

Chapter 1

Submitted by: International Residential Code Committee

CHAPTER 1 SCOPE AND ADMINISTRATION

Notes:

- 1. <u>For reserved sections herein, refer to the amendments and requirements in Chapter 1</u> of the International Building Code for these code requirements.
- 2. For sections that remain unchanged from base code, the term "see this section of the 2024 IRC" shall refer to the unchanged base code.

R101.1 Title. These provisions shall be known as the <u>International Residential Code</u> Residential Code for One- and Two-Family Dwellings of <u>as amended by the city of Phoenix</u> and shall be cited as such and will be referred to herein as "this code." <u>These regulations are one document</u> of the overall Phoenix Building Construction Code as defined by the adopting ordinance.

R101.2 Scope. The provisions of this code <u>or the International Building Code</u> shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height, with a separate means of egress and their accessory structures not more than three stories above grade plane in height.

Exception: The following shall be permitted to be constructed in accordance with this code. where provided with an automatic sprinkler system complying with Section P2904:

- 1. Live/work units located in <u>one- and two-family dwellings</u>, or townhouses and complying with the requirements of Section 508.5 of the International Building Code.
- 2. Owner-occupied lodging houses with five or fewer guestrooms.
- 3. A care facility with five or fewer persons receiving custodial care within a dwelling unit.
- 4. A care facility with five or fewer persons receiving medical care within a dwelling unit.
- 5. A day care facility for five or fewer persons of any age receiving care within a dwelling unit.

R101.2.1 Appendices. - See this section of the 2024 IRC

R101.3 Purpose. - See this section of the 2024 IRC

SECTION R102 APPLICABILITY - Reserved, except as noted below.

R102.6.1 Additions, alterations or repairs. - See this section of the 2024 IRC

SECTION R103 CODE COMPLIANCE AGENCY – Reserved.

SECTION R104 DUTIES AND POWERS OF THE BUILDING OFFICIAL - Reserved.

SECTION R105 PERMITS - Reserved.

SECTION R106 CONSTRUCTION DOCUMENTS - Reserved.

SECTION R107 TEMPORARY STRUCTURES AND USES - Reserved.

SECTION R108 FEES - Reserved.

SECTION R109 INSPECTIONS - Reserved.

SECTION R110 CERTIFICATE OF OCCUPANCY – Reserved.

SECTION R111 SERVICE UTILITIES - Reserved.

SECTION R112 MEANS OF APPEALS - Reserved.

SECTION R113 VIOLATIONS - Reserved.

SECTION R114 STOP WORK ORDER – Reserved.

Justification: All the adopted and amended building code documents taken together are known as the Phoenix Building Construction Code. Each code document is a separate document of the Phoenix Building Construction Code. This document is the International Residential Code as Amended by the City of Phoenix. This document is intended to apply where a code or referenced standard identifies the International Residential Code as being applicable.

The reserved provisions are contained in the Phoenix Building Construction Code – Administrative Provisions (Chapter 1 of the International Building Code).

Cost Impact: No cost impact	
Approved in previous 2018 Code Adoption process:	YES 🛛 NO
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BUILDING CONSTRUCTION CODE CHANGE PROPOSAL Amendment to 2024 International Residential Code (IRC) Chapter 2: Definition: Standard Plans

Submitted by: International Residential Code Committee

SECTION R202 DEFINITIONS

[RB] STANDARD PLANS. Plans authorized by the Planning & Development Department to be used in construction on a repetitive basis. Standard plans may include options allowing variations to the building design that may alter the interior and exterior appearance.

Justification: The definition allows standard plans to be used in lieu of separate submittals for each production home.

Cost Impact: The use of standard plans reduces the cost for the department and the home builders.

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BUILDING CONSTRUCTION CODE CHANGE PROPOSAL Amendment to 2024 International Residential Code (IRC) **Chapter 2 Definition: Fire Separation Distance**

Submitted by: International Residential Code Committee and modified by the DAB Building Code Subcommittee

SECTION R202 DEFINITIONS

[RB] FIRE SEPARATION DISTANCE. The shortest distance measured from the building face to one of the following:

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

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

Justification: This amendment acknowledges that fire does not necessarily spread at 90 degrees to the face of exterior walls and therefore removes the last sentence to make it the true shortest distance measurement.

Previous amendments have indicated that the measurement point was to the wall framing, as this frequently aligned with the face of the concrete stem wall below and made the measurement point easier to identify earlier in construction and simplified lot layouts. Where the exterior wall finishes do not appreciably reduce the distance, the building face could be interpreted within reasonable tolerances to the same point as the previous amendments.

Cost Impact: Minor cost impact. Where property lines or imaginary lot lines are not parallel to the building face, this may require the wall to be fire rated when by base code it would not be.

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Section R301.1.5

Submitted by: International Residential Code Committee

R301.1.5 Access to a public way.

All buildings shall be located on lots fronting a public way or other approved access to a public way. Such approved access shall be recorded with the county of Maricopa, with the approval of the building official or recorded on the approved plot plat in accordance with the Phoenix City Code. The access shall be in compliance with the Phoenix Fire Code.

Justification: Clarifies access requirements for all lots. Carried forward from the previous amendments.

Cost Impact: No cost impact. No additional cost impact above what was approved in the 2012 & 2018 amendments.

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Submitted by: International Residential Code Committee
R301.1.6 Lot Corner Identification.
In construction applications where legally surveyed lot corner identification markers are not
readily verifiable or are missing, the building official, when deemed necessary, shall require lot
boundary markers to be surveyed and permanently identified in accordance with State law at the
owner's or applicant's expense. The survey shall be executed by a registrant licensed to do such
work by the Arizona State Board of Technical Registration.
Justification: Often construction is started without locating the legal corners of a lot, leading to
disputes after substantial completion of the work. This requirement would limit such cases and
ensure compliance to both the Residential Code and the Zoning Ordinance.
Cost Impact: Minimal cost impact. While there could be a possible cost for a survey, this code
amendment could save costs by preventing construction in a prohibited location. The same text

is used in this proposal as approved on 12-01-06, 5-15-13 and 11-8-17 amendments.

