TEMPE ADMINISTRTIVE CODE ARTICLE I, SECTION 8-100 OF THE TEMPE CITY CODE

SEC. 8-100 Adopted; where filed.

- a) That certain document known as "The Tempe Administrative Code," three (3) copies of which are on file in the office of the City Clerk, and this same code, and appendices are hereby referred to, adopted and made part hereof, as if fully set forth in this article.
- b) All sections, chapters, etc., in this article shall be considered to be both a part of Chapter 8 and a part of the Tempe Administrative Code. Provisions in this article shall be cited as Article I of the Tempe City Code followed by the section number.

(Ord. No. 2011.33, 9-22-11; Ord. No. 02015.12, 44-2-15)

Charter reference – Adoption by reference. §2.14.

State law reference - Adoption by reference. A.R.S. §9-801 et. seq.

SEC. 8-101 General

101.1 Title. These provisions shall be known as the Tempe Administrative Code, hereinafter referred to as "this code."

101.2 Scope. The provisions of this code shall serve as the administrative, organizational and enforcement rules and provisions for the Technical Codes which apply to site preparation, construction, alteration, relocation, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building, structure, swimming pool, plumbing, mechanical or fuel gas systems and any building service equipment or appurtenances connected or attached thereto within the City of Tempe, Arizona.

Exceptions: Structures, installations systems, appliances and equipment outside the scope of the Technical Codes:

- 1. Tree houses
- 2. Portable or temporary amusement devices and structures, including merry-gorounds, ferris wheels, rotating conveyances, slides, similar devices and accessory structures whose use is necessary for the operation of such amusement devices and structures; any accessory structure included in the provisions of this sub-section shall be limited to a cover or roof over each device, but shall not include any storage building or detached structure which is not an integral part of the device.
- 3. Tanks or basins, without a building above, built below grade which is a part of the City water or sewage treatment process.
- 4. Storage tanks resting in or upon the ground and installed in accordance with the requirements of the Fire Medical Rescue Department.
- 5. Electrical installations in ships, watercraft other than floating buildings, railway rolling stock, aircraft or automotive vehicles and recreational vehicles other than

- mobile homes. This shall not exempt electrical installations contained in, on or attached to watercraft, railway rolling stock, aircraft or automotive vehicles when such electrical installations receive energy from an external source of power.
- 6. Electrical installations underground in mines and self-propelled mobile surface mining machinery and its attendant electrical trailing cable.
- 7. Electrical installations of railways for generation, transformation, energy storage, or distribution of power used exclusively for the operation of rolling stock, or installations used exclusively for signaling and communication purposes.
- Electrical installations of communication equipment under exclusive control of communication utilities located outdoors or in building spaces used exclusively for such installations.
- 9. Electrical installations under the exclusive control of electrical utilities where such installations:
- a. Consist of service drops or service laterals and associated metering, or
- b. Are on property owned or leased by the electric utility for the purpose of communication, metering, generation, control, transformation, transmission, energy storage or distribution of electrical energy, or
- c. Are located in legally established easements or rights-of-ways, or
- d. Are located by other written agreements either designated by or recognized by public service commissions, utility commissions or other regulatory agencies having jurisdiction for such installations. These written agreements shall be limited to installations for the purpose of communication, metering, generation, control, transformation, transmission, energy storage or distribution of electrical energy where legally established easements or rights-of-way cannot be obtained. These installations shall be limited to federal lands, Native American reservations through the U.S. Department of the Interior Bureau of Indian Affairs, military bases, lands controlled by port authorities and state agencies and departments, and lands owned by railroads.
- 10. Portable liquefied petroleum (LP) gas appliances and equipment of all types not connected to a fixed fuel piping system.
- 11. Installation of farm appliances and equipment such as brooders, dehydrators, dryers and irrigation equipment.
- 12. Raw material (feedstock) applications except for piping to special atmosphere generators.
- 13. Oxygen-fuel gas cutting and welding systems.
- 14. Industrial gas applications using gases such as acetylene and acetylenic compounds, hydrogen, ammonia, carbon monoxide, oxygen and nitrogen.
- 15. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms and natural gas processing plants.
- 16. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by, or used in, chemical reactions
- 17. Liquefied petroleum (LP) gas installations at utility gas plants.
- 18. Liquefied natural gas (LNG) installations.
- 19. Fuel gas piping in power and atomic energy plants.
- 20. Proprietary items of equipment, apparatus or instruments such as gas-generating sets, compressors and calorimeters.
- 21. LP-gas equipment for vaporization, gas mixing and gas manufacturing.

- 22. Temporary liquefied petroleum (LP) gas piping for buildings under construction or renovation not becoming part of the permanent piping system.
- 23. Installation of liquefied petroleum (LP) gas systems for railroad switch heating.
- 24. Installation of hydrogen gas, liquefied petroleum (LP) gas and compressed natural gas (CGN) systems on vehicles.
- 25. Except as provided in Section 401.1.1 of the International Fuel Gas Code (IFGC), gas-piping, meters, gas pressure regulators and other appurtenances used by the serving gas utility supplier in the distribution of gas, other than liquefied petroleum (LP) gas.
- 26. Piping systems for mixtures of gas and air within the flammability range with an operating pressure greater than 10 psig (69kPa gauge).
- 27. Portable fuel cell appliances that are neither connected to a fixed piping system nor interconnected to a power grid.
- 28. Work located primarily in a public way.
- **101.2.1 Appendices.** Provisions in the appendices of the Technical Codes shall not apply unless specifically adopted.
- **101.3 Intent.** The purpose of the Technical Codes is to establish the minimum requirements to provide a reasonable level of safety, public health, and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, including energy conservation, and safety to life and property from fire, explosion and other hazards and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations.
- **101.4 Technical Codes.** The Technical Codes shall include all the codes listed in Sections 101.4.1 through 101.4.9 applied as indicated, plus the codes and standards referenced in the Technical Codes shall be considered part of the requirements of the Technical Codes to the prescribed extent of each such reference.
- **101.4.1 International Building Code.** The adopted provisions of the International Building Code and amendments thereto shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exceptions:

- **a.** Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with separate means of egress and their accessory structures shall be permitted to comply with the International Residential Code.
- **101.4.2 Residential Code.** The adopted provisions of the International Residential Code and amendments thereto shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not

more than three stories above grade plane in height with separate means of egress and their accessory structures.

Exceptions:

- a. Fire sprinkler system requirements shall be provided in accordance with Section 903 of the International Building Code and amendments thereto.
- b. Live/work units located in townhouses and complying with the requirements of Section 419 of the International Building Code and amendments thereto.

101.4.3 Electrical Code. The adopted provisions of the National Electrical Code and amendments thereto shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

Exception: Electrical work for detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with separate means of egress and their accessory structures shall be permitted to comply with the International Residential Code.

101.4.4 Plumbing Code. The adopted provisions of the International Plumbing Code and amendments thereto shall apply to the installation, alteration, repair, replacement and maintenance of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a nonflammable medical gas system.

Exception: Plumbing work for detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with separate means of egress and their accessory structures shall be permitted to comply with the International Residential Code.

101.4.5 Mechanical Code. The adopted provisions of the International Mechanical Code and amendments thereto shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

Exception: Mechanical work for detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with separate means of egress and their accessory structures shall be permitted to comply with the International Residential Code.

101.4.6 Fuel Gas Code. The adopted provisions of the International Fuel Gas Code and amendments thereto shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

Exceptions:

- a. Fuel gas work for detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with separate means of egress and their accessory structures shall be permitted to comply with the International Residential Code.
- b. The design, installation, maintenance, alteration and inspection of mechanical systems operating with fuels other than fuel gas shall be regulated by the International Mechanical Code.

101.4.7 Existing Building Code. The adopted provisions of the International Existing Building Code and amendments thereto shall apply to the repair, alteration, change of occupancy, addition and relocation of all existing buildings.

Exception: A building or portion of a building not previously occupied, used for its intended purpose for which a Certificate of Occupancy has not been issued, shall comply with the International Building Code.

101.4.8 Energy Conservation Code. The adopted provisions of the International Energy Conservation Code and amendments thereto shall apply to the construction, alteration, movement, enlargement, replacement, repair and equipment of residential and commercial buildings.

Exceptions:

- a. Except as specified, this code shall not be used to require the removal, alteration or abandonment of, nor prevent the continued use and maintenance of, an existing building or building system lawfully in existence at the time of adoption.
- b. Any building or structure that is listed in the State or National Register of Historic Places; designated as a historic property under local or state designation law or survey; certified as a contributing resource with a National Register listed or locally designated historic district; or with an opinion or certification that the property is eligible to be listed on the National or State Registers of Historic Places either individually or as a contributing building to a historic district by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, are exempt from this code.
- c. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with separate means of egress and their accessory structures shall be permitted to comply with the International Residential Code.
- d. Existing buildings undergoing repair, alteration or additions and change of occupancy shall be permitted to comply with the International Existing Building Code.

101.4.8.1 Additions, alterations, renovations or repairs. Additions, alterations, renovations or repairs to an existing building, building system or portion thereof shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with this code. Additions, alterations, renovations or repairs shall not create an unsafe or hazardous condition or overload existing building

systems. An addition shall be deemed to comply with this code if the addition alone complies or if the existing building and addition comply with this code as a single building.

Exceptions: The following need not comply provided the energy use of the building is not increased:

- 1. Storm windows installed over existing fenestration.
- 2. Glass only replacements in an existing sash and frame.
- 3. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are filled with insulation.
- 4. Construction where the existing roof, wall or floor cavity is not exposed.
- 5. Reroofing for roofs where neither the sheathing nor the insulation is exposed. Roofs without insulation in the cavity and where the sheathing or insulation is exposed during reroofing shall be insulated either above or below the sheathing.
- 6. Replacement of existing doors that separate conditioned space from the exterior shall not require the installation of a vestibule or revolving door, provided, however, that an existing vestibule that separates a conditioned space from the exterior shall not be removed
- 7. Alterations that replace less than 50 percent of the luminaires in a space provided that such alterations do not increase the installed interior lighting power.
- 8. Alterations that replace only the bulb and ballast within the existing luminaires in a space provided that the alteration does not increase the installed interior lighting power.
- **101.4.8.2** Change in space conditioning. Any non-conditioned space that is altered to become conditioned space shall be required to be brought into full compliance with this code.
- **101.4.8.3 Mixed occupancy.** Where a building includes both residential and commercial occupancies, each occupancy shall be separately considered and meet the applicable provisions of International Energy Conservation Code Commercial Provisions or Residential Provisions.
- **101.4.8.4** Compliance and Compliance materials. Commercial buildings shall meet the commercial provisions of the International Energy Conservation Code. Residential buildings shall meet the residential provisions of the International Energy Conservation Code. The building official shall be permitted to approve specific computer software, worksheets, compliance manuals and other similar materials that meet the intent of this code.
- **101.4.8.4 Above code programs**. The building official or other authority having jurisdiction shall be permitted to deem a national, state or local energy efficiency program to exceed the energy efficiency required by this code. Buildings approved in writing in accordance with such energy efficiency program shall be considered in compliance with this code. The requirements identified as "mandatory" in Chapter 4 shall be met.
- **101.4.9 Swimming Pool and Spa Code.** The provisions of the International Swimming Pool and Spa Code and amendments thereto shall apply to the construction, alterations, movement, renovation, replacement, repairs and maintenance of aquatic facilities, pools and spas. The pools and spas covered by this code are either permanent or temporary, and shall be only those that are

designed and manufactured to be connected to a circulation system and that are intended for swimming, bathing or wading.

Exception: Flotation tanks systems intended for sensory deprivation therapy are not included in the scope of this code.

101.5 Safeguards during construction. All construction work covered in the Technical Codes, including any related demolition shall comply with the requirements of International Existing Building Code Chapter 15 for existing buildings and International Building Code Chapter 33 for new buildings.

101.6 Definitions. Unless otherwise expressly stated, the following words and terms shall have the meanings as shown in this code. Definitions located in the Technical Codes are hereby incorporated into this code.

Building – any structure used or intended for supporting or sheltering any use or occupancy.

Building, existing – a building erected prior to the adoption of this code or one for which a legal certificate of occupancy has been issued for at least one year.

Building official - the officer or other designated authority charged with the administration and enforcement of this code and the Technical Codes, or a regularly authorized deputy or other designee. When the term or title administrative authority, building official, code official, building inspector, gas inspector, plumbing inspector, mechanical inspector or other similar designation is used in this code or in any of the Technical Codes, it shall be construed to mean the building official.

Building service equipment – the plumbing, mechanical, electrical, elevator equipment including piping, wiring, fixtures and other accessories which provide sanitation, lighting, heating, ventilation, cooling, refrigeration, fire-fighting and transportation facilities essential to the occupancy of the building or structure for its designated use.

Jurisdiction – The City of Tempe, Arizona.

Owner – the person, agent, firm or corporation with legal or equitable interest in a property.

Permit – the official document or certificate issued by the building official authorizing performance of a specified activity.

Shall – as used in this code and the Technical Codes is mandatory.

SEC. 8-102 APPLICABILITY

102.1 General. This code and the Technical Codes shall apply to and govern, permit applications received on or after the effective date of the adopting ordinance, except as allowed by that ordinance.

- **102.2 Other laws.** The provisions of this code or the Technical Codes shall not be deemed to nullify any provisions of the Tempe City Code, state or federal laws.
- **102.3 Application of references.** References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code or the Technical Codes.
- **102.4 Referenced codes and standards.** The codes and standards referenced in this code or the Technical Codes shall be considered part of the requirements of this code and the Technical Codes to the prescribed extent of each reference.

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

102.4.1 Conflicts. When there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

Where in a specific case different sections of the Technical Codes specify different materials, methods of construction or other requirements, the most restrictive shall govern.

Where differences occur between provisions of this code or the Technical Codes and the referenced codes and standards, the provisions of this code and the Technical Codes shall apply.

When conflicts occur between the Technical Codes, those provisions providing the greater safety to life as determined by the building official and the fire marshal shall govern. In other conflicts where sanitation, life safety or fire safety are not involved, the most restrictive provisions shall govern.

- **102.4.2 Provisions in referenced codes and standards.** Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code or the Technical Codes, as applicable, shall take precedence over the provisions in the referenced code or standard.
- **102.5 Partial invalidity.** In the event any part or provision of this code or the Technical Codes is held to be illegal or void, this shall not have the effect of making illegal or void any of the other parts or provisions of this code or the Technical Codes.
- **102.6 Existing buildings or structures.** The legal occupancy of any building or structure existing on the date of the adoption of this code shall be permitted to continue without change, except as otherwise specifically provided in this code, the International Existing Building Code or the International Fire Code.
- **102.6.1 Buildings not previously occupied.** A building or portion of a building that has not been previously occupied or used for its intended purpose in accordance with the laws in existence at the time of its completion shall comply with the provisions of the International

Building Code or International Residential Code, as applicable, for new construction or with any current permit for such occupancy.

102.6.2 Buildings previously occupied. The legal occupancy of any building existing on the date of adoption of this code and the Technical Codes shall be permitted to continue without change, except as otherwise specifically provided in this code, the International Existing Building Codes or the International Fire Code provided such continued use is not dangerous to life, health and safety of the occupants and the public as determined by the building official.

102.7 Additions, alterations and repairs. Additions, alterations, renovations or repairs to building service equipment shall conform to that required for new installations without requiring the existing installation to comply with all the requirements of this code and the Technical Codes. Additions, alterations or repairs shall not cause an existing installation to become unsafe, hazardous or overloaded.

Minor additions, alterations, renovations and repairs to existing installations shall meet the provisions for new construction, unless such work is done in the same manner and arrangement as was in the existing system, is not hazardous and is approved the building official.

102.8 Maintenance. Buildings, structures and building service equipment, existing and new, and parts thereof shall be maintained in proper operating condition in accordance with the original design and in a safe and sanitary condition. Devices or safeguards that are required by the Technical Codes, shall be maintained in conformance with the Technical Code under which they were installed. The owner or the owner's authorized agent shall be responsible for the maintenance of building structures and their building service equipment. To determine compliance with this section, the building official may cause a structure to be re-inspected.

102.9 Moved buildings. Buildings, structures and their building service equipment moved into or within this jurisdiction shall comply with the provisions of this code and the Technical Codes for new buildings or structures and their building service equipment.

102.10 Historic buildings. Repairs, alterations and additions necessary for the preservation, restoration, rehabilitation or continued use of a building, structure, or its building service equipment may be made without conforming to the requirements of the Technical Codes when authorized by the Technical Code Advisory Board of Appeals, provided:

- 1. The building or structure has been designated by official action of the legally constituted authority of this jurisdiction as having special historical or architectural significance, and
- 2. Unsafe conditions as described in this code are corrected, and
- 3. The restored building or structure and its building service equipment will be no more hazardous based on life safety, fire-safety and sanitation than the existing building as determined by the building official.

Exception: Repairs, alterations and additions necessary for the preservation, restoration, rehabilitation or continued use of a building, structure, or its building service equipment shall be permitted to comply with the provisions of the International Existing International Building Code.

SEC. 8-103 BUILDING SAFETY DIVISION

- **103.1 General.** There is hereby established a Technical Codes enforcement agency of the Community Development Department of the City of Tempe known as the Building Safety Division under the administrative and operational charge of the building official.
- **103.2 Appointment.** The building official shall be duly appointed.
- **103.3 Deputies.** In accordance with any applicable City procedures, and with the concurrence of the Community Development Director, the building official shall have the authority to appoint technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

SEC. 8-104 DUTIES AND POWERS OF BUILDING OFFICIAL

- **104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code and Technical Codes. The building official shall have the authority to render interpretations of this code and the Technical Codes and to adopt policies and procedures in order to clarify their application. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code and the Technical Codes. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code or the Technical Codes.
- **104.2 Applications and permits.** The building official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings, structures, and building service equipment, inspect the premises where such permits have been issued and enforce compliance with the provisions of this code and the Technical Codes.
- **104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the building official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the building official determines that the proposed work constitutes substantial improvement or repair of substantial damage and where required by this code and the Technical Codes, the building official shall require the building to meet the requirements in Section 1612 of the International Building Code.
- **104.3. Notices and orders.** The building official shall issue all necessary notices or orders to ensure compliance with this code and the Technical Codes.
- **104.4 Inspections.** The building official shall make all the required inspections, or where determined necessary by the building official or required by the Technical Codes shall have the authority to accept reports of inspection by agencies or individuals approved by the building official. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The building official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise.

- **104.5 Identification.** The building official and authorized deputies shall carry proper identification when inspecting structures or premises or otherwise in the performance of duties under this code or the Technical Codes.
- **104.6 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code or the Technical Codes, or where the building official has reasonable cause to believe there exists in a structure or upon a premises a condition contrary to or in violation of this code or the Technical Codes making the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this code or the Technical Codes, provided that if such structure or premises is occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the building official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to the remedies provided by law to secure entry.
- **104.7 Department records.** The building official shall keep official records of applications received, approved plans, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention in the division's approved retention schedule.
- **104.8 Legal defense.** Any suit or criminal complaint instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code and the Technical Codes shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings.
- **104.9 Approved materials and equipment.** Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.
- **104.9.1 Used materials and equipment.** The use of used materials meeting the requirements of this code or the Technical Codes for new materials is permitted. Used equipment and devices shall not be reused unless approved by the building official.
- **104.10 Modifications.** Wherever there are practical difficulties involved in carrying out the provisions of this code or the Technical Codes, the building official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's authorized agent, provided the building official shall first find that special individual reason makes the strict letter of the codes impractical and the modification is in compliance with the intent and purpose of this code and the Technical Codes and that such modification does not impact health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the Building Safety Division.

Requests for modifications must be submitted to the building official in writing along with all supporting documentation and the applicable fee as shown in Appendix A, Table 2-A, Tempe City Code.

104.10.1 Flood hazard areas. The building official shall not grant modifications to any provision required in flood hazard areas as established by the International Building Code Section 1612.3 unless a determination has been made that:

- 1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 of the International Building Code inappropriate.
- 2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
- 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
- 4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
- 5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code and the Technical Codes are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code or the Technical Codes, provided any such alternative is approved by the building official finds the proposed design is satisfactory and complies with the intent of the provisions of this code and the Technical Codes, and the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code and the Technical Codes in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design and method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved.

Records of alternative materials, designs and methods of construction approvals shall be recorded and entered in the files of the Building Safety Division. Requests for alternative materials, design, and methods of construction must be submitted to the building official in writing along with all supporting documentation and the applicable fee as shown in Table 2-A of Appendix A.

104.11.1 Research reports. Supporting data, where deemed necessary to assist in the approval of materials or assemblies not specifically provided for in this code or the Technical Codes shall be provided and shall consist of valid research reports from approved sources.

104.11.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code or the Technical Codes, or evidence a material or method does not conform to the requirements of this code or the Technical Codes, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the City of Tempe. Test methods shall be as specified in this code or the Technical Codes or by other recognized test standards. In the

absence of recognized and accepted test methods, the building official may approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required in the Building Safety Division's approved record retention schedule.

SEC. 8-105 PERMITS

105.1 Required. Any owner or owner 's authorized agent who intends to construct, enlarge, alter, repair, move, demolish, change the occupancy or change character/use within an occupancy group of a building or portion thereof or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code or the Technical Codes, or to cause such work to be done, shall first make application to the building official and obtain the required permit.

Exceptions:

- 1. Governmental entities that are, as a matter of law, immune from having to obtain a permit.
- 2. Annual permit holder.
- 3. Annual utilities permit.
- 4. Registered industrial plant.
- **105.1.1 Annual permits.** Instead of an individual permit for each alteration to an already approved electrical, gas, mechanical or plumbing installation, the building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradesperson who holds a valid maintenance electrician or plumber's certificate of registration for additions, alterations, repair or maintenance of electrical and plumbing systems or equipment in the building, structure or on the premises owned or occupied by said person, firm or corporation.
- **105.1.2 Work report.** The person to whom an annual permit is issued shall keep a detailed record of all additions and alterations not generally regarded as maintenance. The building official shall have access to such records at all times or they shall be submitted monthly to the building official together with any plans or working drawings.

105.1.3 Maintenance electrician or plumber.

- **105.1.3.1 Maintenance electrician or plumber, defined.** For the purpose of this code, a maintenance electrician or plumber is a person who performs or supervises alteration, repair or maintenance of electrical or plumbing systems and equipment in, or about, buildings, structures or premises and holds a valid maintenance electrician's or plumber's certificate of registration issued by the city.
- **105.1.3.2 Maintenance electrician or plumber certificate of registration.** Persons may obtain a maintenance certificate of registration as follows:
 - 1. Any employer may elect to appoint one or more full-time maintenance electricians or plumbers to perform or supervise the alteration, repair or maintenance of electrical wiring

- and equipment or plumbing system and fixtures in or about buildings, structures or premises owned or occupied by the employer.
- 2. Every person desiring to hold or renew a maintenance certificate of registration shall make application with the building official on a form furnished by the city for that purpose.
- 3. Every person applying for a maintenance certificate of registration shall pay to the city a fee as prescribed in Appendix A, Table 2-A, of the city code, at the time of application. No portion of any fee shall be returned either upon failure to qualify, or upon revocation of certification, or for any other cause.
- 4. Every person applying for a maintenance certificate of registration shall undergo such examination as to qualifications and competency to alter, repair or maintain electrical or plumbing systems and equipment as the building official shall direct; provided, however, that the examination shall relate exclusively to the trade or vocation of the desired certificate.
- 5. Every person applying for the renewal of a maintenance certificate of registration shall undergo an examination as to verify the applicants' qualifications and competency relative to the Tempe code provisions as adopted at the time of application. The renewal exam will be administered as an open book exam whereby the exam will be sent to the applicant along with the annual renewal form and a copy of Tempe's code amendments. A grade of at least seventy-five percent (75%) is required to qualify for registration renewal. Renewal applicants whose initial exam was based on the current electrical/plumbing code edition need not complete the renewal exam.
- 6. Every applicant shall have an examination grade or standing of at least seventy-five percent (75%) in order to be entitled to a maintenance certificate of registration. The building official shall, within five (5) days after the grades have been determined, notify each applicant of the grade and whether or not they passed the examination.
- 7. Any person who fails to pass an examination for a maintenance certificate of registration may apply for re-examination after the expiration of thirty (30) days without payment of additional fees. Should such person fail to pass an examination the second time, the building official shall refuse a third application until after the expiration of six (6) months. After six (6) months, such person is permitted to reapply and shall pay the regular examination fee.
- 8. A maintenance certificate of registration shall be issued to every person who makes application for such certificate, pays the required fee, and successfully passes the examination. It is further provided that a maintenance electrician or plumber need not hold an electrical or plumber contractor's license issued by the state.
- 9. Any maintenance certificate of registration issued hereunder shall be subject to suspension or revocation by the building official for failure to alter, repair or maintain electrical wiring or equipment or plumbing systems and fixtures in compliance with the appropriate code.
- 10. Unless earlier suspended or revoked for cause, all maintenance certificates or registration issued by the city shall expire on March 1 of each year and may be renewed for the following year upon receipt of application and the payment of a fee to the city on or before March 1 of each year. Applications for renewal must include completed renewal exams as specified in Item #5.

- 11. A maintenance certificate of registration shall become void in the event that said holder shall cease to act as the maintenance person for the employer specified in the application for such certificate.
- 12. Any person holding a maintenance certificate of registration shall notify building official within five (5) days of the termination of employment with the employer specified in the application for such certificate.
- 13. Maintenance certificates of registration are not transferable from one person to another, and the lending of any certificate of registration or obtaining of permits thereunder for any other person shall be deemed cause for revocation of same.

105.1.3.3 Appeal. Any person who is denied a certificate of registration and wishes to obtain a review of the determination made by the building official shall, within ten (10) days after notification of denial of a certificate of registration, file an application for hearing before the Technical Code Advisory Board of Appeals with the secretary of the board stating the reasons for said appeal. It shall be the duty of the secretary to notify the chairman of the board of the appeal.

The applicant shall be notified to appear and meet with the board for a hearing on said appeal at such time and place as the board shall direct but not more than twenty-five (25) days after the application for rehearing is filed. If the board reaffirms the denial of a certificate of registration, the applicant shall be notified of said denial within five (5) days following the date of rehearing.

The Technical Code Advisory Board of Appeals shall have the authority to restrict, revoke or temporarily suspend any maintenance certificate of registration granted hereunder for good cause shown for any of the following reasons:

- 1. If a certificate of registration was obtained by fraud or misrepresentation.
- 2. If any reason exists which would have been cause for denial of such certificate of registration.
- 3. For negligently or willfully violating the provisions of this article or for refusal to correct such violations.
- 4. For repeated violations of this section.
- 5. For permitting any other person to use such certificate of registration or to perform any act or work of the kind authorized by such certificate for the purpose of avoiding compliance with this article.

The action to restrict, revoke or temporarily suspend any certificate of registration may be commenced upon request of the building official, or upon motion and presentation of cause by any member of the board.

Before any certificate of registration is restricted, revoked or temporarily suspended, the board shall hold a hearing and give the holder of such certificate a fair and reasonable opportunity to present reasons and evidence against the restrictions, suspensions or revocation.

Any person whose certificate of registration is restricted, suspended or revoked shall be notified of such action by registered mail and shall have appeal rights in accordance with the provisions of the Tempe Administrative Code.

105.1.4 Annual utilities permit.

- **105.1.4.1 Scope.** For the purposes of this code, an annual utilities permit allows a serving electrical utility company to install dusk to dawn lighting on public or private property without obtaining separate electrical permits provided:
 - 1. The installation is for dusk to dawn lighting only.
 - 2. The installation and maintenance of the lighting is under the exclusive control of the supplying utility company.
 - 3. The light fixtures shall be approved by the Planning Division and comply with the Zoning and Development Code.
 - 4. The electrical installation complies with a lighting installation standard pre-approved by the building official.
 - 5. The installing utility company has a current annual utilities permit.

This permit shall not be construed to waive any requirement of this code and the Technical Codes, and all applicable requirements shall be complied with.

- **105.1.4.2 Work report.** A report listing of all dusk to dawn lighting installations under an annual utilities permit shall be submitted by the utility company to the building official on a monthly basis.
- **105.1.4.3 Permit fee and renewal.** Every applicant shall submit a proposed dusk to dawn lighting standard installation plan for review and approval. An annual fee shall be paid at the time of application as prescribed in Appendix A, Table 2-A, of the city code. Said fee shall be refunded if the application is disapproved. The permit shall expire on December 31 of each year. The permit may be renewed each year by payment of the fee on or before December 31. Any work performed after permit expiration without obtaining separate permits and inspections required by this code shall be a violation of this code.
- **105.1.4.4 Revocation of permit.** The building official may suspend or revoke a permit when an electrical utility company fails to comply with any of the permit responsibilities or for violation of any provision of this code and the Technical Codes.
- **105.1.4.5 Procedure.** When the building official deems that the permit shall be suspended or revoked, the procedure shall be as follows:
 - 1. The utility company shall be notified in writing by certified mail at least seven days prior to the date of suspension or revocation.
 - 2. Upon receipt of the notice, the utility company may request a hearing. Such request shall be in writing to the building official within seven days of receipt of notice.
 - 3. If a hearing is requested by the utility company, the building official shall set a time, date and place and so notify the utility company.

- 4. When a hearing is conducted, the utility company and other interested parties may be in attendance. Upon completion of the hearing, the building official shall take all evidence submitted under advisement and shall notify the utility company of his findings in writing by certified mail.
- 5. If the decision rendered by the building official is adverse to the utility company, the utility company may appeal from such decision to the Technical Code Advisory Board of Appeals in the manner provided in the Tempe Administrative Code.

105.1.5 Registered industrial plant.

105.1.5.1 Definition. For the purpose of this code, a Registered Industrial Plant is a person, firm, corporation, political entity, or public school engaged in manufacturing, processing, education or similar service which requires specialized buildings, utilities and equipment to the extent that the plant maintains full-time personnel for the operation and maintenance of such buildings, utilities and equipment and when such plant has complied with all the provisions of this section.

105.1.5.2 Qualifications. In addition to meeting the general definitions above, a Registered Industrial Plant shall have a full-time or contract employee who is an architect or engineer registered in the State of Arizona who shall be responsible for complying with the substantive provisions of this code and the Technical Codes

105.1.5.3 Scope. Registered Industrial Plants are exempt from the permitting requirements of Section 105.1 of this code for work on existing buildings, structures and utilities accessory thereto that does not increase the floor area or height or cause the change of use or character of use for which a new certificate of occupancy would be required.

Exception: A Registered Industrial Plant is not exempt from permits and inspections for fire protection systems regulated by the Fire Code. Provided that public schools which are also registered industrial plants and which have fire systems permitted and inspected by the State of Arizona Fire Marshall's office, do not require permits for the minor alteration of existing fire protection systems.

This exemption is limited to buildings owned or leased by the Registered Industrial Plant and under the direct control of the holder of the registration. Said buildings or structures qualify for this exemption after the Certificate of Occupancy has been issued for the structure and all interior improvements covering the initial plant occupancy. This exemption shall not be construed to waive any requirement of this code and the Technical Codes, and all applicable requirements shall be complied with. The Plant registration is non-transferable.

105.1.5.4 Application. To obtain registration, the applicant shall first file an application in writing on a form furnished by the building official for such purpose. Every such application shall:

- 1. Specify the name of the plant for which registration is requested.
- 2. Describe the property to be included under registration by address and other description that will readily identify and locate the buildings and structures to be included under the registration.

- 3. The name of the individual who has the authority to act on behalf of the plant owner(s).
- 4. The name of the registered architect or engineer who will be responsible for the work done under the registration.

Appropriate action shall be taken by the building official on such application and the applicant shall be notified accordingly.

If the application is disapproved, the applicant may appeal from such decision to the Technical Code Advisory Board of Appeals in the manner provided in this code.

105.1.5.5 Registration fees and annual permit fee. Every applicant for registration shall pay a fee as prescribed in Appendix A, Table 2-A, of the city code, at the time of filing. Said fee shall be refunded if the application is disapproved. Registrations shall expire on December 31 of each year. Registration may be renewed each year by payment of the fee on or before December 31. Any work performed after expiration without obtaining additional separate permits and inspections required by this code shall be a violation of this code.

