazing in swinging, sliding, and bi-fold doors

Exception: Glazed openings through which a 3-inch-diameter sphere is unable to pass

Exception: Decorative glazing

Exception: Glazing used as curved glazed panels in revolving doors
 - ☐ Glazing within 24-inch arc of door in closed position and within 60 inches of floor or walking surface

Exception: Glazing with intervening wall or barrier between door and glazing

Exception: Within R-2 and R-3 dwelling units, glazing in walls on latch side of and perpendicular to plane of door in closed position

Exception: Where door accesses closet or storage area maximum 3 feet in depth

Exception: Decorative glazing
 - ☐ Glazing adjacent to showers, bathtubs, hot tubs, swimming pools, and saunas and within 60 inches – vertically and horizontally -- of standing/walking surface
 - ☐ Glazing adjacent to stairways, ramps, and intermediate landings within 60 inches vertically and 36 inches horizontally of the travel surfaces

Exception: Where horizontal rail installed on accessible side of glazing at minimum 34 inches and maximum 38 inches above walking surface
 - ☐ Glazing adjacent to bottom stair landings within 60 inches vertically of landing surface and within 60-inch horizontal arc less than 180 degrees from bottom tread nosing

Exception: Glazing protected by complying guard and minimum 18 inches from guard
 - ☐ Glazing per the following within 36 inches horizontally of walking surfaces:

Exception: Where horizontal rail installed on accessible side of glazing at minimum 34 inches and maximum 38 inches above walking surface

Exception: Decorative glazing

 - Exposed area of individual pane minimum 9 square feet
 - Bottom edge of glazing within 18 inches of floor
 - Top edge of glazing more than 36 inches above floor

L. PARTITION WALLS AND SUSPENDED CEILINGS

1. Detail the following partition wall connections:
 - ☐ Connection to roof/ceiling/floor above with any partitions attached to suspended ceilings laterally braced to the building structure
 - ☐ Connection to slab/floor below
2. Provide complete details indicating the following for suspended ceiling systems (ASCE 7 13.5.6.2.2):

Exception: Alternative connection detailing acceptable for listed suspended ceiling systems

- ☐ Heavy duty T-bar grid system
- ☐ Runner and cross-runner sizes and spacing
- ☐ Vertical wires and compression struts connecting suspension runners and cross-runners to building structure
- ☐ Perimeter support per all of the following:
 - ☐ Minimum 2-inch closure angles
 - ☐ Two adjacent ends of ceiling grid attached to closure angles
 - ☐ At ends opposite those attached to closure angles, ends of ceiling grid resting upon and free to slide on closure angles
 - ☐ At ends free to slide on closure angles, minimum 3/4-inch clearance between ends of ceiling grid and walls
- ☐ For uninterrupted ceiling areas exceeding 1000 square feet, lateral bracing to building structure
- ☐ For uninterrupted ceiling areas exceeding 2500 square feet, seismic separation joints
- ☐ Connection of lighting fixtures, electrical conduits, and cable trays supported by building structure
- ☐ Minimum 2-inch rings/sleeves/adapters for sprinkler heads and allowing minimum 1-inch movement in all horizontal directions
- ☐

M. WILDFIRE-RESISTIVE CONSTRUCTION REQUIREMENTS

Exception: This section not applicable to new or remodeled building located outside wildland-urban interface fire area as defined in County Building Code 92.1.702A

Exception: This section not applicable to greenhouses enclosed with translucent plastic or glass and located minimum 30 feet from other buildings and all property lines

Exception: This section not applicable to freestanding open-side shade covers, shed, gazebos, and similar accessory structures with area less than 250 square feet of projected roof area and located minimum 30 feet from other buildings and all property lines