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BUILDING CONSTRUCTION CODE CHANGE PROPOSAL Amendment to 2024 International Residential Code (IRC) Section R301.2 and Table R301.2

Submitted by: International Residential Code Committee

R301.2 Climatic and geographic design criteria.

Buildings shall be constructed in accordance with the provisions of this code as limited by the provisions of this section. Additional criteria shall be established by the local jurisdiction and set forth in table R301.2.

Table R301.2

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA (Due to space limitations, the table could not be reproduced, only the values are listed)	
Ground snow load°	<u>N/A</u>
Wind speed (mph):	105
Topographic effects ^k :	NO
Special wind region [,] :	NO
Windborne debris zone ^m	NO
Seismic design category ^f :	B
Weathering ^a	Negligible
Frost line depth ^b :	<u>0</u>
Termite ^c :	Moderate to heavy
Winter design temperature ^e .	None to slight
Ice barrier underlayment required ^h	No
Flood hazards ^g	See Phoenix city code
Air freezing index ⁱ	<u>N/A</u>
Mean annual temperature	<u>71.2°F</u>

MANUAL J DESIGN CRITERIA

Refer to Section M1401.3 and N1103.7 of the 2024 IRC Elevation: Latitude: Winter heating: -Summer cooling: Altitude correction factor: -Indoor temperature design: -Design temperature difference: Cooling temperature difference: Cooling temperature difference: Wind velocity heating: Wind velocity cooling: -Coincident wet bulb: -Daily range: Winter humidity:

Summer humidity:

For SI: 1 pound per square foot = 0.0479 kPa, 1 mike per hour = 0.447 m/s.

- a. Where weathering requires a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code, the frost line depth strength required for weathering shall govern. The weathering column shall be filled in with the weathering index, "negligible," "moderate" or "severe" for concrete as determined from Figure R301.2(4). The grade of masonry units shall be determined from ASTM C34, C55, C62, C73, C90, C129, C145, C216 or C652.
- b. Where the frost line depth requires deeper footings than indicated in Figure R403.1(1), the frost line depth strength required for weathering shall govern. The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(5) A]. Wind exposure category shall be determined on a site specific basis in accordance with Section R301.2.1.4.
- e. The outdoor design dry-bulb temperature shall be selected from the columns of 971 /2percent values for winter from Appendix D of the International Plumbing Code. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official. [Also see Figure R301.2(1).]
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdictions' entry into the National Flood Insurance Program (dated of adoption of the fires code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and the (c) the panel numbers and dates of the currently effective FIRM' and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
- h. In accordance with Sections R905.1.2, R905.4.3.1, R905.5.3.1m R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise the jurisdiction shall fill in this part of the table with "NO."
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (FG-days) from Figure R403.3(2) or from the 100-year (99 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 320 F)."
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 320 F)."
- k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- I. In accordance with Figure R301.2(5) A, where there are local historical data documenting unusual wind conditions, the jurisdiction shall fill in the part of the table with "YES" and identify any specific requirements. Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- m. In accordance with Section R301.2.1.2 the jurisdiction shall indicate the wind-borne debris wind zones(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- n. The jurisdiction shall fill in these sections of the table to establish the design criteria using Table 1a or 1b form ACCA Manual J or established criteria determined by the jurisdiction.
- n. The jurisdiction shall fill in this section of the table using the Ground Snow Loads.

Justification: In order for this document to be adopted. The completed reference table has to be a part of it. The deleted sentence is not required as the amendment refers to another code section rather than providing data.		
Cost Impact: No cost impact.		
Approved in previous 2018 Code Adoption process: X YES NO		
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Section R301.2.4

Submitted by: International Residential Code Committee

R301.2.4 Floodplain construction

Buildings and structures constructed in whole or in part in flood hazard areas as established in Table R301.2, and substantial improvement and repair of substantial damage of buildings and structures in whole or in part in flood hazard areas, shall be designed and constructed in accordance with Section R306. Chapter 32B of the Phoenix City Code. Buildings and structures that are located in more than one flood hazard area, including A Zones, coastal A Zones and V Zones, shall comply with the provisions associated with the most restrictive flood hazard area. Building and structures located in whole or in part in identified floodways shall be designed and constructed in accordance with ASCE 24.

R301.2.4.1 Alternative provisions.

As an alternative to the requirements in Section R306, ASCE 24 is permitted subject to the limitations of this code and limitations therein.

Justification: The city's floodplain ordinance is contained in Chapter 32B of the Phoenix city code.

Cost Impact: No cost impact. Current city code requirements are in place.		
Approved in previous 2018 Code Adoption process:	YES 🗌 NO	
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Section Table R301.5

Submitted by: International Residential Code Committee

Table R301.5 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (in pounds per square foot)

USE	LIVE LOAD
Habitable attics and attics served with fixed stairs	30 <u>40</u>
Sleeping rooms	30 <u>40</u>

Justification:

Habitable attics and sleeping rooms can be used as floor space and 40 psf more closely reflects floor live loading. The code change reflects the changes made to the 2018 IBC and is recommended by the Structural Sub-Committee.

Cost Impact: Minimal cost impact.

Approved in previous 2018 Code Adoption process:	YES 🗌 NO
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Section R302.2

Submitted by: International Residential Code Committee

R302.2 Townhouses.

Walls separating *townhouse units* shall be constructed in accordance with Section R302.2.1 or R302.2.2 and shall comply with Sections R302.2.3 through R302.2.5. <u>No plumbing, mechanical, electrical, piping, or other services in any form are allowed to traverse from one side to the other side of the wall or walls separating *townhouse units*.</u>

Justification:

Townhouse units, as defined in this code, extend from the foundation to the roof. Townhouses do not have ownership agreements between unit owners for common spaces and elements, like condominiums are required to per Arizona state law. This requires the code to regulate their independent functioning with respect to utilities and structural independence, so that one neighbor does not impair the ability of the other to be able to use their fully functioning property.

