



TENANT IMPROVEMENTS PLAN CORRECTION LIST

*2016 California Building Codes and West Covina Municipal Code.
 (Occupancy A2, A3, B, M, S)*

INFORMATION	PROJECT ADDRESS:					SUITE:
	PLAN CHECK NO.:				VALUATION: (\$)	
	WORK DESCRIPTION:					
	CONTACT PERSON:				TELEPHONE:	
	OWNER/TENANT:				TELEPHONE:	
	USE	OCCUPANCY GROUP	FLOOR AREA	TYPE OF CONSTRUCTION.	NO. OF STORIES	FIRE SPRINKLERS (Y/N)
INSTRUCTIONS	<p>Your application for a permit, together with plans and specifications, has been examined and you are advised that the issuance of a permit is withheld for the reasons hereinafter set forth. The approval of plans and specifications does not permit the violation of any sections of the Building Code or other local ordinances or state laws.</p> <p>In an effort to streamline the plan review process, please follow the steps outlined below to ensure that there is no delay in processing your application and reviewing your responses to these plan check comments.</p> <ul style="list-style-type: none"> • The plan check will expire 180 days from the plan submittal date. • The LISTED OR CIRCLED items below apply to this plan check. • Revised plans and calculations shall incorporate or address all comments marked on the original checked set of plans, calculations, and this plan review checklist. • In the left-hand margin of the circled/listed corrections, please indicate the sheet number and detail or note number on the plans where the corrections are made. Be as specific as possible. Return the original checked set of plans and calculations along with this checklist to the meeting. Do not schedule an appointment meeting with the plan check staff until all comments have been addressed. • Incomplete, indefinite or faded drawings or calculations will not be accepted. 					
	PLAN REVIEWER:			1 ST REVIEW DATE:		
	TELEPHONE Nos.:			2 ND REVIEW DATE:		
	EMAIL:			3 RD REVIEW DATE:		
	Should you have any questions or need clarification pertaining to the comments made on your project, you may contact the plan check staff by telephone or email from 8:00 to 5:30 Monday through Thursday.					
NOTE	<p>CODES: Unless noted otherwise, all references pertain to the current edition of the California Building Code [CBC], California Plumbing Code [CPC], California Mechanical Code [CMC], California Electrical Code [CEC], California Fire Code [CFC], California Green Building Standards Code [CGBSC], California Health and Safety Code [H&S], or West Covina Municipal Code [WCMC].</p>					

I. GENERAL PROVISIONS

A. Administration

1. Obtain the following Departmental Approvals:
 - a. Planning Department approval (626) 939-8422 located in Room 208.
 - b. Fire Department approval (626) 939-8823 located in Room 208.
 - c. Health Department approval (626) 813-3380 located at 1435 W Covina Pkwy, West Covina, CA 91790.

B. Plan Submittal Requirements

1. The following plans and documents shall be stamped and signed with the expiration date by responsible licensed professional of each respective trade at time of plans approval:
 - a. Architectural plans by Architect of record.
 - b. Structural plans and calculation by Structural engineer or Architect of record.
 - c. Plumbing, Mechanical, Electrical plans by P/M/E engineers of record
2. RESUBMITTAL review – The following are required in the submittal package. Missing plans and documents WILL DELAY processing of the plans for permitting.
 - a. All of the original checked plans and documents.
 - b. Plan check response comments from the design team addressing ALL comments. Response comments must specifically indicate where corrections have been made.
 - c. Two (2) REVISED sets of PLANS, details, notes, specifications (1-set will be returned as the approved plans of the project). If prepared by State Licensed Professional, BOTH sets shall be wet stamped and/or signed by responsible professionals (architect, engineer)
 - d. One (1) set of the following list below (Must be stamped and signed by licensed engineer/architect):
 - i) Calculations – structural, T-24 energy, etc.
 - ii) Reports – soil, acoustical, code modifications, etc.

C. Required documentations

1. Submit structural calculations to justify the adequacy of the structural system for seismic, dead and live loads per CBC Chapter 16 and ASCE 7-10. See comments to follow.
2. Submit documentation showing compliance to the 2016 Building Energy Efficiency. Include printed Nonresidential Energy Compliance documents as part of the plans.
3. Submit the following plans for review:
 - a. Electrical
 - b. Mechanical
 - c. Plumbing

II. WEST COVINA STANDARD NOTES (PRINT ON THE PLANS)

1. Plans approval and permits are for a Core and Shell building only with no certificate of occupancy. Separate plans review, approval, and permits are required for Tenant Improvements. Tenant shall comply with all code provisions governing proposed use and occupancy. A certificate of occupancy is required prior to tenant occupying the space.
2. A certificate of occupancy is required prior to tenant occupying the space. See Building Division personnel for application.
3. All roof and overflow drain lines shall be kept behind the exterior membrane of the exterior walls whether within the stud bay or a separate chase. All gutter or water collection systems shall be kept behind parapet walls so that are not visible.
4. All roof-mounted mechanical equipment must be screened from view from adjacent streets, the freeway and surrounding properties. Screening structures shall be architecturally compatible with the main building. Submit plans, elevations, and construction details for review and approval by Planning Department and Building Division.

