



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Sections 102, 103, 104, 105, 106, & 107**

**Submitted by:** 2018 Uniform Plumbing Code Committee

**CHAPTER 1 – ADMINISTRATION**

**102.0 Applicability. – Reserved.**

~~**102.1 Conflicts Between Codes.** Where the requirements within the jurisdiction of this plumbing code conflict with the requirements of the mechanical code, this code shall prevail. In instances where this code, applicable standards, or the manufacturer’s installation instructions conflict, the more stringent provisions shall prevail. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall prevail.~~

~~**102.2 Existing Installations.** Plumbing systems lawfully in existence at the time of the adoption of this code shall be permitted to have their use, maintenance, or repair continued where the use, maintenance, or repair is in accordance with the original design and location and no hazard to life, health, or property has been created by such plumbing system.~~

~~**102.3 Maintenance.** The plumbing and drainage system, both existing and new, of a premise under the Authority Having Jurisdiction shall be maintained in a sanitary and safe operating condition. Devices or safeguards required by this code shall be maintained in accordance with the code edition under which installed.~~

~~The owner or the owner’s designated agent shall be responsible for maintenance of plumbing systems. To determine compliance with this subsection, the Authority Having Jurisdiction shall be permitted to cause a plumbing system to be reinspected.~~

~~**102.4 Additions, Alterations, Renovations, or Repairs.** Additions, alterations, renovations or repairs shall conform to that required for a new system without requiring the existing plumbing system to be in accordance with the requirements of this code. Additions, alterations, renovations, or repairs shall not cause an existing system to become unsafe, insanitary, or overloaded.~~

~~Additions, alterations, renovations, or repairs to existing plumbing installations shall comply with the provisions for new construction unless such deviations are found to be necessary and are first approved by the Authority Having Jurisdiction.~~

~~**102.4.1 Building Sewers and Drains.** Existing building sewers and building drains shall be permitted to be used in connection with new buildings or new plumbing and drainage work where they are found on examination and test to be in accordance with the requirements governing new work, and the proper Authority Having Jurisdiction shall notify the owner to make changes necessary to be in accordance with this code. No building, or part thereof, shall be erected or placed over a part of a drainage system that is constructed of materials other than those approved elsewhere in this code for use under or within a building.~~

~~**102.4.2 Openings.** Openings into a drainage or vent system, excepting those openings to which plumbing fixtures are properly connected or which constitute vent terminals, shall be permanently plugged or capped in an approved manner, using the appropriate materials in accordance with this code.~~

~~**102.5 Health and Safety.** Where compliance with the provisions of this code fails to eliminate or alleviate a nuisance, or other dangerous or insanitary condition that involves health or safety hazards, the owner or the owner's agent shall install such additional plumbing and drainage facilities or shall make such repairs or alterations as ordered by the Authority Having Jurisdiction.~~

~~**102.6 Changes in Building Occupancy.** Plumbing systems that are a part of a building or structure undergoing a change in use or occupancy, as defined in the building code, shall be in accordance with the requirements of this code that are applicable to the new use or occupancy.~~

~~**102.7 Moved Structures.** Parts of the plumbing system of a building or part thereof that is moved from one foundation to another, or from one location to another, shall be in accordance with the provisions of this code for new installations and completely tested as prescribed elsewhere in this section for new work, except that walls or floors need not be removed during such test where other equivalent means of inspection acceptable to the Authority Having Jurisdiction are provided.~~

~~**102.8 Appendices.** The provisions in the appendices are intended to supplement the requirements of this code and shall not be considered part of this code unless formally adopted as such.~~

## **103.0 DUTIES AND POWERS OF THE AUTHORITY HAVING JURISDICTION. – Reserved.**

~~**103.1 General.** The Authority Having Jurisdiction shall be the Authority duly appointed to enforce this code. For such purposes, the Authority Having Jurisdiction shall have the powers of a law enforcement officer. The Authority Having Jurisdiction shall have the power to render interpretations of this code and to adopt and enforce rules and regulations supplemental to this code as deemed necessary in order to clarify the application of the provisions of this code. Such interpretations, rules, and regulations shall comply with the intent and purpose of this code.~~

~~In accordance with the prescribed procedures and with the approval of the appointing authority, the Authority Having Jurisdiction shall be permitted to appoint such number of technical officers, inspectors, and other employees as shall be authorized from time to time. The Authority Having Jurisdiction shall be permitted to deputize such inspectors or employees as necessary to carry out the functions of the code enforcement agency.~~

~~The Authority Having Jurisdiction shall be permitted to request the assistance and cooperation of other officials of this jurisdiction so far as required in the discharge of the duties in accordance with this code or other pertinent law or ordinance.~~