105.1.5.6 Validity of registration. Registration shall be valid only as long as the named architect or engineer remains in the employ or on contract with the Registered Industrial Plant in an active and full-time capacity.

If the registered architect or engineer should leave the employ of the registrant, registration is suspended until another registered architect or engineer is assigned the responsibility for work done under the registration. The Registered Industrial Plant shall notify the building official immediately and shall call for inspection of any work in progress in accordance with this code.

Before any new work commences while registration is invalid or suspended, permits and inspections shall be obtained pursuant to this code.

105.1.5.7 Revocation of registration. The building official may suspend or revoke a registration when the Registered Industrial Plant fails to comply with any of the registration responsibilities or for violation of any provision of this code and the Technical Codes.

105.1.5.8 Procedure. When the building official deems that the registration shall be suspended or revoked, the procedure shall be as follows:

- 1. The Registered Industrial Plant shall be notified in writing by certified mail at least seven days prior to suspension or revocation.
- 2. Upon receipt of the notice, the Registered Industrial Plant may request a hearing. Such request shall be in writing to the building official within seven days of receipt of notice.
- 3. If a hearing is requested by the Registered Industrial Plant, the building official shall set a time, date and place and so notify the registrant.
- 4. When a hearing is conducted, the Registered Industrial Plant and other interested parties may be in attendance. Upon completion of the hearing, the building official shall take all evidence submitted under advisement and shall notify the Registered Industrial Plant of his findings in writing by certified mail.

5. If the decision rendered by the building official is adverse to the Registered Industrial Plant, the Registered Industrial Plant may appeal from such decision to the Technical Code Advisory Board of Appeals in the manner provided for in the Tempe Administrative Code.

105.1.5.9 Work report and inspections. A report of all work done under the plant registration shall be prepared by the registered architect or engineer and submitted monthly to the building official together with any plans or working drawings for alterations to buildings or utilities covered by the code.

Plans submitted pursuant to this section may be reviewed and inspection of the work conducted by the building official or authorized representatives as set forth in this code, provided, however, that work may proceed without inspection pursuant to this section.

The Registered Industrial Plant may request a plan review or inspection of any work performed under this section without payment of additional fees

Exceptions: Plans, working drawings and work reports need not be submitted for:

- 1. Installation of machines, equipment and processes related to production or testing;
- 2. Additions, alteration and repair of electrical, plumbing or mechanical systems;
- 3. Partitions, rails, counters and similar space dividers not exceeding five feet nine inches in height above the floor.

105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or the Technical Codes or any other laws or ordinances of the City of Tempe. Permits shall not be required for the following:

Building:

- a. Radio and television antennae towers or light standards not exceeding 35 feet in height.
- b. Works of art not over 7 feet (2133.6 mm) in height and their foundation and supporting structure, provided that no part of which is intended to be occupied or used as shelter.
- c. One-story detached accessory structures ancillary to R-3 and R-4 occupancies used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet (18.60 m²).
- d. Fences not more than 7 feet (1829 mm) high.
- e. Oil derricks.
- f. Retaining walls which are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, provided the wall is not supporting a surcharge or impounding Class I, II or IIIA liquids.
- g. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons (18925 L) and the ratio of height to diameter or width does not exceed 2 to 1.
- h. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade and not over any basement or story below and not part of an accessible route.
- i. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- i. Temporary motion picture, television and theater stage sets and scenery.

- k. Prefabricated swimming pools accessory to detached one- and two-family dwellings, which are less than 18 inches (457 mm) deep, are not greater than 5,000 gallons (18925 L) and are installed entirely above ground.
- 1. Shade membrane structures constructed for nursery or agricultural purposes not including service systems.
- m. Membrane and shade lattice structures, which do not exceed 200 square feet (18.60 m²), accessory to Group R-3 occupancies or individual dwelling units in Group R-2 occupancies located within the setbacks as allowed by the zoning ordinance.
- n. Swings and other playground equipment.
- o. Window awnings, in detached one- and two-family dwellings and Group U occupancies, supported by an exterior wall projecting not more than 54 inches (1372 mm) from the exterior wall, no closer than 3 feet from a property line, and not requiring additional support.
- p. Non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.
- q. Replacement roof covering, provided the replacement roof covering classification is equal to or greater than the existing roofing classification; the new roof covering does not increase the loads imposed upon the roof structural frame beyond the original design capacity and no more than two (2) full sheets or 64 square feet of roof sheathing will not be replaced.
- r. Listed, light-gage, pre-manufactured metal (only) patio covers and awnings as an accessory to Group R-3 occupancies or individual dwelling units in Group R-2 occupancies located within the setbacks as allowed by the zoning ordinance. Listings must be applicable to the current edition of International Building Code.
- s. Temporary stages, platforms, bleachers, grandstands and similar structures constructed for use during special events pursuant to special events permit. (See Tempe City Code Section 5-2)
- t. Temporary soil or structural shoring to be used during building construction, remodel or repair.
- u. Special cases as allowed by the building official.

Electrical:

- a. Portable motors or other portable appliances energized by means of a cord or cable having an attachment plug end to be connected to an approved receptacle when that cord or cable is permitted by the National Electrical Code.
- b. Repair or replacement of fixed motors, transformers or fixed approved appliances of the same type and rating in the same location.
- c. Temporary decorative lighting.
- d. Repair or replacement of current-carrying parts of any switch, contactor, metering or control device within the original enclosure, using original manufacturer's equipment parts or listed equivalent replacement parts.
- e. Replacement of flush or snap switches, fuses, lamps sockets, luminaries, receptacles and other minor maintenance and repair work, but not the outlets therefore.
- f. Repair or replacement of any over current device of the same required capacity in the same location.
- g. Repair or replacement of electrodes or transformers of the same size and capacity for signs or gas tube systems.
- h. Taping joints.

- i. Removal of electrical wiring.
- j. Temporary wiring for experimental purposes in suitable experimental laboratories.
- k. The wiring for temporary theater, motion picture or television stage sets.
- 1. Electrical wiring, devices, appliances, apparatus or equipment, not installed in a hazardous location, as defined in Article 500, operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
- m. Low-energy power, control and signal circuits of Class II and Class III, as defined in the National Electrical Code, not installed in a hazardous location, as defined in Article 500.
- n. Installation, alteration or repair of electrical wiring, apparatus or equipment or the generation, transmission, distribution or metering of electrical energy or in the operation of signals or the transmission of intelligence by a public or private utility in the exercise of its function as a serving utility.
- o. Installation of portable generators for use during temporary special events under a City of Tempe Special Events Permit (Chapter 5 of the city code).
- p. Lighting fixtures and conductors within or on a sign regulated by the Zoning and Development Code.
- q. Neon lighting that is part of a plug and cord connected self-contained sign or part of a pre-manufactured piece of sign equipment.
- r. An electrical permit is not required for the installation of an approved temporary metered power outlet that has been supplied and installed by an electric utility.

(FPN:) a temporary metered power outlet is a device, designed to be installed in the electric utility meter socket that provides metered electrical power to receptacles mounted on or in the device, for the purpose of providing temporary construction power to a residential building. Such devices may not energize the meter socket, lugs or equipment on the customer's side of the meter socket. The temporary metered power outlet shall be an approved device with an AIC rating higher than the available fault current provided at the meter.

Such devices may be installed on residential buildings when a valid building permit has been issued, provided that the structural integrity and weather resistive barrier is maintained at the panel location, or the installation is detailed on the approved building plans. This exemption from permitting does not prohibit or limit the authority having jurisdiction from directing the electrical utility to disconnect the temporary metered power outlet in accordance with section 103.16 of the Tempe Administrative Code.

Fuel gas:

- a. Portable heating appliance.
- b. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
- c. Replacement of gas water heating appliances in the same location of equal or less Btu/cfh rating and minor modification to electrical, plumbing, and mechanical connections necessary to serve the new appliance in R2, R3, and R4 occupancies where the appliance serves an individual dwelling unit, provided the serving gas utility is notified prior to the appliance being energized.
- d. Replacement of gas pool and spa heating appliances in the same location of equal or less Btu/cfh rating, and minor modification to electrical, plumbing, and mechanical connections necessary to serve the new appliance in R2, R3, and R4 occupancies where

- the pool or spa serves an individual dwelling unit, provided the serving gas utility is notified prior to the appliance being energized.
- e. Replacement of gas air-conditioning units, direct-vented appliances, furnaces, and log lighters in the same location, of equal or less Btu/cfh, and minor modification to electrical, plumbing, and mechanical connections necessary to serve the appliance in R2, R3, and R4 occupancies where the appliance serves an individual dwelling unit, provided the serving gas utility is notified prior to the appliance being energized.

Mechanical:

- a. Portable heating appliance.
- b. Portable ventilation equipment.
- c. Portable cooling unit.
- d. Steam, hot or chilled water piping within any heating or cooling equipment regulated by International Mechanical Code.
- e. Replacement of any part not altering its approval or making it unsafe.
- f. Portable evaporative cooler.
- g. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.
- h. Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.
- i. Replacement of an air conditioner unit, furnace, heat pump or evaporative cooler in the same location of equal or less cfm and amperage rating and minor modification to electrical, plumbing, and mechanical connections necessary to serve the new appliance in R2, R3, and R4 occupancies, where the appliance serves an individual dwelling unit.

Plumbing:

- a. Stopping of leaks in drains, water, soil, waste or vent pipe, when such work does not require the removal and replacement of pipe, fittings, valves or fixtures.
- b. Clearing of stoppages or the repairing of leaks in pipes, valves or fixtures.
- c. Replacement of electric water heating appliances in the same location of equal or less amperage rating, and minor modification to electrical, plumbing, and mechanical connections to serve the appliance in R2, R3, and R4 occupancies, where the appliance serves an individual dwelling unit.
- d. Equal replacement of boilers and water heaters in the same location regulated by the State of Arizona, except not including work not in the scope of State regulation in industries, premises or activities regulated by Tempe City Code, Chapters 33, Article V & Chapter 27, Article I.
- e. Replacement installation of potable water conditioning or treating appliances in the same location, and minor modification to electrical, plumbing, and mechanical connections necessary to serve the appliance in R2, R3 and R4 occupancies, where the appliance serves an individual dwelling unit.
- f. Replacement installation of potable water conditioning or treating appliances in the same location, and minor modification to electrical, plumbing, and mechanical connections necessary to serve the appliance in A2, A3, A4, B, E, F, M, S, and U occupancies where the appliance serves an individual tenant space, not including industries, premises or activities regulated by Tempe City Code, Chapters 33, Article V & Chapter 27, Article I.
- g. Replacement installation of solar domestic water heating appliances in the same location, and minor modification to electrical, plumbing, and mechanical connections necessary to

- serve the appliance in R3 and R4 occupancies, where the appliance serves an individual dwelling unit.
- h. Replacement installation of solar pool and spa heating appliances in the same location and minor modification to electrical, plumbing, and mechanical connections necessary to serve the new appliance in R3 and R4 occupancies, where the pool or spa serves an individual dwelling unit.
- **105.2.1 Emergency repairs.** Where equipment replacements and repairs requiring a permit must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.
- **105.2.2 Public service agencies.** A permit shall not be required for the installation, alteration or repair of generation, transmission, distribution or metering or other related equipment under the ownership and control of public service agencies by established right.

Nothing in this section shall be construed to exempt any electrical installation used for lighting, power, heating, ventilation, elevators pumping or for other building or premise operations, nor exempt any service equipment for electrical service to a building or premise.

- **105.2.3 Ordinary repairs.** Application or notice to the building official is not required for ordinary repairs to structures for replacement of lamps or the connection of approved portable electrical equipment to approve permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements. Nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electrical wiring or mechanical equipment or other work affecting public health or general safety.
- **105.3 Application for permit.** To obtain a permit, an applicant shall first file an application therefor in writing on a form furnished by the Community Development Department. Such application shall:
 - 1. Identify and describe the work to be covered by the permit for which application is made.
 - 2. Description of the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and locate the proposed building or work.
 - 3. Indicate the use and occupancy of the proposed work.
 - 4. Be accompanied by construction documents and other information as required in Section 107 of this code.
 - 5. State the valuation of the proposed work.
 - 6. Be signed by the applicant or the applicant's authorized agent.
 - 7. Give such other data and information as required by the building official.
 - 8. Be accompanied by the applicable fee(s) as required in Appendix A, Tempe City Code.

105.3.1 Action on application. The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the

application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, identifying the reasons for rejection. If the building official is satisfied that the proposed work conforms to the requirements of this code, the Technical Codes and applicable laws and ordinances thereto, the building official shall issue a permit as soon as practicable, subject only to the payment of appropriate fees.

105.3.2 Time limitation of permit application. An application for a permit for any proposed work shall be valid for a period of one year from the date of filing. The building official is not authorized to grant any extension of time.

Exceptions:

- 1. Prior to the date of expiration of any application for which plans have not been approved, the applicant may submit a written request for one-time extension of one-hundred eighty (180) days. The request must explain the justifiable cause for the delay and include a proposed submittal schedule for the completion of the plan review process. If the request for extension is approved, the applicant must submit a new project submittal application along with a renewal fee equal to twenty-five percent (25%) of the original calculated plan review fee. The renewal fee must be paid no later than thirty (30) calendar days after the original expiration date or the original application shall expire. Additional plan review fee may apply as prescribed in Table 1-A Building Permit Fees; Other Fees; Item 4. Additionally, all permits must be issued and permit fees paid prior to the end of the one-hundred eighty (180) day of the extension date.
- 2. Prior to the date of expiration of any application that has been approved for issuance of permit(s) but for which a permit has not been issued, the applicant may request a one-time extension of one-hundred eighty (180) days. The request must explain the justifiable cause for the delay. If the request for extension is approved, the applicant must submit a new project submittal application along with a renewal fee equal to ten percent (10%) of the original calculated plan review fee. The renewal fee must be paid no later than thirty (30) calendar days after the original expiration date or the original application shall expire. Additionally, the permits must be issued and permit fees paid prior to the end of the one-hundred eighty (180) day of the extension date.

Exceptions one (1) and two (2) above may not be combined.

105.4 Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code, the Technical Codes or of any other ordinance of the City of Tempe. Permits presuming to give authority to violate or cancel the provisions of this code, the Technical Codes or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents or in the construction. The building official is also authorized to prevent occupancy or use of a structure where in violation of this code, the Technical Codes or of any other ordinances of this jurisdiction. Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

- **105.5 Expiration of Permit.** Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within one (1) year after its issuance, or if the work authorized on the site by such permit is suspended or declared abandoned by the owner for a period of one (1) year after the date the work is commenced, or if the building official declares the permit suspended or abandoned after the expiration of one (1) year from the date of permit issuance.
- **105.5.1 Work not commenced.** Every permit issued under the provision of this code and the Technical Codes shall be valid for a period of one (1) year from the date of issuance provided, however, that any permit shall expire if work authorized by such permit is not commenced and an approved inspection obtained within one (1) year from the date of issuance. An approved inspection shall be an inspection that is requested and approved pursuant to Section 110 of this code. Before work can commence on a structure for which the permit has expired, a new permit shall be obtained and the fee therefore shall be based on the total valuation of the structure or work.
- **105.5.2** Work commenced. Every permit issued under the provision of this code and the Technical Codes shall be valid for a period of one (1) year from the date of the last approved inspection. An approved inspection shall be an inspection that is requested and approved pursuant to Section 110 of this code. Before work can continue or resume on a structure for which the permit has expired, a new permit shall be obtained and the fee therefore shall be determined by the building official based on the valuation of the uncompleted portion of the work from the last approved inspection.
- **105.6 Suspension or revocation.** The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or based on incorrect, inaccurate or incomplete information, or in violation of any ordinance, regulation or any of the provisions of this code, the Technical Codes or of other ordinances of this jurisdiction.
- **105.7 Placement of permit.** The building permit or copy thereof shall be kept on the site of the work until the completion of the project.
- **105.8 Unfinished buildings or structures.** Whenever work has commenced on a building or structure for which a permit has been issued, and said permit has expired pursuant to this code, the owner of the property upon which structure is located, or other person or agent in control of said property, upon receipt of notice in writing from the Building Safety Division, shall within 30 days from the date of such written notice, obtain a new permit to complete the work and diligently pursue the work to completion, or within said 30 days, obtain a demolition permit and shall remove or demolish the building or structure within 120 days from the date of written notice.

Notwithstanding the provisions of the Tempe Administrative Code and this section, whenever work on any building, structure, addition, alteration, appendage or repair has commenced, the exterior walls and roof shall be completed in accordance with the approved plans including but

not limited to roofing, fenestration and finish materials including paint, within two years of commencing construction. In the absence of evidence to the contrary, the date of the first inspection request shall establish the date that construction commenced.

This section shall apply to all permits issued on and after the effective date of this ordinance and permits issued or reinstated pursuant to Section 105.5 of this code.

Such building, structure, addition, alteration, appendage or repair not in compliance with this section is subject to the enforcement and abatement procedures of Chapter 21, Tempe City Code, as a public nuisance.

SEC. 8-106 This section is reserved.

SEC. 8-107 CONSTRUCTION DOCUMENTS

107.1 General. Submittal documents consisting of construction documents, statement of special inspections, geotechnical report, specifications, engineering calculations, diagrams, and other data, as required by the building official, shall be submitted with each application for a permit. The construction documents shall be prepared by a registered design professional as required by state law. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

Exception: The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code, the Technical Codes and other ordinances of the City.

- **107.2 Construction documents.** Construction documents shall be in accordance with Sections 107.2.1 through 107.2.10 of this code.
- **107.2.1 Information on construction documents.** Construction documents shall be dimensioned, drawn to scale and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code, the Technical Codes, relevant laws and ordinances as determined by the building official.
- **107.2.2 Screening.** Submittal documents may be subject to screening by the building official for completeness and code compliance prior to being accepted for permit review. Incomplete submittals or submittals containing clear code violations shall be returned to the applicant without being accepted unless otherwise directed by the building official.
- **107.2.3 Title sheet information.** The construction documents shall contain a title sheet or title sheets indicating the name, address and phone numbers of design professionals. The title sheet shall also contain information regarding the code review as performed by the design professional, including the size of the building, type of construction, occupancy

classification(s), area and height modifications (if any), fire sprinklers (if any), and any other information as directed by the building official. The building official is authorized to waive or modify the requirement for a title sheet when the application for permit is for an alteration or repair or when otherwise warranted.

107.2.4 Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for an alteration or repair or when otherwise warranted.

107.2.5 Means of egress. The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress including the path of the exit discharge to the public way in compliance with the provisions of the Technical Codes. In other than Group R-2, R-3 and I-1 occupancies, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces. The building official is authorized to waive or modify the requirement for a means of egress plan when the application for permit is for an alteration or repair or when otherwise warranted.

107.2.6 Exterior wall envelope. Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with the Technical Codes. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roofs, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used. The building official is authorized to waive or modify the requirement for an exterior wall envelope plan when the application for permit is for alteration or repair or when otherwise warranted.

107.2.7 Energy Conservation. Construction documents shall show in sufficient detail pertinent data and features of the building, systems and equipment. Details shall include, but are not limited to, as applicable, insulation materials and their R -values; fenestration U -factors and SHGCs; area-weighted U -factor and SHGC calculations; mechanical system design criteria; mechanical and service water heating system and equipment types, sizes and efficiencies; economizer description; equipment and systems controls; fan motor horsepower (hp) and controls; duct sealing, duct and pipe insulation and location; lighting fixture schedule with wattage and control narrative; and air sealing details.

107.2.8 Fire-resistive construction and Fire Systems. Construction documents shall show in

sufficient detail pertinent data and features of all required fire-resistive construction, including the materials and methods for maintaining required structural safety, fire-resistance rating, complete descriptions of wall, floor/ceiling and roof/ceiling assemblies, fire-blocking details, details and listing for fire and smoke dampers and complete descriptions of listed fire-stopping systems for through/membrane penetrations. Plan sheets for fire protection systems required by the Technical Codes shall be listed on the plan code data sheet.

- **107.2.9 Exterior balconies and elevated walkways.** Where balconies or other walking surfaces are exposed to water from direct or blowing rain, snow or irrigation, and the structure framing is protected by an impervious moisture barrier, the construction documents shall include details for all elements of the impervious moisture barrier system. The construction documents shall include manufacturer's installation instructions.
- **107.2.10 Structural information.** The construction documents shall provide the information specified in Section 1603 of the International Building Code.
- **107.3 Examination of documents.** The building official shall examine or cause to be examined the permit application and accompanying construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code, the Technical Codes and other pertinent laws or ordinances.
- **107.3.1 Approval of construction documents.** When the building official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the building official as required by the approved Building Safety Division retention schedule. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.
- **107.3.2 Previous approvals.** This code and the Technical Codes shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within one year after the permit issuance dated and has not been abandoned pursuant to this code.
- **107.3.3 Phased approval.** With prior approval from the building official, the building official may authorize the issuance of a permit for the construction of foundations, or other parts of a building or structure before the construction documents for the whole building or structure have been submitted, provided adequate information and detailed statements have been filed complying with pertinent requirements of this code and the Technical Codes. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the construction operation and without assurance that a permit for the entire structure will be granted.

Exception: Phased construction approvals are not applicable for Group R-3 and R-4 occupancies.

107.3.4 Design professional in responsible charge. When it is required that the documents be prepared by a registered design professional, the building official shall be authorized to require the owner or owner's authorized agent to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge.

If the circumstances require, the owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

Where structural, electrical, mechanical, plumbing or fuel gas observation are required by Section 1704 of the International Building Code, the inspection program shall name the individual(s) or firm(s) who are to perform structural, electrical, mechanical, plumbing or fuel gas observation and describe the stages of construction where the structural, electrical, mechanical, plumbing or fuel gas observation are to occur.

107.3.4.1 Deferred submittals. Deferral of any submitted item shall have the prior approval of the building official. The registered design professional in responsible charge shall list the deferred submittals on the title sheet of the construction documents for review by the building official. Unless otherwise approved by the building official, deferred submittals are to be submitted to the building official within sixty days of permit issuance. Deferred submittal items shown on the construction documents shall be clearly noted as "For Reference Only". Deferred submittals do not constitute phased approval of the construction.

Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the building official with a notation indicating the deferred submittal documents have been reviewed and been found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the design and submittal documents have been approved by the building official.

107.4 Amended construction documents (Revisions). Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

107.5 Retention of construction documents. One set of approved construction documents shall be retained by the building official for a period of time as prescribed by state or local laws and one set of approved construction documents shall be returned to the applicant, and said set of shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress.

107.6 Responsibility. It shall be the duty of every person who performs work for the installation or repair of building, structure, electrical, gas, mechanical, plumbing, or fire-suppression systems, for which this code or the Technical Codes are applicable, to comply with this code and the Technical Codes.

SEC. 8-108 TEMPORARY STRUCTURES AND USES

- **108.1 General.** The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.
- **108.2 Conformance.** Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of the International Building Code as necessary to ensure public health, safety and general welfare.
- **108.3 Temporary power.** The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70.
- **108.4 Termination of approval.** The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

SEC. 8-109 FEES

- **109.1 Payment of fees.** A permit shall not be issued nor considered valid until the applicable fees established by the City of Tempe in Appendix A, Table 1-A and 2-A, have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.
- **109.2 Schedule of permit fees.** On buildings, structures, electrical, fuel gas, mechanical and plumbing systems or alterations thereto requiring a permit, a fee for each permit shall be paid as required in accordance with the schedule as established in Appendix A, Tempe City Code.
- 109.3 Building Permit valuation. The applicant for a permit shall provide an estimated construction valuation at the time of initial application. Construction valuations shall include total value of the proposed work, including materials and labor, for which the permit is being issued, such as finish work, painting, roofing, electrical, gas, mechanical, plumbing, equipment, heating, air-conditioning, elevators, fire extinguishing systems, other permanent systems/equipment, grading, landscaping, and other site related improvements. The final building permit valuation shall be the greater of the applicant's declared valuation or the valuation calculated by using the Department's building valuation data, except that the building official or designee may set the final building permit valuation when deemed necessary. Building Permits issued for mechanical, electrical, and/or plumbing work are based on the construction valuation for the materials and labor, except that the building official or designee may set the final building permit valuation when deemed necessary.

109.4 Work commenced before a permit issuance (Investigation fees). Any person who commences work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to an investigation fee established by the building official. The investigation fee shall be equal to and in addition to the permit fees required by this code. The payment of such investigation fee shall not exempt an applicant from compliance with all other provisions of this code and the Technical Codes. An investigation fee shall be collected whether or not a permit is then or subsequently issued.

Exceptions:

- 1. The building official may waive the investigation fee when extenuating circumstances exist.
- 2. The investigation fees for homeowners who have performed construction work on their property without contractors is limited to 50% of the of the permit fees required by this code. This fee can be further reduced to 25% if the homeowner submits an application for permit, along with plans, and plan review fee, within 30 days of the Notice to Comply or other notice being issued.
- 3. Investigation fees on construction work designed or performed by registered professionals or contractors cannot be reduced.

109.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

109.6 Fee refunds. The building official may authorize the refunding of any fee paid hereunder which was erroneously paid or collected.

The building official may authorize the refunding of that portion of the permit fee in excess of a minimum valuation permit fee when no work has been started and no inspection has been done for which a permit has been issued in accordance with this code.

The building official may authorize the refunding of that portion of the plan review fee in excess of a minimum valuation permit fee when the application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done.

The building official shall not authorize the refunding of any fee paid except upon written request filed by the original applicant no later than 180 days after the date of fee payment.

109.6.1 Residential fee rebates. Building permit and plan review fees for improvements to single family residences may be rebated to the property owner or permit applicant, with owner approval, upon successful completion of the project. To qualify for the rebate program, projects must be completed and obtain their final inspection approval within one year of permit issuance date and must submit a completed rebate application within 60 days of final inspection approval date.

109.6.2 Partial residential fee rebates. Fifty (50) percent of the building permit and plan review fees for improvements to single family residences for work that was permitted due to a Notice of Violation order may be rebated provided, the building permit is obtained within 90 days of the

issued date of the Notice of Violation, the building permit receives a final approval within 120 days of the building permit issuance date and a rebate application is received within 60 days of final inspection approval date.

109.7 Plan review fees. When submittal documents are required by this code, a plan review fee shall be paid at the time of submitting the documents for such plan review. Said plan review fee shall be 65 percent of the building permit fee as shown in Appendix A, Table 1-A, Tempe City Code.

The plan review fees specified in this subsection are separate fees from the permit fees specified elsewhere in this code and are in addition to the permit fees.

When submittal documents are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in Appendix A, Table 2-A, Tempe City Code.

The plan review fees include the initial plan review and two (2) subsequent re-submittals for the same project. If more than three plan reviews are required, or if the permit application shall expire by time limitation, additional fees shall be assessed for each plan review status meeting and for subsequent plan reviews as determined appropriate by the building official. At the time of permit issuance, additional plan review fees for any increase in valuation shall be assessed in conjunction with, and as a condition of, permit issuance

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- **109.7.1 Expedited plan review.** When approved by the building official and dependent upon available resources, an expedited plan review process may be available for specific projects. Such expedited plan reviews may be accomplished by city staff or through an approved third-party contractor.
- **109.7.2** Expedited plan review fees for reviews completed by city staff shall be equal to the amount of plan review fees required by this section. Expedited plan review fees are separate from the plan review fee and permit fees required in Appendix A are in addition to those fees.
- **109.7.3** Expedited plan reviews completed by an approved third-party contractor shall require an administrative fee paid to the city equal to 35% of the plan review required by this section. This fee is due at time of submittal to the city and prior to the start of the expedited plan review process.

The applicant shall negotiate the third-party contractor's review fee and review turn-around time directly with the third-party contractor. Expedited plan review administrative fees are separate from permit fees required by this section and are in addition to those fees.

109.8 Public school shade structures. Shade structures constructed on property owned by a public school are exempt from plan review fees.

SEC. 8-110 INSPECTIONS

110.1 General. Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code, the Technical Codes or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or the Technical Codes or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the owner, owner's authorized agent or permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

It shall be the duty of the permit holder to provide an approved property address, including number and if required a street name, at all construction sites. Such temporary premises identification shall be clearly visible from the street or roadway fronting the property, shall be installed prior to the first inspection, and shall be maintained until the permanent premises identification is installed and approved.

- **110.1.1 Inspection record card.** Work requiring a permit shall not commence until the permit holder or an agent of the permit holder has posted or otherwise made available the inspection record card to allow the building official or authorized agent to conveniently make the required entries thereon regarding inspections of the work. The card shall be maintained available by the permit holder until final approval, by the building official, has been granted.
- **110.2 Preliminary inspections.** Before issuing a permit, the building official is authorized to examine or cause to be examined buildings, structures, electrical, mechanical, plumbing, fuel gas or sites for which an application has been filed.
- **110.3 Required inspections.** The building official, upon notification, shall make the inspections set forth in this section.
- **110.3.1 Footing and foundation inspection.** Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, the required forms shall be in place prior to inspection.

An inspection shall be made prior to the placement of concrete. Materials for the foundation shall be on the site, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the site.

- **110.3.2** Underground building service equipment. Underground plumbing, gas, mechanical, or electrical systems shall be inspected for approved materials, proper burial depth and slope but prior to the backfilling of trenches. The piping shall be bedded-in for its entire length, and if applicable, the systems shall be under the prescribed tests required by the Technical Codes.
- **110.3.3** Concrete slab and under-floor inspection. Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and if applicable, building service

- equipment, conduit, piping accessories and other ancillary equipment items are in place and approved, but before any concrete is placed or floor sheathing installed, including the sub-floor.
- **110.3.4** Sewer or water service (building or private). Sewer or water service lines, that provide service to a building or multiple buildings on one site and not installed in a public right-of-way or Public Utility Easement, shall be inspected for approved materials and proper slope prior to backfilling of the trenches.
- **110.3.5** Concrete or masonry walls or columns inspection. Walls and columns shall be inspected after all reinforcing steel, and if applicable, conduits and other piping are in place but prior to the placement of concrete or grout. For concrete walls or columns, required forms shall be in place prior to inspection. Masonry walls or columns constructed in lifts shall require an inspection prior to the grouting of each lift.
- **110.3.6 Exterior strap and shear inspection.** Exterior wall shall be inspected after the sheathing (used for bracing/shear), wall bracing, metal straps or anchoring devices are in place but prior to the installation of the weather-resistive barrier or wall covering.
- **110.3.7 Rough building service equipment.** Rough plumbing, gas, mechanical, or electrical systems shall be inspected for approved materials or proper slope but prior to concealing by the building finish materials. When applicable, the systems shall be under the prescribed tests required by the Technical Codes. When applicable, these inspections can be completed in conjunction with a frame inspection.
- **110.3.8 Frame inspection.** Framing inspections shall be made after the roof deck or sheathing, all framing, fireblocking, draftstopping and bracing are in place, pipes, chimneys and vents to be concealed are complete, the rough electrical, plumbing, mechanical, fuel gas pipes and ducts have been approved, after the roof is loaded with roof covering materials and the building has been dried-in.
- **110.3.9 Lath and gypsum board inspection.** Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and, if applicable, exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished. **Exception:** Gypsum board that is not part of a fire-resistance-rated assembly, sound-rated assembly, or a shear assembly.
- **110.3.10 Fire- and smoke-resistant penetrations.** Protection of joints and penetrations in fire-resistance-rated assemblies, smoke barriers and smoke partitions shall not be concealed from view until inspected and approved. When applicable, this inspection may be done in conjunction with the gypsum board inspection prior to joints and fasteners being taped and finished.
- **110.3.11 Energy efficiency inspections.** Inspections shall be made to determine compliance with International Building Code Chapter 13 or International Residential Code Chapter 11 and shall include, but not be limited to, inspections for: envelope insulation R- and U- values, fenestration U- value and SHGC, duct system sealing and R -value, HVAC and water-heating equipment efficiency or other insulation and efficiency verification.

