Chapter 23.25 LOCAL AMENDMENTS TO THE UNIFORM PLUMBING CODE ~~2018 EDITION~~

23.25.100 Local amendments to the Uniform Plumbing Code ~~2018 Edition~~.

Amendments to the ~~2018~~ Uniform Plumbing Code (UPC) are listed hereafter by section. The edition adopted is as listed in AMC 23.05.010. The structure of amendments is as explained in AMC 23.05.015. ~~The digits after the title and chapter digits are the section number of the Uniform Plumbing Code to which the amendment refers, e.g., 23.25.510.8 refers to section 510.8 of the Uniform Plumbing Code.~~

Plumbing provisions for swimming pools, spas and hot tubs shall be in accordance with Title 16 and the Uniform Swimming Pool, Spa and Hot Tub Code adopted by the State of Alaska.

23.25.103—13.25.107 Delete.

Delete sections 103 through 107. Refer to the Anchorage Administrative Code.

23.25.204.0 Definitions. -B-

Amend by adding the following definition:

Bathroom. Any room or space containing a bathtub, shower, combination bath/shower, hot tub, or swimming pool.

23.25.210.0 Definitions. -H-

Amend by adding the following definition:

Health Care Facilities. Buildings or portions ~~or~~ of buildings in which medical, dental, psychiatric, nursing, obstetrical or surgical care is provided.

23.25.312.12.3 Tub waste openings (Rodent proofing).

Delete Section 312.12.3.

23.25.314.4 Excavations (Trenching, Excavation, and Backfill).

Amend section ~~314.4~~ by adding, after the third sentence, the following:

Backfill material shall be ⅜-inch pea gravel or smaller. In the case of cast iron drain, waste and vent piping, the backfill material shall be ¾-inch gravel and earth or smaller.

23.25.318.2 Pressure tests (10 psi or less).

Replace 0.10 psi with 0.20 psi.

23.25.321.0 Mezzanines and platforms.

Amend ~~Chapter 3~~ by adding ~~s~~Section ~~321~~ as follows:

321.0 Mezzanines and platforms.

Every mezzanine or platform containing appliances or equipment requiring access more than 10-feet 6-inches above the ground or floor level shall be made accessible by a stairway or ladder fastened to the structure. The ladder shall be constructed ~~with~~in accordance with Section 306.5 of the International Mechanical Code.~~:~~

~~1. Rung spacing not to exceed 14 inches on center.~~

~~2. Toe spacing not less than 6 inches deep.~~

~~3. At least 18 inch spacing between rails.~~

~~4. Rungs at least 0.75 inches in diameter capable of withstanding a 300 lb. load.~~

~~5. Offset sections and landings capable of withstanding 100 pounds per square foot when height exceeds 30 feet.~~

~~**23.25.407.3 Limitation of hot water temperature for public lavatories.**~~

~~Amend section 407.3 by adding the following sentence to end of section:~~

~~The device shall be installed at the point of use, except a single device may serve multiple fixtures when allowed by the manufacturer installation instructions.~~

23.25.407.4 Transient public lavatories.

Add the following to the end of the sentence:

bus stations, cocktail lounges, bars, concert halls, sports arenas, theaters, shopping malls, churches, and grocery stores.

23.25.409.4 Limitation of hot water in bathtubs and whirlpool tubs.

Add the following ~~to the end of the section~~~~additional~~ item to the list:

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~~The device shall be installed at the point of use, except a single device may serve multiple fixtures when allowed by the manufacturer installation instructions.~~ (3) A valve installed at the point of use and complying with ASSE 1016/ASME A112.1016/CSA B125.16.

23.25.409.6 Installation and Access.

Add the following to the end of the section:

The access opening shall be a minimum of 16 inches by 16 inches, although alternate access arrangements may be considered. The intent is the pump can be easily and safely removed. Pumps shall be located so the supporting or securing bolts are no more than 2-feet from the access opening. The access panel may be caulked in place but shall remain easily removable. If removal of a pump motor is in question, the contractor may be required to remove the pump motor to demonstrate proper access.

23.25.415.2 Drinking Fountain Alternatives.

Delete section 415.2. Refer to International Building Code.

23.25.418.6 Unvented garage floor drains.

~~Amend section 418 "Floor Drains" by adding a subsection as follows~~Add section ~~418.6~~ as follows:

418.6 Unvented garage floor drains.

418.6.1 General.

A maximum of three unvented floor drains may be installed in a residential garage serving a single-family home or duplex. Each floor drain shall be 2-inch minimum with 3-inch minimum trap and trap arm. No other plumbing fixtures may be connected to the garage drain piping.

418.6.2 Inspections.

Underground inspections of these floor drains are not required, but spot checks may be made by inspectors. If requested, MOA staff performs this inspection at no additional fee.

23.25.422 Minimum number of required fixtures.

Delete section 422. Refer to the International Building Code.

23.25.423.0 Minimum hot water supply temperature.

~~Amend Chapter 4 by adding~~Add section ~~423.0~~ as follows:

423.0 Minimum hot water supply temperature.

The minimum hot water temperature to showers, tub and shower combinations, and tub fillers shall be 110°F, except for engineered systems.

23.25.504.1 Location.

In subparagraph (2) delete the reference to Section 506.4 and replace with "the IFGC."

23.25.504.6 Temperature pressure and vacuum relief devices.

Add the following sentence:

When a water heater is installed in a garage, the water heater relief valve piping shall discharge to the floor over the edge of the platform.

23.25.506.0 Air for combustion and ventilation.

Delete section 506.0. Refer to the IMC and IFGC.

23.25.507.2 Seismic Provisions.

Add an exception as follows:

> **Exception:** Tank type gas and electric water heaters that are a ~~minimum of 5 gallons and a~~ maximum of 10 gallons require only one approved seismic strap placed as close to the middle of the heater as possible, measured vertically, without blocking access to the controls.

23.25.507.5 Drainage Pan.

Replace Section 507.5 with the following:

507.5 Drainage pan.

Water heaters shall be installed in a watertight pan of corrosion-resistant material. The pan shall be equipped with a minimum ¾-inch diameter drain discharging to an approved location. Water heater enclosures shall be provided with an approved floor drain.

