

**CITY OF TEMPE AMENDMENTS TO THE  
2018 INTERNATIONAL FIRE CODE  
CHAPTER 14, ARTICLE II, DIVISION 1 AND DIVISION 2  
OF THE TEMPE CITY CODE**

**ARTICLE II. 2018 INTERNATIONAL FIRE CODE**

**Division 1. Generally**

**Sec. 14-16. Adopted; where filed.**

That certain document known as the International Fire Code, 2018 Edition, which has been published in book form by the International Code Council, Inc. (ICC), together with appendix chapters B, C and K, 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 out in this article.

**Charter reference**—Adoption by reference, § 2.14.

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

**Sec. 14-17. Enforcement; annual report.**

- (A) The international fire code adopted by this article shall be enforced by the fire medical rescue department of the City, under the supervision of the Chief of the Fire Medical Rescue Department.
- (B) A report on community risk reduction activities shall be made annually and transmitted to the City Manager.

**Secs. 14-18 – 14-20. Reserved.**

**Secs. 14-21—14-25. Repealed.**

**Secs. 14-26 – 14-40. Reserved.**

**Division 2. Fire Code Amendments**

**Sec. 14-41. Legal status**

The provisions of this division are amendments to the 2018 edition of the International Fire Code as now or hereafter adopted in § 14-16. All sections, chapters, etc., in this division other than this section shall be considered to be both a part of this code and a part of the International Fire Code.

## **SECTION 101 SCOPE AND GENERAL REQUIREMENTS**

Section 101.1 is hereby amended as follows:

*101.1 Title.* These regulations shall be known as the Fire Code of The City of Tempe, hereinafter referred to as “this code.”

Section 105.6.36 is amended as follows:

*105.6.36 Outdoor assembly event.* An operational permit is required to conduct an outdoor assembly event where planned attendance exceeds 250 persons.

Section 105.7.26 is added as follows:

*105.7.26 Fire Fighter Air Replenishment System (FARS).* A construction permit is required for installation of or modification to a Fire Fighter Air Replenishment System (FARS). Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

Section 109 is hereby amended as follows:

## **SECTION 109 APPEALS**

Sections 109.1 through 109.3 are hereby repealed.

Section 109.4 is hereby added as follows:

*109.4 Appeals.* Whenever the Fire Code official of the Fire Medical Rescue Department shall disapprove an application or refuse to grant a permit applied for, or when it is claimed that the provisions of this code do not apply or that the true intent and meaning of the code have been misconstrued or wrongly interpreted, the applicant may appeal from the decision of the Chief of the Fire Medical Rescue Department to the City Manager within thirty (30) days from the date of the decision appealed.

## **SECTION 110 VIOLATIONS.**

Section 110.4 is hereby amended as follows:

*110.4 Violation penalties.* Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or written directive of the Fire Code official, or of a permit or certificate used under provisions of this code, shall be guilty of a class 1 misdemeanor, punishable by a fine of not more than two thousand five hundred dollars (\$2,500.00) or by imprisonment not exceeding ninety (90) days, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

## **SECTION 112 STOP WORK ORDER.**

Section 112.4 is hereby amended as follows:

*112.4. Failure to comply.* 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 the violation penalties specified in Section 110.4.

## **SECTION 202 GENERAL DEFINITIONS.**

Section 202 is hereby amended/added 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 ten 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.

*[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.

*Firefighter air replenishment system (fars).* A permanently installed arrangement of piping, valves, fittings, and equipment to facilitate the replenishment of breathing air in self-contained breathing apparatus (SCBA) for firefighters engaged in emergency operations.

*Occupancy classification, Factory Industrial F-1 Moderate-Hazard Occupancy* is hereby amended as follows:

*[BG]Factory Industrial F-1 Moderate-hazard occupancy.* Factory industrial uses which 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:

