

****Section 109-114; delete entire section and insert the following:**

SECTION 109-114
MEANS OF APPEAL

109.1 114.1 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board of appeals established by ordinance. The board shall be governed by the enabling ordinance.

(Reason: Most jurisdictions already have an ordinance establishing and governing an appeals board for this code. This also calls to the attention of jurisdictions not having such a board that it needs to be established.) for future discussion. (Recommend to remove)

*****Section 305; change to read as follows:**

305.1 Protection against contact. Metallic piping, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or cinder walls and floors or other masonry. Metallic piping shall not be placed in direct contact with corrosive soil. Where sheathing is used to prevent direct contact, the sheathing shall have a thickness of not less than 0.008 inch (8 mil) (0.203 mm) and the sheathing shall be made of approved material plastic. Where sheathing protects piping that penetrates concrete or masonry walls or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.

(Reason: Allows for other materials to be accepted.)

305.4.1 Sewer depth. ~~Building sewers that connect to private sewage disposal systems shall be a minimum of [number] inches (mm) below finished grade at the point of septic tank connection.~~ Building sewers shall be a minimum of 12 inches (304 mm) below grade.

(Reason: Provides sewer depth that is common in this region. Deleted reference to private sewage disposal because a private sewage disposal code is not typically adopted in this region.)

****Section 305.7; change to read as follows:**

~~**305.7 Protection of components of plumbing system.** Components of a plumbing system installed within 3 feet along alleyways, driveways, parking garages or other locations in a manner in which they could be exposed to damage shall be recessed into the wall or otherwise protected in an approved manner.~~

Committee feels the code address this issue.

(Reason: Provide a common cutoff point to designate a general separation distance at which plumbing systems should be safe for consistency in enforcement.)

*****Section 306.2.4; change 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.

(Reason: To follow manufacturer backfill requirements and to be clear to Inspectors out in the field)

****Section 314.2.1; change to read as follows:**

~~**314.2.1 Condensate disposal.** Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. ... {text unchanged} ... Condensate shall not discharge into a street, alley, sidewalk, rooftop, or other areas so as to cause a nuisance.~~

(Reason: *Greater specificity in prohibited locations for condensate discharge. It is the intent of this amendment to send condensate discharge into a sanitary sewer drain. Consistent with regional amendment to IMC 307.2.1.)* **The code provides the minimum requirements.**

****Section 409.2; change to read as follows:**

409.2 Water connection. The water supply to a commercial dishwashing machine shall be protected against backflow by an air gap or backflow preventer in accordance with Section 608. (Remainder of section unchanged).

(Reason: *Domestic dishwashing machines would be difficult to enforce and should already come equipped with backflow preventers. Consistent with regional amendments in IPC Section 608.)* **will review after review of the IRC.**

****Section 413.4; change to read as follows:**

~~**413.4 Required location for floor drains Public laundries and central washing facilities.** 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.~~

(Reason: *To make more compatible with local health code practices.*)

*****Section 502.3; change to read as follows:**

~~**502.3 Water heaters installed in attics.** Attics containing a water heater shall be provided ... {bulk of paragraph unchanged} ... side of the water heater. The clear access opening dimensions shall be not less than 20 inches by 30 inches (508 mm by 762 mm) where such dimensions are large enough to allow removal of the water heater. As a minimum, for access to the attic space, provide one of the following:~~

- ~~1. A permanent stair.~~

2. ~~A pull-down stair with a minimum 300-lb (136 kg) capacity.~~
3. ~~An access door from an upper floor level.~~
4. ~~Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the Code Official due to building conditions.~~

Exceptions:

1. ~~The passageway and level service space are not required where the appliance is capable of being serviced and removed... {remainder of text unchanged}~~

The code provides the minimum requirements.

(Reason: To provide a safe means of accessibility to appliances in attics and to allow for different types of construction limitations. Consistent with regional amendment to IMC and IFGC)

~~Section 502.6; add Section 502.6 to read as follows:~~**

~~502.6 Water heaters above ground or floor.~~ ~~When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.~~

~~Exception:~~ ~~A max 10-gallon water heater (or larger with approval) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.~~

The code provides the minimum requirements.

(Reason: To provide safe access to water heaters. (Consistent with regional amendments to IFGC 306.7 and IMC 306.3. Note reference to amendment above.)

~~*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. ~~Not be directly connected to the drainage system.~~
2. ~~Discharge through an air gap located in the same room as the water heater.~~ **Leave as code reads.**
3. ~~Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.~~
4. ~~Serve a single relief device and shall not connect to piping serving any other relief device or equipment.~~

~~Exception:~~ ~~Multiple relief devices may be installed to a single T & P discharge piping system when approved by the administrative authority and permitted by the manufacturer's installation instructions and installed with those instructions.~~

5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor an approved location or to the outdoors. ~~Leave as code reads.~~
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Terminate not more than 6 inches above and not less than two times the discharge pipe diameter above the floor or flood level rim of the waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and *approved* for such use in accordance with ASME A112.4.1.
14. Be one nominal size larger than the size of the relief valve outlet, where the relief valve discharge piping is installed with insert fittings. The outlet end of such tubing shall be fastened in place.

