

CITY OF GRAPEVINE
Chapter 7, Buildings and Construction,
Article VIII, Plumbing Code

ARTICLE VIII. PLUMBING CODE

Sec. 7-171. Plumbing code adopted

(a) There is hereby adopted by the City of Grapevine, Texas, the 2021 International Plumbing Code {remainder of section unchanged}

Sec. 7-177. Amendments.

[The plumbing code adopted herein is amended as follows:]

Section 101.1[Name of Jurisdiction] changed to “City of Grapevine, TX”

Section 102.8; change to read as follows:

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 15 and such codes, when specifically adopted, and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference. Where the differences occur between provisions of this code and the referenced standards, the provisions of this code shall be the minimum requirements. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the adopted amendments. Any reference to NFPA 70 shall mean the Electrical Code as adopted. Where the enforcement of a provision of this code would violate the conditions of the listing of appliances or equipment, the conditions of the listing and the manufacturer’s installation instructions shall apply.

Section 202; add definition of “Conditioned space” to read as follows:

Conditioned Space. An area, room, or space that is enclosed within the building thermal envelope and is directly or indirectly heated or cooled. Spaces are indirectly heated or cooled where they communicate through openings with conditioned spaces, where they are separated from condition spaces by uninsulated walls, floor or ceilings, or where they contain insulated ducts, piping or other sources of heating or cooling. Additionally, the attic space shall be provided with active or passive heating systems capable of maintaining an indoor temperature of not less than 55 degrees F at a point 3 feet above the floor.

Section 301.6.1; add section to read as follows:

301.6.1 Access required. All mechanical, flare, compression, and push-fit joints shall be provided with *access* or installed in an *approved* location.

Section 305.4.1; change to read as follows:

305.4.1 Sewer depth. Building sewers shall be installed not less than 12 inches (304 mm) below grade.

Section 306.2.4; added to read as follows:

306.2.4 Plastic sewer and DWV piping installation. Plastic sewer and DWV piping installed underground shall be installed in accordance with the manufacturer's installation instructions. Trench width shall be controlled to not exceed the outside the pipe diameter plus 16 inches or in a trench which has a controlled width equal to the nominal diameter of the diameter of the piping multiplied by 1.25 plus 12 inches. The piping shall be bedded in 4 inches of granular fill and then backfilled compacting the side fill in 6-inch layers on each side of the piping. The compaction shall be to minimum of 85 percent standard proctor density and extend to a minimum of 6 inches above the top of the pipe.

Table 403.1; add footnote "g" to read as follows:

g. Drinking fountains are not required in Group M occupancies with an occupant load of 50 or less, Group B occupancies with an occupant load of 25 or less, and for dining and/or drinking establishments.

Section 413.4; change to read as follows:

413.4 Required location for floor drains; Floor drains shall be installed in the following areas:

1. In public laundries and in the central washing facilities of multiple family dwellings, the rooms containing automatic clothes washers shall be provided with floor drains located to readily drain the entire floor area. Such drains shall have a minimum outlet of not less than 3 inches (76 mm) in diameter.
2. Commercial kitchens. In lieu of floor drains in commercial kitchens, the Code Official may accept floor sinks.
3. Public restrooms.

Section 502.3; change to read as follows:

502.3 Water heaters installed in attics. [Bulk of section unchanged].....to allow removal of the water heater. Water heaters shall not be installed in unconditioned attic spaces unless listed for installation outdoors.

Section 504.6.; change to read as follows:

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. {unchanged}
2. {unchanged}
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap. Flexible connectors are prohibited.
4. {unchanged}
5. Discharge to an approved location or to the outdoors.

{remainder unchanged}

Section 605.9; add item 5. to read as follows:

605.9 Prohibited joints and connections. The following types of joints and connections shall be prohibited:

1. {unchanged}
2. {unchanged}
3. {unchanged}
4. {unchanged}
5. Joints in copper or copper-alloy pipe or tubing where underground beneath buildings shall only be made using wrought copper or copper-alloy fittings with brazed joints.

Section 608.17.5; change to read as follows:

608.17.5 Connections to lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker, a double-check assembly or a reduced pressure principal backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principal backflow preventer.

Section 703.6; Delete this section in its entirety.

Section 704.5; added to read as follows:

704.5 Single stack fittings. Single stack fittings with internal baffle, PVC schedule 40 or cast-iron single stack shall be designed by a registered engineer and comply to a national recognized standard.

Section 712.4.3; add Section 712.4.3.1 to read as follows:

712.4.3.1 Dual Pump System. All sumps shall be automatically discharged and, when in any "public use" occupancy where the sump serves more than 10 fixture units, shall be provided with dual pumps or ejectors arranged to function independently in case of overload or mechanical failure. For storm drainage sumps and pumping systems, see Section 1113.

Section 713, 713.1; change to read as follows:

ENGINEERED DRAINAGE DESIGN

713.1 Design of drainage system. The sizing, design and layout of the drainage system shall be designed by a registered engineer using approved design methods.

Section 903.1.1; change to read as follows:

903.1.1 Roof extension unprotected. Open vent pipes that extend through a roof shall terminate not less than six (6) inches (152 mm) above the roof.

Section 1106.1; change to read as follows:

1106.1 General. The size of the vertical conductors and leaders, building storm drains, building storm sewers and any horizontal branches of such drains or sewers shall be based on a rainfall intensity of six (6) inches per hour.

Section 1109; change to read as follows:

1109.1 General. Combined sanitary and storm water sewer systems are expressly prohibited by this code.

Section 1301.1; Change to read as follows:

Section 1301.1 General. The provisions of Chapter 13 shall govern the materials, design, construction and installation and installation of *approved* systems for the collection, storage, treatment and distribution of nonpotable water. For *approved* nonpotable rainwater systems, the provisions of CSA B805/ICC805 shall be an alternative for regulating the materials, design, construction and installation of systems for rainwater collection, storage, treatment and distribution of nonpotable water. These systems shall only be installed where *approved* by the Building Official, in accordance with Texas Commission of Environmental Quality standards

and in compliance with state laws, rules and ordinances applicable in the City of Grapevine.

Section 1401.1; Change to read as follows:

Section 1401.1 Scope. The provisions of this chapter shall govern the materials, design, construction and installation and installation of *approved* subsurface graywater soil absorption (SGSA) systems connected to nonpotable water from on-site water reuse systems. SGSA systems shall only be installed where *approved* by the county of record and the Building Official. Systems shall be designed in accordance with Texas Commission of Environmental Quality standards and in compliance with state law.