Job Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**IMPORTANT ITEMS TO READ:**

Numbers in parenthesis refer to particular code sections of the 2016 Edition of the California Building Code.

**PART I: GENERAL REQUIREMENTS**

**A. ADMINISTRATION**

1. Each sheet of the architectural and structural plans must bear the signatures, registration number and expiration date of an architect or engineer registered in the State of California
2. The address of the building and the name/address of the owner are required on all plans. The name and address of the consultants are required on their plans.

1. Provide the following with each set of plans:

 Topography Survey Map Grading

 Floor Plans Two Elevations

 Construction Section Foundation Plans

 Framing Plans Structural Details

1. Provide fully dimensioned site plan to scale. Show legal description, building lines, easements, lot size, zone boundaries, highway dedication lines, street center line, alley, parking spaces and location of all buildings (Show type of construction, number of stories and the use for all buildings.) (107.2.5)
2. Show the building area, occupancy group(s), use(s), type of construction, number of story(s), fire zone, lot size, lot area and building height on the first sheet or title sheet of plans.
3. Show on site plans the natural and finish grade elevations around the perimeter of the building. Show elevations for all floors and top of roof. Survey Map must be signed by a licensed Surveyor or Civil Engineer. (107.3.4)
4. Remove all plans, details or notes that do not pertain to the project.

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**PART II: BUILDING CODE**

**A. GENERAL REQUIREMENTS**

1. The following nonstructural products shall comply with an approved ICC evaluation report. Copy the report and conditions of approval onto the plans and show compliance with those conditions.

 Deck Coating Roofing Materials

 Exterior Siding Sound/Thermal Insulation

 Fire Rated Assemblies Skylights

 Damp proofing material behind basement walls

 Others such as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Unit skylights and tubular daylighting devices shall be tested and labeled as complying with AAMA/WDMA/CSA 101/I.S./A440. Such label shall state the name of the manufacturer, the approved labeling agency, product designation and performance grade rating. (2405.5)

**B. OCCUPANCY CLASSIFICATION**

1. Any building used for educational purposes by > 6 persons at any one time through the 12th grade shall be classified as E occupancy.
2. Any infant/toddler day care (2 years old and younger) shall be classified as I-4 occupancy.
3. All outpatient clinics can be considered as Group B.
4. Indoor shooting Range can be classified as a Bowling Center (A3).
5. Adult day care shall be determined as I-4 occupancy. (308.6)
6. Child day care facilities with more than 5 but no more than 100 children two and half years of age or younger shall be classified as E occupancy. (308.6)
7. Provide floor area calculation on plan including the non-separated occupancy per 508.3.2. The lesser height, floor area and most restrictive fire protection system for one of the occupancies shall be enforced.
8. Provide unity formula floor area calculation on plan for separated occupancies. This is a mixed occupancies and must comply with one of the design options contained in section 508.1.

**C. BUILDING LIMITATION**

1. Show on the plans the number of stories, occupancy group(s), type(s) of construction and area of the proposed structure. Vent shafts and courts do not count as area. The mezzanine shall not contribute to the building area or number of stories. Basements need not be included in the total allowable area if it does not exceed the area permitted for a one-story, above grade plane building.
2. Specify the use of all rooms/areas on floor plans. Provide an area breakdown by level.
3. The total building area must be limited to ( ) square feet. Provide total allowable area calculation as part of plans.
4. The building as shown is a mixed-occupancy (separated occupancy) building.
5. In each story, the sum of the ratios of the actual area for each separate occupancy divided by the allowable area per story for each occupancy must not exceed one. (508.4.2)
6. For the maximum area of a building, the sum of the ratios of the total actual area for each separate occupancy divided by the allowable area per story for each separate occupancy must not exceed three for buildings with more than three stories above the grade plane. (506.2.4)
7. Unobstructed yards of minimum 20 must be maintained at minimum 25% of the building perimeter to permit a (\_\_\_\_\_\_) % floor area increase. Provide calculation of If determination. (506.3.2)

Allowable area per story is defined as Aa = [At + (NS x If)], where

 At is the tabular allowable area factor (NS, S1, or S13R value, as applicable) in accordance with Table 506.2.

 NS is the tabular allowable area factor in accordance with Table 506.2 for a nonsprinklered building;

 If is the increase due to frontage increase;

 Is is the increase due to sprinklers

The aggregate sum of the ratios for portions of mixed-occupancy, multistory buildings containing A, E, H, I, L, and R occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, including any other associated non-separated occupancies shall not exceed two.