Code addresses the requirements.

(Reason: To provide a higher degree of safety.)

****Section 504.7.1; change to read as follows:**

Section 504.7.1 Pan size and drain to read as follows: The pan shall be not less than 1 1/2 inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table 605.4. Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

Code address the requirements.

****Section 608.1; change to read as follows:**

608.1 General. A potable water supply system shall be designed, installed and maintained in such a manner so as to prevent contamination from non-potable liquids, solids or gases being introduced into the potable water supply through cross-connections or any other piping connections to the system. Backflow preventer applications shall conform to applicable local regulations, Table 608.1, except and as specifically stated in Sections 608.2 through 608.16.10.

Already addressed in chapter 1

(Reason: To recognize local requirements.)

****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.

(Reason: To recognize regional practices.)

****Section 608.18; change to read as follows:**

~~**608.18 Protection of individual water supplies.** An individual water supply shall be located and constructed so as to be safeguarded against contamination in accordance with applicable local regulations. Installation shall be in accordance with Sections 608.17.1 through 608.17.8.~~

Already addressed in Chapter 1

(Reason: To allow local requirements to govern.)

Section 703.6; Delete

(Reason: not a standard practice in this region)

****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.

(Reason: to allow owners, installers, inspectors, and design professionals to readily identify product markers to determine they meet all required standards.)

****Section 712.5-712.4.3; add Section 712.5 712.4.3 to read as follows:**

~~**712.5 712.4.3 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.~~

(Reason: To address dual pump system. To provide reference for storm drainage systems.)

****Section 713, 713.1; change to read as follows:**

SECTION 713

ENGINEERED COMPUTERIZED DRAINAGE DESIGN

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

(Reason: Code was too restrictive.)

****Section 803.3; added to read as follows:**

~~**803.3 Special waste pipe, fittings, and components.** Pipes, fittings, and components receiving or intended to receive the discharge of any fixture into which acid or corrosive chemicals are placed shall be constructed of CPVC, high silicone iron, PP, PVDF, chemical resistant glass, or glazed ceramic materials.~~

~~Already addressed in Chapter 7 and 8 of the code.~~

~~(Reason: To clarify the allowable materials which are specifically listed for chemical drainage applications.)~~

****Section 903.1903.1.1; change to read as follows:**

903.1 Roof extension 903.1.1 Roof extension unporitected. Open vent pipes that extend through a roof shall terminate not less than six (6) inches (152 mm) above the roof. ~~Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.~~

Code changed sections.

~~(Reason: To provide regional guideline on standard installation method for this area and address reference number correction.)~~

*****Section 918.8 918.3; change to read as follows.**

~~918.8 **918.3 Where permitted.** Individual, branch and circuit vents shall be permitted to terminate with a connection to an individual or branch type air admittance valve in accordance with Section 918.3.1. Stack vents and vent stacks shall be permitted to terminate to stack type air admittance valves in accordance with Section 918.3.2. Air admittance valves shall only be installed with the prior approval of the building official.~~

Code test and approved products.

~~(Reason: Mechanical Device that is subject to fail and not installed per manufacturer)~~

****Section 1003; see note below:**

{Until the Health and Water Departments of the area can coordinate a uniform grease interceptor section, each city will have to modify this section individually.}

****Section 1106.1; change to read as follows:**

~~**1106.1 General.** The size of the vortical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on six (6) inches per hour the 100-year hourly rainfall rate indicated in Figure 1106.1 or on other rainfall rates determined from approved local weather data.~~

~~(Reason: Specify the roof drain size normally used in the area.) **Keep as code has written.**~~

****Section 1108.3; change to read as follows:**

~~**1108.3 Sizing of secondary drains.** Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106 based on the rainfall rate for which the primary system is sized in Figure 1106.1 or on other rainfall rates determined from approved local weather data. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by~~

~~Section 1101.7. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.~~

(Reason: Specify that overflow drainage is to be the same size as the normal roof drains.) **Keep as code has written.**

****Section 1109; delete this section.**

*****Section 1202.1; delete Exceptions 1 and 2.**

(Reason: State law already specifies that Med Gas systems must comply with NFPA 99.)

END



North Central Texas
Council of Governments

Recommended Amendments to the 2021 International Mechanical Code

North Central Texas Council of Governments Region

The following sections, paragraphs, and sentences of the *2021 International Mechanical Code (IMC)* are hereby amended as follows: Standard type is text from the IMC. Underlined type is text inserted. ~~Lined through type is deleted text from the IMC.~~ A double asterisk at the beginning of a section identifies an amendment carried over from the 2015 edition of the code and a triple asterisk identifies a new or revised amendment of the 2018 edition of the code.

Note: Historically the North Central Texas Council of Governments (NCTCOG) has limited Chapter 1 amendments in order to allow each city to insert their local policies and procedures. We now have suggested certain items to be brought to the attention of cities considering adoption of the code that may be of concern to several jurisdictions. **It is still intended to be discretionary to each city to determine which Chapter 1 amendments to include.**

*****Section 102.8; change to read as follows:**

102.8 Referenced Codes and Standards. The codes and standards referenced herein shall be those that are listed in Chapter 15 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. 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.

(Reason: Legal wording to recognize locally adopted codes and amendments adopted with referenced codes.)

*****Section 306.3; change to read as follows:**

~~**306.3 Appliances in Attics.** Attics containing appliances shall be provided . . . *{bulk of paragraph unchanged}* . . . side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), and large enough to allow removal of the largest appliance. As a minimum, for access to the attic space, provide one of the following:~~

- ~~1. A permanent stair.~~
- ~~2. A pull-down stair with a minimum 300 lb. (136 kg) capacity.~~
- ~~3. An access door from an upper floor level.~~
- ~~4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.~~

Exceptions:

- ~~1. The passageway and level service space are not required where the appliance is capable of being serviced and removed. . . . *{remainder of section unchanged}*~~

(Reason: To provide a safe means of accessibility to appliances in attics and to allow for different types of construction limitations. Consistent with regional amendment to International Fuel and Gas Code (IFGC) 306.3.) *the code provides the minimum requirements.*

***Section 306.5; change to read as follows:

306.5 Equipment and Appliances on Roofs or Elevated Structures. Where *equipment* requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access, an interior or exterior means of access shall be provided. Exterior ladders providing roof access need not extend closer than 12 feet (2438 mm) to the finish grade or floor level below and shall extend to the *equipment* and *appliances'* level *service space*. Such access shall . . . {bulk of section to read the same} . . . on roofs having a slope greater than four units vertical in 12 units horizontal (33-percent slope). . . {remainder of text unchanged}.

(Reason: To assure access to roof appliances and provide options to not extend exterior ladders to grade. Consistent with IFGC amendments.)

**Section 306.5.1; change to read as follows:

306.5.1 Sloped Roofs. Where appliances, *equipment*, fans or other components that require service are installed on a roof having a slope of three units vertical in 12 units horizontal (25 percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, ~~a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance.~~ The level platform shall be provided on each side of the appliance to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*. . . {remainder of text unchanged}.

(Reason: To assure safe access to roof appliances. Consistent with IFGC amendments.) *The code provides the minimum requirements.*

**Section 306; add Section 306.6 to read as follows:

306.6 Water Heaters Above Ground or Floor. ~~When the mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.~~

Exception: ~~A maximum 10 gallon water heater (or larger with approval) is capable of being accessed through a lay in ceiling and the water heater installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.~~

(Reason: To provide safe access to water heaters and to provide lighting and receptacle for maintenance of equipment. Consistent with regional amendments to IFGC 306.7 and International Plumbing Code (IPC) 502.5.) *The code provides the minimum requirements.*

**Section 307.2.3; amend item 2 to read as follows:

2. ~~A separate overflow drain line shall be connected to the drain pan provided with the equipment. Such overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection. However, the conspicuous point shall not create a hazard such as dripping over a walking surface or other areas so as to create a nuisance.~~

(Reason: Greater specificity in prohibited locations for condensate discharge. Consistent with regional amendment to IPC 314.2.1.) *The code provides the minimum requirements.*

****Section 403.2.1; add an item 5 to read as follows:**

- ~~5. Toilet rooms within private dwellings that contain only a water closet, lavatory, or combination thereof may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.~~

(Reason: Consistent with common regional practice. Consistent with regional amendment to International Residential Code (IRC) R303.3.) The code addressed this issue.

****Section 501.3; add an exception to read as follows:**

501.3 Exhaust Discharge. The air removed by every mechanical exhaust system shall be discharged outdoors at a point where it will not cause a public nuisance and not less than the distances specified in Section 501.3.1. The air shall be discharged to a location from which it cannot again be readily drawn in by a ventilating system. Air shall not be exhausted into an attic, crawl space, or be directed onto walkways.

Exceptions:

1. Whole-house ventilation-type attic fans shall be permitted to discharge into the attic space of dwelling units having private attics.
2. Commercial cooking recirculating systems.
3. Where installed in accordance with the manufacturer's instructions and where mechanical or natural ventilation is otherwise provided in accordance with Chapter 4, listed and labeled domestic ductless range hoods shall not be required to discharge to the outdoors.
4. Toilet room exhaust ducts may terminate in a warehouse or shop area when infiltration of outside air is present.

(Reason: Provide a reasonable alternative in areas where a large volume of outside air is present.)

****Section 607.5.1; change to read as follows:**

~~**607.5.1 Fire Walls.** Ducts and air transfer openings permitted in fire walls in accordance with Section 705.11 ~~706.11~~ of the International Building Code shall be protected with listed fire dampers installed in accordance with their listing. For hazardous exhaust systems see Section 510.1-510.9 IMC.~~

(Reason: Correspond with un-amended IBC 710.7.) It is addressed in the code.

END