

Errata for 2018 National Standard Plumbing Code – 1st Printing

The following is a change that we found after the first printing of the *2018 National Standard Plumbing Code*. We do encourage you to make a note in your code book to ensure that the change is reflected. Thank you.

SECTION: Comment Text Reference on the Inside Title Page

The following explanatory note should have been removed referencing a shaded background:

Comments are presented with a shaded background similar to this note and are intended as supplemental information.

The Comment text follows the respective Code language and is indented from both the left and right margins.

SECTION: Foreword

Origin and Development

The advantages of a statewide adopted National Standard Plumbing Code™ are recognized throughout the industry. Disorder in the industry because of widely divergent plumbing practices and the use of many different, often conflicting, plumbing codes by local jurisdictions influenced the National Association of Master Plumbers in 1883, (predecessor of the National Association of Plumbing-Heating-Cooling Contractors (NAPHCC)) to publish the NAMP “Standard Plumbing Code” in 1933 and furnished revised editions until 1942. NAPHCC participated in the development of special standards for war-time plumbing and later was represented on the National Plumbing Code Coordinating Committee, whose work ultimately resulted in the adoption of A40.8 as a standard or model plumbing code in 1955.

NAPHCC served as a sponsor in the early 1960’s of the project which attempted to update the 1955 document. This project was operated through the procedures of the American National Standards Institute. However, the A40.8 revision project was not completed because consensus could not be achieved.

To provide local and state governments, code administrative bodies and industry with a modern, updated code, NAPHCC published the “National Standard Plumbing Code,” in 1971, following the format and sequence of the A40.8 to provide for maximum convenience of users.

With the June 1973 revision, the American Society of Plumbing Engineers joined this effort by co-sponsoring the National Standard Plumbing Code. ASPE maintained its co-sponsorship status until September 1980. Upon ASPE’s withdrawal of co-sponsorship, the Code Committee composition was changed to include not only members of the contracting and engineering communities but also members of the inspection community. Contractors, engineers and inspectors now comprise the National Standard Plumbing Code Committee.

The International Association of Plumbing and Mechanical Officials® (IAPMO) acquired the publishing rights to the NSPC in 2017. IAPMO is maintaining the National Standard Plumbing Code Committee’s close working relationship with the plumbing industry to maintain a document of minimum requirements for plumbing systems that reflect current practices, materials, and techniques, consistent with public health and safety. Contributions to the content of this code consists of diverse interests as consumers, enforcing authorities, installers/maintainers, labor, manufacturers, research/standards/testing laboratories, special experts, and users.

~~Each revision cycle advances according to a published schedule that includes final dates for all major events and contains four basic steps as follows:~~

- ~~1. Public and Committee Proposal Stage;~~
- ~~2. Comment Stage;~~
- ~~3. Association Technical Meeting;~~
- ~~4. Council Appeals and Issuance of Code.~~

~~IAPMO develops “full consensus” codes built on a foundation of maximum participation and agreement by a broad range of interests. This philosophy has led to producing technically sound codes that promote health and safety, yet do not stifle design or development.~~

~~It is important to stress that; the process remains committed to the principles of consensus code development where consensus Technical Committees and Correlating Committees revise codes. The public and membership is offered multiple opportunities to debate, provide input and raise concerns through Amending Motions at the annual Assembly Consideration Session. Anyone may submit an appeal related to the issuance of a document through the IAPMO Standards Council.~~

The written requirements of a Code can sometimes be interpreted differently by different individuals. For this reason, the NSPC Committee developed the NSPC Illustrated, which includes explanatory comments and illustrations to demonstrate the intent of the various Code Sections.

The Committee also realizes that despite the countless hours of preparation and review, perfection may not have been achieved in this document. For this reason, please send any questions, comments, suggestions, or problems to ~~the Code Development,~~ 4755 E. Philadelphia St., Ontario, CA 91761 nspc@iapmo.org.

~~The 2018 National Standard Plumbing Code is supported by the ASSE International, the Mechanical Contractors Association of America (MCAA), the Plumbing Heating Cooling Contractors National Association (PHCC NA), the United Association (UA), and the World Plumbing Council (WPC). The presence of these logos, while reflecting support, does not imply any ownership of the copyright to the NSPC, which is held exclusively by IAPMO. Further, the logos of these associations indicate the support of IAPMO’s open consensus process being used to develop IAPMO’s codes and standards.~~

Comments on Code Text

The comments following the various Sections of the Code text are intended to explain the intent of that Section of the Code. The comments themselves are not Code requirements but are intended to supplement the Code and provide guidance toward its interpretation.

Figures and Figure Notes

The illustrations (figures) are intended to graphically demonstrate the intent or provide an example of the referenced definition or Code Section. The figures are based only on the referenced definition or Code Section and do not necessarily include all details of the complete installation, such as pipe sizes, specific pipe fittings, required pipe supports, required cleanouts, and other details that are not part of the definition or Code Section being illustrated. The figures must not be used to justify work that does not comply with all requirements of the Code.

