Wisconsin Department of Safety and Professional Services
Division of Policy Development
4822 Madison Yards Way
PO Box 8366
Madison, WI 53707-8366

Phone: 608-266-2112
Web: http://dsps.wi.gov
Email: dsps@wisconsin.gov

Tony Evers, Governor
Dawn B. Crim, Secretary

VIRTUAL/TELECONFERENCE
PLUMBING CODE ADVISORY COMMITTEE MEETING
Virtual, 4822 Madison Yards Way, Madison
Contact: Brad Wojciechowski (608) 266-2112
July 27, 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 June 22, 2021 (2)

C. Administrative Matters – Discussion and Consideration
1) Committee, Department and Staff Updates **(3-4)**

D. Administrative Rule Matters – Discussion and Consideration
1) Review of Plumbing Code Changes **(5-47)**
   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: AUGUST 24, 2021

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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
JUNE 22, 2021

PRESENT: Fred Gardner, Joseph Kiedrowski *(disconnected at 10:31 a.m.)*, Roger Musolff, Spencer Statz

EXCUSED: Justin Kressin, Randy Lorge, Jason Sladky

STAFF: Carl Hampton, Administrator, Division of Policy Development; 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; Justin Gavin, Integrated Services Section Chief-Commercial Buildings; Brandon Piper, Administrator-Division of Industry Services; Erik Hansen, Business Systems Consultant-Sr.; Thomas Westlund, Business Systems Consultant-Sr.; Megan Glaeser, Bureau Assistant; and other Department staff

Fred Gardner, Vice Chairperson, called the meeting to order at 10:22 a.m. A majority of four (4) members was present.

ADOPTION OF AGENDA

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

APPROVAL OF MINUTES OF MAY 26, 2021

MOTION: Spencer Statz moved, seconded by Roger Musolff, to approve the Minutes

(Joseph Kiedrowski disconnected at 10:31 a.m.)

The meeting adjourned at 10:40 a.m. due to loss of quorum.

Project Timeline for Plumbing Code Comprehensive Update*

Activity	Actual or Projected Date
Secretary approval of scope statement	**October 1, 2020**
Governor approval of scope statement; Submit to LRB	October 23, 2020
Scope statement printed in *Wisconsin Administrative Register*	October 26, 2020 (Scope will expire in 30 months, so April 2023
Approval for implementation of Scope statement	November 2020
Advisory Code Committee Meetings	
Meeting #1	December 16, 2020
Meeting #2	January 21, 2021 (substantive review begins)
Meeting #3	February 24, 2021
Meeting #4	March 23, 2021
Meeting #5	April 22, 2021
Meeting #6	May 24, 2021
Meeting #7	June 22, 2021
Meeting #8	July 27, 2021
Meeting #9	August 24, 2021
Meeting #10	September 28, 2021
Meeting #11	October 27, 2021
Meeting #12	November 18, 2021
Meeting #13 (possibly)	December 2021
Complete drafting of rule	**December 2021 estimated**
Secretary Approval of rule	January 2022 estimated
Economic Impact Analysis (EIA) and Housing Impact Analysis, Environmental Review	February - March 2022
Review EIA comments and complete analyses	April – May 2022
Secretary Approval of EIA/Rule Draft	**June 2022 estimated**
Transmit to Clearinghouse	June-July 2022
Clearinghouse Report Due Back	August 2022
Hearing on Permanent Rule	**August-Sept 2022 estimated**
Finalize rule for legislative review	September 2022
Secretary approval for legislative review & submit to GORC	October 2022
GORC approval received	December 2022?
Submit for legislative review	**Deadline 30 months from scope publish date - by 4/26/2023**
Assignment of rule	
Senate and Assembly review ends (includes no hearing)	
Rule Referred to JCRAR	
JCRAR review ends (no extension included)	
Adoption and filing of rule	

Rule in effect	Estimated in 2023

*Note: Color coding in synch with the Rules Promulgation Flowchart

State of Wisconsin
Department of Safety & Professional Services

AGENDA REQUEST FORM

1) Name and title of person submitting the request:	2) Date when request submitted:
Phil Harkleroad	07/14/2021
	Items will be considered late if submitted after 12:00 p.m. on the deadline date which is 8 business days before the meeting

3) Name of Board, Committee, Council, Sections:

Plumbing Code Advisory Committee

4) Meeting Date:	5) Attachments:	6) How should the item be titled on the agenda page?
07/27/2021	☒ Yes ☐ No	Administrative Rule Matters 1. Review of Plumbing Code Changes under SPS 381, 382, 384 2. Update on SharePoint

7) Place Item in:	8) Is an appearance before the Board being scheduled? *(If yes, please complete Appearance Request for Non-DSPS Staff)*	9) Name of Case Advisor(s), if required:
☒ Open Session ☐ Closed Session	☐ Yes ☒ No	

10) Describe the issue and action that should be addressed:

1. Review of Draft review table for SPS (pdf)
2. Member questions, issues, etc.

11) Authorization

07/14/2021

Signature of person making this request **Date**

Philip Harkleroad

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.

Revised 07/2019

Wisconsin Department of Safety and Professional Services

Plumbing Code Advisory Committee Plumbing Code Rule Recommendations for SPS Chapters 305, 381 to 387

DRAFT – SUBJECT TO CHANGE

THIS DOCUMENT IS NOT A RULE DRAFT OR THE OFFICIAL MEETING MINUTES OF THE PLUMBING CODE ADVISORY COMMITTEE.

Meeting minutes and agendas may be viewed HERE.

SPS 382						
NO.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
				Document for July's 27, 2021 meeting		

46A.	TABLE 382.38-1 4M. AND 9M.	REVISE TABLE, ADD NEW USES 4M. AND 9M.	DIS	**TABLE 382.38 – 1** **ALLOWABLE DISCHARGE POINTS BY FIXTURE OR SPECIFIC USES** DISCUSSION: OPEN PARKING LOT IS COVERED UNDER CBC.		*TONY* *4M FIRE PROTECTION WATER DISCHARGE* *STORM CONDUCTORS* *DEFINED IN IBC 406.3*

Use or fixture	POWTS[a]	Municipal Sanitary Sewer	Municipal Storm Sewer	Ground Surface	Combined Sanitary–Storm Sewer	Subsurface Dispersal[i]
4m. Elevator door area drains	X	X	X	X	X	X
9m. Open public parking levels			X	X[b]	X	X

46c.	382.40 (3) (b)	Revise	DIS	(a) *Hot water required.* Except as provided in subds. 1. And 2., hot water shall be provided to all plumbing fixtures, appliances and equipment used for personal washing, culinary purposes, ~~or~~ laundering, or a sink used for building maintenance in a public building.		*Ron* Reviewed – Adding language to include sinks used for building maintenance in public buildings to be included to be required to have hot water. See no issues with added language.
51 a9.	382.41 (3) (b) 5.	DNR does not allow threads on sample taps. Individual dialysis machines are provided with cross connection control through another process. Language was proposed for 382.50 also.	DIS	5. A cross connection ~~shall~~ may not be considered to exist at the hose threaded outlet installed for the sole purpose of any of the following: a. Draining a water supply system or any portion thereof~~;~~. ~~b. Obtaining water quality samples of the water supply system or any portion thereof; or~~ bm. Connecting individual portable dialysis machines when enclosed in a lockable box. c. Connecting individual residential-type automatic clothes washers.	n/a	*Ron* *Reviewed – See no issues with the striking and adding of language.*

51 a12.	382.41 (3) (d) Create 1. and 2.	Revise to clarify confusion whether a cross connection control method, device, or assembly could be bypassed.	DIS	*Prohibitions.* 1.The use of a toxic solution as a heat transfer fluid in single−wall heat exchanger for potable water is prohibited. 2. A cross connection control method, device, or assembly may not be bypassed without a cross connection control method, device, or assembly of at least equal protection.	n/a	*Ron* *Reviewed – See no issue with adding Subdivision 2.*
51 a13.	382.41 (4) (b) 1.	Update code to reflect terminology in the adopted standard.	DIS	Except ~~for a deck−mounted device~~ as provided in pars. (b) 2. and (0), ~~a pipe applied~~ an atmospheric-type vacuum breaker shall be installed such that the bottom of the device or the critical level mark on the device is at least 6~~"~~ inches above all of the following:	n/a	*Ron* *Reviewed- See no issues with language change.*
51 a14.	382.41 (4) (b) 2.	Update code to reflect terminology in the adopted standard.	DIS	A deck−mounted ~~pipe applied~~ atmospheric type vacuum breaker shall be installed such that the bottom of the device or the critical level mark on the device is at least one inch above all of the following:	n/a	*Ron* *Reviewed – See no issue with language clean up.*
51 a15.	382.41 (4) (k) 2.	Update code to reflect terminology in the adopted standard.	DIS	Repeal: ~~A pressure vacuum breaker assembly shall be located only outside.~~	n/a	*Ron* *Reviewed I Agree with the 2019 language – more options for installation.* *(floor served by a floor drain)*

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<tr><td>51a15.a</td><td>382.41
(4) (o)</td><td>Accepting new standard</td><td>DIS</td><td><u>o) A drainage type or electric design type trap seal primer shall be provided with high-hazard backflow protection compliant with this section and all of the following:</u>
<u>1. Fixture trap or tailpiece trap seal primers shall consist of a 1¼ inch (32 mm) or larger tailpiece or trap assembly that is designed to connect to a supply tube that drains to the floor drain trap inlet.</u>
<u>2. Ballcock trap seal primer shall be used in conjunction with anti-siphon fill valves complying with ASSE 1002.</u>
<u>3. Flushometer tailpiece/trap seal primers shall only be used in conjunction with a flushometer complying with ASSE 1037 and shall be installed below the critical level of the vacuum breaker.</u></td><td></td><td>Ron
Reviewed – See no Issue with adding this paragraph.</td></tr>
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<tr><td>51a15.1</td><td>382.41
(5) 3.a.</td><td>Revise</td><td>PAC</td><td>If a reduced pressure principle backflow preventer, ~~or~~ a reduced pressure detector backflow preventer, or a pressure vacuum breaker assembly is located within a building, a drain or receptor shall be provided to receive the discharge from the vent ports of the device. If a floor drain is to receive the discharge from the vent ports ~~of a reduced pressure principle backflow preventer or a reduced pressure detector backflow preventer~~, the flow or pathway of the discharge may not create a nuisance.</td><td></td><td>Ron
Reviewed – See no issues with language.</td></tr>
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a17.</td><td>Table
382.41-1</td><td>Revise Table

(The titles in green are superseded or withdrawn and will be updated to match tables in SPS 381.)</td><td>DIS</td><td>Table 382.41-1
Acceptable Cross Connection Control Methods, Devices, or Assemblies
<table>
<tr><td rowspan="4">Methods or Assemblies of Cross Connection Control (Standard)</td><td colspan="8">Situations and Conditions</td></tr>
<tr><td colspan="4">Backpressure</td><td colspan="4">Backsiphonage</td></tr>
<tr><td colspan="2">Low Hazard</td><td colspan="2">High Hazard</td><td colspan="2">Low Hazard</td><td colspan="2">High Hazard</td></tr>
<tr><td>Continuous</td><td>Noncontinuous</td><td>Continuous</td><td>Noncontinuous</td><td>Continuous</td><td>Noncontinuous</td><td>Continuous</td><td>Noncontinuous</td></tr>
<tr><td></td><td colspan="2">Pressure</td><td colspan="2">Pressure</td><td colspan="2">Pressure</td><td colspan="2">Pressure</td></tr>
<tr><td>Air-gap Fittings for use with Plumbing Fixtures, Appliances,</td><td></td><td></td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
</table></td><td></td><td>Ron</td></tr>
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				and Appurtenances (ASME A112.1.3)											
				Air Gaps (ASME A112.1.2)	X	X	X	X	X	X	X	X			
				Atmospheric Vacuum Breaker (CAN/CSA B64.1.1)						X		X			
				Backflow Preventers with an Intermediate Atmospheric Vent (ASSE 1012)	X	X			X	X					
				Barometric Loops					X	X	X	X			
				Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies (ASSE 1015)	X	X			X	X					*Ron* *Based on research the ASSE 1015 standard meets low hazard for back siphonage.*
				Dual Check Valve Type with Atmospheric Port Backflow Preventer (CAN/CSA B64.3)	X	X			X	X					
				Hose Connection Backflow Preventers (ASSE 1052)	X[a]	X	X[a]	X	X[a]	X	X[a]	X			
				Hose Connection Vacuum Breakers (CAN/CSA B64.2 and B64.2.2)	X[a]	X	X[a]	X	X[a]	X	X[a]	X			
				Hose Connection Vacuum Breakers (ASSE 1011)	X[a]	X	X[a]	X	X[a]	X	X[a]	X			
				~~Pipe Applied~~ Atmospheric Type Vacuum Breakers (ASSE 1001)						X		X			
				Pressure Vacuum Breaker Assembly (ASSE 1020)					X	X	X	X			
				Reduced Pressure Principle Backflow Preventers ~~And~~ and Reduced Pressure Principle Fire Protection ~~Principle~~ Backflow Preventers (ASSE 1013)	X	X	X	X	X	X	X	X			

				Reduced Pressure Principle Backflow Preventer (CAN/CSA B64.4)	X	X	X	X	X	X	X	X	
				Spill Resistant Vacuum Breaker (ASSE 1056 and CAN/CSA B64.1.3					X	X	X	X	
				Vacuum Breaker (CAN/CSA B64.1.2)					X	X	X	X	

[a] See limitation listed under s. SPS 382.41 (4) (c) 1. a.

