

#### Proposed Amendments to the 2012 International Plumbing Code Section 103, 104, 105, 106, 107, 108, 109, 110

Submitted by: Phoenix Planning and Development Department Code Committee

#### PART 2—ADMINISTRATION AND ENFORCEMENT

## SECTION 103 DEPARTMENT OF PLUMBING INSPECTION RESERVED

[A] 103.1 General. The department of plumbing inspection is hereby created and the executive official in charge thereof shall be known as the code official.

[A] 103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.

[A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official.

**[A] 103.4 Liability.** The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

Any suit instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

# SECTION 104 DUTIES AND POWERS OF THE CODE OFFICIAL RESERVED

**[A] 104.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code. The code official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this COde.

**[A] 104.2 Applications and permits.** The code official shall receive applications, review construction documents and issue permits for the installation and alteration of plumbing systems, inspect the premises for which such permits have been issued, and enforce compliance with the provisions of this code.

**[A] 104.3 Inspections.** The code official shall make all the required inspections, or shall accept reports of inspection by *approved* agencies or individuals. All reports of such inspections shall be in writing and be certified by a responsible officer of such *approved* agency or by the responsible individual. The code official is authorized to engage such expert opinion as deemed necessary to report on unusual technical

issues that arise, subject to the approval of the appointing authority.

[A] 104.4 Right of entry. Whenever it is necessary to make an inspection to enforce the provisions of this code, or whenever the code official has reasonable cause to believe that there exists in any building or upon any premises any conditions or violations of this code that make the building or premises unsafe, insanitary, dangerous or hazardous, the code official shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed upon the code official by this code. If such building or premises is occupied, the code official shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the code official 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. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

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

- [A] 104.5 Identification. The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.
- [A] 104.6 Notices and orders. The code official shall issue all necessary notices or orders to ensure compliance with this code.
- [A] 104.7 Department records. The code official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for the retention of public records.

#### SECTION 105 APPROVAL RESERVED

- **[A] 105.1 Modifications.** Whenever there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the code official shall first find that special individual reason makes the strict letter of this code impractical and the modification conforms to the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the plumbing inspection department.
- [A] 105.2 Alternative materials, methods and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material or method of construction shall be approved where the code official finds that the proposed alternative material, method or equipment complies with the intent of the provisions of this code and is at least the equivalent of that prescribed in this code.
  - [A] 105.2.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.
- **[A] 105.3 Required testing.** Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternate materials or methods, the code official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.
  - [A] 105.3.1 Test methods. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the code official shall approve the testing procedures.

- [A] 105.3.2 Testing agency. All tests shall be performed by an approved agency.
- [A] 105.3.3 Test reports. Reports of tests shall be retained by the code official for the period required for retention of public records.
- [A] 105.4 Approved materials and equipment. Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.
  - [A] 105.4.1 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements have been reconditioned, tested, placed in good and proper working condition and approved.

#### SECTION 106 PERMITS RESERVED

**[A] 106.1 When required.** Any owner, authorized agent or contractor who desires to construct, enlarge, alter, repair, move, demolish or change the *occupancy* of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the code official and obtain the required permit for the work.

[A] 106.2 Exempt work. The following work shall be exempt from the requirement for a permit:

- 1. The stopping of leaks in drains, water, soil, waste or vent pipe provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
- 2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, 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 any work to be done in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.
- [A] 106.3 Application for permit. Each application for a permit, with the required fee, shall be filed with the code official on a form furnished for that purpose and shall contain a general description of the proposed work and its location. The application shall be signed by the owner or an authorized agent. The permit application shall indicate the proposed occupancy of all parts of the building and of that portion of the site or lot, if any, not covered by the building or structure and shall contain such other information required by the code official.
  - **[A] 106.3.1 Construction documents.** Construction documents, engineering calculations, diagrams and other such data shall be submitted in two or more sets with each application for a permit. The code official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional when required by state law. Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code. Construction documents for buildings more than two stories in height shall indicate where penetrations will be made for pipes, fittings and components and shall indicate the materials and methods for maintaining required structural safety, fire-resistance rating and fireblocking.

**Exception:** The code official shall have the authority to waive the submission of construction documents, calculations or other data if the nature of the work applied for is such that reviewing of construction documents is not necessary to determine compliance with this code.

**[A] 106.3.2 Preliminary inspection.** Before a permit is issued, the code official is authorized to inspect and evaluate the systems, equipment, buildings, devices, premises and spaces or areas to be used.

[A] 106.3.3 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the code official shall have the authority to grant one or more extensions of time for additional periods not exceeding 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**[A] 106.4 By whom application is made.** Application for a permit shall be made by the person or agent to install all or part of any plumbing system. The applicant shall meet all qualifications established by statute, or by rules promulgated by this code, or by ordinance or by resolution. The full name and address of the applicant shall be stated in the application.

[A] 106.5 Permit issuance. The application, construction documents and other data filed by an applicant for permit shall be reviewed by the code official. If the code official finds that the proposed work conforms to the requirements of this code and all laws and ordinances applicable thereto, and that the fees specified in Section 106.6 have been paid, a permit shall be issued to the applicant.

[A] 106.5.1 Approved construction documents. When the code official issues the permit where construction documents are required, the construction documents shall be endorsed in writing and stamped "APPROVED." Such approved construction documents shall not be changed, modified or altered without authorization from the code official. All work shall be done in accordance with the approved construction documents.

The code official shall have the authority 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 complying with all pertinent requirements of this code. The holders of such permit shall proceed at their own risk without assurance that the permit for the entire plumbing system will be granted.

[A] 106.5.2 Validity. The issuance of a permit or approval of construction documents shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or any 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 construction documents and other data shall not prevent the code official from thereafter requiring the correction of errors in said construction documents and other data or from preventing building operations being carried on thereunder when in violation of this code or of other ordinances of this jurisdiction.

[A] 106.5.3 Expiration. Every permit issued by the code official under the provisions of this code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work can be recommenced, a new permit shall be first obtained and the fee therefor 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 suspension or abandonment has not exceeded 1 year.

**[A] 106.5.4 Extensions.** Any permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit when work is unable to be commenced within the time required by this section for good and satisfactory reasons. The code official shall extend the time for action by the permittee for a period not exceeding 180 days if there is reasonable cause. No permit shall be extended more than once. The fee for an extension shall be one-half the amount required for a new permit for such work.

[A] 106.5.5 Suspension or revocation of permit. The code official shall have the authority to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

[A] 106.5.6 Retention of construction documents. One set of approved construction documents shall be retained by the code official for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws.

One set of *approved* construction documents shall be returned to the applicant, and said set shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress.

- [A] 106.5.7 Previous approvals. This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.
- [A] 106.5.8 Posting of permit. The permit or a copy shall be kept on the site of the work until the completion of the project.
- [A] 106.6 Fees. A permit shall not be issued until the fees prescribed in Section 106.6.2 have been paid, and an amendment to a permit shall not be released until the additional fee, if any, due to an increase of the plumbing systems, has been paid.
  - [A] 106.6.1 Work commencing before permit issuance. Any person who commences any work on a plumbing system before obtaining the necessary permits shall be subject to 100 percent of the usual permit fee in addition to the required permit fees.
  - [A] 106.6.2 Fee schedule. The fees for all plumbing work shall be as indicated in the following schedule:

**JURISDICTION TO INSERT APPROPRIATE SCHEDULE** 

- [A] 106.6.3 Fee refunds. The code official shall authorize the refunding of fees as follows:
- 1. The full amount of any fee paid hereunder that was erroneously paid or collected.
- 2. Not more than [SPECIFY PERCENTAGE] percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.
- 3. Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

The code official shall not authorize the refunding of any fee paid except upon written application filed by the original permittee not later than 180 days after the date of fee payment.

## SECTION 107 INSPECTIONS AND TESTING RESERVED

[A] 107.1 General. The code official is authorized to conduct such inspections as are deemed necessary to determine compliance with the provisions of this code. Construction or work for which a permit is required shall be subject to inspection by the code official, and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall

not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the code official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

- [A] 107.2 Required inspections and testing. The code official, upon notification from the permit holder or the permit holder's agent, shall make the following inspections and such other inspections as necessary, and shall either release that portion of the construction or shall notify the permit holder or an agent of any violations that must be corrected. The holder of the permit shall be responsible for the scheduling of such inspections.
  - Underground inspection shall be made after trenches or ditches are excavated and bedded, piping installed, and before any backfill is put in place.
  - 2. Rough-in inspection shall be made after the roof, framing, fireblocking, firestopping, draftstopping and bracing is in place and all sanitary, storm and water distribution piping is roughed-in, and prior to the installation of wall or ceiling membranes.
  - 3. Final inspection shall be made after the building is complete, all plumbing fixtures are in place and properly connected, and the structure is ready for occupancy.
  - [A] 107.2.1 Other inspections. In addition to the inspections specified above, the code official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced.
  - [A] 107.2.2 Inspection requests. It shall be the duty of the holder of the permit or their duly authorized agent to notify the code official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.
  - [A] 107.2.3 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.
  - **[A] 107.2.4 Approved agencies.** The code official is authorized to accept reports of *approved* inspection agencies, provided that such agencies satisfy the requirements as to qualifications and reliability.
  - [A] 107.2.5 Evaluation and follow-up inspection services. Prior to the approval of a closed, prefabricated plumbing system and the issuance of a plumbing permit, the code official shall require the submittal of an evaluation report on each prefabricated plumbing system indicating the complete details of the plumbing system, including a description of the system and its components, the basis upon which the plumbing system is being evaluated, test results and similar information, and other data as necessary for the code official to determine conformance to this code.
  - [A] 107.2.5.1 Evaluation service. The code official shall designate the evaluation service of an approved agency as the evaluation agency, and review such agency's evaluation report for adequacy and conformance to this code.
  - [A] 107.2.5.2 Follow-up inspection. Except where ready access is provided to all plumbing systems, service equipment and accessories for complete inspection at the site without disassembly or dismantling, the code official shall conduct the frequency of in-plant inspections necessary to ensure conformance to the approved evaluation report or shall designate an independent, approved inspection agency to conduct such inspections. The inspection agency shall furnish the code official with the follow-up inspection manual and a report of inspections upon

