

# Amendment to 2024 International Plumbing Code (IPC) Section 101.1

Submitted by: International Plumbing Code Committee

### **CHAPTER 1 SCOPE AND GENERAL REQUIREMENTS**

### 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. For sections that remain unchanged from base code, the term "see this section of the 2024 IPC" shall refer to the unchanged base code.

#### 101.1 Title

These regulations shall be known as the <u>International Plumbing Code as amended by the City of Phoenix Building Code of [NAME OF JURISDICTION]</u>, hereinafter referred to as "this code." <u>These regulations are one document of the overall Phoenix Building Construction Code as defined by the adopting ordinance.</u>

- **101.2 Scope.** See this section of the 2024 IPC
- 101.2.1 Appendices. See this section of the 2024 IPC
- **101.3 Purpose. -** See this section of the 2024 IPC
- **101.4 Severability. -** Reserved.
- 102.1 General. Reserved.
- **102.2 Existing installations.** See this section of the 2024 IPC
- 102.3 Maintenance. See this section of the 2024 IPC
- **102.4 Additions**, alterations or repairs. See this section of the 2024 IPC
- **102.5 Change in occupancy.** See this section of the 2024 IPC
- 102.6 Historic buildings. See this section of the 2024 IPC
- **102.7 Moved buildings. -** See this section of the 2024 IPC
- **102.8 Referenced codes and standards. -** Reserved
- **102.8.1 Conflicts. -** Reserved.
- 102.8.2 Provisions in referenced codes and standards. Reserved.

102.9 Requirements not covered by code See this section of the 2024 IPC	
102.10 Other laws Reserved.	
102.11 Application of references Reserved.	
SECTION 103 CODE COMPLIANCE AGENCY — Reserved.	
SECTION 104 DUTIES AND POWERS OF THE CODE OFFICIAL — Reserved.	
SECTION 105 PERMITS — Reserved.	
SECTION 106 CONSTRUCTION DOCUMENTS — Reserved.	
SECTION 107 NOTICE OF APPROVAL — Reserved.	
SECTION 108 FEES — Reserved.	
SECTION 109 SERVICE UTILITIES — Reserved.	
SECTION 110 TEMPORARY USES, EQUIPMENT AND SYSTEMS — Reserved.	
SECTION 111 INSPECTIONS AND TESTING — Reserved.	
SECTION 112 MEANS OF APPEALS — Reserved.	
SECTION 113 BOARD OF APPEALS — Reserved.	
SECTION 114 VIOLATIONS — Reserved.	
SECTION 115 STOP WORK ORDER — 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 International Plumbing Code as Amended by the City of Phoenix. This document is intended to apply where a code or referenced standard identifies the International Building 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: ☐ YES ☒ NO	
ACTION TAKEN:	
<b>2024 Code Committee</b> Date: 01/28/2025	
Approved as submitted Modified and approved Denied No action taken	
Development Advisory Board (DAB) Subcommittee Date: 02/06/2025  ☐ 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 International Plumbing Code (IPC) Section 202
Submitted by: International Plumbing Code Committee
202 GENERAL DEFINITIONS
GREASE INTERCEPTOR
<b>Gravity.</b> Plumbing appurtenances of not less than 500 gallons (1893 L) capacity that are installed in the sanitary drainage system to intercept free-floating fats, oils and grease from wastewater discharge. Separation is accomplished by gravity during a retention time-of not less than 30 minutes approved by the Authority Having Jurisdiction.
<b>Justification:</b> City of Phoenix Water Department's Office of Environmental Programs and surrounding cities use a minimum 12-minute retention time. The additional requirements establish construction parameters for interceptors.
<b>Cost Impact:</b> Minimal cost impact. This amendment reduces cost. Adopting a 30-minute retention time would increase the size of required grease interceptors, adding extra expense to the purchase and installation of gravity grease interceptors. The additional requirements are carried over from 2018 UPC.
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
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Transportation, Infrastructure and Planning Subcommittee Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken
City Council Action  □ Approved as submitted □ Modified and approved □ Denied □ No action taken