1. Skylights shall be tempered glass. (County Building Code 92.1.705A.5)
2. Specify on window and door schedules exterior windows, exterior glazed doors, glazed openings within exterior doors, and glazed openings within exterior garage doors complying with one of the following (County Building Code 92.1.708A.2):
 - ☐ Multi-paned glass with minimum one tempered pane (glazing frames made of vinyl materials shall have welded corners, metal reinforcement in interlock area, and be certified to ANSI/AAMA/NWDA 101/I.S.2-97 structural requirements)
 - ☐ Glass block units
 - ☐ Minimum 20-minute fire-rated (provide listing or test report)
 - ☐ Meet performance requirements of SFM Standard 12-7A-2
3. Specify on door schedule exterior doors complying with one of the following (County Building Code 92.1.708A.3):
 - ☐ Exterior surface or cladding of noncombustible or ignition-resistant material
 - ☐ Solid-core wood minimum 1-3/8-inch thick
 - ☐ Minimum 20-minute fire-rated
 - ☐ Meet performance requirements of SFM Standard 12-7A-1

N. ELECTRICAL, MECHANICAL, AND PLUMBING REQUIREMENTS

1. Provide adequate natural or artificial lighting in all spaces per CBC 1205.
2. *Note on plans:* "The project will comply with the County of San Diego lighting ordinance."
3. Provide adequate natural or mechanical ventilation of all spaces per CBC 1203 and CBEES 120.1.
4. Building requires the following per CPC Table 422.1:
 - ☐ Unisex restroom
 - ☐ Separate gender restrooms
 - Note:** All single-user restrooms shall be labeled on plans as unisex
 - ☐ Drinking fountain
5. Indicate on plans location of mechanical units and water heaters.
6. Specify manufacturer, model, and ICC, UL, WH, or equivalent listing report number – UL and ANSI *standard* numbers are insufficient – demonstrating the following for each prefabricated fireplace, wood stove, or pellet stove (CBC 2111.13.1, CalGreen 4.503.1):
 - ☐ Gas fireplaces are direct-vent sealed-combustion type (applies to new buildings only)
 - ☐ Wood stoves and pellet stoves comply with U.S. EPA Phase II emission limits (applies to new buildings only)
 - ☐ Chimney shrouds are part of the approved fireplace assembly