Fire sprinkler piping and electrical installations are allowed within the common wall framing cavity, so long as they only serve the same-side unit, for the same ownership reasons as discussed above.

Cost Impact: Minimal cost impact. Services will have to be delivered individually to each townhouse unit.

Approved in previous 2018 Code Adoption process:	YES 🛛 NO
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Submitted by: International Residential Code Committee

R302.2.6 Structural independence. Each townhouse *unit* shall be structurally independent. **Exceptions:**

- 1. Foundations supporting exterior walls, or common walls.
- 2. Structural roof and wall sheathing from each unit <u>not exceeding ³/₄</u>" thickness fastened to the common wall framing.
- 3. Nonstructural wall and roof coverings.
- 4. Flashing at termination of roof covering over common wall.
- 5. *Townhouse units* separated by a common wall as provided in Section R302.2.2, Item 1 or 2.
- 6. *Townhouse units* protected by an automatic sprinkler system complying with Section P2904 or NFPA 13D.

Justification: Unlike in the International Building Code, there is no maximum size to structures built to the IRC, as such the separation of the units under fire conditions are very important to stop a fire in one unit from spreading to all the units and causing the entire unlimited sized townhouse from being lost.

Note that the townhouse units themselves have no required fire-resistance, just the wall between them. The point of structural independence is so that common walls function so that a fire in one unit causing structural collapse of that unit does not cause the structural collapse of the common wall, as such these walls should not serve as gravity load bearing walls. Doing so greatly increases the chances of the wall being pulled down from one unit collapsing. Gravity framing will have large resistance to vertical failure at the plane of the wall, unlike sheathing. Exceptions 5 and 6 are removed to reinforce this functioning. Exception 2 remains such that the common walls can still be used as braced walls. The $\frac{3}{4}$ " thickness maximum is taken from the exception to IBC Section 706.2 for fire walls that allow floor and roof sheathing to cross the fire wall. This maximum dimension is necessary to restrict the maximum strength of the sheathing, so that it can fail on the fire side during a fire without pulling down the common wall.

Cost Impact: Minimal cost impact. Framing cannot bear on common walls.

Approved in previous 2018 Code Adoption process:	YES 🛛 NO
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Section R302.5.1

Submitted by: International Residential Code Committee

R302.5.1 Opening protection.

Openings from a private garage <u>or carport</u> directly into a room used for sleeping purposes <u>or a hallway that only accesses sleeping room(s)</u> shall not be permitted. Other openings between the garage <u>or carport</u> and dwelling unit shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated door <u>or windows</u>. Doors shall be self-latching and equipped with a self-closing or automatic-closing device.

Justification: Whether a garage or carport, the rooms used for sleeping purposes should be protected from the hazard inherent in this use. Industry is supportive of the self-closing provisions to provide an additional level of safety.

Cost Impact: Minimal cost impact.

Approved in previous 2018 Code Adoption process:	YES 🗌 NO
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Section R309

Submitted by: International Residential Code Committee

SECTION R309 AUTOMATIC SPRINKLER SYSTEMS

R309.1 Townhouse automatic sprinkler systems.

<u>Other than where preempted by Arizona State Law, an automatic sprinkler system shall be</u> installed in *townhouses*.

Exception: An automatic sprinkler system shall not be required where *additions* or *alterations* are made to existing *townhouses* that do not have an automatic sprinkler system installed when not required in accordance with the Phoenix Fire Code.

R309.1.1 Design and Installation. Automatic sprinkler systems for *townhouses* shall be designed and installed in accordance with Section P2904 or NFPA 13D.

R309.2 One- and two-family dwellings automatic sprinkler systems.

<u>Other than where preempted by Arizona State Law,</u> an automatic sprinkler system shall be installed in one- and two-family *dwellings*.

Exception: An automatic sprinkler system shall not be required for *additions* or *alterations* to *existing buildings* that are not already provided with a sprinkler system when not required in accordance with the Phoenix Fire Code.

R309.2.1 Design and Installation. Automatic sprinkler systems shall be designed and installed in accordance with Section P2904 or NFPA 13D.

Justification: The Phoenix Fire Code has provisions brought in with the Bret Tarver Sprinkler Ordinance for when fire sprinklers are required that is more conservative than base code. See Section 903 of the Phoenix Fire Code.

Arizona Revised Statutes (A.R.S.) 9-807 prohibits municipalities from requiring sprinklers in oneand two-family dwellings but allowed Bret Tarver to do so, due to the age of the Bret Tarver ordinance.

The newly adopted Arizona Revised Statute (A.R.S.) 9-462.13 has been interpreted at this time to disallow requiring an automatic sprinkler system for all structures containing up to four dwelling units and all townhomes. With the potential for this law to be altered or clarified, the provisions for fire sprinklers are not removed from the code but are specifically pointing the user to the likelihood of state preemption for their requirement. Where preempted, sprinklers are not required.

Cost Impact: Minimal cost impact. Where state law disallows the requirement for fire sprinklers, there will be a cost reduction.

Approved in previous 2018 Code Adoption process:
VES
NO

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BUILDING CONSTRUCTION CODE CHANGE PROPOSAL Amendment to 2024 International Residential Code (IRC) Section R310.6 & R311.6

Submitted by: International Residential Code Committee

R310.6 Power Source

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

Exceptions:

- 1. Smoke alarms shall be permitted to be battery operated where installed in buildings without commercial power.
- Smoke alarms installed in accordance with Section R310.2.2 shall be permitted to be battery powered: where alteration or repairs do not result in the removal of interior wall or ceiling finishes unless there is an attic or crawl space or basement available which could provide access for hardwiring of smoke alarms.