For all other occupancies, total building area is = Aax2 for 2 stories, = Aax3 for over 2 stories. (T506.2)

1. The total building area must be limited to\_\_\_\_\_\_\_\_\_ square feet. Provide total allowable calculation as part of plans. (506.2)
2. Building exceeds allowable height limit of T504.3 for Type (\_\_\_\_) construction. (504.3): Max (\_\_\_\_) feet in height and Max ( ) stories in height. (504.4)
3. Provide calculations for establishing grade plane as per Section 202. Attach calculations and established grade planes on elevations, plans, and site plan.
4. Show maximum height of the structure (in feet and stories) from top of roof to grade plane on all elevation views. (202)
5. Lowest level is determined not to be a basement. This level is considered as 1st story above grade plane. Include this story in total building height. (202)
6. Automatic sprinkler system (NFPA-13) may be used for only one of the following purposes:

 a. Height increase (504.4)

 b. Area increase (506.2)

 c. Fire-resistance rating substitution (T 601)

1. This structure is of type ( ) construction. Show on the plans the required ( ) rated roof, (\_\_\_\_\_) rated exterior wall construction, ( ) structural frame protection, and (\_\_\_\_\_) floor construction. (T 601)
2. Exterior (bearing) (nonbearing) walls of Type ( ) construction must be of ( ) hour rated construction. (T601)

**D. SPECIAL USE OR AREAS**

1. This structure has an Atrium(s). Show that the requirements of Section 404 are satisfied. (404.1 thru 404.11).

**E. FIRE-RESISTANCE RATED CONSTRUCTION**

* 1. Clearly identify the locations of the Fire Areas, Fire Walls, Fire Barriers and Fire Partitions on the plans. Provide complete legends and details (702) (202)
	2. Fire rated assemblies shall be per Table 721.1(1), generic assemblies of Gypsum Handbook, or have another listing from an approved listing agency.
1. Show the fire separation distance: to interior lot line; to centerline of the street, and to an imaginary line between two buildings on the property. The distance shall be measured at right angles from the face of the wall. (702) (202)
2. Provide complete analysis for protected and unprotected exterior wall openings per section 705 and Equation 7-2. Openings are not allowed when the fire separation distance is 3. (705.8)

 a. Door openings in exterior walls must be protected with (3/4-hour) or (1 1/2 hour) fire assemblies (not permitted). (716.5)

 b. Window openings in exterior walls must be protected with (3/4-hour) or (1 1/2 hour) fire assemblies (not permitted). (716.5)

1. Provide ( ) hour(s) fire-resistance rating for exterior walls for ( ) occupancy, and building type ( ) at ( ) feet from property line or assumed property line. (T601, T602, 705.1, T 706.4). Provide complete details per Section 705.5.
2. Projections beyond the exterior wall must comply with Table 705.2
3. Provide details to show that Fire Wall complies with Section 706 including but not limited to:

 a. Fire Rating shall be (\_\_\_) hr. per Table 706.4

 b. Fire walls must remain structurally stable in the event of collapse of construction on either side during a fire. Provide a detail to show that joist supported by the fire wall is spliced and not continuous (plywood membrane may be continuous), or provide double fire walls or provide justification for any other method used. 706.2

 c. Shall be non-combustible material, except in Type V construction per 706.3

 d. Shall have horizontal continuity per 706.5

 e. Shall extend vertically from the foundation to a point 30 inches above the roof per 706.6

 f. The area of each opening in Fire Walls is limited to 156 sf. Total width of the openings is limited to 25 percent of the wall length in the story under consideration. (706.8)

 g. All openings in fire walls shall be protected with fire assemblies having a fire-resistive rating of (1-1/2) (3) hours. (Table 716.5)

 h. Ducts and air transfer openings through Fire Walls should be avoided. If allowed, duct and air transfer opening penetrations shall be protected as required in Section 714 and 717. Dampers are required. (705.10)

 i. Exits must be provided independently for each area bounded by fire walls except for horizontal exits per section 1026.

1. A complete (\_\_\_\_\_)-hour separation is required between Group (\_\_\_\_\_\_\_\_) and Group (\_\_\_\_\_\_\_\_) Occupancies. Separation walls must provide fire barriers complying with Section 707. Horizontal assemblies shall comply with Section 711. Openings in the separation wall shall have (\_\_\_\_) hour fire assemblies. (508.2.4, T 508.4, 707, 717)
2. Fire barriers and horizontal assemblies separating single occupancies into different fire areas shall be (\_\_\_\_\_\_\_) hour fire rated per Table 707.3.10
3. Areas of each opening in fire barrier are limited 156 sf. Total width is limited to 25 percent of the wall length in the story under consideration. (707.6)

11. Elevator lobby is required at each floor where an elevator enclosure connects more than 2- stories, unless the building is sprinklered with 903.3.1.1. or 903.3.1.2 and it is not a high-rise. (3006.2)