Aircraft (manufacturing, not to include repair)  
Appliances  
Athletic equipment  
Automobiles and other motor vehicles  
Bakeries  
Beverages; over 16-percent alcohol content  
Bicycles  
Boats  
Brooms or brushes  
Business machines  
Cameras and photo equipment  
Canvas or similar fabric  
Carpets and rugs (includes cleaning)  
Clothing  
Construction and agricultural machinery  
Disinfectants  
Dry cleaning and dyeing  
Electric generation plants  
Electronics  
Engines (including rebuilding)  
Food processing and commercial kitchens not associated with restaurants, cafeterias, fast food take-out and similar dining facilities  
Furniture  
Hemp products  
Jute products  
Laundries  
Leather products  
Machinery  
Metals  
Millwork (sash and door)  
Motion pictures and television filming (without spectators)  
Musical instruments  
Optical goods  
Paper mills or products  
Photographic film  
Plastic products  
Printing or publishing  
Refuse incineration  
Shoes  
Soaps and detergents  
Textiles  
Tobacco  
Trailers  
Upholstering  
Wood; distillation  
Woodworking (cabinet) establishments with more than three (3) woodworking appliances.

*Occupancy classification, Institutional Group I-1 is hereby amended as follows:*

*[BG]Group I-1.* This occupancy shall include buildings, structures or parts thereof housing more than ten (10) persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive personal care or custodial care. Buildings of Group I-1 shall be classified as one of the occupancy conditions specified below. 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

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

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

*[BG]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 the International Building Code.

*[BG]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 in accordance with Tempe Administrative Code, Section 101.4.2.

*Occupancy classification, Institutional Group I-2 is hereby amended as follows:*

*[BG]Institutional Group I-2.* This occupancy shall include buildings and structures used for medical, custodial or directed care on a 24-hour basis, 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

*Occupancy classification, Institutional Group I-4 is hereby amended as follows:*

*[BG]Institutional Group I-4, day care facilities.* This group shall include buildings and structures occupied by more than five persons of any age who receive custodial care for less than 24 hours by persons other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

- Adult day care
- Child day care

*[BG]Classification as Group E.* A child day care facility that provides care for more than five but no more than 100 children 21/2 years or less of age, where the rooms in which the children are cared for are located on a *level of exit discharge* serving such rooms and each of these child care rooms has an *exit* door directly to the exterior, shall be classified as Group E.

*[BG]Within a place of religious worship.* Rooms and spaces within places of religious worship providing such care during religious functions shall be classified as part of the primary occupancy.

*[BG]Five or fewer occupants receiving care.* A facility having five or fewer persons receiving custodial care shall be classified as part of the primary occupancy.

*[BG]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.

*Occupancy classification, Residential Group R* is hereby amended as follows:

*[BG]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 5 occupants
- Congregate living facilities (transient) with more than 5 occupants
- Hotels
- Motels

*[BG]Residential Group R-2.* Residential Group R-2 occupancies containing sleeping units or more than two (2) dwelling units where the occupants are primarily permanent in nature, including:

- Apartment houses
- Congregate living facilities (non-transient) with more than 5 occupants
  - Boarding houses (non-transient) with more than 5 occupants
  - Convents
  - Dormitories
  - Fraternities and sororities
  - Monasteries
- Live/work units
- Vacation timeshare properties

*[BG]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:

- Assisted living home that provides accommodation for 5 or fewer persons, of any age, receiving care
- Buildings that do not contain more than two dwelling units as applicable in Tempe Building Safety Administrative Code, Section 101.4.2
- Congregate living facilities* (non-transient) with 5 or fewer occupants subject to the conditions in the Tempe Zoning and Development Code
- Boarding houses (non-transient) with 5 or fewer occupants subject to the conditions in the Tempe Zoning and Development Code
- Lodging houses (transient)

*[BG]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 in accordance with Tempe Administrative Code, Section 101.4.2.

*[BG]Residential Group R-4.* Residential group R-4 shall include buildings, structures or portions thereof for more than 5 but not more than 10 occupants, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive personal care and or custodial care. Buildings of Group R-4 shall be classified as one of the occupancy conditions indicated below. This group shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities
- Assisted living homes
- 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 the International Building Code section 429.

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

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

*[BG]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 308 OPEN FLAMES.**

Section 308.1.4 is hereby amended as follows:

*308.1.4 Open-flame cooking devices.* Charcoal burners and other open-flame cooking devices shall not be operated on balconies/patios or within 10 feet (3048mm) of any structure.

### **Exceptions:**

1. One- and two-family dwellings.

## **SECTION 403 PUBLIC ASSEMBLAGES AND EVENTS.**

Section 403.12.3.1 is hereby amended as follows:

*403.12.3.1 Number of crowd managers.* Not fewer than two trained crowd managers, and not fewer than one trained crowd manager for each 250 persons or portion thereof, shall be provided for the gathering.

