

(d) A place that provides lodging for individuals and in which all of the following conditions are met:

1. Each lodged individual is able to exit the place under emergency conditions without the assistance of another individual.

2. No lodged individual receives from the owner, manager or operator of the place or the owner's, manager's or operator's agent or employe any of the following:

a. Personal care, supervision or treatment, or management, control or supervision of prescription medications.

b. Care or services other than board, information, referral, advocacy or job guidance; location and coordination of social services by an agency that is not affiliated with the owner, manager or operator, for which arrangements were made for an individual before he or she lodged in the place; or, in the case of an emergency, arrangement for the provision of health care or social services by an agency that is not affiliated with the owner, manager or operator.

(e) An adult family home.

(f) A residential care apartment complex.

(g) A residential facility in the village of Union Grove that was authorized to operate without a license under a final judgment entered by a court before January 1, 1982, and that continues to comply with the judgment notwithstanding the expiration of the judgment.

SECTION 5a. Comm 81.01 (67e) is created to read:

Comm 81.01 (67e) "DC detector" has the same meaning as specified in sub. (80).

SECTION 5b. Comm 81.01 (67m) is created to read:

Comm 81.01 (67m) "DCV detector" has the same meaning as specified in sub. (79).

SECTION 6. Comm 81.01 (79) is amended to read:

Comm 81.01 (79) "Double check backflow prevention assembly" means a type of cross connection control device which is composed of 2 independently acting check valves internally force-loaded to a normally closed position, tightly closing shut-off valves located at each end of the assembly and fitted with test cocks. The terms "backflow preventer, double check valve type" or "DCV" have the same meaning as double check backflow prevention assembly.

SECTION 7. Comm 81.01 (80) is amended to read:

Comm 81.01 (80) "Double check detector assembly backflow preventer" means a type of a double check backflow prevention assembly which includes a parallel flow meter to indicate leakage or unauthorized use of water downstream of the assembly. The terms "DC detector" and "double check detector valve type backflow preventer" have the same meaning as double check detector backflow preventer.

SECTION 7a. Comm 81.01 (82m) is created to read:

Comm 81.01 (82m) "Dual check valve type with atmospheric port backflow preventer" has the same meaning as specified in sub. (18).

SECTION 8. Comm 81.01 (90e) is created to read:

Comm 81.01 (90e) "Experimental plumbing system" has the same meaning as experimental system as specified in specified in sub. (91).

SECTION 9. Comm 81.01 (116) is repealed and recreated to read:

Comm 81.01 (116) "Health care and related facility" means a hospital, nursing home, community based residential facility, county home, infirmary, inpatient mental health center, inpatient hospice, ambulatory surgery center, adult daycare center, end stage renal facility, facility for the developmentally disabled, institute for mental disease, urgent care center, clinic or medical office, child caring institution, or school of medicine, surgery or dentistry.

SECTION 10. Comm 81.01 (163e) is created to read:

Comm 81.01 (163e) "Nursing home" has the meaning specified under s. 50.01 (3), Stats.

Note: Section 50.01 (3), Stats., reads: "Nursing home" means a place where 5 or more persons who are not related to the operator or administrator reside, receive care or treatment and, because of their mental or physical condition require access to 24-hour nursing services, including limited nursing care, intermediate level nursing care and skilled nursing services. "Nursing home" does not include any of the following:

(c) A convent or facility owned or operated exclusively by and for members of a religious order that provides reception and care or treatment of an individual.

(d) A hospice, as defined in s. 50.90 (1), Stats., that directly provides inpatient care.

(e) A residential care apartment complex.

SECTION 11. Comm 81.01 (170e) is created to read:

Comm 81.01 (170e) "Patient area plumbing fixture" means a plumbing fixture that is accessible to patients in a health care facility and is intended to be used for culinary, hygienic or domestic purposes.

SECTION 12. Comm 81.01 (189) is amended to read:

Comm 81.01 (189) "Pressure vacuum breaker assembly" means a type of cross connection control device 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 "PVB" has the same meaning as pressure vacuum breaker assembly.

SECTION 12a. Comm 81.01 (199e) is created to read:

Comm 81.01 (199e) "PVB" has the same meaning as specified in sub. (89).

SECTION 13. Comm 81.01 (203) is amended to read:

Comm 81.01 (203) "Reduced pressure detector backflow preventer" means a type of reduced pressure principle type backflow preventer which includes a parallel flow meter to indicate leakage or unauthorized use of water downstream of the assembly. The term "RP detector" has the same meaning as reduced pressure detector backflow preventer.

SECTION 14. Comm 81.01 (204) is amended to read:

Comm 81.01 (204) "Reduced pressure principle ~~type~~ backflow preventer" means a type of cross connection control device which contains 2 independently acting check valves, separated by an intermediate chamber or zone in which there is a hydraulically operated means for venting to atmosphere, and includes 2 shut-off valves and 4 test cocks. The term "RP" has the same meaning as reduced pressure principle backflow preventer.

SECTION 14a. Comm 81.01 (209e) is created to read:

Comm 81.01 (209e) "RP" has the same meaning as specified in sub. (204).

SECTION 14b. Comm 81.01 (209m) is created to read:

Comm 81.01 (209m) "RP detector" has the same meaning as specified in sub. (208).

SECTION 14c. Comm 81.01 (252e) is created to read:

Comm 81.01 (252e) "SVB" has the same meaning as specified in sub. (20).

SECTION 15. Comm 81.01 (288e) and Notes are created to read:

Comm 81.01 (288e) "Whirlpool" has the meaning as specified under s. Comm 90.03 (11) (k).

Note: Section Comm 90.03 (11) (k) reads: "Whirlpool" means a relatively small pool which uses high temperature water and which may include a water agitation system. A "whirlpool" is sometimes called a spa.

Note: A fill and dump bathtub is not a whirlpool.

SECTION 15a. Comm 81.01 (288m) is created to read:

Comm 81.01 (288m) "Whirlpool bath tub" means a plumbing appliance consisting of a bathtub fixture that is equipped and fitted with a circulation piping system designed to accept, circulate and discharge bathtub water upon each use.

SECTION 15b. Comm 81.20 (2) is repealed.

SECTION 15c. Comm 81.20 (3) is renumbered as Comm 81.20 (2) and amended to read:

Comm 81.20 (2) ADOPTION OF STANDARDS. The standards referenced in Tables 81.20-1 to ~~81.20-14~~ 81.20-13 are hereby incorporated by reference into this chapter.

SECTION 15d. Comm 81.20 (2) Notes are created to read:

Note: Copies of the adopted standards are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies of the standards may be purchased through the respective organizations listed in Tables 81.20-1 to 81.20-13.

Note: Refer to chs. Comm 82 - 86 for additional information regarding specific installations, uses and limitations of these standards.

SECTION 15e. Comm 81.20 (2) Table 81.20-2 is repealed and recreated to read:

Table 81.20-2

ANSI	American National Standards Institute, Inc. 1430 Broadway New York, New York 10018
Standard Reference Number	Title
1. Z21.22a-90	Relief Valves and Automatic Gas Shutoff Devices for Hot Water Supply Systems
2. Z21.61-83	Gas-Fired Toilets
3. Z124.1-95	Plastic Bathtub Units
4. Z124.2-95	Plastic Shower Receptors and Shower Stalls
5. Z124.3-95	Plastic Lavatories
6.. Z124.4-96	Plastic Water Closet Bowls and Tanks
7. Z124.6-97	Plastic Sinks
8. Z124.9-94	Fixtures, Plastic Urinal, American National Standard for

SECTION 15f. Table 81.20-3e is created to read:

Table 81.20-3e

ASME		American Society of Mechanical Engineers 345 East 47th Street New York, New York 10017
Standard Reference Number	Title	
1.	A112.1.2-91 (R1998)	Air Gaps in Plumbing Systems
2.	A112.6.1M-97	Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use
3.	A112.14.1-75 (R1998)	Backwater Valves
4.	A112.18.1M-96	Plumbing Fixture Fittings
5.	A112.19.1M-94	Enameled Cast Iron Plumbing Fixtures
6.	A112.19.2M-95	Vitreous China Plumbing Fixtures
7.	A112.19.3M-87 (R1996)	Stainless Steel Plumbing Fixtures (Designed for Residential Use)
8.	A112.19.4-94	Porcelain Enameled Formed Steel Plumbing Fixtures
9.	A112.19.5-79 (R1998)	Trim for Water-Closet Bowls, Tanks, and Urinals (Dimensional Standards)
10.	A112.19.6-95	Hydraulic Performance Requirements for Water Closets and Urinals
11.	A112.21.1M-91	Floor Drains
12.	A112.21.2M-83	Roof Drains
13.	B1.20.1-83 (R1992)	Pipe Threads, General Purpose (Inch)
14.	B16.1-89	Cast Iron Pipe Flanges and Flanged Fittings
15.	B16.3-92	Malleable Iron Threaded Fittings
16.	B16.4-92	Gray Iron Threaded Fittings
17.	B16.5a-98	Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24 (and addenda)
18.	B16.9-93	Factory-Made Wrought Steel Butt welding Fittings
19.	B16.11-96	Forged Fittings, Socket-Welding and Threaded
20.	B16.12-91	Cast Iron Threaded Drainage Fittings
21.	B16.15-85 (R1994)	Cast Bronze Threaded Fittings, Classes 125 and 250
22.	B16.18-84 (R1994)	Cast Copper Alloy Solder Joint Pressure Fittings
23.	B16.22-95	Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings
24.	B16.23-92	Cast Copper Alloy Solder Joint Drainage Fittings-DWV
25.	B16.24-91	Cast Copper Alloy Pipe Flanges and Flanged Fittings, Class 150, 300, 400, 600, 900, 1500 and 2500
26.	B16.26-88	Cast Copper Alloy Fittings for Flared Copper Tubes
27.	B16.28-94	Wrought Steel Butt welding Short Radius Elbows and Returns
28.	B16.29-94	Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings - DWV
29.	B16.42-87 (R1997)	Ductile Iron Pipe Flanges and Flanged Fittings
30.	B16.45-87 (R1997)	Cast Iron Fittings for Sovent® Drainage Systems
31.	B36.19M-85 (R1994)	Stainless Steel Pipe

SECTION 15g. Table 81.20-4 (partial) is amended to read:

Table 81.20-4

ASSE		American Society of Sanitary Engineering P.O. Box 9712 901 Canterbury, Suite A Bay Village, Ohio 44140 West Lake, Ohio 44145-1166
Standard Reference Number	Title	
3.	1003-93 1003-95	Water Pressure Reducing Valves
10.	1010-82 1010-96	Water Hammer Arrestors Arresters
11.	1011-93 1011-95	Hose Connection Vacuum Breakers
13.	1013-93 1013-99	Reduced Pressure Principle Backflow Preventers Detector Fire Protection Backflow Prevention Assemblies
15.	1015-93 1015-99	Double Check Backflow Prevention Assembly Fire Protection Backflow Prevention Assemblies
15e.	1016-96	Individual Thermostatic, Pressure Balancing, and Combination Pressure Balancing and Thermostatic Control Valves for Individual Fixture Fittings
16.	1018-86 1018-88	Trap Seal Primer Valves, Water Supply Fed
17.	1019-93 1019-97	Vacuum Breaker Wall Hydrants, Freeze Resistant Automatic Draining Type
18.	1020-90 1020-89	Pressure Vacuum Breaker Assembly
18e.	1022-96	Backflow Preventer for Carbonated Beverage Machines
21.	1035-93 1035-95	Laboratory Faucet Backflow Preventers
22e.	1043-92	Cast Iron Sovent [®] Sanitary Drain Systems
23.	1047-93 1047-99	Reduced Pressure Detector Fire Protection Backflow Preventer Prevention Assemblies
24.	1048-93 1048-99	Double Check Fire Protection Detector Assembly Backflow Preventer Prevention Assemblies
25.	1052-93 1052-94	Hose Connection Backflow Preventers
25e.	1055-97	Chemical Dispensing Systems
26.	1056-93 1056-95	Back Siphonage Backflow Vacuum Breakers
26e.	1066-97	Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings
27.	5010-1013-1-90	Field Test Procedure for a Reduced Pressure Principle Assembly Using A Differential Pressure Gauge
28.	5010-1015-1-90	Field Test Procedure for a Double Check Valve Assembly Using a Duplex Gauge
29.	5010-1015-2-90	Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge-High and Low-Pressure Hose Method
30.	5010-1015-3-90	Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge-High Hose Method
31.	5010-1015-4-90	Field Test Procedure for a Double Check Valve Assembly Using a Sight Tube
32.	5010-1020-1-90	Field Test Procedure for a Pressure Vacuum Breaker Assembly
33.	5010-1047-1-90	Field Test Procedure for a Reduced Pressure Detector Assembly Using a Differential Pressure Gauge
34.	5010-1048-1-90	Field Test Procedure for a Double Check Detector Assembly Using a Duplex Gauge
35.	5010-1048-2-90	Field Test Procedure for a Double Check Detector Assembly Using a Differential Pressure Gauge-High and Low-Pressure Hose Method
36.	5010-1048-3-90	Field Test Procedure for a Double Check Detector Assembly Using a Differential Pressure Gauge-High-Pressure Hose Method
37.	5010-1048-4-90	Field Test Procedure for a Double Check Detector Assembly Using a Sight Tube

SECTION 15h. Tables 81.20-5 (partial), 81.20-6 (partial), 81.20-7 (partial) are amended to read:

Table 81.20-5

ASTM		American Society for Testing and Materials 100 Barr Harbor Drive West Conshohocken, Pennsylvania 19428-2959
Standard Reference Number		Title
1.	A53-93a <u>A53-97</u>	Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless, Specification for
2.	A74-94 <u>A74-96</u>	Cast Iron Soil Pipe and Fittings, Specification for
3.	A123-89a <u>A123/A123M-97a</u>	Zinc (Hot-Galvanized) Coatings on Iron and Steel Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates and Strip , Specification for
4.	A270-90 <u>A270-95a</u>	Seamless and Welded Austenitic Stainless Steel Sanitary Tubing, Specification for
5.	A377-94 <u>A377-95</u>	Ductile-Iron Pressure Pipe, Standard Index of Specification for
6.	A403/A403M-94a <u>A403/A403M-97a</u>	Wrought Austenitic Stainless Steel Piping Fittings, Specification for
7.	A450/A450M-94 <u>A450/A450M-96</u>	General Requirements for Carbon, Ferritic Alloy, and Austenitic Alloy Steel Tubes, Specification for
7e.	<u>A888-96</u>	<u>Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Pipe Applications, Specifications for</u>
8.	B32-95 <u>B32-96</u>	Solder Metal, Specification for Solder Metal
9.	<u>B42-93</u>	<u>Pipe, Seamless Copper Pipe, Standard Sizes, Specification for</u>
10.	B43-94 <u>B43-96</u>	<u>Seamless Red Brass Pipe, Standard Sizes, Specification for</u>
11.	B75-93	Seamless Copper Tube, Specification for
12.11.	B88-93a <u>B88/B88M-96</u>	<u>Seamless Copper Water Tube, Specification for Water, Seamless, Copper Tube</u>
13.12.	B152-94 <u>B152/B152M-97a</u>	<u>Copper Sheet, Strip, Plate, and Rolled Bar, Specification for</u>
14.13.	B251-93 <u>B251/B251M-97</u>	General Requirements for Tube, Wrought Seamless Copper and Copper-Alloy Tube, Specification for
15.14.	B302-92 <u>B302-97</u>	<u>Threadless Copper Pipe, Specification for</u>
16.15.	B306-92 <u>B306-96</u>	<u>Standard Specifications for Copper Drainage Tube (DWV), Specification for</u>
17.16.	C4-62(R1991) <u>C4-97</u>	<u>Clay Drain Tile and Perforated Clay Drain Tile, Specification for</u>
18.17.	C14-94 <u>C14/C14M-95</u>	<u>Concrete Sewer, Storm Drain, and Culvert Pipe, Specification for</u>
19.18.	C33-93 <u>C33-97</u>	<u>Concrete Aggregates, Specification for</u>
20.19.	C76-94 <u>C76-98</u>	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe, Specification for Reinforced Concrete
20.	<u>C76M-97</u>	<u>Reinforced Concrete Culvert, Storm Drain, and Culvert Pipe (metric), Specifications for</u>
21.	C425-91 <u>C425-97</u>	<u>Compression Joints for Vitrified Clay Pipe and Fittings, Specification for Vitrified Compression Joints</u>
22.	C443-94 <u>C443/C443M-94</u>	<u>Specification for Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets, Specification for</u>
22e.	<u>C507/C507M-95a</u>	<u>Reinforced Concrete Elliptical Culvert, Storm Drain and Sewer, Specifications for</u>
23.	C564-95 <u>C564-97</u>	<u>Rubber Gaskets for Cast Iron Soil Pipe and Fittings, Specification for</u>
24.	C700-91 <u>C700-97</u>	<u>Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated, Specification for</u>
24e.	<u>C877/C877M-94</u>	<u>External Sealing Bands for Noncircular Concrete Sewer, Storm Drain, and Culvert Pipe, Specifications for</u>
24m.	<u>C990/C990M-96</u>	<u>Joints for Concrete Pipe, Manholes, Precast Box Sections Using Preformed Flexible Joint Sealants, Specifications for,</u>
24s.	<u>C1306-95</u>	<u>Hydrostatic Pressure Resistance of a Liquid-Applied Waterproofing Membrane, Standard Test Method for</u>
25.	D1527-94 <u>D1527-96a</u>	<u>Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe, Schedules 40 and 80, Specification for</u>
26.	D1785-93 <u>D1785-96b</u>	<u>Poly (Vinyl Chloride) (PVC)-Plastic Pipe, Schedules 40, 80 and 120, Specification for</u>
27.	D2104-93 <u>D2104-96</u>	<u>Standard Specifications for Polyethylene (PE) Plastic Pipe, Schedule 40, Specification for</u>
28.	D2235-93a <u>D2235-96a</u>	<u>Standard Specifications for Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings, Specification for</u>
29.	D2239-93 <u>D2239-96a</u>	<u>Polyethylene (PE) Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter, Specification for</u>
30.	D2241-93 <u>D2241-96b</u>	<u>Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR Series),</u>

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Standard Reference Number	Title
	Specification for
31. D2282-94 <u>D2282-96a</u>	Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe (SDR-PR), Specification for
33. D2447-93 <u>D2447-95</u>	Polyethylene (PE) Plastic Pipe, Schedules 40 and 80, Based on Outside Diameter, Specification for
34. D2464-94 <u>D2464-96a</u>	Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, Specification for
35. D2466-94a <u>D2466-97</u>	Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, Specification for
36. D2467-94 <u>D2467-96a</u>	Socket-Type Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, Specification for
37. D2468-93 <u>D2468-96a</u>	Acrylonitrile-Butadiene-Styrene (ABS), Plastic Pipe Fittings, Schedule 40, Specification for
38. D2564-93 <u>D2564-96a</u>	Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings, Specification for
39. D2609-93 <u>D2609-97</u>	Plastic Insert Fittings for Polyethylene (PE) Plastic Pipe, Specification for
40. D2657-90 <u>D2657-97</u>	Heat Joining Heat Fusion Joining of Polyolefin Pipe and Fittings, Specification for Standard Practice of
41. D2661-94a <u>D2661-97a</u>	Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings, Specification for
42. D2662-93 <u>D2662-96a</u>	Polybutylene (PB) Plastic Pipe (SIDR-PR), Based on Controlled Inside Diameter, Specification for
43. D2665-94 <u>D2665-97a</u>	Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings, Specification for
44. D2666-93 <u>D2666-96a</u>	Polybutylene (PB) Plastic Tubing, Specification for
45. D2672-94 <u>D2672-96a</u>	Joints for IPS PVC Pipe Using Solvent Cement, Specification for
46. D2680-93 <u>D2680-95a</u>	Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Composite Sewer Piping, Specification for
47. D2683-93 <u>D2683-98</u>	Socket-Type Polyethylene Fittings for Outside Diameter-Controlled Polyethylene Pipe and Tubing, Specification for
48. D2729-93 <u>D2729-96a</u>	Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings, Specification for
49. D2737-93 <u>D2737-96a</u>	Polyethylene (PE) Plastic Tubing, Specification for
50. D2751-93 <u>D2751-96a</u>	Acrylonitrile-Butadiene-Styrene (ABS) Sewer Pipe and Fittings, Specification for
51. <u>D2774-94</u>	Underground Installation of Thermoplastic Pressure Piping, Standard Practice for
52. D2846-93 <u>D2846/D2846M-97</u>	Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems, Specification for
53. D2852-93 <u>D2852-95</u>	Styrene-Rubber (SR) Plastic Drain Pipe and Fittings, Specification for
54. D2855-93 <u>D2855-96</u>	Making Solvent-Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings, Practice for
55. D3000-93 <u>D3000-95a</u>	Polybutylene (PB) Plastic Pipe (SDR-PR) Based on Outside Diameter, Specification for
56. D3034-93 <u>D3034-97</u>	Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings, Specification for
57. D3035-93 <u>D3035-95</u>	Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Controlled Outside Diameter, Specification for
58. D3139-89 <u>D3139-96a</u>	Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals, Specification for
60. D3212-92 <u>D3212-96a</u>	Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals, Specification for
61. D3261-93 <u>D3261-97</u>	Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing, Specification for
62. D3309-93 <u>D3309-96a</u>	Polybutylene (PB) Plastic Hot- and Cold-Water Distribution Systems, Specification for
63. D3311-92 <u>D3311-94</u>	Drain, Waste, and Vent (DWV) Plastic Fittings Patterns, Specification for
64. D4068-91 <u>D4068-96</u>	Chlorinated Polyethylene (CPE) Sheeting for Concealed Water-Containment Membrane, Standard Test Method for
71. F405-93 <u>F405-97</u>	Corrugated Polyethylene (PE) Tubing and Fittings, Specification for
72. F409-93 <u>F409-97</u>	Thermoplastic Accessible and Replaceable Plastic Tube and Tubular Fittings, Specification for
73. F437-93 <u>F437-96a</u>	Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80, Specification for
74. F438-93 <u>F438-97</u>	Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40, Specification for

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Standard Reference Number	Title	
75.	F439-93a <u>F439-97</u>	Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80, Specification for
76.	F441-94 <u>F441/ F441M-97</u>	Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80, Specification for
77.	F442-94 <u>F442/ F442M-97</u>	Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR), Specification for
78.	F477-93 <u>F477-96a</u>	Elastomeric Seals (Gaskets) for Joining Plastic Pipe, Specification for
78e.	<u>F492-95</u>	<u>Propylene and Polypropylene (PP) Plastic-Lined Ferrous Metal Pipe Fittings</u>
79.	F493-93a <u>F493-97</u>	Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings, Specification for
80..	F628-93 <u>F628-97a</u>	Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe with a Cellular Core, Specification for
81.	F656-93 <u>F656-96a</u>	Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings, Specification for
81e.	<u>F679-95</u>	<u>Poly (Vinyl Chloride) (PVC) Large-Diameter Plastic Gravity Sewer Pipe and Fittings</u>
81m.	<u>F789-95a</u>	<u>Type PS-46 and Type PS-115 PVC Plastic Gravity Flow Sewer Pipe and Fittings</u>
81s.	<u>F794-97</u>	<u>Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter</u>
83.	F845-93 <u>F845-96</u>	Plastic Insert Fittings for Polybutylene (PB) Tubing, Specification for
84.	F876-93 <u>F876-97</u>	Crosslinked Polyethylene (PEX) Tubing, Specification for
85.	F877-93 <u>F877-97a</u>	Crosslinked Polyethylene (PEX) Plastic Hot-and Cold- Water Distribution Systems, Specification for
86.	F891-93a <u>F891-97</u>	Coextruded Poly (Vinyl Chloride) (PVC) Plastic Pipe with <u>With</u> a Cellular Core, Specification for
87.	<u>F949-96a</u>	<u>Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings</u>
88.	<u>F1281-98</u>	<u>Crosslinked Polyethylene / Aluminum / Crosslinked Polyethylene (PEX-AL-PEX) Pressure Pipe</u>
89.	<u>F1282-97</u>	<u>Polyethylene / Aluminum / Polyethylene (PE-AL-PE) Composite Pressure Pipe</u>
90.	<u>F1336-93</u>	<u>Poly (Vinyl Chloride) (PVC) Gasketed Sewer Fittings</u>
91.	<u>F1807-98A</u>	<u>Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing</u>

Table 81.20-6

AWS		American Welding Society 550 N.W. LeJune Road Miami, Florida 33126
Standard Reference Number	Title	
AWS A5.8-92	Filler Metals for Brazing and Braze Welding, Specification for	

Table 81.20-7

AWWA		American Water Works Association Data Processing Department 6666 West Quincy Avenue Denver, Colorado 80235
	Standard Reference Number	Title
2.	C111/A21.11-90. <u>C111/A21.11-95</u>	American National Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
3.	C115/A21.15-88. <u>C115/A21.15-94</u>	American National Standard for Flanged Ductile-Iron <u>Pipe with Ductile-Type Iron or and</u> Gray-Iron Pipe with Threaded Flanges
4.	C151/A21.51-91. <u>C151/A21.51-96</u>	American National Standard for Ductile-Iron Pipe, Centrifugally Cast for Water or Other Liquids
5e.	<u>C651-92</u>	<u>Water Mains, Disinfecting</u>
6.	C700-90 <u>C700-95</u>	Cold Water Meters - Displacement Type with Bronze Main Case (w/1991 Addendum)
10.	C706-91 <u>C706-96</u>	Cold Water Meters, Direct-Reading, Remote -Registration Systems for
12.	C708-91 <u>C708-96</u>	Cold Water Meters-Multi-Jet Type
13.	C710-90 <u>C710-95</u>	Cold Water Meters, Displacement Type-Plastic Main Case (w/1991 Addendum)
15.	<u>C906-90</u>	<u>Polyethylene Pressure Pipe and Fittings, 4 in. through 63 in., for Water Distribution</u>

SECTION 15i. Table 81.20-7e is created to read:

Table 81.20-7e

CAN/CSA		Canadian Standards Association 178 Rexdale Boulevard Rexdale (Toronto), Ontario, Canada M9W 1R3
	Standard Reference Number	Title
1.	B64-94	Backflow Preventers and Vacuum Breakers
2.	B125-93	Plumbing Fittings
3.	B137.9-98	Polyethylene / Aluminum / Polyethylene Composite Pressure Pipe Systems
4.	B137.10-98	Crosslinked Polyethylene /Aluminum / Crosslinked Polyethylene Composite Pressure Pipe Systems
5.	B181.1-96	ABS Drain, Waste, and Vent Pipe and Pipe Fittings
6.	B181.2-96	PVC Drain, Waste, and Vent Pipe and Pipe Fittings

SECTION 15j. Table 81.20-8 is amended to read:

Table 81.20-8

CISPI		Cast Iron Soil Pipe Institute 5959 Shallowford Road, Suite 419 Chattanooga, Tennessee 37421
	Standard Reference Number	Title
1.	<u>F1281-97</u>	<u>Crosslinked Polyethylene / Aluminum / Crosslinked (PEX-AL-PEX) Polyethylene Pressure Pipe</u>
1. 2.	301-95 <u>301-97</u>	Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications, <u>Standard</u> Specification for
2. 3.	310-95 <u>310-97</u>	Coupling for Use in Connection with Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications, Specification for

SECTION 15k. Table 81.20-10m is created to read:

Table 81.20-10m

Standard Reference Number	Title
NFPA 13D-1999	Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes

SECTION 15L. Table 81.20-11 is amended to read:

Table 81.20-11

Standard Reference Number	Title
4. <u>Standard- 44-98</u>	<u>Residential Cation Exchange Water Softeners</u>
5. <u>Standard- 61-97b</u>	<u>Drinking Water System Components Health Effects</u>

SECTION 15m. Comm 81.20 (2) Table 81.20-14 is repealed.

SECTION 16. Comm 82.20 (4) (e) is created to read:

Comm 82.20 (4) (e) 1. When requesting approval of an experimental plumbing system, all of the following shall be submitted:

a. At least 2 sets of plans signed in accordance with par. (d) and detailing the system installation for each site.

b. A letter of consent from the site or system owner of the installation. The letter shall acknowledge that the owner has received and read a copy of the experimental plumbing system submittal and is in agreement with all requirements listed within this subdivision.

c. Any additional information as requested by the department.

2. The registered architect, engineer, designer or master plumber responsible for the design of the experimental plumbing system shall, upon completion, certify in writing to the department that the installation is in compliance with the approved plans, specifications and data.

3. Onsite inspections shall be performed by the department at time intervals as specified by the department, but not less than once a year. Time intervals shall be included as conditions of approval. An inspection report shall be written. The department may assess a fee for each inspection.

Note: Refer to ch. Comm 2 for applicable fees.

4. No later than five years after the date of the completed installation the department may perform one of the following:

- a. Order the removal of the experimental plumbing system.
- b. Issue an alternate approval as specified in s. Comm 82.20 (12)(a).
- c. Provide an extension of the experiment with conditions.

5. If an experimental plumbing system is subsequently codified in chs. Comm 82 and 84, or ch. 145, Stats., the requirements as specified in subs. 3. and 4. do not apply.

