

# Amendment to 2024 Uniform Plumbing Code (UPC) Section 101.1

Submitted by: Uniform Plumbing Code Committee

### **CHAPTER 1 ADMINISTRATION**

### Notes:

- 1. <u>For reserved sections herein, refer to the amendments and requirements in Chapter 1 of the International Building Code for these code requirements.</u>
- 2. <u>For sections that remain unchanged from base code, the term "see this section of the 2024 UPC" shall refer to the unchanged base code.</u>

### 101.1 Title

This document shall be known as the "Uniform Plumbing Code," as amended by the City of Phoenix. may be cited a such, and will be referred to herein as "this code." hereinafter referred to as "this code." These regulations are one document of the overall Phoenix Building Construction Code as defined by the adopting ordinance.

- 101.2 Scope. see this section of the 2024 UPC
- 101.3 Purpose. see this section of the 2024 UPC
- **101.4 Unconstitutional. -** Reserved.
- **101.5 Validity. -** Reserved.
- 102.1 Conflicts Between Codes. Reserved.
- **102.2 Existing Installations. -** see this section of the 2024 UPC
- **102.3 Maintenance.** see this section of the 2024 UPC
- 102.4 Additions, Alterations, Renovations, or Repairs. see this section of the 2024 UPC
- 102.4.1 Building Sewers and Drains. see this section of the 2024 UPC
- **102.4.2 Openings. -** see this section of the 2024 UPC
- 102.5 Health and Safety see this section of the 2024 UPC
- 102.6 Changes in Building Occupancy. see this section of the 2024 UPC
- 102.7 Moved Structures. see this section of the 2024 UPC
- 102.8 Appendices. see this section of the 2024 UPC

103.0 DUTIES AND POWERS OF THE AUTHORITY HAVING JURISDICTION. – Reserved.
404 0 DEDMITS Decembed
104.0 PERMITS. – Reserved.
105.0 INSPECTIONS AND TESTING. – Reserved.
106.0 VIOLATIONS AND PENALTIES. – Reserved.
100.0 VIOLATIONS AND FENALTIES INESCIVED.
107.0 BOARD OF APPEALS. – Reserved.
Justification:
All the adopted and amended building code documents taken together are known as the Phoenix
Building Construction Code. Each code document is a separate document of the Phoenix
Building Construction Code. This document is the Uniform Plumbing Code as Amended by the
City of Phoenix. This document is intended to apply where a code or referenced standard
identifies the Uniform Plumbing Code as being applicable.
The reserved provisions are contained in the Phoenix Building Construction Code –
Administrative Provisions (Chapter 1 of the International Building Code).
,
Cost Impact: No cost impact.
Approved in previous 2018 Code Adoption process:
ACTION TAKEN.
ACTION TAKEN:  2024 Code Committee  Date: 01/28/2025
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB) Subcommittee  Date: 02/13/2025
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB)  Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
Transportation, Infrastructure and Planning Subcommittee Date:
Approved as submitted Modified and approved Denied No action taken
City Council Action Date:
Approved as submitted Modified and approved Denied No action taken



Amendment to 2024 Uniform Plumbing Code (UPC) Section 209.0
Submitted by: Uniform Plumbing Code Committee
CHAPTER 2 DEFINITIONS
<b>209.0 Gravity Grease Interceptor.</b> A plumbing appurtenance or appliance that is installed in a sanitary drainage system to intercept nonpetroleum fats, oils and greases (FOG) from a wastewater discharge and is identified by volume, 30 12 or 17-minute retention time, baffle(s), not less than two compartments, a total volume of not less than 300 500 gallons (1135 1895 L), and gravity separation. [These interceptors comply with the requirements of Chapter 10 or are designed by a registered design professional and approved by the Authority Having Jurisdiction.] Gravity grease interceptors are generally shall be installed outside unless otherwise approved by the Authority Having Jurisdiction.
<b>Justification:</b> The larger interceptor has two man-ways and two compartments which makes it easier for the user to clean and maintain the device. The 12 and 17-minute retention time is currently used to size interceptors in the City of Phoenix Water Department's Office of Environmental Programs and was developed based on feedback from three public forums held in 1997 to address sizing of commercial grease interceptors. Gravity interceptors are generally installed outside to prevent sewer gases and odors from entering the building.
<b>Cost Impact:</b> Minimal cost impact. The cost impact to install a 500-gallon interceptor versus a 300-gallon interceptor is minimal. This requirement is an amendment carried forward from the 2012 Uniform Plumbing Code.
Approved in previous 2018 Code Adoption process:
ACTION TAKEN:
2024 Code Committee Date: 12/12/2024
Approved as submitted  Modified and approved Denied No action taken  Development Advisory Board (DAB) Subcommittee  Date: 02/13/2025
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
Development Advisory Board (DAB)  Development Advisory Board (DAB)
Approved as submitted Modified and approved Denied No action taken
Transportation, Infrastructure and Planning Subcommittee Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
City Council Action Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken



Amendment to 2024 Uniform Plumbing Code (UPC) Section 209.0 (GRD)
Submitted by: Uniform Plumbing Code Committee
CHAPTER 2 DEFINITIONS
<b>209.0 Grease Removal Device (GRD).</b> A hydromechanical grease interceptor that automatically, mechanically removes non-petroleum fats, oils and grease (FOG) from the interceptor, the control of which are either automatic or manually initiated. These devices must be able to perform as a gravity interceptor if mechanical or electrical power is lost and be able to provide continued separation.
<b>Justification:</b> Grease removal devices rely on moving parts and electricity to separate grease from the waste stream; therefore, if moving parts break down or electrical power is lost the device will still be able to operate as a passive device and prevent grease from entering the sewer system.
**2012 DAB Technical asked for the last sentence to be reworked and accepted as modified.
Cost Impact: Possibly increased due to increased performance requirements.
Approved in previous 2018 Code Adoption process: ⊠ YES □ NO
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 12/12/2024
Development Advisory Board (DAB) Subcommittee Date: 02/13/2025
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB)  Date:
Approved as submitted Modified and approved Denied No action taken  Transportation, Infrastructure and Planning Subcommittee  Date:
Approved as submitted Modified and approved Denied No action taken
City Council Action Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken



Amendment to 2024 Uniform Plumbing Code (UPC) Section 225.0
Submitted by: Uniform Plumbing Code Committee
CHAPTER 2 DEFINITIONS
225.0 Add new definitions as follows:
Water Dispenser. A plumbing fixture that is manually controlled by the user for the purpose of dispensing potable drinking water into a receptacle such as a cup, glass or bottle. Such fixture is connected to the potable water distribution system of the premises. This definition also includes a freestanding apparatus for the same purpose that is not connected to the potable water distribution system and that is supplied with potable water from a container, bottle or reservoir.  Water Cooler. A drinking fountain that incorporates a means of reducing the temperature of the water supplied to it from the potable water distribution system.
<b>Justification:</b> There is often confusion regarding what is or is not a water cooler. Currently the code does not define any of the terms. In reality, drinking fountains are drinking fountains and everything else is some form of a water dispenser. The code does not require cooled water. The code can be simplified in Section 415.2 by referring only to drinking fountains or their alternative, water dispensers. The new definitions establish that a drinking fountain and a water dispenser that is connected to the potable water supply system are both plumbing fixtures by definition and a bottled water dispenser is not a plumbing fixture by definition.
<b>Cost Impact:</b> No cost impact. This requirement is an amendment carried forward from the 2012 Uniform Plumbing Code.
Approved in previous 2018 Code Adoption process: ☐ YES ☐ NO
ACTION TAKEN:
2024 Code Committee Date: 12/12/2024  ☑ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
Development Advisory Board (DAB) Subcommittee  Date: 02/13/2025  Approved as submitted  Medified and approved  Depict  Development Advisory Board (DAB)
Approved as submitted  Modified and approved  Denied  No action taken  Development Advisory Board (DAB)  Date:
Approved as submitted Modified and approved Denied No action taken
Transportation, Infrastructure and Planning Subcommittee Date:  ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
City Council Action Date:
Approved as submitted Modified and approved Denied No action taken



# **BUILDING CODE CHANGE PROPOSAL**

Amendment to 2024 Uniform Plumbing Code (UPC) Sections 415.2, 415.4
Submitted by: Uniform Plumbing Code Committee
415.0 Drinking Fountains.
415.2 Drinking Fountain Alternatives. Where restaurants provide drinking water in a container free of charge, drinking fountains shall not be required in those restaurants. In other occupancies where drinking fountains are required, water dispensers shall be permitted to be substituted for not more than 50 percent of the required number of drinking fountains. Bottle filling stations shall be permitted to be substituted for drinking fountains up to 50 percent of the requirements for drinking fountains. Drinking fountains shall not be required for an occupant load of 30 50 or less.  415.4 Location. Drinking fountains, water coolers and water dispensers shall not be installed in toilet rooms.
Justification: These terms were added to the above sections to align with the 2024 IBC chapter 29. These terms are defined in 2024 UPC amended Section 225.0.  The number of occupants amendment is made to provide a relief to small businesses from the cost of installing drinking fountains.
Cost Impact: Minimal cost impact. Cost savings by replacing drinking fountain installations with water dispense
Approved in previous 2018 Code Adoption process:
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 12/12/2024
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB) Subcommittee       Date: 02/13/2025         ☑ Approved as submitted ☐ Modified and approved ☐ Denied       ☐ No action taken
Approved as submitted Modified and approved Denied No action taken  Development Advisory Board (DAB)  Date:
Approved as submitted Modified and approved Denied No action taken
Transportation, Infrastructure and Planning Subcommittee Date:  ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
City Council Action Date:
Approved as submitted Modified and approved Denied No action taken