### **Exceptions:**

1. Assembly occupancies used exclusively for religious worship with an occupant load not exceeding 1,000 shall not require crowd managers.
2. The number of crowd managers shall be reduced where, in the opinion of the fire code official, the fire protection provided by the facility and the nature of the event warrant a reduction

## **SECTION 510 EMERGENCY RESPONDER RADIO COVERAGE.**

Section 510.4 is hereby amended as follows:

*510.4 Technical requirements.* Systems, components, and equipment required to provide emergency responder radio coverage system shall comply with Sections 510.4.1 through 510.4.2.5 and Tempe City Code.

Section 511 is hereby added as follows:

## **SECTION. 511 FIREFIGHTER AIR REPLENISHMENT SYSTEMS (FARS).**

*511.1 Scope.* The design, installation, and maintenance of firefighter air replenishment systems shall be in accordance with this section.

*511.2 Required installations.* A firefighter air replenishment system shall be installed in the following buildings:



1. Buildings classified as high-rise in accordance with the International Building Code.
2. Underground buildings and structures, or components thereof, totaling ten thousand (10,000) square feet or more that is either more than two (2) floors below grade or more than thirty (30) feet below grade.

### *511.3 Permits and construction documents.*

*511.3.1 Permits.* A fire permit is required to install, repair or modify a firefighter air replenishment system.

*511.3.2 Construction documents.* Prior to the installation of a firefighter air replenishment system, a minimum of two (2) sets of construction documents shall be submitted to the community development department for review and approval. Construction documents, special inspection forms, calculations, and other data shall be submitted in two (2) complete sets with each application for a permit. The construction documents shall be prepared by a design professional registered in Arizona. Construction documents shall be dimensioned and drawn upon suitable material. 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 and relevant laws, ordinances, rules and regulations, as determined by the fire code official.

The plans submittal shall also include specifications for the tubing, fittings, and manufacturer data sheets for valves, pressure regulators, pressure relief devices, gauges, RIC universal air connections and cylinder filling hoses.

*511.4 Contractor qualification.* The firefighter air replenishment system shall be installed by Arizona state licensed contractors. Proof of licensure shall be provided at the first inspection.

### *511.5 Design criteria.*

*511.5.1* The system shall be designed to at least one hundred twenty-five percent (125%) operating pressure.

*511.5.2* The system shall be designed to fill, at each interior cylinder filling panel, one sixty-six (66) standard cubic foot compressed breathing air cylinder to a maximum pressure of four thousand five hundred (4,500) pounds per square inch gauge (psig).

*511.5.3* The filling operation shall be completed in not more than two (2) minutes upon connection of the cylinder to the fill hose.

*511.5.4* The minimum design flow of the breathing air piping system shall be calculated using two (2) interior cylinder filling panels operating simultaneously and located at the highest level above the fire department access.

*511.6 Operating pressure.* All components used in the system shall be rated to operate at a minimum pressure of five thousand (5,000) psig at seventy degrees (70° F).

*511.7 Marking.* System piping, gauges, valves and air outlets shall be clearly marked by means of steel or plastic labels or tags indicating their function. Markings used for piping systems shall consist of the content's name and include a direction of flow arrow. Markings shall be provided at each valve; at wall, floor or ceiling penetrations; at each change of direction; and at a minimum of every twenty (20) feet or fraction thereof throughout the piping system.

*511.8 Exterior fire department connection panel and enclosure.*

*511.8.1 Location.* A fire department connection panel shall be attached to the building or on a remote monument at the exterior of the building, at a location approved by the fire code official. The panel shall be secured inside of a weather resistant enclosure. The panel shall be within fifty (50) feet of an approved roadway or driveway, or other location approved by the fire code official. The enclosure shall be visible and accessible on approach to the building.

*511.8.2 Construction.* The fire department connection panel shall be installed in a cabinet constructed of minimum eighteen (18) gauge carbon steel, and shall be provided with coating to protect the cabinet from corrosion.

*511.8.3 Vehicle protection.* When the panel is located in an area subject to vehicle traffic, impact protection shall be provided in accordance with this code.