- **110.3.12 Other inspections.** In addition to the inspections specified above, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code or the Technical Codes and other laws enforced by the Building Safety Division.
- **110.3.12.1 Building service equipment.** Building service equipment regulated by the Technical Codes shall not be connected to the fuel or power supply, or water or sewer systems until authorized by the building official. The requirements of this code shall not be considered as prohibiting the operation of building service equipment installed to replace existing building service equipment serving an occupied portion of the building provided an inspection of such building service equipment has been completed and approved for use.
- **110.3.13 Special inspections.** Special inspections and structural, electrical, mechanical, plumbing and fuel gas observations shall be as required in Section 1704 of the International Building Code and this code. Special inspections are in addition to, not in lieu of, the inspections conducted by the building official.
- **110.3.13.1 Inspection and observation program.** When special inspection is required by Section 1704 of the International Building Code or as determined by the building official, the owner, an agent of the owner, or the engineer or registered design professional in responsible charge, but not the contractor or any other person responsible for the work, shall employ one or more special inspectors who shall provide inspections during construction on the type of work listed under Section 1704.1 of the International Building Code or as determined by the building official.

When special inspections are required, the special inspections are to be performed in addition to, not in lieu of, the inspections conducted by the building official, and shall not be construed to relieve the owner or his authorized agent from requesting the periodic and called inspections required by this code and the Technical Codes.

- **110.3.13.2 Special Inspector.** Special inspectors shall be provided by, or under the supervision of an Engineer or registered design professional in responsible charge for which special inspections are required, subject to the following conditions:
- **110.3.13.3 Notification:** (Prior to issuing permit) The owner or his authorized agent shall notify the Building Safety Division in writing on the form provided by this division, the name of the engineer or registered design professional in responsible charge who will carry out the required inspections. The responsible engineer or registered design professional of record shall notify the department of any changes of special inspectors prior to conducting the inspections.
- **110.3.13.4 Certificate of Responsibility:** The engineer or registered design professional in responsible charge of the special inspectors shall so certify to the Building Safety Division in writing on the city form prior to the issuance of the building permit and shall notify the division immediately if terminated prior to completion of the work, for which special inspections are required.

110.3.13.5 Qualification: No person(s) shall be assigned to carry out the duties of the special inspector unless thoroughly qualified by knowledge and experience to render full, complete and competent inspection.

It shall be the responsibility of the engineer or registered design professional in responsible charge of the special inspections to satisfy the duties and responsibilities as stated in Section 1704.1 of the International Building Code.

110.3.13.6 Inspection and Reports: The engineer or registered design professional in responsible charge of the special inspectors or the designated special inspector shall provide continuous, competent and complete inspection on the work for which special inspections are required in accordance with Section 1704.1 of the International Building Code and shall submit reports to the Building Safety Division's Inspection Section stating approval of the work as it progresses, but not less than every two weeks.

The special inspector shall notify the Building Safety Division immediately upon detection of all discrepancies involved in the special inspections that have not been corrected in accordance with the approved plans and specifications prior to proceeding with the work.

- **110.3.14 Final inspection.** The final inspection shall be made after all work shown on the construction documents or as required by the permit is completed. When applicable, the systems shall be under the prescribed tests required by the Technical Codes.
- **110.4 Inspection agencies.** The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.
- **110.5 Inspection requests.** It shall be the duty of the holder of the permit or the authorized agent to notify the building official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for the inspection of such work as required by this code. The building official may require that every request for inspection be filed at least one working day before such inspection is desired.
- 110.6 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or the authorized agent wherein the same fails to comply with this code or the Technical Codes. Any portions that do not comply shall be corrected and shall not be covered or concealed until authorized by the building official. There shall be a final inspection and approval of all construction when the work is completed and prior to any occupancy or use.

SEC. 8-111 CERTIFICATE OF OCCUPANCY

111.1 Use and occupancy. A building or structure shall be used or occupied, and a change of a building or structure or portion thereof shall not be made until the building official has issued a Certificate of Occupancy therefore as provided herein. Issuance of a certificate of occupancy

shall not be construed as an approval of a violation of the provisions of this code, the Technical Codes or other ordinances of the jurisdiction.

Exception. Certificates of occupancy are not required for work exempt from permits.

111.2 Certificate of Occupancy issued. After the building official inspects the building or structure and finds no violations of the provisions of this code, the Technical Codes or other laws that are enforced by the Building Safety Division, the building official is authorized to issue a Certificate of Occupancy that contains the following:

- 1. The building permit number.
- 2. The address of the building or structure.
- 3. The type of construction as defined in the International Building Code.
- 4. The occupancy, in accordance with the provisions of the International Building Code.
- 5. The area of each occupancy within the building for which the permit was issued.
- 6. The occupant load of each occupancy for which the permit was issued.
- 7. Indicate whether an automatic sprinkler system is provided in the building or structure.
- 8. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code and the Technical Codes for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
- 9. The name and signature of the building official or designee.
- 10. Any special stipulations and conditions of the building permit.

Exception: Group U and additions to Group R-3 Occupancies, unless specifically requested by the permit holder. For such occupancies, occupancy and use is authorized upon the satisfactory completion of the final building inspection.

- **111.3 Temporary Certificate of Occupancy.** The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set the conditions, if any, and the time period during which the temporary certificate of occupancy is valid.
- **111.4 Revocation.** The building official is authorized to, in writing, suspend or revoke a certificate of occupancy, letter of compliance or temporary certificate of occupancy issued under the provisions of this code wherever such certificate is issued in error, or based on incorrect information supplied, or where it is determined the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code or the Technical Codes.
- **111.5 Posting.** The certificate of occupancy shall be posted in a conspicuous place within the premises.
- **111.6 Letter of Compliance.** The building official is authorized to issue a letter of compliance for a building or structure permitted as a basic or shell building which cannot be occupied. If after a final inspection of the building or structure, and any electrical, fire protection, plumbing, mechanical, fuel gas or similar systems shown on the approved plans there are no violations to

the provisions of this code, the Technical Codes or other laws and ordinances that are enforced by the Building Safety Division, the permit holder may request such letter of compliance. The letter of compliance certifies that the work performed under the permit has been satisfactorily completed but does not authorize the occupancy of the building or structure.

The letter of compliance shall contain the following:

- 1. The building permit number.
- 2. The address of the structure.
- 3. A description of the building, construction type, proposed occupancy type, fire systems provided and building area.
- 4. A statement that the permitted work has been inspected for compliance with the requirements of this code and the Technical Codes.
- 5. The name and signature of the building official or designee.

SEC. 8-112 SERVICE UTILITIES

- **112.1 Connection to utilities.** A person shall not make connections from a utility, source of energy, fuel or power to any building or building service equipment, regulated by the Technical Codes for which a permit is required by this code, until approved by the building official.
- **112.2 Temporary connection.** The building official may authorize the temporary connection of the building service equipment to the utility source of energy, fuel or power for construction power, testing of building service equipment or for use under a temporary certificate of occupancy.
- **112.3 Authority to disconnect utilities.** The building official shall have the authority to authorize disconnection of utility service or energy supplied to a building, structure or building service equipment therein regulated by this code or the Technical Codes, in case of emergency, where necessary to eliminate an immediate or imminent hazard to life or property or where such utility connection has been made without the approval required by Section 112.1 or 112.2 of this code. The building official shall notify the serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.
- **112.3.1** The building official shall have the authority to authorize disconnection of utility service or energy supplied to a building, structure or building service equipment in similar situations that are deemed to pose a probably or possible hazard to life or property, or when such connection has been made without the approval required by Section 112.1 or 112.2 of this code.

The building official shall notify, in writing, the serving utility, the owner, and the occupant of the building, structure or building service equipment of the decision to disconnect prior to taking such action. The decision of the building official is appealable through the Technical Code Advisory Board of Appeals.

112.4 Authority to condemn building service equipment. When the building official determines that building service equipment regulated in the Technical Codes has become hazardous to life, health or property, or has become unsanitary, the Building official shall order in writing that such equipment either be removed or restored to a safe or sanitary condition, as appropriate.

The written notice shall fix a time limit for compliance with such order. Defective building service equipment shall not be used, operated or maintained after receiving such notice.

- **112.4.1.** When such equipment or installation is to be disconnected, a written notice of such disconnection and causes therefore shall be given within 24 hours to the serving utility, the owner and occupant of such building, structure or premises.
- **112.4.2.** When any building service equipment is used, operated or maintained in violation of the Technical Codes and in violation of a notice issued pursuant to the provisions of this section, the individual or individuals responsible for continued use, operation or maintenance shall be subject to the penalties described in this code and the building official shall institute appropriate action to prevent, restrain, correct or abate the violation.
- **112.5 Connection after order to disconnect.** Persons shall not make connections from an energy, fuel or power supply nor supply energy or fuel to building service equipment that has been disconnected or ordered to be disconnected or the use has been ordered to be discontinued by the building official until the building official authorizes the reconnection and use of such equipment.

SEC. 8-113 TECHNICAL CODE ADVISORY BOARD OF APPEALS

- 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code and the Technical Codes, there shall be and is hereby created a Technical Code Advisory Board of Appeals. The board shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business.
- **113.2 Limitations on authority.** An application for appeal shall be based on a claim that the true intent of the Technical Codes or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of the Technical Codes do not fully apply or an equal or better form of construction is proposed. A Technical Code Advisory Board of Appeals shall have no authority to waive requirements of the Technical Codes.

113.3 Created, composition.

113.3.1 Technical Code Advisory Board of Appeals. There shall be and is hereby created a technical code advisory board of appeals, consisting of nine (9) members who are qualified by experience and training to pass upon matters pertaining to the technical provisions of the Tempe Technical Codes.

For purposes of this section, the "technical provisions" shall mean all provisions of the Technical Codes except the administrative provisions.

Membership includes the following: 1) an architect, registered in the state; 2) a structural engineer registered in the state, an International Code Council (ICC) certified commercial building inspector, or an ICC certified building plans examiner; 3) a building contractor; one member shall be a home builder; 4) an electrical engineer, registered in the state, an ICC certified commercial electrical inspector, or an ICC certified electrical plans inspector; 5) an electrical contractor or an electrician; 6) a mechanical engineer, an ICC certified commercial mechanical inspector, an ICC certified mechanical plans examiner, an ICC certified commercial plumbing inspector, or an ICC certified plumbing plans examiner; 7) a plumber or plumbing contractor; 8) a mechanical contractor; and 9) a representative of the Fire Medical Rescue Department or a fire protection consultant. The building official or a designated employee of the Building Safety Division shall be an ex officio and non-voting member and shall act as secretary to the board.

113.4 Appointment, terms and vacancies. Appointments and terms of members shall be in accordance with Article VI of the City Charter. In the event of the unexcused absence of a member from three (3) consecutive meetings, the position shall be deemed vacant. Vacancies shall be filled in accordance with article VI of the City Charter for the unexpired term of any member unable or ineligible to serve. A member whose term expires may serve until a successor has been appointed. The city council may remove any member for cause.

113.5 Officers. The board shall elect a chairman and vice-chairman from among its members, neither of whom shall be an ex officio member. The chairman and vice-chairman shall each serve for a one-year period or until their successors are elected.

113.6 Meetings. The board shall hold one regular meeting every three (3) months when there is pending business. Special meetings may be called by the building official or at the request of the chairman or any five (5) members. An affirmative vote from a majority of the board members shall be required for passage of any matter before the board.

113.7.1 Powers, duties, responsibilities.

- 1. The board, on request or on its own motion, may interpret the technical provisions of the Technical Codes in special cases when it appears that the provisions of the codes are inadequate and do not cover the point in question, and may recommend to the city council such new legislation as is consistent therewith.
- 2. The board may grant a variance to the technical provisions of the Technical Codes when it can be established that a manifest injustice would be done. A variance shall not be granted by the board unless it finds that:
 - a. Special circumstances or conditions apply to the request; and
 - b. Granting the variance is necessary for the preservation and enjoyment of substantial property rights; and
 - c. Granting the variance will not be materially detrimental to persons residing or working in the premises, to adjacent or surrounding property or to the public in general; and

- d. Granting the variance will be in harmony with the purposes sought to be attained by the Technical Codes.
- 3. Each case shall be evaluated on its individual merits and shall not be construed to set a precedent for deviating from the requirements of the Technical Codes. The findings of the board shall be binding upon all parties except as provided under Section 113.9 of this code.
- 4. The board may approve the use of the alternate materials or methods of construction, provided the alternate materials or method is, for the purpose intended, at least the equivalent of that prescribed by the Technical Codes in suitability, strength, effectiveness, fire resistance, durability, safety and sanitation.
- 5. The board may adopt such rules and provisions necessary for the discharge of its duties, provided said rules are not in conflict with the City Charter or this code.
- 6. The board is empowered to call upon the city attorney's office for legal counsel and upon any other office or board to aid and assist the board in its deliberations.

113.8 Appeal from decision of the building official.

- 1. Any person dissatisfied with a decision of the building official applying to the technical provisions of the Technical Codes or to an alternate material or method of construction may request a hearing before the board by filing an appeal with the building official on a form provided therefore. Such appeal shall be heard at the next regular meeting of the board unless such appeal is filed within twenty-one (21) days preceding the next regular board meeting, in which case such appeal shall be heard at the next succeeding regular or special board meeting.
- 2. All hearings shall be open to the public and any person whose interest may be affected by the decision shall be given an opportunity to be heard.
- 3. The board shall render all its decisions on appeals in writing to the appellant with a copy to the building official.

113.9 Appeal filing, fees.

- 1. Appeals shall be filed in the office of the Community Development Department on a form provided therefore. A fee shall be paid at the time of filing of an appeal, in accordance with the schedule established by city council (Tempe City Code Appendix A).
- 2. No part of the fees required herein shall be refundable after an application is filed and the fee paid.

113.10 Appeal from decision of the board.

- 1. If the board's decision is not concurred with by the appellant or the building official, the appellant or the building official may then appeal the decision to the city council within twenty-one (21) days after the board's submission of such decision to the appellant and building official. The appeal shall be in writing and shall be filed with the city clerk.
- 2. The city council's decision on the matter shall be predicated on the same findings as set forth in Section 113.7 of this code and shall be final.

SEC. 8-114 VIOLATIONS

- **114.1 Unlawful acts.** It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or electrical, plumbing, mechanical, or fuel gas systems regulated by this code and the Technical Codes, or cause same to be done, in conflict with or in violation of any of the provisions of this code and the Technical Codes.
- **114.2 Notice of violation.** The building official is authorized to serve a notice of violation or order on the building owner, the owner's agent or person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building, structure or electrical, plumbing, mechanical, or fuel gas systems in violation of the provisions of this code, the Technical Codes or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.
- **114.3 Prosecution of violation**. If the notice of violation is not complied within the time frame specified in the notice, the building official may institute the appropriate proceeding at law, or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this code or of the Technical Codes or of the order or direction made pursuant thereto.
- **114.3.1 Remedies not exclusive.** Violations of this code or the Technical Codes are in addition to any other violation established by law, and this code and shall not be interpreted as limiting the penalties, actions, or abatement procedures that may be taken by the City or other persons under the laws, ordinances or rules.
- **114.4 Violation penalties**. Any person, firm, or corporation who shall violate any of the provisions of this code and the Technical Codes may be subject to one or more of the penalties as prescribed in the Tempe City Code, Chapter 21.

Civil sanction: A fine of not less than one hundred dollars (\$100) nor more than one thousand dollars (\$1000) but total fines shall not exceed two thousand dollars (\$2000) per day for each property.

Criminal misdemeanor: If found guilty of a class one misdemeanor and upon conviction shall be punished by a fine not to exceed two thousand five hundred dollars (\$2,500) or by imprisonment in the City jail for a period not to exceed six (6) months, or by both such fine and imprisonment.

Separate Offense: Each day any violation is continued or the failure to perform any act or duty required by this section shall constitute a separate violation or offense.

114.5 Illegal building. Every building or portion thereof or electrical, plumbing, mechanical, or fuel gas system constructed without a building permit where required by this code, shall be made to conform to the provisions of this code and the Technical Codes or shall be demolished.

SEC. 8-115 STOP WORK ORDER

- **115.1 Stop Work Orders.** Whenever the building official finds any work regulated by this code or the Technical Codes being performed in a manner either contrary to the provisions of this code or the Technical Codes or is dangerous or unsafe, the building official is authorized to issue a stop work order.
- **115.2 Issuance.** The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.
- **115.3 Unlawful continuance.** Any person who shall continue any work 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 penalties as prescribed by this code and the law.
- **115.3.1 Appeals.** Any person aggrieved by a stop work order issued by the building official may appeal such stop work order to the Technical Code Advisory Board of Appeals in accordance with the requirements of this code.
- 115.4 Occupancy violations. When a building or structure or electrical, plumbing, mechanical, or fuel gas systems therein regulated by this code and the Technical Codes is being used contrary to the provisions of such codes, the building official may order such use discontinued by written notice served on any person causing such use to be continued. Such person shall, after receipt of notice, discontinue the use within the time prescribed by the building official and make the building, structure, electrical, plumbing, mechanical, or fuel gas systems or portions thereof, comply with the requirements of such codes.

SEC. 8-116 UNSAFE STRUCTURES AND EQUIPMENT

- 116.1 General. Structures or building service equipment that are or hereafter become structurally unsafe, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or that constitute a fire hazard, or are otherwise dangerous to human life or which in relation to existing use constitutes a hazard to safety or health, or public welfare, that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in this section. A vacant structure that is not secured against entry shall be deemed an unsafe condition. All such unsafe buildings are hereby declared to be public nuisances and shall be abated by repair, rehabilitation, demolition or removal in accordance with the procedure specified in this section.
- **116.1.1 Unsafe buildings appendages.** Parapet walls, cornices, spires, towers, tanks, statuary and other appendages or structural members which are supported by, attached to, or a part of a building and which are in a deteriorated condition or are otherwise unable to sustain the design loads which are specified in this code, are hereby designated as unsafe building appendages. All such unsafe building appendages are public nuisances and shall be abated in accordance with this section.

- **116.2 Record.** The building official shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.
- 116.3 Notice. The building official shall examine or cause to be examined every building or structure or portion thereof reported as dangerous or damaged and, if found to be an unsafe building as defined in this section, the building official shall serve on the owner, agent or person in control of the building or structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the building official acceptance or rejection of the terms of the order. This notice may require the owner, agent or person in control of the building, within 48 hours, to commence either the required repairs or improvements or demolition and removal of the building or structure or portions thereof, and all such work shall be completed within 90 days from the date of notice, unless otherwise stipulated by the building official. If necessary, such notice shall also require the building, structure or portion thereof to be vacated forthwith and not reoccupied until the required repairs and improvements are completed, inspected, and approved by the building official.
- **116.3.1 Posting of signs.** The building official shall post at each entrance of such building, a notice to read: DO NOT ENTER UNSAFE TO OCCUPY by order of the Community Development Department, City of Tempe. Such notice shall remain posted until the required repairs, demolition or removal are completed. Such notice shall not be removed without written permission of the building official and no person shall enter the building except for the purpose of making the required repairs or of demolishing the building.
- 116.4 Method of service. Proper service of such notice shall be by one of the following methods; personal service upon the owner of record, if found within the city limits; sent by first class mail, postage paid, addressed to the owner, occupant, agent, manager or responsible person at the last known address; delivered in any manner permitted by the Arizona Rules of Civil Procedure for service of process or posted in a conspicuous place on or about the entrance of the structure affected by such notice. Service by mail is deemed complete upon deposit in the U.S. mail. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner. The designated period within which said owner, agent or person in control of the structure is required to comply with the order of the building official shall begin as of the date such notice was mailed, received or posted.
- **116.5 Restoration.** The structure or building service equipment determined to be unsafe by the building official is permitted to be restored to a safe condition. To the extent repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with the requirements of this code and the Technical Codes.
- **116.6 Right to demolish.** In case the owner shall fail, neglect or refuse to comply with the notice to repair, rehabilitate, or to demolish and remove said building or structure or portion thereof, the City Council may order the owner of the building prosecuted as a violator of the provisions of this code and may order the building official to proceed with the work specified in such notice.

116.7 Costs. Costs incurred under this section shall be paid out of the city funds and shall be charged to the owner and collected by the Finance Division in the manner specified in Chapter 21, Tempe City Code.

SEC. 8-117 BUILDING ADDRESS, TENANT SUITE AND DWELLING UNIT NUMBER ASSIGNMENT

117.1 Scope. The provisions of this section shall serve as the requirements for the assignment of addresses, building identification letters, tenant suite and dwelling unit numbers for buildings within the City of Tempe.

117.2 Intent. The purpose of this section is to establish a consistent method of assigning building identification to aid fire fighters and other emergency responders, provide for efficient access to property records and information, ensure conformance to the standards of the U. S. Postal Service, and our utility companies.

117.3 General address assignments. The Community Development Department is responsible for the assignment of addresses and building identification letters. New developments will be initially processed under the address and or parcel number assigned for each undeveloped parcel. The Building Safety Division will subsequently assign the final address or addresses while the project plans are under review and before building permits are issued with each building being suited at the time of permit review of a shell building.

In addition, the Building Safety Division is responsible for the assignment of the individual tenant suite and dwelling unit numbers.

Once assigned, all building addresses, building identification letters, tenant suite and dwelling unit numbers shall be forwarded by the Community Development Department to the Maricopa County Assessor's Office, U.S. Postal Service, Tempe Police Department and Fire Medical Rescue Departments, and all utility companies.

The actual size, color, and field placement of addresses, tenant suite and dwelling unit numbers shall be as specified in the Tempe Zoning and Development code.

117.4 Tenant suite and dwelling unit numbers processing procedure. To initiate this process the project must submit a separate site plan including the building layouts to the Building Safety Division for tenant suite and dwelling unit number assignment. This submittal shall consist of a properly scaled site plan depicting the site, building layouts, parking lots, building orientations, driveway locations, building exits, elevators, lobbies, and corridors. Proposed tenant layout plans may also be submitted with the required site plan to assist in the proper assignment of suite numbers.

Paper copy submittals shall consist of two (2) copies of plan sheets, at least 24" x 36" in size, providing the same information as noted above.

All tenant suite and dwelling unit numbers shall be assigned prior to permit issuance for any tenant improvements.

117.5 Tenant suite and dwelling unit number assignments. All tenant suite and dwelling unit spaces within multi-occupant, multi-family and multi-family mixed use buildings shall be assigned individual tenant suite and dwelling unit numbers. Separate street addresses shall not be assigned to multiple tenants in a single building.

Exception: Existing buildings with tenant suite or individual address numbers that were approved prior to this current address policy except as noted in Section 117.7 of this code.

117.5.1 Tenant space layout. Retail and office buildings will be assigned a separate suite number for each 20-foot increment of space along the length of the building. Buildings that have tenant entrances on 2 or more sides will be assigned suite numbers on the entry sides of the building for each 20 foot increment of space. Reference lines will be drawn on the plan in to represent the 20 foot spacing. The reference lines shall determine the suite number a tenant improvement may use based on its proposed location within the building.

Exceptions:

- 1. Mixed use buildings such as office/warehouse and similar mixed uses may be divided into increments of up to 40 feet.
- 2. Apartments, condominiums, and hotels/motels will be assigned a unit number for each dwelling or sleeping unit.
- 3. Townhouses without the availability of individual addresses will be assigned a unit number for each unit.

The suite numbers assigned to these spaces represent the possible number of spaces that the building may be divided into and are not meant to represent the actual tenant space layouts.

If a proposed tenant improvement encompasses multiple spaces, the tenant may choose any suite number within the range of suite numbers that the space will occupy.

When a proposed tenant improvement that encompasses multiple spaces splits a space, the higher suite/unit number within the range may not be used by the tenant.

117.5.2 Numbering. Suite/unit numbers are assigned as three (3) digit numbers. The first digit in the suite number will represent the floor level of the suite/unit. Unit number are assigned as four (4) digit numbers for townhomes (without individual addresses), apartments and residential condominiums of nine (9) stories or less.

Exception: Four-digit suite/unit numbers will be used for multi-occupant floors above the 9th floor, including multifamily residential condominiums and apartments. Duplicate unit numbers will not be used within multifamily projects, even if the project has more than one address or street entry. Projects containing multiple street addresses (areas) and containing a letter designation for each building will have unit numbers assigned sequentially throughout the project. When numbering sequentially from one area to another, each new area will commence its numbering with the next 100 series left off from the previous area.

117.5.3 Exterior tenant entrances. For buildings with exterior tenant entrances, the suite numbering shall follow the addressing guidelines based on the orientation of the building and its location in relation to Mill Avenue and the Salt River.

117.5.4 Interior tenant entrances. For buildings with suites only accessed through interior entrances, the suite numbering starts with 101 on the left side of the main entrance of access and continues clockwise around the corridor.

For multiple floors, the suite numbering begins with the first suite on the left after exiting the elevator or main entry stairway for buildings with no elevator, and continuing clockwise around the corridor.

When buildings have multiple floors, the first suite shall start with '01 numbers, such as 201, and 301, applicable to each floor level and shall start in the same general location as required for the first suite (101) on the ground floor then continue clockwise sequentially around the corridor.

Exception: Single tenant spaces that occupy a complete floor level may be assigned the '00 number, such as 200 and 300, applicable to that floor level, provided that when the floor is occupied by two or more tenant spaces the numbers shall be reassigned to '01 numbering.

117.5.5 Basements. Basement suite/unit numbers shall be preceded with the letter B.

117.6 Non-conforming structures appeal process. Buildings and projects that cannot readily conform to these standards shall be reviewed on a case by case basis by a multi-disciplinary team made up an authorized member of the Police Department, Fire Medical Rescue Department, Community Development Department, and the U.S. Postal Service. Decisions rendered by this team may only be appealed through a formal application for a Code Modification and with input of the Community Development Department Director or their designee.

117.7 Existing buildings. Buildings not in conformity with the current address policy may continue to utilize existing suite numbering until such time that the building is:

- 1. At or below a 50% vacancy rate; and
- 2. When a tenant improvement is proposed.

Buildings not in conformity and with a proposed new tenant improvement after the building is at or below 50% vacancy rate shall be required to use the newly assigned suite numbers. The existing occupied suites will have twelve (12) months, from date of assignment, to conform to the newly assigned suite numbers. If a conflict in suite numbering exists because of re-suiting to the current policy, the building official or designee shall implement a suite numbering plan for the building which shall, as practicable, bring all suites into substantial compliance.

CITY OF TEMPE AMENDMENTS TO THE 2018 INTERNATIONAL BUILDING CODE ARTICLE II, SECTION 8-200 OF THE TEMPE CITY CODE

Sec. 8-200 Adopted; where filed; amendments.

That certain document known as "The International Building Code, 2018 Edition," which has been published as a code in book form by the International Code Council (ICC), chapters two through thirty-five and appendix chapters I, J and N inclusive, three (3) copies with amendments of which are on file in the office of the City Clerk, and this same code, appendices and amendments are hereby referred to, adopted and made a part hereof, as if fully set forth in this article.

(Ord. No. 2008.72, 12-11-08; Ord. No. 2011.33, 9-22-11; Ord. No. 2014.14, 3-20-14; Ord. No. O2015.12, 4-2-15)

Charter reference – Adoption by reference. §2.14.

State law reference - Adoption by reference. A.R.S. §9-801 et. seq.

SECTION 202 DEFINITIONS (remainder of existing list is unchanged)

Section 202 is hereby amended as follows:

Assisted living facility. A residential care institution, including adult foster care, that provides or contracts to provide supervisory care services, personal care services or directed care services on a continuing basis.

Assisted living home. An assisted living facility that provides resident rooms to 10 or fewer residents.

Directed care service. Care of residents, including personal care services, who are incapable of recognizing danger, summoning assistance, expressing need, or making basic care decisions.

Dressing room. A room in which changing clothes or dressing is an intended use, including but not limited to fitting rooms, locker rooms, and shower or bathing rooms where a separate room is not provided for dressing.

[BF] Fire Separation Distance. The distance measured from the building face to one of the following:

- 1. The closest interior lot line.
- 2. To the centerline of a street, an alley or public way.
- 3. To an imaginary line between two buildings on the lot.

The distance shall be measured at right angles from the face of the wall framing.

Fraternity and sorority houses. Any building used in whole or in part as a dwelling consisting of five or more dwelling units or sleeping rooms with more than fifty (50%) percent of the dwelling units or sleeping rooms occupied by and maintained exclusively or primarily for college, university or professional school students who are affiliated with a social, honorary or professional organization recognized currently or in the past by a college, university or professional school.

Parking facility. Any surface parking lot, open or enclosed parking garage whether detached or integral to a building or one or more groups of carport canopies located on one lot or an adjacent lot with a parking agreement.

Personal care service. The care of persons who do not require medical care. Personal care involves responsibility for the safety of the residents while inside the building or assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and administration of medications and treatments.

SECTION 306 FACTORY GROUP F

Section 306.2 is hereby amended as follows:

306.2 Moderate-hazard factory industrial, Group F-1. Factory industrial uses that are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following: (Use list unchanged except as noted below)

Food processing and commercial kitchens not associated with restaurants, fast food take-out, cafeterias and similar dining facilities.

Woodworking (cabinet) (establishments with more than 3 woodworking appliances.)

SECTION 308 INSTITUTIONAL GROUP I

Section 308.2 is hereby amended as follows:

308.2 Institutional Group I-1. Institutional Group I-1 occupancy shall include buildings, structures or portions thereof for more than 10 persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive personal care and or custodial care. Buildings of Group I-1 shall be classified as one of the occupancy conditions specified in Section 308.2.1 or 308.2.2 of this code. This group shall include, but not be limited to, the following:

Alcohol and Drug abuse treatment centers
Assisted living facilities
Assisted living home
Congregate care facilities
Group homes
Halfway houses
Residential board and custodial care facilities
Social rehabilitation facilities
Section 308.2.1 is hereby amended as follows:

308.2.1 Condition 1. This occupancy condition shall include buildings in which all persons receiving personal care and or custodial care who, without any assistance, are capable of responding to an emergency situation to complete building evacuation.

Section 308.2.2 is hereby amended as follows:

308.2.2 Condition 2. This occupancy condition shall include buildings in which all persons receiving personal care and or custodial care who require limited verbal or physical assistance while responding to an emergency situation to complete building evacuation.

Section 308.2.3 is hereby amended as follows:

308.2.3 Six to Ten persons receiving care. A facility housing not fewer than 6 and not more than 10 persons, excluding staff, shall be classified as a Group R-4 and shall comply with Section 429 of this code.

Section 308.2.4 is hereby amended as follows:

308.2.4 Five or fewer persons receiving care. A facility with 5 or fewer persons, excluding staff, shall be classified as Group R-3 and shall comply with the International Residential Code in accordance with Tempe Administrative Code, Section 101.

Section 308.3 is hereby amended as follows:

308.3 Institutional Group I-2. This occupancy shall include buildings and structures used for medical, custodial or directed care on a 24-hour basis for persons who are incapable of self-preservation. This group shall include, but not be limited to, the following:

Foster care facilities

Detoxification facilities

Hospitals

Nursing facilities (both intermediate-care facilities and skilled nursing facilities)

Psychiatric facilities

Section 308.3.2 is hereby repealed.

Section 308.5.4 is hereby amended as follows:

308.5.4 Four or fewer persons receiving care in a dwelling unit. A facility such as above within a dwelling unit and having four or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

SECTION 310 RESIDENTIAL GROUP R

Section 310.2 is hereby amended as follows:

310.2 Residential Group R-1. Residential Group R-1 occupancies containing sleeping units where

the occupants are primarily transient in nature, including:

Boarding houses (transient) with more than 10 occupants Congregate living facilities (transient) with more than 10 occupants Hotels (transient or non-transient) Motels (transient or non-transient)

Section 310.3 is hereby amended as follows:

310.3 Residential Group R-2. Residential Group R-2 occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

Apartment houses

Congregate living facilities (non-transient) with more than 10 occupants

Boarding houses (non-transient) with more than 10 occupants

Convents

Dormitories

Fraternities and sororities

Monasteries

Live/work units

Vacation timeshare properties

Section 310.4 is hereby amended as follows:

310.4 Residential Group R-3. Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4 or I including:

Buildings that do not contain more than two dwelling units as applicable in Tempe Administrative Code, Section 101.

Assisted living home that provides accommodation for 5 or fewer persons, of any age, receiving care.

Congregate living facilities (non-transient) with 5 or fewer guest rooms and 10 or fewer occupants.

Boarding houses (non-transient) with 5 or fewer guest rooms and 10 or fewer occupants.

Congregate living facilities (transient) with 5 or fewer guest rooms and 10 or fewer occupants.

Boarding houses (transient) with 5 or fewer guest rooms and 10 or fewer occupants.