5. **FIRE SPRINKLERS:** Installation or alteration of the building Fire Sprinklers, Fire Detection and/or Alarm Systems require separate permit(s). Submit construction plans to the West Covina Fire Prevention Bureau for review and approval. Design and installation shall conform to NFPA Standards, 2016 California Electrical Code, and State Fire Marshal Regulations.
6. Plywood installed on metal studs forming partitions, ceiling, soffits, or other structures of Type I or II construction shall be fire treated conforming to ASTM E-84 testing standards.
7. Additional exit signs and emergency lighting may be required during inspections.
8. **SEPARATE PERMITS:** Contractors/subcontractors shall submit separate application(s) and secure separate permit(s) for:
 - a. Electrical work
 - b. Mechanical work
 - c. Plumbing work
 - d. Swimming pools/spas
 - e. Site walls/fences exceeding 6' in height (submit to City Engineering for review/permit)
 - f. Retaining walls (submit to City Engineering for review/permit)
 - g. Grading (submit to City Engineering for review/permit)
 - h. Fire Sprinklers (submit to Fire Department for review/permit)
 - i. Demolition
9. **REQUIRED FINAL INSPECTIONS:** The contractor is responsible for scheduling and securing final inspection approvals from the following departments prior to scheduling Building Final Inspection:
 - a. Planning Department (Room 208, 626-939-8422)
 - b. Fire Department (Room 205, 626-939-8823)
 - c. Engineering Division (Room 215, 626-939-8425)
10. **BUILDING IDENTIFICATION:** Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. CRC§ R319.1.

III. PLAN CHECK COMMENTS

1. See plans for additional corrections/comments. Return check set of plans with all documents and revised plans.
2. PROJECT INFORMATION. On the TITLE/COVER sheet:
 - a. Specify the name and address of the owner/tenant. List all consultants (architect/designer, engineer(s), energy, soils, etc.), with their contact information, associated with the project. CBC§ 107.
 - b. Specify the current code edition.
 - c. Specify proposed/existing occupancy group(s).
 - d. Specify building construction type.
 - e. Indicate if the existing building is equipped with fire sprinklers.
 - f. Note on plans square footage of the lease (TI) space.
3. Provide an occupant load analysis in tabular format on the cover page of the plans. Specify the name and floor area of the space(s), occupant load factor according to CBC Table 1004.1.2, derived occupancy load for each space, and the total occupant load (number of persons) for the space/area/building under this permit application. CBC§ 1004.
4. Provide a complete SITE/PLOT plan. Show property lines, lot dimensions, side yards, existing buildings, and distances between adjacent buildings, parking with accessible parking, public right of way, and north arrow. Locate accessible path of travel from public way and accessible parking to the main entrance.
5. Specify the use of each room or area on the floor plan.
6. **PLANS PREPARATION:** Provide the following requirements:
 - a. Fully dimensioned and scaled the floor plan. Dimensionally locate all interior walls, openings, door and windows.
 - b. Complete reflected ceiling plan (RCP). Identify ceiling finish of each room. Locate all dropped soffits. Provide finish ceiling height(s). Show exit signs and emergency lighting where required.
 - c. A wall schedule. Clearly show and indicate all new, existing, and removed walls and construction. Specify wall material and reference relevant construction details.

