

SCOTTSDALE REVISED CODE
Amendments to
CHAPTER 36 - FIRE PREVENTION AND PROTECTION
ARTICLE II. FIRE CODE
DIVISION 1. GENERALLY

Section 36-18.1 - Adoption and Amendments.

- (a) The 2021 edition of the International Fire Code (2021 IFC), published by the International Code Council, Inc., is adopted by reference. Three (3) copies of it shall remain in the office of the city clerk and be open to inspection at all times.
- (b) The text of the 2021 edition of the International Fire Code (2021 IFC), is amended only as shown in the following sections ("Scottsdale Amendments"). These Scottsdale Amendments include the addition of two Appendices: O and P. All other provisions remain as specified in the 2021 IFC.
- (c) The 2021 edition of the International Fire Code (2021 IFC) and the Scottsdale Amendments shall be known as the "Fire Code of the City of Scottsdale."

CHAPTER 1 ADMINISTRATION

SECTION 101

SCOPE AND GENERAL REQUIREMENTS

101.1 Title *is amended to read as follows:*

These regulations shall be known as the Fire Code of the City of Scottsdale, hereinafter referred to in the IFC and Chapter 36 of the Scottsdale Revised Code as "this code."

101.2.1 Appendices *is amended to read as follows:*

Appendices B, C, D, E, F, G, H, I, J, K, M, N, O, and P are adopted as part of this code as follows:

1. Appendices O and P are adopted as additional City of Scottsdale appendices to the 2021 IFC.
2. Appendices F, O, and P are adopted as regulatory and enforceable parts of this code.
3. Appendices B, C, D, E, G, H, I, J, K, M and N are adopted as reference guidelines.

SECTION 105

PERMITS

105.6.2, Compressed gases, is amended to add the following Exception to the existing Exception in the 2021 IFC:

Carbon Dioxide (Inert and simple asphyxiant) shall require a permit for 200 cubic feet or more at NTP.

105.6.15, LP-gas, is amended to read as follows:

105.6.15 LP-gas. An operational permit is required for:

1. Storage and use of LP-gas.
Exception: A permit is not required for individual containers with a 10 gallon (37.85L) water capacity or less serving occupancies in Group R-3.
2. Operation of cargo tankers that transport LP-gas.
3. The removal of underground LP-gas containers or tanks

SECTION 107 FEES

107.2, Schedule of permit fees, is amended to read as follows:

107.2 Fee schedule.

(a) Fees shall be paid in accordance with the City Council adopted fee schedule for charges associated with permitting and inspections, special event staffing, CPR classes, copies of records and reports, and other services provided by the Fire Department.

(b) A schedule of fees is available at the Fire Department's administrative offices and on the City's website.

SECTION 111 MEANS OF APPEALS

111.1, Board of appeals established, is amended to read as follows:

111.1 Board of appeals established. Reference to the "board" or "the board of appeals" in this code shall mean the Building Advisory Board of Appeals as established and referred to in Section 31-11 of the Scottsdale Revised Code. The Board shall hear all appeals of orders, decisions or determinations made by the fire code official to apply and interpret this code. The board shall render all decisions and findings in writing to the appellant with a copy to the fire code official.

SECTION 112 VIOLATIONS

112.4, Violation Penalties, is amended to read as follows:

112.4 Violation Penalties are provided in section 36-19 of the Scottsdale Revised Code.

112.4.1 Abatement of violation. In addition to the imposition of the penalties provided in S.R.C. section 36-19, the fire code official is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises.

**CHAPTER 2
DEFINITIONS
SECTION 202
GENERAL DEFINITIONS**

- (a) *The following definitions are added to Section 202:*

ACCESS CHALLENGED RESIDENCE. Single family homes with additional challenges including, but not limited to, access, or size, as determined by fire code official.

BIG BOX SINGLE FAMILY RESIDENCE (BB-SFR). Single family residences over 12,000 square foot in area.

LANDLORD. Shall have the meanings given in Arizona Revised Statutes.

MULTIPLE SINGLE-FAMILY. Attached single family dwellings not more than three (3) stories in height with a separate means of egress constructed under the International Residential Code (IRC).

NICET. National Institute for the Certification of Engineering Technologies, 1420 King Street, Alexandria, VA 22314-2915.

RENTAL AGREEMENT. Shall have the meanings given in Arizona Revised Statutes.

TENANT. Shall have the meanings given in Arizona Revised Statutes.

UNIFORM TRAFFIC COMPLAINT. The form approved by the State Supreme Court in their "Rules of Procedure in Civil Traffic Violation cases".

- (b) *The definition of OCCUPANCY CLASSIFICATION is amended as follows but only for the specified paragraphs. The rest of the definition remains the same.*

Institutional Group I-1 remains in its entirety except that the introductory paragraph and last paragraph are amended as follows:

Introductory paragraph:

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 custodial care. Buildings of Group I-1 shall be classified as one of the occupancy conditions indicated below and shall comply with Section 420 of the *International Building Code*. This group shall include, but not be limited to, the following:

Last paragraph:

Six to 10 persons receiving custodial care. A facility housing not fewer than six and not more than 10 persons receiving custodial care shall be classified as Group R-4.

Facilities such as the above with five or fewer persons may be classified as Group R-3 or may comply with the International Residential Code in accordance with Section 101.2 of the International Building Code. A facility such as above, housing at least six and not more than 10 persons, may be classified as Group R-4. Occupancies providing care and accommodations for more than ten (10) occupants, excluding staff, shall be classified as Group I occupancy types.

The remaining portions of Institutional Group I-1 shall remain as in the 2021 IFC.

Residential Group R-3 remains in its entirety except that certain categories are amended as follows:

Congregate living facilities (non-transient) with 5 or fewer occupants.

Congregate living facilities (transient) with 5 or fewer occupants.

Lodging houses (transient) with 5 or fewer occupants.

