



City of Huntington Beach
Department of Building & Safety
PLUMBING PLAN CHECK CORRECTION LIST
Based on 2012 Uniform Plumbing Code,
2013 California Plumbing Code
2000 Main Street, Huntington Beach, CA 92648
Office: (714) 536 - 5241 Fax: (714) 374 - 1647

ADDRESS _____ JOB DESCRIPTION _____
PLANCHECK # _____ PERMIT # _____
DATE _____ CONSTRUCTION TYPE _____
CONTACT NAME _____ OWNER _____
CONTACT NO. _____ PLANCHECKER Frank Biangone 714-536-5296

I. GENERAL

1. Provide a written response to corrections circled on this sheet and/or notes on plans made by plan checker. All plan corrections shall be clouded or otherwise noted to expedite re-submittal plan check.
2. Note corrections and/or notes on submitted drawings – return red marked set with two, new sets of revised drawings.
3. All plans and calculations are to be prepared, stamped and signed by a licensed engineer, architect, or design/installer. CPC sec. 103.2.2
4. Note fire rated construction on the plans to verify proper provisions for listed penetration protection. CPC sec. 1501.1
5. Show on plans which fixtures are handicap accessible.
6. All fixtures and appliances are to be identified and are required to be listed and labeled by an approved testing agency. CPC sec. 401.1
7. All plans submitted to the Huntington Beach Building Dept. for plan check must be submitted on minimum ledger size paper. (11 x 17).

II. DRAIN, WASTE AND VENT

1. Floor drain or similar traps directly connected to the drainage system and subject to infrequent use shall be protected with a trap seal prime. Trap seal primers shall be accessible for maintenance. CPC sec. 1007.0
2. Provide detail on drain waste, and vent systems. Include size of pipe and pipe materials.
3. Vent sizes through the roof must equal or exceed the size of the building sewer in area. CPC sec. 904.1
4. Toilet rooms in excess of one water closet or containing one water closet and one urinal require a trap primed floor drain. CPC sec. 411.2.1
5. Laundry facilities in commercial buildings and common laundries of multi-family dwellings require a trap primed floor drain. CPC sec. 411.2.3
6. Commercial kitchens require a trap-primed floor drain in cooking and/or prep areas. CPC sec. 411.2.2
7. Trap primed floor drains shall be installed in toilet rooms containing two or more water closets or a combination of one water closet and one urinal, except in a dwelling unit. 2013 CPC sec. 418.3
8. Indirect waste pipes exceeding 5 feet, but less than 15 feet in length shall be directly trapped, but such traps need not be vented. 2010 CPC sec. 803.0
9. An approved type of two way cleanout fitting installed inside the building wall near the connection between the building drain and the building sewer or installed outside the building at the lower end of a building drain and extended to grade, shall be permitted to be substituted for an upper terminal cleanout. 2010 CPC sec. 707.4 (4)
10. Each cleanout shall be installed so that it opens to allow cleaning in the direction of flow of the soil, waste or sewer pipes. 2010 CPC sections. 707.5, 719.4 (building sewers).
11. Show all required cleanout location and sizes. UPC sec. 707.4
12. Each horizontal drain pipe shall be provided with cleanout at it's upper terminal. 2010 CPC sec. 707.4
13. **All cleanouts serving drains with backwater valves shall be permanently labeled with the words "BACKWATER VALVE DOWNSTREAM". CPC sec. 710.1**
14. All food prep sinks and similar equipment shall be indirectly connected to the drainage system by means of an airgap. CPC sec. 801.2.3
15. Pot, scullery, dishwashing, silverware sinks and commercial dishwashing machines and other similar fixtures shall be directly connected to the drainage system. A floor drain shall be provided adjacent to the fixture, and the fixture shall be connected on the sewer side of the floor drain trap, providing that no other drainage line is connected between the floor drain waste connection and the fixture drain. 2010 CPC sec. 704.3