- request, and the plumbing system shall have an identifying label permanently affixed to the system indicating that factory inspections have been performed.
- [A] 107.2.5.3 Test and inspection records. All required test and inspection records shall be available to the code official at all times during the fabrication of the plumbing system and the erection of the building, or such records as the code official designates shall be filed.
- [A] 107.3 Special inspections. Special inspections of alternative engineered design plumbing systems shall be conducted in accordance with Sections 107.3.1 and 107.3.2.
  - [A] 107.3.1 Periodic inspection. The registered design professional or designated inspector shall periodically inspect and observe the *alternative engineered design* to determine that the installation is in accordance with the *approved* construction documents. All discrepancies shall be brought to the immediate attention of the plumbing contractor for correction. Records shall be kept of all inspections.
  - [A] 107.3.2 Written report. The registered design professional shall submit a final report in writing to the code official upon completion of the installation, certifying that the *alternative engineered design* conforms to the *approved* construction documents. A notice of approval for the plumbing system shall not be issued until a written certification has been submitted.
- [A] 107.4 Testing. Plumbing work and systems shall be tested as required in Section 312 and in accordance with Sections 107.4.1 through 107.4.3. Tests shall be made by the permit holder and observed by the code official.
  - [A] 107.4.1 New, altered, extended or repaired systems. New plumbing systems and parts of existing systems that have been altered, extended or repaired shall be tested as prescribed herein to disclose leaks and defects, except that testing is not required in the following cases:
  - 1. In any case that does not include addition to, replacement, alteration or relocation of any water supply, drainage or vent piping.
  - 2. In any case where plumbing equipment is set up temporarily for exhibition purposes.
  - [A] 107.4.2 Equipment, material and labor for tests. All equipment, material and labor required for testing a plumbing system or part thereof shall be furnished by the permit holder.
  - [A] 107.4.3 Reinspection and testing. Where any work or installation does not pass any initial test or inspection, the necessary corrections shall be made to comply with this code. The work or installation shall then be resubmitted to the code official for inspection and testing.
- [A] 107.5 Approval. After the prescribed tests and inspections indicate that the work complies in all respects with this code, a notice of approval shall be issued by the code official.
  - **[A] 107.5.1 Revocation.** The code official is authorized to, in writing, suspend or revoke a notice of approval issued under the provisions of this code wherever the notice is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure, premise or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.
  - [A] 107.6 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility source for the purpose of testing plumbing systems or for use under a temporary certificate of occupancy.
  - [A] 107.7 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel, power, water system or sewer system to any building or system that is regulated by this code for which a permit is required until authorized by the code official.

#### SECTION 108 VIOLATIONS RESERVED

- [A] 108.1 Unlawful acts. It shall be unlawful for any person, firm or corporation to erect, construct, alter, repair, remove, demolish or utilize any plumbing system, or cause same to be done, in conflict with or in violation of any of the provisions of this code.
- **[A] 108.2 Notice of violation.** The code official shall serve a notice of violation or order to the person responsible for the erection, installation, alteration, extension, repair, removal or demolition of plumbing work in violation of the provisions of this code, or in violation of a detail statement or the *approved* construction documents thereunder, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.
- [A] 108.3 Prosecution of violation. If the notice of violation is not complied with promptly, the code official shall request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the structure in violation of the provisions of this code or of the order or direction made pursuant thereto.
- [A] 108.4 Violation penalties. Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair plumbing work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a [SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.
- [A] 108.5 Stop work orders. Upon notice from the code official, work on any plumbing system that is being done contrary to the provisions of this code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than [AMOUNT] dollars or more than [AMOUNT] dollars.
- [A] 108.6 Abatement of violation. The imposition of the penalties herein prescribed shall not preclude the legal officer of the jurisdiction from instituting appropriate action to prevent unlawful construction or to restrain, correct or abate a violation, or to prevent illegal occupancy of a building, structure or premises, or to stop an illegal act, conduct, business or utilization of the plumbing on or about any premises.
- **[A] 108.7 Unsafe plumbing.** Any plumbing regulated by this code that is unsafe or that constitutes a fire or health hazard, insanitary condition, or is otherwise dangerous to human life is hereby declared unsafe. Any use of plumbing regulated by this code constituting a hazard to safety, health or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage or abandonment is hereby declared an unsafe use. Any such unsafe equipment is hereby declared to be a public nuisance and shall be abated by repair, rehabilitation, demolition or removal.
  - [A] 108.7.1 Authority to condemn equipment. Whenever the code official determines that any plumbing, or portion thereof, regulated by this code has become hazardous to life, health or property or has become insanitary, the code official shall order in writing that such plumbing either be removed or restored to a safe or sanitary condition. A time limit for compliance with such order shall be specified in the written notice. No person shall use or maintain defective plumbing after receiving such notice.

When such plumbing is to be disconnected, written notice as prescribed in Section 108.2 shall be given. In cases of immediate danger to life or property, such disconnection shall be made

immediately without such notice.

[A] 108.7.2 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by the technical codes in case of an emergency, where necessary, to eliminate an immediate danger to life or property. Where possible, the owner and occupant of the building, structure or service system shall be notified of the decision to disconnect utility service prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service systems shall be notified in writing, as soon as practical thereafter.

**[A] 108.7.3 Connection after order to disconnect.** No person shall make connections from any energy, fuel, power supply or water distribution system or supply energy, fuel or water to any equipment regulated by this code that has been disconnected or ordered to be disconnected by the code official or the use of which has been ordered to be discontinued by the code official until the code official authorizes the reconnection and use of such equipment.

When any plumbing is maintained in violation of this code, and in violation of any notice issued pursuant to the provisions of this section, the code official shall institute any appropriate action to prevent, restrain, correct or abate the violation.

#### SECTION 109 MEANS OF APPEAL RESERVED

**[A] 109.1 Application for appeal.** Any person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

**[A] 109.2 Membership of board.** The board of appeals shall consist of five members appointed by the chief appointing authority as follows: one for 5 years, one for 4 years, one for 3 years, one for 2 years and one for 1 year. Thereafter, each new member shall serve for 5 years or until a successor has been appointed.

[A] 109.2.1 Qualifications. The board of appeals shall consist of five individuals, one from each of the following professions or disciplines:

- Registered design professional who is a registered architect; or a builder or superintendent of building construction with at least 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 2. Registered design professional with structural engineering or architectural experience.
- 3. Registered design professional with mechanical and plumbing engineering experience; or a mechanical and plumbing contractor with at least 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 4. Registered design professional with electrical engineering experience; or an electrical contractor with at least 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 5. Registered design professional with fire protection engineering experience; or a fire protection contractor with at least 10 years' experience, 5 years of which shall have been in responsible charge of work.
  - [A] 109.2.2 Alternate members. The chief appointing authority shall appoint two alternate members who shall be called by the board chairman to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for 5 years or until a successor has been appointed.

- [A] 109.2.3 Chairman. The board shall annually select one of its members to serve as chairman.
- [A] 109.2.4 Disqualification of member. A member shall not hear an appeal in which that member has any personal, professional or financial interest.
- [A] 109.2.5 Secretary. The chief administrative officer shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer.
- [A] 109.2.6 Compensation of members. Compensation of members shall be determined by law.
- [A] 109.3 Notice of meeting. The board shall meet upon notice from the chairman, within 10 days of the filing of an appeal or at stated periodic meetings.
- [A] 109.4 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.
  - [A] 109.4.1 Procedure. The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received.
- [A] 109.5 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.
- [A] 109.6 Board decision. The board shall modify or reverse the decision of the code official by a concurring vote of three members.
  - [A] 109.6.1 Resolution. The decision of the board shall be by resolution. Certified copies shall be furnished to the appellant and to the code official.
  - [A] 109.6.2 Administration. The code official shall take immediate action in accordance with the decision of the board.
  - [A] 109.7 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

# SECTION 110 TEMPORARY EQUIPMENT, SYSTEMS AND USES RESERVED

- [A] 110.1 General. The code official is authorized to issue a permit for temporary equipment, systems and uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.
- **[A] 110.2 Conformance.** Temporary equipment, systems and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.
- [A] 110.3 Temporary utilities. The code official is authorized to give permission to temporarily supply utilities before an installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the code.
- [A] 110.4 Termination of approval. The code official is authorized to terminate such permit for temporary

equipment, systems or uses and to order the temporary equipment, systems or uses to be discontinued.			
<b>Reasons:</b> The deleted provisions are contained in the Phoenix Building Construction Code, 2012 IBC, which is being used as a centralized location for the administrative provisions. These provisions may conflict with the adopted administrative code sections and retaining them is redundant.			
Cost Impact: No cost impact	t.		
ACTION TAKEN:			
2012 Code Committee			Date: 12/20/2012
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard Technical Subcommittee		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	Modified and approved	Denied	☐ No action taken



### Proposed Amendments to the 2012 International Plumbing Code General Definitions, Section 202

Submitted by: Environmental Services Division

**GREASE REMOVAL DEVICE.** A plumbing appurtenance that is installed in the sanitary drainage system to intercept free-floating fats, oils and grease from waste water 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 use 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.

**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.

\*\*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 2006 Uniform Plumbing Code.

