

PROPOSED SAN FRANCISCO PLUMBING CODE AMENDMENTS 2013 Edition

CHAPTER 1 ADMINISTRATION

DIVISION I CALIFORNIA ADMINISTRATION

No San Francisco Plumbing Code Amendments.

DIVISION II ADMINISTRATION

SECTION 101.0 – GENERAL

101.1 Revise this section as follows:

101.1 Title. This document shall be known as the “Uniform 2013 San Francisco Plumbing Code,” may be cited as such, and will be referred to herein as “this code.”

SECTION 102.0 – ORGANIZATION AND ENFORCEMENT

102.2 Add the following to the end of this section:

The Authority Having Jurisdiction, when necessary, may call upon the Police Department and other City and County of San Francisco agencies for aid or assistance in carrying out or enforcing any of the provisions of this code.

102.2.1 Revise the first paragraph of this section as follows:

102.2.1 Right of Entry. Where it is necessary to make an inspection to enforce the provisions of this code **or other codes or ordinances**, or where the Authority Having Jurisdiction has reasonable cause to believe that there exists in a building or upon a premises a condition or violation of this code **or other codes or ordinances** that makes the building or premises unsafe, insanitary, dangerous or hazardous, the Authority Having Jurisdiction shall be permitted to enter the building or premises at reasonable times to

inspect or to perform the duties imposed upon the Authority Having Jurisdiction by this code or other codes or ordinances, provided that where such building or premises is occupied, the Authority Having Jurisdiction shall present credentials to the occupant and request entry. Where such building or premises is unoccupied, the Authority Having Jurisdiction shall first make a reasonable effort to locate the owner or other person having charge or control of the building or premises and request entry. Where entry is refused, the Authority Having Jurisdiction has recourse to every remedy provided by law to secure entry.

102.2.3 Revise this section as follows:

102.2.3 Authority to Disconnect Utilities in Emergencies. The Authority Having Jurisdiction shall have the authority to disconnect a plumbing system to a building, structure or equipment regulated by this code in case of emergency where necessary to eliminate an immediate hazard to life or property. **For notification procedures, see Section 102A.16 of the Building Code.**

102.2.6 Add the following section:

102.2.6 Rules and Regulations. The Authority Having Jurisdiction shall have the power to render interpretations of this code and to adopt and enforce rules and supplemental regulations to clarify the application of its provisions. Such interpretations, rules and regulations shall be in conformance with the intent and purpose of this code. Such rules and regulations, commonly referred to as “Code Rulings” and “Administrative Bulletins” supplemental to this code, shall not take effect until approved by the Building Inspection Commission and signed by the Authority Having Jurisdiction except in unusual circumstances where the Authority Having Jurisdiction has determined that there is an immediate need to protect the public health and safety. When the Authority Having Jurisdiction finds that such circumstances exist, the Authority Having Jurisdiction may order immediate enforcement of a particular rule or regulation. The Authority Having Jurisdiction shall arrange for a subscription service to such rules and regulations, the entire cost of which is to be borne by the subscribers.

102.2.7 Add the following section:

102.2.7 Code Revisions. The Authority Having Jurisdiction shall transmit to the Building Inspection Commission, at intervals not exceeding three years, recommendations for changes to this code, based on studies of the following:

- 1. Requests of the Board of Examiners for variances from this code, and for approvals of alternate materials, alternate designs and methods of construction.**
- 2. Code changes recommended by the Board of Examiners.**
- 3. Code changes recommended by the Code Advisory Committee or other bodies subordinate to the Building Inspection Commission.**
- 4. Results obtained and problems encountered in legal actions taken to correct code violations.**
- 5. Changes or improvements in materials, methods of construction or design, and changes proposed by interested persons.**
- 6. Investigations of fire and structural damage to buildings, and of determination of**

unsatisfactory building performance.

7. Periodic changes to the California Plumbing Code and other State regulations which may affect this code.

8. Administrative Bulletins and Code Rulings currently in effect.

9. Violations of the code found on inspections or investigations.

102.2.8 Add the following section:

102.2.8 Modifications. When there are practical difficulties involved in carrying out the provisions of this code, the Authority Having Jurisdiction may grant modifications for individual cases. The Authority Having Jurisdiction shall first find that a special individual reason makes the strict letter of this code impractical and that the modification is in conformance with the intent and purpose of this code and that such modification does not lessen the standard of this code to safeguard life or limb, health, property, or public welfare. The details of any action granting modifications shall be recorded and entered in the files of the Department of Building Inspection.

102.5 Replace this section as follows:

102.5 Penalties. Any person, the owner or the owner's authorized agent, who violates, disobeys, omits, neglects or refuses to comply with, or resists or opposes the execution of any of the provisions of this code, shall be liable for a civil penalty, not to exceed \$500 for each day such violation is committed or permitted to continue, which penalty shall be assessed and recovered in a civil action brought in the name of the people of the City and County of San Francisco by the City Attorney in any court of competent jurisdiction. Any penalty assessed and recovered in an action brought pursuant to this paragraph shall be paid to the City Treasurer and credited to the Department of Building Inspection's Special Fund.

Any person, the owner or the owner's authorized agent, who violates, disobeys, omits, neglects or refuses to comply with, or who resists or opposes the execution of any of the provisions of this code, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding \$500 or by imprisonment not exceeding six months, or by both such fine and imprisonment, unless otherwise provided in this code, and shall be deemed guilty of a separate offense for every day such violation, disobedience, omission, neglect or refusal shall continue. Any person who shall do any work in violation of any of the provisions of this code, and any person having charge of such work who shall permit it to be done, shall be liable for the penalty provided.