1. Provide (\_\_\_\_\_) hour rated Fire Partition at walls separating tenant spaces ( ) and common areas, corridors, and elevator lobbies. (708.1, 708.3)
2. Fire barrier at vertical occupancy separations must have continuity and must extend through underfloor area, attic areas, and suspended ceiling areas (707.5)
3. Opening protectives shall be per section Tables 716.5 and 716.6. Doors shall be \_\_\_\_\_hr. fire rated and windows shall be ( )hr. fire rated (716)
4. Openings through a floor/ ceiling assembly shall be protected by (1) \_ (2) \_hour shaft enclosure. The shaft enclosure shall be constructed of fire barriers and horizontal assemblies. (713)
5. Section 712.1.9 permits two floors to be open to each other when all 6 conditions are met. If not, the atrium provision shall be utilized for open two story spaces. See additional corrections for atrium.

1. Penetrations in walls requiring protected openings must be firestopped with an approved material in accordance with Section 714.3.1. Space between penetrating materials (described below) must be designed to prevent the movement of hot flame or gases:
	* 1. Steel, Copper or ferrous pipes or conduits may penetrate concrete or masonry walls where the penetrating item is a maximum 6- inch diameter and the area of the opening through the wall does not exceed 144 square inches. (714.3.1)
		2. Membrane penetrations of maximum 2- hr fire- resistance rated wall and partitions by steel electrical outlet boxes not exceeding 16 square inches are permitted provided openings do not exceed 100 square inches for any 100 square feet of wall area. Outlet boxes on opposite sides of walls or partitions must be separated by a horizontal distance of 24 inches. (714.3.2)
2. Where walls are penetrated by other materials or where larger openings are required than permitted in (b) above, they must be qualified by tests conducted in accordance with Section 714.3.1.2

* + - 1. Smoke and fire dampers must be installed in the following locations per Sections 717.5
1. Duct penetrations of fire walls in accordance to section 717.5.1.
2. Duct penetrations of fire barriers, except exit enclosures and exit passageways where they are not allowed to penetrate. (717.5.2)
3. Ducts penetrating shafts. (717.5.3)
4. Ducts penetrating fire partitions and fire-rated corridor walls. See exception for steel ducts with no openings into corridor (717.5.4)
5. Ducts penetrating smoke barriers (717.5.5)
6. Ducts penetrating horizontal assemblies (717.6)
	* + 1. Show draft stop location on plans. Also, provide these notes on the plans:
7. In buildings used for other than residential occupancies, draft stops must be installed in wood frame floor construction containing concealed space. Such draft stops must be installed so that the area of the concealed space does not exceed (1000) square feet (718.3.3).
8. In buildings used for other than residential occupancies, draft stops must be installed in the attic (mansards) (overhangs) (false fronts set out from walls) (similar concealed spaces) formed by combustible construction. Such draft stops must be installed so that the area of the concealed space does not exceed (3000) square feet (718.4.3).
9. Draft-stopping materials must not be less than -inch gypsum board, 3/8-inch plywood, 3/8-inch Type 2-M particle board or other materials approved by the building department. Draft-stopping must be adequately supported. (718.3.1)
	* + 1. Draft stops shall be provided within attics, mansards, overhangs and similar concealed spaces formed of combustible construction, unless the building is sprinklered with NFPA13 sprinkler system (3000 sf between draft stops) (718.4.3)
			2. Draft stop shall be provided within a concealed floor-ceiling assembly formed of combustible construction, unless the building is sprinklered with NFPA 13 sprinkler system (1000 sf between draft stops) (718.3.3)
			3. The fire-resistance rating of structural members and assemblies shall not be less than the rating required for the fire-resistance rated assemblies supported by the structural members. (704.1)
			4. Note on plans: Fire blocking must be provided in accordance with Section 718.2 at the following locations:
10. In concealed spaces of stud walls and partitions, including furred spaces, at the ceiling and floor levels.
11. In concealed spaces of stud walls and partitions, including furred spaces, at 10-foot intervals along the length of the wall.
12. At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.
13. In concealed spaces between stair stringers at the top and bottom of the run and between studs along and in line with the run of stairs if the wall under the stairs is unfinished.
14. In openings around vents, pipes, ducts, chimneys, fireplaces and similar openings which afford a passage for fire at ceiling and floor levels, with noncombustible materials.
15. In concealed spaces of exterior wall coverings and other exterior architectural elements where permitted to be of combustible construction.
16. In concealed spaces between the floor slab and the underside of the wood framing where wood sleepers are used for laying wood flooring on masonry or concrete fire-resistance rated floors.
17. This building is of Type V-A / III-A construction, provide / show:

