

**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**, 2015 edition, including Appendices A, B, C, D, E, and I, and the Green Plumbing and Mechanical Code Supplement with the following exceptions:

(1) Sections 103.0 to 107.2, inclusive, Table 104.5 of Chapter 1, 306.2, 307.1, 307.2, 312.12.3, 312.13, 312.14, 313.7, 314.2, 314.3, 317.1(5), 319.1, 408.8, 422.5, 609.5 to 609.7(2), inclusive, 609.11.1, 609.11.2, 710.1, 713.3, 713.5, 714.4, 714.5, 716.1, 721.2, 722.2 to 723.1, inclusive, 802.1, 811.5, 814.2, 814.2.1, 904.2, 1101.5 to 1101.11, inclusive, 1101.15, 1101.15.3, Chapter 5, Chapter 12, Chapter 13, Chapter 14, Chapter 15, Chapter 16, Table C 401.1 of Appendix C, E401.1 to E415.4 of Appendix E, inclusive, Appendix F, Appendix G, Appendix H, Appendix J, Appendix K, and Appendix L. The Green Plumbing and Mechanical Code Supplement is deemed to be a non-mandatory referenced standard and is applicable only when plumbing systems or installation methods are not referenced in the 2015 edition of the Uniform Plumbing Code;

(2) The words "or repair" and "or repairs" are removed from section 102.4;

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

(4) The word "water," is removed from the first sentence of 312.6; and the words "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 below the pipe." is added to section 312.6;

(5) The words "1 and Chapter 14, "Firestop Protection"" are removed from section 312.7;

(6) The words "Exception: See Section 1210.3.3" are removed from section 312.9;

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

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

(9) The words "and in gas piping as permitted by section 1212.5" are removed from section 315.1;

(10) The word "shall" is changed to "may" in section 407.4 and footnote 6 of Table 422.1;

(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 inch thick" in section 402.6.1;

(12) The words "and in all mechanical rooms or the lowest level of a structure. The floor shall slope toward the floor drains" are added to section 418.3;

(13) The words "A dual check backflow preventer which conforms to ASSE 1024 shall 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;

(14) The words "Copies of testable backflow preventer test reports for the initial installation shall be sent to the water supplier. Copies of annual testable backflow preventer test reports shall be sent to the water supplier. A testable device is a device with atmospheric vents, test ports, or both" are added to section 603.4.2;

(15) 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 and "Section 505.4.1" is changed to "C302.0 to C302.3, inclusive" in section 603.5.4;

(16) The words "Unless they are installed above the known groundwater table, they are installed at least 10 feet away from any sewer line or any other source of contamination, and they are installed only on seasonal-use facilities" are added to section 603.5.17;

(17) The words "or underground outside of structures" are removed from section 604.3;

(18) The words "This does not apply to electric water heaters" are added to section 604.13;

(19) The words "primer purple in color" are changed to "primer approved" in section 605.12.2;

(20) The words "Individual shutoff valves shall be installed on each plumbing fixture and each exterior hose bib. Exception: In single family dwellings, individual valves are not required on tub valves, shower valves, and exterior hose bibs" are added to section 606.5;

(21) The word "provided" is changed to "approved" in section 608.5;

(22) 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);

(23) The words "Building supply yard piping shall be not less than 12 inches (305mm) below the average local frost depth. The cover shall be not less than 12 inches (305mm) below finish grade." are removed from section 609.1;

(24) The words "Potable water service piping shall not be located in, under, or above cesspools, septic tanks, septic tank drainage fields, or drainage pits. A separation of 25 feet shall be maintained from such systems, except for livestock confinement facilities which may be 3 feet" are added to section 609.2(2);

(25) The words "Except for plastic piping" are removed from section 609.4;

(26) The words "*Dwellings units are exempt from this requirement.*" are added to the end of 609.10;

(27) The words "The minimum size water service allowed is 1 inch except to travel trailer or mobile home sites which shall be not less than 3/4 inch" are added to section 610.1;

(28) 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);

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

(30) The words "not to exceed one-third of the total permitted length of a vent shall be permitted to be installed in a horizontal position" are removed from "Note 6" under Table 703.2;

(31) The words " primer purple in color" are changed to "primer approved" in section 705.5.2;

(32) The words "Exception: 1/4 bends may be used on individual fixture drains for horizontal to vertical, horizontal to horizontal, and vertical to horizontal changes in direction." are added to section 706.1;