SECTION 17. Comm 82.20 (11) is repealed and recreated to read:

Comm 82.20 (11) PETITION FOR VARIANCE. The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. Comm 3.

Note: Chapter Comm 3 requires the submittal of a petition for variance form (SBD-9890) and a fee, and that an equivalency is established in the petition for variance that meets the intent of the rule being petitioned. Chapter Comm 3 also requires the department to process regular petitions within 30 business days and priority petitions within 10 business days.

Note: Form SBD-9890 is available on request at no charge from the department at the Safety and Buildings Division, P.O. Box 2509, Madison WI 53701-2509, telephone (608) 266-1818, S&B web address: <http://www.commerce.state.wi.us/SB/SB-Forms.html/>.

SECTION 18. Comm 82.20 (12) is repealed and recreated to read:

Comm 82.20 (12) ALTERNATE AND EXPERIMENTAL PLUMBING SYSTEM REVIEW AND APPROVAL. The provisions of this chapter, ch. Comm 84 or ch. 145, Stats., are not intended to prevent the design and use of approved innovative plumbing systems.

(a) *Alternate plumbing systems.* The department may issue an approval of an alternate plumbing system if the system complies with the intent of chs. Comm 82 and 84, or ch. 145, Stats.

1. For an alternate plumbing system, before availability for statewide installation and use, an alternate plumbing system approval shall be issued. Concepts, plans, specifications and the documentation to support the system design shall be submitted to the department for review.

2. The department may require the submission of any information deemed necessary for review. Sufficient evidence shall be submitted to substantiate at least the following:

- a. Assertions of function and performance.
- b. Compliance with the intent of chs. Comm 82 and 84, or ch. 145, Stats.

3. The department shall review and make a determination on an application for alternate plumbing system within 3 months of receipt of all information and fees required to complete the review. Approval for an alternate plumbing system shall be issued by the department in writing.

4. The department may include specific conditions in issuing an approval for an alternate plumbing system, including an expiration date for the approval. A violation of any of the conditions under which an approval is issued shall constitute a violation of this chapter.

5. If upon review the department determines that an alternate plumbing system does not comply with the intent of chs. Comm 82 and 84, or ch. 145, Stats., the request for approval shall be denied in writing.

(b) *Experimental plumbing systems.* The department may issue an approval of an experimental plumbing system for the purpose of proving compliance with the intent of chs. Comm 82 and 84 and ch. 145, Stats.

1. For an experimental plumbing system, a separate approval shall be obtained for each system or project to be installed for the purpose of proving compliance with the intent of chs. Comm 82 and 84 and ch. 145, Stats. Approval for an experimental plumbing system shall be issued by the department in writing.

2. The department may require the submission of additional information deemed necessary for determining that the design meets the intent of chs. Comm 82 and 84, and ch. 145, Stats.

3. The department shall review and make a determination on an application for an experimental plumbing system within 6 months of receipt of all information and fees required to complete the review.

4. The department may include specific conditions in issuing an approval for an experimental plumbing system, including an expiration date for the approval. A violation of any of the conditions under which an approval is issued shall constitute a violation of this chapter.

5. Denial of an experimental plumbing system or project by the department shall be made in writing.

6. The department may establish parameters to limit the number of applications for review it will accept for experimental plumbing systems.

(c) *Modification.* If an approved alternate or experimental plumbing system is modified or additional assertions of function or performance are made, the approval shall be void, unless the system is resubmitted to the department for review and approval is granted.

(d) *Revocation of approval.* The department may revoke an approval issued under this section for any false statements or misrepresentations of facts or data on which the approval was based, or as a result of system failure.

(e) *Limitations.* An approval issued by the department for an alternate or experimental plumbing system may not be construed as an assumption of any responsibility for defects in design, construction or performance of any system nor for any damages that may result.

(f) *Fees.* Fees for the review of an alternate or experimental plumbing system under this section and any onsite inspections shall be submitted in accordance with ch. Comm 2.

SECTION 19. Comm 82.20 (1) Table 82.20-1 (partial) is amended to read:

Table 82.20-1
SUBMITTALS TO DEPARTMENT
Type of <u>Plumbing</u> Installation
4. Engineered <u>Alternate and experimental</u> plumbing systems.

SECTION 20. Comm 82.21 (2) (a) is repealed and recreated to read:

Comm 82.21 (2) (a) Existing systems. 1. Except as specified in subd. 2., any existing plumbing system shall be permitted to remain and maintenance continue if the maintenance is in accordance with the original system design and any of the following apply:

- a. The plumbing system was installed in accordance with the code in effect at the time of installation.
 - b. The plumbing system conforms to the present code.
2. When a hazard to life, health or property exists or is created by an existing system, that system shall be repaired or replaced.

SECTION 21. Comm 82.21 (3) is repealed and recreated to read:

Comm 82.21 (3) MAINTENANCE AND TESTING OF CROSS CONNECTION CONTROL DEVICES. (a) The maintenance and performance testing requirements of this subsection apply to all cross connection control devices regardless of date of installation.

Note: For further clarification, see Table 82.21-1.

(b) 1. A performance test shall be conducted for the devices listed in Table 82.21-1 at all of the following:

- a. At the time of installation.
- b. Immediately after repairs or alterations to the device have occurred.
- c. At least annually.

2. The performance test shall be conducted using the appropriate test standard for the device as specified in Table 82.21-1.

3. A cross connection device performance test shall be conducted by an individual registered by the department in accordance with s. Comm 5.99.

4. a. The results of the cross connection device performance test shall be submitted as specified in Table 82.21-1 in a format prescribed by the department.

Note: Test results shall be submitted on the Cross Connection Control Device Performance Test form (SBD-9927), available on request from the department at the Safety and Buildings Division, P.O. Box 7302, Madison WI 53707-7302; Fax (608) 267-0592, S&B web address: <http://www.commerce.state.wi.us/SB/SB-Forms.html/>.

b. As specified in Table 82.21-1, the results of the cross connection device performance test shall be submitted to the department and purveyor within 60 days of completion of the test.

5. The results of performance tests for the devices or assemblies listed in Table 82.21-1 shall be made available upon request to the department, its agent, or the local governmental unit.

(c) The maintenance and performance testing requirements of this subsection shall also apply to those cross connection control devices or assemblies installed prior to the effective date of this subsection.

SECTION 22. Comm 82.21 (3) Table 82.21-1 is created to read:

**Table 82.21-1
Testing and Submitting Requirements
for Cross Connection Control Devices or Assemblies**

Industry Common Name of Assembly	ASSE Standard Name	CAN/CSA Standard Name and Number	ASSE Test Standard	Test Results Submitted To Department and Purveyor
DCV	Double check backflow prevention assembly ASSE 1015	Backflow preventer, double check valve type (DCVA) CAN/CSA-B64.5-94	5010-1015-1, 5010-1015-2, 5010-1015-3, 5010-1015-4	No ^a
DCV detector	Double check detector assembly backflow preventer ASSE 1048		5010-1048-1, 5010-1048-2, 5010-1048-3, 5010-1048-4	No ^a
PVB	Pressure vacuum breaker assembly ASSE 1020	Vacuum breaker, pressure type (PVB) CAN/CSA-B64.1.2-94	5010-1020-1	Yes
RP	Reduced pressure principle backflow preventer ASSE 1013	Backflow preventer, reduced pressure principle type (RP) CAN/CSA-B64.4-94	5010-1013-1	Yes

Industry Common Name of Assembly	ASSE Standard Name	CAN/CSA Standard Name and Number	ASSE Test Standard	Test Results Submitted To Department and Purveyor
RP Detector	Reduced pressure detector backflow preventer ASSE 1047		5010-1047-1	Yes
SVB	Backsiphonage backflow vacuum breaker ASSE 1056		Per department approved guidelines	Yes

^a The results of the performance test shall be maintained at the site where the device is installed.

SECTION 23. Comm 82.31 (16) (d) 2. Note is created to read:

Note: Section Comm 64.57 (2) (a) adopts the American Institute of Architects (AIA) "Design and Construction of Hospital and Health Care Facilities" that includes greater vent terminal to air intake distances. These guidelines are available from AIA, telephone 1-800-365-2724.

SECTION 24. Comm 82.33 (9) (i) is repealed and recreated to read:

Comm 82.33 (9) (i) *Swimming pools.* 1. The backwash and drain wastewater from a swimming pool, wading pool or whirlpool shall discharge in accordance with Table 82.33-3.

2. The discharge from interior deck drains shall be directed to the sanitary sewer via an air-gap.

3. The discharge from exterior deck drains shall be directed to the storm sewer by way of an air-gap or to grade.

4. The requirements for sewer connections as specified in ch. Comm 90 applies to all public swimming pools.

SECTION 25. Comm 82.33 Table 82.33-3 is created to read:

**Table 82.33-3
ALLOWABLE DISCHARGE POINTS
FROM PUBLIC SWIMMING POOLS, WADING POOLS AND WHIRLPOOLS**

Discharge Type	Private Sewage System	Sanitary Sewer	Municipal Storm Sewer	Ground Surface Storm
1. Public Swimming Pools, Wading Pools, and Whirlpools, diatomaceous earth backwash	X ^a	X		
2. Public Swimming Pools, Wading Pools, and Whirlpools, drain wastewater	X ^a	X ^c	X ^{b & d}	X ^{b & d}
3. Public Swimming Pools, Wading Pools, and Whirlpools, sand filter backwash	X ^a	X ^c	X ^{b & d}	X ^{b & d}
4. Public Whirlpools, backwash and drain wastewater	X ^a	X ^c		

^a Allowed when the private sewage system is designed to include pool wastewater.

^b Allowed with permission of the local municipality.

^c Allowed if local municipal treatment plant will accept pool wastewater.

^d Allowed with permission of the department of natural resources.

SECTION 26. Comm 82.34 (4) (b) 2. is amended to read:

Comm 82.34 (4) (b) 2. Catch basins serving garages for one- and 2-family dwellings shall be designed and installed in accordance with par. (a) 2.

SECTION 27. Comm 82.36 (3) (b) 3. is amended to read:

Comm 82.36 (3) (b) 3. The ~~clear water~~ waste from a drinking fountain, water heater relief valve, storage tank relief valve, water softener, or iron filter, ~~or floor drain or water testing sink within a municipal well house~~ shall be discharged to either a sanitary drain system or a storm drain system.

SECTION 27a. Comm 82.36 (3) (b) 3. Note is created to read:

Note: See also s. NR 811.29 for setbacks to wells.

SECTION 27b. Comm 82.36 (3) (b) 5. is created to read:

Comm 82.36 (3) (b) 5. The wastes from a floor drain located in a municipal well pump house, a water testing sink within a municipal well pump house or a one- and 2-family garage shall be discharged to a sanitary drain system or to ground surface.

SECTION 28. Comm 82.36 (4) (a) is amended to read:

Comm 82.36 (4) LOAD ON DRAIN PIPING. (a) Storm water drainage. The load factor on storm water drain piping shall be computed in terms of gallons per minute or on the square footage of the horizontal projection of roofs, paved areas, yards and other tributary areas based on a minimum of

3.7 inches per hour and the surface area to gallons per minute (gpm) conversion factors in Tables 82.36-1 to 82.36-3.

SECTION 29. Comm 82.36 (5) (a) is amended to read:

Comm 82.36 (5) SELECTING SIZE OF STORM AND CLEAR WATER DRAIN PIPING.

(a) Horizontal storm water drain piping. The pipe size for horizontal drain piping for storm water shall be determined from Tables 82.36-1 to 82.36-4a, or a detailed engineering analysis acceptable to the department.

SECTION 30. Comm 82.36 Table 82.36-4a is created to read:

**Table 82.36-4a
MAXIMUM CAPACITY OF STORM WATER
HORIZONTAL DRAIN PIPING FLOWING FULL
FOR ELLIPTICAL REINFORCED CONCRETE PIPE**

Pipe Diameters in Inches (circular pipe equivalent)	Maximum Capacities (in gallons per minute)			
	Pitch of Piping Per Foot			
	1/16 inch	1/8 inch	1/4 inch	1/2 inch
14 X 23 (18)	3,300	4,675	6,700	9,500
19 X 30 (24)	7,200	10,060	14,700	21,000
24 X 38 (30)	13,250	18,740	26,500	37,475
29 X 45 (36)	21,545	30,475	43,095	60,940
34 X 53 (42)	32,500	45,965	65,000	91,925
38 X 60 (48)	46,405	65,625	92,800	131,245
43 X 68 (54)	63,525	89,840	127,050	179,800
48 X 76 (60)	84,135	118,985	168,270	237,965

SECTION 31. Comm 82.36 (6) (a) is amended to read:

Comm 82.36 (6) (a) Storm water drain piping.

The minimum pitch of horizontal drain piping shall be in accordance with Tables 82.36-1 to 82.36-4a, or as otherwise approved by the department.

SECTION 32. Comm 82.40 (3) (d) 3. is created to read:

Comm 82.40 (3) (d) 3.

The installation of each reduced pressure principle backflow preventer, reduced pressure detector backflow preventer, pressure vacuum breaker assembly, and back siphonage backflow vacuum breaker shall display a department assigned identification number. The provisions of this subdivision shall take effect [revisor to add date, 6 months from effective date of this rule].

a. The method to display the department assigned identification number shall be a weather-resistant tag, securely attached to the cross connection control assembly.

b. The tag shall contain at least the following information.

Wisconsin Department of Commerce Identification/Object Number _____ Cross Connection Control Assembly Do Not Remove This Tag

c. The department assigned identification number shall be printed in the blank area with a permanent, waterproof marker or similar indelible method.

Note: To obtain a department assigned identification number for a cross connection control assembly the department at the Safety and Buildings Division; P.O. Box 7302; Madison, Wisconsin 53707-7302; telephone (608) 266-0521; Fax (608) 267-0592; TTY (608) 264-8777.

SECTION 33. Comm 82.40 (8) (g) is amended to read:

Comm 82.40 (8) (g) *Temperature control.* The water temperature to all showers in public buildings shall be controlled by thermostatic mixing valves or by individually controlled pressure balanced mixing valves. A thermostatic or pressure balanced mixing valve may not be bypassed.