85% DRAFT

O. ENERGY EFFICIENCY REQUIREMENTS

NONRESIDENTIAL PROJECTS

1. Provide complete energy efficiency compliance documentation demonstrating design compliance with the **2019** California Building Energy Efficiency Standards (CBEES) for nonresidential and hotel/motel buildings. (CBEES 100.0)
Exception: I occupancies
Exception: Qualified historic buildings, except lighting compliance per CBEES 140.6(a)3Q required
2. Proposed design shall comply with energy efficiency requirements applicable to climate zone _____. (CBEES 100.1)
3. Existing buildings and their envelopes -- including shell buildings and unconditioned spaces -- occupied and conditioned for the first time shall comply as new construction. (CBEES 100.0(a), CBEES 141.0)
4. The following energy efficiency compliance forms shall be completed and made a permanent part of plans (CBEES 10-103):
 - ☐ Mandatory certificates of compliance:
 - NRCC-CXR-01-E: Design review kickoff (required for newly constructed buildings)
 - NRCC-CXR-02-E: Construction documents (required for newly constructed buildings)
 - NRCC-CXR-03-E **or** NRCC-CXR-04-E: Simple HVAC **or** complex mechanical systems (required for newly constructed buildings)
 - NRCC-CXR-05-E: Design review signature page (required for newly constructed buildings)
 - NRCC-SRA-01-E: Solar-ready areas
 - NRCC-SRA-02-E **or** NRCC-SPV-01-E **or** NRCC-STH-01-E: Minimum solar zone area worksheet **or** solar photovoltaic system **or** solar water heating system
 - ☐ Performance certificates of compliance:
 - NRCC-PRF-01-E: Performance calculations covering building envelope, mechanical system, domestic hot water, indoor lighting of conditioned spaces, and select covered processes
 - ☐ Prescriptive certificates of compliance:
 - NRCC-ENV-01-E: Envelope component approach
 - ☐ Supplemental certificates of compliance:
 - NRCC-ENV-02-E: Fenestration worksheet (required for prescriptive submittals to complete NRCC-ENV-01-E)
 - NRCC-ENV-03-E: Solar Reflectance Index (required for prescriptive submittals using SRI in lieu of emittance/reflectance to complete NRCC-ENV-01-E)
 - NRCC-ENV-05-E: Fenestration certificate label (required for submittals where NFRC label certificates not available)
 - NRCC-ENV-06-E: Area weighted average calculation worksheet (required for prescriptive submittals where envelope features use weighted-area compliance to complete NRCC-ENV-01-E)
 - NRCC-PRC-01-E: Process compliance forms and worksheets
5. Energy efficiency compliance forms shall be signed by **all of the following** (CBEES 10-103):
 - ☐ Energy efficiency documentation author
 - ☐ Project designer or owner
6. Building orientation indicated on NRCC-ENV-01-E form shall match orientation shown on plot plan. (CBEES 100.1)
7. Glazing areas indicated on NRCC-ENV-01-E form shall match floor plan. (CBEES 100.1)
8. Proposed design as indicated on NRCC-ENV-01-E form shall comply with the following glazing measures:
 - ☐ Prescriptive (CBEES 140.3(5), CBEES Table 140.3-B):
 - Maximum U-factor:
Exception: 0.47 for replacement glazing per CBEES Table 141.0-A
Exception: Hotel/motel facilities per CBEES Table 140.3-C
Exception: Chromogenic glazing shall comply with CBEES 140.3(a)5B exception
 - Fixed windows: 0.36
 - Operable windows: 0.46
 - Curtainwalls or storefronts: 0.41
 - Glazed doors: 0.45
 - Swinging exterior doors: 1.45
 - Non-swinging exterior doors: 0.70
 - Glass curb-mounted skylights: 0.58
 - Glass deck-mounted skylights: 0.46
 - Plastic curb-mounted skylights: 0.88
 - Maximum Relative Solar Heat Gain Coefficient (RSHGC) per CBEES Table 140.3-B:
Exception: 0.31 for replacement glazing per CBEES Table 141.0-A, with exemption for maximum 150 s.f. of replacement glazing **or** maximum 50 s.f. of added glazing **or** maximum 50 s.f. of added skylight area
Exception: Hotel/motel facilities per CBEES Table 140.3-C
Exception: Window assemblies with built-in shading methods with RSHGC calculated per CBEES Equation 140.3-A
Exception: Maximum RSHGC = 0.56 for windows forming display perimeter on exterior walls of first story

Exception: Chromogenic glazing shall comply with CBEES 140.3(a)5Cexception

- Fixed windows: 0.25
- Operable windows: 0.22
- Curtainwalls or storefronts: 0.26
- Glazed doors: 0.23
- Glass curb-mounted skylights: 0.25
- Glass deck-mounted skylights: 0.25
- Plastic curb-mounted skylights: No limit

- Minimum Visible Transmittance (VT) per CBEES Table 140.3-B

Exception: Exemption for maximum 150 s.f. of replacement glazing or maximum 50 s.f. of added glazing or maximum 50 s.f. of added skylight area

Exception: Hotel/motel facilities per CBEES Table 140.3-C

Exception: Windows complying with CBEES Equation 140.3-B

- Fixed windows: 0.42
- Operable windows: 0.32
- Curtainwalls or storefronts: 0.46
- Glazed doors: 0.17
- Glass curb-mounted skylights: 0.49
- Glass deck-mounted skylights: 0.49
- Plastic curb-mounted skylights: 0.64

- Maximum total glazing area = 40% of gross exterior wall area or 6 feet times display perimeter, whichever is greater
- Maximum total west-facing glazing area = 40% of gross west-facing exterior wall area or 6 feet times west-facing display perimeter, whichever is greater
- Maximum skylight area = 5% of gross exterior roof area