It shall be unlawful for any person to interfere with the posting of any notice provided for in this code or to tear down or mutilate any such notice posted by the Department of Building Inspection.

SECTION 103.0 – PERMITS AND INSPECTIONS

103.1 Add the following second paragraph of this section:

Emergency work for the protection of life or limb, health, property and public welfare shall

have a permit obtained within one day of commencing such work, excluding Saturdays, Sundays and legal holidays.

103.1.1 Replace Section 103.1.1(1) and the first paragraph of Section 103.1.1(2) as follows:

103.1.1 Exempt Work. A permit shall not be required for the following:

- (1) Repair of leaks not requiring cutting into or removing piping.
- (2) Unstopping of traps, sewers, vents or waste pipes not requiring cutting into or removal of traps or piping.
- (3) Replacement, repair or maintenance of faucets, valves, hose bibbs or roof drain not requiring cutting into or removal of piping.
- (4) Replacement of toilets with 1.6 gallon (6.06 liter) per flush toilet fixtures except in structures with alternate water piping.
- (5) Replacement of furnace filters.
- (6) Removal of drainage, water or gas piping from a building when the water supply, gas and drainage lines have been disconnected in an approved manner under a permit.
- (7) Work involved in setting up for display of plumbing fixtures or appliances, when not connected to any supply or drainage lines, in a sales establishment.
- (8) Installation of plumbing systems installed by a utility in the operation of their utility business.
- (9) (8) Replacement of water conservation devices not requiring cutting into or removal of piping.
- (10) (9) Work performed in buildings or structures owned and occupied by the State and Federal governments.

103.1.3 Add the following section:

103.1.3 Homeowner's Permit. A permit for plumbing work in, on or about a single-family dwelling may be issued by the Authority Having Jurisdiction, provided said work is done by the owner or a family member who has demonstrated, to the satisfaction of the administrative authority, his or her qualifications to satisfactorily perform the plumbing work in the dwelling which is, or is intended to be, occupied by the owner. If the plumbing work performed under the homeowner's permit does not comply with the requirements of this code and if the corrections are not made as required by the Department of Building Inspection, then the work shall be corrected by a State-licensed plumbing contractor under a separate permit.

Such State-licensed plumbing contractor shall be required to pay only the permit issuance fee as set forth in Section 110A, Table 1A-C – Plumbing/Mechanical Permit Issuance and Inspection Fees - of the Building Code. If additional inspection is required, the appropriate fees as set forth in

Section 110A, Table 1A-C - Plumbing/Mechanical Permit Issuance and Inspection Fees and Table 1A-G - Inspection, Surveys and Reports - of the Building Code shall apply.

103.1.4 Add the following section:

103.1.4 Amending Applications. After a permit has been issued and an inspection of the work has been made, the scope of the permit may be altered by filing an amended permit application and paying fees for any additional work as set forth in Table 1A-C - Plumbing/Mechanical Permit Issuance and Inspection Fees and Table 1A-G - Inspections, Survey, and Reports of Section 110A of the Building Code.

103.2 Replace this section as follows:

103.2 Application. Permit applicants shall file with the Department of Building Inspection an application on a form furnished for that purpose.

A permit for inspection of the proposed plumbing work set forth in the application will be issued to State-licensed contractors or to homeowners subject to the requirements of Section 103.1.3. A separate permit shall be obtained for each separate building, structure or property.

103.3 Replace this section as follows:

103.3 Permit Issuance. An issued permit entitles the permittee to proceed with the work described therein. The issuance of a permit does not constitute approval of any work done under that permit. Permits shall not be transferable.

103.3.3 Replace this section as follows:

103.3.3 Permit Expiration. Plumbing permits expire per Section 106A.4.4 of the San Francisco Building Code. Permit fees may be partially refunded if a written cancellation request is made to the Building Official prior to commencement of the permitted work and within 90 days of the date of permit issuance. See Section 110A, Table 1A-R - Refunds - of the Building Code for refunds.

103.3.3.1 Add the following section:

103.3.3.1 Commencement of Work on Permit Expired Due to Work Not Started. A new permit shall be obtained to undertake the work described on an expired permit on which no work was performed. If not more than one year has elapsed since the expiration of the original permit, the applicant is eligible for reduced fees. See Section 110A, Table 1A- B – Other Building Permit and Plan Review Fees - of the Building Code for applicable fees.

If a refund has been granted per Section 103.3.3, the applicant shall not be eligible for the reduced fees as set forth in Section 110A, Table 1A-B - Other Building Permit and Plan Review Fees - of the Building Code.

103.3.3.2 Add the following section:

103.3.3.2 Recommencement of Work on Permit Expired Due to Work Not Completed. The applicant shall obtain a new permit for the work not completed. The permit fee shall be based on

work remaining to be done. Fees shall be as set forth in Section 110A, Table 1A-C – Plumbing/Mechanical Permit Issuance and Inspection Fees - of the Building Code.

103.4 *Replace this section as follows:*

103.4 Permit Fees. Before any permit is issued, the applicant shall pay to the Central Permit Bureau the fees as set forth in Section 110A, Table 1A-C – Plumbing/Mechanical Permit Issuance and Inspection Fees - of the Building Code. The replacement of a plumbing fixture or a gas appliance without a change in drainage, piping or venting shall not require the payment of permit issuance fee. A separate permit issuance fee shall be paid for each class of work, i.e., sewers and drainage, gas and water.

Final inspection will not be made unless all outstanding fees related to the permit work have been paid.

103.4.1 *Replace the following section:*

103.4.1 Inspections Not Covered by Permit Fees.

103.4.1.1 Off Hours of Inspection. Off-hour inspection may be performed outside normal inspection hours by prior arrangement and prepayment of fees as set forth in Section 110A, Table 1A-G - Inspections, Surveys and Reports - of the Building Code.