R311.6 Power Source

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

Exceptions:

- 1. Carbon monoxide alarms shall be permitted to be battery operated where installed in buildings without commercial power.
- Carbon monoxide alarms installed in accordance with Section R311.2.2 shall be permitted to be battery powered, where alteration or repairs do not result in the removal of interior wall or ceiling finishes unless there is an attic or crawl space or basement available which could provide access for hardwiring of smoke alarms.

Justification: The base code language would allow projects that fall under the technical definition of alteration and repair that are complete gut remodels, whole house rewires, etc. to only be required to provide battery powered smoke and carbon monoxide alarms. It also lends to suggesting that additions that are receiving new electrical wiring could also be constructed with smoke and carbon monoxide alarms that are not hardwired. This is not consistent with the intent of the smoke and carbon monoxide alarm provisions of providing consistent, redundant levels of safety for sleeping occupants in the building. It stands to reason that such projects should fall under the same requirement for power source as newly constructed dwelling units. The language used in the amendment is language that has been derived from previous versions of the code.

YES 🛛 NO
Date: 01/31/2025
No action taken
Date: 03/27/2025
No action taken
Date: 04/22/2025
No action taken
Date: 05/21/2025
No action taken
Date: 06/18/2025
No action taken



Section R319.4.4

Submitted by: International Residential Code Committee

R319.4.4 Bars, grilles, covers and screens.

Where bars, grilles, covers, screens or similar devices are placed over *emergency escape and rescue openings*, bulkhead enclosures or area wells that serve such openings, the minimum net clear opening size shall comply with sections R319.2.1 through R319.2.2 and R319.4.1. Such devices shall be releasable or removable from the inside without the use of a key or tool or <u>special knowledge</u> or force greater than that required for the normal operation of the escape and rescue opening. <u>The dwelling shall be equipped with smoke alarms installed in accordance with Section R310.</u>

Justification: Retains current requirements for smoke detectors when quick release security bars over bedroom windows are installed. Carryover.

Cost Impact: Minimal cost impact.

Approved in previous 2018 Code Adoption process:	YES 🗌 NO
ACTION TAKEN:	
2024 Code Committee	Date: 01/24/2025
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Transportation, Infrastructure and Planning Subcommittee	Date: 05/21/2025
Approved as submitted D Modified and approved D Denied	No action taken
City Council Action	Date: 06/18/2025
Approved as submitted D Modified and approved D Denied	No action taken
Adapted by City of Phasnix Ordinance C 7207 offactiv	Vo August 1 2025



Section R319.5

Submitted by: International Residential Code Committee

R319.5 Replacement windows for emergency escape and rescue openings.

Replacement for emergency escape and rescue openings installed in buildings meeting the scope of this code shall be exempt from Sections R319.2 and R319.4.4, provided that the replacement window meets the following conditions:

- 1. The replacement window is the manufacturer's largest standard size window that will fit within the same size as the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a an operating style that provides for an equal or greater the greatest window opening area, height dimensions, and width dimensions., than the existing window. If an operating style can meet the requirements of 319.2, that operating style shall be provided.
- 2. The replacement window is not part of a change of occupancy. See Section 319.7.1

Justification: Aligns with current city policy established in 2007. Replacement emergency escape and rescue openings should meet minimum code requirements where possible. When it is not possible, the emergency escape and rescue opening should not be further reduced in size but instead improved where possible. Further reducing the size of emergency escape and rescue openings creates a higher hazard for occupants and rescue personnel.

Cost Impact: Minimal cost impact.

Approved in previous 2018 Code Adoption process:	YES	\boxtimes	NO
ACTION TAKEN:			
2024 Code Committee	Date:	03/14/	2025
Approved as submitted Denied and approved Denied	🗌 No	action	taken
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City Council Action	Date:	06/18/2	2025
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Adapted by City of Phoepix Ordinance G 7397 effectiv		int 1 2	0.25



BUILDING CONSTRUCTION CODE CHANGE PROPOSAL

Amendment to 2024 International Residential Code (IRC) Section R319.6

Submitted by: International Residential Code Committee

R319.6 Dwelling additions

Where dwelling unit additions contain sleeping rooms, an emergency escape and rescue opening shall be provided in each new sleeping room. Where dwelling unit additions have basements, an emergency escape and rescue opening shall be provided in the new basement.

Exceptions:

- 1. An emergency escape and rescue opening is not required in a new basement that contains a sleeping room with an emergency escape and rescue opening <u>that meets</u> the requirements of R319.2.1 through R319.4.4.
- 2. An emergency escape and rescue opening is not required in a new basement where there is an emergency escape and rescue opening <u>that meets the requirements of R319.2.1 through R319.4.4</u> in an existing basement that is accessed from the new basement.
- 3. An operable window complying with Section R319.7.1 shall be acceptable as an emergency escape and rescue opening.

Justification: Provides clarification of requirements for existing emergency escape and rescue openings. Removes added language allowing for less safe emergency and escape and rescue openings. Aligns with current city polices and requirements established in 2007.

Cost Impact: Minimal cost impact.

Approved in previous 2018 Code Adoption process:	YES 🛛 NO
ACTION TAKEN:	
2024 Code Committee	Date: 03/14/2025
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Approved as submitted D Modified and approved D Denied	No action taken
City Council Action	Date: 06/18/2025
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Adopted by City of Phoenix Ordinance G-7397 effective	ve August 1, 2025



Submitted by: International Residential Code Committee

R319.7 Alterations or repairs of existing basements.

New sleeping rooms created in an existing basement shall be provided with emergency escape and rescue openings in accordance with Section R319.1 and R319.2. Other than new sleeping rooms, wWhere existing basements undergo alterations or repairs, an emergency escape and rescue opening shall be provided in accordance with R319.1 and R319.2 is not required.

Exception: An operable window complying with R319.7.1 shall be acceptable as an emergency escape and rescue opening. For existing basements not containing habitable space, where alterations or repairs do not result in new habitable space, an emergency escape and rescue opening shall not be required.