> **Exceptions:**
>
> 1. A floor drain is not required when a water heater is installed in a garage and the garage floor slopes to the exterior.
> 2. A floor drain is not required if a water heater is equipped with a listed safety device to control flooding.
> 3. A floor drain is not required when a water heater is installed in an attic or above a drop ceiling and the pan is drained to an approved location.

4. A pan is not required when a water heater is installed on a concrete slab on grade.

5. A pan is not required in a garage, where a corrosion-resistant material is placed under the water heater provided that it covers the entire platform and extends to all walls adjoining the platform and turning up the walls a minimum of two inches.

~~23.25.507. 5.127 Water heaters located in manufactured (mobile) homes.~~

~~Amend section 507.5 by adding the follow section:~~

~~507.5.127 Water heaters located in manufactured (mobile) homes.~~

~~A. Installation of a water heater in a compartment off a bedroom shall be acceptable if the water heater was factory installed, if the compartment is sealed from the bedroom by a panel screwed to the wall, and if the combustion air is taken from a source outside of the bedroom and complies with Uniform Plumbing Code the International Fuel Gas Code.~~

~~B. Replacement water heaters shall be tested, approved, and listed for use in mobile manufactured homes. Combustion air shall be provided in accordance with the International Fuel Gas Code.~~

23.25.507.6 Added or converted equipment or appliances.

Revise Items (1) through (3) to read as follows:

(1) Air for combustion and ventilation is provided where required, in accordance with the provisions of the International Fuel Gas Code (IFGC), Chapter 3. Where existing facilities are not adequate, they shall be upgraded to meet the IFGC.

~~Revise Item (2) to read as follows:~~

(2) The installation ~~of~~ components and appliances meet the clearance to combustible material provisions of the IFGC, Chapter ~~5~~3.

~~Revise Item (3) to read as follows:~~

(3) The venting system is constructed and sized in accordance with the provisions of the IFGC, Chapter 5. Where the existing venting system is not adequate, it shall be upgraded to comply with the IFGC.

23.25.507.13 Installation in residential garages.

~~Delete "unless listed as flammable vapor ignition resistant".~~ Delete the exception ~~to 507.13~~.

23.25.507.16 Venting of flue gases.

Replace "~~provisions of section~~Section 509.0" with "~~provisions of~~ the IMC or IFGC ~~Chapter 5~~ as applicable."

23.25.507.25 Accessibility for Service.

Replace "~~in accordance with~~ Section 508.4" with "~~in accordance with IMC 306.3 the~~ IMC Section 306 or IFGC Section 306 as applicable."

23.25.507.~~27~~ 26 Clearance to combustible materials.

Delete S~~s~~ection 507.~~27~~26. Refer to the IMC ~~and~~ or IFGC as applicable.

23.25.507. 27Water heaters located in manufactured (mobile) homes.

Add Section as follows:

507.27 Water heaters located in manufactured (mobile) homes.

A. Installation of a water heater in a compartment off a bedroom shall be acceptable if the water heater was factory installed, the compartment is sealed from the bedroom by a panel screwed to the wall, and the combustion air is taken from a source outside of the bedroom and complies with the IMC and IFGC.

B. Replacement water heaters shall be tested, approved, and listed for use in manufactured homes. Combustion air shall be provided in accordance with the IMC and IFGC.

23.25.508.0 Appliances on ~~roofs~~Roofs, in Attics or Under-Floor Spaces.

Delete S~~s~~ection 508.0. Refer to the IMC ~~and~~ or IFGC as applicable.

23.25.509.0 Venting of appliances.

Delete S~~s~~ection 509.0. Refer to the IMC ~~and~~ or IFGC as applicable.

23.25.510.0 Sizing of category I venting systems.

Delete S~~s~~ection 510.0. Refer to the ~~IMC and~~ IFGC.

23.25.603.0 Cross-connection control.

Amend section 603.0 by adding the following:

PURPOSE AND SCOPE: The purpose of this section is to protect the public health by controlling or eliminating actual or potential cross-connections. The control or elimination of cross-connections shall be in accordance with this code and~~,~~ the current editions of:

1. ~~the~~ The Cross-Connection Control Manual published by the Pacific Northwest ~~section~~ Section of The American Water Works Association ~~and~~,
2. ~~t~~The Manual of Cross-Connection Control published by the University of Southern California Foundation for Cross-Connection Control, and
3. The Backflow Prevention Reference Manual published by the International Association of Plumbing Mechanical Officials.

In the event a conflict exists between the technical publications adopted herein and the Uniform Plumbing Code, the most stringent provision shall apply.

UNSAFE FACILITIES: The Municipality may refuse to furnish water and may discontinue services to any premises where plumbing facilities, appliances, or equipment using water are dangerous, unsafe, or not in conformity with the water utility tariff or other related municipal ordinances. No potable water service connection to any premises shall be installed or continued in use by a purveyor unless the potable water supply is protected by all necessary backflow prevention devices and assemblies. The installation or maintenance of a cross-connection, endangering the quality of the purveyor's water supply, shall be unlawful and is prohibited.

ADMINISTRATIVE AUTHORITY: The Building Official or authorized representative.

PURVEYOR: The operator or owner of a water supply.

PREMISES: Real property, including any house or building thereon, located within the Municipality of Anchorage.

CROSS-CONNECTION INSPECTIONS: No water shall be delivered to any structure hereafter built within the Municipality of Anchorage until it is inspected by the Administrative Authority or water supply utility for possible cross-connections and approved as being protected from such cross-connections.

Inspections may ~~shall~~ be made periodically of all potentially hazardous buildings, structures, or improvements of any nature now receiving water through the municipal water system, for the purpose of ascertaining whether cross-connections exist. Such inspections shall be made by the Administrative Authority or water supply utility.

Any building modification requiring a plumbing or mechanical permit may require a cross-connection inspection and compliance.

POSSIBLE CROSS-CONNECTIONS: Backflow prevention assemblies or devices shall be installed in any premises where, in the judgment of the Administrative Authority, the nature and extent of activities, or the materials used or stored on the premises, may present a hazard to the potable water supply in the event a cross-connection were to be made; even though such cross-connection has not been made. Such circumstances include, but are not limited to:

1. Premises having an auxiliary water supply.
2. Premises having intricate plumbing arrangements making it impractical to ascertain whether or not cross-connections in fact exist.
3. Premises where entry is restricted so inspection for cross-connections cannot be made with sufficient frequency or on sufficiently short notice to assure cross-connections do not exist.
4. Premises having a repeated history of cross-connections being established or re-established.
5. Premises on which any substance is handled under pressure, so as to permit entry into the water supply. This shall include the handling of process waters and cooling waters.
6. Premises where materials of a toxic or hazardous nature are handled in such a way if back siphonage should occur, a health hazard might result.

The following facilities, or portions of a building containing one of the listed facilities, when connected to a potable water supply, require backflow prevention assemblies or devices unless the authority having jurisdiction

determines no hazard exists. An example of a facility within a building is a dental office in a multi-story office building. For this application, a reduced pressure principle backflow preventer is required to be installed on the hot and cold water serving the dental office and backflow prevention is not required on the main supply to the building. This protects both the city main and the occupants in the building:

Hospitals, mortuaries, and clinics;

Laboratories;

Metal plating industries;

Piers and docks;

Sewage treatment plants;

Food or beverage processing plants;

Chemical plants;

Petroleum processing or storage plants;

Radioactive material processing plants, nuclear reactors, or other facilities where radioactive materials may be utilized;

Manufacturing facilities;

Car wash facilities;

Water systems not within the definition of potable water supply;

Fire sprinkler systems;

Medical/dental facilities;

Waterfront facilities;

Irrigation systems;

Laundries and dry cleaners;

High rise or other buildings above system pressure which require booster pumps; and

Sand, gravel and concrete plants or other material processing plants.

23.25.603.2 Approval of devices and assemblies.

~~Amend by adding~~Add the following:

Backflow assemblies and devices shall be considered approved if they successfully passed both the laboratory and field evaluation tests conducted by the University of Southern California Foundation for Cross-Connection Control.

23.25.603.4.8 Area drain sizing for backflow assemblies.

Replace section 603.4.8 "Drain Lines" with the following:

603.4.8 Area drain sizing for backflow assemblies. For new building construction, backflow devices or assemblies with drainage (reduced pressure principle assemblies) shall be provided with an area drain, as listed below.

Backflow Device Size	Area Drain Waste Line Minimum Size
1" and less	2"
1¼"—2"	3"
2½"—3"	4"
4" and greater	6"

Exception: Area drain size is not required to be larger than building sewer service line

23.25.603.5.6.4 Lawn irrigation.

~~Amend section 603.5.6 by adding~~ Add the following ~~subsection~~Section:

603.5.6.4 Lawn irrigation.

The Uniform Plumbing Code regulates the installation of these types of plumbing systems up to and including the required type(s) of backflow preventer. A permit, plan check, and inspection are required to ensure the potable water piping is sized correctly for the number of fixture units effected by such a system and required piping material and backflow preventer(s) are installed. The installation downstream of the required backflow preventer is not regulated by the plumbing code and is considered non-potable water piping. Installation of backflow preventers and/or vacuum breakers on public systems shall be done by a plumbing contractor properly licensed with the Municipality of Anchorage. Private installations require either a plumbing contractor or a legal owner ~~complying with all the requirements in~~ in accordance with the Anchorage Administrative Code.

23.25.603.5.8 Water-cooled equipment.

~~Amend section by adding~~ Add a second paragraph to read as follows:

Installation, operation or use of air conditioning or cooling units employing water or other fluid as a cooling agent without a recovery and recirculation unit is prohibited.

23.25.603.5.10 Steam or hot water boilers.

Amend ~~section 603.5.10~~ as follows:

603.5.10 Steam or hot water boilers. Potable water connections to hot water boilers shall be protected from backflow by a minimum double check valve with intermediate vent backflow prevention assembly complying with ASSE 1012. Potable water connections to steam boilers shall be protected from backflow by a minimum reduced pressure principle backflow prevention assembly in accordance with Table 603.2. Where chemicals are introduced into the system a reduced pressure principle backflow prevention assembly shall be provided in accordance with Table 603.2.

23.25.603.5.~~22~~ 23 Potable water supply to dental chairs.

~~Amend section 603.5 by adding section 603.5.22~~ 23 Add Section as follows:

603.5.~~22~~ 23 Potable water supply to dental chairs. Potable water supply to each individual dental chair shall be protected at a minimum by a Spill-Resistant Pressure Vacuum Breaker. ~~complying with an ASSE 1056~~ backflow prevention device.

23.25.603.5.~~23~~ 24 Hydronic heating/cooling.

~~Amend section 603.5 by adding~~Add ~~section~~ Section ~~603.5.23~~ 24 as follows:

603.5.~~23~~ 24 Hydronic heating/cooling. Systems with heat transfer fluids containing plain water or water/propylene glycol mixture require a minimum double check valve with intermediate atmospheric vent backflow preventer, complying with ASSE 1012, to be installed on any directly connected potable water makeup piping to the system. ~~In addition, the~~ The below listed requirements apply when a system contains propylene glycol:

1. Water/propylene mixture shall contain a food grade powder dye. (A suitable example is FD+C Powder Dye.) Liquid food coloring is not acceptable due to its potential dissipation into the system.
2. A warning tag shall be installed on the backflow preventer stating the following information:
    A. System contains propylene glycol - use no other substitute.
    B. Do not add ethylene glycol or automotive anti-freeze of any type.
    C. No high hazard toxic chemicals permitted to be added to this system.

Systems having a heat transfer fluid containing Ethylene Glycol (approved for such use) require minimum protection of the potable water makeup system by installation of a physical air gap or a reduced pressure principal backflow preventer.

23.25.603.5.~~24~~ 25 Steam systems.

~~Amend section 603.5 by adding section~~ Add Section ~~603.5.24~~ 25 as follows:

603.5.~~24~~ 25 Steam systems.

Due to the potential addition of toxic chemicals in any steam system, the minimum protection for the potable water makeup shall be by installation of a physical air gap or a reduced pressure principal backflow preventer.

23.25.603.5.~~25~~ 26 Cooling towers.

~~Amend section 603.5 by adding s~~Add Section ~~603.5.25~~ 26 as follows:

603.5.~~25~~ 26 Cooling towers. Cooling towers obtaining makeup water from a potable source shall have a reduced pressure principal backflow preventer or air gap separation installed at the source of the potable water.

23.25.603.5.~~26~~ 27 Buildings over 30 feet in height.

~~Amend section 603.5 by adding s~~Add Section ~~603.5.26~~ 27 as follows:

603.5.~~26~~ 27 Buildings over 30 feet in height. Buildings with water piping exceeding 30 feet in height measured from grade plane as defined by the Building Code to the highest portion of the piping system shall be equipped with a Double Check Valve Assembly on the main water supply to the building.

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23.25.603.5.~~27~~ 28 Commercial hose bibbs.

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~~Amend section 603.5 by adding s~~Add Section ~~603.5.27~~ 28 as follows:

603.5.~~27~~ 28 Commercial hose bibbs. Hose bibbs within facilities that have a potential for a high hazard cross-connection such as automotive and maintenance shops and any facility where chemicals are used or stored in the vicinity of the hose bibb shall be protected by a minimum pressure vacuum breaker or spill-resistant vacuum breaker.

23.25.603.5.~~28~~ 29 Steam producing kitchen appliances.

~~Amend section 603.5 by adding s~~Add Section ~~603.5.289~~ as follows:

603.5.~~28~~ 29 Steam producing kitchen appliances. Steam producing kitchen appliances shall be protected from backflow by a minimum double check valve with intermediate vent backflow prevention device complying with ASSE 1012.

23.25.604.1 Pipe, tube and fittings (Materials).

Add the following sentence:

Nonmetallic piping shall not be used for cold water building supply distribution systems outside of a building.

Add the following exception:

Exception: ~~PVC or HDPE water service pipe 4 inch in diameter and greater may extend from the utility main horizontally into the footprint of the building. The piping shall transition underground to an approved metallic pipe at a 90-degree fitting. The PVC and HDPE pipe and fittings shall comply with the latest version of the Anchorage Water and Wastewater Utility (AWWU) Design Construction Practice Manual (DCPM).~~ Plastic materials where allowed under Section 604.10 as amended.

23.25.604.3 Copper or copper alloy tube (Materials).

Delete "or underground outside of structures" in the Exception.

23.25.604.10 Plastic materials.

Replace section 604.10 with the following:

604.10 Plastic materials.

Plastic piping materials shall not be used for water service piping from the street service main, private well, or other water source to a building or premises.

Exceptions:

1. PVC or HDPE water service pipe 4-inch in diameter and greater may extend from the utility main horizontally into the footprint of the building. The piping shall transition underground to an approved metallic pipe at a 90-degree fitting. The PVC and HDPE pipe and fittings shall comply with the latest version of the Anchorage Water and Wastewater Utility (AWWU) Design Construction Practice Manual (DCPM).

2. For residential private wells serving two or less dwelling units, approved plastic materials shall be permitted to be used where all the following conditions are met:

    a. Supply piping shall be minimum 1" inner diameter HDPE as listed for PE in Table 604.1.

    b. Pipe joints shall only be made by socket fusion in accordance with Section 605.6.1.3.

    c. Where the riser enters the building and prior to other connections, a "T" with threaded cap or plug must be installed for thawing purposes.

    d. Where replacing an existing metallic pipe: if the metallic pipe was used for electrical grounding, it shall remain for electrical grounding purposes or an approved alternative electrical grounding system shall be installed.

    e. A tracer wire shall be installed in accordance with Section 604.10.1.

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23.25.606.3 Multidwelling units.

~~Amend section 606.3 by adding~~ Add the following:

Shutoff valves located in a crawlspace shall be visible and shall be located within 10-feet of the crawl space access hatch/door.

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23.25.608.5 Discharge piping.

Delete item (7).

23.25.609.3 Under concrete slab.

Add the following exception:

Exception: Brazing shall not be required on non-pressurized, non-potable piping such as trap primers. Where joints are permitted, they shall be of the approved type.

~~**23.25.609.4 Testing.**~~

~~Revise the paragraph to read as follows:~~

~~Upon completion of a section or of the entire hot and cold water supply system, the system shall be tested and proved tight under a water pressure not less than the working pressure under which it is to be used. The water used for tests shall be obtained from a potable source. A 50 psig air pressure may be substituted for the water test. In either test method, the piping shall withstand the test without leaking for a period of not less than 15 minutes.~~

23.25.609.~~10~~11.1 Mechanical devices.

Add the following:

Properly sized expansion tanks approved for potable water may be used in a single-family or duplex residence in lieu of water hammer arresters. Such expansion tanks shall be installed on the cold water piping between the residence shutoff valve and each water heater location. In the event the expansion tank(s) do not eliminate water hammer, mechanical water hammer devices will be required. Examples of quick-acting valve locations include, but are not limited to, dishwasher, clothes washer, toilet ballcock, icemaker, and any single handle faucet.

23.25.609.~~11~~ 12 Pipe insulation.

Delete section. Refer to the IECC for insulation requirements.

23.25.609.~~12~~ 13 Crawlspace water supply access.

~~Amend section 609 by adding section 609.12~~ 13 Add Section as follows:

609.~~12~~ 13 Crawlspace water supply access.

An unobstructed clear passageway no less than ~~40~~ 30 inches high by 22 inches wide is required from the crawlspace access to the water supply line entrance.

23.25.610.8 Size of meter and building supply pipe using Table 610.4.

~~Amend by replacing~~ Replace the last sentence ~~of section 610.8~~ with the following:

No new street service or building supply pipe shall be less than 1-inch in diameter.

23.25.612.0 Residential fire sprinkler systems.

Delete section 612.0. Required residential fire sprinkler systems shall comply with the International Fire Code.

23.25.613.0 Indoor water meter setter.

~~Amend Chapter 6 by adding s~~Add Section ~~613~~ as follows:

613.0 Indoor water meter setter.

All newly constructed single family, duplex and triplex residences shall ~~install~~ have an approved indoor water meter setter with meter idler or a removable section of pipe to facilitate the future installation of water meters in a horizontal position. It shall be located in the vicinity of the main supply full-way valve, ahead of any branch lines and shall also have a valve on the outlet side. An easily accessible frost-proof area with adequate clearances shall be provided for meter installation, maintenance or removal. "Easily accessible" shall be considered an open area not concealed by an appliance, furnace, water heater or standard building material. When the meter is installed in a crawlspace, the maximum distance from the access opening to the meter shall not exceed 10-feet.

A horizontal section of pipe may be used in lieu of the indoor meter setter provided the pipe is equal in length to a water meter of the same size including meter couplings, but in no case shall it be less than 24 inches in length. The piping shall be supported to provide a permanent support for the water meter when installed.

When the water tariff is revised to allow the metering of these residences, the utility shall furnish two meters and remote feed-outs at its expense and its crews shall install remote read-out meters at the time of actual meter installation.

Exception: this provision shall not apply to private wells.

23.25.704.3 Commercial Sinks.

Amend the second sentence in paragraph 704.3 to read as follows:

A floor drain or flush mounted floor sink shall be provided within 5 feet of the fixture, and ~~the fixture...~~shall be connected on the sewer side of the sink.

Add the following exception:

Exception: Commercial sinks may indirectly waste to a floor sink where no grease trap exists.

23.25.712.1 Media.

Delete "except that plastic pipe shall not be tested with air" from the first sentence.~~Replace the first sentence of section 712.1 with the following:~~

~~The piping of the plumbing, drainage, and venting systems shall be tested with water or air. The air test shall be a minimum 5 psig and shall be performed with gauges of 0.20 psi incrementation or less.~~

23.25.719.1 Locations (Building Sewer Cleanouts).

~~Delete~~ Replace the first paragraph ~~and substitute~~with the following:

Cleanouts shall be placed at the end of building drains, 2-feet outside of the building and shall be of same material as the building drain.

23.25.724.0 Building drain access.

~~Amend Chapter 7 by adding section 724.0~~ Add Section as follows:

724.0 Building drain access.

An unobstructed clear passageway no less than ~~40~~ 30 inches high by 22 inches wide is required from the crawlspace access to the building drain entrance and all cleanouts.

23.25.801.4 Bar and fountain sink traps.

Amend ~~section 801.4~~ by replacing "5 feet" with "15~~-~~ feet".

23.25.814.1.1 Condensate Pumps.

~~Amend by adding~~Add the following exception~~at end of the paragraph~~:

Exception: ~~This section does not apply to d~~Dwellings that fall under the scope of the ~~IRC~~International Residential Code.

23.25.814.2 Condensate control.

Amend item (1) by adding the following sentence:

This section does not apply to dwellings that fall under the scope of the IRC.

23.25.815.0 Soda fountains, condensates, drip pans, ice machines, and other similar equipment.

~~Amend Chapter 8 by adding s~~Add Section ~~815.0~~ as follows:

815.0 Soda fountains, condensates, drip pans, ice machines, and other similar equipment.

A. If the drain outlet for this type of equipment is below or remotely located from an approved point of disposal, the equipment may drain by gravity to a single pump, lift station receiver based on the following:

1. A "Little Giant" condensate unit or equal is acceptable for lift station receiver. The pump shall be appropriately sized for the required condition.
2. The equipment drain outlet or tailpiece may not exceed 1-inch I.D.
3. The discharge pipe and fittings from the lift station receiver shall be a material approved for drainage piping and shall be piped to an approved indirect waste receptor per ~~section 701~~Chapter 7.

B. Vending company employees may install the drainage piping from the equipment they install to an approved point of disposal, provided the equipment drain pipe from the outlet of the tailpiece to a lift station receiver or approved point of disposal does not exceed 5-feet measured along the centerline of the pipe and such piping is installed in accordance with this code.

C. If the equipment installed requires a water supply, it shall be provided by a properly licensed plumber to within 10-feet of the equipment, complete with any required backflow prevention device. The vendor employee may make the water connection from that point to the equipment.

23.25.906.1 Roof Termination.

Change “6 inches” to “18 inches”. Delete the last sentence of the section.~~Amend section 906.1 by deleting the last sentence.~~

23.25.906.8 Roof Terminations.

~~Amend section 906 by adding s~~Add Section ~~906.8~~ as follows:

906.8 Roof Terminations. For roof construction, including those regulated by the International Residential Code:

1. ~~No roof penetration shall be located in required valley ice barrier.~~
2. All roof penetrations shall be located a minimum of ~~6~~ six feet from valley centerline and ~~4~~ four feet from the exterior wall line measured on a horizontal plane~~, excluding attic ventilation~~.

23.25.908.2 Horizontal Wet Venting for Bathroom Groups.

~~Delete subsection 908.2~~Add to the end of the section:~~.~~

“and detail or schematic is provided and approved.”

23.25.911.0 Circuit Venting.

~~Delete section 911.0.~~ Add to the end of the first sentence:

"where engineered design and detail or schematic is provided and approved."

23.25.913.0 Air Admittance Valves.

Add ~~the following~~ Section ~~913.0 Air Admittance Valves~~ as follows:

913.0 Air Admittance Valves

913.1 General. Vent systems utilizing Air Admittance Valves (AAV) shall comply with this section. Individual and branch-type air admittance valves shall conform to ASSE 1051. Stacking-type air admittance valves are prohibited.

913.2 Installation. The valves shall be installed in accordance with the requirements of this section and the manufacturer's instructions. Air admittance valves shall be installed after the required DWV testing has been performed.

913.3 Permitted Use. The use of AAVs shall be limited to the following circumstances:

913.3.1. Island Fixtures. Where a group of sinks and drains, not exceeding a total of 4 drainage fixture units, are remote from a wall extending to the ceiling.