## Amendment to 2024 International Plumbing Code (IPC) Section 202 (GRD) **Submitted by:** International Plumbing Code Committee **202 GENERAL DEFINITIONS** GREASE REMOVAL DEVICE, AUTOMATIC (GRD). A plumbing appurtenance that is installed in the sanitary drainage system to intercept free-floating fats, oils and grease from wastewater discharge. Such a device operates on a time-or event-controlled basis and has the ability to remove free-floating fats, oils and grease automatically without intervention from the user except for maintenance. These devices must be able to perform as a gravity interceptor if mechanical or electrical power is lost, and provide continuous separation. Justification: Some grease removal devices rely on moving parts and electricity to separate grease from the waste stream. This amendment requires that 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. Cost Impact: Minimal cost impact. This disallows some types of devices, so the remaining options may be more expensive. **⊠** YES **Approved in previous 2018 Code Adoption process:** NO **ACTION TAKEN:** 2024 Code Committee Date: 12/19/2024 $\square$ Approved as submitted $\square$ Modified and approved $\square$ Denied No action taken **Development Advisory Board (DAB) Subcommittee** Date: 02/06/2025 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: ☐ No action taken ☐ Approved as submitted ☐ Modified and approved ☐ Denied **City Council Action** Date:

No action taken

☐ Approved as submitted ☐ Modified and approved ☐ Denied



Amendment to 2024 International Plumbing Code (IPC) Section 312.11.2
Submitted by: International Plumbing Code Committee
SECTION 312 TESTS AND INSPECTIONS
312.11.2 Testing.  Reduced pressure principle, double check, pressure vacuum breaker, reduced pressure detector fire protection, double check detector fire protection, and spill-resistant vacuum breaker backflow preventer assemblies and hose connection backflow preventers shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The testing procedure shall be performed in accordance with one of the following standards ASSE 5013, ASSE 5015, ASSE 5020, ASSE 5047, ASSE 5048, ASSE 5052, ASSE 5056, CSA B64.10 or CSA B64.10.1. Testing gauges shall comply with ASSE 1064. Testing or maintenance shall be performed by a certified backflow assembly tester or repairer in accordance with ASSE Series 5000, or otherwise approved by the Authority Having Jurisdiction.
<ol> <li>Justification:         <ol> <li>Allows the AHJ the ability to use the test procedures outlined in the most current edition of the USC Foundation for Cross-Connection Control and Hydraulic Research Manual of Cross-Connection Control, mandated by State Rule R18-4-215 and Phoenix City Code Chapter 37, Article XII. Backflow Prevention.</li> </ol> </li> <li>Mirrors identical requirements found in 2018 UPC Section 603.2 "Approval of Devices" or Assemblies.</li> </ol>
Cost Impact: Minimal cost increase.
Approved in previous 2018 Code Adoption process:   YES   NO
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 01/02/2025
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB) Subcommittee Date: 02/06/2025
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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 International Plumbing Code (IPC) Section 403.2
Submitted by: International Plumbing Code Committee
<b>403.2 Separate facilities.</b> Where plumbing fixtures are required, separate toilet facilities shall be provided for each sex.
Exceptions:
<ol> <li>Separate toilet facilities shall not be required for dwelling units and sleeping units.</li> <li>Separate toilet facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer.</li> <li>Separate toilet facilities shall not be required in mercantile occupancies in which the maximum occupant load is 50 100 or fewer.</li> <li>Separate toilet facilities shall not be required in business occupancies in which the maximum occupant load is 25 50 or fewer.</li> <li>Separate toilet facilities shall not be required to be designated by sex where single-user toilet rooms are provided in accordance with Section 403.1.2.</li> <li>Separate toilet facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by all persons regardless of sex and privacy is provided for water closets in accordance with Section 405.3.4 and for urinals in accordance with Section 405.3.5.</li> </ol>
<b>Justification:</b> These revisions are made to provide consistency between the 2024 UPC section 422.2, 2024 IBC section 2902.2 and the 2024 IPC to allow for small business and mercantile occupancies to provide a single toilet facility for up to 50 occupants.
Cost Impact: Cost savings and increases will vary.
Approved in previous 2018 Code Adoption process:  ☐ YES ☐ NO
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 01/09/2025
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB) Subcommittee Date: 02/06/2025
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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 International Plumbing Code (IPC) Section 410.2	
Submitted by: International Plumbing Code Committee	
<b>410.2 Small occupancies.</b> Drinking fountains shall not be required for an occupant load of 45 50 or fewer.	
<b>Justification:</b> This amendment is made to provide a relief to small businesses from the cost of installing drinking fountains, but also to save the physical space they would take up.	
Cost Impact: Minimal cost impact. Cost savings.	
Approved in previous 2018 Code Adoption process:	
ACTION TAKEN:	
<b>2024 Code Committee</b> Date: 01/16/2025	
Approved as submitted Modified and approved Denied No action taken	
Development Advisory Board (DAB) Subcommittee Date: 02/06/2025	
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 International Plumbing Code (IPC) Section 424.2	
Submitted by: International Plumbing Code Committee	
424.2 Substitution for water closets. In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets for males according to Table 403.1 in assembly and educational occupancies. Urinals shall not be substituted for more than 50 percent of the required water closets for males according to Table 403.1 in all other-occupancies.	
<b>Justification:</b> These revisions are made to provide consistency between the UPC and IPC and the minimum plumbing fixture table that is found in the 2024 International Building Code.	
Cost Impact: Minimal cost impact. The cost increase will be greater for assembly and educational occupancies.	
Approved in previous 2018 Code Adoption process:	
ACTION TAKEN:	
<b>2024 Code Committee</b> Date: 01/16/2025	
Approved as submitted Modified and approved Denied No action taken	
Development Advisory Board (DAB) Subcommittee  Date: 02/06/2025	
Approved as submitted Modified and approved Denied No action taken  Development Advisory Board (DAB)  Date:	
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	