103.4.1.2 Reinspections. A reinspection fee shall be assessed for each inspection or reinspection made necessary by any of the following conditions:

- (1) When the portion of the work for which the inspection is requested is not complete or code complying.
- (2) When previously identified deficiencies in the work are not properly corrected.
- (3) When the approved construction documents are not available to the inspector.
- (4) When access is not provided on the date and time of the inspection appointment.
- (5) When work deviates from the approved construction documents.

The first reinspection for failure to comply with code requirements shall not be assessed a reinspection fee. All subsequent reinspections for the same or subsequent errors or omissions shall be charged a reinspection fee.

Subsequent to inspector determination of reinspection fee requirements, no required or requested inspections shall be made nor shall the job be given a certificate of final completion and occupancy or final approval until the required reinspection fees are paid. See Section 110A, Table 1A-G - Inspections, Surveys and Reports - of the Building Code for applicable fees.

103.4.1.3 Survey. A plumbing survey may be requested when a plumbing inspector's assistance is desired to establish code compliance of existing or proposed plumbing system requirements. See Section 110A, Table 1A-G - Inspections, Surveys and Reports - of the Building Code for applicable

fees.

103.4.3.1 *Revise this section as follows:*

103.4.3.1 Fees. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. See Section 110A, Table 1A-C – Plumbing/Mechanical Permit Issuance and Inspection Fees, and Table 1A-K - Penalties, Hearings, Code Enforcement Assessments- of the Building Code for applicable fees. The investigation fee shall be equal to the amount of the permit fee that is required by this code if a permit were to be issued. The payment of such investigation fee shall not exempt a person from compliance with other provisions of this code, nor from a penalty prescribed by law.

The Director may reduce the investigation fee to two times the amount of the permit fee as called for in Section 110A, Table 1A-C - Plumbing/Mechanical Permit Issuance and Inspection Fees - of the Building Code for work that was constructed prior to the current building ownership or for work without permit which was done prior to January 1, 1967, if the owner files with the Director a notarized affidavit together with documents substantiating such dates of work.

Appeals of investigation fees may be filed with the Board of Appeals in the manner provided in Part III of the San Francisco Municipal Code. Such filing shall be subject to the fees and rules of the Board of Appeals. The Board of Appeals, in reviewing the appeal, may reduce the appealed amount to not less than two times the permit fee as set forth in Section 110A, Table 1A-C- Plumbing/Mechanical Permit Issuance and Inspection Fees - of the Building Code.

103.4.4 *Replace this section as follows:*

103.4.4 **Fee Refunds.** ~~The Authority Having Jurisdiction shall be permitted to authorize the refunding of a fee paid hereunder that was erroneously paid or collected.~~ For fee refunds, see Section 107A.6 of the Building Code.

103.5.9 *Revise the fourth paragraph as follows:*

To obtain reinspection, the applicant shall file an application therefore in writing upon a form furnished for that purpose and pay the reinspection fee in accordance with ~~Table 103.4~~ Section 110A, Table 1A-G - Inspections, Surveys and Reports - of the Building Code.

SECTION 104.0 – ABATEMENT OF PUBLIC NUISANCE

104.0 *Add the following section:*

104.0 Abatement of Public Nuisance

In order to abate a nuisance as defined in Section 216.0 of this code, the inspection and abatement procedures as set forth in Section 102A of the Building Code shall apply.

SECTION 105.0 – BOARD OF EXAMINERS

105.0 Add the following section:

105.0 Board of Examiners

Application may be made to the Board of Examiners for approval of alternate materials, methods and types of construction and for variances from the provisions of this code. See Building Code, Section 105A.1.

SECTION 106.0 – REPAIRS TO DEFECTIVE BUILDING SEWERS

106.0 Add the following section:

106.0 Repairs to Defective Building Sewers

106.1 General. Any defective building sewer found to be a nuisance or hazardous to the public shall be repaired at the owner's expense by a licensed plumbing contractor in accordance with this code. In the event the owner fails to repair the defective building sewer after written notice has been sent the owner by the Authority Having Jurisdiction, the Authority Having Jurisdiction shall abate the condition in accordance with Section 102A of the Building Code.

106.2 Cost of Repairs by City and County of San Francisco. Whenever the Authority Having Jurisdiction, pursuant to the authority conferred by this code and the Building Code, shall cause a building sewer to be repaired or replaced, the cost thereof shall be paid from the "Plumbing Building Sewer Revolving Fund" and assessed against the property served by said building sewer.

106.3 Plumbing Building Sewer Revolving Fund. A special revolving fund, to be known as the "Plumbing Building Sewer Revolving Fund," is hereby created for the purpose of defraying the costs and expenses which may be incurred by the Department of Building Inspection in carrying out the authority conferred by this code to repair or replace defective building sewers.

The Board of Supervisors shall transfer one half of the funds appropriated to the "Side Sewer Repair" fund of the Department of Building Inspection or shall appropriate, establish or increase the special revolving fund with such funds as it may deem necessary in order to expedite performance of the work of repairing or replacing defective building sewers. The special revolving fund shall be replenished with all funds collected under the proceeding hereinafter provided for, either upon voluntary payments or as a result of the sale of the property after delinquency, or otherwise. Balances remaining in the Plumbing Building Sewer Revolving Fund at the close of any fiscal year shall be carried forward in such fund.