913.3.2. Where a group of fixtures, not exceeding a total of 4 drainage fixture units, is more than a 30-foot horizontal radius from another plumbing fixture or plumbing vent of adequate size.

~~**913.3.3.** Additional locations when submitted and approved by the AHJ by submitting a "Request for Alternate Design, Materials, or Methods of Construction".~~

913.4 Where Permitted. Individual and branch-type air admittance valves shall vent only fixtures that are on the same floor level and connect to a horizontal branch drain. Where the horizontal branch drain is located more than four stories below the top of a waste stack, the horizontal branch shall be provided with a relief vent that shall connect to a vent or extend outdoors to the open air. The relief vent shall connect to the horizontal branch drain between the waste stack and the most downstream fixture drain connected to the horizontal branch drain. The relief vent shall be sized in accordance with Section 904 and installed in accordance with Section 905. The relief vent shall be permitted to serve as the vent for other fixtures.

913.5 Location. Individual and branch-type air admittance valves shall be located not less than 4 inches above the horizontal branch drain or fixture drain being vented. The air admittance valve shall be located within the maximum developed length permitted for the vent. The air admittance valve shall be installed not less than 6 inches above insulation materials.

913.6 Access and Ventilation. Access shall be provided to all air admittance valves. Such valves shall be installed in a location that allows adequate volumes of air to enter the valve. AAVs installed in interior walls shall be provided with a removable grille/louver that is of adequate size to replace the valve through the opening.

913.7 Size. The air admittance valve shall be rated in accordance with the standard for the size of the vent to which the valve is connected and per the manufacturer's recommended sizing guidelines.

913.8 Vent Required. Within each plumbing system, not less than one vent shall extend through the roof in accordance with Chapter 9.

Commented [DK1]: Amended language voted included requiring it go through alternate means and methods which was not the intention of the group. The intention was to allow reviewers to approve it, not require the building official to sign off on their use.

Commented [DK2R1]: Further clarification: due to the simplicity of the prescriptive requirements on horizontal wet venting, it should not require engineering; this opens up opportunity for inspectors to approve for residential projects. Circuit venting will still require engineering, though it'll be more common on commercial projects which will already include a mechanical engineer.

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913.9 Prohibited Installations. Air admittance valves shall not be installed in non-neutralized chemical waste systems as described in Chapter 8. Air admittance valves shall not be located in spaces utilized as supply or return air plenums. Air admittance valves shall not be used to vent sumps or tanks except where the vent system for the sump or tank has been designed by an engineer. Air admittance valves shall not be installed on outdoor vent terminals for the sole purpose of reducing clearances to gravity air intakes or mechanical air intakes. Air admittance valves shall not be installed in cold attics, exterior walls, or where exposed to freezing temperatures. Air admittance valves shall not be installed within fire rated assemblies. Air admittance valves shall not be installed to vent water closets.

23.25. Table 1002.2 Horizontal Lengths of Trap Arms.

Add ** after "Horizontal Lengths of Trap Arms" and add below Table 1002.2 the following note:

** Trap arms for residential floor drains may be extended beyond the limits of Table 1002.2 to where they pass under the nearest wall before installing the required vent.

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23.25.1007.1 General (Trap Seal Protection).

~~Amend by adding~~Add the following exception:

Exception: Floor drains in ~~one- and two-family dwellings~~dwellings regulated by the International Residential Code.

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~~23.25.1014.1 General (Grease interceptors).~~

~~Amend by adding the following words to the first sentence after the words "draining from fixtures":~~

~~"such as pot sinks (two- and three-compartment), scullery sinks, dishwashing sinks, silverware sinks,"...~~

23.25.1014.1.4 Hood washdown.

~~Amend section 1014.1 by adding s~~Add Section ~~1014.1.4~~ as follows:

1014.1.4 Hood washdown. Discharge from Type 1 hood washdown shall be discharged through an approved grease Interceptor in accordance with AWWU and AHJ requirements.

23.25.1014.1.5 Grease Producing Fixtures.

~~Amend section 1014.1 by adding s~~Add Section ~~1014.1.5~~ as follows:

1014.1.5 Grease Producing Fixtures. A grease interceptor shall be provided within 50 feet of grease producing fixtures.

23.25.1014.1.6 External Cleanouts.

~~Amend section 1014.1 by adding s~~Add Section ~~1014.1.6~~ as follows:

1014.1.6 External Cleanouts. Where hydromechanical grease interceptors are installed, an external manway shall be provided for cleaning of utility sewer piping. The manway shall be sized and installed in accordance with the utility requirements and the Authority Having Jurisdiction.

23.25.1014.1.7 Piping Slope.

~~Amend section 1014.1 by adding s~~Add Section ~~1014.1.7~~ as follows:

1014.1.7 Piping Slope. Drain piping upstream of the grease interceptor shall be sloped at a minimum of ¼-inch per foot of horizontal travel.

23.25.1017.~~1~~ 3 Interceptor~~s required~~ Details.

Amend item (5) by replacing ~~reference to~~ "550 gallons" with "100 gallons".

23.25.1101.2 Where required.

Delete from the first sentence "or into a combined sewer system where a separate storm sewer system is not available."

Delete from the second sentence "In the case of one- and two-family dwellings," and "such as streets or lawns".

23.25.1101.4 Material uses.

Replace "Chapter 14 Firestop Protection" with "the International Building Code".

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23.25.1101.6.1 Discharge (Subsoil drains).

~~Amend section 1101.6.1 by adding~~Add the following to the beginning of the section:

When required by the authority having jurisdiction…

23.25.1101.7 Building subdrains.

Amend section 1101.7 by replacing "public sewer" with "storm drain".

23.25.1101.10 Filling stations and motor vehicle washing establishments.

~~Amend section 1101.10 by adding~~Add to the beginning of the section ~~paragraph~~:

When required by the authority having jurisdiction …

23.25.1101.12.1 Primary roof drainage.

Replace the first sentence with the following:

Roof areas of a building shall be drained by roof drains, gutters, scuppers, or sheet flow off the edge of the roof.