Lodging houses (transient) with 5 or fewer guest rooms and 10 or fewer occupants

Section 310.4.1 is hereby amended as follows:

310.4.1 Assisted living home. Assisted living homes for 5 or fewer persons, excluding staff, receiving care that are within a single-family dwelling are permitted to comply with the International Residential Code in accordance with Tempe Administrative Code, Section 101.

Section 310.5 is hereby amended as follows:

310.5 Residential Group R-4. Residential Group R-4 occupancies shall include buildings, structures or portions thereof for more than five but not more than 10 occupants, excluding staff that reside on a 24-hour basis in a supervised residential environment and receive personal care and or custodial care. The persons receiving care are capable of self-preservation. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Assisted living home
Congregate care facilities
Convalescent facilities
Group homes
Halfway houses
Residential board and custodial care facilities
Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 except as otherwise provided for in Section 429 of this code.

Section 310.5.1 is hereby amended as follows:

310.5.1 Condition 1. This occupancy condition shall include buildings in which all persons receiving personal care and or custodial care who, without any assistance, are capable of responding to an emergency situation to complete building evacuation.

Section 310.5.2 is hereby amended as follows:

310.5.2 Condition 2. This occupancy condition shall include buildings in which all persons receiving personal care and or custodial care who require limited verbal or physical assistance while responding to an emergency situation to complete building evacuation.

SECTION 402 COVERED MALL AND OPEN MALL BUILDINGS

Section 402.5 is hereby amended as follows:

402.5 Automatic sprinkler system.

The Exception is hereby repealed.

SECTION 403 HIGH-RISE BUILDINGS

Section 403.3 is hereby amended as follows:

403.3 Automatic sprinkler system.

The Exceptions are hereby repealed.

SECTION 404 ATRIUMS

Section 404.3 is hereby amended as follows:

404.3 Automatic sprinkler protection.

The Exceptions are hereby amended to:

Exception: Where the ceiling of the atrium is more than 55 feet (16 764 mm) above the floor, sprinkler protection at the ceiling of the atrium is not required.

SECTION 406 MOTOR-VEHICLE-RELATED OCCUPANCIES

Section 406.3.4 is hereby added as follows:

406.3.4 Surface parking lot carport canopies. A surface parking lot carport canopy is a non-combustible structure comprised of a freestanding roof supported by columns and entirely open on all sides with no enclosures beneath the roof. The carport canopies shall be used exclusively for the solar protection of parked motor vehicles and shall not be used to shelter any other use or occupancy.

Section 406.3.4.1 is hereby added as follows:

406.3.4.1 Construction type and height. Carport canopies shall not exceed one-story in height, be constructed entirely of non-combustible materials and classified as a minimum Type IIB construction, except that the roof covering may be of a fabric material provided it has a flame-spread rating of not more than 25 when tested in accordance with ASTM E 84 or UL 723 or meets the fire propagation performance criteria of NFPA 701. Parking lot carport canopies shall be designed in accordance with the requirements of Chapter 16 of this code.

Exception: Photovoltaic modules may be placed on the roof of or serve as the roof membrane for a carport canopy.

Carport canopies shall have a clear height of not less than 7 feet (2134 mm). Accessible parking spaces are required under carport canopies and the clear height and number of spaces shall meet Tempe's accessibility requirements.

Section 406.3.4.2 is hereby added as follows:

406.3.4.2 Occupancy, Allowable area and Location on property. Carport canopies shall be classified as a Group U occupancy. The allowable area and location on property shall comply with Sections 406.3.4.2.1 and 406.3.4.2.2 of this code.

Section 406.3.4.2.1 is hereby added as follows:

406.3.4.2.1. Carport canopies may be a maximum of 5000 square feet in area provided:

- 1. The length does not exceed 125 feet or the width does not exceed 40 feet.
- 2. No portion of the canopy may be located any closer than 5 feet (1524 mm) to any building or property line.
- 3. A clear separation of not less than 5 feet (1524 mm) shall be maintained between other canopies on the same property. Parking lot carport canopies that cannot maintain the required separation between other canopies on the same property shall be considered as one canopy provided the combined canopies do not exceed the allowable area, length and/or width.
- 4. No canopy shall cover or encroach into any required fire lane or driving access aisle.
- 5. Carport canopies that meet all the requirements of this section may be located on the top tier of a parking garage. Carport canopies under this section may be located in any required yard without affecting any of the general building limitations of the Code provided the carport structure is no more than 50 feet (15240 mm) in length and a clear separation of 24 feet (7315 mm) is maintained between any other carport or property line.
- 6. The canopy shall comply with the Zoning and Development Code.

Section 406.3.4.2.2 is hereby added as follows:

406.3.4.2.2. Canopies where the roof membrane is comprised of photovoltaic modules may be a maximum of 30,000 square feet in area provided all of the following conditions are met:

- 1. The structure shall be comprised of steel or other non-combustible materials.
- 2. No portion of canopy shall be located closer than 30 feet (9144 mm) to any building or closer than 10 feet (3048 mm) to a property line.
- 3. A clear horizontal separation of not less than 20 feet (6096 mm) shall be maintained between any other canopy roof lines on the same property.
- 4. Canopies that cannot maintain the required separation between other canopies on the same property shall be considered as one canopy provided the combined canopies do not exceed the allowable area and meet all the conditions in this section.
- 5. A minimum clear height of 15 feet (4572 mm) above finished grade, where a vehicle may drive or park, shall be maintained to any horizontal structural frame, secondary member or diagonal bracing of the structure.
- 6. A minimum 8 inches (203 mm) of open space shall be provided between each row of photovoltaic modules.
- 7. No portion of the canopy may be located within any existing required yard used for building area increases.
- 8. The canopy shall comply with the Zoning and Development Code.

Section 406.3.4.3 is hereby added as follows:

406.3.4.3 Automatic sprinkler systems. Parking lot carport canopies constructed in accordance with all the requirements of this section shall be permitted without automatic sprinkler system protection.

Parking lot canopies which do not comply with all the provisions of this section shall be constructed in accordance with all the other provisions of this code.

SECTION 429 R-4 ASSISTED LIVING HOMES

Section 429 is hereby added as follows:

429.1 Applicability. The provisions of this section shall apply to a building or part thereof housing more than five but not more than 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides licensed care services.

Except as specifically required by the Building Safety Division, R-4 occupancies shall meet all applicable provisions of Group R-3.

429.2 General. Buildings or portions of buildings classified as R-4 occupancies shall meet all the applicable provisions of Group R-3, may be constructed of any materials allowed by this code, shall not exceed two stories in height and shall not exceed 7000 square feet per story.

429.3 Mixed Uses. R-4 occupancies shall be separated from other uses as provided in Table 508.4.

429.4 Accessibility. R-4 occupancies shall comply with ICC A117.1 Section 1002 as an Accessible dwelling unit.

Exception: Existing buildings shall comply with ICC A117.1 Section 1003 as a Type A dwelling unit.

429.5 Number of exits. Every story, basement, or portion thereof shall have not less than two exits.

Exception: Basements below and stories above the first floor containing no sleeping rooms may have one means of egress as provided in Chapter 10 of this code.

429.6 Distance to exits. Travel distance shall comply with Chapter 10 of this code, except that the maximum travel distance from the center point of any sleeping room to an exit shall not exceed 75 feet.

429.7 Exit Signs/Illumination. Required exit doors shall be provided with illuminated exit signs in accordance with Sections 1008 and 1013 of this code.

429.8 Emergency escape and rescue. R-4 occupancies shall comply with the egress requirements of Section 1030 of this code.

429.9 Delayed egress locks. In R-4 occupancies, delayed egress locks shall be permitted in

accordance with Section 1010.1.9.8 of this code.

429.10 Smoke alarms and Carbon monoxide alarms. All habitable rooms and hallways in R-4 occupancies shall be provided with smoke alarms and, when required, carbon monoxide alarms. The smoke and carbon monoxide alarms shall be installed in accordance with Section 907.10.2 and Section 915 of this code.

429.11 Sprinkler systems. R-4 occupancies shall be provided with a sprinkler system installed in accordance with Section 903.3.1.3 of this code. Sprinkler systems installed under this Section shall be installed throughout, including attached garages. Such systems may not contain unsupervised valves between the domestic water riser control valve and the sprinklers.

SECTION 502 GENERAL

Section 502.1 is hereby amended as follows:

502.1 Address identification. New buildings shall be provided with approved address identification in accordance with the Tempe Zoning and Development Code, Section 4-903 A and Tempe Administrative Code, Section 117. Existing buildings shall be provided with approved address identification as required when originally constructed. Where original approvals do not exist, existing buildings shall be provided with numbers where each character shall be a minimum of 4 inches (102 mm) in high and a minimum stroke width of 1/2 inch (12.7 mm). They shall be installed on a contrasting background and be plainly visible from the street or road fronting the property. Address numbers shall be maintained.

SECTION 509 INCIDENTAL USES

Section 509.4.2.1 is hereby repealed.

SECTION 603 COMBUSTIBLE MATERIAL IN TYPE I AND II CONSTRUCTION

Section 603.1.3 is hereby amended as follows:

603.1.3 Electrical. The use of electrical wiring methods with combustible insulation, tubing, raceways and related components shall be permitted when installed in accordance with the limitations of this code and the National Electrical Code.

[F] SECTION 903 AUTOMATIC SPRINKLER SYSTEMS

Section 903.2 is hereby amended as follows:

[F] 903.2 Where required. Approved automatic sprinkler systems in new buildings, structures, and other locations shall be provided in the locations described in sections 903.2.1 through 903.2.13 of this code.

Exceptions: Unless the use of the facility otherwise requires automatic fire sprinkler protection, fire sprinkler systems shall not be required for the following:

1. Spaces or areas in telecommunications buildings used exclusively for

telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 of this code and are separated from the remainder of the building by not less

than 1-hour fire barriers constructed in accordance with Section 707 or not less than 2-hour horizontal assemblies constructed in accordance with Section 712, or both.

- 2. Detached non-combustible parking lot carports in accordance with Section 406.3.4 of this code.
- 3. In other than H occupancies, detached non-residential buildings of 1,000 square feet or less in floor area.
- 4. Detached non-combustible canopies less than 5,000 square feet in roof area used exclusively for vehicle fuel dispensing stations provided the fire separation distance required by Table 602 of this code is maintained from property lines or other buildings.
- 5. Non-combustible (columns, beams and roof members) shade canopies less than 5,000 square feet; not closer than 5 feet to any building, property line or other shade canopy; and shading one of the following: vehicles for sale at a dealership, vehicle-washing or drying facilities, playground equipment, or outdoor eating areas without cooking.
- 6. Shade canopies less than 5000 square feet; not closer than 5 feet to any property line or other shade canopy; with a non-combustible frame and a roof membrane meeting the fire propagation performance criteria of NFPA 701 or has a flame spread index not greater than 25 when tested in accordance with ASTM E 84 or UL 723; shading one of the following: vehicles for sale at a dealership, vehicle-washing or drying facilities, playground equipment, outdoor eating areas without cooking or similar uses.
- 7. Combustible shade canopies less than 1,000 square feet; not closer than 10 feet to any building, property line or other shade canopy; and shading one of the following: vehicles for sale at a dealership, vehicle–washing or drying facilities, playground equipment, or outdoor eating areas without cooking.
- 8. Shipping containers used for non- hazardous storage purposes and not closer than 5 feet to any building, property line or other container.
- 9. Exterior roof overhangs or awnings of Type I, II or III construction with no combustible storage beneath.
- 10. Temporary covered walkways for the protection of pedestrians during construction, remodeling and demolition activities.
- 11. Factory built buildings utilized as temporary sales offices or construction offices.
- 12. Shade structures (attached or detached) located no closer than 5 feet to a property line, constructed of steel columns, beams and roof members where the roof shall be at least 55% open to the sky with roof members that are evenly spaced across the entire area of the structure.

Section 903.2.1 is hereby amended as follows:

[F]903.2.1 Group A. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A occupancies as provided in this section. Section 903.2.1.1 is hereby amended as follows:

[F]903.2.1.1 Group A-1. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A-1 occupancies.

Adopted by City of Tempe Ordinance No. O2018.59

Section 903.2.1.2 is hereby amended as follows:

[F]903.2.1.2 Group A-2. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A-2 occupancies.

Section 903.2.1.3 is hereby amended as follows:

[F]903.2.1.3 Group A-3. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A-3 occupancies.

Section 903.2.1.4 is hereby amended as follows:

[F]903.2.1.4 Group A-4. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A-4 occupancies.

Section 903.2.1.6 is hereby amended as follows:

[F]903.2.1.6 Assembly occupancies on roofs. Where an occupied roof has an assembly occupancy, all floors between the occupied roof and the level of exit discharge shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 of this code.

Exception: Is hereby repealed.

Section 903.2.2 is hereby amended as follows:

[F]903.2.2 Ambulatory care facilities. An automatic sprinkler system shall be installed throughout buildings and portions thereof used as an ambulatory care facility.

Section 903.2.2.1 is hereby amended as follows:

[F]903.2.2.1 Group B. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group B occupancies.

Section 903.2.3 is hereby amended as follows:

[F]903.2.3 Group E. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group E occupancies.

Section 903.2.4 is hereby amended as follows:

[F]903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings and portions thereof containing a Group F-1 occupancy.

Section 903.2.4.1 is hereby amended as follows:

[F]903.2.4.1 Woodworking operations. An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain woodworking operations which generate finely divided combustible waste or which use finely divided combustible materials.

Adopted by City of Tempe Ordinance No. O2018.59

Section 903.2.5.1 is hereby amended as follows:

[F]903.2.5.1 General. An automatic sprinkler system shall be installed throughout buildings and portions thereof used as Group H occupancies.

Section 903.2.5.2 is hereby amended as follows:

[F]903.2.5.2 Group H-5 occupancies. An automatic sprinkler system shall be installed throughout buildings and portions thereof containing Group H-5 occupancies. The design of the sprinkler system shall not be less than that required by this code for the occupancy hazard classifications in accordance with Table 903.2.5.2 of this code.

Where the design area of the sprinkler system consists of a corridor protected by one row of sprinklers, the maximum number of sprinklers required to be calculated is 13.

Section 903.2.5.3 is hereby amended as follows:

[F]903.2.5.3 Pyroxylin plastics. An automatic sprinkler system shall be provided throughout buildings, and portions thereof, where cellulose nitrate film or pyroxylin plastics are manufactured, stored or handled.

Section 903.2.6 is hereby amended as follows:

[F]903.2.6 Group I. An automatic sprinkler system shall be provided throughout buildings and portions thereof with a Group I fire area.

Section 903.2.7 is hereby amended as follows:

[F]903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings and portions thereof containing a Group M occupancy.

Section 903.2.8 is hereby amended as follows:

[F]903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 of this code shall be provided throughout all buildings and portions thereof with a Group R fire area.

Section 903.2.8.1 is hereby amended as follows:

[F]903.2.8.1 Group R-3. An automatic sprinkler system installed in accordance with Section

903.3.1.3 shall be installed in Group R-3 occupancies and their attached accessory occupancies.

Exceptions:

- 1. Group R-3 occupancies of 5,000 square feet or less and other occupancies, buildings or structures accessory to R-3 occupancies constructed using this code or the International Residential Code.
- 2. Individual Group R-3 townhouse units of 5,000 square feet or less and other occupancies accessory to R-3 townhouse when constructed and separated in compliance with the International Residential Code.

Section 903.2.8.2 is hereby amended as follows:

[F]903.2.8.2 Group R-4 Condition 1. An automatic sprinkler system installed in accordance with Section 903.3.1.3 of this code shall be installed in Group R-4 Condition 1 occupancies.

Section 903.2.8.3 is hereby amended as follows:

[F]903.2.8.3 Group R-4 Condition 2. An automatic sprinkler system installed in accordance with Section 903.3.1.2 of this code shall be installed in Group R-4 Condition 2 occupancies.

Section 903.2.8.4 is hereby repealed.

Section 903.2.9 is hereby amended as follows:

[F]903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings and portions thereof containing a Group S-1 occupancy.

Section 903.2.9.1 is hereby amended as follows:

[F]903.2.9.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings and portions thereof used as repair garages in accordance with Section 406.8 of this code.

Section 903.2.10 is hereby amended as follows:

[F]903.2.10 Group S-2. An automatic sprinkler system shall be provided throughout buildings and portions thereof containing a Group S-2 occupancy.

Section 903.2.10.1 is hereby amended as follows:

[F]903.2.10.1 Commercial parking garages. An automatic sprinkler system shall be provided throughout buildings used for the storage or parking of any motor vehicle(s).

Section 903.2.11 is hereby amended as follows:

[F]903.2.11 Specific building areas, hazards, changes of occupancy and building additions. In all occupancies, an automatic sprinkler system shall be installed for building design, hazards, change of occupancies and building additions set forth in Sections 903.2.11.1 through 903.2.11.8 of this code.

Section 903.2.11.1 is hereby repealed. Section 903.2.11.1.1 is hereby repealed.

Section 903.2.11.1.2 is hereby repealed.

Section 903.2.11.1.3 is hereby repealed.

Section 903.2.11.3 is hereby repealed.

Section 903.2.11.7 is hereby added as follows:

[F]903.2.11.7 Fraternities and Sororities. Any building or portion thereof built or converted for use as a fraternity or sorority house as defined in Section 202 of this code, shall have an approved automatic sprinkler system installed in accordance with Section 903.3 of this code.

Section 903.2.11.8 is hereby added as follows:

[F]903.2.11.8 Occupancies which permit smoking. In buildings or portions thereof where the smoking of a lit pipe, cigar, cigarette, plant, herb or other form of smoking materials has been approved shall have an automatic sprinkler system installed in accordance with Section 903.3 of this code.

Section 903.2.11.9 is hereby added as follows:

[F]903.2.11.9 Additions. All additions to existing buildings or structures and all buildings or structures that are expanded by an addition(s) shall be provided with an automatic fire protection system complying with Section 903.3 of this code as applicable.

Exceptions:

- 1. An existing non-sprinklered building or structure and additions to such existing building, provided the occupancy of the existing building is not changed, the addition is the same occupancy, and the total area of all such additions to the building do not exceed 1000 square feet.
- 2. Additions to existing non-sprinklered Group R-3 occupancy or other buildings or structures accessory to R-3 occupancies where the addition area is 5000 square feet or less.

Section 903.2.11.10 is hereby added as follows:

[F]903.2.11.10 Change of occupancy. An automatic sprinkler system complying with Section 903.3 of this code shall be provided for an existing building or portion thereof undergoing a change of occupancy as follows, based upon the relative hazard levels indicated in Table 903.2.3 of this code:

1. When a change of occupancy is made to a higher level as shown in Table 903.2.11.10 of this code, the area or building shall be provided with an automatic fire sprinkler system.

- 2. When a change of occupancy is made within hazard level 1 as shown in Table 903.2.11.10 of this code, the area or building shall be provided with an automatic fire sprinkler system.
- 3. Any change of occupancy of a building or area of more than 5000 square feet shall be retrofitted with a fire sprinkler system.

Table 903.2.11.10 is hereby added as follows:

[F]TABLE 903.2.11.10 EXISTING BUILDING HAZARD LEVELS

Hazard Level	Building Occupancy Type
1 (highest)	H, I, R-1, R-2, R-4
2	A-2, A-5
3	A-1, A-3, A-4, E
4	B, F-1, M, S-1
5 (lowest)	F-2, S-2, U, R-3

Notes: Occupancies are as defined in this code.

When a change of occupancy of 5000 square feet or less is made to a lower hazard level or within a hazard level (except hazard level 1), as shown in Table 903.2.11.10 above, the building is not required to be provided with an automatic fire sprinkler system.

This section is not intended to indicate all instances or circumstances where fire sprinkler systems are required; refer to Chapter 9 of both this code and the Tempe Fire Code for other requirements.

Section 903.2.13 is hereby added as follows:

[F]903.2.13. New buildings with unknown occupancy type or hazard classification. In new buildings constructed with an interior ceiling/deck height exceeding twenty (20) feet and the occupancy or hazard classification is unknown, the minimum fire sprinkler design criteria shall be .495/2000 sq. ft.

Section 903.3.1.1.2 is hereby amended as follows:

[F]903.3.1.1.2 Bathrooms. In group R Occupancies, sprinklers shall not be omitted in bathrooms located within individual dwelling units or sleeping units.

Section 903.3.1.2 is hereby amended as follows:

[F]903.3.1.2 NFPA 13R sprinkler systems. Automatic sprinkler systems in group R occupancies up to and including four stories in height in buildings not exceeding 60 feet (18 288mm) in height above the lowest level of fire department vehicle access shall be permitted to be installed in accordance with NFPA13R provided there are no deletions of sprinklers in, bathrooms, closets (including those containing mechanical or electrical equipment), garages, carports, and accessible areas under interior stairs and landings used for storage or living purposes.

The number of stories of group R occupancies constructed in accordance with sections 510.2 and 510.4 of the International Building Code shall be measured from the horizontal assembly creating

separate buildings.

Section 903.3.1.2.1 is hereby amended as follows:

[F]903.3.1.2.1 Balconies and decks. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of dwelling units and sleeping units.

Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25 mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

Section 903.3.1.3 is hereby amended as follows:

[F]903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one and two-family dwellings; Group R-3; R-4, Condition 1 and 2; and individual townhouses shall be permitted to be installed throughout in accordance with NFPA 13D, provided there are no deletions of sprinklers in bathrooms, closets (including those containing mechanical or electrical equipment), foyers, garages, carports, and accessible areas under interior stairs and landings used for storage or living purposes.

SECTION 905 STANDPIPE SYSTEMS

Section 905.4 is hereby amended as follows:

905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations:

- 1. In every required stairway, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at an intermediate floor level landing between floors, unless otherwise approved by the fire code official.
- 2. On each side of the wall adjacent to the exit opening of a horizontal exit.
 - **Exception:** Where floor areas adjacent to a horizontal *exit* are reachable from exit *stairway* hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30480 mm) of hose, a hose connection shall not be required at the horizontal exit.
- 3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where floor areas adjacent to an exit passageway are reachable from exit stairway hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.

4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.

- 5. Where the roof has slope less than four units vertical in 12 units horizontal (33.3-percent slope), a hose connection shall be located to serve the roof or at the highest landing of a stairway with stair access to the roof provided in accordance with Section 1011.12 of this code and on the roof where stairways do not access the roof. An additional hose connection shall be provided at the top of the most hydraulically remote standpipe for testing purposes.
- 6. Where the most remote portion of a non-sprinklered floor or story is more than 100 feet (30 480 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 150 feet (45720 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in approved locations.

[F] SECTION 907 FIRE ALARM AND DETECTION SYSTEMS

Section 907.2.10.6 is hereby amended as follows:

[F]907.2.10.6 Power source. In new construction, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions:

- 1. Smoke alarms are not required to be equipped with battery backup where they are connected to an emergency electrical system that complies with Section 2702 of this code.
- 2. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure.
- 3. Where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, hard-wiring of smoke alarms in existing areas shall not be required unless there is an attic, crawl space or basement available which could provide access for hard wiring without the removal of interior finishes.

Section 907.2.10.6.1 is hereby amended as follows:

[F]907.2.10.6.1 Alterations, repairs and additions. When alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

Exceptions:

- 1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.
- 2. Repairs of plumbing or mechanical systems are exempt from the requirements of this section.

SECTION 915 CARBON MONOXIDE DETECTION

Section 915.4.1 is hereby amended as follows:

915.4.1 Power source. Carbon Monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source, and when primary power is interrupted shall be equipped with a battery backup. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions:

- 1. Carbon Monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power or where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure.
- 2. Carbon Monoxide alarms are not required to be equipped with battery backup where they are connected to an emergency electrical system that complies with Section 2702 of this code.
- 3. Where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, hard-wiring of smoke alarms in existing areas shall not be required unless there is an attic, crawl space or basement available which could provide access for hard wiring without the removal of interior finishes.

Section 915.4.1.1 is hereby amended as follows:

915.4.1.1 Alterations, repairs and additions. When alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with Carbon Monoxide alarms located as required for new dwellings.

Exceptions:

- 1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.
- 2. Repairs of plumbing or mechanical systems are exempt from the requirements of this section.

SECTION 918 EMERGENCY RESPONDER RADIO COVERAGE

Section 918.1 is hereby amended as follows:

918.1 General. Emergency responder radio coverage shall be provided in all new buildings in accordance with Tempe City Code Chapter 9, Article II, Section 9-21 and Tempe Fire Code, Sections 510 and 1103.2.

SECTION 1003 GENERAL MEANS OF EGRESS

Section 1003.5 is hereby amended as follows:

1003.5 Elevation change. Where changes in elevation of less than 12 inches (305 mm) exist in the means of egress, sloped surfaces shall be used. Where the slope is greater than one-unit vertical in 20 units horizontal (5-percent slope), ramps complying with Section 1012 shall be used. Where the difference in elevation is 6 inches (152 mm) or less, the ramp shall be equipped with either handrails or floor finish materials that contrast with adjacent floor finish materials.

Exceptions:

- 1. A single step with a maximum riser height of 7 inches (178 mm) is permitted for buildings with occupancies in Groups F, H, R-2, R-3, S and U at exterior doors not required to be accessible by Chapter 11 of this code, provided the door, other than an exterior storm or screen door, does not swing over the step.
- 2. No Change N/C
- 3. N/C

Throughout a story in a Group I-2 occupancy, any change in elevation in portions of the exit access that serve non-ambulatory persons shall be by means of a ramp or sloped walkway.

SECTION 1004 OCCUPANT LOAD

Table 1004.5 is hereby amended as follows:

TABLE 1004.5 MAXIMUM FLOOR AREA ALLOWANCE PER OCCUPANT

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR ^a
Skating rinks, swimming pools	
Rink and pool	50 gross ^b
Decks	15 gross

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2 .

- a. Floor area in square feet per occupant.
- b. The occupant load of Public pools of Class B, C and Aquatic Recreation Facilities shall be in accordance with Sections 403 and 608 of the International Swimming Pool and Spa Code.

The remainder of Table 1004.5 is unchanged.

SECTION 1007 EXIT AND EXIT ACCESS DOORWAYS

Section 1007.1.2 is hereby amended as follows:

1007.1.2 Three or more exits or exit access doorways. Where access to three or more exits is required, at least two exit doors or exit access doorways shall be arranged in accordance with the provisions of Section 1007.1.1 of this code. Additional required exit doors or exit access doorways shall be arranged a reasonable distance apart so that if one becomes block, the others will be available, but in no case, shall the distance between the additional exits be less than 30 feet (9144 mm).

SECTION 1010 DOORS, GATES AND TURNSTILES

Section 1010.1.5 is hereby amended as follows:

1010.1.5. Floor elevation. There shall be a floor or landing on each side of a door. Such floor or landing shall be at the same elevation on each side of the door. Landings shall be level except for exterior landings, which are permitted to have a slope not to exceed 0.25-unit vertical in twelve (12) units horizontal (2-percent slope).

Exceptions:

- 1. No Change N/C
 - 1.1. N/C
 - 1.2. N/C
- 2. Exterior doors as provided for in Section 1003.5, Exception 1 and Section 1022.2 of this code, which are not on an accessible route provided the door, other than an exterior storm or screen door, does not swing over the landing.
- 3. N/C
- 4. N/C
- 5. Exterior decks, patios or balconies that are part of Type B dwelling units, have impervious surfaces and that are not more than four (4) inches (102 mm) below the finished floor level of the adjacent interior space of the dwelling unit, provided the door, other than an exterior storm or screen door, does not swing over the landing.
- **6.** N/C

SECTION 1025 LUMINOUS EGRESS PATH MARKINGS

Section 1025.1 is hereby amended as follows:

1025.1 General. Approved luminous egress path markings delineating the exit path shall be provided in all high-rise buildings in accordance with this section.

Exception: Luminous egress path markings shall not be required on the level of exit discharge in lobbies that serve as part of the exit path in accordance with Section 1028.1, Exception 1 of this code.

SECTION 1102 COMPLIANCE

Section 1102.1 is hereby amended as follows:

1102.1. Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with this code, ICC A117.1, and Arizona Revised Statutes, Title 41, Chapter 9, Article 8, Public Accommodation and Services, The Arizonans with Disabilities Act, R 10-3-401 through R 10-3-404, which includes 28 CFR Part 35 and 28 CFR 36 and the ADA 2010 Standards for Accessible Design.

Where provisions may conflict between the different codes, the provision that provides the greatest degree of accessibility shall be used for any given building, facility or element.

SECTION 1107 DWELLING UNITS AND SLEEPING UNITS

Section 1107.2 is hereby amended as follows:

1107.2 Design. Dwelling units and sleeping units that are required to be Accessible units, Type A units, Type B units, Type C units or units with accessible communication features shall comply with the applicable portions of Chapter 11 of ICC A117.1. Units required to be Type A units are permitted to be designed and constructed as Accessible units. Units required to be Type B units are permitted to be designed and constructed as Accessible units or as Type A units. Section 1107.5 is hereby amended as follows:

1107.5 Group I. Accessible units, Type B units and units with accessible communication features shall be provided in Group I occupancies in accordance with Sections 1107.5.1 through 1107.5.5 of this code.

Section 1107.5.1 is hereby amended as follows:

1107.5.1 Group I-1. Accessible units, Type B units and units with accessible communication features shall be provided in Group I-1 occupancies in accordance with Sections 1107.5.1.1 and 1107.5.1.2 of this code.

Section 1107.5.1.1 is hereby amended as follows:

1107.5.1.1 Accessible units. At least 4 percent, but not less than one, of the dwelling units and sleeping units shall be Accessible units. All Accessible units dwelling units and sleeping units shall be provided with accessible communication features.

Exception: The installation of communication features may be deferred until required for a specific tenant/patient provided every Accessible unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to install the required devices.

Section 1107.5.1.2 is hereby amended as follows:

1107.5.1.2 Type B units. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit. At least 10 percent, but not less than one, of the dwelling units and sleeping units shall be provided with accessible communication features.

Exceptions:

- 1. The number of Type B units is permitted to be reduced in accordance with Section 1107.7 of this code.
- 2. The installation of communication features may be deferred until required for a specific tenant/patient provided every Type B unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to install the required devices.

Section 1107.5.2 is hereby amended as follows:

1107.5.2 Group I-2 nursing homes. Accessible units, Type B units and units with accessible communication features shall be provided in nursing homes of Group I-2 occupancies in accordance with Sections 1107.5.2.1 and 1107.5.2.2 of this code.

Section 1107.5.2.1 is hereby amended as follows:

1107.5.2.1 Accessible units. At least 50 percent but not less than one of each type of the dwelling units and sleeping units shall be Accessible units. All Accessible units dwelling units and sleeping units shall be provided with accessible communication features.

Exception: The installation of communication features may be deferred until required for a specific tenant/patient provided every Accessible unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to install the required devices.

Section 1107.5.2.2 is hereby amended as follows:

1107.5.2.2 Type B units. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit. At least 10 percent, but not less than one, of the dwelling units and sleeping units shall be provided with accessible communication features.

Exceptions:

- 1. The number of Type B units is permitted to be reduced in accordance with Section 1107.7 of this code.
- 2. The installation of communication features may be deferred until required for a specific tenant/patient provided every Type B unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to install the required devices.

Section 1107.5.4 is hereby amended as follows:

1107.5.4 Group I-2 rehabilitation facilities. In hospitals and rehabilitation facilities of Group I-2 occupancies that specialize in treating conditions that affect mobility, or units within either that specialize in treating conditions that affect mobility, 100 percent of the dwelling units and sleeping units shall be Accessible units and 10 percent of the units shall be provided with accessible communication features.

Section 1107.6 is hereby amended as follows:

1107.6 Group R. Accessible units, Type A units and Type B units shall be provided in Group R occupancies in accordance with Sections 1107.6.1 through 1107.6.4 of this code.

Section 1107.6.1 is hereby amended as follows:

1107.6.1 Group R-1. Accessible units, Type B units and units with accessible communication features shall be provided in Group R-1 occupancies in accordance with Sections 1107.6.1.1 and 1107.6.1.2 of this code.

