

2024 Construction Codes Adoption Highlights

International Building Code	Local Amendments:	Notes:
	Subsection 104.2.3 "Alternative materials, design and methods of construction and equipment" is hereby amended by deleting the entire exception to this subsection.	The International Code Council Performance Code is not adopted in the City of Chandler.
	Subsection 111.1 "Change of occupancy", Subsection 111.2 "Certificate Issued" and Subsection 111.3 "Temporary occupancy". The city has no proposed amendment to these subsections. When the new code is adopted then it will go into the City Code as written.	Ensure the essential safety features such as required fire sprinkler systems and design occupant load on the issued certificate of occupancy to meet the building and fire safety standards accurately and consistently.
	Subsection 412.4.5 "Height and area limits" is hereby amended by deleting the entire paragraph and reword it along with an additional note "d" to TABLE 412.3.6 as follows: Residential aircraft hangars shall be provided with a group 13R fire suppression system OR the hangar and dwelling may be provided with a group 13D fire suppression system.	For the sake of consistence, Chandler would provide a clear guidance for all residential aircraft hangars to comply with the fire suppression requirements, instead of case-by-case basis.
	Subsection 1612.3 "Establishment of flood hazard areas" is hereby amended by inserting The City of Chandler, Arizona as Name of Jurisdiction and the latest effective date as Date of Issuance.	Provide specific information about name of jurisdiction and date of issuance.
	Model Code Changes:	Notes:
	Chapter 9 has added many sections for fire protection requirements associated with lithium-ion battery manufacturing, storage, use, repair, charging and research.	Provides more fire protection requirements for the ever-growing lithium-ion battery applications.
	SECTION 907.10.1 – SMOKE ALARM REPLACEMENT was added requiring the replacement of smoke detectors.	Specify smoke alarm replacement in certain situations.

	SECTIONS 912.5.1 – 912.5.4 - SIGNS were added dictating signage for sprinkler system fire department connections on multiple buildings or with combined systems.	FDC signage in Chandler is dictated by Fire Department detail FD104 and requires 2" letters.
	SECTION 915 – CARBON MONOXIDE DETECTION is now applied in any occupancy with a CO source requires detection and/or alarm. CO detectors are required to be tied into the fire alarm and activate notification alarm.	Provides CO detection in many more occupancies with a CO source.
	SECTION 917.2 – MASS NOTIFICATION was added into all Group E occupancies in addition to college and university campuses that were previously in this section.	Currently only applied in college and university campuses. Not, it applies for all Group E occupancies.
National Electrical Code	Local Amendments:	Notes:
	Subsection 110.3 "Examination, Identification, Installation, Use, and Listing (Product Certification) of Equipment" is hereby amended by adding language "or other agencies approved by the City of Chandler building official" into body of code to simplify the listing requirement.	Chandler allows for equipment evaluation to be done by a wider range of qualified personnel including nationally recognized testing labs, qualified engineers, and sometimes by qualified staff.
	Subsection 210.8 "Ground-Fault Circuit-Interrupter Protection for Personnel" is hereby amended by adding an exception at the end of 210.8(A)(3) as follows. Exception: Plug receptacles that are designed to be used for powering listed air conditioning, heating or cooling equipment.	Protect Chandler residents from suffering heat related health injuries due to HVAC shut down since the variable speed motors used to gain higher efficiencies in HVAC would almost certainly trip the GFCI breakers.
	Subsection 210.8 (F) "Outdoor Outlets" is amended by deleting its expiration date from the exception to read as follows. Exception No. 2: GFCI protection shall not be required for listed HVAC equipment.	The variable speed motors would likely trip the GFCI breakers and cause HVAC equipment shut-downs.

Subsection 230.67 "Surge Protection". The city has no proposed amendment to this subsection. When the new code is adopted then it will go into the City Code as written.	The surge protection not only provides the protection for the equipment, but also prevents the potential fire hazards from happening as well. This is coordinated with the surge protection application as described in the International Residential Code.
Subsection 406.12 "Tamper-Resistant Receptacles" is amended by deleting its use in the item 10 for areas of agricultural buildings.	Tamper-resistant receptacles are an important next step to make the home a safer place for children and are becoming the industry standard.
Model Code Changes:	Notes:
SECTION 210.8(A)(6) Dwelling Units now require all kitchen receptacles to have GFCI protection.	Additional GFCI locations are now required in kitchen area.
SECTION 210.8(D) – GFCI is required to be installed for drinking water cooler, electric ranges, wall mounted ovens, counter mounted cooking units and microwaves.	Adds GFCI protection to several more appliances both in single family and multi-family structures.
SECTION 210.23(A) – TEN-AMPERE BRANCH CIRCUIT was added to supply lighting outlets, exhaust fans or a gas fireplace.	Ten-ampere circuits are only applied for a limited applications.
SECTIONS 220.5(C) / 220.41 – LIGHTING LOADS FOR DWELLING UNITS was a new section. It now requires the floor area of garages to be included when calculating the minimum lighting load for dwelling units.	A garage is in a trend of becoming adaptable for future use as a habitable room or occupiable space.