*511.8.4 Enclosure marking.* The front of the enclosure shall be marked "FIREFIGHTER AIR REPLENISHMENT SYSTEM" on securely attached steel, plastic engraved or painted plate. The lettering shall be in a color that contrasts with the enclosure front and in letters that are a minimum of two (2) inches high with three-eighths (3/8) inch brush stroke. The marking of the enclosure shall be visible.

*511.8.5 Enclosure components.* The enclosure shall house a fire department connection panel containing the following components:

1. One male rapid intervention crew/company universal air connection (RIC UAC) fitting. When connected to a female fitting, the assembled UAC shall meet the construction, performance and dimensional requirements of NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services 2013 Edition.
2. Two (2) pressure gauges. The face of the pressure gauge shall be a minimum of two and one-half (2.5) inch diameter. The gauge shall have a pressure range of zero to ten thousand (0-10,000) psig and indicating units shall not be less than one hundred (100) psig or greater than two hundred fifty (250) psig increments. One pressure gauge shall be provided and marked to indicate the fill pressure. One pressure gauge shall be provided and marked to indicate the system pressure.
3. One pressure regulator. One pressure regulator shall be installed between the RIC UAC fitting and the safety relief valve. The set pressure of the regulator shall not exceed the inlet pressure specified for the male RIC UAC fitting.
4. One spring-loaded safety relief valve. A spring-loaded safety relief valve shall be installed downstream of the pressure regulator inlet. The relief valve shall meet the requirements of the ASME Boiler and Pressure Vessel Code, Section VIII, Unfired Pressure Vessels, and shall not be field adjustable. The relief valve shall have a set-to-open pressure not exceeding 1.1 times the design pressure of the system.

5. One shutoff valve. The shutoff valve shall be installed upstream of the male RIC UAC connection and check valve.
6. One check valve. The check valve shall be installed between the male RIC UAC connection and the shutoff valve.
7. Instructions. Instructions explaining how to operate the shutoff valve shall be posted.
8. Tubing, fittings, adapters and supports. As required.

*511.8.6 Security.* To prevent unauthorized access to or tampering with the system, the fire department connection panel enclosure shall be maintained locked by an approved means.

*511.8.7. Fire department key box.* A fire department key box shall be provided adjacent to the fire department connection panel and enclosure. A key for the enclosure shall be provided in the key box.

*511.9. Interior cylinder fill panels and enclosure.*

*511.9.1. Location.* The panel shall be located a minimum of thirty-six (36) inches but not more than sixty (60) inches above the finished floor. Cylinder fill panels shall be installed in the interior of buildings as follows:

1. High rise buildings. An interior cylinder fill panel and enclosure shall be installed at an approved central location on floors of high rise buildings commencing on the third floor above grade and every third floor thereafter. In addition, if basements exist greater than two (2) floors below grade, the fill panels will commence on the grade level and every third below grade level thereafter.
2. Underground structures as defined by Section 511.2 An interior cylinder fill panel and enclosure shall be installed in approved locations on the grade level and every third below grade level thereafter.

*511.9.2 Cabinet requirements.* Each cylinder fill panel shall be installed in a cabinet constructed of minimum eighteen (18) gauge carbon steel. The depth of the cabinet shall not create an exit obstruction. With the exception of the shutoff valve, pressure gauges, fill hoses and ancillary components, no system components shall be visible and shall be contained behind a minimum eighteen (18) gauge interior panel.

*511.9.3 Door.* Hinges for the cabinet door shall be located inside of the cabinet. The door shall be arranged such that when the door is open, it does not reduce the required exit width or create an obstruction in the path of egress.

*511.9.4 Cabinet marking.* The front of each cylinder fill panel shall be marked "FIREFIGHTER AIR REPLENISHMENT SYSTEM." The lettering shall be in a color that contrasts with the cabinet front and in letters that are a minimum of two (2) inches high with three-eighths (3/8) inch brush stroke. The marking of the cabinet shall be visible to emergency response personnel.