**City Council Action** 

☐ Approved as submitted ☐ Modified and approved ☐ Denied

### **BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

## Amendments to 2024 International Plumbing Code (IPC) **Section 605.25 Submitted by:** International Plumbing Code Committee 605.25 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 IPC Table 605.3, IPC Table 605.4, IPC Table 605.5, and IPC Table 605.6. **Justification:** 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. Cost Impact: Minimal. This amendment increases the initial construction cost. This amendment reduces the cost associated with future water breaks, property damage, and personal financial liability. Approved in previous Code Adoption process: **⊠** YES NO **ACTION TAKEN:** 2024 Code Committee Date: 01/15/2025 Approved as submitted \( \square\$ Modified and approved \( \square\$ Denied ☐ No action taken **Development Advisory Board (DAB) Subcommittee** Date: 02/06/2025 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** ☐ Approved as submitted ☐ Modified and approved ☐ Denied No action taken

Date:



Amendment to 2024 International Plumbing Code (IPC) Section 608.7.2
Submitted by: International Plumbing Code Committee
SECTION 608 PROTECTION OF POTABLE WATER SUPPLY
<b>608.7 Cross connection control.</b> Cross connections shall be prohibited, except where <i>approved</i> backflow prevention assemblies, backflow prevention devices or other means or methods are installed to protect the potable water supply.
<b>608.7.1 Private water supplies.</b> Cross connections between a private water supply and a potable public supply shall be prohibited.
608.7.2 Secondary backflow protection.  The following activities or facilities shall have a Secondary Reduced Pressure Principle Backflow Prevention assembly installed as close as practicable 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.
Justification: ADEQ, Maricopa County and City of Phoenix Water Department all require secondary protection for the services cited.
<b>Cost Impact:</b> Yes there will be a cost increase due to the requirement for an additional backflow preventer. This amendment carries over from previous code cycles.
Approved in previous 2018 Code Adoption process:
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 01/23/2025
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB) Subcommittee  Date: 02/06/2025  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 CONSTRUCTION CODE CHANGE PROPOSAL
Amendment to 2024 International Plumbing Code (IPC) Section 608.8.1
Submitted by: International Plumbing Code Committee
608.8 Valves and outlets prohibited below grade.  Potable water outlets and combination stop-and-waste valves shall not be installed underground or below grade. A freezeproof yard hydrant that drains the riser into the ground shall be considered as having a stop-and-waste valve below grade.
<b>Exception:</b> Freezeproof yard hydrants that drain the riser into the ground shall be permitted to be installed, provided that the potable water supply to such hydrants is protected in accordance with Section 608.14.2 or 608.14.5 ASSE 1057 Freeze Resistant Sanitary Yard Hydrant with Backflow Protection, and the hydrants and the piping from the backflow preventer to the hydrant are identified in accordance with Section 608.9.
608.8.1 Prohibited Locations.  Backflow prevention devices shall not be installed in pits, underground vaults, or submerged locations.
<ol> <li>Justification:         <ol> <li>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.</li> <li>Eliminates the possibility of installing a backflow prevention assembly in a pit or vault.</li> <li>Reflects installation drawings shown in City of Phoenix Standard Details P1351 through P1355.</li> <li>Corresponds to manufacturer's installation instructions which restrict underground installations to AHJ approval.</li> <li>Above ground installation assures that Fire Department personnel have visual access to fire line backflow prevention assembly shut off valves and verifies that the assembly OS&amp;Y (outside stem &amp; yoke) shut-off valves are open by presence of a rising stem.</li> </ol> </li> <li>Cost Impact: Minimal cost impact. Requires compliance with ASSE 1057 instead of the other standards in Section 608.14.2 or 608.14.5.</li> </ol>
Approved in previous 2018 Code Adoption process:
ACTION TAKEN:
<b>2024 Code Committee</b> □ Date: 01/23/2025  □ Approved as submitted □ Modified and approved □ Denied □ No action taken
Approved as submitted Modified and approved Denied No action taken  Development Advisory Board (DAB) Subcommittee  Date: 02/06/2025