- d. Fire ratings of all required fire separations (fire barriers, firewalls, shaft protections, exterior walls, etc.). Reference relevant construction details.
 - e. Use for each space (i.e., office, conference, storage, etc.).
 - f. Area for each unit.
7. Provide a fire separation between Assembly occupancies (churches, theaters, restaurants, bars, conference rooms, etc.) and adjacent stores, offices, or storage facilities. The fire rating of the fire barrier shall comply with Table 508.3.4 (1-Hour for sprinklered buildings and 2-Hour for non-sprinklered buildings. CBC §508.3.1.
 8. When occupancy separation is required between the spaces, provide the following on the plans: CBC §707.
 - a. Graphically identify the separation on the plans (fire barriers).
 - b. Detail on the plans a listed assembly providing required fire rating. Reference detail to location on the plans/sections. Additionally show the following on the plans:
 - i) Detail and reference connection of fire barriers at intersection of floor and ceiling/roof. Fire barriers shall be continuous from top of slab/floor sheathing, through concealed spaces, to the underside of the floor/roof deck/slab above. CBC§ 707.5
 - ii) On floors above the first, show/detail how fire barrier support system to be provided with the same rating. CBC§ 707.5.1.
 - iii) Openings in fire barriers are limited to 25% of the wall length and 156 S/F maximum. Remove excess doors/windows to meet requirements. Indicate the fire rating of doors/windows in accordance to CBC Table 716.5. CBC§ 707.6.
 9. For floor elevation changes less than 12" within the means of egress, provide accessible pedestrian ramp design per CBC §11B-405. See exceptions of CBC§ 1003.5 for alternatives. CBC§ 1003.5.
 10. Two exits are required from each space or story when. CBC§ 1016.1.
 - a. Occupant load > 49, (Group A, B, E, F, M, U occupancies)
 - b. Occupant load > 10, (Group R occupancy)
 - c. Occupant load > 29, (Group S occupancy)
 - d. Common path of egress > 75 ft.
 - e. Common path of egress > 100 ft. (B, F, S) sprinklered building. CBC Table 1006.2.1.
 11. The combined occupant load, including occupants from intervening rooms, exceeds the limitations of CBC Table 1006.2.1 for the proposed occupancy. Provide second exit. CBC§ 1004.1.
 12. The common path of egress exceeds the limitations of CBC Table 1006.2.1. Provide second exit. CBC§ 1006.2.1.
 13. Provide "Maximum Occupancy ____ Persons" sign for all Assembly occupancy. On the floor plan, show sign location in a conspicuous place on the plans. CBC§ 1004.3.
 14. Provide exits separation of one-half (one-third if sprinklered throughout with NFPA 13 system) the diagonal dimension of the building or area served. CBC§ 1007.1.1.
 15. **EMERGENCY LIGHTING:** The means of egress system shall be illuminated with at least one-foot candle at the floor level for 90 minutes. Show on the plans, light fixtures that are connected to the emergency power supply or battery pack at the following locations:
 - a. Spaces: Aisles, hallways, corridors, and exit access stairways/ramps serving rooms/spaces where two exits are required. CBC§ 1008.3.1.
 - b. Buildings: Interior and exterior exit and exit access stairways/ramps/balconies, exit passageways, vestibules and areas on the level of exit discharge used for exit discharge serving buildings where two exits are required. CBC§ 1010.3.2.
 - c. Rooms: Electrical equipment rooms, fire command centers, fire pump rooms,
 - d. Above exterior landings serving buildings where two exits are required. CBC§ 1010.3.2.
 16. Clearly identify both existing and proposed doors on the plans. Provide a door label for each door and reference it to a door schedule. On the door schedule provide the following information:
 - a. Size (Width x Height). 3'-0"x6'-8" nominal with a minimum 32"x80" clear opening in any position of door swing, but in no case shall any swinging door leaf exceed 48". CBC§ 1010.1.1.
 - b. Door fire rating for doors with fire-rated walls (NR, 20 min, 60 min., etc.)
 - c. Hardware (lever type, closer, etc.) CBC§ 11B-309.4.

