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## Significant Plumbing Code Updates

Effective October 1, 2023

### Chapter SPS 302

1. SPS 302.61 (2) – Changed fee for revisions to previously approved plans from \$85 to \$85 for the first hour and \$80 per hour thereafter.

### Chapter SPS 305

1. SPS 305.003 (2m) – Created a definition for ASSE
2. References to “Cross Connection Control” and “Cross Connection Control Device” across code modified to Cross Connection Control Assembly.
3. References to “licensed master plumber,” “registered utility contractor” and similar titles modified across code to remove “licensed” or “registered” from the title.
4. References to various categories of sewers split to create categories for sanitary and storm.
5. 305.90 (1) (b) 1. – The plumbing activities that may be undertaken by holders of various “-restricted service” licenses or registrations are updated to clarify that permitted activity is limited to plumbing from the street main to the immediate inside or proposed inside foundation wall of a building, and expanded to include the following:
  - a. Manufactured home community water supply systems, and campground or recreational vehicle park water supply systems, as defined in ch. SPS 381.
  - b. Manufactured home community drain systems, sanitary; manufactured home community drain systems, storm; campground or recreational vehicle park drain systems, sanitary; and campground or recreational vehicle park drain systems, storm, as defined in ch. SPS 381.
  - c. Wastewater treatment devices, as defined in ch. SPS 381, not located within a building’s foundation perimeter.
  - d. Stormwater use systems, not located within a building’s foundation perimeter.
  - e. Reclaimed water systems, not located within a building’s foundation perimeter.
6. 305.90 (1) (b) 3. – The plumbing activities that may be undertaken by holders of various “-restricted appliance” are updated to clarify that permitted activity is limited to connections with an existing water distribution system which do not require a direct connection to the drain system for the installation and modification of the following:
  - a. Items requiring connection with a water distribution system.
  - b. Stormwater use or reclaimed water supply systems.
  - c. The minimum required piping to connect allowed installations to the system.
7. 305.90 (1) (b) 4. - The plumbing activities that may be undertaken by holders of utility contractor or pipelayer credentials are updated to clarify that permitted activity is limited to the following:

- a. Water services, and private water mains, building sewers, and private interceptor main sewers as defined in ch. SPS 381, from the street main to the immediate inside building perimeter.
  - b. Building sanitary sewers, building storm sewers, and private interceptor main sewers, as defined in ch. SPS 381, from the street main to the immediate inside building perimeter.
8. 305.94 (3) (a) – Experience requirements for applying for a journeyman plumber-restricted service license examination are modified from:
- “At least 1,000 hours of plumbing related work experience as a registered learner-restricted service.”
- To:
- “Completed one continuous year of plumbing-related work experience consisting of not less than 1,000 hours.”
9. 305.97 (6) – Responsibilities of utility contractors are updated to clarify that the work is from the street main to the immediate inside or proposed inside foundation wall of the building.
10. 308.98 (1) - The plumbing activities that may be undertaken by holders of pipelayer registrations are updated to clarify that permitted activity is limited to plumbing from the street main to the immediate inside or proposed inside foundation wall of a building.
11. 305.99 (3) – Requirements for registration as a cross connection control assembly tester are modified from:
- “... instruction in at least all of the following:
- (a) Reduced pressure principle backflow preventers.
  - (b) Reduced pressure detector fire protection backflow prevention assemblies.
  - (c) Pressure vacuum breaker assembly.
  - (d) Double check detector fire protection backflow prevention assemblies.
  - (e) Double check fire protection backflow prevention assemblies.
  - (f) Spill resistant vacuum breakers.”
- to:
- “... at a minimum, one of the following:
- (am) At least 40 hours in a department approved course or courses in the theory of cross connection control, the operation, testing and maintenance of cross connection control assemblies, and the national standards for these cross connection control assemblies.
  - (bm) An ASSE approved course meeting standard ASSE 5150.”

## Chapter SPS 381

1. 381.01 – Definitions
- a. Definitions are created for the following terms:
    - i. “Adult day care center” or “ADCC” has the meaning given in s. DHS 105.14 (1) (b) 5.
    - ii. “Air admittance valve” or “AAV” means a device designed to allow air to enter the drainage system to balance the pressure and prevent siphonage of the water trap when negative pressure develops in the system.
    - iii. “Barometric loop” means a continuous section of supply piping that abruptly rises to a height of approximately 35 feet before returning to the originating level. Barometric loop is used to protect against back-siphonage but not against back pressure.
    - iv. “Bidet sprayer” means a component of a personal hygiene device intended for genital and perineal cleanliness and intended for installation in water closets and water closet seats.

- v. "Campground or recreational vehicle park drain system, sanitary" means all piping or any portion thereof, within public or private premises, that conveys domestic wastewater from a campground or recreational vehicle park.
- vi. "Campground or recreational vehicle park drain system, storm" means all plumbing or any portion thereof, within public or private premises, that conveys any of the following:
  - 1. Storm water from a campground or recreational vehicle park.
  - 2. Groundwater from a campground or recreational vehicle park.
  - 3. Clear water from a campground or recreational vehicle park.
- vii. "Campground or recreational vehicle park water supply system" means the piping through which potable water is conveyed to points of usages intended to serve sites in a campground or recreational vehicle park.
- viii. "Camping trailer" has the definition under s. 340.01 (6m) Stats.
- ix. "Cross connection control method" means a mechanism used to prevent backflow into a water supply system other than a backflow prevention device or backflow prevention assembly, such as an air gap, vacuum breaker tee, or barometric loop.
- x. "Dishwasher, commercial-type" or "dishwashing machine, commercial-type" means a machine or appliance that is manufactured and marketed for a use other than residential that mechanically washes, rinses, and sanitizes dishes or utensils and discharges to the plumbing drainage system.
- xi. "Dishwasher, residential-type" or "Dishwashing machine, residential-type" means a machine or appliance manufactured and marketed for residential use that mechanically washes, rinses, and sanitizes dishes or utensils and discharges to the plumbing drainage system.
- xii. "Disinfection" means the process of killing or inactivating microorganisms, particularly pathogens.
- xiii. "Health care related facility" means an assisted living, residential care apartment complex, memory care, infirmary, inpatient mental health center, inpatient hospice, adult day care center, renal dialysis center, facility for the developmentally disabled, institute for mental disease, urgent care center, medical clinic or office, dental clinic or office, residential care center for children and youth, or school of medicine, surgery, or dentistry.
- xiv. "Imminent health hazard" means a significant threat or danger to health that is considered to exist when there is evidence sufficient to show that a product, practice, circumstance, or event creates a situation that requires immediate correction or cessation of operation to prevent injury or illness based on any of the following:
  - 1. The number of potential injuries or illnesses.
  - 2. The nature, severity, or duration of the potential injury or illness.
- xv. "Lavatory" means a sink or washbasin designed for washing of the hands and face.
- xvi. "Manufactured home community drain system, sanitary" means all piping or any portion thereof, within public or private premises, which conveys domestic wastewater from a manufactured home in a manufactured home community.
- xvii. "Manufactured home community drain system, storm" means all piping or any portion thereof, within public or private premises, that conveys any of the following:
  - 1. Storm water from a manufactured home community.
  - 2. Groundwater from a manufactured home community.
  - 3. Clear water from a manufactured home community.
- xviii. "Manufactured home community water supply system" means the piping through which potable water is conveyed to points of connection to a manufactured home or homes in a manufactured home community.