~~**103.2 Liability.** The Authority Having Jurisdiction charged with the enforcement of this code, acting in good faith and without malice in the discharge of the Authority Having Jurisdiction's duties, shall not thereby be rendered personally liable for damage that accrues to persons or property as a result of an act or by reason of an act or omission in the discharge of duties. A suit brought against the Authority Having Jurisdiction or employee because of such act or omission performed in the enforcement of provisions of this code shall be defended by legal counsel provided by this jurisdiction until final termination of such proceedings.~~

**103.3 Applications and Permits.** ~~The Authority Having Jurisdiction shall be permitted to require the submission of plans, specifications, drawings, and such other information in accordance with the Authority Having Jurisdiction, prior to the commencement of, and at a time during the progress of, work regulated by this code.~~

~~The issuance of a permit upon construction documents shall not prevent the Authority Having Jurisdiction from thereafter requiring the correction of errors in said construction documents or from preventing construction operations being carried on thereunder where in violation of this code or of other pertinent ordinance or from revoking a certificate of approval where issued in error.~~

**103.3.1 Licensing.** ~~Provision for licensing shall be determined by the Authority Having Jurisdiction.~~

**103.4 Right of Entry.** ~~Where it is necessary to make an inspection to enforce the provisions of this code, or where the Authority Having Jurisdiction has reasonable cause to believe that there exists in a building or upon a premises a condition or violation of this code that makes the building or premises unsafe, insanitary, dangerous, or hazardous, the Authority Having Jurisdiction shall be permitted to enter the building or premises at reasonable times to inspect or to perform the duties imposed upon the Authority Having Jurisdiction by this code, provided that where such building or premises is occupied, the Authority Having Jurisdiction shall present credentials to the occupant and request entry. Where such building or premises is unoccupied, the Authority Having Jurisdiction shall first make a reasonable effort to locate the owner or other person having charge or control of the building or premises and request entry. Where entry is refused, the Authority Having Jurisdiction has recourse to every remedy provided by law to secure entry.~~

~~Where the Authority Having Jurisdiction shall have first obtained an inspection warrant or other remedy provided by law to secure entry, no owner, occupant, or person having charge, care or control of a building or premises shall fail or neglect, after a request is made as herein provided, to promptly permit entry herein by the Authority Having Jurisdiction for the purpose of inspection and examination pursuant to this code.~~

#### **104.0 PERMITS. – Reserved.**

**104.1 Permits Required.** ~~It shall be unlawful for a person, firm, or corporation to make an installation, alteration, repair, replacement, or remodel a plumbing system regulated by this code except as permitted in Section 104.2, or to cause the same to be done without first obtaining a separate plumbing permit for each separate building or structure.~~

**104.2 Exempt Work.** ~~A permit shall not be required for the following:~~

- ~~(1) The stopping of leaks in drains, soil, waste, or vent pipe, provided, however, that a trap, drainpipe, soil, waste, or vent pipe become defective, and it becomes necessary to remove and replace the same with new material, the same shall be considered as new work and a permit shall be procured and inspection made as provided in this code.~~
- ~~(2) The clearing of stoppages, including the removal and reinstallation of water closets, or the repairing of leaks in pipes, valves, or fixtures, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes, or fixtures.~~

~~Exemption from the permit requirements of this code shall not be deemed to grant authorization for work to be done in violation of the provisions of the code or other laws or ordinances of this jurisdiction.~~

**104.3 Application for Permit.** To obtain a permit, the applicant shall first file an application therefore in writing on a form furnished by the Authority Having Jurisdiction for that purpose. Such application shall:

- (1) Identify and describe the work to be covered by the permit for which application is made.
- (2) Describe the land upon which the proposed work is to be done by legal description, street address, or similar description that will readily identify and definitely locate the proposed building or work.
- (3) Indicate the use or occupancy for which the proposed work is intended.
- (4) Be accompanied by construction documents in accordance with Section 104.3.1.
- (5) Be signed by the permittee or the permittee's authorized agent. The Authority Having Jurisdiction shall be permitted to require evidence to indicate such authority.
- (6) Give such other data and information in accordance with the Authority Having Jurisdiction.

**104.3.1 Construction Documents.** Construction documents, engineering calculations, diagrams, and other data shall be submitted in two or more sets with each application for a permit. The construction documents, computations, and specifications shall be prepared by, and the plumbing designed by, a registered design professional. Construction documents shall be drawn to scale with clarity to identify that the intended work to be performed is in accordance with the code.

**Exception:** The Authority Having Jurisdiction shall be permitted to waive the submission of construction documents, calculations, or other data where the Authority Having Jurisdiction finds that the nature of the work applied for is such that reviewing of construction documents is not necessary to obtain compliance with the code.