Section 1107.6.1.1 is hereby amended as follows:

1107.6.1.1 Accessible units. Accessible dwelling units and sleeping units shall be provided in

accordance with Table 1107.6.1.1 of this code. All Accessible units dwelling units and sleeping units shall be provided with accessible communication features. On a multiple-building site, where structures contain more than 50 dwelling units or sleeping units, the number Accessible units shall be determined per structure. On a multiple-building site, where structures contain 50 or fewer dwelling units or sleeping units, all dwelling units or sleeping units on site shall be considered to determine the total number of Accessible units. Accessible units shall be dispersed among the various classes of units.

Exception: The installation of communication features may be deferred until required for a specific tenant provided every Accessible unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to install the required devices.

Section 1107.6.1.2 is hereby amended as follows:

1107.6.1.2 Type B units. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit. At least 10 percent, but not less than one, of the dwelling units and sleeping units shall be provided with accessible communication features.

Exceptions:

- 1. The number of Type B units is permitted to be reduced in accordance with Section 1107.7 of this code.
- 2. The installation of communication features may be deferred until required for a specific tenant provided every Type B unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to install the required devices.

Section 1107.6.2 is hereby amended as follows:

1107.6.2 Group R-2. Accessible units, Type A units, Type B units and units with accessible communication features shall be provided in Group R-2 occupancies in accordance with Sections 1107.6.2.1 and 1107.6.2.3 of this code.

Section 1107.6.2.1 is hereby amended as follows:

1107.6.2.1 Live/Work units. In live/work units, constructed in accordance with Section 419 of this code, the non-residential portion is required to be accessible. In a structure where there are four or more live/work units, intended to be occupied as a residence, the residential portion of the live/work unit shall be a Type B unit. At least 10 percent, but not less than one, of the dwelling units and sleeping units shall be provided with accessible communication features.

Exceptions:

- 1. The number of Type B units is permitted to be reduced in accordance with Section 1107.7 of this code.
- 2. The installation of communication features may be deferred until required for a specific tenant provided every Type B unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to

install the required devices.

Section 1107.6.2.2 is hereby amended as follows:

1107.6.2.2 Apartment houses, monasteries and convents. Type A units, Type B units and units with accessible communication features shall be provided in apartment houses, monasteries and convents in accordance with Sections 1107.6.2.2.1 and 1107.6.2.2.2 of this code. Bedrooms in monasteries and convents shall be counted as units for the purposes of determining the number of units. Where the bedrooms are grouped in sleeping units, only one bedroom in each sleeping unit shall be counted toward the number of required Type A units.

Section 1107.6.2.2.1 is hereby amended as follows:

1107.6.2.2.1 Type A units. In Group R-2 occupancies containing more than 20 dwelling units or sleeping units, at least 2 percent but not less than one of the units shall be a Type A unit. All Type A dwelling units and sleeping units shall be provided with accessible communication features. All Group R-2 units on a site shall be considered to determine the total number of units and the required number of Type A units. Type A units shall be dispersed among the various classes of units.

Exceptions:

- 1. The number of Type A units is permitted to be reduced in accordance with Section 1107.7 of this code.
- 2. Existing structures on a site shall not contribute to the total number of units on a site.
- 3. The installation of communication features may be deferred until required for a specific tenant provided every Type A unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to install the required devices.

Section 1107.6.2.2.2 is hereby amended as follows:

1107.6.2.2.2 Type B units. Where there are four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit. At least 10 percent, but not less than one, of the dwelling units and sleeping units shall be provided with accessible communication features.

Exceptions:

- 1. The number of Type B units is permitted to be reduced in accordance with Section 1107.7 of this code.
- The installation of communication features may be deferred until required for a specific tenant provided every Type B unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to install the required devices.

Section 1107.6.2.3 is hereby amended as follows:

1107.6.2.3 Group R-2 other than apartment houses, monasteries and convents. In Group R-2 occupancies, other than live/work units, apartment houses, monasteries and convents falling within the scope of Sections 1107.6.2.1 and 1107.6.2.2 of this code, Accessible units, Type B units and

units with accessible communication features shall be provided in accordance with Sections 1107.6.2.3.1 and 1107.6.2.3.2 of this code. Bedrooms within congregate living facilities, dormitories, sororities, fraternities and boarding houses shall be counted as sleeping units for the purposes of determining the number of units. Where the bedrooms are grouped in dwelling or sleeping units, only one bedroom in each dwelling or sleeping unit shall be counted toward the number of required Accessible units.

Section 1107.6.2.3.1 is hereby amended as follows:

1107.6.2.3.1 Accessible units. Accessible dwelling units and sleeping units shall be provided in accordance with Table 1107.6.1.1 of this code. All Type A dwelling units and sleeping units shall be provided with accessible communication features.

Exception: The installation of communication features may be deferred until required for a specific tenant provided every Type B unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to install the required devices.

Section 1107.6.2.3.2 is hereby amended as follows:

1107.6.2.3.2 Type B units. Where there are four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and every sleeping unit intended to be occupied as a residence shall be a Type B unit. At least 10 percent, but not less than one, of the dwelling units and sleeping units shall be provided with accessible communication features.

Exceptions:

- 1. The number of Type B units is permitted to be reduced in accordance with Section 1107.7 of this code.
- 2. The installation of communication features may be deferred until required for a specific tenant provided every Type B unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to install the required devices.

Section 1107.6.3 is hereby amended as follows:

1107.6.3 Group R-3. In Group R-3 occupancies where there are four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit, and units with accessible communication features. At least 10 percent, but not less than one, of the dwelling units and sleeping units shall be provided with accessible communication features. Bedrooms within congregate living facilities, dormitories, sororities, fraternities and boarding houses shall be counted as sleeping units for the purposes of determining the number of units.

Exceptions:

- 1. The number of Type B units is permitted to be reduced in accordance with Section 1107.7 of this code.
- 2. The installation of communication features may be deferred until required for a

specific tenant provided every Type B unit has all the infrastructure of the communication systems installed so there is no removal of the building's finishes to install the required devices.

Section 1107.6.3.1 is hereby added as follows:

1107.6.3.1 Group R-3 Type C (Vistable) units. In all Group R-3 occupancies of one- and two-family dwellings and townhouses, each dwelling unit shall meet the requirements of a Type C unit in accordance with Section 1105 of the ICC A117.1.

Exception: A dwelling unit where the entrance level or first floor at grade level consists of a foyer, which is less than 70 square feet in area, or other non-habitable spaces, such as a garage or storage area, do not need to comply with this provision.

SECTION 1203 TEMPERATURE CONTROL

Section 1204.1 is hereby amended as follows:

1204.1 Equipment and systems. Habitable or occupiable spaces shall be provided with active or passive space-heating and space cooling systems capable of maintaining temperatures between 70°F (21°C) and 90°F (32°C) at a point 3 feet (914 mm) above the floor. The installation of portable space heaters or coolers shall not be used to achieve compliance with this section.

Exception: Space heating or cooling systems are not required for:

- 1. Interior spaces where the primary purpose of the space is not associated with human comfort
- 2. Group F, H, S or U occupancies.

SECTION 1603 CONSTRUCTION DOCUMENTS

Section 1603.1.10 is hereby added as follows:

1603.1.10 Floor design live loads posted. Where the live loads for which each floor or portion thereof of a commercial or industrial building is or has been designed to exceed 50 psf (2.40 kN/m2), such design live loads shall be conspicuously posted by the owner in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices. The construction documents shall show the proposed sign location and the maximum floor loads.

Section 1603.1.11 is hereby added as follows:

1603.1.11 Issuance of certificate of occupancy. A certificate of occupancy required by Section 107 shall not be issued until the floor load signs, required by Section 1603.1.10 of this code, have been installed.

Section 1603.1.12 is hereby added as follows:

1603.1.12 Restrictions on loading. It shall be unlawful to place, or cause or permit to be placed,

on any floor or roof of a building, structure or portion thereof, a load greater than is permitted by this code.

SECTION 1607 LIVE LOADS.

Table 1607.1 is hereby amended as follows:

Table 1607.1 MINIMUM UNIFORMLY DISTRIBUTED LOADS AND MINIMUM CONCENTRATED LIVE LOADS

Table 1607.1 is unchanged except for the following:

OCCUPANCY OR USE	UNIFORM (psf)	CONCENTRATED (lbs.)
25. Residential		-
One- and two-family dwellings		
Uninhabitable attics with limited storage i, j, k	40	
Habitable attics and sleeping areas		
	40	

SECTION 1612 FLOOD LOADS

Section 1612.3 is hereby amended as follows:

1612.3 Establishment of flood hazard areas. To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study for Maricopa County, Arizona and Incorporated Areas," dated July 19, 2001, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and

Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.

SECTION 1704 SPECIAL INSPECTIONS, CONTRACTOR RESPONSIBILITY AND OBSERVATIONS

Section 1704.1 is hereby amended as follows:

1704.1 General. This section provides minimum requirements for special inspections, the statement of special inspections, contractor responsibility and observations.

Section 1704.2 is hereby amended as follows:

1704.2 Special inspections and tests. Where application is made to the building official for construction as described in Section 105 of the Tempe Administrative Code, the owner or the owner's authorized agent, other than the contractor, shall employ one or more approved agencies to perform special inspections and tests during construction on the types of work specified in Section 1705 of this code and identify the approved agencies to the building official. These special inspections are in addition to the inspections by the building official that are identified in Section 110 of the Tempe Administrative Code.

Prior to the issuance of a permit, the registered design professional responsible for the observations shall provide a partially completed, parts A, B and C, Special Inspection Certificate (city form) to the building official.

The registered design professional responsible for the observations or the designated special inspector, shall periodically visit the site during the course of construction requiring the observations as set forth in the statement of special inspections.

Upon completion of the work requiring observations, a completed Special Inspection Certificate (city form) shall be provided to the building official under the seal and signature of the registered design professional responsible for the observations. A final inspection will not be approved or a Certificate of Occupancy will not be issued until the special inspection certificate is received by the building official.

Exceptions:

- 1. No Change N/C
- 2. N/C
- 3. N/C
- 4. N/C

Section 1704.5 is hereby amended as follows:

1704.5 Submittals to the building official. In addition to the submittal reports of special inspections and tests 1704.2.4 of this code, reports and certificates shall be submitted by the owner or the owner's authorized agent to the building official for each of the following:

- 1. No Change N/C
- 2. N/C
- 3. N/C
- 4. N/C
- 5. N/C
- 6. N/C
- 7. N/C
- 8. Special Inspection Certificate for types of equipment or installations of electrical, mechanical, fuel gas or plumbing as require in Section 1705.12.6 of this code.

Section 1704.6.1 is hereby amended as follows:

1704.6.1 Structural observations for structures. Structural observations shall be provided for those structures where one or more of the following conditions exist:

- 1. No Change N/C
- 2. N/C
- 3. N/C
- 4. N/C
- 5. The height of the structure is greater than 75 feet (22,860 mm) above grade plane.
- 6. The structure is more than three stories above grade plans.
- 7. Post-tension concrete foundations.
- 8. Elevated post-tension concrete structures.
- 9. Prefabricated units and their connections when such units are utilized structurally in the lateral force-resisting systems of a structure.

Section 1704.7 is hereby added as follows:

1704.7 Electrical Observations. The owner or the owner's authorized agent, other than the contractor, shall employ the registered design professional responsible for the electrical design or one or more approved agencies designated by the registered design professional responsible for the electrical design to perform visual observations of complex electrical equipment and systems for general conformance to the approved plans and specification, including but not limited to, placement and interconnection of equipment and shall identify the approved agencies to the building official in accordance with Section 1704.2 of this code. Electrical observations shall be performed at significant stages of the construction when the installation is complete and ready for inspection. Electrical observations are in addition to and not in lieu of inspections required by Section 110 of the Tempe Administrative Code, as required by Section 1705.12.6 of this code, and shall be provided when one of the following conditions exist:

1. When such observation is specifically required by Section 1705.12.6 of this code or the building official.

Section 1704.8 is hereby added as follows:

1704.8 Mechanical Observations. The owner or the owner's authorized agent, other than the contractor, shall employ the registered design professional responsible for the mechanical design or one or more approved agencies designated by the registered design professional responsible for the mechanical design to perform visual observations of complex mechanical equipment and systems for general conformance to the approved plans and specification, including but not limited to, placement and interconnection of equipment and shall identify the approved agencies to the building official in accordance with Section 1704.2 of this code. Mechanical observations shall be performed at significant stages of the construction when the installation is complete and ready for inspection. Mechanical observations are in addition to and not in lieu of inspections required by Section 110 of the Tempe Administrative Code and Section 1705.12.6 of this code, and shall be provided when one of the following conditions exist:

1. When such observation is specifically required by Section 1705.12.6 of this code or the building official.

Section 1704.9 is hereby added as follows:

1704.9 Plumbing Observations. The owner or the owner's authorized agent, other than the contractor, shall employ the registered design professional responsible for the plumbing design or one or more approved agencies designated by the registered design professional responsible for the plumbing design to perform visual observations of complex plumbing equipment and systems for general conformance to the approved plans and specification, including but not limited to, placement and interconnection of equipment and shall identify the approved agencies to the building official in accordance with Section 1704.2 of this code. Plumbing observations shall be performed at significant stages of the construction when the installation is complete and ready for inspection. Plumbing observations are in addition to and not in lieu of inspections required by Section 110 of the Tempe Administrative Code and Section 1705.12.6 of this code, and shall be provided when one of the following conditions exist:

1. When such observation is specifically required Section 1705.12.6 of this code or by the building official.

Section 1704.10 is hereby added as follows:

1704.10 Fuel Gas Observations. The owner or the owner's authorized agent, other than the contractor, shall employ the registered design professional responsible for the fuel gas design or one or more approved agencies designated by the registered design professional responsible for the fuel gas design to perform visual observations of complex fuel gas equipment and systems for general conformance to the approved plans and specification, including but not limited to, placement and interconnection of equipment and shall identify the approved agencies to the building official in accordance with Section 1704.2. Fuel gas observations shall be performed at significant stages of the construction when the installation is complete and ready for inspection. Fuel gas observations are in addition to and not in lieu of inspections required by Section 110 of the Tempe Administrative Code and Section 1705.12.6 of this code, and shall be provided when one of the following conditions exist:

1. When such observation is specifically required by Section 1705.12.6 of this code or the building official.

SECTION 1705 REQUIRED SPECIAL INSPECTIONS AND TESTS

Section 1705.12.6 is hereby amended as follows:

1705.12.6 Electrical, Mechanical, Plumbing and Fuel Gas components. Periodic special inspection of electrical, mechanical, plumbing and fuel gas components shall be required for the following:

- 1. No Change N/C
- 2. N/C
- 3. N/C
- 4. N/C
- 5. N/C
- 6. N/C including 6.1 and 6.2

- 7. Ground-fault protection (GFP) performance tests for equipment with ground-fault protection.
- 8. Switch boards, panelboards, motor control centers and other equipment rated at 1,000 amperes or more or over 600 volts.
- 9. The installation or alteration of electrical systems over 600V.
- 10. Transformers rated 100 kVA or more, single-phase or 300 kVA or more three-phase.
- 11. Insulation integrity of conductors that supply equipment rated at 1,000 amperes or more, or over 600 volts.
- 12. Emergency and standby power systems, including switchboards, panelboards, distribution boards, transfer equipment, power source, conductors, fire pumps, exhaust and ventilation fans.
- 13. Selective Coordination This includes verification of the installation in accordance with the required selective coordination study.
- 14. The installation or alteration of that portion of a health care facility's electrical system which fall under the scope of Article 517 of the National Electrical Code, including such systems installed in facilities where outpatient surgical procedures are performed.
- 15. The installation or alteration of electrical systems within locations classified as hazardous by provisions of the National Electrical Code, except for gasoline dispensing installations and systems located within storage garages, repair garages or lubritorium's.
- 16. Duct smoke detectors for air distribution systems as required by the International Mechanical Code, Section 606.
- 17. Fire, fire/smoke, radiation and smoke damper operation for dampers required by International Mechanical Code, Section 607.
- 18. Installation of alternative grease duct enclosure systems including but not limited to grease duct-wrap or double wall grease duct systems, allowed under the International Mechanical Code, Sections 506.3.11,2 and 506.3.11.3.
- 19. The welding of grease duct joints, seams penetrations, and duct-to-hood joints required by International Mechanical Code, Section 506.3.2 and 506.3.2.2.
- 20. The required grease duct leakage test required by International Mechanical Code, Section 506.3.2.5.
- 21. Type I hood performance test and the capture and containment test required by the International Mechanical Code, Section 507.6 and 507.6.1.

Test and Balance report for air balance of ventilation systems installed in ambulatory care and I-2 occupancies designed and installed in accordance with ASHRAE 170 as required by International Mechanical Code, Section 407.1.

- 22. Hazardous exhaust systems install in accordance with International Mechanical Code, Section 510.
- 23. Smoke control systems in accordance with International Mechanical Code, Section 513
- 24. Alternative engineered design plumbing systems as allowed by the International Plumbing Code. Section 316.
- 25. Medical gas and vacuum systems as allowed by the International Plumbing Code, Section 1202.
- 26. Non-medical oxygen systems as allowed by the International Plumbing Code, Section 1203
- 27. Non-potable water systems as allowed by the International Plumbing Code, Chapters 13 and 14.
- 28. Computer designed drainage and vacuum drainage systems as allowed by the International Plumbing Code, Sections 713 and 715.
- 29. Liquefied petroleum gas motor vehicle fuel-dispensing facilities as allowed by the International Fuel Gas Code, Section 412.
- 30. Compressed natural gas motor vehicle fuel-dispensing facilities as allowed by the International Fuel Gas Code, Section 413.
- 31. Gaseous hydrogen systems as allowed by the International Fuel Gas Code, Chapter 7.
- 32. Special cases Work which, in the opinion of the building official, involves unusual hazards or conditions.

SECTION 1907 MINIMUM SLAB PROVISIONS

Section 1907.2 is hereby added as follows:

1907.2 Post-tension slabs on ground. All post-tension slabs on ground shall be permanently stamped, marked or otherwise identified in a conspicuous location indicating the slab is a post-tension slab. Conspicuous locations include, but are not limited to, entrance porches, slabs at garage doors or patio slabs.

SECTION 2902 MINIMUM PLUMBING FACILITIES

Table 2902.1 is hereby amended as follows:

TABLE 2902.1 MINIMUM NUMBER OF REQUIRED PLUMBING FACILITIES ^a (See Sections 2902.2 and 2902.3)

Table is unchanged except as noted below

No.	CLASSIFICATION		WATER (SEE SECOF INTERNA PLUMBIN CODEFOLURINALS	NG R	2		BATHTUBS OR SHOWERS	DRINKING FOUNTAINS ^{f,g,h} (SEE SECTION 410.1 OF THE INTERNATIONA L PLUMBING CODE)	OTHER e.j
			MALE	FEMALE	MALE	FEMALE			
1	Assembly d, i	N/C - All	N/C - All	N/C - All	N/C - All		_	N/C - All	1 service sink
2	Business (see Sections 2902.2, 2902.4, 2902.4.1 and 2902.6)		1 per 25 fo 50 and 1 premainder	per 50 for the	1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80		_	Where Separate Facilities are required by Section 2902.2 1 per 100	1 service sink
6	Mercantile (see Section 2902.2, 2902.5 and 2902.6)	Retail stores, service stations, shops, salesrooms, markets and shopping centers			1 per 750		_	Where Separate Facilities are required by Section 2902.2 1 per 1,000	1 service sink

- a. No Change N/C
- b. N/C
- c. N/C
- d. N/C
- e. For business and mercantile occupancies with an occupant load of 30 or fewer, service sinks shall not be required.
- f. N/C
- g. In other than I-1 Residential care, I-3 Reformatories, detention centers and correctional centers, I-4 Adult day care and child care, R-2 Dormitories, fraternities, sororities and boarding houses, R-3 Congregate living facilities with 16 or fewer persons, and R-4 Residential care/assisted living facilities, drinking fountains are not required for an occupant load of 30 or fewer.
- h. Drinking fountains will not be required in individual tenant spaces or single tenant buildings of Group B, F-1, F-2, S-1 or S-2 occupancies where an accessible break room sink is provided within the tenant space or building.
- i. Occupancies that provide food and/or beverage service to patrons do not need to provide drinking fountains.
- j. Where each tenant space has full access to a centrally located service sink on the floor it occupies, individual tenant service sinks will not be required.

Section 2902.2 is hereby amended as follows:

2902.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exception:

- 1. No Change N/C
- 2. In other than I-1, I-3, I-4, R-2, R-3 and R-4 occupancies, separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 30 or fewer.
- 3. N/C
- 4. Is hereby repealed.

Section 2902.3.2 is hereby amended as follows:

2902.3.2 Location of toilet facilities in occupancies other than mall buildings. In occupancies other than covered and open mall buildings, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities and the path of travel to such facilities shall not exceed a distance of 500 feet (152,400 mm). The required public and employee toilet facilities may not be located in a building under different ownership or in a tenant space under the control of a different tenant.

Exception: The location and maximum travel distance to required employee facilities in factory and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum travel distance are approved.

SECTION 3102 MEMBRANE STRUCTURES

Section 3102.6 is hereby amended as follows:

3102.6 Mixed construction. Membrane structures shall be permitted to be utilized as specified in this section as a portion of buildings of other types of construction. Height and area limits shall be as specified for the type of construction and occupancy of the building.

Exception: A membrane structure attached or detached at the exterior of a building may be considered as a portion of buildings of other types of construction provided the construction type as classified in Section 3102.3 of this code is either non-combustible (IIB) or Heavy timber (IV) and the height and area limits shall be as specified for the type of construction and occupancy of the building.

SECTION 3103 TEMPORARY STRUCTURES

Section 3103.1.2 is hereby amended as follows:

3103.1.2 Permit required. Temporary structures that cover an area greater than 400 square feet (18.58 m2), including connecting areas or spaces with a common means of egress or entrance which are used or intended to be used for the gathering together of 50 or more persons, shall not

be erected, operated or maintained for any purpose without obtaining a permit from the building official.

SECTION 3107. SIGNS.

Section 3107.1 is hereby amended as follows:

3107.1 General. Signs shall be permitted, designed, constructed and maintained in accordance with the City of Tempe Zoning and Development Code.

CITY OF TEMPE AMENDMENTS TO THE 2018 INTERNATIONAL EXISTING BUILDING CODE ARTICLE IV, SECTION 8-400 OF THE TEMPE CITY CODE

Sec. 8-400 Adopted; where filed; amendments.

That certain document known as "The International Existing Building Code, 2018 Edition," which has been published as a code in book form by the International Code Council (ICC), chapters two through sixteen and appendix chapters A, A1 through A5 and B, three (3) copies with amendments of which are on file in the office of the City Clerk, and this same code, appendices and amendments are hereby referred to, adopted and made a part hereof, as if fully set forth in this article.

(Ord. No. 2011.33, 9-22-11; Ord. No. O2015.12, 4-2-15)

Charter reference – Adoption by reference. §2.14.

State law reference - Adoption by reference. A.R.S. §9-801 et. seq.

SECTION 301 ADMINISTRATION

Section 301.5 is hereby amended as follows:

301.5 Compliance with accessibility. Accessibility requirements for existing buildings shall comply with Chapter 11 of the International Building Code as amended and the provisions of Sections 305.1 through 305.9.4 of this code.

SECTION 1101 GENERAL

Section 1101.1 is hereby amended as follows:

1101.1 Scope. An addition to a building or structure shall comply with the Technical Codes as amended and other standards as adopted for new construction, without requiring the existing building or structure to comply with any requirements of those codes or of these provisions, except as required by Chapter 11 of the International Building Code. Where an addition impacts the existing building or structure, that portion shall comply with this code.

Exception: In flood hazard areas, the existing building is subject to the requirements of Tempe City Code, Chapter 12 and applicable provisions of Section 1103.3 of this code.

All additions to existing buildings or structures and all buildings or structures that are expanded by an addition(s) shall be provided with an automatic fire protection system complying with the International Building Code Section 903.2 as applicable.

Exception: An existing non-sprinklered building or structure and additions to such existing building, provided the occupancy of the existing building is not changed, the addition is the same occupancy, and the total area of all such additions to the building do not exceed 1000 square feet.

SECTION 1301 GENERAL

Section 1301.2 is hereby amended as follows:

1301.2 Applicability. Structures existing prior to the date of the first certificate of occupancy for the building or portion thereof, in which there is work involving additions, alterations, or changes of occupancy shall be made to conform to the requirements of this chapter or the provisions of Chapters 5 through 13. The provisions of Sections 1301.2.1 through 1301.2.5 of this code shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, M, R, and S. These provisions shall not apply to buildings with occupancies in Group H, Group I-1, I-3 or I-4.

Section 1301.3.1 is hereby amended as follows:

1301.3.1 Hazards. Where the code official determines that an unsafe condition exists as provided for in the Tempe Administrative Code, such unsafe condition shall be abated in accordance with the Tempe Administrative Code.

SECTION 1401 GENERAL

Section 1401.2 is hereby amended as follows:

1401.2 Conformance. The building shall be safe for human occupancy as determined by the International Fire Code and the International Building Code as amended and applicable. Any repair, alteration, or change of occupancy undertaken within the moved structure shall comply with the requirements of this code applicable to the work being performed. Any field-fabricated elements shall comply with the requirements of the International Building Code or the International Residential Code as amended and applicable.

SECTION 1507 AUTOMATIC SPRINKLER SYSTEM

Section 1507.1 is hereby amended as follows:

1507.1 Completion before occupancy. In portions of a building where an automatic sprinkler system is required by this code or the International Building Code as amended, it shall be unlawful to occupy those portions of the building until the automatic sprinkler system installation has been tested and approved, except as provided in the Tempe Administrative Code.

SECTION A202 SCOPE

Section A202.1 is hereby amended as follows:

A202.1 Scope. The provisions of this chapter shall apply to wall anchorage systems that resist out-of-plane forces and to collectors in existing reinforced concrete or reinforced masonry buildings with flexible diaphragms. Wall anchorage systems that were designed and constructed in accordance with the 2003 or subsequent editions of the International Building Code shall be deemed to comply with these provisions.

CITY OF TEMPEAMENDMENTS TO THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE ARTICLE IX, SECTION 8-900 OF THE TEMPE CITY CODE

Sec. 8-900. Adopted; where filed; amendments.

That certain document known as the "International Energy Conservation Code, 2018 Edition," which has been published as a code in book form by the International Code Council (ICC), chapters two through six and appendix chapter CA for commercial provisions, and chapters two through six and appendix chapter RA for residential provisions, three (3) copies with amendments of which are on file in the office of the City Clerk, and this same code, and amendments are hereby referred to, adopted and made a part hereof, as if fully set forth in this article.

(Ord. No. 2011.33, 9-22-11; Ord. No. O2015.12, 4-2-15)

Charter reference – Adoption by reference. §2.14.

State law reference - Adoption by reference. A.R.S. §9-801 et. seq.

SECTION C202 GENERAL DEFINITIONS

Section C202 is hereby amended as follows:

RESIDENTIAL BUILDING. For this code, includes detached one-and two-family dwellings, multiple single-family dwellings (townhouses), Group R-3 and R-4 buildings three stories or less in height above grade plane and Group R-2 buildings six stories or less in height above grade and where each dwelling unit has individual heating, cooling and hot water systems.

SECTION C401.1 GENERAL

Section C401.1 is hereby amended as follows:

C401.1 Scope. The requirements contained in this chapter are applicable to commercial buildings, portions of commercial buildings and their building sites.

- 1. Lighting and their controls, that are required by the City of Tempe, Zoning and Development Code, are not regulated by this code.
- 2. Building mechanical systems and equipment serving individual rooms heating, cooling or ventilating needs for elevator control equipment, machinery rooms, fire pump rooms or similar essential building systems, emergency systems, equipment or apparatus.
- 3. Evaporative coolers are not covered by this code.

SECTION C404 SERVICE WATER HEATING (Mandatory)

Section C404.9.3 is hereby amended as follows:

C404.9.3 Covers. Outdoor heated pools and outdoor permanent spas shall be provided with a vapor-retardant cover or other approved vapor-retardant means.

Exceptions:

- 1. Where more than 75 percent of the energy for heating, computed over an operating season of not less than 3 calendar months, is from a heat pump or an on-site renewal energy system, covers or other vapor-retardant means shall not be required.
- 2. Where pools are equipped with pump motors with a total of one or more horsepower, the motors shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds then no cover or other vapor-retardant means shall not be required. Commercial pool pump motor controls that are sold for use with a two or more-speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high- speed override capability shall be for a temporary period not to exceed one twenty-four-hour cycle without resetting to the default setting.

SECTION R202 GENERAL DEFINITIONS

Section R202 is hereby amended as follows:

Residential building. For this code, includes detached one-and two-family dwellings, multiple single-family dwellings (townhouses), Group R-3 and R-4 buildings three stories or less in height above grade plane and Group R-2 buildings six stories or less in height above grade and where each dwelling unit has individual heating, cooling and hot water systems.

SECTION R401 GENERAL.

Section R401.1 is hereby amended as follows:

R401.1 Scope. This chapter applies to residential buildings.

- 1. Lighting and their controls, that are required by the City of Tempe Zoning and Development Code, are not regulated by this code.
- 2. Building mechanical systems and equipment serving individual rooms heating, cooling or ventilating needs for elevator control equipment, machinery rooms, fire pump rooms or similar essential building systems, emergency systems, equipment or apparatus.
- 3. Evaporative coolers are not covered by this code.

Section R401.2 is hereby amended as follows:

R401.2 Compliance. Projects shall comply with one of the following:

- 1. Sections R401 through R404 of this code.
- 2. Section R405 of this code and the provisions of Sections R401 through R404 of this code indicated as "Mandatory."
- 3. The energy rating index (ERI) approach in Section R406 of this code.
- 4. As an alternative, additions, alterations, remodels, and repairs may comply with the Building Safety Division's standard energy conservation details.

SECTION R402 BUILDING THERMAL ENVELOPE

Section R402.1 is hereby amended as follows:

R402.1 General (Prescriptive). The building thermal envelope shall meet the requirements of Sections R402.1.1 through R402.1.4 of this code.

- 1. The following low-energy buildings or portions thereof, separated from the remainder of the building by building envelope assemblies complying with this section shall be exempt from the building thermal envelope provisions of Section 1102 of this code.
 - 1.1 Those with a peak design rate of energy usage less than 3.4 Btu/h ft² (10.7 W/m²) or 1.0 watt/ ft² of floor area for space-conditioning purposes.
 - 1.2 Those that do not contain conditioned space.
- 2. Log homes designed in accordance with ICC 400.
- 3. In residential buildings as defined by this code, the Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards Protocol for third party testing and inspections, shall be deemed to meet the requirements of Sections R402.4.1, R402.4.1.2 and R403.3.3 of this code, and shall meet the following conditions:
 - 3.1 Third Party Testing and Inspections shall be completed by RESNET certified Raters or Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field Review procedures.
 - 3.2 Sampling in accordance with Chapter 6 of the RESNET Standards shall be performed by Raters or Rating Field Inspectors working under a RESNET Accredited Sampling Provider.
 - 3.3 Third Party Testing is required for the following items:
 - a. R402.4.1 –Building Envelope Thermal and Air Barrier Checklist
 - b. R402.4.1.2 Testing Air Leakage Rate
 - c. R403.3 Sealing Duct Tightness
 - 3.4 The other requirements identified as "mandatory" in IECC Chapter 4 RE shall be met.
 - 3.5 Alternate testing and inspection programs and protocols may be allowed when approved by the building official in accordance with the Tempe Administrative Code, Section 104.

SECTION R403 SYSTEMS (Mandatory)

Section R403.2.1 is hereby amended as follows:

R403.2.1 Insulation. Supply ducts shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum of R-6.

Exceptions:

- 1. Ducts or portions thereof located completely inside the building thermal envelope.
- 2. Supply and return ducts may be insulated to a minimum of R-6 when one or more of the following conditions are met:
 - 2.1 Minimum SEER rating of space heating/cooling system is 14 or better.
 - 2.2 Maximum U-factor is 0.35 and maximum SHGC is 0.22 for all fenestration products.
 - 2.3 Roof/ceiling insulation minimum R-value is R-49.
 - 2.4 Wall insulation minimum R-value is R-19.
 - 2.5 Residential buildings that meet the requirements of Section R402.1 or R405 of this code.
 - 2.6 Residential buildings with unvented attic and unvented enclosed rafter assemblies in accordance with Section R806.5 of the International Residential Code.