- xix. "Medical or high purity water" means water that has uncommon stringent specifications with specific resistance measured in microsiemens per centimeter ( $\mu\text{S}/\text{cm}$ ) or megohm-centimeters ( $\text{Mohm}\cdot\text{cm}$ ).
- xx. "Process piping" means that piping which is separated from a water supply system or drain system by the acceptable methods or means specified under ch. SPS 382 and is part of a system used exclusively for refining, manufacturing, industrial, or shipping purposes of every character and description.
- xxi. "Public lavatory" means a lavatory located in a public restroom or located outside of a public restroom. Hand wash sinks required by Department of Agriculture, Trade and Consumer Protection (DATCP), Department of Health Services (DHS), National Institutes of Health (NIH), or United States Department of Agriculture (USDA) are considered public lavatory fixtures.
- xxii. "Push-fit fitting" means a mechanical fitting that joins pipes or tubes and achieves a seal by pushing the mating pipe or tube into the fitting.
- xxiii. "Siphonic roof drain system" means a drainage system designed to receive water collecting on a roof surface via negative pressure conditions created by roof drains that allow water to enter the stormwater piping system while minimizing the ingress of air, generating a negative differential fluid pressure within the piping system thereby inducing full-bore flow without pipe gradient.
- xxiv. "Special wastewater" means any wastewater containing deleterious waste material as defined in s. SPS 382.34 (3) (b).
- xxv. "Thermal disinfection" means a method of providing bacterial control within a water distribution system using water that is heated and initially circulated to a minimum temperature of 140°F and with a minimum temperature of 124°F at the point of return to the heat source.
- xxvi. "Trap seal primer, drainage and electric types" means a device designed to supply water to a drain trap to provide and maintain its water seal by using a supply fixture drain line, an anti-siphon fill valve for water closet tanks, flushometer valve tailpiece, or an electric trap seal primer.
- xxvii. "Vector control" means any method to limit or eradicate the mammals, birds, insects or other arthropods, collectively called "vectors," which transmit disease pathogens.
- xxviii. "Water operator-in-charge" means the person designated by the owner of the building waterworks to be directly responsible for the day-to-day operations of the waterworks.
- xxix. "Yard hydrant" means a device with a water supply outlet, or faucet, that has a valve control and outlet above ground and a connection to the water supply system below ground.

b. Definitions are modified for the following:

- i. "Backflow preventer" means any generic backflow prevention method, device, or assembly.
- ii. "Backflow preventer with an intermediate atmospheric vent" means a ~~type of~~ cross connection control device ~~which consists of~~ having 2 independently acting operating check valves internally separated by an intermediate chamber with a means for automatically venting it to the atmosphere. This can be installed in the horizontal, vertical up, or vertical down orientations. The check valves are force-loaded to a normally closed position and separated by an intermediate chamber with a means for automatically venting to atmosphere where the venting means is internally force loaded to the venting means is force loaded to a normally open position. The terms "backflow preventer" or "dual check valve type with atmospheric port backflow preventer" has the same meaning as backflow preventer with intermediate atmospheric vent.

- iii. "Branch tailpiece" means a fitting or combination of fittings consisting of a combination tail piece and a wye.
- iv. "Building drain" means horizontal piping within or under the fully enclosed portion of a building, installed below the lowest fixture or the lowest floor level from which fixtures can drain by gravity to the building sewer.
- v. "Building sewer" means that part of the drain system not within or under the fully enclosed portion of a building which conveys its discharge to a public sewer, private interceptor main sewer, private onsite wastewater treatment system, or other point of discharge or dispersal.
- vi. "Cross connection control assembly" means a ~~testable backflow preventer consisting of an arrangement of components~~ mechanical backflow preventer used to prevent backflow into a water supply system that requires shut-off valves and a test cock or test cocks to meet any specific standard, such as a reduced pressure principle backflow preventer, a double check backflow preventer, a pressure vacuum breaker, or a spill resistant vacuum breaker.
- vii. "Cross connection control device" means ~~any mechanical device which automatically prevents backflow from a contaminated source into a potable water supply system~~ a mechanical backflow preventer used to prevent backflow into a water supply system that does not require a shut-off valve or test cock to meet any specific standard, such as an atmospheric type vacuum breaker, a hose connection vacuum breaker, or a backflow preventer with an atmospheric vent.
- viii. "Double check backflow prevention assembly" means a ~~type of cross connection control assembly which is composed~~ consisting of 2 independently acting check valves, internally force-loaded to a normally closed position, 2 tightly closing shut-off valves that are properly located at each end of the assembly and fitted with test cocks. The term "double check valve backflow preventer" has the same meaning as double check backflow prevention assembly, and test cocks that are properly located.
- ix. "Freeze resistant sanitary yard hydrant with backflow protection" means a ~~type of device, serving as a hose bibb that has design features that minimize the risk of freezing, prevent groundwater contamination and provide backflow protection.~~ The term "freeze resistant sanitary yard hydrant with backflow protection" has the same meaning as freeze resistant sanitary yard hydrant typically installed with a portion below ground surface, to supply potable water without danger of damage to the device due to freezing, and to provide protection of the potable water supply and groundwater from contamination due to back-siphonage or back-pressure.
- x. "Health care ~~and related~~ facility" means a hospital, nursing home, community-based residential facility, ~~county home, infirmary, inpatient mental health center, inpatient hospice, or an~~ ambulatory surgery center, adult daycare center, end stage renal facility, facility for the developmentally disabled, institute for mental disease, urgent care center, clinic or medical office, residential care center for children and youth or school of medicine, surgery or dentistry.
- xi. "Health care plumbing appliance" means a plumbing appliance, ~~the function of which is unique to health care activities~~ used in health care and related facilities, the function of which involves a potential for exposure to infectious wastes. Examples of health care plumbing appliances include autoclaves, dialysis units, endoscope reprocessors, sterilizers, surgical suction systems, therapeutic tubs, and washer or disinfectant units. Examples of appliances or fixtures that are not regarded as health care plumbing appliances are auto-analyzers, bathtubs, high-purity water systems, and wheelchair washers.
- xii. "~~Pipe applied atmospheric~~ "Atmospheric type vacuum breaker" means a type of cross connection control device where the flow of water into the device causes a float to close

an air inlet port and when the flow of water stops the float falls and forms a check valve against back siphonage and at the same time opens the air inlet port to allow air to enter and satisfy the vacuum.

