



# COMMERCIAL PLAN CHECK CORRECTION SHEETS (2011 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](mailto: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](http://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 these 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 particular code sections of the 2008 Edition of the Los Angeles Code.

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
- Grading and shoring - general
- Security Requirements
- Sound transmission
- Structural - General
- Disabled Accessibility

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

- P/GI 2002-024 Recording Covenants with LA County
- P/GI 2008-025 Copies of LA Ordinances (Planning's)
- P/BC 2002-018 Installation of Access floor System
- P/BC 2002-021 Calculating building code's floor areas
- P/BC 2002-022 Natural Ventilation for Auto Repair
- P/BC 2008-027 Onsite Wastewater treatment system
- P/BC 2008-040 Suspended Ceiling Assemblies
- P/BC 2002-041 Locking of Doors Located in Stair Shafts
- P/BC 2008-044 Alquist-Priolo EQ Fault Zoning Act
- P/BC 2008-060 30 days notification of intent to excavate
- P/BC 2008-064 Flood Hazard Management Specific Plan
- P/BC 2008-065 Coastal Development Permit
- P/BC 2002-073 Policy on signed and wet Stamped plans
- P/BC 2002-074 Sound Insulation near Airport
- P/BC 2008-081 Conv. into Heavy Duty Equipment Room (struct)
- P/BC 2002-082 Plastic Materials for Rooftop
- P/BC 2002-095 Plumbing Fixtures
- P/BC 2002-106 Water Curtain in lieu of protected ext. openings
- P/BC 2008-101 Methane hazard Mitigation standard plan
- P/BC 2008-103 Sump Pumps for surface drainage
- P/BC 2008-113 Reports for submittal to Grading Division
- P/ZC 2002-001 Parking Lot Design
- P/ZC 2002-006 Projections in Yards
- P/ZC 2002-008 Zoning Code "Building height"
- P/ZC 2002-011 Parking requirements
- P/ZC 2002-013 Auto Dismantling Yards, Junk Yards, Scrap Metal Yards, or Open Air Storage of Used Materials, Used Equipment and Used Machinery in the M-2 and M-3 Zones

Affidavit / Additional Documents:

- Summary Clearance worksheet (attached)
- Grading Bond PC/GRAD/Bond 03 and 04
- Protection of adjoining property :PC/GRAD/App.13
- Lot Tie PC/STR/Aff.22
- Building Maintenance PC/STR/Aff.23
- Other \_\_\_\_\_
- Maintenance of Building Support - PC/STR/Aff.25
- Oversize Building - C/STR/Aff.28
- Off-street Parking - C/STR/Aff.27
- Parking Attendant - C/STR/Aff.31
- Green Building Declaration - C/STR/Aff.39
- Structural Observation
- Graffiti Removal :PC/STR/Aff.42

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**PART I: GENERAL REQUIREMENTS**

**A. PERMIT APPLICATIONS**

- 1. Provide a fully dimensioned plot plan to scale, in ink and copy it to the PCIS application's plot plan sheet.
- 2. Valuation is revised to \$ \_\_\_\_\_. Pay additional plan check fee of \$ \_\_\_\_\_.
- 3. Arts Development and School fees are applicable to this project, as required by Section 107.4.6
- 4. Provide complete and correct legal description (Tract, Lot, Block, Grant Deed). Provide complete information for applicant, owner, engineer, architect, and contractor.
- 5. Obtain separate permit for the following items:
  - a. Retaining walls or block fence walls
  - b. Grading work

- c. Block walls
  - d. Signs
  - e. Swimming pools
  - f. Fire sprinkler systems
  - g. A separate structure
  - h. Electrical, Mechanical, Plumbing work
  - i. Shoring
  - j. Demolition
6. 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 workers 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.