1. Attic access openings in a fire-resistance rated ceiling/wall assembly shall be protected by self-closing doors with automatic latches constructed as require for the ceiling/wall. (718.4.1.1)
2. All openings in floors are required to be enclosed by a shaft having wall, floor, and ceiling of \_\_\_\_\_ hour fire resistive construction. (714.4)
3. Recessed ceiling light fixtures must be boxed around with 5/8" Type X drywall to maintain the 1-hour ceiling assembly. (714.3.2)
4. Continuous drywall is required behind all electrical service panels, fire hoses and medicine cabinets. (714.3.2)
5. Exhaust fans from the bathroom must enter through the wall. Dampers are required if the ceiling is penetrated. (717.5)
6. Plumbing penetration through horizontal occupancy separations shall be boxed out and filled with approved safing material. Insulation is not approved. (714.4.1)
7. Penetration of the 1 hour ceiling by ducts from the FAU and the stove hood require dampers (use a ductless hood whenever possible). Attic units (including heat pumps) require dampers at all ceiling penetrations. (717.6.1)
8. Steel beams and columns shall be protected as required for 1-hour protection. Where ceiling forms the protective membrane for fire-resistive assemblies (occupancy separations and rated roof/ceiling or floor/ceiling assemblies), the construction (floor joists) and their supporting horizontal structural members (beams) need not be individually fire protected except where such members support directly applied loads from more than one floor or roof. The required fire resistance shall not be less than that required for individual protection of members. (704.3)
9. All plumbing penetrations through walls which require protected openings (Fire walls, Fire barriers, Fire partitions) are required to be galvanized or cast iron piping
10. S2 Occupancy, type I construction garage requires ( ) hour separation (minimum floor assembly for S2 occupancy) from ( ) occupancy, but not less than required per T508.4. Show details (509.4, 508.3.3, T508.4). A \_\_\_\_\_\_ rated self-closing door between the garage and \_\_\_\_\_\_\_\_\_. (406.3.4)
11. Occupancy garage shall comply with the followings:
12. Concrete or similar non-combustible and non-absorbent floor, or asphalt surface at ground level only. (406.4.5)
13. Sloped floor to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway. (406.4.5)
14. Floor system designed for uniform or concentrated loads per table 1607.1.
15. Minimum headroom of 7ft. (406.4.1)
16. Vehicle barriers not less than 2 feet 9 inches high placed at the end of drive lanes, and at the end of parking spaces where the difference in adjacent floor elevation is greater than 1 foot. (406.4.3)
17. Vehicle barriers designed in accordance with section 1607.8.3.

**F. INTERIOR FINISHES**

* 1. Indicate on plans that interior finish materials applied to wall and ceilings shall be tested as specified in Section 803. Specify the classifications per Table 803.11 and Section 803.1. Clearly indicate on the plans.
	2. The flame-spread rating of paneling materials on the walls of the corridor, lobby and exit enclosure must be identified on plans. (T-803.11)

**G. FIRE PROTECTION**

1. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. (903.2)
2. Building with floor areas over 1500 sf shall be sprinklered where 20 sq. ft. of opening for every 50 ft of wall length is not provided. (903.2.11.1(2))
3. Add a note on plan: This building must be equipped with an automatic fire extinguishing system, complying with (NFPA-13/ NFPA-13R); The Sprinkler System shall be approved by Plumbing Div. prior to installation. (903.2)
4. Show the location on the plans. Class I, II or III standpipe (dry, wet, combination) are required in this building. (905.3)
5. An approved fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.5.
6. Show locations of hard-wired smoke detectors with a battery back up in each sleeping room and at a point centrally located in the corridor or area giving access to each sleeping area. (907.2.11.2)
7. Provide automatic sprinkler system at top of rubbish and linen chutes and in their terminal room (903.2.11.2)
8. Waste and linen collection rooms over 100 square feet shall provide 1 hour separation or provide automatic fire-extinguishing system or classify room occupancy to comply with separation per 508.4 (T508.4, T509)
9. Smoke and heat vents, or mechanical smoke exhaust systems, and draft curtains shall be provided except where areas of buildings are equipped with early suppression fast response sprinklers. Show locations on plans. (910.2)
10. Smoke and heat vents shall be installed in the roofs of one story building or portions thereof occupied for the uses set forth in Section 910.2.1 thru 910.2.2