Amendment to 2024 Uniform Plumbing Code (UPC) Table 422.1
Submitted by: Uniform Plumbing Code Committee
422.0 Minimum Number of Required Fixtures.
Table 422.1 Minimum Plumbing Facilities
Replace UPC Table 422.1 and footnotes with 2024 International Plumbing (IPC) Table 403.1 & footnotes. add new footnotes, "g" & "h" in this replacement table. Delete all references to the IPC from this replacement table.
<ul> <li>g. Drinking fountains are not required for an occupant load of 45 50 or fewer.</li> <li>h. Where urinals are provided they may be substituted for water closets, provided the number of water closets is not reduced to less than 50% of the minimum required by Table 422.1.</li> </ul>
<b>Justification:</b> These revisions are made to provide consistency between the 2024 UPC and the minimum plumbing fixture table that is found in the 2024 IPC.
Cost Impact: Minimal cost impact. Cost savings.
Approved in previous 2018 Code Adoption process:   ☐ YES ☐ NO
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 12/12/2024
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB) Subcommittee Date: 02/13/2025
Development Advisory Board (DAB)  ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
Transportation, Infrastructure and Planning Subcommittee Date:
Approved as submitted Modified and approved Denied No action taken
City Council Action Date:
Approved as submitted Modified and approved Denied No action taken



**Development Advisory Board (DAB)** 

**City Council Action** 

☐ Approved as submitted ☐ Modified and approved ☐ Denied

☐ Approved as submitted ☐ Modified and approved ☐ Denied

**Transportation, Infrastructure and Planning Subcommittee** 

Approved as submitted Modified and approved

## **BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

# Amendment to 2024 Uniform Plumbing Code (UPC) **Section 603.4.3** Submitted by: Uniform Plumbing Code Committee 603.4.3 Access and Clearance. Access and clearance shall be provided for the required testing, maintenance, and repair. Access and clearance shall be in accordance with manufacturer's instructions, and not less than 12 inches between the lowest portion of the assembly and grade, floor, or platform. Installations elevated Elevated installations that exceed 5 feet above the floor or grade shall be provided with a platform capable of supporting a tester or maintenance person. Secondary backflow assemblies shall be installed above ground, as close as practicable to the point of service delivery. A minimum 3-foot (914 mm) clear space shall be maintained for testing, maintenance and repair. Justification: Clears up original grammatically incorrect code language regarding elevated installations. Clarifies that secondary backflow prevention assemblies shall be installed above ground. Clarifies the minimum required clearance dimensions for secondary backflow prevention assemblies. Cost Impact: No cost impact. Approved in previous 2018 Code Adoption process: ⊠ YES NO **ACTION TAKEN:** 2024 Code Committee Date: 01/30/2025 Approved as submitted Modified and approved Denied No action taken **Development Advisory Board (DAB) Subcommittee** Date: 02/13/2025 Approved as submitted Modified and approved Denied ☐ No action taken

Date:

Date:

Date:

Denied

☐ No action taken

No action taken

No action taken



# Amendment to 2024 Uniform Plumbing Code (UPC) **Section 603.4.9 Submitted by:** Uniform Plumbing Code Committee 603.4.9 Prohibited Locations. Backflow prevention devices with atmospheric vents or ports shall not be installed in pits, underground vaults, or submerged locations, Backflow preventers shall not be located in an area containing fumes that are toxic, poisonous, or corrosive. Justification: Phoenix City Code Chapter 37-144 (d) regarding backflow assembly accessibility and testing presents design constraints for adequate clearance and drainage in a proposed vault installation. Proposed vault dimensions typically restrict full accessibility to all parts of an assembly. Eliminates the possibility of installing a backflow prevention assembly in a pit or vault. Adds the word vault to better define underground locations. Reflects installation drawings shown in City of Phoenix Standard Details P1351 through P1355. Corresponds to manufacturer's installation instructions which restrict underground installations to AHJ approval. Cost Impact: No cost impact. **Approved in previous 2018 Code Adoption process: ⊠** YES NO **ACTION TAKEN:** 2024 Code Committee Date: 01/23/2025 Approved as submitted Modified and approved Denied No action taken **Development Advisory Board (DAB) Subcommittee** Date: 02/13/2025 Approved as submitted \( \bigcap \) Modified and approved \( \bigcap \) Denied No action taken **Development Advisory Board (DAB)** Date: Approved as submitted Modified and approved Denied ☐ No action taken **Transportation, Infrastructure and Planning Subcommittee** Date: ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken **City Council Action** Date: ☐ Approved as submitted ☐ Modified and approved ☐ Denied No action taken



Amendment to 2024 Uniform Plumbing Code (UPC) Section 603.4.10
Submitted by: Uniform Plumbing Code Committee
New section:
603.4.10 Secondary Backflow Protection. The following activities or facilities shall have a Secondary Reduced Pressure Principle Backflow Prevention assembly installed as close as practical to each point of service delivery: Hospitals, surgical clinics, medical buildings, laboratories, morgues, mortuaries, veterinary hospitals, animal grooming shops, industrial occupancies, packing plants, slaughter houses, chemical plants, municipal waste treatment facilities, auxiliary water systems, construction water services or as otherwise listed in the most current edition of Phoenix City Code Chapter 37 ARTICLE XII. Backflow Prevention. Note: Multiple water services which are interconnected onsite shall be provided with not less than a Double Check Valve Assembly at each service connection.
<b>Justification:</b> ADEQ, Maricopa County and City of Phoenix Water Services Department all require secondary protection for the services cited.
Cost Impact: No Cost Impact
Approved in the previous 2018 Code Adoption process:
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 01/23/2025
Development Advisory Board (DAB) Subcommittee Date: 02/13/2025
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB)  Date:
Approved as submitted Modified and approved Denied No action taken
Transportation, Infrastructure and Planning Subcommittee Date:
'
Transportation, Infrastructure and Planning Subcommittee  ☐ Approved as submitted ☐ Modified and approved ☐ Denied  City Council Action  ☐ Approved as submitted ☐ Modified and approved ☐ Denied  ☐ No action taken  ☐ No action taken