Section R403.9.3 is hereby amended as follows:

R403.9.3 Covers. Outdoor heated pools and outdoor permanent spas shall be provided with a vapor-retardant cover or other approved vapor-retardant means.

- 1. Where more than 75 percent of the energy for heating, computed over an operating season of not less than 3 calendar months, is from a heat pump or an on-site renewal energy system, covers or other vapor-retardant means shall not be required.
- 2. Where pools are equipped with pump motors with a total of one or more horsepower, the motors shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds then no cover or other vapor-retardant means shall not be required. Residential pool pump motor controls that are sold for use with a two or more-speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high- speed override capability shall be for a temporary period not to exceed one twenty-four-hour cycle without resetting to the default setting.

CITY OF TEMPE AMENDMENTS TO THE 2018 INTERNATIONAL FUEL GAS CODE ARTICLE VII, SECTION 8-700 OF THE TEMPE CITY CODE

Sec. 8-700. Adopted; where filed; amendments.

That certain document known as "The International Fuel Gas Code, 2018 Edition," which has been published as a code in book form by the International Code Council (ICC), chapters two through eight and appendix chapters A, B, and C inclusive, three (3) copies with amendments of which are on file in the office of the City Clerk, and this same code, appendices and amendments are hereby referred to, adopted and made a part hereof, as if fully set forth in this article.

(Ord. No. 2011.33, 9-22-11; Ord. No. O2015.12, 4-2-15)

Charter reference – Adoption by reference. §2.14.

State law reference - Adoption by reference. A.R.S. §9-801 et. seq.

SECTION 303 APPLIANCE LOCATION

Section 303.3 is hereby amended as follows:

303.3 Prohibited locations. Appliances shall not be located in sleeping rooms, bathrooms, toilet rooms, storage closets or surgical room, or in a space that opens only into such rooms or spaces, or any room operating under negative pressure unless the appliances are listed for that use except where the installation complies with one of the following:

- 1. No Change N/C
- 2. N/C
- 3. N/C
- 4. N/C
- 5. N/C
- 6. N/C

Exception: The following appliances may be located in sleeping rooms, bathrooms and toilet rooms:

- Appliances installed in an enclosure in which all combustion air is taken from the outdoors and the enclosure is equipped with a solid weather-stripped door and selfclosing device.
- 2. Direct-vent appliances that obtain all combustion air directly from the outdoors.

Liquefied Petroleum (LPG) appliances shall not be installed in an attic, or other location that would cause ponding or retention of gas.

Section 303.7 is hereby amended as follows:

303.7 Pit locations. Appliances installed in pits or excavations shall not come in contact with the surrounding soil. The sides of the pit or excavation shall be held back a minimum of 12 inches (305 mm) from the appliance. Where the depth exceeds 12 inches (305 mm) below adjoining grade, the walls of the pit or excavation shall be lined with concrete or masonry, such concrete or masonry shall extend not less than 4 inches (102 mm) above to adjacent grade and shall have sufficient lateral load-bearing capacity to resist collapse. The appliance shall be protected from flooding in an approved manner. Liquefied petroleum (LPG) appliances shall not be installed in a pit, or other location that would cause a ponding or retention of gas.

SECTION 304 COMBUSTION, VENTILATION AND DILUTION AIR

Section 304.1 is hereby amended as follows:

304.1 General. Air for combustion, ventilation and dilution of flue gases for appliances installed in buildings shall be provided by application of one of the methods prescribed in Sections 304.5 through 304.9 of this code. Where the requirements of Section 304.5 of this code are not met, outdoor air shall be introduced in accordance with one of the methods prescribed in Sections 304.6 through 304.9 of this code. For LPG appliances, any duct serving the lower opening shall be at the floor level and slope to the outdoors without traps or pockets. Direct-vent appliances, gas appliances of other than Category I and appliances equipped with power burners shall be provided with combustion ventilation and dilution air in accordance with the appliance manufacturer's instructions.

Exception: Type 1 clothes dryers that are provided with makeup air in accordance with Section 614.6 of this code.

Section 304.1.1 is hereby added as follows:

304.1.1 Prohibited sources. Combustion air ducts and openings shall not connect appliance enclosures with space in which the operation of a fan may adversely affect the flow of combustion air. Combustion air shall not be obtained from an area in which flammable vapors present a hazard. Fuel-fired appliances shall not obtain combustion air from any of the following rooms or spaces:

- 1. Sleeping rooms.
- 2. Bathrooms.
- 3. Toilet rooms.

Section 304.11 is hereby amended as follows:

304.11 Combustion air ducts. Combustion air ducts shall comply with all of the following:

- 1. No Change N/C
- 2. N/C
- 3. N/C
- 4. N/C

- 5. N/C
- 6. N/C
- 7. N/C
- 8. N/C
- 9. For LPG appliances, any duct serving the lower opening shall be at the floor level and slope to the outdoors without traps or pockets.

SECTION 305 INSTALLATION

Section 305.3 is hereby amended as follows:

305.3 Elevation of ignition source. Equipment and appliances having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor in hazardous locations and public garages, private garages, repair garages, motor fuel-dispensing facilities and parking garages. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

Exceptions:

- 1. Elevation of the ignition source is not required for appliances that are listed as flammable vapor ignition resistant.
- 2. Direct-vent appliances that obtain all combustion air directly from the outdoors.
- 3. Electric clothes dryers installed in private garages.

Sec 311 FUEL GAS SPECIAL INSPECTIONS AND OBSERVATIONS

Section 311.1 is hereby added as follows:

311.1 Fuel Gas Observations. The owner or the owner's authorized agent, other than the contractor, shall employ the registered design professional responsible for the fuel gas design or one or more approved agencies designated by the registered design professional responsible for the fuel gas design to perform visual observations of complex fuel gas equipment and systems for general conformance to the approved plans and specification, including but not limited to, placement and interconnection of equipment and shall identify the approved agencies to the building official in accordance with Section 1704.2 of the International Building Code as amended. Fuel gas observations shall be performed at significant stages of the construction when the installation is complete and ready for inspection. Fuel gas observations are in addition to and not in lieu of inspections required by the Tempe Administrative Code, Section 110, and Section 1705.12.6 of the of the International Building Code, and shall be provided when one of the following conditions exist:

- 1. Liquefied petroleum gas motor vehicle fuel-dispensing facilities as allowed by Section 412 of this code.
- 2. Compressed natural gas motor vehicle fuel-dispensing facilities as allowed by Section 413 of this code.
- 3. Gaseous hydrogen systems as allowed by Chapter 7 of this code.
- 4. Special cases Work which, in the opinion of the building official, involves unusual hazards or conditions.

SECTION 404 PIPING SYSTEM INSTALLATION

Section 404.6.1 is hereby added as follows:

404.6.1 Underground piping. No gas piping shall be permitted under asphalt, concrete or other paved surface that adjoins any building or structure unless installed in a gas-tight conduit or other approved method of venting is provided.

The conduit shall be of wrought iron, plastic pipe, steel pipe or other approved conduit material. Metal conduit shall be protected from corrosion in accordance with Section 404.11 of this code. The interior diameter of the conduit shall be not less than one-half inch larger than the outside diameter of the gas pipe within. The conduit shall extend to a point not less than 12 inches (305 mm) beyond or 4 inches (102 mm) above the paved surface. The ends shall not be sealed.

Section 404.12 is hereby amended as follows:

404.12 Minimum burial depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping, and 18 inches (457 mm) below grade for plastic piping.

Section 404.12.1 is hereby repealed.

Section 404.17.1 is hereby amended as follows:

404.17.1 Limitations. Plastic pipe shall be installed outdoors underground only. Plastic pipe shall not be used within or under any building or slab or be operated at pressures greater than 100 psig (689 kPa) for natural gas or 30 psig (207 kPa) for LP-gas.

Exceptions:

- 1. No Change N/C
- 2. N/C
- 3. Plastic pipe shall be permitted under outdoor patio, walkway and driveway slabs provided that the burial depth complies with Section 404.6.1 and Section 404.12 of this code.

SECTION 406 INSPECTION, TESTING AND PURGING

Section 406.4.1 is hereby amended as follows:

406.4.1 Test pressure. The test pressure to be used shall be no less than ten (10) pounds per square inch (69 kPa) gauge pressure, or where approved by the building official, the piping and valves may be tested at a pressure of at least six (6) inches (152.4 mm) of mercury, measured with a manometer or slope gauge. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches (0.4 m) water column pressure, the test pressure shall be no less than sixty (60) pounds per square inch (413 kPa). Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe. Section 406.4.2 is hereby amended as follows:

406.4.2 Test duration. Test duration shall be not less than fifteen (15) minutes or for welded pipe and piping carrying gas at pressures in excess of fourteen (14) inches (0.4 m) water column pressure, the test duration shall be not less than thirty (30) minutes. The duration of the test shall not be required to exceed 24 hours.

Section 406.4.3 is hereby added as follows:

- 406.4.3 Test Gauges. Tests required by this code which are performed utilizing dial gauges shall be limited to gauges having the following pressure increments or graduations:
- 406.4.3.1. Tests requiring a pressure tests of ten (10) pounds (69 kPa) or less shall be performed with gauges having increments of one-tenth (1/10) pound (0.69 kPa) or less.
- 406.4.3.2. Tests requiring a pressure tests exceeding ten (10) pounds (69 kPa) but less than one hundred (100) pounds (690 kPa) shall be performed with gauges having increments of one pound (7 kPa) or less.
- 406.4.3.3. Tests requiring a pressure tests exceeding one hundred (100) pounds (690 kPa) shall be performed with gauges having increments 2 psi (14 kPa) or less.

Pressure tests required by this code, which are performed utilizing dial gauges, shall be limited to a gauge having a maximum gauge rating not exceeding twice the applied test pressure.

CITY OF TEMPE AMENDMENTS TO THE 2018 INTERNATIONAL MECHANICAL CODE ARTICLE V, SECTION 8-500 OF THE TEMPE CITY CODE

Sec 8-500 Adopted; where filed; amendments.

That Certain document known as "The International Mechanical Code, 2018 Edition," which has been published as a code in book form by the International Code Council (ICC), chapters two through nine and chapters eleven, twelve, fourteen, fifteen and appendix chapter A inclusive, three (3) copies with amendments of which are on file in the office of the City Clerk, and this same code, appendix and amendments are hereby referred to, adopted and made a part hereof, as if fully set forth in this article.

(Ord. No. 2011.33, 9-22-11; Ord. No. O2015.12, 4-2-15)

Charter reference – Adoption by reference. §2.14.

State law reference - Adoption by reference. A.R.S. §9-801 et. seq.

SECTION 202 GENERAL DEFINITIONS

Section 202 is hereby amended as follows:

Fireplace. Means a built-in-place masonry hearth and fire chamber or a factory built appliance, designed to burn solid fuel or to accommodate gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating, or industrial processes.

Smoke detector. An approved, listed and labeled device that senses visible or invisible particles of combustion.

Solid fuel. Means and includes, but is not limited to, wood, coal, or other nongaseous or non-liquid fuels, including those fuels defined by the Maricopa County Air Pollution Control Officer as "inappropriate fuel" to burn in residential wood burning devices.

Wood stove. Means a solid-fuel-burning heating appliance including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

SECTION 303 EQUIPMENT AND APPLIANCE LOCATION

Section 303.3 is hereby amended as follows:

303.3 Prohibited locations. Fuel-fired appliances shall not be located in, or obtain combustion air from, any of the following rooms or spaces:

- 1. Sleeping rooms.
- 2. Bathrooms.
- 3. Toilet rooms.

- 4. Storage closets.
- 5. Surgical rooms.
- 6. Any room operating under negative pressure unless the appliances are listed for that use.

Exceptions: This section shall not apply to the following appliances:

- 1. Direct-vent appliances that obtain all combustion air directly from the outdoors.
- 2. Solid fuel-fired appliances provided that the room is not a confined space and the building is not of unusually tight construction.
- 3. Appliances installed in a dedicated enclosure in which all combustion air is taken directly from the outdoors, in accordance with Chapter 7 of this code. Access to such enclosure shall be through a solid door, weather-stripped in accordance with the exterior door air leakage requirements of the International Energy Conservation Code and equipped with an approved self-closing device.

Section 303.7 is hereby amended as follows:

303.7 Pit locations. Appliances installed in pits or excavations shall not come in direct contact with the surrounding soil and shall be installed not less than 3 inches (76 mm) above the pit floor. The sides of the pit or excavation shall be held back not less than 12 inches (305 mm) from the appliance. Where the depth exceeds 12 inches (305 mm) below adjoining grade, the walls of the pit or excavation shall be lined with concrete or masonry. Such concrete or masonry shall extend not less than 4 inches (102 mm) above to adjoining grade and shall have sufficient lateral load-bearing capacity to resist collapse. Excavation on the control side of the appliance shall extend not less than 30 inches (762 mm) horizontally. The appliance shall be protected from flooding in an approved manner. Liquefied petroleum (LPG) appliances shall not be installed in a pit, attic or other location that would cause a ponding or retention of gas.

SECTION 304. INSTALLATION

Section 304.3 is hereby amended as follows:

304.3 Elevation of ignition source. Equipment and appliances having an ignition source and located in hazardous locations and public garages, private garages, repair garages, automotive motor fuel-dispensing facilities and parking garages shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor surface on which the equipment or appliance rests. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

Exceptions:

- 1. Elevation of the ignition source is not required for appliances that are listed as flammable vapor-ignition resistant.
- 2. Direct-vent appliances that obtain all combustion air directly from the outdoors.
- 3. Clothes dryers installed in private garages.

SECTION 309 TEMPERATURE CONTROL

Section 309.1 is hereby amended as follows:

309.1 Space heating and cooling systems. Interior spaces intended for human occupancy shall be provided with active or passive space-heating and space cooling systems capable of maintaining indoor temperatures between 70°F (21°C) and 90°F (32°C) at a point 3 feet (914 mm) above the floor on the design heating and cooling day. The installation of portable space heaters or coolers shall not be used to achieve compliance with this section.

Exception: Space heating or cooling systems are not required for:

- 1. Interior spaces where the primary purpose of the space is not associated with human comfort.
- 2. Group F, H, S or U occupancies.

SECTION 313 MECHANICAL SPECIAL INSPECTIONS AND OBSERVATIONS

Section 313.1 is hereby added as follows:

313.1 Mechanical special inspections and observations. The owner or the owner's authorized agent, other than the contractor, shall employ the registered design professional responsible for the mechanical design or one or more approved agencies designated by the registered design professional responsible for the mechanical design to perform visual observations of complex mechanical equipment and systems for general conformance to the approved plans and specification, including but not limited to, placement and interconnection of equipment and shall identify the approved agencies to the building official in accordance with Section 1704.2 of the International Building Code as amended. Mechanical observations shall be performed at significant stages of the construction when the installation is complete and ready for inspection. Mechanical observations are in addition to and not in lieu of inspections required by the Tempe Administrative Code, Section 110, and by Section 1705.12.6 of the International Building Code, and shall be provided when one of the following conditions exist:

- 1. Duct smoke detectors for air distribution systems as install in accordance with Section 606 of this code.
- 2. Fire, fire/smoke, radiation and smoke damper operation for dampers install in accordance with Section 607 of this code.
- 3. Installation of alternative grease duct enclosure systems including but not limited to grease duct-wrap or double wall grease duct systems, install in accordance with Sections 506.3.11.2 and 506.3.11.3 of this code.
- 4. The welding of grease duct joints, seams penetrations, and duct-to-hood joints required by Section 506.3.2 and 506.3.2.2 of this code.
- 5. The required grease duct leakage test required by Section 506.3.2.5 of this code.
- 6. Type I hood performance test and the capture and containment test required by Section 507.6 and 507.6.1 of this code.
- 7. Test and Balance report for air balance of ventilation systems installed in ambulatory care and I-2 occupancies designed and installed in accordance with ASHRAE 170 as required by Section 407.1 of this code.
- 8. Hazardous exhaust systems install in accordance with Section 510 of this code.
- 9. Smoke control systems in accordance with Section 513 of this code.
- 10. Special cases Work which, in the opinion of the building official, involves unusual hazards or conditions.

SECTION 403 MECHANICAL VENTILATION

Section 403.3.1.5 is hereby amended as follows:

403.3.1.5 Balancing. The ventilation air distribution system shall be provided with means to adjust the system to achieve not less than the minimum ventilation airflow rate as required by Sections 403.3 and 403.3.1.2 of this code. Ventilation systems shall be balanced by using a nationally accepted air balance test method. Such balancing shall verify that the ventilation system is capable of supplying and exhausting the airflow rates required by Sections 403.3 and 403.3.1.2 of this code. The final air balance report shall be provided to the mechanical engineer of record and the building inspector.

SECTION 408 MARIJUANA RELATED OCCUPANCIES

Section 408.1 is hereby added as follows:

408.1 General. Any building or portion thereof used to cultivate, produce, process, infuse or dispense marijuana shall be designed such that no emissions of dust, fumes, vapors or odors into the environment from the building or portion thereof. A ventilation system shall be designed to prevent the distribution of odors to other occupied spaces in the building or adjacent properties. Design of the odor control system shall be based on acceptable engineering practices. All equipment and filter media shall be listed and labeled for the application. Exhaust systems used in odor control systems shall meet the requirements of Section 501 of this code.

Section 408.1.1 is hereby added as follows:

408.1.1 Exhaust outlets. The termination point of exhaust outlets shall be in accordance with Section 501.3 of this code. Exhaust from cultivation and production facilities shall be in accordance with Section 501.3.1(2) of this code and for dispensaries in accordance with Section 501.3.1(3) of this code.

SECTION 506 COMMERCIAL KITCHEN HOOD VENTILATION SYSTEM DUCTS AND EXHAUST EQUIPMENT

Section 506.3.11 is hereby amended as follows:

506.3.11. Grease duct enclosures. A commercial kitchen grease duct serving a Type I hood that penetrates a ceiling, wall, floor or any concealed spaces shall be enclosed from the point of penetration to the outlet terminal. In-line exhaust fans not located outdoors shall be enclosed as required for grease ducts. A duct shall penetrate exterior walls only at locations where unprotected openings are permitted by the International Building Code. The duct enclosure shall serve a single grease duct and shall not contain other ducts, piping or wiring systems. Duct enclosures shall be a shaft enclosure in accordance with Section 506.3.11.1 of this code, a field-applied enclosure in accordance with Section 506.3.11.2 of this code or factory-built enclosure assembly in accordance with Section 506.3.11.3 of this code. Duct enclosures shall have a fire-resistance rating of not less than that of the assembly penetrated and not less than 1 hour. Fire dampers and smoke dampers shall not be installed in grease ducts.

Exception: A duct enclosure for a grease duct that penetrates only a non-fire-resistant-rated roof/ceiling assembly and only passes through the attic space may have the total thickness of the required fire-resistive material installed on the duct side of the duct enclosure.

SECTION 507 COMMERCIAL KITCHEN HOODS

Section 507.2.7 is hereby amended as follows:

507.2.7 Type I hoods penetrating a ceiling. Type I hoods or portions thereof penetrating a ceiling, wall or furred space shall comply with Section 506.3.11 of this code. Field-applied grease duct enclosure systems, as addressed in Section 506.3.11.2 of this code, shall not be utilized to satisfy the requirements of this section.

Exception: Type I hoods or portions thereof, penetrating a non-fire-resistant-rated roof/ceiling assembly of a single-story building or a non-fire-resistant-rated roof/ceiling assembly at the top story of a multi-story building, will not be required to comply with Section 506.3.11 of this code.

SECTION 902 MASONRY FIREPLACES

Section 902.1 is hereby amended as follows:

902.1 General. Masonry fireplaces shall be constructed in accordance with the International Building Code and comply with Section 930 of this code.

SECTION 903 FACTORY-BUILT FIREPLACES

Section 903.1 is hereby amended as follows

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903.1 General. Factory-built fireplaces shall be listed and labeled and shall be installed in accordance with the conditions of the listing and comply with Section 930 of this code. Factory-built fireplaces shall be tested in accordance with UL 127.

SECTION 904. PELLET FUEL-BURNING APPLIANCES

Section 904.1 is hereby amended as follows:

904.1 General. Pellet fuel-burning appliances shall be listed and labeled in accordance with ASTM E 1509 and shall be installed in accordance with the terms of the listing and comply with Section 930 of this code.

SECTION 905 FIREPLACE STOVES AND ROOM HEATERS

Section 905.1 is hereby amended as follows:

905.1 General. Fireplace stoves and solid-fuel-type room heaters shall be listed and labeled and shall be installed in accordance with the conditions of the listing and comply with Section 930.

Fireplace stoves shall be tested in accordance with UL 737. Solid-fuel-type room heaters shall be tested in accordance with UL1482. Fireplace inserts intended for installation in fireplaces shall be listed and labeled in accordance with the requirements of UL1482 and shall be installed in accordance with the manufacturer's installation instructions and comply with Section 930 of this code.

SECTION 930 SOLID FUEL-BURNING EQUIPMENT OR FIREPLACE RESTRICTIONS

Section 930 is hereby added as follows:

930.1 General. On or after December 31, 1998, no person, firm, or corporation shall construct or install a fireplace or a woodstove, and the city shall not approve or issue a permit to construct or install a fireplace or a woodstove, unless the fireplace or woodstove complies with one of the following:

- 1. A fireplace which has permanently installed gas or electric log insert;
- 2. A fireplace, woodstove, or other solid-fuel-burning appliance which has been certified by the United States Environmental Protection Agency as conforming to 40 Code of Federal Regulations Part 60, Subpart AAA;
- 3. A fireplace, woodstove, or other solid-fuel-burning appliance that has been tested and listed by a nationally recognized testing agency to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA;
- 4. A fireplace, woodstove, or other solid-fuel-burning appliance that has been determined by the Maricopa County Air Pollution Control Officer to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA; or
- 5. A fireplace that has a permanently installed woodstove insert that complies with paragraphs 2, 3, or 4 above.

Exception: The following installations are not regulated and are not prohibited by this section:

- 1. Furnaces, boilers, incinerators, kilns, and other similar space heating or industrial process equipment;
- 2. Cook stoves, barbecue grills, and similar appliances designed primarily for cooking; and
- 3. Fire pits, barbecue grills, and other outdoor fireplaces.

Fireplaces constructed or installed on or after December 31, 1998, that contain a gas or electric log insert or a woodstove insert, shall not be altered to directly burn wood or any other solid fuel. On or after December 31, 1998, no person, firm, or corporation shall alter a fireplace, woodstove, or other solid-fuel-burning appliance in any manner that would void its certification or operational compliance with the provisions of this section.

Fireplaces constructed or installed on or after December 31, 1998, shall not be altered without first obtaining a permit from the city to insure compliance with this section.

CITY OF TEMPE AMENDMENTS TO THE 2018 INTERNATIONAL PLUMBING CODE ARTICLE VI, SECTION 8-600 OF THE TEMPE CITY CODE

Sec. 8-600 Adopted; where filed; amendments.

That certain document known as "The International Plumbing Code, 2018 Edition," which has been published as a code in book form by the International Code Council (ICC), chapters two through fifteen and, appendix chapters B and E inclusive, three (3) copies with amendments of which are on file in the office of the City Clerk, and this same code, appendix and amendments are hereby referred to, adopted and made a part hereof, as if fully set forth in this article.

(Ord. No. 2011.33, 9-22-11; Ord. No. O2015.12, 4-2-15)

Charter reference – Adoption by reference. §2.14.

State law reference - Adoption by reference. A.R.S. §9-801 et. seq.

SECTION 312 TESTS AND INSPECTIONS

Section 312.1.1 is hereby amended as follows:

312.1.1 Test gauges. Gauges used for testing shall be as follows:

- 1. Tests requiring a pressure of 10 psi (69 kPa) or less shall utilize a testing gauge having increments of 0.10 psi (0.69 kPa) or less.
- 2. Tests requiring a pressure of greater than 10 psi (69 kPa) but less than or equal to 100 psi (689 kPa) shall utilize a testing gauge having increments of 1 psi (6.9 kPa) or less.
- 3. Tests requiring a pressure of greater than 100 psi (689 kPa) shall utilize a testing gauge having increments of 2 psi (14 kPa) or less.

Pressure tests required by this code, which are performed utilizing dial gauges, shall be limited to a gauge having a maximum gauge rating not exceeding twice the applied test pressure.

Section 312.3 is hereby amended as follows:

312.3 Drainage and vent air test. Plastic piping may be tested using air. An air test shall be made by forcing air into the system until there is a uniform gauge pressure of 5 psi (34.5 kPa) or sufficient to balance a 10-inch (254 mm) column of mercury. This pressure shall be held for a test period of not less than 15 minutes. Any adjustments to the test pressure required because of changes in ambient temperatures or the seating of gaskets shall be made prior to the beginning of the test period.

Section 312.5 is hereby amended as follows:

312.5 Water supply system test. Upon completion of a section of or the entire water supply system, the system, or portion completed, shall be tested and proved tight under a water pressure

not less than the working pressure of the system; or, by an air test of not less than 50 psi (344 kPa). Plastic piping systems may be tested using air. This pressure shall be held for not less than 15 minutes. The water utilized for tests shall be obtained from a potable source of supply. The required tests shall be performed in accordance with this section and Section 110 of the Tempe Administrative Code.

SECTION 317 PLUMBING SPECIAL INSPECTIONS AND OBSERVATIONS

Section 317.1 is hereby added as follows:

317.1 Plumbing special inspections and observations. The owner or the owner's authorized agent, other than the contractor, shall employ the registered design professional responsible for the plumbing design or one or more approved agencies designated by the registered design professional responsible for the plumbing design to perform visual observations of complex plumbing equipment and systems for general conformance to the approved plans and specification, including but not limited to, placement and interconnection of equipment and shall identify the approved agencies to the building official in accordance with Section 1704.2 of the International Building Code as amended. Plumbing observations shall be performed at significant stages of the construction and when the installation is complete and ready for inspection. Plumbing observations are in addition to and not in lieu of inspections required by the Tempe Administrative Code, Section 110, and Section 1705.12.6 of the International Building Code, and shall be provided when one of the following conditions exist:

- 1. Alternative engineered design plumbing systems as allowed by Section 316 of this code.
- 2. Computer designed drainage and vacuum drainage systems as allowed Sections 713 and 715 of this code.
- 3. Medical gas and vacuum systems as allowed by Section 1202 of this code.
- 4. Non-medical oxygen systems as allowed by the Section 1203 of this code.
- 5. Non-potable water systems as allowed Chapters 13 and 14 of this code.
- 6. Special cases Work which, in the opinion of the building official, involves unusual hazards or conditions.

SECTION 403 MINIMUM PLUMBING FACILITIES

Section 403.1 is hereby amended as follows:

403.1 Minimum number of fixtures. The minimum number of plumbing fixtures shall be determined by the International Building Code as amended.

Table 403.1 and the remainder of Section 403 are hereby repealed.

SECTION 410 DRINKING FOUNTAINS

Section 410.2 is hereby repealed.

Section 410.4 is hereby amended as follows:

410.4 Substitution. Occupancies that provide food and/or beverage service to patrons do not need to provide drinking fountains. In other occupancies, where drinking fountains are required, water dispensers, bottled water dispensers or bottled water, where free of charge, shall be permitted to be substituted for not more than 50 percent of the required number of drinking fountains.

Section 410.5 is hereby amended as follows:

410.5 Prohibited location. Drinking fountains, water dispensers, bottled water dispensers or bottled water shall not be installed in restrooms.

SECTION 416 FOOD WASTE DISPOSER UNITS

Section 416.3 is hereby amended as follows:

416.3 Commercial food waste disposer. Commercial food waste disposers are not allowed per the Public Works Director.

SECTION 504 SAFETY DEVICES

Section 504.7.1 is hereby amended as follows:

504.7.1 Pan size and drain. The pan shall not be less than 1½ inches (38 mm) deep and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a minimum diameter of ¾ inch (19 mm) installed with a uniform alignment at a uniform slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope). Piping for safety pan drains shall be of those materials listed in Table 605.4 of this code.

SECTION 604 DESIGN OF BUILDING WATER DISTRIBUTION SYSTEM

Section 604.1 is hereby amended as follows:

604.1 General. The design of the water distribution system shall be determined according to the methods in Appendix E of this code or when approved by the code official, to design methods conforming to acceptable engineering practice.

Sec 701 GENERAL

Section 701.2 is hereby amended as follows:

701.2 Sewer required. Sanitary drainage piping from plumbing fixtures in buildings and sanitary drainage piping systems from premises shall be connected to a public sewer. Where a public sewer is not available the sanitary drainage piping and systems shall be connected to a private disposal system in compliance with the Maricopa County Health Department Environmental Service Division. The public sewer may be considered as not being available only when so determined by the Maricopa County Health Department Environmental Service Division.

Exception: Sanitary drainage piping and systems that convey only discharge from bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to connect to a public sewer or to a private sewage disposal system provided that the piping or systems are connected to a system designed by a registered design professional in accordance with Chapters 13 and 14 of this code.

SECTION 803 SPECIAL WASTES

Section 803.2 is hereby amended as follows:

803.2 Neutralizing device required for corrosive wastes. Corrosive liquids, spent acids or other harmful chemicals that destroy or injure a drain, sewer, soil or waste pipe or create noxious or toxic fumes or interfere with sewage treatment processes shall not be discharged into the plumbing system without being thoroughly diluted, neutralized or treated by passing through an approved dilution or neutralizing device. Such devices shall be automatically provided with sufficient supply of diluting water or neutralizing medium so as to make the contents non-injurious before discharge into the drainage system. The nature of the corrosive or harmful waste and the method of its treatment or dilution shall be approved prior to installation. Detailed plans and specifications of the pretreatment facilities may be required by the Public Works Director or designate.

SECTION 904 VENT TERMINALS

Section 904.1 is hereby amended as follows:

904.1 Roof extension. All open vent pipes that extend through a roof shall be terminated at least 6 inches (152 mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134 mm) above the roof.

SECTION 1003 INTERCEPTORS AND SEPARATORS

Section 1003.1 is hereby amended as follows:

1003.1 Where required. Interceptors and separators shall be provided, when required by the Public Works Director, to prevent the discharge of oil, grease, sand and other substances harmful or hazardous to the building drainage system, the public sewer or sewage treatment plant or processes.

Section 1003.2 is hereby amended as follows:

1003.2 Approval. The size, type and location of each interceptor and of each separator shall be approved by the Public Works Director, and shall be designed and installed in accordance with the manufacturer's instructions and the requirements of this section based on the anticipated conditions of use. Wastes that do not require treatment or separation shall not be discharged into any interceptor or separator.

Section 1003.3.4 is hereby amended as follows:

1003.3.4 Hydromechanical grease interceptors and automatic grease removal devices. Hydromechanical grease interceptors; fats, oils and grease disposal systems and automatic grease removal devices shall be sized by the Public Works Director. Hydromechanical grease interceptors; fats, oils and grease disposal systems and automatic grease removal devices shall be designed and tested in accordance with ASME A112.14.3 Appendix A, ASME A112.14.4, CSA B481.1, PDI G101 or PDI G102. Hydromechanical grease interceptors; fats, oils and grease disposal systems and automatic grease removal devices shall be installed in accordance with the manufacturer's instructions and approved by the Public Works Director.

Where manufacturer's instructions are not provided, Hydromechanical grease interceptors and automatic grease removal devices shall be installed in compliance with ASME A112.14.3, ASME A112.14.4, CSA B481.1 or PDI G101 with the approval of the Public Works Director. This section shall not apply to gravity grease interceptors.

SECTION 1106 SIZE OF CONDUCTORS, LEADERS, SCUPPERS AND STORM DRAINS.

Section 1106.1 is hereby amended as follows:

1106.1 General. The size of vertical conductors and leaders, scuppers, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on an hourly rainfall rate of 3" per hour.

SECTION 1109 COMBINED SANITARY AND STORM SYSTEM

Section 1109.1 is hereby repealed.

CITY OF TEMPE AMENDMENTS TO THE 2018 INTERNATIONAL SWIMMING POOL AND SPA CODE ARTICLE X, SECTION 8-1000 OF THE TEMPE CITY CODE

Sec. 8-1000. Adopted; where filed; amendments.