ACTION TAKEN:			
2012 Code Committee			Date: 12/13/2012
Approved as submitted	Modified and approved	Denied	☐ No action taken
<b>Development Advisory Boa</b>	ard Technical Subcommittee		Date: 01/17/2013
☐ Approved as submitted	Modified and approved	Denied	☐ No action taken
<b>Development Advisory Boa</b>	ard		Date: 01/17/2013
	Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	Modified and approved	Denied	☐ No action taken



Approved as submitted

#### **CODE CHANGE PROPOSAL**

### Proposed Amendments to the 2012 International Plumbing Code Table 403.1 and footnotes

Submitted by: Phoenix Planning and Development Department Code Committee

Table 403.1 - continued

#### MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES<sup>a</sup>

(See Sections 403.2 and 403.3)

Delete all service sink requirements from Table 403.1

f. Drinking fountains are not required for an occupant load of <del>15</del>-50 or fewer.

Modified and approved

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

**Reasons:** These revisions are made to provide consistency between the UPC and IPC and the minimum plumbing fixture table that is found in the 2012 International Building Code.

Cost Impact: No cost impact. **ACTION TAKEN:** 2012 Code Committee Date: 12/20/2012 ☐ Approved as submitted Modified and approved ☐ Denied No action taken **Development Advisory Board Technical Subcommittee** Date: 1/17/13 ☐ Modified and approved Approved as submitted Denied ☐ No action taken **Development Advisory Board** Date: 1/17/13 Approved as submitted Modified and approved Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13 Approved as submitted Modified and approved Denied No action taken **City Council Action** Date: 5/15/13

Denied

No action taken



Proposed Amendments to the 2012 International Plumbing Code Section 403.2			
Submitted by: Phoenix Planning and Development	Department Cod	de Committee	
<b>403.2 Separate Facilities.</b> Where plumbing fixtures are reeach sex.	equired, separate	e facilities shall be provided for	
Exceptions:			
1. Separate facilities shall not be required for dwelling	g units and sleep	oing units.	
<ol> <li>Separate 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> </ol>			
Separate facilities shall not be required in mercantile <u>and business</u> occupancies in which the maximum occupant load is <u>50</u> <del>100</del> or fewer.			
<b>Reasons:</b> These revisions are made to provide consistency between the 2012 UPC section 422.2, 2012 IBC section 2902.2 and the 2012 IPC to allow for small business and mercantile occupancies to provide a single toilet facility for up to 50 occupants.			
Cost Impact: Cost savings for small mercantile and busin	ess occupancies	S.	
ACTION TAKEN:			
2012 Code Committee		Date: 12/13/2012	
Approved as submitted	Denied	☐ No action taken	
<b>Development Advisory Board Technical Subcommitte</b>		Date: 1/17/13	
Approved as submitted  Modified and approved	Denied	☐ No action taken	
Development Advisory Board_		Date: 1/17/13	
Approved as submitted  Modified and approved	Denied	No action taken	
Council Subcommittee	_	Date: 4/16/13	
Approved as submitted  Modified and approved	□ Denied	□ No action taken	
City Council Action		Date: 5/15/13	
Approved as submitted  Modified and approved	Denied		



# Proposed Amendments to the 2012 International Plumbing Code Section 410.3, 410.4 Submitted by: Phoenix Planning and Development Department Code Committee

#### Add new definitions as follows:

DRINKING FOUNTAIN. A plumbing fixture that is connected to the potable water distribution system and the drainage system. The fixture allows the user to obtain a drink directly from a stream of flowing water without the use of any accessories.

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.

**410.3 Substitution.** 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 coolers or bottled water dispensers shall be permitted to be substituted for not more than 50 percent of the required number of drinking fountains.

**410.4 Prohibited location.** *Drinking fountains, water coolers* and <del>bottle</del> *water dispensers* shall not be installed in public restrooms.

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 410.3 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: Cost savings from replacing drinking fountain installations with water dispensers. **ACTION TAKEN:** 2012 Code Committee Date: 12/13/2012 Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken **Development Advisory Board Technical Subcommittee** Date: 1/17/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken **Development Advisory Board** Date: 1/17/13 Approved as submitted ☐ No action taken Modified and approved ☐ Denied **Council Subcommittee** Date: 4/16/13 Approved as submitted ☐ No action taken Modified and approved Denied **City Council Action** Date: 5/15/13 Approved as submitted ☐ Modified and approved Denied No action taken



#### **Proposed Amendments to 2012 International Plumbing Code** Section 419.2 Submitted by: Phoenix Planning and Development Department Code Committee 419.2 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 in assembly and educational occupancies. Urinals shall not be substituted for more than 50 percent of the required water closets in all other occupancies. Reasons: These revisions are made to provide consistency between the UPC and IPC and the minimum plumbing fixture table that is found in the 2012 International Building Code. **Cost Impact: None ACTION TAKEN:** 2012 Code Committee Date: 12/20/2012 ☐ Approved as submitted Modified and approved Denied No action taken **Development Advisory Board Technical Subcommittee** Date: 1/17/13 ☐ Modified and approved ☐ Denied Approved as submitted ☐ No action taken **Development Advisory Board** Date: 1/17/13 Approved as submitted Modified and approved ☐ Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13 Approved as submitted Denied ☐ Modified and approved ☐ No action taken **City Council Action** Date: 5/15/13 Approved as submitted ☐ Modified and approved Denied No action taken



Proposed Amendments to the 2012 International Plumbing Code Section 605.3 Table 605.3				
Submitted by: Phoenix Planning and Development Department Code Committee				
Table 605.3 Water Service Pipe MATERIAL Acrylonitrile butadiene styrene (ABS) plastic pipe STANDARD ASTM D 1527; ASTM D 2282				
Reasons: ABS material conflicts with first sentence of IPC Section 605.3 which requires water service pipe to conform to NSF 61.				
Cost Impact: None				
ACTION TAKEN:				
2012 Code Committee	_	_	Date: 12/20/2012	
Approved as submitted	Modified and approved	Denied		
	ard Technical Subcommittee	_	Date: 1/17/13	
Approved as submitted	Modified and approved	Denied		
Development Advisory Box			Date: 1/17/13	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
Council Subcommittee			Date: 4/16/13	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
City Council Action	·	·	Date: 5/15/13	
Approved as submitted	☐ Modified and approved	☐ Denied	☐ No action taken	



Proposed Amendments to the 2012 International Plumbing Code Section 605.5 Table 605.5					
Submitted by: Phoenix Plan	Submitted by: Phoenix Planning and Development Department Code Committee				
Table 605.5 PIPE FITTINGS MATERIAL Acrylonitrile butadiene styr			NDARD <del>M D 2468</del>		
		PC Section 60	5.5 which requires pipe fittings		
utilized in water supply system	ms to comply with NSF 61.				
Ocal Immedia					
Cost Impact: None					
ACTION TAKEN:					
2012 Code Committee			Date: 12/20/2012		
	☐ Modified and approved	Denied	☐ No action taken		
<b>Development Advisory Boa</b>	rd Technical Subcommittee		Date: 1/17/13		
Approved as submitted	Modified and approved	Denied	☐ No action taken		
<b>Development Advisory Boa</b>	ırd		Date: 1/17/13		
Approved as submitted	Modified and approved	Denied	☐ No action taken		
Council Subcommittee			Date: 4/16/13		
Approved as submitted	Modified and approved	Denied	☐ No action taken		
City Council Action			Date: 5/15/13		
Approved as submitted	Modified and approved	☐ Denied	□ No action taken		



### Proposed Amendments to the 2012 International Plumbing Code Section 608.3.2

Submitted by: Phoenix Planning and Development Department Code Committee

#### **New Section**

608.3.2 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.

#### Reasons:

- Inserts 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 Section 901.10 requirements for access to fire protection equipment.

Cost Impact: None			
10710117117			
ACTION TAKEN:			
2012 Code Committee			Date: 12/20/2012
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	rd Technical Subcommittee		Date: 1/17/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	nrd		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	■ Modified and approved	☐ Denied	□ No action taken



### Proposed Amendments to the 2012 International Plumbing Code Section 608.7.1

Submitted by: Phoenix Planning and Development Department Code Committee

**New Section** 

<u>608.7.1 Prohibited Locations.</u> Backflow prevention devices shall not be installed in pits, underground vaults, or submerged locations.

#### 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.
- 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: None				
ACTION TAKEN:				
2012 Code Committee			Date: 12/20/2012	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
Development Advisory Boa	ard Technical Subcommittee		Date: 1/17/13	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
Development Advisory Boa	ard		Date: 1/17/13	
	Modified and approved	Denied	☐ No action taken	
Council Subcommittee			Date: 4/16/13	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
City Council Action			Date: 5/15/13	
Approved as submitted	☐ Modified and approved	☐ Denied	☐ No action taken	



Approved as submitted

Approved as submitted

**City Council Action** 

#### **CODE CHANGE PROPOSAL**

### Proposed Amendments to the 2012 International Plumbing Code Section 608.7.2

Submitted by: Phoenix Planning and Development Department Code Committee **New Section** 608.7.2 Secondary Backflow Protection. The following activities or facilities shall have reduced pressure principle backflow prevention assemblies installed as close as practicable to the point of service delivery: Hospitals, surgical clinics, laboratories, morgues, mortuaries, veterinary hospitals, industrial occupancies, packing plants, slaughter houses, chemical plants, municipal waste treatment facilities, and construction water services. 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 Department all require secondary protection for the services cited. **Cost Impact:** None – This amendment carries over from previous code cycles. **ACTION TAKEN:** 2012 Code Committee Date: 12/20/2012 Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken **Development Advisory Board Technical Subcommittee** Date: 1/17/13 Approved as submitted ☐ Modified and approved No action taken Denied **Development Advisory Board** Date: 1/17/13 Approved as submitted Modified and approved Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13

☐ Denied

☐ Denied

☐ No action taken

No action taken

Date: 5/15/13

☐ Modified and approved

Modified and approved



### Proposed Amendments to 2012 International Plumbing Code Section 704.1

Submitted by: Phoenix Planning and Development Department Code Committee

### SECTION 704 DRAINAGE PIPING INSTALLATION

**704.1 Slope of horizontal drainage piping.** Horizontal drainage piping shall be installed in uniform alignment at uniform slopes. The slope of a horizontal drainage pipe shall be not less than that indicated by Table 704.1.