- xiii. ~~“Pressure vacuum breaker assembly” means a type of cross connection control assembly which consists of an independently operating internally loaded check valve and an independently operating loaded air inlet located on the discharge side of the check valve, a tightly closing shut-off valve located at each end of the assembly, and test cocks. The term “pressure vacuum breaker” has the same meaning as pressure vacuum breaker assembly.~~ an independently acting check valve force-loaded to the closed position, and an independently acting air inlet valve located downstream of the check valve that is force-loaded to the open position. The assembly also includes two tightly closing shutoffs, one at the inlet of the assembly and one at the outlet of the assembly, and two tightly closing test cocks, one immediately upstream, and one immediately downstream of the check valve.
- xiv. ~~“Reduced pressure principle backflow preventer” means a type of cross connection control assembly which contains~~ consisting of 2 independently acting independently-acting check valves, internally force loaded to a normally closed position and separated by an intermediate chamber or zone in which there is a hydraulically operated relief means for venting to atmosphere, and includes internally force loaded to a normally open position. These assemblies are designed to operate under continuous pressure conditions. The assembly shall include 2 properly located, tightly closing shut-off valves and 4 properly located test cocks.
- xv. ~~“Spill resistant vacuum breaker” means a cross connection control device assembly consisting of one check valve force loaded closed, and an air inlet force loaded open to atmosphere located downstream of the check valve, 2 shutoff~~ The assembly also includes 2 tightly closing shut-off valves and 2 test cocks or a no. 1 test cock and a bleed valve.
- xvi. ~~“Water distribution system” means that portion of a water supply system from the outlet of the building control valve to the connection of a fixture supply connector, plumbing fixture, plumbing appliance, water-using equipment, or other piping systems to be served.~~
- xvii. ~~“Water service” means that portion of a water supply system from the water main or private water supply up to and including the building control valve.~~

c. Definitions are removed for the following:

- i. “Manufactured dwelling”

## 2. 381.01 – Definitions

a. Definitions are created for the following terms:

- i. “Adult day care center” or “ADCC”
- ii. “Air admittance valve” or “AAV”
- iii. “Barometric loop”
- iv. “Bidet sprayer”
- v. “Campground or recreational vehicle park drain system, sanitary”
- vi. “Campground or recreational vehicle park drain system, storm”
- vii. “Campground or recreational vehicle park water supply system”
- viii. “Camping trailer”
- ix. “Cross connection control method”
- x. “Dishwasher, commercial-type” or “dishwashing machine, commercial-type”
- xi. “Dishwasher, residential-type” or “Dishwashing machine, residential-type”
- xii. “Disinfection”

- xiii. "Health care related facility"
- xiv. "Imminent health hazard"
- xv. "Lavatory"
- xvi. "Manufactured home community drain system, sanitary"
- xvii. "Manufactured home community drain system, storm"
- xxiii. "Manufactured home community water supply system"
- xix. "Medical or high purity water"
- xx. "Process piping"
- xxi. "Public lavatory"
- xxii. "Push-fit fitting"
- xxiii. "Siphonic roof drain system"
- xxiv. "Special wastewater"
- xxv. "Thermal disinfection"
- xxvi. "Trap seal primer, drainage and electric types"
- xxvii. "Vector control"
- xxviii. "Water operator-in-charge"
- xxix. "Yard hydrant"

b. Definitions are modified for the following:

- i. "Backflow preventer"
- ii. "Backflow preventer with an intermediate atmospheric vent"
- iii. "Branch tailpiece"
- iv. "Building drain"
- v. "Building sewer"
- vi. "Cross connection control assembly"
- vii. "Cross connection control device"
- viii. "Double check backflow prevention assembly"
- ix. "Freeze resistant sanitary yard hydrant with backflow protection"
- x. "Health care ~~and related~~ facility"
- xi. "Health care plumbing appliance"
- xii. ~~Pipe applied atmospheric~~ "Atmospheric type vacuum breaker"
- xiii. "Pressure vacuum breaker assembly"
- xiv. "Reduced pressure principle backflow preventer"
- xv. "Spill resistant vacuum breaker"
- xvi. "Water distribution system"
- xvii. "Water service"

c. Definitions are removed for the following:

- i. "Manufactured dwelling"

- 3. 381.20 (3) – Adoption of Standards section is updated to clarify that the standards in Tables 381.20-1 to 381.20-13 are incorporated by reference into all of chs. SPS 381 to 387 and not just ch. SPS 381.
- 4. 381.20 Tables – Standards incorporated by reference are updated, clarified, and expanded.

## Chapter SPS 382

- 1. 382.10 (2) (b) – "Camping units" are excluded from minimum plumbing fixture requirements for dwellings connected to a POWTS or public sewer.