Justification: Clarifies section reference for sizing requirements of emergency escape and rescue openings. Also removes added language allowing for less safe emergency and escape and rescue openings. Aligns with current city policy and requirements established in 2007. Allowing a reduced size for emergency escape and rescue openings creates a hazard for occupants and rescue personnel.

Cost Impact: Minimal cost impact.

Approved in previous 2018 Code Adoption process:	YES 🛛 NO
ACTION TAKEN:	
2024 Code Committee	Date: 03/14/2025
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Submitted by: International Residential Code Committee

R319.7.1 Existing emergency escape and rescue openings.

Where a change of occupancy would require an emergency escape and rescue opening in accordance Section R319.1, operable windows serving as the emergency escape and rescue opening shall comply with the following: R319.1.1 through R319.4.4.

- 1. An existing operable window shall provide a minimum net clear opening of 4 square feet (0.38 m²) with a minimum net clear opening height of 22 inches (559 mm) and a minimum net clear opening width of 20 inches (508 mm)
- 2. A replacement window where such window complies with both of the following:

2.1.The replacement window meets the size requirements in Item 1. 2.2.The replacement window is the manufacturer's largest standard-size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

Justification: Most changes of occupancies in Residential construction result in a higher occupant load, and/or involve the care of individuals. Maintaining the city's current and longstanding policy (2007) of emergency and escape and rescue openings provides for an increased level of safety and a higher probability of escape and rescue in an emergency. Allowing a reduction in the size requirements of emergency and rescue openings creates a hazard for occupants and rescue personnel.

Cost Impact: Minimal cost impact. Approved in previous 2018 Code Adoption process: **ACTION TAKEN:** 2024 Code Committee Date: 03/14/2025 Approved as submitted Modified and approved Denied No action taken Development Advisory Board (DAB) Subcommittee Date: 03/27/2025 Approved as submitted I Modified and approved I Denied No action taken **Development Advisory Board (DAB)** Date: 04/22/2025 Approved as submitted Modified and approved Denied □ No action taken Transportation, Infrastructure and Planning Subcommittee Date: 05/21/2025 Approved as submitted I Modified and approved I Denied No action taken **City Council Action** Date: 06/18/2025 Approved as submitted Modified and approved Denied No action taken Adopted by City of Phoenix Ordinance G-7397 effective August 1, 2025



Section R322

Submitted and modified by: Strategic Workgroup on Accessibility and further modified by staff

R322.1 Dwelling units or sleeping units. Where there are four or more *dwelling units* or *sleeping units* in a single structure, the provisions of Chapter 11 of the *International Building Code* for Group R-3 shall apply. <u>Other *dwelling unit* and *sleeping unit* containing structures shall comply with Section R322.1.1.</u>

Exception: Owner-occupied lodging houses with five or fewer guestrooms are not required to be accessible.

R322.1.1 Dwelling units.

New dwelling units and sleeping units shall comply with the inclusive home design features of Section R322.1.1

Exceptions: The following are not required to comply with Section R322.1.1:

- 1. <u>All portions of the *dwelling units* or *sleeping units* not on the floor level that contains the <u>accessible entrance</u>.</u>
- 2. A raised or sunken floor area in a portion of a living, dining, or sleeping room.
- 3. Where a *dwelling unit* or *sleeping unit* contains less than 70 square feet of *habitable space* on the dwelling's primary entrance level.
- 4. <u>Standard plans for use in a residential subdivision that received preliminary site plan</u> approval prior to the effective date of the 2024 Phoenix Building Construction Code.
- 5. Upon determination by the *building official* that by virtue of terrain or other unusual characteristics of the building site, there are practical difficulties associated with compliance of any specific provision of Section R322.1.1 and that the additional cost to comply with the applicable provisions of this section will exceed three hundred dollars, as shown by evidence presented by the applicant.

R322.1.1.1 Entrance.

At least one dwelling unit entrance shall be accessible and on an accessible route from the street or sidewalk, the dwelling unit's driveway, or the dwelling unit's garage or carport in compliance with Chapter 4 of ICC A117.1 - 2017. The required accessible entrance shall not be to a bedroom.

Exceptions:

- 1. Doors and gates in the accessible route and the one accessible entrance need only comply with ICC A117.1-2017 Section 404.2.1, 404.2.2, 404.2.3 and 404.2.4 as well as section R322.1.1.4.
- 2. The clear width need not exceed 36 inches minimum.
- 3. <u>Ramps need not be provided with handrails, maximum ramp rise, intermediate</u> <u>landings, and edge protection where the sides of the ramp have a maximum vertical</u> <u>drop of ½" within 10 inches horizontally.</u>

R322.1.1.2 Interior circulation path.

There shall be an interior circulation path that connects the accessible entrance, Section R322.1.1.7 toilet room or bathroom, and one *habitable space* with an area of 70 square feet minimum. This Interior circulation path shall have a clear width of 36 inches minimum as

measured between fixed or built-in elements. Exceptions in ICC A117.1-2017 Section 1104.4.1 are permitted to be used.

R322.1.1.3 Circulation path doors.

User passage doors in the Section R322.1.1.2 circulation path shall have a clear opening width of 32 inches minimum; measured on a swinging door between the face of the door open to 90 degrees and the door stop.

R322.1.1.4 Door hardware.

Door hardware for user passage doors on the entire floor level that contains the accessible entrance shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching, or twisting of the wrist to operate. Operable parts of hardware shall be 34 inches minimum and 48 inches maximum above the floor.

Exceptions:

- 1. Locks used only for security and not used for normal operation.
- 2. Pocket doors.
- 3. Where the door serves as part of a required pool or spa barrier, the height of the hardware shall not apply.

R322.1.1.5 Operable parts.

Lighting controls, electrical switches and receptacle outlets, user controls for thermostats, and user controls for security or intercom systems shall be placed 15 inches minimum and 48 inches maximum above the floor.