The figures are not intended to restrict installations to the arrangement shown. In many cases, the figures show only one example or a typical example of an acceptable arrangement. Any arrangement that meets the intent of the referenced Code Section is acceptable.

This Edition

This edition of the National Standard Plumbing Code – Illustrated includes changes from the 2015 Code, the 2015 Green Plumbing and Mechanical Code Supplement, and the changes that were approved at the March 9, 2017 Public Hearing.

SECTION: Table of Contents

Appendix I Title should be “Flow in Horizontal Sanitary Drain Piping” not “Flow in Sloping Drains.”

SECTION: 2.12 Sleeves for Piping

Paragraph a.) should read as follows:

a. A piping passing through concrete walls, floor, slabs, and masonry walls shall be provided with sleeves for protection. EXCEPTION: Sleeves shall not be required for pipes passing through drilled or bored holes. Such holes shall provide ~~1-1/2~~ 1/2 inch minimum clearance around the pipe and any thermal insulation.

SECTION: 6.2.10.b Interceptor Sizing

Change “Appendix K” to “Appendix I.”

6.2.10 Interceptor Sizing

b. Gravity interceptors for commercial kitchens shall be sized based on the inlet pipe flowing half-full according to Appendix ~~K~~ I, a 30-minute retention time, and an additional 25% storage factor for floatable FOG and settled solids, or as required by the Adopting Agency.

TABLE 10.19: Sizing of Residential Water Softeners

Correct the number of bathroom groups served to the following:

Required Size of Softener Connection (in.)	Number of Bathroom Groups Served ¹
3/4	Up to 22 <u>2²</u>
1	Up to 43 <u>4³</u>

TABLE 11.4.1: Drainage Fixture Unit (DFU) Values

Correct the following two line items:

INDIVIDUAL FIXTURES

Floor Drain, ~~Standby~~ Auxiliary

Shower (multiple 2.5 gpm showerheads) refer to section 11.5.7 ~~&~~

SECTION: 11.4.4.e Floor Drains

Change “Standby” to “Auxiliary” in two instances.

e. ~~Standby~~ Auxiliary floor drains, as defined in Section 1.2, shall be have no drainage fixture unit load (0.0 DFU). All downstream drain piping shall be not less than the pipe size of the ~~standby~~ auxiliary floor drain.

SECTION: 11.11.2.c Locations of Suds Pressure Zones

Change “pipe diameters” to “feet.”

11.11.2 Locations of Suds Pressure Zones

c. Zone 3 - in the horizontal drain beyond the base of a sanitary drain stack. A suds pressure zone shall extend 10 pipe diameters from the base of the stack. Also, if a turn greater than 45 degrees occurs in the horizontal drain less than 50 ~~pipe diameters~~ feet

from the base of the stack, suds pressure zones shall exist 40 pipe diameters upstream and 10 pipe diameters downstream from the horizontal turn.

SECTION: 12.10.2 Individual Water Closets

Figure 12.10.2 was removed, edit the figure reference sentence as noted below:

See Figures ~~12.10.2~~ and 1.2.77

SECTION: 12.10.3 Bathroom Groups

Based on the new text, Figures 12.10.3-A through F were removed. Delete the following figure reference sentence:

Refer to Figures ~~12.10.3 A through F~~

APPENDIX M to APPENDIX K

Change the following four references from Appendix M to Appendix K.

- Section 10.14.3.a
- Section B.5.4
- Table B.5.4 Note (4)
- Data for Figures B.8.1: Water Service Pipe Sizing Table

SECTION: Alphabetical Index

The following updates should be made to the Index.

Accessible and Readily Accessible:

In-line pressure balancing valves, ~~10.15.6~~ 10.15.6.n
Manifold shutoff valves, ~~10.17.3~~ 10.17.3.b
Water hammer arrestors, ~~10.14.7~~ 10.14.7.c

Air Break or Air Gap (drainage):

~~Fixtures and appliances, 9.1.5~~
Food handling fixtures and appliances, 9.1.5
Food service equipment and fixtures, 2.25.2

Air Gap (drainage)

~~Drinking water treatment units, 10.18.2~~
Food prep and service equipment, ~~10.5.8.e~~ 10.5.8.c
Water heater relief valve discharge piping, 10.16.6 10.16.6.d, 10.16.6.f

Air Gap (water supply):

~~Bidets without flushing rims, 7.7.2~~
Over-the-rim bidet supply fitting 7.7.2b
Food prep and service equipment, ~~10.5.8~~ 10.5.8.b

Backflow Preventers:

Testing and ~~repair~~ maintenance of, 10.5.6

Backflow Protection from:

Chemical dispensers, ~~10.5.13~~ 10.5.13.a

Cleaning units, portable, ~~10.5.13~~ 10.5.13.b
Dental pumping units, ~~10.5.13~~ 10.5.13.c
Laboratory sink faucets, ~~10.5.13~~ 10.5.13.e
Special installations, ~~7.18.1~~ 7.18
Sump pumps (water powered), ~~10.5.13~~ 10.5.13.d

