

University of Arizona
AMENDMENTS TO THE
INTERNATIONAL BUILDING CODE
2018 EDITION

The following provisions of the International Building Code, 2018 Edition, as published by the International Code Council, Inc. are hereby revised as follows:

CHAPTER 1
SCOPE AND APPLICATION

Section 101.1 Revise as follows: Title.

Insert: [NAME OF JURISDICTION] as, "*University of Arizona.*"

Section 101.4 Referenced codes. Change, "The other codes listed in Sections 101.4.1 through 101.4.7, and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference."

To read, "*The other codes listed in Sections 101.4.1 through 101.4.7, as locally amended, and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.*"

Section 101.4.3 Plumbing.

~~Delete the last sentence,~~ "The provisions of the *International Private Sewage Disposal Code* shall apply to private sewage disposal systems."

Section 101.4.4 Property maintenance. ~~Delete this section in its entirety.~~

Section 101.4.6 Energy. Delete this section in its entirety, and add the following section:

"Section 101.4.6 Electrical. The provisions of the National Electrical Code, 2017 edition, shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto."

Section 105.1.1 Annual permit. ~~Delete this section in its entirety.~~

Section 105.1.2 Annual permit records. ~~Delete this section in its entirety.~~

Section 105.2 Work exempt from permit. Revise as follows:

Change,

"Building:

2. Fences not over 7 feet (2134 mm) high."

To read,

"Building:

2. Fences not over 7 feet (2134 mm) high and masonry or concrete walls not over 6 feet (1829 mm) high, which do not retain earth."

Electrical: Revise as follows: Add the following after item 3:

"Other items:

1. Power for amusement devices and carnival rides in place on a site for less than 30 calendar days and not connected to a utility company's facilities.

2. Repair or replacement of fixed motors and transformers of the same type and rating in the same location.
3. Temporary decorative lighting.
4. Repair or replacement of current-carrying parts of any switch, contactor, control device, or overcurrent device of the required capacity in the same location.
5. Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 volt-amps of energy.
6. Devices used in manufacturing, processing or fabricating.”

Mechanical.

Add the following item number:

“8. Replacement of evaporative coolers with like coolers.”

111.2 Certificate issued. REVISE Section by ADDING the following to the end of the Section: **Exception:** Approved final inspections for International Residential Code, group “A” and “B” occupancies less than 4,000 SF in area, and group “U” occupancy structures shall constitute the certificate of occupancy.

CHAPTER 9 FIRE PROTECTION AND LIFE SAFETY SYSTEMS

SECTION 903 AUTOMATIC SPRINKLER SYSTEMS

Section 903.2 Where required. Revise as follows: Change, “*Approved automatic sprinkler systems* in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12.” To read, “and in all new construction and major renovations, alterations and additions, as defined in the University of Arizona Construction and Renovation Permitting Procedure (adopted: July 2011), unless approved by the fire code official. In all new construction, major and minor renovations, alterations and additions, where the fire code official has determined the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, that are not specifically provided for by this code, shall be determined by the fire code official in accordance with section 102.9 of the International Fire Code.”

[F] Section 903.3.1.3 NFPA 13D sprinkler system. Revise as follows: Add the following at the end of the paragraph:

“Automatic sprinkler systems shall provide coverage for attached garages and under the horizontal projections of any part of the roof enclosed on 3 sides and greater than 4 feet in depth.”

Add the following section:

“**[F] Section 903.4.4.** Provide electronic pressure monitoring of the supply and system sides of the fire sprinkler system using 24VDC ¼” NPT 4-20ma transducers that provide a range of 0-300psi with a burst rating of at least 400psi. They shall be installed in the same location as the system and supply pressure gauges. Each pressure transducer shall be monitored.”

[F] Section 904.12.2 System interconnection. Revise as follows: Add the following to the end of the first sentence: “...and to all electrical receptacles located within the perimeter of the protected exhaust hood.”

SECTION 907 – FIRE ALARM AND DETECTION SYSTEMS

907.2 Where required—new buildings and structures. Add the following sentence to the end of the first paragraph: “*Class A fire alarm systems* shall be installed in all new buildings, structures, and renovation projects where the scope of demolition and construction covers at least any single floor of a

building. Concurrent small renovations on multiple floors of a building where the cumulative scope of work in square feet is greater than the largest single floor of the building shall also install a *Class A fire alarm system*.”

CHAPTER 10 MEANS OF EGRESS

SECTION 1010 DOORS, GATES AND TURNSTILES

Section 1010.1.9.8.1 Delayed egress locks. Revise as follows: add the following at the end of the paragraph 6: “6.4 Lettering shall be at least 1 inch (25 mm) in height and shall have a stroke of not less than 1/8 inch (3.2 mm), on a contrasting background.”

Section 1010.1.9.9 Sensor release of electrically locked egress doors. #4. Revise as follows: After the words, “PUSH TO EXIT” in the second sentence add, “Lettering shall be at least 1 inch (25 mm) in height and shall have a stroke of not less than 1/8 inch (3.2 mm), on a contrasting background.”

Section 1010.1.10.1 Installation. Revise as follows:

Add the following:

“5. Panic or *fire exit hardware* shall be the only locking device on the door except where otherwise permitted in this code.”

CHAPTER 11 ACCESSIBILITY

Section 1102.1 Design. Revise as follows: change, “Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1.” To read, “Buildings and facilities shall be designed and constructed to be accessible in accordance with this code, Arizona Revised Statutes (ARS§41-1492.02) and ICC A117.1.”

