



**VIRTUAL/TELECONFERENCE
PLUMBING CODE ADVISORY COMMITTEE MEETING
Virtual, 4822 Madison Yards Way, Madison
Contact: Christine Poleski (608) 266-2112
March 23, 2021**

The following agenda describes the issues that the Committee plans to consider at the meeting. At the time of the meeting, items may be removed from the agenda. Please consult the meeting minutes for a record of the actions of the Committee.

AGENDA

10:00 A.M.

OPEN SESSION – CALL TO ORDER – ROLL CALL

- A. Adoption of Agenda (1)**
- B. Approval of Minutes for February 24, 2021 (2-3)**
- C. Administrative Matters – Discussion and Consideration**
 - 1) Committee, Department and Staff Updates
- D. Administrative Rule Matters – Discussion and Consideration**
 - 1) Review of Plumbing Code Changes **(4-22)**
 - a. SPS 381 – Definitions and Standards
 - b. SPS 382 – Design, Construction, Installation, Supervision, Maintenance, and Inspection of Plumbing
 - c. SPS 384 – Plumbing Products
- E. Public Comments**

ADJOURNMENT

NEXT MEETING: APRIL 22, 2021

MEETINGS AND HEARINGS ARE OPEN TO THE PUBLIC, AND MAY BE CANCELLED WITHOUT NOTICE.

Times listed for meeting items are approximate and depend on the length of discussion and voting. All meetings are held at 4822 Madison Yards Way, Madison, Wisconsin, unless otherwise noted. In order to confirm a meeting or to request a complete copy of the board's agenda, please call the listed contact person. The board may also consider materials or items filed after the transmission of this notice. Times listed for the commencement of disciplinary hearings may be changed by the examiner for the convenience of the parties. Requests for interpreters for the deaf or hard of hearing, or other accommodations, are considered upon request by contacting the Affirmative Action Officer, 608-266-2112, or the Meeting Staff at 608-266-5439.

**VIRTUAL/TELECONFERENCE
PLUMBING CODE ADVISORY COMMITTEE
MEETING MINUTES
FEBRUARY 24, 2021**

PRESENT: Fred Gardner (*arrived at 10:03 a.m.*), Joseph Kiedrowski, Justin Kressin, Randy Lorge, Roger Musolff, Jason Sladky (*excused at 1:59 p.m.*), Spencer Statz

STAFF: Christine Poleski, Executive Director; Jameson Whitney, Legal Counsel; Garry Krause, Bureau Director; Tony Martin, Plumbing Plan Reviewer; Glen Schlueter, Plumbing Product Reviewer; Bruce Meiners, Plumbing Consultant; Philip Harkleroad, Section Chief; Ron Soquet, Plumbing Plan Reviewer; Megan Glaeser, Bureau Assistant; and other Department staff

Jason Sladky, Chairperson, called the meeting to order at 10:00 a.m. A majority of six (6) members was present.

ADOPTION OF AGENDA

MOTION: Joseph Kiedrowski moved, seconded by Roger Musolff, to adopt the Agenda as published. Motion carried unanimously.

APPROVAL OF MINUTES

MOTION: Roger Musolff moved, seconded by Justin Kressin, to approve the Minutes of January 21, 2021 as published. Motion carried unanimously.

(*Fred Gardner arrived at 10:03 a.m.*)

ADMINISTRATIVE RULE MATTERS

Review of Draft Updates to Plumbing Code SPS 381-387 and SPS 302, 305, 325, 361-366

MOTION: Joseph Kiedrowski moved, seconded by Roger Musolff, to recommend approval of 1-42 in SPS 305 Licenses, Certifications and Registrations as outlined in the 2/24/2021 20210224PCACAdditionalMaterials.pdf. Motion carried unanimously.

MOTION: Joseph Kiedrowski moved, seconded by Spencer Statz, to recommend approval of SPS 382 Design, Construction, Installation, Supervision, Maintenance, and Inspection of Plumbing, SPS 383 Private Onsite Wastewater Treatment Systems, SPS 384 Plumbing Products, SPS 385 Soil and Site Evaluations, and SPS 386 Boat and On-Shore Sewage Facilities as outlined in the 2/24/2021 20210224PCACAdditionalMaterials.pdf. Motion carried unanimously.

MOTION: Joe Kiedrowski moved, seconded by Fred Gardner, to table approval of Committee Member Items for Consideration, to a future meeting, as outlined in the 2/24/2021 20210224PCACAdditionalMaterials.pdf. Motion carried unanimously.

MOTION: Joe Kiedrowski moved, seconded by Fred Gardner, to recommend approval of Non-Committee Member Items for Consideration, as outlined in the 2/24/2021 20210224PCACAdditionalMaterials.pdf. Motion carried unanimously.

MOTION: Joe Kiedrowski moved, seconded by Fred Gardner, to recommend approval of Additional Items for Consideration items 13a, 14, and 15, as outlined in the 2/24/2021 20210224PCACAdditionalMaterials.pdf and to table the remainder to a future meeting. Motion carried unanimously.

(Jason Sladky was excused at 1:59 p.m.)


ADJOURNMENT

MOTION: Justin Kressin moved, seconded by Roger Musolff, to adjourn the meeting. Motion carried unanimously.

The meeting adjourned at 2:04 p.m.

**State of Wisconsin
Department of Safety & Professional Services**

AGENDA REQUEST FORM

1) Name and title of person submitting the request: Bruce Meiners		2) Date when request submitted: 03/08/2021 <small>Items will be considered late if submitted after 12:00 p.m. on the deadline date which is 8 business days before the meeting</small>	
3) Name of Board, Committee, Council, Sections: Plumbing Code Advisory Committee			
4) Meeting Date: 03/23/2021	5) Attachments: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6) How should the item be titled on the agenda page? Administrative Rule Matters 1. Review of Plumbing Code Changes under SPS 305, 381, 382, 384 2. Update on SharePoint	
7) Place Item in: <input checked="" type="checkbox"/> Open Session <input type="checkbox"/> Closed Session	8) Is an appearance before the Board being scheduled? <i>(If yes, please complete Appearance Request for Non-DSPS Staff)</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	9) Name of Case Advisor(s), if required:	
10) Describe the issue and action that should be addressed: 1. Review of Draft review table for SPS (pdf) 2. SharePoint – member questions, issues, ect.			
11) Authorization			
 Signature of person making this request		03/08/2021 Date	
Supervisor (if required)		Date	
Executive Director signature (indicates approval to add post agenda deadline item to agenda) Date			
Directions for including supporting documents: 1. This form should be attached to any documents submitted to the agenda. 2. Post Agenda Deadline items must be authorized by a Supervisor and the Policy Development Executive Director. 3. If necessary, provide original documents needing Board Chairperson signature to the Bureau Assistant prior to the start of a meeting.			

**State of Wisconsin
Department of Safety & Professional Services**

Wisconsin Department of Safety and Professional Services

March Plumbing Code Council

DRAFT

SPS 381,382 & 384 DESIGN, CONSTRUCTION, INSTALLATION, SUPERVISION, MAINTENANCE, AND INSPECTION OF PLUMBING

NO.	RULE PROVISION	ISSUE/REASON FOR CHANGE	PROPOSED BY	EXISTING LANGUAGE AND PROPOSED CHANGE	POTENTIAL IMPACT/COST	COMMENTS/STATUS
1G2.	381.01 (189)	UPDATE DEFINITION TO MATCH THE DESCRIPTION PROVIDED IN THE ASSE 1020 STANDARD.	DIS	(189) "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.		<p align="center">TONY</p> <p align="center">CONSISTENT WITH ASSE 1020 & IAPMO STDS. LANGUAGE</p>
1I.	381.01	CREATE		<p align="center"><u>"RESIDENTIAL-TYPE DISHWASHER" MEANS AN APPLIANCE THAT WITH THE AID OF WATER, AUTOMATICALLY WASHES, RINSES, AND INCLUDES A DRYING PROCESS FOR DISHWARE AND UTENSILS BY A CHEMICAL, MECHANICAL, OR ELECTRICAL MEANS AND DISCHARGES TO THE PLUMBING DRAINAGE SYSTEM.</u></p> <p align="center"><u>NOTE: A RESIDENTIAL-TYPE DISHWASHER MAY ALSO BE REFERRED TO AS A HOUSEHOLD DISHWASHER BUT IS NOT LIMITED TO THE INSTALLATION IN A ONE- OR 2-FAMILY DWELLING. THE INTENDED USE OF THE DISHWASHER DICTATES IF THE APPLIANCE IS CONSIDERED RESIDENTIAL OR COMMERCIAL.</u></p>		<p align="center">RON</p> <p align="center">NO CHANGES TO THE RECOMMENDED REVISION.</p>
5B8.1	TABLE 382.20-1, FOOTNOTE A.	REVISE NOTE, REGISTRATION IS REQUIRED FOR ASSEMBLIES, NOT DEVICES.	DIS	THE REGISTRATION OF CROSS CONNECTION CONTROL DEVICES ASSEMBLIES AS REQUIRED UNDER S. SPS 382.20 (1) (C) IS INCLUDED AS A PART OF PLAN REVIEW AND APPROVAL.		<p align="center">TONY</p> <p align="center">REVISED FOR CLARITY</p>
9A1.	382.30 (10) (A) 2. C.	REVISE	DIS	BETWEEN THE HIGHEST "PUMP ON" SWITCH LEVEL AND THE SUMP INLET, THE SUMP SHALL HOLD THE AMOUNT OF INPUT THAT EXCEEDS THE DISCHARGE OF THE PUMPING EQUIPMENT IN A 5-MINUTE PEAK INPUT PERIOD. CAPACITY SHALL BE BASED ON ONE PUMP ONLY. BUT IN NO CASE SHALL THE VERTICAL DISTANCE BETWEEN THE SWITCH AND THE INLET BE LESS THAN 3" INCHES.		<p align="center">TONY</p> <p align="center">GRAMMATICAL CORRECTION(S)</p>

9A2.	382.30 (10) (D)	REVISE, AND RENUMBER (INTRO) TO 1.	DIS	(D) <u>EXTERIOR SUMPS.</u> EXTERIOR SUMPS SHALL COMPLY WITH S. SPS 384.25. THE MINIMUM CAPACITY OF EXTERIOR SUMPS SHALL BE DETERMINED IN ACCORDANCE WITH ALL OF THE FOLLOWING: 1. PEAK INPUT FLOW IN GALLONS PER MINUTE SHALL BE DETERMINED IN ACCORDANCE WITH EITHER OF THE FOLLOWING: A. THE WATER SUPPLY FIXTURE UNIT, WSFU, METHOD OF ALL THE FIXTURES THAT DRAIN TO THE SUMP. B. THE PROVISIONS AS SPECIFIED IN S. SPS 383.43 (2) THROUGH (6). 2. IN LIEU OF PROVIDING THE DUPLEX PUMPING EQUIPMENT AS SPECIFIED IN PAR. (B) 2., A ONE-DAY HOLDING CAPACITY MAY BE PROVIDED ABOVE A HIGH-LEVEL ALARM WHEN INSTALLED ON A SIMPLEX SYSTEM.		TONY CHANGE CODE SECTION TO 384.30 AS IT RELATES TO PLUMBING PRODUCTS.
9A.	382.30 (11) (B) 3. C.	HEALTH/SAFETY ISSUE. POOL ROOMS MUST DRAIN DRY AND POOL APPROVALS ARE BEING HELD UP. DATCP NO LONGER DOING PETITIONS. (SPS 390) COVERED IN POOL CODE	DIS AMENDED BY PAC	3. 'FLOOR DRAIN REQUIRED.' A. WHERE A PLUMBING FIXTURE OR APPLIANCE IS LOCATED ON A FLOOR WHICH IS ENTIRELY BELOW GRADE, A FLOOR DRAIN SHALL BE INSTALLED TO SERVE THAT FLOOR. B. IN ANY ROOM CONTAINING THE RECESSED OR CONCEALED PORTIONS OF STERILIZERS LOCATED IN HEALTH CARE OR RELATED FACILITIES, AT LEAST ONE FLOOR DRAIN CONNECTING TO THE DRAINAGE SYSTEM SHALL BE INSTALLED IN A MANNER TO ADEQUATELY DRAIN THE ENTIRE FLOOR AREA. <u>C. IN ANY PUBLIC SWIMMING POOL TOILET OR LOCKER ROOM, FLOORS SHALL BE PITCHED AND THE FLOOR DRAINS LOCATED IN A MANNER TO PREVENT STANDING WATER.</u> [NOTE TO DPD: TWEAK WORDING AS NEEDED. SHOULD A NOTE BE INSERTED HERE TO REFER TO POOL CODE VS. DUPLICATING LANGUAGE?] DISCUSSION: PER SPS 390, POOL ROOM FLOORS NEED TO DRAIN DRY.		TONY CONSISTENCY WITH SPS 390.19(2) HOSE BIBB REQUIREMENT FOR TOILET FACILITIES SPS 390.13(9)(B)
9.						DELETED. BRUCE
16.	382.31 (16) (E)	DEPT. APPROVAL NOT REQUIRED	DIS	EXTENSION THROUGH WALL. WHERE APPROVED BY THE DEPARTMENT, A A VENT MAY TERMINATE THROUGH AN EXTERIOR WALL. SUCH A VENT SHALL TERMINATE AT LEAST 10 FEET HORIZONTALLY FROM ANY LOT LINE AND SHALL TERMINATE DOWNWARD. THE VENT SHALL BE SCREENED AND SHALL COMPLY WITH PAR. (D).		RON

17.	382.31 (18)	RENUMBER DUE TO CREATION OF NEW SECTION	DIS	RENUMBER (18) PROHIBITED USES TO (19). (18) (19) PROHIBITED USES		NO COMMITTEE ACTION REQUIRED.
19.	382.32 (3) (E)		DIS, AMENDED BY PAC	<p>SIZE. TRAPS SHALL BE OF DIAMETERS NOT LESS THAN THOSE SPECIFIED IN TABLE 382.30-1 OF S. SPS 382.30.</p> <p>A. <u>1. THE MINIMUM TRAP DIAMETER FOR A TRAP SERVING A SHOWER REPLACING A RESIDENTIAL NON-PUBLIC RESIDENTIAL-TYPE BATHTUB IS 1.5 INCHES PROVIDING THE FOLLOWING APPLY:</u></p> <p>1. <u>A. THE SHOWER IS SERVED BY ONE CONTROL VALVE AND ONE SHOWER HEAD.</u></p> <p><u>B. THE SHOWER HEAD SHALL HAVE A MAXIMUM FLOW RATE OF 2.5 GALLONS PER MINUTE (GPM).</u></p> <p>DISCUSSION: CONSIDER ADDING "FIXTURES SHALL DRAIN DRY"? DETERMINE WHERE THIS PROVISION SHOULD BE PLACED IN SPS 384.</p> <p><u>C. THE SHOWER SHALL HAVE NO MORE THAN ONE CONTROL VALVE AND NOT ALLOW FOR THE OPERATION OF MORE THAN ONE SHOWERHEAD SIMULTANEOUSLY.</u></p>		BRUCE
19A.	382.32 (4) (B) 1.	REVISE, DUE TO MULTIPLE PETITIONS, ESP. FROM HOSPITALS	DIS	<p>1. 'VERTICAL DISTANCE.' EXCEPT AS PROVIDED IN SUBD. 1. A. TO C., THE THE VERTICAL DISTANCE OF A WALL OUTLET FIXTURE BETWEEN THE TOP OF THE FIXTURE DRAIN OUTLET AND THE HORIZONTAL CENTER LINE OF THE TRAP OUTLET SHALL NOT EXCEED 15".</p>	ELIMINATES NEED FOR PETITION	RON
20.	382.32 (4) (B) 1. C.	SIMILAR TYPE FIXTURES	DIS	<p>THE VERTICAL DISTANCE BETWEEN THE WATER LEVEL IN THE BOWL OF A FLOOR OUTLET WATER CLOSET OR FLOOR OUTLET CLINIC SINK AND THE CENTER LINE OF THE HORIZONTAL PORTION OF THE FIXTURE DRAIN SHALL NOT EXCEED 36 INCHES.</p>		RON
20A.	382.32 (4) (B) 1. E.	CREATE E., SPANCRETE ISSUES, SEPARATING FROM 19A.	DIS	<p><u>1.E. 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 SHALL NOT EXCEED 18".</u></p>		RON
21.	382.32 (5) (b)	Issues with dishwashers, clothes washers and disposals	DIS	<p>Existing: <i>Kitchen sinks.</i> Horizontal drain piping serving a kitchen sink trap shall not connect to vertical drain piping by means of a double sanitary tee.</p> <p>Proposed: <u>1. Horizontal drain piping serving appliances with pumping action discharge shall not connect to vertical drain piping by means of a double sanitary tee.</u></p>		Ron

21.a	382.32 (5) (c) 2.	Enforcement Issue		SPS 382.32 (5)(c)2. A floor outlet water closet shall connect to a 4-inch or 4 X 3- inch closet collar fitting. A 4 X3 inch closet bend fitting may be installed where a 4 inch closet collar fitting is used.		. Ron LANGUAGE, ALREADY STATED IN SPS382.30(9)(a)
22.	382.33		DIS	(b) Indirect waste piping and local waste piping draining the fixtures, appliances and devices having a public health concern, including but not limited to those listed in Table 382.33-1, shall be considered as plumbing and shall comply with the provisions of this section. Table 382.33-1 – some states allow indirect waste piping. Discussion: kitchen sink – suds. <u>Table 382.33-1</u> Refrigerated food storage rooms and compartments Refrigerated food display cases Ice compartments <u>and ice makers</u> Vending machines Steam tables, kettles, <u>and related equipment</u> Food preparation sinks Potato peelers Egg boilers Boiler blowoff basin outlet drains Coffee makers and urns Food processing equipment Baptismal founts Clothes washers and extractors Dishwashers Stills Sterilizers Bar and soda fountains Boiler blowoff basin outlet drains <u>Other devices, fixtures, and appliances as approved by the department</u>		BRUCE
22a.	382.33 (5) (b) Note	Repeal note due to repeal of re: section in SPS 325.	PAC	SPS 382.33 (5) (b) and (note): (b) <i>Local waste piping</i> . Local waste piping handling sanitary wastes and more than 30" in length shall be provided with a trap in accordance with s. SPS 382.32 (4). Note: Residential exclusion sec. S. SPS 325.		
22b.	382.33 (6)	Amend for drafting style	UDC	(6) MAXIMUM LENGTH. Indirect waste piping and local waste piping handling sanitary wastes shall <u>may</u> not exceed 30 feet in length horizontally nor 15 feet in length vertically.		BRUCE

SPS 384 PLUMBING PRODUCTS

ALL 384 COMMITTEE QUESTIONS TO GLEN

NO.	RULE PROVISION	ISSUE/REASON FOR CHANGE	PROPOSED BY	EXISTING LANGUAGE AND PROPOSED CHANGE	POTENTIAL IMPACT/COST	COMMENTS/STATUS
1.	TABLE 384.10	REVISE ROW 3	DIS	<p style="text-align: center;">TABLE 384.10 SUBMITTALS TO DEPARTMENT</p> <hr/> <p style="text-align: center;">Product Categories</p> <hr/> <p>3. Health care plumbing and laboratory appliances</p> <hr/> <p>DISCUSSION: DIS EXPLAINED WAYS TO GAIN PRODUCT APPROVAL</p> <ol style="list-style-type: none"> 1. PRODUCT IS LISTED 2. ALTERNATE APPROVAL – REQUIRES PRODUCT APPROVAL 3. SUBMISSION PER TABLE 384.10 VOLUNTARY SUBMISSION UNDER SPS 384.10 (3) 		OK GWS
1A.	TABLE 384.10	REVISE ROW 7	DIS	<p style="text-align: center;">TABLE 384.10 SUBMITTALS TO DEPARTMENT</p> <hr/> <p style="text-align: center;">Product Categories</p> <hr/> <p>7. Wastewater Water treatment devices used to meet the requirements in s. SPS 382.70</p> <hr/>		OK GWS
2.	384.10 (3) (D)		DIS	384.10 (3) (D) 1. THE DEPARTMENT SHALL MAY REVIEW A SUBMITTAL UNDER THIS SUBSECTION WITH INPUT FROM A TECHNICAL ADVISORY COMMITTEE.		OK GWS

2A.	TABLE 384.11	REVISE (THE ITEMS IN GREEN ARE SUPERSEDED BY THE CSA B64-11 SERIES.)	DIS, REVISED BY PAC	<p style="text-align: center;">Table 384.11 DEVICE LISTINGS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Device</th> <th style="text-align: center;">Referenced Standard</th> </tr> </thead> <tbody> <tr> <td>Anti-siphon Fill Valves (Ballcocks) for Gravity Water Closet Flush Tanks</td> <td>ASSE 1002</td> </tr> <tr> <td>Atmospheric Type Vacuum Breakers</td> <td>ASSE 1001</td> </tr> <tr> <td>Atmospheric Vacuum Breakers</td> <td>CAN/CSA B64.1.1</td> </tr> <tr> <td>Backflow Preventers for Beverage Dispensing Equipment</td> <td>ASSE 1022</td> </tr> <tr> <td>Backflow Preventer with an Intermediate Atmospheric Vent</td> <td>ASSE 1012</td> </tr> <tr> <td>Backflow Prevention Devices for Hand-Held Showers</td> <td>ASSE 1014</td> </tr> <tr> <td>Chemical Dispensing Systems</td> <td>ASSE 1055</td> </tr> <tr> <td>Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies</td> <td>ASSE 1015</td> </tr> <tr> <td>Double Check Detector Fire Protection Backflow Prevention Assemblies</td> <td>ASSE 1048</td> </tr> <tr> <td>Double Check Valve Backflow Preventers</td> <td>CAN/CSA B64.5</td> </tr> <tr> <td>Dual Check Valve Backflow Preventers with Atmospheric Port</td> <td>CAN/CSA B64.3</td> </tr> <tr> <td>Hose Connection Backflow Preventers</td> <td>ASSE 1052</td> </tr> <tr> <td>Hose Connection Vacuum Breakers</td> <td>CAN/CSA B64.2</td> </tr> <tr> <td>Hose Connection Vacuum Breakers</td> <td>ASSE 1011</td> </tr> <tr> <td>Laboratory Faucet Backflow Preventers</td> <td>ASSE 1035</td> </tr> <tr> <td>Laboratory Faucet Type Vacuum Breakers</td> <td>CAN/CSA B64.7</td> </tr> <tr> <td>Pressure Vacuum Breakers</td> <td>CAN/CSA B64.1.2</td> </tr> <tr> <td>Pressure Vacuum Breaker Assembly</td> <td>ASSE 1020</td> </tr> <tr> <td>Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures</td> <td>ASSE 1037</td> </tr> <tr> <td>Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies</td> <td>ASSE 1047</td> </tr> <tr> <td>Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Principle Backflow Preventers</td> <td>ASSE 1013</td> </tr> <tr> <td>Reduced Pressure Principle Backflow Preventers</td> <td>CAN/CSA B64.4</td> </tr> <tr> <td>Spill Resistant Vacuum Breakers Assemblies</td> <td>ASSE 1056</td> </tr> <tr> <td>Vacuum Breaker Wall Hydrants, Hydrant with Backflow Protection and Freeze Resistant Automatic Draining Type</td> <td>ASSE 1019</td> </tr> <tr> <td>Residential Cation Exchange Water Softeners (move to alphabetical order)</td> <td>NSF 44</td> </tr> <tr> <td>Yard Hydrants</td> <td>ASSE 1057</td> </tr> </tbody> </table>	Device	Referenced Standard	Anti-siphon Fill Valves (Ballcocks) for Gravity Water Closet Flush Tanks	ASSE 1002	Atmospheric Type Vacuum Breakers	ASSE 1001	Atmospheric Vacuum Breakers	CAN/CSA B64.1.1	Backflow Preventers for Beverage Dispensing Equipment	ASSE 1022	Backflow Preventer with an Intermediate Atmospheric Vent	ASSE 1012	Backflow Prevention Devices for Hand-Held Showers	ASSE 1014	Chemical Dispensing Systems	ASSE 1055	Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies	ASSE 1015	Double Check Detector Fire Protection Backflow Prevention Assemblies	ASSE 1048	Double Check Valve Backflow Preventers	CAN/CSA B64.5	Dual Check Valve Backflow Preventers with Atmospheric Port	CAN/CSA B64.3	Hose Connection Backflow Preventers	ASSE 1052	Hose Connection Vacuum Breakers	CAN/CSA B64.2	Hose Connection Vacuum Breakers	ASSE 1011	Laboratory Faucet Backflow Preventers	ASSE 1035	Laboratory Faucet Type Vacuum Breakers	CAN/CSA B64.7	Pressure Vacuum Breakers	CAN/CSA B64.1.2	Pressure Vacuum Breaker Assembly	ASSE 1020	Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures	ASSE 1037	Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies	ASSE 1047	Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Principle Backflow Preventers	ASSE 1013	Reduced Pressure Principle Backflow Preventers	CAN/CSA B64.4	Spill Resistant Vacuum Breakers Assemblies	ASSE 1056	Vacuum Breaker Wall Hydrants, Hydrant with Backflow Protection and Freeze Resistant Automatic Draining Type	ASSE 1019	Residential Cation Exchange Water Softeners (move to alphabetical order)	NSF 44	Yard Hydrants	ASSE 1057		<p>THE MOST RECENT VERSION OF THE CSA B64 SERIES IS PART OF A NEWLY ESTABLISHED ELEC. STANDARDS LIBRARY.</p> <p>OK GWS</p>
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2B.	384.12	REVISE	DIS, REVISED BY PAC	384.12 IDENTIFICATION. EACH LENGTH OF PIPE AND EACH PIPE FITTING, TRAP, FIXTURE, MATERIAL, DEVICE, AND PRODUCT TO BE USED IN PLUMBING SHALL BE MARKED AS REQUIRED BY THE APPLICABLE STANDARD SPECIFIED BY REFERENCE <u>OR BY RULE IN THIS CHAPTER OR AS SPECIFIED BY RULE IN THIS CHAPTER CHS. SPS 381 TO 386. CROSS CONNECTION CONTROL DEVICES AND ASSEMBLIES SHALL BE LABELED WITH THE APPROPRIATE APPLICABLE STANDARD.</u>		OK GWS
2D.	384.20 (5) (A)	REPEAL (A) AND CREATE NEW PROVISION (HM) USE CONSISTENT TERMINOLOGY	DIS	REPEAL: (A) AUTOMATIC CLOTHES WASHERS. RESIDENTIAL-TYPE AUTOMATIC CLOTHES WASHERS SHALL CONFORM TO ASSE 1007. AMEND (5) (TITLE): <u>PLUMBING FIXTURES, AND PLUMBING APPLIANCES, AND APPURTENANCES.</u> CREATE: (5) (HM) <u>HOME LAUNDRY EQUIPMENT. RESIDENTIAL-TYPE AUTOMATIC AND SEMI-AUTOMATIC CLOTHES WASHERS, COMBINATION WASHER-DRYERS, AND DRYERS INCLUDING THOSE RESIDENTIAL-TYPES THAT ARE COIN-OPERATED, SHALL CONFORM TO ASSE 1007.</u>		OK GWS
2E.	384.20 (5) (AM)	CREATE LANGUAGE TO ADD AAV AND ACCEPT ASSE STANDARD.	DIS, REVISED BY PAC	SPS 384.20 (5) (AM) <u>AIR ADMITTANCE VALVES. INDIVIDUAL, BRANCH-TYPE, AND STACK AIR ADMITTANCE VALVES FOR SANITARY DRAINAGE SYSTEMS SHALL CONFORM TO ASSE 1050 OR ASSE 1051, AND S. SPS 382.31 (18M).</u> FOR DISCUSSION/CONSIDERATION: ALSO SEE #18. CONSIDER MOVING 382.31 (18M) FROM #18 AND MOVE IT TO THIS CREATED AAV SECTION.		COMPLIMENTS TONY'S AAV BLOCK OK GWS
2F.	384.20 (5) (E)	REVISE USE CONSISTENT TERMINOLOGY	DIS	(E) <u>DISHWASHING MACHINES. 1. RESIDENTIAL-TYPE DISHWASHING MACHINES SHALL CONFORM TO ASSE 1006.</u> 2. COMMERCIAL-TYPE DISHWASHING MACHINES SHALL CONFORM TO ASSE 1004.		NO COMMITTEE ACTION REQUIRED. OK GWS
2G.	384.20 (5) (H) 2.	REVISE	DIS	2. FOOD WASTE GRINDERS SHALL BE <u>TRAPPED SEPARATELY AND</u> CONNECTED TO A DRAIN OF SUFFICIENT SIZE TO SERVE THE UNIT, BUT NOT LESS THAN 1 ½ INCHES IN DIAMETER.		OK GWS
3.	384.20 (5) (L) 2.		DIS, AMENDED BY PAC	384.20 (5) (L) 2. EXCEPT FOR COMBINATION BATHTUB-SHOWER UNITS, <u>AND A SHOWER REPLACING AN EXISTING NON-PUBLIC BATHTUB THAT IS SERVED BY ONE SHOWERHEAD,</u> WASTE OUTLETS SERVING SHOWERS SHALL BE AT LEAST 2 INCHES IN DIAMETER AND SHALL HAVE REMOVABLE STRAINERS OF SUFFICIENT STRENGTH FOR THE ANTICIPATED LOADS.		OK GWS

3A.	384.20 (5) (L) 4. <u>A</u>	REVISE, CREATE A.	DIS	<u>ALL EXCEPT AS SPECIFIED IN SUBD. A. C, ALL SHOWER COMPARTMENTS, REGARDLESS OF SHAPE, SHALL HAVE A MINIMUM FINISHED INTERIOR OF 900 SQUARE INCHES AND SHALL BE CAPABLE OF ENCOMPASSING A CIRCLE WITH A DIAMETER OF 30 INCHES. A. THE MINIMUM REQUIRED AREA AND DIMENSION SHALL BE MEASURED IN A HORIZONTAL PLANE 24 INCHES ABOVE THE TOP OF THE THRESHOLD AND MAY NOT EXTEND BEYOND THE CENTERLINE OF THE THRESHOLD. B. THE MINIMUM AREA AND DIMENSIONS SHALL BE MAINTAINED TO A POINT 70 INCHES ABOVE THE SHOWER WASTE OUTLET WITH NO PROTRUSIONS OTHER THAN THE FIXTURE VALVE OR VALVES, SHOWERHEADS, SOAP DISHES, RETRACTABLE SEATS, AND SAFETY GRAB BARS OR RAILS. A. C. SHOWER STALLS MAY NOT BE LESS THAN 25 INCHES IN MINIMUM WIDTH MEASURED FROM THE FINISHED INTERIOR TO THE CENTER OF THE THRESHOLD PROVIDED THE STALL IS NOT LESS THAN 1,300 SQUARE INCHES.</u>		OK GWS
3B.	384.20 (5) (N) <u>6.</u>	CREATE 6.	DIS	<u>(N) 6. TROUGH URINALS ARE PROHIBITED.</u>		MAY BE A GREEN ISSUE DUE TO WATER CONSERVATION OK GWS
3C.	384.20 (5) (N) <u>7.</u>	CREATE 7.	DIS	<u>(N) 7. URINALS REQUIRING WATER SHALL HAVE AN INDIVIDUAL EQUIPPED FLUSHING DEVICE.</u>		MAY BE A GREEN ISSUE DUE TO WATER CONSERVATION OK GWS
4.	384.20 (5) (O)		DIS, AMENDED BY PAC	<u>384.20 (5)(O) 1. C. WATER CLOSET MATERIALS NOT LISTED MUST MEET THE PROVISIONS OF S. SPS 384.20 (1), (3) (B) 7. AND SUB. (4).</u>		OK GWS
4A.	384.20 (5) (O) 1. <u>C.</u>	CREATE <u>C.</u>	DIS	<u>(O) 1. C. WATER CLOSET MATERIALS NOT LISTED SHALL MEET THE PROVISIONS OF SUBD. (3) 7. AND SUB. (4).</u>		OK GWS
4C.	384.20 (5) (P) <u>3. E.</u>	CREATE	DIS	<u>E. TEMPERATURE AND PRESSURE RELIEF VALVE DISCHARGE PIPE SHALL COMPLY WITH ASTM A112.4 OR MATERIALS LISTED IN TABLE 384.30-8.</u>	LESS RESTRICTIVE	GWS PROBLEM: REFERENCED STANDARD DOES NOT EXIST. BELIEVE CORRECT STANDARD TO BE ASME A112.4.1-2009

5.	384.30(4)(a)	ADD CODE BASED REQUIREMENTS FOR POTABLE WATER STORAGE TANKS	DIS	(a) <i>Water quality.</i> A water supply system shall be resistive to corrosive action and degrading action from the water being conveyed. <u>Potable water storage tanks shall conform to s. NR 812.33 Wis. Adm. Code.</u>		GWS REPLACES HIGHLIGHTED PORTION BELOW
18.	382.31 (18M) AAV	Codifying AAV alternate approval Doesn't have to go through plan review if in code.	DIS, Amended by PAC	Create new section: <u>(18m) AIR ADMITTANCE VALVES (AAV). The use of air admittance valves in lieu of traditional venting shall comply with all of the following:</u> (a) <u>The AAV may only serve as a termination point for a branch vent, circuit vent, common vent, individual vent, wet vent or- combination drain and vent system. The AAV may serve a pumped-discharge type clothes washer standpipe when the fixture drain downstream of the point of vent is at least 3 inches in diameter.</u> (b) <u>Branches that have fixtures served by the AAV must comply with all of the following:</u> 1. <u>When connected to a stack that has 4 or more branch intervals above the branch connection, the branch must be provided with a relief vent located between most downstream fixture and the stack.</u> (c) <u>The AAV may not serve as a vent termination point for any of the following:</u> 1. <u>Areas of negative pressure such as parking garages, laboratories, research facilities etc.</u> 2. <u>Commercial parking structure</u> 3. <u>To relieve positive pressures</u> 4. <u>A fixture serving a chemical waste system.</u> 5. <u>POWTS components such as a holding tank or treatment tank</u> 6. <u>A stack vent serving two or more branch intervals</u> 7. <u>A vent stack that is required in accordance with s. SPS 382.31 (4) (a).</u> 8. <u>A vent serving a sump.</u> 9. <u>An enclosed stairwell.</u> 10. <u>An area utilized as supply or return air plenum.</u> 11. <u>A pit, vault, or depression which is below the adjacent grade or floor level.</u> 12. <u>Plumbing wastewater and treatment devices used to treat fats, oils & grease (FOG).</u>		TONY ASSE 1050 & 1051

- 13. An area that subjects the valve to grease or other materials which could cause fouling of the valve's seal.
- 14. Clean rooms such as FDA/DATCP regulated food and beverage production areas, Bio Safety Labs, Pharmaceutical production and/or processing facilities.
Note: For specific applications not listed, please contact DSPS.
- 15. A health care facility as defined in s. SPS 381.01 (116). (add new healthcare definition)
- 16. A restaurant kitchen licensed by the state or local department of health.
- 17. A residential bedroom.
Note: Does not include closets or bathrooms with solid doors. In accordance with Standard IBC 508.2.3
- 18. A daycare.

(d) The size and developed length for a vent using an AAV shall conform with Table 382.31-6.

Maximum DFU's	Maximum Developed Distance of Vent to Connection of AAV		
	Diameter in Inches		
	1-1/4 ^a	1-1/2	
1	35	NL ^b	
3	28	140	
6	NP ^c	100	
20	NP ^c	60	
160	NP ^c	NP ^c	

^a Drainage Fixture Units based on ch. SPS 382.

^b NL means no limit.

^c NP means not permitted.

^d Not more than two water closets or similar type fixtures of four or more drainage fixture units.

(e) Installation. The installation of the AAV shall conform with all of the following:

- 1. The AAV must be installed in the vertical position (plus or minus 15 degrees from plumb).
- 2. The vent system being served by the AAV may have horizontal offsets located less than 36 inches above the floor on which the fixtures are installed providing the vent does not connect to another vent.
- 3. The installation location of the AAV shall conform with all of the following:
 - a. A minimum of 4 inches above the top of the horizontal pipe being served.
 - b. No more than 20 inches below the flood rim of any fixture served.
 - c. At least 6 inches above insulation materials.

				<p>d. <u>In an accessible area.</u></p> <p>e. <u>Within a space that allows air to enter the product and has an opening equivalent to requirements in 382.31 (14).</u></p> <p>f. <u>With at least one vent connected to the building drain waste and vent system and located downstream of AAV extending to outside atmosphere.</u></p> <p>g. <u>With a 3 inch or larger vent to the outside atmosphere connected to the building drain waste and vent system.</u></p> <p>(f) <u>Testing. AAV's shall be tested. The AAV shall be tested prior to or after installation. The AAV shall be subjected to a pressure equal to 1 inch of water column. After observing for 1 minute, if the pressure falls .5 of an inch or less, it will be considered a passing AAV.</u></p> <p>(g) <u>Notice to Owner: When an AAV is installed in a building, the contractor shall provide the owner with a copy of the manufacturer's written AAV description.</u></p>		
50.	382.40 (8) (d) 7.	New - Issues w/water supply quality & effective means to flush system.	DIS, amended by PAC	<p>Create:</p> <p><u>The main water distribution systems piping one nominal pipe size over code minimum shall be provided with provisions for effective flushing of the system at 8 feet per second.</u></p> <p><u>Water distribution piping larger than one nominal pipe size over the code minimum shall provide for effective flushing of the system at 8 feet per second.</u></p> <p>8/9/17 Discussion: Hospitals inability to flush lines due to oversizing for future expansions resulting in bad water quality. Consider rule re: how long water can remain stagnant without flushing. Sediment builds up and high levels of lead showing up in drinking fountains.</p>	More cost effective than to retrofit. [Need cost]	BRUCE
51.	382.40 (8) (i)	Protection of public health. Incorporates IPC & UPC model codes.	DIS, amended by PAC	<p><i>Flushing and disinfection of potable water supply systems.</i> 1. a. Before a newly constructed water supply system is to be put into use, the piping of the system shall be filled flushed with water and disinfected. and allowed to stand for at least 24 hours. After 24 hours each Each water outlet shall be flushed beginning with the outlet closest to the building control valve and then each successive outlet in the system. The flushing at each water outlet shall continue for at least one minute and until the water appears clear and with no trace of disinfectant at the outlet.</p> <p>b. Each portion of a water supply system which is altered or repaired shall be flushed for at least one minute and until the water appears clear.</p> <p><i>Check IPC and UPC provisions for disinfection for potable water supply systems. Review guidance documents for disinfection and incorporate into code.</i></p> <p><i>Could incorporate language from IPC 610.</i></p>		BRUCE

				<p>10/10/17: Discussion: Injecting chemicals into water system – chlorine gas – discussion between DIS and DNR. DNR has jurisdiction from tap. What is committee’s recommendation re: plan review for additives into water system?</p> <p>For abandoned well, put new in. Now have to treat water – DIS does plan review. Inspected to ensure proper operations, followed up with DNR, not aware with DHS inspections – may check for bacterial free.</p> <p>Health concerns, DIS finds out after the fact during routine inspections, added after plan review.</p> <p>Concern: 200 parts per million – safety concern for occupants inside a building.</p>		
51 a1.	382.40(8) <u>(jm)</u>	New Code	DIS, amended by PAC	<p><u>[Add “Scope” phrase. Water tanks for public, potable use shall meet the criteria set forth in this section.]</u></p> <p><u>(8) (jm) Water tanks. 1. Pneumatic pressure tanks. Pneumatic pressure tanks shall conform to all of the following:</u></p> <p><u>a. Tanks shall conform to ch. SPS 384.</u></p> <p><u>b. Tanks shall be served by a pressure relief valve.</u></p> <p><u>c. Tanks shall be able to be isolated for maintenance, repair, or replacement and equipped with a drain valve by means of a control valve.</u></p> <p><u>d. Water calculations incorporating the size of a pneumatic pressure tank may use a 5-minute peak flow in gpm for the water supply system. The system shall be designed to minimize stagnation.</u></p> <p><u>e. Tanks shall be stamped or labeled showing the manufacturer's name, model number, the tank volume, year manufactured, and the allowable working pressure.</u></p> <p><u>2. Storage tanks. a. Storage tanks shall conform to s. SPS 384.</u></p> <p><u>b. Storage tanks shall be constructed and maintained to protect the water supply in accordance with the following requirements:</u></p> <p><u>c. All water storage tanks and structures shall be watertight which exclude water, rain, snow, birds, animals, insects, and dust.</u></p> <p><u>d. Exterior translucent tanks shall be covered.</u></p> <p><u>4. Potable water. Potable water may not be stored in a tank or compartment adjacent to nonpotable water when the two compartments are separated by a single wall.</u></p> <p><u>5. Locks. Locks shall be provided on access manholes, inspection covers, fill pipe, fences, ladder cage bottoms, and any other measures deemed necessary to prevent trespassing, vandalism, and sabotage.</u></p>		BRUCE

6. Drains. Piping used for purposes, to drain a storage tank or structure, shall discharge to the ground surface through an air gap. The drain may discharge over a drainage inlet receptor, splash pad, or rip rap.