2. 382.20 (1) – A definition for “direct plumbing fixture replacement” is created in 382.20 (1) (am) for use in subsection 382.20 (1) and reference to “direct replacements” in 382.20 (1) (b) 1. is updated to “direct plumbing fixture replacements”.
3. 382.20 (1) (am) - In this subsection “direct plumbing fixture replacement” means a fixture installed in the place of equipment previously approved by the Department that does not increase the fixture load requirements and does not require alteration or modification of piping configuration.
4. 382.20 (1) (c) – Requirements for registration of cross connection control assemblies are modified to remove “reduced pressure fire protection principle backflow preventer” and “reduced pressure detector fire protection” from the list of assemblies that must be registered, and updates “backflow prevention assembly” to “double check backflow prevention assembly.”
5. Table 382.20-1
  - a. Installations requiring submittal to the department for review are updated to add the following:
    - i. All plumbing, new installations, additions and alterations, regardless of the number of plumbing fixtures involved, serving renal dialysis centers, community-based residential facilities (CBRF), and inpatient hospice. (Agent municipalities may perform this review when so authorized by the department.)
    - ii. Potable water storage systems.
    - iii. Potable water treatment by use of injection of a solution into the water supply system. (Excludes one and two family dwellings.)
    - iv. Medical or high purity water.
    - v. Mixed wastewater holding device. (Agent municipalities may perform this review when so authorized by the department.)
    - vi. Multipurpose piping systems (MPP) (Excludes one and two family dwellings.)
  - b. Installations requiring submittal to the department for review are modified as follows:
    - i. Submittals for plumbing, new installations, additions and alterations, regardless of the number of plumbing fixtures involved, serving hospitals, nursing homes, and ambulatory surgery centers at 1. add the following footnote: “Agent municipalities may perform this review when so authorized by the department.”
    - ii. “reduced pressure fire protection principle backflow preventers” at 5. are updated to “double check backflow prevention assemblies.”
    - iii. “reduced pressure detector fire protection backflow prevention assemblies” are removed from the list of installations requiring submittal at 5.
    - iv. “health care and related facilities” at 5. is updated to “health care facilities”
    - v. “Stormwater and clearwater infiltration plumbing systems serving a public building or facility” at 6. is updated to “Stormwater and clearwater detention, treatment, and infiltration plumbing systems serving a public building or facility.”
    - vi. “Treatment systems, other than POWTS, designed to treat water for compliance with Table 382.70–1.c” at 7. is updated to “Onsite residential and commercial water reuse treatment systems designed to treat water for compliance with Table 382.70–1.”
6. 382.20 (2) (d) – A new par. is created stating “An agent municipality appointment shall be renewed every five years.”
7. 382.20 (4) Plans and specifications
  - a. 382.20 (4) (a) is updated to require only one complete set of plans to be submitted instead of the previous requirement of 2 sets of plans.



- b. Requirements related to plans proposing the installation, creation or extension of a sanitary private interceptor main sewer which is to discharge to a municipal treatment facility at 382.20 (4) (b) 2. are removed.
  - c. Requirements related to plans proposing the installation of a building sewer for new construction which is to discharge to a municipal treatment facility at 382.20 (4) (b) 3. and 4. are removed.
8. 382.20 (13) (e) – Requirements that upon permanent removal or replacement of a device listed under this section the owner shall notify the department are modified as follows:
- a. “reduced pressure fire protection principle backflow preventers” are updated to “double check backflow prevention assemblies.”
  - b. “reduced pressure detector fire protection backflow prevention assemblies” are removed from the list.
9. 382.20 (13) (f) – A requirement is added that “Test equipment shall be tested and calibrated according to ASSE/IAPMO/ANSI SERIES 5000 standard.”
10. 382.21 (1) – The section is modified to clarify that all new plumbing and all parts of existing systems which have been altered, extended, or repaired shall be both tested and inspected. The previous code only stated that they shall be tested.
11. 382.22 (7) - The section is modified to require that if a dead end is created in the removal of any part of a drain system, all openings in the drain system shall be properly sealed in accordance with s. SPS 384.40. The previous code required proper sealing, but did not identify s. SPS 384.40 as the standard for proper sealing.
12. Table 382.22-1 – The table is updated as follows:

**Table 382.22-1**  
**Testing ~~And~~ and Submitting Requirements ~~For~~ for Cross Connection Control Assemblies**

ASSE Standard Name and Number	CAN/CSA Standard Name and Number	ASSE Test Standard Number and Test Required	Test Results to be Submitted to Department
<u>Double Check Backflow Prevention Assemblies ASSE 1015</u>	<u>Double Check Valve Backflow Preventers CAN/CSA B64.5</u>	5015	<u>Yes</u>
<del>Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies ASSE 1015</del>	<del>Double Check Valve Backflow Preventers CAN/CSA B64.5 and Double Check Valve Backflow Preventers for Fire Protection Systems CAN/CSA-B64.5.1</del>	5015	No
Double Check Detector Fire Protection Backflow Prevention Assemblies ASSE 1048		5048	No
Pressure Vacuum Breaker Assembly ASSE 1020	Pressure Vacuum Breakers CAN/CSA-B64.1.2	5020	Yes
<u>Reduced Pressure Principle Backflow Preventers ASSE 1013</u>	<u>Reduced Pressure Principle Backflow Preventers CAN/CSA B64.4</u>	5013	Yes
<del>Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Principle Backflow Preventers ASSE 1013</del>	<del>Reduced Pressure Principle Backflow Preventers CAN/CSA B64.4 and Reduced Pressure Principle Backflow Preventers <del>For</del></del>	5013	<del>Yes</del> <u>No</u>

	for Fire Protection Systems CAN/CSA-B64.4.1		
Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies ASSE 1047		5047	<del>Yes</del> <u>No</u>
Spill Resistant Vacuum Breaker <u>Assemblies</u> ASSE 1056	Spill Resistant Vacuum Breakers CAN/CSA B64.1.3	5056	Yes

13. 382.30 (4) (a) 1. - Requirements establishing limits on total drainage load are expanded to allow that the total drainage load “may be less than the limits specified in Tables 382.30-2 and 382.30-3 based on approved alternate standard consistent with s. SPS 381.20 (2) or an analysis provided by a Wisconsin registered architect, registered professional engineer, or permitted designer of engineering systems – plumbing.”
14. 382.30 (4) (a) 2. – Requirements for assigning drainage fixture unit values assigned to a receptor specific to indirect waste from a domestic water heater and sizing of drain piping are removed and replaced with a provision that drainage fixture unit values assigned to a receptor “may be less than the limits specified in Tables 382.30-2 and 382.30-3 based on approved alternate standard consistent with s. SPS 381.20 (2) or an analysis provided by a Wisconsin registered architect, registered professional engineer, or permitted designer of engineering systems – plumbing.”
15. Table 382.30-1 – The table is updated to be consistent with updated definitions, “Self Service Laundry” is removed from the table, and values for “Elevator Threshold Drains” are added.
16. 382.30 (10) (a) 2. – The section is updated to clarify that when determining the minimum capacity of a sump “capacity shall be based on one pump only.”
17. 382.30 (10) (c) – Requirements are added that “Macerating toilet systems and waste pumping systems for plumbing fixtures shall conform to ASME A112.3.4-2018/CSA B45.9-18.” Additionally, requirements are clarified to state that the factors to be used for determining the minimum capacity of a pump and sump system listed in 382.30 (1) (a) c. 1. to 3. are to be used only if the minimum capacity is unspecified by the manufacturer.
18. 382.30 (10) (d) – A requirement that exterior sumps comply with s. SPS 384.25 is added.
19. 382.30 (11) (c) 2. e. – The description of which public facilities are exempt from frost protection requirements under the section are clarified by changing “summer use” to specifically identify those public facilities “that are not open during the period from November 15 to March 15 and which are not places of employment.”
20. 382.30 (12) (f) 3. – A requirement that in addition to existing options private interceptor main sewer may pass through or under a building to serve another building if “An easement and agreement for maintenance and repairs shall be recorded with the register of deeds no later than 90 days after installation.”
21. 382.30 (13) (c) – An exception to the existing prohibition on exposed drain piping over pools, surge tanks, or open filters for a pool is added when “a trough is installed below exposed drain piping to divert the flow of seepage to a discharge point consistent with Table 382.38-1.”
22. 382.30 (14) – A new subsection is created establishing requirements for the design and installation of vacuum waste collection systems.

