



R1 and R2 OCCUPANCIES PLAN CHECK CORRECTION SHEETS (2014 LABC)

Plan Check Submittal Date: _____

Plan Check / PCIS App #: _____

Job Address: _____

Applicant: _____ Phone: _____

P.C. Engineer: _____ (print first / last name) Phone: _____
E-mail: firstname.lastname@lacity.org

Your feedback is important, please visit our website to complete a Customer Survey at www.ladbs.org/LADBSWeb/customer-survey.jsf.

If you have any questions or need clarification on any plan check matters, please contact a plan check supervisor or call our Customer Hotline at (213) 482-0056.

INSTRUCTIONS FOR PROCEEDING WITH THE PLAN CHECK (PC) PROCESS:

1. Review corrections circled on this Plan Check Correction Sheet and on the plans and calculation sheets.
2. Provide a written response or reference to details pursuant to the corrections. Location of any revisions on the plans shall be identified as part of your responses. For any questions related to the PC corrections, email or call the Plan Check Engineer.
3. Phone or email the PC engineer for a verification appointment after you have addressed the corrections. Verification of corrections is only done by appointment.
4. Complete item #2 above and bring the originally checked set of plans and calculations to the meeting along with this plan correction sheets. Unprepared responses with incomplete plans or calculations may result in cancellation of the meeting.
5. During the appointment, the plan check engineer will go over the corrections and comments. Once all the items have been corrected to comply with the code requirements and clearances are obtained, the permit will be ready to be issue.

IMPORTANT ITEMS TO READ:

1. Your early attention is suggested to the approval process from other Departments as listed in the Clearance Summary Worksheet due to possible delays resulting from a public hearing or other processes required by other Departments. The Planning Department, the Community Redevelopment Agency, and others may have requirements that could significantly affect the final design of the project.
2. The permit application will expire 18 months from the plans submittal date.
3. Please be advised that the permit will be issued upon verification of compliance with the corrections included herein. The approval of plans does not permit the violation of any section of the Building Code, or other ordinance or state law.
4. Numbers in parenthesis refer to Code sections of the 2014 edition of the Los Angeles Codes.

THE FOLLOWING SUPPLEMENTAL CORRECTION SHEETS ARE ATTACHED AND SHALL BE CONSIDERED A PART OF THIS REVIEW. COMPLIANCE WITH THESE CORRECTIONS MUST BE OBTAINED PRIOR TO THE ISSUANCE OF THE PERMIT.

Supplemental Correction sheets attached:

- Fire District
- Flood Hazard
- Methane Seepage Regulation
- Storm Water Requirements
- Energy Conservation
- High Wind Area
- Security Requirements
- Sound transmission
- Grading and shoring - General
- Structural - General
- Disable Accessibility
- Hillside Ord. and Seismic Design (slope >3:1)
- Bicycle Parking Ordinance

Review the following checked information bulletins and forms. Revise plans to show compliance (Copies can be obtained at www.ladbs.org).

- P/GI 2014-024 Recording Covenants with LA County
- P/GI 2014-025 Copies of LA Ordinances (Planning's)
- P/BC 2014-011 Illumination and Lock Requirements
- P/BC 2014-016 Dwellings in High Wind Velocity Areas
- P/BC 2014-026 Fire-Resistive for One-Hour Throughout
- P/BC 2014-021 Calculating building code's floor areas
- P/BC 2014-023 Fire Retardant Roof Covering for Walking Deck
- P/BC 2014-027 Onsite Wastewater Treatment System
- P/BC 2014-038 Mezzanines in Residential Buildings
- P/BC 2014-044 Alquist-Priolo EQ Fault Zoning Act
- P/BC 2014-047 Expansive Soils
- P/BC 2014-057 Drainage Across Lot/Property Lines
- P/BC 2014-060 30 Days Notification of intent to Excavate
- P/BC 2014-064 Flood Hazard Management Specific Plan
- P/BC 2014-065 Coastal Development Permit
- P/BC 2014-069 Sound-Rated Partitions and Floor-Ceiling
- P/BC 2014-073 Policy on Signed and Wet Stamped plans
- P/BC 2014-074 Sound Insulation near Airport
- P/BC 2014-081 Conv. into Heavy Duty Equipment Room
- P/BC 2014-096 6" Concrete Block Masonry Fences
- P/BC 2014-101 Methane Hazard Mitigation Standard Plan
- P/BC 2014-105 Guardrail Adjacent to Openable Windows
- P/BC 2014-106 Water Curtain in Lieu of Protected Ext. Openings
- P/BC 2014-103 Sump Pumps for Surface Drainage
- P/BC 2014-113 Reports for Submittal to Grading Division
- P/ZC 2014-001 Parking Lot Design
- P/ZC 2014-002 Heights of Fences
- P/ZC 2014-004 Yard Projection & Height for Decks
- P/ZC 2014-005 Yard Reduction Requests
- P/ZC 2014-006 Projections in Yards
- P/ZC 2014-008 Zoning Code "Building height"
- P/ZC 2014-010 General Zoning for Multiple-Dwelling Developments
- P/ZC 2014-011 Summary of Parking Regulations
- P/ZC 2014-016 Retaining Walls in Hillside Areas
- P/ZC 2014-017 Summary of Assisted Living Facilities

Forms and Affidavits:

- Summary Clearance Worksheet (attached)
- Grading Bond: PC/GRAD/Bond 03 and 04
- Protection of Adjoining Property: PC/GRAD/App.13
- Drainage Easement: PC/GRAD/Aff.17
- Community Driveway for 2 Parcels: PC/STR/Aff.13
- Impact Hazard Glazing: PC/STR/Aff.19
- Graffiti Removal: PC/STR/Aff.42
- Lot Tie: PC/STR/Aff.22
- Building Maintenance: PC/STR/Aff.23
- Maintenance of Building Support: PC/STR/Aff.25
- Oversize Building: PC/STR/Aff.28
- Off-street parking: PC/STR/Aff.27
- Parking Attendant: PC/STR/Aff.31
- Green Building Declaration: PC/STR/Aff.39
- Structural Observation
- Vehicle Lift System: PC/STR/Aff.43