☐ No action taken

☐ No action taken

Date:

☐ Approved as submitted ☐ Modified and approved ☐ Denied

Development Advisory Board (DAB)

Transportation, Infrastructure and Planning Subcommittee	Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied	☐ No action taken
City Council Action	Date:
City Council Action	Dale.



# Amendment to 2024 International Plumbing Code (IPC) Section 608.15.3

Submitted by: International Plumbing Code Committee

### 608.15 Location of backflow preventers.

Access shall be provided to backflow preventers as specified by the manufacturer's instructions.

### 608.15.1 Outdoor enclosures for backflow prevention devices.

Outdoor enclosures for backflow prevention devices shall comply with ASSE 1060.

### 608.15.2 Protection of backflow preventers.

Backflow preventers shall not be located in areas subject to freezing except where they can be removed by means of unions or are protected from freezing by heat, insulation or both.

### 608.15.2.1 Relief port piping.

The termination of the piping from the relief port or *air gap* fitting of a backflow preventer shall discharge to an *approved* indirect waste receptor or to the outdoors where it will not cause damage or create a nuisance. The indirect waste receptor and drainage piping shall be sized to drain the maximum discharge flow rate from the relief port as published by the backflow preventer manufacturer.

### 608.15.3 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.

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:

- 1. Inserts code language regarding elevated installations.
- 2. Clarifies that secondary backflow prevention assemblies shall be installed above ground.
- 3. Clarifies the minimum required clearance dimensions for secondary backflow prevention assemblies.
- 4. Coordinates with Phoenix Fire Code requirements for access to fire protection equipment.

**Cost Impact:** Yes due to more labor intensive requirements.

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
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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 International Plumbing Code (IPC) Section 803.1
Submitted by: International Plumbing Code Committee
803.1 Neutralizing device required for corrosive wastes.  Corrosive liquids, spent acids or other harmful chemicals that destroy or injure a drain, sewer, soil or waste pipe, or create noxious or toxic fumes or interfere with the sewage treatment processes shall not be discharged into the plumbing system without being thoroughly diluted, neutralized, or treated by passing through an approved dilution or neutralizing device. Such devices shall be automatically provided with a sufficient supply of diluting water or neutralizing medium so as to make the contents noninjurious before discharge into the drainage system. The nature of the corrosive or harmful waste and the method of its treatment or dilution shall be approved prior to installation.
Justification: Diluting chemical wastes is prohibited by the Clean Water Act, 40 CFR, 403.6 (d).
Cost Impact: Minimal Cost Impact. This requires neutralizing mediums in lieu of dilution.
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: 02/06/2025
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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 International Plumbing Code (IPC) Section 1003.2		
Submitted by: International Plumbing Code Committee		
1003.2 Approval.  The size, type and location of each interceptor and of each separator shall be designed and installed in accordance with the manufacturer's instructions and the requirements of this section based on the anticipated conditions of use the Authority Having Jurisdiction. Wastes that do not require treatment or separation shall not be discharged into any interceptor or separator.		
<b>Justification:</b> Phoenix City Code Section 28–13 gives approval authority for all interceptors to the Director of Water Services. This code change is an administrative change to clarify approval authority for these devices in the International Plumbing Code.		
Cost Impact: Minimal cost impact. Restricts the types of interceptors to those only approved by the Director of the Water Services Department.		
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: 02/06/2025		
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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:		
City Council Action  Date:		



# Amendment to 2024 International Plumbing Code (IPC) Section 1003.3.1

Submitted by: International Plumbing Code Committee

### 1003.3.1 Grease interceptors and automatic grease removal devices required.

A grease interceptor or automatic grease removal device shall be required to receive the drainage from fixtures and equipment with grease laden waste located in food preparation areas, such as in restaurants, hotel kitchens, hospitals, school kitchens, bars, factory cafeterias and clubs. Fixtures and equipment shall include, but are not limited to pot sinks, prerinse sinks; soup kettles or similar devices; wok stations; floor drains or sinks into which kettles are drained; automatic hood wash units., and dishwashers without prerinse sinks. Commercial dishwashers and food waste disposal units shall discharge to a gravity grease interceptor. Grease interceptors and automatic grease removal devices shall receive waste only from fixtures and equipment that allow fats, oils or grease to be discharged. Where lack of space or other constraints prevent the installation or replacement or a grease interceptor, one or more grease interceptors shall be permitted to be installed on or above the floor and upstream of an existing grease interceptor.