**B. CLEARANCES**

1. Obtain all clearances as noted on the attached Clearance Summary Worksheet. Apply immediately for the signoff 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 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 "instruction 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 2008-060)
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. 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)
9. Fire lane access is required. Obtain clearance from the Hydrants and Access Unit of the Fire Department LAMC 57.09.03
10. Obtain a site plan review approval from City Planning Department for any development project which creates, or results in an increase of 50,000 gross square feet or more of nonresidential floor area.
11. (See attached supplemental correction sheet) - Signoff from Watershed Protection Division, Bureau of Sanitation, Department of Public Works is required for:
  - a. New developments, or
  - b. Existing developments where the proposed work results in the addition or replacement of 5,000 square feet of impervious surface areas, and one of the following categories of projects:
    - Projects located in or adjacent to or discharging directly into an Environmental Sensitive Area.
    - Parking lots (including roof top parking) with 25 or more parking spaces or 5,000 sq. feet or more (including accessory driveways).
    - Commercial/Industrial developments with 43,560 square feet or more of impervious surfaces (including buildings and parking areas).
    - Auto Repair Facilities (not including auto sound or alarm facilities).
    - Retail Gasoline Services Stations.
    - Stand-alone Restaurants (including take outs)
    - Vehicle or equipment fueling areas.
    - Vehicle or equipment maintenance areas, including washing and repair.
    - Commercial or industrial waste handling or storage.
    - Outdoor handling or storage of hazardous materials.
    - Outdoor manufacturing areas.
    - Outdoor food handling or processing.
    - Outdoor animal care, confinement, or slaughter.
    - Outdoor horticulture activities.
    - Major Transportation projects.
  - c. Projects with more than 500 s.f. of new floor area. Ord. 181,899

12. Obtain Clearances from the Green Building Division of LADBS.
13. 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.

**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 Los

Angeles County Assessors. The 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)
5. Provide the following with each set of plans:
- Topography Survey Map
  - Floor Plans
  - Construction Section
  - Framing Plans
  - Grading
  - Two Elevations
  - Foundation Plans
  - Structural Details

- 6. Provide fully dimensioned plot 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.) (106.3.2.1)
- 7. Show location and distance of active and abandoned oil wells with respect to building perimeter, if any.
- 8. Show the building area, occupancy group(s), use(s), type of construction, number of story(s), fire zone, lot size, lot area and height on the first sheet or title sheet of plans.
- 9. 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)
- 10. Remove all plans, details or notes do not pertain to the project.

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**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 for all buildings on site to determine parking requirements.
- 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 signoff.
- 5. Building exceeds ( ) height for Zone ( ). Show maximum height of the structure from top of roof to grade on all elevation views.
- 6. Height and stories restriction in Height District 1VL is max. at 3 stories and 45 ft and in Height District 1XL is max. at 2 stories and 30 ft. 12.21.1A1
- 7. For Height District 1, floor area is limited to 1.5 X Buildable Lot Area. 12.21.1A1
- 8. 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:
  - 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.
- 9. Maintain a 10' front yard in CR, C1, or C1.5 Zone. Maintain min. rear yard when abutting a A or R Zone.
- 10. Maintain a ( ) Building Line setback 12.22C1.
- 11. Maintain a 5' / 15' front yard in MR-1 and MR-2 Zones.
- 12. Provide a summary of the existing legal use and floor area
- 13. Provide ( ) paved parking spaces. Compact stalls no more than 40% is allowed if there are more than 10 stalls on site 12.21A4, 12.21A5©
- 14. For Off Site parking, provide proof of the extra available parking on existing site or obtain a 'Use of land' permit for the new parking lot. Off Site Parking Affidavit is required 12.21A5(h)
- 15. Attendant Parking Affidavit is required for Tandem parking.
- 16. 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
- 17. 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.
- 18. 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 2001-001
- 19. Automobiles are not permitted to back onto a public street or sidewalk.\* 12.21A5(i)1.
- 20. Revise plans to maintain a backup aisle (12.21A5(b))
- 21. 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.
- 22. Provide a 10'x10' visibility triangle from property lines and maintain clear from 2.5' to 10' above curb. 12.21C7
- 23. Transportation Demand Ordinance. Check zoning section 12.21A16 - 12.26J. Requirements vary depending on size starting