Residential Group R-4 remains in its entirety except that the introductory paragraph is amended as follows:

Residential Group R-4. Residential Group R-4 occupancies shall include buildings that do not contain more than two dwelling units, structures or portions thereof for more than five but not more than 10 persons excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive 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:

CHAPTER 3 GENERAL REQUIREMENTS

SECTION 308 OPEN FLAMES

308.1.4, Open-flame cooking devices, is amended to read as follows,

308.1.4 Open-flame devices. Charcoal burners, chimineas, barbecues fixed or portable, open flame heaters, firepots and other open-flame devices are prohibited on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family dwellings.
2. When all of the following conditions are met:
 - a. Where buildings including garages, balconies and decks are protected by an automatic sprinkler system,
 - b. Device(s) is/are fueled by natural gas or LP-gas
 - c. LP-gas portable tank having a water capacity not greater than 5 gallons.

CHAPTER 4 EMERGENCY PLANNING AND PREPAREDNESS

SECTION 403 EMERGENCY PREPAREDNESS REQUIREMENTS

403.9, Group R Occupancies, is amended by adding a new subsection 403.9.4 and amending the introductory paragraph to read as follows:

403.9 Group R Occupancies. Group R Occupancies shall comply with Sections 403.9.1 through 403.9.4.

Add a new section 403.9.4 to read as follows:

403.9.4 Group R-3 group care home/assisted living facility. An approved fire safety evacuation plan in accordance with section 404 shall be prepared and maintained for Group R group care home/assisted living occupancies.

CHAPTER 5 FIRE SERVICE FEATURES

**SECTION 503
FIRE APPARATUS ACCESS ROADS**

503.2, Specifications, is amended to read as follows:

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8 and the Scottsdale Design Standards and Policies Manual (DS&PM).

503.2.1, Dimensions, is amended to read as follows, including the addition of a new subsection 503.2.1.1:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 24 feet (7315 mm) except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

503.2.1.1 Temporary fire department access. Temporary fire department access roadway prior to and during construction of every facility, building or portion of a building shall install and maintain a roadway 16'-0" (4,877mm) wide, with minimum 0'-4" (101.6mm) thickness of aggregate base course or decomposed granite compacted to a 90% density where natural soil will not meet compaction requirements.

503.2.4, Turning radius, is amended to read as follows:

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be determined by the fire code official and the Scottsdale (DS&PM).

503.2.7, Grade, is amended to read as follows:

503.2.7 Grade. The grade of the fire apparatus access road shall be within the limits established by the fire code official based on the fire department's apparatus and Scottsdale (DS&PM).

503.3, Marking, is amended to read as follows:

503.3 Marking. Where required by the fire code official, approved signs or other approved notices shall be provided for fire apparatus access roads (fire lanes) to identify such roads or prohibit the obstruction thereof on public and private property. Signs or notices shall be maintained in a clean and legible condition at all times and shall be replaced or repaired when necessary to provide adequate visibility. All fire lanes shall be marked in the following manner:

1. Fire lane signs per City of Scottsdale standard detail, and / or
2. Curb, street or driveway painted red to indicate fire lane and labeled "FIRE LANE NO PARKING" in white block letters 3 inches (76.2mm) in height, 3/4 in. (19.5 mm) stroke, on the vertical face of the curb to indicate fire lane.
3. Lettering shall not be greater than 50'-0" (15.24m) apart and shall be posted at the beginning and end of the fire lane.

It shall be unlawful for any vehicle, equipment or device to park in or block the fire lane. Any vehicle, equipment or device found parked in or blocking a fire lane shall be cited by the police or the fire department.

503.4, Obstruction of fire apparatus access roads, is amended to read as follows, including the addition of a new subsection 503.4.2:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times.

503.4.2 Traffic control spikes. Traffic control spike or similar devices that immobilize a vehicle shall be prohibited.

503.6, Security gates, is amended by adding the following subsections to read as follows:

503.6.1 Key switch and sensor pre-emption location. A key switch and pre-emption sensor shall be required on all electric entry control gates. Key switch shall be installed in a location on the gate control panel that is readily visible and accessible. The pre-emption sensor shall be at or behind the gate.

EXCEPTION: Single Family Residence: A pre-emption sensor is optional.

503.6.2 Manual gates. An approved dual padlock locking system shall be used on manual gates. An approved Fire Department Knox padlock shall be used on one side and the owners/management on the other.

503.6.3 Retro-fit of security gates. The installation of a key switch and pre-emption sensor shall be required on all existing electric entry-controlled security gates across a fire apparatus access road. All gates shall be in compliance on or before July 1, 2014.

SECTION 505 PREMISES IDENTIFICATION

505.1, Address identification, is replaced with new section 505.1 and subsection 505.1.1 to read as follows:

505.1 Address numbers. New and existing 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. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Address and building numbers for commercial properties shall be a minimum of 12 inches (305 mm) high with a minimum stroke width of 2.0 inches (51 mm). Units within a building shall be a minimum of 6 inches (152 mm) high with a minimum stroke width of 1.0 inch (25.4 mm). Individual unit or suite numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm). One and two family dwelling shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm). Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

505.1.1 Interior room numbers. New and existing buildings shall have an approved room and suite numbers identification placed in positions that are plainly legible and visible. Numbers shall contrast with their background; interior suite and room numbers shall be Arabic numeral or alphabet letters. Interior room and suite numbers shall be a minimum of 1.25 (1 ¼) inches (31.75 mm) high with a brush stroke width of 0.25 (1/4) inches (6.35 mm).

SECTION 506 KEY BOXES

506.1, Where required, is amended to read as follows:

506.1 Where required. A key box shall be required on all commercial structures that contain off-site monitored fire systems or where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes. The fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type listed in accordance with UL 1037, and shall contain keys to gain necessary access as required by the fire code official.

1. The first key box shall be installed at the main entrance of the structure. Additional key boxes may be required based on the size, layout, and location of fire sprinkler riser room. (Example:

strip malls may have one centered on the front and at the riser room; large office, warehouses and big box retail buildings would have boxes at the main entry, rear or additional entry and the riser room.)