17. Exit or exit access doors shall be hinged and pivoted. Revolving, sliding or overhead doors shall not be used as exit doors for rooms/space with occupancy load > 10 for uses other than offices, storage, or factory. CBC§ 1010.1.2.
18. Doors serving an occupant load of 50 or more or hazardous rooms/ areas shall swing in the direction of exit travel CBC§ 1010.1.2.1.
19. Exit doors and gates from Group A, B-occupancy restaurants, E, H, or I occupancy serving 50 or more occupants shall be provided with panic hardware. CBC§ 1010.1.10.
20. Provide the following sign with 1" high; lettering on the main exit door/door frame serving B, F, M, S and A (less than 300 occupants) stating: *"THIS DOOR TO REMAIN UN-LOCKED WHEN BUILDING IS OCCUPIED."* CBC§ 1010.9.3.
21. **EXIT SIGNS:** Exit signs are required when two (2) or more exit access or exits are required from a space/building. Show location of all exit signs on the floor or reflected ceiling plans. CBC§ 1013.1.
 - a. Provide exit signs at all required exits.
 - b. Provide "Line of Sight" design around corners, curves or similar obstructions. See plans as indicated.
 - c. Placement of exit signs so that no point within the corridor shall be more than 100' from a nearest visible exit sign.
 - d. Note on the plans: *"Exit signs shall be internally or externally illuminated with 5-foot-candles. Exit signs shall be illuminated at all times and will be connected to the building power and an emergency power source providing 90 minutes of illumination in case of primary power loss."*
22. **RAISED CHARACTERS AND BRAILLE SIGNAGE:** Tactile signage complying with CBC 11B-703.2 shall be provided where two (2) means of egress are required by CBC§ 1013.1. Locate signs on the floor plan and provide details/notes of the following: CBC §1013.4.
 - a. MEANS OF EGRESS: (two or more required exits)
 - i) At interior exit access doors leading to exit enclosures or exit passageways: Sign to read "EXIT ROUTE".
 - ii) At exterior exit doors: Sign to read "EXIT".
 - iii) At interior exit doors leading to a horizontal exit: Sign to read "EXIT".
 - iv) At exit stairs/ramps: Sign to read "EXIT STAIR DOWN", "EXIT STAIR UP", "EXIT RAMP DOWN", "EXIT RAMP UP".
 - b. ROOM/SPACE IDENTIFICATION: Note on the plans, *"Permanent signs identifying rooms and spaces shall be provided with raised characters and Braille complying with CBC 11B-216.2, 11B-703.2, and 11B-703.3."*
 - c. Mounting locations and heights: CBC§ 11B-703.4.1, 11B-703.4.2.
 - i) Wall sign shall be mounted:
 - (a) On the latch side of single doors; on the hinge side of the right-hand door, in the direction of travel, of double doors.
 - (b) With the centerline of the sign centered on an 18"x18" clear floor space in front of the sign.
 - ii) The bottom of the Braille cells shall not be less than 48" from finished floor and the top of the raised letters shall not be more than 60" from finished floor.
23. **HANDRAILS:** Provide handrails on both sides of stairs/ramp pursuant to CBC§ 1011.11 and 1012.8. Detail or note the following to show compliance: CBC§ 1014.
 - a. Height: 34"-38" above the walking surface
 - b. Circular cross-sectional profile with outer diameter (OD) between 1.25"-2"
 - c. Circular cross-sectional profile to comply with 'Type II' handrails per CBC§ 1014.3.2.
 - d. Handrail extensions at top (12") and bottom (bottom tread plus 12") landings of stairs.
 - e. Handrail extensions at top and bottom landings of 12" for ramps.
 - f. Clearance from wall of 1.5" minimum
 - g. Projection into the required clear widths of aisles, stairs or ramps of 4.5" maximum.
24. **GUARDS** (guardrails) are required at floor and roof openings, landings, balconies, and at open sides of floor or roof levels over 30" in height from adjacent ground or floor. Detail or note the following to show compliance: CBC § 1015.
 - a. Guardrails to be 42" minimum in height.
 - b. Open guardrails shall have intermediate rails or an ornamental pattern such that a 4" sphere cannot pass through.
 - c. Provide connection details of guard/handrail on open side of balconies, decks, landings, and stairs adequate to support a 50-plf distributed load or single concentrated 200 lb load at a right angle to the top rail. CBC 1607.8
25. Occupants may not go through kitchen, storage, restrooms, closets or spaces used for similar purposes to get to an exit unless specially allowed by section 1016.2, Item #5.

26. In retail occupancies, provide the following for the exit access going through the stockroom: CBC§ 1016.2, Exception 2 of item 5.
- A 44-inch minimum demarcated aisle, defined by full-height or partial-height walls, that connects and maintains the required clear width from the retail space to the exit.
 - No locking device on door within the stockroom from the egress side.
 - Not more than 50% of the exit access going through the stockroom.
 - Stocked materials of the same hazard classification as those found in the main retail space.
27. 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: CBC§ 2406.4.
- Swing doors and sliding doors (including the fixed panel of the sliding door).
 - Fixed or operable panels adjacent to a door where the nearest exposed edge of the glazing is within 24" 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" above the walking surface. Read code for exceptions.
 - Fixed or operable panel:
 - Exposed area of an individual pane greater than 9 sq. ft.
 - Exposed bottom edge less than 18" above the floor.
 - Exposed top edge greater than 36" above the floor.
 - One or more walking surfaces within 36" horizontally of the plane of the glazing.
28. For non-accessible toilet/bidets stalls, show 30' minimum wide compartments with 24" clearance in front of the toilets/bidets. The centerline of toilets/bidets shall not be less than 15" to adjacent walls. CPC§ 402.5.
29. Toilet Room finishes
- Toilet and bathing room floors shall have a smooth, hard, nonabsorbent surface such as Portland cement, ceramic tile or other approved material that extends upward onto the walls at least 6". CBC§ 1210.2.1.
 - Walls within 2' of the front and sides of urinals and water closets shall have a smooth, hard, nonabsorbent surface of Portland cement, concrete, ceramic tile or other approved material surface to a height of 4'-0", and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture. CBC§ 1210.2.2