**H. MEANS OF EGRESS**

1. Exterior exit stairs, balconies and ramps shall be located at least 10 ft. from adjacent lot lines and from other buildings on the same lot. (1027.5)
2. All stairways shall be built of materials consistent with the types permitted for the type of construction of the building, except that wood handrails shall be permitted for all types of construction. (1011.7)
3. For areas having fixed seats and aisles, the occupant load shall be determined by the number of fixed seats installed therein. The occupant load for areas in which fixed seating is not installed, such as waiting spaces and wheelchair spaces, shall be determined in accordance with Section 1004.1.2. and added to the number of fixed seats. (1004.4)
4. For areas having fixed seating without dividing arms, the occupant load shall not be less than the number of seats based on one person for each 18 inches of seating length. (1004.4)
5. The occupant load of seating booths shall be based on one person for each 24 inches of booth seat length measured at the backrest of the seating booth. (1004.4)
6. Show detailed summary of the floor area and all deductions for Gross and/or Net floor area. (1004.1)
7. Use correct occupant load factor for the function of space according to Table 1004.1.2
8. Two exits are required from each space where the design occupant load or common path of egress travel distance exceeds the values listed in Table 1006.2.1. (1006.2.1)
9. Occupant load > 49, (A, B, E, F, M, U)
10. Occupant load > 10, (R)
11. Occupant load > 29, (S)
12. Common path of egress > 75 ft.
13. Common path of egress > 100 ft. (B, F, S) sprinklered building (T1006.21)
14. Provide two means of egress for stories exceeding Table 1006.3.2(1), 1006.3.2(2).
15. Where two or more exits are required, at least two exits must be separated by (half) (1/3) the max. diagonal length of the space or area served. (1007.1.1)
16. Where more than one exit is required, no one exit can exceed 50% of the required egress width. (1005.5)
17. All exit doors shall comply with Section 1010.1
18. Clear width of each door opening shall be min. 32” or per Sec. 1005.1, whichever is greater
19. Min. door height of 6'-8"
20. Shall be capable of opening 90 degrees.
21. The maximum width of a swinging door leaf shall be 48” nominal.
22. Exit door shall be side-hinged swinging type
23. Door(s) # \_\_\_\_\_\_ serve(s) an area that has an occupant load of 50 or more. Swing this/these door(s) in the direction of egress travel. (1010.1.2.1)
24. Show the path of exit travel to and within exits. The exit path shall be identified by exit signs conforming to the requirements of Section 1013. Exit signs shall be readily visible from any direction of approach. Exit signs shall be located as necessary to clearly indicate the direction of egress travel. No point shall be more than 100 feet from the nearest visible sign. (1013.1)
25. All required exits shall be maintained until arrival at grade or the public way. (1006.3.1)
26. Change of elevation at \_ (\_\_\_\_\_\_\_\_) is less than 12 inches, provide sloped surface. If slope is greater than 5%, ramps shall comply with Section 1012 (1003.5)
27. Provide a 1 hour fire rated corridor in accordance with Table 1020.1.
28. Occupant load > 30
29. Occupant load >10
30. Detail and reference all rated corridor construction in and protected openings in accordance to Section 708 for fire partitions. Protection to be of a 20 min. doors and 45 min. for other openings. (1020.1)
31. Provide a min. corridor width of 44 inches or per Sec. 1005.1, whichever is greater. (1020.2)
32. Revolving doors used for egress purposes shall be accompanied by a side-hinged swinging egress door located max. 10ft along the same wall. (1010.1.4.1)
33. Provide complete details for ramps when used as part of the egress component. Show width, slope, landing and handrails dimensions accordance with Section 1012.
34. Thresholds at doorways shall not exceed 0.50 inch in height. 0.75 inch in height for sliding doors serving dwelling units. (1010.1.7)
35. Floors or landings on each side of doors to have the same elevation. Landings shall be level except for exterior landings (max. 2% slope). (1010.1.5)
36. Landing width at doors must have a min. clear dimension of doors served. Min. length of such landings is 44 inches (36 inches). (1010.1.6)
37. Doors shall not project more than 7" into the required corridor width or at landings when fully opened. And not more than 50% in any position. (1010.1.6)
38. Dead end corridors must not exceed 20 feet, 50 feet for sprinklered bldg. (1020.4)
39. Detail all stairways to comply with Section 1011
40. Rise: 7 inch max. Run (tread): 11 inch min. (1011.5)
41. Rise: 7.75 inch max. Run (tread): 10 inches for stairs within dwelling units. (1009.7.2)
42. Headroom clearance: 6 ft – 8 inches. (1009.5)
43. Width: (44 inches) (36 inches) (48 inches between hand rails for accessible stairs). (1009.4)
44. Landing width: Same as stairway served (1009.8)
45. Landing length: Same as width, max. 48” (1009.8)
46. Provide a landings at every 12 ft. of vertical rise at stairways. (1009.10)
47. Handrail height: 34-38 inches, max 4 inch openings (1012.2)
48. Handgrip portion of handrail shall not be less than 1.25 inches and not greater than 2 inches in cross-section for circular type. 4 inch - 6.25 inch perimeter for other shapes. (1012.3)
49. A minimum 1.5 inch handrail clearance from adjacent wall. (1012.7)
50. Handrail extension of 12 inches beyond the top and bottom riser. (1012.6)
51. 1-hour fire rated construction for the enclosed usable space under the stairs. (1009.9.3)
52. Curved stairways: (1009.11)
53. Spiral stairways: (1009.12)
54. Provide 42 inch high guards at Decks; Landings; Balconies and Walkways where there is a vertical drop of >30”. (1015.2)
55. For glass handrails and guards, the panels and their support system shall be designed to withstand the loads specified in Chapter 16. A safety factor of four shall be used. The minimum nominal thickness of the glass shall be 1/4 inch. (2407)
56. The means of egress system must have a clear ceiling height of 7’-6”. (1003.2)
57. Show calculations for all egress component widths to comply with section 1005.1.
58. Provide min. 48 inch plus width of door when doors are placed in series. (1010.1.8)
59. Provide a barrier in the exit enclosure at (\_\_\_\_\_\_\_\_\_\_\_\_) to prevent entry into the basement level. (1022.8)
60. Building has an exit enclosure connecting more than 3-stories. Provide an approved stairway sign indicating the floor level, terminus of the top and bottom of the stair and the identification number of the stair. It shall be located approximately 5 ft. above the floor landing and be readily visible when the stair doors are in an open or closed position. (1023.9)
61. Open space under exterior stairways shall not be used for any purpose. (1011.7.4)
62. Provide floor-level exit signs in all interior corridors of Group A, E, I, R-1 and R-4 occupancies. (1013.7)
63. The exit passageway may only be used as a means of egress. Provide a 1-hour fire-resistance rating or of the same rating required for any connecting exit enclosure. Walls, floors and ceilings shall be constructed as fire barriers in accordance with Section 707 (1024.1 & 1024.3)
64. Opening into exit passageways shall be limited to those necessary for egress from normally occupied spaces. Elevators not allowed. Openings and penetrations shall comply with Section 715. (1024.5)
65. Spiral stairways shall not serve as required exit for an area exceeding 250 and serves not more than 5 occupants. (1011.10)
66. In buildings located four or more stories in height above grade plane, one stairway shall extend to the roof surface, unless the roof has a slope steeper 4:12 (33%). (1011.12)
67. Vertical exit enclosures: (1023.2)
68. Connecting 4-stories more: provide 2-hour fire-resistance rating construction (fire barrier);
69. Connecting up to 3-stories: provide 1-hour fire-resistance rating construction (fire barrier);
70. All openings to be protected in accordance to Section 716. No openings other than exit doorways and exterior wall openings are permitted. (1023.4)
71. Accessible Means of Egress: (1009)
72. In buildings where a required accessible floor is four or more stories above or below the level of exit discharge, egress elevator shall be provided, read exceptions. (1009.2.1)
73. Provide 48 inch clear width between handrails. (1009.3)
74. Platform lifts not allowed as part of accessible means of egress. (1009.5);
75. Max force to operate doors is limited to 15-lb.
76. Show location and dimension of area of refuge. (1009.6)