2. The key box shall be installed between 4'-0" (1.219 m) to 6'-0" (1.829 m) above finished grade. The key box shall be immediately visible to fire personnel from the emergency apparatus. Posts, fences, vehicles, vegetation, trash, storage and other materials shall not be placed or kept near the key boxes in a manner that would prevent the key boxes from being immediately discernible.

SECTION 507 FIRE PROTECTION WATER SUPPLIES

507.4, Water supply test, is amended to read as follows:

507.4 Water supply test. Testing of water supply system shall comply with the procedures in the Scottsdale DS&PM.

507.5.1, Where required, is amended by adding new subsections 507.5.1.2, Hydrant spacing, and 507.5.1.3, Dead ends, to read as follows:

507.5.1.2 Hydrant spacing. Fire hydrants shall be spaced on fire apparatus access roads as follows:

1. Commercial, multi-family (R-1 and R-2) and multiple single-family development hydrant spacing will be a maximum of 700 feet (213,360mm) on center.
2. Non-hillside. One and two family dwellings (IRC and R-3) development hydrant spacing will be a maximum of 1,200 feet (365,760mm) on center.
3. Hillside. One and two family dwellings (IRC and R-3) development hydrant spacing will be a maximum of 600 feet (182,880mm) on center.
4. Hillside cul-de-sacs. The maximum distance shall not exceed three hundred (300) feet (91,940mm) to any hydrant from the end of a cul-de-sac.

507.5.1.3 Dead ends. On cul-de-sacs in residential and commercial developments the maximum distance to a hydrant shall not exceed one half (½) of the maximum allowable distance between fire hydrants designated in 507.5.1.2.

Section 507.5, Fire hydrant systems, is amended by adding new subsections 507.5.7, 507.5.7.1, and 507.5.8, to read as follows:

507.5.7. Fire hydrant color. All fire hydrants shall have aboveground barrels painted with a primer coat plus two (2) coats of OSHA yellow paint.

507.5.7.1 Reclaimed water fire hydrant color. All fire hydrants using a reclaimed water supply shall have the caps and bonnet painted with a prime coat plus two (2) coats of purple paint. A placard shall be affixed to the hydrant in English and Spanish "DO NOT DRINK WATER."

507.5.8 Reflective markers. All fire protection equipment, fire department connections and hydrants shall be clearly identified by installation of reflective blue markers, and comply with the City of Scottsdale supplement to MAG Uniform Standard Details for Public Works Construction, standard detail 2363.

SECTION 508 FIRE COMMAND CENTER

508.1.1, *Location and access, is amended to read as follows:*

508.1.1 Location and access. The fire command center shall be in a location that is easily identifiable and accessible from the main lobby of the building and provide quick access to the building tower stairways. The location and accessibility of the fire command center shall be approved by the fire chief.

508.1.3, *Size, is amended to read as follows:*

508.1.3 Size. The fire command center shall be a minimum of 96 square feet (8.91m²) in area with a minimum dimension of 8 feet (2438 mm).

SECTION 510

EMERGENCY RESPONDER COMMUNICATION COVERAGE

510.1, *Emergency responder communication coverage in new buildings, is amended by adding a new the following new subsection 510.1.1 to read as follows:*

510.1.1 Fire Code Official Designee. The fire code official may designate the City Radio Engineer as the fire code official for purposes of Section 510.

CHAPTER 6

BUILDING SERVICES AND SYSTEMS

SECTION 604

ELEVATOR OPERATION, MAINTENANCE AND FIRE SERVICE KEYS

604.2, *Emergency operation, is amended by adding the following new subsection to read as follows:*

604.2.1 Elevator car to accommodate ambulance stretcher. Where elevators are provided in buildings four or more stories above grade plane or four or more stories below grade plane, at least one elevator shall be provided for fire department emergency access to all floors. Elevators designated as emergency access shall be of such a size and arrangement to accommodate an ambulance stretcher 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than 3 inches (76 mm) high and shall be placed inside on both sides of the hoist way door frame.

SECTION 605

FUEL-FIRED APPLIANCES

605.4.1, *Fuel oil storage in outside, above-ground tanks, is amended to read as follows:*

605.4.1 Fuel oil storage in outside, above-ground tanks. Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L). The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) may be approved by special permit by the fire code official.

605.4.2.2, *Quantity limits for fuel oil storage inside buildings, is amended to read as follows:*

605.4.2.2 Quantity limits. One or more fuel oil storage tanks containing Class II or III *combustible liquid* shall be permitted in a building. The aggregate capacity of all tanks shall not exceed the following:

1. 660 gallons (2498 L) in sprinklered buildings, where stored in a tank complying with UL 142 or UL 2085.

CHAPTER 9 FIRE PROTECTION AND LIFE SAFETY SYSTEMS

SECTION 901 GENERAL

901.2, Construction documents, is amended to replace subsection 901.2.1 and add the following subsections 901.2.2 – 901.2.4:

901.2.1 Plan certification for fire alarm systems and occupant notification. All fire monitoring and occupant notification system plans submitted to the fire department for review and approval shall bear a qualified registrant's seal or review certification of a minimum level III in Fire Alarms Systems from the National Institute for the Certification of Engineering Technologies (NICET).

901.2.2 Plan certification for fire sprinkler systems. All fire sprinkler plans submitted to the fire department for review and approval shall bear a qualified registrant's seal or review certification of a minimum level III NICET in Water Based Systems Layout (National Institute for the Certification of Engineering Technologies), in accordance with City of Scottsdale Fire Department Interpretation and Applications Manual.

901.2.3 Plan certification for all other fire protection systems. Plan certification for all other fire protection systems will be accompanied by a certification of competence when required.

901.2.4 On-site plans. Plans and specifications shall be submitted to the fire department for review and approval prior to construction. One set of fire department approved plans shall be on the job site for each inspection.