Justification: Automatic grease removal devices are not allowed as a standalone device by the

City of Phoenix Water Department's Office of Environmental Programs. Installing one or more grease interceptors upstream of an existing interceptor does not increase the flow capacity of the existing grease interceptor. Cost Impact: Minimal cost impact. Disallows automatic grease removal devices which may be cheaper than a grease interceptor. **Approved in previous 2018 Code Adoption process: ◯** YES NO **ACTION TAKEN:** 2024 Code Committee Date: 01/25/2025 ☐ No action taken **Development Advisory Board (DAB) Subcommittee** Date: 02/06/2025 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 International Plumbing Code (IPC) Section, 1003.3.2
Submitted by: International Plumbing Code Committee
1003.3.2 Food waste disposers restriction. Reserved  A food waste disposer shall not discharge to a grease interceptor.
<b>Justification:</b> Commercial food waste disposers are required to discharge to a gravity grease interceptor, per the City of Phoenix Water Department's Office of Environmental Programs.
Cost Impact: Minimal cost impact. Reduces cost by allowing discharge to a grease interceptor.
Approved in previous 2018 Code Adoption process:   YES   NO
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 01/25/2025
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Transportation, Infrastructure and Planning Subcommittee Date:
Approved as submitted Modified and approved Denied No action taken
City Council Action  Date:



## Amendment to 2024 International Plumbing Code (IPC)

Section 1003.3.5
Submitted by: International Plumbing Code Committee
1003.3.5 Hydromechanical grease interceptors, fats, oils and greases disposal systems and automatic grease removal devices.  Hydromechanical grease interceptors shall be sized in accordance with Section 1003.3.5.1. Fats, oils, and greases disposal systems and automatic grease removal devices shall be sized in accordance with ASME A112.14.3, ASME A112.14.4, ASME A112.14.6, CSA B481.3 or PDI G101. Hydromechanical grease interceptors; fats, oils, and greases disposal systems and automatic grease removal devices shall be designed and tested in accordance with ASME A112.14.3, ASME A112.14.4, CSA B481.1, PDI G101 or PDI G102. Hydromechanical grease interceptors; fats, oils, and greases disposal systems and automatic grease removal devices shall be installed in accordance with the manufacturer's instructions. Where manufacturer's instructions are not provided, hydromechanical grease interceptors; fats, oils, and greases disposal systems and automatic grease removal devices shall be installed, in compliance with the Authority Having Jurisdiction. ASME A112.14.3, ASME A112.14.4, ASME A112.14.6, CSA B481.3 or PDI G101.
<b>Justification:</b> To clarify hydromechanical grease interceptor sizing for the public as required by the City of Phoenix's Water Department Pollution Control and create consistency in sizing with Uniform Plumbing Code.
Cost Impact: Yes there is a possible cost increase with the increased sizing criteria.  This requirement is an amendment carried forward from the 2018 International Plumbing Code.
Approved in previous 2018 Code Adoption process:
ACTION TAKEN:
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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 International Plumbing Code (IPC) Section: Table 1003.3.5.1

Submitted by: International Plumbing Code Committee

Amend existing table title, values and add an additional column for fixtures connected.

TABLE 1003.3.5.1
CAPACITY OF GREASE INTERCEPTORS

TOTAL FLOW-THROUGH	GREASE RETENTION
RATING (gpm)	CAPACITY (pounds)
4	8
6	<del>12</del>
7	14
9	<del>18</del>
<del>10</del>	<del>20</del>
<del>12</del>	<del>24</del>
14	<del>28</del>
<del>15</del>	<del>30</del>
<del>18</del>	<del>36</del>
<del>20</del>	40
<del>25</del>	<del>50</del>
<del>35</del>	<del>70</del>
<del>50</del>	<del>100</del>
<del>75</del>	<del>150</del>
<del>100</del>	<del>200</del>

# TABLE 1003.3.5.1 HYDROMECHANICAL GREASE INTERCEPTOR SIZING BASED ON FIXTURE COUNT <sup>ab</sup>

Maximum Number of Fixtures Connected	Total Flow-Through Rating (gpm)	Grease Retention Capacity Equal to or Greater Than (pounds)
<u>1</u>	20	40
<u>2</u>	25	50
<u>3</u>	35	70
4	50	100