51 a18.	Table 382.41-2 (left-side column)	Revise/add to table	DIS	Table 382.41-2 Acceptable Cross Connection Control Methods, Devices or Assemblies for Specific Applications Methods or Assemblies (Standard) ~~**Water Closet Flush Tank Ball Cocks (ASSE 1002)**~~ **Anti-siphon fill valves for water closet tanks (ASSE 1002)** **Commercial Dishwashing Machines (ASSE 1004)[a]** **Trap Seal Primer – Drainage Types and Electric Design Types (ASSE 1044)** Wall Hydrants, Frost Proof Automatic Draining Anti−Backflow Type (ASSE 1019), types A, ~~or~~ B, or C **[a] ASSE 1004 allows any of the following standards ASSE 1001, ASSE 1011, ASSE 1020, ASSE 1052, or ASSE 1056**		*Ron* *Reviewed – No issues with updating the chart.*
51 a19.	382.41 (3) (b) 5. c.	Revise	DIS	Connecting individual residential-type automatic clothes washers or dryers.		*Ron* *Reviewed – No issues to add to the code.*
51 a20.	382.41 (3) (b) 6. b.	Repeal (b) 6. b. and incorporate 6. note into code language.	DIS	~~(b) 6. b. 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.~~ (b) 6. ~~Note~~ bm. Cross connection control devices used in conjunction with automatic fire sprinkler systems ~~are to~~ 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.		*Ron* *Reviewed Would like to discuss as a group.* *Reference 51 a11.*

51 a21.	382.41 (4) (g) 2.	Repeal	DIS	~~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.~~		*Ron* *Reviewed – No issues to remove. No reason for being in the code.*
51 a22.	382.41 (5) (f)	Revise	DIS	The installation of a reduced pressure principle backflow preventer, a reduced pressure principle fire protection ~~principle~~ backflow preventer, ~~a reduced pressure detector backflow preventer,~~ a reduced pressure detector fire protection backflow prevention assembly, a double check backflow prevention assembly, a double check fire protection backflow prevention assembly, a double check detector fire protection backflow prevention assembly ~~backflow preventer~~, a pressure vacuum breaker assembly, and a spill resistant vacuum beaker shall conform to all of the following limitations:		*Ron* *Reviewed – No issues with language clean up.*
54.	382.50 (3) (b) 4.	(See related: #54a.)	DHS to DIS, amended by PAC	Amend 382.50 (3) (b) 4. ~~a.4. A hot water distribution system shall be under constant recirculation to provide continuous hot water at each hot water outlet, except that uncirculated hot water distribution piping may not exceed 25 feet in developed length.~~ ~~b~~ a. A hot water distribution system using thermal disinfection, as specified in SPS 382.50(3)(b)6.a., shall be under constant recirculation to provide continuous hot water at each hot water outlet, except that uncirculated hot water distribution piping may not exceed 3 feet in developed length.		*Bruce*
56.	382.50 (3) (b) 6.	Codifying current practice.	DIS	6. Hot water distribution systems may not include a heat recovery system and shall be installed and maintained to provide ~~bacterial control~~ disinfection by one of the following methods: a. Water stored and circulation initiated at a minimum of 140^0F and with a return of a minimum of 124^0F.	Significant impact - added expense	*BRUCE*

		Note to DPD: Repeal b., create bm. to e., and renumber c. to f.		~~b. Water chlorinated at 2 mg/L residual.~~ ~~**Note:** Additional information may be contained in ASHRAE Guideline 12-2000, Minimizing the Risk of Legionellosis Associated with Building Water Systems. This standard is published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE); 1791 Tullie Circle, N.E., Atlanta, GA 30329, phone: (800) 5-ASHRAE or (404) 636-8400 ext. 507; fax: (404) 321-5478; e-mail: orders@ashrae.org; or online at www.ashrae.org.~~ ~~c.~~ f. Another disinfection ~~system~~ method approved by the department. Note: See explanatory information for further information.		
56a.	382.50 (3) (b) 6. bm. to ~~e.~~ f.	Create bm. to ~~e.~~ f. (See related: #56)		bm. Chloride dioxide. d. 0.5 Chlorine e. Chloramine. ~~c.~~ f. Another disinfection system approved by the department Or utilizing disinfectant provided by the municipality ……. Discussion: Other methods being considered and may be added when approved. (Ozone, ultra-filtration)		*BRUCE*
57b.	382.50 (3) (b) 11.	Create 11. (See related: #52, 53, 57c)	DIS	11. Hot water distribution piping shall be labeled with the disinfection method when other than thermal disinfection is used.	Minimal	*BRUCE*
58.	382.41 (5) (d) 1.	Alternate standard. Creation of "b" is an exception to existing code.		~~a.~~ 1. A cross connection control device or cross connection control assembly may not be located in uninhabitable spaces susceptible to flooding. ~~b.~~ 1m. 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.	Less restrictive.	*Tony* *Proposed definition amendment* *381.01 (65m)*

58a.	382.60 (2)	Venting	DIS	382.60 (2) INSTALLATION. (a) Piping hangers and anchors shall be securely attached to the building's structure at intervals to support the piping and its contents, but not at intervals greater than those specified in Table 382.60, except PVC used for venting may have a maximum horizontal spacing of 5 feet. The connection of drain piping to a fixture or appliance shall be considered a point of support. 5/30/18 – Discussion of incident where J-hooks weren't spaced every 4' and failed/broke when full of water. Hangers used should anticipate contents and load as specified in rule.		***Tony*** *Hangers used should anticipate contents and load as specified in rule.* ***Use for vent pipe only.***
59.	382.70 (4)	Alternate standard. Infiltration is covered within 382.365	DIS	Table 382.70-1 Number 8: Subsurface ~~infiltration and~~ irrigation, using reuse as the source [c]		*Bruce* Discussion: SPS 382.70 is total performance-based provision.

SPS 381-384						
NO.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
115	381.01(74)		DIS	381.01 (74) "Disinfection" means the process of killing or inactivating microorganisms, particularly pathogens.		Glen (74a) shown for renumbering only.

SPS 381-384						
NO.	RULE PROVISION	ISSUE/REASON FOR CHANGE	PROPOSED BY	EXISTING LANGUAGE AND PROPOSED CHANGE	POTENTIAL IMPACT/COST	COMMENTS/STATUS
				(74a) "Disinfection unit" means a type of POWTS treatment component, excluding a soil−based POWTS treatment component, that utilizes a chemical or photoelectric process to reduce the wastewater fecal coliform contaminant load.		

COMMITTEE MEMBER ITEMS FOR CONSIDERATION						
NO.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
3.	382.20	Plan Review		(8) REVISIONS. All changes or modifications~~, which involve~~ involving the provisions of chs. SPS 382 to 384, made to plumbing plans and specifications~~,~~ ~~which~~ that have been granted approval under sub. (1), shall be submitted to the department or agent municipality for examination. All changes and modifications shall be approved in writing by the department or agent municipality prior to installation of the plumbing, except as provided in pars. (a) to (c). (a) 1. The building owner and master plumbing in charge shall assume all risk and liability for proceeding with construction or installation based on changes or modifications to plans that have not been approved in writing by the department or agent municipality. 2. Work performed under par. (a) 1. is done without assurance the change or modification will be approved by the department or agent municipality. (b) Revisions to the approved plan must be submitted to, reviewed, and approved by the department or agent municipality within 30 days of owner occupancy. (c) A building owner and master plumber in charge shall be held responsible for any changes required after the revised plans have been reviewed and shall remove or replace any plumbing installation that is does not comply with code.	None	*1* *Tony* **Tabled at 02/24/2021 Meeting.** *Similar to the provisions of a Permission to Start without creating an Alternate Approval for revisions.*
13.	381.01 (66M)	CREATE NEW DEFINITION FOR CONSISTENCY AND TO BETTER DIFFERENTIAT	DIS	"CROSS CONNECTION CONTROL METHOD" A M MEANS 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, ~~AND~~ VACUUM BREAKER TEE, OR BAROMETRIC LOOP.	N/A	***RON, REVIEWED – SEE NO ISSUE WITH ADDING LANGUAGE CHANGE.***

		E BETWEEN METHOD, DEVICE, AND ASSEMBLY.				
13.a	Definitions 381 DPD to renumber			**ADD DEFINITION OF BAROMETRIC LOOP** Barometric loop *(baro-met-ric loop*) consists of a continuous section of supply piping that abruptly rises to a height of approximately 35 ft. (10.7 m) and then returns back down to the originating level. it is a loop in the piping system that effectively protects against back-siphonage. it may not be used to protect against back pressure. its operation, in the protection against back-siphonage, is based upon the principle that a water column, at sea level pressure, will not rise above 33.9 ft.		*Bruce*
14	381.01 (68) (	Amend definition	PAC	"Dead end" means: (b) Any portion of the water distribution system terminating by means of a plug, cap, or closed fitting and dry downstream with no outlet.		*Bruce* *Check above*
14.						**JANUARY 21, MEETING**
52.	382.50 (3) (b) 9. and 382.40 (8) (i) 5.	Goal is to minimize/prevent stagnation of water.	DIS, amended by PAC	Create 382.50(3) (b) 9. and 382.40 (8) (i) 5. 9. Dead ends within the water distribution systems cannot exceed 6 pipe diameters.	Major - Long-term benefit	**Tabled at 01/21/2021 Meeting.** *Bruce* *Both or one section?*

11.	382.30 (11) (c) 2. e.	Allows for seasonal homes	DIS, Amended by PAC	Where a building sewer or private interceptor main sewer is installed to serve ~~summer~~ seasonal use ~~public facilities,~~ frost protection requirements shall not apply. *Discussion: Consider changing "summer" to "seasonal" for consistency w/other rules. Consider creation of note to reference definition of "seasonal".* Per SPS 364.0309 (2), "Seasonal" is considered as the period between May 1 through October 15.		*Ron* *Reviewed – no issues with language changes. Matching the language with other Department codes.*
11.						**FEBRUARY 24, 2021 MEETING**
12.	382.30 (12)(f) 382.30 (11) (a)	Non-easement issues	DIS	Existing: ~~No private interceptor main sewer may pass through or under a building to serve another building, unless one of the following conditions are met:~~ Proposed: 3. An easement and agreement for maintenance and repairs shall be recorded with the register of deeds no later than 90 days after installation. Discussion: Issues w/neighbor disputes re: who is maintaining easement. Proposal provides directive to alleviate issues. *Consider additional amendments to this section.* *Consider adding new language after 'main sewer'…..'or building sewer that connects to a private interceptor…' OR change 382.30(11) (a). Includes water, storm, and sanitary sewers.*		Ron. *Proposed is adding a subdivision for maintenance agreement.*
12.				**COMMITTEE NOT IN FAVOR AS CURRENTLY WRITTEN** **ADDRESS 2 OR MORE PROPERTIES, SEPARATE OWNERS, ETC. (ROGER)** **REVISIT AT FUTURE MEETING**		**FEBRUARY 24, 2021 MEETING**
13.	382.30 (13)(c)	Clarification	DIS Amended by PAC	Exposed drain piping shall not be located over a pool, surge tank, or an open filter for a pool. Proposed: Add Note: Note: ~~Piping with insulation is not exposed.~~	Less restrictive	*Tony,*