Exceptions:

- 1. <u>Receptacle outlets serving a dedicated use.</u>
- 2. Controls and switches that can be remotely operated.
- 3. Where manufacturer's installation instructions specify a required height.
- 4. floor receptacle outlets.
- 5. controls mounted on ceiling fans.
- 6. controls mounted on appliances.
- 7. controls mounted on smoke detectors and carbon monoxide detectors.

R322.1.1.6 Toilet room and bathroom wall reinforcement.

Toilet rooms and bathrooms on the floor level that contains the accessible entrance shall be provided with wall reinforcements for future grab bars where walls occur around toilets, showers, and bathtubs in compliance with Section 1104.11.1 of ICC A117.1-2017.

R322.1.1.7 toilet room or bathroom contents and floor clearance.

One bathroom on the floor level that contains the accessible entrance shall be provided with a bathtub or a shower and shall contain a lavatory and a water closet. This bathroom shall be provided with floor clearance space that complies with either Section 304 or 1104.11.2 and 1104.11.3 of ICC A117.1-2017.

Exceptions:

1. Where there are no spaces used for sleeping purposes on the level that contains the accessible entrance, the bathroom is not required to be provided with a bathtub or a shower.

2. A toilet room or bathroom is not required where a *dwelling unit* or *sleeping unit* contains less than 150 square feet of *habitable space* on the level that contains the accessible entrance.

Justification: Inclusive home design criteria has been in effect in Pima County and the City of Tucson since 2003. People over 65 years are the fastest growing sector of the American population and Phoenix is a retirement destination. Inclusive home design criteria allows people to stay in their homes and their neighborhood longer as they age.		
Modifications to this amendment were approved by the Strategic Workgroup on Accessibility on 05/09/2025 to be presented to the Transportation, Infrastructure and Planning Subcommittee.		
Further modifications were made on 05/20/2025, 06/05/2025, and 06/11/2025 following discussions between members of the strategic workgroup, home builders, and a councilmember.		
Cost Impact: minimal cost impact to provide these features during construction but can be a significant cost when these features need to be retrofitted into an already constructed home.		
Staff Committee Rationale for Recommendation: The amendment proposal aligns with the goals of the City of Phoenix Strategic Work Group on Accessibility. Members of the work group were appointed by the City Manager.		
Approved in previous 2018 Code Adoption process: YES NO		
ACTION TAKEN:		
2024 Code Committee Date: 03/18/2025		
Approved as submitted 🛛 Modified and approved 🗌 Denied 🗌 No action taken		
Development Advisory Board (DAB) Subcommittee Date: 03/27/2025		
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Section R322.2

Submitted by: International Residential Code Committee

SECTION R322 ACCESSIBILITY

R322.2 Model home complex.

R322.2.1 No-step entrance.

At least one single family dwelling as part of a Model Home Complex, as described in the Phoenix Zoning Ordinance, shall have a no-step entrance as described in Section R322.2.2.

R322.2.2 Dwellings.

Residential single family dwellings, as part of a Model Home Complex, as described in the Zoning Ordinance, shall have a route of travel as described herein. The route of travel shall be a continuous no-step path connecting each subdivision sales office or public way to the primary entry.

The route of travel shall conform to the following requirements:

- 1. The running slope shall not exceed 1:12.
- 2. Routes of travel complying with this section are not required to have handrails.
- 3. <u>The route of travel shall be a firm, stable, and slip resistant surface for a minimum</u> width of 36 inches (914 mm) continuous and clear for a height of 7 feet (2.134 m) above the route.
- 4. The entry to the model home shall have a maneuvering space of a minimum 48 inches (1219 mm) by 48 inches (1219 mm) on the exterior side of the entry door.
- 5. The threshold at the entry shall not exceed ½ inch (13 mm).
- 6. The no step entry shall be identified by a readily viewable sign.

Justification: To provide a somewhat accessible route to the model home to allow access without traversing steps or steep slopes. This requirement was approved by the Development Advisory Board on May 17th, 2001 and has been in the Phoenix Building Construction Code since that time.

Cost Impact: Minimal cost impact.

Approved in previous 2018 Code Adoption process:

🖂 YES

ACTION TAKEN:	
2024 Code Committee	Date: 01/15/2025
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Development Advisory Board (DAB) Subcommittee	Date: 03/27/2025
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Transportation, Infrastructure and Planning Subcommittee	Date: 05/21/2025
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BUILDING CONSTRUCTION CODE CHANGE PROPOSAL

Amendment to 2024 International Residential Code (IRC) Section R325.8

Submitted by: International Residential Code Committee

R325.8 - Required heating and cooling.

Where the winter design temperature in table R301.2 is below 60° F (16° C), every dwelling unit Interior spaces intended for human occupancy shall be provided with heating and cooling facilities capable of maintaining a room temperature of not less than 68° F (20°C) between 70°F (21°C) and 82°F (28°C) (if cooled by air conditioning, and 86°F (30°C) if cooled by evaporative cooling), measured at a point 3 feet (914mm) above the floor in the center of the room. and 2 feet (610 mm) from the exterior walls in habitable rooms at the design temperature. The installation of one more portable space heaters or portable space coolers shall not be used to achieve compliance with this section.

Justification:

This amendment requires newly constructed buildings to comply with City of Phoenix Neighborhood Preservation Ordinance Sec. 39-5(B)(1)(b), which deals with buildings that are rented. All newly constructed buildings may be rented at some point in their life.

Cost Impact: Significant cost impact; this amendment requires cooling in all interior spaces intended for human occupancy, which the base code does not.

Approved in previous 2018 Code Adoption process:	YES 🗌 NO
ACTION TAKEN:	
2024 Code Committee	Date: 02/28/2025
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Transportation, Infrastructure and Planning Subcommittee	Date: 05/21/2025
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Section R330.3.1

Submitted by: International Residential Code Committee

R330.3.1 Spacing

Individual units shall be separated from each other by not less than 3 feet (914 mm) except where other separation distances are specified by the ESS listing and the manufacturer's installation instructions-, or as permitted in accordance with the Phoenix Fire Code.