PART I: GENERAL REQUIREMENTS

A. PERMIT APPLICATIONS

- 1. Provide a fully dimensioned plot plan to scale, in ink and copy onto the PCIS application's plot plan sheet.
- 2. Valuation is revised to \$.
Pay additional plan check fee of \$.
School fees are applicable to this project.
- 3. Provide complete and correct legal description (Tract, Lot, Block, Grant Deed). Provide complete information for applicant, owner, engineer, architect, and contractor.
- 4. Obtain separate application for the following items:
 - a. Retaining walls
 - b. Grading work
 - c. Block fence walls
 - d. Signs
 - e. Swimming pools
 - f. Fire sprinkler systems
 - g. A separate structure
 - h. Electrical, Mechanical, Plumbing work
 - i. Shoring
 - j. Demolition
- 5. The permit application must be signed by the property owner, or licensed contractor, or authorized agent at the time the permit is to be issued:
 - a. **For owner-builder permits:** Owner's signature can be verified with owner's driver license. Owner's representatives must present owner's approval with a notarized letter from the owner.
 - b. **For contractor building permits:** Prior to the issuance of a building permit, the contractor shall have the following:
 - i. Certificate of Worker's Compensation Insurance made out to the Contractors State License Board.
 - ii. Notarized letter of authorization for agents.
 - iii. Copy of Contractors State License or pocket ID.
 - iv. Copy of City of Los Angeles business tax registration certificate or a newly paid receipt for one.

copies of recorded affidavits, contact Building and Safety Records Section. For copies of City Planning documents, contact the Department of City Planning at (213) 978-1259, or fax request to (213) 978-1263

- 4. A recorded affidavit is required (see sheet # 2). Obtain a copy of "instructions to process affidavits" from LADBS's web site and follow the instruction.
- 5. Provide temporary shoring plans for excavations removing the lateral support of public way or an existing building. Excavations adjacent to a public way require Public Works approval prior to permit issuance.
- 6. Where there is an excavation of a greater depth than are the walls or foundation of an adjoining building or structure and located closer to the property line than the depth of the excavation, the owner shall provide the Department of Building and Safety with evidence that the adjacent property owner(s) have been given a 30-day written notice of such intent to make an excavation. This notice shall state the depth of such excavation and when it will commence. This notice shall be by certified mail, return receipt requested. (3307.1) (IB: P/BC 2014-060)
- 7. Soil/Foundation/Geology report(s) must be approved by the Grading Section. Provide a copy of the approved report and Department approval letter. Show compliance with the report's requirements and approval letter's conditions.
- 8. No permit can be issued without a recorded Parcel Map/Tract Map. Provide an official recorded copy prior to permit issuance.
- 9. Rough grading approval is required before a building permit can be issued for Tracts.
- 10. Building projections into public properties must comply with Chapter 32. Note on the plans: "Temporary pedestrian protection shall be provided as required by Section 3306. Obtain Public Works' approval. (3201.3, 3202.3.4, 3306)
- 11. Fire lane access is required where any part of the building is 150 ft from the edge of an improved street or approved fire lane. Obtain clearance from the Hydrants and Access Unit of the Fire Department. LAMC 57.09.03

B. CLEARANCES

- 1. Obtain all clearances as noted on the attached **Clearance Summary Worksheet**. Apply immediately for the sign off is necessary as it can take months for some departments to review the project. Comply with conditions given during approval prior to the permit issuance.
- 2. Obtain **lot cut date** from Land Records of Public Works. Lot divided after 6-1-46 shall comply with Lot area requirement of the Zone. Lot divided after 7-29-62 shall obtain a Certificate of Compliance from City Planning Department. Allow months to process. Obtain application from Planning Dept
- 3. Provide copies of the following recorded documents for the parcel: (). More requirements or Clearances may follow upon review of the documents. For

- 12. Obtain a site plan review approval from City Planning Department for any development project which creates, or results in an increase of 50 or more dwelling units or guest rooms, or combination thereof. (16.10 B.3)
- 13. (See attached supplemental correction sheet) - Sign off from Watershed Protection Division, Bureau of Sanitation, Department of Public Works is required for:
 - * Projects located in or adjacent to or discharging directly into an Environmental Sensitive Area.
 - * Residential projects with 10 or more dwelling units.
 - * Parking lots (including roof top parking) with 25 or more parking spaces or 5,000 sq. feet or more (including accessory driveways).
 - * Projects with more than 500 s.f. of new floor area.

Ord. 181,899

14. Obtain Clearances from the Green Building Division of LADBS.
15. The city records indicate there possibly is an oil well on the site. Obtain clearance to construct a new building or addition near or on an oil well from the Fire Department. Prior to requesting building permit clearance from the Fire Department, obtain a determination letter from the State of California, Division of Oil, Gas, and Geothermal Resources.

Division, (_____)

5. Provide the following with each set of plans:

<input type="checkbox"/> Topography Survey Map	<input type="checkbox"/> Grading
<input type="checkbox"/> Floor Plans	<input type="checkbox"/> Two Elevations
<input type="checkbox"/> Construction Section	<input type="checkbox"/> Foundation Plans
<input type="checkbox"/> Framing Plans	<input type="checkbox"/> Structural Details
6. Provide fully dimensioned plot plan to scale showing:

<input type="checkbox"/> Legal Description	<input type="checkbox"/> Building Lines
<input type="checkbox"/> Easements	<input type="checkbox"/> Lot Size
<input type="checkbox"/> Highway Dedication Lines	<input type="checkbox"/> Zone Boundaries
<input type="checkbox"/> Alley	<input type="checkbox"/> Street Centerline
<input type="checkbox"/> Parking Spaces	<input type="checkbox"/> U s e o f a l l buildings

Size of all buildings (106.3.2.1)
 Show use of each room
7. Show location and distance of active and abandoned oil wells with respect to building perimeter, if any.
8. 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. (106.4.3.3)
9. Remove all plans, details or notes that do not pertain to the project.
10. Provide a minimum of four elevation monuments on the approved building plans as main reference points for the building. Such elevations shall be established before approval of excavation of footings is given.