Amendments to 2024 Uniform Plumbing Code Section 604.14
Submitted by: Uniform Plumbing Code Committee
604.14 Non-Metallic Potable Water Pipe, Fittings, and Valves  Non-Metallic potable water pipe, fittings, and valves shall not be exposed in exterior outdoor locations. Components of the exterior exposed potable water system shall be metallic only and approved metallic materials, fittings, and valves are listed in UPC Table 604.1
<b>Justification:</b> Due to extreme exterior summer weather conditions, all nonmetallic potable water pipe, fittings, and valves shall be prohibited from areas of direct sunlight, such as roofs, ground surfaces, and exterior wall locations. Nonmetallic pipe, fittings, and valves would be subjected to extreme exterior heat and will soften and sag between pipe supports. In addition, exposure to UV rays from the sun will cause the pipe to become brittle and be subjected to fracture and breakage when placed under stress or strain. Both conditions will lead to water breaks and failures with the likely result of heavy property damage.
<b>Cost Impact:</b> Minimal. This amendment addresses the reduction of future water breaks, property damage, and personal financial liability.
Approved in previous Code Adoption process:
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 01/15/2025
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB) Subcommittee Date: 02/13/2025
Approved as submitted  Modified and approved  Denied  No action taken
Development Advisory Board (DAB)  Date:
Approved as submitted  Modified and approved  Denied  No action taken
Transportation, Infrastructure and Planning Subcommittee       Date:         ☐ Approved as submitted       ☐ Modified and approved       ☐ Denied       ☐ No action taken
City Council Action  Defined and approved Defined No action taken  Date:
Approved as submitted Modified and approved Denied No action taken



Amendment to 2024 Uniform Plumbing Code (UPC) Section 612.0
Submitted by: Uniform Plumbing Code Committee
Sections: 612.0 Residential Fire Sprinkler System.
Delete Section 612.0 in its entirety.
<b>Justification:</b> Design, installation and inspection of Fire Sprinkler Systems in one and two-family dwellings or townhouses is regulated by the Phoenix Fire Code.
Cost Impact: No cost impact.
Approved in previous 2018 Code Adoption process:
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 01/25/2025
Approved as submitted  Modified and approved  Denied  No action taken
Development Advisory Board (DAB) Subcommittee Date: 02/13/2025
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB)  Date:
Approved as submitted Modified and approved Denied No action taken
Transportation, Infrastructure and Planning Subcommittee Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
City Council Action Date:



# Amendment to 2024 Uniform Plumbing Code (UPC) Section 718.1

Submitted by: Uniform Plumbing Code Committee

### 718.1 Slope.

Building sewers shall be run in practical alignment and at a uniform slope of not less than ½ inch per foot (20.0mm/m) toward the point of disposal.

### Exceptions:

- 1. Where approved by the Authority Having Jurisdiction and where it is impractical, due to the depth of the street sewer, the structural features or the arrangement of a building or structure, to obtain a slope of 1/4 inch per foot (20.8 mm/m), piping 4 inches (100 mm) through 6 inches (150 mm) shall be permitted to have a slope of not less than 1/8 inch per foot (10.4 mm/m) and such piping 8 inches (200 mm) and larger shall be permitted to have a slope of not less than 1/16 inch per foot (5.2 mm/m). The maximum and minimum fixture unit loading shall be in accordance with Table 717.1.
- 2. The Authority Having Jurisdiction may approve a lessor slope in lieu of a sewage ejector or pumping station when a registered engineer or architect certifies the sewer design and its installation, and when the building owner agrees in writing under notary to accept the lessor slope. The minimum slope permitted shall be calculated from Manning's Formula using a coefficient roughness of 0.013 and a sewage velocity of 2 feet per second. See chart below for calculated pipe slope and flow. (Arizona Administrative Code, R18-9-E301 Paragraph D, 2, e).

# Manning's Formula Solution - Friction Factor - n = 013

Pipe Size (inches)	Slop e (%)	Velocity (ft/s)	Full Flow Rate (cfs)	Full Flow Rate (GPM)	Full Flow Rate (GPD)	1/2 Full Flow Rate (GPM)
4	0.85	2.01	0.18	79	113,410	39
6	0.50	2.02	0.40	178	256,451	89
8	0.33	2.00	0.70	313	450,954	157
10	0.25	2.01	1.10	492	708,085	246
12	0.20	2.03	1.59	715	1,029,85	358
15	0.15	2.04	2.50	1,123	1,617,13	561
16	0.15	2.13	2.97	1,334	1,920,75	667

A low slope sewer certificate of compliance is required to be provided to the building official for designs and installations that utilize this exception.

**Justification:** This amendment adds the option of using a lessor slope for building sewers based on engineering calculations. The owner will be required to sign under notary that they have accepted the lessor slope. The registrant shall certify the design and final installation through special inspection.