106.4 Assessment for Costs. The Authority Having Jurisdiction shall take action to have the costs of all work done or caused to be done pursuant to this section assessed against the parcel or parcels of land upon which said building is served by the building sewer per Section 102A of the Building Code. Such costs shall include, in addition to all costs related to repairing or replacing the building sewer or demolishing and clearing the site, the City and County of San Francisco's costs in administering the required work. See Section 110A, Table 1A-K - Penalties, Hearings, Code Enforcement Assessments - of the Building Code for the applicable fee.

CHAPTER 2 DEFINITIONS

SECTION 201.0 – GENERAL

201.1 *Add the following to the end of the first sentence:*

Where words, terms and phrases are not defined, they shall have their ordinary accepted meaning within the context with which they are used.

SECTION 204.0 – B

204.0 *Add the following definition:*

Boiler - A closed vessel used for heating water or liquid, or for generating steam or vapor by direct application of heat from combustible fuels or electricity.

SECTION 208.0 – F

208.0 *Add the following definition:*

Foot Vent - See "Relief Vent," Section 220.0.

SECTION 216.0 – N

216.0 *Add the following items after Item (3) under definition of "Nuisance":*

- (4) Open, unsecured, leaking, plugged or otherwise defective sewer, gas or water lines.**
- (5) Inadequate plumbing system maintenance, dilapidation, obsolescence, or damage.**
- (6) Plumbing or plumbing fixtures, gas appliances or piping installed in violation of this code or without permit.**
- (7) Where a change in occupancy classification is made without complying with the applicable provisions of this code and the Building Code.**

SECTION 218.0 – P

218.0 *Revise this definition as follows:*

Plumbing System. Includes all potable water, building supply, and distribution pipes; all plumbing fixtures and traps; all drainage and vent pipes; and all building drains and building sewers, including their respective joints and connections, devices, receptors, and appurtenances within the property lines of the premises and shall include potable water piping, potable water treating or using equipment, medical gas and medical vacuum systems, liquid and fuel gas piping, and water heaters and vents for same, **and fire sprinkler systems. Plumbing systems shall include all plumbing appliances, plumbing appurtenances and plumbing fixtures.**

SECTION 221.0 – S

221.0 *Add the following definition:*

Story - That portion of a building included between the upper surface of any floor and the upper surface of the floor next above. For the purposes of this code, balcony, loft and mezzanine levels that contain plumbing outlets are also to be considered as stories.

CHAPTER 3 GENERAL REGULATIONS

SECTION 313.0 – HANGERS AND SUPPORTS

313.8 *Add the following section:*

313.8 Materials

313.8.1 Plumber's tape hanger iron may be used to secure pipe not greater than 2 inches (50.8 mm) in diameter.

313.8.2 Hanger iron shall be galvanized and not thinner than 22 gauge, 1/32-inch thick (0.8 mm) and 3/4-inch (19.05 mm) wide, securely nailed or screwed to the structure. When the strap-iron is formed around the pipe, it shall be secured with a 1/4-inch (6.35 mm) stove bolt.

CHAPTER 4 PLUMBING FIXTURES AND FIXTURE FITTINGS

SECTION 403.3 – URINALS

403.3.1 *Revise this section as follows:*

403.3.1 Nonwater Urinals. Nonwater urinals shall be listed and comply with the applicable standards referenced in Table 1401.1. Nonwater urinals shall have a barrier liquid sealant to maintain a trap seal. Nonwater urinals shall permit the uninhibited flow of waste through the urinal to the sanitary drainage system. Nonwater urinals shall permit the uninhibited flow of waste through the urinal to the sanitary drainage system. Nonwater urinals shall be cleaned and maintained in accordance with the manufacturer's instructions after installation. **Where nonwater urinals are installed, not less than one water supplied fixture rated at not less than 1 water supply fixture unit (WSFU) shall be installed upstream on the same drain line to facilitate drain line flow and rinsing.** Where nonwater urinals are installed they shall have a water distribution line rough-in to the urinal location to allow for the

installation of an approved backflow prevention device in the event of a retrofit.

SECTION 406.0 – PROHIBITED FIXTURES

406.0 Add the following section:

406.4 Watercloset-Sink Combinations. Watercloset-Sink combinations are not allowed in structures with treated alternate water piping.

SECTION 422.0 – MINIMUM NUMBER OF REQUIRED FIXTURES

422.1 Replace this section as follows:

422.1 **Fixture Count.** Plumbing fixtures shall be provided for the type of building occupancy and in the minimum number shown in table 422.1. ~~The total occupant load and occupancy classification shall be determined in accordance with the building code. Occupancy classification not shown in table 422.1 shall be considered separately by the Authority Having Jurisdiction.~~ in accordance with Section 2902 of the Building Code.

Table 422.1 Add a note under the title as follows:

TABLE 422.1

Minimum Plumbing Facilities

NOTE : This Table is not applicable in San Francisco.

Refer to Table 2902.1 of the Building code.

EXCERPT FROM THE 2013 SAN FRANCISCO BUILDING CODE

Table 2902.1 of the San Francisco Building code has been inserted below for your convenience.