C. 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.
3. (Three)/ (Two) sets of plans will be required during permit issuance. One of these set of plans will be submitted to the County Assessors. Plans must be: (106.3.2.2.& 106.3.3.) (California Revenue and Taxation Section 72)
 - a. Quality blue or black line drawings with uniform and light background color.
 - b. Max. 36' x 48" size with minimum 1/8" lettering size.
 - c. Sticky back details must produce prints without contrasting shades of background color.
4. The final set of plans must be stamped by (City Planning Dpt.), (Fire Dpt), (Disable Access Division), Green Building

PART II: ZONING (Allow time for discretionary approval process from City Planning if zoning requirements can't be met.)

1. Comply with the provisions of the **Specific Plan** _____ **floor area** is limited to 1.5 X Buildable Lot Area. (12.21.1A1)
2. Comply with Zoning Information File # (_____)
3. Provide a copy of the **Certificate of Occupancy** and/or building permit with plot plan showing the legal existing use and parking.
4. The proposed **use** (_____) is not permitted in Zone (_____). **Planning entitlement is** required. Provide a copy of the CUP, ZA, CPC for review and copy the conditions of approval onto the plans for Planning's sign off.
5. Number of dwelling units is excessive for Lot Area in Zone (_____).
6. Building exceeds (_____) **height** for Zone (_____). Show maximum height of the structure from top of roof to grade on all elevation views.
7. For Height District 1-VL, Building is limited to 3 stories and 45 feet tall. (12.21.1A1)
8. For Height District 1-XL, Building is limited to 2 stories and 30 feet tall. (12.21.1A1)
9. For Height District 1 in a commercial or industrial zoned lot,
10. No building or **structure** can exceed the heights as shown below due to close proximity to a Lot zoned for single family residences (RW1 or more restrictive) at where the lot is located adjacent or across a street / alley. A portion of the proposed building within a distance from an adjacent Lot zoned for residences shall be limited to the height as listed below (12.21.1A10):
 - a. 0 to 49 ft ; limits to 25 ft tall.
 - b. 50 to 99 ft; limits to 33 ft tall.
 - c. 100 to 199 ft; limits to 61 ft tall.
11. Basement containing a habitable room shall be considered a story for side and rear yard and Height District's requirements. (12.21C1(l), 12.21.1A8)
12. Provide and dimension on plan with (_____) front yard; (_____) side yard; (_____) rear yard as required for Zone (_____)
13. Maintain a (_____) **Building Line** setback (12.22C1).
14. Maintain a minimum (10' / 20') separation between buildings (12.21 C2a)
15. A (10'/ _____)Passageway is required from the street to each dwelling unit or guest room (12.21C2b)

16. Projection of () into the () yard / passageway is not permitted or limited to () (12.22C20)
17. Provide 30" minimum clear access around main building(s) and accessory living quarters. (12.22C20(l))
18. Fences, planters, and retaining walls shall not exceed a height of () ft. above the natural ground level in required () yard. (12.22C20(f))
19. For development of over 5 units, provide a total minimum usable open space on site of : 100 sq for each unit with less than 3 habitable room; and 125 sq ft for each unit having 3 habitable rooms; and 175 sq ft for each unit for over 3 habitable rooms (A kitchen is not counted as a habitable room for this requirement) (12.21G2.)
 - a. Common open space shall be open to the sky and have no structures that project into the open space area and readily accessible to all residents of the site (12.21G2a)
 - b. Common open space shall have a minimum of 400 sf with no horizontal dimension less than 15 ft. (12.21G2a1(iii))
 - c. Common open space shall be located at grade level or first habitable room level, except for developments in R3, R4 or R5. (12.21G2a1(iv))
 - d. Landscaping must be approved by Planning Dept.
20. **Provide a summary of the existing legal use and floor area** for all buildings on site to determine parking requirements.
21. **Provide () paved parking spaces.** A minimum of one standard stalls per dwelling unit. (12.21 A4, 12.21 A5)
22. Parking is not permitted in the required front yard and 5' side yard along the side street lot line of a corner lot. (12.21A6a)
23. Attendant Parking Affidavit is required for **Tandem parking.**
24. Comply with parking design standards per Information Bulletin. Plans shall be drawn to scale (around 1/8"=1') to shown aisle widths, circulation driveway, stall widths, and stalls width increase for obstructions and end stalls condition. (12.21A5)
25. Parking site and turning areas within 15' of a property line shall be enclosed with a **5'- 9" high wall.** (12.21A6(d), (e), (f)) A solid concrete or masonry of 6" thick construction is required for parking areas of over 4 cars. 12.21A6(f). A **3' high wall** is required where parking is within 15' of the sidewalk.
26. Maximum driveway slope shall not exceed 20%. [Grade details and transition slopes required where slope exceeds 12½%. Maximum driveway cross slope is 10%. Maximum slope within parking area is 5%. 12.21A5(g), Information Bulletin# P/ZC 2002-001
27. Automobiles are not permitted to back onto a public street or sidewalk. (12.21A5(i)1)
28. Revise plans to maintain a backup aisle. (12.21A5(b))
29. Provide 3 ft 6 in high enclosing **walls** at each floor level of the parking garages in the PB, C1.5, C2, C4, C5, CM zone. 12.12.1.5A2(a), 12.13.1.5A2(b)5, 12.14A24, 12.16A2, 12.17.1A1.
30. **Transportation Demand Ordinance.** Check zoning section 12.21A16 - 12.26J. Requirements vary depending on size starting with developments of 25,000 ft². Obtain clearance from Transportation Dept.
31. Provide a loading space for motel/hotel and all buildings in the C or M zones which abut an alley. (12.21C6)
32. Provide a **storage area** on the rear half of lot. Enclosed with a 6' high solid fence (12.14A42)
33. Provide a **recycling room** for apartment with 4 or more units. The room(s) shall be separate from the trash area. (12.21A19)
34. Accessory building is not permitted on front half of lot, except when located minimum 55-ft from the front line or private garage located on sloping lot in accordance with 12.21C5(l). (12.21C5(b))
35. Provide minimum 5-ft setback from rear property line (10' from alley center line) and () setback from side property line for accessory building containing recreation room or accessory living quarters. (12.21C5(e), (f), (g))
36. Note on plans. **"Double striping** of stalls shall be per Zoning Code Section 12.21A5, Chart No. 5."
37. Los Angeles City Electrical Test Lab Research Report is required to use a mechanical lift to provide parking spaces.
38. "A maintenance of vehicle lift system (2-levels or more) affidavit" shall be approved and recorded prior to issuing a building permit.
39. "2-vehicle parking lift" ceiling height shall be minimum 16'-0" for sprinklered buildings (14'-6" for nonsprinklered buildings).