SECTION 903 AUTOMATIC SPRINKLER SYSTEMS

Section 903 is amended by repealing the existing provisions and substituting the following:

903.1 General. Automatic sprinkler systems shall comply with Section 36-18 of the Scottsdale Revised Code.

SECTION 905 STANDPIPE SYSTEMS

905.3.4, Stages, is amended to read as follows, including the deletion of the Exception and subsection 905.3.4.1:

905.3.4 Stages. Stages greater than 1,000 square feet in area (93 m²) shall be equipped with a Class I wet standpipe system with 2.5 inch (64 mm) hose connections on each side of the stage supplied from the automatic fire sprinkler system and shall have a flow rate of not less than that required for class 1 standpipes.

Section 905 is amended by adding the following section 905.13 to read as follows:

905.13. Hose connections for access challenges. Buildings exceeding 10,000 square feet (929 m²) in area per story or when the exterior ground floor walls exceed the required distance from fire apparatus access roads not otherwise required to be equipped with a standpipe system by section 905.3 of the 2021 IFC, shall be equipped with class I manual hose connections (2-1/2" NST) for fire department use as follows:

(1) The locations shall be in accordance with Scottsdale Revised Code, NFPA 13, and 2021 IFC sec. 905.4, except item 1. 905.4, item 1 locations shall be at each floor-level landing, including grade level, within enclosed stairways, rather than located at intermediate floor level landings.

(2) Single story structures are not required to have hose connections except in those interior portions of the building that exceed 200 feet (60.96 m) of travel from an emergency access road.

(3) Where the most remote portion of a floor or story is more than 200 feet from a hose connection, additional hose connections are required.

(4) The hose connections may be combined with the fire sprinkler system and sized to deliver 250 gallons per minute at 100 psi from the most hydraulically remote outlet, using 150 psi fire department pump-in pressure. Calculations for hose demand shall be submitted with sprinkler plans.

SECTION 906 PORTABLE FIRE EXTINGUISHERS

906.1, Where required, is amended by amending subpoint 1 to add R-3 Residential Care/Assisted Living Facilities; and amending subpoint 1 of Exception 1 to read as follows, with the remaining portions of Section 906.1 remaining as in the 2021 IFC, including the Exceptions 2 and 3 and subpoints 2 through 6:

906.1 Where required. Portable fire extinguishers shall be installed in all of the following locations:

1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-3 Residential Care/Assisted Living Facilities, R-4 and S occupancies

Exceptions:

1. In Group R-2 occupancies, portable fire extinguishers shall be required only in locations specified in Items 2 through 6.

SECTION 907 FIRE ALARM AND DETECTION SYSTEMS

907.2, Where required—new buildings and structures, is amended to read as follows, with the remaining portions of Section 907.2 remaining as in the 2021 IFC, including the Exceptions to 907.2 and subsections 907.2.1 through 907.2.23:

907.2 Where required—new buildings and structures. An approved manual, automatic or manual and automatic fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and City of Scottsdale Fire Department Interpretation and Applications Manual, and provide occupant notification in accordance with Section 907.5, unless other requirements are provided by another section of this code.

Not fewer than one manual fire alarm box shall be provided in an *approved* location to initiate a fire alarm signal for the fire alarm system employing automatic fire detectors or waterflow detection devices. Where other sections of this code allow elimination of the alarm boxes due to sprinklers, a single fire alarm box shall be installed.

Section 907.7, Acceptance tests and completion, is amended by adding a new subsection 907.7.4 Activation, to read as follows:

907.7.4 Activation. Where an alarm notification system is required by another section of this code, it shall be activated by:

1. Required automatic fire alarm system.
2. Sprinkler water-flow devices.

a. Multi-level structures: All multilevel structures are required to have a flow switch and tampered control valve per floor. See fire department Interpretation and Applications Manual.

3. Required manual fire alarm boxes.

SECTION 912 FIRE DEPARTMENT CONNECTIONS

912.1, Installation, is amended to read as follows:

912.1 Installation. Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design and shall comply with Sections 912.2 through 912.7 and the City of Scottsdale Fire Department’s Interpretation and Applications Manual.

912.2, Location, is amended by adding the following new subsections 912.2.3 and 912.2.4 to read as follows:

912.2.3 Remote Fire Department Connections. Remote fire department connections shall be located within four feet (1219.2mm) to eight feet (2438.4mm) of the curb line of an access road or public street, or as otherwise specified. The fire department connection line shall be a wet line with the check valve at the hose connection above grade.

912.2.4 Wall Mounted Fire Department Connections. Wall mounted fire department connections are permitted on systems not over ordinary hazard Group 2, when:

1. There are no glazed structural openings within 5 feet (1524mm) horizontally from inlet connection.
2. The structure is not classified as an “H” occupancy.
3. The fire department connection is within 50 feet of an approved roadway or driveway and arranged so that hose lines can be readily attached to the inlets without interference from any nearby objects including buildings, fences, post, plantings or other fire department connections or as approved by the fire code official (see City of Scottsdale Fire Department Interpretation and Applications Manual).

CHAPTER 10 MEANS OF EGRESS

SECTION 1004 OCCUPANT LOAD

1004.9, Posting of occupant load, is amended to read as follows:

1004.9 Posting of occupant load. Every room or space that is an assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place, near the main exit or exit access doorway from the room or space. Posted signs shall be maintained by the owner or authorized agent. The number of people occupying the room shall not exceed the maximum occupant load as posted on the sign pursuant to Section 109.6 of the 2021 IFC. The sign shall be as approved by City of Scottsdale Fire & Building Departments.

CHAPTER 11 CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS

SECTION 1103 FIRE SAFETY REQUIREMENTS FOR EXISTING BUILDINGS

1103.5, *Sprinkler systems*, shall be amended by adding a new subsection 1103.5.6 and amending the introductory paragraph to read as follows:

1103.5 Sprinkler systems. An automatic sprinkler system shall be provided in existing buildings in accordance with section 1103.5.1 through 1103.5.6.