TABLE 2902.1 – MINIMUM PLUMBING FIXTURES 1, 2, 3

<u>TYPE OF BUILDING OR OCCUPANCY⁴</u>	<u>WATER CLOSETS⁵</u> <u>(Fixtures per person)</u>		<u>LAVATORIES⁵</u> <u>(Fixtures per person)</u>		<u>BATHTUB OR SHOWER</u> <u>(Fixtures per person)</u>
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
<u>For the occupancies listed below, use 30 square feet (2.78 m²) per occupant for the minimum number of plumbing fixtures.</u>					
<u>Group A</u>					

<u>TYPE OF BUILDING OR OCCUPANCY⁴</u>	<u>WATER CLOSETS⁵</u> (Fixtures per person)		<u>LAVATORIES⁵</u> (Fixtures per person)		<u>BATHTUB OR SHOWER</u> (Fixtures per person)
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
<u>Conference rooms, dining rooms, drinking establishments, exhibit rooms, gymnasiums, lounges, stages and similar uses including restaurants classified as Group B occupancies</u>	<u>1:1-25</u>	<u>1:1-25</u>	<u>one for each water closet up to four; then one for each two additional water closets</u>		
	<u>2:26-75</u>	<u>2:26-75</u>			
	<u>3:76-125</u>	<u>3:76-125</u>			
	<u>4:126-200</u>	<u>4:126-200</u>			
	<u>5:201-300</u>	<u>5:201-300</u>			
	<u>6:301-400</u>	<u>6:301-400</u>			

Over 400, add one fixture for each additional 200 males or 150 females.

For the assembly occupancies listed below, use the number of fixed seating or, where no fixed seating is provided, use 15 square feet (1.39 m²) per occupant for the minimum number of plumbing fixtures.

<u>Assembly places—</u> <u>Auditoriums, convention halls, dance floors, lodge rooms, stadiums and casinos</u>	<u>1:1-50</u>	<u>3:1-50</u>	<u>1:1-200</u>	<u>1:1-200</u>
	<u>2:51-100</u>	<u>4:51-100</u>	<u>2:201-400</u>	<u>2:201-400</u>
	<u>3:101-150</u>	<u>6:101-200</u>	<u>3:401-750</u>	<u>3:401-750</u>
	<u>4:151-300</u>	<u>8:201-400</u>	<u>Over 750, add one fixture for each additional 500 persons</u>	
	<u>Over 300 males, add one fixture for each additional 200, and over 400 females add one for each 125.</u>			

For the assembly occupancies listed below, use the number of fixed seating or, where no fixed seating is provided, use 30 square feet (2.29 m²) per occupant for the minimum number of plumbing fixtures.

<u>Worship places</u>				
<u>Principal assembly area</u>	<u>one per 150</u>	<u>one per 75</u>	<u>one per two water closets</u>	
<u>Worship places</u>				
<u>Educational and activity unit</u>	<u>one per 125</u>	<u>one per 75</u>	<u>one per two water closets</u>	

<u>TYPE OF BUILDING OR OCCUPANCY</u> ⁴	<u>WATER CLOSETS</u> ⁵ (Fixtures per person)		<u>LAVATORIES</u> ⁵ (Fixtures per person)		<u>BATHTUB OR SHOWER</u> (Fixtures per person)
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	

For the occupancies listed below, use 200 square feet (18.58 m²) per occupant for the minimum number of plumbing fixtures.

<u>Group B</u>					
<u>Offices or public buildings</u>	<u>1:1-15</u>	<u>1:1-15</u>	<u>one per two water closets</u>		
	<u>2:16-35</u>	<u>2:16-35</u>			
	<u>3:36-55</u>	<u>3:36-55</u>			
	<u>Over 55, add one for each 50 persons.</u>				

For the occupancies listed below, use 50 square feet (4.65 m²) per occupant for the minimum number of plumbing fixtures.

<u>Group E</u>	<u>1:1-15</u>	<u>1:1-15</u>	<u>one per 40</u>	<u>one per 40</u>	
<u>Schools—for staff use</u>	<u>2:16-35</u>	<u>2:16-35</u>			
<u>All schools</u>	<u>3:36-55</u>	<u>3:36-55</u>			
	<u>Over 55, add one fixture for each additional 40 persons.</u>				
<u>Schools—for student use</u>	<u>1:1-20</u>	<u>1:1-20</u>	<u>1:1-25</u>	<u>1:1-25</u>	
<u>Day care</u>	<u>2:21-50</u>	<u>2:21-50</u>	<u>2:26-50</u>	<u>2:26-50</u>	
	<u>Over 50, add one fixture for each additional 50 persons.</u>		<u>Over 50, add one fixture for each additional 50 persons.</u>		
<u>Elementary</u>	<u>one per 30</u>	<u>one per 25</u>	<u>one per 35</u>	<u>one per 35</u>	
<u>Secondary</u>	<u>one per 40</u>	<u>one per 30</u>	<u>one per 40</u>	<u>one per 40</u>	

(Continued)

<u>TYPE OF BUILDING OR OCCUPANCY⁴</u>	<u>WATER CLOSETS⁵</u> <u>(Fixtures per person)</u>		<u>LAVATORIES⁵</u> <u>(Fixtures per person)</u>		<u>BATHTUB OR SHOWER</u> <u>(Fixtures per person)</u>
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
<u>For the occupancies listed below, use 50 square feet (4.65 m²) per occupant for the minimum number of plumbing fixtures.</u>					
<u>Education Facilities other than Group E</u>					
<u>Others (colleges, universities, adult centers, etc.)</u>	<u>one per 40</u>	<u>one per 30</u>	<u>one per 40</u>	<u>one per 40</u>	
<u>For the occupancies listed below, use 2,000 square feet (185.8 m²) per occupant for the minimum number of plumbing fixtures.</u>					
<u>Group F</u>	<u>1:1-10</u>	<u>1:1-10</u>	<u>one for each two water closets</u>		<u>one shower for each 15 persons exposed to excessive heat or to skin contamination with irritating materials</u>
<u>Workshop, foundries and similar establishments, and Group H Occupancies</u>	<u>2:11-25</u>	<u>2:11-25</u>			
	<u>3:26-50</u>	<u>3:26-50</u>			
	<u>4:51-75</u>	<u>4:51-75</u>			
	<u>5:76-100</u>	<u>5:76-100</u>			
	<u>Over 100, add one fixture for each additional 300 persons.</u>				
<u>For the occupancies listed below, use the designated application and 200 square feet (18.58 m²) per occupant of the general use area for the minimum number of plumbing fixtures.</u>					
<u>Group I</u>					
<u>Hospital waiting rooms</u>	<u>one per room (usable by either sex)</u>		<u>one per room</u>		
<u>Hospital general use areas</u>	<u>1:1-15</u>	<u>1:1-15</u>	<u>one per each two water closets</u>		
	<u>2:16-35</u>	<u>3:16-35</u>			
	<u>3:36-55</u>	<u>4:36-55</u>			
	<u>Over 55, add one fixture</u>				

