The Allegheny County Health Department’s Rules and Regulations for Plumbing and Building Drainage, Article XV, are meant to replace or include the regulations in the International Plumbing Code. Until the document can be produced as a single booklet, it is necessary to read Article XV amendments or revisions of the International Plumbing Code in conjunction with the International Plumbing Codes for residential and commercial plumbing.

The Allegheny County Health Department is precluded by copyright from including material from the International Code Council on its website. For the latest version of the International Plumbing Code, visit [http://www.iccsafe.org/e/category.html](http://www.iccsafe.org/e/category.html) and select the mechanical/plumbing option on the list.

*Chapter 1 of Article XV incorporates both Chapter 1 - Administration from the IPC and Chapter 1-Administration of the IRC.*
CHAPTER 1
ADMINISTRATION

SECTION 101
GENERAL

IPC 101.1 DELETE & REPLACE WITH:
IRC R101.1 DELETE & REPLACE WITH:
AC-101.1 Title. These regulations shall be known as the Plumbing Code of the Allegheny County Health Department, hereinafter referred to as “Article XV”.

ADD:
AC-101.1.1 Effective date. This Article, after approval, shall become effective no sooner than ten (10) days after being advertised in a newspaper of general circulation in Allegheny County. All other provisions of Article XV shall be superceded.

IPC 101.3 DELETE & REPLACE WITH:
IRC R101.3 DELETE & REPLACE WITH:
AC-101.3 Intent. This Article provides for the comprehensive and uniform regulation of plumbing throughout Allegheny County to protect the public from the health hazards of inadequate or unsanitary plumbing; sets forth procedures for contracting with municipalities to provide inspection services and to issue permits and licenses; sets fees for the aforementioned services and licenses, provides for the imposition of penalties; sets forth definitions and procedures for the administration of the Plumbing Code of the Allegheny County Health Department; and provides for a Plumbing Program and a Plumbing Advisory Board.

ADD:
AC-101.3.1 Administration by other Municipalities within Allegheny County. Those municipalities in Allegheny County presently administering the provisions of this Article and the Plumbing Code of the Allegheny County Health Department may continue to do so, so long as no plumbing permits are issued for plans with requirements meeting standards less stringent than those outlined in this Article. Changes to the agreements with these municipalities are to be reviewed annually by the Board of Health. The person(s) who serve as inspector(s) in municipalities wishing to administer the Plumbing Code of the Allegheny County Health Department shall be appointed by the governing body of the municipality and shall have such qualifications as set forth by Article XV and the PA Construction Code Act of 1999 (Act 45) Chapter 401, Training and Certification.

SECTION 103
DEPARTMENT OF PLUMBING INSPECTION

IPC 103.1 DELETE & REPLACE WITH:
IRC R103.1 DELETE & REPLACE WITH:
AC-103.1 General. The Plumbing Program of the Allegheny County Health Department is responsible for the enforcement of these regulations.

IPC 103.2 DELETE & REPLACE WITH:
IRC R102.3 DELETE & REPLACE WITH:
AC-103.2 Appointment. The Chief Plumbing Inspector shall be appointed by the Director of the Allegheny County Health Department.
AC-103.3 Staffing. In accordance with the prescribed procedures of the Allegheny County Health Department, the Director shall appoint Plumbing Inspector Supervisors, Plumbing Inspectors, and other related technical officers and employees.

ADD:
AC-103.5 Conflict of interest. No person appointed Chief Plumbing Inspector, Assistant Chief Plumbing Inspector, Plumbing Inspector Supervisor, and/or Plumbing Inspector shall, directly or indirectly, be engaged in business or work regulated by this Article during his employment with the Department.

SECTION 104
DUTIES AND POWERS OF THE CODE OFFICIAL

AC-104.1 General. The Director and/or his designee shall enforce the provisions of this Article and shall preside over the resolution of any question relating to the installation, alteration, repair, maintenance, or operation of all plumbing systems, devices, and equipment.

AC-104.2 Rule-making authority. The Board of Health shall have the authority, in the interest of public health, safety and the general welfare, to adopt rules and regulations through its established rulemaking process for the approval of the Allegheny County Chief Executive.

The Board of Health shall direct the Department to propose rules, regulations, standards, policies, and procedures to the Board of Health for approval, to interpret and implement the provisions of this Article; to secure the intent thereof; and to designate due to local climatic or other conditions appropriate, alternative minimum standards. Such rules, regulations, standards, policies, or procedures shall not have the effect of waiving structural or fire performance requirements specifically provided for in this code, or of violating accepted engineering practice involving public safety.

The Board of Health may direct the Plumbing Advisory Board to review and comment upon rules, regulations, standards, policies, and procedures proposed by the Department.

AC-104.3 Applications and permits. The Chief Plumbing Inspector and/or his designee shall receive applications and issue permits for installation and alteration of plumbing, inspect the premises for which such permits have been issued, and assure through necessary enforcement procedures compliance with the provisions of this Article.

AC-104.4 Inspections. The Chief Plumbing Inspector and/or his designee shall make all required inspections, or shall accept reports of inspections by approved agencies or individuals. All inspection reports shall be in writing and be endorsed by an officer of such approved agency or by an approved individual. The Chief Plumbing Inspector and/or his designee is authorized to engage such expert opinion as is deemed necessary to resolve unusual technical issues that arise, subject to the approval of the Director.


**SECTION 104**

**Civil Penalties.** A person who violates any of the provision of this Article, or any order issued by the Director under this regulation, is subject to a Civil Penalty in accordance with the provisions of the Department’s Rules & Regulations, Article XVI, “Civil Penalties”.

**SECTION 105**

**APPROVAL**

**SECTION 106**

**PERMITS**

**ADD:**

**Engaging in the business of plumbing.** No person, other than a currently licensed master plumber, shall engage in the business of plumbing or expose the sign of plumbing or any advertisement pertaining thereto, except wholesale or retail plumbing fixture suppliers. Any firm or corporation desiring to engage in the business of plumbing shall have at least one member who possesses a valid master plumber’s license, who shall register with the Department his or her name, along with the name(s) of all officers of the firm or corporation upon whose behalf he is registering.

**Exempt Work.** The following work shall be exempt from the requirement for a permit:

1. Repairs that involve the working parts of a faucet or valve, the clearance of stoppages, or the replacement of defective faucets or valves, may be made without a permit. However, a permit shall be obtained when any part of the plumbing system becomes defective and requires replacement or alteration.

2. Allied Trades may install equipment not identified as plumbing but which may require water and/or waste connections such as heating, air conditioning, cooling, refrigeration, fire sprinkler systems, and industrial piping. These connections may be made without a permit to water and waste outlets originally provided for in the plumbing and drainage systems, when such connections are made in conformance with Article XV, provided that: where such equipment or systems are being ADD:ed to a structure in which no provisions have previously been provided for water supply and/or drainage outlets, the services of a
registered master plumber will be required; and provided further that installers of any equipment requiring potable water using equipment or systems subject to backflow/and or which would in any way utilize toxic materials or chemicals which could potentially contaminate the potable water supply, shall be required to engage the services of a registered plumber to install proper backflow prevention devices as approved by the Administrative Authority.

3. Installation of public facilities: The "Drainage Systems" regulated by this Article include all piping within public or private premises that conveys sewage or other wastes to a legal point of disposal, but do not include the mains of public water or sewer systems or public or private sewage treatment or disposal plants.

**IPC 106.4 DELETE & REPLACE WITH:**

**AC-106.4 By whom application is made.** Application/plans for permits shall be made by the owner/occupant or master plumber installing all or part of any plumbing system. The applicant shall meet all qualifications established by statute, or by rules and regulations promulgated by this Code. The full name of and address of the applicant shall be stated in the application.

Exceptions:

1. Existing single family dwellings: Any permit required by this Article to allow any work regulated by this Article may be issued to a bonafide owner who presently occupies an existing single family dwelling, who intends to occupy the existing single family dwelling and any of its accessory buildings, exclusively for private purposes, on the condition that the said owner personally purchase all material and perform all labor in connection therewith. Such privilege does not convey the right to violate any of the provisions of this Article, nor is it to be construed as exempting any such property owner from obtaining a permit, nor covering or concealing work in any manner until after it has been inspected by the Administrative Authority's inspectors, nor from payment of required fees.

2. Site Work: When a commercial or industrial site is being developed, registered professional engineers, registered architects, or registered master plumbers may file plans, obtain permits, and install and/or supervise the installation of sewers and water supply systems regulated by this Article from the point of public connection or proper disposal to a point five (5) feet from the building (commonly identified as "site work").

Where a new residential site is being developed and public sewers are not immediately available, registered professional engineers, registered architects or registered master plumbers may file plans, obtain permits, and install and/or supervise the installation of common private sewers and common water supply systems up to the point of individual sewer or individual water service pipe connections to the common line. In addition, the requirements of Section AC-701.3 and AC-701.3.1 shall also be required.

**IPC 106.5.4 DELETE & REPLACE WITH:**

**AC-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 may commence work, when the permittee provides satisfactory reasons why the work cannot be commenced within the time required by the original permit. The Chief Plumbing Inspector and/or his designee shall extend the time for action by the permittee for a period not exceeding 180 days, upon the demonstration of good cause. No permit shall be extended more than once. The fee for extension shall be the equivalent of the plan fee.

**ADD:**

**AC-106.5.7 Permission to proceed.** Plans filed shall not constitute permission to proceed. A permit must be obtained prior to commencing any plumbing work.
ADD:

**AC-106.5.8 Performance of plumbing work.** No person, other than a licensed master plumber, a licensed journeyman plumber in the employ of a licensed master plumber, a registered plumbing apprentice in the employ of a licensed master plumber, or a bonafide owner presently occupying an existing single family building shall install, alter, or make connections with any sewer, water, drain, or any pipe connected therewith; or alter the location of any existing plumbing fixtures, water distribution piping system or sewer drainage system.

**IPC 106.6.2 DELETE & REPLACE WITH:**

**IRC R108.2 DELETE & REPLACE WITH:**

**AC-106.6.2 Fee schedule.** The fees for all plumbing work shall be as indicated on a fee schedule approved annually by the Board of Health.

**IPC 106.6.3 DELETE & REPLACE WITH:**

**IRC R108.5 DELETE & REPLACE WITH:**

**AC-106.6.3 Fee refunds.** The Chief Plumbing Inspector shall authorize fee refunds as follows:

1. Fixture fees before work has commenced.

NO refunds shall be made on plan fees or after plumbing work has been commenced.

The Chief Plumbing Inspector 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.

ADD:

**AC-106.7 Registration and licensing of plumbers.** The Department shall issue licenses for Master and Journeyman Plumbers, as well as register apprentice plumbers. All licenses/registrations will be valid for a twelve (12) month period.

**AC-106.7.1 Licensing of plumbers.** The Department shall approve or disapprove applications for Journeyman and Master Plumbers, and shall register apprentice plumbers. The Department shall examine and license Journeyman and Master Plumbers.

**AC-106.7.2 Identification.** Proper identification, such as government issued photo ID, photo driver’s license, and/or valid photo plumbers license must be carried and presented upon request to Department staff.

**AC-106.7.3 Valid Master Licenses.** No licensed master plumber shall do plumbing in the County of Allegheny unless a valid current permit to do such work has been issued by the Administrative Authority.

**AC-106.7.4 Valid Journeyman and Apprentice Licenses.** No licensed master plumber shall employ any person who is not currently licensed as a plumber or registered as an apprentice plumber to perform plumbing work under any contract entered into by the licensed master plumber; and no licensed plumber or registered apprentice plumber shall perform any plumbing work except as supervised by a licensed master plumber.

**AC-106.7.5 “Registered Master Plumber” Display.** All vehicles used by a master plumber in the operation of his business shall bear his name or the name of his company, and the words “Registered Master Plumber” or his license number, which shall be known as a HEALTH PERMIT number and may be abbreviated to H.P. and followed by his number in lettering not less than three (3) inches high.
AC-106.7.6 Notice of Change of Business. Every licensed master plumber shall immediately notify the Department of any change in the place of his business or upon the termination of his business.

AC-106.7.7 Unauthorized Use. No person, firm, or corporation, carrying on the business of plumbing, shall allow his name to be used by any person not employed or contracted by that person, firm or corporation, directly or indirectly, either to obtain a permit or permits, or to do any work under his license.

AC-106.7.8 Master Plumber Qualifications. No master plumber's license shall be granted a journeyman plumber until he has had at least two (2) years experience as a licensed journeyman plumber and has successfully passed the required examination.

AC-106.7.8.1 License Designation. Once a journeyman plumber takes the master plumber examination, successfully passes, and receives his master's license, he/she must remain a master plumber and may not revert to a journeyman plumber.

AC-106.7.9 Journeyman Plumber Qualifications. No journeyman plumber's license shall be granted a registered apprentice plumber until he has:

- Acquired a minimum four (4) years experience or the equivalent of 8,000 hours worked;
- Completed 576 hours of plumbing training at an accredited school, preferably within six (6) years of the beginning of the apprenticeship training; and
- Passed the required examination.

A test qualification exemption may be granted to a registered apprentice plumber who has at least three (3) years and six (6) months’ experience, who will take the Journeyman Plumbers’ examination prior to completing this fourth (4th) year of training, provided that he submits to the Department, documentation that he will complete four (4) years work experience within six (6) months of passing the required examination.

ADD:

AC-106.7.9.1 Advanced Standing Examination. Applicants for advanced standing examination must meet one of the following requirements:

1. Successful completion of a related training program consisting of at least one (1) school year of instruction.
2. Successful completion of related training provided by the military during active service.
3. Successful completion of college credits toward a major in a related field.
4. Successful completion of other comparable training/college credits satisfying the requirements of 1, 2, or 3.
5. Successful Completion of a Bachelor’s Degree from an accredited institution.

Credit granted shall be applicable to the first year of apprentice training only. A passing score of 75% is required on the advanced standing examination. If an applicant fails the examination, he may retake the examination once within thirty (30) days of the original examination date. The applicant will be required to pay an additional examination fee to retake the examination.

If an applicant is claiming college technical credits, an official transcript, with the university/technical school’s raised or watermark seal and the registrar’s signature on the transcript, must be submitted. The transcript must be mailed directly from the university or technical school to the Allegheny County Health Department Plumbing Program. A transcript that states “issued to the student” is not acceptable. A certificate indicating completion of a training program and military documents verifying training must be submitted if an applicant is claiming this training.
AC-106.7.10 Apprentices. All apprentice plumbers shall register with the Department within 30 days of the beginning of their apprenticeship training. Failure to do so may result in revocation of an apprentice's registration card.

AC-106.7.11 Examinations. The Department shall develop and conduct examinations as needed. Notice shall be given no less than two (2) weeks prior to the dates scheduled for the examinations in at least two (2) newspapers of general circulation in Allegheny County.

AC-106.7.12 License renewal. A licensed master or journeyman plumber desiring to continue in the business of plumbing, shall annually, within thirty (30) days of his birth date apply to the Department for a renewal of his license and pay the annual license renewal fee as specified in the current fee schedule. No examination shall be required for the renewal of a master or journeyman license, provided proper application and payment is made in the time period specified above.

AC-106.7.12.1 Inactive status. A licensed master or journeyman plumber who has retired or is not engaged in the business of plumbing shall file with the Department written notice that he desires to voluntarily assume inactive status and discontinue the business of plumbing. When a licensed master or journeyman plumber fails to pay the annual fee pursuant to Section AC-106.6.2.4, he becomes inactive by default.

AC-106.7.12.2 Reinstatement from Inactive Status. Any person who has assumed inactive status pursuant to Section AC-106.7.12.1 shall be reinstated to active status upon payment of any fee in effect for the year in which the reinstatement request is made, and for any and all annual registration fees that have not been paid since his last assumption of inactive status.

AC-106.7.12.3 Reinstatement to Active Status with Re-Examination. Any person who requests a transfer to active status after more than four (4) years on inactive status may be required to undergo, at the discretion of the Director, an examination as provided in Section AC-106.7.11.

AC-106.7.13 Retirement. A licensed Master or Journeyman Plumber who has retired shall file with the Department written notice that he voluntarily desires to retire. A retiree shall be considered inactive.

AC-106.7.14 Revocation of License. The Department may revoke any license issued under the provisions of this Article, if the Department finds that a license was obtained by fraud or misrepresentation or that the licensee has persistently violated any provision of this Article or any rule or regulation adopted pursuant thereto. Before making such findings, the Department shall afford the licensee an opportunity for a hearing before the Director, and shall give the licensee at least ten days notice of such hearing.

AC-106.7.14.1 Reinstatement from Revocation. A person whose license has been revoked shall not be permitted to apply for reinstatement of his license within one year of the revocation date. Any person who applies for reinstatement shall be required to undergo an examination as determined by the Department.

AC-106.7.15 Suspension of License. The Director may suspend for a period not exceeding thirty (30) days any license issued under the provisions of this Article if the Director finds that the licensee has violated any provision of this Article or any rule or regulation adopted thereto. Before making such a finding, the Director shall afford the licensee an opportunity for a hearing before the Department and it shall give at least five days notice of such hearing to the licensee.
AC-106.7.15.1 Reinstatement with Re-Examination. A person whose license has been suspended may be required to undergo an examination as shall be determined by the Chief Plumbing Inspector.

AC-106.7.16 Non-Resident License. Any person, not residing in Allegheny County, desiring to do plumbing work in Allegheny County, who has been licensed by another state or political subdivision, may apply to the Department to take the Allegheny County plumbers’ license examination, provided the applicant holds a similar license issued under licensing procedures equivalent to Allegheny County’s. The applicant shall pay the examination fees set forth in the current fee schedule.

AC-106.7.16.1 Temporary Reciprocal License. Any non-resident desiring to do plumbing work in Allegheny County, who has been licensed by another state or political subdivision, may apply to the Department for a temporary reciprocal license. The Department shall issue the temporary reciprocal license provided the applicant holds a similar license issued under licensing procedures equivalent to Allegheny County’s, which in the discretion of the Department, would merit the issuance of such a license. A temporary reciprocal license must be obtained for each plumbing permit sought by a non-resident plumber. A non-resident plumber may obtain licenses for such plumbing work for which he has contracted at the time of application for a temporary reciprocal license. No additional licenses shall be granted until the previous work has received final inspection and approval. The applicant shall pay the fees set forth in the current fee schedule.

AC-106.7.17 Registration of Plumbers and Apprentices. The Department shall maintain a register of all licensed Master and Journeyman Plumbers and registered Apprentice Plumbers. The register shall be open to public inspection in accordance with the rules, regulations or policies governing the inspection of other Departmental records.

SECTION 107
INSPECTIONS AND TESTING

IPC 107.1 ADD:

IRC R109.3 ADD:

AC-4. Plumbing work for which a permit is required shall not be covered or concealed in any manner until after it has been inspected and approved by the Department inspectors.

AC-5. After an inspection request has been received by the Department, an inspection shall be authorized. The Department shall exercise best efforts to complete the inspection within twenty-four (24) working hours. Inspection requests received on weekends or holidays will be deferred until the first regular work day unless they concern emergency conditions or a street closure. The person listed on a permit must request the final inspection.

IPC 107.3.3 ADD:

AC-107.3.3.1 Re-inspection fees. A re-inspection fee shall be charged when an inspection cannot be completed because the work has not progressed sufficiently to allow for testing, as defined in the relevant sections, or for final inspection. The fee, as listed on the current fee schedule, must be paid prior to any subsequent re-inspections.
SECTION 108
VIOLATIONS

IPC 108.2 ADD:
IRC R113.2 ADD:

AC-108.2.1 Issuance of notices. Whenever the Director determines that there has been a violation of any provisions of this Article, he/she shall give notice of the violation to the person responsible for compliance. The notice shall:

1. Be in writing;
2. Include a statement of the reason why it is being issued;
3. Permit a reasonable amount of time for compliance; and
4. Inform the person responsible for compliance of his right to a hearing.