Subsection 1103.5.6, Group R-4, is added to read as follows:

1103.5.6 Group R-4. An automatic sprinkler system shall be installed in accordance with Scottsdale Revised Code 36-18.

1103.8.1, *Where required*, is amended by adding two new subsections 1103.8.1.1 and 1103.8.1.2 to read as follows:

1103.8.1.1 Owner landlord and occupant responsibilities. Devices provided and maintained. In a dwelling unit occupied under the terms of a rental agreement or under a month-to-month tenancy:

1. At the time of each occupancy the landlord shall provide smoke detection devices in working condition and, after written notification by the tenant, shall be responsible for replacement; and
2. The tenant shall keep the devices in working condition by keeping charged batteries in battery-operated devices, by testing the devices periodically, and by refraining from permanently disabling the devices.

1103.8.1.2 Records and maintenance. The landlord or owner of any rental property shall inspect all smoke detection devices as required under NFPA 72 annually and a record of all inspections and maintenance activities shall be kept by the landlord or owner and available for inspection upon request by fire code official. See City of Scottsdale Fire Department Interpretation and Applications Manual.

CHAPTER 12
ENERGY SYSTEMS
SECTION 1207
ELECTRICAL ENERGY STORAGE SYSTEMS (ESS)

1207.1.4, *Hazard mitigation analysis*, is amended to add the following subsection 1207.1.4 (4) to read as follows:

4. When required by the *fire code official*.

1207.3.4, *Energy storage management system*, is amended to add the following subsections 1207.3.4 (1) and 1207.3.4 (2) to read as follows:

1. The system shall transmit an alarm signal to an approved location and to an approved annunciator panel if potentially hazardous temperatures or other conditions such as short circuits, over voltage or under voltage are detected.
2. The approved annunciator panel shall visibly indicate any hazardous temperature or other conditions. The location of the annunciator panel shall be approved by the *fire code official*.

1207.4, *General installation requirements*, is amended to add the following subsection 1207.4.13 to read as follows:

1207.4.13 Testing, maintenance and repair. Storage batteries and associated equipment and systems shall be tested and maintained in accordance with the manufacturer's instructions. Any storage batteries or system components used to replace existing units shall be compatible with the battery charger, energy management systems, other storage batteries and other safety systems. Introducing other types of storage batteries into the stationary storage battery system or other types of electrolytes into flow battery systems shall be treated as a new installation and require approval by the *fire code official* before the replacements are introduced into service.

1207.6, Electrochemical ESS technology-specific protection, is amended to add the following subsection 1207.6.6 to read as follows:

1207.6.6 Emergency energy release. An approved means must be provided to safely release stored energy from the batteries in an emergency situation.

1207.11, ESS in Group R-3 and R-4 occupancies, remains in its entirety with amendments as follows in sections 1207.11.3 (4) and 1207.11.4:

1207.11.3 Location. ESS shall be installed only in the following locations:

. . . .

4. Other locations with the approval of the fire code official.

1207.11.4 Energy ratings. Individual ESS units shall have a maximum rating of 20 kWh. The aggregate rating structure shall not exceed:

1. 80 kWh in attached or detached garages and detached accessory structures.
2. 80 kWh on exterior walls.
3. 80 kWh outdoors on the ground.

**CHAPTER 23
MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES
SECTION 2301 GENERAL**

2301.4, Indoor motor fuel-dispensing facilities, is amended to read as follows:

2301.4 Indoor motor fuel-dispensing facilities. Motor fuel-dispensing facilities located inside buildings are prohibited.

Section 2301 is amended to add the following new section 2301.7 to read as follows:

2301.7 Fire Protection. Fire sprinkler protection shall be designed in accordance with the building code as required for minimum Ordinary Group Hazard 2.

**SECTION 2304
DISPENSING OPERATIONS**

2304.3, Unattended self-service motor fuel-dispensing facilities, is amended to read as follows:

2304.3 Unattended self-service motor fuel-dispensing facilities. Unattended self-service motor fuel-dispensing facilities are prohibited.

Exception: Unattended self-serve stations may be allowed by special permit by the fire code official for private commercial use only. Written request and documentation shall be submitted showing compliance with two (2) way communications and cameras that are monitored off site at a 24 hour location and shall comply with subsections 2304.3.1 through 2304.3.7 and all other applicable codes and ordinances.

Subsections 2304.3.1 through 2304.3.7 remain as written in the 2021 IFC.

**SECTION 2306
FLAMMABLE AND COMBUSTIBLE
LIQUID MOTOR FUEL-DISPENSING FACILITIES**

2306.2.2, Above-ground tanks located inside buildings, is amended to read as follows:

2306.2.2 Above-ground tanks located inside buildings. Above-ground tanks, located inside buildings and used for the storage of Class I, II and IIIA liquid fuels, are prohibited.

2306.2.3, Above-ground tanks located outdoors above grade, is amended to read as follows:

2306.2.3 Above-ground tanks located outdoors, above grade. Above-ground tanks, located outdoors of buildings and used for the storage of Class I, II or IIIA liquid motor fuels, are prohibited.

Exception: Installation of 2000 gallons (7,570.8L) or less aggregate quantity may be approved by special permit by fire code official.

**CHAPTER 53
COMPRESSED GASSES
SECTION 5307
COMPRESSED GASES
NOT OTHERWISE REGULATED**

Section 5307.3, Insulated liquid carbon dioxide systems used in beverage dispensing applications, remains as in the 2021 IFC., except as amended below.

Section 5307.3.2(1), Gas detection systems, is amended to read as follows:

5307.3.2 (1) Activates an audible and visible supervisory alarm at a normally attended location upon detection of a carbon dioxide concentration of 15,000 parts per million (27,000 mg/m³).

Section 5307.3 is amended by adding a new subsection 5307.3.3 to read as follows:

5307.3.3 Alarm monitoring and power supply. Emergency alarm system shall be monitored and powered by the buildings alarm/monitoring system where an alarm notification system is required by another section of this code.

Exception: If no building alarm system exists or is required by another section of this code, a gas detection device or system shall have a 90 minute backup power supply.