23.25.1101.12.2.2.2 Combined system.

Revise 1101.12.2.2.2 to read as follows:

1101.12.2.2.2 Combined system.

The secondary roof drains may connect to the horizontal portion of the primary drain a minimum of 3 feet downstream from the primary drain. Additionally, an approved flexible connector shall be installed on each roof drain per the manufacturer's installation instructions or a swing joint configuration may be used (see detail "A" of MOA Handout P.02). When this combined system is used, an overflow line shall be installed in the drain line and run to the exterior of the building above grade to an appropriately designed overflow drain or scupper system to allow sheet flow from the drain line to surface in the case of a below grade freeze-up of the main drain line or storm main. The primary storm drainage system shall connect to an underground public storm sewer or discharge to an approved location.

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23.25.1105.0 Controlled-flow roof drainage.

Delete section 1105.0.

23.23.1107.2 Methods of testing storm drainage systems.

Delete "except that plastic pipe shall not be tested with air" from the first sentence.

23.25.1207.2 Temporary gas installations—Permit required.

~~Amend section 1207 by adding subs~~Add Section ~~1207.2~~ as follows:

1207.2 Temporary gas installations - permit required.

A. Temporary gas approval is given to allow "comfort heating" appliances to be used to provide temporary heat to a building or building site prior to the completion of the building's primary heating system.

B. The most commonly used appliance is a natural gas portable space heater. Other comfort heat appliances allowed for temporary heat purposes are warm air furnaces, boilers, and unit heaters. It is NOT the policy of the Building Safety Division or Enstar Natural Gas Company to allow "~~decorator~~ decorative fireplaces" or "ranges" to be utilized as temporary heat for buildings. These appliances are not designed or "listed" for such purpose.

C. All appliances used to provide temporary heat for buildings shall be installed in accordance with the manufacturers' instructions and terms of their listing, with particular attention being paid to the clearances to combustibles from the top, bottom, back, and sides of these appliances.

D. Unit heaters used for temporary heat shall be installed per manufacturers' instructions and listed clearances to combustibles from the top, bottom, front, back, and sides of these appliances. The vent connector shall be graded at ¼-inch per foot slope upward to the outside and ~~it~~ shall be changed to "B" vent at the wall penetration. The "B" vent must maintain its listed clearance to combustibles, extend a minimum of 5-feet vertically, and be secured.

E. Furnaces used for temporary heat shall comply with the same requirements as for unit heaters as stated above. In addition, the return air for the furnace shall be ducted a minimum of 10-feet from the furnace.

F. Portable space heaters shall be provided with one hundred percent outside air to the back end of the heater. In most cases, the gas regulator attached to these heaters shall be piped to the outside. ~~If~~ the regulator vent ~~discharges, it~~ shall not ~~be allowed to~~ discharge into the space being heated.

G. Gas hose used for temporary heaters shall be a type approved by the Building Safety Division and all manufacturers' listed clearances shall be maintained. The hose shall have an internal wire mesh or braid and be "kink proof". Supporting wire shall run the full length of the hose. Each time a hose is moved from one lot to another, it shall be retested with 60 psig air pressure.

23.25.1207.3 Temporary gas installations—Permit not required.

~~Amend section 1207 by adding s~~Add Section ~~1207.3~~ as follows:

1207.3 Temporary gas installations—Permit not required.

A permit and inspection shall not be required for residential temporary construction heat serving tented footings and foundations. This provision ~~is for~~applies to thawing ground and curing concrete, not comfort heat for workers, such as plumbers installing underground. This allowance is limited to portable "SURE FLAME" type heaters and not intended for unit heaters, furnaces, and boilers with special venting considerations. All heaters and hoses shall be of the approved type. Heaters shall be listed by an approved listing agency. All hoses shall have an internal wire mesh or braid and be "kink proof". Supporting wire shall run the full length of the hose. One hundred percent outside air shall be provided to heater at all times. Listed clearances to combustibles shall be maintained. A licensed journeyman plumber or gasfitter shall perform all work.

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23.25.1208.~~5~~4.2 Medium pressure gas.

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~~Amend section 1208.5 by adding s~~Add Section ~~1208.5~~4.2 as follows:

1208.~~5~~4.2 Medium pressure gas. The installation of a medium pressure gas system (2 psig or 5 psig) within a building must be pre-approved by the local gas utility. Steel piping shall be welded or press-connect fittings listed to ANSI LC-4/CSA 6.32 in accordance with UPC 1208.5. Test pressure for all medium pressure gas piping shall be 60 psig.

Exception: Medium pressure gas piping within mechanical rooms that house the equipment being served ~~shall~~ may be threaded ~~or welded~~ in accordance with 1208.~~6.11~~5. Threaded piping shall not be concealed within construction ~~the space~~.

23.25.1208.~~5~~4.3 CSST medium pressure gas.

~~Amend section 1208.5 by adding s~~Add Section ~~1208.5~~4.3 as follows:

1208.~~5~~4.3 CSST medium pressure gas.

The installation of a CSST medium pressure gas system (2 psig or 5 psig) within a building must be pre-approved by the local gas utility. Test pressure for all medium pressure gas piping shall be 60 psig. Joints shall be limited to the meter connection and appliance regulator being served. Intermediate joints are not allowed without prior approval.

23.25.1208.~~6.11~~5.9.1 Pipe joints.

~~Amend by adding~~Add the following at the end of the paragraph:

All joints in underground ferrous piping shall be welded when any of the following conditions apply:

1. The nominal pipe diameter is 2½ inches or larger.
2. The pipe is installed under a driveway.
3. Medium pressure systems.

23.25.1208.~~6.11~~5.9.2 Tubing joints.

~~Amend by adding~~Add the following sentences at the end of the paragraph:

All joints in underground copper shall be brazed with wrought copper fittings. No underground joints shall be permitted unless the underground length of run exceeds 60-feet. All pipe to tubing transitions shall be made above ground.

23.25.1208.~~6.11.4~~5.9.5 Metallic pipe fittings.