PART III: BUILDING CODE

A. GENERAL REQUIREMENTS

1. The following nonstructural products shall comply with an approved ICC evaluation report or Los Angeles City Research 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 _____

2. Add notes on plans:

- * The construction shall not restrict a five-foot clear and unobstructed access to any water or power distribution facilities (Power poles, pull-boxes, transformers, vaults, pumps, valves, meters, appurtenances, etc.) or to the location of the hook-up. The construction shall not be within ten feet of any power lines-whether or not the lines are located on the property. Failure to comply may cause construction delays and/or additional expenses .
- * An approved Seismic **Gas Shutoff** Valve will be installed on the fuel gas line on the down stream side of the utility meter and be rigidly connected to the exterior of the building or structure containing the fuel gas piping.” (Per Ordinance 170,158) (Includes Commercial additions and TI work over \$10,000.) Separate plumbing permit is required.
- * Provide ultra low flush water closets for all new construction. Existing shower heads and toilets must be adapted for low water consumption.
- * Shower compartments and walls above bathtubs with installed shower heads shall be finished with a smooth, nonabsorbent surface to height not less than 70 inches above the drain inlet. Section 1210.2.3 Use of water-resistant gypsum backing board shall be as stated in Section 2509.3
- * Water heaters must be strapped to a wall (Sec. 507.3, UPC)

- * Unit Skylights shall be labeled by a LA City Approved Labeling Agency. Such label shall state the approved labeling agency name, product designation and performance grade rating (research report not required). 2405.5
- * A copy of the evaluation report and/or conditions of listing shall be made available at the job site.

B. OCCUPANCY CLASSIFICATION

1. When the sleeping units are not equipped with cooking facilities and the stay of the guests is no more than 30 days, the building shall be classified as R1 occupancy. Even with cooking facilities such as the “extended-stay hotels”, they are still considered as R1 due to the time duration of the stay.
2. Dormitory for elderly with a 24 hour a day medical supervision with more than 5 occupants shall be classified as I2. (308.4)
3. All congregate living facilities such as small boarding houses, convents, dormitories, monasteries or non-transient motels for blended families no more than 16 occupants and small enough to operate as a single family unit shall be classified as R3 occupancy. (310.5)
4. All institutional facilities that accommodate six or less people are to be classified as Group R3.1 (310.5.1). Comply with special requirements per Section 425.
5. Residential care /assisted living facilities including more than six ambulatory clients (exclude staff) shall be classified as R4. (310.6)
6. Townhouses not more than 3 stories above grade in height with a separate means of egress for each unit shall be classified as R3 occupancy. (If a portion of the means of egress is exiting through a common area such as an exit court on the side of the building, this townhouse should be classified as a R2 occupancy).
7. Adult care of child care for less than 24 hours with six or less

persons shall be classified as R3 occupancy. (310.5)

8. Residential care / assisted living facilities with more than 6 ambulatory clients and no more than 6 non-ambulatory or bedridden clients shall be classified as R4 (310.6)
Comply with Section 425 for special requirements.
9. This is a mixed occupancy building and subject to the provisions of Section 508.
10. The following are required for attached garage / carport (**U occupancy**):
 - a. Garage shall not exceed 1000 sq ft or one story in height except in a mixed occupancy where the floor area shall not exceed 3000 sq. ft. provided the exterior walls and openings are protected as required for the major occupancy of the buildings. (406.3.1, 406.3.2)
 - b. Separation from the dwelling unit and its attic area by means of a minimum 1/2-inch gypsum board applied to the garage side (406.3.4).
 - c. Separated from all habitable rooms above by not less than a 5/8-inch Type X gypsum board or equivalent and 1/2-inch gypsum board applied to structures supporting the separation (406.3.4)
 - d. Doors between garage and the dwelling unit shall be self-closing and self-latching, solid wood or solid or honeycomb core steel not less than 1 3/8 inches thick, or have a minimum fire protection rating of 20 minutes. (406.3.4)
 - e. Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit from the garage shall be constructed of a minimum 0.019-inch (0.48 mm) sheet steel and shall have no openings into the garage. (406.3.4)
 - f. Exterior walls of a U occupancy less than 5' from a property line must be one-hour construction without openings. (T 602)
 - g. Garage shall not open directly into a room used for sleeping purposes. (406.3.4)
 - h. Concrete or similar noncombustible and nonabsorbent floor, or asphalt surface at ground level only. The minimum thickness of concrete floor slabs supported directly on the ground shall not be less than 3-1/2 inches.(406.4.5)

C. BUILDING LIMITATION

1. Show on plans:
 - Height (existing, proposed)
 - Number of stories (existing, proposed)
 - Number of basement level(s)
 - Occupancy Group(s)
 - Type(s) of Construction
 - Fire District(s)
 - Fire Walls (705)
 - Unobstructed yards (506.2)
 - Sprinkler Type (903.2.8, 504.2, 506.3) (if applicable)
 - Use of all rooms/areas on floor plans
 - Fire Alarm (907)
 - Allowable floor Area Analysis (506)
2. The building as shown is a mixed-occupancy (separated occupancy) building.
 - a. In each story , the sum of the ratios of the actual building area of each separate occupancy divided by the allowable building area per story of each occupancy must not exceed one. (508.4.2)
 - b. 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 two. (506.4)
3. Unobstructed yards of minimum 20' must be maintained at minimum 25% of the building perimeter to permit a (_____) % floor area increase. Provide calculation of I_f determination. (506.2) Allowable area per story is defined as $A_a = A_t + [A_t \times I_f] + [A_t \times I_s]$, where:

I_f is the increase of due to frontage increase is

I_s is the increase due to sprinklers

Total building area is = $A_a \times 2$ for multistory.