Cost Impact: This amendment will reduce the costs associated with the current approval process for low slope sewer installations.
Approved in previous 2018 Code Adoption process:
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 01/15/2025
$oxed{oxed}$ Approved as submitted $oxed{oxed}$ Modified and approved $oxed{oxed}$ Denied $oxed{oxed}$ No action taken
Development Advisory Board (DAB) Subcommittee Date: 02/13/2025
Development Advisory Board (DAB) Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
Transportation, Infrastructure and Planning Subcommittee Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
City Council Action Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken



Amendment to 2024 Uniform Plumbing Code (UPC) Section 1014.1
Submitted by: Uniform Plumbing Code Committee
1014.0 Grease Interceptors.
1014.1 General. Where it is determined by the Authority Having Jurisdiction that waste pretreatment is required, an approved type of grease interceptor(s) shall comply with ASME A112.14.3, ASME A112.14.4, CSA B481, ANSI/CAN/IAPMO Z1001, PDI G-101, or PDI G-102, and sized in accordance with Section 1014.2.1 or Section 1014.3.6, shall be installed in accordance with the manufacturer's installation instructions to receive the drainage from fixtures or equipment that produce grease-laden waste. Grease-laden waste fixtures shall include, but not be limited to, sinks and drains, such as floor drains, floor sinks, and other fixtures or equipment in serving establishments, such as restaurants, cafes, lunch counters, cafeterias, bars and clubs, hotels, hospitals, sanitariums, factory or school kitchens, or other establishments where grease is introduced into the drainage or sewage system in quantities that can effect line stoppage or hinder sewage treatment or private sewage disposal systems. A Where approved by the Authority Having Jurisdiction, a combination of hydromechanical, gravity grease interceptors and engineered systems shall be allowed to meet this code and other applicable requirements of the Authority Having Jurisdiction where space or existing physical constraints of existing buildings necessitate such installations. A grease interceptor shall not be required for individual dwelling units or private living quarters. Water closets, urinals, and other plumbing fixtures conveying human waste shall not drain into or through the grease interceptor.
<b>Justification:</b> Combination pretreatment systems are generally not allowed by the Water Services Department's Environmental Services Division but will be considered on a case by case basis.
Cost Impact: No cost impact.
Approved in previous 2018 Code Adoption process:
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 11/14/2024
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB) Subcommittee Date: 02/13/2025
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB)  ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
Transportation, Infrastructure and Planning Subcommittee Date:
Approved as submitted Modified and approved Denied No action taken
City Council Action Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken



Amendment to 2024 Uniform Plumbing Code (UPC) Section 1014.1.3			
Submitted by: Uniform Plumbing Code Committee			
1014.0 Grease Interceptors.			
1014.1.3 Food Waste Disposers and Dishwashers. All food waste disposers and dishwashers installed in commercial applications shall be connected to and / or discharge into a gravity grease interceptor unless approved by the Authority Having Jurisdiction. No food waste disposer or dishwasher shall be connected to or discharge into a grease interceptor. Commercial food waste disposers shall be permitted to discharge directly into the building's drainage system.			
<b>Exception:</b> Food waste disposers shall be permitted to discharge to grease interceptors that are designed to receive the discharge of food waste.			
<b>Justification:</b> This code change is necessary to positively identify where disposers and dishwashers shall be discharged. Connecting a commercial disposer unit and/or dishwasher to a hydromechanical interceptor will have a negative effect on the operation, separation and grease retention efficiency of the device. This is required by the Water Service Department's Office of Environmental Programs.			
Cost Impact: No cost impact. This requirement is an amendment carried forward from the 2018 Uniform Plumbing Code.			
Approved in previous 2018 Code Adoption process:   YES   NO			
ACTION TAKEN:			
<b>2024 Code Committee</b> Date: 11/13/20204			
Approved as submitted Modified and approved Denied No action taken			
Development Advisory Board (DAB) Subcommittee  Date: 02/13/2025  Approved as submitted  Medified and approved  Depict  Development Advisory Board (DAB)			
Approved as submitted Modified and approved Denied No action taken			
Development Advisory Board (DAB)  ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken			
Transportation, Infrastructure and Planning Subcommittee Date:			
Approved as submitted Modified and approved Denied No action taken			
City Council Action Date:			
Approved as submitted Modified and approved Denied No action taken			



Amendment to 2024 Uniform Plumbing Code (UPC) Section 1014.2.3			
Submitted by: Uniform Plumbing Code Committee			
1014.2 Hydromechanical Grease Interceptors.			
1014.2.3 Maintenance. An approved two-way cleanout shall be installed on the discharge side of all separators, interceptors, (clarifiers) and hydromechanical grease interceptors.			
<b>Justification:</b> The purpose of this code section is to provide an entry point to clean the line downstream of the device and back to the device.			
<b>Cost Impact:</b> Minimal cost impact. The cost impact is minimal to install additional piping for cleanouts. This requirement is an amendment carried forward from the 2018 Uniform Plumbing Code.			
Approved in previous 2018 Code Adoption process:			
ACTION TAKEN:			
<b>2024 Code Committee</b> Date: 11/14/2024			
Development Advisory Board (DAB) Subcommittee Date: 02/13/2025			
Approved as submitted Modified and approved Denied No action taken			
Development Advisory Board (DAB)  Date:			
Approved as submitted Modified and approved Denied No action taken			
Transportation, Infrastructure and Planning Subcommittee Date:			
Approved as submitted Modified and approved Denied No action taken			
City Council Action  Date:			