AC-108.2.2 Service of notice. The notice shall be served upon the person responsible for compliance with these regulations by any of the following:

1. By handing a copy to the responsible person, or by handing a copy to the persons designated in Rule 402 of the Rules of Civil Procedure promulgated by the Supreme Court of Pennsylvania, or
2. By sending a copy to the responsible person’s last known address by regular mail, or
3. By posting a copy in a conspicuous place in or about the premises.

IPC 108.3 DELETE & REPLACE WITH:
IRC R113.3 DELETE & REPLACE WITH:

AC-108.3 Prosecution of violation. In the event of the failure to comply with an order issued pursuant to any section of this Code, the Director may institute appropriate actions or proceedings at law or in equity to restrain, correct or abate the violation, or he may cause the order to be carried out at the expense of the County. The County may recover the amount of the expense by action of assumpsit, or, where appropriate in the manner provided by law for the collection of claims under the Act of May 16, 1923, P.L. 207, or any amendment or reenactment thereof.

IPC 108.4 DELETE & REPLACE WITH:
IRC R113.4 DELETE & REPLACE WITH:

AC-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 shall be guilty of the offenses listed below. For the purposes of this section, violations on separate dates shall be considered separate offenses. Each violation of a separate subsection or section of this Article shall constitute a separate offense.

AC-108.4.1 Summary Offenses. Any person who violates any of the provisions of this Article or any rule or regulation of the Allegheny County Health Department, or who interferes with the Director or any other agent of the Department in the discharge of his official duties, shall, for the first offense, upon conviction thereof in a summary proceeding before any District Magistrate in Allegheny County, be sentenced to pay the costs of prosecution and a fine of not less than thirty dollars ($30) nor more than three hundred dollars ($300) and, in default thereof, shall be subject to imprisonment for not less than ten (10) days and not more than thirty (30) days.
AC-108.4.2 Misdemeanors. Any person who violates any of the provisions of this Article or any rule or regulation of the Allegheny County Health Department, or who interferes with the Director or his or her representative in the discharge of his or her official duties, convicted of a second or subsequent offense, shall be guilty of a misdemeanor and shall, upon conviction thereof, be sentenced to pay a fine of not less than five hundred dollars ($500) nor more than one thousand dollars ($1000) or to undergo imprisonment not exceeding one (1) year, or both.

AC-108.4.3 Civil Penalties. A person who violates any of the provisions of this Article or any order issued by the Director or his designee under this Article, is subject to a Civil Penalty in accordance with the provisions of the Department’s Rules and Regulations, Article XVI, “Civil Penalties.”

IPC 108.5 DELETE & REPLACE WITH:
IRC R114.1 DELETE & REPLACE WITH:
AC-108.5 Stop work orders. Upon notice of the Chief Plumbing inspector or his designee, 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, 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 Chief Plumbing Inspector or his designee shall not be required to give written notice prior to ordering the work to stop. Any person who continues any work on or about a 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 subject to enforcement action.

SECTION 109
MEANS OF APPEAL

IPC SECTION 109 DELETE ENTIRE SECTION & REPLACE WITH
IRC SECTION R112 DELETE ENTIRE SECTION & REPLACE WITH

AC-109.1 Application for appeal. Any person aggrieved by any action taken by the Director and/or his or her designee may request a hearing within ten (10) days in accordance with the Allegheny County Health Department Rules and Regulations, Article XI, “Hearings and Appeals.”

ADD:

AC-SECTION 110
PLUMBING ADVISORY BOARD

AC-110.1 General. The Board of Health shall appoint a Plumbing Advisory Board to consist of the following ten (10) members:

One (1) representative of a City of the Second Class
One (1) representative who shall be a Licensed Professional Engineer
One (1) representative who shall be a Licensed Architect
One (1) representative who shall be a Licensed Master Plumber
One (1) representative of the Allegheny County League of Municipalities
One (1) representative representing the Allied Trades
One (1) representative from the Home Builder’s Association
Two (2) representatives who shall be a Licensed Journeyman Plumber
One (1) citizen’s representative not affiliated with the above representative classifications
AC-110.2 Terms of Appointments. The Plumbing Advisory Board shall be Allegheny County residents consisting of ten (10) members as specified in Section AC-110.1. Two (2) members shall be appointed for a term of one (1) year, two (2) members for a term of two (2) years and the remainder for a term of three (3) years. Upon expiration of any term, all succeeding terms shall be for a term of three (3) years, or until successors are appointed and qualified. Terms shall be limited to two (2) consecutive three (3) year terms. Excessive absenteeism shall be cause for dismissal of any member. If a member has been dismissed or is absent due to death or extended illness, a new member shall be appointed.

AC-110.3 Election of Officers. The Plumbing Advisory Board shall elect its own Chairman and Vice-Chairman annually, and shall have the power to elect new officers in the event of a vacancy. A quorum shall consist of a majority of the presently appointed voting members of the Board. It shall meet within thirty (30) days following the adoption of this Article, and after, at the call of the Chairman, or at such times as may be necessary for proper performance of its duties, but at least once during any six month period. The Board of Health shall appoint additional members to fill all vacancies. The Director and the Chief Plumbing Inspector shall be ex-officio members of the Board without the right to vote. The Chief Plumbing Inspector shall serve as Secretary for the Plumbing Advisory Board.

AC-110.4 Duties of the Plumbing Advisory Board. The Plumbing Advisory Board shall advise the Director in administering the provisions of this Article.
ADD: THE FOLLOWING DEFINITIONS:

ACCESSORY BUILDINGS. Buildings that are dependent upon and cannot function independently of the central unit.

ACID DRAIN. An acid-resisting drain pipe used for installations for chemical manufacturing, laboratories, processing or other acid liquids used for commercial or experimental purposes.

ADMINISTRATIVE AUTHORITY. The term "Administrative Authority" when used in this Article, shall mean the Director of the Allegheny County Health Department or his authorized representative, including an individual official, board, division, or municipality authorized by the Department to administer and enforce the provisions of this Article.

APARTMENT BUILDING. A structure containing dwelling units that also contains common areas accessible from within the structure such as hallways, basements, laundry facilities, etc.

ARTICLE. The term "Article" or "this Article" when used alone shall mean these rules and regulations, subsequent amendments thereto or any emergency rule or regulation which the Board of Health may recommend for adoption by the County Executive.

BOARD OF HEALTH. The term "Board of Health" shall mean the Board of Health of Allegheny County.

BUILDING CLASSIFICATION. The arrangement adopted by the Administrative Authority for the designation of buildings in classes according to use or occupancy.

BUILDING DRAIN (house drain). (delete IPC definition and replace with) That part of the lowest piping of a drainage system which receives the discharge of soil, waste, and other drainage pipes inside the walls of the building and conveys such discharges to the building sewer; the building drain shall be considered to extend (5) five feet outside the building wall.

BUILDING TRAP (house trap). (delete IPC definition and replace with) A device, fitting or assembly of fittings installed in the building drain to prevent the entrance of sewer gas into the drainage system of the building from the building sewer or main sewer and provide a circulation of fresh air for the drainage system through a fresh air inlet.

CHIEF PLUMBING INSPECTOR. Term "Chief Plumbing Inspector" shall mean any qualified person employed by the Administrative Authority to provide the general supervision of the Assistant Chief Plumbing Inspector, Supervisors and Inspectors and such other employees as may be necessary to administer and enforce the provisions of this Article.

CLINIC SINK (Bedpan Hopper). A fixture having an integral trap in which the upper portion of the visible trap seal provides a water surface. The fixture shall be designed as to permit complete removal of the contents by siphonic and/or blowout action, and to reseal the trap. A flushing rim shall provide water to cleanse the interior surface. The fixtures shall have flushing and cleansing characteristics similar to a water closet.

COMMON SEWER LATERAL. A private sewer that collects the sewage discharge of more than one building drain/sewer and conveys it to a public sewer.

DEPARTMENT. The Allegheny County Health Department.
DIRECTOR. The Director of the Allegheny County Health Department or his authorized representative.

DURHAM SYSTEM. Term used to describe soil or waste systems where all piping is of threaded pipe, tubing, or other rigid construction, using recessed drainage fittings to correspond to the types of piping.

FIXTURE. (Defined per fixture fee schedule) The word fixture, as used in the fee structure shall mean each water closet, urinal, wash basin, sink, bath tub, house trap, floor drain, roof drain or downspout area drain, laundry tray, hot water heater or openings provided for any of the aforementioned or any plumbing or drainage appliances trap-connected, either directly or indirectly, to the plumbing or drainage system, whether water-supplied or not, installed in the building or on the lot within the property line.

Each installed vacuum breaker or backflow prevention device on unprotected equipment or apparatus shall constitute one fixture fee. (Not to include required vacuum breaker on plumbing fixtures covered in this Code, integral or built-in backflow devices or hose bib-attached devices.)

FRESH AIR INTAKE or VENT. A means for introducing fresh air into a building drainage system through a building or house trap.

GRADE. The slope or fall of a line of pipe in reference to a horizontal plane. In drainage it is usually expressed as the fall in a fraction of an inch per foot length of pipe.

INDUSTRIAL WASTES. Liquid wastes resulting from the process employed in industrial establishments and are free of fecal matter.

INfiltration. The water entering a sanitary drainage system from the ground through such means as, but not limited to, defective pipes, pipe joints, connections, or manhole walls. Infiltration does not include, and is distinguished from, inflow.

INFLOW. The water entering a sanitary drainage system from such sources as, but not limited to: rain conductors, foundation drains, yard and area drains, catch basins, surface run-off, manhole or lamp-hole covers, fresh air vents, or connections with storm or combination sewer/drain piping. Inflow does not include, and is distinguished from, infiltration.

LAMP-HOLE COVER. The removable covering to a lamp-hole cleanout in a sewer line.

LIQUID WASTE. Liquid waste is the discharge from any fixture, appliance, or appurtenance, in connection with a plumbing system that does not receive fecal matter.

LOCAL VENT. A local vent pipe is a pipe on the fixture side of the trap through which vapor or foul air is removed from a room or fixture.

MAY OR SHALL. The word "may" as used in the rules and regulations is a permissive term. The word "shall" as used in these rules and regulations is a mandatory term.

MUNICIPALITY. A city, incorporated town, township, borough, or home-rule municipality other than a county, or any authority created pursuant to the laws of the Commonwealth of Pennsylvania.

NEUTRALIZING TANK. A neutralizing tank is a receptor designed and installed to receive the discharge of acid drains and to safely neutralize said acid by passing acid through limestone chips or other acceptable neutralizing material in neutralizing tanks before discharging to regular drainage system.

PERSON. The word "person" as used in these rules and regulations shall mean a natural person, his heirs, executors, administrators or assigns; and includes a firm, partnership or corporation, its or their successors or assigns. Singular includes plural, male includes female.
PLUMBER (APPRENTICE). The term “Apprentice Plumber” shall mean any person who is engaged in learning the plumbing trade by working with and assisting a journeyman or master plumber in the installation, maintenance, and repair of plumbing and drainage and is governed by the rules and regulations promulgated under “The Apprenticeship and Training Act,” 1961, July 14, P.L. 304.

PLUMBER (JOURNEYMAN). The term “Journeyman Plumber” shall mean a person other than a master or apprentice plumber who is not on inactive status, having satisfied the Examining Board of the Allegheny County Health Department as to his knowledge of the installation of plumbing and has been licensed by the Department to install plumbing under the direction of a master plumber.

PLUMBER (MASTER). The term “Master Plumber” shall mean a person other than a journeyman or apprentice plumber, who is not on inactive status, having satisfied the Allegheny County Health Department as to his knowledge of the installation of plumbing and has been licensed by the Department to install plumbing as a Master Plumber.

PREMISES. The land and building(s) owned by a single entity or co-owned by a group, that together constitute places of business or private residence(s).

PREMISES, QUALIFYING. Qualifying Premises are those premises with occupied buildings that have at least one point on an exterior wall located within two hundred fifty (250) feet of a public water or sewer system, built in or after 1994; or within one hundred fifty feet (150) of a public sewer system built before 1994; as measured from the wall of the occupied building nearest the public system, across the premises’ land, and along an easement, alley or street to the public water or sewer system.

PRIVATE SEWER. A private sewer is a sewer privately owned and not directly controlled by public authority.

RECEPTOR. A fixture or device that receives the discharge from indirect waste pipes.

REVENT PIPE. A revent pipe (sometimes called an individual vent) is that part of a vent pipe line that connects directly with an individual waste or group of wastes, underneath or back of the fixture, and extends either to the main or branch vent pipe.

SEPTIC TANK. A watertight receptacle that receives sewage and is designed and constructed to provide for sludge storage, sludge decomposition and to separate solids from the liquid through a period of detention before allowing the liquid to be discharged to a subsurface absorption area.

TRAP ARM. The developed length in the fixture drain measured from the trap weir to the vent fitting.

WET VENT. A vent that also serves as a drain.
CHAPTER 3
GENERAL REGULATIONS

SECTION 305
PROTECTION OF PIPES AND PLUMBING SYSTEM COMPONENTS

IPC 305.6 DELETE & REPLACE WITH:
AC-305.6 Freezing. Water service piping, exterior building drains and sewers shall be installed below recorded frost penetration but not less than 3’ 6” below grade for water piping and 3’ below grade for sewers and exterior building drains, measured to the top of pipe, provided that sewers to septic tanks are at least twelve (12) inches below grade. Plumbing piping in exterior building walls or exposed areas within buildings shall be adequately protected against freezing by insulation or heat or both.

IPC 305.6.1 DELETE (addressed in new Section AC-305.6)

IPC 305.7 DELETE & REPLACE WITH:
AC-305.7 Waterproofing of Openings. Joints at the roof and around vent pipes shall be made watertight by the use of lead, copper, aluminum or other approved flashing material. Exterior wall openings shall be made watertight. Floor drains installed above the basement floor with useable space below shall be waterproofed with approved flashing material. The flashing material shall be securely fastened to the waste outlet at the seepage entrance making a watertight joint between the flashing material and the floor drain. Flashing material shall extend a minimum of 18 inches from the center of the floor drain.

ADD:
AC-310.6 Construction Requirements for Wash Rooms and Toilet Rooms. In non-residential buildings, water closets, urinals, bathtubs, and showers shall be located only in toilet rooms or bathrooms provided with waterproof floors, and with waterproofing extending at least six (6) inches above the floors, except at doors.

AC-310.6.1 Location Near Food Processing Areas. Water closets, urinals, bathtubs and showers shall not be located on the next floor directly above space used for manufacturer, preparation, packaging, storage, or display of food.

AC-310.6.2 Location Near Food Handling or Storage Areas. The doors of toilet rooms in any establishment regulated by Article III of the Rules and Regulations of the Allegheny County Health Department shall not open directly into any kitchen or dining rooms, or any room in which food, drink, or utensils are handled or stored. When such toilet rooms are located adjacent to the kitchen or dining areas, an intervening vestibule of at least three feet square shall be provided.

AC-310.6.3 Location in Sleeping Apartments. Water closets shall not be located in sleeping apartments except when installed in properly lighted and ventilated toilets or bathrooms.

SECTION 312
TESTS & INSPECTIONS

ADD:
AC-312.10 Testing for Sanitary Site Work. All sanitary site work shall be tested by air to 5 psi for 15 minutes, deflection tests, no greater than 5%, or manufacturer’s recommended actions, and all manholes shall be vacuum tested to 5 inches of mercury for 10 minutes.
### Chapter 4

**Fixtures, Faucets and Fixture Fittings**

#### Section 403

**Minimum Plumbing Facilities**

**IPC 403.1 - Table 403.1 Add: or Replace With:**

<table>
<thead>
<tr>
<th>NO.</th>
<th>Classification</th>
<th>Use Group</th>
<th>Description</th>
<th>Water Closets (Urinals See Section 419.2)</th>
<th>Lavatories</th>
<th>Bathtubs/Shower Rooms</th>
<th>Drinking Fountain (See Section 410.1)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Assembly</td>
<td>A-1&lt;sup&gt;d&lt;/sup&gt;</td>
<td>Auditoriums, theaters Replace IPC Section</td>
<td>2 per 100 (up to 400)</td>
<td>1 per 25 (up to 100)</td>
<td>1 per 75</td>
<td>1 per toilet room, but not less than 1 per 1000</td>
<td>1 service sink per floor</td>
</tr>
<tr>
<td></td>
<td>(see Sections 403.2, 403.4, and 403.4.1)&lt;sup&gt;1,2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>over 400-ADD: 1 per 125</td>
<td>over 100-ADD: 1 per 65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A-2&lt;sup&gt;d&lt;/sup&gt;</td>
<td>Nightclubs, dance halls, restaurants, lounges, bars, taverns Replace IPC Section</td>
<td>2 per 1-50</td>
<td>1 per 1-25</td>
<td>1 per 75</td>
<td>1 service sink per floor</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 per 51-100</td>
<td>2 per 26-50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 per 101-160</td>
<td>3 per 51-100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>over 160-ADD: 1 per 40</td>
<td>4 per 101-160</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>for</td>
<td>over 160-ADD: 1 per 40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Business</td>
<td>B</td>
<td>Office Buildings (Public and government) Add: to IPC section</td>
<td>1 per 1-15</td>
<td>1 per 1-15</td>
<td>1 per 75</td>
<td>1 service sink per floor</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 per 16-35</td>
<td>2 per 16-35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 per 36-55</td>
<td>3 per 36-55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 per 56-80</td>
<td>4 per 56-80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 per 81-110</td>
<td>5 per 81-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6 per 111-150</td>
<td>6 per 111-150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>over 150-ADD: 1 per 40</td>
<td>over 150-ADD: 1 per 40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO.</td>
<td>CLASSIFICATION</td>
<td>USE GROUP</td>
<td>DESCRIPTION</td>
<td>WATER CLOSETS (URINALS SEE SECTION 419.2)</td>
<td>LAVATORIES</td>
<td>BATHTUBS/SHOWERS</td>
<td>DRINKING FOUNTAIN (SEE SECTION 410.1)</td>
<td>OTHER</td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
<td>-----------</td>
<td>-------------</td>
<td>------------------------------------------</td>
<td>------------</td>
<td>------------------</td>
<td>--------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>3</td>
<td>Educational</td>
<td>E</td>
<td>Elementary (students)</td>
<td>1 per 40</td>
<td>1 per 30</td>
<td>1 per 50</td>
<td>Footnote 7</td>
<td>1 per 100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Elementary (secondary)</td>
<td>1 per 50</td>
<td>1 per 40</td>
<td>1 per 50</td>
<td></td>
<td>1 per 100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University, adult centers, etc.</td>
<td>1 per 50</td>
<td>1 per 40</td>
<td>1 per 50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Staff (all schools) ³</td>
<td>same as office buildings</td>
<td>same as office buildings</td>
<td>same as office buildings</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Replace IPC section</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Factories, Industrial</td>
<td>F-1 and F-2</td>
<td>Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials</td>
<td>1 per 25 up to 100</td>
<td>1 per 25 up to 100</td>
<td>1 per 10 up to 100</td>
<td>1 per 10 up to 100</td>
<td>1 per 100</td>
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<tr>
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<td></td>
<td></td>
<td>Replace IPC section</td>
<td>over 100-1 per 100</td>
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<td>over 100-ADD: 1 per 15</td>
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<td></td>
<td></td>
<td>See Footnote 9</td>
<td>See Footnote 9</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Institutional</td>
<td>1-4</td>
<td>Day care and child care centers ¹²</td>
<td>1 per 10 ¹¹</td>
<td>1 per 10</td>
<td>1 per 10</td>
<td>1 per 10</td>
<td>1 per 100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Children under 6</td>
<td>1 per 12</td>
<td>1 per 12</td>
<td>1 per 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Children over 6</td>
<td>1 per 15</td>
<td>1 per 15</td>
<td>1 per 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Staff</td>
<td>ADD: to IPC section</td>
<td></td>
<td></td>
<td></td>
<td>Footnotes 10</td>
</tr>
</tbody>
</table>

1. “Restaurant” occupancy refers only to establishments that sell food primarily to be consumed on the premises. Establishments that have only “stand-up” facilities for eight (8) or less persons and establishments that sell “take-out” food only shall not be classified as a “restaurant.”