<u>TYPE OF BUILDING OR OCCUPANCY</u> ⁴	<u>WATER CLOSETS</u> ⁵ (Fixtures per person)		<u>LAVATORIES</u> ⁵ (Fixtures per person)		<u>BATHTUB OR SHOWER</u> (Fixtures per person)
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
	<u>for each additional 40 persons.</u>				
<u>Hospital patient room</u>	<u>one per room</u>		<u>one per room</u>		<u>one per room</u>
<u>Hospital ward room</u>	<u>one per eight patients</u>		<u>one per 10 patients</u>		<u>one per 20 patients</u>
<u>Jails and reformatories</u>					
<u>Cell</u>	<u>one per cell</u>		<u>one per cell</u>		
<u>Exercise room</u>	<u>one per exercise room</u>		<u>one per exercise room</u>		
<u>Other institutions (on each occupied floor)</u>	<u>one per 25</u>	<u>one per 25</u>	<u>one per 10</u>	<u>one per 10</u>	<u>one per eight</u>
<u>For the occupancies listed below, use 200 square feet (18.58 m²) per occupant for the minimum number of plumbing fixtures.</u>					
<u>Group M</u>					
<u>Retail or wholesale stores</u>	<u>1:1-50</u>	<u>1:1-50</u>	<u>one for each two water closets</u>		
	<u>2:51-200</u>	<u>2:51-100</u>			
	<u>3:101-400</u>	<u>3:101-200</u>			
		<u>4:201-300</u>			
		<u>5:301-400</u>			
	<u>Over 400, add one fixture for each additional 500 males and one for each 150 females.</u>				
<u>For Group R Occupancies, dwelling units and hotel guest rooms, use the chart. For congregate residences, use 200 square feet (18.58 m²) for Group R, Division I Occupancies and 300 square feet (27.87 m²) for Group R, Division 3 Occupancies for the minimum plumbing fixtures.</u>					
<u>Group R</u>					

<u>TYPE OF BUILDING OR OCCUPANCY</u> ⁴	<u>WATER CLOSETS</u> ⁵ (Fixtures per person)		<u>LAVATORIES</u> ⁵ (Fixtures per person)		<u>BATHTUB OR SHOWER</u> (Fixtures per person)
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
<u>Dwelling units</u>	<u>one per dwelling unit</u>		<u>one per dwelling unit</u>		<u>one per dwelling unit</u>
<u>Hotel guest rooms</u>	<u>one per guest room</u>		<u>one per guest room</u>		<u>one per guest room</u>
<u>Congregate residences</u>	<u>one per 10</u>	<u>one per 8</u>	<u>one per 12</u>	<u>one per 12</u>	<u>one per eight</u>
	<u>Add one fixture for each additional 25 males and one for each additional 20 females.</u>		<u>Over 12, add one fixture for each additional 20 males and one for each additional 15 females.</u>		

(Continued)

<u>TYPE OF BUILDING OR OCCUPANCY</u> ⁴	<u>WATER CLOSETS</u> ⁵ (Fixtures per person)		<u>LAVATORIES</u> ⁵ (Fixtures per person)	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
<u>For the occupancies listed below, use 5,000 square feet (464.5 m²) per occupant for the minimum number of plumbing fixtures.</u>				
<u>Group S</u>	<u>1:1-10</u>	<u>1:1-10</u>	<u>one per 40 occupants of each sex</u>	<u>one shower for each 15 persons exposed to excessive heat or to skin contamination with poisonous, infectious or irritating materials</u>
<u>Warehouses</u>	<u>2:11-25</u>	<u>2:11-25</u>		
	<u>3:26-50</u>	<u>3:26-50</u>		
	<u>4:51-75</u>	<u>4:51-75</u>		
	<u>5:76-100</u>	<u>5:76-100</u>		
	<u>Over 100, add one for each 300 males and females.</u>			

NOTE: Occupant loads over 30 shall have one drinking fountain for each 150 occupants.

1 The figures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction thereof.

<u>TYPE OF BUILDING OR OCCUPANCY⁴</u>	<u>WATER CLOSETS⁵</u> <u>(Fixtures per person)</u>		<u>LAVATORIES⁵</u> <u>(Fixtures per person)</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>

- 2 Drinking fountains shall not be installed in toilet rooms.**
- 3 When the design occupant load is less than 10 persons, a facility usable by either sex may be approved by the building official.**
- 4 Any category not mentioned specifically or about which there are any questions shall be classified by the building official and included in the category which it most nearly resembles, based on the expected use of the plumbing facilities.**
- 5 Where urinals are provided, one water closet less than the number specified may be provided for each urinal installed, except the number of water closets in such cases shall not be reduced to less than one half of the minimum specified.**
- 6 Twenty-four inches (610 mm) of wash sink or 18 inches (457 mm) of a circular basin, when provided with water outlets for such space, shall be considered equivalent to one lavatory.**

CHAPTER 5 WATER HEATERS

SECTION 604.0 – WATER HEATER REQUIREMENTS

504.1 Add the first paragraph to the section:

504.1 Location. Water Heaters mounted on the exterior of a building and located 7' or more above grade shall require an approved means for service or replacement.

