



CITY OF NEWPORT BEACH

COMMUNITY DEVELOPMENT DEPARTMENT

BUILDING DIVISION

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WATER HEATER CHECKLIST

This is to be used as a general checklist; it is not inclusive of all code requirements and inspection criteria.

California Plumbing Code (CPC) and California Mechanical Code (CMC)

- Permit required for replacement or repair of water heaters. [CPC 101.4 & 108.4]
- Cold water supply has full bore ball type shut off valve (CPC 605.2) and pipe unions are within 12 " of unit. [CPC 609.5]
- Approved flex lines are installed in accessible space. [CPC 604.4]
- Hot and cold piping is insulated within the first five feet. [Cal Energy 1,2,3a & SMMC 8.108.060 (B)] Hot water recirculating lines are fully insulated. [SMMC 8108.060]
- Minimum access to water heater in attic is 22"X30". [CPC 509.4.1]
- Light fixture and service receptacle required for water heater in attic. [CPC 509.4.5]
- Water heater not located in bedrooms, bathroom, clothes closet or closets openings into bedrooms or bathrooms. (See Mechanical code for exceptions) [CPC 505.1, 505.1.1, & 505.1.2]
- Approved safety pan required under unit when leakage would cause structural damage to the building. [CPC 508.4]
- In garage or carport area unit is to be protected from damage. [CPC 510.3 & 508.14]
- Installation in garage or warehouses, the pilots, burners, heating elements and switches must be at least 18" above floor. [CPC 508.1401]
- Double wall type B vent has at least 1" clearance to combustible materials. [Table 8-2]
- Combustible clearances per appliance nameplate or manufacturer's listing.
- Electric water heaters to have a labeled disconnect in sight and clearly visible from unit. [CEC 4212.21 & 422.31]
- Overcurrent device and conductors are rated at not less than 125% of the rating found on the nameplate of the unit. [CEC 42412.21 & 422.20 (A)]
- Combustion Air Requirements per CPC 507 and appliance manufacturer.
- Pressure relief valve and temperature relief valve or a combination type valve is required. [CMC 1004.1 & CPC 506.2]
- TPR valve not directly connected to the drainage system. [CPC 801.4]
- Pressure temperature relief line terminates outside, 6 to 24 inches from ground and pointing down. Line is to be of approved material, drain at ¼" per foot with no traps, reductions or threads on end. [CPC 506.2 and 608.5]
- Seismic strapping required: one in the upper 1/3 and one in the lower 1/3 and minimum 4 inches to controls. [CBC 510.6 & CPC 508.2]
- If outside must be on concrete pad at least 3" above grade. [CPC 510.6 & 508.3]
- Indoor installations require a watertight pan to protect building structure.
- If rooftop installation, units shall have inside means of access to the roof through a minimum 22in X 24in scuttle or trap door when building is more than 15' in height. Units and/or access closer than 10' to the edge of the roof require guards to 42" in height. Units on the roof shall

have a service receptacle (GFCI) located on the roof adjacent to the equipment and switched light at access. [CMC 304.0 & 904.10&CBC]

- Each water heater has own gas shut-off valve. [CPC 1211.15] Maximum approved type length flex connector 6 feet. [CPC 1212 & 1212.4]
- Provide pressure test and isometric/calculations for new and extended gas systems. [CPC 1214.3 & 1204.3.2]
- Single wall metal vent connectors require a minimum clearance to combustibles of 6" (CMC Table 3-C). Vent connectors are for exposed areas and not for use in attics or crawl spaces. Vent connectors are to rise at least ¼" per foot. Single wall vents to be securely fastened in place with 3 fasteners per connection. [CMC 805.2 & 802.10.2.4 Table 8.2]
- Termination of type B vent at least 12" above any portion of flat roof, not within 8' of any vertical surface and 2' above any part of building within 10'. [CPC Table 5-2 & CMC 802.6.2]
- Vacuum relief valve required for water heaters above the appliances they serve. (CPC 608.7)
- Carbon monoxide detector(s) per CBC 420: on each level and in hallways serving bedrooms.
- Smoke detectors per CBC 907 same as carbon monoxide detectors but also inside bedrooms.