2. For establishments serving food and/or drinks, see Article III, “Restaurants” and Article IV, “General Food”, of the Allegheny County Health Department Rules & Regulations.

3. Dipper wells with running water shall be provided in conjunction with the dispensing of ice cream, yogurt and/or related products.

4. One 3-compartment rinsing sink shall be installed in each bar.

5. A 3-compartment sink shall be provided when food is prepared and served on the premises.

6. Utility sinks shall be provided for washing utensils, equipment, and appurtenances in accordance with Article III, “Restaurants” and Article IV, “General Food.”

7. Provide showers for 1/5 of the maximum number of students using gymnasium and/or pool at one time.

8. Staff facilities in university, college adult centers may be combined with student facilities.

9. Provide one lavatory for each five persons exposed to skin contamination with poisonous, infectious, or irritating material.

10. Sinks used for dishes, utensils and any other food related items shall be NSF approved.

11. Water closets for children under age 6 shall be of suitable size and height, and seats shall be of an open sanitary type.

12. Separate toilet facilities shall be provided in centers with daily enrollment of 25 or more children.
ADD:
AC-403.4.1.1 TRAVEL DISTANCE: DELETE 500’ FROM IPC 403.4.1 AND REPLACE WITH 300’

SECTION 417
SHOWERS

ADD:
AC-417.7 Gang Showers, Drainage and Where Permitted. Gang or public type showers will be permitted only in places of temporary occupancy where sleeping accommodations are not provided and their use is of a transitory nature, such as athletic field houses, gymnasiums, and swimming pool bath houses. Where approved, such showers shall be drained in such a manner that water from any shower head will not drain across areas occupied by other bathers. Gutters, or perimeter drains shall be required in public or gang shower rooms. Gutters shall have rounded corners for easy cleaning and maintenance and shall be sloped not less than 1/8” per foot toward properly installed drains. Drains in such gutters, or along the perimeter, shall be spaced not more than 8’ from side walls and not more than 16’ apart, and may not be less than 3” in diameter when above basement floor, or less than 4” inches in diameter when under basement floor.

SECTION 419
URINALS

IPC 419.2 DELETE & REPLACE WITH:
AC-419.2 Number of Urinals. The number of urinals for males shall be at least 50% of the total number of water closets required for males. The number of water closets may be decreased by the number of urinals which are used, but the number of remaining water closets shall not be less than 50% of the original tabulated total.
CHAPTER 5
WATER HEATERS

No Changes
ADD:

AC-602.2.1 Public Water System Available. A public water supply system shall be deemed available to a premises if a building used for human occupancy on the premises is located within two hundred fifty (250) feet, measured across the premises’ land and along a street, alley or easement, to a public water system. A connection conforming to the standards set forth in this Code shall be made thereto. Where public water systems are made available to the premises, building systems shall be connected to the available public water system to protect the health of building occupants.

AC-602.2.1.1 Notice to Discontinue Use. The Administrative Authority may issue notices giving up to ninety (90) days to discontinue the use of such private system and to connect to a public facility. Existing private water supplies may be used or continued for purposes other than supplying water for drinking, bathing, or culinary purposes, and further provided that such private water supply is not cross-connected or inter-connected with a potable water supply system.

AC-602.2.2 Reintroduction of Water. Water received from a public or private water supply system shall not be introduced or reintroduced into any other or the same public or private water supply system after it has been used for any purpose, including, but not limited to, usage in, or as, heat exchange devices, steam condensate, cooling water from engine jackets, boiler water, or air conditioner water.

SECTION 603
WATER SERVICE

IPC 603.2 DELETE & REPLACE WITH:

AC-603.2 Separation of Water Service and Building Sewer. Except as permitted below, the underground water service pipe and the building drain or building sewer shall be not less than ten (10) feet apart horizontally and shall be separated by undisturbed or compacted earth.

EXCEPTIONS:

Placement in Same Trench. The water service pipe may be placed in the same trench with the building drain and building sewer, provided approval is given by the Administrative Authority and the following conditions are met:

1. The bottom of the water service pipe, at all points, shall be at least twelve (12) inches above the top of the sewer line at its highest point.
2. The water service pipe shall be placed on a solid shelf excavated at one side of the common trench.
3. The number of joints in the service pipe shall be kept to a minimum.
4. The sewer material shall be of an approved type.
5. Where the location of the plumbing fixtures in the building make it impractical due to lot condition and/or topography either to maintain a horizontal separation of ten (10) feet between water service lines and building drain or sewer lines, or a vertical separation of 1’ with the water service pipe above the building drain or sewer, the water service pipe shall be enclosed in a continuous, impervious plastic sheath with ends properly sealed below grade from where required separations are not met to a point not less than six (6) inches above the top of the finished concrete floor, minimum water line and sewer line depths required by this code shall be adhered to at all times. The Administrative Authority shall notify the home owner or the existence of any plastic sheathing used outside the building foundation. This notification shall be included in the final inspection certificate.

SECTION 606
INSTALLATION OF THE BUILDING WATER DISTRIBUTION SYSTEM

IPC 606.2 DELETE & REPLACE WITH:
AC-606.2 Individual Fixture Valves. In all building classifications, the water service line to each fixture or other piece of equipment shall be provided with a valve or fixture stop to shut off the water to the fixture. All sill cocks and wall hydrants shall be separately controlled by a valve inside the building.

SECTION 608
PROTECTION OF POTABLE WATER SUPPLY

ADD:
AC-608.14.2 Protection of Water Service. Newly installed or replaced water service piping shall be provided with a backflow device located at or near the water meter. Dual check valves, double check valves, and reduced pressure zone type backflow preventers are acceptable for the purpose of this section.
ADD:
AC-701.2.1 Dwelling Units. The water distribution and drainage system of any dwelling unit shall be separately and independently connected to a public water supply and sewer system respectively if available. Multiple dwelling units stacked vertically, directly above or below, do not require separate and independent connections, but each vertical column of dwelling units must be separately and independently connected to a public water supply and sewer system respectively if available. Other buildings including apartment buildings, as defined in this Code, shall be separately and independently connected to the available public sewer and public water supply.

AC-701.2.1.1 Commercial. Single story commercial buildings partitioned and designed for occupancy by separate tenants with individual external entrances and without internal communication shall have each partitioned commercial unit separately connected to the public sewer system.

AC-701.2.1.2 A variance request may be granted by the Director pursuant to Section 105.1, but shall require, in addition to any other requirements, that the present owner records an easement and mutual maintenance agreement in the deed of said property, and that a copy of the deed is filed with the Administrative Authority.

ADD:
AC-701.2.2 Public Sewer System Available. A connection conforming to the standards set forth in this Code shall be made between a Qualifying Premises and an available public sewer system. A public sewer system shall be deemed available to a Qualifying Premises and its building(s) if the occupied building components of such a premises are located within two hundred fifty (250) feet of such sewer system built in or after 1994, or within one hundred fifty (150) feet of a sewer system build before 1994, measured along the premises, street, alley or easement. Where public sewer systems are made available to a premises, its occupied building systems shall be connected to the available public sewer system to protect the health of building occupants. An Administrative Authority may issue notices giving Qualifying Premises owners or occupants up to ninety (90) days to discontinue the use of private systems and to connect to a public sewer system.

ADD:
AC-701.2.3 Inspection / Site Tee Required at Public Sewer Connections. All new or replaced sanitary or combined sewer laterals, when connected to public sewers, shall be provided with an inspection / site tee at or near the property line. Such connection shall be brought to grade and finished with a water- and air-tight cleanout assembly.

IPC 701.3 DELETE & REPLACE WITH:
AC-701.3 Public Sewers and / or Water Mains Not Available. Where public sewers and / or water mains are not immediately available, it may become necessary to construct a private sanitary sewer, storm sewer, and/or water main to connect with a public utility. A variance must be obtained from the Director prior to construction of a private sanitary sewer, storm sewer, and/or water main. Plans indicating size, materials, and method of construction must be submitted to the Administrative Authority for approval. Private sewers and/or water mains shall be constructed on the outside of building or buildings and branched into each house or building separately. When private sewers and/or water mains must cross another property or properties to connect with a public sanitary sewer, storm sewer and/or
water main, an easement shall be recorded in the deeds of all affected property owners. A mutual maintenance agreement shall be recorded in the deeds of all such properties connected to a private sewer or water main system to affix equal responsibility in maintaining the private sewer(s) or water main(s). A copy of each deed shall be filed with the Administrative Authority.

**AC-701.3.1 Existing Common Sewer Lateral.** When the Administrative Authority identifies the existence of a common sewer lateral (CSL), that is not recorded in the Recorder of Deeds Office of Allegheny County, it may issue orders to all affected property owners to separately connect to an available public sewer, or in the alternative, to record in the Recorder of Deeds Office of Allegheny County, a document, approved by the Administrative Authority, identifying the existence of the CSL and adequately specifying the maintenance responsibilities for property owners.

---

**SECTION 702**  
**MATERIALS**

**ADD:**  
**AC-702.7 Chemical Waste and Vent Systems**

**TABLE AC-702.7.1**  
**CHEMICAL WASTE PIPING - ABOVE GROUND - WITHIN BUILDINGS**

<table>
<thead>
<tr>
<th>Presently Approved Materials</th>
<th>Areas of Permitted Use or Limitations</th>
<th>Standards</th>
<th>Source</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Silicon Content Cast Iron Pipe</td>
<td>All building classifications</td>
<td>(CW) Corrosion Waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borosilicate</td>
<td>All building classifications</td>
<td>(CW) C-599-70</td>
<td>ASTM</td>
<td></td>
</tr>
<tr>
<td>Lead Pipe</td>
<td>All building classifications</td>
<td>(CW)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Vulcathene - Polypropylene & Polyethylene Pipe & Fittings, Joints of Heat Fusion OR Vultite Compression Fittings | All building classifications | Type I D-1248  
Type II D-2146 | ASTM | (5) |
| Fuseal - Polypropylene Pipe & Fittings, Schedule 40, Joints-Heat Fusion | All building classifications | NSF (CW) Type I - 29209  
D-2146 | NSF | (5) |
| Orion Fittings, Inc.  
1 Polypropylene & Polyethylene Pipe & Fittings, Schedule 40 - Heat Fusion Joints | All building classifications | Type II - 2306  
D-2146  
D-1248 | ASTM | (5) |
<p>| 2. Polypropylene Pipe &amp; Fittings, Schedule 40 - Type II - Heat Fusion Joints OR “Riontite” Mechanical MJ Coupler System | All building classifications | D-2146 | ASTM | (5) |
| 3. Fire Retardant - Polypropylene Pipe &amp; Fittings - Schedule | All building classifications | D-2146 (with flame resistant) | ASTM | (5) |</p>
<table>
<thead>
<tr>
<th>Presently Approved Materials</th>
<th>Areas of Permitted Use or Limitations</th>
<th>Standards</th>
<th>Source</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>40, Type II - Heat Fusion Joints OR “Riontite” Mechanical MJ Coupler System</td>
<td>All building classifications</td>
<td>DD-G-541-B C-599-70 FS ASTM</td>
<td>ADDitives)</td>
<td>(5)</td>
</tr>
<tr>
<td>4. Borosilicate Glass Pipe &amp; Polypropylene Fittings - Joined by the “Riontite” Mechanical MJ Coupler System</td>
<td>All building classifications</td>
<td>(CW)</td>
<td></td>
<td>(4) (5)</td>
</tr>
<tr>
<td>Modified Epoxy Resin Plastic Pipe with Silica or Fiber Fillers</td>
<td>All building classifications</td>
<td>(CW)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
1. Approved caulked or mechanical compression coupling joints
2. Approved mechanical compression coupling joints
3. Approved wiped joints
4. Approved mechanical compression coupling joints or threaded joints. Chemical waste piping shall be selected on the basis of its ability to handle the type of chemicals to be transported.
5. Installation shall be in accordance with manufacturer’s recommendations or installation standards covering materials.

### TABLE AC-702.7.2
**CHEMICAL WASTE PIPING - BELOW GROUND**

<table>
<thead>
<tr>
<th>Presently Approved Materials</th>
<th>Areas of Permitted Use or Limitations</th>
<th>Standards</th>
<th>Source</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Silicon Content Cast Iron Pipe</td>
<td>All building classifications</td>
<td>(CW) Corrosion Waste</td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Borosilicate Glass Pipe</td>
<td>All building classifications</td>
<td>(CW) C-599-70 ASTM</td>
<td></td>
<td>(2) (5)</td>
</tr>
<tr>
<td>Lead Pipe</td>
<td>All building classifications</td>
<td>(CW)</td>
<td></td>
<td>(3)</td>
</tr>
<tr>
<td>Vulcathene - Polypropylene &amp; Polyethylene Pipe &amp; Fittings, Joints of Heat Fusion OR Vultite Compression Fittings</td>
<td>All building classifications</td>
<td>Type I D-1248 Type II D-2146 ASTM</td>
<td></td>
<td>(6)</td>
</tr>
<tr>
<td>Fuseal - Polypropylene Pipe &amp; Fittings, Schedule 40, Heat Fusion Joints</td>
<td>All building classifications</td>
<td>NSF (CW) Type I - 29209 D-2146 D-1248 ASTM</td>
<td></td>
<td>(6)</td>
</tr>
<tr>
<td>Orion Fittings, Inc. 1 Polypropylene &amp; Polyethylene Pipe &amp; Fittings, Schedule 40 - Heat Fusion Joints</td>
<td>All building classifications</td>
<td>Type II - 2306 D-2146 D-1248 ASTM</td>
<td></td>
<td>(6)</td>
</tr>
<tr>
<td>2. Polypropylene Pipe &amp; Fittings, Schedule 40 - Type II - Heat Fusion Joints OR “Riontite” Mechanical MJ Coupler System</td>
<td>All building classifications</td>
<td>D-2146 ASTM</td>
<td></td>
<td>(6)</td>
</tr>
<tr>
<td>3. Fire Retardant - Polypropylene Pipe &amp; Fittings - Schedule</td>
<td>All building classifications</td>
<td>D-2146 (with flame resistant ASTM</td>
<td></td>
<td>(6)</td>
</tr>
<tr>
<td>Presently Approved Materials</td>
<td>Areas of Permitted Use or Limitations</td>
<td>Standards</td>
<td>Source</td>
<td>Notes</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------------</td>
<td>-----------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>40, Type II - Heat Fusion Joints OR “Riontite” Mechanical MJ Coupler System</td>
<td>All building classifications</td>
<td>ADD:itives)</td>
<td>FS ASTM</td>
<td>(5)</td>
</tr>
<tr>
<td>4. Borosilicate Glass Pipe &amp; Polypropylene Fittings - Joined by the “Riontite” Mechanical MJ Coupler System</td>
<td>All building classifications</td>
<td>DD-G-541-B C-599-70</td>
<td>(CW)</td>
<td>(4)</td>
</tr>
<tr>
<td>Modified Epoxy Resin Plastic Pipe with Silica or Fiber Fillers</td>
<td>All building classifications</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTES:  
1. Approved caulked or mechanical compression coupling joints  
2. Approved mechanical compression coupling joints  
3. Approved wiped joints  
4. Approved mechanical compression coupling joints or threaded joints. Chemical waste piping shall be selected on the basis of its ability to handle the type of chemicals to be transported.  
5. Installation requirements for glass pipe when used underground:  
   a. All glass pipe shall be coated with at least 1/8” mastic coating including joints. Coating to be administered before pipe is placed in ditch. After coating, pipe is to be laid on a bed of eight (8) inches of granulated slag, sand, or sandy loam.  
   b. Piping, after being laid, is to be covered by six (6) inches of granulated slag, sand, or loam, and hand filled to a depth of twelve (12) inches above top of piping. No large boulders or stones are to be placed on pipe at any time.  
   c. In lieu of protecting glass pipe with a mastic coating, the Administrative Authority will accept buried glass pipe when protected by a proper casing, with a thickness capable of supporting maximum load conditions that can occur in the specific field application (Example: Bury-Pack)  
   d. It is required that this pipe, after being laid and tested, shall be inspected by the Administrative Authority and the inspector be given time to return for q check on the backfill operation.  
6. Installation shall be in accordance with manufacturer’s recommendations or installation standards covering materials.
### TABLE AC-702.7.3
CHEMICAL VENT PIPING

<table>
<thead>
<tr>
<th>Presently Approved Materials</th>
<th>Areas of Permitted use or Limitations</th>
<th>Standards</th>
<th>Source</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Silicon Content Cast Iron Pipe</td>
<td>All building classifications</td>
<td>(CW) Corrosion Waste</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>Borosilicate Glass Pipe</td>
<td>All building classifications</td>
<td>(CW) C-599-70</td>
<td>ASTM (2)</td>
<td></td>
</tr>
<tr>
<td>Vulcathene - Polypropylene &amp; Polyethylene Pipe &amp; Fittings, Joints of Heat Fusion OR Vultite Compression Fittings</td>
<td>All building classifications</td>
<td>Type 1 D-1248 Type II D-2146</td>
<td>ASTM (4)</td>
<td></td>
</tr>
<tr>
<td>Fuseal - Polypropylene Pipe &amp; Fittings, Schedule 40, Heat Fusion Joints</td>
<td>All building classifications</td>
<td>NSF (CW) Type I - 29209 D-2146 D-1246</td>
<td>NSF (4)</td>
<td></td>
</tr>
<tr>
<td>Orion Fittings, Inc. 1 Polypropylene &amp; Polyethylene Pipe &amp; Fittings, Schedule 40 - Heat Fusion Joints</td>
<td>All building classifications</td>
<td>Type II - 2306 D-2146 D-1246</td>
<td>ASTM (4)</td>
<td></td>
</tr>
<tr>
<td>2. Polypropylene Pipe &amp; Fittings, Schedule 40 - Type II - Heat Fusion Joints OR “Riontite” Mechanical MJ Coupler System</td>
<td>All building classifications</td>
<td>D-2146</td>
<td>ASTM (4)</td>
<td></td>
</tr>
<tr>
<td>3. Fire Retardant - Polypropylene Pipe &amp; Fittings - Schedule 40, Type II - Heat Fusion Joints OR “Riontite” Mechanical MJ Coupler System</td>
<td>All building classifications</td>
<td>D-2146 (with flame resistant additives)</td>
<td>ASTM (4)</td>
<td></td>
</tr>
<tr>
<td>4. Borosilicate Glass Pipe &amp; Polypropylene Fittings - Joined by the “Riontite” Mechanical MJ Coupler System</td>
<td>All building classifications</td>
<td>DD-G-541-B C-599-70</td>
<td>FS ASTM (4)</td>
<td></td>
</tr>
<tr>
<td>Modified Epoxy Resin Plastic Pipe with Silica or Fiber Fillers</td>
<td>All building classifications</td>
<td>(CW)</td>
<td>(3)</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
1. Approved caulked or mechanical compression coupling joints
2. Approved mechanical compression coupling joints
3. Approved mechanical compression coupling joints or threaded joints.
4. Installation shall be in accordance with manufacturer’s recommendations or installation standards covering materials.
SECTION 704
DRAINAGE PIPING INSTALLATION

IPC 704.1   DELETE & REPLACE WITH:
AC-704.1   Slope of Horizontal Drainage Piping.  Horizontal drainage piping shall be installed in uniform alignment at uniform slopes of not less than 1/4-inch per foot for three (3) inch or less diameter pipe, and not less than 1/8-inch per foot for pipe diameters of four (4) inches or more. Where conditions do not permit laying building drains and sewers with slope as great as that specified, a lesser slope may be permitted, as determined in from Table AC-710.1-A, provided the computed velocity is at least two (2) feet per second.