9. Proposed design as indicated on NRCC-ENV-01-E form shall comply with the following roof/ceiling insulation measures:

- ❑ Mandatory (CBEES 120.7(a)):

Exception: Alterations where roof is exposed to the roof deck shall comply with minimum insulation requirements of CBEES 141.0(b)2Biii

- Metal building: Maximum U-factor = 0.098 per applicable CBEES joint appendix table
- Wood-framed and others: Maximum U-factor = 0.075 per applicable CBEES joint appendix table
- Insulation shall not be placed on top of a suspended ceiling with removable ceiling panels

Exception: Conditioned spaces with a combined floor area no greater than 2,000 s.f. in an otherwise unconditioned building when the average height of the space between the ceiling and roof over these conditioned space is greater than 12 feet

- ❑ Prescriptive (CBEES 140.3(a)1B, CBEES Table 140.3-B):

Exception: Hotel/motel buildings per CBEES Table 140.3-C

- Metal building: Maximum U-factor = 0.65 per applicable CBEES joint appendix table
- Wood-framed and others:
 - **Climate zone 7** projects: Maximum U-factor = 0.067 per applicable CBEES joint appendix table
 - **Climate zone 10, 14, and 15** projects: Maximum U-factor = 0.039 per applicable CBEES joint appendix table

10. Proposed design as indicated on NRCC-ENV-01-E form shall comply with the following wall insulation measures:

Exception: Minimum R-13 insulation required in demising partitions between conditioned and enclosed unconditioned spaces per CBEES 110.8(f)

- ❑ Mandatory (CBEES 120.7(b)):

Exception: Alterations shall comply with minimum insulation requirements of CBEES 141.0(b)1B

- Metal building: Maximum U-factor = 0.113 per applicable CBEES joint appendix table
- Metal-framed: Maximum U-factor = 0.151 per applicable CBEES joint appendix table
- Light mass walls (heat capacity ≥ 7 and <15): Maximum U-factor = 0.440 per applicable CBEES joint appendix table for 6-inch or greater hollow core CMU
- Heavy mass walls (heat capacity ≥ 15): Maximum U-factor = 0.690 per applicable CBEES joint appendix table for 8-inch or greater hollow core CMU
- Wood-framed and others: Maximum U-factor = 0.110 per applicable CBEES joint appendix table
- Spandrel panels and glass curtain walls: Maximum U-factor = 0.280 per applicable CBEES joint appendix table
- Demising walls:
 - Wood-framed walls: Maximum U-factor = 0.099 per applicable CBEES joint appendix table
 - Metal-framed walls: Maximum U-factor = 0.151 per applicable CBEES joint appendix table

- ❑ Prescriptive (CBEES 140.3(a)2, CBEES Table 140.3-B):

Exception: Hotel/motel buildings per CBEES Table 140.3-C

- Metal building:
 - **Climate zone 7** projects: Maximum U-factor = 0.113 per applicable CBEES joint appendix table
 - **Climate zone 10 and 14** projects: Maximum U-factor = 0.061 per applicable CBEES joint appendix table
 - **Climate zone 15** projects: Maximum U-factor = 0.057 per applicable CBEES joint appendix table
- Metal-framed:
 - **Climate zone 7** projects: Maximum U-factor = 0.098 per applicable CBEES joint appendix table
 - **Climate zone 10, 14, and 15** projects: Maximum U-factor = 0.062 per applicable CBEES joint appendix table
- Light mass walls (heat capacity ≥ 7 and <15):