**104.3.2 Plan Review Fees.** Where a plan or other data is required to be submitted in accordance with Section 104.3.1, a plan review fee shall be paid at the time of submitting construction documents for review.

The plan review fees for plumbing work shall be determined and adopted by this jurisdiction.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 104.5.

Where plans are incomplete or changed so as to require additional review, a fee shall be charged at the rate shown in Table 104.5.

**104.3.3 Time Limitation of Application.** Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, plans and other data submitted for review thereafter, shall be returned to the applicant or destroyed by the Authority Having Jurisdiction. The Authority Having Jurisdiction shall be permitted to exceed the time for action by the applicant for a period not to exceed 180 days upon request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

**104.4 Permit Issuance.** The application, construction documents, and other data filed by an applicant for a permit shall be reviewed by the Authority Having Jurisdiction. Such plans shall be permitted to be reviewed by other departments of this jurisdiction to verify compliance with applicable laws under their jurisdiction. Where the Authority Having Jurisdiction finds that the work described in an application for permit and the plans, specifications, and other data filed therewith are in accordance with the requirements of the code and other pertinent laws and ordinances and that the fees specified in Section 104.5 have been paid, the Authority Having Jurisdiction shall issue a permit therefore to the applicant.

**104.4.1 Approved Plans or Construction Documents.** Where the Authority Having Jurisdiction issues the permit where plans are required, the Authority Having Jurisdiction shall endorse in writing or stamp the construction documents "APPROVED." Such approved construction documents shall not be changed, modified, or altered without authorization from the Authority Having Jurisdiction, and the work shall be done in accordance with approved plans.

The Authority Having Jurisdiction shall be permitted to issue a permit for the construction of a part of a plumbing system before the entire construction documents for the whole system have been submitted or approved, provided adequate information and detailed statements have been filed in accordance with the pertinent requirements of this code. The holder of such permit shall be permitted to proceed at the holder's risk without assurance that the permit for the entire building, structure, or plumbing system will be granted.

**104.4.2 Validity of Permit.** The issuance of a permit or approval of construction documents shall not be construed to be a permit for, or an approval of, a violation of the provisions of this code or other ordinance of the jurisdiction. No permit presuming to give authority to violate or cancel the provisions of this code shall be valid.

The issuance of a permit based upon plans, specifications, or other data shall not prevent the Authority Having Jurisdiction from thereafter requiring the correction of errors in said plans, specifications, and other data or from preventing building operations being carried on thereunder where in violation of this code or of other ordinances of this jurisdiction.

**104.4.3 Expiration.** A permit issued by the Authority Having Jurisdiction under the provisions of this code shall expire by limitation and become null and void where the work authorized by such permit is not commenced within 180 days from the date of such permit, or where the work authorized by such permit is suspended or abandoned at a time after the work is commenced for a period of 180 days. Before such work is recommenced, a new permit shall first be obtained to do so, and the fee, therefore, shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and provided further that such suspensions or abandonment has not exceeded 1 year.

**104.4.4 Extensions.** A permittee holding an unexpired permit shall be permitted to apply for an extension of the time within which work shall be permitted to commence under that permit where the permittee is unable to commence work within the time required by this section. The Authority Having Jurisdiction shall be permitted to extend the time for action by the permittee for a period not exceeding 180 days upon written request by the permittee showing that circumstances beyond the control of the permittee have prevented action from being taken. No permit shall be extended more than once. In order to renew action on a permit after expiration, the permittee shall pay a new full permit fee.

~~**104.4.5 Suspension or Revocation.** The Authority Having Jurisdiction shall be permitted to, in writing, suspend or revoke a permit issued under the provisions of this code where the permit is issued in error or on the basis of incorrect information supplied or in violation of other ordinance or regulation of the jurisdiction.~~

~~**104.4.6 Retention of Plans.** One set of approved construction documents and computations shall be retained by the Authority Having Jurisdiction until final approval of the work covered therein.~~

~~One set of approved construction documents, computations, and manufacturer's installation instructions shall be returned to the applicant, and said set shall be kept on the site of the building or work at times during which the work authorized thereby is in progress.~~

~~**104.5 Fees.** Fees shall be assessed in accordance with the provisions of this section and as set forth in the fee schedule, Table 104.5. The fees are to be determined and adopted by this jurisdiction.~~

~~**104.5.1 Work Commencing Before Permit Issuance.** Where work for which a permit is required by this code has been commenced without first obtaining said permit, a special investigation shall be made before a permit is issued for such work.~~

~~**104.5.2 Investigation Fees.** An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee that is required by this code if a permit were to be issued. The payment of such investigation fee shall not exempt a person from compliance with other provisions of this code, nor from a penalty prescribed by law.~~