AC-704.1.1 Depth of horizontal Building Drains.  Horizontal building drains inside buildings (at highest point) a minimum of 12” from finished floor to flow line of pipe, shall be required on all underground sanitary building drains, where sufficient fall is available.

SECTION 705
JOINTS

IPC 705.18   ADD:
AC-705.18.8 Unshielded and Shielded couplings. Installation shall be in accordance with manufacturer's specifications and recommendations, as well as code requirements. Unshielded couplings installed horizontally above ground shall have supports placed on the piping within six (6) inches of both ends of the coupling. Unshielded couplings are not permitted underground.

SECTION 706
CONNECTIONS BETWEEN DRAINAGE PIPING AND FITTINGS

IPC 706.3   DELETE & REPLACE WITH:
AC-706.3   Fittings Used to Change Direction.  Change in direction piping shall be made by the appropriate use of 45 degree wyes, long or short sweep bends, sixth, eighth, or sixteenth bends, or by a combination of these equivalent fittings. Single sanitary tees may be used in drainage lines only where the direction of flow is from the horizontal to the vertical. Quarter bends may be used in drainage lines where the direction of flow is from the horizontal to the vertical, or vertical to the horizontal.

TABLE 706.3
FITTINGS FOR CHANGE IN DIRECTION
(Addressed in new Section AC-706.3)
DELETE

SECTION 708
CLEANOUTS

IPC-708.3.2   ADD:
AC-708.3.2.1 4-Inch Building Sewers.  Cleanouts required every 50 feet.
AC-708.3.5 Building (House) Traps. Each house or building drain shall be provided with a horizontal intercepting trap, which shall be the same size as the building drain in which it is installed. The trap shall be provided with an accessible cleanout and a fresh air grill or inlet, which shall terminate in a location acceptable to the Administrative Authority.

AC-708.3.5.1 Relieving Vents or Fresh Air Intakes Sizes. Relieving vents or fresh air intakes shall be no less than four (4) inches in diameter for building drains up to and including eight (8) inches in diameter. For drains larger than eight (8) inches, the fresh air intake shall be 1/2 the diameter of the drain. Openings in the grill of the fresh air inlet shall equal the area of the inlet pipe. The fresh air inlet shall not be used as an area drain.

AC-708.3.5.2 Intercepting Traps. Cleanouts for intercepting traps shall be no less than four (4) inches in diameter for trap sizes up to and including ten (10) inches. For traps larger than ten (10) inches, the cleanout shall be no less than six (6) inches.

AC-708.3.5.3 Trap Placement. It is recommended that the trap shall be placed inside the cellar or basement wall or as close thereto as practical, allowing for construction circumstances. Where house or building traps are placed outside of buildings, they shall be placed as close as practical to the outside of the foundation wall and the fresh air vent shall be extended above ground. In addition, on traps installed below four (4) feet in depth, a wye and 1/8 bend, combination wye, or two-way cleanout tee shall be installed on the downstream or sewer side of the trap with a pipe extending to grade and finished with a cleanout.

AC-708.3.5.4 Illustrations. Refer to illustration in AC-Appendix H for trap assembly dimensions.

ADD:
AC-708.3.7 Cleanout Location with Sanitary Cross Use. When a sanitary cross is used for side-by-side or back-to-back fixtures on waste pipes 2 inches and smaller, a cleanout must be provided in the vertical drain above or below the sanitary cross.

SECTION 709
FIXTURE UNITS

IPC 709.1 DELETE & REPLACE WITH:
AC-709.1 Load on Drainage Piping. The load on drainage system piping shall be computed in terms of drainage fixture units in accordance with Table AC-709.1-A and IPC Section 709.3.
<table>
<thead>
<tr>
<th>PLUMBING FIXTURES</th>
<th>FIXTURE UNIT VALUES</th>
<th>MINIMUM TRAP SIZE IN INCHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic clothes washer (when connected to a drainage system)</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Bathtub (with or without overhead shower)</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Bedpan washer</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Bidet</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Combination sink &amp; tray (separate traps for each compartment)</td>
<td>3</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Combination sink &amp; tray with food waste grinder (separate traps for each compartment)</td>
<td>4</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Dental unit for cuspidor</td>
<td>1</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Dental lavatory</td>
<td>1</td>
<td>1-1/4</td>
</tr>
<tr>
<td>Drinking fountain</td>
<td>1</td>
<td>1-1/4</td>
</tr>
<tr>
<td>Dishwasher - commercial</td>
<td>3 or 5</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Dishwasher - domestic</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Floor drain - above ground</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Floor drain - below ground</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Floor drain - car wash or similar functions</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Kitchen sink - domestic</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Kitchen sink - domestic, with food waste grinder</td>
<td>3</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Kitchen sink - domestic, double-bowl (separate traps for each compartment)</td>
<td>3</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Kitchen sink - domestic, double-bowl with food waste grinder (separate traps for each compartment)</td>
<td>4</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Lavatory - common</td>
<td>1</td>
<td>1-1/4</td>
</tr>
<tr>
<td>Lavatory - barber shop, beauty parlor, surgeon</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Lavatory - multiple-type (wash fountain or wash sink)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Laundry tray - 1 or 2 compartment</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Laundry tray - 3 to 5 compartments</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Shower stall - single</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Shower stalls - group or gang type (above ground)</td>
<td>2 per head</td>
<td>3</td>
</tr>
<tr>
<td>Shower stalls - group or gang type (below ground)</td>
<td>2 per head</td>
<td>4</td>
</tr>
<tr>
<td>Sink - surgeon</td>
<td>3</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Sink - flushing rim type, flush valve supplied</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Sink - service type, with trap combined</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Sink - service type, ordinary</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Sink - service type, janitor's style, floor receptor (above ground)</td>
<td>4</td>
<td>2, 3, or 4</td>
</tr>
<tr>
<td>Sink - service type, janitor's style, floor receptor (below ground)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Sink - commercial - pot, scullery or similar type (separate traps for each compartment)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Sink - commercial, with food grinder</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Urinal - pedestal, siphon-jet</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Urinal - wall hung, blowout type, flush valve supplied</td>
<td>4-6</td>
<td>2-3</td>
</tr>
<tr>
<td>Urinal - trough (each 2 ft. section)</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Urinal - wall hung, siphon jet</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Urinal - wall-lip type, flush tank or self-closing valve</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Urinal - stall type</td>
<td>2-4</td>
<td>2</td>
</tr>
<tr>
<td>Urinal - non-water supplied</td>
<td>0.5</td>
<td>Note d</td>
</tr>
<tr>
<td>Water closet - tank operated</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Water closet - valve operated</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>
### PLUMBING FIXTURES

<table>
<thead>
<tr>
<th>TYPE OF FIXTURE</th>
<th>MINIMUM TRAP SIZE IN INCHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlisted fixture drain or trap size</td>
<td>1</td>
</tr>
<tr>
<td>1-1/4 inches or less</td>
<td>1</td>
</tr>
<tr>
<td>1-1/2 inches or less</td>
<td>2</td>
</tr>
<tr>
<td>2 inches or less</td>
<td>3</td>
</tr>
<tr>
<td>2-1/2 inches or less</td>
<td>4</td>
</tr>
<tr>
<td>3 inches or less</td>
<td>5</td>
</tr>
<tr>
<td>4 inches or less</td>
<td>6</td>
</tr>
</tbody>
</table>

*IPC 709.2 DELETE (addressed in new Table AC-709.1)*

*IPC 709.4 DELETE (addressed in new Table AC-802.1)*

### SECTION 710

**DRAINAGE SYSTEM SIZING**

*IPC 710.1 DELETE & REPLACE WITH:*

**AC-710.1 Selecting Size of Drainage Pipe.** Pipe sizes shall be determined from Tables AC-710.1-A and AC-710.1-B on the basis of drainage load computed from Table AC-709.1-A and IPC Section 709.3.

#### TABLE AC-710.1-A

**MAXIMUM LOADS ON BUILDING DRAINS AND SEWERS**

<table>
<thead>
<tr>
<th>Diameter Of Drain In Inches</th>
<th>Maximum Number Of Fixture Units That May Be Connected To Any Portion(^1) Of The Building Drain Or The Building Sewer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall Per Foot</td>
</tr>
<tr>
<td></td>
<td>1/16 Inch</td>
</tr>
<tr>
<td>* 1-1/4&quot; +</td>
<td>NP</td>
</tr>
<tr>
<td>* 1-1/2&quot; +</td>
<td>NP</td>
</tr>
<tr>
<td>* 2&quot; +</td>
<td>NP</td>
</tr>
<tr>
<td>* 2-1/2&quot; +</td>
<td>NP</td>
</tr>
<tr>
<td>* 3&quot;</td>
<td>NP</td>
</tr>
<tr>
<td>4&quot;</td>
<td>NP</td>
</tr>
<tr>
<td>5&quot;</td>
<td>NP</td>
</tr>
<tr>
<td>6&quot;</td>
<td>NP</td>
</tr>
<tr>
<td>8&quot;</td>
<td>1,400</td>
</tr>
<tr>
<td>10&quot;</td>
<td>2,500</td>
</tr>
<tr>
<td>12&quot;</td>
<td>3,900</td>
</tr>
<tr>
<td>15&quot;</td>
<td>7,000</td>
</tr>
</tbody>
</table>

\(^1\) - Includes branches of building drain

\(^2\) - Not over three (3) water closets

* - When building drain is above basement floor

+ - No water closets permitted

NP - Not Permitted
### TABLE AC-710.1-B
**MAXIMUM LOADS ON SOIL & WASTE STACKS & BRANCHES OF STACKS**

<table>
<thead>
<tr>
<th>Diameter Of Drain In Inches</th>
<th>Any Horizontal Fixture Branch</th>
<th>One Stack Of 3 Stories In Height - Includes 1 &amp; 2 Story Buildings</th>
<th>More Than 3 Stories In Height</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total For Stack</td>
<td>Total At One Story Or Branch Interval</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Story Or Branch Interval</td>
<td>Interval</td>
</tr>
<tr>
<td>1-1/4” waste</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1-1/2” waste</td>
<td>3</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>2” waste</td>
<td>6</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>2-1/2” waste</td>
<td>12</td>
<td>20</td>
<td>42</td>
</tr>
<tr>
<td>3” soil and/or waste</td>
<td>20²</td>
<td>48³</td>
<td>72³</td>
</tr>
<tr>
<td>4” waste</td>
<td>160</td>
<td>240</td>
<td>500</td>
</tr>
<tr>
<td>5” waste</td>
<td>360</td>
<td>540</td>
<td>1,100</td>
</tr>
<tr>
<td>6” waste</td>
<td>640</td>
<td>960</td>
<td>1,900</td>
</tr>
<tr>
<td>8” waste</td>
<td>1,400</td>
<td>2,200</td>
<td>3,600</td>
</tr>
<tr>
<td>10” waste</td>
<td>2,500</td>
<td>3,800</td>
<td>5,600</td>
</tr>
<tr>
<td>12” waste</td>
<td>3,900</td>
<td>6,000</td>
<td>8,400</td>
</tr>
</tbody>
</table>

1. Does not include branches of the building drain
2. Not over three (3) water closets
3. Not over six (6) water closets

**IPC 710.1.1 DELETE** *(addressed in illustration new Section AC-711.2)*

**IPC 710.1.2 DELETE** *(addressed in new Section AC-711.1)*

**IPC 710.2 DELETE & REPLACE WITH:**

**AC-710.2 Provisions for Future Fixtures.** When provision is made for the future installation of fixtures, those provided for shall be considered in determining the required sizes of drain and vent pipes. Where future connections are left in the roughing of soil and waste stacks, vent connections must also be provided, and all such future connections shall be terminated with a plugged fitting or fittings so arranged as to form no dead end.

**ADD:**

**AC-710.3 Soil and Waste Stacks.** All soil and waste stacks shall extend in a vertical line from the highest to the lowest horizontal branch or fixture connected thereto through the roof and shall not be reduced in size, except that where offsets in vertical stacks are unavoidable, such as increase in sizing as outlined in Section AC-711.2 of this Chapter and shall not be considered as a reduction in stacks. Also, first floor water closets, the location of which prevents a connection to available soil stacks, may connect to the building drain and be relieved by a proper size relief vent. This procedure shall not be considered as a reduction in the soil stack, however, all soil stacks extending beyond the first floor level provided to receive the discharge of water closets or similar fixtures shall not be reduced in size. No soil or waste stack shall be smaller in size than the attending vent stack, nor shall any soil or waste stack be smaller in size than the largest horizontal branch connected thereto, except that a 4 x 3 water closet connection shall not be considered as a reduction in pipe size.
**ADD:**

**AC-710.4 Minimum Size of Stack or Vent Stack.** Any building or structure containing at least one water closet or pedestal urinal shall have a building drain installed with at least one stack vent or vent stack, not less than three (3) inches in diameter, carried full size through the roof. No soil, waste, or vent pipe shall be installed on the outside of a new building. Any building or structure having a sewer connection with a public or private sewer which has a drainage system installed to receive discharge from floor drainage only will require a minimum of two (2) inch relief vent, which must be extended through the roof of the building, from the rear of the main building drain, and which must be of a larger size where warranted. Building drains installed for roof drainage only will not require a relief vent.

**ADD:**

**AC-710.5 Minimum Size of Underground Sanitary Drainage Piping.** Sanitary drainage systems installed underground or below a basement or cellar floor shall be four (4) inches in diameter.

**Exceptions:**

1. Traps used for bathtubs and individual showers may be 1-1/2 inches or 2 inches respectively.
2. Waste lines extending at least one (1) inch above the finished floor provided for clear water wastes identified in AC-Table 802.1 terminated with proper fittings in the vertical piping between a floor drain and floor drain trap. Minimum size is 1-1/2”.
3. In residential installations, waste and/or soil pipe, 3”, 2”, and 1-1/2” may be installed with the perimeter of a toilet room, and 3” and 2” installed as branches of the building drain provided the developed length does not exceed 10’ from the main building drain. (Note: Use of cast iron 2” and smaller shall be prohibited.)

**SECTION 711**

**OFFSETS IN DRAINAGE PIPING IN BUILDINGS OF FIVE STORIES OR MORE**

**IPC 711 DELETE ENTIRE SECTION & REPLACE WITH:**

**SECTION 711**

**SIZING OF OFFSETS IN VERTICAL STACKS**

**AC-711.1 Offsets of 45° or Less.** An offset in a vertical stack, with a change of direction of 45° or less from the vertical, may be sized as a straight vertical stack.

**AC-711.1.1 Buildings With 4 or More Stories.** On buildings with four (4) or more stories above an offset, no horizontal branch shall connect to the stack within two (2) feet above or below the offset, or may connect with the travel portion of the offset at least two (2) feet from either change in direction.

**AC-711.2 Offsets of more than 45°.** A stack with an offset of more than 45° from the vertical shall be sized as follows:

1. The portion of the stack above the offset shall be sized as for a regular stack based on the total number of fixture units above the offset, except that the portion of the stack above the offset shall not be smaller in size than required for straight vertical stacks based upon the total fixture unit count for the entire stack.

2. The portion of the stack below the offset shall be sized as for the offset or based on the total number of fixture units on the entire stack, whichever is larger. A relief vent for the offset shall be installed in accordance with Chapter 9, Section AC-904.5.1, and in no building with four (4) or more stories above an offset shall the horizontal branch of
fixtures on a floor directly above an offset connect to the stack at that level, but shall connect with the horizontal portion of the offset at least two (2) feet from either change in direction, or it shall connect at least two (2) feet below the offset. (See Illustration AC-711.2)

ILLUSTRATION AC-711.2

AC-711.2.1 The portion of the stack above the offset shall be sized as for a regular stack based on the total number of fixture units above the offset, except that the portion of the stack above the offset shall not be smaller in size than required for straight vertical stacks based upon total fixture unit count for the entire stack.

Total of 95 f.u. at one branch interval stack must be 5". (TABLE AC-710.1-B)

AC-711.2 The offset shall be sized as for the building drain (TABLE AC-710.1-A)

AC-711.2.2 A relief vent for the offset shall be installed in accordance with Chapter 9, Section AC-904.5

AC-711.4 No relief vent will be required for an offset in a stack when such offset is located at least 10 feet below the lowest horizontal branch connected to the stack.
AC-711.3 Above Highest Branch. An offset above the highest horizontal branch is an offset in the stack-vent and shall be considered only as it affects the developed length of the vent. But no such offset shall be made in the stack-vent at an angle greater than 45°, unless suitable provisions are made to prevent the accumulation of rust, scale, or condensate.

AC-711.4 Below Lowest Branch. In the case of an offset in a soil or waste stack below the lowest horizontal branch, there shall be no change in diameter required if the offset is made at an angle not greater than 45°. If such an offset is made at an angle greater than 45° to the vertical, the required diameter of the offset and the stack below it shall be determined as for a building drain (Table AC-710.1-A). No relief vent will be required for an offset in a stack when such offset is located at least ten (10) feet below the lowest horizontal branch connected to the stack, however, the attending vent stack may be started or located at this position (See illustration AC-711.2).
CHAPTER 8
INDIRECT/SPECIAL WASTE

SECTION 802
INDIRECT WASTES

ADD:

TABLE AC-802.1
INDIRECT WASTE TABLE

<table>
<thead>
<tr>
<th>Trap Size</th>
<th>Fixture Unit</th>
<th>Type Of Fixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 inch</td>
<td>2</td>
<td>Bain-Marie (steam table)</td>
</tr>
<tr>
<td>3/4 inch</td>
<td>1/2</td>
<td>Beer Dispenser</td>
</tr>
<tr>
<td>1-1/2 inch</td>
<td>2</td>
<td>Chinese Range (water cooled top)</td>
</tr>
<tr>
<td>3/4 inch</td>
<td>1/2</td>
<td>Coffee Urn</td>
</tr>
<tr>
<td>3/4 inch</td>
<td>1/2</td>
<td>Cold Pan</td>
</tr>
<tr>
<td>1 inch</td>
<td>1</td>
<td>Dipper Well</td>
</tr>
<tr>
<td>2 or 3 inch</td>
<td>3 or 5</td>
<td>Dishwasher</td>
</tr>
<tr>
<td>3/4 inch</td>
<td>1/2</td>
<td>Egg boiler</td>
</tr>
<tr>
<td>1 inch</td>
<td>1</td>
<td>Food Display Cases - meat-fish-poultry, salad and vegetables</td>
</tr>
<tr>
<td>3/4 inch</td>
<td>1/2</td>
<td>Food warmer</td>
</tr>
<tr>
<td>1 inch</td>
<td>1</td>
<td>Hood washer</td>
</tr>
<tr>
<td>3/4 inch</td>
<td>1/2</td>
<td>Ice Bin</td>
</tr>
<tr>
<td>3/4 inch</td>
<td>1/2</td>
<td>Ice Box</td>
</tr>
<tr>
<td>1 inch</td>
<td>1</td>
<td>Ice Cream Dispenser (soft serve)</td>
</tr>
<tr>
<td>3/4 inch</td>
<td>1/2</td>
<td>Ice Making Machine</td>
</tr>
<tr>
<td>2 inch</td>
<td>3</td>
<td>Potato Peeler</td>
</tr>
<tr>
<td>3/4 inch</td>
<td>1/2</td>
<td>Refrigerated Coil</td>
</tr>
<tr>
<td>1-1/2 inch</td>
<td>2</td>
<td>Rinsing sink (bar sink)</td>
</tr>
<tr>
<td>1 inch</td>
<td>1</td>
<td>Soda Fountain</td>
</tr>
<tr>
<td>1-1/2 inch</td>
<td>2</td>
<td>Steam Kettle</td>
</tr>
<tr>
<td>1 inch</td>
<td>1</td>
<td>Waitress Station (glass filler)</td>
</tr>
<tr>
<td>4 inch</td>
<td>5</td>
<td>Walk-In Refrigerator (below ground)</td>
</tr>
<tr>
<td>3 inch</td>
<td>4</td>
<td>Walk-In Refrigerator (above ground)</td>
</tr>
</tbody>
</table>

ADD:

AC-802.1.1.1 Dishwashing Machines and Potato Peelers. Residential dishwashing machines, those in private living quarters or dwelling units, shall be indirectly connected by means of an air break; except where the manufacturer has provided a built-in air gap or air break, no additional air gap or air break will be required. When a commercial dishwashing machine or potato peeler is located adjacent to a floor drain, the waste from the dishwashing machine or potato peeler may be connected directly on the sewer side of the floor drain trap, provided that the drain line from the dishwashing machine or potato peeler is properly trapped and vented.
ADD:
AC-803.1.1 Condenser Tanks. No steam pipe shall connect to any part of a drainage or plumbing system, nor shall any water above 140°F be discharged into any part of a drainage system except where cooling methods are provided which automatically cool the discharge to 140°F or less before being discharged to the building drainage system. If potable water is used with a direct connection to the cooling apparatus, a backflow preventer shall be installed in the potable water supply. Where condensate or blow-off tanks are used to lower temperatures, the tank shall be sized to a capacity of 1/3 the total water capacity of the vessel(s) discharging into the tank. The tank shall be vented independently through the roof with a galvanized wrought iron vent pipe not less than two (2) inches in size. The overflow or discharge from the tank shall be properly trapped and vented before connecting to the building drainage system. The trap shall be not less than 1-1/2 inches in size, or larger when warranted, based on gallon per minute discharged or each gallon per minute being equal to one (1) fixture unit, when the overflow or discharge pipe is submerged inside the tank forming its own integral trap an additional trap will not be required, but the integral trap shall be vented by a proper size vent.
CHAPTER 9
VENTS

IPC 901-917  DELETE & REPLACE WITH:

SECTION 901
SELECTING SIZE OF VENT PIPE

AC-901.1  General. Vent sizes shall be determined from AC-Table 901.1 on the basis of length and fixture units connected.