**CHAPTER 57
FLAMMABLE AND COMBUSTIBLE LIQUIDS**

5704.2.9.5, *Above-ground tanks inside of buildings, is replaced with the following:*

5704.2.9.5 Above-ground tanks inside buildings. Above-ground tanks inside of buildings are prohibited.

5704.2.9.6, *Above-ground tanks outside of buildings, is replaced with the following:*

5704.2.9.6. Above-ground tanks outside of buildings. Above-ground tanks outside of buildings including gravity discharge tanks are prohibited.

Exception: Installations of 2000 gallons (7,570.8L) or less aggregate quantity may be approved by special permit application by fire code official.

5704.2.13.1.4, *Tanks abandoned in place, is amended to read as follows:*

5704.2.13.1.4 Tanks abandoned in place. Tanks abandoned in place shall be prohibited within the entire city.

**CHAPTER 61
LIQUEFIED PETROLEUM GASES
SECTION 6104
LOCATION OF LP-GAS CONTAINERS**

6104.3, *Container location, is hereby amended by substituting the following for footnote e to Table 6104.3:*

e. The following shall apply to above-ground containers installed alongside buildings:

1. Containers of less than a 125-gallon water capacity are allowed next to the building they serve when in compliance with Items 2, 3 and 4.
2. Department of Transportation (DOT) specification containers shall be located and installed so that the discharge from the container pressure relief device is at least 3 feet horizontally from building openings below the level of such discharge and shall not be beneath buildings unless the space is well ventilated to the outside and is not enclosed for more than 50 percent of its perimeter. The discharge from container pressure relief devices shall be located not less than 5 feet from exterior sources of ignition, openings into direct-vent (sealed combustion system) appliances or mechanical ventilation air intakes.
3. ASME containers of less than a 125-gallon water capacity shall be located and installed such that the discharge from pressure relief devices shall not terminate in or beneath buildings and shall be located at least 5 feet horizontally from building openings below the level of such discharge and not less than 5 feet from exterior sources of ignition, openings into direct vent (sealed combustion system) appliances, or mechanical ventilation air intakes.
4. The filling connection and the vent from liquid-level gauges on either DOT or ASME containers filled at the point of installation shall not be less than 10 feet from exterior sources of ignition, openings into direct vent (sealed combustion system) appliances or mechanical ventilation air intakes.
5. A container less than 125 gallons (473.2l) may be located next to a block fence when the tank is not within 5 feet (1524mm) of a structure on adjoining property.

**CHAPTER 80
REFERENCED STANDARDS**

For purposes of this Fire Code, the applicable National Fire Protection Association (NFPA) referenced standards shall be those standards in effect on the date the 2021 edition of the International Fire Code was adopted by the City of Scottsdale.

APPENDIX O
SECTION O101
GENERAL

O101.1 Scope. The unrestricted use of grass-, grain-, brush- or forest-covered land in hazardous fire areas is a potential menace to life and property from fire and resulting erosion. Safeguards to prevent the occurrence of fire and provide adequate fire-protection facilities to control the spread of fire which might be caused by recreational, residential, commercial, industrial, or other activities conducted in hazardous fire areas shall be in accordance with Appendix O.

SECTION O102
DEFINITIONS

O102.1 Definitions. For the purpose of Appendix O, certain terms are defined as follows:

Tracer is any bullet or projectile incorporating a feature which marks or traces the flight of said bullet or projectile by flame, smoke or other means which result in fire or heat.

Tracer ammunition is any bullet or projectile incorporating a feature designed to create a visible or audible effect which result in fire or heat and shall include any incendiary bullets or projectiles.

SECTION O103
PERMITS

O103.1 Permits. Fire code official is authorized to stipulate conditions for permits. Permits shall not be issued when public safety would be at risk, as determined by fire code official.

SECTION O104
RESTRICTED ENTRY

O104.1 Restricted entry. Fire code official shall determine and publicly announce when hazardous fire areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of hazardous fire areas, except public roadways, inhabited areas or established trails and campsites which have not been closed during such time when the hazardous fire is closed to entry, is prohibited.

Exceptions:

1. Residents and owners of private property within hazardous fire areas and their invitees and guests going to or being upon their land.
2. Entry, in the course of duty, by peace or police officer, and other duly authorized public officers, members of a fire department and members of the United States forest service.

SECTION O105
TRESPASSING ON POSTED PROPERTY

O105.1 General. When fire code official determines that a specific area within a hazardous fire area presents an exceptional and continuing fire danger because of the density of natural growth, difficulty of terrain, proximity to structures or accessibility to public, such areas shall be closed until changed conditions warrant termination of closure. Such areas shall be posted as hereafter provided.

O105.2 Signs. Approved signs prohibiting entry by unauthorized persons and referring to Appendix O shall be placed on every closed area.

O105.3 Trespassing. Entering and remaining within areas closed and posted is prohibited.

Exception: Owners and occupiers of private or public property within closed and posted areas, their guest or invitees, and local state and federal public officers and their authorized agents acting in the course of duty.

SECTION O106 SMOKING

O106.1 General. Lighting, igniting or otherwise setting fire to or smoking tobacco, cigarettes, pipes or cigars in hazardous fire areas is prohibited.

Exception: Places of habitation or within the boundaries of established smoking areas or campsites as designated by fire code official.

SECTION O107 SPARK ARRESTERS

O107.1 Spark arresters. Chimneys used in conjunction with fireplaces, barbecues, incinerators or heating appliances in which solid or liquid fuel is used, upon buildings, structures or premises located within 200 feet (60 960 mm) of hazardous fire areas, shall be provided with a spark arrester constructed with heavy wire mesh or other noncombustible material with openings not to exceed ½ inch (12.7mm).

SECTION O108 TRACER BULLETS, TRACER CHARGES, DISCHARGE OF FIREARMS, ROCKETS AND MODEL AIRCRAFT.

O108.1 General. Tracer bullets and tracer charges shall not be possessed, fired or caused to be fired into or across hazardous fire areas.

Firearms, rockets, model planes, gliders and balloons powered with an engine, propellant or other features liable to start or cause fire shall not be fired or projected into or across hazardous fire areas.

SECTION O109 EXPLOSIVES AND BLASTING

O109.1 Explosives and blasting. Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of within hazardous fire areas except by permit from fire code official.

SECTION O110 FIREWORKS

O110.1 Fireworks. Fireworks shall not be used or possessed in hazardous fire areas. Fire code official is authorized to seize, take, remove or cause to be removed fireworks in violation of section 110.

SECTION O111 APIARIES

O111.1 Apiaries. Lighted and smoldering material shall not be used in connection with smoking bees in or upon hazardous fire areas except by permit from fire code official.

SECTION O112 OPEN-FLAME DEVICES

O112.1 Open-flame devices. Welding torches, tar pots, decorative torches, sky lanterns and other devices, machines or processes liable to start or cause fire shall not be operated or used in or upon hazardous fire areas, except by permit from fire code official.

Exception: Use within habited premises or designated campsites which are a minimum of 30 feet (9144 mm) from grass-, grain-, brush-, or forest-covered areas.

O112.2 Flame-employing devices. Flame-employing devices, such as lanterns or kerosene road flares, shall not be operated or used as a signal or marker in or upon hazardous fire areas.

Exception: The proper use of fuses at the scene of emergencies or as required by standard operating procedures.

SECTION O113 OUTDOOR FIRES

O113.1 Outdoor fires. Outdoor fires shall not be built, ignited or maintained in or upon hazardous fire areas, except by permit from fire code official.

Exception: Outdoor fires within habited premises or designated campsites where such fires are built in a permanent barbecue, portable barbecue, outdoor fireplace, incinerator or grill and are a minimum of 30 feet (9144 mm) from a grass-, grain-, brush-, or forest-covered area.

Permits shall incorporate such terms and conditions which will reasonably safeguard public safety and property. Outdoor fires shall not be built, ignited or maintained in or upon hazardous fire areas under the following conditions:

1. When high winds are blowing,
2. When a person age 17 or over is not present at all times to watch and tend fire, or:
3. When public announcement is made that open burning is prohibited.
4. Permanent barbecue, portable barbecues, outdoor fireplaces or grills shall not be used for the disposal of rubbish, trash or combustible waste material.

SECTION O114 INCINERATORS AND FIREPLACES

O114.1 General: Incinerators, outdoor fireplaces, permanent barbecues and grills shall not be built, installed or maintained in hazardous fire areas without prior approval of fire code official.

Incinerators, outdoor fireplaces, permanent barbecues and grills shall be maintained in good repair and in a safe condition at all times. Openings in such appliances shall be provided with an approved spark arrester, screen or door.

Exception: When approved, unprotected openings in barbecues and grills are necessary for proper function.

SECTION O115 CLEARANCE OF BRUSH AND VEGETATIVE GROWTH FROM ELECTRICAL TRANSMISSION LINES

O115.1 General. Clearance of brush and vegetative growth from electrical transmission lines shall be in accordance with Section 115.

Exception: Section 115 does not authorize persons not having legal right of entry to enter upon or damage the property of others without consent of the owner.

O115.2 Support clearance. Persons owning, controlling, operating or maintaining electrical transmission lines upon hazardous fire areas shall, at all times, maintain around and adjacent to poles supporting a

switch, fuse, transformer, lightning arrester, line junction, dead end, corner pole, towers, or other poles or towers at which power company employees are likely to work most frequently an effective firebreak consisting of a clearing or not less than 10 feet (3048 mm) in each direction from the outer circumference of such pole or tower.

Exception: Lines used exclusively as telephone, telegraph, messenger call, alarm transmission or other lines classed as communication circuits by a public utility.

O115.3 High tension line clearance. Persons owning, controlling, operating or maintaining electrical transmission lines upon hazardous fire areas shall maintain the clearance specified in Section 115.3 in all directions between vegetation and conductors carrying electrical current:

1. For lines operating at 2,400 volts and less than 68,000 volts, 4 feet (1219 mm).
2. For lines operating at 68,000 volts and less than 110,000 volts, 6 feet (1829 mm).
3. For lines operating at 110,000 volts and over, 10 feet (3048 mm).

Such distance shall be sufficiently great to furnish the required clearance from the particular wire or conductor to positions of such wire or conductor at temperatures of 120 F (48.9 C) or less. Forked, dead, old, decadent and rotten trees; trees weakened by decay or disease; and trees leaning toward the line, which could contact the line from the side or fall on the line, shall be felled, cut or trimmed to remove the hazard.

O115.4 Self-supporting aerial cable. Line clearance is not required for self-supporting aerial cable, except that forked trees, leaning trees and other growth which could fall across the cable and break it shall be removed.

SECTION O116 CLEARANCE OF BRUSH OR VEGETATION GROWTH FROM STRUCTURES

O116.1 General. Persons owning, leasing, controlling, operating or maintaining buildings or structures in, upon or adjoining hazardous fire areas, and persons owning, leasing or controlling land adjacent to such buildings or structures, shall at all times:

1. Maintain an effective firebreak by removing and clearing away flammable vegetation and combustible growth from areas within 30 feet (9144 mm) of such buildings or structures;

Exception: Single specimens of trees, ornamental shrubbery or similar plants used as ground covers, provided that they do not form a means of rapidly transmitting fire from the native growth to any structure.

2. Maintain additional fire protection or firebreak by removing brush, flammable vegetation and combustible growth located from areas within 30 feet to 100 feet (9144 mm to 30 480 mm) from such buildings or structures, when required by fire code official because of extra-hazardous conditions causing a firebreak of only 30 feet (9144 mm) to be insufficient to provide reasonable fire safety;

Exception: Grass and other vegetation located more than 30 feet (9144 mm) from buildings or structures and less than 18 inches (457 mm) in height above the ground need not be removed where necessary to stabilize the soil and prevent erosion.