i) Size: (2) 30 inch x 48 inch or 1/200, whichever is greater

ii) Separation from other space by a smoke barrier (detail construction per Section 709)

iii) Note: Two-way communication required;

iv) Signage on door of area of refuge

v) Exterior area of refuge to comply with section 1007.7-1007.7.2

1. Egress through intervening space is not allowed to go through: (1016.2)
2. Different tenant space or dwelling units.
3. A more hazardous occupancy.
4. Commercial kitchens.
5. Storage rooms, closets or similar spaces
6. Egress convergence applies at (\_\_\_\_\_\_\_\_\_\_\_\_) Show calculation for egress width to account for combined occupant load from floor above and below. (1005.6)
7. Horizontal exits: (1026),
8. Detail horizontal exits as a 2 hour fire barrier or a fire wall in accordance to Section 706.
9. Provide self-closing or automatic closing doors;
10. Not allowed as the only exit from a space;
11. Horizontal exits cannot exceed 50% of total exits required;
12. Provide clear summary for the refuge area. Show capacity for a minimum of 3 sq. ft. for each combined occupant to be accommodated therein.
13. Building is not fully sprinklered in accordance to 903.3.1.1 or 903.3.1.2, exception may not be used.
14. Egress balconies to comply Section 1021. Detail plans to meet all requirements.
15. One openable window with an openable area of not less than 5.7 sq. ft., minimum clear 24" height and 20" width, and a sill height not over 44" above the floor is required in all bedrooms below the fourth story and basement. (1030)
16. Provide calculation to show that existing egress system is adequate to accommodate new usable outdoor area; (1004.5)
17. Show and dimension common path of egress travel from each space. (1006.2.1)
18. Label each space to match the function of space according to Table 1004.1.2.
19. Legend on floor plans to show where exits are located and the travel distance to it from the most remote point within a story, measured along the natural and unobstructed path of egress travel.
20. Show clear width dimension at corridors and exit passageways where doors open into it.
21. Area of refuge cannot project into egress path of travel
22. Hatch/label and dimension all areas of refuge.
23. For High-rise buildings, provide smoke-proof or pressurized exit enclosures for buildings required to comply with Section 403 or 405 (1023.11)

Note on Plans:

1. Exit signs shall be internally or externally illuminated

2. Exit signs illuminated by an external source shall have an intensity of not less than 5 foot candles (54 Iux).

3. Internally illuminated signs shall be listed and labeled and shall be installed in accordance with the manufacturers instructions and Section 2702.