CHAPTER 16 STRUCTURAL DESIGN

SECTION 1609 WIND LOADS

Section 1609.1.1 Determination of wind loads. REVISE Section by ADDING the following after the last paragraph:

Per the Basic Wind Speed Figures, use the following:

Risk Category I – 100 mph

Risk Category II – 105 mph

Risk Category III – 110 mph

Risk Category IV – 115 mph

ADD new Section 1609.5.1.1 as follows:

“**1609.5.1.1 Uplift resistance to minimize microburst effects.** In addition to requirements in ASCE 7, minimum uplift resistance shall be determined by either method 1 or 2 below:

1. **Design-based wind uplift criteria** Wind uplift requirements shall be determined by using the design wind value of 110 mph within Table 2308.7.5 for the continuous load path transmitting the uplift forces from the rafter or truss ties to the foundation.
2. **Prescriptive-based wind uplift criteria** (Please note that the requirements of this Section are in addition to those required for the structural connection of wood members)

- a. **Conventionally-framed wood or cold-formed steel structures** All bearing wall vertical connections shall be clipped with either approved structural sheathing or approved clips to provide a continuous load path from the joist or truss through the ledger or top plate to the bottom wall plate. Where clips are used, they shall be minimum Simpson H2.5 (A34 at ledger), or equivalent load capacity, of configuration to match connection and spaced at intervals not to exceed 24." At openings, lower cripple studs do not require clipping but king/trimmer studs require double clips at bottom and upper cripples require both full clipping to header as well as header to king stud. All platform framing requires either strapping listed for the purpose or continuous sheathing over rim joist from stud to stud vertically at each floor level. All non-bearing exterior walls shall be clipped as above except that the spacing may be extended not to exceed every other stud.
- b. **Masonry or concrete structures** If lateral design requires larger anchors or more conservative spacing, these may be used in lieu of those called out in this Section.
 - i. **Roof bearing on wall top plate** Top plates shall be secured to masonry or concrete walls with minimum 0.5" anchor bolts embedded minimum 7" and spaced at intervals not to exceed 48." Each joist or truss shall be clipped to plate at bearing with minimum Simpson H2.5 or equivalent load capacity and of configuration to match connection. Gable end joists or trusses shall also be clipped at intervals not to exceed 48."
 - ii. **Roof bearing on wall ledger** Joists or trusses bearing on a wall ledger shall be secured to masonry or concrete walls with minimum Simpson PAI23 purlin anchors or equal with equivalent load capacity listed for the application and embedded into wall per listing at intervals not to exceed 48". Nonbearing roof diaphragm edges shall have the outermost joist or truss likewise anchored to the wall through blocking.
- c. **Structural steel structures** Structural steel buildings shall have roof members attached by either welds, bolts, screws or other similarly approved connections at intervals not to exceed 48". Ledger designs shall connect to roof trusses with strapping listed for the purpose at intervals not to exceed 48" on all diaphragm sides. If lateral design requires larger anchors or more conservative spacing, these may be used in lieu of those called out in this Section.

SECTION 1610 SOIL LATERAL LOADS

Add the following section:

"Section 1610.1.1 Presumptive active pressure. For typical unsaturated soils within Pima County, a presumptive active lateral pressure of 35 psf per foot of depth may be used without a geotechnical report. Level backfill is assumed with this active pressure. Surcharges shall be applied as necessary."

**CHAPTER 17
SPECIAL INSPECTIONS AND TESTS**

SECTION 1705 REQUIRED SPECIAL INSPECTIONS AND TESTS

Section 1705.4 Masonry Construction. REVISE Section by ADDING a new exception item 4 as follows:

4. Non-essential facilities designed in accordance with Section 2107 with allowable masonry stresses reduced by one half and the maximum value of $f'm$ limited to 1500 psi for concrete or clay masonry. The following limitations shall apply to this exception:

1. The unsupported height (or length)- to- thickness ratio of a building wall shall not exceed 20
2. The soil retaining height for a wall retaining wall shall not exceed 4'-0' measured from the top of footing for an 8-inch-thick wall or 6'-0' for a 12- inch- thick wall.
3. The height- to- thickness ratio shall not exceed 10 for a cantilevered masonry fence or combination masonry fence and retaining wall as measures from the top of footing to the top of the wall. If a combination retaining/fence wall consist of more than one wall thickness, the smallest thickness shall be used in determining the height-to-thickness ratio

Any portion or portions of a structure in which the design masonry stresses exceed one half the allowable masonry stresses, shall require Special Inspection for that portion or portions of the structure.

**CHAPTER 18
SOILS AND FOUNDATIONS**

SECTION 1806 PRESUMPTIVE LOAD-BEARING VALUES OF SOILS

Add the following section:

“Section 1806.2.1 Presumptive coefficient of friction:

For typical unsaturated soils, a presumptive coefficient of friction of 0.30 for lateral sliding resistance may be used without a geotechnical report. Friction resistance may be used in conjunction with passive pressure to resist sliding forces.”

**CHAPTER 18
SPECIAL CONSTRUCTION**

SECTION 3109 SWIMMING POOLS AND HOT TUBS

Section 3109 Swimming pool enclosures and safety devices. Revise as follows:

Delete section and subsections (in its entirety) and Replace with:

“Arizona Administrative Code, Title 18, Chapter 5, Article 2. Public and Semipublic Swimming Pools and Spas as well as A.R.S. §36.”

The following Appendix Requirements are adopted:

APPENDIX I: PATIO COVERS