That certain document known as "The International Swimming Pool and Spa Code, 2018 Edition," which has been published as a code in book form by the International Code Council (ICC), chapters two through eleven, three (3) copies with amendments of which are on file in the office of the City Clerk, and this same code, and amendments are hereby referred to, adopted and made a part hereof, as if fully set forth in this article.

Charter reference – Adoption by reference. §2.14.

State law reference - Adoption by reference. A.R.S. §9-801 et. seq.

SECTION 202 DEFINITIONS

Section 202 is hereby amended as follows:

Public Swimming pool (*Public Pool*). A pool intended to be used for swimming or bathing that is operated by a community, municipality, political subdivision, school district, university, college or a commercial establishment or their lessee or concessionaire regardless of whether a fee is charged for use. This includes in-ground, aboveground, and on-ground pools; spas and fixed inplace wading pools. Public pools shall be further classified and defined as follows:

Class A competition pool. No Change - N/C

Class B public pool. N/C

Class C semi-public pool. A pool operated solely for and in conjunction with lodgings such as hotels, motels, resorts, apartments, condominiums, townhouse complexes, trailer courts, mobile home parks, or similar establishments. A semipublic pool includes a pool that is operated by a neighborhood or community association for the residents of the community and their guests and a swimming pool at a country club, camp or similar establishment where the primary business of the establishment is not the operation of a swimming pool and where the use of the swimming pool is included in the fee for the primary use of the establishment. This includes in-ground, aboveground, and on-ground pools; spas and fixed in-place wading pools.

Class D wave action pool. N/C

Class D-2 activity pool. N/C

Class D-3 catch pool. N/C

Class D-4 leisure pool. N/C

Class D-5 vortex pool. N/C

Class D-6 interactive play attraction. N/C

Class E pool. N/C

Class F pool. N/C

Types VI-IX. N/C

Type O. N/C

Residential. For purposes of this code, residential applies to detached one- and two-family dwellings.

Residential Swimming pool (Residential Pool). A pool intended to be used for swimming or bathing that is accessory to a residential setting and available only to the household and its guests. This includes in-ground, aboveground, and on-ground swimming pools and spas. Other pools or spas, shall be considered semi-public or public pools or spas, for purposes of this code.

Types I-V. No Change - N/C *Type O.* N/C

SECTION 301 GENERAL

Section 301.1.2 is hereby added as follows:

301.1.2 Unenclosed pools. It is hereby declared to be a public nuisance and dangerous to the public health, safety, and welfare to maintain an outdoor swimming pool or spa in the city unless enclosed in accordance with Section 305.2 of this code. It shall be the responsibility of both the property owner and the occupant of the premises to install and maintain the fences, locks, latches, alarms, and gates in good condition and proper working order when water is in the pool, and either or both may be deemed in violation of this code for failure to do so.

Section 301.1.3 is hereby added as follows:

301.1.3 Prerequisites to issuance of building permit. A building permit shall not be issued for any swimming pool, spa or hot tub unless the plans for such pool provide for an enclosure as required by this code.

Section 301.1.4 is hereby added as follows:

301.1.4 Final inspection and approval. No swimming pool, spa or hot tub shall be filled in whole or in part with water unless the pool enclosure has been installed in accordance with this code and approved by the building official or authorized representative.

SECTION 303 ENERGY

Section 303.1.3 is hereby added as follows:

303.1.3 Covers. Outdoor heated pools and outdoor permanent spas shall be provided with a vapor-retardant cover or other approved vapor-retardant means.

Exceptions:

- 1. Where more than 75 percent of the energy for heating, computed over an operating season of not less than 3 calendar months, is from a heat pump or an on-site renewal energy system, covers or other vapor-retardant means shall not be required.
- 2. Where pools are equipped with pump motors with a total horsepower of one or more shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds then no cover or other vapor-retardant means shall not be required. Residential pool pump motor controls that are sold for use with a two or more-speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high- speed override capability shall be for a temporary period not to exceed one twenty-four-hour cycle without resetting to the default setting.

SECTION 304 FLOOD HAZARD AREAS

Section 304.2 is hereby amended as follows:

304.2 Determination of impacts based on location. Pools and spas located in flood hazard areas indicated within the International Building Code or the International Residential Code, including above-ground, on-ground and in-ground pools and spas that involve placement of fill, shall comply with Tempe City Code, Chapter 12.

Exception: This exception is hereby repealed.

Sections 304.2.1, 304.2.2 and 304.3 are hereby repealed.

SECTION 305 BARRIER REQUIREMENTS

Section 305.2 is hereby amended as follows:

305.2 Outdoor swimming pools and spas. Outdoor pools and spas and indoor swimming pools shall be surrounded by a barrier that complies with Sections 305.2.1 through 305.7 of this code. In addition to this code, where a pool or spa is regulated by the Maricopa County Environmental Health Code, the fencing, doors, gates or screen enclosure shall also comply with Chapter VI, Section 6, of that code.

Exception: A pool or spa provided with a safety cover listed and labeled in accordance with ASTM F 1346 shall not require barrier protection as required in Section 305.2.1 of this code.

Section 305.2.1 is hereby amended as follows:

305.2.1. Barrier height and clearances. Barrier heights and clearances shall be accordance with all of the following:

- 1. The top of the barrier shall be at least 5 feet (1525 mm) above grade measured on the side of the barrier that faces away from the pool or spa. Such height shall exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier.
- 2. No Change N/C
- 3. N/C
- 4. N/C

Section 305.2.4 is hereby repealed.

Section 305.2.10 is hereby amended as follows:

305.2.10 Poolside barriers setbacks. The pool or spa side of the required barrier shall be at least 24 (610 mm) inches, measured horizontally, from the water's edge.

Section 305.3 is hereby amended as follows:

305.3 Gates. Access doors or gates shall comply with the requirements of Sections 305.3.1 through 305.3.3 of this code and shall be equipped to accommodate a locking device. Pedestrian access doors or gates shall open outward away from the pool or spa and shall be self-closing and have a self-latching device.

Section 305.3.3 is hereby amended as follows:

305.3.3 Latches. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the grade, the release mechanism shall be located on the pool or spa side of the door or gate at least 3 inches (76 mm) below the top of the door or gate, and the door or gate and barrier shall have no opening greater than 1/2 inch (12.7 mm) within 24 inches (610 mm) of the release mechanism. Where applicable, latches shall comply with Section 307.1.4 of this code.

Exception: When access doors or gates are secured by a padlock, electronic opener or similar device which requires a key, integral combination, key card or fob, the latch may be located at less than 54 inches (1372 mm).

Section 305.4 is hereby amended as follows:

305.4 Structure as a barrier. Where a wall of a dwelling or structure serves as part of the barrier and where doors or windows provide direct access to the pool or spa through that wall, one of the following shall be required:

1. Operable windows having a sill height of less than 48 inches (1219 mm) above the indoor finished floor and doors shall have an alarm that produces an audible warning when the window or door or their screens, if present, are opened. The alarm shall be listed and labeled as a water hazard entrance alarm in accordance with UL 2017. The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds after the window door and/or its screen, if present, are opened and be capable of being

heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touch pad or switch, to temporarily deactivate the alarm for a single opening. Deactivation shall last for not more than 15 seconds. In dwellings or structures not required to be Accessible units, Type A units or Type B units, the deactivation switch shall be located 54 inches (1372 mm) or more above the finished floor. In dwellings or structures required to be Accessible units, Type A units or Type B units, the deactivation switch shall be located at 54 inches (1372 mm) maximum and 48 inches (1219 mm) minimum above the finished floor.

- 2. No Change N/C
- 3. An approved means of protection, such as self-closing windows or doors with self-latching devices, is provided. Such means of protection shall provide a degree of protection that is no less than the protection afforded by Item 1 or 2.

Section 305.5 is hereby amended as follows:

305.5 On-ground residential pool structure as a barrier. An on-ground residential pool wall structure or a barrier mounted on top of an on-ground residential pool wall structure shall serve as a barrier where all of the following conditions are present:

- 1. Where only the pool wall serves as the barrier, the bottom of the wall is on grade, the top of the wall is not less than 5 feet (1525 mm) above grade for the entire perimeter of the pool, the wall complies with the requirements of Section 305.2 of this code and the pool manufacturer allows the wall to serve as a barrier.
- 2. Where a barrier is mounted on top of the pool wall, the top of the barrier is not less than 5 feet (1525 mm) above grade for the entire perimeter of the pool, and the wall and the barrier on top of the wall comply with the requirements of Section 305.2 of this code.
- 3. No Change N/C
- 4. N/C
- 5. N/C

SECTION 403 BATHER LOAD

Section 403.1 is hereby amended as follows:

403.1 Maximum bather load. The maximum bather load of Class B and Class C pools shall be in accordance with Table 403.1 of this section. The maximum bather load of pools in other classes shall be in accordance with Section 1004 of the International Building Code.

SECTION 410 SANITARY FACILITIES

Section 410.1 is hereby amended as follows:

410.1 Toilet facilities. Class A and Class B pools shall be provided with toilet facilities having the required number of plumbing fixtures in accordance with the International Building Code or the Maricopa County Environmental Health Code.

SECTION 609 TOILET ROOMS AND BATHROOMS

Section 609.2 is hereby amended as follows:

609.2 Number of fixtures. Pools shall have toilet facilities with the number of fixtures in accordance with the International Building Code or the Maricopa County Environmental Health Code.

Section 609.2.1 is hereby repealed.

Section 609.2.2 is hereby repealed.

CITY OF TEMPE AMENDMENTS TO THE 2018 INTERNATIONAL RESIDENTIAL CODE ARTILE III, SECTION 8-300 OF THE TEMPE CITY CODE

Sec. 8-300 Adopted; where filed; amendments.

That certain document known as "The International Residential Code, 2018 Edition," which has been published as a code in book form by the International Code Council (ICC), chapters two through forty-four, and appendix chapters A, B, C, G, H, J, K, P and Q inclusive, three (3) copies with amendments of which are on file in the office of the City Clerk, and this same code, appendices and amendments are hereby referred to, adopted and made a part hereof, as if fully set forth in this article.

(Ord. No. 2011.33, 9-22-11; Ord. No. O2015.12, 4-2-15)

Charter reference – Adoption by reference. §2.14.

State law reference - Adoption by reference. A.R.S. §9-801 et. seq.

SECTION 202 DEFINITIONS

Section 202 is hereby amended as follows: (remainder of existing list is unchanged)

[BF] Fire Separation Distance. The distance measured from the building face to one of the following:

- 1. The closest interior lot line.
- 2. To the centerline of a street, an alley or public way.
- 3. To an imaginary line between two buildings on the lot.

The distance shall be measured at right angles from the face of the wall framing.

SECTION 301 DESIGN CRITERIA

Section R301.1.2 is hereby added as follows:

R301.1.2 Type C (Vistable) units. In all one- and two-family dwellings and townhouses, each dwelling unit shall meet the requirements of a Type C unit in accordance with Section 1105 of the ICC A117.1.

Exception: A dwelling unit where the entrance level or first floor at grade level consists of a foyer, which is less than 70 square feet in area, or other non-habitable spaces, such as a garage or storage area, do not need to comply with this provision.

Table R301.2 (1) CLIMATIC AND GEOGRAPHICAL DESIGN CRITERIA

Table R301.2(1) is hereby amended as follows:

Table R301.2 (1) CLIMATIC AND GEOGRAPHICAL DESIGN CRITERIA

GROUND	WIND DESIGN				SEISMIC	SUBJECT TO DAMAGE FROM			WINTER	ICE BARRIER		Air	MEAN
SNOW LOAD	Speed ^d (mph)	Topographic effects ^k	Special wind region ¹	Windborne debris zone ^m	DESIGN CATEGORY ^g	Weathering ^a	Frost line depth ^b	Termite ^c	DESIGN TEMP ^e	UNDER- LAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	FREEZING INDEX ⁱ	ANNUAL TEMP. ^j
0	115	No	No	No	С	Negligible	12 inches	moderate to heavy	34 ⁰ F	No	See Maricopa County	N/A	71.2°F

Manual J Design Criteriaⁿ

Refer to Sections N1103.7 and M1401.3

No change to table footnotes except as follows:

n. Use "Phoenix AP" in Tables 1A or 1B from ACCA Manual J to establish the design criteria.

Section R301.2.4 is hereby amended as follows:

R301.2.4 Floodplain construction. Buildings and structures constructed in whole or in part in flood hazard areas (including A or V Zones) as established in Table R301.2(1) of this code, and substantial improvement and repair of substantial damage of buildings and structures in flood hazard areas, shall be designed and constructed in accordance with the Tempe City Code, Chapter 12.

Section R301.2.4.1 is hereby repealed.

Table R301.5 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS

Table R301.5 is hereby amended as follows:

TABLE R301.5 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (In pounds per square foot)

USE	LIVE LOAD
Uninhabitable attics without storage b	10
Uninhabitable attics with limited storage b, g	20
Habitable attics and attics served with fixed stairs	40
Balconies (exterior) and decks ^e	40
Fire escapes	40
Guardrails and handrails d	200 ^h
Guardrails in-fill components f	50 ^h
Passenger vehicle garages ^a	50 ^a
Rooms other than sleeping rooms	40
Sleeping rooms	40
Stairs	40°

No change to table footnotes.

SECTION R302 FIRE-RESISTANT CONSTRUCTION

Table R302.1(2) is hereby amended as follows:

Table R302.1(2)

EXTERIOR WALLS - DWELLINGS WITH FIRE SPRINKLERS

The table remains unchanged except the following footnote:

Footnote (a.) is hereby repealed.

Section R302.2.2 is hereby amended as follows:

R302.2.2 Common walls. Common walls separating townhouses shall be assigned a fire-resistance rating in accordance with items 1, 2 or 3. The common wall shared by two townhouses shall be constructed without plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing in accordance with Sections R302.2.3 and R302.2.4 of this code. Electrical installations shall be installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4 of this code.

Exceptions:

- 1. Where an individual fire sprinkler system complying with International Building Code, Section 903.3.1.3 is provided within each townhouse, the common wall shall be not less than a 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E119, UL 263 or Section 703.3 of the International Building Code.
- 2. Where an individual fire sprinkler system complying with International Building Code, Section 903.3.1.3 is not provided within each townhouse, the common wall shall be not less than a 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E119, UL 263 or Section 703.3 of the International Building Code.
- 3. Where each townhouse is located on an individual parcel as recorded with the county recorder's office, the common wall shall be not less than two separate 1-hour fire-resistance-rated wall assemblies or one 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E119, UL 263 or Section 703.3 of the International Building Code. A parapet shall be provided per Section R302.2.4 for any common wall at or on a property line. The installation of a fire sprinkler system shall not change the required rating or construction of the common wall.

Section R302.3 is hereby amended as follows:

R302.3 Two-family dwellings. Dwelling units in two-family dwellings shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating when tested in accordance with ASTM E 119, UL 263 or Section 703.3 of the International Building Code. Fire-resistance-rated floor/ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing in accordance with Sections R302.2.3 and R302.2.4 of this code.

Exceptions:

- 1. A fire-resistance rating of ½-hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13.
- 2. Wall assemblies need not extend through attic spaces when the ceiling is protected by not less than 5/8-inch (15.9 mm) Type X gypsum board and an attic draft stop constructed as specified in Section R302.12.1 of this code is provided above and along the wall assembly separating the dwellings, and the structural framing supporting the ceiling is protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.
- 3. Where each dwelling of a two-family dwelling building is located on an individual parcel as recorded with the county recorder's office, the common wall shall be not less than two separate 1-hour fire-resistance-rated wall assemblies or one 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E119, UL 263 or Section 703.3 of the International Building Code. The common wall shared by a two-family dwelling shall be constructed without plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. A parapet shall be provided per Section R302.2.4 for any common wall at or on a property line. The installation of a fire sprinkler system shall not change the required rating or construction of the common wall.

Section R302.5.1 is hereby amended as follows:

R302.5.1. Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inch (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors. Doors providing opening protection shall be equipped with an automatic-closing or self-closing and self-latching device.

SECTION R303 LIGHT, VENTILATION AND HEATING

Section R303.10 is hereby amended as follows:

R303.10 Required heating. Every dwelling unit shall be provided with heating and cooling facilities capable of maintaining room temperatures between 70°F (21°C) and 90°F (32°C) at a point 3 feet (914 mm) above the floor and 2 feet (610 mm) from exterior walls in all habitable rooms. The installation of one or more portable space heaters or coolers shall not be used to achieve compliance with this section.

SECTION R308 GLAZING

Section R308.4.5 is hereby amended as follows:

R308.4.5 Glazing and wet surfaces. Glazing in walls, enclosures or fences containing or facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and indoor or outdoor swimming pools or spas where the bottom exposed edge of the glazing is less than 56 inches (1422 mm) measured vertically above any standing or walking surface shall be considered a hazardous location. This shall apply to single glazing and all panes in multiple glazing.

Exception: Glazing that is more than 56 inches (1422 mm), measured horizontally and in a

straight line, from the water's edge of a bathtub, hot tub, spa, whirlpool, or swimming pool or from the edge of a shower, sauna or steam room.

SECTION R309 GARAGES AND CARPORTS

Section R309.5 is hereby amended as follows:

R309.5 Fire sprinklers. Attached private garages, carports or detached garages and carports of more than 5000 square feet shall be protected by fire sprinklers that complies with Section 903.2.8.1 of the International Building Code as amended. Garage sprinklers shall be residential sprinklers or quick-response sprinklers, designed to provide a density of 0.05 gpm/ft2. Garage doors shall not be considered obstructions with respect to sprinkler placement.

SECTION R311 MEANS OF EGRESS

Section R311.2 is hereby amended as follows:

R311.2. Egress door. Not less than one egress door shall be provided for each dwelling unit. The egress door shall be side-hinged, and shall provide a clear width of 32 inches (813 mm) when measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The clear height of the door opening shall not be less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily openable from inside the dwelling without the use of a key or special knowledge or effort.

Exception: One and two-family dwellings and individual dwelling units of townhomes not more than three stories above grade plane may be provided with a night latch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key or special knowledge or effort.

SECTION R313 AUTOMATIC FIRE SPRINKLERS.

Section R313.1 is hereby amended as follows:

R313.1 Automatic fire sprinkler system. In one and two-family dwellings, townhouses and attached accessory uses thereto, an automatic fire sprinkler system shall be installed as require by Section 903.2.8.1 of the International Building Code as amended.

The remainder of Section R313 is hereby repealed.

SECTION R311 MEANS OF EGRESS

Section R311.2 is hereby amended as follows:

R311.2. Egress door. Not less than one egress door shall be provided for each dwelling unit. The egress door shall be side-hinged, and shall provide a clear width of not less than 32 inches (813 mm) where measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The minimum clear height of the door opening shall not be less than 78 inches (1981

mm) in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily openable from inside the dwelling without the use of a key or special knowledge or effort.

Exception: One and two-family dwellings and individual dwelling units of townhomes not more than three stories above grade plane may be provided with a night latch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key or special knowledge or effort.

SECTION R314 SMOKE ALARMS

Section R314.2.2 is hereby amended as follows:

R314.2.2 Alterations, repairs and additions. When alterations, repairs or additions requiring a permit occur, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

Exceptions:

- 1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of a porch or deck.
- 2. Repairs of plumbing or mechanical systems are exempt from the requirements of this section.

Section R314.6 is hereby amended as follows:

R314.6 Power source. Smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source, and where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

Exceptions:

- 1. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure.
- 2. Smoke alarms installed in accordance with Section R314.2.2 of this code shall be permitted to be battery powered.
- 3. Primary power from the building wiring to smoke alarms in existing areas shall not be required where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for hard wiring without the removal of interior finishes.

SECTION R315 CARBON MONOXIDE ALARMS

Section R315.2.2 is hereby amended as follows:

R315.2.2 Alterations, repairs and additions. When alterations, repairs or additions requiring a

permit occur, the individual dwelling unit shall be equipped with carbon monoxide alarms located as required for new dwellings.

Exceptions:

- 1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of a porch or deck.
- 2. Repairs of plumbing or mechanical systems are exempt from the requirements of this section.

Section R315.6 is hereby amended as follows:

R315.6 Power source. Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source, and where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

Exceptions:

- 1. Carbon monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power or where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure.
- 2. Carbon monoxide alarms installed in accordance with Section 315.2.2 of this code shall be permitted to be battery powered.
- 3. Primary power from the building wiring to carbon monoxide alarms in existing areas shall not be required where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for hard wiring without the removal of interior finishes.

SECTION R319 SITE ADDRESS

Section R319.1 is hereby amended as follows:

R319.1 Address numbers. Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. The actual size, color, and field placement of addresses numbers shall be as specified in the Tempe Zoning and Development Code and the Tempe Administrative Code.

Exceptions: Buildings constructed prior to January 20, 2005 may replace missing address numbers with numbers that are a minimum 4 inches (102mm) high with a minimum stroke width of ½ inch (12.7mm) that have a color contrast with the background color of at least fifty (50%) percent.

SECTION R322 FLOOD-RESISTANT CONSTRUCTION

Section R322.1 is hereby amended as follows:

R322.1 General. Buildings and structures constructed in whole or in part in flood hazard areas

(including A or V Zones) as established in Table R301.2(1) of this code, and substantial improvement and repair of substantial damage of buildings and structures in flood hazard areas, shall be designed and constructed in accordance with the Tempe City Code, Chapter 12 and applicable provisions contained in this section.

SECTION R324 SOLAR ENERGY SYSTEMS

Section R324.1 is hereby amended as follows:

R324.1 General. Solar energy systems shall comply with the provisions of this section and Section 1204 of the International Fire Code.

Sections R324.6, R324.6.1, R324.6.2 and R324.6.2.1 are hereby repealed.

SECTION R401 GENERAL

Section R401.3 is hereby amended as follows:

R401.3 Drainage. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection in accordance with the provisions in the Tempe City Code, Chapter 12. Lots shall be graded to drain surface water away from foundation walls. The grade shall fall a minimum of 6 inches (152 mm) within the first 10 feet (3048 mm).

Exception: Where lot lines, walls, slopes or other physical barriers prohibit 6 inches (152 mm) of fall within 10 feet (3048 mm), drains or swales shall be constructed in accordance with the provisions in the Tempe City Code, Chapter 12 to ensure drainage away from the structure. Impervious surfaces within 10 feet (3048 mm) of the building foundation shall be sloped a minimum of 2 percent away from the building.

SECTION R403 FOOTINGS

Section R403.1 is hereby amended as follows:

R403.1 General. All exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings, crushed stone footings, wood foundations, or other approved structural systems that shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill. Concrete footing shall be designed and constructed in accordance with the provisions of Section R403 of this code or in accordance with ACI 332.

Exception:

1. For enclosures of existing carport and patio covers as a non-habitable use, non-bearing wood framed exterior walls within the projection of the existing roof may be supported on an existing non-cracked slab. The minimum slab thickness shall be 3.5 inches (89 mm) and the construction shall comply with the requirements of Section R317 of this code for protection of decay.

2. For enclosures of existing carport and patio covers as a habitable use, non-bearing wood framed exterior walls within the projection of the existing roof may be supported on an existing non-cracked slab provided the finished floor elevation matches the existing floor elevation of the other habitable spaces. The minimum slab thickness shall be 3.5 inches (89 mm) and the construction shall comply with the requirements of Section R317 of this code for protection of decay.

SECTION R502 WOOD FLOOR FRAMING

Section R502.3.1 is hereby amended as follows:

R502.3.1 Sleeping areas and attic joists. Table R502.3.1(1) of this code shall be used to determine the maximum allowable span of floor joists that support sleeping areas and attics that are accessed by means of a fixed stairway in accordance with Section R311.7 of this code provided that the design live load does not exceed 40 pounds per square foot (1.92 kPa) and the design dead load does not exceed 20 pounds per square foot (0.96 kPa). The allowable span of ceiling joists that support attics used for limited storage or no storage shall be determined in accordance with Section R802.5 of this code.

SECTION R1007. CLEAN BURNING FIREPLACES.

Section R1007.1 is hereby added as follows:

R1007.1 Clean Burning Fireplaces. The purpose of this standard is to regulate fireplaces, woodstoves, or other solid-fuel burning devices to reduce the amount of air pollution caused by particulate matter and carbon monoxide.

The effective date of the regulations and prohibitions set forth in this standard took effect on December 31, 1998.

Definitions: For purposes of this standard, the following words and terms shall be defined as follows:

FIREPLACE means a built-in place masonry hearth and fire chamber or a factory-built appliance, designed to burn solid fuel or to accommodate gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating, or industrial processes.

SOLID FUEL includes but is not limited to wood, coal, or other nongaseous or non-liquid fuels, including those fuels defined by the Maricopa County Air Pollution Control Officer as inappropriate fuel to burn in residential wood-burning devices.

WOODSTOVE means a solid-fuel burning heating appliance including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

Section R1007.2 is hereby added as follows:

R1007.2. Installation restrictions. On or after the effective date, no person, firm or corporation shall construct or install a fireplace or a woodstove, and the building official shall not approve or issue a permit to construct or install a fireplace or a woodstove, unless the fireplace or woodstove complied with one of the following:

- 1. A fireplace which has a permanently installed gas or electric log insert.
- 2. A fireplace, woodstove, or other solid-fuel burning appliance which has been certified by the United States Environmental Protection Agency as conforming to 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.
- 3. A fireplace, woodstove or other solid-fuel burning appliance which has been tested and listed by a nationally recognized testing agency to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.
- 4. A fireplace, woodstove or other solid-fuel burning appliance which has been determined by the Maricopa County Air Pollution Control Officer to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.
- 5. A fireplace which has a permanently installed woodstove insert which complies with subparagraphs 2, 3, or 4 above.

Section R1007.3 is hereby added as follows:

R1007.3. The following installations are not regulated by this standard and are not prohibited by this standard:

- 1. Furnace, boilers, incinerators, kilns, and other similar space heating or industrial process equipment.
- 2. Cook-stoves, barbecue grills, and similar appliances designed primarily for cooking.
- 3. Fire pits, barbecue grills, and other outdoor fireplaces.

Section R1007.4 is hereby added as follows:

R1007.4. Fireplace or Woodstove Alterations Prohibited:

Section R1007.4.1. On or after the effective date, no person, firm or corporation shall alter or remove a gas or electric log insert or a woodstove insert from a fireplace for purposes of converting the fireplace to directly burn wood or other solid fuel.

Section R1007.4.2. On or after the effective date, no person, firm or corporation shall alter a fireplace, woodstove or other solid fuel burning appliance in any manner that would void its certification or operational compliance with the provisions of this standard.

Section R1007.5 is hereby added as follows:

R1007.5. Permits Required. In addition to the provisions and restrictions of this standard, construction, installation or alteration of all fireplaces, woodstoves and other gas, electric or solid-fuel burning appliances and equipment shall be done in compliance with provisions of this Code and shall be subject to the permits and inspections.

SECTION N1102 BUILDING THERMAL ENVELOPE

Section N1102.1 is hereby amended as follows:

N1102.1 (R402.1) General (Prescriptive). The building thermal envelope shall meet the requirements of Sections N1102.1.1 through N1102.1.4 of this code.

Exceptions:

- 1. The following low-energy buildings or portions thereof, separated from the remainder of the building by building envelope assemblies complying with this section shall be exempt from the building thermal envelope provisions of Section 1102 of this code.
 - 1.1 Those with a peak design rate of energy usage less than 3.4 Btu/h ft² (10.7 W/m²) or 1.0 watt/ ft² of floor area for space-conditioning purposes.
 - 1.2 Those that do not contain conditioned space.
- 2. Log homes designed in accordance with ICC 400.
- 3. The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards Protocol for third party testing and inspections, shall be deemed to meet the requirements of Sections N1102.4.1.1, N1102.4.1.2 and N1103.3 of this code and shall meet the following conditions:
 - 3.1 Third Party Testing and Inspections shall be completed by RESNET certified Raters or Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field Review procedures.
 - 3.2 Sampling in accordance with Chapter 6 of the RESNET Standards shall be performed by Raters or Rating Field Inspectors working under a RESNET Accredited Sampling Provider.
 - 3.3 Third Party Testing is required for the following items:
 - a) N1102.4.1 [R402.4.1.1] –Building Envelope Thermal and Air Barrier Checklist
 - b) N1102.4.1.2 [R402.4.1.2] –Testing Air Leakage Rate
 - c) N1103.3 [R403.3] Sealing Duct Tightness
 - 3.4 The other requirements identified as "mandatory" in IECC Chapter 4 RE shall be met.
 - 3.5 Alternate testing and inspection programs and protocols may be allowed when approved by the building official in accordance with the Tempe Administrative Code, Section 103.12.

SECTION N1103.8 POOLS

Section N1103.10.3 is hereby amended as follows:

N1103.10.3 (R403.10.3) Covers. Outdoor heated pools and outdoor permanent spas shall be provided with a vapor-retardant cover or other approved vapor-retardant means.

Exceptions:

1. Where more than 75 percent of the energy for heating, computed over an operating season of not less than 3 calendar months, is from a heat pump or an on-site renewal energy system, covers or other vapor-retardant means shall not be required.

2. Where pools are equipped with pump motors with a total of one or more horsepower, the motors shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds then no cover or other vapor-retardant means shall not be required. Residential pool pump motor controls that are sold for use with a two or more-speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high- speed override capability shall be for a temporary period not to exceed one twenty-four-hour cycle without resetting to the default setting.

SECTION M1307 APPLIANCE INSTALLATION

Section M1307.3 is hereby amended as follows:

M1307.3. Elevation of ignition source. Appliances having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor in garages. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate with a private garage through openings shall be considered to be part of the private garage.

Exceptions:

- 1. Elevation of the ignition source is not required for appliances that are listed as flammable-vapor-ignition resistant.
- 2. Direct-vent appliances that obtain all combustion air directly from the outdoors.
- 3. Clothes dryers installed in private garages.

Section M1307.7 is hereby added as follows:

M1307.7. Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

SECTION G2406 APPLIANCE LOCATION

Section G2406.2 is hereby amended as follows:

G2406.2 (303.3). Prohibited locations. Appliances shall not be located in sleeping rooms, bathrooms, toilet rooms, storage closets or surgical rooms, or in a space that opens only into such rooms or spaces, except where the installation complies with one of the following:

- 1. No Change N/C
- 2. N/C
- 3. N/C
- 4. N/C
- 5. N/C
- 6. N/C
- 7. Liquefied Petroleum (LPG) appliances shall not be installed in an attic, pit or other location that would cause ponding or retention of gas.

SECTION G2407 (304) COMBUSTION, VENTILATION AND DILUTION AIR

Section G2407.1.1 is hereby amended as follows:

G2407.1.1. Prohibited sources. Combustion air ducts and openings shall not connect appliance enclosures with space in which the operation of a fan may adversely affect the flow of combustion air. Combustion air shall not be obtained from an area in which flammable vapors present a hazard. Fuel-fired appliances shall not obtain combustion air from any of the following rooms or spaces:

- 1. Sleeping rooms.
- 2. Bathrooms.
- 3. Toilet rooms.

Exception: The following appliances may be located in sleeping rooms, bathrooms and toilet rooms:

- 1. Appliances installed in an enclosure in which all combustion air is taken from the outdoors and the enclosure is equipped with a self-closing, self-latching solid weather-stripped door.
- 2. Direct-vent appliances that obtain all combustion air directly from the outdoors.

Section G2407.11 is hereby amended as follows:

G2407.11 (304.11) Combustion air ducts. Combustion air ducts shall comply with all of the following:

- 1. No Change N/C
- 2. N/C
- 3. N/C
- 4. N/C
- 5. N/C
- 6. N/C
- 7. N/C
- 8. N/C
- 9. For LPG appliances, any duct serving the lower opening shall be at the floor level and sloped to the outdoors without traps or pockets.

SECTION G2408 INSTALLATION

Section G2408.2 is hereby amended as follows:

G2408.2 (305.3). Elevation of ignition source. Equipment and appliances having an ignition source shall be elevated such that the source of ignition is not less than eighteen (18) inches (457 mm) above the floor in hazardous locations and public garages, private garages, repair garages, motor fuel-dispensing facilities and parking garages. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

Exceptions:

- 1. Elevation of the ignition source is not required for appliances that are listed as flammable-vapor-ignition resistant.
- 2. Direct-vent appliances that obtain all combustion air directly from the outdoors.
- 3. Electric clothes dryers installed in private garages.