CHAPTER 6 WATER SUPPLY AND DISTRIBUTION

SECTION 603.0 – CROSS-CONNECTION CONTROL

603.1 Add a new third paragraph to this section as follows:

Structures with alternate water piping shall have an Reduced-Pressure Principle Backflow

Prevention Assembly installed on the domestic supply as close as practical to the meter.

603.5.6.4 *Add the following section:*

603.5.6.4 All such installations shall be approved in writing by the San Francisco Water Department prior to installation.

SECTION 604.0 – MATERIALS

604.1 *Add the following sentence to the end of the second paragraph:*

Connections between copper water piping and ferrous materials shall be made with dielectric or insulated fittings or brass nipples of 6 inches (152.4 mm) minimum length.

SECTION 606.0 – VALVES

606.8 *Add the following section:*

606.8 All buildings four stories or more in height or water supply greater than 40 feet above the water meter shall have an approved backflow assembly installed as near as possible to the water meter and before the first fitting or branch line. The backflow assembly installed shall be in accordance to the degree of hazard within the building, but in no case less than an approved double check assembly. See Table 603.2.

SECTION 609.0 – INSTALLATION, TESTING, UNIONS AND LOCATION

609.10.2 *Add the following section:*

609.10.2 Air Chambers. Air chambers shall be installed on all hot and cold water outlets supplying quick-acting valves to provide water hammer relief. The size of each air chamber shall be 24 times the diameter of the fixture supply.

609.10.3 *Add the following section:*

609.10.3 Quick-Acting Valves. The following valves shall be considered quick-acting: flushometers, single-handle faucets, single-handle tub and tub/shower combination control valves, single-handle shower control valves, rapid response electric solenoid valves (such as used on ice-makers, clothes washers, etc.) and any other appliance or fixture that dispenses water in a quick open and close method in its operation.

CHAPTER 7 SANITARY DRAINAGE

SECTION 701.0 – MATERIALS

701.1(2) (A) *Revise this section as follows:*

(A) ~~[HCD1 & HCD 2]~~ ABS and PVC installations are limited to not more than two stories of **Commercial or private areas** of residential accommodations.

701.1(3) *Revise this section as follows:*

701.1(3) No vitrified clay pipe or fittings shall be used above-ground or where pressurized by a pump or ejector **or underground within the foundation line of the building.** They shall be kept not less than 12 inches (305 mm) belowground.

701.1(7) *Add the following section:*

701.1(7) Copper tubing shall not be used for urinal drainage or applications which are detrimental to the integrity of copper tubing.

SECTION 706.0 – CHANGES IN DIRECTION OF DRAINAGE FLOW

706.4 *Revise this section as follows:*

706.4 Vertical drainage lines connecting with horizontal drainage lines shall enter through 45 degree (0.79 rad) wye branches, combination wye and one-eighth bend branches, or other approved fittings of equivalent sweep. Branches or offsets of 60 degrees (1.05 rad) shall be permitted to be used where installed in a true vertical position. **In buildings more than three stories in height, any fixture within 10 feet (304 mm) of the connection of the vertical to horizontal change shall enter the horizontal drainage line at least 10 feet (304 mm) downstream from the change or may connect into the next vertical downstream line.**

SECTION 710.0 – DRAINAGE OF FIXTURES LOCATED BELOW THE NEXT UPSTREAM MANHOLE OR BELOW THE MAIN SEWER LEVEL

710.1.1 *Add the following section:*

710.1.1 Drainage of Fixtures Located Below the Fresh Air Inlet. Where a fixture is installed with the flood rim level equal to or lower than the elevation of the fresh air inlet serving the house trap, the piping serving the fixture shall be protected by installing an approved type of backwater valve. Where a fixture is installed with the flood rim level higher than the elevation of the fresh air inlet serving the house trap, the fixture shall not discharge through such backwater valve.

CHAPTER 8 INDIRECT WASTES

No San Francisco Plumbing Code Amendments.

CHAPTER 9

VENTS

SECTION 901.0 – GENERAL

901.1. *Add second paragraph to this section as follows:*

No mechanical device shall be installed in any venting system. Such venting system shall remain unobstructed to an approved termination.

SECTION 907.0 – VENT STACKS AND RELIEF VENTS

907.1 *Revise this section as follows:*

907.1 Drainage Stack. Each drainage stack that extends ~~10~~ **six (6)** or more stories above the building drain or other horizontal drain, shall be served by a parallel vent stack, which shall extend undiminished in size from its upper terminal and connect to the drainage stack at or immediately below the lowest fixture drain. Each such vent stack shall also be connected to the drainage stack at each fifth floor, counting down from the uppermost fixture drain, by means of a yoke vent, the size of which shall be not less in diameter than either the drainage or the vent stack, whichever is smaller.

907.3 *Add the following section:*

907.3 Vent Stacks and Relief Vents. Every building in which plumbing is installed shall have at least one main stack which shall run undiminished in size and as directly as possible from each building drain serving said building through to the open air above the roof.

For the purposes of this section, the main stack shall be defined as the largest size stack that is connected to a building drain or sewer.

A vent stack shall be installed with a soil or waste stack whenever relief vents or other branch vents are required in two or more branch intervals. A vent stack shall be installed in accordance with Section 706.1.

The size of the soil stack shall be determined by the total fixture units on that stack as per Table 703.2.