*511.9.5 Cabinet components.* The cabinet shall be of sufficient size to allow for the installation of the following components:

1. One shutoff valve. Shutoff valve to be located between the cylinder fill panel and the main compressed air riser. It is permissible to locate this shutoff valve outside of the cylinder fill panel.
2. Two (2) pressure gauges. The face of each pressure gauge shall be a minimum two and one-half (2.5) inch diameter. The gauge shall have a pressure range of zero to ten thousand (0-10,000) psig and indicating units shall not be less than one hundred (100) psig or greater than two hundred fifty (250) psig increments. One pressure gauge shall be provided and marked to indicate the fill pressure on the four thousand five hundred (4,500) psig connections.
3. One pressure regulator. One regulator shall be installed between the safety relief valve and the four thousand five hundred (4,500) psig fill connection. The set pressure of the regulator shall not exceed the discharge pressure specified for the RIC UAC fitting.
4. One spring-loaded safety relief valve. A spring-loaded safety relief valve shall be installed downstream of the four thousand five hundred (4,500) psig pressure regulator inlet. The relief valve shall meet the requirements of CGAS-1.3 2016 Edition and shall not be field adjustable. The relief valve shall have a set to open pressure not exceeding 1.1 times the design pressure of the system.
5. Four (4) four thousand five hundred (4,500) psig self-contained breathing apparatus (SCBA) fill hoses with RIC UAC fittings. When protective caps are provided, they shall be equipped with a retainer so the cap cannot be disconnected from the hose.
6. Tubing, fittings, adapters and supports. As required.

*511.9.6 Cylinder filling hose.* The design of the cabinet shall provide a means for storing the hose to prevent kinking. When the hose is coiled, the brackets shall be installed so that the hose bend radius is maintained at four (4) inches or greater. The discharge outlet of each cylinder filling hose shall have a female RIC UAC. The female fitting shall be designed to connect to a male RIC UAC. The assembled RIC UAC shall meet the construction, performance and dimensional requirements of NFPA 1981, Standard on Open Circuit Self-Contained Apparatus for Fire and Emergency Services, 2016 Edition.

*511.9.7 Security.* To prevent unauthorized access to or tampering with the system, each panel cover shall be maintained locked by an approved means.

#### *511.10 Installation of components.*

*511.10.1 Pressure monitoring switch.* An electric low-pressure monitoring switch shall be installed in the piping system to monitor the air pressure. The pressure switch shall be connected to the building's fire alarm system. The pressure switch shall transmit a supervisory signal when the pressure of the breathing air system is less than three thousand (3,000) psig at seventy degrees (70° F) plus one hundred (100) psig. If the building is not equipped with a fire alarm system, activation of the pressure switch shall activate an audible alarm located at the building's main entrance. A weather resistant sign shall be provided adjacent to the audible alarm stating, "FIREFIGHTER AIR REPLENISHMENT SYSTEM – LOW AIR PRESSURE ALARM." The

lettering shall be in a contrasting color and the letters shall be a minimum of two (2) inches high with three-eighths (3/8) inch brush stroke.

*511.10.2 Tubing.* Piping shall be constructed of stainless steel. Stainless steel tubing shall meet ASTM A-269, Grade 316. Stainless steel fitting shall be a minimum .375 outside diameter x .065 wall 316 fully annealed seamless. Stainless steel fittings shall be at least Grade 316 and meet the requirements of ASTM A-479. Routing of tubing and bends shall be such as to protect the tubing from mechanical damage. When piping must pass through a fire-rated assembly or other solid material, the piping shall be protected by a schedule 40 steel sleeve that is at least three (3) times the pipe diameter extending at twelve (12) inches past the assembly. Both ends of the sleeve shall be filled with an approved non-intumescent fire stop material.

*511.10.3 Support.* Piping shall be supported at maximum intervals of five (5) feet. Individual tubing clamps and mounting components shall be mechanically secured to the building support-members in accordance with manufacturers specifications.

*511.10.4 Fittings.* Fittings shall be constructed of stainless steel or other approved materials that are compatible with breathing air. The use of nonmetallic materials shall be compatible with breathing air. Stainless steel fittings shall be Grade 316 and meet the requirements of ASTM A-479.

*511.10.5 Prohibition.* The use of carbon steel, iron pipe, malleable iron, high strength gray iron, or alloy steel is prohibited.

*511.11 System assembly requirements.* The system shall be an all welded system except where the tubing joints are readily accessible and at the individual air fill panels. When mechanical high-pressure tube fittings are used, they shall be approved for the type of materials to be joined and rated for the maximum pressure of the system. Welding procedures shall meet nationally recognized standards of good practice. Prior to and during the welding of sections of tubing, a continuous, regulated dry nitrogen or argon purge at three (3) psig shall be maintained to eliminate contamination with products of the oxidation or welding flux. The purge shall commence a minimum of two (2) minutes prior to welding operations and continue until the welded joint is at an ambient temperature of sixty degrees (60° F) to eighty degrees (80° F).