(33) The words "(5) Where the piping is concealed, a fixture trap or a fixture with integral trap, readily removable without disturbing concealed roughing work, shall be accepted as a cleanout equivalent" are added to section 707.4(4);

(34) The words "and gate valve" are removed from section 710.3(2);

(35) The words "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 shall be substituted in lieu thereof. A smoke test shall be made by introducing into the entire system a pungent, thick smoke proceeded by one or more smoke machines. When the smoke appears at stack openings on the roof, they shall be closed and at a pressure equivalent to a one-inch water column shall be developed and maintained for the period of the inspection. A peppermint test shall be 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 shall be followed at once by 10 quarts of hot water whereupon all roof vent terminals shall be sealed. A positive test which reveals leakage shall be the detection of the odor of peppermint at any trap or other point on the system."

Oil of peppermint of persons whose person or clothes have come in contact with oil of peppermint shall be excluded from the test area" are added to section 712.1;

(36) The words "After the plumbing fixtures have been set and their traps filled with water, they shall be submitted to a final test" are removed from section 712.1;

(37) "5 feet (1524mm)" is changed to "15 feet" in section 801.4;

(38) The words "Drip pans shall be installed under storage-type water heaters to prevent tank leakage from causing property damage. Exceptions:

1. The lowest level of buildings, provided that the floor is concrete or other material that will not be damaged or deteriorated by water leakage from the tank;
2. Crawl spaces;
3. Spaces having floor drainage that will collect leakage from the tank; and
4. Locations where tank leakage will not damage the building or its contents.

Drip pans shall be watertight and constructed of corrosive-resistant materials. Metallic pans shall be 24 gauge minimum. Non-metallic pans shall be .0625 inches minimum thickness. Pans shall be not less than 1-1/2 inches deep and shall be of sufficient size to hold the heater without interfering with drain valves, burners, controls, and any required access. High impact plastic pans shall be 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 shall have drain outlets not less than 1 inch size, with indirect drain pipes extending to an approved point of discharge" are added to section 801.7;

(39) The words "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 airgaps 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 1½ inch trap. The discharge line from the dishwasher shall be not less than 1/2 inch nominal size and shall either be looped up and securely fastened to the underside of the counter or be connected to a deck-mounted dishwasher air gap fitting. The discharge shall then be connected to a wye fitting between the sink waste outlet and the trap inlet or to the disposal" in section 807.3;

(40) The words ", and Chapter 14 "Firestop Protection"" are removed from section 903.1(2);

(41) 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 two (2) inches (51mm) 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 1 foot (305mm) below the roof in an insulated space and terminate not less than 10 inches (254mm) above the roof, or in accordance with the Authority Having Jurisdiction" are changed to "Each vent extension through a roof shall

be at least 3 inches in diameter except kitchen sink vents in single-family dwellings, which shall be at least 2 inches in diameter. The change in diameter shall be made inside the building at least 1 foot below the roof with an approved fitting" in section 906.7;

(42) The words "Alternate island sink installations require a minimum of a 3-inch diameter drain undiminished in size which shall rise up through the sink cabinet and capped off as high as possible. The vent shall connect no further than 15 feet from the vertical section of the drain and shall be a minimum of 1½ inch in diameter. A 3x3x1½-inch sanitary tee is required for connection to the trap" are added to section 909.1;

(43) The words "Exception: In single family dwellings the maximum length for a floor drain connected to a uniformly sized building drain vented on both the upstream and downstream side of the connection to the floor drain is 15 feet. The minimum trap seal shall be 4 inches." are added to section 910.1;

(44) The words "17 B&S Gauge" is changed to "20 B&S Gauge" and "(0.045 inch) (1.143)" are deleted from section 1003.1;

(45) The words "Slip joint extensions with 45 degree slip joint offsets are allowed" are added to section 1003.2;

(46) The words "The trap shall be the same size as the trap arm to which it is connected" are removed from section 1003.3;

(47) The words "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." are added to section 1016.3;

(48) The words "ABS and PVC DWV piping installations shall be installed in accordance with Chapter 14 "Firestop Protection"" are removed from section 1101.4;

(49) The number "20" is removed from Table C304.2 in Appendix "C".

**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.

**General Authority:** SDCL 36-25-15.

**Law Implemented:** SDCL 36-25-15.

**Reference: Uniform Plumbing Code**, 2015 edition, pages numbered numerically, 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. Cost \$143.