IV. DISABLED ACCESSIBILITY

- ACCESSIBLE ROUTE:** Clearly define on the plans an accessible path of travel from public sidewalk and accessible parking to the building entrance. Specify the width, slopes (in the direction of travel and cross slope), ramps, and/or curb ramps that exist along the path. For multi-story buildings, locate elevators on the plans. CBC§ 11B-206.2.1.
- EXISTING FACILITIES:** When alterations or additions are made to existing buildings or facilities, an accessible path of travel to the specific area of alteration or addition shall be provided unless otherwise exempt. CBC §11B-202.4. If the existing elements of the accessible path of travel are not in complying with the cure code provisions, corrections shall be made to bring these elements up to current code. Provide additional information for:
 - Accessible path of travel. Show compliance with CBC Chapter 11B, Division 4.
 - Accessible parking. Show compliance with CBC§ 11B-208 and CBC Chapter 11B, Division 5
 - Accessible restroom(s). Show compliance with CBC§ 11B-213 and CBC Chapter 11B, Division 6.
- At the accessible entrance into the building or facility, affix a decal displaying the International Symbol of Accessibility complying with CBC§ 11B- 703.7.2.1. For existing buildings and facilities where not entrances are accessible, provide directional signage, including the International Symbol of Accessibility, to direct patrons to the accessible entrance. A directional sign shall be provided at every junction along the accessible path. CBC§ 11B- 216.6.
- Detectable Warnings**
 - Curb ramps shall have detectable warnings that extend 36 inches in the direction of travel for the full width of the ramp run excluding any flared sides. CBC§ 11B-247.1.2.2, CBC §11B-705.1.2.2
 - Walks that cross or adjoin a route provided for vehicular traffic, such as in a street, driveway, or parking facility, shall be separated by detectable warnings, curbs, railings or other elements between the pedestrian areas and vehicular areas. CBC §202, CBC §11B-247.1.2.5, CBC §11B-705.1.2.5

5. Provide and reference floor transition detail from exterior walk/landings to tenant space, Show transition as flush or at no more than ½ inch above the floor and change in level between ¼ inch and ½ inch shall be beveled with a slope no greater than 1 unit vertical and 2-unit horizontal (50% slope). CBC§ 11B-404.2.5, 11B-302, and 11B-303.
6. The clear width for aisles shall be 36" minimum if serving elements on only one side, and 44" minimum if serving elements on both sides. CBC§ 11B-403.5.1 exception 4
7. SHOW a level and clear floor or landing on each side of every door. The level area shall have a length in the direction of door swing of at least 60" and the length opposite the direction of door swing of 44" (48" if the door has a closer) as measured at right angles to the plane of the door in the closed position. CBC§ 11-B-305.2 and CBC§ 11B-404.2.1
8. The width of the level landing on the side to which the door swings shall extend: CBC§ 11B-404.2.4, Fig 11B-404.2.4.1.
 - a. A minimum of 24" past the strike edge of the door for exterior doors
 - b. A minimum of 18" past the strike edge for interior doors on the door pull side.
 - c. A minimum of 12" past the strike edge for interior doors on the door push side when equipped with latch and closer.
9. Add the following door notes on the plan:
 - a. Swinging door and gate surfaces within 10 inches of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Parts creating horizontal or vertical joints in these surfaces shall be within 1/16 inch of the same plane as the other and be free of sharp or abrasive edges. Cavities created by added kick plates shall be capped. CBC§11B-404.2.10
 - b. The force for pushing or pulling open a door or gate shall be as follows: CBC§11B-404.2.9
 - i) Interior and exterior hinged doors and gates, sliding, or folding doors: 5 pounds maximum.
 - ii) Required fire doors: the minimum opening force allowable by the appropriate administrative authority, not to exceed 15 pounds.
 - c. Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum. CBC §11B-404.2.8.1
 - d. Latching and locking doors that are hand activated and which are in a path of travel shall be operable with a single effort by lever type hardware, by panic bars, push-pull activating bars, or other hardware designed to provide passage without requiring the ability to grasp the opening hardware. CBC§ 11B-309.4.
 - e. Hand-activated door opening hardware shall be 34" minimum and 44" maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides. CBC§11B-404.2.7.
10. Where dining surfaces are provided for the consumption of food or drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with 11B-902. In addition, where work surfaces are provided for use by other than employees, at least 5 percent shall comply with 11B-902. §11B-226.1
 - a. Where food or drink is served for consumption at a counter exceeding 34 inches in height, a portion of the main counter 60" minimum in length shall be provided between 28" and 34" maximum from finished floor. CBC§11B-226.3
 - b. If seating for persons in wheelchairs is provided at fixed tables or counters, knee spaces at least 27" high, 30" wide, and 19" deep shall be provided. CBC§11B-306.
 - c. The tops of dining surfaces and work surfaces shall be 28 inches minimum and 34 inches maximum above the finish floor or ground. CBC§11B-902.3
11. Provide design of accessible cash/wrap/transaction counter where one section is at least 36" long and no more than 28" to 34" high. Please clearly detail on the plans. CBC§ 11B-904.4.
12. Provide section at counter. Please clearly detail on the plans the allowable reach ranges per CBC§ 11B-308.
13. ACCESSIBLE RESTROOMS
 - a. Provide fully dimensioned and to scale enlarged plans of the proposed restrooms. Locate all fixtures and accessories. Show required clearances and mounting locations to meet code requirements for accessibility.
 - b. Show a clear floor space of at least 60" in diameter, or a T-shaped space complying with Figures 11B-304.3.2. No door shall encroach into this space for more than 12". CBC§ 11B-603.2.