BUILDING CONSTRUCTION CODE CHANGE PROPOSAL			
Amendment to 2024 Uniform Plumbing Code (UPC)			
Section 1014.3.5			
Submitted by: Uniform Plumbing Code Committee			
1014.3 Gravity Grease Interceptors.			
1014.3.5 Construction Requirements. Gravity grease interceptors shall be designed to remove grease from effluent and shall be sized in accordance with this section. Gravity grease interceptors shall also be designed to retain grease until accumulations can be removed by pumping the interceptor. When provided, a sample box shall be located at the outlet end if gravity grease interceptors so that the Authority Having Jurisdiction can periodically sample effluent quality. The minimum gravity grease interceptor capacity shall be 500 gallons and the maximum capacity shall be 5000 gallons unless otherwise approved by the Authority Having Jurisdiction. A 500-gallon interceptor shall have a minimum of two compartments and two man-ways. Interceptors 750 gallons and above shall have a minimum of two compartments and three man-ways. All man-ways shall have a minimum 20" inside diameter. All interceptors shall have a vented two-way cleanout on the discharge side of the interceptor. All interceptors shall have a separate set of approved plans on file with the Environmental Services Division. The plans shall be sealed by a registered professional engineer and be approved by the Authority Having Jurisdiction. These plans shall be on file with the city before installation can be completed.  The grade rings (risers) of gravity grease interceptors shall be grouted with shrink and water proof grout. The interceptor lids shall be just above grade so as to prevent rain water infiltration. All interceptors shall have gas tight and/or traffic rated lids where required.			
<b>Justification:</b> The Water Service Department's Environmental Services Division does not sample effluent discharges from grease interceptors therefore providing a sample box is an unnecessary expense for a facility. The additional requirements establish construction parameters for interceptors.			
Cost Impact: Minimal Cost Impact. Additional requirements for grease interceptors.			
Approved in previous 2018 Code Adoption process:			
ACTION TAKEN:			
<b>2024 Code Committee</b> Date: 11/28/2024			
Approved as submitted Modified and approved Denied No action taken			
Development Advisory Board (DAB) Subcommittee Date: 02/13/2025			
Approved as submitted Modified and approved Denied No action taken			
Development Advisory Board (DAB)  Date:			
Approved as submitted Modified and approved Denied No action taken			
Transportation, Infrastructure and Planning Subcommittee Date:  ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken			
City Council Action  Date:			
Approved as submitted Modified and approved Denied No action taken			



# Amendment to 2024 Uniform Plumbing Code (UPC) **Section 1014.3.6 Submitted by:** Uniform Plumbing Code Committee 1014.3 Gravity Grease Interceptors. **1014.3.6 Sizing criteria.** The volume of the interceptor shall be determined by calculating drainage fixture units (DFUs) using Table 1014.3.6 702.1. Where drainage fixture units (DFUs) are not known, the interceptor shall be sized based on the maximum DFUs allowed for the pipe size connected to the inlet of the interceptor. Refer to Table 703.2, Drainage Piping, Horizontal. **Example:** Take the total DFUs going to grease waste, multiply by three (3) gallons per minute (GPM), multiply by a 12-minute detention time and this will give the interceptor size in gallons. If there is a disposal, use a 17-minute detention time. Justification: The purpose of this code change is to define how an interceptor will be sized. The sizing criteria was developed from three public forums held in 1997 to standardize gravity grease interceptor sizing. **Cost Impact:** Minimal cost increase due to changing the sizing criteria. This requirement is an amendment carried forward from the 2006, 2012, and 2018 Uniform Plumbing Codes. **Approved in previous 2018 Code Adoption process: ◯** YES NO **ACTION TAKEN:** 2024 Code Committee Date: 11/28/2024 ☐ No action taken **Development Advisory Board (DAB) Subcommittee** Date: 02/13/2025 Approved as submitted $\square$ Modified and approved $\square$ Denied ☐ No action taken **Development Advisory Board (DAB)** Date: Approved as submitted Modified and approved Denied ☐ No action taken **Transportation, Infrastructure and Planning Subcommittee** Date: ☐ Approved as submitted ☐ Modified and approved ☐ Denied No action taken **City Council Action** Date: ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken





Amendment to 2024 Uniform Plumbing Code (UPC) Section: Example 1014.3.6
Submitted by: Uniform Plumbing Code Committee
1014.3 Gravity Grease Interceptors.
EXAMPLE 1014.3.6 GRAVITY GREASE INTERCEPTOR SIZING EXAMPLE
Given: A restaurant with the following fixtures and equipment.
One food preparation sink; three floor drains – one in the food prep area, one in the grill area, and one receiving the indirect waste from the ice machine and mop sink.
Kitchen Drain Line DFU Count (from Table 702.1): 3 floor drains at 2 DFUs each = 6 DFUs Mop sink at 3 DFUs each = 3 DFUs Food prep sink at 3 DFUs each = 3 DFUs Total = 12 DFUs
Using Table 1014.3.6, the grease interceptor will be sized at 750 gallons (2389 L). Using UPC 1014.3.6:
12 DFUs x 3 GPM x 12-minute detention time = 432 gallons. The interceptor will be sized at 500 gallons (1893 L).
<b>Justification:</b> The purpose of this code change is to provide a design example that clearly illustrates how to size an interceptor.
Cost Impact: No cost impact.
Approved in previous 2018 Code Adoption process:
ACTION TAKEN:
2024 Code Committee Date: 11/28/2024
Approved as submitted Modified and approved Denied No action taken  Development Advisory Board (DAB) Subcommittee  Date: 02/13/2025
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
Development Advisory Board (DAB)  Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
Transportation, Infrastructure and Planning Subcommittee Date:
Approved as submitted Modified and approved Denied No action taken
City Council Action Date:
Approved as submitted Modified and approved Denied No action taken



Amendment to 2024 Uniform Plumbing Code (UPC) Section 1101.12.1		
Submitted by: Uniform Plumbing Code Committee		
1101.12 Roof Drainage.		
1101.12.1 Primary Roof Drainage. Roof areas of a building shall be drained by roof drains, scuppers or gutters. The location and sizing of drains and gutters shall be coordinated with the structural design and pitch of the roof. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by this section. Scupper openings shall be not less than 4 inches (102 mm) in height and have an opening width equal to the circumference of the roof drain required for the area served, sized in accordance with Table 1101.12. Unless otherwise required by the Authority Having Jurisdiction, roof drains, scuppers, gutters, vertical conductors or leaders, and horizontal storm drains for primary drainage shall be sized based on a rainfall rate of three (3) inches per hour storm of 60 minutes duration and 100 year return period. Refer to Table D 101.1 (in Appendix D) for 100 years, 60 minute storms at various locations.		
<b>Justification:</b> Current language in the 2024 UPC implies that scuppers are only approved for secondary roof drainage. It has been a long-standing practice in Phoenix to allow the use of scuppers as primary roof drains. This proposal adds the acceptance of scuppers as primary roof drains and matches the sizing criteria found for the secondary scuppers in Section 1101.12.2.1. The annual rainfall rate is given in the Appendix D of this code as 2.2 inches per hour. It is proposed to round this number up to 3 inches for ease of use of the sizing Tables.		
Cost Impact: Minimal cost increase as increasing the expected rainfall rate will require larger drains. Carried over from 2018 Amendment.		
Approved in previous 2018 Code Adoption process:		
ACTION TAKEN:		
2024 Code Committee Date: 11/21/2024		
Approved as submitted Modified and approved Denied No action taken		
Development Advisory Board (DAB) Subcommittee  ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken		
Approved as submitted Modified and approved Denied No action taken  Development Advisory Board (DAB)  Date:		
Approved as submitted Modified and approved Denied No action taken		
Transportation, Infrastructure and Planning Subcommittee Date:		
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken		
City Council Action Date:		
Approved as submitted Modified and approved Denied No action taken		



### Amendment to 2024 Uniform Plumbing Code (UPC) Sections 1101.12.2.2 & 1101.12.2.2.2

Submitted by: Uniform Plumbing Code Committee

1101.12 Roof Drainage.

**1101.12.2.2 Secondary Roof Drain.** Secondary roof drains shall be provided. The secondary roof drains shall be located not less than 2 inches (51 mm) above the roof surface. The maximum height of the roof drains shall be a height to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.12.1. The secondary roof drains shall connect to a piping system in accordance with Section 1101.12.2.2.1. or Section 1101.12.2.2.2.

**1101.12.2.2.1 Separate Piping System.** The secondary drainage system shall be separate system of piping, independent of the primary roof drainage system. The discharge shall be above grade, in a location observable by the building occupants or maintenance personnel. Secondary roof drain systems shall be sized in accordance with Section 1101.12.1 based on rainfall rate for which the primary system is sized.

1101.12.2.2.2 Combined System. The secondary roof drains shall connect to the vertical piping of the primary storm drainage conductor downstream of the last horizontal offset located below the roof. The primary storm drainage system shall connect to the building storm water that connects to an underground public storm sewer. The combined secondary and primary roof drain systems shall be sized in accordance with Section 1103.0 based on double rainfall rate for the local area.

**Justification:** The city of Phoenix does not allow for combined primary and secondary rainwater removal systems. A combined system does not have any way to indicate there is a blockage in the primary drain.