*511.12 Prevention of contamination.* The installing contractor shall ensure that, at all times, the system components are not exposed to contaminants, including but not limited to, oils, solvents, dirt and construction materials. When contamination of system components has occurred, the affected component shall not be installed in the system.

*511.13 Testing and inspection.*

*511.13.1 Testing.* Following the initial fabrication, assembly, and installation of the piping distribution system, exterior connection panel and interior cylinder fill panels, the Fire Medical Rescue Department shall witness the pneumatic testing of the complete system at a minimum test pressure of five thousand five hundred (5,500) psi using oil free dry air, nitrogen or argon. A minimum twenty-four (24) hour pneumatic or hydrostatic test shall be performed. During this test, all fittings, joints and system components shall be inspected for leaks. A solution compatible with the system component materials shall be used on each joint and fitting. Any defects in the

system or leaks detected shall be documented on an inspection report, repaired or replaced. A test of the low-pressure monitoring switch shall be performed. Each air fill panel shall be tested for compatibility with the Fire Medical Rescue Department's SCBA RIC UAC. The pipe or tubing manufacturer mill report shall be provided to the Fire Medical Rescue Department.

*511.13.2* A minimum of two (2) samples shall be taken from separate air fill panels and submitted to an independent certified gas analysis laboratory to verify the system's cleanliness and that the air is certified as breathing air. The laboratory shall submit a written report of the analysis to the Fire Medical Rescue Department documenting that the breathing air complies with this section.

*511.13.3* During the period of air quality analysis, the air fill panel inlet shall be secured so that no air can be introduced into the system and each air fill panel shall be provided with a sign stating, "AIR QUALITY ANALYSIS IN PROGRESS, DO NOT FILL OR USE ANY AIR FROM THIS SYSTEM." This sign shall be a minimum of eight and one half (8-1/2) inches by eleven (11) inches with minimum of one-inch lettering.

*511.13.4 Special inspection.* Prior to the final acceptance of the firefighter breathing air system, the building owner shall provide for the special inspection, testing and certification of the system. Special inspections shall be administered as required by Section 1704 of the International Building Code. At a minimum, the inspections shall include verifying the system's compatibility with the Fire Medical Rescue Department's SCBA apparatus, the system's ability to maintain five thousand (5,000) psi working pressure, the operability of the low-pressure monitoring switch and that the system's air quality complies with the requirements of Section 511.12. Prior to final acceptance, the building owner shall provide the Fire Medical Rescue Department with written verification of a testing and certification contract. Upon satisfactory completion of all city fire code inspections, special inspection, tests, and verification of air quality, the system shall be considered complete.

*511.14 Annual maintenance inspections.* The breathing air within the system shall be inspected at least annually in accordance with this section. As part of the inspection, one air sample shall be taken and certified as breathing air in accordance with this section. The laboratory test results shall be maintained onsite and readily available for review by the Fire Medical Rescue Department.

## **SECTION 803 INTERIOR WALL AND CEILING FINISH IN EXISTING BUILDINGS.**

Section 803.4 is amended as follows:

*803.4. Fire-retardant coatings.* The required flame spread or smoke-developed index of surfaces in existing buildings shall be allowed to be achieved by application of approved fire-retardant coatings, paints or solutions to surfaces having a flame spread index permitted to be achieved by application of approved fire-retardant coatings, paints or solutions to surfaces having a flame spread index rating exceeding that allowed. Such applications shall be applied by personnel approved by the fire code official in accordance with NFPA 703 and the required fire-retardant properties shall be maintained or renewed in accordance with the manufacturer's instructions. The fire-retardant paint, coating or solutions shall have been assessed by testing over the same substrate to be used in the application.

## SECTION 903 AUTOMATIC SPRINKLER SYSTEMS.

Section 903.2 is hereby amended as follows:

*Section 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.

### **Exceptions:**

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 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the international Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 712 of the International Building Code, or both.
2. Detached non-combustible parking lot carports in accordance with Section 406.3.4 of the International Building 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 the International Building 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:

*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:

*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.

Section 903.2.1.2 is hereby amended as follows:

*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:

*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:

*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:

*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.