- c. Single Occupancy Restroom: Clearance around a water closet shall be 60" minimum measured perpendicular from the side wall and 56" minimum measured perpendicular from the rear wall. A minimum 60" wide x 48" deep maneuvering space shall be provided in front of the water closet. CBC§11B-604.3.1
- d. Accessible Compartment of Multiple Occupancy Restrooms
- i) Clearance around a water closet: 60 inches minimum measured perpendicular from the side wall and 56" minimum measured perpendicular from the rear wall for wall mounted toilets (59" for floor mounted toilets). CBC§ 11B- 604.8.1.1.
 - ii) Maneuvering Clearance in front of toilet: (See CBC Figures 11B-604.8.1.1.2 and 604.8.1.1.3)
 - (a) Side Door opening outward: a minimum of 60" wide x 60" deep in front of the toilet.
 - (b) Front Door opening outward: a minimum of 60" wide x 48" deep in front of the toilet.
 - (c) Door opening inward: a minimum of 60" wide x 36" deep in front of the clearance space required by CBC§ 11B-604.8.1.1.
- e. ACCESSIBLE RESTROOM FIXTURES AND ACCESSORIES
- i) Show the centerline of the water closet to be 17" minimum to 18" maximum from the side wall or partition. For ambulatory accessible toilet compartment: 17" minimum and 19" maximum. CBC§11B-604.2.
 - ii) Show that all lavatories, when located adjacent to a sidewall or partition, shall be a minimum distance of 18" to the centerline of the fixture. CBC§ 11B- 606.6.
 - iii) The seat height of a water closet above the finish floor shall be 17" minimum and 19" maximum measured to the top of the seat. Seats shall not be sprung the return to a lifted position. Seats shall be 2" high maximum and a 3" high seat shall be permitted only in alterations where the existing fixture is less than 15 inches high. CBC§11B-604.4
 - iv) Show a clear floor space 30" x 48" in front of a lavatory to allow a forward approach. Such clear floor space shall adjoin or overlap an accessible route and shall extend a maximum of 19" into knee and toe space underneath the lavatory. Door shall not swing into the clear floor space or clearance required for any fixture. CBC§11B- 305.3, 11B- 305.4, 11B-604.8.1.2.
 - v) Show that accessible lavatories (sinks) to be a minimum 17" in horizontal depth and mounted with the rim or counter edge no higher than 34" above the finished floor and with vertical clearance measured from the bottom of the apron or the outside bottom edge of the lavatory of 29", reducing to 27" at a point located 8" back from the front edge. In addition, a minimum 9" high toe clearance must be provided extending back toward the wall to a distance no more than 6" from the back wall. The toe clearance space must be free of equipment or obstructions. CBC §11B-306.2.1- 11B- 306.2.4.
 - vi) Show that hot water and drainpipes under accessible lavatories shall be insulated or otherwise covered. There shall be no sharp or abrasive surfaces under lavatories. CBC§ 11B- 606.5
 - vii) Urinals shall be the stall-type or the wall-hung type with the rim 17" maximum above the finish floor or ground. Urinals shall be 13½" deep minimum measured from the outer face of the urinal rim to the back of the fixture. A clear floor space 30"x48" in front of the urinal to allow forward approach shall be provided. CBC §11B-605.2
 - viii) Mirrors located above the lavatories or countertops shall be installed within the bottom edge of the reflecting surface 40" maximum above the finish floor or ground. CBC §11B-603.3
 - ix) Where towel, sanitary napkins, waste receptacles, dispensers, or other equipment and controls are provided, show at least one of each type shall be located on an accessible route, with all operable parts, including coin slots, within 40" from the finished floor and shall comply with CBC §11B-603.5.
 - x) Toilet paper dispensers shall comply with Section 11B-309.4 Operation and shall be 7" minimum and 9" maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be below the grab bar, 19" minimum above the finish floor and shall not be located behind the grab bars. Dispensers shall not be of a type that control delivery or that does not allow continuous paper flow. CBC §11B-604.7
- f. GRAB BARS
- i) Provide grab bars on the sidewall (42") closest to the water closet and on the rear wall (36"). CBC§ 11BB-604.5.
 - ii) The top of the grab bars shall be mounted at 33" minimum and 36" maximum from the finished floor to the TOP of the bar. CBC§ 11B-609.4.

- iii) Show the outer diameter of a circular grab bar to be 1-1/4" minimum and 2" maximum. Noncircular grab bars shall comply with CBC§ 11B-609.2.2.
- iv) Specify that the space between the grab bars and the wall and bottom obstructions to be 1-1/2" and to top obstructions to be 12". CBC§ 11B-609.3.

14. SIGNAGE

- a. RESTROOM SIGNAGE:
 - i) Door Sign: MEN'S sanitary facilities shall be identified by an equilateral triangle 1/4" thick with edges 12" long and a vertex pointing upward; WOMEN'S sanitary facilities shall be identified by a circle 1/4" thick and 12" in diameter; and UNISEX sanitary facilities shall be identified by a circle 1/4" thick, 12" in diameter, with a 1/4" thick triangle superimposed on the circle and within the 12" diameter. CBC§ 11B- 703.7.2.6.
 - b. Tactile Wall Sign: Provide a tactile sign with Braille characters on the wall of the latch side of the door.
 - c. Comply with Assembly Bill 1732 ("All-Gender"). Restroom signage for single occupancy toilet facilities shall be signed as follows:
 - i) Door sign shall be identified by a 1/4" thick, 12" in diameter-circle, with a 1/4" thick triangle superimposed on the circle and within the 12" with NO pictogram.
 - ii) Tactile and Braille signage on wall shall identify the restroom as "RESTROOM", ALL-GENDER RESTROOM", or "UNISEX RESTROOM".
 - d. Mounting locations and heights: CBC§ 11B-703.7.2.6, 11B-703.4.2.
 - i) Door signs shall be mounted on the centerline of the door and between 58" and 60" from the finished floor.
 - ii) Wall sign shall be mounted with the centerline of the sign no more than 12" from the jamb of the door. The bottom of the Braille cells shall not be less than 48" from finished floor and the top of the raised letters shall not be more than 60" from finished floor.
15. FITTING/CHANGING ROOMS: 5%, but never less than one, of dressing rooms for each type of use in each cluster of dressing rooms shall be accessible by providing the following: CBC §11B-222.1 and CBC §11B-803
- a. A 60"diameter circular turning space or a T-shaped turning space complying with 11B-304.3.2 shall be provided within the room.
 - b. Doors shall not swing into the room unless a turning space is provided beyond the arc of the door swing.
 - c. A bench complying with 11B-903:
 - i) Benches shall be provided within the room. The bench seat shall be 48" minimum long, 20" to 24" deep, and a clear floor space complying with 11B-305. Clear Floor or Ground Space shall be provided at the end of the bench seat and parallel to the short axis of the bench. The bench shall provide for back support or shall be affixed to a wall along its long dimension.
 - ii) The top of the bench seat shall be 17" to 19" above the finish floor. Benches shall be affixed to the wall or floor. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds is applied at any point on the seat, fastener, mounting device, or supporting structure.
 - d. Coat hooks shall be no higher than 48" from the floor and shall not be located above the bench or other seating in the room.
 - e. Shelves shall be 40" minimum and 48" maximum above the finish floor or ground.
 - f. Full-length mirrors, at least 18" wide x 54" high, shall be installed with the bottom edge of the reflecting surface 20" maximum above the finish floor. Mirrors shall be mounted in a position affording a view to a person on the bench as well as to a person in a standing position.