23. 382.31 (11) (a) – Venting requirements for vertical drains are reorganized for clarity and updated to add appliances with pump discharge, food waste grinders, and clothes washers to the list of items that may not be connected to a common vent by means of a double sanitary tee fitting.
24. 382.31 (16) (d) – Location requirements for vent terminals are updated to modify and relocate a prohibition on vents terminating under the overhang of a building to allow vents terminating below an overhang provided the vent is located at least 5 feet below any overhang.
25. 382.31 (16) (e) – A requirement is added to existing requirements for vents terminating through an exterior wall that the vent shall terminate beyond the soffit.
26. 382.31 (17) (d) – A new paragraph is created establishing requirements for elevator threshold drain vent stacks.
27. 382.31 (17m) – A new subsection is created establishing requirements for Air Admittance Valves.
28. 382.32 (3) (c) 2. – ASSE 1044 is added as an alternative standard for Trap Seal Primer Valves.
29. 382.32 (3) (c) 3. – A new subdivision is created establishing a requirement that Barrier Type Trap Seal Protectors for floor drains conform to ASSE 1072.
30. 382.32 (3) (e) – A new exception to minimum trap diameters is added for non-public residential-type bathtubs under certain conditions.
31. 382.32 (4) (b) 1. c. – The existing vertical distance requirement between water level and drain for floor outlet water closets is extended to Floor outlet clinic sinks.
32. 382.32 (4) (b) 1. e. – A new provision is added requiring that “The vertical distance of a floor outlet fixture between the top of the fixture drain outlet and the horizontal center line of the trap outlet may not exceed 18 inches.”
33. 382.32 (5) (b) – The section is updated to provide that “Horizontal drain piping serving a kitchen sink trap shall not connect to vertical drain piping by means of a double sanitary tee where an appliance with pump discharge or a food waste grinder are installed.”
34. 382.35 (5) (c) 2. – An exception allowing that “A 4 × 3 inch closet bend fitting may be installed where a 4 inch closet collar fitting is used.” is removed.
35. Table 382.33-1 – “Ice makers” and “Other devices, fixtures, and appliances as approved by the department” are added to Table 382.33-1 “Types of Fixtures, Appliances and Devices of a Public Health Concern.”
36. 382.33 (8) (d) 6. – The exception to the general rule that plumbing fixtures may not be used as a receptor for indirect or local waste piping for indirect or local waste piping serving a water heater temperature and pressure relief valve or water treatment device is modified to restrict the exception to apply only to one- or two-family dwellings.
37. 382.33(8) (d) 7. – The section is updated to allow the indirect waste piping serving a dental mold grinder to discharge to a tailpiece in lieu of a riser of a sink. In addition, the sink no longer is specified as a laboratory sink.

38. 382.33 (8) (d) 8. and 9. – Water closets, clinic sinks, or urinals receiving the discharge from a mortuary or autopsy table and water closets or lavatories receiving discharge from a dialysis machine when certain conditions are met are added to the list of exceptions to the general rule that plumbing fixtures may not be used as a receptor for indirect or local waste piping.
39. 382.33 (9) (bm) – A new paragraph is created containing indirect waste piping requirements for clothes dryers.
40. 382.33 (9) (fm) – A new paragraph is created containing indirect waste piping requirements for elevator threshold drains.
41. 382.33 (9) (g) 1. – Provisions relating to bar and soda fountain sinks are clarified to make it clear that the provisions apply regardless of whether a bar sink is installed for hand washing or other use, a provision requiring that for the section to apply the trap for the sink cannot be vented as specified in s. SPS 382.31 is removed, and the use of indirect waste piping is made optional rather than mandatory.
42. 382.33 (9) (k) 3. – Language is added allowing an air-break to be used to direct the discharge from deck drains serving outdoor pools to the storm sewer, and establishing installation requirements if an air-break is used.
43. 382.34 (3) (e) – Language is added requiring that grease interceptors be maintained on a cycle not to exceed 90 days or per manufacturer's instructions.
44. 382.34 (3) (g) 4. – A requirement that an exterior subsurface treatment tank holding component, or reservoir to be installed in an area subject to saturated conditions, shall be installed to effectively prevent flotation of the tank or component is created.
45. 382.34 (4) (b) 1. – A requirement is added that sediment baskets in floor drains serving garages in one- and two-family dwellings must be removeable.
46. 382.34 (4) (c) – Material requirements for catch basin, floor drain, and trench drain grates are removed.
47. 382.34 (5) (b) 2. – Requirements that grease interceptors mandated by the section be “exterior” grease interceptors is removed. A requirement that the mandated grease interceptors be of sufficient capacity to ensure compliance with s. SPS 383.44 (2) is added.
48. 382.34 (5) (c) – Requirements are clarified to make clear that only “greasy” waste discharge from kitchens or food processing areas must be received by an exterior grease interceptor.
49. 382.34 (5) (c) 1. g. – A new requirement is added to existing language requiring that any new or replacement exterior grease interceptor have at least two compartments.
50. 382.34 (5) (d) 8. – A new section is created providing a formula that may be used for calculating greasy waste from a wok.
51. 382.34 (15) (g) – A new section is created requiring a vacuum relief valve in each water treatment appliance and establishes installation requirements.

52. 382.34 (15) (h) – A new section is created requiring that containment tank outlets connected to a drain system include a means to contain the wastewater from entering the drain system until proven to be safe for discharge.
53. 382.35 (3) (a) – An exception to drain cleanout requirements is created for elevator threshold drains under the conditions in SPS 382.33 (9) (fm).
54. 382.35 (3) (f) – The 28-inch minimum height requirement for cleanouts in a drain stack is removed.
55. 382.35 (6) – An exception to the sizing requirements for cleanouts and cleanout extensions is established allowing that “the replacement or repair of a non-public 6 inch sanitary sewer may be served by an existing 4 inch extension within the building.”
56. 382.36 (3) (d) and (e) – New sections are created establishing requirements for tank access and labeling in stormwater plumbing systems.
57. 382.36 (5) (a) 3. and (b) – Language is clarified by replacing the criteria for an acceptable engineering analysis from “acceptable to the department” with “based on an analysis provided by a Wisconsin registered architect, registered professional engineer, or permitted designer of engineering systems – plumbing, or an approved alternate standard per s. SPS 381.20 (2)...”
58. 382.36 (6) (g) 4. – A new section is created requiring a design that accomplishes vector control for subsurface stormwater detention systems that have a permanent pool of water.
59. Tables 382.36-2 and -3 – Tables are updated to provide values for 2 inch pipe.
60. 382.36 (7) (d) 1. – Language is modified to allow connection of a stormwater leader discharging to a storm building sewer to be made at or above the finished grade. Prior code required connection only above the finished grade.
61. 382.36 (7) (d) 1m. – A new section is created requiring a removable strainer to protect the inlet if a stormwater leader discharging to a storm building sewer is in direct connection and at finished grade and requiring the capacity of the strainer to be in accordance with s. SPS 382.36 (9) (b).
62. 382.36 (7) (d) 11. – A new section is created requiring that “Subsoil drain connections to the storm sewer shall be installed at a point above the horizontal center line of the storm sewer in such a manner that the subsoil drain is entirely above the top of the building sewer; or be provided with a backwater valve.”
63. 382.36 (7) (e) – A new section is created requiring that hydrodynamic stormwater separators conform to ASTM F1745/F1745m.
64. 382.36 (8) (a) 4. a. – Language is modified to clarify that minimum sump sizes may not be smaller than manufacturer requirements to ensure sufficient pump run time.
65. 382.36 (8) (a) 5. – A new section is created establishing requirements for solid covered sumps.
66. 382.36 (8) (b) 3. – A new section is created prohibiting clearwater discharge into a stormwater sump, except in one- and 2-family dwellings.

67. 382.36 (10) and (11) – New sections are created establishing requirements for siphonic roof drains, controlled flow roof drains, and requirements for secondary roof drains are moved from 382.36 (11) to 382.36 (10) (d).
68. 382.36 (12) (b) 2. a. – Requirements for vents serving a solid covered sump are modified to allow additional flexibility.
69. 382.36 (13) (b) 1. a. to d. – New sections are created detailing what information related to accumulated solids or byproduct removal requirements must be included in a stormwater plumbing system operation and maintenance plan required under SPS 382.36 (13) (b).
70. 382.365 (3) (am) – A new section is created requiring all infiltration systems to comply with Wisconsin department of natural resources standards for site evaluation for stormwater infiltration and bioretention for infiltration.
71. 382.365 (3) (b) 1. – Requirements for minimum depth of suitable in situ soil for infiltration systems are moved from Table 382.365-1 to newly created 382.365 (3) (b) 1. a. and b.
72. 382.365 (3) (bm) – A new section is created establishing requirements for installation of stormwater infiltration systems where engineered soil is incorporated in lieu of in situ soil.
73. 382.365 (3) (c), Tables 365-1 to Tables 365-2 – Section and tables are removed.
74. 382.37 (2) (a) and (g) – Camping unit transfer tanks and RV transfer tanks are added to the list of sources from which waste can be received by a sanitary dump station, and language is added to clarify that the supply of water provided to wash down the drain receptor and pad must be permanent. Finally, a requirement that non-potable water supply provided to wash down the drain receptor and pad must be located at least 50 feet from a potable water supply unless a variance is approved.
75. 382.37 (3) (b) 4. to 6. – New sections are created establishing additional requirements for campground water supply systems including individual water connections to each campsite, allowing direct connection to camping unit if the fixtures comply with chs. SPS 381-387, and allowing connection to a camping unit by NSF/ANSI 51 or 61 compliant hose if each camping unit is individually protected by approved cross connection control.
76. Table 382.38-1 – Additional lines are added for elevator threshold drains, garage catch basins or oil interceptors in public buildings and facilities, and open public parking levels.
77. 382.40 (3) (b) – Sinks used for building maintenance in a public building are added to the list of applications where hot water must be supplied to all fixtures, appliances, and equipment.
78. 382.40 (3) (c) 4. – A new section is created requiring water supply systems to be protected from thermal expansion when a closed system is created.
79. 382.40 (3) (d) 4. – “Reduced pressure fire protection principle backflow preventer” and “reduced pressure detector fire protection backflow preventer” are removed from the list of devices required to display a department assigned identification number, and “double check backflow prevention assembly” is added.
80. 382.40 (3) (e) 1. – Language is added to require that materials for a multipurpose piping system be acceptable under the NFPA 13D standard and s. SPS 384.30 unless exceptions which are created in 1. a. and 1. b. apply.

81. 382.40 (3) (e) 3. to 5. – New sections are created establishing requirements for materials, providing values for multipurpose calculations, and requiring that a flow test be performed at the controlling sprinkler before the system is put into operation.
82. 382.40 (5) (a) – Language is added exempting tankless type water heaters meeting the requirements of newly created s. 382.40 (5) (am) from water heater sizing requirements.
83. 382.40 (5) (b) – New sections are created establishing requirements that all hot water circulation system connections be made downstream of the control valve serving the water heating device and that hot water circulation piping and tubing may not exceed the maximum velocity requirements specified per the manufacturer.
84. 382.40 (5) (bm) – A new section is created establishing alternate requirements for temperature maintenance systems serving public lavatories in public buildings.
85. Table 382.40-1d, Table 382.40-1h – Table 382.40-1d is created and contains information on determining the maximum allowable pipe length public lavatories can be from the hot water source. Table 382.40-1h is created and contains information on determining the maximum allowable volume of water between a hot water source and a public lavatory.
86. 382.40 (6) (c) – A new section is created establishing requirements for calculating the load factor for an individual water heater serving an individual residence, apartment, living unit of a hotel or motel, and similar places where plumbing fixtures are intended for use by an individual or family.
87. Table 384.40-2 – Values are added for “Automatic clothes washer, individual residential type.”
88. 382.40 (7) - Language is clarified by replacing the criteria for an acceptable engineering analysis from “or on a detailed engineering analysis acceptable to the department” with “an approved alternate standard per s. SPS 381.20 (2), or an analysis provided by a Wisconsin registered architect, registered professional engineer or permitted designer of engineering systems – plumbing.”
89. 382.40 (7) (d) 1. d. – A new section is created establishing flow pressure requirements for fixture supplies not otherwise specified in ss. 382.40 (7) (d) 1. a. to c.
90. 382.40 (7) (d) 4., 4. a., and (e) – Language is added clarifying that either inadequate pressure or inadequate water supply volume would require the installation of a hydropneumatics pressure booster system or a water pressure booster pump, requiring pressure gauges to be installed on the influent and effluent piping, and exempting combination sprinkler distribution piping as designated in sub. (3) (e) from the 8 foot per second maximum flow velocity required by 382.40 (7) (e).
91. 382.40 (7) (g) 4. – A new section is created establishing requirements for water distribution piping less than ½ inch diameter.
92. 382.40 (8) (b) 10. – A new section is created establishing a requirement that private water mains be provided with provisions for flushing of the system at a minimum of 10 feet per second until clear.
93. 382.40 (8) (d) 3. b. – Language is added establishing requirements that water distribution piping serving as a meter bypass shall be of the same material and shall be equal to or one nominal pipe size smaller than the water distribution piping immediately downstream of the meter.