- with developments of 25,000 ft<sup>2</sup>. Provide ( ) bicycle parking spaces for buildings over 10,000 ft<sup>2</sup>; show size and location. Show ( ) lockers, and ( ) shower stalls per zoning section 12.21A16. Up to 2% of required parking can be replaced with bicycles stalls.
24. For Mini-Shopping Center / Commercial Corner Development , Planning entitlement is required for certain uses or types of operation (see 12.22A23).  
a) No Tandem parking 12.22A23(a)(2)(1)
25. Provide a loading space with minimum 400 sq. ft, 20 ft of

length along the alley. 12.21C6

26. Provide a storage area on the rear half of lot. Enclosed with a 6' high solid fence 12.14A42
27. Provide a recycling room per section 12.21A19.
28. Note on plans. "Double striping of stalls shall be per Fig. 7 of the City of LA Bldg. Dept. Standards
29. No permit can be issued without a recorded Parcel Map/Tract Map. Provide an official recorded copy prior to permit issuance.

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## 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
  - Exterior Siding
  - Fire Rated Assemblies
  - Damp proofing material behind basement walls
  - Others such as \_\_\_\_\_
  - Roofing Materials
  - Sound/Thermal Insulation
  - Skylights
2. 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
3. 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 flush water closets for all new construction. Existing shower heads and toilets must be adapted for low water consumption.
  - \* A copy of the evaluation report and/or conditions of listing shall be made available at the job site.
4. The aggregate value of proposed (addition) (alteration) is in excess of 50% of the replacement cost of the existing building. The entire building shall be made to conform to current Building Code. (3403.1.1, 3404.1.1)

### B. OCCUPANCY CLASSIFICATION

1. Any building used for educational purposes by > 6 persons at any one time through the 12<sup>th</sup> grade shall be classified as E occupancy.
2. Any day care for more than 5 children and older than 2 years of age shall be classified as E occupancy.
3. Any infant/toddler day care (2 years old and younger) shall be classified as I4 occupancy except for room has at least one exit door directly to the exterior on the ground level can be classified as E occupancy.
4. All outpatient clinics can be considered as Group B.
5. Indoor shooting Range can be classified as a Bowling Center (A3).
6. Adult day care with more than 5 persons shall be determined as A3 occupancy. 303.1
7. Child day care facilities with more than 5 children two and half years of age or younger shall be classified as I4 occupancy.
8. 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.
9. 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 story. One basement level need not be included in the total allowable area if it is not a story and does not exceed the area permitted for a one-story building. Specify the use of all rooms/areas on floor plans. Provide an area breakdown by level.
2. The total building area must be limited to ( ) square feet. Provide total allowable calculation as part of plans.
3. The building as shown is a mixed-occupancy (separated

occupancy) building.

- a. 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)
  - 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. (506.5)
4. 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  $A_a = A_i + [A_i \times I_f] + [A_i \times I_s]$ , where  $I_f$  is the increase due to frontage increase;  $I_s$  is the increase due to sprinklers

Total building area is =  $A_a \times 2$  for multistory for high-rise, Group A, E, H, I, L, and R occupancies and those in Section 1.11.