~~**104.5.3 Fee Refunds.** The Authority Having Jurisdiction shall be permitted to authorize the refunding of a fee as follows:~~

~~(1) The amount paid hereunder that was erroneously paid or collected.~~

~~(2) Refunding of not more than a percentage, as determined by this jurisdiction where no work has been done under a permit issued in accordance with this code.~~

~~The Authority Having Jurisdiction shall not authorize the refunding of a fee paid except upon written application filed by the original permittee not to exceed 180 days after the date of fee payment.~~

## **105.0 INSPECTIONS AND TESTING. – Reserved.**

~~**105.1 General.** Plumbing systems for which a permit is required by this code shall be inspected by the Authority Having Jurisdiction.~~

~~No plumbing system or portion thereof shall be covered, concealed, or put into use until inspected and approved as prescribed in this code. Neither the Authority Having Jurisdiction nor the jurisdiction shall be liable for expense entailed in the removal or replacement of material required to permit inspection. Plumbing systems regulated by this code shall not be connected to the water, the energy fuel supply, or the sewer system until authorized by the Authority Having Jurisdiction.~~

~~**105.2 Required Inspections.** New plumbing work and such portions of existing systems as affected by new work, or changes, shall be inspected by the Authority Having Jurisdiction to ensure compliance with the requirements of this code and to ensure that the installation and~~

construction of the plumbing system are in accordance with approved plans. The Authority Having Jurisdiction shall make the following inspections and other such inspections as necessary. The permittee or the permittee's authorized agent shall be responsible for the scheduling of such inspections as follows:

- (1) The underground inspection shall be made after trenches or ditches are excavated and bedded, piping installed, and before backfill is put in place.
- (2) Rough-in inspection shall be made prior to the installation of wall or ceiling membranes.
- (3) Final inspection shall be made upon completion of the installation.

**105.2.1 Uncovering.** Where a drainage or plumbing system, building sewer, private sewage disposal system, or part thereof, which is installed, altered, or repaired, is covered or concealed before being inspected, tested, and approved as prescribed in this code, it shall be uncovered for inspection after notice to uncover the work has been issued to the responsible person by the Authority Having Jurisdiction.

The requirements of this section shall not be considered to prohibit the operation of plumbing installed to replace existing equipment or fixtures serving an occupied portion of the building in the event a request for inspection of such equipment or fixture has been filed with the Authority Having Jurisdiction not more than 72 hours after such replacement work is completed, and before a portion of such plumbing system is concealed by a permanent portion of the building.

**105.2.1.1 Water Supply System.** No water supply system or portion thereof shall be covered or concealed until it first has been tested, inspected, and approved.

**105.2.1.2 Covering or Using.** No plumbing or drainage system, building sewer, private sewer disposal system, or part thereof, shall be covered, concealed, or put into use until it has been tested, inspected, and accepted as prescribed in this code.

**105.2.2 Other Inspections.** In addition to the inspections required by this code, the Authority Having Jurisdiction shall be permitted to require other inspections to ascertain compliance with the provisions of this code and other laws that are enforced by the Authority Having Jurisdiction.

**105.2.3 Inspection Requests.** It shall be the duty of the person doing the work authorized by a permit to notify the Authority Having Jurisdiction that such work is ready for inspection. The Authority Having Jurisdiction shall be permitted to require that a request for inspection be filed not less than 1 working day before such inspection is desired. Such request shall be permitted to be made in writing or by telephone, at the option of the Authority Having Jurisdiction. It shall be the duty of the person requesting inspections in accordance with this code to provide access to and means for inspection of such work.

**105.2.4 Advance Notice.** It shall be the duty of the person doing the work authorized by the permit to notify the Authority Having Jurisdiction, orally or in writing that said work is ready for inspection. Such notification shall be given not less than 24 hours before the work is to be inspected.

**105.2.5 Responsibility.** It shall be the duty of the holder of a permit to make sure that the work will stand the test prescribed before giving the notification.

The equipment, material, and labor necessary for inspection or tests shall be furnished by the person to whom the permit is issued or by whom inspection is requested.

**105.2.6 Reinspections.** A reinspection fee shall be permitted to be assessed for each inspection or reinspection where such portion of work for which inspection is called is not complete or where required corrections have not been made.

This provision shall not be interpreted as requiring reinspection fees the first time a job is rejected for failure to be in accordance with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for inspection or reinspection.

Reinspection fees shall be permitted to be assessed where the approved plans are not readily available to the inspector, for failure to provide access on the date for which the inspection is requested, or for deviating from plans requiring the approval of the Authority Having Jurisdiction.