Justification:

New code section. Installation of ESS systems are also reviewed and inspected by the Phoenix Fire Department. Language is provided to ensure compliance with and allowances provided by the Phoenix Fire Code. The Phoenix Fire Code has provisions for permitted locations based on large scale fire testing. Many manufacturers conduct large scale fire testing of their own equipment, which may provide more possible installation locations for the customer.

Cost Impact: No cost impact. Possible cost savings. Approved in previous 2018 Code Adoption process: **ACTION TAKEN:** 2024 Code Committee Date: 03/14/2025 No action taken Approved as submitted \square Modified and approved \square Denied **Development Advisory Board (DAB) Subcommittee** Date: 03/27/2025 Approved as submitted Modified and approved Denied No action taken Development Advisory Board (DAB) Date: 04/22/2025 Approved as submitted \square Modified and approved \square Denied No action taken Transportation, Infrastructure and Planning Subcommittee Date: 05/21/2025 Approved as submitted Modified and approved Denied No action taken **City Council Action** Date: 06/18/2025 Approved as submitted I Modified and approved I Denied No action taken Adopted by City of Phoenix Ordinance G-7397 effective August 1, 2025



Section R330.4

Submitted by: International Residential Code Committee

R330.4 Locations

ESS shall be installed only in the following locations:

- 1. Detached garages and detached accessory structures.
- 2. Attached garages separated from the dwelling unit living space in accordance with Section R302.6
- 3. Outdoors or on the exterior side of exterior walls located not less than 3 feet (914 mm) from doors and windows directly entering the dwelling unit, except where smaller separation distances are permitted by the UL 9540 listing and manufacturer's installation instructions-, or as permitted in accordance with the Phoenix Fire Code.
- 4. Enclosed utility closets, basements, storage or utility spaces within dwelling units with finished or noncombustible walls and ceilings. Walls and ceilings of unfinished wood-framed construction shall be provided with not less than 5/8-inch (15.9 mm) Type X gypsum wallboard. Openings into the dwelling shall be equipped with solid wood doors not less than 1-3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1-3/8 inches (35 mm) in thickness, or doors with a 20-minute fire protection rating. Doors shall be self-latching and equipped with a self-latching or an automatic-closing device. Penetrations through the required gypsum wallboard into the dwelling shall be protected as required by Section R302.11, Item 4.

ESS shall not be installed in sleeping rooms, or closets or spaces opening directly into sleeping rooms.

Justification:

New code section. Installations of ESS systems are also reviewed and inspected by the Phoenix Fire Department. Language is provided to ensure compliance with and allowances provided by the Phoenix Fire Code. The Phoenix Fire Code has provisions for permitted locations based on large scale fire testing. Many manufacturers conduct large scale fire testing of their own equipment, which may provide more possible installation locations for the customer.

Cost Impact: No cost impact. Possible cost savings.	
Approved in previous 2018 Code Adoption process:	YES 🛛 NO
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Section R333

Submitted by: International Residential Code Committee

R333 Fireplace Restrictions

R333.1 Definitions.

For the purpose of this section, the following words and terms shall be defined as follows:

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

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

WOOD STOVE: A solid fuel burning heating appliance including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

R333.2 General.

In accordance with the City of Phoenix Council adopted Ordinance G-4062, on or after December 31, 1998, no person, firm or corporation shall construct or install a fireplace or a wood stove, and the Building Official shall not approve or issue a permit to construct or install a fireplace or a wood stove, unless the fireplace or wood stove complies with one of the following.

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

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

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

R333.3 Fireplace or wood stove alterations prohibited.

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

<u>Fireplaces constructed or installed on or after December 31, 1998, shall not be altered without first obtaining a permit from the City to ensure compliance with this section.</u>

Justification: This amendment is included to comply with Chapter 40 of the Phoenix City Code and with Maricopa County Air Pollution Control regulations.

Cost Impact: No cost impact. Matches existing regulations. Approved in previous 2018 Code Adoption process: NO **ACTION TAKEN:** 2024 Code Committee Date: 01/15/2025 Approved as submitted I Modified and approved I Denied No action taken **Development Advisory Board (DAB) Subcommittee** Date: 03/20/2025 Approved as submitted Modified and approved Denied No action taken **Development Advisory Board (DAB)** Date: 04/22/2025 Approved as submitted I Modified and approved I Denied No action taken **Transportation, Infrastructure and Planning Subcommittee** Date: 05/21/2025 Approved as submitted Modified and approved Denied No action taken **City Council Action** Date: 06/18/2025 □ No action taken Approved as submitted Modified and approved Denied Adopted by City of Phoenix Ordinance G-7397 effective August 1, 2025



Section R401.3

Submitted by: International Residential Code Committee

R401.3 Drainage.

Delete the text of	this section o	f the IRC an	<u>d replace it w</u>	vith: All drainage	ge shall co	nform to the
requirements of (Chapter 32A o	f the Phoeni	x City Code.		_	

Justification: The City's Grading and Drainage ordinance is contained in Chapter 32A of the Phoenix City Code. This amendment eliminates any potential conflicts.

Cost Impact: No cost impact. The City Code requirements are applicable whether this amendment exists or not.

Approved in previous 2018 Code Adoption process:	YES 🗌 NO				
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2024 Code Committee	Date: 04/17/2025				
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Development Advisory Board (DAB) Subcommittee	Date: N/A				
Approved as submitted Modified and approved Denied	$ extsf{No}$ No action taken				
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Section R401.4.1

Submitted by: International Residential Code Committee

R401.4.1 Geotechnical evaluation.

In lieu of a complete geotechnical evaluation, the presumptive load-bearing values in Table R401.4.1(1) and the soil classifications in Table R401.4.1(2) shall be assumed for undisturbed supporting soils near the surface when approved by the building official.