For all other occupancies, total building area is =  $A_a \times 2$  for 2 stories, =  $A_a \times 3$  for over 2 stories. (T503, 506.4.1)

5. The total building area must be limited to \_\_\_\_\_ square feet. Provide total allowable calculation as part of plans. (T503, 506.5, 506.5.1, 506.5.2)
6. Building exceeds allowable height limit of T 503 for Type ( ) construction. (503): Max ( ) feet in height and Max ( ) stories in height
7. Provide calculations for establishing grade plane as per Section 502.1. Attach calculations and established grade planes on elevations plans and site plan. (502.1)
8. Show maximum height of the structure (in feet and stories) from top of roof to grade plane on all elevation views. (502.1)
9. Lowest level is determined not to be a basement. This level is considered as 1<sup>st</sup> story above grade plane. Include this story in total building height. (502.1)
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 (T 601)
11. 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)
12. Exterior (bearing) (nonbearing) walls of Type ( ) construction must be of ( ) hour rated construction. (T601)

#### **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). Show that the requirements of Section 404 are satisfied. (404.1 thru 10)
3. Within the live entertainment facilities and except for restrooms, the premises must be configured so that there is an unobstructed view of all interior areas to which any patron is permitted access. There shall be no entertainment booths, rooms or cubicles. Visibility shall not be blocked or obscured by doors, curtains, drapes, partitions or room dividers of any kind. Partitions of any kind, including drapes made of opaque or other material, are not permitted. Nothing in this subsection precludes the installation of columns which are essential for the structural integrity of the building. (LAMC 103.102.1)

#### **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)
2. Fire rated assemblies shall be per Table 720, 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. (702)
4. Provide complete analysis for protected and unprotected exterior wall openings per section 705 and Equation 7-1. Openings are not allowed when the fire separation distance is  $\leq 3'$ . (705.8)
  - a. Door openings in exterior walls must be protected with (3/4-hour) or (1 1/2 hour) fire assemblies (not permitted) (715.4)
  - b. Window openings in exterior walls must be protected with (3/4-hour) or (1 1/2 hour) fire assemblies (not permitted). (715.5)
5. Provide ( )-hr 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 706.4
6. Projections beyond the exterior wall must not extend beyond whichever results in the lesser projection:
  - a. A point one-third the distance from an assumed vertical plane located where protected openings are first required due to location on property. (704.2, 705.2)
  - b. A point more than 12" into area when openings are prohibited. (705.2)
  - c. Provide minimum 30 inch high parapet at ( ) walls (705.11.1)
7. 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 705.5
  - e. Shall extend vertically from the foundation to a point 30 inches above the roof per 706.5
  - 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 715.4)
  - 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 713 and 716. 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.
8. A complete (\_\_\_\_)-hour separation is required between Group (\_\_\_\_) and Group (\_\_\_\_) Occupancies. Separation walls shall be fire barriers complying with Section 707. Horizontal assemblies shall comply with Section 712. Openings in the separation shall have (\_\_\_\_) hour fire assemblies. (508.3.4, T 508.4, 707, 712)
  9. Fire barriers and horizontal assemblies separating single occupancies into different fire areas shall be (\_\_\_\_)hour fire rated per Table 707.3.9
  10. 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. (706.8)
  11. Elevator lobby is required at each floor where an elevator enclosure connects more than 2- stories, unless the provided the building is sprinklered with 903.3.1.1. or 903.3.1.2 and it is not a high-rise. (708.14.1)
  12. Provide (\_\_\_\_) hour rated Fire Partition at walls separating tenant spaces (\_\_\_\_) and common areas, corridors, and elevator lobbies. (709.1, 709.3)
  13. Fire barrier at vertical occupancy separations must have continuity and must extend through underfloor area, attic areas, and suspended ceiling areas (707.5)
  14. Opening protectives shall be per section Tables 715.4 and 715.5. Doors shall be \_\_\_\_\_hr fire rated and windows shall be (\_\_\_\_)hr fire rated (715)
  15. Envelope ceilings must satisfy the following conditions of Section 704.
    - a. Envelope ceilings must not be used to provide fire protection for beam and girders supporting more than one floor or roof, or supporting load bearing or non bearing walls more than two stories high.
    - b. Structural members protected on all sides for the full length with materials having the required fire-resistance rating
    - c. Membrane penetrations of steel, ferrous, or copper conduits with maximum 6- inch diameter shall have the annular space protected and must be limited to 144 square inches of ceiling area. Duct openings must be protected by approved ceiling fire dampers
  - d. Individual electrical outlet boxes must have been tested for use in fire- resistance- rated assemblies with LARR or ICC approval
  16. 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. (708)
  17. Exception 7 of Section 708.2 permits two floors to be open to each other when all conditions are met. If not, the atrium provision shall be utilized for open two story spaces. See additional corrections for atrium.
  18. Penetrations in walls requiring protected openings must be firestopped with an approved material in accordance with Section 713.3.1. Space between penetrating materials (described below) must be designed to prevent the movement of hot flame or gases
    - a. 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
    - b. 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.
    - c. 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 713.3.1.1
  19. Smoke and fire dampers must be installed in the following locations per Sections 716.3.2.
    - a. Duct penetrations of fire walls in accordance to section 716.11
    - b. Duct penetrations of fire barriers, except exit enclosures and exit passageways where they are not allowed to penetrate. (716.5.2)
    - c. Ducts penetrating shafts. (716.5.3)
    - d. Ducts penetrating fire partitions and fire-rated corridor walls. See exception for steel ducts with no openings into corridor (716.5.4)
    - e. Ducts penetrating smoke barriers (716.5.5)
    - f. Ducts penetrating horizontal assemblies (716.6)
  20. Show draft stop location on plans. Also, provide these notes on the plans:
    - a. 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 (717.3.3).
    - b. 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 (717.4.3).