**Exception:** The Authority Having Jurisdiction may approve a lessor slope for building sewers in lieu of a sewage ejector or pumping station when a registered engineer or architect certifies the building 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 previous approval process for low slope sewer installations.

ACTION TAKEN:			
2012 Code Committee			Date: 12/20/2012
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard Technical Subcommittee		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	Modified and approved	☐ Denied	□ No action taken



# Proposed Amendments to the 2012 International Plumbing Code Special Wastes, Section 803.2 Submitted by: Environmental Services Division

**803.2 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 flumes or interfere with the sewage treatment processes shall not be discharge into the plumbing system without being thoroughly <del>diluted,</del> neutralized, or treated by passing through an *approved* <del>dilution or</del> neutralizing device. Such devices shall be <del>automatically</del> provided with a sufficient supply of <del>diluting water or</del> 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 <del>or dilution</del> shall be *approved* prior to installation.

Reasons: Diluting chemical wastes is prohibited by the Clean Water Act, 40 CFR, 403.6 (d).			
Cost Impact: No cost impact	t.		
ACTION TAKEN:			
2012 Code Committee			Date: 12/13/2012
	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard Technical Subcommittee		Date: 1/17/13
	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
M Approved as submitted	Modified and approved	Denied	☐ No action taken



### Proposed Amendments to 2012 International Plumbing Code Section 1002.4

Submitted by: Phoenix Planning and Development Department Code Committee

**1002.4 Trap seals.** Each fixture trap shall have a liquid seal of not less than 2 inches (51 mm) and not more than 4 inches (102 mm), or deeper for special designs relating to accessible fixtures. Where a trap seal is subject to loss by evaporation, a trap seal primer valve shall be installed. Trap seal primer valves shall connect to the trap at a point above the level of the trap seal. A trap seal primer valve shall conform to ASSE 1018 or ASSE 1044.

**Exception:** Trap seal primer valves are not required when an alternative device is provided to prevent evaporation of the liquid seal. Barrier type floor drain devices used to prevent evaporation shall conform to ASSE 1072, be accessible for maintenance and installed in accordance with manufacturer's instructions. A source of water for filling of traps shall be located in the vicinity of the plumbing fixture.

#### Reasons:

A barrier-type device has been developed for installation in a floor drain that prevents evaporation of the required liquid seal. This type of device opens when liquid enters the drain and then closes to prevent the migration of sewer gases back into the building. The devices are installed in the body of the floor drain and are typically made of an elastomeric material. Many of these devices are tested to several national standards such as ASSE 1072 and are listed by both the ICC-ES (IPC) and IAPMO (UPC) major Code agencies. The current Code requires that a trap seal primer valve be installed where trap seals are subject to evaporation. Trap seal primer valves have been proven to be adversely affected by the hard water in Phoenix and very often fail, thus leaving no trap seal protection. Once the liquid in the trap evaporates, sewer gas will migrate into the building. This exception will allow use of the listed devices in place of the trap seal primer valves required by the Code section.

**Cost Impact:** Cost savings from replacement of trap seal primer valves with lower cost barrier-type devices and reduced maintenance.

ACTION TAKEN:			
2012 Code Committee			Date: 12/20/2012
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Bo	ard Technical Subcommittee		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Bo	ard		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	Modified and approved	Denied	☐ No action taken



**City Council Action** 

Approved as submitted

#### **CODE CHANGE PROPOSAL**

#### **Proposed Amendments to the 2012 International Plumbing Code** Approval, Section 1003.2 Submitted by: Environmental Services Division 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. Reasons: 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: No cost impact. **ACTION TAKEN:** 2012 Code Committee Date: 12/13/2012 Approved as submitted ☐ Denied Modified and approved ☐ No action taken Date: 1/17/13 **Development Advisory Board Technical Subcommittee** Approved as submitted ☐ Modified and approved Denied ☐ No action taken **Development Advisory Board** Date: 1/17/13 Approved as submitted Modified and approved ☐ Denied No action taken **Council Subcommittee** Date: 4/16/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken

☐ Modified and approved

Date: 5/15/13

No action taken

☐ Denied



### Proposed Amendments to the 2012 International Plumbing Code Grease Interceptors, Section 1003.3.1

Submitted by: Environmental Services Division

1003.3.1 Grease interceptors and automatic grease removal devices. 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 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. 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 an upstream of an existing grease interceptor.

#### Reasons:

There is limited testing on the performance of grease interceptors installed in series. Installing a grease interceptor suspended above a floor space has the potential to become a public nuisance. The maintenance of these devices is generally neglected and over time the interceptor can deteriate and leak on the floor below.

Cost Impact: No cost impact	t.		
ACTION TAKEN:			
2012 Code Committee			Date: 12/13/2012
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard Technical Subcommittee		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken



**City Council Action** 

Approved as submitted

#### **CODE CHANGE PROPOSAL**

#### **Proposed Amendments to the 2012 International Plumbing Code** Food Waste Grinders, Section 1003.3.2 Submitted by: Environmental Services Division 1003.3.2 Food Waste Grinders. Where food waste grinders connect to grease interceptors, a solids interceptor shall separate the discharge before connecting to the grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste grinder. All commercial food waste disposal units shall be discharged to a gravity grease interceptor. Emulsifiers, chemicals, enzymes and bacteria shall not discharge into the food waste grinder. Reasons: Food waste grinders contribute grease and food waste to the building drainage system and have the potential to cause blockages in the public sewer system. Cost Impact: There is a cost impact to install a gravity interceptor versus a solids interceptor if the facility chooses to install a food waste grinder. This requirement is an amendment carried forward from the 2006 Uniform Plumbing Code. **ACTION TAKEN:** 2012 Code Committee Date: 12/13/2012 Approved as submitted Modified and approved ☐ Denied ☐ No action taken **Development Advisory Board Technical Subcommittee** Date: 1/17/13 Approved as submitted ☐ Modified and approved ☐ No action taken Denied **Development Advisory Board** Date: 1/17/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13 Approved as submitted ☐ Modified and approved Denied No action taken

☐ Modified and approved

Date: 5/15/13

☐ No action taken

Denied



#### Proposed Amendments to the 2012 International Plumbing Code Grease Interceptor Capacity, Section 1003.3.4.1

Submitted by: Environmental Services Division

**1003.3.4.1 Grease interceptor capacity.** Grease interceptors shall have the grease retention capacity indicated in Table 1003.3.4.1 for the flow- through rates indicated.

### TABLE 1003.3.4.1 CAPACITY OF GREASE INTERCEPTORS ab

Total Number of Crosse	TOTAL FLOW TUROUCH RATING	
Total Number of Grease	TOTAL FLOW-THROUGH RATING	GREASE RETENTION
Retention Fixtures	(gpm)	CAPACITY (pounds)
Connected		
-	4	8
	6	<del>12</del>
-	7	14
-	9	<del>18</del>
-	<del>10</del>	<del>20</del>
-	<del>12</del>	<del>24</del>
-	<del>14</del>	<del>28</del>
-	<del>15</del>	<del>30</del>
-	<del>18</del>	<del>36</del>
1	20	40
2	25	50
3	35	70
4	50	100
-	<del>75</del>	<del>150</del>
-	<del>100</del>	<del>200</del>

For SI: 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 Having Jurisdiction may permit the use of larger devices.

**Reasons:** The Total Number of Retention Fixtures, Total Flow—Through Ratings and Retention Capacities were developed from three public forums held in 1997 to standardize the design of interceptors. These forums provided design and sizing guidelines with input from the public and are still currently used to size interceptors in the City of Phoenix as well as neighboring cities.