4. Exit signs shall be illuminated at all times. (1013.3)

5. Exit signs shall be connected to an emergency power system that will provide an illumination of not less than 90 min. in case of primary power loss (1013.6.3)

6. Egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort. See 1010.1.9.3 for exceptions.

7. Door handles, lock and other operating devices shall be installed at a min. 34 and a max. 48 above the finished floor

8. THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED.

9. All egress door operation shall also comply with Section 1010.1.9 1010.1.9.12

10. The means of egress, including the exit discharge, shall be illuminated at all times the building space served by the means of egress is occupied.

11. The means of egress illumination level shall not be less than 1 foot-candle at the walking surface

12. The power supply for means of egress illumination shall normally be provided by the premises electrical supply. In the event of power supply failure, an emergency electrical system shall automatically illuminate the following areas:

a. Aisles and unenclosed egress stairways in rooms and spaces that require two or more means of egress

b. Corridors, exit enclosures and exit passageways in buildings required to have two or more exits;

c. Exterior egress components at other than the level of exit discharge until exit discharge is accomplished for buildings required to have two or more exits.

d. Interior exit discharge elements, as permitted in Section 1028.1, in buildings required to have two or more exits.

e. Exterior landings, as required by Section 1010.1.6, for exit discharge doorways in buildings required to have two or more exits.

13. The emergency power system shall provide power for a duration of not less than 90 minutes and shall consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 2702.

14. Emergency lighting facilities shall be arranged to provide initial illumination that is at least an average of 1 foot-candle (11 lux) and a minimum at any point of 0.1 foot-candle (1 lux) measured along the path of egress at floor level. Illumination levels shall be permitted to decline to 0.6 foot-candle (6 lux) average and a minimum at any point of 0.06 foot-candle (0.6 lux) at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded.

**I. INTERIOR ENVIRONMENT**

1. Provide a door and window schedule. Show type and size of each.

2. All shower compartments, regardless of shape, shall have a minimum finished interior area of not less than 1024 square inches (0.66 m2) and shall be capable of encompassing a 30 inch (0.76 m) circle. The minimum area and dimensions shall be maintained to a point 70 inches (1.8 m) above the shower drain outlet. (1210.2.3, LAPC 408.6)

3. Provide \_\_\_\_\_ water closets for women, \_\_\_\_\_ water closets for men, and \_\_\_\_\_\_ urinals (2901, LAPC Table 422.1, IB: P/BC2014-095

4. Toilet room floors shall have a smooth, hard nonabsorbent surface such as Portland cement, ceramic tile or other approved material that extends upward onto the walls at least 4" (1210.2.1)

5. Walls within 2 feet (610 mm) of the front and sides of urinals and water closets shall have a smooth, hard non-absorbent surface of Portland cement, concrete, ceramic tile or other smooth, hard non-absorbent surface to a height of 4 feet (1219 mm), and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture. (1210.2.2)

6. Cement, fiber-cement or glass mat gypsum backers in compliance with ASTM C1178, C1288 or C1325 shall be used as a base for wall tile in tub and shower areas and wall and ceiling panels in shower areas. Water-resistance gypsum backing board shall be used as a base for tile in water closet compartment walls when installed in accordance with GA-216 or ASTM C840. Regular gypsum wallboard is permitted under tile or wall panels in other wall and ceiling areas when installed in accordance with GA-216 or ASTM C840. Water-resistant gypsum board shall not be used in the following locations: Section 2509.3.

a. Over a vapor retarder.

b. In areas subject to continuous high humidity, such as saunas, steam rooms or gang shower rooms

c. On ceilings where frame spacing exceeds 12 inches O.C. for 1/2 inch thick and more than 16 inches O.C. for 5/8 inch thick.

7. Show the location, on plans, of any room(s) that will be used for compact storage (movable files). Rooms that are used for compact storage must comply with the following requirements: LAMC Section 94.2012.1

a. The maximum area of a compact storage room is limited to 1500 square feet for systems designed as Ordinary Hazard Group 2 and 5000 square feet for Extra Hazard Group 1.

b. The clear space below the sprinklers shall be a minimum of 18 inches between the top of the storage and the ceiling sprinkler detector.