Section 903.2.2 is hereby amended as follows:

*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 added as follows:

*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:



*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:

*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:

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

Section 903.2.5.1 is hereby amended as follows:

*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:

*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 under the International Building Code for the occupancy hazard classifications in accordance with Table 903.2.5.2.

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:

*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:

*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:

*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:

*903.2.8 Group R.* An automatic sprinkler system installed in accordance with Section 903.3 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:

*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. R-3 occupancies of five thousand (5,000) square feet or less and other buildings or structures accessory to R-3 occupancies constructed in accordance with the International Building 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:

*903.2.8.2 Group R-4 Condition 1.* An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be installed in Group R-4 Condition 1 occupancies.

Section 903.2.8.3 is hereby amended as follows:

*903.2.8.3 Group R-4 Condition 2.* An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be installed in Group R-4 Condition 2 occupancies.

Section 903.2.9 is hereby amended as follows:

*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:

*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 the International Building Code.

Section 903.2.10 is hereby amended as follows:

*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:

*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:

903.2.11 *Specific building areas and hazards.* In all occupancies, an automatic fire sprinkler system shall be installed for building design or hazards in the locations set forth in Sections 903.2.11.1 through 903.2.11.10.

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:

*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 Chapter 2 of this code, shall have an approved automatic sprinkler system installed in accordance with Section 903.3.

Section 903.2.11.8 is hereby added as follows:

*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, an automatic sprinkler system shall be installed in accordance with Section 903.3.

Section 903.2.11.9 is hereby added as follows:

*903.2.11.9 Additions.* 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 903.2 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 one thousand (1,000) square feet

Section 903.2.11.10 is hereby added as follows:

*903.2.11.10. Change of occupancy.* An automatic sprinkler system complying with Section 903.2 shall be provided for an existing building or portion thereof undergoing a change of occupancy as follows, based upon the relative risk assessment indicated in Table 903.2.11.10:

1. When a change of occupancy is made to a higher level as shown in Table 903.2.11.10, 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, 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 five thousand (5,000) square feet shall be retrofit with a fire sprinkler system.

Table 903.2.11.10

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, 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 this Chapter and the Tempe Fire Code for other requirements.

Section 903.2.12 is hereby added as follows:

*903.2.12. 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:

*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:

*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 and 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:

*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:

*903.3.1.3 NFPA 13D sprinkler systems.* Automatic sprinkler systems installed in one and two-family dwellings, Group R-3 and 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), garages and carports garages and 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 a 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 the International Building 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 (30480 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.

## **SECTION 907 FIRE ALARM AND DETECTION SYSTEMS.**

Section 907.2.10.6 is hereby amended as follows:

*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 in accordance with section 1203. 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 the International Building 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 added as follows:

*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 receive power from battery. 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 the International Building 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 added 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 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 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 the International Building Code, provided the door, other than an exterior storm or screen door, does not swing over the step.
2. A stair with a single riser or with two risers and a tread is permitted at locations not required to be accessible by Chapter 11 of the International Building Code, where

the risers and treads comply with Section 1011.5, the minimum depth of the tread is 13 inches (330 mm) and at least one handrail complying with Section 1014 is provided within 30 inches (762 mm) of the centerline of the normal path of egress travel on the stair.

3. A step is permitted in aisles serving seating that has a difference in elevation less than 12 inches (305 mm) at locations not required to be accessible by Chapter 11 of the International Building Code, provided that the risers and treads comply with Section 1029.14 and the aisle is provided with a handrail complying with Section 1029.16.

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

## **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. Additional required exit doors or exit access doorways shall be spaced so a minimum distance of one fourth of the length of the maximum overall diagonal dimension of the area served is maintained between any other required exit door or exit access doorway.

## **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. Doors serving individual dwelling units in Groups R-2 and R-3 where the following apply:
  - 1.1. A door is permitted to open at the top step of an interior *flight of stairs*, provided the door does not swing over the top step.
  - 1.2. Screen doors and storm doors are permitted to swing over *stairs* or landings
2. Exterior doors as provided for in Section 1003.5, Exception 1, and Section 1022.2, 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. In Group R-3 occupancies not required to be Accessible units, Type A units or Type B units, the landing at an exterior doorway shall not be more than 73/4 inches (197 mm) below the top of the threshold, provided the door, other than an exterior storm or screen door, does not swing over the landing.
4. Variations in elevation due to differences in finish materials, but not more than 1/2 inch (12.7 mm).