- c. 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. (717.3.1)
21. 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) (717.4.3)
22. 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) (717.3.2 & 3)
23. Horizontal occupancy separation must be supported with a structural system having equivalent fire-resistive protection. (704.1)
24. In building over one-story in height, members supporting concrete or masonry require 1-hour fire resistive protection (704)
25. Note on plans: Fire blocking must be provided in accordance with Section 717 at the following locations:
- In concealed spaces of stud walls and partitions, including furred spaces, at the ceiling and floor levels.
  - In concealed spaces of stud walls and partitions, including furred spaces, at 10-foot intervals along the length of the wall.
  - At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.
  - 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.
  - 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.
26. This building is of Type V-A / III-A construction, provide / show:
- 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.
  - All interior partitions shall be constructed of not less than 1-hour fire-resistive construction.
  - 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.
  - All openings in floors are required to be enclosed by a shaft having wall, floor, and ceiling of \_\_\_\_\_ hour fire resistive construction. 708.4
  - Recessed ceiling light fixtures must be boxed around with 5/8" Type "X" drywall" to maintain the 1-hour ceiling assembly.
  - Continuous drywall is required behind all electrical service panels, fire hoses and medicine cabinets.
  - Exhaust fans from the bathroom must enter through the wall. Dampers are required if the ceiling is penetrated.(716.5)
- h. Plumbing penetration through horizontal occupancy separations shall be boxed out and filled with approved safing material. Insulation is not approved. (713.4.1.1)
- 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. (716.6)
- 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 ( ) 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 \_\_\_\_\_ 406.2, T508.2.5
28. Occupancy garage shall comply with the followings:
- Concrete or similar noncombustible and nonabsorbent floor, or asphalt surface at ground level only 406.2.6
  - Sloped floor to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway 406.2.6
  - Floor system designed for uniform or concentrated loads per table 1607.1
  - Minimum headroom of 7ft - 406.2.2
  - 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 - 406.2.4
  - Vehicle barriers designed in accordance with section 1607.7

## **F. INTERIOR FINISHES**

- 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 803.5 and Section 803.1. Clearly indicate on the plans.
- The flame-spread rating of paneling materials on the walls of the corridor, lobby and exit enclosure must be identified on plans. (T-803.5)

## **G. FIRE PROTECTION**

- The approved automatic sprinkler system must be provided in the \_\_\_\_\_(903.2)
- An automatic sprinkler system is required (throughout entire building) / (throughout the fire area) since the (building)/ (fire