V. STRUCTURAL REQUIREMENTS

1. Provide accurate construction details for connections supporting suspended/ceiling soffit. Clearly show specific structural connectors to roof/floor diaphragm above. For wood truss systems, detail connection to derive support from both top and bottom chords. Provide design for lateral bracing.
2. Provide accurate construction details of partition walls exceeding 6 feet in height. Provide wall anchorage details (top and bottom). Be Specific. Include gage and spacing of studs, bracing of top track (48" O/C at 45 degrees with alternating side), and anchorage of bottom track. Specify size, type and quantity of connectors. Provide ICC number and spacing as required for fasteners (shot pins). CBC § 1607.13 and ASCE 13.5.8.
3. Provide construction details for suspended ceiling. Where ceiling is not supporting interior partitions, ceiling bracing shall be provided by four No. 12 gauge wires secured to the main runner within 2" of the cross runner intersection and splayed 90° from each other at an angle not exceeding 45° from the plane of the ceiling. A strut (adequate to resist the vertical component from lateral loads) fastened to the main runner shall be extended to and fastened to the structural members of the roof or floor above. These horizontal restraint points shall be placed 12' o/c in both directions with the first point within 6' of each wall. Attachment of restraint wires to the structure above shall be adequate for the load imposed. Alternate design in accordance to ASCE 13.5.6 by a state licensed Engineer or Architect may be accepted.

4. For ceiling areas exceeding 2500 S/F, a seismic separation joint or full height partitions that breaks up the into areas not exceeding 2500 S/F shall be provided. ASCE 13.5.6.2.2.
5. Provide structural design to justify structural capacity of the existing roof to carry new mechanical units. Submit structural plans and calculations. Justify service loading design per CBC§ 1605 and seismic anchorage per ASCE 13.3 and 13.4.
6. Show framing at hard-lid gypsum ceiling. Provide details to show how ceiling is supported at walls.
7. Provide design for steel storage racks exceeding 6' in height complying with ASCE 15.5.3. Submit calculations and structural details for review.

VI. ELECTRICAL, MECHANICAL, PLUMBING REQUIREMENTS

1. Provide 2016 Nonresidential Energy Compliance documents on plans:
 - a. Building Envelop Certificate of Compliance documents
 - b. Lighting/Electrical Power Distribution Certificate of Compliance documents
 - c. Mechanical/Process Certificate of Compliance documents
 - d. Plumbing Certificate of Compliance documents
2. **EMERGENCY LIGHTING:** Provide design for emergency lighting pursuant to CBC§ 1008.3. The means of egress system shall be illuminated with at least one-foot candle at the floor level for 90 minutes. Show on the plans, light fixtures that are connected to the emergency power supply or battery pack at the following locations:
 - a. Spaces: Aisles, hallways, corridors, and exit access stairways/ramps serving rooms/spaces where two exits are required. CBC§ 1008.3.1.
 - b. Buildings: Interior and exterior exit and exit access stairways/ramps/balconies, exit passageways, vestibules and areas on the level of exit discharge used for exit discharge serving buildings where two exits are required. CBC§ 1010.3.2.
 - c. Rooms: Electrical equipment rooms, fire command centers, fire pump rooms,
 - d. Above exterior landings serving buildings where two exits are required. CBC§ 1010.3.2.
3. Locate exit signs and emergency lighting per architectural plans. Clearly define how emergency power will be provided.
4. Locate main/sub electrical panel(s) on the plans. Provide ampere rating of the panels. Provide single diagram and load calculations.
5. Provide plumbing fixtures design pursuant to CPC§ 422 and Table 422.1. On the plans, show occupancy factor(s) used and the number of fixtures required and provided in tabular format.
6. Provide piping material schedule. Identify material and schedule for potable and waste drainage systems.
7. Provide a floor drain in public restrooms with two or more water closets or a combination of one water closet and one urinal. CPC§ 418.3
8. For restaurant with cooking facility, provide design of grease interceptor per CPC§ 1014.0. Clearly define location of the interceptor. Specify size of drainage pipes and all fixtures connected to the grease waste system.
9. Submit plans, details, and specifications for the installation of Type I grease hoods.
10. Public toilet rooms shall be provided with a mechanical exhaust system capable of providing a min. 50 CFM per each water closet and urinal. CMC§ 403.7 and CMC Table 403.7.