7. Overflow. a. Tanks or reservoir shall be provided with overflow piping and shall be brought down to within 6 to 12 inches above graded-normal surfaces. The pipe shall open downward over a drainage inlet, splash pad, or rip rap. Interior tanks within the building structure shall provide overflow piping discharging to an approved clearwater receptor, or as approved by the department.

b. The overflow outlet pipe shall be provided with a 4-mesh non-corrodible screen.

c. The overflow outlet pipe shall be of approved water distribution as per SPS Table 384.30-8.

d. The overflow outlet pipe shall be sized and of sufficient diameter to permit discharge flow in excess of the maximum fill rate of the inlet pipe flow.

e. Overflow piping shall be visible at the discharge location.

f. Storage tanks or reservoirs with more than one compartment and each compartment can be isolated from the rest of the tanks or reservoirs shall be provided with its own overflow pipe.

8. Inlet and outlet piping. a. Inlet and outlet piping from a tank or storage structure shall be sized in accordance with SPS 382.40(7).

b. Piping shall be of approved materials in accordance with SPS Table 384.30-8 for locations within the building, above floor, SPS Table 384.30-7 for locations below grade and outside of the building foundation parameters.

9. Access. a. Water tanks or structures shall have convenient access for cleaning and maintenance.

b. Manhole openings shall be fitted with a solid watertight cover which overlaps the framed opening and extends down around the opening frame a minimum of 2 inches.

A water tight gasket shall be attached to the bottom side of the manhole cover.

c. Manhole covers for buried tanks or structures shall be no less than 24 inches above a sloped finished grade.

d. Inspection covers shall be water tight and ~~locked~~ secured to prevent unauthorized access.

e. Interior paints or coatings shall conform to NSF/ANSI Standard 61 certified.

10. Bypass Piping. Bypass piping shall be provided allowing the tank or reservoir to be taken out of service for maintenance and inspection purposes when directly connected to a well or municipal water supply.

11. Vents. a. Storage tanks shall be vented to the atmosphere. The overflow pipe may not be considered a vent.

b. Vents shall be constructed of water distribution materials as per Table 384.30-8, or as approved by the department.

c. Vents shall terminate above the top of the tank in a U-bend or vent cap with the opening or 24 to 36 inches above grade and covered with a 24-mesh stainless steel screen at a location that is secured.

d. Minimum vent size shall allow an air flow consistent with water inflow and outflow rates. Minimum size shall be 2 inches.

12. Location. a. Exterior tanks may not be located within a flood plain or floodway or within 2 feet above the regional flood elevation.

b. Grading the surrounding area shall be such that surface water will not stand within 50 feet of the storage tank.

c. Storage tanks shall be located in an area that is accessible year-round.

d. Contamination sources such as sewers, drains, fuel storage tanks, or standing water shall be kept a minimum of 50 feet from the tank or as approved by the department.

e. The top roof of an exterior tank may not be less than 2 feet above the normal ground surface.

13. Controls. a. Atmospheric pressure tanks shall have a means for maintaining pressure within the building water distribution system. A hydro-pneumatic tank, pump facilities, or other reliable methods shall be provided to maintain system pressure.

b. Manual valves shall be installed in the water distribution system to isolate tank and pump equipment from the water distribution system.

c. Valves designated for operation of the storage tank shall be visibly recognized as being open or closed. Solenoid valves shall have a control system panel that will have indicators showing visual valve open or closed status.

d. Drain valves shall be provided for maintenance purposes for access to the storage tank.

e. High water fill valve or float valve shall maintain the storage tank levels to the minimum water storage required for use. A bypass to the fill valve shall be provided.

f. Tank water levels shall be ~~able to be observed~~ observable by means of a sight level indicator.

g. A pressure gauge shall be installed downstream of the storage tank and booster pumps.

h. A thermometer or sensors shall be installed on the storage tank for water temperature monitoring purposes.

14. Water supply. a. The influent water supply to the storage tank shall be from an approved source and controlled to maintain the minimum and maximum water levels.

b. The influent water supply shall terminate a minimum of 6 inches above the high-water level.

c. The influent water supply piping shall be provided with a control valve.

15. Pumps. shall be installed according to the manufacturer specifications and s. SPS 382.40(7)(d)4.

			<p><u>Pump</u> piping shall have required check valves, pressure gauge, isolation valves, and sampling faucet installed on the system.</p> <p>16. Disinfection. <u>Continuous</u> water treatment is required for <u>all</u> storage tanks through a constant water flow through the potable water storage tank. <u>All of the water tank volume shall be turned over every 24 hours.</u></p> <p>17. Labeling. All piping and control valves serving the storage tank water system shall be labeled in accordance with Table 382.40-1a for specific use. <u>Labels</u> shall be grey, triangular with 4-inch sides, and labeled as "Potable Water, Storage Tank".</p> <p>18. Storage tank inspections. a. <u>The interior and exterior of water storage facilities shall be regularly inspected and maintained in accordance with NR 810.14.</u> b. <u>Inspections of storage facilities 10,000 gallons or greater shall be by a professional tank inspection firm or by a registered professional engineer.</u> c. <u>Maintenance shall include removal of sedimentation and biofilm, repairs as necessary to maintain good working condition.</u> d. <u>All storage facilities shall be inspected a minimum of every 5 years, unless otherwise approved by the department.</u> e. <u>Inspections of vent and overflow screens and hatches shall be conducted once per year.</u></p> <p>19. Records. a. <u>A record shall be kept on dates of cleaning, relining, and replacement of components or parts.</u> b. <u>Department representatives shall be provided access to the water storage system and records upon request.</u></p>		

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