

Proposed City of San Diego Amendments – Part I

2010 California Plumbing Code - Plumbing Regulations

2010 California Plumbing Code

The package to follow includes modifications requested by the board of Building Appeals and Advisors when they met on September 2, 2010 and changes shown in double underline or double strike through will be considered at the October 7, 2010 meeting.

Ch 14 Article 7 Division 1

§147.0103 Adoption of the ~~2007~~ 2010 California Plumbing Code

- (a) Except as provided in Section 147.0104 through 147.107, the ~~2007~~ 2010 California Plumbing Code, published and amended by the California Building Standards Commission (BSC) and as amended by the California Department of Housing and Community Development [HCD]; the Division of the State Architect-Access Compliance [DSA/AC]; the State Office of Statewide Health Planning and Development [OSHPD3]; and the State Fire Marshal [SFM], a copy of which is on file in the office of the City Clerk as Document No. OO-19730, is adopted by reference.
- (b) When reference is made to the ~~2007~~ 2010 California Plumbing Code, it shall be the ~~2007~~ 2010 California Plumbing Code, California Code of Regulations Title 24, Part 5 as published by the California Building Standards Commission and adopted by the City of San Diego.
- (c) Application. The amendments made by the state agencies to the model code and incorporated into the ~~2007~~ 2010 California Plumbing Code are applicable only to those occupancies or uses which the state agency making the amendments is authorized to regulate, as listed in Section ~~101.3, 102, 108, 109.1, 110.3~~ 1.1.3, 1.2.0, 1.8.0, 1.9.0, 1.10.3, and 1.13.0 of the ~~2007~~ 2010 California Plumbing Code. The Building Official shall only enforce those amendments made by the following state agencies:

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- (1) California Building Standards Commission.
- (2) The Department of Housing and Community Development (HCD 1, HCD 1/AC).
- (3) Division of the State Architect, Access Compliance (DSA/AC).
- (4) Office of the State Fire Marshal (SFM).
- (5) Office of Statewide Health, Planning and Development (OSHPD3)
- (6) California Energy Commission (CEC).
- (7) Department of Water Resources (DWR).

§147.0104 Modifications to the ~~2007~~ 2010 California Plumbing Code Adopted by the City of San Diego

The following sections or sub-sections of the ~~2007~~ 2010 California Plumbing Code have been modified by the City of San Diego:

- (a) Chapter 6, Section 609.3, Underslab Copper Tubing;

§147.0105 Additions to the ~~2007~~ 2010 California Plumbing Code Adopted by the City of San Diego

The following sections or sub-sections of the 2010 California Plumbing Code have been added by the City of San Diego:

- (a) ~~None;~~ Chapter 6, Section 609.3.2.1, Underslab Copper Tubing; Section 609.3.2.2, Underslab Copper Tubing Serving Kitchen Islands and Trap Seal Primers.
- (c) Chapter 12, Section 1209.7.3.1, Gas Pressure Regulators.

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§147.0106 Adoption of Appendices to ~~2007~~ 2010 California Plumbing Code

(a) The following Appendix Chapters of the ~~2007~~ 2010 California Plumbing Code adopted by a State agency as identified in section 147.0103 and the adoption matrices of the ~~2007~~ 2010 California Plumbing Code are adopted by the City of San Diego:

- (1) Appendix G - Graywater Systems.
- (2) Appendix K - Private Sewage Disposal Systems.
- (3) Appendix L - Alternate Plumbing Systems.

(b) The following Appendix Chapters of the ~~2007~~ 2010 California Plumbing Code not adopted by a State agency as identified in section 147.0103 and in the adoption matrices of the ~~2007~~ 2010 California Plumbing Code are adopted by the City of San Diego:

- (1) Appendix A - Recommended Rules for Sizing the Water Supply System.
- (2) Appendix B - Explanatory Notes On Combination Waste And Vent Systems.
- (3) Appendix D - Sizing Storm Water Drainage Systems.
- (4) Appendix I - Installation Standards.

§147.0107 Portions of the ~~2007~~ 2010 California Plumbing Code Not Adopted

The following portions of the ~~2007~~ 2010 California Plumbing Code are not adopted:

- (a) Chapter 1 - ~~General Code Provisions~~ Division II, Administration.

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- (b) Chapter 13 - Health Care Facilities and Medical Gas and Vacuum Systems.

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Delete Section 147.0204. No State agency adopted Chapter 29 of the CBC so this amendment is no longer necessary.

~~§147.0204 — Local Modifications to 412 “Minimum Number of Required Fixtures” of the 2007 California Plumbing Code.~~

~~(a) — Modify Section 412.1 as follows:~~

~~412.1 Fixture count. Plumbing fixtures shall be provided for the type of building occupancy and in the minimum number shown in Table 4-1 of the 2007 California Plumbing Code. Chapter 29 “Plumbing Systems” of the 2007 California Building Code has not been adopted.~~

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147.0206

2010-2013

Adopt an amendment to Section 609.3 to prohibit the use of copper piping under slabs.

- Add a new Section 147.0206

§147.0206 Local Modifications to Section 609 “Installation, testing, Unions and Location” of the California Plumbing Code.

- (a) Section 609.3 has been adopted with additions pursuant to Section 147.0105 and modifications pursuant to Section 147.0104 of the Land Development Code.
- (b) Modify Section 609.3 as follows.
 - (1) 609.3. Ferrous Metallic piping shall have a protective coating of an approved type, machine applied and conforming to recognized standards. Field wrapping shall provide equivalent protection and shall be restricted to those short sections and fittings necessarily stripped for threading. Zinc coating (galvanizing) shall not be deemed adequate protection for piping or fittings. Approved nonferrous piping shall not be required to be wrapped.
 - (a) Add Section 609.3.2.1 and 609.3.2.2 as follows.
 - (1) 609.3.2.1 ~~Copper~~ Metallic piping tubing providing potable water distribution within dwelling units shall not be permitted to be installed under a concrete floor slab.
 - (2) ~~609.3.2.2~~ Exception: ~~Copper~~ Metallic piping tubing serving plumbing fixtures located within kitchen islands or similar plumbing fixtures, and ~~Copper~~ metallic piping tubing serving trap seal primers protecting floor drain traps pursuant to Section 1007.0, shall be installed without joints and the installation shall satisfy the following requirements.

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- (A) The ~~copper~~ metallic piping tubing shall be installed within a watertight continuous pipe sleeve that prevents direct contact between the ~~copper~~ metallic piping tubing and underslab soils.
- (B) During construction the protective pipe sleeve shall be capped at its ends until the ~~copper~~ metallic piping tubing is installed.
- (C) Flexible couplings or caulking shall be used to close the gap between the ~~copper~~ metallic piping tubing and the protective sleeve and shall prevent water from entering the void created between the ~~copper~~ metallic piping tubing and the protective sleeve.
- (D) The inner walls of the protective sleeve and the ~~copper~~ metallic piping tubing shall be free of soil particles and other foreign substances.

609.3 Water piping installed within a building and in or under a concrete floor slab resting on the ground shall be installed in accordance with the following requirements:

609.3. Ferrous piping shall have a protective coating of an approved type, machine applied and conforming to recognized standards. Field wrapping shall provide equivalent protection and shall be restricted to those short sections and fittings necessarily stripped for threading. Zinc coating (galvanizing) shall not be deemed adequate protection for piping or fittings. Approved nonferrous piping shall not be required to be wrapped.

609.3.2 Copper tubing shall be installed without joints where possible. Where joints are permitted, they shall be brazed, and fittings shall be wrought copper.

609.3.2.1 ~~Ferrous~~ Metallic piping tubing providing potable water distribution within dwelling units shall not be permitted to be installed under a concrete floor slab.

609.3.2.2 Exception: ~~Copper~~ Metallic piping tubing serving plumbing fixtures located within kitchen islands or similar plumbing fixtures shall be installed without joints and the installation shall satisfy the following requirements.

- (A) The ~~copper~~ metallic piping or tubing shall be installed within a watertight continuous pipe sleeve that prevents direct contact between the ~~copper~~ metallic piping tubing and underslab soils.
- (B) During construction the protective pipe sleeve shall be capped at its ends until the ~~copper~~ metallic piping tubing is installed.
- (C) Flexible couplings or caulking shall be used to close the gap between the ~~copper~~ metallic piping or tubing and the protective sleeve and shall prevent water from entering the void created between the ~~copper~~ metallic piping tubing and the protective sleeve.
- (D) The inner walls of the protective sleeve and the ~~copper~~ metallic piping tubing shall be free of soil particles and other foreign substances.

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Reason: This code change is necessary to restrict the use of copper tubing under slabs on ground. There have been numerous instances where under slab pipe leaks have occurred due to corrosive soils and to electrolytic reaction between the water and copper tubing as well as due to thermal expansion and contraction causing the piping to rub against hard underground debris. The City of Livermore has such a prohibition. The National Association of Home Builders Research Center addressed the issue in an August 1992 report entitled “INVESTIGATIVE REPORT OF COPPER PLUMBING FAILURES UNDER CONCRETE SLABS” with recommendations that formed the basis of this proposal. Note: For the purpose of this section, "within the building" shall mean within the fixed/limits of the building foundation.

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147.0212 2010-2013

Propose an amendment to adopt a change to the permissible location of gas pressure regulators per the round 2 code changes.

Modify Section 1209.7.3 of the CPC to allow the Building Official the authority to determine the permissible location for gas pressure regulators, for example to in one-hour corridors or exit enclosures. Add Section 147.0212

§147.0212 Local additions to Section 1209.7 “Gas Pressure Regulators” of the California Plumbing Code.

- (a) Add Section 1209.7.3.1 as follows.
- (b) 1209.7.3.1 When used, approved regulators shall be installed in locations approved by the Building Official.

1209.7.3 Location. The gas pressure regulator shall be accessible for servicing. [NFPA 54:5.8.3]

1209.7.3.1 When used, approved regulators shall be installed in locations approved by the Building Official and shall be accessible for servicing.

Reason: This code change is necessary to limit the location where gas pressure reducing valves can be placed in multi-story buildings and gives the Building Official the option to agree on placement of the valves. This item was considered by the Planning Commission and the Board of Building Appeals and Advisors during the 2007 Code cycle and modified due to comments from the City Attorney and to simplify the code change based on initial intent of in proposing the code change.

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Propose an amendment to update Section 147.0305 to be consistent with CPC Section 402.1 of the CPC as adopted and amended by HCD for water conserving plumbing fixtures.

§147.0303 Definitions Used in this Division

The following definitions are applicable to this division:

“Existing Plumbing Fixtures” means any toilet using more than 1.6 gallons of water per flush, urinals using more than 1.0 gallons of water per flush, showerheads with a maximum flow capacity of more than 2.5 gallons of water per minute, and faucets that emit more than 2.5 gallons of water per minute.

“Low Water-Use Plumbing Fixtures” means any toilet using a maximum of 1.6 gallons of water per flush, urinals that use a maximum of 1.0 gallons of water per flush, showerheads with a maximum flow capacity of 2.5 gallons of water per minute, and faucets that emit a maximum of 2.5 gallons of water per minute.

“New Construction” means any construction of a previously nonexistent structure requiring a development or construction permit issued after the effective date of the ordinance adopting this section.

§147.0305 General Regulations for Low-water Use Plumbing Fixtures

- (a) New non-residential building flow rates for water closets shall not exceed 1.6 gallons of water per flush, urinals and associated flushometer valves if any shall not exceed 1.0 gallons of water per

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flush, or shower heads shall not exceed a water supply rate of 2.5 gallons per minute measured at 80 psi.

- (a) ~~Effective December 1, 1991, no new building shall be constructed that has a toilet that uses more than 1.6 gallons of water per flush, or that has urinals and associated flushometer valves, if any, that use more than 1.0 gallon of water per flush, or showerheads with a flow capacity of more than 2.5 gallons of water per minute, or faucets that emit more than 2.5 gallons of water per minute.~~
- (b) ~~All toilets, urinals, and associated flushometer valves installed after December 1, 1991, shall be approved by the Building Official as meeting adequate standards of safety and sanitation and shall be certified by the International Association of Plumbing and Mechanical Officials and comply with all applicable American National Standards Institute standards.~~
- (e) (b) The use of existing plumbing fixtures with a maximum flush not to exceed 3.5 gallons of water or urinals with a maximum flush exceeding 1.0 gallon of water, may be allowed, when in the opinion of the Building Official, the configuration of the building drainage system requires a greater quantity of water to adequately flush the system.
- (d) ~~Any shower installed for a medically recognized health or safety purpose that cannot safely operate with a flow rate that does not exceed 2.5 gallons of water per minute is exempt from this section.~~
- (e) (c) The requirements prescribed by this section may be suspended for a specified period of time by the Building Official if it is determined that there is an inadequate supply, including a choice of style or colors for the consumer, of low-water use toilets specified in this section to meet the needs of new construction.

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(f) (d) Should an existing plumbing fixture be voluntarily replaced with an ultra low-flush water use plumbing fixture, the permit requirements mandated in Section 129.0402 will not apply.

Reason: This code change is necessary to remind persons replacing plumbing fixtures where the work is exempt from a plumbing permit that additional water conserving plumbing fixture requirements exist in the CPC. The CPC amendments apply to occupancies and uses for which they have regulatory authority mainly all housing including condominiums and apartments, transient lodging such as hotels and motels, etc. The SDMC is general and applies to all uses and occupancies and the HCD amendment is more specific and therefore the regulations if more restrictive supersede the SDMC.