### TABLE AC-901.1
SIZE & LENGTH OF VENTS

<table>
<thead>
<tr>
<th>Size of Vent Pipe in Inches</th>
<th>Maximum Developed Length in feet</th>
<th>Number of Fixture Units Vented - Branch or Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 1-1/4</td>
<td>20</td>
<td>2 Units</td>
</tr>
<tr>
<td>* 1-1/2</td>
<td>30</td>
<td>10 Units</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td>24 Units</td>
</tr>
<tr>
<td>2-1/2</td>
<td>60</td>
<td>40 Units</td>
</tr>
<tr>
<td>3</td>
<td>80</td>
<td>100 Units</td>
</tr>
<tr>
<td>4</td>
<td>140</td>
<td>500 Units</td>
</tr>
<tr>
<td>5</td>
<td>140</td>
<td>1100 Units</td>
</tr>
<tr>
<td>6</td>
<td>140</td>
<td>1900 Units</td>
</tr>
<tr>
<td>8</td>
<td>200</td>
<td>3600 Units</td>
</tr>
</tbody>
</table>

* No water closets permitted on vent piping less than 2” in diameter

In applying vent sizing table above, for water closets or pedestal urinals, a fixture unit value of eight (8) shall be assigned to all types of such fixtures, whether flush tank or flush valve supplied.

AC-901.2  Minimum Diameter of Vent Piping. No vent pipe shall be less than 1-1/4” in diameter.

AC-901.3  Individual Vents. The diameter of individual vents shall be based on the size of trap being vented, but not less than the following sizes:

1. 1-1/4” vent for 1-1/4” traps
2. 1-1/2” vent for 1-1/2” to 2-1/2” traps
3. 2” vent for 3” and 4” traps
4. 1/2 their diameter for traps 5” and over

AC-901.4  Relief Vents. The diameter of a relief vent shall be at least 1/2 the diameter of the soil or waste branch served, except as provided for in Sections AC-904.5 and AC-915.

AC-901.5  Circuit or Loop Vents. The diameter of circuit or loop vents shall be based on the number of fixture units connected as determined from Table AC-901.1.

AC-901.6  Size of Branch Vents. Branch vents which are meant to include all parts of the venting system other than the main vent, vent stack, or stack-vent shall be sized in accordance with the limits of length and number of fixture units vented, as provided for in Table AC-901.1, except where otherwise provided for in this Chapter. The length of the branch vent for application with Table AC-901.1 shall be measured from its connection with the furthest fixture drain to its connection to a larger vent, vent stack, stack-vent or its terminal in the open air.
AC-901.7  **Wet Vent Permitted.** In one (1) and two (2) family dwellings, individual plumbing fixtures within a bathroom group may be wet vented. The wet portion shall be no less than two (2) inches in diameter, within the trap to vent requirements of Section AC-907.1, and on the same floor level. Also, no more than four (4) fixture units may be discharged to the wet portion. (Air admittance valves are not acceptable for this application.)

SECTION 902
MATERIALS

AC-902.1  **Material.** Vent pipe and fittings for the venting system shall comply with the provisions of IPC Section 702.

SECTION 903
PROTECTION OF TRAP SEALS

AC-903.1  **Protection of Trap Seals.** The protection of trap seals from siphonage or back-pressure shall be accomplished by the appropriate use of soil or waste stacks, vents, re-vents, back vents, loop vents, circuit or continuous vents, or a combination thereof, installed in accordance with the requirements of this Chapter, so that at no time shall the trap be subjected to a pressure differential of more than one (1) inch of water.

SECTION 904
VENT STACKS AND STACK VENTS

AC-904.1  **Stack Vent Required.** Every soil or waste stack shall be extended vertically as a stack-vent to the open air above the roof.

AC-904.2  **Vent Stack Required.** An attendant vent stack or main vent shall be installed with a soil or waste stack whenever relief vents, back vents, circuit vents, or other branch vents are required in buildings of three (3) or more branch intervals.

AC-904.3  **Size and Length of Vent Stacks.** Vent stacks or main vents shall have a diameter of at least 1/2 that of the soil or waste stack, but not less than 1-1/2" in diameter, and shall be of a larger size in accordance with the limits of length and number of fixture units vented as determined from Table AC-901.1. Vent stacks shall not be smaller than the largest branch vent connected thereto. The length of a main or vent stack for application with Table AC-901.1 shall be the total developed length as follows:

1. From the lowest connection to the vent stack with the soil stack, waste stack, or building drain to the terminal of the vent stack when it terminates separately to the open air.

2. From the lowest connection of the vent stack with the soil stack, waste stack, or building drain to the stack vent plus the length of stack vent and vent stack when the two are joined with a single extension to the open air.

AC-904.4  **Connections at Base and Top.** All main vents or vent stacks shall connect full size at their base to the building drain or to the main soil or waste pipe, at or below the lowest fixture branch. All vent stacks or main vents shall extend undiminished in size above the roof, or shall be reconnected with the main soil or waste stack at least six (6) inches above the flood level of the highest fixture connection with a single extension from the connection through the roof.

AC-904.5  **Buildings with Five or More Branch Intervals Above an Offset.** Offsets of more than 45º from the vertical in a soil or waste stack shall be vented by installing a relief vent as a vertical continuation
of the lower section of the stack or as a side vent connected to the lower section between the offset and the next lower fixture or horizontal branch connection.

**AC-904.5.1 Sizing of Offset Relief Vent.** The diameter of the offset relief vent shall not be less than the diameter of the main vent to which it connects or of the soil or waste stack, whichever is smaller. (Also see Section AC-907.4.)

**AC-904.6 Vent Headers.** Stack-vent and vent stacks may be connected into a common vent header at the top of the stacks and then extended to the open air as a direct extension of one stack. This header shall be sized in accordance with the requirements of Table AC-901.1, the number of units being the sum of all units on all vent stacks connected thereto and the developed length being the longest vent length from the intersection at the base of the most distant stack to the vent terminal in the open air.

**SECTION 905 VENT TERMINALS**

**AC-905.1 Extension Above Roofs.** Extension of vent pipes through a roof shall be terminated at least twelve (12) inches above it. Where a roof is to be used for any purpose other than weather protection, the vent shall be at least seven (7) feet above the roof.

**AC-905.2 Waterproof Flashing.** Each vent terminated shall be made watertight with the roof by proper flashing.

**AC-905.3 Flag Poling Prohibited.** Vent terminals shall not be used for the purpose of flag poling, TV aerials, or similar purposes.

**AC-905.4 Location of Vent Terminal.** No vent terminal shall be located directly beneath any door, window, or other ventilating opening of the building or of an adjacent building, nor shall the vent terminal be within ten (10) feet horizontally of such an opening unless it is at least two (2) feet above the top of such opening. Vent terminals shall not terminate under the overhang of a building.

**AC-905.5 Extensions Through Wall.** Vent terminals through a wall, when approved by the Administrative Authority, shall be at least ten (10) feet horizontally from any adjacent building line and terminate downward. They shall be effectively screened and properly flashed, caulked, or otherwise sealed at the wall penetration and shall meet the requirements of Section AC-905.4

**SECTION 906 VENT GRADE AND CONNECTIONS**

**AC-906.1 Vent Grade.** All vent and branch vent pipes shall be so graded and connected as to drain back to the soil or waste pipe by gravity.

**AC-906.2 Vertical Rise.** Where vent pipes connect to a horizontal soil or waste pipe, without the benefit of a proper washout, the vent shall be taken off above the center line of the waste or soil pipe. The vent pipe shall rise vertically, or at an angle not more than 45° from the vertical to a point at least six (6) inches above the flood level rim of the fixture it is venting before offsetting horizontally or before connecting to a branch vent. (Refer to illustration in AC- Appendix H.)

**AC-906.3 Height Above Fixtures.** A connection between a vent pipe and a vent stack or stack-vent shall be made at least six (6) inches above the flood-level rim of the highest fixture served by the vent. Horizontal vent pipes forming branch vents, relief vents, or loop vents shall be at least six (6) inches above the flood-level rim of the highest fixture served.
SECTION 907
FIXTURE VENTS

AC-907.1 Distance of Trap From Vent. Each fixture trap shall have a protecting vent so located that the slope and the developed length in the fixture drain from the trap weir to the vent fitting are within the requirements set forth in Table AC-907.1.

### TABLE AC-907.1
DISTANCE OF FIXTURE TRAP FROM VENT

<table>
<thead>
<tr>
<th>Size of Fixture Trap</th>
<th>Distance of Trap to Vent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/4 inches</td>
<td>2 feet - 6 inches</td>
</tr>
<tr>
<td>1-1/2 inches</td>
<td>3 feet - 6 inches</td>
</tr>
<tr>
<td>2 inches</td>
<td>5 feet - 0 inches</td>
</tr>
<tr>
<td>2-1/2 inches</td>
<td>5 feet - 0 inches</td>
</tr>
<tr>
<td>3 inches</td>
<td>6 feet - 0 inches</td>
</tr>
<tr>
<td>4 inches and over</td>
<td>10 feet - 0 inches</td>
</tr>
</tbody>
</table>

AC-907.2 Trap Dip. The vent pipe opening from a soil or waste pipe, except for water closets and similar fixtures, shall not be below the weir of the trap.

AC-907.3 Crown Venting Limitations. No vent shall be installed within two pipe diameters of the trap weir.

AC-907.4 Below Lowest Branch. In the case of an offset in a soil or waste stack below the lowest horizontal branch, there shall be no change in diameter required if the offset is made at an angle of not greater than 45°. If such an offset is made at an angle greater than 45° to the vertical, the required diameter of the offset and the stack below it shall be determined as for a building drain (Section AC-710.1-A). No relief vent will be required for an offset in a stack when such offset is located at least ten (10) feet below the lowest horizontal branch connected to the stack, however, the attending vent stack may be started or located at this position (see illustration AC-711.2)

SECTION 908
VENTS FOR FIXTURE TRAPS BELOW TRAP DIP

AC-908.1 Hydraulic Gradient. Fixture drains shall be vented within the hydraulic gradient between the trap outlet and vent connection, but in no case shall the unvented drain exceed the distance provided for in Table AC-907.1.

SECTION 909
VENTING REQUIREMENTS FOR FLOOR SET WATER CLOSETS & PEDESTAL URINALS

AC-909.1 Water Closets and Pedestal Urinals Independently Connected to Soil Stack. A single floor set water closet or pedestal urinal independently connected to a soil stack, and within the required distance as provided in Table AC-907.1, will not require any additional relief. Where two (2) closets, two (2) urinals, or any combination thereof are installed on one (1) horizontal branch, they shall be looped or circuit vented as provided for in Section AC-913.1.

AC-909.2 Water Closets Connected to Building Drain. A single water closet independently connected to any stack vented portion of the building drain and not over ten (10) feet from such drain will not require a relief vent. Where more than ten (10) feet or more than one (1) such fixture is located on one (1) branch, there shall be provided a proper size relief or loop vent. No floor set water closet or similar floor level connected fixture shall be connected to the building drain closer than five (5) feet upstream or downstream of a soil or waste stack in buildings of four (4) or more stories.
SECTION 910
VENTING REQUIREMENTS FOR WALL HUNG, VALVE OPERATED WATER CLOSETS

AC-910.1  Wall Hung, Valve Operated Water Closets. A single wall hung water closet shall have the three (3) inch soil or vent stack, directly in back of the closet, or have a separate two (2) inch vent, and when water closets are located above one another, each shall have a separate two (2) inch vent in back of each closet, except the uppermost closet will not require a separate two (2) inch vent, provided it connects directly to the stack vent. When more than three (3) wall hung water closets are located in one horizontal branch, they shall be provided with a circuit or loop vent as provided for in Section AC-913.1, in addition to the two (2) inch vent directly in back of each closet, but no other relief vents will be required. Wall hung water closets shall have a separate two (2) inch vent in back of each closet, except that two (2) closets back to back may have a common two (2) inch vent.

SECTION 911
VENTING REQUIREMENTS FOR FLOOR DRAINS & SIMILAR FLOOR-LEVEL CONNECTING FIXTURES

AC-911.1  Floor Drains and Similar Floor Level Connected Fixtures Above Basement Floor. Floor drains above the basement floor shall have traps a minimum size of three (3) inches, except emergency floor drains in laundry rooms of single family homes, in which two (2) inch traps may be used. These emergency floor drains shall be considered plumbing fixtures, and shall be properly vented. Floor drains or showers with a trap size of three (3) or four (4) inches, upstream of water closets or similar fixtures, may be circuit or loop vented. When floor drains or showers are placed on a common horizontal branch with water closets or similar fixtures and located on the downstream side of such fixtures, they shall be individually vented, or they shall be isolated on their own waste branch, and circuit or loop vented. Loop or circuit vents shall be sized as provided in Table AC-901.1. They shall vent or take off in front of the last fixture connection, or be washed out by the fixture they serve, or the vent may be washed out by a higher connected fixture.

AC-911.2  Floor Drains and Similar Fixtures Connected to Building Drain. A single floor drain or similar floor-level connected fixture, independently connected to any stack vented portion of the building drain, and not over ten (10) feet from such drain, will not require a relief vent. Where more than ten (10) feet, or where more than one (1) such fixture is located on one (1) branch, a proper sized loop or relief vent shall be provided.

SECTION 912
VENTING REQUIREMENTS FOR WATER CLOSETS, FLOOR DRAINS, CONDUCTORS OR SIMILAR FLOOR-LEVEL CONNECTED FIXTURES LOCATED ON SAME HORIZONTAL BRANCH OF BUILDING DRAIN

AC-912.1  Combination of Fixtures on One (1) Horizontal Branch. When two (2) water closets, two (2) floor drains, or two (2) similar floor-level connected fixtures or any combination of these fixtures are located on one (1) horizontal branch of the building drain, they shall be provided with a proper size relief or loop vent.

SECTION 913
CIRCUIT AND LOOP VENTING FOR WATER CLOSETS AND PEDESTAL URINALS (FLOOR TYPE TANK OPERATED, VALVE OPERATED-WALL HUNG-TANK OPERATED)

AC-913.1  Battery Venting. A soil branch to which two (2), but not more than eight (8), water closets or pedestal urinals are connected in a battery shall be vented by a circuit or loop vent which shall be taken off in front of the last fixture connection of the battery, and washed out by the fixture it serves or by a higher connected fixture. In addition, lower floor branches serving more than three (3) water closets or
pedestal urinals shall be provided with a relief vent taken off in front of the first fixture connection of the battery, in addition to the required circuit vent. When nine (9) or more water closets are connected in a battery, an additional relief vent shall be required and must be evenly spaced between the first relief vent and the circuit vent, so that there are never more than eight (8) water closets between a relief, circuit or loop vent.

AC-913.2 Dual Branches. When water closets or pedestal urinals are located back-to-back, dual or parallel horizontal branches may be used, provided that each branch is separately looped or circuit vented and that any other venting requirements in Section AC-913.1 are met. (Refer to illustration in AC-Appendix H)

AC-913.3 Fixtures Back-to-Back in Battery. When water closets or pedestal urinals are connected to one (1) horizontal branch through a double wye or a sanitary cross in a vertical position, a common vent for each two (2) fixtures back-to-back or double-connection shall be provided. The common vent shall be installed in a vertical position as a continuation of the double connection. The branch shall be circuit or loop vented as required in Section AC-913.1, but no other relief vents will be required.

AC-913.4 Soil Branches to Stacks Which Rise More Than One (1) Story in Height. Branches to soil stacks which receive the discharge of water closets and similar fixtures which rise more than one (1) story in height shall maintain and continue the size of such branches as a circuit or loop vent. The load of such branches shall not exceed that contained in Chapter 7, Table AC-710.1-B. (Refer to illustration in AC-Appendix H)

AC-913.5 Vent Connections. When circuit, loop or relief vent connections are taken off of the horizontal branch, the vent branch connection shall be taken off at a vertical angle or from the top of the horizontal branch, or otherwise be adequately washed out by a higher connected fixture drain.

SECTION 914
COMMON VENTS

AC-914.1 Individual Vent as Common or Dual Vent. A common or dual vent is permitted for two (2) fixture traps when installed on a vertical continuous waste line, and vent or stack vented with the highest fixture, provided both fixture drains connect with the vertical drain or stack on the same level and within the distance allowed between the trap and its vent.

SECTION 915
RELIEF OR YOKE VENTS FOR STACKS OF MORE THAN TEN (10) BRANCH INTERVALS

AC-915.1 Relief or Yoke Vents. Soil and waste stacks in buildings having more than ten (10) branch intervals shall be provided with a relief or yoke vent at each tenth interval installed, beginning with the top floor. Where an odd number of floors above 10 are involved, they shall be equally divided. The size of the relief or yoke vent shall be equal to the size of the vent stack to which it connects. The lower end of each relief or yoke vent shall connect to the soil or waste stack through a wye below the horizontal branch serving that floor, and the upper end shall connect to the vent stack through an inverted wye or tee not less than three (3) feet above the floor level.

SECTION 916
VENTING OF SUMPS AND SEWERS

AC-916.1 Sizing and Venting of Sub-drain and Sumps. The system of drainage piping below the sewer level shall be sized, installed, and vented in a like manner to that of the gravity system. Every sump or receiving tank shall have a vent pipe, which shall be sized according to the number of fixture
units draining to the sump, and in accordance with Table AC-901.1, based on branch venting for developed length. In no case shall the vent pipe be less than two (2) inches in diameter. Sumps receiving the discharge of clear water, such as rain water, sub-soil, or seepage drainage will not require a vent.