**Cost Impact:** No cost impact. This requirement is an amendment carried forward from the 2006 Uniform Plumbing Code.

Trainbing Codo.				
ACTION TAKEN:				
2012 Code Committee			Date: 12/13/2012	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
Development Advisory Box	ard Technical Subcommittee		Date: 1/17/13	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
Development Advisory Box	ard		Date: 1/17/13	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
Council Subcommittee			Date: 4/16/13	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
City Council Action			Date: 5/15/13	
Approved as submitted	Modified and approved	Denied	☐ No action taken	



Proposed Amendments to the 2012 International Plumbing Code Interceptor Maintenance, Section 1003.3.4.3				
Submitted by: Environmental Services Division				
1003.3.4.3 Interceptor Maint	tenance. A two way cleanout	shall be install	ed on the discharge side of all	
hydromechanical grease inter	-			
	<del></del>			
Reasons: The purpose of th	is code section is to provide ar	entry point to	clean the line downstream of	
the device and back to the de	evice.			
			leanouts. This requirement is an	
amendment carried forward from the 2006 Uniform Plumbing Code.				
ACTION TAKEN:				
2012 Code Committee	_		<u>Date: 12/13/2012</u>	
Approved as submitted	Modified and approved	☐ Denied		
	rd Technical Subcommittee		Date: 1/17/13	
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken	
Development Advisory Board Date: 1/17/13				
Approved as submitted	Modified and approved	Denied	☐ No action taken	
Council Subcommittee			Date: 4/16/13	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
City Council Action			Date: 5/15/13	
Approved as submitted	☐ Modified and approved	☐ Denied	□ No action taken	



Proposed Amendments to the 2012 International Plumbing Code Section 1106.1				
Submitted by: Phoenix Planning and Develo	ubmitted by: Phoenix Planning and Development Department Code Committee			
<b>1106.1 General.</b> 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 <u>an hourly rainfall rate of three (3) inches per hour the 100-year hourly rainfall rate indicated in Figure 1106.1 or on other rainfall rates determined from approved local weather data.</u>				
Reasons:  Current language in the 2006 UPC requires roof drain sizing based on six (6) inches per hour rainfall rate.  The 2012 UPC and the 2012 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 for ease of using the sizing tables and to provide consistency between the two plumbing codes.				
** DAB Technical asked for further structural input on changing the rainfall rate to 3 inches per hour.				
Cost Impact: Cost savings from decreasing the size of rainwater piping systems.				
ACTION TAKEN:				
2012 Code Committee	Date: 01/03/2013			
Approved as submitted  Modified and ap				
Development Advisory Board Technical Subco				
Approved as submitted  Modified and ap				
Development Advisory Board	Date: 2/21/13			
Approved as submitted  Modified and ap				
Council Subcommittee	Date: 4/16/13			
Approved as submitted  Modified and ap City Council Action	proved Denied No action taken Date: 5/15/13			
Approved as submitted  Modified and ap				



#### Proposed Amendments to the 2012 International Plumbing Code Section 1106.5

Submitted by: Phoenix Planning and Development Department Code Committee

1106.5 Parapet wall scupper location. Parapet wall roof drainage scupper and overflow scupper location shall comply with the requirements of Section 1503.4 of the *International Building Code*. When scuppers are used for primary and/or secondary (emergency overflow) roof drainage, the quantity, size, location and inlet elevation of the scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1611.1 of the 2012 International Building Code. 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 1106.2(1). The flow through the primary system shall not be considered when locating and sizing scuppers. A rainfall rate of three (3) inches per hour shall be used for sizing purposes.

#### Reasons:

Current language in the 2012 IPC and IBC 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 IPC 1108.3 and IBC 1503.4.2.

\*\* DAB Technical asked for further structural input on changing the rainfall rate to 3 inches per hour.

**Cost Impact:** Cost savings from allowing scuppers for primary roof drainage. **ACTION TAKEN:** 2012 Code Committee Date: 01/03/2013 Approved as submitted Modified and approved ☐ Denied No action taken **Development Advisory Board Technical Subcommittee** Date: 02/12/2013 Approved as submitted Modified and approved ☐ Denied ☐ No action taken **Development Advisory Board** Date: 2/21/13 Approved as submitted Modified and approved Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13 Approved as submitted ☐ Modified and approved ☐ No action taken Denied **City Council Action** Date: 5/15/13 Approved as submitted ☐ Modified and approved Denied No action taken



### Proposed Amendments to the 2012 International Plumbing Code Section 1108.3

Submitted by: Phoenix Planning and Development Department Code Committee

1108.3 Sizing of secondary drains. Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106 based on the rainfall rate for which the primary system is sized in Tables 1106.2(1), 1106.2(2), 1106.3 and 1106.6. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall have an opening dimension of 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 1106.2(1). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

#### Reasons:

This proposal eliminates any confusion between this section and section 1106.5 regarding the required opening width dimensions for scuppers.

\*\* DAB Technical asked for further structural input on changing the rainfall rate to 3 inches per hour.

Cost Impact: No cost impact	t.		
ACTION TAKEN:			
			Data: 04/02/0040
2012 Code Committee			Date: 01/03/2013
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard Technical Subcommittee		Date: 02/12/2013
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard		Date: 2/21/13
	☐ Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken



### Proposed Amendments to the 2012 International Plumbing Code Section 1109.1

Submitted by: Phoenix Planning and Development Department Code Committee

# SECTION 1109 COMBINED SANITARY AND STORM SYSTEM (Reserved)

**1109.1 Size of combined drains and sewers.** The size of a combination sanitary and *storm drain* or *sewer* shall be computed in accordance with the method in Section 1106.3. The fixture units shall be converted into an equivalent projected roof or paved area. Where the total fixture load on the combined drain is less than or equal to 256 fixture units, the equivalent drainage area in horizontal projection shall be taken as 4,000 square feet (372 m²). Where the total fixture load exceeds 256 fixture units, each additional fixture unit shall be considered the equivalent of 15.6 square feet (1.5 m²) of drainage area. These values are based on a rainfall rate of 1 inch (25 mm) per hour.

#### 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.				
ACTION TAKEN:				
2012 Code Committee			Date: 01/03/2013	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
Development Advisory Board Technical Subcommittee			Date: 1/17/13	
□ Approved as submitted	☐ Modified and approved	Denied	☐ No action taken	
Development Advisory Boa	ard		Date: 1/17/13	
□ Approved as submitted	☐ Modified and approved	Denied	☐ No action taken	
Council Subcommittee			Date: 4/16/13	
	☐ Modified and approved	Denied	☐ No action taken	
City Council Action		·	Date: 5/15/13	
Approved as submitted	☐ Modified and approved	☐ Denied	□ No action taken	



Proposed Amendments to the 2012 International Plumbing Code Appendices				
Submitted by:	Submitted by: Phoenix Planning and Development Department Code Committee			
Adopt Appendices: E & F				
Reasons:  Appendix E provides two methods of water pipe sizing not provided in the body of the code. Appendix F contains structural safety provisions that match those found in the IBC and the UPC				
Cost Impact: No cost impact.				
ACTION TAKEN:				
2012 Code Committe	<del>.</del> e			Date: 1/17/13
Approved as subm	nitted 🔲 Modified and	d approved	Denied	☐ No action taken
Development Adviso	ory Board Technical Su	bcommittee		Date: 1/17/13
Approved as subm	nitted 🔲 Modified and	d approved 🗌	Denied	☐ No action taken
Development Adviso	ory Board			Date: 1/17/13
Approved as subm	nitted 🔲 Modified and	d approved 🗌	Denied	☐ No action taken
Council Subcommitt	:ee			Date: 4/16/13
Approved as subm	nitted	d approved	Denied	☐ No action taken
<b>City Council Action</b>				Date: 5/15/13
Approved as subm	nitted	d approved	Denied	☐ No action taken



#### Proposed Amendments to the 2012 Uniform Plumbing Code Chapter 2 Definitions, Section 209.0

Submitted by: Environmental Services Division

**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 professional engineer 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:** 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 2006 Uniform Plumbing Code.

ACTION TAKEN:			
2012 Code Committee			Date: 01/03/2013
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard Technical Subcommittee		Date: 01/17/2013
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard		Date: 01/17/2013
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken



Approved as submitted

#### CODE CHANGE PROPOSAL

#### **Proposed Amendments to the 2012 Uniform Plumbing Code** Chapter 2 Definitions, Section 209.0 Submitted by: **Environmental Services Division** 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. \*\*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 2006 Uniform Plumbing Code. **ACTION TAKEN:** 2012 Code Committee Date: 01/03/2013 Approved as submitted ☐ Denied ☐ No action taken Modified and approved **Development Advisory Board Technical Subcommittee** Date: 01/17/2013 Approved as submitted Modified and approved ☐ No action taken Denied **Development Advisory Board** Date: 01/17/2013 Approved as submitted ☐ Modified and approved Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13 Approved as submitted ☐ Modified and approved Denied No action taken **City Council Action** Date: 5/15/13

Denied

No action taken

☐ Modified and approved



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

## Proposed Amendment to the 2012 Uniform Plumbing Code Chapter 2 Definitions, Section 210.0

**Submitted by:** Environmental Services Division

**210.0 Hydromechanical Grease Interceptor**. A plumbing appurtenance or appliance that is installed in a sanitary drainage system to intercept nonpetroleum fats, oil and grease (FOG) from a wastewater discharge and is identified by flow rate, and separation and retention efficiency. The design incorporates air entrainment, hydromechanical separation, interior baffling, or barriers in combination or separately, and one of the following:

- A External flow control, with air intake (vent), directly connected
- B External flow control, without air intake (vent), directly connected Internal flow control, directly connected
- C Without external flow control, directly connected
- D Without external flow control, indirectly connected

These interceptors comply with the requirements of Table 1014.2.1 <u>and Table 1014.2.1A</u>. Hydromechanical grease interceptors are generally installed inside <u>and they must be able to function as gravity interceptors if mechanical or electrical power is lost.</u>

#### Reasons:

Flow control is necessary to regulate the flow into a hydromechanical interceptor and prevent connected plumbing fixtures from exceeding the grease retention capacity of the device. Installing a hydromechanical device without this control valve will negatively affect the grease retention and separation efficiency of the device. Hydromechanical grease interceptors must be able to function as gravity interceptors if mechanical or electrical power is lost otherwise the device will allow grease to enter the sanitary drainage system.

**Cost Impact:** No cost impact. This requirement is an amendment carried forward from the 2006 Uniform Plumbing Code.

ACTION TAKEN:			
2012 Code Committee			Date: 01/03/2013
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard Technical Subcommittee		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	Modified and approved	Denied	☐ No action taken



## Proposed Amendments to the 2012 Uniform Plumbing Code Section 415.2, 415.4

Submitted by: Phoenix Planning and Development Department Code Committee

### Add new definitions as follows:

<u>DRINKING FOUNTAIN.</u> A plumbing fixture that is connected to the potable water distribution system and the drainage system. The fixture allows the user to obtain a drink directly from a stream of flowing water without the use of any accessories.

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.