(T503, 506.2, 506.4.1)

4. Building exceeds allowable height limit of T 503 for Type (____) construction. (503): Max (____) feet in height and Max (____) stories in height
 5. Maximum 3 / 2 stories allowed for R1 and R2 , type (VA / VB) construction (T503)
 6. R2 occupancy above S2, type I or type IV construction may measure the height in terms of stories from above the parking area when building complies with Section (510.4).
 7. Provide calculations for establishing grade plane as per Section 202. Attach calculations and established grade planes on elevations plans and site plan. (202)
 8. Show maximum height of the structure (in feet and stories) from top of roof to grade plane (to the average height of the highest roof surface) on all elevation views. (202)
 9. 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)
 10. Automatic sprinkler system (NFPA-13) may be used for only one of the following purposes:
 - a. Height increase (504.2)
 - b. Area increase (506.3)
 - c. Fire-resistance rating substitution (not for exterior wall) (T 601, footnote (d))
 11. Automatic sprinkler system (NFPA-13) may be used for both height and area increase for R2 occupancy, type VA construction only 504.2, 506.3
 12. Indicate area increase method on plan. Indicate if automatic sprinkler system is used for area increase, height increase or fire-resistance rating substitution.
 13. 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)
 - a. Structural steel members shall be protected with an approved product. Thicknesses of fire proofing material shall be specified on the plans. (703.2)
 - b. Restrained Construction - Steel members shall be identified by the Engineer. (703.2.3)
 14. Exterior (bearing) (nonbearing) walls of Type (____) construction must be of (____) hour rated construction. (T601)
 15. Fire partitions and Smoke barriers shall be continuous to the underside of the floor or roof sheathing and passing through any concealed spaces or attic areas (708.4, 709.4)
- D. SPECIAL USE OR AREAS**
1. Show location and distance of active and abandoned oil wells with respect to building perimeter (6105)
 2. This structure has an Atrium(s). Comply with Section 404 (404.1 thru 10)
- 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 (706, 707, 708)
 2. Fire rated assemblies shall be per Table 721, generic assemblies of Gypsum Handbook, have LARR approval or ICC approval
 3. 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. (202)
- consideration. (706.8)
4. Provide complete analysis for protected and unprotected exterior wall openings per section 705.8 & Equation 7-2. Openings are not allowed when the fire separation distance is less or equal to 3'. (705.8)
 - a. Door openings in exterior walls must be protected with (3/4-hour) or (1 ½ hour) fire assemblies (not permitted) (715.4)
 - b. Window openings in exterior walls must be protected with (3/4-hour) or (1 ½ hour) fire assemblies (not permitted).(T-716.5)
 5. Provide ()Hr fire resistance rating for exterior walls for R2, type () at () ft from property line or assumed property line. () hr fire resistance rating exterior wall required for building zero feet from P.L.
 6. Projections shall not extend any closer to the line used to determine the fire separation distance or not more than a minimum 24" / 40" from line used to determine the fire separation distance with fire separation distance of _____ ft. (T-705.2)
 7. Provide minimum 30 inch parapet at () walls (705.11)
 8. 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 noncombustible 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
 9. Fire wall can not create a separate building for the purpose of automatic fire sprinkler system requirements as set forth in chapter 9, unless the fire wall is 4- hours w/ no openings (706.1.1)
 10. A complete (____)-hour separation is required between Group (____) and Group (____) Occupancies. Separation walls shall to be fire barriers complying with Section 707. Horizontal assemblies shall comply with Section 717. Openings in the separation shall have (____) hour fire assemblies. (508.4.4, T 508.4, 708, 712, 715)
 11. Fire barriers and horizontal assemblies separating single occupancies into different fire areas shall be (____)hour fire rated per Table 707.3.10.
 12. 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)
 13. Elevator lobby is required at each floor where an elevator enclosure connects more than 2- stories. (713.14.1)
 14. Provide (____)hour rated Fire Partition at walls separating dwelling units and common areas, corridors, and elevator lobbies. (708.1, 708.3)
 15. Fire barrier at vertical occupancy separations must have continuity and must extend through underfloor area, attic areas, and suspended ceiling areas (707.5)
 - 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 1025.

16. Opening protectives shall be per section Tables 716.5. Doors shall be ___hr fire rated and windows shall be ()hr fire rated (716)
17. 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/or horizontal assemblies. (713.1, 713.4)
18. *A floor opening connecting not more than two stories is permitted if it complies with all the conditions per Section 712.1.8. If not, the atrium provision shall be utilized for open two story spaces. See additional corrections for atrium.*
19. Penetrations in a fire-rated wall shall be protected by an approved fire stop material in accordance with Section 714.3.1.
- 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
 - 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)
 - 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 (714.3.1.1)
20. Smoke and fire dampers must be installed in the following locations per Sections 717.3
- Duct penetrations of fire walls in accordance to section (717.1.1)
 - Duct penetrations of fire barriers, except exit enclosures and exit passageways where they are not allowed to penetrate. (717.5.2)
 - Ducts penetrating shafts. (717.5.3)
 - Ducts penetrating fire partitions and fire-rated corridor walls. See exception for steel ducts with no openings into corridor (717.5.4.1)
 - Ducts penetrating smoke barriers (717.5.5)
 - Ducts penetrating horizontal assemblies (717.6)
21. Show draft stop location on plans. Also, provide these notes on the plans:
- In buildings used for residential occupancies, draft stops must be installed in wood frame floor construction containing concealed space. Draftstopping shall be located above and inline with the dwelling unit and sleeping unit separation. (718.3.3).
 - In buildings used for 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. Draftstopping shall be installed above and inline with sleeping unit and dwelling unit separation walls that do not extend to the underside of the floor sheathing above. (718.4.3).
 - Draft-stopping materials must not be less than ½-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)
22. 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) (718.4.2)
23. 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 (718.3.2)
24. Horizontal occupancy separation must be supported with a structural system having equivalent fire-resistive protection. (704.1)
25. Note on plans: Fire blocking must be provided in accordance with Section 718 at the following locations:
- In concealed spaces of stud walls and partitions, including furred spaces, at the ceiling and floor levels. (718.2.2)
 - In concealed spaces of stud walls and partitions, including furred spaces, at 10-foot intervals along the length of the wall. (718.2.2)
 - At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings, cove ceilings and similar locations. (718.2.3)
 - 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. (718.2.4)

- e. 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. (718.2.5)
26. This building is of Type V-A / III-A construction, provide / show:
- a. Continuous drywall behind all tubs is required unless the walls are within the unit and non-bearing. Back to back tubs with a common plumbing wall are impractical in 1-hour buildings.
 - b. All interior bearing walls shall be constructed of not less than 1-hour fire-resistive construction. (T-601)
 - c. Attic access openings in 1-hour ceiling can be 2 layers of 3/4" plywood or one layer of 1-5/8" T&G material, self-closing.
 - d. All openings in floors are required to be enclosed by a shaft having wall, floor, and ceiling of _____ hour fire resistive construction. (713.1)
 - e. Recessed ceiling light fixtures must be boxed around with 5/8" Type "X" drywall" to maintain the 1-hour ceiling assembly.
 - f. Continuous drywall is required behind all electrical service panels, fire hoses and medicine cabinets.
 - g. Exhaust fans from the bathroom must enter through the wall. Dampers are required if the ceiling is penetrated (717.5)
 - h. Plumbing penetration through horizontal occupancy separations shall be boxed out and filled with approved safing material. Insulation is not approved.
 - i. 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. (711)
 - j. 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)
- k. All plumbing penetrations thru walls which require protected openings (Fire walls, Fire barriers, Fire partitions) are required to be galvanized or cast iron piping.
27. S2 Occupancy, type I construction garage requires 2 hour separation (minimum floor assembly for S2 occupancy) from R2 occupancy, but not less than required per T508.4 Show details (510.4, 508.3.3, T508.4). A _____ rated self-closing door between the garage and _____ (406.1.4)
28. S2 Occupancy garage shall comply with the followings:
- a. Concrete or similar noncombustible and nonabsorbent floor, or asphalt surface at ground level only. (406.4.5)
 - b. Sloped floor to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway (406.4.5)
 - c. Floor system designed for uniform or concentrated loads per table 1607.1
 - d. Minimum headroom of 7ft - (406.4.1)
 - e. 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)
 - f. 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. In addition, provide details showing application in accordance with Section 803, 804, and Table 803.9.
 - 2. The flame-spread rating of paneling materials on the walls of the corridor, lobby and exit enclosure must be identified on plans. (T-803.9)

3. An automatic sprinkler system is required throughout per section 903.2.8.

G. FIRE PROTECTION

1. 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. An automatic sprinkler system is required throughout all buildings with a Group "R" fire area. Note on plan. "This building and garage 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)
3. Exceptions to, or reductions in building code requirements based on the installation of automatic fire extinguishing system is not allowed when utilizing NFPA-13R type residential sprinkler system allowed for R occupancies (903.2.8, 504.2, 506.3, T601 footnote (d)).
4. Show the location on the plans. Class I, II or III standpipe (dry, wet, combination) are required in this building.(905.3.1)
5. Provide automatic sprinkler system at top of rubbish and linen chutes and in their terminal room (903.2.11.2)
6. Waste and linen collection rooms over 100 square feet shall provide 1 hour separation or provide automatic fire-extinguishing system or classify room with occupancy comply with separation per Table 509
9. The Type I parking structure permitted by section 510.3 is a story (first story) and not a basement. Because of this, the structure is 4 stories in height and requires sprinklers throughout (903.2)
10. Add note: "This building shall be provided with a manual alarm system with the capability to support visible alarm notification appliances in accordance with NFPA 72". (907.2.9, 907.5.2.3.3, 907.5.2.3.4)

11. Provide an automatic alarm system for the hotel with both visual and audible alarms activated by the both in-room smoke detector and the building fire alarm system on _____ sleeping units. (907.5.2.3.3)

H. MEANS OF EGRESS

1. Exterior exit stairs and ramps shall be located at least 10 ft from adjacent lot lines and from other buildings on the same lot (1026.5)
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. (1009.9)
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 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 (if used) 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 or story. (1015.1)
 - a. Occupant load > 49, (A, B, E, F, M, U)
 - b. Occupant load > 10, (R)
 - c. Occupant load > 29, (S)
 - d. Common path of egress > 75ft. (T-1014.3)

- e. Common path of egress > 100ft. (B, F, S) sprinklered building (T-1014.3) egress travel until arrival at the public way (1005.4)
 - f. Common path of egress > 125ft. (R2) sprinklered building (T-1014.3)
9. Provide two means of egress for stories exceeding the limits of Table 1021.2(1) and 1021.2(2)
 10. Where two or more exits are required, at least two exits must be separated by ½ the maximum diagonal length of the area served. (1015.2.1) - see exceptions.
 - a. Occupant load > 30
 - b. Occupant load >10
 11. Where more than one exits are required, the means of egress shall be configured such that the loss of any one exit shall not reduce the available capacity to less than 50% of the required capacity. (1005.5)
 12. All exit doors shall comply with Section 1008-1008.1
 - a. Clear width of each door opening shall be min. 32" or per section 1005.1, whichever is greater
 - b. Min. door height of 6'-8"
 - c. Shall be capable of opening 90 degrees.
 - d. The maximum width of a swinging door leaf shall be 48" nominal.
 - e. Exit door shall be side-hinged swinging type (1008.1.2)
 13. 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. (1008.1.2)
 14. 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 1011. 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.(1011)
 15. The capacity of the means of egress required from any story of a building shall not be reduced along the path of
 - 16. Change of elevation at _____ is less than 12 inches, provide sloped surface. If slope is greater than 5%, ramps shall comply with Section 1010 (1003.5)
 - 17. Provide a 1hr. fire rated corridor in accordance with Table 1018.1.
 - a. Occupant load > 30
 - b. Occupant load >10
 - 18. Detail and reference all rated corridor construction and protected openings in accordance to Section 709 for fire partitions. Protection to be of a 20min. doors and 45min. for other openings. (1018.1)
 - 19. Provide a minimum corridor width per Table 1018.2 or per Section 1005.1 (1018.2)
 - 20. Revolving doors used for egress purpose shall be accompanied by a side-hinged swinging egress door located max. 10ft along the same wall. (1008.1.4.1)
 - 21. Provide complete details for ramps when used as part of the egress component. Show width, slope, landing and handrails dimensions accordance with Section 1010.
 - 22. Thresholds at doorways shall not exceed 0.50" in height. 0.75" in height for sliding doors serving dwelling units. (1008.1.7)
 - 23. Floors or landings on each side of doors to have the same elevation. Landings shall be level except for exterior landings (max. 2% slope) (1008.1.5)
 - 24. Landing width at doors must have a min. clear dimension of doors served. Landings shall have a length measured in the direction of travel of not less than 44" (36") (1008.1.6)
 - 25. 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.
(1008.1.6)