SECTION 34. Comm 82.40 (8) (i) 2. is amended to read:

Comm 82.40 (8) (i) 2. New private water mains and extensions to private water mains shall be disinfected prior to use in accordance with AWWA ~~C601~~ C651 or the following method:

SECTION 35. Comm 82.41 (3) (a) Table 82.41-1 is repealed and recreated to read:

**Table 82.41-1
ACCEPTABLE CROSS CONNECTION CONTROL METHODS OR ASSEMBLIES
FOR SPECIFIC APPLICATIONS**

METHODS or ASSEMBLIES of CROSS CONNECTION CONTROL (Standard)	SITUATIONS and CONDITIONS							
	Backpressure				Backsiphonage			
	Low Hazard		High Hazard		Low Hazard		High Hazard	
	Contin- uous Pressure	Noncon- tinuous	Contin- -uous Pressure	Noncon- tinuous	Contin- uous Pressure	Noncon- tinuous	Contin- uous Pressure	Noncon- tinuous
Air Gaps (ASME A112.1.2)	X	X	X	X	X	X	X	X
Atmospheric Type Vacuum Breaker (CAN/CSA B64.1.1)						X		X
Back Siphonage Vacuum Breaker (ASSE 1056)					X	X	X	X
Backflow Preventers with Intermediate Atmospheric Vent (ASSE 1012)	X	X			X	X		
Barometric Loops					X	X	X	X
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 Type Vacuum Breakers (CAN/CSA B64.2.1 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 Type Vacuum Breaker (CAN/CSA B64.1.2)					X	X	X	X
Pressure Vacuum Breaker Assembly (ASSE 1020)					X	X	X	X
Reduced Pressure Principle Backflow Preventers (ASSE 1013)	X	X	X	X	X	X	X	X
Reduced Pressure Principle Type Backflow Preventer (CAN/CSA B64.4)	X	X	X	X	X	X	X	X

SECTION 36. Comm 82.41 (3) (a) Table 82.41-2 is repealed and recreated to read:

**Table 82.41-2
ACCEPTABLE CROSS CONNECTION CONTROL METHODS
OR ASSEMBLIES
FOR SPECIFIC APPLICATIONS**

Methods or Assemblies of Cross Connection Control (Standard)	Types of Application or Use
Backflow Preventer for Carbonated Beverage Machines (ASSE 1022)	Beverage dispensers
Chemical Dispensing Systems (ASSE 1055)	Chemical dispensing systems
Double Check Backflow Prevention Assemblies (ASSE 1015)	Automatic fire sprinkler systems and standpipe systems
Double Check Detector Assembly Backflow Preventer (ASSE 1048)	Automatic fire sprinkler systems and standpipe systems
Double Check Detector Valve Type Backflow Preventer (CAN/CSA B64.5)	Automatic fire sprinkler systems and standpipe systems
Hand Held Showers (ASSE 1014)	Hand held shower assemblies
Laboratory Faucet Backflow Preventer (ASSE 1035)	Laboratory faucets
Laboratory Faucet Type Vacuum Breakers (CAN/CSA B64.7)	Laboratory faucets
Laboratory Faucet Vacuum Breakers (ASSE 1035)	Laboratory faucets
Pressurized Flushing Devices (Flushometers) For Plumbing Fixtures (ASSE 1037)	Flushometer plumbing fixtures
Reduced Pressure Detector Backflow Preventer (ASSE 1047)	Automatic fire sprinkler systems
Trap Seal Primer Valves, Water Supply Fed (ASSE 1018)	Traps for drain systems
Vacuum Breaker Tees [s. Comm 82.41 (5) (k)]	Water treatment devices
Wall Hydrants, Frost Proof Automatic Draining Anti-Backflow Type (ASSE 1019), types A or B	Hose threaded outlet connections
Water Closet Flush Tank Ball Cocks (ASSE 1002)	Gravity water closet flush tanks

SECTION 37. Comm 82.41 (3) (a) 2. is amended to read:

Comm 82.41 (3) (a) 2. For the situations described in par. (b) 3., cross connection control shall be provided as part of the fixture fitting outlet or in the water supply piping for the fixture fitting outlet.

SECTION 38. Comm 82.41 (4) (b) is repealed and recreated to read:

Comm 82.41 (4) (b) 1. Except for a deck-mounted device, a pipe applied atmospheric 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:

- a. The flood level rim of the receptor serving the water supply port.

- b. The highest point downstream from the device where backpressure would be created.
- c. The highest point of an injection or aspiration port.

2. 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:

- a. The flood level rim of the receptor serving the water supply port.
- b. The highest point downstream from the device where backpressure would be created.
- c. The highest point of an injection or aspiration port.

SECTION 39. Comm 82.41 (4) (k) 1. is amended to read:

Comm 82.41 (4) (k) 1. ~~An anti-siphon,~~ A pressure type vacuum breaker shall be installed such that the bottom of the device or the critical level mark on the device is at least 12 inches above all of the following:

- a. The flood level rim of the receptor serving the water supply port; ~~and.~~
- b. The highest point downstream from the device where backpressure would be created.

SECTION 39a . Comm 82.41 (4) (k) 1. c. is created to read:

Comm 82.41 (4) (k) 1. c. The highest point of an injection or aspiration port.

SECTION 40. Comm 82.41 (4) (n) is repealed and recreated to read:

Comm 82.41 (4) (n) A back siphonage vacuum breaker shall be installed so that the bottom of the device or the critical level mark on the device is at least 12 inches above all of the following:

- 1. The flood level rim of the receptor serving the water supply port.
- 2. The highest point downstream from the device where back pressure would be created.
- 3. The highest point of an injection or aspiration port.

SECTION 41. Comm 82.41 (5) (a) is amended to read:

Comm 82.41 (5) INSTALLATION. (a) An air gap for cross connection control shall conform to ANSI ASME A112.1.2.

SECTION 41a . Comm 82.41 (5) (L) is created to read:

Comm 82.41 (5) (L) A chemical dispensing system shall be connected to the water distribution system in either of the following manners:

1. The fixture supply shall be individually connected to the water distribution system.
2. The fixture supply shall be installed with a pressure bleeding device. The pressure bleeding device shall create a visually free flow of water through the atmosphere from the faucet connection into the fixture drain.

SECTION 42. Comm 82.50 (2) is amended to read:

Comm 82.50 (2) SCOPE. The scope of this section shall cover devices, fixtures and equipment which are installed and maintained in health care and related facilities as defined in s. Comm 81.01 (116) ~~such as hospitals, nursing or rest homes, homes for the aged, infirmaries, residential care facilities, orphanages, sanitariums, sanatoriums, clinics, mortuaries, and schools of medicine, surgery, dentistry, and research and testing laboratories whether enumerated or not. This section may also apply to offices and clinics of dentists and doctors.~~

SECTION 43. Comm 82.50 (10) (g) and (h) are repealed and recreated to read:

Comm 82.50 (10) (g) Hot water supply control. 1. "Health care and related facilities." a. The maximum temperature to fixture fitting outlets accessible to patients located in health care and related facilities shall not exceed 115°F.

b. The maximum temperature to other fixture fitting outlets shall not exceed 140°F.

2. "Hospitals, community-based residential facilities, inpatient hospices and nursing homes." Hot water to patients' showers, therapeutic equipment, and all types of baths located in hospitals, community-based residential facilities, inpatient hospices and nursing homes shall be provided with control valves which automatically regulate the temperature of the water supply to the fixture within a temperature range of 110°F to 115°F. Such control valves shall automatically reduce flow to 0.25 gpm or less when the water supply to the fitting outlet exceeds 115°F.

(h) *Hot water supply.* The water distribution system shall be designed to provide hot water not to exceed the maximum temperature listed in Table 26.

SECTION 44. Comm 82.50 (10) (g) Table 26 (partial) and Title are amended to read:

Table 26
SYSTEM TEMPERATURE

	Patient Areas	Area	Clinical	Dietary	Laundry (2 gals. per lb. of laundry)
Gal/hr/bed	6 1/2		6 1/2	4	4 1/2
System Temp. °F. (Maximum)	110° 140°		125° 140°	180°	180°

SECTION 45. Comm 82.50 (10) (i) is repealed.

SECTION 46. Comm 82.60 (2) (d) is created to read:

Comm 82.60 (2) (d) Shower valves and piping from the shower valve to the shower head outlet shall be securely attached to the structure.

SECTION 47. Comm 84.10 (4) and (5) are amended to read:

Comm 84.10 (4) REVOCATION. The department may revoke any approval ~~or listing~~ issued under this section for any false statements or misrepresentation of facts ~~data~~ on which the approval ~~or listing~~ was based, or as a result of the product's failure, or if ~~future information indicates~~ data indicate a ~~potential~~ health hazard or ~~potential~~ threat to the waters of the state.

(5) LIMITATIONS. An approval ~~or listing~~ of a plumbing product by the department may not be construed as an assumption of any responsibility for defects in design, construction or performance of any product nor for any damages that may result. All products shall be installed in accordance with the manufacturer's printed instructions and as specified in chs. Comm 82 – 84. If there is a conflict between the manufacturer's printed instructions and requirements of chs. Comm 82 – 84, the requirements of chs. Comm 82 – 84 shall take precedence.

SECTION 48. Comm 84.20 (2) is amended and renumbered as 84.20 (2) (a) to read:

Comm 84.20 (2) MATERIALS. (a) Plumbing fixtures shall have smooth surfaces ~~which that~~ are impervious to water.

SECTION 49. Comm 84.20 (2) (b) and Note are created to read:

Comm 84.20 (2) (b) All plumbing fixture fittings which are end-point devices, covered by the scope of NSF 61, section 9 and installed to supply water intended for human ingestion, shall conform to NSF 61, section 9.

Note: The scope of NSF 61, section 9 defines which devices are intended for use for human ingestion in response to the Federal clean drinking water act.

SECTION 50. Comm 84.20 (4) (b) 2. is amended to read:

Comm 84.20 (4) (b) 2. "Securing wall mounted fixtures." Wall mounted fixtures shall be rigidly supported by a hanger which is attached to structural members so that the load is not transmitted to the fixture drain connection or any other part of the plumbing system. The hanger for a wall mounted water closet shall conform to ANSI ASME A112.6.1M.

SECTION 51. Comm 84.20 (4) (b) 9. is repealed and recreated to read:

Comm 84.20 (4) (b) 9. 'Safing.' a. The floor of all site-constructed shower stalls and shower rooms shall be protected with a safing material installed beneath the finished floor of the entire enclosure or room and upward along the sides to a minimum of 6 inches above the curb or maximum water level of the room or enclosure. The corners of the enclosure or room shall be safed to a height of 6 feet and at least 3 inches in each direction from the corners.

b. All floor drains or other similar fixtures shall be installed with a safing material extending a minimum of 12 inches from the fixture.

c. The safing material shall conform to s. Comm 84.30 (6).

d. The safing material shall be properly drained.

e. All installations directly over an unexcavated portion of a building are exempt from this subdivision.

SECTION 52. Comm 84.20 (5) (b) 1. a. and b. are amended to read:

Comm 84.20 (5) (b) Bathtubs. 1. a. Enameled cast iron bathtubs shall conform to ANSI ASME A112.19.1M.

b. Porcelain enameled formed steel bathtubs shall conform to ANSI ASME A112.19.4.

SECTION 52a. Comm 84.20 (5) (b) 2. is amended to read:

Comm 84.20 (5) (b) 2. Bathtubs shall have waste outlets and overflows at least 1-1/2 inches in diameter. A ~~pop-up stopper or other~~ closing device shall be provided on the waste outlet.

SECTION 52b. Comm 84.20 (5) (c) is amended to read:

Comm 84.20 (5) (c) Bidets. Vitreous china bidets shall conform to the material requirements in ANSI ASME A112.19.2M.

SECTION 52c. Comm 84.20 (5) (c) 2. is amended to read:

Comm 84.20 (5) (c) 2. Bidets with submerged inlet fittings shall be protected by vacuum breakers which conform to ASSE 1001 or CAN/CSA B64.1.1.

SECTION 52d. Comm 84.20 (5) (d) is created to read:

Comm 84.20 (5) (d) Chemical dispensing systems. Chemical dispensing systems shall conform to ASSE 1055.

SECTION 52e. Comm 84.20 (5) (d) to (q) are renumbered as Comm 84.20 (5) (e) to (r).

SECTION 52f. Comm 84.20 (5) (f) is amended to read:

Comm 84.20 (5) (f) *Drinking fountains.* 1. Drinking fountains and water coolers shall conform to ARI 1010 or ANSI ASME A112.19.2M.

SECTION 52g. Comm 84.20 (5) (j) 1. a. to d. is amended to read:

Comm 84.20 (5) (j) *Lavatories.* 1. a. Enameled cast iron lavatories shall conform to ANSI ASME A112.19.1M.

b. Vitreous china lavatories shall conform to ANSI ASME A112.19.2M.

c. Stainless steel lavatories shall conform to ANSI ASME A112.19.3.

d. Porcelain enameled formed steel lavatories shall conform to ANSI ASME A112.19.4.

SECTION 52h. Comm 84.20 (5) (L) 2. is repealed.

SECTION 52i. Comm 84.20 (5) (L) 3. to 5. are renumbered as Comm 84.20 (5) (j) 2. to 4. and amended to read:

Comm 84.20 (5) (L) ~~3.~~ 2. Except for combination bathtub-shower units, waste outlets serving showers shall be at least 2 inches in diameter and shall have removable strainers of sufficient strength for the anticipated loads.

~~4-3.~~ Where a waste outlet serves more than one shower space or shower head, the waste outlet shall be at least 2 inches in diameter and the waste outlet shall be so located and the floor so pitched that waste water from one shower does not flow over the floor area serving another shower.

Note: Section Comm 52.60 (5) (a) specifies slip-resistant requirements for shower rooms and compartments in public buildings and places of employment.

~~5-4.~~ 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. 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. 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.

SECTION 52j. Comm 84.20 (5) (m) 1. and 2. are amended to read:

Comm 84.20 (5) (m) Sinks. 1. a. Enameled cast iron sinks shall conform to ANSI ASME A112.19.1M.

b. Vitreous china sinks shall conform to ANSI ASME A112.19.2M.

c. Stainless steel sinks shall conform to ANSI ASME A112.19.3.

d. Porcelain enameled formed steel sinks shall conform to ANSI ASME A112.19.4.

2. Sinks shall be provided with waste outlets not less than 1 1/2 inches in diameter. ~~Sinks on which a food grinder is installed shall have a waste opening not less than 3/4 inches in diameter.~~

SECTION 52k. Comm 84.20 (5) (m) 1. e. is created to read:

Comm 84.20 (5) (m) 1. e. Plastic sinks shall conform to ANSI Z124.6.

SECTION 53. Comm 84.20 (5) (n) 1. and 2. are amended to read:

Comm 84.20 (5) (n) Urinals. 1. a. Vitreous china urinals shall conform to ANSI ASME A112.19.2M-90 and A112.19.6-90.

2. A urinal may not be located closer than ~~16~~ 15 inches from its center to any side wall, partition, vanity or other obstruction, nor closer than 30 inches center to center, between urinals. When the space between stall type urinals or a stall type urinal and a side wall is less than 12 inches, the space shall be filled flush with the front and top of the urinal with nonabsorbent material.