	SECTION 225.41(A)(B)(C) – EMERGENCY DISCONNECTS requires that the marking must be on the outside of the front of the enclosure, must have red background with white text and lettering must at least ½” high.	First responders can easily identify the location of Emergency Disconnect installed at a readily accessible outdoor location on or within site of the dwelling unit.
	SECTION 630.8 – GFCI PROTECTION FOR PERSONNEL now requires GFCI protection for all 125v, single-phase, 15 and 20-amp receptacles for hand tools or portable lighting equipment in areas where welders are operated.	Provide GFCI for safety protection.
International Plumbing Code	Local Amendments: CHAPTER 1 "SCOPE AND ADMINISTRATION" is amended by deleting in its entirety to comply with the provisions along with the amendments as described in the CHAPTER 1 SCOPE AND ADMINISTRATION of the 2024 International Building Code.	Notes: Eliminate the duplication and redundancy, we update only one administration chapter in the IBC and apply it for the other related codes.
	Model Code Changes: SECTION 419.6 – SOAP DISPENSERS shall be provided for public lavatories.	Notes: For the sake of public health.
	SECTION 504.7 – Required Pan now allows a plastic pan installed beneath a gas-fired water heater and shall be constructed of material having a flame spread index of 25 or less and a smoked-developed index of 450 or less.	Currently not allow use of a plastic pan installed beneath a gas fired water heater.
International Mechanical Code	Local Amendments: CHAPTER 1 "SCOPE AND ADMINISTRATION" is amended by deleting in its entirety to comply with the provisions along with the amendments as described in the CHAPTER 1 SCOPE AND ADMINISTRATION of the 2024 International Building Code.	Notes: Eliminate the duplication and redundancy, we update only one administration chapter in the IBC and apply it for the other related codes.

	Model Code Changes: SECTION 306.5 - Equipment or Appliances on Roofs or Elevated Structures now requires a top landing. The ladder shall be provided with a clear and unobstructed landing on the exit side of the roof hatch, having a minimum space of 30 inches deep and being the same width as the hatch.	Notes: Provide a safety measure for workers and inspectors working in the roof top.
International Residential Code	Local Amendments: Subsection R102.2 "Other laws" is amended by adding the following provisions to the end thereof: Additionally, the building official will enforce the provisions of such other laws when mandated by state or federal law.	Align with the amendment to the International Building Code.
	Subsection 103.1 "Creation of agency" is hereby amended by inserting Development Services Department as Name of Department.	Align with the amendment to the International Building Code.
	Subsection R105.2 "Work exempt from permit" is amended by adding items 6 and 7 into the electrical items exempt from permit.	Add those missed electrical items exempt from permit back into the city code.
	Subsection R110.1 "Use and change of occupancy", Subsection R110.2 "Certificate Issued" and Subsection R110.3 "Temporary occupancy". The city has no proposed amendment to these subsections. When the new code is adopted then it will go into the City Code as written.	Ensure the essential safety features such as required fire sprinkler systems and design occupant load on the issued certificate of occupancy to meet the building and fire safety standards accurately and consistently.
	Subsection N1101.13 (R401.2) "Application" is amended by deleting this amendment from the city code.	Section N1101.13.5 has been deleted from the 2024 IRC Chapter 11.

Subsection N1101.13.5 (R401.2.5) "Additional energy efficiency" is amended by deleting this amendment from the city code.	Section N1101.13.5 has been deleted from the 2024 IRC Chapter 11. The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.
TABLE N1102.1.3 (R402.1.3) "INSULATION MINIMUM R-VALUES AND FENESTRATION REQUIREMENTS BY COMPONENT" is hereby amended by deleting this amendment from the city code.	The ceiling R-value has been changed back from "49" to "38" in the 2024 IRC Chapter 11. The increase in ceiling R-value does not contribute substantial energy savings, but it would add substantial costs to builders and homeowners.
Subsection N1103.3.7 (R403.3.7) "Duct system testing" is amended by adding one new exception to read as follows: 4. A duct air-leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelop.	Align with the amendment to the International Energy Conservation Code. It could encourage more home builders to design homes with all ducts and air handlers within the thermal envelop.
Subsection N1110.2.5 (R502.2.5) "Additional efficiency credit requirements for additions" is amended by deleting the subsection in its entirety.	The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.

Subsection N1111.1.5 (R503.1.5) "Additional efficiency credit requirements for substantial improvements" is amended by deleting the subsection in its entirety.	The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.
Subsection E3902.3 "Outdoor receptacles" is hereby amended by adding an exception to read as follows. Exception: Plug receptacles that are designed to be used for powering listed air conditioning, heating or cooling equipment.	Protect Chandler residents from suffering heat related health injuries due to HVAC shut down since the variable speed motors used to gain higher efficiencies in HVAC would almost certainly trip the GFCI breakers.
Subsection E3902.14 "Outdoor outlets" is amended by deleting its expiration date from the exception to read as follows. Exception No. 2: GFCI protection shall not be required for listed HVAC equipment.	The variable speed motors would likely trip the GFCI breakers and cause HVAC equipment shut-downs.
Model Code Changes:	Notes:
SECTION R315 – SLEEPING LOFTS was added addressing spaces designated for sleeping on an intermediate level or levels between the floor and ceiling of a story.	Provide more allowance for sleeping spaces.
SECTION R330.8.1 – ESS VEHICLE IMPACT PROTECTION was added addressing the protection of Energy Storage Systems installed in garages.	Provides a safety measure addressing location, construction, size and height of these barriers.
SECTION N1103.13/R403.13 – GAS FIREPLACES was added to remove the option for installation of a gas fireplace that utilizes a continuous pilot light. Gas fireplaces need to be the ones with electronic ignition.	Provide extra safety for home owners who have gas fireplaces.