	382.30 (13) (b)			SPS 382.30(13) (c) (Note) is created to read: **Note**: See ch. SPS 382 Appendix for examples of exposed piping considerations. *5/04/17 - Discussion: Intent is to prevent installation of ceilings to cover piping. Consider additional amendments to this section and other sections relating to exposed pipes over consumables. Consider including examples of porous insulation (indicating a leak) in the Appendix (i.e. fiberglass w/paper sleeve or other porous insulation)* *6/14/17 - This may fall under health department. They may allow a trough.*		
13.				**TONY TO FOLLOW UP WITH DATCP RE: NOTES AVAILABLE FROM 2017**		**FEBRUARY 24, 2021 MEETING**
13 a1.	382.31 (10) (a)	Revise – Allows use of double wyes	DIS	(a) The circuit vent shall connect to the horizontal drain at the same point or a point between the 2 most upstream fixtures.	Provides flexibility	*Ron/Randy Lorge* *Is it requested by the industry?*
13.a1				**ADD "WET VENT" IF WE ADD THIS ALL OTHER TYPES OF VENT.** **REVISIT AFTER FURTHER INVESTIGATION (PROVIDE DRAWINGS AT FUTURE MEETING) RANDY WILL LOOK THROUGH PLUMBING CODE REPORTS.**		**TABLED FROM FEBRUARY 24, 2021 MEETING**
16.	382.31 (16) €	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).~~ *Extension through wall.* Vent shall terminate at least 10 feet horizontally from any lot line. Extension of vents through wall shall terminate beyond the soffit. Where vent terminates below soffit 5 feet of vertical distance is required. The vent shall terminate downward and be screened. The vent shall comply with par. (d). See Appendix		RON *I rewrote the paragraph for clarification on the terminating requirements to avoid creating a definition of overhang.*
						MARCH 23, 2021 MEETING.

24.	382.33 (8) (d) 3.	Use of term "branch" is confusing. Gives the installer options by field fabricating.	DIS	The indirect or local waste piping serving a cross connection control device or assembly, water treatment device, air conditioner, humidifier or furnace condensate may discharge into a branch ~~tailpiece~~ serving a laundry tray.		***Tony*** ***SPS 381.01(35m) defines "branch tailpiece". Illustrations are in A-382.33(8)(c)-2. Related to local waste piping.*** **APRIL 22, 2021 MEETING.**
38.	382.35 (3) (f)	With the advent of plastic pipe, the rule is outdated.	DIS	*Stacks.* Where a cleanout is provided in a drain stack, the cleanout shall be located ~~28 to 60 inches~~ above the lowest floor penetrated by the stack. *(Rule was written when cast iron was the prevalent material used in stacks and prevented fixture connections into the cleanouts.)*		***Ron*** *IPC and UPC have no specific measurement. Code should have language for maximum height.* *Round tabled thru DIS group came up with 12'' to 60'' for updating measurements.*
				REVISIT AT FUTURE MEETING		**APRIL 22, 2021 MEETING.**

45c.	382.37 (3) (b) 2. a. and b.	Revised, add new language, a.	DIS	2. a. If water is provided to a campsite, individual approved backflow protection shall serve each hose connection in accordance with s. SPS 382.41. • b.Wye connectors are prohibited. Except for c. • C. A splitter may be used on a water supply to an individual campsite connecting an individual RV system and providing an additional hose for other purposes within the campsite. A splitter shall not be used to provide water to more than one campsite or to more than one RV.		***Tony*** *Do we need a definition of a splitter?*
45.c						**APRIL 22, 2021 MEETING.**
46.	382.37 (3) (b) 4. Same as #45b. above?	New - Issues w/water supply quality & effective means to flush out system.	DIS,	a. A camping unit may discharge wastewater into a transfer container. The connection to the transfer container shall be made watertight. ~~The transfer container shall be provided with a minimum 2-inch screened vent.~~ The note, as recommended, already appears under this section. Is this covered in SPS 384.25(5)? Camping unit transfer containers. Camping unit 50R 381(209)(M) SPS 381.01(209m) defines "transfer container" as the following: • **(209m)** "RV transfer tank" means a type of stationary container used to collect and hold wastewater discharges generated by an individual camping trailer or recreational vehicle. SEE ALSO SPS 384.25(5): • (5) VENTING. (A) EACH TANK, EXCEPT CAMPING UNIT TRANSFER CONTAINERS, SHALL BE PROVIDED WITH A MEANS OF VENTING GASES FORMED INSIDE OF THE TANK TO THE ATMOSPHERE.	More restrictive	***Tony****.and Glen* *"See Appendix 382 for additional information."* *Add table 10.10.2.1.3 to appendix 382. ?*

37c.	382.35 (3) (e) 2.	Re: Finished basements	DIS	2. A cleanout in a drain stack may serve as the cleanout at the junction of the building drain and building sewer, if the stack is within ~~5~~ 10 feet of where the building drain and building sewer connect.		*Ron* *No history of PFV.* IPC and UPC has 5' limitations reference to access from crawlspaces, trap doors and doors. Recommend not change to existing code.
37c.						**MAY 26, 2021 MEETING.**
51e.	382.50(3) (b) 7. b.	Prevent adult day care patients from being burned	DIS	a. A water distribution system may not be designed, installed, or maintained so that the fixture fitting outlets accessible to patients of an adult day care exceeds 115 degrees F. **DPD TO CHECK ON NUMBERING**	Minimal	*BRUCE*
	381.01 DPD to renumber			**POTENTIAL DEFINITION OF "ADULT DAY CARE"** Adult Day Care is a day program that provides the elderly and other adults with services when their caregivers are at work or need relief. Adult Day Care is a type of Assisted Living.		*Definition from DHS website*
						MAY 26, 2021 MEETING.
51f.	382.50(3) (b) 7. c.	Create new subd.		The use of limit stops in faucets or shower/tub mixing valves to achieve a maximum temperature of 115 degrees F is prohibited.	Cost-savings for	

		.			customers. Saves customers the expense of adding thermostatic mixers after they have already purchased limit stop faucets that do not perform	
51f.				**USE OF STOPS 115+ IS PROHIBITED; THERMOSTATIC CONTROLLED IS REQUIRED**		**MAY 26, 2021 MEETING.**
54a.	382.50 (3) (b) 4. b	Create c. (See related: #54)	DIS	b. Control valves shall automatically regulate the temperature of the water supply of the distribution system that exceeds 140 degrees to patient areas.	Example: Water circulated at 150 deg would have to have that temp regulated by a control valve.	*BRUCE*
54a.				**REMINDER: UPDATE APPENDIX**		**MAY 26, 2021 MEETING.**
57f.	382.51 (2) (e)	Create (e)	DIS	(1) (e) The entire water supply system shall be designed for periodic flushing at a minimum velocity of 3 fps per ANSI/AWWA Standard C651, Table 3. **FLUSHING PER AWWA C651, TABLE 3**	Minimal for **"Manufactured homes and**	*TONY*

FLUSH PIPELINES AT 3.0 FPS

Table 3 Required flow and openings (either taps or hydrants) to flush pipelines at 3.0 ft/sec (0.91 m/sec) (40 psi [276 kPa] residual pressure in water main)*

Pipe Diameter		Flow Required to Produce 3.0 ft/sec (approx.) Velocity in Main		Size of Tap Used, *in. (mm)*			Number of Hydrant Outlets	
				1 (25)	1½ (38)	2 (51)		
in.	*(mm)*	*gpm*	*(L/sec)*	Number of Taps Required on Pipe†			2½-in. (64-mm)	4½-in. (114 mm)
4	(100)	120	(7.4)	1	—	—	1	1
6	(150)	260	(16.7)	—	1	—	1	1
8	(200)	470	(29.7)	—	2	—	1	1
10	(250)	730	(46.3)	—	3	2	1	1
12	(300)	1,060	(66.7)	—	—	3	2	1
16	(400)	1,880	(118.6)	—	—	5	2	1

*With a 40-psi (276-kPa) pressure in the main with the hydrant flowing to atmosphere, a 2½-in. (64-mm) hydrant outlet will discharge approximately 1,000 gpm (63.1 L/sec); and a 4½-in. (114-mm) hydrant outlet will discharge approximately 2,500 gpm (160 L/sec).

†Number of taps on pipe based on 3.0-ft/sec discharge through 5 ft (1.5 m) of galvanized iron (GI) pipe with one 90° elbow.

AWWA 651 MAIN FLUSHING

					manufactured home communities."	
57f.				**REVISIT MINIMUM FLUSHING REQUIREMENTS**		**MAY 26, 2021 MEETING.**

<table>
<tr><th colspan="7">SPS 381- 384 STANDARDS</th></tr>
<tr><th>No.</th><th>RULE PROVISION</th><th>ISSUE/REASON FOR CHANGE</th><th>PROPOSED BY</th><th>EXISTING LANGUAGE AND PROPOSED CHANGE</th><th>POTENTIAL IMPACT/COST</th><th>COMMENTS/STATUS</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>7G</td><td>384.30 (3) (E) 3.</td><td></td><td>DSPS</td><td>3. ROOF DRAINS SHALL BE SIZED IN ACCORDANCE WITH S. SPS 382.36 AND THE DRAIN OUTLET SHALL NOT BE LESS THAN 2 <s>21/2</s> INCHES IN DIAMETER.
Note: SEE S. SPS 382.36 (10) AND (11) FOR ADDITIONAL ROOF DRAIN REQUIREMENTS.</td><td></td><td>See #116

THE IPC AND UPC BOTH ALLOW 2 IN. SIZE</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>7H</td><td>384.30 (3) (D)</td><td><s>REPEAL</s>RETAIN AND UPDATE</td><td>DSPS</td><td>Subsoil DRAINPIPE. SUBSOIL DRAINS SHALL BE OPEN JOINTED, HORIZONTALLY SPLIT, OR PERFORATED PIPE CONFORMING TO ONE OF THE STANDARDS LISTED IN TABLE 384.30–4<s>7</s>.

TABLE 384.30-4
Subsoil drain pipe and perforated effluent distribution piping for non-pressurized soil absorption systems
<table><tr><th>Material</th><th>Standard</th></tr><tr><td>Cast iron</td><td>ASTM A74; ASTM A888; CISPI 301</td></tr><tr><td>Polyethylene (PE)[a]</td><td>ASTM F405; ASTM F810</td></tr><tr><td>Polyvinyl chloride (PVC)[a]</td><td>ASTM D2729, ASTM D3034; ASTM F891</td></tr><tr><td>Vitrified clay</td><td>ASTM C700</td></tr></table>Note A: <s>THE P</s> PIPE SHALL HAVE <s>2 ROWS, AND</s> ONLY 2 ROWS<s>,</s> OF PERFORATIONS PARALLEL TO THE AXIS OF THE PIPE AND 120° ± 5° APART. <s>THE P</s> PERFORATIONS SHALL BE AT THE NOMINAL 4 AND 8 O'CLOCK POSITIONS WHEN THE PIPE IS INSTALLED.</td><td></td><td>BELIEVE REFERENCE TO TABLE 384.30-7 MAY HAVE BEEN TYPO.