* 1. The minimum design live load for compact storage rooms shall be 250 psf.

8. One elevator in buildings four or more stories above or below grade plane shall be of such a size to accommodate a 24-inch by 84-inch ambulance stretcher in the horizontal, open position and shall be identified by the international symbol for emergency medical services. See 3002.4a for exceptions. (3002.4)

9. **Add note on plans**:

a. Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings in accordance with Section 1205.2 or shall be provided with artificial light that is adequate to provide an average illumination of 10 foot-candles over the area of the room at a height of 30 inches above the floor level. (1205.1 and 1205.3)

**J. BUILDING ENVELOPE**

1. A fire retardant roof covering is required. Provide a complete description on plans. Class A roof covering is required for all buildings located in a Very High Fire Hazard Severity Zone. (1505.1, 7207.4)

2. Show roof slope(s), drain(s) and overflow drain(s) or scuppers on the roof plan. Provide a detail of the roof drain and overflow system.

a. Size the roof drains and overflow drains according to Chapter 11 of the LAPC. (1503.4)

b. The roof drain and overflow drain must be independent lines to a yard box.

c. Roof drainage is not permitted to flow over public property.

d. Overflow scuppers shall be designed in accordance to 1101.11.2.1 of the LAPC

e. Show roof elevation to provide a minimum 1/4in per foot roof slope for drainage or design to support accumulated water.

f. Site drainage: Show on plans how concentrated drainage is being conveyed to the street via non-erosive devices (7013.10)

3. Provide access to all mechanical equipment located on the roof.

4. Show that the penthouse satisfies the requirements of Section 1510

5. Skylights set at an angle of less than 45 degrees from the horizontal plane shall be mounted at least 4 inches above the plane of the roof on a curb constructed as required for the frame. Except for R3 occupancies, skylights without a curb shall be permitted on roof s with a minimum slope of 14 degrees (three units vertical in 12 units horizontal (Section 2405.4) Glass skylights shall comply with Section 2405. Plastic skylights shall comply with Section 2610

1. Details of the guardrails at the floor and roof openings, occupied roofs and balconies or porches more than 30" above grade are required. Guardrails shall be 42" in height, have intermediate rails or balusters spaced at 4" maximum. It shall be designed as per Section 1607.8, (1015)

8. Provide veneer details. Show method of anchorage, size and spacing of anchors. Comply with requirements per Section 1405.6.

9. Each pane of safety glazing installed in hazardous locations shall be identified by a manufacturers designation specifying who applied the designation, the manufacturer or installer and the safety glazing standard. The following shall be considered specific hazardous locations for the purposed of safety glazing. Glazing in: Section 2406

a. Swing doors.

b. Fixed and sliding panels of sliding door assemblies and panels in sliding and bi-fold closet door assemblies.

c. Storm doors.

d. Unframed swinging doors.

e. Doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, bathtubs, and showers.

f. Fixed or operable panels adjacent to a door where the nearest exposed edge of the glazing is within 24 inches (610 mm) arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 inches (1525 mm) above the walking surface. Read code for exceptions.

g. Fixed or operable panel, other than described in items e and f, which meets all of the following conditions (read code for exception with special installation).

i) Exposed area of an individual pane greater than 9 square feet (0.84 m2)

ii) Exposed bottom edge less than 18 inches (457 mm) above the floor.

iii) Exposed top edge greater than 36 inches (914 mm) above the floor.

iv) One or more walking surfaces within 36 inches (914 mm) horizontally of the plane of the glazing.

h. Guards and railings regardless of area or height above a walking surface. Included are structural baluster panels and nonstructural in-fill panels.

i. Walls and fences enclosing indoor and outdoor swimming pools and spas where all of the following conditions are present:

i) The bottom edge of the glazing is less than 60 inches (1525 mm) above a walking surface on the pool or spa side of the glazing.

ii) The glazing is within 60 inches (1525 mm) of a swimming pool or spa waters edge.

j. Adjacent to stairways, landings and ramps within 36 inches horizontally of a walking surface; when the exposed surface of the glass is less than 60 inches above the plane of the adjacent walking surface(read code for exception with special installation).

k. Adjacent to stairways within 60 inches horizontally of the bottom tread of a stairway in any direction when the exposed surface of the glass is less than 60 inches above the nose of the tread (read code for exception with special installation).

10. Provide a weep screed for stucco at the foundation plate line a minimum of 4 inches above the earth or 2 inches above paved areas. Weep screeds shall be of a type which will allow trapped water to drain to the exterior of the building. (Show these dimensions on a foundation detail drawing) (Section 2512.1.2)

**K. ACCESSIBILITY (see separate checklist)**

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**ADDITIONAL CORRECTIONS**

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