**AC-916.2 Separate Vents.** Vents from pneumatic ejectors or similar equipment shall be carried separately to the open air as a vent terminal. Such relief pipes shall be of sufficient size to relieve air pressure inside the ejector to atmospheric pressure within ten (10) seconds, but shall not be of less than two (2) inches in diameter.

**ADD:**

**SECTION 920**

**AIR ADMITTANCE VALVE**

**AC-920.1 Material.** Air admittance valves shall conform to ASSE 1051 “Individual and Branch type Air Admittance Valves” and NSF 14 “Plastic Piping System Components.”

**AC-920.2 Areas of Permitted Use.** The air admittance valve is an acceptable alternate method of venting plumbing fixtures such as sinks, lavatories, bathtubs, showers, laundry trays, automatic washers and similar fixtures requiring a trap not larger than two (2) inches. Installation is limited to single family buildings, two (2) stories or less in height, and without corrosive wastes.

**AC-920.2.1 Requests for Use in Remodeling Installations.** The Administrative Authority will consider requests for use of the air admittance valve on permitted type fixtures, in remodeling installations, in other building classifications where conventional venting requirements would create structural problems or damage, and where the location of such fixtures and their waste connections to existing drains will not present a back pressure condition.

**AC-920.2.2 Installation requirements.** The sealing washer of the air admittance valve must be located at least six (6) inches above the top of the trap arm. To ensure compliance with this requirement, the total length of pipe between the top of the directional or vent tee and the 1-1/2” female adapter, in which the air admittance valve is mounted, shall not be less than four (4) inches.

**AC-920.2.2.1 Distance of Fixture Trap from Vent.** The directional or vent tee shall be within the requirements set forth in Table AC-907.1,

**AC-920.2.2.2 Limitations.** The device is limited to use of plumbing fixtures with a trap size of two (2) inches or smaller and a total fixture unit value of three (3).

**AC-920.2.2.3 Common Drain Pipe.** Two (2) fixtures individually protected by the air admittance valve may be drained by a common 1-1/2 inch drain pipe, provided the fixture unit value does not exceed three (3). Where the fixture unit value exceeds three (3), or where more than two (2) fixtures are installed on a common drain, the drain must be increased to 2”. A maximum of three (3) fixtures, not exceeding a total fixture unit of six (6) may be individually protected by air admittance valve on a common 2” drainpipe.

**AC-920.2.2.4 Accessibility for Inspection.** The device is to be installed in accordance with Article XV and the manufacturer’s recommendations. The device is not to be installed in a sealed wall cavity and is to remain accessible for inspection.

**AC-920.2.2.5 Mounting.** The air admittance valve may be mounted under a counter top in base cabinets, or in the inside wall behind a ready access panel.

**AC-920.2.2.6 Fixture Threads.** Only petroleum jelly shall be used on the threads of an air admittance valve to ensure an air-tight fit. Anything else, including a pipe-thread
compound, may deteriorate the air admittance valve or its adaptor. Air admittance valves should be hand tightened.

**AC-920.2.2.7 Installation Subject to Back Pressure.** The device shall not be installed where it is subject to back pressure, such as at the base of soil or waste stacks.
CHAPTER 10
TRAPS, INTERCEPTORS AND SEPARATORS

SECTION 1002
TRAP REQUIREMENTS

**IPC 1002.6** DELETE & REPLACE WITH:

**AC-1002.6** Building (House) Traps. Each house or building drain shall be provided with a horizontal intercepting trap, which shall be the same size as the building drain in which it is installed. The trap shall be provided with an accessible cleanout and a fresh air grill or inlet, which shall terminate in a location acceptable to the Administrative Authority.

**AC-1002.6.1** Relieving Vents or Fresh Air Intakes. Relieving vents or fresh air intakes shall be no less than four (4) inches in diameter for building drains up to and including eight (8) inches in diameter. For drains larger than eight (8) inches, the fresh air intake shall be one-half (1/2) the diameter of the drain. Openings in the grill or fresh air inlet shall equal the area of the inlet pipe. The fresh air inlet shall not be used as an area drain.

**AC-1002.6.2** Cleanouts. Cleanouts for intercepting traps shall be no less than four (4) inches in diameter for trap sizes up to and including ten (10) inches. For traps larger than ten (10) inches, the cleanout shall be no less than six (6) inches in diameter.

**AC-1002.6.3** Trap Placement. It is recommended that the trap be placed inside the cellar or basement wall or as close thereto as practical, allowing for construction circumstances. Where house or building traps are placed outside of buildings, they shall be placed as close as practical to the outside of the foundation wall and the fresh air shall be extended above ground. In addition, on traps installed below four (4) feet in depth, a wye and one-eighth bend, combination wye or two-way cleanout tee shall be installed on the downstream or sewer side of the trap with a pipe extending to grade and finished with a cleanout.

**AC-1002.6.4** Illustrations. Refer to illustrations in AC-Appendix H for trap assembly.

**AC-1002.6.5** Protection of Brittleware Traps. Where the use of vitrified clay or brittleware traps installed underground is approved by the Administrative Authority, the traps shall be embedded in a concrete encasement extending four (4) inches beyond the bottom and sides of the trap.

SECTION 1003
INTERCEPTORS AND SEPARATORS

**IPC 1003.2** DELETE AND REPLACE WITH:

**AC-1003.2** Approval. The size, type and location of each interceptor or separator shall be approved by the Administrative Authority, and no wastes, other than those requiring treatment or separation shall be discharged into any interceptor. Before installing any special type separator, a drawing, including all pertinent information, shall be submitted for approval to the Administrative Authority.

**AC-1003.3.1** ADD:

**AC-1003.3.2** Grease Interceptor Location. Grease interceptors, where necessary or required, shall not be located in any kitchen or room where food is prepared, cooked, mixed, baked, smoked, preserved, exposed, bottled, packed, handled, stored, or manufactured. This provision need not apply where a semi-automatic draw-off type grease interceptor is provided.
IP 1003.9  ADD:
AC-1003.9.1 Venting of Oil Separators. Oil or other flammable waste separators shall be provided with a three (3) inch vapor vent extending from the top of the separator and terminating independently in the open air at an approved location at least twelve (12) feet above grade or as approved by the Administrative Authority.

IP 1003.10  ADD:
AC-1003.10.1 Maintenance Schedule of Interceptors, and Separators. Interceptors and separators shall be maintained in efficient operating condition by periodic removal of accumulated grease, scum, oil, or other floating substances and solids deposited in the interceptor or separator. When interceptors and separators are installed, a maintenance schedule and records, including the hauler, shall be kept on the premises and made available upon request to the Administrative Authority.
CHAPTER 11
STORM DRAINAGE

SECTION 1101
GENERAL

IPC 1101.2 DELETE & REPLACE WITH:
AC 101.2 Where required. All roofs, paved areas, yards, courts, courtyards, or areas using a topping or finish capable of collecting water shall be drained into a separate storm sewer system, or a combined sewer system, as per Section AC 1104.2, where such systems are available. Alternatively, as a green initiative, structural and non-structural storm water management practices separate from a storm sewer or combination sewer may be employed as they comply with Document 363-0300-002 Best Management Practices for Stormwater Management issued by the Pennsylvania Department of Environmental Protection available electronically at http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-8305 or are of a best management practice design that meets or exceeds the requirements of the above noted document and meet the requirements of the Administrative Authority and the local municipality. If there is no storm or combined sewer available for such drains, or if an individual chooses to construct an alternative system specified above, then the water from said drains shall be conducted by proper pipe or pipes below the surface of the sidewalk, to the street gutter or to a place of disposal satisfactory to the Administrative Authority, where the local municipality has no ordinance or regulation in place, and in accordance with any other plans or ordinances adopted under the Storm Water Management Act, 1978, October 4, P.L. 864, No. 167, or other ordinances or regulations of the municipality involved. In no case shall collected surface or storm water be allowed to drain over sidewalks or driveways, or onto adjacent properties where the water can create soil erosion or have adverse effects on a structure.

SECTION 1103
TRAPS

ADD:
AC-1103.1.1 Inside Conductors. All inside conductors shall be trapped.

SECTION 1104
CONDUCTORS AND CONNECTIONS

IPC 1104.2 DELETE & REPLACE WITH:
AC-1104.2 Combining Storm with Sanitary Drainage. The sanitary and storm drainage system of a building shall be entirely separate, except that where a combined sewer is available; the building storm sewer may be connected in the same horizontal plane through a single wye fitting to the sanitary sewer. Such connection shall be made downstream of the sanitary building trap or beyond the property line or at a location approved by the Administrative Authority.
DEFINITIONS

ADD: THE FOLLOWING DEFINITIONS:

ACCESSORY BUILDINGS. Buildings that are dependent upon and cannot function independently of the central unit.

ADMINISTRATIVE AUTHORITY. The term “Administrative Authority” when used in this Article, shall mean the Director of the Allegheny County Health Department or his authorized representative, including an individual official, board, division, or municipality authorized by the Department to administer and enforce the provisions of this Article.

APARTMENT BUILDING. A structure containing dwelling units that also contains common areas accessible from within the structure such as, but not limited to: hallways, basements, laundry facilities, etc.

ARTICLE. The term “Article” or “this Article” when used alone shall mean these rules and regulations, subsequent amendments thereto, or any emergency rule or regulation which the Board of Health may recommend for adoption by the County Executive.

BOARD OF HEALTH. The term “Board of Health” shall mean the Board of Health of Allegheny County.

BUILDING CLASSIFICATION. The arrangement adopted by the Administrative Authority for the designation of buildings in classes according to use or occupancy.

BUILDING DRAIN (house drain) (delete IPC definition) that part of the lowest piping of a drainage system which receives the discharge of soil, waste, and other drainage pipes inside the walls of the building and conveys such discharges to the building sewer; the building drain shall be considered to extend (5) five feet outside the building wall.

BUILDING TRAP (house trap) (delete IPC definition) A device, fitting or assembly of fittings installed in the building drain to prevent the entrance of sewer gas into the drainage system of the building from the building sewer or main sewer and provide a circulation of fresh air for the drainage system through a fresh air inlet.

CHIEF PLUMBING INSPECTOR. Term “Chief Plumbing Inspector” shall mean any qualified person employed by the Administrative Authority to provide the general supervision of the Assistant Chief Plumbing Inspector, Supervisors and Inspectors and such other employees as may be necessary to administer and enforce the provisions of this Article.

COMMON SEWER LATERAL. A private sewer that collects the sewage discharge of more than one building drain/ sewer and conveys it to a public sewer.

DEPARTMENT. The Allegheny County Health Department.

DIRECTOR. The Director of the Allegheny County Health Department or his authorized representative.

FIXTURE. (Defined per fixture fee schedule) The word fixture, as used in the fee structure shall mean each water closet, urinal, wash basin, sink, bath tub, house trap, floor drain, roof drain or downspout area drain, laundry tray, hot water heater or openings provided for any of the aforementioned or any plumbing or drainage appliances trap-connected, either directly or indirectly, to the plumbing or drainage system, whether water-supplied or not, installed in the building or on the lot within the property line.
Each installed vacuum breaker or backflow prevention device on unprotected equipment or apparatus shall constitute one fixture fee. (Not to include required vacuum breaker on plumbing fixtures covered in this Code, integral or built-in backflow devices or hose bib-attached devices.)

**FRESH AIR INTAKE or VENT.** A means for introducing fresh air into a building drainage system through a building or house trap.

**GRADE.** The slope or fall of a line of pipe in reference to a horizontal plane. In drainage it is usually expressed as the fall in a fraction of an inch per foot length of pipe.

**INfiltration.** The water entering a sanitary drainage system from the ground through such means, but not limited to, defective pipes, pipe joints, connections, or manhole walls. Infiltration does not include, and is distinguished from, inflow.

**INFLOW.** The water entering a sanitary drainage system from such sources as, but not limited to: rain conductors, foundation drains, yard and area drains, catch basins, surface run-off, manhole or lamp-hole covers, fresh air vents, or connections with storm or combination sewer/drain piping. Inflow does not include, and is distinguished from, infiltration.

**LAMP-HOLE COVER.** The removable covering to a lamp-hole cleanout in a sewer line.

**LIQUID WASTE.** Liquid waste is the discharge from any fixture, appliance, or appurtenance, in connection with a plumbing system that does not receive fecal matter.

**MAY OR SHALL.** The word "may" as used in the rules and regulations is a permissive term. The word "shall" as used in these rules and regulations is a mandatory term.

**MODULE COMPONENT.** Any major manufactured subsystem or subassembly containing plumbing designed for use as an integral component part of a structure designed for residential occupancy, which contains concealed parts or processes of manufacture that cannot be inspected at the building site without disassembly, damage or destruction. Module Component, is identified in the Industrialized Housing Act, Act of May 11, 1972, P.L. 286 and the regulations of the Pennsylvania Department of Community Affairs (as being subject to the Industrialized Housing Act.)

**MUNICIPALITY.** A city, incorporated town, township, borough, or home-rule municipality, other than a county, or any authority created pursuant to the laws of the Commonwealth of Pennsylvania.

**PERSON.** The word "person" as used in these rules and regulations shall mean a natural person, his heirs, executors, administrators or assigns; and includes a firm, partnership or corporation, their successors or assigns. Singular includes plural, male includes female.

**PLUMBER (APPRENTICE).** The term "Apprentice Plumber" shall mean any person who is engaged in learning the plumbing trade by working with and assisting a journeyman or master plumber in the installation, maintenance, and repair of plumbing and drainage and is governed by the rules and regulations promulgated under "The Apprenticeship and Training Act," 1961, July 14, P.L. 304.

**PLUMBER (JOURNEYMAN).** The term "Journeyman Plumber" shall mean a person other than a master or apprentice plumber who is not on inactive status, having satisfied the Examining Board of the Allegheny County Health Department as to his knowledge of the installation of plumbing and has been licensed by the Department to install plumbing under the direction of a master plumber.

**PLUMBER (MASTER).** The term "Master Plumber" shall mean a person other than a journeyman or apprentice plumber, who is active in the plumbing profession, having satisfied the Allegheny County Health Department as to his knowledge of plumbing installation and who has been licensed by the Department to install plumbing as a "Master Plumber."
PREMISES. The land and buildings owned by a single entity or co-owned by a group, that together constitute a place of business or private residence(s).

PREMISES, QUALIFYING. Qualifying Premises are those premises with buildings that have at least one point on an exterior wall located within two hundred fifty (250) feet of a public sewer build on or after 1994, or within one hundred fifty feet (150) of a public sewer built before 1994, as measured from the wall of the building nearest the public sewer, across the premises' land, and along an easement, alley or street to the public sewer.

PRIVATE SEWER. A private sewer is a sewer privately owned and not directly controlled by a public authority.

RECEPTOR. A fixture or device that receives the discharge from indirect waste pipes.

REVENT PIPE. A revent pipe (sometimes called an individual vent) is that part of a vent pipe line that connects directly with an individual waste pipe or group of waste pipes, underneath or behind the fixture, and extends either to the main or branch vent pipe.

SEPTIC TANK. A water-tight receptacle that receives sewage and is designed and constructed to store and decompose sludge and to separate solids from liquid through a period of detention before allowing the liquid to be discharged to a subsurface absorption area.

TRAP ARM. The developed length of fixture drain measured from the trap weir to the vent fitting.

WET VENT. A vent that may also serve as a drain.
ADD:
AC-P2501.3  Toilet Facilities for Workers. Suitable toilet facilities shall be provided and maintained in a sanitary condition for the use of workmen during construction. The required temporary facilities, connected to water and sewer lines, shall be installed as soon as the lines are available. Prior to the availability of water and sewer lines, chemical or incinerator type closets, approved by the Administrative Authority, shall be used.

ADD:
AC-P2502.3  Health and Safety. Where a health or safety hazard exists on a premises by reason of an existing plumbing installation or lack thereof, the owner or his agent shall install additional plumbing, or make such connections as may be necessary, to abate such condition and bring the plumbing installation within the provisions of this Code.

ADD:
AC-P2502.4  Duty of Owners and Plumbers in Constructing Drains, Soil Pipes, Passages and Connections. It shall be the duty of every person constructing, owning or having a possessory interest in any drain, soil pipe, passage or connection, between a sewer and any ground or building, to construct or maintain such drain, soil pipe, passage and/or connection, so that it is adequate for its purpose, and at all times allows all material that enters or should enter to pass freely. No change to the drainage, sewerage, or sewer connection of any premises shall be permitted by a plumber, owner, or party with a possessory interest unless he has received written approval from the Administrative Authority.
ADD:

**AC-P2602.1.1 Connection to a Public Water & Sewer System.** All sanitary sewer and wastewater shall drain into an approved public sewer system or septic tank. In no case shall sanitary sewer discharge into a storm system, unless it is a combined sewer system and proper traps are installed.

**AC-P2602.1.1.1 Dwelling Units.** The water distribution and drainage system of any dwelling unit that is not vertically stacked shall be separately and independently connected to a public water supply and sewer system, if available. Multiple dwelling units stacked vertically, directly above or below, do not require separate and independent connections, but each vertical column of dwelling units must be separately and independently connected to a public water supply and sewer system, if available. Other buildings, including apartment buildings, as defined in this Code, shall be separately and independently connected to the available public sewer and public water supply.

**AC-P2602.1.1.2 Public Water System Available.** A public water supply system shall be deemed available to a premises if a building used for human occupancy on the premises is located within two-hundred fifty (250) feet, measured across the premises’ land and along a street, alley or easement, to a public water system. A connection conforming to the standards set forth in this Code shall be made thereto. Where public water systems are made available to the premises, building systems shall be connected to the available public water system to protect the health of building occupants.

**AC-P2602.1.1.2.1 Notice to Discontinue Use.** The Administrative Authority may issue notices giving up to ninety (90) days to discontinue the use of such private system and to connect to a public facility. Existing private water supplies may be used or continued for purposes other than supplying water for drinking, bathing, or culinary purposes, and further provided that such private water supply is not cross-connected or inter-connected with a potable water supply system.

**AC-P2602.1.1.2.2 Reintroduction of Water.** Water received from a public or private water supply system shall not be introduced or reintroduced into any public or private water supply system after it has been used for any purpose, including, but not limited to, usage in, or as heat exchange devices, steam condensate, cooling water from engine jackets, boiler water, or air conditioner water. Water used for space heating through water heaters may be permitted provided all materials used are of approved materials for water distribution.

**AC-P2602.1.2 Public Sewer System Available.** A connection conforming to the standards set forth in this Code shall be made between a Qualifying Premises and an available public sewer system. A public sewer system shall be deemed available to a Qualifying Premises and its building(s) if the building components of such a premises are located within two hundred fifty (250) feet of such sewer system built in or after 1994, or within one hundred fifty (150) feet of a sewer system build before 1994, measured along the premises, street, alley or easement. Where public sewer systems are made available to a premises, its building systems shall be connected to the available public sewer system to protect the health of building occupants. An Administrative Authority may issue notices giving Qualifying Premises owners or occupants up to ninety (90) days to discontinue the use of private systems and to connect to a public sewer system.
AC-P2602.1.3 Inspection / Site Tee Required at Public Sewer Connections. All new or replaced sanitary or combined sewer laterals, when connected to public sewers, shall be provided with an inspection / site tee at or near the property line. Such connection shall be brought to grade and finished with a water- and air-tight cleanout assembly.

AC-2602.1.4 Public Sewers and / or Water Mains Not Available. Where public sewers and / or water mains are not immediately available, it may become necessary to construct a private sanitary sewer, storm sewer, and/or water main to connect with a public utility. A variance must be obtained from the Director prior to construction of a private sanitary sewer, storm sewer, and/or water main. Plans indicating size, materials, and method of construction must be submitted to the Administrative Authority for approval. Private sewers and/or water mains shall be constructed on the outside of houses or buildings and shall branch into each house or building separately. When private sewers and/or water mains must cross another property or properties to connect with a public sanitary sewer, storm sewer and/or water main, an easement shall be recorded in the deeds of all involved parties. A mutual maintenance agreement shall be recorded in the deeds of all such buildings connected to a private sewer or water main system to affix equal responsibility in maintaining said private sewer(s) or water main(s). A copy of the recording shall be filed with the Administrative Authority.