Amend Item (2) by deleting "or cast iron".

Delete Item (5).

Add Item ~~9~~ (10) as follows:

(~~9~~10)~~.~~ Right and left nipple couplings. Where unions are necessary, right and left nipples and couplings shall be used. Ground joint unions may be used at exposed fixture, appliance, or equipment connections and in exposed exterior locations immediately on the discharge side of a building shutoff valve.

23.25.1208.~~8~~7.2.1 Manufactured home connections.

~~Amend section 1208.8.2 by adding s~~Add Section ~~1208.87.2.1~~ as follows:

1208.~~8~~7.2.1 Manufactured home connections. Pounds to inches water column regulators serving manufactured (mobile) homes ~~and connected to copper tubing~~piping ~~s~~hall be attached to the exterior of the ~~mobile~~ home and shall not be located under the ~~mobile~~ home.

23.25.1208.~~8~~7.3 Regulator Protection.

~~Amend by adding the following~~Add to the end of the section:

When the regulator instructions do not specify an installation elevation, the regulator shall be installed 12 inches minimum above the anticipated snow depth to avoid the accumulation of snow and ice.

23.25.1210.1.1 Cover requirements.

~~Amend by adding~~Add the following sentence to the end of the paragraph:

Plastic and copper gas piping shall have at least 18 inches of earth cover or other equivalent protection.

23.25.1210.1.5 Piping through foundation wall.

Replace text with the following:

Building fuel gas piping entrances and exits shall be located above grade or in an approved vented vault.

23.25.1210.1.8 Ground penetrations.

~~Amend section 1210.1 by adding s~~Add Section ~~1210.1.8~~ as follows:

1210.1.8 Ground penetrations. At all points where fuel gas piping enters or leaves the ground there shall be installed, above ground, an approved or listed fuel gas piping connector capable of absorbing a 6-inch displacement in any direction, due to frost heave action. If the fuel gas riser is itself flexible, room for absorbing a 6-inch displacement ~~must~~shall be installed in lieu of using a connector for such means.

23.25.1210.1.9 Fuel gas piping connectors.

~~Amend section 1210.1 by adding s~~Add Section ~~1210.1.9~~ as follows:

1210.1.9 Fuel gas piping connections. Fuel gas piping connectors listed for outdoor use may be used between the meter and house main. No flex connector may pass through any wall, partition, panel, or other barrier. Solid fittings shall be used on each end.

23.25.1210.1.10 Frost heave protection for copper tubing.

~~Amend section 1210.1 by adding s~~Add Section ~~1210.1.10~~ as follows:

1210.1.10 Frost heave protection for copper tubing. At points where copper tubing type systems enter or leave the ground, they shall be protected from frost heave action by the incorporation of a suitable above ground 6-inch radius loop, or listed fuel gas piping connector of equal size.

23.25.1210.~~2.1~~3.2 Building Structure.

~~Amend section 1210.2.13.2 by replacing~~Replace the last sentence with the following:

Cutting and notching of beams and joists shall be in conformance with the manufacturer's requirements~~,~~ or with the approval of a licensed design professional.

23.25.1210.~~2.4~~3.5.4 Above-ground outdoor piping.

~~Amend section 1210.2.4 by adding s~~Add Section ~~1210.2.43.5.4~~ as follows:

1210.~~2.4~~3.5.4 Above-ground outdoor piping. Piping installed outdoors shall be elevated not less than 5½ inches above ground or roof surface. Piping installed across a roof surface shall be securely supported and located where it will be protected from physical damage. Where passing through an outside wall, the piping shall be protected against corrosion by coating or wrapping with an inert material. Where piping is encased in a protective pipe sleeve, the annular space between the piping and the sleeve shall be sealed.

23.25.1210.3.6 Piping under exterior decks, porches, and walkways.

Add Section ~~1210.3.6~~ as follows:

1210.3.6 Piping under exterior decks, porches, and walkways. Piping that is run under the surface of any exterior platform (e.g. decks, porches, walkways) shall be CSST approved for outdoor use from the exterior face of structure to the termination point.

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23.25.1212.1 Connecting Appliances and Equipment.

Replace item (1) as follows:

(1) Rigid metallic pipe and fittings, excluding hanging appliances not otherwise restrained against lateral movement.

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23.25.1301.~~7~~ 6 Veterinary clinics.

~~Amend section 1301 by adding s~~Add Section ~~1301.7~~ 6 as follows:

23.25.1301.~~7~~ 6 Veterinary clinics. The material requirements, installation, and testing practices of NFPA 99 for Category 3 gas and vacuum systems shall apply to veterinary clinics except third party verification is not required and wet vacuum systems may be installed using schedule 40 PVC with pressure fittings.

23.25.13~~08.7~~27.9 Vacuum systems for dental offices.

~~Amend section 1308 by adding s~~Add Section ~~1308.7~~27.9 ~~as~~ as follows.

13~~08.7~~27.9 Vacuum systems for dental offices. The purpose of this amendment is to point out and clarify the requirements for wet vacuum systems in dental offices. Refer to NFPA 99~~C (most current edition)~~ for full text on these requirements.

A. Category 3 wet vacuum systems (in dental offices) may be installed using schedule 40 PVC with pressure fittings. Piping and fittings installed in plenums shall have a flame spread index of not more than 25 and a smoke developed rating of not more than 50.

B. The wet vacuum system (in dental offices) is considered a Category 3 system if:

   1. The system is entirely separate from other Category 1 systems.

   2. The occupancy to be served and the function of the occupancy is distinct from other occupancies in the building.

   3. The patient population, during or subsequent to treatment, are not dependent for life on the vacuum system, and the treatment the facility performs may be completed without detrimental effect on patient outcomes in the event of sudden loss of vacuum systems.

C. The wet vacuum system (in dental offices) shall be verified by a third party technically competent and experienced in the field of Category 3 vacuum systems and testing and meeting the requirements of ANSI/ASSE Standard 6030.

23.25 Appendices.

Adopt Appendices A, B, C (excluding C601), D, E (~~parts E through M~~sections E201 and E501 through E506), and I.

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