94. 382.40 (8) (d) 7. to 10. – New sections are created establishing the following requirements for water distribution piping:
- a. When water distribution piping larger than the code minimum is used the system shall be designed to allow effective flushing of the system at 8 feet per second.
  - b. Hygienic sampling valves shall be installed within 6 feet, upstream and downstream, of a chemical injection system or water treatment device installed to mitigate a contaminant regulated under chs. NR 809 or NR 140.
  - c. A water treatment device that consists of 2 or more treatment tanks shall also have a hygienic sampling valve between each treatment tank.
  - d. Any portion of the water distribution system terminating by means of a plug, cap, or closed fitting and dry downstream with no outlet may not exceed 6 pipe diameters.
95. 382.40 (8) (i) 1. a. – Language relating to flushing water systems before they are put into use is modified to add a requirement that the system be disinfected, to add a requirement that the system must be flushed at each water outlet until no trace of disinfectant is detected, and to remove a provision requiring the system to be filled and allowed to stand for 24 hours.
96. 382.49 (8) (jm) – New sections are created establishing requirements for water tanks for public, potable use.
97. Tables 382.40-8 -9 – Table titles are updated to reflect updated technical standards.
98. Tables 382-12 to -15 – New tables are created containing information on allowable loads for certain PVC and CPVC piping.
99. 382.41 (3) (b) 5. b. – “Obtaining water quality samples of the water supply system or any portion thereof; or” is removed from the list of installation purposes for which A cross connection is not considered to exist at the hose threaded outlet.
100. 382.41 (3) (b) 5. bm. – “Connecting individual portable dialysis machines when enclosed in a lockable box.” is added to the list of installation purposes for which a cross connection is not considered to exist at the hose threaded outlet.
101. 382.41 (3) (b) 5. c. – Language is added to include clothes dryers to the list of installation purposes for which a cross connection is not considered to exist at the hose threaded outlet.
102. 382.41 (3) (b) 6. b. – The following language is removed from the section:

“Except as provided in subd. 7., a low hazard situation shall be considered to exist for the connection of a piping system, including but not limited to automatic fire sprinkler systems, standpipe systems, and processing purposes, which provides potable water for nonrequired potable water uses.”

The following language is added to the section:

“Cross connection control devices used in conjunction with automatic fire sprinkler systems shall be listed by an acceptable testing agency for such an application under the standards governing the design and installation of automatic fire sprinkler systems.”



103. 382.41 (3) (d) 2. – A new section is created prohibiting bypassing a cross connection control method, device, or assembly without a cross connection control method, device, or assembly of at least equal protection.
104. Tables 382.41-1 and -2 – Table 382.41-1 is updated to a new version, and table 382.41-2 is removed.
105. 382.41 (4) (g) 2. – A provision allowing “A double check backflow prevention assembly and a double check detector assembly backflow preventer which serve a water-based fire protection system may have a test outlet located between the number 2 check valve and the number 2 listed indicating control valve.” is removed.
106. 382.41 (4) (k) 2. – A requirement that “A pressure vacuum breaker assembly shall be located only outside.” is removed.
107. 382.41 (4) (o) – New sections are created establishing backflow protection requirements for water-fed trap seal primers.
108. 382.41 (5) (d) 1m. – An exception allowing that “A cross connection control device or cross connection control assembly that does not incorporate a vent port may be installed in an uninhabited location susceptible to flooding.” is added.
109. 382.41 (5) (e) 3. a. – “Pressure vacuum breaker” is added to the list of devices that must be provided with a drain or receptor if located within a building.
110. 382.41 (5) (f) – “Reduced pressure detector backflow preventer” and “double check detector assembly backflow preventer” are removed from the list of devices that must conform to the requirements in 382.41 (5) (f) 1. to 5.. “Double check fire protection backflow prevention assembly” and “double check detector fire protection backflow prevention assembly” are added to the list of devices that must conform to the requirements in 382.41 (5) (f) 1. to 5..
111. 382.50 (2) (b) – An exception to the requirement that selection of spouts and actions on plumbing fixtures comply with s. 382.50 (2) (b) and Table 382.50-1 is created for psychiatric-care facilities in areas where patient safety is at risk with standard gooseneck spouts and actions.
112. 382.50 (2) (b) 1. b. – A requirement that spouts have laminar flow in facilities listed in s. 382.50 (3) (b) is added.
113. 382. 50 (2) (b) 2. – Application of the section is expanded from “all lavatories used by patients and food handlers” to “all fixtures used by ... patients, residents, and food handlers....” Additional requirements are added that “single lever faucet handles may be used in lieu of wrist blades,” and “in lavatories with self-closing faucets accessible to patients, the flow of the hot water shall be calculated to evacuate the water distribution piping from the faucet to the recirculated hot water supply.”
114. 382.50 (3) (a) 2. – An exception for additional services supplying water to additions deemed non-essential as defined in a hospital water management plan is added to the requirement that each water service connection to a hospital shall adequately serve the total building water supply demand as specified in s. SPS 382.40 (7).
115. 382.50 (3) (ag) – A new section is created establishing requirements that in health care facilities hot and cold water shall be provided to all sinks accessible to patients, that hot water shall be initiated and stored

at a minimum of 140°F, and that the maximum temperature to fixture fitting outlets accessible to patients may not exceed 115°F.