AC-2602.1.5 Existing Common Sewer Lateral. When an Administrative Authority identifies the existence of a common sewer lateral (CSL), that are not recorded in the Recorder of Deeds Office of Allegheny County, it may issue orders to all known users to separately connect to any available public sewer, or in the alternative, to record in the Recorder of Deeds Office of Allegheny County, a document, approved by the Administrative Authority, which shall identify the existence of said CSL and adequately specify the maintenance responsibilities of the property owners or occupiers for the CSL.

SECTION P2603
STRUCTURAL AND PIPING PROTECTION

IRC P2603.6 DELETE & REPLACE WITH:

AC-P2603.6 Freezing. Water service piping, exterior building drains and sewers shall be installed below recorded frost penetration, but water piping shall be installed not less than 3 feet 6 inches below grade and exterior building drains and sewers shall not be installed less than 3 feet below grade, measured to the top of the pipe, provided that sewers to septic tanks are at least 12 inches below grade. Plumbing piping in exterior building walls or exposed areas within buildings shall be adequately protected against freezing by insulation, heat or both.

IRC P2603.6.1 DELETE (addressed in AC-P2603.6)
SECTION P2604
TRENCHING AND BACKFILLING

ADD:
AC-P2604.1.2 Support of Piping. Buried pipe regulated by this Code shall be supported throughout its entire length by undisturbed earth, rock, shale, or by hard fill of sand, gravel, crushed stone, or approved structural means. Unless otherwise specified in this Code, all buried plastic pipe shall be laid on a minimum of two (2) inch bed of sand or equivalent granular material, with an envelope of the same material at the sides and top of the pipe. Encasement thickness shall be a minimum of six (6) inches on each side of the pipe, and a minimum of four (4) inches from top of the pipe to the underside of the slab, and twelve (12) inches above the top of the pipe elsewhere.

Exceptions:
1. Slag is not an acceptable backfill material.

SECTION P2605
SUPPORT

ADD:
AC-P2605.1
5. The laying of sewers or drains on ordinary fill or unstable ground which would allow further settlement is prohibited. Where an Administrative Authority has reason to doubt the stability of soil or ground conditions, or where in fact fill is to be used, it shall be placed and designed under the supervision of a qualified engineer who shall certify its stability, in writing, to the Administrative Authority. Methods of providing a supporting system in filled ground acceptable to the Administrative Authority include: a hard fill arrangement using sand, gravel, or crushed stone below the pipe down to natural or undisturbed ground. As an alternative to hard fill, an approved structural system of support may be used, consisting of a continuous concrete mat at least four (4) inches thick, properly reinforced and poured the full width of the trench. The mat shall be supported by concrete piers drilled to a depth of solid footing and spaced at sufficient intervals to provide the necessary support for the system.

SECTION P2607
WORKMANSHIP

ADD:
AC-P2607.2 Guidelines. Workmanship shall conform to generally accepted good plumbing practice.

AC-P2607.2.1 Identification of Systems. In all buildings, except 1- and 2-family dwellings, all piping systems shall be properly identified using appropriate tags, marking tape, or other method(s) acceptable to the Administrative Authority.

Exceptions:
1. Piping installed in any building to remove radon gas shall be identified by the use of continuous orange markings.
CHAPTER 27
PLUMBING FIXTURES

SECTION P2706
WASTE RECEPTORS

IRC P2706.2.1  DELETE (addressed in AC-P3201.6, Note 2)

SECTION P2719
FLOOR DRAINS

IRC P2719.1  DELETE & REPLACE WITH:
AC-P2719.1  General. The floor drain shall be so constructed that it can be readily cleaned, and the drain inlet shall be easily accessible at all times. Floor drains subject to backflow shall be provided with a backwater valve.

AC-P2719.1.1  Size of Floor Drains. Floor drains and traps shall be of a size to serve efficiently the purpose for which they are intended. (See Table AC-P3004.1 and Section AC-P3110.3)
CHAPTER 29
WATER SUPPLY AND DISTRIBUTION

SECTION P2901
GENERAL

ADD:

AC-P2901.2   Public Water System Available. A public water supply system shall be deemed available to a premises if a building used for human occupancy on the premises is located within two-hundred fifty (250) feet, measured across the premises' land and along a street, alley or easement, to a public water system. A connection conforming to the standards set forth in this Code shall be made thereto. Where public water systems are made available to the premises, building systems shall be connected to the available public water system to protect the health of building occupants.

AC-P2901.2.1 Notice to Discontinue Use. The Administrative Authority may issue notices giving up to ninety (90) days to discontinue the use of private water systems and to connect to a public water system. Existing private water supplies may be used for purposes other than supplying water for drinking, bathing, or culinary purposes, and further provided that the existing private water supply is not cross-connected or inter-connected with a potable water supply system.

AC-P2901.2.2 Reintroduction of Water. Water received from a public or private water supply system shall not be introduced or reintroduced into any other or the same public or private water supply system after it has been used for any purpose, including, but not limited to: usage in, or as heat exchange devices, steam condensate, cooling water from engine jackets, boiler water, or air conditioner water. Water used for space heating through water heaters may be permitted provided all materials used are of approved materials for water distribution.

SECTION P2902
PROTECTION OF POTABLE WATER SUPPLY

ADD:

AC-P2902.1.1 Protection of Water Service. Newly installed or replaced water service piping shall be provided with a backflow device located at or near the water meter. Dual check valves, double check valves, and reduced pressure zone type backflow preventers are acceptable for the purposes of this section.

SECTION P2903
WATER-SUPPLY SYSTEM

IRC P2903.9.3 DELETE & REPLACE WITH:

AC-P2903.9.3   Individual Fixture Valves. In all building classifications, the water supply line to each fixture or other piece of equipment shall be provided with a valve or fixture stop to shut off the water to the fixture. All sill cocks and wall hydrants shall be separately controlled by a valve inside the building. All valves shall be provided with access.

IRC P2903.10 DELETE (addressed in AC-P2903.9.3)
**SECTION P2904**
**MATERIALS, JOINTS AND CONNECTIONS**

**IRC P2904.4.1 DELETE & REPLACE WITH:**

**AC-P2904.4.1 Separation of Water Service and Building Sewer.** Except as permitted below, underground water service pipes and the building drains or building sewers shall be not less than ten (10) feet apart, horizontally, and shall be separated by undisturbed or compacted earth.

**AC-P2904.4.1.1 Placement in Same Trench.** A water service pipe may be placed in the same trench with a building drain and building sewer, provided that written approval is obtained by the Administrative Authority and the following conditions are met:

1. The bottom of the water service pipe, at all points, shall be at least twelve (12) inches above the top of the sewer line at its highest point.

2. The water service pipe shall be placed on a solid shelf excavated at one side of the common trench.

3. The number of joints in the service pipe shall be kept to a minimum.

4. The sewer material shall be of an approved type.

5. Where the location of the plumbing fixtures in the building make it impractical due to lot condition and/or topography either to maintain a horizontal separation of ten (10) feet between water service lines and building drain or sewer lines, or a vertical separation of 1 foot with the water service pipe above the building drain or sewer, the water service pipe shall be enclosed in a continuous, impervious plastic sheath with ends properly sealed below grade from where required separations are not met to a point not less than six (6) inches above the top of the finished concrete floor, minimum water line and sewer line depths required by this code shall be adhered to at all times. The Administrative Authority shall notify the property owner of the existence of any plastic sheathing used outside the building foundation. This notification shall be included in the final inspection certificate.
### CHAPTER 30
**SANITARY DRAINAGE**

### SECTION 3004
**DETERMINING DRAINAGE FIXTURE UNITS**

**IRC TABLE P3004.1 DELETE & REPLACE WITH:**

### TABLE AC-P3004.1
**FIXTURE UNIT VALUES FOR VARIOUS PLUMBING FIXTURES & MINIMUM TRAP SIZE**

<table>
<thead>
<tr>
<th>PLUMBING FIXTURES</th>
<th>FIXTURE UNIT VALUES</th>
<th>MINIMUM TRAP SIZE IN INCHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic clothes washer (when connected to a drainage system)</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Bathtub (with or without overhead shower)</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Bidet</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Combination sink &amp; tray (separate traps for each compartment)</td>
<td>3</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Combination sink &amp; tray with food waste grinder (separate traps for each compartment)</td>
<td>4</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Dishwasher - domestic</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Floor drain - above ground</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Floor drain - below ground</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Floor drain (emergency) see Section AC-P3110.3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Kitchen sink - domestic</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Kitchen sink - domestic, with food waste grinder</td>
<td>3</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Kitchen sink - domestic, double-bowl (separate traps for each compartment)</td>
<td>3</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Kitchen sink - domestic, double-bowl with food waste grinder (separate traps for each compartment)</td>
<td>4</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Lavatory - common</td>
<td>1</td>
<td>1-1/4</td>
</tr>
<tr>
<td>Laundry tray - 1 or 2 compartment</td>
<td>2</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Laundry tray - 3 to 5 compartments</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Shower stall - single</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Shower stalls - group or gang type (above ground)</td>
<td>2 per head</td>
<td>3</td>
</tr>
<tr>
<td>Shower stalls - group or gang type (below ground)</td>
<td>2 per head</td>
<td>4</td>
</tr>
<tr>
<td>Sink - service type, with trap combined</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Sink - service type, ordinary</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Water closet - (1.6 gallon per flush)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Water closet - (greater than 1.6 gallon per flush)</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Full-bath group with bathtub (with 1.6 gallon per flush water closet)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Full-bath group with bathtub (with water closet greater than 1.6 gallon per flush)</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPE OF FIXTURE</th>
<th>FIXTURE UNIT VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlisted fixture drain or trap size</td>
<td></td>
</tr>
<tr>
<td>1-1/4 inches or less</td>
<td>1</td>
</tr>
<tr>
<td>1-1/2 inches or less</td>
<td>2</td>
</tr>
<tr>
<td>2 inches or less</td>
<td>3</td>
</tr>
<tr>
<td>2-1/2 inches or less</td>
<td>4</td>
</tr>
<tr>
<td>3 inches or less</td>
<td>5</td>
</tr>
<tr>
<td>4 inches or less</td>
<td>6</td>
</tr>
</tbody>
</table>

a. For continuous or semi-continuous flow, 1 gallon per minute flow shall equal 1.5 fixture units.
SECTION P3005
DRAINAGE SYSTEM

**IRC P3005.1** DELETE & REPLACE WITH:
**AC-P3005.1** Fittings Used to Change Direction. Change in direction in drainage piping shall be made by the appropriate use of 45° wyes; long or short sweep bends; sixth, eighth, or sixteenth bends; or by a combination of these or equivalent fittings. Single sanitary tees may be used in drainage lines only where the direction of flow is from the horizontal to the vertical. Quarter bends may be used in drainage lines where the direction of flow is from the horizontal to the vertical, or vertical to the horizontal.

DELETE IRC TABLE 3005.1 (addressed in AC-P3005-*.1)

**IRC P3005.2.7** DELETE & REPLACE WITH:
**AC-P3005.2.7** Building (House) Traps. Each house or building drain shall be provided with a horizontal intercepting trap, which shall be the same size as the building drain in which it is installed. The trap shall be provided with an accessible cleanout and a fresh air grill or inlet, which shall terminate in a location acceptable to the Administrative Authority.

**AC-P3005.2.7.1** Relieving Vents or Fresh Air Intakes Sizes. Building or house trap relieving vents or fresh air intakes shall be no less than four (4) inches in diameter for building drains up to and including eight (8) inches in diameter. For drains larger than eight (8) inches, the fresh air intake shall be 1/2 the diameter of the drain. Openings in the grill of the fresh air inlets shall equal the area of the inlet pipe. The fresh air inlet shall not be used as an area drain.

**AC-P3005.2.7.2** Intercepting Traps. Cleanouts for intercepting traps shall be no less than four (4) inches in diameter for trap sizes up to an including ten (10) inches. For traps larger than ten (10) inches, the cleanout shall be no less than six (6) inches.

**AC-P3005.2.7.3** Trap Placement. It is recommended that the trap shall be placed inside the cellar or basement wall or as close thereto as practical, allowing for construction circumstances. Where house or building traps are placed outside of buildings, they shall be placed as close as practical to the outside of the foundation wall and fresh air intakes shall be extended above ground. In addition, on traps installed below four (4) feet in depth, a wye and 1/8 bend, combination wye, or two-way cleanout tee shall be installed on the downstream or sewer side of the trap with a pipe extending to grade, and finished with a cleanout.

**AC-P3005.2.7.4** Illustrations. Refer to illustration in AC-Appendix M for trap assembly dimensions.

**IRC P3005.3** DELETE & REPLACE WITH:
**AC-P3005.3** Slope of Horizontal Drainage Piping. Horizontal drainage piping shall be installed in uniform alignment at uniform slopes not less than 1/4-inch per foot for three (3) inch diameter and less, and not less than 1/8-inch per foot for diameters of four (4) inches or more. Where conditions do not permit building drains and sewers to be laid with slope as great as that specified, a lesser slope may be permitted, as determined in Table AC-P3005.4.1-A, provided that the computed velocity is at least two (2) feet per second.

**AC-P3005.3.1** Depth of horizontal Building Drains. Horizontal building drains inside a building shall be required to be a minimum 12 inches (at highest point) from finished floor to the flow line of the pipe on all underground sanitary building drains, where sufficient fall is available.
IRC P3005.4.1  **DELETE & REPLACE WITH:**
AC-P3005.4.1  **Selecting Size of Drainage Pipe.** Pipe sizes shall be determined from Tables AC-P3005.4.1-A and AC-P3005.4.1-B on the basis of drainage load computed from Table AC-P3004.1.

**IPC TABLE P3005.4.1  DELETE & REPLACE WITH:**

**TABLE AC-P3005.4.1-A**
MAXIMUM LOADS ON BUILDING DRAINS AND SEWERS

<table>
<thead>
<tr>
<th>Diameter Of Drain In Inches</th>
<th>Maximum Number Of Fixture Units That May Be Connected To Any Portion(^1) Of The Building Drain Or The Building Sewer</th>
<th>Fall Per Foot</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1/16 Inch</td>
</tr>
<tr>
<td>* 1-1/4&quot; +</td>
<td>NP</td>
<td>NP</td>
</tr>
<tr>
<td>* 1-1/2&quot; +</td>
<td>NP</td>
<td>NP</td>
</tr>
<tr>
<td>* 2&quot; +</td>
<td>NP</td>
<td>NP</td>
</tr>
<tr>
<td>* 2-1/2&quot; +</td>
<td>NP</td>
<td>NP</td>
</tr>
<tr>
<td>* 3 &quot;</td>
<td>NP</td>
<td>NP</td>
</tr>
<tr>
<td>4&quot;</td>
<td>NP</td>
<td>180</td>
</tr>
<tr>
<td>5&quot;</td>
<td>NP</td>
<td>390</td>
</tr>
<tr>
<td>6&quot;</td>
<td>NP</td>
<td>700</td>
</tr>
<tr>
<td>8&quot;</td>
<td>1,400</td>
<td>1,600</td>
</tr>
<tr>
<td>10&quot;</td>
<td>2,500</td>
<td>2,900</td>
</tr>
<tr>
<td>12&quot;</td>
<td>3,900</td>
<td>4,600</td>
</tr>
<tr>
<td>15&quot;</td>
<td>7,000</td>
<td>8,300</td>
</tr>
</tbody>
</table>

\(^1\) Includes branches of building drain
\(^2\) Not over three (3) water closets
* - When building drain is above basement floor
+ - No water closets permitted
NP - Not Permitted
### TABLE AC-P3005.4.1-B
**MAXIMUM LOADS ON SOIL & WASTE STACKS & BRANCHES OF STACKS**

<table>
<thead>
<tr>
<th>Diameter Of Drain In Inches</th>
<th>Any Horizontal ¹ Fixture Branch</th>
<th>One Stack Of 3 Stories In Height - Includes 1 &amp; 2 Story Buildings</th>
<th>More Than 3 Stories In Height</th>
<th>Total For Stack</th>
<th>Total At One Story Or Branch Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/4&quot; waste</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1-1/2&quot; waste</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2&quot; waste</td>
<td>6</td>
<td>10</td>
<td>24</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2-1/2&quot; waste</td>
<td>12</td>
<td>20</td>
<td>42</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>3&quot; soil and/or waste</td>
<td>20 ²</td>
<td>48 ³</td>
<td>72 ³</td>
<td>20 ²</td>
<td></td>
</tr>
<tr>
<td>4&quot; waste</td>
<td>160</td>
<td>240</td>
<td>500</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>5&quot; waste</td>
<td>360</td>
<td>540</td>
<td>1,100</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>6&quot; waste</td>
<td>640</td>
<td>960</td>
<td>1,900</td>
<td>350</td>
<td></td>
</tr>
<tr>
<td>8&quot; waste</td>
<td>1,400</td>
<td>2,200</td>
<td>3,600</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>10&quot; waste</td>
<td>2,500</td>
<td>3,800</td>
<td>5,600</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>12&quot; waste</td>
<td>3,900</td>
<td>6,000</td>
<td>8,400</td>
<td>1,500</td>
<td></td>
</tr>
</tbody>
</table>

¹ - Does not include branches of the building drain
² - Not over three (3) water closets
³ - Not over six (6) water closets

**IRC P3005.4.2 DELETE & REPLACE WITH:**

**AC-P3005.4.2. Soil and Waste Stacks.** All soil and waste stacks shall extend through the roof in a vertical line from the highest to the lowest horizontal branch or fixture connected thereto and shall not be reduced in size, except that where offsets in vertical stacks are unavoidable, such as increase in sizing as outlined in Section AC-P3006.2 of this Chapter, and shall not be considered as a reduction in stacks. Also, first floor water closets, the location of which prevents a connection to available soil stacks, may connect to the building drain and be relieved by a proper size relief vent. This procedure shall not be considered as a reduction in the soil stack, however; and no soil stacks extending beyond the first floor level provided to receive the discharge of water closets or similar fixtures shall be reduced in size. No soil or waste stack shall be smaller in size than the attending vent stack, nor shall any soil or waste stack be smaller in size than the largest horizontal branch connected thereto, except that a 4 x 3 water closet connection shall not be considered as a reduction in pipe size.

**AC-P3005.4.2.1 Minimum Size of Stack or Vent Stack.** Any building or structure containing at least one water closet shall have a building drain installed with at least one stack vent or vent stack carried full size through the roof, not less than three (3) inches in diameter. No soil, waste, or vent pipe shall be installed on the outside of a new building. Any building or structure having a sewer connection with a public or private sewer which has a drainage system installed to receive discharge from floor drainage only will require a minimum of a two (2) inch relief vent, which must be extended through the roof of the building, from the rear of the main building drain, and be of a larger size where warranted. Building drains installed for roof drainage only will not require a relief vent.
AC-P3005.4.2.2 Minimum Size of Underground Sanitary Drainage Piping. Sanitary drainage systems installed underground or below a basement or cellar floor shall be four (4) inches in diameter.

Exceptions:
1. Traps used for bathtubs and individual showers may be 1-1/2 “ or 2 ” respectively.
2. Waste lines extending at least one (1) inch above the finished floor provided for clear water wastes identified in IRC Section P2706.1 terminated with proper fittings in the vertical piping between a floor drain and floor drain trap. Minimum size is 1-1/2”.
3. In residential installations, waste and/or soil pipe, 3” , 2” , and 1-1/2” may be installed within the perimeter of a toilet room, and 3” and 2” pipes may be installed as branches of the building drain, provided that the developed length does not exceed 10’ from the main building drain. (Note: The use of cast iron pipe 2” and smaller shall be prohibited.)