CHAPTER 10

TRAPS AND INTERCEPTORS

SECTION 1008.0 – BUILDING TRAPS

1008.1 *Revise this section as follows:*

1008.1 General

Building traps shall not be installed except where required by the Authority Having Jurisdiction. Each building trap where installed shall be provided with a cleanout and with a relieving vent or fresh-air intake on the inlet side of the trap, ~~which need not be larger than one-half the diameter of the drain to which it connects.~~ Such relieving vent or fresh-air intake shall be carried above grade and terminate in a screened outlet located outside the building. Such trap shall have a fresh air inlet of not less than 4 inch (101.6 mm) diameter pipe. The inlet shall be covered by an approved perforated plate not less than 16 square inches (102323.mm²). Perforations shall be not more than 3/8 inch (9.6 mm) diameter and provide an aggregate open area of not less than one-half the cross-sectional area of the sewer trap. The air inlet shall be connected to the building side of the trap and shall lead to the open air, terminating at a point not less than 10 feet (304 mm) from any window or door.

SECTION 1016.0 – SAND INTERCEPTORS

1016.3 Add the following section:

1016.3.1 When drains are provided for planter boxes, such drains shall enter into the sanitary or storm drainage plumbing system by discharging into an approved sump, receiving tank or sand settling tank. No trap shall be installed between the planter box and any approved receptor. Sizes of drains shall conform to Table 703.2.

Catch basins or sumps to drain surface water or collect subsoil drainage shall meet the following requirements:

(1) The catch basin or sump shall be poured in place, and all sides and bottom shall be watertight.

(2) A removable metal grill approved for applied design loads shall be placed on top.

(3) Each catch basin shall be served with its own trap and cleanout, and shall connect to the storm or sanitary system independently.

(4) If inlet is located below the building sewer or drain, a sump pump minimum of 1-1/2" (38.1 mm) outlet may be used. The bottom of sump shall maintain a 1'- 0" (25.4 mm) distance from the inlet, creating a 1' - 0" (25.4 mm) sand trap.

(5) If the depth of the sump is over 5' - 0" (1.52 m) a larger catch basin shall be required with a permanent ladder securely bolted to the interior to provide access for maintenance. A minimum clear space of 30" × 30" (762 mm × 762 mm) shall be provided.

(6) A listed and approved plastic catch basin may be installed in areas of residential buildings that are not subjected to any vehicular traffic and shall be installed on a concrete base to prevent settling, provided all other code requirements of this section and the listing and installation requirements of such catch basin are met.

CHAPTER 11

STORM DRAINAGE

SECTION 1101.0 – GENERAL

1101.1.1 Add the following section:

1101.1.1 Leaders, Connection to Drain. All storm water or casual water from roof areas, balconies, lightwells, courtyards or similar areas which total more than 200 square feet (18.4 square meters) aggregate shall drain or be conveyed directly to the building drain, or building sewer, or to an approved alternate location based on approved geotechnical and engineering designs. Such drainage shall not be directed to flow onto adjacent property or over public way, including sidewalks. The opening of the leader shall meet the same requirements as Section 1106.0 of the California Plumbing Code.

1101.1.2 Add the following section:

1101.1.2 Temporary Provisions. When the stormwater sewer is not yet installed, the building stormwater drainage system may discharge into the sewer on the street side of the main trap as near to the curblin as possible.

1101.1.3 Add the following section:

1101.1.3 Temporary Provisions Drain Trap. When, under the provisions of Section 1101.1.2 the building stormwater drainage system discharges to the sewer, a trap shall be placed in that drain at a point near where it branches into the sewer. The trap shall be supplied with clean water by an approved means such as a hose bibb or trap primer.

CHAPTER 12 FUEL GAS PIPING

SECTION 1208.0 – GAS PIPING SYSTEM DESIGN, MATERIALS, AND COMPONENTS

1208.5.1.1 Add a second paragraph as follows:

Gas piping in exterior locations, except as otherwise regulated by this code, shall be of galvanized iron or steel, with galvanized fittings.

CHAPTER 13 HEALTH CARE FACILITIES AND MEDICAL GAS AND VACUUM SYSTEMS

No San Francisco Plumbing Code Amendments.

**CHAPTER 14
REFERENCED STANDARDS**

No San Francisco Plumbing Code Amendments.

**CHAPTER 15
FIRESTOP PROTECTION**

No San Francisco Plumbing Code Amendments.

**CHAPTER 16
ALTERNATE WATER SOURCES FOR
NONPOTABLE APPLICATIONS**

No San Francisco Plumbing Code Amendments.

**CHAPTER 17
NONPOTABLE RAINWATER CATCHMENT
SYSTEMS**

No San Francisco Plumbing Code Amendments.

**Appendix A
RECOMMENDED RULES FOR SIZING THE
WATER SUPPLY SYSTEM**

No San Francisco Plumbing Code Amendments.

**Appendix B
EXPLANATORY NOTES ON COMBINATION
WASTE AND VENT SYSTEMS**

No San Francisco Plumbing Code Amendments.

Appendix D
SIZING STORMWATER DRAINAGE SYSTEMS

No San Francisco Plumbing Code Amendments.

Appendix G
SIZING OF VENTING SYSTEMS SERVING
APPLIANCES EQUIPPED WITH DRAFT HOODS,
CATEGORY 1 APPLIANCES, AND APPLIANCES
LISTED FOR USE WITH TYPE B VENTS

No San Francisco Plumbing Code Amendments.

Appendix H
PRIVATE SEWAGE DISPOSAL SYSTEMS

No San Francisco Plumbing Code Amendments.

Appendix I
INSTALLATION STANDARDS

No San Francisco Plumbing Code Amendments.

Appendix J
COMBINATION OF INDOOR AND OUTDOOR
COMBUSTION AND VENTILATION OPENING
DESIGN

No San Francisco Plumbing Code Amendments.