**415.2 Where required.** Where food is consumed indoors, water stations shall be permitted to be substituted for drinking fountains 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. Drinking fountains shall not be required for an occupant load of 30 50 or less.

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

### 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.

The number of occupants for exempt status is revised to coordinate with the 2012 IPC footnote "f" to Table 403.1.

Cost Impact: Cost savings from replacing drinking fountain installations with water dispensers.

ACTION TAKEN:			
2012 Code Committee			Date: 12/20/2012
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard Technical Subcommittee		Date: 1/17/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard		Date: 1/17/13
□ Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
City Council Action		•	Date: 5/15/13
Approved as submitted	☐ Modified and approved	☐ Denied	□ No action taken



# Proposed Amendments to the 2012 Uniform Plumbing Code Table 422.1 and footnotes

Submitted by: Phoenix Planning and Development Department Code Committee

# Table 422.1 Minimum Plumbing Facilities

Replace the entire table and footnotes with Table 403.1 including amended footnotes from the 2012 IPC. Rename as Table 422.1. Also delete all service sink requirements from the table.

- f. Drinking fountains are not required for an occupant load of <del>15-50</del> or fewer.
- g. 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.

#### Reasons:

These revisions are made to provide consistency between the UPC and IPC and the minimum plumbing fixture table that is found in the 2012 International Building Code.

Cost Impact: No cost impac	t.		
ACTION TAKEN:			
2012 Code Committee			Date: 12/20/2012
☐ Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard Technical Subcommittee		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken



Proposed Amendments to the 2012 Uniform Plumbing Code Section 422.2			
Submitted by: Phoenix Planning and Development Department Code Committee			
422.2 Separate Facilities. Separate toilet facilities shall be provided for each sex.			
Exceptions:			
(1) Residential installations.			
(2) In occupancies with a total occupant load of 40 15 or less, including customers and employees, one toilet facility, designed for use by no more than one person at a time, shall be permitted for use by both sexes.			
(3) In business and mercantile occupancies with a total occupant load of 50 or less including customers and employees, one toilet facility, designed for use by no more than one person at a time, shall be permitted for use by both sexes.			
Reasons: Past versions of the UPC as well as the current 2012 IPC have used 15 occupants as the threshold value			
for a unisex restroom for many years. This practice should be continued to provide consistency. This also			
provides consistency with 2012 IPC section 403.2.			
Cost Impact: Cost savings for small buildings of all occupancies.			
ACTION TAKEN:			
<b>2012 Code Committee</b> Date: 12/13/2012			
Approved as submitted  Modified and approved Denied No action taken			
Development Advisory Board Technical Subcommittee Date: 1/17/13			
Approved as submitted  Modified and approved Denied No action taken			
Development Advisory Board Date: 1/17/13			
Approved as submitted  Modified and approved  Denied  No action taken			
Council Subcommittee Date: 4/16/13			
Approved as submitted			
Approved as submitted  Modified and approved  Denied  No action taken			



### Proposed Amendments to 2012 Uniform Plumbing Code Section 603.4.3

Submitted by: Phoenix Planning and Development Department 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 Section 901.10 requirements for access to fire protection equipment.

Cost Impact:			
None			
ACTION TAKEN:			
2012 Code Committee			Date: 12/20/2012
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Bo	ard Technical Subcommittee		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Bo	ard		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
✓ Approved as submitted	☐ Modified and approved	☐ Denied	☐ No action taken



### Proposed Amendments to the 2012 Uniform Plumbing Code Section 603.4.9

Submitted by: Phoenix Planning and Development Department 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.

#### 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 <u>vault</u> 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.

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Cost Impact: None.				
ACTION TAKEN:				
2012 Code Committee			Date: 12/20/2012	
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken	
Development Advisory Boa	ard Technical Subcommittee		Date: 1/17/13	
	☐ Modified and approved	Denied	☐ No action taken	
Development Advisory Boa	ard		Date: 1/17/13	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
Council Subcommittee			Date: 4/16/13	
Approved as submitted	Modified and approved	Denied	☐ No action taken	
City Council Action			Date: 5/15/13	
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken	



## **Proposed Amendments to 2012 Uniform Plumbing Code Section 603.4.10**

**Submitted by:** Phoenix Planning and Development Department Code Committee

603.4.10 Secondary Backflow Protection. The following	activities or fac	ilities shall have reduced		
pressure principle backflow prevention assemblies installed as close as practicable to the point of service				
delivery: Hospitals, surgical clinics, laboratories, morgues, mortuaries, veterinary hospitals, industrial				
occupancies, packing plants, slaughter houses, chemical p				
construction water services.		·		
Note: Multiple water services which are interconnected on	site shall be pro	ovided with not less than a		
Double Check Valve Assembly at each service connection		<del></del>		
•	_			
Reasons:				
ADEQ, Maricopa County and city of Phoenix Water Depart	tment all require	e secondary protection for the		
services cited.	·	• •		
Cost Impact:				
None – This amendment carries over from previous code of	·			
,				
ACTION TAKEN:				
2012 Code Committee		Date: 12/20/2012		
Approved as submitted  Modified and approved	Denied	☐ No action taken		
Development Advisory Board Technical Subcommittee Date: 1/17/13				
Development Advisory Board Date: 1/17/13				
Approved as submitted  Modified and approved	Denied	☐ No action taken		
Council Subcommittee		Date: 4/16/13		
Approved as submitted  Modified and approved	Denied	☐ No action taken		
City Council Action Date: 5/15/13				
Approved as submitted  Modified and approved	☐ Denied	☐ No action taken		



Proposed Amendments to 2012 Uniform Plumbing Code Section 718.1			
Submitted by: Phoenix Planning and Development Department Code Committee			
718.1 Grade, Support, and Protection of Building Sewers.			
<b>718.1 Slope.</b> Building sewers shall be run in practical alignment and at a uniform slope of not less than $\frac{1}{4}$ inch per foot (20.8 mm/m) toward the point of disposal.			
Exceptions:			
(1) Where approved by the Authority Having Jurisdiction and where it is impractical, due to depth of the street sewer or to the structural features or to the arrangement of a building or structure, to obtain a slope of ¼ 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.			
<b>Cost Impact:</b> This amendment will reduce the costs associated with the current approval process for low slope sewer installations.			
ACTION TAKEN:			
2012 Code Committee  ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken ☐ Denied ☐ Den			
Development Advisory Board Technical Subcommittee       Date: 1/17/13         ☑ Approved as submitted       ☐ Modified and approved       ☐ Denied       ☐ No action taken			
Development Advisory Board  Development Advisory Board  Development Advisory Board			
Approved as submitted Modified and approved Denied No action taken			
Council Subcommittee Date: 4/16/13  ☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken			
City Council Action Date: 5/15/13			
Approved as submitted  Modified and approved  Denied  No action taken			



### Proposed Amendments to the 2012 Uniform Plumbing Code Air Admittance Valves, Section 912.0

Submitted by: Phoenix Planning and Development Code Committee

### 912.0 Air Admittance Valves

- 912.1 General. Vent systems shall be allowed to be served by approved air admittance valves. Stack-type air admittance valves shall be in conformance with ASSE 1050 and individual and branch-type air admittance valves shall be in conformance with ASSE 1051.
- **912.2 Installation.** The valves shall be installed in accordance with the requirements of this section and the manufacturer's installation instructions. Air admittance valves shall be installed after the drain, waste and vent testing required by Sections 712.2 or 712.3 has been approved by the administrative authority.
- 912.3 Where permitted. Individual and branch vents shall be permitted to terminate with a connection to an individual or branch-type air admittance valve in accordance with Section 912.3.1. Stack vents and vent stacks shall be permitted to terminate to stack-type air admittance valves in accordance with Section 912.3.2.
- 912.3.1 Horizontal branches. Individual and branch-type air admittance valves shall vent only fixtures that are on the same floor level and connect to a horizontal branch drain. Where the horizontal branch is located more than four branch intervals from the top of the stack, the horizontal branch shall be provided with a relief vent that shall connect to a vent stack or stack vent, or extend outdoors to the open air. The relief vent shall connect to the horizontal branch drain between the stack and the most downstream fixture drain connected to the horizontal branch drain. The relief vent shall be sized in accordance with Section 904.1 and installed in accordance with Section 905. The relief vent shall be permitted to serve as the vent for other fixtures.
- <u>912.3.2 Stack.</u> Stack-type air admittance valves shall be prohibited from serving as the vent terminal for vent stacks or stack vents that serve drainage *stacks* having more than six *branch intervals*.
- **912.4 Location.** Individual and branch-type air admittance valves shall be located a minimum of 4 inches (102 mm) above the *horizontal branch drain* or *fixture drain* being vented. Stack-type air admittance valves shall be located not less than 6 inches (152 mm) above the *flood level rim* of the highest fixture being vented. The air admittance valve shall be located within the maximum *developed length* permitted for the vent. The air admittance valve shall be installed not less than 6 inches (152 mm) above insulation materials.
- <u>912.5 Access and ventilation.</u> *Access* shall be provided to all air admittance valves for the purpose of maintenance or replacement. The valve shall be located within a ventilated space that allows air to enter the valve.
- <u>912.6 Size.</u> The air admittance valve shall be rated in accordance with the standard for the size of the vent to which the valve is connected.
- 912.7 Vent required. Within each plumbing system, not less than one stack vent or vent stack shall extend outdoors to the open air.
- 912.8 Prohibited installations. Air admittance valves shall not be installed in non-neutralized special waste systems as described in Chapter 8 except where such valves are in compliance with ASSE 1049, are constructed of materials approved in accordance with Section 811.2 and are tested for chemical resistance in accordance with ASTM F 1412. Air admittance valves shall not be located in spaces utilized

as supply or return air plenums. Air admittance valves without an engineered design shall not be utilized to				
vent sumps or tanks of any type.				
Reasons: Air admittance valves are currently allowed in the 2012 Interna	tional Plumbing Code Section			
918.0 and were previously allowed in the Arizona State Plumbing Code, A	rizona Administrative Code. Title			
4, Chapter 48. This amendment is designed to align the acceptance of air				
adopted plumbing code.				
adopted pramating code.				
Cost Impact: Cost savings from reducing the number of plumbing vent pi	pes serving a building.			
ACTION TAKEN:				
2012 Code Committee	Date: 11/20/13			
	☐ No action taken			
Development Advisory Board Technical Subcommittee	Date: 11/21/13			
Approved as submitted  Modified and approved  Denied	☐ No action taken			
Development Advisory Board	Date: 1/16/14			
	☐ No action taken			
Council Subcommittee	Date: 2/18/14			
Approved as submitted  Modified and approved  Denied	☐ No action taken			
City Council Action	Date: 2/26/14			
Approved as submitted  Modified and approved Denied	☐ No action taken			