SECTION P3006
SIZING OF DRAIN PIPE OFFSETS

IRC P3006.1 DELETE & REPLACE WITH:
AC-P3006.1 Offsets of 45° or Less. An offset in a vertical stack, with a change of direction of 45° or less from the vertical, may be sized as a straight vertical stack.

IRC P3006.2 DELETE & REPLACE WITH:
AC-P3006.2 Offsets of more than 45°. A stack with an offset of more than 45° from the vertical shall be sized as follows:

1. The portion of the stack above the offset shall be sized as for a regular stack based on the total number of fixture units above the offset, except that the portion of the stack above the offset shall not be smaller in size than required for straight vertical stacks based upon the total fixture unit count for the entire stack.
2. The offset shall be sized as for a building drain. Table AC-P3005.4.1-A
3. The portion of the stack below the offset shall be sized as for the offset, or may be based on the total number of fixture units on the entire stack, whichever is larger.
CHAPTER 31
VENTS

SECTION P3101
VENT SYSTEMS

**IRC P3101.4** DELETE & REPLACE WITH:
AC-P3101.4 Exclusion Outside Building. No soil, waste, or vent pipe extension shall be run or placed outside of a wall of any new building, but shall be carried up inside the building.

SECTION P3102
VENT STACKS AND STACK VENTS

**IRC P3102.3** DELETE (addressed in AC-P3114.1.1)

SECTION P3104
VENT CONNECTIONS AND GRADES

**IRC P3104.1**
EXCEPTION: DELETE (addressed in AC-P3114.1.1)

SECTION P3105
FIXTURE VENTS

**IPC TABLE P3105.1** DELETE & REPLACE WITH:
TABLE AC-P3105.1

<table>
<thead>
<tr>
<th>Size of Fixture Trap</th>
<th>Slope (inch per foot)</th>
<th>Distance of Trap to Vent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/4 inches</td>
<td>1/4</td>
<td>2 feet - 6 inches</td>
</tr>
<tr>
<td>1-1/2 inches</td>
<td>1/4</td>
<td>3 feet - 6 inches</td>
</tr>
<tr>
<td>2 inches</td>
<td>1/4</td>
<td>5 feet - 0 inches</td>
</tr>
<tr>
<td>2-1/2 inches</td>
<td>1/4</td>
<td>5 feet - 0 inches</td>
</tr>
<tr>
<td>3 inches</td>
<td>1/4</td>
<td>6 feet - 0 inches</td>
</tr>
<tr>
<td>4 inches and over</td>
<td>1/8</td>
<td>10 feet - 0 inches</td>
</tr>
</tbody>
</table>

**IRC P3105.3** DELETE (less stringent)

SECTION P3107
COMMON VENT

**IRC P3107.1** DELETE & REPLACE WITH:
AC-P3107.1 Individual Vent as a Common or Dual Vent. A common or dual vent is permitted for two (2) fixture traps when installed on a vertical continuous waste and vent, or stack vented when the highest fixture, provided both fixture drains connect with the vertical drain or stack on the same level and within the distance allowed between a trap and its vent.

**IRC P3107.2** DELETE (addressed in AC-P3201.6 note 2)

**IRC P3107.3** DELETE (addressed in AC-P3108.1)
SECTION P3108
WET VENTING

**IRC P3108.1 DELETE & REPLACE WITH:**

**AC-P3108.1** Wet Vent Permitted. In one (1) and two (2) family dwellings, individual plumbing fixtures within a bathroom group may be wet vented. The wet portion shall be no less than two (2) inches in diameter, within the trap to vent requirements of Section AC-P3105.1, and on the same floor level. Also, no more than four (4) fixture units may be discharged to the wet portion. (Air admittance valves are not acceptable for this application.)

**IRC P3108.2 DELETE** *(addressed in AC-P3108.1)*

**IRC P3108.3 DELETE** *(INCLUDING TABLE P3108.3) (addressed in AC-P3108.1)*

**IRC P3108.4 DELETE** *(addressed in AC-P3108.1)*

SECTION P3110
CIRCUIT VENTING

**IRC P3110.1 DELETE & REPLACE WITH:**

**AC-P3110.1** Water Closets Independently Connected to Soil Stack. A single floor set water closet independently connected to a soil stack, and within the required distance as provided in Table AC-P3105.1, will not require any additional relief. Where two (2) water closets, two (2) urinals, or any combination thereof are installed on one (1) horizontal branch, they shall be looped or circuit vented as provided for in Section AC-P3110.5.

**AC-P3110.1.1** Water Closets Connected to Building Drain. A single water closet independently connected to any stack vented portion of the building drain and not over ten (10) feet from such drain will not require a relief vent. Where more than ten (10) feet, or where more than one (1) such fixture is located on one (1) branch, a proper size relief or loop vent shall be provided. No floor set water closet or similar floor level connected fixture shall be connected to the building drain closer than five (5) feet upstream or downstream of a soil or waste stack in buildings of four (4) or more stories.

**IRC P3110.2 DELETE & REPLACE WITH:**

**AC-P3110.2** Venting Requirements For Wall Hung, Valve Operated Water Closets. A single wall hung water closet shall have the three (3) inch soil, or vent stack, directly in back of the closet, or have a separate two (2) inch vent, and when closets are located above one another, each shall have a separate two (2) inch vent in back of each closet, except that the uppermost closet will not require a separate two (2) inch vent, provided it connects directly to the stack vent. When more than three (3) wall hung water closets are located in one horizontal branch, they shall be provided with a circuit or loop vent as provided for in Section AC-P3110.5, in addition to the two (2) inch vent directly in back of each closet, but no other relief vents will be required. Wall hung water closets shall have a separate two (2) inch vent in back of each closet, except that two (2) closets back to back may have a common two (2) inch vent.

**IRC P3110.3 DELETE & REPLACE WITH:**

**AC-P3110.3** Floor Drains and Similar Floor Level Connected Fixtures Above Basement Floor. The minimum size trap for floor drains above the basement floor shall be three (3) inches, except emergency floor drains in laundry rooms of single family homes may be two (2) inches and shall be considered as a plumbing fixture, and be properly vented. Floor drains, or showers with a trap size of three (3) or four (4) inches upstream of water closets or similar fixtures may be circuit or loop vented.
When floor drains or showers are placed on a common horizontal branch with water closets or similar fixtures and located on the downstream side of such fixtures, they shall be individually vented, or they shall be isolated on their own waste branch and circuit or loop vented. Loop or circuit vents shall be sized as provided in AC-P3113.1, and they shall vent or take off in front of the last fixture connection, or be washed out by the fixture they serve, or by a higher connected fixture.

**AC-P3110.3.1 Floor Drains and Similar Fixtures Connected to Building Drain.** A single floor drain or similar floor-level connected fixture independently connected to any stack vented portion of the building drain, not over ten (10) feet from such drain, will not require a relief vent. Where a single floor drain or similar floor-level connected fixture is more than ten (10) feet from a stack vented portion of the building drain, or where more than one (1) such fixture is located on one (1) branch, a proper sized relief or loop vent shall be provided.

**IRC P3110.4 DELETE & REPLACE WITH:**

**AC-P3110.4 Combination of Fixtures on One (1) Horizontal Branch.** When two (2) water closets, two (2) floor drains, two (2) similar floor-level connected fixtures, or any combination of these fixtures are located on one (1) horizontal branch of the building drain, they shall be provided with a proper size relief or loop vent.

**ADD:**

**AC-P3110.5 Circuit and Loop Venting for Water Closets (Floor Type-Tank Operated, Valve Operated-Wall Hung-Tank Operated).**

**AC-P3110.5.1 Battery Venting.** A soil branch to which two (2), but not more than eight (8), water closets are connected in a battery, shall be vented by a circuit or loop vent which shall be taken off in front of the last fixture connection of the battery, washed out by the fixture it serves, or by a higher connected fixture. In addition, lower floor branches serving more than three (3) water closets shall be provided with a relief vent taken off in front of the first fixture connection of the battery, in addition to the required circuit vent. When nine (9) or more water closets are connected in a battery, an addition relief vent will be required and shall be evenly spaced between the first relief vent and the circuit vent, so that there are never more than eight (8) water closets between a relief, circuit or loop vent.

**AC-P3110.5.2 Dual Branches.** When water closets are located back-to-back, dual or parallel horizontal branches may be used, provided each branch is separately looped or circuit vented and any other venting requirements as required by Section AC-P3110.5 are met. (Refer to illustration in AC-Appendix M)

**AC-P3110.5.3 Fixtures Back-to-Back in Battery.** When water closets are connected to one (1) horizontal branch through a double wye or a sanitary cross in a vertical position, a common vent for each two (2) fixtures back-to-back or double-connection shall be provided. The common vent shall be installed in a vertical position as a continuation of the double connection. The branch shall be circuit or loop vented as required in Section AC-P3110.5, but no other relief vents will be required.

**AC-P3110.5.4 Soil Branches to Stacks Which Rise More Than One (1) Story in Height.** Branches to soil stacks which receive the discharge of water closets and similar fixtures which rise more than one (1) story in height shall maintain and continue the size of such branches as a circuit or loop vent. The load of such branches shall not exceed that contained in Table 3005.4.1-B. (Refer to illustration in AC-Appendix M)

**AC-P3110.5.5 Vent Connections.** When the circuit, loop or relief vent connections are taken off the horizontal branch, the vent branch connection shall be taken off at a vertical angle or from the top of the horizontal branch, or otherwise be adequately washed out by a higher connected fixture drain.
SECTION P3113
VENT PIPE SIZING

IRC P3113.1 DELETE & REPLACE WITH:
AC-P3113.1 Size of Vents. Vent sizes shall be determined from Table AC-P3113.1 on the basis of length and fixture units connected.

<table>
<thead>
<tr>
<th>Size of Vent Pipe in Inches</th>
<th>Maximum Developed Length in feet</th>
<th>Number of Fixture Units Vented - Branch or Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/4</td>
<td>20</td>
<td>2 Units</td>
</tr>
<tr>
<td>1-1/2</td>
<td>30</td>
<td>10 Units</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td>24 Units</td>
</tr>
<tr>
<td>2-1/2</td>
<td>60</td>
<td>40 Units</td>
</tr>
<tr>
<td>3</td>
<td>80</td>
<td>100 Units</td>
</tr>
<tr>
<td>4</td>
<td>140</td>
<td>500 Units</td>
</tr>
<tr>
<td>5</td>
<td>140</td>
<td>1100 Units</td>
</tr>
<tr>
<td>6</td>
<td>140</td>
<td>1900 Units</td>
</tr>
<tr>
<td>8</td>
<td>200</td>
<td>3600 Units</td>
</tr>
</tbody>
</table>

* No water closets permitted on vent piping less than 2” in diameter

In applying vent sizing table above, for water closets, a fixture unit value of eight (8) shall be assigned to all types of such fixtures, whether flush tank or flush valve supplied.

IRC P3113.2 DELETE & REPLACE WITH:
AC-P3113.2 Minimum Diameter of Vent Piping. No vent pipe shall be less than 1-1/4” in diameter.

AC-P3113.2.1 Individual Vents. The diameter of individual vents shall be based on the size of trap being vented, but not less than the following sizes:

1. 1-1/4” vent for 1-1/4” traps
2. 1-1/2” vent for 1-1/2” to 2-1/2” traps
3. 2” vent for 3” and 4” traps
4. 1/2 their diameter for traps 5” and over

AC-P3113.2.2 Relief Vents. The diameter of a relief vent shall be at least 1/2 the diameter of the soil or waste branch served, except as provided for in Section 904.5 and 915.

AC-P3113.2.3 Circuit or Loop Vents. The diameter of circuit or loop vents shall be based on the number of fixture units connected as determined from Table AC-P3113.1.
IRC P3113.3 DELETE & REPLACE WITH:
AC-P3113.3 Size of Branch Vents. Branch vents which are meant to include all parts of the venting system other than the main vent, vent stack, or stack-vent shall be sized in accordance with the limits of length and number of fixture units vented, as provided for in Table AC-P-3113.1, except where otherwise provided for in this Chapter. The length of the branch vent for application with Table AC-P3113.1 shall be measured from its connection with the furthest fixture drain to its connection to a larger vent, vent stack, stack-vent or its terminal in the open air.

IRC P3113.4
IRC P3113.4.1 DELETE & REPLACE WITH:
AC-P3113.4.1 Sizing and Venting of Sub-drain and Sumps. The system of drainage piping below the sewer level shall be sized, installed, and vented in a like manner to that of the gravity system. Every sump or receiving tank shall have a vent pipe, which shall be sized according to the number of fixture units draining to the sump and in accordance with Table AC-P3113.1 based on branch venting for developed length, but in no case less than two (2) inches in diameter. Sumps receiving the discharge of clear water, such as rain water, subsoil or seepage drainage will not require a vent.

IRC P3113.4.2 DELETE & REPLACE WITH:
AC-P3113.4.2 Separate Vents. Vents from pneumatic ejectors or similar equipment shall be carried separately to the open air as a vent terminal. Such relief pipe shall be of sufficient size to relieve air pressure inside the ejector to atmospheric pressure within ten (10) seconds, but shall not be less than two (2) inches in size.

SECTION P3114
AIR ADMITTANCE VALVES

IRC P3114.1 DELETE & REPLACE WITH:
AC-P3114.1 Material. Air admittance valves shall conform to ASSE 1051 “Individual and Branch Type Air Admittance Valves” and NSF 14 “Plastic Piping System Components.”

IRC P3114.2 DELETE & REPLACE WITH:
AC-P3114.2 Areas of Permitted Use. Air admittance valves are approved as alternate methods of venting plumbing fixtures such as sinks, lavatories, bathtubs, showers, laundry trays, automatic washers and similar fixtures requiring a trap not larger than two (2) inches. Installation is limited to single-family buildings, two (2) stories or less in height, and without corrosive wastes.

AC-P3114.2.1 Requests for Use in Remodeling Installations. The Administrative Authority will consider requests for use of the Air admittance valves on permitted type fixtures in remodeling installations in other building classifications, where conventional venting requirements would create structural problems or damage, and where the location of such fixtures and their waste connections to existing drains will not present a back pressure condition.

IRC P3114.3 DELETE & REPLACE WITH:
AC-P3114.3 Installation requirements. The sealing washer of an air admittance valve must be located at least six (6) inches above the top of the trap arm. To ensure compliance with this requirement, the total length of pipe between the top of the directional or vent tee and the 1-1/2” female adapter in which the air admittance valve is mounted, shall not be less than four (4) inches.

AC-P3114.3.1 Distance of Fixture Trap from Vent. The directional or vent tee shall be within the requirements set forth in Table AC-P3105.1.

AC-P3114.3.2 Limitations. Air admittance valves are limited to use on plumbing fixtures with a trap size of two (2) inches or smaller and a total fixture unit value of three (3).
AC-P3114.3.3 Common Drain Pipe. Two (2) fixtures individually protected by an air admittance valve may be drained by a common 1-1/2” drain pipe, provided the fixture unit value does not exceed three (3). Where the fixture unit value exceeds three (3), or where more than two (2) fixtures are installed on a common drain, the drain must be increased to 2”. A maximum of three (3) fixtures, not exceeding a total fixture unit of six (6) may be individually protected by air admittance valves on a common 2” drain pipe.

AC-P3114.3.4 Accessibility for Inspection. Air admittance valves are to be installed in accordance with Article XV and the manufacturer’s recommendations. The device is not to be installed in a sealed wall cavity and shall remain accessible for inspection.

AC-P3114.3.5 Mounting. An air admittance valve may be mounted under a counter top in base cabinets, or in the inside wall behind a ready access panel.

AC-P3114.3.6 Fixture Threads. Only petroleum jelly shall be used on air admittance valve threads to ensure an airtight fit. Anything else, including a pipe-thread compound, may deteriorate the air admittance valve or its adaptor. Air admittance valves should be hand tightened.

AC-P3114.3.7 Installation Subject to Back Pressure. Air admittance valves shall not be installed where they are subject to back pressure, such as at the base of soil or waste stacks.

IRC P3114.4 DELETE (addressed in AC-P3114.3)
IRC P3114.5 DELETE (addressed in AC-P3114.3)
IRC P3114.6 DELETE (addressed in AC-P3114.3)
IRC P3114.7 DELETE (addressed in AC-P3114.3)
CHAPTER 32
TRAPS

SECTION P3201
FIXTURE TRAPS

IRC P3201.4 DELETE & REPLACE WITH:
AC-P3201.4 Building (House) Traps. Each house or building drain shall be provided with a horizontal intercepting trap, which shall be the same size as the building drain in which it is installed. The trap shall be provided with an accessible cleanout and a fresh air grill or inlet, which shall terminate in a location acceptable to the Administrative Authority.

AC-P3201.4.1 Relieving Vents or Fresh Air Intakes Sizes. Relieving vents or fresh air intakes shall be no less than four (4) inches in diameter for building drains up to and including eight (8) inches in diameter. For drains larger than eight (8) inches, the fresh air intake shall be 1/2 the diameter of the drain. Openings in the grill of the fresh air inlet shall equal the area of the inlet pipe. The fresh air inlet shall not be used as an area drain.

AC-P3201.4.2 Intercepting Traps. Cleanouts for intercepting traps shall be no less than four (4) inches in diameter for trap sizes up to an including ten (10) inches. For traps larger than ten (10) inches, the cleanout shall be no less than six (6) inches.

AC-P3201.4.3 Trap Placement. It is recommended that the trap be placed inside the cellar or basement wall, or as close thereto as practical, allowing for construction circumstances. Where house or building traps are placed on the outside of buildings, they shall be placed as close as practical to the outside of the foundation wall and the fresh air vents shall be extended above ground. In addition, on traps installed below four (4) feet in depth, a wye and 1/8 bend, combination wye, or two-way cleanout tee shall be installed on the downstream or sewer side of the trap with a pipe extending to grade, and finished with a cleanout.

AC-P3201.4.4 Illustrations. Refer to illustration in AC-Appendix M for trap assembly dimensions.

AC-P3201.4.5 Protection of Brittleware Traps. Where the use of vitrified clay or brittleware traps installed underground is approved by the Administrative Authority, the traps shall be embedded in a concrete encasement extending four (4) inches beyond the bottom and sides of the trap.

IRC P3201.5 DELETE & REPLACE WITH:
AC-P3205.5 Prohibited Traps. The following traps are prohibited:

1. Traps which depend upon moving parts to maintain their seal.
2. Bell traps.
4. Separate fixture traps which depend on interior partitions for their seal.
5. “S” traps.
6. Manufactured traps 1-1/4” and larger with an area serving as the top and bottom dip not constructed of a one-piece 180° bend.
7. Running trap with double cleanouts (except where trap is exposed and accessible).
IRC P3201.6
2. DELETE & REPLACE WITH:

AC-P3201.6
2. Each fixture and all outlets for chemical or experimental laboratory tables, or any fixture having a waste-pipe specified, shall be furnished with a trap, which shall be placed as close as practical to the fixture it serves, or integral therewith. In no case shall the trap be more than one (1) foot from said fixture. The waste from one fixture must not connect with the trap of another, except that a residential dishwasher or a 2 to 5-part laundry tray may be connected with a single trap. The size of traps for a given fixture shall be as computed in Section AC-P3004.1.

IRC P3201.6
3. DELETE

IRC TABLE P3201.7 - DELETE (addressed in Table 3004.1)
SECTION 802.3

Indirect waste receptor

Extend above floor

Material as approved by code

Clean out

Floor Line
SECTION AC-906.2

Horizontal Vent

0'-6'

Vertical

0'-6'

Fixture Flood Level

Horizontal Waste / Soil

45'

SECTION AC-906.3

0'-6'

Fixture Flood Level

Wash Out

VERTICAL RISE

INSTALLATION IN OLD BUILDING
SECTION AC-1002.6.4
(Offset In Fresh Air Vent Pipe When Needed)