	SECTION E3601.8 – EMERGENCY DISCONNECTS requires the marking must be on the outside of the front of the enclosure, must have red background with white text and lettering must at least ½" high.	First responders can easily identify the location of Emergency Disconnect installed at a readily accessible outdoor location on or within site of the dwelling unit.
	SECTION – E3702.3 – TEN-AMPERE BRANCH CIRCUIT was added to supply lighting outlets, exhaust fans or a gas fireplace.	This ten-ampere circuits only applies for a limited applications.
	SECTION – E3706.2 – PANELBOARD CIRCUIT IDENTIFICATION was added requiring a directory that clearly explains abbreviations and symbols if abbreviations and symbols are used.	Owners and technicians can easily identify the specific use.
International Fuel Gas Code	Local Amendments:	Notes:
	CHAPTER 1 "SCOPE AND ADMINISTRATION" is amended by deleting in its entirety to comply with the provisions along with the amendments as described in the CHAPTER 1 SCOPE AND ADMINISTRATION of the 2024 International Building Code.	Eliminate the duplication and redundancy, we update only one administration chapter in the IBC and apply it for the other related codes.
	Model Code Changes:	Notes:
	No significant changes.	No significant changes.
International Energy Conservation Code	Local Amendments:	Notes:
	Subsection C102.2 "Other laws" is amended by adding the following provisions to the end thereof: Additionally, the building official will enforce the provisions of such other laws when mandated by state or federal law.	Align with the amendment to the International Building Code.
	Subsection C104.1 "Creation of enforcement agency" is hereby amended by inserting Development Services Department as Name of Department.	Align with the amendment to the International Building Code.

Subsection C405.15 "Renewable energy systems" is hereby to delete in its entirety.	The renewable energy systems will increase additional costs that are far exceed the negligible energy savings.
Subsection R102.2 "Other laws" is amended by adding the following provisions to the end thereof: Additionally, the building official will enforce the provisions of such other laws when mandated by state or federal law.	Align with the amendment to the International Building Code.
Subsection R103.1 "Creation of enforcement agency" is hereby amended by inserting Development Services Department as Name of Department.	Align with the amendment to the International Building Code.
Subsection R401.2 "Application" is amended by deleting this amendment from the city code.	Section R401.2.5 has been deleted from the 2024 IECC.
Subsection R401.2.5 "Additional energy efficiency" is amended by deleting this amendment from the city code.	Subsection R401.2.5 has been deleted from the 2024 IECC. The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.
TABLE R402.1.3 "INSULATION MINIMUM R-VALUES AND FENESTRATION REQUIREMENTS BY COMPONENT" is hereby amended by deleting this amendment from the city code.	The ceiling R-value has been changed back from "49" to "38" in the 2024 IECC. The increase in ceiling R-value does not contribute substantial energy savings, but it would add substantial costs to builders and homeowners.

	Subsection R502.2.5 "Additional efficiency credit requirements for additions" is amended by deleting the subsection in its entirety.	The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.
	Subsection R503.1.5 "Additional efficiency credit requirements for substantial improvements" is amended by deleting the subsection in its entirety.	The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.
	Model Code Changes:	Notes:
	SECTION C403.7.8 – OCCUPANT SENSORS FOR VENTILATION was added to address that occupied-standby controls shall be required for each of the multipurpose rooms, office areas, break rooms, etc. and the ventilation air is allowed to be reduced to zero when the space is not occupied.	Reduce energy consumption when the space is unoccupied.
International Existing Building Code	Local Amendments:	Notes:
	CHAPTER 1 "SCOPE AND ADMINISTRATION" is amended by deleting in its entirety to comply with the provisions along with the amendments as described in the CHAPTER 1 SCOPE AND ADMINISTRATION of the 2024 International Building Code.	Eliminate the duplication and redundancy, we update only one administration chapter in the IBC and apply it for the other related codes.
	Model Code Changes:	Notes:
	No significant changes.	No significant changes.
International Swimming Pool and Spa Code	Local Amendments:	Notes:
	CHAPTER 1 "SCOPE AND ADMINISTRATION" is amended by deleting in its entirety to comply with the provisions along with the amendments as described in the CHAPTER 1 SCOPE AND ADMINISTRATION of the 2024 International Building Code.	Eliminate the duplication and redundancy, we update only one administration chapter in the IBC and apply it for the other related codes.
	Model Code Changes:	Notes:
	No significant changes.	No significant changes.