- area) is \_\_\_\_\_ occupancy and / or the fire area is over \_\_\_\_\_ square feet and/ or over \_\_\_\_\_ occupant load (903.2)
3. 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 (706.1.2).
  4. A sprinkler system is required for a four-story, Type V building. (504.2)
  5. 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)
  6. 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)
  7. Show the location on the plans. Class I, II or III standpipe (dry, wet, combination) are required in this building.(905.3.1)
  8. Manual or automatic fire alarm system is required under the following conditions for \_\_\_\_\_ occupancy (907.2)
  9. 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)
  10. Provide automatic sprinkler system at top of rubbish and linen chutes and in their terminal room -903.2.11.2
  11. 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 508.4 (T508.2, T508.4)
  12. The Type I parking structure permitted by section 509.3 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)
  13. Add note on plans: Provide fire sprinklers throughout. The Sprinkler System shall be approved by Plumbing Div. prior to installation. (12.21A17(d), 903.2)
  14. 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)
  15. 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 910.2.3
- 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 (1027.3)
  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. (1009.6)
  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 1004.1.1 and added to the number of fixed seats.
  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.
  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. (1004.7)
  6. Show detailed summary of the floor area and all deductions (is used) for Gross and/or Net floor area. (1004.1)
  7. Use correct occupant load factor for the function of space according to Table 1004.1.1.
  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 > 75 ft.
    - e. Common path of egress > 100 ft. (B, F, S) sprinklered building
  9. Provide two means of egress for stories exceeding Table 1021.2.
  10. Where two or more exits are required, at least two exits must be separated by (half) (1/3) the max. diagonal length of the area served. (1015.2.1)
  11. Where more than one exit is required, no one exit can exceed 50% of the required egress width.(1005.1)
  12. All exit doors shall comply with Section 1008-1008.1
    - a. Clear width of each door opening shall be min. 32" or per Sec. 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
  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. All required exits shall be maintained until arrival at grade or the public way. (1021.1.1)
  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 1 hour 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 in and

- protected openings in accordance to Section 709 for fire partitions. Protection to be of a 20 min. doors and 45 min. for other openings. (1018.1)
19. Provide a min. corridor width of 44 inches or per Sec. 1005.1, which ever is greater. (1018.2)
  20. Revolving doors used for egress purposes 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. Min. length of such landings is 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)
  26. Dead end corridors must not exceed 20 feet., 50 feet for sprinklered bldg. (1018.4)
  27. Detail all stairways to comply with Section 1009
    - a. Rise: 7" max. Run (tread): 11" min. (1009.4)
    - b. Rise: 7.75" max. Run (tread): 10" for stairs within dwelling units. (1009.4)
    - c. Headroom clearance: 6'-8." (1009.2)
    - d. Width: (44") (36") (48" between hand rails for accessible stairs).(1009.1)
    - e. Landing width: Same as stairway served (1009.5)
    - f. Landing length: Same as width, max. 48" (1009.5)
    - g. Provide a landings at every 12ft. of vertical rise at stairways.(1009.7)
    - h. Handrail height: 34-38", max 4" openings (1012.2)
    - 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)
    - 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)
    - l. 1-hour fire rated construction for the enclosed usable space under the stairs. (1009.6.3)
    - m. Curved stairways: (1009.8)
    - n. Spiral stairways: (1009.9)
  28. Provide 42" high guards (1013) at Decks; Landings; Balconies and Walkways where there a vertical drop of >30".
  29. 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)
  30. The means of egress system must have a clear ceiling height of 7'-6".(1003.2)
  31. Show calculations for all egress component widths to comply with section 1005.1.
  32. Provide min. 48" plus width of door when doors are placed in series. (1008.1.8)
  33. Provide a barrier in the exit enclosure at (\_\_\_\_\_) to prevent entry into the basement level. (1022.7)
  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. (1022.8)
  35. Usable enclosed space under enclosed or unenclosed stairways shall be provided with a 1-hr. fire-resistance-rated construction or the same fire rating of the stairs enclosure, whichever is greater. (1009.6.3)
  36. Open space under exterior stairways shall not be used for any purpose. (1009.6.3)
  37. Provide floor-level exit signs in all interior corridors of Group A, E, I, R-1 and R-4 occupancies. (1011.6)
  38. 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)
  39. 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. (1023.5)
  40. Spiral stairways shall not serve as required exit for an area exceeding 250 and serves not more than 5 occupants. (1009.9)
  41. 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%). (1009.13)
  42. Vertical exit enclosures: (1022)
    - 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 715. No openings other than exit doorways and exterior wall openings are permitted. 1022.3)
  43. 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, read 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.