### Proposed Amendments to 2012 Uniform Plumbing Code Section 1007.1

Submitted by: Phoenix Planning and Development Department Code Committee

### 1007.0 Trap Seal Protection.

**1007.1 General.** Floor drain or similar traps directly connected to the drainage system and subject to infrequent usage shall be protected with a trap seal primer, except where not deemed necessary for safety of sanitation by the Authority Having Jurisdiction. Trap seal primers shall be accessible for maintenance.

**Exception:** Trap seal primer valves are not required when an alternative device is provided to prevent evaporation of the liquid seal. Barrier type floor drain devices used to prevent evaporation shall conform to ASSE 1072, be accessible for maintenance and installed in accordance with manufacturer's instructions. A source of water for filling of traps shall be located in the vicinity of the plumbing fixture.

#### Reasons:

A barrier-type device has been developed for installation in a floor drain that prevents evaporation of the required liquid seal. This type of device opens when liquid enters the drain and then closes to prevent the migration of sewer gases back into the building. The devices are installed in the body of the floor drain and are typically made of an elastomeric material. Many of these devices are tested to several national standards such as ASSE 1072 and are listed by both the ICC-ES (IPC) and IAPMO (UPC) major Code agencies. The current Code requires that a trap seal primer valve be installed where trap seals are subject to evaporation. Trap seal primer valves have been proven to be adversely affected by the hard water in Phoenix and very often fail, thus leaving no trap seal protection. Once the liquid in the trap evaporates, sewer gas will migrate into the building. This exception will allow use of the listed devices in place of the trap seal primer valves required by the Code section.

Cost Impact: Cost savings from replacement of trap seal primer valves with lower cost barrier-type devices and reduced maintenance.

ACTION TAKEN:			
2012 Code Committee			Date: 12/20/2012
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard Technical Subcommittee		Date: 1/17/13
	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard		Date: 1/17/13
	☐ Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	Modified and approved	Denied	☐ No action taken



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

#### **Proposed Amendment to the 2012 Uniform Plumbing Code Grease Interceptors, Section 1014.1.3** Submitted by: **Environmental Services Division** 1014.1.3 Food Waste Disposal Units and Dishwashers. Unless specifically required or permitted by the Authority Having Jurisdiction, no All food waste disposal units or and dishwashers 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. No commercial food waste disposal units and/or dishwashers shall discharge into a hydromechanical grease interceptor. Reasons: This code change is necessary to positively identify where disposals and dishwashers shall be discharged. Connecting a commercial disposal 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 2006 Uniform Plumbing Code. **ACTION TAKEN:** 2012 Code Committee Date: 01/03/2013 Approved as submitted Modified and approved ☐ Denied ☐ No action taken **Development Advisory Board Technical Subcommittee** Date: 1/17/13 Modified and approved ☐ No action taken Approved as submitted Denied **Development Advisory Board** Date: 1/17/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13 Approved as submitted ☐ Modified and approved Denied No action taken **City Council Action** Date: 5/15/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken



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

# Proposed Amendment to the 2012 Uniform Plumbing Code Grease Interceptors, Section 1014.1

Submitted by: Environmental Services Division

1014.1 Where Required. Where it is determined by the Authority Having Jurisdiction that waste pretreatment is required, an approved type of grease interceptor(s) in accordance with the provisions of this section shall be correctly sized and properly installed in grease waste line(s) leading from sinks and drains, such as floor drains, floor sinks, and other fixtures or equipment in serving establishments such as restaurants, cafes, lunch counters, cafeterias, bars and clubs, hotels, hospitals, sanitariums, factory or school kitchens, or other establishments where grease is introduced into the drainage or sewage system in quantities that can effect line stoppage or hinder sewage treatment or private sewage disposal. Where approved by the Authority Having Jurisdiction a combination of hydromechanical, gravity grease interceptors, and engineered systems shall be allowed in order 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 for private living quarters. Water closets, urinals, and other plumbing fixtures conveying human waste shall not drain into or through the grease interceptor.

<b>Reasons:</b> 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.

ACTION TAKEN:			
2012 Code Committee			Date: 01/03/2013
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	rd Technical Subcommittee		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	nrd		Date: 1/17/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken



# Proposed Amendments to the 2012 Uniform Plumbing Code Capacity, Section 1014.2.1

Submitted by: Environmental Services Division

**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 <u>and 1014.2.1A.</u> 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.

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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 2006 Uniform Plumbing Code.

ACTION TAKEN:			
2012 Code Committee			Date: 01/03/2013
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	rd Technical Subcommittee		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Development Advisory Boa	rd		Date: 1/17/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken



Approved as submitted

Approved as submitted

**City Council Action** 

### **CODE CHANGE PROPOSAL**

#### **Proposed Amendments to the 2012 Uniform Plumbing Code** Interceptor Sizing, Table 1014.2.1A Submitted by: Environmental Services Division Code Change Proposal. Add Table 1014.2.1A. TABLE 1014.2.1A HYDROMECHANICAL GREASE INTERCEPTOR SIZING BASED ON FIXTURE COUNT GREASE RETENTION TOTAL FLOW-THROUGH RATING Total Number of Grease **Retention Fixtures** (gpm) CAPACITY (pounds) Connected 20 40 1 2 25 50 3 35 70 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 2006 Uniform Plumbing Code. **ACTION TAKEN:** 2012 Code Committee Date: 01/03/2013 Approved as submitted Denied ☐ Modified and approved ☐ No action taken **Development Advisory Board Technical Subcommittee** Date: 1/17/13 Approved as submitted Modified and approved Denied ☐ No action taken **Development Advisory Board** Date: 1/17/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13

Denied

Denied

☐ No action taken

☐ No action taken

Date: 5/15/13

☐ Modified and approved

☐ Modified and approved



Proposed Amendments to the 2012 Uniform Plumbing Code Maintenance, Section 1014.2.3						
Submitted by: Environmenta	Submitted by: Environmental Services Division					
1014.2.3 Maintenance. A two	o way cleanout shall be installe ceptors.	ed on the disch	arge side of all			
Reasons:						
The purpose of this code sect	tion is to provide an entry point	to clean the lir	ne downstream of the device			
and back to the device.						
Cost Impact: The cost impact is minimal to install additional piping for cleanouts. This requirement is an						
amendment carried forward from the 2006 Uniform Plumbing Code.						
ACTION TAKEN:						
2012 Code Committee			Date: 01/03/2013			
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken			
<b>Development Advisory Board Technical Subcommittee</b> Date: 1/17/13						
Approved as submitted	Modified and approved	Denied	☐ No action taken			
Development Advisory Board Date: 1/17/13						
Approved as submitted	Modified and approved	Denied				
Council Subcommittee	_	_	Date: 4/16/13			
Approved as submitted	Modified and approved	Denied	No action taken			
City Council Action			Date: 5/15/13			
Approved as submitted	Modified and approved	Denied	No action taken			



# Proposed Amendments to the 2012 Uniform Plumbing Code Gravity Grease Interceptors, Section 1014.3.5

Submitted by: Environmental Services Division

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 three 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) and the inlet/outlet 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:** There is a cost savings for omitting sample boxes from all grease interceptor installations. The additional requirements are amendments carried forward from the 2006 Uniform Plumbing Code.

ACTION TAKEN:			
2012 Code Committee			Date: 01/03/2013
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
<b>Development Advisory Boa</b>	rd Technical Subcommittee		Date: 1/17/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
<b>Development Advisory Boar</b>	rd		Date: 1/17/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken



## Proposed Amendments to the 2012 Uniform Plumbing Code Gravity Grease Interceptors Sizing Example, 1014.3.6

Submitted by: Environmental Services Division

# 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

Approved as submitted

Approved as submitted

**City Council Action** 

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.						
ACTION TAKEN:						
2012 Code Committee	Date: 01/03/2013					
Approved as submitted $\square$ Modified and approved $\square$ D	Denied   No action taken					
Development Advisory Board Technical Subcommittee	Date: 1/17/13					
Approved as submitted $\square$ Modified and approved $\square$ D	Denied   No action taken					
Development Advisory Board	Date: 1/17/13					
Approved as submitted  Modified and approved  C	Denied   No action taken					
Council Subcommittee	Date: 4/16/13					

☐ Denied

Denied

☐ No action taken

☐ No action taken

Date: 5/15/13

☐ Modified and approved

☐ Modified and approved



Proposed Amendments to the 2012 Uniform Plumbing Code Gravity Grease Interceptors Sizing, Table 1014.3.6					
Submitted by: Environmental Services Division					
Code Change Proposal: De	elete Table 1014.3.6				
Reasons: The purpose of this code cha defined in UPC 1014.3.6.	nge is to delete a redundant se	ection. Gravity	grease interceptor sizing is		
<b>Cost Impact:</b> No cost impact. This requirement is an amendment carried forward from the 2006 Uniform Plumbing Code.					
ACTION TAKEN:					
2012 Code Committee			Date: 01/03/2013		
Approved as submitted	Modified and approved	Denied	☐ No action taken		
<b>Development Advisory Boa</b>	rd Technical Subcommittee		Date: 1/17/13		
Approved as submitted	Modified and approved	Denied	☐ No action taken		
Development Advisory Board Date: 1/17/13					
Approved as submitted	Modified and approved	Denied	☐ No action taken		
Council Subcommittee			Date: 4/16/13		
Approved as submitted	Modified and approved	Denied	☐ No action taken		
City Council Action Date: 5/15/13					
Approved as submitted	☐ Modified and approved	☐ Denied	☐ No action taken		



# Proposed Amendments to the 2012 Uniform Plumbing Code Gravity Grease Interceptors Sizing Criteria, Section 1014.3.6

Submitted by: Environmental Services Division

**1014.3.6 Sizing Criteria.** The volume of the interceptor shall be determined by <u>calculating drainage</u> <u>fixture units (DFUs)</u> using Table <del>1014.3.6</del> <u>702.1</u>. 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.