For SI Units: 1 gallon per minute = 3.785 L/m, 1 pound = 0.454 kg.

a. For total flow-through ratings greater than 100 (gpm), double the flow-through rating to determine the grease retention capacity (pounds) 50 (gpm) shall be specially approved by the Authority Having Jurisdiction.

b. For installations with more than (4) fixtures, The Authority F the use of larger devices.	laving Jurisdiction may permit
Justification: The purpose of amending this table is to provide the public with prehydromechanical grease interceptors as required by the City of Phe Office of Environmental Programs.	
Cost Impact: Yes there will be a possible increase due to the incr This requirement is an amendment carried forward from the 2018 I	•
Approved in previous 2018 Code Adoption process:	YES NO
ACTION TAKEN:	
ACTION TAKEN: 2024 Code Committee	Date: 01/23/2025
2024 Code Committee	Date: 01/23/2025
2024 Code Committee  ☑ Approved as submitted ☐ Modified and approved ☐ Denied	Date: 01/23/2025 ☐ No action taken
2024 Code Committee  ☑ Approved as submitted ☐ Modified and approved ☐ Denied  Development Advisory Board (DAB) Subcommittee	Date: 01/23/2025  No action taken  Date: 02/06/2025
2024 Code Committee  ☑ Approved as submitted ☐ Modified and approved ☐ Denied  Development Advisory Board (DAB) Subcommittee  ☑ Approved as submitted ☐ Modified and approved ☐ Denied	Date: 01/23/2025 ☐ No action taken Date: 02/06/2025 ☐ No action taken
2024 Code Committee  ☐ Approved as submitted ☐ Modified and approved ☐ Denied  Development Advisory Board (DAB) Subcommittee ☐ Approved as submitted ☐ Modified and approved ☐ Denied  Development Advisory Board (DAB) ☐ Approved as submitted ☐ Modified and approved ☐ Denied  Transportation, Infrastructure and Planning Subcommittee	Date: 01/23/2025  No action taken  Date: 02/06/2025  No action taken  Date:
2024 Code Committee	Date: 01/23/2025  No action taken Date: 02/06/2025  No action taken Date:  No action taken
2024 Code Committee  ☐ Approved as submitted ☐ Modified and approved ☐ Denied  Development Advisory Board (DAB) Subcommittee ☐ Approved as submitted ☐ Modified and approved ☐ Denied  Development Advisory Board (DAB) ☐ Approved as submitted ☐ Modified and approved ☐ Denied  Transportation, Infrastructure and Planning Subcommittee	Date: 01/23/2025  No action taken Date: 02/06/2025  No action taken Date: No action taken Date:



Amendment to 2024 International Plumbing Code (IPC) Section, 1003.3.5.3
Submitted by: International Plumbing Code Committee
1003.3.5 Hydromechanical grease interceptors, fats, oils and greases disposal systems
and automatic grease removal devices.
1003.3.5.1 Grease interceptor capacity. Grease interceptors shall have the grease retention capacity indicated in Table 1003.3.5.1 for the flow-through rates indicated.
1003.3.5.2 Rate of flow controls.  Grease interceptors shall be equipped with devices to control the rate of water flow so that the water flow does not exceed the rated flow. The flow-control device shall be vented and terminate not less than 6 inches (152 mm) above the flood rim level or be installed in accordance with the manufacturer's instructions.
1003.3.5.3 Interceptor maintenance.  A two-way cleanout shall be installed on the discharge side of all 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.
Cost Impact: Minimal cost impact. To install additional piping for cleanouts. This requirement is an amendment carried forward from the 2018 Uniform and International Plumbing Code.
Approved in previous 2018 Code Adoption process:
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 01/20/2025
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
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 International Plumbing Code (IPC) Section 1003.3.7