~~Back Pressure~~ Backpressure Backflow:

~~Back Siphonage~~ Backsiphonage Backflow

Backwater Valve Valves:

~~Exception~~ EXCEPTION for installation of, ~~5.5.1~~ 5.5.1.d

Bathroom Groups:

~~Stack venting of,~~ 12.11

Wet venting of, ~~12.10~~ 12.10.3

Bathtubs:

Above food handling areas, ~~2.25.1~~ 2.25.1.h

Temperature control for, ~~10.15.6~~ 10.15.6.h

Bedpan Washers:

Requirements for, ~~14.8~~ 14.8.1

Cleanouts:

For ~~storm drain~~ stormwater traps, ~~13.3.1.e~~ 13.3.1.d

~~Combination Fixture:~~

Definition of, 1.2

~~Day Care Center:~~

Definition of, 1.2

~~Day Nursery:~~

Definition of, 1.2

Developed Length (~~of piping~~) of Piping:

Double Check Valve Assembly:

Application of, ~~10.5.3~~ 10.5.3.a.2

Drainage System, Storm Water:

Vertical walls, ~~3.1.10.3~~ 13.1.10.3

Drinking Water Facilities:

Minimum number required, 7.12.2 Table 7.21.1

~~Ejector, Pump Type:~~

Definition of, 1.2

Floor Flanges:

For water closets, ~~2.22,~~ 3.3.4

Flow Rates (water):

For individual fixtures, 10.14.2, B.3, Table B.3

Food Waste Disposers:

~~Vent washdown prohibited,~~ 12.12.4

Graywater:

Code coverage, ~~10.1.f~~
Permitted uses, ~~10.1.e,~~ ~~10.1.d,~~ 10.3c, 10.3d

Grease Interceptors:

~~Hydro-mechanical~~ Hydromechanical, 6.2.1.1, ~~6.2.2~~

Ground Water:

Outdoor drinking fountains, ~~7.12.3~~ 7.12.4

Harvested Rainwater:

Code coverage, ~~10.1.f~~
Permitted uses, ~~10.1.e~~ 10.3e

Health Hazards:

Definition of, 1.2

Mixed Water Temperature Control:

Animal washing, ~~10.15.6.m~~ 10.15.6.l (6.letter "l")

Mobile Home Parks:

Requirements for, Chapter 18

Multiple Dwelling:

Definition of, 1.2

Non-Health Hazards:

Definition of, 1.2

Pipe Joints:

Butt fusion, PE, 4.2.18
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Plumbing Fixtures:

Food waste ~~grinders~~ disposers, 7.14
Individual fixture pumps and ejectors, 11.7.11

Pressure Relief Connection:

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Reclaimed Non-Potable Water:

Code coverage, ~~10.1.f~~
Permitted uses, ~~10.1.b~~ 10.3b

Reduced Pressure Principle Backflow Preventer

Installation of, ~~10.5.5~~ 10.5.5.d

Revent, Reventing:

Definitions of, 1.2

Stack Venting:

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Standards:

List of referenced, ~~Table 19.1~~ Table 18.1
Organizations, ~~19.2~~ 18.2

Sub Stack:

~~Definition of, 1.2~~

Travel Trailer Parks:

Requirements for, Chapter 18

Valves:

Automatic compensating valves, 10.15.6.e, 10.15.6.h

In-line pressure balancing, ~~10.15.6~~ 10.15.6.n

TAFR flow reduction device, ~~10.15.6~~ 10.15.6.m

Vent, Back:

~~Definition of, 1.2~~

Vent, Side:

~~Definition of, 1.2~~

Vent Piping:

Aggregate size of vent terminals, 12.16.8

~~Fixture reventing, 12.12~~

For subdrain sump pits, 12.14.2

Loop venting, ~~12.13~~, 12.16.2

Relief vents for drain stacks, 12.3.2

~~Revent, reventing, 1.2, 12.12~~

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~~Stack venting, 12.14~~

Underground piping size, 12.16.7

~~Vent washdown, 12.12.4~~

Water Bottle Filling Station:

Compliance, ~~7.12.1~~ 7.12.1.e

Water Distribution Piping:

Water quality, ~~10.1~~ 10.3

Water Heaters, Domestic:

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Electric, household, ~~10.15.11~~ 10.15.10.f

Gas-fired storage, ~~10.15.11~~ 10.15.10.b, 10.15.10.c

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Tankless, gas-fired, ~~10.5.11~~ 10.15.10.d

Used for space heating, ~~10.15.10~~ 10.15.11

Water Pressure Booster Systems:

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Water Pressure Tanks:

Construction of, 3.3.8

~~Drains for, 10.8.6~~

~~Pressure relief for, 10.8.9~~

Safety devices for, 3.3.10

~~Vacuum relief for, 10.8.8~~

Whirlpool Baths:

Above food handling areas, ~~2.25.1~~ 2.25.1.h