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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 Uniform Plumbing Code.

ACTION TAKEN:			
2012 Code Committee			Date: 01/03/2013
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard Technical Subcommittee		Date: 1/17/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Development Advisory Boa	ard		Date: 1/17/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken
Council Subcommittee			Date: 4/16/13
	☐ Modified and approved	Denied	☐ No action taken
City Council Action			Date: 5/15/13
Approved as submitted	☐ Modified and approved	Denied	☐ No action taken



Approved as submitted

Approved as submitted

**City Council Action** 

### **CODE CHANGE PROPOSAL**

### Proposed Amendments to 2012 Uniform Plumbing Code Section 1017.1

Submitted by: Phoenix Planning and Development Department Code Committee 1017.1 Interceptors Required. Repair garages and gasoline stations with grease racks or grease pits, and factories that have oily, flammable, or both types of wastes as a result of manufacturing, storage, maintenance, repair, or testing processes, and in hydraulic elevator pits shall be provided with an oil or flammable liquid interceptor that shall be connected to necessary floor drains. (Remainder of section to remain unchanged) **Exception:** An oil interceptor is not required in hydraulic elevator pits where an approved alarm system is installed. Reasons: Protect drainage system. Harmonize UPC with 2012 IPC section 1003.4 to be consistent in elevator installations. Cost Impact: Cost savings from installation of alarm system instead of oil interceptor. **ACTION TAKEN:** 2012 Code Committee Date: 12/13/2012 Approved as submitted ☐ Modified and approved Denied ☐ No action taken **Development Advisory Board Technical Subcommittee** Date: 1/17/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken **Development Advisory Board** Date: 1/17/13 Approved as submitted Modified and approved Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13

☐ Denied

Denied

☐ No action taken

☐ No action taken

Date: 5/15/13

☐ Modified and approved

☐ Modified and approved



Approved as submitted

**Council Subcommittee** 

**City Council Action** 

**Development Advisory Board** 

### **CODE CHANGE PROPOSAL**

## **Proposed Amendments to the 2012 Uniform Plumbing Code** Section 1101.11.1 Submitted by: Phoenix Planning and Development Department Code Committee 1101.11 Roof Drainage. 1101.11.1 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 1101.11. Unless otherwise required by the Authority Having Jurisdiction, roof drains, scuppers, gutters, vertical conductors or leaders, and horizontal storm drains for primary drainage shall be sized based on a rainfall rate of three (3) inches per hour storm of 60 minutes duration and 100 year return period. Refer to Table D 1.1 (in Appendix D) for 100 year, 60 minute storms at various locations. Reasons: Current language in the 2012 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 1101.11.2.1. 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. \*\* DAB Technical asked for further structural input on changing the rainfall rate to 3 inches per hour. Cost Impact: Cost savings from allowing scuppers for primary roof drainage and from reducing the design rainfall rate from the current six (6) inches per hour (2006 UPC) down to three (3) inches per hour. **ACTION TAKEN:** 2012 Code Committee Date: 01/03/2013

Modified and approved

**Development Advisory Board Technical Subcommittee** 

☐ Denied

☐ Denied

Denied

Denied

☐ Denied

☐ No action taken

Date: 02/12/2013

☐ No action taken

☐ No action taken

☐ No action taken

Date: 2/21/13

Date: 4/16/13

Date: 5/15/13

☐ No action taken



# Proposed Amendments to the 2012 Uniform Plumbing Code Section 1101.11.2

Submitted by: Phoenix Planning and Development Department Code Committee

**1101.11.2 Secondary drainage.** Secondary (emergency) roof drainage shall be provided by one of the methods specified in Section 1101.11.2.1 or 1101.11.2.2.

**1101.11.2.1** Roof Scuppers or Open Side. Secondary roof drainage shall be provided by an open-sided roof or scuppers where the roof perimeter construction extends above the roof in such a manner that water will be entrapped. An open-sided roof or scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.11.1. Scupper openings shall be a minimum of 4' inches (102 mm) high and have a width equal to the circumference of the roof drain required for the area served, sized in accordance with Table 1101.11.

**1101.11.2.2 Secondary Roof Drain.** Secondary roof drains shall be provided. The secondary roof drains shall be located a minimum of 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 1101.11.1. The secondary roof drains shall connect to a piping system conforming to Section 1101.11.2.2(A) or 1101.11.2.2(B).

**1101.11.2.2(A) Separate Piping System.** The secondary roof drainage system shall be a 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 1101.11.1 based on the rainfall rate for which the primary system is sized.

1101.11.2.2(B) Combined System. The secondary roof drains shall connect to the vertical piping of the primary storm drainage conductor downstream of any horizontal offset 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 1106.0 based on double the 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. **ACTION TAKEN:** 2012 Code Committee Date: 01/03/2013 Approved as submitted ☐ Denied Modified and approved ☐ No action taken **Development Advisory Board Technical Subcommittee** Date: 1/17/13 Approved as submitted Modified and approved ☐ No action taken Denied **Development Advisory Board** Date: 1/17/13 Approved as submitted Modified and approved Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13 Approved as submitted ☐ Modified and approved ☐ No action taken Denied **City Council Action** Date: 5/15/13 Approved as submitted Denied ☐ No action taken ☐ Modified and approved



Approved as submitted

### **CODE CHANGE PROPOSAL**

#### **Proposed Amendments to the 2012 Uniform Plumbing Code Section 1104.3** Submitted by: Phoenix Planning and Development Department Code Committee 1104.3 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 single wye fittings 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. **ACTION TAKEN:** 2012 Code Committee Date: 01/03/2013 Approved as submitted ☐ Denied ☐ Modified and approved ☐ No action taken **Development Advisory Board Technical Subcommittee** Date: 1/17/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken **Development Advisory Board** Date: 1/17/13 Approved as submitted Modified and approved ☐ Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken **City Council Action** Date: 5/15/13

☐ Denied

No action taken

☐ Modified and approved



#### **Proposed Amendment to 2012 Uniform Plumbing Code** Chapter 12 Submitted by: Phoenix Planning and Development Department Code Committee **CHAPTER 12 FUEL GAS PIPING** Reserved Delete entire content of Chapter 12. Reasons: All the code sections are represented in the 2012 International Fuel Gas Code. Duplication of the material may be confusing. While both the IFGC and the UPC use NFPA 54 as the basis of their code language, the different code bodies diverge in specific areas. This could lead to conflicts. Cost Impact: No cost impact. **ACTION TAKEN:** 2012 Code Committee Date: 12/13/2012 Approved as submitted □ No action taken ☐ Modified and approved Denied **Development Advisory Board Technical Subcommittee** Date: 1/17/13 Approved as submitted Modified and approved ☐ No action taken Denied **Development Advisory Board** Date: 1/17/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken **Council Subcommittee** Date: 4/16/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken **City Council Action** Date: 5/15/13 Approved as submitted ☐ Modified and approved Denied ☐ No action taken



Proposed Amendments to the 2012 Uniform Plumbing Code Appendices						
Submitted by:	Phoenix	Planning and Develop	ment De	epartment Co	de Committee	
Adopt Appendices:	А, В, <del>D</del> , I					
Reasons:	,		,			
additional information rates of rainfall for or Previous amended	Appendix A provides an alternative engineered method of water pipe sizing. Appendix B provides additional information on combination waste and vent systems. Appendix D provides tables of maximum rates of rainfall for cities in the US and is used to size rainwater roof drains, leaders and scuppers. Previous amended section 1101.11.1.1 establishes the rainfall rate as 3 inches per hour so Appendix D is not needed. Appendix I contains installation standards for various piping systems.					
Cost Impact: No co	st impact.					
<b>ACTION TAKEN:</b>						
2012 Code Commi	ttee				Date: 01/03/2013	
Approved as sub	mitted	Modified and apprent	oved	Denied	☐ No action taken	
Development Advisory Board Technical Subcommittee Date: 1/17/13						
Approved as sub	mitted	Modified and apprent	oved	Denied	☐ No action taken	
Development Advisory Board Date: 1/17/13						
Approved as sub	mitted	Modified and apprent	oved	Denied	☐ No action taken	
Council Subcommittee Date: 4/16/13						
Approved as sub	mitted	Modified and apprent	oved	Denied	☐ No action taken	
City Council Action Date: 5/15/13						
Approved as sub	mitted	☐ Modified and appr	oved	☐ Denied	☐ No action taken	