To obtain reinspection, the applicant shall file an application therefore in writing upon a form furnished for that purpose and pay the reinspection fee in accordance with Table 104.5.

In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

**105.3 Testing of Systems.** Plumbing systems shall be tested and approved in accordance with this code or the Authority Having Jurisdiction. Tests shall be conducted in the presence of the Authority Having Jurisdiction or the Authority Having Jurisdiction's duly appointed representative.

No test or inspection shall be required where a plumbing system, or part thereof, is set up for exhibition purposes and has no connection with a water or drainage system. In cases where it would be impractical to provide the required water or air tests, or for minor installations and repairs, the Authority Having Jurisdiction shall be permitted to make such inspection as deemed advisable in order to be assured that the work has been performed in accordance with the intent of this code. Joints and connections in the plumbing system shall be gastight and watertight for the pressures required by the test.

**105.3.1 Defective Systems.** An air test shall be used in testing the sanitary condition of the drainage or plumbing system of building premises where there is reason to believe that it has become defective. In buildings or premises condemned by the Authority Having Jurisdiction because of an insanitary condition of the plumbing system, or part thereof, the alterations in such system shall be in accordance with the requirements of this code.

**105.3.2 Retesting.** Where the Authority Having Jurisdiction finds that the work will not pass the test, necessary corrections shall be made, and the work shall be resubmitted for test or inspection.

**105.3.3 Approval.** Where prescribed tests and inspections indicate that the work is in accordance with this code, a certificate of approval shall be issued by the Authority Having Jurisdiction to the permittee on demand.

**105.4 Connection to Service Utilities.** No person shall make connections from a source of energy or fuel to a plumbing system or equipment regulated by this code and for which a permit is required until approved by the Authority Having Jurisdiction. No person shall make connection from a water supply line nor shall connect to a sewer system regulated by this code and for which a permit is required until approved by the Authority Having Jurisdiction. The Authority



Having Jurisdiction shall be permitted to authorize temporary connection of the plumbing equipment to the source of energy or fuel for the purpose of testing the equipment.

#### **106.0 VIOLATIONS AND PENALTIES. – Reserved.**

**106.1 General.** ~~It shall be unlawful for a person, firm, or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert, demolish, equip, use, or maintain plumbing or permit the same to be done in violation of this code.~~

**106.2 Notices of Correction or Violation.** ~~Notices of correction or violation shall be written by the Authority Having Jurisdiction and shall be permitted to be posted at the site of the work or mailed or delivered to the permittee or their authorized representative.~~

~~Refusal, failure, or neglect to comply with such notice or order within 10 days of receipt thereof, shall be considered a violation of this code and shall be subject to the penalties set forth by the governing laws of the jurisdiction.~~

**106.3 Penalties.** ~~A person, firm, or corporation violating a provision of this code shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punishable by a fine, imprisonment, or both set forth by the governing laws of the jurisdiction. Each separate day or portion thereof, during which a violation of this code occurs or continues, shall be deemed to constitute a separate offense.~~

**106.4 Stop Orders.** ~~Where work is being done contrary to the provisions of this code, the Authority Having Jurisdiction shall be permitted to order the work stopped by notice in writing served on persons engaged in the doing or causing such work to be done, and such persons shall forthwith stop work until authorized by the Authority Having Jurisdiction to proceed with the work.~~

**106.5 Authority to Disconnect Utilities in Emergencies.** ~~The Authority Having Jurisdiction shall have the authority to disconnect a plumbing system to a building, structure, or equipment regulated by this code in case of emergency where necessary to eliminate an immediate hazard to life or property.~~

**106.6 Authority to Condemn.** ~~Where the Authority Having Jurisdiction ascertains that a plumbing system or portion thereof, regulated by this code, has become hazardous to life, health, or property, or has become insanitary, the Authority Having Jurisdiction shall order in writing that such plumbing either be removed or placed in a safe or sanitary condition. The order shall fix a reasonable time limit for compliance. No person shall use or maintain defective plumbing after receiving such notice. Where such plumbing system is to be disconnected, written notice shall be given. In cases of immediate danger to life or property, such disconnection shall be permitted to be made immediately without such notice.~~

#### **107.0 BOARD OF APPEALS. – Reserved.**

**107.1 General.** ~~In order to hear and decide appeals of orders, decisions, or determinations made by the Authority Having Jurisdiction relative to the application and interpretations of this code, there shall be and is hereby created a Board of Appeals consisting of members who are qualified by experience and training to pass upon matters pertaining to plumbing design, construction, and maintenance and the public health aspects of plumbing systems and who are not employees of the jurisdiction. The Authority Having Jurisdiction shall be an ex-officio member and shall act as secretary to said board but shall have no vote upon a matter before the board. The Board of Appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render~~

decisions and findings in writing to the appellant with a duplicate copy to the Authority Having Jurisdiction.