exit enclosures for buildings required to comply with Section 403 or 405 (1022.9)

- e. Show location and dimension area of refuge. (1007.6)
  - i) Size: (2) 30"x48" 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
- 44. Egress through intervening space is not allowed to go through:(1014.2)
  - a. Different tenant space or dwelling units.
  - b. A more hazardous occupancy.
  - c. Commercial kitchens.;
  - d. Storage rooms, closets or similar spaces
- 45. Egress convergence applies at (\_\_\_\_\_) Show calculation for egress width to account for combined occupant load from floor above and below. (1004.5)
- 46. 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 3 sq. ft. for each combined occupant to be accommodated therein.
- 47. Building is not fully sprinklered in accordance to 903.3.1.1 or 903.3.1.2, exception may not be used.
- 48. Egress balconies to comply Section 1019. Detail plans to meet all requirements
- 49. 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. ;(1029)
- 50. Provide calculation to show that existing egress system is adequate to accommodate new usable outdoor area.:(1004.8)
- 51. Show and dimension common path of egress travel from each space. (1014.3)
- 52. Label each space to match the function of space according to Table 1004.1.1
- 53. 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.
- 54. Show clear width dimension at corridors and exit passageways where doors open into it.
- 55. Area of refuge can not project into egress path of travel
- 56. Hatch/label and dimension all area of refuge.
- 57. For High-rise buildings, provide smoke-proof or pressurized

**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 90 min. in case of primary power loss (1011.2-1011.5.3)
- 6. Egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort. See 1008.1.8.3 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 1008.1.9 – 1008.1.9.7.
- 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 1027.1, in buildings required to have two or more exits.
  - e. Exterior landings, as required by Section 1008.1.5, 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.

other liquids collected in the bottom of an elevator shaft may not be discharged to the sanitary sewer or storm drain. Plumbing Information Bulletin, P/PC 2001-04.

## **I. INTERIOR ENVIRONMENT**

1. Provide a door and window schedule. Show type and size of each.
2. Provide shower and locker facilities as required by Section 6307
3. All shower compartments, regardless of shape, shall have a minimum finished interior area of not less than 1024 square inches (0.66 m<sup>2</sup>) 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. (1210.3, LAPC 411.7)
4. Provide \_\_\_ water closets for women, \_\_\_ water closets for men, and \_\_\_ urinals (2901, LAPC T4-1, IB:P.BC2002-95)
5. 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" (1210.1)
6. 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)
7. 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 1/2 inch thick and more than 16 inches O.C. for 5/8 inch thick.
8. 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.
  - c. The minimum design live load for "compact storage" rooms shall be 250 psf.
9. 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)
10. **Add note on plans:**
  - a. All elevator pits shall be equipped with a drain to prevent the accumulation of water. The water and

- b. 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 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 roofs 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. Provide anti-graffiti finish at the first 9 feet, measured from grade, at exterior walls and doors. LAMC 91.6306
7. 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 1607.7.1 (1013.2)
8. Provide veneer details. Show method of anchorage, size and spacing of anchors. Comply with requirements per Section 1405.
9. 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.