SECTION G2415 PIPING SYSTEM INSTALLATION

Section G2415.6.1 is hereby added as follows:

G2415.6.1 (404.6.1) Underground piping. No gas piping shall be permitted under an asphalt, concrete or other paved surface that adjoins any building or structure unless installed in a gas-tight conduit or other approved method of venting is provided.

The conduit shall be of wrought iron, plastic pipe, steel pipe or other approved conduit material. The conduit shall be protected from corrosion in accordance with Section G2415.11 of this code. The interior diameter of the conduit shall be not less than one-half inch larger than the outside diameter of the gas pipe within. The conduit shall extend to a point not less than 12 inches (305 mm) beyond or 4 inches (102 mm) above the paved surface. The ends shall not be sealed.

Section G2415.12 is hereby amended as follows:

G2415.12 (404.12). *Minimum burial depth*. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping, and 18 inches for plastic piping.

Section G2415.12.1 (404.12.1) is hereby repealed.

SECTION G2417 INSPECTION, TESTING AND PURGING

Section G2417.4 is hereby amended as follows:

G2417.4. (406.4) Test pressure measurement. Test pressure shall be measured with a manometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made.

Section G2417.4.1 is hereby amended as follows:

G2417.4.1 (406.4.1) Test pressure. The test pressure to be used shall be no less than ten (10) pounds per square inch (69 kPa) gauge pressure, or where approved by the building official, the piping and valves may be tested at a pressure of at least six (6) inches (152.4 mm) of mercury, measured with a manometer or slope gauge. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches (0.4 m) water column pressure, the test pressure shall be no less than sixty (60) pounds per square inch (413 kPa). Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.

Section G2417.4.2 is hereby amended as follows:

G2417.4.2 (406.4.2) Test duration. Test duration shall be not less fifteen (15) minutes or for welded pipe and piping carrying gas at pressures in excess of fourteen (14) inches (0.4 m) water column pressure, the test duration shall be not less than thirty (30) minutes. The duration of the test shall not be required to exceed 24 hours.

Section G2417.4.3 is hereby amended as follows:

G2417.4.3 (406.4.3) Test gauges. Tests required by this code which are performed utilizing dial gauges shall be limited to gauges having the following pressure increments or graduations.

- 1. Required pressure tests of ten (10) pounds (69 kPa) or less shall be performed with gauges having increments of one-tenth (1/10) pound (0.69 kPa) or less.
- 2. Required pressure tests exceeding ten (10) pounds (69 kPa) but less than one hundred (100) pounds (690 kPa) shall be performed with gauges having increments of one pound (7 kPa) or less.
- 3. Required pressure tests exceeding one hundred (100) pounds (690 kPa) shall be performed with gauges having increments 2 psi (14 kPa) or less.

Pressure tests required by this code, which are performed utilizing dial gauges, shall be limited to a gauge having a maximum gauge rating not exceeding twice the applied test pressure.

SECTION P2503 INSPECTION AND TESTS

Section P2503.9 is hereby amended as follows:

P2503.9. Test gauges. Gauges used for testing shall be as follows:

- 1. Tests requiring a pressure of 10 psi or less shall utilize a testing gauge having increments of 0.10 psi or less.
- 2. Tests requiring a pressure of 10 psi but less than or equal to 100 psi shall utilize a testing gauge having increments of 1 psi or less.
- 3. Tests requiring a pressure of greater than 100 psi shall utilize a testing gauge having increments of 2 psi or less.

Pressure tests required by this code, which are performed utilizing dial gauges, shall be limited to a gauge having a maximum gauge rating not exceeding twice the applied test pressure.

SECTION P2603 STRUCTURAL AND PIPING PROTECTION

Section P2603.5.1 is hereby amended as follows:

P2603.5.1. Sewer depth. Building sewers shall be a minimum of 12 inches (305 mm) below grade.

SECTION P2801 GENERAL

Section P2801.5.1 is hereby amended as follows:

P2801.5.1. Pan size and drain. The pan shall not be less than 1½ inches (38 mm) deep and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a minimum diameter of ¾ inch (19 mm) installed with a uniform alignment at a uniform slope in the direction of discharge of not less than one-eighth unit vertical in 12 units' horizontal (one-percent slope). Piping for safety pan drains shall be of those materials listed in Table P2906.5 of this code. Where a pan was not previously installed, a pan shall not be required for a replacement water heater.

SECTION P2903 WATER-SUPPLY SYSTEM

Section P2903.7 is hereby amended as follows:

P2903.7 Size of water-service mains, branch mains and risers. The minimum size water service pipe shall be 3/4 inch (19 mm). The size of water service mains, branch mains and risers shall be determined according to water supply demand [gpm (L/m)], available water pressure [psi (kPa)] and friction loss caused by the water meter and developed length of pipe [feet (m)], including equivalent length of fittings. The size of each water distribution system shall be determined according to the methods in Appendix P or when approved by the code official, to design methods conforming to acceptable engineering practice.

SECTION P2904 DWELLING UNIT AND ACCESSORY BUILDING FIRE SPRINKLER SYSTEMS

Section P2904.1 is hereby amended as follows:

P2904.1 General. The design and installation of residential fire sprinkler systems, where required by Section 903.2.8.1 of the International Building Code, shall be in accordance with NFPA 13D.

The remaining of Sections 2904 are hereby repealed.

SECTION P3001 GENERAL

Section P3001.4 is hereby amended as follows:

P3001.4. Sewer required. Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer, where available, or an approved private disposal system in accordance with the Maricopa County Health Department Environmental Service Division and the State of Arizona's Department of Environmental Quality Title 18 Chapter 9 R18-9-A309. The public sewer may be considered as not being available only when so determined by the Maricopa County Health Department Environmental Service Division.

SECTION E3701 GENERAL

Section E3701.1 is hereby amended as follows:

E3701.1. Scope. This chapter covers branch circuits and feeders and specifies the minimum required branch circuits, the allowable loads and the required overcurrent protection for branch circuits and feeders that serve less than 100 percent of the dwelling unit load. Feeder circuits that serve 100 percent of the dwelling load shall be sized in accordance with the procedures in Chapter 36 of this code. Aluminum conductors smaller than #8 shall not be used for lighting or power circuits indoors.

Sec E3901 RECEPTACLE OUTLETS

Section E3901.9 is hereby amended as follows:

E3901.9 Basements, garages and accessory buildings. Not less than one receptacle outlet, in addition to any provided for specific equipment, shall be installed in each separate unfinished portion of a basement; in each vehicle bay at not less than 18 inches (457 mm) and not more than 5.5 feet (1676 mm) above the floor in attached garages; in each vehicle bay at not less than 18 inches (457 mm) and not more than 5.5 feet (1676 mm) above the floor in detached garages that are provided with electric power and in accessory building that is provided with electrical power. [210.52(G)(1), (2) and (3)]

SECTION E3908 GROUNDING

Section E3908.8 is hereby amended as follows:

E3908.8. Types of Equipment Grounding Conductors. The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

- 1. No Change N/C
- 2. Threaded rigid metal conduit and fittings.
- 3. Threaded Intermediate metal conduit and fittings.
- 4. Electrical metallic tubing with an individual equipment grounding conductor.
- 5. Armor of Type AC cable with an individual equipment grounding conductor.
- 6. N/C
- 7. N/C
- 8. N/C
- 9. Liquid-tight flexible metal conduit with an individual equipment grounding conductor or where both the conduit and fittings are listed for grounding.

CHAPTER 42 SWIMMING POOLS

Section E4201.2 is hereby amended as follows:

E4201.2 Definitions.

PERMANENTLY INSTALLED SWIMMING, WADING, IMMERSION AND

THERAPEUTIC POOLS. Those that are constructed in the ground or partially in the ground, and all others capable of holding water with a depth greater than 18 inches (430 mm), and all pools installed inside of a building, regardless of water depth, whether or not served by electrical circuits of any nature.

SECTION E4203 EQUIPMENT LOCATION AND CLEARANCES

Section E4203.8 is hereby added as follows:

E4203.8 Mechanical and electrical equipment location. Mechanical and electrical equipment not addressed in other sections in Chapter 42, shall not be permitted within the area extending 6 feet (1.83 m) horizontally from the inside wall of the pool.

Exception: Listed swimming pool covers where the electrical equipment is part of the total assembly.

(FPN): In determining the above dimension, the distance to be measured is the shortest path to the equipment without piercing a floor, wall, ceiling, doorway with hinged or sliding door, window opening, or other similar effective permanent barrier.

CHAPTER 43 CLASS 2 REMOTE-CONTROL, SIGNALING AND POWER-LIMITED CIRCUITS

SECTION E4302 POWER SOURCES

Section E4302.3 is hereby added as follows:

E4302.3 Bell and signal transformers. In dwelling units, bell and signal transformers shall not be installed in attics, closets or in any other inaccessible concealed place.

APPENDIX K SOUND TRANSMISSION

Sec. AK102 AIR-BORNE SOUND

Section AK102.1 is hereby amended as follows:

AK102.1 General. Airborne sound insulation for walls and floor-ceiling assemblies separating dwelling units from each other shall meet a Sound Transmission Class (STC) rating of no less than 50 (45 if field tested) when tested in accordance with ASTM E 90. Penetrations or openings in construction assemblies for piping; electrical devices; recessed cabinets; bathtubs; soffits; or heating, ventilation or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required rating. Dwelling unit entrance doors, which share a common space, shall be tight fitting to the frame and sill.

Sec. AK103 STRUCTURAL-BORNE SOUND

Section AK103.1 is hereby amended as follows:

AK103.1. General. Floor/ceiling assemblies between dwelling units or between a dwelling unit and a public or service area within a structure shall have an Impact Insulation Class (IIC) of no less than 50 (45 if field tested) when tested in accordance with ASTM E 492.

APPENDIX Q TINY HOUSES

Sec. AQ102 DEFINITIONS

Section AQ102.1 is hereby amended as follows:

AQ102.1 General. No changes except to the following:

Tiny house. A dwelling that is no less than 120 square feet (18.58 m²) and no more than 400 square feet (37 m²) in floor area excluding lofts that is not under the authority of the Arizona Department of Housing, Manufactured Housing Division, or constructed as a recreational vehicle as determined by the building official.

CITY OF TEMPE AMENDMENTS TO THE 2017 NATIONAL ELECTRICAL CODE ARTICLE VIII, SECTION 8-800 OF THE TEMPE CITY CODE

Sec. 8-800. Adopted; where filed; amendments.

That certain document known as "The National Electrical Code, 2017 Edition," that which has been published as a code in book form by the National Fire Protection Association entitled National Electrical Code, N.F.P.A. No. 70-2017 edition, chapters one through nine, three (3) copies with amendments of which are on file in the office of the City Clerk, and this same code, and amendments are hereby referred to, adopted and made a part of, as if fully set out in this article.

(Ord. No. 2008.72, 12-11-08; Ord. No. O2015.12, 4-2-15)

Charter reference - Adoption by reference. §2.14.

State law reference - Adoption by reference. A.R.S. §9-801 et. seq.

ARTICLE 110 REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

Art. 110.2 is hereby added as follows:

110.2(A) Electrical special inspections and observation. The owner or the owner's authorized agent, other than the contractor, shall employ the registered design professional responsible for the electrical design or one or more approved agencies designated by the registered design professional responsible for the electrical design to perform visual observations of complex electrical equipment and systems for general conformance to the approved plans and specification, including but not limited to, placement and interconnection of equipment and shall identify the approved agencies to the building official in accordance with Section 1704.2 of the International Building Code as amended. Electrical observations shall be performed at significant stages of the construction when the installation is complete and ready for inspection. Electrical observations are in addition to and not in lieu of inspections required by Section 110 of the Tempe Administrative Code and Section 1705.12.6 of the International Building Code, and shall be provided when one of the following conditions exist:

- 1. Ground-fault protection performance tests for equipment with ground-fault protect.
- 2. Switch boards, panelboards, motor control centers and other equipment rated at 1,000 amperes or more or over 600 volts.
- 3. The installation or alteration of electrical systems over 600V.
- 4. Transformers rated 100 kVA or more, single phase or 300 kVA or more three-phase.
- 5. Insulation integrity of conductors that supply equipment rated at 1,000 amperes or more, or over 600 volts.
- 6. Emergency and standby power systems, including switchboards, panelboards, distribution boards, transfer equipment, power source, conductors, fire pumps, exhaust and ventilation fans.

- 7. Selective Coordination This includes verification of the installation in accordance with the required selective coordination study.
- 8. The installation or alteration of that portion of a health care facility's electrical system which fall under the scope of Article 517 of this code, including such systems installed in facilities where outpatient surgical procedures are performed.
- 9. The installation or alteration of electrical systems within locations classified as hazardous by provisions of this code, except for gasoline dispensing installations and systems located within storage garages, repair garages or lubritorium's.
- 10. Special cases Work which, in the opinion of the building official, involves unusual hazards or conditions.

Art. 110.7 is hereby amended as follows:

110.7 Wiring Integrity. Completed wiring installations shall be free from short circuits, ground faults, or any connections to ground other than those required or permitted elsewhere in this code.

All equipment rated at 1,000 amperes or more shall be tested for insulation breakdown prior to its being energized. This test shall be performed by an independent testing facility or agency approved by the authority having jurisdiction and in accordance with this code.

ARTICLE 210 BRANCH CIRCUITS

Art. 210.8 is hereby amended as follows:

210.8 Ground-Fault Circuit-Interrupter Protection for Personnel. Ground-fault circuit-interrupter protection for personnel shall be provided as required in Article 210.8(A) through (E) of this code. The ground-fault circuit-interrupter circuit shall be installed in a readily accessible location.

- (A) Dwelling Units. All 125-volt, single-phase, 15- and 20 ampere receptacles installed in the locations specified in Article 210.8(A)(1) through (11) of this code shall have round-fault circuit-interrupter protection for personnel.
 - (1) No Change N/C
 - (2) N/C
 - (3) N/C
 - (4) N/C
 - (5) N/C
 - (6) N/C
 - (7) N/C
 - (8) N/C
 - (9) N/C
 - (10) N/C
 - (11) Other indoor damp or wet locations not specifically listed.

- (A) Dwelling Units. All 125-volt, single-phase, 15- and 20 ampere receptacles installed in the locations specified in Article 210.8(A)(1) through (11) of this code shall have round-fault circuit-interrupter protection for personnel.
 - (1) No Change N/C
 - (2) N/C
 - (3) N/C
 - (4) N/C
 - (5) N/C
 - (6) Other indoor damp or wet locations not specifically listed.
 - (7) N/C
 - (8) N/C
 - (9) N/C
 - (10) N/C

Art. 210.52 (G) (1) is hereby amended as follows:

210.52 (G)(1) Garages. In each attached garage and in each detached garage that is provided with electric power, at least one receptacle outlet shall be installed in each vehicle bay at not less than 457 mm (18 in.) and not more than 1.7 m (5½ ft.) above the floor.

ARTICLE 225 OUTSIDE BRANCH CIRCUITS AND FEEDERS

Art. 225.32 is hereby amended as follows:

225.32 Location. The disconnecting means shall be installed either inside or outside the building or structure served or where the conductors pass through the building or structure. The disconnecting means shall be at a readily accessible location nearest the point of entrance of the conductors. For the purpose of this Article, the requirements of Article 230.6 of this code shall be utilized.

Exception No. 1: No Change – N/C

Exception No. 2: N/C

Exception No. 3: N/C

Exception No. 4: N/C

Exception No. 5: For free-standing canopies, carports, and similar structures; a branch circuit disconnecting means shall be permitted to be located elsewhere on the premises. An equipment grounding conductor sized per Article 250.122 of this code shall be run with the circuit conductors and bonded to the exposed structural metal.

ARTICLE 230 SERVICES

Art. 230.70 is hereby amended as follows:

230.70 General. Means shall be provided to disconnect all conductors in a building or other structure from the service-entrance conductors.

- (A) Location. The service disconnecting means shall be installed in accordance with Article 230.70(A) (1), (A) (2) and (A) (3) of this code.
- (1) Readily Accessible Location. The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure, or inside nearest the point of entrance of the service conductors. The service disconnecting means shall be installed adjacent to and accessible from the same working area as the utility meter.

All service disconnecting means, located inside a building, shall be separated from the remainder of the building with fire barriers or horizontal assemblies or both of not less than one-hour fire-resistive construction in accordance with Sections 707 and 711 of the International Building Code. Any openings or penetrations shall have protectives installed in accordance with Sections 716 and 717 of the International Building Code.

Exception: Open parking structures with no other occupancy.

ARTICLE 250 GROUNDING AND BONDING

Art. 250.118 is hereby amended as follows:

250.118 Types of Equipment Grounding Conductors. The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

- (1) No Change N/C
- (2) Threaded rigid metal conduit or with an individual equipment grounding conductor
- (3) Threaded intermediate metal conduit or with an individual equipment grounding conductor
- (4) Electrical metallic tubing with an individual equipment grounding conductor
- (5) N/C
- (6) N/C
- (7) N/C
- (8) N/C
- (9) N/C
- (10) N/C
- (11) N/C
- (12) N/C
- (13) N/C
- (14) N/C

ARTICLE 310 CONDUCTORS FOR GENERAL WIRING

Art. 310.15(B)(7) is hereby amended as follows:

(7) Single-Phase Dwelling Services and Feeders. For one-family dwellings, and the individual dwelling units of two-family and multi-family dwellings, service and feeder conductors supplied by a single-phase 120/240-volt system shall be permitted to be sized in accordance with Article 310.15(B)(7)(1) through (4) of this code.

- (1) No Change N/C
- (2) N/C
- (3) N/C
- (4) N/C

ARTICLE 334 NONMETALLIC-SHEATHED CABLE: TYPES NM, NMC, AND NMS

Art. 334.10 is hereby amended as follows:

334.10 Uses Permitted. Type NM, Type NMC, and Type NMS cables shall be permitted to be used in the following except as prohibited in Article 334.12 of this code.

- (1) One- and two-family dwellings and their accessory structures.
- (2) Multifamily dwellings permitted to be of Types III, IV, and V construction.
- (3) Other dwelling accessory buildings or structures in accordance with Article 334.10 (1) and (2) of this code.
- (4) Cable trays in dwelling structures in accordance with Article 334.10 (1) and (2) of this code where cables are identified for the use.
- (5) No Change N/C

ARTICLE 680 SWIMMING POOLS, FOUNDATIONS, AND SIMILAR INSTALLATIONS

Art. 680.15 is hereby added as follows:

680.15 Mechanical and electrical equipment location.

Mechanical and electrical equipment not addressed in other sections in Article 680 shall not be permitted within the area extending 6 feet (1.83 m) horizontally from the inside wall of the pool.

Exception: listed swimming pool covers where the electrical equipment is part of the total assembly.

(FPN): In determining the above dimension the distance to be measured is the shortest path to the equipment without piercing a floor, wall, ceiling, doorway with hinged or sliding door, window opening, or other similar effective permanent barrier.

ARTICLE 725 CLASS 1, CLASS 2, AND CLASS 3 REMOTE-CONTROL, SIGNALING, AND POWER-LIMITED CIRCUITS

Art. 725.32 is hereby amended as follows:

725.32 Bell and signal transformers. In residential occupancies, bell or signal transformers shall not be installed in attics, closets, or in any other inaccessible concealed place.

ORDINANCE NO. O2018.59

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, REPEALING CHAPTER 8. TEMPE CITY CODE. RELATING TO BUILDINGS AND BUILDING REGULATIONS, AND ADOPTING THE TEMPE ADMINISTRATIVE CODE, THE BUILDING CODE, THE 2018 INTERNATIONAL INTERNATIONAL RESIDENTIAL CODE, THE 2018 INTERNATIONAL EXISTING BUILDING CODE, THE 2018 INTERNATIONAL MECHANICAL CODE, THE 2018 INTERNATIONAL PLUMBING CODE, THE **2018 INTERNATIONAL** FUEL GAS CODE, THE 2017 NATIONAL ELECTRICAL CODE, THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE, 2018 INTERNATIONAL SWIMMING POOL AND SPA CODE, AND AMENDMENTS THERETO

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, as follows:

<u>Section 1.</u> That Articles I, II, III, IV, V, VI, VII, VIII and IX of the Tempe City Code Chapter 8, Building and Building Regulations, are hereby repealed in their entirety.

<u>Section 2.</u> That Tempe City Code, Chapter 8, Article I, Section 8-100, Tempe Administrative Code adopted; where filed; amendments, is hereby adopted as follows:

ARTICLE I. TEMPE ADMINISTRATIVE CODE

SEC. 8-100. ADOPTED; WHERE FILED;

- (A) THAT CERTAIN DOCUMENT KNOWN AS "THE TEMPE ADMINISTRATIVE CODE," THREE (3) COPIES OF WHICH ARE ON FILE IN THE OFFICE OF THE CITY CLERK, AND THIS SAME CODE IS HEREBY REFERRED TO, ADOPTED AND MADE A PART HEREOF, AS IF FULLY SET FORTH IN THIS ARTICLE.
- (B) ALL SECTIONS, CHAPTERS, ETC., IN THIS ARTICLE SHALL BE BOTH A PART OF THIS CODE AND A PART OF THE TEMPE ADMINISTRATIVE CODE. PROVISIONS IN THIS ARTICLE SHALL BE CITED AS THE TEMPE CITY CODE, CHAPTER 8, ARTICLE I, FOLLOWED BY THE NUMBER OF THE SECTION.

<u>Section 3.</u> That Tempe City Code, Chapter 8, Article II, 2018 International Building Code adopted; where filed; amendments, is hereby adopted as follows:

ARTICLE II. 2018 INTERNATIONAL BUILDING CODE

SEC. 8-200. ADOPTED; WHERE FILED; AMENDMENTS.

THAT CERTAIN DOCUMENT KNOWN AS "THE INTERNATIONAL BUILDING CODE, 2018 EDITION," Ordinance No. 02018.59

WHICH HAS BEEN PUBLISHED AS A CODE IN BOOK FORM BY THE INTERNATIONAL CODE COUNCIL, CHAPTERS TWO THROUGH THIRTY-FIVE AND APPENDIX CHAPTERS I, J AND N INCLUSIVE, THREE (3) COPIES WITH AMENDMENTS OF WHICH ARE ON FILE IN THE OFFICE OF THE CITY CLERK, AND THIS SAME CODE, APPENDICES AND AMENDMENTS ARE HEREBY REFERRED TO, ADOPTED AND MADE A PART HEREOF, AS IF FULLY SET FORTH IN THIS ARTICLE.

<u>Section 4.</u> That Tempe City Code, Chapter 8, Article III, 2018 International Residential Code adopted; where filed; amendments, is hereby adopted as follows:

ARTICLE III. 2018 INTERNATIONAL RESIDENTIAL CODE

SEC. 8-300. ADOPTED; WHERE FILED; AMENDMENTS.

THAT CERTAIN DOCUMENT KNOWN AS "THE INTERNATIONAL RESIDENTIAL CODE, 2018 EDITION," WHICH HAS BEEN PUBLISHED AS A CODE IN BOOK FORM BY THE INTERNATIONAL CODE COUNCIL, CHAPTERS TWO THROUGH FORTY-FOUR, AND APPENDIX CHAPTERS A, B, C, G, H, J, K, P AND Q INCLUSIVE, THREE (3) COPIES WITH AMENDMENTS OF WHICH ARE ON FILE IN THE OFFICE OF THE CITY CLERK, AND THIS SAME CODE, APPENDICES AND AMENDMENTS ARE HEREBY REFERRED TO, ADOPTED AND MADE A PART HEREOF, AS IF FULLY SET FORTH IN THIS ARTICLE.

<u>Section 5.</u> That Tempe City Code, Chapter 8, Article IV, 2018 International Existing Building Code adopted; where filed; amendments, is hereby adopted as follows:

ARTICLE IV. 2018 INTERNATIONAL EXISTING BUILDING CODE

SEC. 8-400. ADOPTED; WHERE FILED; AMENDMENTS.

THAT CERTAIN DOCUMENT KNOWN AS "THE INTERNATIONAL EXISTING BUILDING CODE, 2018 EDITION," WHICH HAS BEEN PUBLISHED AS A CODE IN BOOK FORM BY THE INTERNATIONAL CODE COUNCIL, CHAPTERS TWO THROUGH SIXTEEN AND APPENDIX CHAPTERS A, A1 THROUGH A5 AND B INCLUSIVE, THREE (3) COPIES WITH AMENDMENTS OF WHICH ARE ON FILE IN THE OFFICE OF THE CITY CLERK, AND THIS SAME CODE, APPENDICES AND AMENDMENTS ARE HEREBY REFERRED TO, ADOPTED AND MADE A PART HEREOF, AS IF FULLY SET FORTH IN THIS ARTICLE.

<u>Section 6.</u> That Tempe City Code, Chapter 8, Article V, 2018 International Mechanical Code adopted; where filed; amendments, is hereby adopted as follows:

ARTICLE V. 2018 INTERNATIONAL MECHANICAL CODE

SEC. 8-500. ADOPTED; WHERE FILED; AMENDMENTS.

THAT CERTAIN DOCUMENT KNOWN AS "THE INTERNATIONAL MECHANICAL CODE, 2018 EDITION," WHICH HAS BEEN PUBLISHED AS A CODE IN BOOK FORM BY THE INTERNATIONAL CODE COUNCIL, CHAPTERS TWO THROUGH NINE AND CHAPTERS ELEVEN, TWELVE, FOURTEEN, FIFTEEN AND APPENDIX CHAPTER A INCLUSIVE, THREE (3) COPIES WITH AMENDMENTS OF WHICH ARE ON FILE IN THE OFFICE OF THE CITY CLERK, AND THIS SAME CODE, APPENDIX AND AMENDMENTS ARE HEREBY REFERRED TO, ADOPTED AND MADE A PART HEREOF, AS IF FULLY SET FORTH IN THIS ARTICLE.

<u>Section 7.</u> That Tempe City Code, Chapter 8, Article VI, 2018 International Plumbing Code adopted; where filed; amendments, is hereby adopted as follows:

ARICLE VI. 2018 INTERNATIONAL PLUMBING CODE

SEC. 8-600. ADOPTED; WHERE FILED; AMENDMENTS.

THAT CERTAIN DOCUMENT KNOWN AS "THE INTERNATIONAL PLUMBING CODE, 2018 EDITION," WHICH HAS BEEN PUBLISHED AS A CODE IN BOOK FORM BY THE INTERNATIONAL CODE COUNCIL, CHAPTERS TWO THROUGH FIFTEEN AND, APPENDIX CHAPTERS B AND E INCLUSIVE, THREE (3) COPIES WITH AMENDMENTS OF WHICH ARE ON FILE IN THE OFFICE OF THE CITY CLERK, AND THIS SAME CODE, APPENDIX AND AMENDMENTS ARE HEREBY REFERRED TO, ADOPTED AND MADE A PART HEREOF. AS IF FULLY SET FORTH IN THIS ARTICLE.

<u>Section 8.</u> That Tempe City Code, Chapter 8, Article VII 2018 International Fuel Gas Code adopted; where filed; amendments, is hereby adopted as follows:

ARTICLE VII. 2018 INTERNATIONAL FUEL GAS CODE

SEC. 8-700. ADOPTED; WHERE FILED; AMENDMENTS.

THAT CERTAIN DOCUMENT KNOWN AS "THE INTERNATIONAL FUEL GAS CODE, 2018 EDITION," WHICH HAS BEEN PUBLISHED AS A CODE IN BOOK FORM BY THE INTERNATIONAL CODE COUNCIL, CHAPTERS TWO THROUGH EIGHT AND APPENDIX CHAPTERS A, B, AND C INCLUSIVE, THREE (3) COPIES WITH AMENDMENTS OF WHICH ARE ON FILE IN THE OFFICE OF THE CITY CLERK, AND THIS SAME CODE, APPENDICES AND AMENDMENTS ARE HEREBY REFERRED TO, ADOPTED AND MADE A PART HEREOF, AS IF FULLY SET FORTH IN THIS ARTICLE.

<u>Section 9</u>. That Tempe City Code, Chapter 8, Article VIII 2017 National Electrical Code adopted; where filed; amendments, is hereby adopted as follows:

ARTICLE VIII. 2017 NATIONAL ELECTRICAL CODE

SEC. 8-800. ADOPTED; WHERE FILED; AMENDMENTS.

THAT CERTAIN DOCUMENT KNOWN AS "THE NATIONAL ELECTRICAL CODE, 2017 EDITION," THAT WHICH HAS BEEN PUBLISHED AS A CODE IN BOOK FORM BY THE NATIONAL FIRE PROTECTION ASSOCIATION ENTITLED NATIONAL ELECTRICAL CODE, N.F.P.A. NO. 70-2017 EDITION, CHAPTERS ONE THROUGH NINE INCLUSIVE, (3) COPIES WITH AMENDMENTS OF WHICH ARE ON FILE IN THE OFFICE OF THE CITY CLERK, AND THIS SAME CODE, AND AMENDMENTS ARE HEREBY REFERRED TO, ADOPTED AND MADE A PART OF, AS IF FULLY SET FORTH IN THIS ARTICLE.

<u>Section 10</u>. That Tempe City Code, Chapter 8, Article IX, 2018 International Energy Conservation Code adopted; where filed; amendments, is hereby adopted as follows:

ARTICLE IX. 2018 INTERNATIONAL ENERGY CONSERVATION CODE

SEC. 8-900. ADOPTED; WHERE FILED; AMENDMENTS.

THAT CERTAIN DOCUMENT KNOWN AS THE "INTERNATIONAL ENERGY CONSERVATION CODE, 2018 EDITION," WHICH HAS BEEN PUBLISHED AS A CODE IN BOOK FORM BY THE INTERNATIONAL CODE COUNCIL, CHAPTERS TWO THROUGH SIX AND APPENDIX CHAPTER CA FOR COMMERCIAL PROVISIONS INCLUSIVE, AND CHAPTERS TWO THROUGH SIX AND APPENDIX CHAPTER RA FOR RESIDENTIAL PROVISIONS INCLUSIVE, THREE (3) COPIES WITH

AMENDMENTS OF WHICH ARE ON FILE IN THE OFFICE OF THE CITY CLERK, AND THIS SAME CODE, AND AMENDMENTS ARE HEREBY REFERRED TO, ADOPTED AND MADE A PART HEREOF, AS IF FULLY SET FORTH IN THIS ARTICLE.

<u>Section 11</u>. That Tempe City Code, Chapter 8, Article X, 2018 International Swimming Pool and Spa Code adopted; where filed; amendments, is hereby adopted as follows:

ARTICLE X. 2018 INTERNATIONAL SWIMMING POOL AND SPA CODE

SEC. 8-1000. ADOPTED; WHERE FILED; AMENDMENTS.

THAT CERTAIN DOCUMENT KNOWN AS "THE INTERNATIONAL SWIMMING POOL AND SPA CODE, 2018 EDITION," WHICH HAS BEEN PUBLISHED AS A CODE IN BOOK FORM BY THE INTERNATIONAL CODE COUNCIL CHAPTERS TWO THROUGH ELEVEN INCLUSIVE, THREE (3) COPIES WITH AMENDMENTS OF WHICH ARE ON FILE IN THE OFFICE OF THE CITY CLERK, AND THIS SAME CODE, AND AMENDMENTS ARE HEREBY REFERRED TO, ADOPTED AND MADE A PART HEREOF, AS IF FULLY SET FORTH IN THIS ARTICLE.

<u>Section 12</u>. All ordinances, code sections, and parts of ordinances and code sections in conflict herewith, are expressly repealed. If any section, subsection, sentence, clause or phrase of this Ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance.

<u>Section 13.</u> Pursuant to City Charter, Section 2.12, ordinances are effective thirty (30) days after adoption. This Ordinance shall become effective and have application to all buildings and structures for which permits have been applied for on or after October 1, 2018, except that a customer may elect to utilize the previous provisions of Chapter 8 as were in effect since July 1, 2015, for permits applied for during the period of October 1, 2018 through December 31, 2018.

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, this $\underline{30th}$ day of August, 2018.

	/s/
ATTEST:	Mark W. Mitchell, Mayor
/s/	
Brigitta M. Kuiper, City Clerk	
APPROVED AS TO FORM:	
/s/ Judith R. Baumann, City Attorney	