**107.2 Limitations of Authority.** The Board of Appeals shall have no authority relative to interpretation of the administrative provisions of this code, nor shall the board be empowered to waive requirements of this code.

**TABLE 104.5  
PLUMBING PERMIT FEES**

**Permit Issuance**

1. For issuing each permit .....	*
2. For issuing each supplemental permit.....	*

**Unit Fee Schedule (in addition to Item 1 and Item 2 above)**

1. For each plumbing fixture on one trap or a set of fixtures on one trap (including water, drainage piping, and backflow protection therefore) .....	*
2. For each building sewer and each trailer park sewer.....	*
3. Rainwater systems — per drain (inside building) .....	*
4. For each cesspool (where permitted) .....	*
5. For each private sewage disposal system .....	*
6. For each water heater, vent, or both .....	*
7. For each gas piping system of one to five outlets .....	*
8. For each additional gas piping system outlet, per .....	*
9. For each industrial waste pretreatment interceptor, including its trap and vent, except kitchen-type grease interceptors functioning as fixture traps .....	*
10. For each installation, alteration, or repair of water piping, water treating equipment, or both .....	*
11. For each repair or alteration of drainage or vent piping, each fixture.....	*
12. For each lawn sprinkler system on one meter including backflow protection devices therefore .....	*
13. For atmospheric-type vacuum breakers not referenced in Item 12:	
One to 5.....	*
Over 5, each.....	*
14. For each backflow protective device other than atmospheric-type vacuum breakers:	
Two inches (50 mm) in diameter and smaller .....	*
Over 2 inches (50 mm) in diameter .....	*
15. For each gray water system .....	*
16. For initial installation and testing of a reclaimed water system .....	*
17. For each annual cross-connection testing of a reclaimed water system (excluding initial test) .....	*
18. For each medical gas piping system serving one to five inlet(s)/outlet(s) for a specific gas .....	*
19. For each additional medical gas inlet(s)/outlet(s) .....	*

**Other Inspections and Fees**

1. Inspections outside of normal business hours .....	*
2. Reinspection fee .....	*
3. Inspections for which no fee is specifically indicated .....	*
4. Additional plan review required by changes, additions, or revisions to approved plans (minimum charge — 1/2 hour) .....	*

For SI units: 1 inch = 25 mm

\* Jurisdiction will indicate their fees here

**Reasons:**

The deleted provisions are contained in the Phoenix Building Construction Code, 2018 IBC-Administrative Provisions. These provisions may conflict with the adopted administrative code and retaining them is redundant.

**Cost Impact:** No cost impact.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 209.0**

**Submitted by:** 2018 Uniform Plumbing Code Committee

**CHAPTER 2 DEFINITIONS**

**209.0 Gravity Grease Interceptor.** 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.

**Reasons:**

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 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.

**Cost Impact:** Minimal cost impact.

The cost impact to install a 500-gallon interceptor versus a 300-gallon interceptor is minimal for a facility. This requirement is an amendment carried forward from the 2012 Uniform Plumbing Code.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 209.0 (GRD)**

**Submitted by:** 2018 Uniform Plumbing Code Committee

**CHAPTER 2 DEFINITIONS**

**209.0 Grease Removal Device (GRD).** 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.

**Reasons:**

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:** No cost impact.

This requirement is an amendment carried forward from the 2012 Uniform Plumbing Code.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 225.0**

**Submitted by:** 2018 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.

**Reasons:**

There is often confusion regarding what is or is not a water cooler. Some people think that a water cooler is a drinking fountain since typically they also cool the water that is being dispensed. Others think that a water cooler is a bottled water dispenser that is capable of cooling the water dispensed. 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. Whether or not the water is cooled is irrelevant. 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. It is necessary to be clear as to what the code requires to be provided and also what the code intends to allow as an alternative. This proposal also paves the way for new technology that is being marketed and installed today, namely water dispensers that are built into a wall, connected to the potable water supply system and dispense water into cups, glasses and bottles. These units typically treat the potable water with additional filtering and/or reverse osmosis treatment

**Cost Impact:** No cost impact.

This requirement is an amendment carried forward from the 2012 Uniform Plumbing Code.

Approved in previous 2012 Code Adoption process:

YES

NO



**BUILDING CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 415.2, 415.4**

**Submitted by:** 2018 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 50 or less.

**415.4 Location.** *Drinking fountains, water coolers and water dispensers shall not be installed in toilet rooms.*

**Reasons:**

These terms were added to the above sections to align with 2018 IBC chapter 29. These terms are defined in 2018 UPC amended Section 225.0

**Cost Impact:**

Cost savings by replacing drinking fountain installations with water dispensers.