SECTION 53a. Comm 84.20 (5) (n) 1. b. is created to read:

Comm 84.20 (5) (n) Urinals. 1. b. Plastic urinals shall conform to ANSI Z124.9 and ASME A112.19.6.

SECTION 54. Comm 84.20 (5) (o) is amended to read:

Comm 84.20 (5) (o) Water closets. 1. a. Vitreous china water closets shall conform to ~~either ANSI A112.19.2M-82 or ASME A112.19.2M-90 and ANSI A112.19.6-90.~~

SECTION 54a. Comm 84.20 (5) (r) 1. is amended to read:

Comm 84.20 (5) (r) Water treatment devices. 1. Water softeners shall conform to WQA S-100 NSF-44.

SECTION 55. Comm 84.20 (6) (a) and (b) are amended to read:

Comm 84.20 (6) FAUCETS, SPOUTS AND FIXTURE SUPPLY CONNECTORS. (a) Except for circular and semi-circular wash fountains, all faucets and showerheads shall conform to ANSI ASME A112.18.1M or CAN/CSA B125.

(b) Circular and semi-circular wash fountains shall conform to the working pressure, burst pressure, discharge rate and product marking requirements of ANSI ASME A112.18.1M or CAN/CSA B125.

SECTION 56. Comm 84.30 (5) (c) 10. is created to read:

Comm 84.30 (5) (c) 10. Individual thermostatic, pressure balancing, and combination pressure balancing and thermostatic control valves serving individual showers shall conform to ASSE 1016 or CAN/CSA B125.

SECTION 56a. Comm 84.30 (5) (c) 1. to 17. is renumbered Comm 84.30 (5) (c) 1. to 18. and amended to read:

Comm 84.30 (5) (c) *Special fittings and valves.* 1. Water hammer arrestors shall conform to ANSI ASME A112.26.1 or ASSE 1010.

2. Relief valves and automatic gas shutoff devices for hot water supply systems shall conform to ANSI Z21.22.

3. Backwater valves shall conform to ANSI ASME A112.14.1, CAN/CSA B181.1 or CAN/CSA B181.2.

4. Pipe applied atmospheric type vacuum breakers shall conform to ASSE 1001, and CAN/CSA B64.1.1.

5. Water pressure reducing valves and strainers for water pressure reducing valves for domestic water supply systems shall conform to ASSE 1003.

6. Hose connection vacuum breakers shall conform to ASSE 1011 or CAN/CSA B64.2.

7. Backflow preventers with intermediate atmospheric vent shall conform to ASSE 1012 and dual check type atmospheric port backflow preventers shall conform to CAN/CSA B64.3.

8. Reduced pressure principle backflow preventers shall conform with ASSE 1013 or CAN/CSA B64.4

9. Double check backflow prevention assemblies shall conform to ASSE 1015 or CAN/CSA B64.5.

~~10.~~ 11. Trap seal primer valves, water fed shall conform to ASSE 1018.

11.12. Vacuum breaker wall hydrants, freeze resistant automatic draining type shall conform to ASSE 1019, types A or B.

12.13. Pressure vacuum breaker assemblies shall conform to ASSE 1020 or CAN/CSA B64.1.2.

13.14. Laboratory faucet backflow preventers shall conform to ASSE 1035 and laboratory faucet type vacuum breakers shall conform to CAN/CSA B64.7.

14.15. Reduced pressure detector backflow preventers shall conform to ASSE 1047.

15.16. Double check detector assembly backflow preventers shall conform to ASSE 1048.

16.17. Back siphonage backflow vacuum breakers shall conform to ASSE 1056.

17.18. Hose connection backflow preventers shall conform to ASSE 1052.

SECTION 56a. Comm 84.30 (5) (c) 8. Note is created to read:

Note: Reduced pressure principle fire protection backflow preventers are not permitted for cross connection control.

SECTION 56b. Comm 84.30 (5) (c) 9. Note is created to read:

Note: Double check fire protection backflow prevention assemblies are not permitted for cross connection control.

SECTION 57. Comm 84.30 (5) (c) 19. is created to read:

Comm 84.30 (5) (c) 19. Backflow preventers for carbonated beverage machines shall conform to ASSE 1022.

SECTION 58. Comm 84.30 (6) (f) is amended to read:

Comm 84.30 (6) (f) *Safing ~~materials~~ material.* Safing materials shall be ~~made of materials~~ which are waterproof when subjected to 2 feet of hydrostatic head when tested in accordance with ASTM C1306 or ASTM D4068. The material shall be recognized by the manufacturer for use as a safing material.

SECTION 59. Tables 84.30-3 (partial), 84.30-5 (partial), 84.30-6 (partial), 84.30-8 (partial), 84.30-9 (partial) 84.30-10 (partial) and 84.30-11 (partial) are amended to read:

**Table 84.30-3
SANITARY BUILDING SEWER PIPE AND TUBING**

Material	Standard
<u>PVC Corrugated Sewer Pipe With a Smooth Interior and Fittings</u>	<u>ASTM F949</u>
<u>PVC Large-Diameter Plastic Gravity Sewer Pipe and Fittings</u>	<u>ASTM F679</u>
<u>PVC Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter</u>	<u>ASTM F794</u>
<u>Type PS-46 and Type PS-115 PVC Plastic Gravity Flow Sewer Pipe and Fittings</u>	<u>ASTM F789</u>

Note a: ^aThermoplastic sewer pipe shall be installed in accordance with ASTM D2321.

Note b: ^bCopper tubing, type M, may not be installed underground.

**Table 84.30-5
PRESSURIZED DRAIN PIPE AND TUBING
AND SERVICE SUCTION LINES**

Material	Standard
<u>Chlorinated polyvinyl chloride Poly (Vinyl Chloride) (CPVC)^a</u>	<u>ASTM D2846; ASTM F441/F441M; ASTM F442/F442M</u>
<u>Polyethylene Pressure Pipe and Fitting, 4 in. through 63 in., for Water Distribution</u>	<u>AWWA C906</u>

Note a: ^aThermoplastic sewer pipe shall be installed in accordance with ASTM D2321.

Note b: ^bCopper tubing, type M, may not be installed underground.

**Table 84.30-6
STORM BUILDING SEWER PIPE AND TUBING**

Material	Standard
<u>Concrete, circular</u>	<u>ASTM C14; ASTM C76</u>
<u>Concrete, elliptical</u>	<u>ASTM C507/C507M</u>
<u>PVC Corrugated Sewer Pipe With a Smooth Interior and Fittings</u>	<u>ASTM F949</u>
<u>PVC Large-Diameter Plastic Gravity Sewer Pipe and Fittings</u>	<u>ASTM F679</u>
<u>PVC Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter</u>	<u>ASTM F794</u>
<u>Type PS-46 and Type PS-115 PVC Plastic Gravity Flow Sewer Pipe and Fittings</u>	<u>ASTM F789</u>

Note a: ^aThermoplastic sewer pipe shall be installed in accordance with ASTM D2321.

Note b: ^bCopper tubing, type M, may not be installed underground.

**Table 84.30-8
PIPE AND TUBING FOR
WATER SERVICES AND PRIVATE WATER MAINS**

Material	Standard
Chlorinated polyvinyl chloride Poly (Vinyl Chloride) (CPVC) ^a	ASTM D2846; ASTM F441/F441M; ASTM F442/F442M
Crosslinked Polyethylene /Aluminum / Crosslinked Polyethylene	CAN/CSA B137.10, ASTM F1281
Polyethylene (PE) ^a	ASTM D2239; ASTM D2737; ASTM D2104; ASTM D2447; ASTM D3035, AWWA C906
Polyethylene / Aluminum / Polyethylene	CAN/CSA B137.9
Polyethylene / Aluminum / Polyethylene (PE-AL-PE)	ASTM F1282
Composite Pressure Pipe	
Stainless steel	ANSI ASME B36.19/B36.19M

Note a: ^a Plastic water service systems shall be installed in accordance with ASTM D2774.

Note b: ^b Copper tubing, type M, may not be installed underground.

**Table 84.30-9
WATER DISTRIBUTION PIPE AND TUBING**

Material	Standard
Chlorinated polyvinyl chloride Poly (Vinyl Chloride) (CPVC) ^a	ASTM D2846, ASTM F441/441M ^c , ASTM F442/442M ^d
Crosslinked Polyethylene /Aluminum / Crosslinked Polyethylene	CAN/CSA B137.10, ASTM F1281
Polyethylene / Aluminum / Polyethylene	CAN/CSA B137.9
Polyethylene / Aluminum / Polyethylene (PE-AL-PE)	ASTM F1282
Composite Pressure Pipe	
Stainless steel Steel	ANSI ASME B36.19M; ASTM A270; ASTM A450

Note a: ^a Plastic pipe and tubing installed underground shall be in accordance with ASTM D2774.

Note b: ^b Copper tubing, type M, may not be installed underground.

Note c: ^c Use is limited to pipe 2 1/2 inches or less in diameter.

^d Use is limited to pipe with a SDR 11 or less.

**Table 84.30-10
EXTERIOR TURF
SPRINKLER SYSTEM PIPE AND TUBING**

Material	Standard
Chlorinated polyvinyl chloride Poly (Vinyl Chloride) (CPVC) ^a	ASTM D2846; ASTM F441 ; ASTM F441/F441M;
Crosslinked Polyethylene / Aluminum / Crosslinked (PEX-AL-PEX) Polyethylene Pressure Pipe	ASTM F1281
Crosslinked Polyethylene /Aluminum / Crosslinked Polyethylene	CAN/CSA B137.10
Polyethylene / Aluminum / Polyethylene	CAN/CSA B137.9
Polyethylene / Aluminum / Polyethylene (PE-AL-PE)	ASTM F1282
Composite Pressure Pipe	

Note a: ^a Plastic pipe and tubing installed underground shall be in accordance with ASTM D2774.

Note b: ^b Copper tubing, type M, may not be installed underground.

**Table 84.30-11
PIPE FITTINGS**

Material	Standard
Cast copper alloy	<u>ANSI ASME B16.18; ANSI ASME B16.23; ANSI ASME B16.26; ANSI B16.32</u>
Cast iron	<u>ANSI ASME B16.4; ANSI ASME B16.12; ANSI ASME B16.1; ASME B16.45</u>
Copper	<u>ANSI ASME B16.22; ANSI ASME B16.29; ANSI B16.43</u>
Crosslinked Polyethylene (PEX)	ASTM F1807
Polyvinyl chloride Chloride (PVC)	ASTM D2464; ASTM D2466; ASTM D2467; ASTM D3311; ASTM F409; <u>ASTM F1336</u>
<u>Polyvinyl Chloride (PVC) Gasketed Sewer Fittings</u>	<u>ASTM F1336</u>

Note a: ^aSteel fittings and malleable iron fittings to be used in a water supply system shall be galvanized-coated in accordance with ASTM A123/123M.

Note b: ^bSee s. Comm 84.30 (4) (intro.) concerning the maximum lead content for fittings.

Note c: ^cCopper and copper alloy fittings conforming to MSS ~~SP-10~~ SP-103, may not be installed underground.

SECTION 60. Comm 84.30 (6) (e) is amended to read:

Comm 84.30 (6) (e) *Flush pipes and fittings.* Flush pipes and fittings shall be of nonferrous material and shall conform to ANSI ASME A112.19.5.

SECTION 61. Comm 84.40 (2) (c) is amended to read:

Comm 84.40 (2) (c) *Threaded joints.* Threaded joints shall only be used on pipes of schedule 80 or heavier. Threaded joints shall conform to ANSI ASME B1.20.1. The pipe shall be threaded with dies specifically designed for plastic pipe. Thread lubricant or tape approved for such use shall be applied to the male threads only.

SECTION 62. Comm 84.40 (3) (a) is amended to read:

Comm 84.40 (3) (a) *Threaded joints.* Threaded joints shall conform to ANSI ASME B1.20.1. Pipe joint compound or tape shall be used on the male threads only.

SECTION 63. Comm 84.40 (4) (a), (c) and (d) are amended to read:

Comm 84.40 (4) (a) *Brazed joints.* All joint surfaces to be brazed shall be cleaned bright by other than chemical means. Brazing filler metal conforming to AWS A5.8 or other approved material shall be used. The joining of water supply piping shall be made with lead-free materials. “Lead free” shall mean a chemical composition equal to or less than 0.2% of lead. Solders and fluxes containing in excess of 0.2% lead shall not be used.

(c) *Soldered joints.* All joint surfaces to be soldered shall be cleaned bright by other than chemical means. A nontoxic flux shall be applied to all joint surfaces. Solder conforming to ASTM B32 or other approved material shall be used. The joining of water supply piping shall be made with lead-free materials. ~~“Lead-free” shall mean a chemical composition equal to or less than 0.2% of lead.~~ Solders and fluxes containing in excess of 0.2% lead shall not be used.

(d) *Threaded joints.* Threaded joints shall conform to ANSI-ASME B1.20.1. Pipe joint compound or tape shall be used on the male threads only.

SECTION 64. Comm 84.40 (7) is renumbered as Comm 84.40 (7) (a) amended to read:

Comm 84.40 (7) CONCRETE PIPE. (a) *Circular pipe.* Joints between circular concrete pipe or fittings shall be made by use of an elastomeric seal conforming to ASTM C443 or C990.

SECTION 65. Comm 84.40 (7) (b) is created to read:

Comm 84.40 (7) (b) Elliptical pipe. Joints between elliptical concrete pipe or fittings shall be made by use of materials conforming to ASTM C887 Type II or ASTM C990.

SECTION 66. Comm 84.40 (8) (a) and (d) are amended to read:

Comm 84.40 (8) (a) Brazed joints. All joint surfaces to be brazed shall be cleaned bright by other than chemical means. Brazing filler metal conforming to AWS A5.8 or other approved material shall be used. The joining of water supply piping shall be made with lead-free materials. ~~“Lead-free” shall mean a chemical composition equal to or less than 0.2% of lead.~~

(d) *Soldered joints.* All joint surfaces to be soldered shall be cleaned bright by other than chemical means. A nontoxic flux shall be applied to all joint surfaces. Solder conforming to ASTM B32 or other approved material shall be used. The joining of water supply piping shall be made with lead-free materials. ~~“Lead-free” shall mean a chemical composition equal to or less than 0.2% of lead.~~

SECTION 67. Comm 84.40 (9) (b) is amended to read:

Comm 84.40 (9) (b) Threaded joints. Threaded joints shall conform to ANSI-ASME B1.20.1. Pipe joint compound or tape shall be used on the male threads only.

SECTION 68. Comm 84.40 (10) (a) is amended to read:

Comm 84.40 (10) (a) Threaded joints. Threaded joints shall conform to ANSI-ASME B1.20.1. Pipe joint compound or tape shall be used on the male threads only.

SECTION 69. Comm 84.40 (14) (c) is amended to read:

Comm 84.40 (14) (c) Threaded joints. Threaded joints shall only be used on pipes of schedule 80 or heavier. Threaded joints shall conform to ANSI-ASME B1.20.1. The pipe shall be threaded with dies specifically designed for plastic pipe. Thread lubricant or tape approved for such use shall be applied to the male threads only.

SECTION 70. A-82.20 (4) Appendix is repealed and recreated to read:

A-82.20 (4) PLANS AND SPECIFICATIONS. The following is a list of water quality management agencies and the area they serve.

Note: This listing is compiled by the department of natural resources and is updated periodically.

<u>AGENCY</u>	<u>AREAS SERVED</u>
East Central Wisconsin Regional Planning Agency 132 Main Street Menasha, WI 54952 (920) 751-4770	Counties of Calumet, Fond du Lac, Green Lake, Marquette, Menominee, Outagamie, Shawano, Waupaca, Waushara, Winnebago
Dane County Regional Planning Commission 217 South Hamilton Street, Room 403 Madison, WI 53703 (608) 266-4137	County of Dane
Brown County Planning Commission 100 N. Jefferson Street, Room 608 Green Bay, WI 54301 (920) 448-3400	County of Brown
Southeastern Wisconsin Regional Planning Commission 916 North East Avenue PO Box 1607 Waukesha, WI 53187-1607	Counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Waukesha, Washington
West Central Wisconsin Regional Planning Commission 800 Wisconsin Street Eau Claire, WI 54703-3606 (715) 836-2918	"Chippewa-Eau Claire Metropolitan Planning Area;" Cities of Altoona, Chippewa Falls, Eau Claire, <i>River Falls (est. completion July 2000)</i> , Towns of Brunswick, Hallie, Lafayette, Seymour, Tilden, Union, Washington
St. Croix County Planning Department 1101 Carmichael Road Hudson, WI 54016 (715) 386-4673	"Hudson Urban Area;" City of Hudson, Towns of Hudson, St. Joseph, Troy, Village of N. Hudson, Western 1/2 of Town of Warren
Bay-Lake Regional Planning Commission 211 N. Broadway, Suite 211 Green Bay, WI 54303-2757 (920) 448-2820	Cities of Marinette, Kohler, Sheboygan, Sheboygan Falls, Sturgeon Bay, <i>Manitowoc & Two Rivers (est. completion Jan. 2000)</i> Towns of Peshtigo, Porterfield, Mosel, Wilson, Lima, Sheboygan, Sheboygan Falls, Herman Villages of Howards Grove, Kohler
Rock County Planning Agency 51 South Main Street Janesville, WI (608) 757-5310	Cities of Janesville and Beloit, Towns of Beloit, Harmony, Janesville, La Prairie, Rock, Turtle Village of Clinton

AGENCY

AREAS SERVED

LaCrosse/Onalaska,
Office of City Engineer
400 LaCrosse Street
LaCrosse, WI 54601
(608) 789-7505

Cities of LaCrosse, Onalaska
Towns of Shelby, Campbell

Portage County Planning Department
1516 Church Street
Stevens Point, WI 54481
(715) 346-1334

"Stevens Point Urban Area;" City of Stevens Point
Villages of Plover, Park Ridge, Whiting
Towns of Hull, Linwood, Plover

Marathon County Planning Department
210 River Drive
Wausau, WI 54403-5449
(715) 261-6040

"Wausau Urban Area;" Cities of Wausau, Schofield
Towns of Maine, Stettin, Texas, Wausau, Weston
"Rib Mountain Metropolitan Sewerage District;" Towns of
Kronenwetter, Rib Mountain, Rothschild
Village of Weston

Wood County Planning
400 Market Street
Wisconsin Rapids, WI 54495
(715) 421-8466

"Southern Wood County;" Cities of Nekoosa, Wisconsin Rapids
Towns of Grand Rapids, Port Edwards, Rudolph, Saratoga,
Seneca, Sigel
Villages of Biron, Port Edwards, Rudolph

Dunn County Land Conservation
390 Red Cedar Street
Menomonie, WI 54751
(715) 232-1496

City of Menomonie (Sanitary Sewer Extensions only)

Oconto County/West Shore
Oconto County Office of Land Use and Zoning
310 Washington Street
Oconto, WI 54153-1621
(920) 834-6827

City of Oconto
Towns of Abrams, Little River, Little Suamico, Pensaukee, Stiles,
Oconto

North Central Wisconsin Regional Planning Commission
407 Grant Street
Wausau, WI 54403
(715) 261-6565

City of Marshfield (est. completion July 2000)
City of Merrill

Sauk County Planning & Zoning
505 Broadway
Baraboo, WI 53913
(608) 355-3285

City of Baraboo (est. completion July 2000)

City of Superior
Administrative Engineer
1407 Hammond Avenue
Superior, WI 54880
(715) 394-0691

City of Superior

Utilities General Manager
Sturgeon Bay Utilities
P.O. Box 259
230 East Vine Street
Sturgeon Bay, WI 54235
(920) 746-2820

City of Sturgeon Bay

SECTION 71. A-84.20 (5) Appendix is repealed and recreated to read:

A-84.20 (5) SPACING OF PLUMBING FIXTURES.

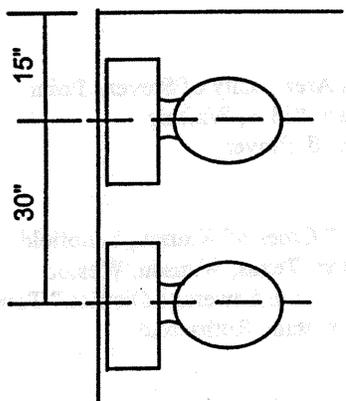


Figure 84.20-1. Spacing between water closets.

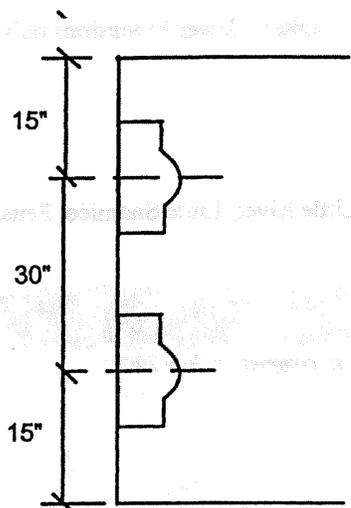


Figure 84.20-2. Spacing between stall type urinals.

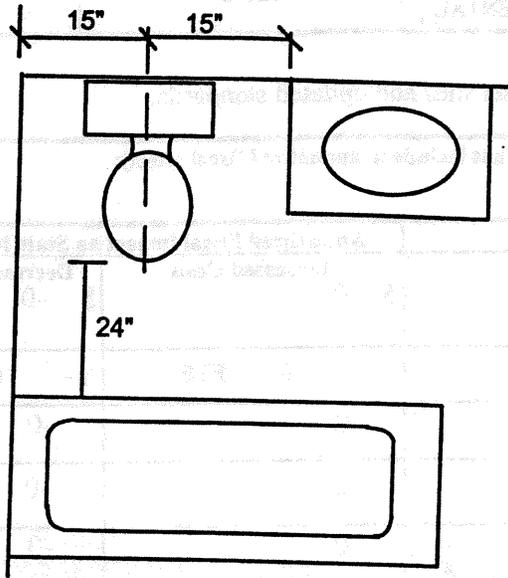
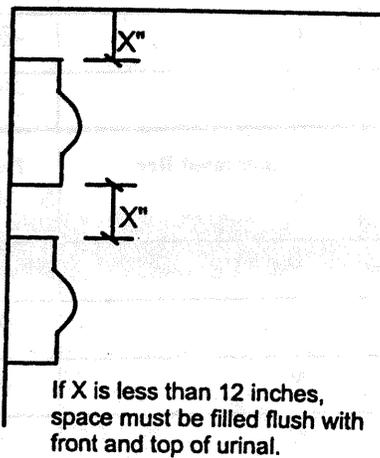


Figure 84.20-3. Spacing between water closet and tub.



If X is less than 12 inches,
space must be filled flush
with front and top of urinal.

Figure 84.20-4. Spacing between wall hung or stall type urinals.

(end)

EFFECTIVE DATE

Pursuant to s. 227.22 (2) (intro.), Stats., these rules shall take effect on the first day of the third month following publication in the Wisconsin Administrative Register, except s. Comm 82.40 (3) (d) 3. shall take effect on the first day of the ninth month following publication in the Wisconsin Administrative Register.

FISCAL ESTIMATE WORKSHEET
Detailed Estimate of Annual Fiscal Effect
DOA-2047(R02/97)

ORIGINAL
 CORRECTED

UPDATED
 SUPPLEMENTAL

LRB or Bill No./Adm. Rule No.
Chs. Comm 82&84

Amendment No.

Subject: Wisconsin Uniform Plumbing Code and Fee Code
Various changes to chs. Comm 82 & 84 regarding health-related facilities and updated standards.

I. One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):

None

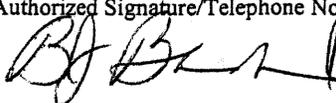
II. Annualized Costs:	Annualized Fiscal impact on State funds from:	
	Increased Costs	Decreased Costs
A. State Costs By Category	\$ 0	\$ -0
State Operations - Salaries and Fringes		
(FTE Position Changes)	(0 FTE)	(- 0 FTE)
State Operations - Other Costs	0	-0
Local Assistance	0	-0
Aids to Individuals or Organizations	0	-0
TOTAL State Costs By Category	\$ 0	\$ -0
B. State Costs By Source of Funds	\$ 0	\$ -0
GPR		
FED	0	-0
PRO/PRS	0	-0
SEG/SEG-S	0	-0
III. State Revenues- Complete this only when proposal will increase or decrease state revenues (e.g., tax increase, decrease in license fee, etc.)	Increased Rev.	Decreased Rev.
GPR Taxes	\$ 0	\$ -0
GPR Earned	0	-0
FED	0	-0
PRO/PRS	0	-0
SEG/SEG-S	0	-0
TOTAL State Revenues	\$ 0	\$ -0

NET ANNUALIZED FISCAL IMPACT

	<u>STATE</u>	<u>LOCAL</u>
NET CHANGE IN COSTS	\$ 0	\$ 0
NET CHANGE IN REVENUES	\$ 0	\$ 0

Agency/Prepared by: (Name & Phone No.)
Jean M. MacCubbin, Code Consultant
608-266-0955

Authorized Signature/Telephone No.



Date

8/4/99

FISCAL ESTIMATE
DOA-2048 (R02/97)

ORIGINAL
 CORRECTED

UPDATED
 SUPPLEMENTAL

LRB or Bill No./Adm. Rule No.
Chs. Comm 82 & 84
Amendment No. if Applicable

Subject Wisconsin Uniform Plumbing Code and Fee Code
Various changes to chs. Comm 82 & 84 regarding health-related facilities and updated standards.

Fiscal Effect

State: No State Fiscal Effect

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation

- Increase Existing Appropriation
- Decrease Existing Appropriation
- Create New Appropriation
- Increase Existing Revenues
- Decrease Existing Revenues

- Increase Costs - May be Possible to Absorb Within Agency's Budget Yes No
- Decrease Costs

Local: No local government costs

- 1. Increase Costs
 Permissive Mandatory
- 2. Decrease Costs
 Permissive Mandatory

- 3. Increase Revenues
 Permissive Mandatory
- 4. Decrease Revenues
 Permissive Mandatory

5. Types of Local Governmental Units Affected:
- Towns Villages Cities
 - Counties Others _____
 - School Districts WTCS Districts

Fund Sources Affected

- GPR FED PRO PRS SEG SEG-S

Affected Ch. 20 Appropriations

Not applicable

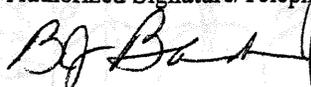
Assumptions Used in Arriving at Fiscal Estimate

There are no new regulatory schemes contained in these proposed rule revisions that would significantly affect revenues or expenditures.

Long-Range Fiscal Implications
None known or anticipated.

Agency/Prepared by: (Name & Phone No.)
Jean M. MacCubbin, Code Consultant
608-266-0955

Authorized Signature/Telephone No.



Date

8/4/99

DEPARTMENT OF COMMERCE
PUBLIC HEARING ATTENDANCE RECORD

RULE NO.: Chs. Comm 82 & 84

DATE: October 6, 1999

RELATING TO: Uniform Plumbing Code

TIME: 10:30 a.m.

LOCATION: WHEDA Conf Rm 3C, 210 W Washington Ave

CITY: MADISON

Name	Representation (Business, Assoc., Group, Self, etc.)	City and State	Appearing in Support	Appearing in Opposition	Appearing for Information
Herb Hoepfner	Hoepfner Products	Gilroy, CA			X
Paul Conrad	Mansfield Plumbing Products	Perryville, OH		X	
Dennis Detlef	WI Assn of Residential Facilities	Milw., WI			X
Rick Dawson	ATIM	Sea Pointe WI		X	
Paul Ackroyd	RAND ENG.	MA.		X	
Arthur J. Higgins	P.J. Higgins & Assoc.	FREDERICK MD		X	
Joan Melbourn	NIBCO Sales Eng.	Mad Ill		X	
Dave Viola	PMI	Chgo IL		X	
Jim Karnon	City of Janesville	Janesville WI			X
Louie Pody	City of Janesville	Janesville WI			
Anne McMahon	Blumentfeldt Associates	Madison, WI			
Dennis Siegb	Wiscon Cold Pipe Assn	Mountb. WI.			
Mike Beckwith	Dept of Comm	Madison WI			X
John McCluskey	Commerce	Madison			X

DEPARTMENT OF COMMERCE
PUBLIC HEARING COMMENT AND AGENCY RESPONSE

Clearinghouse Rule No.:		Hearing Location: MADISON	
Rule Number: chs. Comm 82 & 84		Hearing Date: October 6, 1999	
Relating to: Plumbing Code			
Comments: Oral or Exhibit No.	Presenter, Group Represented, City and State	Comments/Recommendations	Agency Response
1	DENNIS DETLEF WI ASSOC OF RESIDENTIAL FACILITIES 1126 S 70th ST MILWAUKEE WI 53214	<ol style="list-style-type: none"> Organization is concerned with rule revision impacts on CBRFs in the State of Wisconsin. CBRFs should not be considered in the definition of "health care facilities"; less than 10% of CBRFs statewide have 24 or more beds and the vast majority do not operate under the 'medical model' and are not eligible for T-19 (Medicaid). CBRFs are created and operated to provide homelike settings; thus residents are quite competent in meeting day-to-day responsibilities. S. Comm 82.11(80) definition for health care facility should delete the inclusion of CBRFs. Commerce needs to consider creating a separate plumbing code to apply to some or all CBRFs. 	<ol style="list-style-type: none"> - 5. Department believes that DHFS is the appropriate agency to modify definition of Health care facility.
	RICH DAVISON 860 HERRA DR WATERLOO WI 53594	<ol style="list-style-type: none"> Called for additional, unbiased information to be used in making proposed rule revision with respect to ASSE 1019 wall hydrants. Has concerns about actual number of these types of hydrants installed in the State of Wisconsin; currently there is no known information on backflow problems (estimates about 250,000 in use statewide). If proposal would be adopted, it would reduce the number of hydrants available on the market. 	The department has deferred adoption of this proposal pending ASSE review and action.
	HERB HOEPTNER 7796 OAK SPRINGS CIR GILROY CA 95020	<ol style="list-style-type: none"> Re: ASSE 1910 standard; noted testing done by Woodruff, a manufacturer, was done improperly, included only piston type hydrants (ASSE 1019), DATUM not clear, and sample set not representative. More testing is needed prior to adoption of proposed rule revision. The results appear to indicate that the gaskets are the problem vs. the spring-type hydrants. 	The department has deferred adoption of this proposal pending ASSE review and action.