5. Exterior decks, patios or balconies that are part of Type B *dwelling units*, have impervious surfaces and that are not more than 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.

## **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 all in high-rise building occupancies in accordance with Sections 1025.1 through 1025.5.

**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.

## **SECTION 1103 FIRE SAFETY REQUIREMENTS FOR EXISTING BUILDINGS.**

Section 1103.5 is hereby amended as follows:

*1103.5 Sprinkler systems.* An automatic sprinkler system shall be provided in existing building in accordance with Sections 1103.5.1 through 1103.5.4 and Section 903.2.11 of this code.

## **SECTION 5608. FIREWORKS DISPLAY.**

Section 5608.1 is hereby amended as follows:

*5608.1. General.* Fireworks displays, use of pyrotechnics before *a proximate audience* and pyrotechnic special effects in motion picture, television, theatrical, and group entertainment productions, shall comply with this Sections 5608.2 through 5608.10 and NFPA 1123 or NFPA 1126. Indoor use of Fireworks displays, pyrotechnics and pyrotechnic special effects shall be prohibited.

ORDINANCE NO. O2018.58

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, REPEALING CHAPTER 14, ARTICLE II, DIVISION 1 AND DIVISION 2, TEMPE CITY CODE, RELATING TO FIRE PREVENTION AND PROTECTION, AND ADOPTING THE 2018 INTERNATIONAL FIRE CODE, AND AMENDMENTS THERETO.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, as follows:

**Section 1.** That Article II, Division 1 and Division 2 of the Tempe City Code Chapter 14, Fire Prevention and Protection, are hereby repealed in their entirety.

**Section 2.** That Tempe City Code, Chapter 14, Article II, Division 1, **2018 International Fire Code adopted; where filed; amendments**, is hereby adopted as follows:

**ARTICLE II. 2018 INTERNATIONAL FIRE CODE**

**DIVISION 1. GENERALLY**

**SEC. 14-16. ADOPTED; WHERE FILED; AMENDMENTS.**

THAT CERTAIN DOCUMENT KNOWN AS THE INTERNATIONAL FIRE CODE, 2018 EDITION, WHICH HAS BEEN PUBLISHED IN BOOK FORM BY THE INTERNATIONAL CODE COUNCIL, INC. (ICC), TOGETHER WITH APPENDIX CHAPTERS B, C AND K, 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 OUT IN THIS ARTICLE.

**SEC. 14-17. ENFORCEMENT; ANNUAL REPORT.**

- (A) THE INTERNATIONAL FIRE CODE ADOPTED BY THIS ARTICLE SHALL BE ENFORCED BY THE FIRE MEDICAL RESCUE DEPARTMENT OF THE CITY, UNDER THE SUPERVISION OF THE CHIEF OF THE FIRE MEDICAL RESCUE DEPARTMENT.
- (B) A REPORT ON COMMUNITY RISK REDUCTION ACTIVITIES SHALL BE MADE ANNUALLY AND TRANSMITTED TO THE CITY MANAGER.

**SECS. 14-18-14-20. RESERVED.**

**SECS. 14-21 -14-25. REPEALED.**

**SECS. 14-26 – 14-40. RESERVED.**

**Section 3.** That Tempe City Code, Chapter 14, Article II, Division 2, **Fire Code Amendments** , is hereby adopted as follows:

## **DIVISION 2 – FIRE CODE AMENDMENTS**

### **SEC. 14-41. LEGAL STATUS**

THE PROVISIONS OF THIS DIVISION ARE AMENDMENTS TO THE 2018 EDITION OF THE INTERNATIONAL FIRE CODE AS NOW OR HEREAFTER ADOPTED IN § 14-16. ALL SECTIONS, CHAPTERS, ETC., IN THIS DIVISION OTHER THAN THIS SECTION SHALL BE CONSIDERED TO BE BOTH A PART OF THIS CODE AND A PART OF THE INTERNATIONAL FIRE CODE.

**Section 4.** 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.

**Section 5.** 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 30th day of August, 2018.

/s/

Mark W. Mitchell, Mayor

ATTEST:

/s/

Brigitta M. Kuiper, City Clerk

APPROVED AS TO FORM:

/s/

Judith R. Baumann, City Attorney