Submitted by: International Plumbing Code Committee

# 1003.3.7 Gravity grease interceptors and gravity grease interceptors with fats, oils, and greases disposal systems.

The required capacity of gravity grease interceptors and gravity grease interceptors with fats, oils, and greases disposal systems shall be determined by multiplying the peak drain flow into the interceptor in gallons per minute by a retention time of 30 minutes total DFU's x 3gpm x 12-minute retention time with no food waste disposers or, total DFU's x 3-gpm x 17minute retention time with food waste disposers. Gravity grease interceptors shall be designed and tested in accordance with IAPMO/ANSI Z1001. Gravity grease interceptors with fats, oils, and greases disposal systems shall be designed and tested in accordance with ASME A112.14.6 and IAPMO/ANSI Z1001. Gravity grease interceptors and gravity grease interceptors with fats, oils, and greases disposal systems shall be installed in accordance with manufacturer's instructions and the Authority Having Jurisdiction. Gravity grease interceptors shall comply with the requirements of Chapter 10 or shall be designed by a registered professional engineer and approved by the Authority Having Jurisdiction. 500 gallon interceptors 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. The grade rings (risers) of gravity grease interceptors shall be grouted with shrink proof grout. Gravity grease interceptors shall be installed outside unless otherwise approved by the Authority Having Jurisdiction. Where manufacturer's instructions are not provided, gravity grease interceptors and gravity grease interceptors with fats, oils, and greases disposal systems shall be installed in compliance with the Authority Having Jurisdiction ASME A112.14.6 and IAPMO/ANSI Z1001.

Example: Take the total DFU's 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:** To clarify retention time, construction, and gravity grease interceptor sizing for the public and to align with UPC. Gravity interceptors are generally installed outside to prevent sewer gases and odors from entering the building.

**Cost Impact:** Yes, due to larger interceptor sizes based on sizing criteria. This requirement is an amendment carried forward from the 2018 Uniform Plumbing Code.

Approved in previous 2018 Code Adoption process:	YES   NO
ACTION TAKEN:	
2024 Code Committee	Date: 01/02/2025
Approved as submitted  Modified and approved  Denied	☐ No action taken
Development Advisory Board (DAB) Subcommittee	Date: 02/06/2025
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 International Plumbing Code (IPC) Section 1106.1
Submitted by: International Plumbing Code Committee
SECTION 1106 SIZE OF CONDUCTORS, LEADERS AND STORM DRAINS
1106.1 General.  The size of the vertical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on an hourly rainfall rate of three (3) inches per hour. the 100-year hourly rainfall rate indicated in Figures 1106.1(1) through 1106.1(5) or on other rainfall rates determined from approved local weather data.
<b>Justification:</b> The 2024 UPC and the 2024 IPC list rainfall rates for Phoenix as 2.2 and 2.5 inches per hour, respectively. It is recommended that a rainfall rate of three (3) inches per hour be used to remain consistent with previous amendments and for ease of using the sizing tables.
Cost Impact: Minimal cost impact. Due to drain and pipe size increase.
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: 02/06/2025
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 International Plumbing Code (IPC) Section 1109		
Submitted by: International Plumbing Code Committee		
SECTION 1109 - COMBINED SANITARY AND STORM PUBLIC SEWER Reserved		
1109.1 General. Where the public sewer is a combined system for both sanitary and storm water, the storm sewer shall be connected independently to the public sewer.		
<b>Justification:</b> 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. The base code section did not trigger any requirements by remaining, as the City does not have a combined system.		
Approved in previous 2018 Code Adoption process: ☐ YES ☐ NO		
ACTION TAKEN:		
<b>2024 Code Committee</b>		
Approved as submitted Modified and approved Denied No action taken		
Development Advisory Board (DAB) Subcommittee Date: 02/06/2025		
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 International Plumbing Code (IPC) Appendices
Submitted by: International Plumbing Code Committee
Adopt Appendices C & E.
<b>Justification:</b> Appendix "C" contains structural safety provisions that match those found in the IBC and the UPC. Appendix "E" provides two methods of water pipe sizing not provided in the body of the code.
Cost Impact: Minimal cost impact. Reduces cost by increasing water pipe sizing options.
Approved in previous 2018 Code Adoption process:
ACTION TAKEN:
<b>2024 Code Committee</b> Date: 01/06/2025
Approved as submitted Modified and approved Denied No action taken
Development Advisory Board (DAB) Subcommittee Date: 02/06/2025
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
<u>Transportation, Infrastructure and Planning Subcommittee</u> <u>Date:</u>
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 International Fuel Gas Code (IFGC) Section 101.1

Submitted by: International Fuel Gas Code Committee

**Chapter 1 Scope and Administration** 

### Notes:

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

#### 101.1 Title

These regulations shall be known as the <u>International Fuel Gas Code as amended by the City of Phoenix</u> <u>Building Code of [NAME OF JURISDICTION]</u>, hereinafter referred to as "this code." <u>These regulations are one document of the overall Phoenix Building Construction Code as defined by the adopting ordinance.</u>