STANDARDS ADDED TO TABLE ALREADY ADOPTED FOR OTHER UNDERGROUND USES.

IPC CONTAINS A SIMILAR CODE SECTION (1102.5) AS DOES THE UPC (1101.4.6)</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>46</td><td>381.01(50R)</td><td>CONSOLIDATE AND REVISE</td><td>DSPS</td><td>381.01(50R) "CAMPING UNIT TRANSFER TANK" MEANS A TYPE OF PORTABLE CONTAINER USED TO COLLECT AND HOLD WASTEWATER DISCHARGE<s>S GENERATED BY</s> AN INDIVIDUAL CAMPING UNIT.</td><td></td><td></td></tr>
</table>

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
	381.01(209M) 381.01(50H) 381.01(201A) 381.01(201B) 382.37(2)(A)	DELETE NOW REDUNDANT DEFINITION CREATE CREATE CREATE REVISED FOR CONSISTENCY WITH REVISED DEFINITIONS		**381.01(50R)** "**CAMPING UNIT TRANSFER TANK**" OR "**RV TRANSFER TANK**" MEANS A CONTAINER USED TO COLLECT AND HOLD DOMESTIC WASTEWATER DISCHARGED FROM AN INDIVIDUAL CAMPING UNIT OR THE HOLDING TANK OF AN INDIVIDUAL CAMPING TRAILER, RECREATIONAL VEHICLE, RECREATIONAL MOBILE HOME OR SIMILAR VEHICLE. ~~**381.01(209M)** "RV TRANSFER TANK" MEANS A TYPE OF STATIONARY CONTAINER USED TO COLLECT AND HOLD WASTEWATER DISCHARGES GENERATED BY AN INDIVIDUAL CAMPING TRAILER OR RECREATIONAL VEHICLE.~~ **301.01(50H)** "**CAMPING TRAILER**" MEANS A VEHICLE WITH A COLLAPSIBLE OR FOLDING STRUCTURE DESIGNED FOR HUMAN HABITATION AND TOWED UPON A HIGHWAY BY A MOTOR VEHICLE. CAMPING TRAILER HAS THE MEANING GIVEN IN § 340.01 (6M). **301.01(201A)**"**RECREATIONAL MOBILE HOME**" MEANS A PREFABRICATED STRUCTURE THAT IS ≤ 400 FT.^{2}, OR THAT IS CERTIFIED BY THE MANUFACTURER AS CONFORMING TO ANSI A119.5-20, THAT IS DESIGNED TO BE TOWED OR DRIVEN AND USED PRIMARILY AS TEMPORARY LIVING QUARTERS FOR RECREATIONAL, CAMPING, TRAVEL, OR SEASONAL PURPOSES. RECREATIONAL MOBILE HOME HAS THE MEANING GIVEN IN § 66.0435 (1) (HM), EXCEPT THIS DEFINITION ACKNOWLEDGES THE CURRENT ANSI STANDARD AND THAT SUCH VEHICLES MAY BE DRIVEN (I.E. SELF-PROPELLED) **301.01(201B)** "**RECREATIONAL VEHICLE**" MEANS A VEHICLE THAT IS DESIGNED TO BE TOWED BY A MOTOR VEHICLE OR DRIVEN UPON A HIGHWAY, THAT IS EQUIPPED AND USED, OR INTENDED TO BE USED, PRIMARILY FOR TEMPORARY OR RECREATIONAL HUMAN HABITATION, THAT HAS WALLS OF RIGID CONSTRUCTION, AND IS ≤ 45 FT. IN LENGTH. RECREATIONAL VEHICLE HAS THE MEANING GIVEN IN § 340.01 (48R), EXCEPT THIS DEFINITION ACKNOWLEDGES SUCH VEHICLES MAY BE DRIVEN (SELF-PROPELLED) **SANITARY DUMP STATIONS.** **(A)** SANITARY DUMP STATIONS WHICH ARE USED TO RECEIVE ~~DOMESTIC WASTES AND~~ DOMESTIC WASTEWATER FROM CAMPING UNIT TRANSFER TANKS OR RV TRANSFER TANKS ~~THE HOLDING~~		NOW CONSISTENT WITH SPS 327, SPS 383, ATCP 79AND RELATED STATS AS NOTED.

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
	382.37 (3)(A)8.A. & B. 384.25(5)(A) 384.25(10)(A)	CREATED FOR CLARITY AND CONSISTENCY WITH REVISED DEFINITIONS REVISED FOR CONSISTENCY WITH REVISED DEFINITIONS CREATE		~~TANKS OF TRAVEL TRAILERS, RECREATIONAL VEHICLES OR OTHER SIMILAR MOBILE VEHICLES, AND TRANSFER CONTAINERS~~ SHALL CONFORM WITH THIS SUBSECTION. **NOTE:** SEE CH. SPS 382 APPENDIX A-382.37 (2) FOR FURTHER EXPLANATORY MATERIAL. 8. AN INDIVIDUAL CAMPING UNIT, CAMPING TRAILER, RECREATIONAL MOBILE HOME OR RECREATIONAL VEHICLE MAY DISCHARGE WASTEWATER INTO A CAMPING UNIT TRANSFER TANK OR RV TRANSFER TANK AS PERMITTED UNDER S. SPS 383.32 (1)(H) AND S. SPS 383.32 (1)(I) WIS. ADM. CODE. A. CAMPING UNIT TRANSFER TANKS AND RV TRANSFER TANKS SHALL DISCHARGE TO A SANITARY DUMP STATION OR CAMPSITE RECEPTOR. B. CONNECTIONS TO CAMPING UNIT TRANSFER TANKS AND RV TRANSFER TANKS SHALL BE WATERTIGHT. **(5)** VENTING. (A) EACH TANK, EXCEPT CAMPING UNIT TRANSFER TANKS OR RV TRANSFER TANKS ~~CAMPING UNIT TRANSFER CONTAINERS~~, SHALL BE VENTED ~~PROVIDED WITH A MEANS OF VENTING GASES FORMED INSIDE OF THE TANK~~ TO ~~THE~~ ATMOSPHERE. (A) CAMPING UNIT TRANSFER TANKS AND RV TRANSFER TANKS SHALL HAVE LIQUID LEVEL INDICATORS THAT ARE READILY VISIBLE WHEN THE TANKS ARE IN USE. Note: TRANSLUCENT MATERIALS (E.G. NATURAL PE) ARE AN ACCEPTABLE MEANS OF LIQUID LEVEL INDICATION.		USE RESTRICTED UNDER S. SPS 383.32(1)(H)&(I) THE USE OF RV TRANSFER TANKS SHALL BE RESTRICTED TO ANY OF THE FOLLOWING SITES: 1. CAMPGROUNDS PERMITTED BY THE DEPARTMENT OF HEALTH SERVICES UNDER CH. ATCP 79. 2. PROPERTIES WHERE THE USE OF THE RV TRANSFER TANK IS PERMITTED BY AN ADOPTED GOVERNMENTAL UNIT ORDINANCE AND MONITORED BY THE GOVERNMENTAL UNIT. (I) THE USE OF CAMPING UNIT TRANSFER TANKS SHALL BE RESTRICTED TO CAMPGROUNDS PERMITTED BY THE DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION UNDER CH. ATCP 79.

<table>
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<tr><td>114</td><td>381.01

381.20 AND TABLE 384.11</td><td>UPDATE CODE REQUIREMENTS FOR FOG TREATMENT</td><td>DSPS/gLENs.</td><td>THE FOLLOWING DEFINITION WOULD BE ADDED TO S. SPS 381.01 (108X): “FOG” MEANS FATS, OILS AND GREASES.

FOG (Fats, Oils & Greases) TABLE
<table><tr><th>Standard Designation</th><th>Title</th></tr><tr><td>ASME/ANSI A112.14.3-2018</td><td>Hydromechanical Grease Interceptors</td></tr><tr><td>ASME A112.14.4-2001 (R2012)</td><td>Grease Removal Devices</td></tr><tr><td>ASME A112.14.6-2010</td><td>FOG (Fats, Oils and Greases) Disposal Systems</td></tr></table></td><td></td><td></td></tr>
</table>

No.	RULE PROVISION	ISSUE/REASON FOR CHANGE	PROPOSED BY	EXISTING LANGUAGE AND PROPOSED CHANGE	POTENTIAL IMPACT/COST	COMMENTS/STATUS
	382.34(5) 382.34(5)(C)			CSA B481 Series-12 (R2017) — Grease Interceptors IAPMO/ANSI Z1001-2013 — Prefabricated Grease Interceptors PDI-G 101 (R2017) — Testing and Rating Procedure for Hydro Mechanical Grease Interceptors with Appendix of Installation and Maintenance PDI-G 102 (2009) — Testing and Certification for Grease Interceptors with FOG Sensing and Alarm Devices THESE ARE THE STANDARDS THAT SUPPORT THE PROPOSED REVISION OF S. SPS 382.34(5) WIS. ADM. CODE. THESE STANDARDS, IF ADOPTED, WILL BE ADDED TO THE APPROPRIATE TABLE, OR NEWLY CREATED TABLE (PDI), IN S. SPS 381.20 WIS. ADM. CODE AND TABLE 384.11 WIS. ADM. CODE. (5) ~~GREASE AND OIL TREATMENT.~~ Fat, Oil and Grease (FOG) Treatment. (C) ~~Exterior Grease Interceptors~~ Grease interceptors. GREASE INTERCEPTORS SHALL RECEIVE THE ENTIRE WASTE DISCHARGE FROM KITCHENS OR FOOD PROCESSING AREAS. 1. HYDROMECHANICAL GREASE INTERCEPTORS, FOG DISPOSAL SYSTEMS AND AUTOMATIC GREASE REMOVAL DEVICES SHALL BE: a. SIZED IN ACCORDANCE WITH ASME A112.14.3, ASME A112.14.4, ASME A112.14.6, CSA B481.3 OR PDI G101; b. DESIGNED AND TESTED IN ACCORDANCE WITH ASME A112.14.3, ASME A112.14.4, CSA B481.3, PDI G101 OR PDI G102: c. INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. IF MANUFACTURER'S INSTRUCTIONS ARE NOT PROVIDED, THEN DEVICE SHALL BE INSTALLED IN ACCORDANCE WITH ASME A112.14.3, ASME A112.14.4, ASME A112.14.6, CSA B481.3 OR PDI G101; AND d. EQUIPPED WITH FLOW CONTROL DEVICES TO PREVENT FLOW RATE FROM EXCEEDING THE MAXIMUM RATED FLOW. THE FLOW CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS OR VENTED AND TERMINATE ≥ 6-IN. ABOVE THE FLOOD LEVEL RIM.		