**Approved in previous 2012 Code Adoption process:**

**YES**

**NO**





**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section: Table 422.1**

**Submitted by:** 2018 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 2018 IBC Table 2902.1 & footnotes.  
Amend footnote “e” and add new footnotes, “h” & “g” in this replacement table.  
Delete all service sink requirements and all references to the IPC from this replacement table.

~~e. For business and mercantile occupancies with an occupant load of 15 or fewer, service sinks shall not be required.~~

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.

g. Drinking fountains are not required for an occupant load of 45 50 or fewer.

**Reasons:**

These revisions are made to provide consistency between the UPC and the IBC and the minimum plumbing fixture table that is found in the 2018 International Building Code.

**Cost Impact:** No cost impact.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**  
**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)**  
**Section 603.4.3**

**Submitted by:** 2018 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.

**Reasons:**

- 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.
- Coordinates with Phoenix Fire Code requirements for access to fire protection equipment.

**Cost Impact:** No cost impact.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 603.4.9**

**Submitted by:** 2018 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.

**Reasons:**

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.

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&Y (outside stem & yoke) shut-off valves are open by presence of a rising stem.

**Cost Impact:** No cost impact.

**Approved in previous 2012 Code Adoption process:**

**YES**

**NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 603.4.10**

**Submitted by:** 2018 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 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.

**Reasons:**

ADEQ, Maricopa County and City of Phoenix Water Services Department all require secondary protection for the services cited.

**Approved in previous 2012 Code Adoption process:**

**YES**

**NO**

**Cost Impact:** No cost impact.



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 612.0**

**Submitted by:** 2018 Uniform Plumbing Code Committee

**Sections:** 612.0 Residential Fire Sprinkler System.

Delete Section 612.0 in its entirety.

**Reasons:**

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 2012 Code Adoption process:**       YES       NO



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 718.1**

**Submitted by:** 2018 Uniform Plumbing Code Committee

**718.1 Slope.** Building sewers shall be run in practical alignment and at a uniform slope of not less than 1/4 inch per foot (20.8 mm/m) toward the point of disposal.

**Exception:**

- (1) Where approved by the Authority Having Jurisdiction and where it is impractical, due to the depth of the street sewer or to the structural features or to the arrangement of a building or structure, to obtain a slope of 1/4 inch per foot (20.8 mm/m), such pipe or 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).
- (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. Certification of the building sewer shall meet the special inspection requirements of the Phoenix Building Construction Code.

**Reasons:**

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 2012 Code Adoption process:**

**YES**

**NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 1014.1**

**Submitted by:** 2018 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) complies with ASME A112.14.3, ASME A112.14.4, CSA B481, 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 located in areas of establishments where food is prepared, 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.

**Reasons:**

Combination pretreatment systems are generally not allowed by the Environmental Services Division but will be considered on a case by case basis.

**Cost Impact:** No cost impact.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**  
**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)**  
**Section 1014.1.3**

**Submitted by:** 2018 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.~~

**Exception:** ~~Food waste disposers shall be permitted to discharge to grease interceptors that are designed to receive the discharge of food waste.~~

**Reasons:**

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.

**Cost Impact:** No cost impact.

This requirement is an amendment carried forward from the 2012 Uniform Plumbing Code.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**





**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 1014.2.1**

**Submitted by:** 2018 Uniform Plumbing Code Committee

**1014.2 Hydromechanical Grease Interceptors.**

**1014.2.1 Capacity.** The total capacity in gallons (gal) (L) of fixtures discharging into a hydromechanical grease interceptor shall not exceed two and one-half times the certified gallon per minute (gpm) (L/s) flow rate of the interceptor in accordance with Table 1014.2.1 and 1014.2.1A. No hydromechanical interceptor shall be installed which has an approved rate of flow greater than fifty-five (55) gallons per minute or (3.5 L/s), nor less than twenty (20) gallons per minute (1.3 L/s) except where approved by the Authority Having Jurisdiction.

For the purpose of this section, the term “fixture” shall mean and include each plumbing fixture, appliance, apparatus, or other equipment required to be connected to or discharged into a grease interceptor by a provision of this section.

**Reasons:**

The purpose of this code change is to provide the public with prescriptive sizing guidelines for hydromechanical grease interceptors.