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)

26. Dead end corridors must not exceed 20 feet., 50 feet for sprinklered bldg.
(1018.4)

30. The means of egress system must have a clear ceiling height of 7'-6".(1003.2)

27. Detail all stairways to comply with Section 1009

31. Show calculations for all egress component widths to comply with sections 1005.2 and 1005.3.

a. Rise: 7" max. Run (tread): 11" min. (1009.7.2)

b. Rise: 7.75" max. Run (tread): 10" for stairs within dwelling units. (1009.7.2)

32. Provide min. 48" plus width of door when doors are placed in series. (1008.1.8)

c. Headroom clearance: 6'-8." (1009.5)

d. Width: (44") (36") (48" between hand rails for accessible stairs).(1009.4)

33. Provide a barrier in the exit enclosure at (_____) to prevent entry into the basement level. (1022.8)

e. Landing width: Same as stairway served (1009.8)

f. Landing length: Same as width, max. 48" (1009.8)

34. 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. (1022.9)

g. Provide a landings at every 12ft. of vertical rise at stairways.(1009.10)

h. Handrail height: 34-38", max 4" openings (1012.2 and 1013.4)

35. Open space under exterior stairways shall not be used for any purpose.(1009.9.4)

i. Handgrip portion of handrail shall not be less than 1.25" and not greater than 2" in cross-section for circular type. 4"- 6.25"perimeter for other shapes. (1012.3)

36. Provide floor-level exit signs in all interior corridors of Group A, E, I, and R-2.1 occupancies and in all areas serving guest rooms of hotels in Group R, Division 1 occupancies (1011.7)

j. A minimum 1.5" handrail clearance from adjacent wall (1012.7)

k. Handrail extension of 12" beyond the top and bottom riser. (1012.6)

37. 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, 1023.1 & 1023.3)

l. 1-hour fire rated construction for the enclosed usable space under the stairs. (1009.9.4)

m. Curved stairways:(1009.11)

n. Spiral stairways: (1009.12)

38. Opening into exit passageways shall be limited to those necessary for egress from normally occupied spaces. Elevators shall not open into an exit passageway. Openings and penetrations shall comply with Section 716. (1023.5)

28. Provide 42" high guards (1013) at Decks; Landings; Balconies and Walkways where there a vertical drop of greater than 30".

39. Spiral stairways shall not serve as required exit for an area exceeding 250 and serves not more than 5 occupants.

29. For glass handrails and guards, the panels and their support system shall be designed to withstand the loads

(1009.12)

40. 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%). (1009.16)

41. Vertical exit enclosures: (1022.2)

- a. Connecting 4-stories more: provide 2-hour fire-resistance rating construction (fire barrier);
- b. Connecting up to 3-stories: provide 1-hour fire-resistance rating construction (fire barrier);
- c. All openings to be protected in accordance to Section 716. Openings shall be limited to those necessary for exit access to the enclosure from normally occupied space and for egress from the enclosure. (1022.4)

42. Accessible Means of Egress: (1007)

- a. 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, see exceptions (1007.2.1)
- b. Provide 48" clear width between handrails. (1007.3)
- c. Platform lifts not allowed as part of accessible means of egress. (1007.5);
- d. Max force to operate doors is limited to 15-lb. (1008.1.3)
- e. Show location and dimension area of refuge. (1007.6)
 - i. Size: (2) 30"x48" or 1/200, whichever is greater (1007.6.1)
 - ii. Separation from other space by a smoke barrier (1007.6.2) (detail construction per Section 709)
 - iii. Note: Two-way communication required (1007.6.3)
 - iv. Signage on door of area of refuge (1007.9)
 - v. Exterior area of refuge to comply with section 1007.7

43. Egress through intervening space is not allowed to go through:(1014.2)

- a. Different tenant space or dwelling units.
- b. A room that can be locked to prevent egress.
- c. Commercial kitchens.;
- d. Storage rooms, closets or similar spaces

44. Egress convergence applies at (_____) Show calculation for egress width to account for combined occupant load from floor above and below. (1005.6)

45. Horizontal exits: (1025),

- a. Detail horizontal exits as a 2 hour fire barrier or a fire wall in accordance to Section 706.
- b. Provide self-closing or automatic closing doors.;
- c. Not allowed as the only exit from a space.;
- d. Horizontal exits can not exceed 50% of total exits required.;
- e. Provide clear summary for the refuge area. Show capacity for a minimum of 3sq.ft. for each combined occupant to be accommodated therein.

46. Egress balconies to comply Section 1019. Detail plans to meet all requirements.

47. One operable window with an operable 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. (1029)

48. Escape and rescue windows with a finished sill height below the adjacent ground elevation shall have a window well complying with section 1029.5

49. Provide calculation to show that existing egress system is adequate to accommodate new usable outdoor area. (1004.5)

50. Show and dimension common path of egress travel from each space. (1014.3) *Common path of egress travel shall not exceed 75 ft or 125 feet provided the R2 is protected throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1*

51. Label each space to match the function of space according to Table 1004.1.2
52. 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.
53. Show clear width dimension at corridors and exit passageways where doors open into it.
54. Area of refuge can not project into egress path of travel
55. Hatch/label and dimension all area of refuge
56. For Highrise buildings, provide smokeproof or pressurized exit enclosures for buildings required to comply with Section 403 or 405 (1022.10)

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 lux).
3. Internally illuminated signs shall be listed and labeled and shall be installed in accordance with the manufacturer's instructions and Section 2702.
4. Exit signs shall be illuminated at all times.
5. Exit signs shall be connected to an emergency power system that will provide an illumination of not less than 90min. in case of primary power loss. (1011.5-1011.6.3)
6. Egress doors shall be readily openable from the egress side without the use of a key or special knowledge or

effort. (1008.1.9)

7. Door handles, lock and other operating devices shall be installed at a min. 34" and a max. 48" above the finished floor. (1008.1.9.2)
8. All egress door operation shall also comply with Section 1008.1.9
9. 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. The means of egress illumination level shall not be less than 1foot-candle at the walking surface. (1006.1)
10. 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 (1006.3):
 - 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 their 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 1027.1, in buildings required to have two or more exits.
 - e. Exterior landings, as required by Section 1008.1.6, for exit discharge doorways in buildings required to have two or more exits.
11. 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. (1006.3)
12. 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. (1006.3)

13. The exit signs shall also be connected to an emergency electrical system provided from storage batteries unit equipment or an on-site generator set, and the system shall be installed in accordance with the Electrical Code. For high rise buildings, see section 403.
10. For the purpose of providing natural light or ventilation at exterior openings of buildings, a min. yard of 3 feet in width for one and two story building is required. For buildings more than two stories, the min. width of the yard shall be increased to 1 foot for each additional story 1206.2

I. INTERIOR ENVIRONMENT

1. Provide stairway illumination. Min. 1 foot-candle at tread runs. (1205.4)
2. Provide 32" wide doors to all interior accessible rooms 1008.1.1
3. One room must be a min. of 120 sq. ft. in area. Other habitable rooms, except kitchens, must be a min. of 70 sq. ft. (1208.3)
4. Habitable rooms other than a kitchen shall not be less than 7' in any direction. (1208.1)
5. Required ceiling height is 7'-6" min., 7'-0" min. in kitchen, bathrooms, laundry rooms and storage rooms. (1208.2)
6. Provide natural light in (habitable rooms) , () by means of exterior wall openings with an area not less than 8% of floor area. (1205.2)
7. Provide natural light for adjoining spaces (1205.2.1)
8. Provide natural ventilation in (habitable rooms) (bathrooms) () by means of operable exterior wall openings with an area not less than 4% of floor area. Mechanical ventilating systems may be permitted (1204.3)
9. Provide natural ventilation for adjoining spaces (1203.4.1.1)
11. Courts used for natural light or ventilation and having window opening on opposite side shall not be less than 6 feet in width. Courts bounded on three or more sides by the wall of the buildings shall not be less than 10 feet in length, unless bounded one end by a public way or yard. For buildings more than two stories in height, the court shall be increased 1 foot in width and 2 feet in length for each additional story. (1206.3)
12. A mechanical ventilation system in lieu of openable windows in the bathroom, toilet room and laundry, which furnishes five air changes per hour direct to the outside, is required.
13. Attic ventilation of 1/150 of the area of ventilated space (approximately 10 sq. in. for each 10 sq. ft. of attic area) is required.(1203.2)
14. An attic access opening (20" x 30") is required at each separate attic space with a minimum of 30" clearance. (1209.2)
15. Under-floor ventilation shall be not less than 1/150 of under floor area. (1203.3.1)
16. Show minimum 18" x 24" under floor access opening. (1209.1)
17. Openings below grade for the purpose of natural ventilation shall have a minimum size according to (1203.4.1.2)
18. Provide a door and window schedule. Show type and size of each.
19. 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 803.9 and Section 803.1. Clearly indicate on the plans

20. Provide shower and locker facilities as required by Section 6307
21. 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 inlet. (1210.2.3, LAPC 411.7)
22. Provide ___ water closets for women, ___ water closets for men, and ___ urinals (2901), (LAPC T4-1, (IB: P/BC 2014-095)
23. Toilet rooms shall be provided with a fully openable exterior window with an area not less than 3 square feet or a vertical duct not less than 100 square inches in area for the first water closet plus 50 square inches additional of area for each additional water closet, or a mechanically operated exhaust system capable of providing a complete change of air every 15 minutes. Such mechanically operated exhaust system shall be connected directly to the outside, and the point of discharge shall be at least 3 feet from any opening that allows air entry into occupied portions of the building.
24. Toilet room floors shall have a smooth, hard non—absorbent surface such as Portland cement, ceramic tile or other approved material that extends upward onto the walls at least 4" (1210.2.1)
25. Walls and partitions within 2 feet of service sinks, urinals, and water closets shall have a smooth, hard, nonabsorbent surface, to a height of not less than 4 feet above the floor, 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)
26. 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 2509.2
- 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 ½ inch thick and more than 16 inches O.C. for 5/8 inch thick.
27. Provide separation by a tight fitting door between food preparation area(s) (including food storage rooms) and toilet room(s) (6302.5) .
28. Revise plans to show compliance with the sound insulation requirements for habitable space near airports.(See design requirements as written on IB: P/BC 2014-074)
29. 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. 91.3002.4
30. **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. (3201.4)
 - d. Overflow scuppers shall be designed in accordance to Table 11-1 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 as required by the LAMC.(1513)
4. Show that the penthouse satisfies the requirements of Section 1509
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; 2610.2) Glass skylights shall comply with Section 2405. Plastic skylights shall comply with Section 2610
6. For pre-fab fireplaces, provide manufacturer, model, and Underwriter Laboratories certification number (or ICC's). For masonry fire place, provide details and calculations for chimney. (2106)
7. Provide anti-graffiti finish at the first 9 feet, measured from grade, at exterior walls and doors. (6306)
8. Provide veneer details. Show method of anchorage, size and spacing of anchors. Comply with requirements per Section 1405.6.
9. In R2 occupancy, window sill of openable windows more than 72 inches above finished grade or other surface below shall not be less than 24 inches from finished floor of the room it is located in (1405.13.2)
10. 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 per Section 1607.8 (1013.2)
11. Each pane of safety glazing installed in hazardous locations shall be identified by a manufacturer's 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.