SPS 381- 384 STANDARDS						
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				2. AUTOMATIC GREASE REMOVAL DEVICES SHALL BE: a. INSTALLED DOWNSTREAM OF EACH FIXTURE, OR MULTIPLE FIXTURES, IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS; b. SIZED TO PRETREAT THE MEASURED OR CALCULATED FLOWS OF ALL CONNECTED FIXTURES OR EQUIPMENT; AND c. ACCESSIBLE FOR INSPECTION, SERVICE AND MAINTENANCE. 3. GRAVITY GREASE INTERCEPTORS AND FOG DISPOSAL SYSTEMS SHALL: a. DETERMINE CAPACITY BY MULTIPLYING THE PEAK FLOW RATE INTO THE INTERCEPTOR IN GALLONS PER MINUTE (GPM) BY A RETENTION TIME OF 30 MIN. b. BE DESIGNED AND TESTED IN ACCORDANCE WITH ASME A112.14.6 AND IAPMO Z1001. c. BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. IF MANUFACTURER'S INSTRUCTIONS ARE NOT PROVIDED, THEN DEVICE SHALL BE INSTALLED IN ACCORDANCE WITH ASME A112.14.6 AND IAPMO/ANSI Z1001. 4. GREASE INTERCEPTORS THAT DO NOT CONFORM S. 382.34(5)(C)1. SHALL CONFORM TO S. 382.34(5)(C)2,3 AND 4. OR S. 382.34(5)(D) WIS. ADM. CODE. THIS IS INTENDED TO ALLOW A PLUMBER/DESIGNER TO DO IT THE NEW WAY (ABOVE) OR THE ESTABLISHED WAY (BELOW). ~~1.~~ 2.'**Design**.' **A.** THE LIQUID DEPTH OF THE INTERCEPTOR SHALL NOT BE LESS THAN 42" NOR MORE THAN AN AVERAGE OF 72". **B.** A RECTANGULAR INTERCEPTOR TANK SHALL HAVE A MINIMUM WIDTH OF 36_ AND A MINIMUM LENGTH OF 72". THE LONGEST DIMENSION OF THE TANK SHALL BE PARALLEL TO THE DIRECTION OF WASTE FLOW. **C.** A HORIZONTAL–CYLINDRICAL INTERCEPTOR TANK SHALL HAVE A MINIMUM INSIDE DIAMETER OF 52" AND A MINIMUM LENGTH OF 72". THE LONGEST DIMENSION OF THE TANK SHALL BE PARALLEL TO THE DIRECTION OF WASTE FLOW. **D.** VERTICAL–CYLINDRICAL INTERCEPTOR TANKS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 72".		

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
				E. EACH PREFABRICATED INTERCEPTOR TANK SHALL BE CLEARLY MARKED TO INDICATE LIQUID CAPACITY AND THE NAME AND ADDRESS OR REGISTERED TRADEMARK OF THE MANUFACTURER. THE MARKINGS SHALL BE IMPRESSED INTO OR EMBOSSED ONTO THE OUTSIDE WALL OF THE TANK IMMEDIATELY ABOVE THE OUTLET OPENING. EACH SITE−CONSTRUCTED CONCRETE TANK SHALL BE CLEARLY MARKED AT THE OUTLET OPENING TO INDICATE THE LIQUID CAPACITY. THE MARKING SHALL BE IMPRESSED INTO OR EMBOSSED ONTO THE OUTSIDE WALL OF THE TANK IMMEDIATELY ABOVE THE OUTLET OPENING. **F.** THE INLET AND OUTLET OPENINGS OF INTERCEPTOR TANKS OR TANK COMPARTMENTS SHALL BE PROVIDED WITH, OPEN−END SANITARY TEE FITTINGS OR BAFFLES, SO DESIGNED AND CONSTRUCTED AS TO DISTRIBUTE THE FLOW AND RETAIN THE GREASE IN THE TANK OR TANK COMPARTMENTS. THE SANITARY TEE FITTINGS OR BAFFLES SHALL EXTEND AT LEAST 6" ABOVE THE LIQUID LEVEL. AT LEAST 2" OF CLEAR SPACE SHALL BE PROVIDED ABOVE THE TOP OF THE SANITARY TEE FITTINGS OR BAFFLES. THE SANITARY TEE FITTING OR BAFFLE AT THE INLET OPENING SHALL EXTEND BELOW THE LIQUID LEVEL OF THE TANK A DISTANCE EQUAL TO ⅓ OF THE TOTAL LIQUID DEPTH. THE SANITARY TEE FITTING OR BAFFLE AT THE OUTLET OPENING SHALL EXTEND BELOW THE LIQUID LEVEL OF THE TANK A DISTANCE EQUAL TO ⅔ OF THE TOTAL LIQUID DEPTH. THE WATERLINE IN THE INTERCEPTOR SHALL BE AT LEAST 2" BELOW THE HORIZONTAL DRAIN DISCHARGING TO THE INTERCEPTOR. **G.** EACH COMPARTMENT OF AN INTERCEPTOR TANK SHALL BE PROVIDED WITH AT LEAST ONE MANHOLE OPENING LOCATED OVER EITHER THE INLET OR OUTLET OPENING. ADDITIONAL MANHOLE OPENINGS SHALL BE PROVIDED SUCH THAT NO INTERIOR COMPARTMENT WALL OF A TANK IS MORE THAN 4 FEET FROM THE EDGE OF THE MANHOLE OPENING. THE DISTANCE BETWEEN MANHOLE OPENINGS SERVING THE SAME COMPARTMENT SHALL NOT EXCEED 8 FEET. MANHOLE OPENINGS SHALL BE NOT LESS THAN 23" IN THE LEAST DIMENSION. MANHOLES SHALL TERMINATE AT OR ABOVE GROUND SURFACE AND BE OF APPROVED MATERIALS. STEEL TANKS SHALL HAVE A MINIMUM 2" COLLAR FOR THE MANHOLE EXTENSIONS PERMANENTLY WELDED TO THE TANK. THE MANHOLE EXTENSION ON FIBERGLASS TANKS SHALL BE OF THE SAME MATERIAL AS THE TANK AND AN INTEGRAL PART OF THE TANK. THE COLLAR SHALL HAVE A MINIMUM HEIGHT OF 2". **H.** MANHOLE RISERS FOR INTERCEPTOR TANKS SHALL BE PROVIDED WITH A SUBSTANTIAL, FITTED, WATERTIGHT COVER OF CONCRETE, STEEL, CAST IRON OR OTHER APPROVED MATERIAL. MANHOLE COVERS SHALL TERMINATE AT OR ABOVE GRADE AND SHALL HAVE AN APPROVED LOCKING DEVICE. **I.** A MINIMUM 4 - 6 INCH PERMANENT LABEL SHALL BE AFFIXED TO THE MANHOLE COVER, IDENTIFYING THE INTERCEPTOR TANK WITH THE WORDS GREASE INTERCEPTOR. WHERE THE TANK ACTS AS THE SEPTIC TANK AND GREASE INTERCEPTOR THE LABEL SHALL IDENTIFY IT AS SUCH. THE WORDING USED ON THE WARNING LABEL SHALL BE APPROVED BY THE DEPARTMENT, AS PART OF THE MATERIALS APPROVAL FOR THE TANK UNDER CH. SPS 384. **J.** AN INLET OR OUTLET OPENING WHICH DOES NOT HAVE A MANHOLE OPENING AS SPECIFIED IN SUBD. 1. G. SHALL BE PROVIDED WITH AN AIRTIGHT INSPECTION OPENING LOCATED OVER THE INLET		

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
				OR OUTLET. THE INSPECTION OPENING SHALL BE AT LEAST 4" IN DIAMETER. THE INSPECTION OPENING SHALL TERMINATE AT OR ABOVE GRADE. **NOTE:** SEE CH. SPS 382 APPENDIX FOR FURTHER EXPLANATORY MATERIAL. ~~2.~~3. '**CAPACITY AND SIZING.**' THE MINIMUM LIQUID CAPACITY OF A GREASE INTERCEPTOR SHALL BE DETERMINED IN ACCORDANCE WITH THE PROVISIONS OF THIS SUBDIVISION, EXCEPT NO GREASE INTERCEPTOR MAY HAVE A CAPACITY OF LESS THAN 1000 GALLONS IF THE INTERCEPTOR IS TO DISCHARGE TO A PRIVATE ONSITE WASTEWATER TREATMENT SYSTEM OR LESS THAN 750 GALLONS IF THE INTERCEPTOR IS TO DISCHARGE TO A MUNICIPAL SEWER SYSTEM AND TREATMENT FACILITY. **A.** THE MINIMUM CAPACITY OF A GREASE INTERCEPTOR SERVING A RESTAURANT WITH SEATING SHALL BE EQUAL TO **C**, WHERE **C = S X H X A,** WHERE **S** = NUMBER OF SEATS, WITH EACH DRIVE−IN CAR SERVICE SPACE COUNTING AS 3 SEATS AND EACH DRIVE−UP SERVICE WINDOW COUNTING AS 60 SEATS. **H** = HOURS PER DAY THAT MEALS ARE SERVED, AT LEAST 6 HOURS BUT NOT MORE THAN 12 HOURS. **A** = APPLIANCE FACTOR: 0.75 FOR A KITCHEN WITH NO DISHWASHING MACHINE AND NO FOOD WASTE GRINDER. 1.0 FOR A KITCHEN WITH EITHER A DISHWASHING MACHINE OR A FOOD WASTE GRINDER. 1.25 FOR A KITCHEN WITH BOTH A DISHWASHING MACHINE AND A FOOD WASTE GRINDER. **B.** THE MINIMUM CAPACITY OF A GREASE INTERCEPTOR SERVING A DINING HALL, HOSPITAL, NURSING HOME, SCHOOL KITCHEN, CHURCH KITCHEN OR A KITCHEN FOR CARRYOUT OR DELIVERY SERVICE SHALL BE EQUAL TO **C**, WHERE: **C = M X G X (H ÷ 2) X P**, WHERE **M** = MEALS SERVED PER DAY. **G** = 3 GALLONS PER MEAL SERVED. **H** = HOURS PER DAY THAT MEALS ARE SERVED, AT LEAST 6 HOURS BUT NOT MORE THAN 12 HOURS. **P** = MEAL PERIODS PER DAY; 1, 2 OR 3. **C.** THE MINIMUM CAPACITY OF A GREASE INTERCEPTOR AS DETERMINED IN SUBD. 2. A. OR B. MAY BE HALVED FOR ESTABLISHMENTS WITH		

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
				ALL PAPER SERVICE, BUT MAY NOT BE LESS THAN 1000 GALLONS IF THE INTERCEPTOR IS TO DISCHARGE TO A PRIVATE SEWAGE SYSTEM OR LESS THAN 750 GALLONS IF THE INTERCEPTOR IS TO DISCHARGE TO A MUNICIPAL SEWER SYSTEM AND TREATMENT FACILITY. ~~3.~~ 4. '**INSTALLATION**.' **A.** GREASE INTERCEPTOR TANKS MAY NOT BE LOCATED WITHIN 5 FEET OF A BUILDING OR ANY PORTION OF THE BUILDING OR SWIMMING POOL; 10 FEET OF A WATER SERVICE; 2 FEET OF A LOT LINE; 10 FEET OF A CISTERN OR 10 FEET OF A RESERVOIR OR HIGH WATER MARK OF A LAKE, STREAM, POND OR FLOWAGE. **NOTE:** THE DEPARTMENT OF NATURAL RESOURCES UNDER CHS. NR 811 AND 812 MAY REQUIRE ADDITIONAL SETBACKS. SEE CH. SPS 382 APPENDIX FOR FURTHER EXPLANATORY MATERIAL. **B.** WHERE A GREASE INTERCEPTOR TANK IS INSTALLED IN GROUNDWATER, THE TANK SHALL BE ADEQUATELY ANCHORED. **C.** GREASE INTERCEPTOR TANKS SHALL BE INSTALLED ON A BEDDING OF AT LEAST 3_ IN DEPTH. THE BEDDING MATERIAL SHALL BE SAND, GRAVEL, GRANITE, LIMEROCK OR OTHER NONCORROSIVE MATERIALS OF A SIZE THAT ALL WILL PASS THROUGH A 3⁄4" SIEVE. **D.** THE BACKFILL MATERIAL FOR STEEL AND FIBERGLASS GREASE INTERCEPTOR TANKS SHALL BE AS SPECIFIED IN SUBD. 3. C. FOR BEDDING AND SHALL BE TAMPED INTO PLACE. THE BACKFILL MATERIAL FOR CONCRETE GREASE INTERCEPTOR TANKS SHALL BE SOIL MATERIAL, OF A SIZE THAT WILL PASS THROUGH A 4 INCH SCREEN AND SHALL BE TAMPED INTO PLACE. **E.** ALL JOINTS ON CONCRETE RISERS AND MANHOLE COVERS FOR A GREASE INTERCEPTOR SHALL BE TONGUE AND GROOVE OR SHIPLAP TYPE AND SEALED WATERTIGHT USING NEAT CEMENT, MORTAR OR BITUMINOUS COMPOUND. ALL JOINTS ON STEEL RISERS FOR A GREASE INTERCEPTOR SHALL BE WELDED OR FLANGED AND BOLTED AND BE WATERTIGHT. ALL STEEL MANHOLE EXTENSIONS FROM A GREASE INTERCEPTOR SHALL BE BITUMINOUS COATED INSIDE AND OUTSIDE. ALL METHODS OF ATTACHING FIBERGLASS RISERS FOR A GREASE INTERCEPTOR SHALL BE WATERTIGHT AND APPROVED BY THE DEPARTMENT. **NOTE:** SEE CH. SPS 382 APPENDIX A–382.30 (11) (D) FOR MATERIAL REPRINTED FROM S. NR 812.08. SECTION NR 812.08 MAY HAVE ADDITIONAL SETBACK REQUIREMENTS TO WELLS. ~~(E)~~(D) **INTERIOR GREASE INTERCEPTORS**. **1.** 'FLOW RATING.' AN INTERIOR GREASE INTERCEPTOR SHALL BE CAPABLE OF ACCOMMODATING A FLOW OF AT LEAST 15 GALLONS PER MINUTE, BUT NOT LESS THAN THE MANUFACTURER'S SPECIFICATIONS. **2.** 'FLOW RATE RELATED TO CONNECTED CAPACITY.' THREE–FOURTHS OF THE TOTAL HOLDING CAPACITY IN GALLONS OF ALL FIXTURES AND DEVICES DISCHARGING TO AN INTERIOR GREASE INTERCEPTOR, SHALL NOT EXCEED THE VALUE OF THE MAXIMUM FLOW RATE WHICH THE INTERCEPTOR CAN ACCOMMODATE.		

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
				3. 'GREASE HOLDING CAPACITY AS RELATED TO FLOW RATE.' THE GREASE HOLDING CAPACITY IN POUNDS SHALL NOT BE LESS THAN DOUBLE THE VALUE OF THE MAXIMUM FLOW RATE WHICH THE INTERCEPTOR CAN ACCOMMODATE. **4.** 'FLOW CONTROLS.' WHERE REQUIRED BY THE MANUFACTURER, DEVICES WHICH CONTROL THE RATE OF FLOW THROUGH AN INTERIOR GREASE INTERCEPT SHALL BE INSTALLED. **A.** THE FLOW CONTROL DEVICES SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE AND CLEANING. **B.** FLOW CONTROLS SHALL BE INSTALLED IN THE DRAIN BRANCH LEADING TO EACH FIXTURE AND SHALL BE SO RATED THAT THE COMBINED FLOW FROM ALL COMBINATIONS OF DISCHARGE WILL NOT DEVELOP EITHER SUFFICIENT STATIC OR VELOCITY HEAD SO THE ESTABLISHED FLOW RATE OF THE INTERCEPTOR CAN BE EXCEEDED. **NOTE:** SEE CH. SPS 382 APPENDIX FOR FURTHER EXPLANATORY MATERIAL. **5.** 'FLOW CONTROL VENTS.' ORIFICE TYPE FLOW CONTROLS FOR AN INTERIOR GREASE INTERCEPTOR SHALL BE VENTED IN ACCORDANCE WITH S. SPS 382.31. **6.** 'PROHIBITED LOCATIONS AND TYPES.' NO WATER–COOLED GREASE INTERCEPTOR MAY BE INSTALLED. NO GREASE INTERCEPTOR MAY BE LOCATED WHERE THE SURROUNDING TEMPERATURES, UNDER OPERATING CONDITIONS, ARE LESS THAN 40° F. **7.** A MAXIMUM OF 12 INCHES OF HORIZONTAL INLET PIPE MAY BE SUBMERGED.		
115	384.20(5)(P)		DIS	~~(p) Water heaters. 1. Listed equipment. ALL WATER HEATERS SHALL BEAR THE LABEL OF A LISTING AGENCY ACCEPTABLE TO THE DEPARTMENT.~~ ~~**Note:** SEE CH. SPS 384 Appendix A–384.11 FOR LISTING AGENCIES ACCEPTABLE TO THE DEPARTMENT.~~ ~~2. Design. a. ALL PRESSURIZED WATER HEATERS AND PRESSURIZED HOT WATER STORAGE TANKS, EXCEPT THOSE BEARING THE LABEL OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS, SHALL BE DESIGNED AND CONSTRUCTED TO WITHSTAND A MINIMUM TEST PRESSURE OF 150% OF THE MAXIMUM ALLOWABLE WORKING PRESSURE OF THE HEATER OR TANK.~~ ~~b. ALL PRESSURIZED WATER HEATERS AND PRESSURIZED HOT WATER STORAGE TANKS SHALL BE RATED FOR A MINIMUM WORKING PRESSURE OF 125 PSIG.~~ ~~c. A DRAIN VALVE SHALL BE INSTALLED AT THE LOWEST POINT OF EACH WATER HEATER AND HOT WATER STORAGE TANK.~~ ~~3. Safety devices. a. RELIEF VALVES SHALL BE LISTED BY THE AMERICAN GAS ASSOCIATION, UNDERWRITERS LABORATORIES, INC. OR AMERICAN SOCIETY OF MECHANICAL ENGINEERS WHEN THE HEAT INPUT TO A WATER HEATER IS LESS THAN OR EQUAL TO 200,000 BTU PER HOUR.~~ ~~b. RELIEF VALVES SHALL BE LISTED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS WHEN THE HEAT INPUT TO A WATER HEATER EXCEEDS 200,000 BTU PER HOUR.~~ ~~c. PRESSURE RELIEF VALVES SHALL BE SET TO OPEN AT EITHER THE MAXIMUM ALLOWABLE WORKING PRESSURE RATING OF THE WATER HEATER OR STORAGE TANK OR 150 PSIG, WHICHEVER IS SMALLER.~~		GLEN

No.	RULE PROVISION	ISSUE/REASON FOR CHANGE	PROPOSED BY	EXISTING LANGUAGE AND PROPOSED CHANGE	POTENTIAL IMPACT/COST	COMMENTS/STATUS
	381.20 AND TABLE 384.11			~~d. TEMPERATURE AND PRESSURE RELIEF VALVES SHALL BE SET TO OPEN AT A MAXIMUM OF 210º F AND IN ACCORDANCE WITH SUBD. 3. C.~~ **~~Note:~~** ~~See s. SPS 382.40 (5) (D) 1. CONCERNING THE SIZING OF TEMPERATURE AND PRESSURE RELIEF VALVES.~~ THESE ARE THE STANDARDS THAT SUPPORT THE PROPOSED REVISION OF S. SPS 384.20(5)(P) WIS. ADM. CODE. THESE STANDARDS, IF ADOPTED, WILL BE ADDED TO THE APPROPRIATE TABLE, OR NEWLY CREATED TABLE (PDI), IN S. SPS 381.20 WIS. ADM. CODE AND TABLE 384.11 WIS. ADM. CODE. **Table 384.20-5P** **Water Heating**		

Type	Standard
Residential Storage Tank, Electric	UL/ANSI 174-2021 (STANDARD FOR SAFETY Household Electric Storage Tank Water Heaters)
Storage Tank, Oil Fueled	UL/ANSI 732-1997 (R2018) (STANDARD FOR SAFETY Oil-Fired Storage Tank Water Heaters)
Storage Tank ≤ 75,000 BTU/hr., Gas Fueled	CSA/ANSI Z21.10.1:19 • CSA 4.1:19 (Gas water heaters, volume I, storage water heaters with input ratings of 75,000 BTU per hour or less)
Storage Tank and Instantaneous > 75,000 BTU/hr., Gas Fueled	CSA/ANSI Z21.10.3:19 • CSA 4.3:19 (Gas-fired water heaters, volume III, storage water heaters with input ratings above 75,000 BTU per hour, circulating and instantaneous)
Commercial Storage Tank, Electric	UL/ANSI 1453-2018 (STANDARD FOR SAFETY Electric Booster and Commercial Storage Tank Water Heaters)
Solid Fuel	UL/ANSI 2523-2018 (STANDARD FOR SAFETY Solid Fuel-Fired Hydronic Heating Appliances, Water Heaters, and Boilers)
Instantaneous, Electric	UL/ANSI 499-2021 (STANDARD FOR SAFETY Electric Heating Appliances)
Pools and Tubs, Electric	UL/ANSI 1261-2017 (STANDARD FOR SAFETY Electric Water Heaters for Pools and Tubs)

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
	384.20(5)(P)			<table><tr><td>Relief Valve Drain Tubes</td><td>ASME/ANSI A112.4.1-2009 (R2019) (Water Heater Relief Valve Drain Tubes)</td></tr><tr><td>Relief Valves</td><td>ANSI Z21.22-2015 (R2020)/CSA 4.4-2015 (R2020) (Relief valves for hot water supply systems)</td></tr><tr><td>Single Wall Heat Transfer Fluid[1]</td><td>Category Code: HT-1</td></tr></table> 1 = NSF REGISTRATION GUIDELINES FOR PROPRIETARY SUBSTANCES AND NONFOOD COMPOUNDS. The NSF NONFOOD COMPOUNDS REGISTRATION PROGRAM IS A CONTINUATION OF THE USDA PRODUCT APPROVAL AND LISTING PROGRAM, WHICH IS BASED ON MEETING REGULATORY REQUIREMENTS INCLUDING FDA 21 CFR FOR APPROPRIATE USE, INGREDIENT AND LABELING: HTTPS://INFO.NSF.ORG/USDA/PSNCLISTINGS.ASP (P) Water heaters. 1. Listed equipment. ALL WATER HEATING EQUIPMENT SHALL BE TESTED AND LISTED BY A NATIONALLY RECOGNIZED, ANSI ACCREDITED, THIRD PARTY LISTING AGENCY ACCEPTABLE TO THE DEPARTMENT UNDER THE APPROPRIATE STANDARD LISTED IN TABLE 384.20-5P. 2. IF A DUAL USE (COMBINED POTABLE WATER AND SPACE HEATING) SYSTEM REQUIRES WATER FOR SPACE HEATING > 125° F, THEN AN ASSE 1017 COMPLIANT THERMOSTATIC MIXING VALVE SHALL BE INSTALLED TO LIMIT THE INITIAL TEMPERATURE OF WATER SUPPLIED TO THE POTABLE HOT WATER DISTRIBUTION SYSTEM TO ≤ 125° F. 3. DRAIN VALVES, ≥ ¾-IN. NPS WITH MALE GHT OUTLETS, SHALL BE INSTALLED AT THE LOWEST POINT OF EACH WATER HEATER AND HOT WATER STORAGE TANK. 4. WATER HEATERS SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE, MAINTENANCE AND REPLACEMENT.		125°F IS THE MAX. TEMP. SETTING PERMITTED BY WIS. §134.81 AND §196.373. THE INTENT OF THE STATUTES IS SCALD PREVENTION. THE STATUTES PERTAIN TO MFG'S/SELLERS OF WATER HEATERS AND NOTIFICATION BY PUBLIC UTILITIES FURNISHING GAS/ELECTRICITY RESPECTIVELY. THE UPC INDICATES 140° F. A WATER TEMP. OF 125°F WILL NOT KILL L.

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
	382.40(5)(C)			5. WATER HEATERS SHALL BE INDELIBLY LABELED AS REQUIRED BY THE APPLICABLE STANDARD LISTED IN TABLE 384.20-5P. 6. THE INITIAL TEMPERATURE OF WATER FROM TANKLESS WATER HEATERS INSTALLED FOR RESIDENTIAL USE SHALL BE ≤ 125° F. 7. WATER HEATERS AND STORAGE TANKS INSTALLED FOR RESIDENTIAL HOT WATER SHALL HAVE THE MAXIMUM WORKING PRESSURE INDELIBLY MARKED ON THE TANK EXTERIOR SO IT IS EASILY VISIBLE AFTER INSTALLATION. 8. HOT WATER SUPPLY SYSTEMS SHALL BE EQUIPPED WITH AUTOMATIC TEMPERATURE CONTROLS CAPABLE OF ADJUSTMENTS FROM THE LOWEST TO THE HIGHEST ACCEPTABLE TEMPERATURE SETTINGS FOR THE INTENDED USE. 382.40(5)(C) HOT WATER SUPPLY SYSTEMS. 1. HOT WATER SUPPLY SYSTEMS SHALL BE SIZED TO PROVIDE HOT WATER SUFFICIENT TO MEET PEAK DEMAND. 2. WATER HEATERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. 3. WATER HEATERS AND SAFETY DEVICES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH TABLE 384.20-5P. 4. ELEVATION OF WATER HEATER IGNITION SOURCES AND MECHANICAL DAMAGE PROTECTION REQUIREMENTS FOR WATER HEATERS SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE AND THE INTERNATIONAL FUEL GAS CODE. 5. WATER HEATERS USING SOLID, LIQUID OR GAS FUEL SHALL NOT BE INSTALLED WITHIN A ROOM CONTAINING AIR-HANDLING EQUIPMENT WHEN THE ROOM IS USED AS A PLENUM. 6. WATER HEATERS INSTALLED WITHIN AN ATTIC SPACE SHALL BE PROVIDED WITH AN ACCESS OPENING AND UNOBSTRUCTED PASSAGEWAY LARGE ENOUGH TO PERMIT REMOVAL OF THE WATER HEATER.		PNEUMOPHILA (RAPIDLY), BUT IT DOES NOT FACILITATE GROWTH OR REPRODUCTION. AT 125°F, IT REQUIRES APPROX. A 2-3 HOUR EXPOSURE TO KILL L. PHEUMOPHILA.

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
				PASSAGEWAYS SHALL HAVE THE FOLLOWING DIMENSIONS: ≥ 30-IN. IN HEIGHT, ≥22-IN. IN WIDTH AND ≤ 20-FT. IN LENGTH MEASURED ALONG THE CENTERLINE OF THE PASSAGEWAY FROM THE ACCESS OPENING TO THE WATER HEATER. THE PASSAGEWAY SHALL HAVE CONTINUOUS AND SOLID FLOORING ≥ 24-IN. IN WIDTH. A LEVEL SPACE, ≥ 30-IN IN WIDTH SHALL BE PROVIDED AT THE SERVICE SIDE OF THE WATER HEATER. WATER HEATERS SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE, MAINTENANCE AND REPLACEMENT WITHOUT COMPROMISING THE FUNCTION OF A FIRE RATED ASSEMBLY, REMOVING PERMANENT CONSTRUCTION, OTHER APPLIANCES OR ANY PIPING/DUCTWORK NOT CONNECTED TO THE WATER HEATER. A LEVEL SPACE, ≥ 30-IN IN WIDTH SHALL BE PROVIDED AT THE SERVICE SIDE OF THE WATER HEATER. 7. THE COLD-WATER SUPPLY PIPING FROM THE WATER DISTRIBUTION LINE TO EACH HOT WATER STORAGE TANK OR WATER HEATER SHALL BE PROVIDED WITH A VALVE LOCATED NEAR THE APPLIANCE SERVING ONLY THE STORAGE TANK OR WATER HEATER. THE VALVE SHALL BE ACCESSIBLE AND ON THE SAME FLOOR LEVEL AS THE APPLIANCE BEING SERVED. ~~(c) *Water heaters.* All water heaters and safety devices shall be designed and constructed in accordance with s. SPS 384.20 (5)(p).~~ (C) *Water heaters.* ALL WATER HEATERS AND SAFETY DEVICES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE STANDARD LISTED IN TABLE 384.20-5P. 382.40(5)(D): (d) *Safety devices.* WATER HEATERS SHALL BE EQUIPPED WITH SAFETY DEVICES AS SPECIFIED IN ~~this paragraph.~~ (d) *Safety devices.* WATER HEATERS SHALL BE EQUIPPED WITH SAFETY DEVICES AS SPECIFIED IN THE APPLICABLE STANDARDS LISTED IN TABLE 384.20-5P AND: 1. VACUUM RELIEF VALVES SHALL BE INSTALLED SERVING BOTTOM FED WATER HEATERS AND HOT WATER STORAGE TANKS AND WHEN THE BOTTOM OF THE HEATER OR TANK IS LOCATED MORE THAN 20-FT. ABOVE ANY FAUCET OR OUTLET SERVED BY THE HEATER OR TANK. VACUUM RELIEF VALVES SHALL CONFORM TO ANSI Z21.22.		

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
				2. Shutdown. a. AN ELECTRIC DISCONNECTION METHOD SHALL BE PROVIDED FOR ELECTRIC HOT WATER SUPPLY SYSTEMS IN ACCORDANCE WITH NFPA 70. b. A SEPARATE FUEL SUPPLY SHUT-OFF VALVE TO ALL OTHER TYPES OF HOT WATER SUPPLY SYSTEMS. 3. STORAGE TANK WATER HEATERS AND STORAGE TANKS OPERATING ABOVE ATMOSPHERIC PRESSURE SHALL BE PROVIDED WITH A SELF-CLOSING PRESSURE AND TEMPERATURE RELIEF VALVES OR A COMBINATION VALVE. THE RELIEF VALVE(S) SHALL CONFORM TO ANSI Z21.22-2015 (R2020)/CSA 4.4-2015 (R2020). THE TEMPERATURE STEAM RATING OF A COMBINATION TEMPERATURE AND PRESSURE RELIEF VALVE SHALL BE ≥ THE ENERGY INPUT RATING (BTU/HR.) OF THE WATER HEATER. NO SHUTOFF VALVE, CHECK VALVE, OR OTHER RESTRICTING DEVICE MAY BE INSTALLED BETWEEN THE WATER HEATER OR STORAGE TANK AND THE COMBINATION TEMPERATURE AND PRESSURE RELIEF VALVE. A PRESSURE AND TEMPERATURE RELIEF VALVE(S) SHALL BE INSTALLED ON BOTH THE STORAGE WATER HEATER AND STORAGE TANK. THERE SHALL BE NO CHECK VALVE OR SHUTOFF VALVE BETWEEN THE RELIEF VALVE(S) AND THE HEATER OR TANK SERVED. THE RELIEF VALVE(S) SHALL NOT BE USED TO CONTROL THERMAL EXPANSION. 4. ALL PRESSURIZED NON–STORAGE TYPE WATER HEATERS SHALL BE PROVIDED WITH A PRESSURE RELIEF VALVE. 5. PRESSURE RELIEF VALVES SHALL BE SET TO OPEN AT EITHER THE MAXIMUM ALLOWABLE WORKING PRESSURE RATING OF THE WATER HEATER OR STORAGE TANK OR 150 PSIG, WHICHEVER IS SMALLER. 6. TEMPERATURE AND PRESSURE RELIEF VALVES SHALL BE SET TO OPEN AT ≤ 210° F. 7. TEMPERATURE AND PRESSURE RELIEF VALVES SHALL BE INSTALLED IN THE SHELL OF THE WATER HEATER TANK SO THAT THE SENSING ELEMENT OF THE VALVE EXTENDS INTO THE HEATER OR TANK AND MONITORS THE TEMPERATURE IN THE TOP 6 INCHES OF THE HEATER OR TANK.		

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
				8. EVERY RELIEF VALVE WHICH IS DESIGNED TO DISCHARGE WATER OR STEAM SHALL BE CONNECTED TO A DISCHARGE PIPE AND: a. THE DISCHARGE PIPE AND FITTINGS SHALL BE MADE OF A MATERIAL ACCEPTABLE FOR WATER DISTRIBUTION PIPING IN ACCORDANCE WITH S. SPS 384.30 (4) (e) 1. OR CONFORM TO ASME A112.4.1-2009 (R2019). b. THE DISCHARGE PIPE AND FITTINGS SHALL HAVE A DIAMETER NOT LESS THAN THE DIAMETER OF THE RELIEF VALVE OUTLET. IF DISCHARGE PIPING IS INSTALLED USING INSERT FITTINGS, THEN THE PIPING SHALL BE ONE NOMINAL PIPE SIZE LARGER THAN THE RELIEF VALVE OUTLET AND THE OUTLET END OF THE TUBING SHALL BE SECURELY FASTENED. c. THE DISCHARGE PIPE MAY NOT BE TRAPPED. d. NO VALVE MAY BE INSTALLED IN THE DISCHARGE PIPE. e. THE DISCHARGE PIPE SHALL BE INSTALLED TO DRAIN BY GRAVITY FLOW TO A FLOOR SERVED BY A FLOOR DRAIN OR TO A RECEPTOR IN ACCORDANCE WITH S. SPS 382.33 (8). THE OUTLET OF THE DISCHARGE PIPE SHALL TERMINATE WITHIN 6 INCHES OVER THE FLOOR OR RECEPTOR, BUT NOT LESS THAN A DISTANCE EQUAL TO TWICE THE DIAMETER OF THE OUTLET PIPE. THE OUTLET OF THE DISCHARGE PIPE MAY NOT BE THREADED. f. THE DISCHARGE PIPE FOR A WATER HEATER SHALL TERMINATE WITHIN THE SAME ROOM OR ENCLOSURE WITHIN WHICH THE WATER HEATER OR HOT WATER STORAGE TANK IS LOCATED. 9. WATER HEATERS THAT ARE LISTED UNDER A STANDARD DISPLAYED IN TABLE 384.20-5P BY AN ANSI ACCREDITED THIRD PARTY AGENCY ACCEPTABLE TO THE DEPARTMENT SHALL NOT REQUIRE ADDITIONAL SAFETY DEVICES BEYOND THAT REQUIRED BY THE LISTING.		

<table>
<tr><th colspan="6">SPS 381- 384 STANDARDS</th></tr>
<tr><th>No.</th><th>RULE PROVISION</th><th>ISSUE/REASON FOR CHANGE</th><th>PROPOSED BY</th><th>EXISTING LANGUAGE AND PROPOSED CHANGE</th><th>POTENTIAL IMPACT/COST</th><th>COMMENTS/STATUS</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>118</td><td>TABLE 381.20-4 & TABLE 384.11

TABLE 382.41-1

TABLE 382.41-1</td><td></td><td>DIS</td><td>
<table>
<tr><td>ASSE 1081-2014 (R2020)</td><td>Backflow Preventers with Integral Pressure Reducing Boiler Feed Valve and Atmospheric Vent Style for Domestic and Light Commercial Water Distribut</td></tr>
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BACKPRESSURE BACK SIPHONAGE
LOW HAZARD LOW HAZARD
CONTINUOUS/NON-CONTINUOUS CONTINUOUS/NON-CONTINUOUS
<table>
<tr><th>Methods or Assemblies (Standards)</th><th>App</th></tr>
<tr><td>ASSE 1081-2014 (R2020) Backflow Preventers with Integral Pressure Reducing Boiler Feed Valve and Intermediate Atmospheric Vent Style for Domestic and Light Commercial Water Distribution Systems</td><td>Clos feed</td></tr>
</table>
1 = ASSE 1081 DOES NOT ENCOMPASS POTABLE WATER CONTACT SAFETY; CLOSED-LOOP BOILER VALVES ARE POTENTIALLY EXEMPT FROM THE LEAD RULE UNDER CFR TITLE 40, CHAPTER I, SUBCHAPTER D, PART 143, SUBPART B, §143.16.
</td><td></td><td>DEVICES COVERED BY ASSE 1081 ARE MULTI-FUNCTIONAL PRODUCTS, COMBINED INTEGRALLY IN A
SINGLE HOUSING OR MANIFOLD TO PROVIDE THE REQUIRED FEATURES IN A COMPACT FORMAT THAT IS SERVICEABLE AND EASILY INSTALLED.

THESE DEVICES ARE INTENDED TO PROVIDE THE SAME BENEFITS AND FEATURES AS
THE PRODUCTS INDIVIDUALLY MANUFACTURED AND QUALIFIED UNDER ASSE 1003 (REQUIREMENTS FOR WATER PRESSURE REDUCING VALVES FOR DOMESTIC WATER DISTRIBUTION SYSTEMS) AND ASSE 1012 (BACKFLOW PREVENTER WITH AN INTERMEDIATE ATMOSPHERIC VENT).

BOTH ASSE 1003 AND 1012 ARE ALREADY ADOPTED UNDER THE PLUMBING CODE.</td></tr>
</table>

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
				INFO ONLY: "§ 143.16 Exemptions. THE PROHIBITIONS IN §§143.13 AND 143.15 AND THE PRODUCT CERTIFICATION REQUIREMENTS IN §143.19 SHALL NOT APPLY TO THE PRODUCTS LISTED IN PARAGRAPHS (A) THROUGH (C) OF THIS SECTION: a. PIPES, PIPE FITTINGS, PLUMBING FITTINGS, OR FIXTURES, INCLUDING BACKFLOW PREVENTERS, THAT ARE USED EXCLUSIVELY FOR NONPOTABLE SERVICES SUCH AS MANUFACTURING, INDUSTRIAL PROCESSING, IRRIGATION, OUTDOOR WATERING, OR ANY OTHER USES WHERE THE WATER IS NOT ANTICIPATED TO BE USED FOR HUMAN CONSUMPTION. ADDITIONAL PRODUCTS THAT COULD BE "USED EXCLUSIVELY FOR NONPOTABLE SERVICES" INCLUDE: 1. PRODUCTS THAT ARE CLEARLY LABELED, ON THE PRODUCT, PACKAGE, OR TAG WITH A PHRASE SUCH AS: "NOT FOR USE WITH WATER FOR HUMAN CONSUMPTION" OR ANOTHER PHRASE THAT CONVEYS THE SAME MEANING IN PLAIN LANGUAGE; 2. PRODUCTS THAT ARE INCAPABLE OF USE IN POTABLE SERVICES (*E.G.,* PHYSICALLY INCOMPATIBLE) WITH OTHER PRODUCTS THAT WOULD BE NEEDED TO CONVEY WATER FOR POTABLE USES; OR 3. PRODUCTS THAT ARE PLAINLY IDENTIFIABLE AND MARKETED AS BEING SOLELY FOR A USE OTHER THAN THE CONVEYANCE OF WATER (THESE OTHER USES INCLUDE CONVEYANCE OF AIR, CHEMICALS OTHER THAN WATER, HYDRAULIC FLUIDS, REFRIGERANTS, GASSES, OR OTHER NON-WATER FLUIDS). b. TOILETS, BIDETS, URINALS, FILL VALVES, FLUSHOMETER VALVES, TUB FILLERS, SHOWER VALVES, FIRE HYDRANTS, SERVICE SADDLES, AND WATER DISTRIBUTION MAIN GATE VALVES (PROVIDED THAT SUCH VALVES ARE 2 INCHES IN DIAMETER OR LARGER). c. CLOTHES WASHING MACHINES, EMERGENCY DRENCH SHOWERS, EMERGENCY FACE WASH EQUIPMENT, EYEWASH DEVICES, FIRE SUPPRESSION SPRINKLERS, STEAM CAPABLE CLOTHES DRYERS, AND SUMP PUMPS."		

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
119	381.01 (199P) TABLE 381.20-4 & TABLE 384.11 TABLE 384.30-10 S. 384.40 (1) (D)		DIS	"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. ASSE 1061-2020 | Performance Requirements for Push-Fit F Push-Fit Fittings[3,4] | ASSE 1061-2020 3 = NOMINAL SIZE ≤ 2-IN. CTS. 4 = SHALL NOT BE USED IN TEMPERATURE/PRESSURE RELIEF VALVE DRAIN LINES UNLESS THEY ARE TESTED AND RATED FOR EXCESSIVE CONDITIONS OF 210.0 °F (98.89 °C) AND 150.0 PSIG (1034 KPA), PER ASME A112.4.1 OR ASTM F877. (D) PUSH-FIT FITTINGS SHALL: 1. HAVE A NOMINAL SIZE ≤ 2-IN. CTS. 2. NOT BE USED IN TEMPERATURE/PRESSURE RELIEF VALVE DRAIN LINES UNLESS THEY ARE TESTED AND RATED FOR EXCESSIVE CONDITIONS OF 210.0 °F (98.89 °C) AND 150.0 PSIG (1034 KPA), PER ASME A112.4.1 OR ASTM F877.		GLEN

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
120	TABLE 381.20-3E & TABLE 384.11 382.30 (10)(C)		DIS	ASME A112.3.4-2018/CSA B45.9-18 | Macerating Toilet Systems and Waste Pur for Plumbing Fixtures (C) Prefabricated SUMP AND PUMP systems. MACERATING TOILET SYSTEMS AND WASTE PUMPING SYSTEMS FOR PLUMBING FIXTURES SHALL CONFORM TO ASME A112.3.4-2018/CSA B45.9-18. IF UNSPECIFIED BY THE MANUFACTURER, THE MINIMUM CAPACITY OF A PUMP AND SUMP SYSTEM SHALL BE DETERMINED IN ACCORDANCE WITH ALL OF THE FOLLOWING: 1. THE WATER SUPPLY FIXTURE UNIT, WSFU, METHOD SHALL BE USED TO DETERMINE PEAK INPUT FLOW IN GALLONS PER MINUTE. THE PEAK INPUT SHALL INCLUDE ALL THE FIXTURES THAT DRAIN TO THE SUMP. 2. UNLESS STORAGE IS PROVIDED AS SPECIFIED IN PAR. (A) 2., THE CAPACITY OF THE PREFABRICATED PUMP AND SUMP SYSTEM SHALL ACCOMMODATE THE PEAK INPUT FLOW. 3. THE LOW WATER LEVEL SHALL BE MAINTAINED IN ACCORDANCE WITH THE PUMP MANUFACTURER'S REQUIREMENTS.		GLEN
121	TABLE 381.20-7E & TABLE 384.11		DIS	CSA B45.13:19/IAPMO Z1700-2019 | Vacuum Waste Collection Systems 382.30(14) Vacuum waste collection systems shall:		GLEN

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
	382.30(14)			a. CONFORM TO CSA B45.13:19/IAPMO Z1700-2019. b. BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. c. INCLUDE A VACUUM GENERATING SYSTEM, WASTE COLLECTION CENTER, PIPING NETWORK, VACUUM VALVE AND CONTROL COMPONENTS USED TO ISOLATE THE VACUUM PIPING NETWORK FROM ATMOSPHERIC PRESSURE AND COLLECT WASTE AT THE POINT OF ORIGIN. IF A VACUUM SYSTEM PROVIDES THE ONLY MEANS OF SANITATION, THEN A CONTINGENCY SYSTEM SET TO OPERATE AUTOMATICALLY SHALL BE INSTALLED. d. VACUUM GENERATING SYSTEMS SHALL: 1. INCLUDE VACUUM PUMPS ADEQUATE TO CREATE A CONSTANT VACUUM IN THE PIPING NETWORK AND STORAGE TANKS; 2. HAVE AUTOMATED CONTROLS FOR THE OPERATING OF PUMPS, COLLECTION TANKS AND ALARMS; 3. INCLUDE DEMAND ACTIVATED VACUUM PUMPS; AND 4. BE PROVIDED WITH A VACUUM PUMP EXHAUST VENT CAPABLE OF HANDLING THE TOTAL AIR VOLUME OF THE VACUUM PUMP. e. WASTE COLLECTION CENTERS OR STORAGE TANKS SHALL: 1. BE ADEQUATELY SIZED TO PREVENT FOULING OF THE SYSTEM; 2. BE DESIGNED TO WITHSTAND 150% OF THE RATED VACUUM CREATED BY THE VACUUM GENERATING SYSTEM WITHOUT LEAKAGE OR COLLAPSE; AND 3. BE ACCESSIBLE FOR INSPECTION, REPAIR AND REPLACEMENT. f. VACUUM PIPING NETWORKS SHALL: 1. BE DESIGNED TO WITHSTAND 150% OF THE RATED VACUUM CREATED BY THE VACUUM GENERATING SYSTEM WITHOUT LEAKAGE OR COLLAPSE; 2. BE UNDER CONTINUOUS VACUUM; 3. BE CONSTRUCTED OF MATERIALS SPECIFIED BY THE MFG.; 4. BE SIZED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS; AND 5. CONNECT TO WATER CLOSETS WITH ≥ 1½-IN. I.D. PIPING. g. VACUUM INTERFACE VALVES SHALL: 1. BE INSTALLED TO ISOLATE THE VACUUM PIPING NETWORK FROM ATMOSPHERIC PRESSURE; AND 2. OPEN AUTOMATICALLY WHEN A WASTE REMOVAL CYCLE IS INITIATED FOR THE FIXTURE.		

No.	RULE PROVISION	ISSUE/REASON FOR CHANGE	PROPOSED BY	EXISTING LANGUAGE AND PROPOSED CHANGE	POTENTIAL IMPACT/COST	COMMENTS/STATUS
				h. CONTROL COMPONENTS SHALL INCLUDE LEVELS INDICATOR SWITCHES THAT AUTOMATICALLY CONTROL THE DISCHARGE PUMPS AND PROVIDE THE FOLLOWING WARNINGS OF MALFUNCTION OR BLOCKAGE: 1. START DISCHARGE; 2. STOP DISCHARGE; 3. AUDIBLE ALARM FOR ABNORMALLY HIGH EFFLUENT LEVELS; AND 4. FULL TANK SHUTDOWN WARNING. i. GRAVITY TYPE FIXTURES SHALL CONFORM TO S. SPS 384.20 WIS. ADM. CODE. j. VACUUM WATER CLOSETS SHALL: 1. HAVE S. SPS 382.41 LISTED VACUUM BREAKERS INSTALLED IN FIXTURE SUPPLY PIPING; AND 2. HAVE A WSFU VALUE OF 1 K. PIPING HANGERS AND SUPPORTS USED IN VACUUM WASTE COLLECTION SYSTEMS SHALL CONFORM TO S. SPS 382.60 WIS. ADM. CODE."		
122	S. SPS 384.20 (5) (B) 2.		DIS	2. BATHTUBS SHALL HAVE WASTE OUTLETS AND OVERFLOWS AT LEAST 1–1/2 INCHES IN DIAMETER. A CLOSING DEVICE SHALL BE PROVIDED ON THE WASTE OUTLET. A. OVERFLOW OPENINGS ARE NOT REQUIRED TO BE CIRCULAR. ROUGH, NON-CIRCULAR OVERFLOW OPENINGS SHALL HAVE AT LEAST ONE DIMENSION ≥ 1½-IN. MEASURED IN ANY DIRECTION, AND THE EFFECTIVE OPEN AREA OF OVERFLOW OPENINGS SHALL BE ≥ THE AREA OF A CIRCLE WITH A DIAMETER OF 1½-IN. (I.E. 1.77 IN.^{2}).		GLEN
123	TABLE 381.20-3E &		DIS	ASME A112.6.2-2017 | Framing-Affixed Supports (Carriers) for Off-the-Floor Plumbing Fixtures		GLEN

SPS 381- 384 STANDARDS						
No.	**RULE PROVISION**	**ISSUE/REASON FOR CHANGE**	**PROPOSED BY**	**EXISTING LANGUAGE AND PROPOSED CHANGE**	**POTENTIAL IMPACT/COST**	**COMMENTS/STATUS**
	TABLE 384.11					
124	381.01(74)		DIS	381.01 (74) "DISINFECTION" MEANS A PROCESS OF KILLING OR INACTIVATING MICROORGANISMS, PARTICULARLY PATHOGENS. (74A) "DISINFECTION UNIT" MEANS A TYPE OF POWTS TREATMENT COMPONENT, EXCLUDING A SOIL BASED POWTS TREATMENT COMPONENT, THAT UTILIZES A CHEMICAL OR PHOTOELECTRIC PROCESS TO REDUCE THE WASTEWATER FECAL COLIFORM CONTAMINANT LOAD.		GLEN