- **Climate zone 7** projects: Maximum U-factor = 0.440 per applicable CBEES joint appendix table
 - **Climate zone 10, 14, and 15** projects: Maximum U-factor = 0.170 per applicable CBEES joint appendix table
 - Heavy mass walls (heat capacity ≥ 15):
 - **Climate zone 7** projects: Maximum U-factor = 0.690 per applicable CBEES joint appendix table
 - **Climate zone 10** projects: Maximum U-factor = 0.650 per applicable CBEES joint appendix table
 - **Climate zone 14 and 15** projects: Maximum U-factor = 0.184 per applicable CBEES joint appendix table
 - Wood-framed and others:
 - **Climate zone 7** projects: Maximum U-factor = 0.110 per applicable CBEES joint appendix table
 - **Climate zone 10 and 14** projects: Maximum U-factor = 0.059 per applicable CBEES joint appendix table
 - **Climate zone 15** projects: Maximum U-factor = 0.042 per applicable CBEES joint appendix table
11. Proposed design as indicated on NRCC-ENV-01-E form shall comply with the following raised-floor insulation measures:
- ☐ Mandatory (CBEES 120.7(c)):

Exception: Alterations shall comply with minimum insulation requirements of CBEES 141.0(b)1C

 - Raised mass (minimum 3-inch lightweight concrete over metal deck): Maximum U-factor = 0.269 per applicable CBEES joint appendix table
 - Others: Maximum U-factor = 0.071 per applicable CBEES joint appendix table
 - ☐ Prescriptive (CBEES 140.3(a)4, CBEES Table 140.3-B):

Exception: Hotel/motel buildings per CBEES Table 140.3-C

 - Raised mass (minimum 3-inch lightweight concrete over metal deck):
 - **Climate zone 7 and 10** projects: Maximum U-factor = 0.269 per applicable CBEES joint appendix table
 - **Climate zone 14 and 15** projects: Maximum U-factor = 0.092 per applicable CBEES joint appendix table
 - Others:
 - **Climate zone 7 and 10** projects: Maximum U-factor = 0.071 per applicable CBEES joint appendix table
 - **Climate zone 14 and 15** projects: Maximum U-factor = 0.039 per applicable CBEES joint appendix table
12. Specify on building sections the R-values of the following insulation assemblies – cavity and/or continuous as applicable – as indicated on NRCC-ENV-01-E form:
- ☐ Roof/ceiling
 - ☐ Wall
 - ☐ Raised-floor
 - ☐ Slab-perimeter (if required per performance method)
13. *Note on building sections for **climate zone 7** projects:* “Class I or Class II vapor retarder shall be installed on the interior side of framed walls.” (CBC 1405.3.1)
- Exception:** Basement walls
- Exception:** Below-grade portion of any wall
- Exception:** Construction where moisture or its freezing will not damage its materials
- Exception:** Class III vapor retarder acceptable per CBC 1405.3.2 on interior side of framed walls where minimum R-10 insulated sheathing applied over 2x4 framing or minimum R-15 insulated sheathing applied over 2x6 framing
14. Proposed design as indicated on NRCC-ENV-01-E form shall comply with the following cool roof measures:
- Exception:** Existing roofs with 50% or less **and** 2000 s.f. or less of roof area altered
- ☐ Prescriptive (CBEES 140.3(a)1Ai):

Exception: Hotel/motel facilities per CBEES 140.3(a)1Aii

Exception: If aged solar reflectance value not available from Cool Roof Rating Council, aged value shall be determined by CBEES 110.8(i)2 equation using initial solar reflectance

Exception: Roof areas covered by building-integrated photovoltaic panels or solar thermal panels are exempt

 - Steep-sloped roofs (i.e., greater than 2:12 slope):
 - Minimum thermal emittance = 0.75
 - Exception:** Roofing with minimum SRI = 16 calculated per NRCC-ENV-03-E worksheet
 - Minimum **aged** solar reflectance = 0.20
 - Exception:** Roofing with minimum SRI = 16 calculated per NRCC-ENV-03-E worksheet
 - Low-sloped roofs (i.e., 2:12 or less slope):