- **101.2 Scope.** see this section of the 2024 IFGC
- **101.2.1 Appendices. -** see this section of the 2024 IFGC
- 101.2.2 Gaseous hydrogen systems. see this section of the 2024 IFGC
- **101.2.3 Piping systems. -** see this section of the 2024 IFGC
- 101.2.4 Gas appliances. see this section of the 2024 IFGC
- **101.2.5 Systems**, *appliances* and *equipment* outside the scope. see this section of the 2024 IFGC
- **101.2.6 Other fuels. -** see this section of the 2024 IFGC
- 101.3 Purpose. see this section of the 2024 IFGC
- **101.4 Severability. -** Reserved.
- **102.1 General. -** Reserved.
- **102.2 Existing installations. -** see this section of the 2024 IFGC
- **102.2.1 Existing buildings. -** see this section of the 2024 IFGC
- **102.3 Maintenance. -** see this section of the 2024 IFGC
- 102.4 Additions, alterations or repairs. see this section of the 2024 IFGC

102.5 Change in occupancy. - see this section of the 2024 IFGC

102.6 Historic buildings. - see this section of the 2024 IFGC

102.7 Moved buildings. - see this section of the 2024 IFGC

102.8 Referenced codes and standards. - Reserved

**Exception:** Where enforcement of a code provision would violate the conditions of the listing of the *equipment* or *appliance*, the conditions of the listing and the manufacturer's installation instructions shall apply.

102.8.1 Conflicts. - Reserved.

102.8.2 Provisions in referenced codes and standards. - Reserved.

102.9 Requirements not covered by code. - see this section of the 2024 IFGC

102.10 Other laws. - Reserved.

102.11 Application of references. - see this section of the 2024 IFGC

Section 103 (IFGC) Code compliance agency <u>- Reserved.</u>

Section 104 (IFGC) Duties and powers of the code official - Reserved.

Section 105 (IFGC) Permits - Reserved.

Section 106 (IFGC) Construction documents - Reserved.

Section 107 (IFGC) Notice of approval - Reserved.

Section 108 (IFGC) Fees - Reserved.

Section 109 (IFGC) Service utilities - Reserved.

Section 110 (IFGC) Temporary uses, equipment and systems - Reserved.

Section 111 (IFGC) Inspections and testing - Reserved.

Section 112 (IFGC) Means of Appeals - Reserved.

Section 113 (IFGC) Violations - Reserved.

Section 114 (IFGC) Stop Work Order - 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 International Fuel Gas Code as Amended by the City of Phoenix. This document is intended to apply where a code or referenced standard identifies the International Fuel Gas 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:	YES 🛛 NO	
ACTION TAKEN:		
2024 Code Committee	Date: 01/15/2025	
	☐ No action taken	
Development Advisory Board (DAB) Subcommittee	Date: 02/06/2025	
	☐ 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 International Fuel Gas Code (IFGC) Section 403.11

Submitted by: International Fuel Gas Code Committee

### 403.11 Flanges.

Flanges and flange gaskets shall comply with Sections 403.11.1 through 403.11.7.

#### 403.11.1 Cast iron.

Cast-iron flanges shall be in accordance with ASME B16.1

#### 403.11.2 Steel.

Steel flanges shall be in accordance with ASME B16.5 or ASME B16.47.

#### **403.11.3 Nonferrous.**

Nonferrous flanges shall be in accordance with ASME B16.24 except *listed* components using aluminum flange connections constructed in accordance with dimensional specifications of ANSI/ASME B16.5.

#### 403.11.4 Ductile iron.

Ductile-iron flanges shall be in accordance with ASME B16.42.

### 403.11.5 Raised face.

Raised face flanges shall not be joined to flat faced cast-iron, ductile-iron or nonferrous material flanges.

### 403.11.6 Flange facings.

Standard facings shall be permitted for use under this code. Where 150-pound (1034 kPa) pressure-rated steel flanges are bolted to Class 125 cast-iron flanges, the raised face on the steel flange shall be removed.

## 403.11.7 Lapped flanges.

Lapped flanges shall be used only above ground or in exposed locations accessible for inspection.

**Justification:** Modifying the flange will void the ASME rating and the manufacturer's listing.

Cost Impact: No cost impact.

Approved in previous 2018 Code Adoption process:	ES NO	
This amendment was approved in previous code adoptions. It has subsequently been evaluated by the committee for applicability to the 2024 IFGC and carried forward as presented.		
ACTION TAKEN:		
2024 Code Committee	Date: 12/05/2024	
	☐ No action taken	
Development Advisory Board (DAB) Subcommittee	Date: 02/06/2025	
	☐ 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	