16. All floor drains, mop sinks, prep sinks and floor sinks and drains receiving grease waste from any food prep sinks must drain through a grease trap or interceptor, depending upon the amount of grease receiving fixtures. CPC sec. 1014.1
17. Size of Hydromechanical Grease Interceptors is determined using Table 10-2 of the CPC.
18. All plumbing equipment and fixtures connected to a grease trap must drain through an approved vented flow control device installed in a readily accessible and visible location. No drain or vent connection may be made between the vented flow control device and the grease trap inlet. Show location of vented flow control device on plan. 2010 CPC sec. 1014.2.1
19. Size of Gravity Grease Interceptors is determined using Table 10-3 of the CPC.
20. Gravity Grease Interceptors shall not be installed in any portion of the building where food is handled. CPC sec. 1014.3.4.1
21. A sample box or port is required immediately downstream of grease interceptor per city of Huntington Beach.
22. Elevator sumps are to be drained through an oil separator before draining into the sanitary system, or the sump is to be drained to a holding tank with a liquid level alarm. CPC sec. 1009.1
23. Structure requires rain water system based on 4 inch rainfall per hour. Include square footage of roof per area served by rain water system. CPC Ch. 11, CPC Tbl. 11-1.
24. Secondary roof drainage shall be provided by the use of roof scuppers or a secondary roof drain per CPC sections 1101.11.2.1 and 1101.11.2.2
25. Total number of water closets for women must equal the total number of water closets and urinals required for men. Exception is: *Requirement shall not apply when single occupancy toilet facilities are provided for each sex in an A or E occupancy with an occupant load of less than 50.* 2013 CPC table 422-1 footnote # 3.
26. Use Table 422-1 and Table A (Occupant Load factor) of the 2013 California Plumbing Code to determine minimum number of fixtures required for occupancy denoted in plans.
27. Each combination waste and vent system as defined in Chapter 2 shall be provided with a vent or vents adequate to ensure free circulation of air. The vent connection shall be downstream of the uppermost fixture. 2010 CPC sec. 910.3
28. Any branch drain in a combination waste and vent system in excess of 15' in length requires a separate vent located immediately downstream of uppermost fixture. CPC sec. 910.3
29. Plumbing fixtures shall drain to the public sewer or private sewer by means of gravity unless such fixtures are below the level of the main sewer. 2010 CPC sec 709.0
30. The discharge line from a sump pump shall be provided with an accessible backwater check valve and a gate or ball valve. The gate or ball valve shall be fullway and located on the discharge side of the check valve. 2010 CPC sec. 710.4
31. If the gravity line that the pumped discharge drains to is horizontal, the pumped discharge shall enter the gravity drain pipe from the top through a wye branch fitting. 2010 CPC sec. 710.4
32. A flexible hand held shower spray unit with a hose at least 59 inches long that can be used both as a fixed shower head and as a hand held shower shall be provided and installed on the back wall of the compartment adjacent to the seat wall, 19 in. minimum and 27 in. maximum from the seat wall. 2013 CBC sec. 1127A.5.2.5, 1127A.5.3.5.1.
33. Where toilet compartments are provided, at least one toilet compartment shall comply with section 11B-604.8.1 of CBC. In addition to the compartment required to comply with section 11B-604.8.1, at least one compartment shall comply with section 11B-604.8.2 to provide an ambulatory compartment where six or more toilet compartments are provided, or where the combination of urinals and water closets totals six or more fixtures. 2013 CBC sec. 11B-213.3.1.
34. Where separate facilities are provided for persons of each sex, these facilities shall be accessible to persons with disabilities. Where unisex facilities are provided, these facilities shall be accessible to persons with disabilities. 2010 CBC sec. 1115B.1.1
35. Establishments engaged in the storage, preparation, selling, serving, processing or other handling of food and beverage involving equipment that requires drainage shall provide indirect waste piping systems. 2013 CPC sec. 801.2

III. WATER DISTRIBUTION

1. Provide detail on water distribution system. Include size of pipe and pipe materials.
2. Specify water meter size and total developed length of the water system .CPC sec. 610.1
3. Size water system using Chapter 6 or Appendix A of the UPC. Size for public or private use. CPC sec. 610.5
4. Pie velocities not to exceed 10 feet per second unless engineered to do so. CPC Appendix A-6.1
5. Hot water required at _____ for sanitation. 2010 CPC sec. 601.1
6. A minimum of one drinking fountain is required to be installed on each floor/level of all schools, theatres, auditoriums, dormitories, offices or public buildings. Exception is occupant load less than 30. CPC Table 4-1, footnote 13, 17.
7. Quick closing valves in a battery (two or more) must have water hammer absorbing devices installed CPC sec. 609.10
8. Anti – siphon and/or backflow protection required at _____. CPC sec. 603
9. Backflow device access and clearance shall require a minimum of one foot between the lowest portion of the apparatus and grade. Installations of the backflow device exceeding five feet above the floor or grade shall be provided with a permanent platform capable of supporting a tester or maintenance person. 2010 CPC sec. 603.3.4
10. New potable water systems are required to be disinfected by chlorination. CPC Sec.609.9
11. Bacteriological testing of potable water system required to be performed by an independent third party testing laboratory. CPC Sec. 609.9.4

12. Hot water discharging from all tubs and whirlpool type tubs shall be limited from exceeding 120°F by a device conforming to standard ASSE 1070. Water heater control may not be used for this requirement. CPC sec. 414.5
13. Hot water delivered from public lavatories shall be limited from exceeding 120°F by a device conforming to standard ASSE 1070. Water heater control may not be used for this requirement. CPC sec. 413.1. Must install Thermal Mix Valve(s). Please show location of Thermal Mix Valve(s) on plan.
14. Water meter must be upsized to ____ inch to accommodate additional plumbing fixtures. CPC table 6-6.
15. In multi-family dwellings one or more accessible shut off valves shall be provided in each dwelling unit so that the water from that unit can be shut off without shutting off water to other units. CPC sec. 605.3
16. **Non potable water outlets shall be permanently labeled “CAUTION : NON POTABLE WATER, DO NOT DRINK” CPC sec. 601.2.4**
17. **An approved expansion tank shall be installed in the cold water distribution piping downstream of any pressure regulator placed on the main cold water pipe service to prevent excessive pressure from developing due to thermal expansion and to maintain the pressure setting of the regulator. CPC sec. 608.2**
18. The installation of PEX tubing in potable water supply systems must follow individual manufacturers’ installation procedures and the procedures set forth in CPC sections 604, 604.11, 604.11.1 and 604.11. 2.
19. PEX tubing when placed in the soil and used in potable water systems intended to supply drinking water, the tubing shall be sleeved with a material approved for potable water use in soil or material(s) that are impervious to solvents or petroleum products. CPC tbl. 6-4 footnote 3.
20. PEX tubing shall meet or exceed the requirements of NSF P171 CL-R, ASTM F876-08 or an equivalent standard when used in continuously recirculating hot water systems where chlorinated water is supplied to the system and PEX tubing is exposed to the hot water 100% of the time. CPC tbl. 6-4 footnote 4.
21. A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water by 20 percent shall be provided. The reduction shall be based on the maximum allowable water use per plumbing fixture and fittings as required by the California Building Standards Code. The 20 percent reduction in potable water shall be demonstrated by one of the following methods: (1) Each plumbing fixture and fitting shall meet the 20 percent reduced flow rate specified in table 5.303.2.3 of the 2010 CA. Green Building Code , or, (2) A calculation demonstrating a 20 percent reduction in the building “water use baseline” as established in table 5.303.2.3 shall be provided. CA Green Code sec. 5.303.2
22. Where static water pressure in the main water supply piping is exceeding 80 psi an approved type pressure regulator preceded by an adequate strainer shall be installed and the static pressure reduced to 80 psi or less. 2013 CPC sec. 608.2. The city of Huntington Beach does not achieve a static pressure of 80 psi in its water main supply piping. Please remove pressure regulator from plan.

IV. GAS PIPING

1. Provide detail on gas piping; include size of piping and pipe materials.
2. Provide lengths of all gas piping branches and the main line from meter to structure. Include all valve locations. CPC sec. 1217.4(A thru F)
3. Provide total btuh demand for each outlet on the gas piping system. Include both new and existing outlet btuh demand for proper sizing approval of gas system. CPC sec. 1217.4(A thru F)
4. Description of each appliance of the gas piping system is required. CPC sec. 1217.4(A thru F)
5. **CSST (corrugated stainless steel tubing) gas pipe systems shall be bonded to the electrical service grounding electrode system at the point where the CSST gas piping enters the building. The bond jumper shall be a minimum 6 awg. copper. CPC sec. 1211.15.2**
6. Gas piping 5psi and above located inside a structure is prohibited unless one of the following conditions are met: 1. Pipe is located in a ventilated chase, 2. Pipe is located in buildings or separate area of building used exclusively for industrial heating or processing, research, warehousing or boiler or mechanical equipment room. 3. Pipe system is welded. CPC sec. 1211.5
7. Line pressure regulators at multiple regulator installations shall be marked by a metal tag or other permanent means designating the building or the part of the building being served by such regulator. 2010 CPC sec. 1209.7.7.
8. In multiple tenant buildings supplied through a master meter, or through a service regulator where a meter is not provided, or where meters or service regulators are not readily accessible from the equipment location, an individual shut off valve for each apartment or tenant line shall be provided at a convenient point of general accessibility. 2010 CPC sec. 1211.11.2 (B)

V. WATER HEATERS

- 1 Required temperature and pressure relief valve must terminate outside of structure, to an approved plumbing fixture or to location approved by Administrative Authority. CPC sec. 608.5
- 2 Water heater enclosure required to have combustion air per CPC. sec. 507.

- 3 Water heater location not shown on plans.
- 4 Water heater located above ceiling requires a min. 24" wide walkway max. 20' in length to appliance working platform. CPC secs. 509.4.2, 509.4.3
- 5 A level working platform not less than 30" x 30" shall be provided at the service side of the appliance. CPC sec. 509.4.4
- 6 A permanent 120 volt receptacle outlet and a lighting fixture shall be installed near the appliance with the switch controlling the light to be at entrance to passageway. CPC sec. 509.4.5
- 7 Any water system provided with a check valve, backflow preventer, or any other normally closed device that prevents dissipation of building water pressure back into the water main shall be provided with an approved, listed, and adequately sized expansion tank or other approved device having a similar function to control thermal expansion. 2010 CPC sec. 608.3
- 8 Water heater requires two straps. One located in the upper third of tank and one located in the lower third of the tank a minimum 4 inches above the control valve. CPC sec. 508.2
- 9 Water heater venting detail not shown on plans.
- 10 Water heaters located in an attic-ceiling assembly, floor ceiling assembly or a floor - sub-floor assembly or where leakage from the water heater can cause damage to the structure a watertight, corrosion resistant pan shall be installed underneath the water heater. CPC sec. 508.4
- 11 Water heaters located in a bedroom or bathroom closet must be installed with a listed, gasketed door and self-closing device. The door must also be installed with a threshold and bottom door seal. CPC sec. 505.1
- 12 Non direct-vent type water heaters installed in beauty shops, barbershops or other facilities where chemicals that generate corrosive or flammable products such as aerosol sprays are routinely used shall be located in an equipment room separate or partitioned off from other areas with provisions for combustion air from outdoors. CPC sec. 508.10

VI. MEDICAL/DENTAL GAS, AIR AND VACUUM SYSTEMS.

1. Plot plan required denoting cylinder storage area, property lines, driveways and existing neighboring buildings or structures. CPC sec. 1312.2.1
2. All Medical/Dental gas/vacuum and/or air piping installed underground within buildings or embedded in concrete floors or walls shall be installed in a continuous conduit. CPC sec. 1318.1
3. Piping system layout required denoting location of all alarms, valves and inlets/outlets. CPC sec.1312.2.2
4. All medical gas, vacuum and air piping, valves and manifolds shall have permanent labels bearing the name of the gas they convey or control. CPC secs. 1323, 1323.1
5. An alarm system with audio and visual signals shall be installed in each medical/dental air and vacuum systems. CPC sec. 1324
6. Medical air and vacuum systems require two sources manifolded together working separately. CPC secs. 1325.1, 1326.1(1).
7. Medical air compressors and vacuum pumps shall be installed in an accessible well lit, ventilated clean location provided with drainage facilities with medical air located separately from medical gas cylinder storage/source. CPC sec. 1325, 1326
8. Intake to medical air compressors shall be located outdoors, above the roof a minimum of 10 feet from any door, window, intake or opening into the building and a minimum of 20 feet above the ground. CPC sec. 1325.3
9. Exhaust from vacuum pumps shall be piped to the outside with a turned down, screened termination. The exhaust terminal shall be a horizontal distance of 10 feet from any door, window or air intake. CPC sec. 1326.2(1,2,3 and 4)
10. Prior to any medical/dental gas, air or vacuum systems placed in service each and every system must be certified by a qualified, independent third party verification agency. A final report is to be given to the Administrative Authority of jurisdiction for acceptance. Certification report is to include checklist specified by CPC sec. 1328.1 thru sec. 1328.4.

VII. ADDITIONAL CORRECTIONS

1. See additional attached notes and respond accordingly to correction(s) noted.