2022

PORT OF SAN FRANCISCO PLUMBING CODE

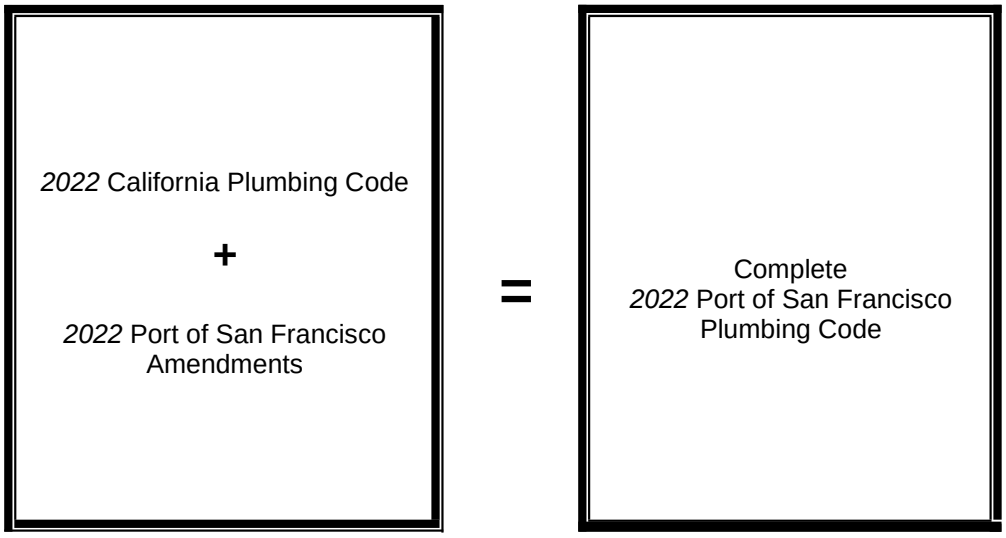
Based on the *2022* California Plumbing Code

PORT OF SAN FRANCISCO

This page is intentionally blank

The complete 2022 Port of San Francisco Plumbing Code adopts and amends the 2022 edition of the California Plumbing Code.

Effective Date: January 1, *2023*



PUBLISHERS NOTE

To simplify the use of the Port of San Francisco amendments with corresponding sections of the 2022 California Codes, *new* changes to the Port of San Francisco amendments appear in *italics* to indicate a modification of a section or portion of a section in the corresponding California Code.

Should you find publication errors (e.g., typographical) or inconsistencies in this code or wish to offer comments toward improving its format, please address your comments to:

Port of San Francisco Engineering Division -
Building Permit Group Pier 1, The
Embarcadero
San Francisco, CA 94111

Phone: (415)274-*0554*

This page is intentionally blank

This page is intentionally blank

TABLE OF CONTENTS

CHAPTER 1 ADMINISTRATION DIVISION I

CALIFORNIA ADMINISTRATION

See Division II for Port of San Francisco Plumbing Code administrative provisions.

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

DIVISION II ADMINISTRATION

101.0 Title, Scope and General

101.1 Revise this section to read as follows:

101.1 Title. This document shall be known as the *2022* Port of San Francisco Plumbing Code, may be cited as such and will be referred to herein as "this code."

101.3 Revise this section to read as follows*:*

101.3 Purpose. This code shall provide health, safety, and welfare.

102.5 Add a second paragraph to this section to read as follows:

102.5 Health and Safety.

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 Port of San Francisco Building Code shall apply.

103.0 Duties and Powers of Authority Having Jurisdiction

103.1 Revise this section to read as follows:

103.1 Authority Having Jurisdiction. The Port of San Francisco Commission, through the Chief Harbor Engineer, shall be the authority having jurisdiction.

103.1.1 Add the following section:

103.1.1 Administrative Authority. The Chief Harbor Engineer of the Port of San Francisco is hereby authorized to enforce all the provisions of this code as set forth in the Port of San Francisco Building Code Section 104.A.2.

104.0 Permits

104.1 Add the following as the second paragraph of this section:

104.1 Permits required.

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.

104.1.1 Add the following section:

104.1.1 Additional Work. After an approved permit has been issued a separate alteration permit shall be required for any changes in work or for any additional work as set forth in Section 106A.4.6 of the Port of San Francisco Building Code.

104.4.3 Replace this section to read as follows:

104.4.3. Expiration See Section 106A.4.4 of the Port of San Francisco Building Code.

104.5 Fees.

104.5 Replace this section to read as follows:

104.5 General. Permit, inspection, and investigation fees, as set forth in the Building Code, Chapter1A and Tables 1A-A Building Permit Fees, 1A-B Building Application and Plan Review Fees, 1A-C Plumbing Permit and Inspection Fees, 1A-G Inspections Surveys and Reports and 1A-K Investigation Fees, Hearings and Code Enforcement Fees of the Building Code shall be paid prior to permit issuance.

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

For fee refunds, see Section 107A.6 of the Building Code.

106.5 Revise this section to read as follows:

106.5 Authority to Disconnect Utilities in Emergencies. The Chief Harbor Engineer 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 of the Port of San Francisco Building Code.

CHAPTER 2 DEFINITIONS

216.0 – N –

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 Port of San Francisco Building Code.

This page is intentionally blank

CHAPTER 3 GENERAL REGULATIONS

313.0 Hangers and Supports.

313.2 Add the following new section

313.2 Materials:

313.2.1 All plumbing systems installed under piers or wharfs shall be supported by 316 stainless steel hangers and hardware. The system shall be engineered, as required, to provide adequate support.

313.3 Add a sentence to this section to read as follows:

All piping installed under piers, wharfs or docks shall be braced with rigid 316 stainless steel support hardware at every 10 feet (maximum), to prevent horizontal movement from wave action.

315.0 Joints and Connections

315.3 Add the following new section

315.3 Mechanical joints for hub-less pipe and fittings shall only be made with stainless steel 4 band no-hub couplings.

This page is intentionally blank

CHAPTER 4 PLUMBING FIXTURES AND FIXTURE FITTINGS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

CHAPTER 5 WATER HEATERS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

CHAPTER 6 WATER SUPPLY AND DISTRUBUTION

604.1 Pipe, Tube, and Fittings

604.1 Add sentences to this section to read as follows:

For exposed aboveground piping installation, pipes and fittings shall be metallic piping only, no plastic pipe and fitting shall be allowed. The interior and exterior surfaces of steel/iron pipes and fittings shall be lined and coated with dielectric coating material, such as epoxy or polyurethane. Coating and lining shall be repaired and re-coated to avoid coating damages. A low voltage bare surface detection test (using a Wet Sponge Test) shall be performed on all coated surfaces. All metallic surfaces shall be free of voids in the coating. Piping support and hardware material shall be stainless steel 316.

For piping installation underneath piers, wharfs or docks, pipes and fittings shall be metallic piping unless otherwise approved by the Chief Harbor Engineer. Interior and exterior surfaces of steel/iron pipes and fittings shall be lined and coated with dielectric coating material, such as epoxy or polyurethane. Coating and lining shall be repaired and re-coated to avoid coating damages. A low voltage bare surface detection test (Wet Sponge Test) shall be performed on all coated surfaces. All metallic surfaces shall be free of voids in the coating. For piping underneath a pier or other over-water structure, where it is not exposed to direct sunlight, a limited amount of HDPE piping (High Density Polyethylene) may be allowed but it is subject to the approval of the Chief Harbor Engineer. The approval to use HDPE piping is a case-by-case basis. No PVC, CPVC or ABS shall be permitted. Piping support and hardware material shall be stainless steel 316. The spacing between the supports for non-metallic piping shall be calculated by a civil/structural engineer to include the impact of the Bay water tidal waves.

This page is intentionally blank

CHAPTER 7 SANITARY DRAINAGE

701.2 Drainage Piping.

701.2.1 Add the following new section

701.2.1 For exposed aboveground piping installation, pipes and fittings shall be metallic piping only; no plastic pipe and fittings shall be allowed. The interior and exterior surfaces of steel/iron pipes and fittings shall be lined and coated with dielectric coating material, such as epoxy or polyurethane. Coating and lining at pipe cuts or blemishes shall be repaired to avoid coating damages. A low voltage 'holiday' (voids in pipe coating) detection (Wet Sponge Test) shall be performed on all coated surfaces. All metallic surfaces shall be 'holiday' free. Piping support and hardware material shall be stainless steel 316.

For piping installation underneath piers, wharfs or docks, pipes and fittings shall be metallic piping unless otherwise approved by the Chief Harbor Engineer. Interior and exterior surfaces of steel/iron pipes and fittings shall be lined and coated with dielectric coating material, such as epoxy or polyurethane. Coating and lining shall be repaired to avoid coating damages. A low voltage bare surface detection test (Wet Sponge Test) shall be performed on all coated surfaces. All metallic surfaces shall be free of voids in the coating. For piping underneath the pier where it is not exposed to direct sunlight, a limited amount of HDPE piping (High Density Polyethylene) may be allowed but it is subject to the approval of the Chief Harbor Engineer. The approval to use HDPE piping is on a case-by-case basis. No PVC, CPVC or ABS shall be permitted. Piping support and hardware material shall be stainless steel 316. The spacing between the supports for non-metallic piping shall be calculated by a civil/structural engineer to include the impact of the Bay water tidal waves.

707.0 Cleanouts.

707.4 Add the first sentence to read as follows:

707.4 All required cleanouts shall be to grade or readily accessible from the pier surface, and so located as to serve the purpose for which they are intended.

This page is intentionally blank

CHAPTER 8 INDIRECT WASTES

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

CHAPTER 9 VENTS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

CHAPTER 10 TRAPS AND INTERCEPTORS

1007.0 Trap Seal Protection

1007.3 Add the following section:

1007.3 Trap Primer Protection. Unless alternate materials are approved by the Chief Harbor Engineer, trap primer plumbing lines exposed under piers, wharves, and docks, the lines shall be stainless steel. The lines shall be protected from damage (such as wave action, floating debris, etc.,) to the satisfaction of the Authority Having Jurisdiction.

1016.0 Sand Interceptors.

1016.3 Construction and Size.

1016.3.1 Add the following section:

1016.3.1 Drains for Planter Boxes. When drains are provided for planter boxes, such drains shall enter 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 1½" (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" x 30" (762 mm x 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.

This page is intentionally blank

CHAPTER 11 STORM DRAINAGE

No Port of San Francisco Plumbing Code Amendments

-

This page is intentionally blank

CHAPTER 12 FUEL GAS PIPING

1210.3.1 Add the following section:

12*10.3.1.1* Fish Processing Facilities. In portions of fish processing facilities, canneries, and other indoor wet locations, and in locations where walls are frequently washed or subject to sea air, ferrous gas piping shall be protected as required by Section 12*10.3.1*

1210.*3.4* Add a second sentence to the first paragraph to read as follows:

Unless specifically approved by the Chief Harbor Engineer, gas piping shall be prohibited underneath piers, docks, or wharfs.

This page is intentionally blank

CHAPTER 13 HEALTH CARE FACILITIES AND MEDICAL GAS AND VACUUM SYSTEMS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

CHAPTER 14 FIRESTOP PROTECTION

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

CHAPTER 15 ALTERNATE WATER SOURCES FOR NONPOTABLE APPLICATIONS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

CHAPTER 16 NON-POTABLE RAINWATER CATCHMENT SYSTEMS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

CHAPTER 16A NON–POTABLE WATER REUSE SYSTEMS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

CHAPTER 17 REFERENCED STANDARDS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

APPENDIX A
RECOMMENDED RULES FOR SIZING THE WATER SUPPLY SYSTEM

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

APPENDIX B
EXPLANATORY NOTES ON COMBINATION WASTE AND VENT SYSTEMS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

APPENDIX C
ALTERNATE PLUMBING SYSTEMS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

APPENDIX D
SIZING STORM WATER DRAINAGE SYSTEMS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

APPENDIX H
PRIVATE SEWAGE DISPOSAL SYSTEMS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

APPENDIX I
INSTALLATION STANDARDS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

APPENDIX K
POTABLE RAINWATER CATCHMENT SYSTEMS

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank

APPENDIX L
SUSTAINABLE PRACTICES

No Port of San Francisco Plumbing Code Amendments

This page is intentionally blank