116. 382.50 (3) (b) 4. – The section changes the uncirculated hot water distribution piping from 25 feet to 3 feet in development length. The uncirculated hot water distribution piping development length of 3 feet does not apply when using a thermal disinfection system under subdpar. 6. a.
117. 382.50 (3) (b) 4m. – A new section is created establishing a requirement that in a water supply system serving a hospital, community-based residential facility, inpatient hospice or nursing home control valves shall automatically regulate the temperature of the water supply of the distribution system that exceeds 140°F to each fixture accessible to patients.
118. 382.50 (3) (b) 5. – Language is added to require pressure balanced and thermostatically controlled control valves to meet the requirements of the section.
119. 382.50 (3) (b) 6. – Language is added to prohibit the inclusion of a heat recovery system in hot water distribution systems in a water supply system serving a hospital, community-based residential facility, inpatient hospice or nursing home. Language is modified from “bacterial control” to “disinfection.”
120. 382.50 (3) (b) 6. b. and be. to bs. – “Water chlorinated at 2 mg/L residual.” is removed from the list of methods that may be used to meet the disinfection requirements in 382.50 (3) (b) 6.. “.5 mg/L residual chlorine”, “Chloramine”, “Chlorine dioxide”, and “Another disinfection system method approved by the department or using disinfectant provided by the municipality with an approved minimum residual disinfectant concentration at all points and individual site approval by the department” are added to the list of methods that may be used to meet the disinfection requirements in 382.50 (3) (b) 6..
121. 382.50 (3) (b) – New sections are created establishing the following requirements for a water supply system serving a hospital, community-based residential facility, inpatient hospice or nursing home:
  - a. The use of limit stops in faucets or shower or tub mixing valves to achieve a maximum temperature of 115°F is prohibited,
  - b. Water outlets accessible to patients shall have laminar flow,
  - c. Any portion of the water distribution system terminating by means of a plug, cap, or closed fitting and dry downstream with no outlet within the water distribution system may not exceed 6 pipe diameters,
  - d. Where a dialysis box is installed in a patient room or a patient toilet room, all of the following shall apply:
    - i. The dialysis box shall be lockable.
    - ii. Hose threads located within a lockable dialysis box used exclusively for the connection of portable dialysis equipment do not require a cross connection control device.
    - iii. A receptor located within a dialysis box shall be sealed when not in use.
  - e. Hot water distribution piping shall be labeled with the disinfection method used. Labeling shall be within the water heater mechanical room on the hot water distribution piping at the point of injection, within 5 feet of the injection point, and every 25 feet thereafter within the mechanical room. The interior of all doors serving the mechanical room shall be labeled with the disinfection method. All label lettering shall be at least ½ inch height in clearly readable letters.
  - f. Facilities with a population exceeding 250 occupants shall have a water management plan. The management plan shall include all of the following:
    - i. An emergency water contingency plan program on the loss or contamination of the water supply.
    - ii. A pathogen control plan.
    - iii. The emergency and routine disinfection procedures.

- iv. The identity of the individual responsible for the water quality.
- v. The provisions for the periodic flushing of the water supply system.
- vi. Balancing valve report for the hot water distribution system.
- g. Expansion tanks installed in the hot water distribution system shall be of the flow-through type.
- h. A water distribution system serving an adult day care center may not be designed, installed, or maintained so that the maximum water temperature to fixture fitting outlets accessible to participants exceeds 115°F.

122. Table 381.50-1 – The table is updated to add values for four categories of common areas.

123. 382.51 (2) (e) – A new section is created establishing a requirement that the entire water supply system shall be designed for periodic flushing at a minimum velocity of 3 feet per second per ANSI/AWWA Standard C651, Table 3.

124. 382.60 (2) (a) – An exception to the requirement that piping hangers and anchors may not be at intervals greater than those specified in Table 382.60 allowing that “PVC used for venting may have a maximum horizontal spacing of 5 feet.”

125. 382.70 (5) – New sections are created establishing requirements for nonpotable water treatment devices and systems.

## **Chapter SPS 383**

1. 383.71 – Department responsibilities related to POWTS are modified.

## **Chapter SPS 383**

1. Table 384.10 – Line 3 is expanded from “Health care plumbing appliances” to “Health care plumbing and laboratory appliances.”
2. 384.11 – Language is replaced, establishing that “Appurtenances, devices, fixtures, materials and methods shall conform to the referenced standard in Table 384.11. Appurtenances, devices, fixtures, materials, and methods shall be listed by a nationally recognized, ANSI accredited, third party agency acceptable to the department. Appurtenances, devices, fixtures, materials, and methods that do not conform to the listed standards may achieve code compliance via Alternate or Experimental approvals in accordance with s. SPS 384.50.”
3. Table 384.11 – The table is replaced and multiple additional categories of appurtenances, devices and fixtures are added.
4. 384.20 (5) (a) to (c), (e), and (h) – Language is added to allow an approved cross connection method outlined in Table 382.41-1 for residential type clothes washers, residential type dishwashing machines, and residential type food waste grinders. Standards for enameled cast iron bathtubs, porcelain enameled formed steel bathtubs, plastic bathtubs, and vitreous and non-vitreous china bidets are updated.
5. 384.20 (5) (p) – Requirements for water heaters are comprehensively revised.
6. Table 384.20-1m – A new table is created containing reference standards for a number of water heating applications.
7. 384.20 (6) (c) – Requirements for fixture supply connectors are comprehensively revised.

8. 384.20 (6) (d) – The section is updated to reflect that “Hand-held showers, faucets, and fixture fittings with integral backflow protection hose connection outlets shall conform to ASME A112.18.1/CSA B125.1 or shall have an ASME A112.18.3 backflow prevention device.”
9. 384.30 (1) – The section is updated to reflect that “When designing a plumbing system, due consideration shall be given to sizing, working pressure, temperature and material, compatibility of a plumbing system with the water and wastewater to be conveyed, and the environment in which the plumbing system is to be installed.”
10. Table 384.30-1 to -5 – The tables are updated to add additional materials and update the required standards for most categories.
11. 384.30 (3) (e) 3. – Language is updated to change the minimum roof drain outlet size from 2.5 inches to 2 inches in diameter.
12. Table 384.30-6 – The table is updated to add additional materials and update the required standards for most categories.
13. 384.30 (4) (a) – Language is added creating a new requirement that “Potable water storage tanks shall conform to s. NR 812.33.”
14. Table 384.30-7 and -8 - The tables are updated to add additional materials and update the required standards for most categories.
15. 384.30 (6) (b) – A new sections is added establishing a requirement that plastic tubular traps, continuous wastes, and trap adapters shall comply with s. SPS 384.40 (1) (a). Standards for solvent cemented joints are updated to add ASTM F3328-18.
16. 384.30 (14) (b) – Standards for solvent cemented joints are updated to add ASTM F3328-18.
17. 384.40 (16) – Requirements for joints between pipe and fittings of different materials are update to “JOINTS BETWEEN PIPE AND FITTINGS OF DIFFERENT MATERIALS. Dielectric unions shall be installed at the point of connection of dissimilar metal piping materials. Dielectric unions shall conform to ASSE 1079.”