3. Remove portions of trees which extend within 10 feet (3048 mm) of the outlet of a chimney;
4. Maintain trees adjacent to or overhanging a building free of deadwood; and
5. Maintain the roof of a structure free of leaves, needles or other dead vegetative growth.

O116.2 Corrective actions. The executive body is authorized to instruct fire code official to give notice to the owner of the property upon which conditions regulated by Section 116.1 exist to correct such conditions. If the owner fails to correct conditions, the executive body is authorized to cause the same to be done and make the expense of such correction a lien upon the property where such condition exists.

SECTION 0117 CLEARANCE OF BRUSH OR VEGETATION GROWTH FROM ROADWAYS

O117.1 Clearance of brush or vegetation. Fire code official is authorized to cause areas within 10 feet (3048 mm) on each side of portions of highways and private streets which are improved, designed or ordinarily used for vehicular traffic to be cleared of flammable vegetation and other combustible growth. Fire code official is authorized to enter upon private property to do so.

Exception: Single specimens of trees, ornamental shrubbery or cultivated ground such as green grass, ivy, succulents or similar plants used as ground cover, provided that they do not form a means of readily transmitting fire.

SECTION 0118 UNUSUAL CIRCUMSTANCES

O118.1 Unusual circumstances. If fire code official determines that difficult terrain, danger of erosion or other unusual circumstances make strict compliance with the clearance of vegetation provisions of Sections 115, 116, or 117 of Appendix O undesirable or impractical, enforcement thereof may be suspended and reasonable alternative measures shall be provided.

SECTION 0119 DUMPING

O119.1 Dumping. Garbage, cans, bottles, papers, ashes, refuse, trash, or rubbish or combustible waste material shall not be placed, deposited or dumped in or upon hazardous fire areas, in or upon or along trails, and roadways or highways in hazardous fire areas.

Exception: Approved public and private dumping areas.

SECTION 0120 DISPOSAL OF ASHES

O120.1 Disposal of ashes. Ashes and coals shall not be placed, deposited or dumped in or upon hazardous fire areas.

Exceptions:

1. In the hearth of an established fire pit, camp stove or fireplace.
2. In a noncombustible container with a tight-fitting lid, which is kept or maintained in a safe location not less than 10 feet (3048 mm) from combustible vegetation or structures.
3. Where such ashes or coals are buried and covered with 1 foot (304.8 mm) of mineral earth not less than 25 feet (7620 mm) from combustible vegetation or structures.

SECTION 0121 USE OF FIRE ROADS AND FIREBREAKS

O121.1 Use of fire roads and firebreaks. Motorcycles, motor scooters and motor vehicles shall not be driven or parked upon, and trespassing is prohibited upon, fire roads or firebreaks beyond the point where travel is resisted by a cable, gate or sign, without the permission of the property owners. Vehicles shall not be parked in a manner which obstructs the entrance to a fire road or firebreak.

Exception: Public officers acting within their scope of duty.

Radio and television aerials, guy wires thereto, and other obstructions shall not be installed or maintained on fire roads or firebreaks unless located 16 feet (5877 mm) or more above such fire road or firebreak.

**SECTION O122
USE OF MOTORCYCLES, MOTOR SCOOTERS AND MOTOR VEHICLES**

O122.1 Use of motor vehicles. Motorcycles, motor scooters and motor vehicles shall not be operated within hazardous fire areas, without a permit by fire code official, except upon clearly established public or private roads. Permission from the property owner shall be presented when requesting a permit.

**SECTION O123
TAMPERING WITH FIRE DEPARTMENT LOCKS, BARRICADES AND SIGNS**

O123.1 Tampering with fire department locks, barricades and signs. Locks, barricades, seals, cables, signs and markers installed within hazardous fire areas, by or under the control of fire code official, shall not be tampered with, mutilated, destroyed or removed.

Gates, doors, barriers and locks installed by or under the control of fire code official shall not be unlocked.

**SECTION O124
LIABILITY FOR DAMAGE**

O124.1 Liability for damage. The expenses of fighting fires which result from a violation of Appendix O shall be a charge against the person whose violation of Appendix O caused the fire. Damages caused by such fires shall constitute a debt of such person and are collectable by fire code official in the same manner as in the case of an obligation under a contract, expressed or implied.

**APPENDIX P
EXCAVATION AND CONFINEMENT**

**SECTION P101
GENERAL**

P101.1 Scope. The provisions of this appendix shall apply to any man-made cut, cavity, trench or depression in an earth surface formed by earth removal, and the provisions identify procedures to protect employees from the hazards of entry into confined spaces.

**SECTION P102
DEFINITIONS**

P102.1 Definitions. The following words and terms shall, for the purpose of this appendix and as used elsewhere in this code, have the meanings shown herein.

CONFINED SPACE. Is a space that:

1. Is large enough and so configured that an employee can bodily enter and perform assigned work; and
2. Has limited or restricted means for entry or exit;
3. Is not designed for continuous employee occupancy.

EXCAVATION. Any man-made cut, cavity, trench or depression in an earth surface, formed by earth removal.

TRENCH. A narrow excavation made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet. If forms or other

structures are installed or constructed in an excavation so as to reduce the dimension measured from the form or structures to the side of the excavation to 15 feet or less, the excavation is a trench.

**SECTION P103
EXCAVATION AND TRENCHES**

P103.1 Excavation and trenches. Excavation and trenches shall be in accordance with the 29 CFR, Part 1926, Subpart P, Sections 1926.650-652.

**SECTION P104
CONFINED SPACES**

P104.1 Confined spaces. Confined spaces shall be in accordance with 29 CFR, Part 1910.146. Other recognized standards that must be adhered to include 40 CFR, Parts 280 and 281.

**SECTION P105
UNSAFE CONDITIONS**

P105.1 Unsafe conditions. When in the opinion of the fire code official or his/her designee, an unsafe condition exists, excavation and confined space operations shall cease until such time as adequate means have been taken to provide for the safety of persons working in or around the excavation or confined space. Failure to do so may result in citations and fines.