Cost Impact: Minimal Cost Impact. Remove the combined system option. Approved in previous 2018 Code Adoption process: **⊠** YES NO **ACTION TAKEN:** Date: 11/21/2024 2024 Code Committee Approved as submitted Modified and approved Denied ☐ No action taken **Development Advisory Board (DAB) Subcommittee** Date: 02/13/2025 Denied ☐ No action taken **Development Advisory Board (DAB)** Date: ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken Transportation, Infrastructure and Planning Subcommittee Date: Approved as submitted Modified and approved Denied ☐ No action taken **City Council Action** Date: ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken



## Amendment to 2024 Uniform Plumbing Code (UPC) Section 1101.16.2 Submitted by: Uniform Plumbing Code Committee 1101.16 Leaders, Conductors, and Connections. Leaders or conductors shall not be used as soil, waste, or vent pipes nor shall soil, waste, or vent pipes be used as leaders or conductors. 1101.16.1 Protection of Leaders. Leaders installed along alleyways, driveways, or other locations where exposed to damage shall be protected by metal quards, recessed into the wall, or constructed from the ferrous pipe. 1101.16.2 Combining Storm with Sanitary Drainage. The sanitary and storm drainage system of a building shall be entirely separate, except where a combined sewer is used, in which case the building storm drain shall be connected in the same horizontal plane through a single wye fitting to the combined building sewer not less than 10 feet (3048 mm) downstream from a soil stack. Justification: The city of Phoenix does not allow for combined sanitary and storm drainage systems. This type of combined system is under the jurisdiction of the city of Phoenix Water Services Department. Cost Impact: No cost impact. **Approved in previous 2018 Code Adoption process: ⊠** YES NO **ACTION TAKEN:** 2024 Code Committee Date: 11/21/2024 Approved as submitted Modified and approved Denied ☐ No action taken **Development Advisory Board (DAB) Subcommittee** Date: 02/13/2025 Approved as submitted Modified and approved Denied ☐ No action taken **Development Advisory Board (DAB)** Date: ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken **Transportation, Infrastructure and Planning Subcommittee** Date: Approved as submitted Modified and approved Denied ☐ No action taken **City Council Action** Date: ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken



# Amendment to 2024 Uniform Plumbing Code (UPC) Section 1208.5.11.

Submitted by: Uniform Plumbing Code Committee

### 1208.5.11 Flange Specification.

Flanges shall comply with Section 128.5.11.1 through Section 1208.5.11.7.

### **1208.5.11.1 Cast Iron Flanges**

Cast iron flanges shall be in accordance with ASME B16.1. [NFPA 54:5.5.9.1.1]

### 1208.5.11.2 Steel Flanges.

Steel flanges shall be in accordance with one of the following:

- (1) ASME B16.5 or
- (2) ASME B16.47. [NFPA 54:5.5.9.1.2]

### 1208.5.11.3 Non-Ferrous Flanges.

Non-ferrous flanges shall be in accordance with ASME B16.24. [NFPA 54:5.5.9.1.2]

### 1208.5.11.4 Ductile Iron Flanges.

Ductile iron flanges shall be in accordance with ASME B16.42. [NFPA 54:5.5.9.1.4]

### 1208.5.11.5 Dissimilar Flange Connections.

Raised-face flanges shall not be joined to flat-faced cast iron, ductile iron or nonferrous material flanges. [NFPA54:5.5.9.2]

### 1208.5.11.6 Flange Facings.

Standard facings shall be permitted for use under this code. Where 150 psi (1034 kPa) steel flanges are bolted to Class 125 cast iron flanges, the raised face on the steel flange shall be removed. [NFPA 54:5.5.9.3]

## **1208.5.11.7 Lapped Flanges.**

Lapped flanges shall be used only aboveground or in exposed locations accessible for inspection. [NFPA 54:5.5.9.4]

**Justification:** Defacing a listed product voids its certification to a design standard. This amendment is consistent with the amended similar section in the 2024 International Fuel Gas Code.

Cost Impact: No cost impact.

Approved in previous 2018 Code Adoption process:	YES   NO
ACTION TAKEN:	
2024 Code Committee	Date: 12/12/2024
Approved as submitted  Modified and approved  Denied	☐ No action taken
Development Advisory Board (DAB) Subcommittee	Date: 02/13/2025
□ Approved as submitted □ Modified and approved □ Denied	☐ No action taken
Development Advisory Board (DAB)	Date:
Approved as submitted Modified and approved Denied	☐ No action taken
Transportation, Infrastructure and Planning Subcommittee	Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied	☐ No action taken
City Council Action	Date:
Approved as submitted Modified and approved Denied	☐ No action taken



Amendment to 2024 Uniform Plumbing Code (UPC) Section: Appendices				
Submitted by: Uniform Plumbing Code Committee				
Adopt Appendices A, B, I, & M				
<b>Justification:</b> Appendix A provides an alternative engineered method of water pipe sizing. Appendix B provides supplemental and explanatory information on combination waste and vent systems. Appendix I contains installation standards for PEX tubing systems. Appendix M provides a method for estimating water supply requirements for single and multi-family dwelling units using water conserving plumbing fixtures. Appendix M is also in line with the current City of Phoenix water conservation ordinances.				
Cost Impact: Minor Cost Impact. Potential cost decrease for alternative water pipe sizing.				
Approved in previous 2018 Code Adoption process:				
ACTION TAKEN:				
<b>2024 Code Committee</b>				
Approved as submitted Modified and approved Denied No action taken				
Development Advisory Board (DAB) Subcommittee Date: 02/13/2024				
Approved as submitted Modified and approved Denied No action taken				
Development Advisory Board (DAB)  Date:				
Approved as submitted Modified and approved Denied No action taken  Transportation. Infrastructure and Planning Subcommittee  Date:				
Transportation, Infrastructure and Planning Subcommittee Date:  ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken				
City Council Action Date:				
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken				