

20:54:02:01. Conformance with uniform code -- Exceptions. All plumbing materials and plumbing systems or parts of plumbing systems installed must meet or exceed the minimum provisions of the Uniform Plumbing Code, 2024 edition, including Appendices A, B, C, D, E, I, K, L, M, N, O, Q, and R, with the following exceptions:

(1) Sections 103.0 to 107.2, inclusive, Table 104.5 of Chapter 1, 312.12.3, 313.7, 317.1(5), 319.0 to 319.1, inclusive, 422.5, 609.11.1, ~~609.11.2~~, 609.12 to 609.12.2, inclusive, 722.2 to 723.1, inclusive, 802.0 to 802.1, inclusive, 811.5, 904.2, 1101.5 to 1101.11, inclusive, 1101.15 to 1101.15.3, inclusive, Chapter 5, Chapters 12 to 14, inclusive, ~~Table C 401.1 of Appendix C~~, Sections E ~~401.1 401.0~~ to E ~~415.4 406.4~~, inclusive, of Appendix E, Appendices F to H, inclusive, Appendix J, Appendix P, and Appendix S;

(2) The word "or" is added before "renovations" and the words "or repairs" are removed in the first sentence of section 102.4. The word "or" is added before "renovations" and the words ", or repairs" are removed from the second and third sentences from section 102.4;

(3) The sentence "Cap close to mail and abandon the rest." is added as the last sentence of section 309.6;

(4) The words "Voids around piping passing through concrete floors on the ground shall be sealed." are removed from section 312.1;

(5) The word "water," is removed from the first sentence of section 312.6 and the following words are added to section 312.6: "No water piping shall be installed in an exterior wall or unheated attic. An exterior wall includes any wall between a heated space and an unheated space. Water service piping must be installed with a minimum earth cover of 72 inches. Building sewers must be installed with a minimum earth cover of 42 inches. Building sewers on septic systems may be installed at any depth that will accommodate the burial depth of the septic tank. If the

building sewer is installed at a depth less than 30 inches, the pipe shall be protected from freezing with a minimum of 3 inches of foam insulation above and two feet of overhang on each side of the pipe.";

(6) The words "and Chapter 14, "Firestop Protection"" are removed from section 312.7;

(7) The words "Fuel gas piping shall be protected in accordance with Section 1210.4.3" are removed from section 312.9;

(8) The words "or wrapped" are added after the word "bored" in section 312.10;

(9) The words "metal" and "securely fastened to the adjoining structure" are removed from section 312.12.2;

(10) The words "and in gas piping as permitted by section 1212.6" are removed from section 315.1;

(11) The words "closet bends or stubs shall be cut off so as to present a smooth surface even with the top of the closet ring before rough inspection is called" are changed to "The top of the closet flange shall be installed above the finished floor not to exceed three-eighths of an inch thick" in section 402.6.1;

(12) The words "except for guest rooms in hotels, motels, dormitories, boarding houses, and similar occupancies, which may be round." is added at the end of the second sentence in section 411.1;

(13) The words "except closed front seats are permitted in hotels, motels, guest rooms, dormitories, boarding houses, and similar occupancies" are added to the end of the second sentence in section 411.3;

(14) The words "(5) In all mechanical rooms, and floors must ~~slope toward the floor drain~~ have one-fourth inch slope in a one foot radius around the drain." are added to section 418.3;

- (15) The words "(6) In the lowest level." are added to section 418.3;
- (16) The word "shall" is changed to "may" in section 407.4 and footnote 6 of Table 422.1;
- (17) The words "Unless separate facilities are required by state law," are added to the beginning and "Separate" is changed to "separate" of section 422.2(4);
- (18) The words "A dual check backflow preventer that conforms to ASSE 1024 must be installed on the building side immediately downstream of the water meter where the water service enters the building." are added to section 602.3;
- (19) The words "Copies of testable backflow assembly test reports for the initial installation shall be sent to the water supplier. Copies of annual testable backflow preventer test reports must be sent to the water supplier. A testable assembly has properly located, resiliently seated test cocks and tightly closing, resiliently seated shut off valves at each end of the assembly." are added to section 603.4.2;
- (20) The words "Water-to-water heat exchangers that return the water back to the public system of waterworks may not be allowed on a public water system unless approved by the Authority Having Jurisdiction" are added to section 603.5.4;
- (21) "Section 505.4.1" is changed to "Sections C 302.0 to C 302.3, inclusive, of Appendix C" in section 603.5.4;
- (22) The words "unless they are installed above the known groundwater table, at least ten feet away from any sewer line or any other source of contamination, and only on seasonal-use facilities" are added to the end of section 603.5.17;
- (23) The words "or underground outside of structures" are removed from section 604.3;
- (24) The sentence "This does not apply to electric water heaters." is added to the end of section 604.13;

- (25) The words "primer purple in color" are changed to "approved primer" in section 605.12.2;
- (26) The word "discharge" is changed to "inlet" in the first sentence of section 606.2;
- (27) The sentences "Individual shutoff valves shall be installed on each plumbing fixture and each exterior hose bib, except in single family dwellings. Individual valves are not required on tub valves, shower valves, and exterior hose bibs." are added to the end of section 606.5;
- (28) The word "provided" is changed to "approved ~~primer~~" in section 608.5;
- (29) The words "or outside of the building with the end of the pipe not exceeding 2 feet (610 mm) and not less than 6 inches (152 mm) above the ground and pointing downwards" are removed from section 608.5(3);
- (30) The word "prohibited" is changed to "permitted" in section 608.5(7);
- (31) The sentences "Building supply yard piping shall be not less than 12 inches (305 mm) below the average local frost depth. The cover shall be not less than 12 inches (305 mm) below finish grade." are removed from section 609.1;
- (32) The words "Potable water service piping may not be located in, under, or above cesspools, septic tanks, septic tank drainage fields, or drainage pits. A separation of twenty-five feet must be maintained from these systems, except for livestock confinement facilities, which may be three feet" are added to section 609.2(2);
- (33) The words "shall not" are replaced with "may" in section 609.5;
- (34) The word "shall" is replaced with "may" in section 609.5;
- (35) The sentence "*Dwellings units are exempt from this requirement unless an expansion tank is installed.*" is added to the end of section 609.11;

(36) The words "The minimum size water service allowed is one inch, except to travel trailer or mobile home sites, which must be at least three-fourths of an inch. Exception is when remodel is being done without changes to existing foundation." are added to the end of section 610.1;

(37) The words "Plastic pipe and fittings installed underground outside of buildings may be SDR 35 ASTM 3034 or heavier" are added to section 701.2 and the words "and Chapter 14 'Firestop Protection'" are removed from section 701.2(2);

(38) The words "(7) CPVC Schedule 80 pipe and fittings may be used in lieu of cast-iron in underground installations for high temperature discharge applications." are added to section 701.2 and the following are added to Table 701.2 and Table 1701.1

TABLE 701.2
MATERIALS FOR DRAIN, WASTE, VENT PIPE AND FITTINGS

MATERIAL	UNDERGROUND DRAIN, WASTE, VENT PIPE AND FITTINGS	ABOVEGROUND DRAIN, WASTE, VENT PIPE AND FITTINGS	BUILDING SEWER PIPE AND FITTINGS	REFERENCED STANDARD(S) PIPE	REFERENCED STANDARD(S) FITTINGS
<u>CPVC Schedule 80</u>	<u>X</u>	<u>X</u>	<u>=</u>	<u>ASTM F441/F441M, CSA B181.2</u>	<u>ASTM F439, CSA B181.2</u>

(portions of table not shown remain unchanged)

TABLE 1701.1
REFERENCED STANDARDS

STANDARD NUMBER	STANDARD TITLE	APPLICATION	REFERENCED SECTION
<u>CSA B181.2-2024</u>	<u>Polyvinylchloride (PVC) and chlorinated polyvinylchloride (CPVC) drain, waste, and vent pipe and pipe fittings</u>	<u>Piping, Fittings</u>	<u>Table 701.2</u>

(portions of table not shown remain unchanged)

i

~~(38)~~ (39) The words "tubular PVC or tubular ABS" are added after "(0.8 mm)" in section 701.4;

~~(39)~~ (40) The sentence "Not to exceed one-third of the total permitted length of a vent shall be permitted to be installed in a horizontal position." is removed from Note 6 under Table 703.2;

~~(40)~~ (41) The words "except commercial dishwashing machines must be provided with indirect wastes" are added to the end of the first sentence to section 704.3;

~~(41)~~ (42) The words "primer purple in color" are changed to "approved primer" in section 705.6.2;

~~(42)~~ (43) The sentence "Exception: one-quarter bends may be used on individual fixture drains for horizontal to vertical, horizontal to horizontal, and vertical to horizontal changes in direction." is added to the end of section 706.1;

~~(43)~~ (44) The sentence "(5) Where the piping is concealed, a fixture trap or a fixture with integral trap, readily removable without disturbing concealed roughing work, is accepted as a cleanout equivalent." is added to the exceptions in section 707.4;

~~(44)~~ (45) The words "and gate valve" are removed from section 710.3(2);

~~(45)~~ (46) Section 712.1 is revised as follows:

(a) The words "except plastic pipe shall not be tested with air" are removed;

(b) The sentence "After the plumbing fixtures have been set and their traps filled with water, they shall be submitted to a final test" is removed;

(c) The following sentences are added at the end: "Where the Administrative Authority, due to practical difficulties or hardships, finds that a water or air test cannot be performed, a smoke or peppermint test must be substituted in lieu thereof. A smoke test is made by introducing into the entire system a pungent, thick smoke produced by one or more smoke machines. When the smoke appears at stack openings on the roof, the stack openings must be closed, with a pressure equivalent to a one-inch water column developed and maintained during the inspection. A peppermint test is conducted by the introduction of two ounces of oil of peppermint into the roof terminal of every line or stack to be tested. The oil of peppermint is immediately followed by ten quarts of hot water,

whereupon all roof vent terminals are sealed. The detection of the odor of peppermint at any trap or other point on the system is a positive test result revealing leakage. Anyone whose person or clothes have come in contact with oil of peppermint must be excluded from the test area.";

~~(46)~~ (47) "Five feet (1524 mm)" is changed to "fifteen feet" in section 801.4;

~~(47)~~ (48) The following words are added to section 801.7: "Drip pans must be installed under storage-type water heaters to prevent tank leakage from causing property damage, except that drip pans are not required in:

1. The lowest level of buildings, provided that the floor is concrete or other material that is not damaged or deteriorated by water leakage from the tank;

2. Crawl spaces;

3. Spaces having floor drainage that collects leakage from the tank; and

4. Locations where tank leakage does not damage the building or its contents.

Drip pans must be watertight and constructed of corrosive-resistant materials. Metallic pans must be twenty-four gauge minimum. Non-metallic pans must be one-sixteenth of an inch minimum thickness. Pans must be not less than one and one-half inches deep and must be of sufficient size to hold the heater without interfering with drain valves, burners, controls, and any required access. High impact plastic pans are permitted under gas-fired water heaters where the heater is listed for zero clearance for combustible floors and the application is recommended by the pan manufacturer. Drip pans must have drain outlets not less than one inch in size, with indirect drain pipes extending to an approved point of discharge.";

~~(48)~~ (49) In section 807.3, the sentences "No domestic dishwashing machine shall be directly connected to a drainage system or food waste disposer without the use of an approved dishwasher airgap fitting on the discharge side of the dishwashing machine. Listed dishwasher air gap fittings

shall be installed with the flood level (FL) marking at or above the flood level of the sink or drainboard, whichever is higher." are changed to "The discharge from a residential kitchen sink and dishwasher may discharge through a single one and one-half inch trap. The discharge line from the dishwasher must be at least one-half inch nominal size and either looped up and securely fastened to the underside of the counter or connected to a deck-mounted dishwasher air gap fitting. The discharge must connect to a wye fitting between the sink waste outlet and the trap inlet or to the disposal.";

~~(49)~~ (50) The sentence "ABS and PVC DWV piping installations shall be in accordance with Chapter 14 "Firestop Protection." Except for" is removed from section 903.1(2);

~~(50)~~ (51) In section 906.7, the words "Where frost or snow closure is likely to occur in locations having minimum design temperature below 0°F (-17.8°C), vent terminals shall be a minimum of three inches (76 mm) in diameter but in no event smaller than the required vent pipe. The change in diameter shall be made inside the building not less than one foot (305 mm) below the roof in an insulated space and terminate not less than 10 inches (254 mm) above the roof, or in accordance with the Authority Having Jurisdiction" are changed to "Each vent extension through a roof must be at least three inches in diameter, except kitchen sink vents in single-family dwellings, which must be at least two inches in diameter. The change in diameter must be made inside the building at least one foot below the roof with an approved fitting.";

~~(51)~~ Reserved.;

(52) ~~Reserved~~ The word "shall" is replaced with "may" and the words "or upstream" are added after the word "downstream" in section 908.2.4;

~~(53)~~ Reserved.;

~~(54)~~ (53) The following words are added as an additional paragraph to the end of section 909.1:
"Alternate island sink installations require a minimum of a three-inch diameter drain, undiminished in size, which rises up through the sink cabinet and is capped off as high as possible. The vent may not connect further than fifteen feet from the vertical section of the drain and must be a minimum of one and one-half inch in diameter. A three by three by one and one-half inch sanitary tee is required for connection to the trap.";

~~(55)~~ (54) The sentences "Exception: In single family dwellings the maximum length of a floor drain that is connected to a uniformly sized building drain vented on both the upstream and downstream sides of the connection to the floor drain is fifteen feet. The minimum trap seal is four inches." are added to the end of sections ~~418.6~~ 418.5 and 910.1;

~~(56)~~ (55) The words "17 B&S Gauge" are changed to "20 B&S Gauge" and the words "(0.045 inch) (1.143 mm)" are deleted from section 1003.1;

~~(57)~~ (56) The sentence "Slip joint extensions with forty-five degree slip joint offsets are allowed." is added to the end of section 1003.2;

~~(58)~~ (57) The sentence "The trap shall be the same size as the trap arm to which it is connected." is removed from section 1003.3;

~~(59)~~ (58) The sentence "Floor drains in garages serving dwelling units for parking purposes that are connected to a building sanitary sewer shall have a means of collecting sediment and shall be provided with a water trap seal." is added to the end of section 1016.3; and

~~(60)~~ (59) The sentence "ABS and PVC DWV piping installations shall be installed in accordance with applicable standards referenced in Chapter 17 and Chapter 14 "Firestop Protection."" is removed from section 1101.4.

Source: SL 1975, ch 16, § 1; 12 SDR 91, effective December 2, 1985; 12 SDR 151, 12 SDR 155, effective July 1, 1986; 14 SDR 29, effective September 3, 1987; 15 SDR 136, effective March 15, 1989; 16 SDR 88, effective November 12, 1989; 17 SDR 75, effective December 3, 1990; 19 SDR 36, effective September 17, 1992; 20 SDR 29, effective September 1, 1993; 21 SDR 40, effective September 4, 1994; 23 SDR 83, effective November 28, 1996; 24 SDR 19, effective August 21, 1997; 26 SDR 33, effective September 12, 1999; 29 SDR 52, effective October 20, 2002; 30 SDR 99, effective December 22, 2003; 31 SDR 35, effective September 23, 2004; 35 SDR 67, effective October 1, 2008; 37 SDR 48, effective September 21, 2010; 38 SDR 40, effective September 20, 2011; 41 SDR 219, effective July 2, 2015; 43 SDR 31, effective September 12, 2016; 45 SDR 91, effective January 9, 2019; 46 SDR 29, effective September 5, 2019; 52 SDR 42, effective October 28, 2025.

General Authority: SDCL 36-25-15.

Law Implemented: SDCL 36-25-15.

Reference: **Uniform Plumbing Code**, 2024 edition, International Association of Plumbing and Mechanical Officials. Copies may be obtained from the International Association of Plumbing and Mechanical Officials, 5001 East Philadelphia Street, Ontario, CA 91761. Copies may be viewed free of charge at <https://epubs.iapmo.org/2024/UPC/>.