Exception: Roof assemblies with thermal mass of minimum 25 psf are exempt

 - Minimum thermal emittance = 0.75
 - Exception:** Roofing with minimum SRI = 75 calculated per NRCC-ENV-03-E worksheet
 - Minimum **aged** solar reflectance = 0.63
 - Exception:** A lesser aged solar reflectance is allowed provided the roof/ceiling assembly meets trade-off values of CBEES 140.3
 - Exception:** Roofing with minimum SRI = 75 calculated per NRCC-ENV-03-E worksheet
 - ☐ Performance (CBEES 110.8(i)):
 - Roofing products not certified by Cool Roof Rating Council shall assume the following values:

Exception: Solar Reflectance Index (SRI) calculated per NRCC-ENV-03-E worksheet may be used as alternative

 - Asphalt shingles: 0.75 thermal emittance, 0.08 **aged** solar reflectance
 - Other roofing products: 0.75 thermal emittance, 0.10 **aged** solar reflectance

15. For projects with cool roofing indicated on NRCC-ENV-01-E form, specify the following cool roof product information on roof plans (CBEES 110.8(i)):
- ☐ Cool Roof Rating Council (CRRC) product ID number
 - ☐ Manufacturer brand
 - ☐ Product model
 - ☐ Product color
16. Provide **large, clear** note on **plot plan**: "Properly completed and signed Certificates of Installation (NRCI) and Certificates of Acceptance (NRCA) shall be provided to the inspector in the field." (CBEES 10-103)

P. GREEN BUILDING REQUIREMENTS

NONRESIDENTIAL PROJECTS

1. Indicate on plans the following construction waste management requirements (CalGreen 5.408.1) (for more information, please consult the [County of San Diego Construction & Demolition Recycling Guide](#)):
- ☐ **Note on plans**: "A minimum of 65 percent of nonhazardous construction and demolition waste shall be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale."
 - ☐ **Note on plans**: "Unless verifiable documentation from a waste management company is provided demonstrating a minimum 65 percent of construction and demolition waste has been diverted from landfills, a construction waste management plan shall be maintained on site and shall identify the waste materials to be diverted from disposal, determine if waste materials will be sorted on-site or bulk mixed, identify the diversion facilities where materials collected will be taken, and specifies the amount of materials diverted shall be calculated by weight or volume, but not both."
 - ☐ For additions and alterations, **note on plans**: "Universal waste items, such as fluorescent lamps and ballast, thermostats containing mercury, and other California-prohibited universal waste materials, shall be disposed of properly and diverted from landfills."
 - ☐ **Note on plans**: "100% of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled unless such material is contaminated by disease or pest infestation."

Q. SUPPLEMENTAL ADDITION AND ALTERATION REQUIREMENTS

R. DISABLED ACCESS – PUBLIC ACCOMMODATIONS AND COMMERCIAL BUILDINGS

1. Provide complete plans, details, dimensions, and notes per the following for disabled access elements serving public accommodations or commercial buildings (CBC Chapter 11B):
- ☐ Accessibility correction list 1B: Site accessibility and exterior routes of travel
 - ☐ Accessibility correction list 2B: Parking and passenger drop-off and loading zones
 - ☐ Accessibility correction list 3B: Curb ramps
 - ☐ Accessibility correction list 4B: Ramps
 - ☐ Accessibility correction list 5B: Entrances, exits, and interior routes of travel
 - ☐ Accessibility correction list 6B: Doors and gates
 - ☐ Accessibility correction list 7B: Stairways
 - ☐ Accessibility correction list 8B: Elevators and platform lifts
 - ☐ Accessibility correction list 9B: Toilet facilities
 - ☐ Accessibility correction list 10B: Shower, bathing, and locker room facilities
 - ☐ Accessibility correction list 11B: Drinking fountains
 - ☐ Accessibility correction list 12B: Miscellaneous elements
 - ☐ Accessibility correction list 13B: Alarms (if alarm required per item H.3)
 - ☐ Accessibility correction list 14B¹ - 14B⁸: Occupancy/use-specific disabled access requirements
 - ☐ Accessibility correction list 15B: Existing and historical buildings