**Cost Impact:** No cost impact.

This requirement is an amendment carried forward from the 2012 Uniform Plumbing Code.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section: Table 1014.2.1A**

**Submitted by:** 2018 Uniform Plumbing Code Committee

**1014.2 Hydromechanical Grease Interceptors.**

**Add new table:**

**TABLE 1014.2.1A  
HYDROMECHANICAL GREASE INTERCEPTOR SIZING BASED ON FIXTURE COUNT**

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

For SI Units: 1 gallon per minute = 0.06 L/s, 1 pound = 0.454 kg.

**Reasons:**

The purpose of adding this table to the code is to provide the public with prescriptive sizing guidelines for hydromechanical grease interceptors.

**Cost Impact:** No cost impact.

This requirement is an amendment carried forward from the 2012 Uniform Plumbing Code.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 1014.2.3**

**Submitted by:** 2018 Uniform Plumbing Code Committee

**1014.2 Hydromechanical Grease Interceptors.**

**Add new section:**

**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.*

**Reasons:**

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.

The cost impact is minimal to install additional piping for cleanouts. This requirement is an amendment carried forward from the 2012 Uniform Plumbing Code.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**  
**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)**  
**Section 1014.3.5**

**Submitted by:** 2018 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. ~~It is recommended that a sample box be located at the outlet end of 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.

**Reasons:**

The 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:**

The 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.

**Approved in previous 2012 Code Adoption process:**       **YES**               **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 1014.3.6**

**Submitted by:** 2018 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 4014.3.6 702.1. 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.

**Reasons:**

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:** No cost impact.

This requirement is an amendment carried forward from the 2006 & 2012 Uniform Plumbing Code.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section: Table 1014.3.6**

**Submitted by:** 2018 Uniform Plumbing Code Committee

**1014.3 Gravity Grease Interceptors.**

**Delete TABLE 1014.3.6 GRAVITY GREASE INTERCEPTOR SIZING**

**Reasons:**

Gravity grease interceptor sizing is defined in 2018 UPC amended section 1014.3.6 and amended section Example 1014.3.6

**Cost Impact:** No cost impact.

This requirement is an amendment carried forward from the 2012 Uniform Plumbing Code.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)**

**Section: Example 1014.3.6**

**Submitted by:** 2018 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).

**Reasons:**

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 2012 Code Adoption process:**  YES  NO



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**  
**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)**  
**Section 1101.12.1**

**Submitted by:** 2018 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-minute duration and 100-year return period. Refer to Table D-101.1 (in Appendix) for 100 years, 60-minute storms at various locations.

**Reasons:**

Current language in the 2018 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:** No cost impact.  
Carried over from 2012 Amendment.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**





**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 1101.12.2.2 & 1101.12.2.2.2**

**Submitted by:** 2018 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.~~

**Reasons:**

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:** No cost impact.

**Approved in previous 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section 1101.16.2**

**Submitted by:** 2018 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 guards, 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.~~

**Reasons:**

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 2012 Code Adoption process:**       **YES**       **NO**



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**  
**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)**  
**Section 1208.5.10.5.**

**Submitted by:** 2018 Uniform Plumbing Code Committee

**1208.5.10 Flange Specification.**

Cast iron flanges shall be in accordance with ASME B16.1. [NFPA 54:5.6.10.1.1]

**1208.5.10.1 Steel Flanges.**

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

- (1) ASME B16.5 or
- (2) ASME B16.47. [NFPA 54:5.6.10.1.2]

**1208.5.10.2 Non-Ferrous Flanges.**

Non-ferrous flanges shall be in accordance with ASME B16.24. [NFPA 54:5.6.10.1.3]

**1208.5.10.3 Ductile Iron Flanges.**

Ductile iron flanges shall be in accordance with ASME B16.42. [NFPA 54:5.6.10.1.4]

**1208.5.10.4 Dissimilar Flange Connections.**

Raised-face flanges shall not be joined to flat-faced cast iron, ductile iron or nonferrous material flanges. [NFPA54:5.6.10.2]

**1208.5.10.5 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 54:5.6.10.3]~~

**1208.5.10.6 Lapped Flanges.**

Lapped flanges shall be used only aboveground or in exposed locations accessible for inspection. [NFPA 54:5.6.10.4]

**Reasons:**

Defacing a listed product voids its certification to a design standard. This amendment is consistent with the amended similar section in the 2018 International Fuel Gas Code.

**Cost Impact:** No cost impact.

Approved in previous 2012 Code Adoption process:

YES

NO



**BUILDING CONSTRUCTION CODE CHANGE PROPOSAL**

**Proposed Amendment to 2018 Uniform Plumbing Code (UPC)  
Section: Appendices**

**Submitted by:** 2018 Uniform Plumbing Code Committee

Adopt Appendices A, B & I.

**Reasons:**

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.

**Cost Impact:** No cost impact.

**Approved in previous 2012 Code Adoption process:**  **YES**  **NO**