DEPARTMENT OF COMMERCE
PUBLIC HEARING COMMENT AND AGENCY RESPONSE

Clearinghouse Rule No.:		Hearing Location: MADISON	
Rule Number: chs. Comm 82 & 84		Hearing Date: October 6, 1999	
Relating to: Plumbing Code			
Comments: Oral or Exhibit No.	Presenter, Group Represented, City and State	Comments/Recommendations	Agency Response
4	PATRICK J HIGGINS 305 E PATRICK ST FREDERICK MD 21701	<ol style="list-style-type: none"> S. Comm 82.1.1(185a), revise definition of whirlpool, add a definition for whirlpool tub. Check model codes. S. Comm 82.40(8)(g), If the concern is about low pressure, then add an exception; suggested: <u>EXCEPTION: Buildings in which available pressure is less than 30 psi.</u> If the concern is about temperature changes, there are devices to prevent thermal shock and scalding. S. Comm 82.40(8)(g), add working to include: "<u>...or combination thermostatic/pressure balancing devices.</u>" S. Comm 82.40(8)(g), Add the following text to handle the position stop: "<u>The handle position control on such valves shall be adjusted to deliver a maximum discharge temperature of 120 degrees F.</u>" Table 84.21-1, consider a footnote as these types are prone to spillage, and therefore, an emergency drain is required: "<u>ASSE 1020 devices shall be limited to outdoor use or where an emergency drain is provided.</u>" Table 842.41-1, delete the requirement for a barometric loop, they do not protect against contamination which occur with bacterial movement. S. Comm 82.41(4)(b), allow atmospheric vacuum breakers to be installed as low as 1" above the point of contamination. S. Comm 82.41(4)(n), allow the SVB device to the installed to 1". S. Comm 82.50(10), reword as it is not known that any device could comply as the test is worded at present: (2) Such control valves shall be adjusted not to exceed 115 degrees F. or shall significantly reduce flow when the mixed water supply to the fixture fitting outlet exceeds 115 degrees F. S. Comm 82.50, danger of hot water in public restrooms is very problematic; suggest adding the following text: (3) Lavatories for public use. <u>The maximum temperature to fixture fitting outlets in lavatories for public use shall not exceed 115 degrees F.</u> S. Comm 84.20(5)(b), suggests adding the equivalent CSA B45 standard for bathtubs as in the following: a. <u>CSA B45.2.</u> b. <u>or</u> 	<ol style="list-style-type: none"> Department will create a definition for whirlpool tubs for clarification. The concern is for temperature fluctuation caused by pressure variations. Department will revise rule revision to include suggestion. Department believes suggested text is unnecessary. These comments will be considered in a future code revision. Department believes that many cross connection control devices do not protect against bacterial movement; text will not be revised as suggested. - 8. These comments will be considered in a future code revision. Department has considered suggestion and will make appropriate rule revision. - 34. These comments will be considered in a future code revision.

DEPARTMENT OF COMMERCE
PUBLIC HEARING COMMENT AND AGENCY RESPONSE

Clearinghouse Rule No.: Rule Number: chs. Comm 82 & 84 Relating to: Plumbing Code	Hearing Location: MADISON Hearing Date: October 6, 1999		
Comments: Oral or Exhibit No.	Presenter, Group Represented, City and State	Comments/Recommendations	Agency Response
	<p>(continued) PATRICK J HIGGINS 305 E PATRICK ST FREDERICK MD 21701</p>	<p>CSA B45.3. c. or CSA B45.5. and d. Non-vitreous ceramic bathtubs shall comply with ASME A112.19.9.</p> <p>12. S. Comm 84.20(5)(c), suggests same for bidets as in the following: a. or CSA B45.1. b. <u>Non-vitreous ceramic bidets shall conform to ASME A112.19.9.</u></p> <p>13. S. Comm 84.20(5)(e), suggests same for drinking fountains as in adding ASME A112.19.9 or CSA B45.1.</p> <p>14. S. Comm 84.20(5)(f) 1., suggests same for lavatories as in the following: a. or CSA B45.2. b. or CSA B45.1 c. or CSA B45.4. d. or CSA B45.3. e. or CSA B45.5. and add f. <u>Non-vitreous china lavatories shall conform to ASME A112.19.9. and in 2. Add or CSA B45.5.</u></p> <p>15. S. Comm 84.20(5)(j) and same for showers: in 1. Add the following: <u>or CSA B45.5. and add a new 2. Non-vitreous shower receptors shall comply with ASME A112.19.9.</u></p> <p>16. S. Comm 84.20(5)(k) same for sinks, add the following: a. or CSA B45.2. b. or CSA B45.1. c. or CSA B45.4. d. or CSA B45.3. e. or CSA B45.5. and add f. <u>Non-vitreous china lavatories shall conform to ASME A112.19.9.</u></p> <p>17. S. Comm 84.20(5)(L) 1., amend as follows: <u>A112.19.6 or CSA B45.1.</u></p> <p>18. S. Comm 84.20(5)(m) same for water closets, add the following in 1.a. or CSA B45.1. and add a new 2. <u>Non-vitreous china water closets shall conform to ASME A112.19.9. Plastic water closets shall conform to ANSI Z124.4 or CSA B45.0 and B45.5.</u></p> <p>19. S. Comm 84.20(5)(m) suggest adding a section on standards for Seats.</p> <p>20. S. Comm 84.30(5)(c), suggest deleting reference to ASME A112.26.1 as ASME has withdrawn and relies on ASSE 1010.</p> <p>21. S. Comm 84.30(5)(c) 5., suggests amending as follows: <u>Water pressure reducing valves and strainers for water pressure reducing valves for domestic water supply systems shall conform to ASSE 1003 or CSA B356. (These are essentially equivalent.)</u></p>	

DEPARTMENT OF COMMERCE
PUBLIC HEARING COMMENT AND AGENCY RESPONSE

Clearinghouse Rule No.:		Hearing Location: MADISON	
Rule Number: chs. Comm 82 & 84		Hearing Date: October 6, 1999	
Relating to: Plumbing Code			
Comments: Oral or Exhibit No.	Presenter, Group Represented, City and State	Comments/Recommendations	Agency Response
	(continued) PATRICK J HIGGINS 305 E PATRICK ST FREDERICK MD 21701	<p>22. S. Comm 84.30(5) (c) 11., suggests amending as follows: Trap seal primer valves, water-fed shall conform to ASSE 1018 or 1044. (These are essentially equivalent.)</p> <p>23. Table 84.60-3e, add ASME A112.3.1-93, standard for Stainless Steel DWV Systems.</p> <p>24. Table 84.60-4e, add ASSE 1044.</p> <p>25. Table 84.60-5, add ASTM C1173 and C1277 (relating to couplings used below ground).</p> <p>26. Table 84.60-7e, add: CSA B45, Plumbing Fixtures.</p> <p>27. Table 84.60-8, F1281, this is not a CISPI standard. Delete all references to CISPI as no input from the industry; add ASTM A888, C1173 and C1277 for these materials.</p> <p>28. S. Comm 84.35(?) (c) 12., suggests removing piston type wall hydrants.</p> <p>29. S. Comm 84.40(5)(b), suggests amending in light if CISPI not an industry standard: Mechanical sleeve joints for drain and vent systems shall have a rubber an elastometric sealing sleeve conforming to ASTM C564, C1440, ASTM C1173, ASTM C1277, CISPI 340 or FM 1680. Where a stainless steel band is used, the band assembly should conform to CISPI 340 ASTM C1173, ASTM C1277, or FM 1680. Mechanical joints shall be installed in accordance with the manufacturer's instructions.</p> <p>30. S. Comm 84.50(19), suggest adding: <u>Stainless steel DWV plumbing systems. (a) Stainless steel DWV pipe and fittings shall be joined using o-rings recommended by the manufacturer for the waste being conveyed. (b) Joints between stainless steel drainage systems and other piping materials shall be made with approved mechanical couplings. (c) Spacing shall be as follows: vertical (any size)-- each story; horizontally 2 inches - 7 ft.; 3 inches - 8 ft.; 4 inches - 9 ft.; and 6 inches - 10 ft.</u></p> <p>31. Table 84.30-1, suggests adding the following reference: <u>Stainless Steel Drainage Systems, Types 304 and 316L, ASME A112.3.1</u></p> <p>32. Table 84.50-2, suggests adding the following reference: <u>Stainless</u></p>	

DEPARTMENT OF COMMERCE
PUBLIC HEARING COMMENT AND AGENCY RESPONSE

Clearinghouse Rule No.:		Hearing Location: MADISON	
Rule Number: chs. Comm 82 & 84		Hearing Date: October 6, 1999	
Relating to: Plumbing Code			
Comments: Oral or Exhibit No.	Presenter, Group Represented, City and State	Comments/Recommendations	Agency Response
5	(continued) PATRICK J HIGGINS 305 E PATRICK ST FREDERICK MD 21701	Steel Drainage Systems, Type 316L, ASME A112.3.1 33. Tables 84.50-3, 84.50-6, and 84.50-7, suggests adding the following reference: <u>Stainless Steel Drainage Systems, Type 316L, ASME A112.3.1</u> 34. S. Comm 84.30(5)(c), suggests adding the following: <u>18. Drains from relief valves shall comply with ASME A112.4.1.</u>	1. No response needed. 2. Department has deferred adoption pending ASSE review and action.
	PAUL CONRAD 150 FIRST ST PERRYVILLE OH 44864	1. Mansfield sold approximately 35 million of similar type wall hydrants and there is no documentation of failure. RE: S. Comm 84.30(5)(c) 12. Included a report #99W0309E2, conducted by JB Engineering and Code Consulting, P.C., which tests piston type styles only and no non-piston type styles were evaluated in the report. (ASSE 1019 standard does not define "piston-type" check valve.) 3. Suggests that the Department question the options prior to legislation. 4. Removal of hydrants for the tests conducted is not documented; there is no baseline; the sample set did not include other types of hydrants. 5. The tests need to be repeated through an ASSE certified lab, which has not been done.	No response necessary.
7	JAMES E NIEHAUS 4505 PEAKVIEW CT LIBERTY TWP OH 45011	Registered in opposition; did not provide written or verbal testimony.	
	DAVID VIOLA PLUMBING MANUFACTURERS INST 1340 REMINGTON RD STE A SCHAUMBURG IL 60173	1. S. Comm 82.11(185e), suggests to delete the notes and add definition from ASSE A112.19.7. 2. S. Comm 82.40(8), add the phrase: "thermostatic, pressure balance, or combination pressure balance/thermostatic" after the word individually. 3. S. Comm 82.50(10)(g), make change to be consistent with ASSE 1016, 1017, and 1062: "the system shall be designed so that the hot water supply to the control valve will close completely in the event	1. Department will revise definition and create definition for whirlpool tub for clarification. 2. The concern is for temperature fluctuation caused by pressure variations. 3. Department agrees and will make appropriate rule revision.

DEPARTMENT OF COMMERCE
PUBLIC HEARING COMMENT AND AGENCY RESPONSE

Clearinghouse Rule No.:		Hearing Location: MADISON	
Rule Number: chs. Comm 82 & 84		Hearing Date: October 6, 1999	
Relating to: Plumbing Code			
Comments: Oral or Exhibit No.	Presenter, Group Represented, City and State	Comments/Recommendations	Agency Response
	(continued) DAVID VIOLA PLUMBING MANUFACTURERS INST 1340 REMINGTON RD STE A SCHAUMBURG IL 60173	<p>that the tempered water supplies to the fixture fitting exceeds 115 degrees F."</p> <p>4. S. Comm 84.03(2)(e), delete the definition for lead free and remove an unnecessary term.</p> <p>5. S. Comm 84.20(5)(m), add a new section "(c) Flexible water Connectors shall conform to ASSE A112.18.6." Add this into the adoption table 84.60-3e.</p> <p>6. S. Comm 84.30(5)(c), add a reference to ASSE 1017.</p> <p>7. S. Comm 84.40(4)(c), delete the last 2 sentences and replace with: "solders and fluxes containing in excess of 0.2% lead shall not be used."</p> <p>8. Ss. Comm 84.40(8)(a) and 84.40(8)(d), same as above.</p>	<p>4. - 8. These comments will be considered in a future code revision.</p>
8	RAND ACKROYD SELF, WATTS IND. 360 HIGH ST NEWBURYPORT MA 01950	<p>1. Opposed to the ASSE 1019 revision.</p> <p>2. ASSE is a vacuum breaker standard and not a check flow or backflow standard.</p> <p>3. The standard does not require a check valve in it; thus the standard does include a test for a checking member (totally different tests from check valves) and a pressure relief member.</p> <p>4. Frost-free hydrants usually are used with hoses that have shut off; the standards then doesn't apply here, but the pressure relieving function does apply to prevent back siphonage.</p> <p>5. Has serious questions about the legitimacy of the testing, the report results and competitive company conducting the tests.</p> <p>6. The report results do indicate that these products ARE protecting against backflow. (There are no known removal standards for these products.)</p> <p>7. The amount of leakage of checking member is not indicated, if significant it would have been so reported.</p> <p>8. The report re: pressure relief, these results were excellent; all but 2 passed. The results though are misleading, as leakage is NOT an indication of failure of the device but pressure relief is.</p> <p>9. Test report re: vacuum breaker, the report indicates that a number of</p>	<p>1. Department has deferred adoption pending ASSE review and action.</p>

DEPARTMENT OF COMMERCE
PUBLIC HEARING COMMENT AND AGENCY RESPONSE

Clearinghouse Rule No.:		Hearing Location: MADISON	
Rule Number: chs. Comm 82 & 84		Hearing Date: October 6, 1999	
Relating to: Plumbing Code			
Comments: Oral or Exhibit No.	Presenter, Group Represented, City and State	Comments/Recommendations	Agency Response
	(continued) RAND ACKROYD SELF, WATTS IND. 360 HIGH ST NEWBURYPORT MA 01950	<p>hydrants failed. The elevation is known; 1/16" rise is not failure. In summary, there is no knowledge of reported incident of failure; the report results actually back this up that as a vacuum breaker the device is working properly (except for the 2 that otherwise had malfunctions).</p> <p>11. A ban on this type of hydrant, based on this report, would mean that there may not be other products on the market to fill the void.</p> <p>12. The report or any hard data has been available to ASSE standards committee that any special changes are in order; their annual meeting is upcoming.</p> <p>13. The proper place for a ban is not in the plumbing code but in the standards-writing organization.</p>	

PUBLIC HEARING COMMENT AND AGENCY RESPONSE

Clearinghouse Rule No.:		Hearing Location: MADISON	
Rule Number: chs. Comm 82 & 84		Hearing Date: WRITTEN COMMENTS (through 101699)	
Relating to: Plumbing Code			
Comments: Oral or Exhibit No.	Presenter, Group Represented, City and State	Comments/Recommendations	Agency Response
2	PAULA MALANDRO RICHMOND FOUNDRY 2501 S FRONT ST PHILADELPHIA PA 19148	<ol style="list-style-type: none"> Request deleting all references to CISPI standards for hubless cast iron and No-hub pipe and fitting. Suggest replacing CISPI standards with ASTM A-888, C-1171, and C-1277 standards. Rational for comments in 1 & 2 above is that CISPI is a trade association and ASTM is a consensus writing standards organization. 	<ol style="list-style-type: none"> Department believes citing both standards provides additional options for installers. ASTM A-888(96) is proposed to be adopted in the draft. (The other ASTM standards, C-1171 and 1277, are not included at this time.)
3	SUE SCHROEDER DHFS BUR OF QUALITY ASSURANCE 1 W WILSON ST MADISON WI 53701-2969	<ol style="list-style-type: none"> Section Comm 82.10 (80), the Stats, define both "health care facility" and "inpatient health care facility"; see ss. 50.135(1), 51.62(1), 101.123(1)(b), 154.01(4), and 155.01(6), Stats. Bur. of Quality Assurance recommends the following text: "Health care facility" means any hospital, nursing home, community based residential facility, county home, infirmary, inpatient mental health center, inpatient hospice, ambulatory surgery centers, adult day care centers, end stage renal facilities, facility for the developmentally disabled, institute for mental disease, urgent care centers, (and) medical offices and clinics. Section Comm 82.50 (2), suggest adding "related (health care) facilities" to health care facilities: "1) School of medicine, surgery and dentistry. Depending on how the schools are organized, health care could be provided in a hospital, clinic or the school itself. For example, surgery "patients" could be in the school of medicine and not receive the protection of Comm 82 that they would receive in a hospital or other surgery center. 2) Child Caring Institutions. (old term is orphanage)." Section Comm 82.50(10)(g), the temperatures conflict with chs. HFS 83 and 132. 	<ol style="list-style-type: none"> 1. - 2. The Department will revise rules accordingly 3. Department will amend the definition to "health care and related facilities"; child caring institutions will be included. 4. DHFS will revise chs. HFS 83 and 132 to reference s. Comm 82.50(10)(g).
9	JAMES SHULER WOODFORD MFG CO 2121 WAYNOKA RD COLORADO SPRINGS CO 80915	<ol style="list-style-type: none"> Company in favor of adoption of ASSE 1019 standard. Company is in support of revising text to note only non-piston type A and B conforming to ASSE 1019 as company's testing resulted in high failure rate; non-piston type A and B should only be allowed. 	The Department has deferred adoption of this proposal pending ASSE review and action.

DEPARTMENT OF COMMERCE
PUBLIC HEARING COMMENT AND AGENCY RESPONSE

Clearinghouse Rule No.:		Hearing Location: MADISON	
Rule Number: chs. Comm 82 & 84		Hearing Date: WRITTEN COMMENTS (through 101699)	
Relating to: Plumbing Code			
Comments: Oral or Exhibit No.		Agency Response	
Presenter, Group Represented, City and State		Comments/Recommendations	
10	DUANE SCHUETTPELZ WDNR PUBLIC WATER SYSTEMS SECTION	<p>1. S. Comm 82.36(3)(b)3.a., recommends the following text changes: delete "or covered parking structure", delete "a storm drain system" and add: <u>to grade in accordance with (3)(b) 2. Covered parking structures, with the exception of the exposed top level, shall be discharged to a sanitary drain system whenever a sanitary drain system is available. If there is not a sanitary drain system available for a parking structure to connect to, the department of natural resources may be contacted to determine an acceptable alternative. The exposed top level of a covered parking structure shall be directed to either a storm drain system, sanitary drain system or to grade in accordance with (3)(b)2.</u></p> <p>2. There is significant potential for the dumping of oils, antifreeze, paints, etc. into garage drains. Residential owners are less likely to dump these fluids if they go to grade.</p> <p>3. For the changes to covered portions of the garage structure, this water tends to be significantly contaminated from auto fluids, road salts, heavy metals, hydrocarbons and in high concentrations. It is therefore appropriate to direct this wastewater to sanitary sewer.</p>	<p>1. Department will take suggestion under consideration and make appropriate rule revisions as storm drain requirements are planned to be handled in depth in a future rule draft.</p> <p>2. - 3. No response necessary.</p>
11	DONALD J. MORIVA, P.E. DJ MORIVA COMPANY INC. 5555 IRISH LANE MADISON WI 53711	<p>1. S. Comm 84.25(5), opposed to use of 800 gal. concrete septic tank (not in this rule revision).</p> <p>2. S. Comm 84.25(9), do not rely on pump manufacturers to rate a pump as an "effluent pump" in the state (not in this rule revision).</p> <p>3. S. Comm 84.30, Table 84.30-3, HDPE polyethylene pipe is practicable for use with horizontal directional boring in both public ROW and on private priority (not in this rule revision).</p> <p>4. S. Comm 82.30 (11)(f) 2., referred to NR 110.?? (?) (h). (not in this rule package).</p>	<p>1. - 4. Comments are on sections that pertain to another rule revision the Department is undertaking; will route to the appropriate staff for consideration.</p>

RULE REPORT

Department of Commerce

Rule No.: Chs. Comm 82 & 84

Relating to: Wisconsin Uniform Plumbing Code and Fee Code

Agency contact person for substantive questions:

Name Lynita Docken

Title Plumbing Program Manager

Telephone Number 608-785-9349

Agency contact person for internal processing:

Name Jean M. MacCubbin

Title Code Consultant

Telephone Number 608-266-0955

1. Agency statutory authority under which the agency intends to promulgate the rule(s).
ss. 101.02 (1), 101.63 (1), 101.73 (1), 101.82 (1) and 145.02 (3), Stats.

2. Citation of federal regulations which require adoption or which are relevant to the proposed rule(s).
none known

3. Citation of court decisions which are applicable to the proposed rule(s).
none known

4. Description of the proposed rule(s).

This rule revision includes changes to various definitions important to health-related occupancies so as to conform to the regulations of the Department of Health and Family Services (DHFS). Other proposed revisions are in response to 1997 Wisc. Acts 27, 237 and 768 and updating administrative rules to be more contemporary within the industry by adopting more recent nationally-recognized standards.

Chapter 82

- Provides for submittal and review of alternate and experimental plumbing systems;
- Updates definitions for recent Statutory changes relating to health care and related facilities;
- Creates a process to allow existing systems to be maintained to the code in effect at time of installation;
- Allows for use of elliptical concrete piping for stormwater drain, thus allowing for shallower excavations;
- Provides for pool and whirlpool backwash and wastewater discharge destination;
- Provides for tagging and tracking of cross connection control devices;
- Allows for testing methodologies for cross connection control devices as per national and international standards; and
- Creates maximum temperature for plumbing systems and point of use for hospitals and other health care facilities to provide fail safe for scalding and elimination of *Legionella* bacterial growth.

Chapter 84

- Adopts updated standards for plumbing fixtures-- baths, lavatories, urinals, bidets, and faucets;
- Adopts standards for safing materials;
- Adopts standards for drain piping-- sanitary, storm and sewer;
- Adopts updated standards for piping-- water service, water mains, and turf sprinkler systems;
- Adopts updated standards for pipe fittings, valves, and joint materials; and
- Adopts standards for concrete elliptical storm piping.

5. Reason for the proposed rule(s).

The proposed rules have been developed in order to bring the state plumbing code up-to-date with current state law, the latest nationally-recognized standards and new technology.

RESPONSE TO LEGISLATIVE COUNCIL CLEARINGHOUSE REPORT

Department of Commerce

CLEARINGHOUSE RULE NO.: 99-123

RULE NO.: Chapters 81, 82 & 84

RELATING TO: Wisconsin Uniform Plumbing Code

Agency contact person for substantive questions.

Name Lynita Docken

Title Plumbing Program Manager

Telephone Number 608-785-9349

Legislative Council report recommendations accepted in whole.

Yes

No

1. Review of statutory authority [s. 227.15(2)(a)]
 - a. Accepted
2. Review of rules for form, style and placement in administrative code [s. 227.15(2)(c)]
 - b. Accepted in part

Comments:

- 2a. Section 1. has been moved to another rule revision specific to division fees; accepted suggestion for revision of all other tables where appropriate.
- 2b. Partially accepted; redundant text was deleted; definitions for Canadian terms having same meaning were created.
- 2c. Disagree; by following the suggested format, the outline would require the use of a level not recommended in the manual.
- 2d. Partially accepted; rephrased the delayed effective date.
- 2g. Partially accepted; the delayed effective date was rephrased but left in the rule text to assist with training as a History Note may be overlooked by the regular user of the code.
- 2m. The paragraph was created and inserted within the list vs. at the end, as the list is organized a by numbering used for the standards in accompanying tables.

(Continued on reverse side)

3. Review rules for conflict with or duplication of existing rules [s. 227.15(2)(d)]

a. Accepted

4. Review rules for adequate references to related statutes, rules and forms [s. 227.15(2)(e)]

b. Accepted in part

Comments:

4c. Text was revised to note that the time interval for certain inspections will be included in the conditions of approval. A Note was also added to provide a cross reference to ch. Comm 2, Fees.

4d. The department will communicate any limitations via the monthly publication, Wisconsin Plumbing Codes Report.

4e. A note was added to provide a cross reference to the table which specifies the testing methods.

5. Review language of rules for clarity, grammar, punctuation and plainness [s. 227.15(2)(f)]

a. Accepted

Comments:

5a. Text was revised to clarify that items shall be submitted to the department.

5c. Definition was revised. Process is no longer in the definition, but included as a separate section, s. Comm 82.20 (12)(b).

5d. Text was clarified with regard to submittal information and identified the owner of installation.

5e. Text was revised to include additional provisions for what changes to the experiment the department may make.

5g. Text clarified to note "before availability for statewide use".

5h. No changes were made; this is standard code text allowing the department to request additional information for a complete submittal.

5j. Text clarified and a cross reference was made to Table 82.21-1; in accordance with this table, not all reports need to be submitted to the department.

5l. No changes were made; this is standard code text to provide flexibility in the variety of engineering analyses that could be made and submitted.

5m. Section clarified and the definition of health care facility also clarified.

6. Review rules for potential conflicts with, and comparability to, related federal regulations [s. 227.15(2)(g)]

a. Accepted

7. Review rules for permit action deadline [s. 227.15(2)(h)]

a. Accepted



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Tommy G. Thompson, Governor
Brenda J. Blanchard, Secretary

7/7/00

Senate Chief Clerk
Room 402
1 East Main Street
Madison, Wisconsin 53703

Assembly Chief Clerk
Room 402
1 East Main Street
Madison, Wisconsin 53703

Dear Chief Clerks:

**TRANSMITTAL IN FINAL DRAFT FORM OF ADMINISTRATIVE
RULES AND REPORT**

CLEARINGHOUSE RULE NO.: 99-123

RULE NO.: Chapters Comm 81, 82 & 84

RELATING TO: Wisconsin Uniform Plumbing Code

Pursuant to section 227.19, Stats., agencies are required to submit, in triplicate, copies of the proposed administrative rules in final draft form together with a rule report and an analysis. The recommendations received from the Legislative Council are also to be submitted.

At this time, this material, together with cover letters to the President of the Senate and the Speaker of the Assembly, is being transmitted for referral to the standing committees for legislative review.

Respectfully submitted,

Brenda J. Blanchard
Secretary

P.O. Box 7970
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(608) 266-1018
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Tommy G. Thompson, Governor
Brenda J. Blanchard, Secretary

7/7/00

Senator Fred Risser
President of the Senate
Room 220 South, State Capitol
Madison, Wisconsin 53702

Representative Scott Jensen
Speaker of the Assembly
Room 211 West, State Capitol
Madison, Wisconsin 53702

Dear Senator Risser and Representative Jensen:

NOTICE OF ADMINISTRATIVE RULES IN FINAL DRAFT FORM

CLEARINGHOUSE RULE NO.: 99-123

RULE NO.: Chapters Comm 81, 82 & 84

RELATING TO: Wisconsin Uniform Plumbing Code

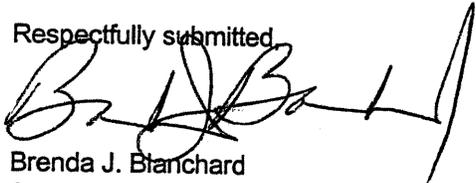
Section 227.19, Stats., requires agencies to submit proposed rules in final draft form to the presiding officer of each house for referral to the appropriate legislative standing committees.

The following information, as required by law, is being submitted to you.

1. Rules in final draft form (in triplicate).
2. Report consisting of:
 - a) Rule Report.
 - b) Public Hearing Attendance Record.
 - c) Public Hearing Comment and Agency Response Form.
 - d) Legislative Council Rules Clearinghouse Report.
 - e) Response to Legislative Council Rules Clearinghouse Report.
 - f) Fiscal Estimate.
 - g) Final Regulatory Flexibility Analysis.

If you have any questions regarding this matter, please do not hesitate to contact us.

Respectfully submitted,


Brenda J. Blanchard
Secretary