Presumptive load-bearing values shall apply to materials with similar physical and engineering characteristics. Mud, organic silt and organic clays, peat, disturbed soils and undocumented fill shall not be assumed to have a presumptive load-bearing capacity unless data to substantiate the use of such a value are submitted.

Justification: This amendment is intended to further assist the design community in clarifying when a geotechnical evaluation is required. Unprepared fill materials, disturbed soils, mud, muck, peat, organic silt and soft clays have no presumptive load-bearing capacity without soil tests. Authorization for construction on these exceptionally weak soils should be provided by a geotechnical engineer.

Table R401.4.1(2) is intended as a guide to aid soil classification when that is not done as part of a full geotechnical report. Indicating that the designer is required to assume a soil classification is dangerous to the property without any type of soil knowledge being present. The Table should be used as a guide when already knowing the local soil expansion and collapse potential along with the soil particle size distribution.

Cost Impact: Minimal cost impact. The cost of a geotechnical evaluation and testing is minimal when compared to the cost of repairs for foundation failures that may occur as a result of structures being supported on weak soils.

Soil testing for particle size distribution alone to classify the soil is quite cheap when you bring a small soil sample into a laboratory, at approximately \$30, however many soil testing companies that aren't just laboratories will attempt to sell the customer an entire geotechnical investigation, and that is much more expensive.

Approved in previous 20	18 Code Adoption process:	🗌 YES
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NO

ACTION TAKEN:	
2024 Code Committee	Date: 01/24/2025
Approved as submitted I Modified and approved I Denied	No action taken
Development Advisory Board (DAB) Subcommittee	Date: 03/20/2025
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Development Advisory Board (DAB)	Date: 04/22/2025
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Transportation, Infrastructure and Planning Subcommittee	Date: 05/21/2025
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Approved as submitted 🗌 Modified and approved 🗌 Denied	No action taken
City Council Action	Date: 06/18/2025
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Section 403.1

Submitted by: International Residential Code Committee

R403.1 General

All exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings, crushed stone footings, wood foundations, or other *approved* structural systems that shall be of sufficient design to accommodate all loads according to Section R301and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill. Concrete footing shall be designed and constructed in accordance with the provisions of Section R403 or in accordance with ACI 332.

Exception: For enclosure of existing carport and patio covers, non-bearing wood framed exterior walls within the projection of the existing roof may be supported on an existing, uncracked concrete slab. The minimum slab thickness shall be 3.5 inches and the construction shall comply with the requirements of R304 for protection against decay.

Justification: This will allow enclosure of existing covered areas without requiring construction of a new footing. The only loads on the base of the wall are lateral loads from wind, which can be resisted by existing slab.

Cost Impact: Minimal cost impact. Reduce cost for carport and patio enclosures.

Approved in previous 2018 Code Adoption process:	YES 🗌 NO
ACTION TAKEN:	
2024 Code Committee	Date: 01/16/2025
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Transportation, Infrastructure and Planning Subcommittee	Date: 05/21/2025
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Adopted by City of Phoenix Ordinance G-7397 effection	ve August 1, 2025



Section R502.3.1

Submitted by: International Residential Code Committee

R502.3.1 Sleeping areas and attic joists.

Table R502.3.1(± 2) shall be used to determine the maximum allowable span of floor joists that support sleeping areas and attics that are accessed by means of a fixed stairway in accordance with Section R318.7 provided that the design live load does not exceed 30 ± 40 pounds per square foot ($\pm 44 \pm 1.92$ kPa) and the design dead load does not exceed 20 pounds per square foot (0.96 kPa). The allowable span of ceiling joists that support attics used for limited storage or no storage shall be determined in accordance with Section R802.5.

Justification: This will coordinate the required design table with the proposed amendment to Table R301.5 for live loads in sleeping areas.

Cost Impact: Minimal cost impact.

Approved in previous 2018 Code Adoption process:	YES 🗌 NO
ACTION TAKEN:	
2024 Code Committee	Date: 01/23/2025
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Submitted by: International Residential Code Committee

R606.12 Seismic requirements

All new masonry elements shall meet the minimum reinforcing requirements of R606.12.2.2.3, <u>R606.12.2.3.2 and R606.12.2.3.3</u>. In addition, the seismic requirements of this section shall apply to the design of masonry and the construction of masonry building elements located in Seismic Design Category D0, D1, or D2. Townhouses in Seismic Design Category C shall comply with the requirements of Section R606.12.2. These requirements shall not apply to glass unit masonry conforming to Section R607, anchored masonry veneer conforming to Section R703.8 or adhered masonry veneer conforming to Section R703.12.

Justification: This will require minimum reinforcing in all new masonry construction. This reinforcing has been required in previous editions of the Phoenix Construction Code at the recommendation of the Structural Engineers Association of Arizona as an inexpensive way to significantly increase the safety of masonry construction. The code change reflects the changes made to the 2018 IBC and is recommended by the Structural Sub-Committee.

Cost Impact: Minimal cost impact	
Approved in previous 2018 Code Adoption process:	YES 🗌 NO
ACTION TAKEN:	
2024 Code Committee	Date: 01/16/2025
Approved as submitted Denied and approved Denied	No action taken
Development Advisory Board (DAB) Subcommittee	Date: 03/20/2025
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Approved as submitted Denied Denied	No action taken
City Council Action	Date: 06/18/2025
Approved as submitted D Modified and approved D Denied	No action taken
Adapted by City of Phasnix Ordinance C 7207 offactiv	August 4 2025



BUILDING CONSTRUCTION CODE CHANGE PROPOSAL Amendment to 2024 International Residential Code (IRC) Chapter 11, Section N1101.4.1

Submitted by: Home Builders Association of Central Arizona

N1101.4.1 RESNET testing & inspection protocol.

The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards (MINHERS) for third party testing and inspections shall be deemed to meet the requirements of sections N1102.5.1, N1102.5.1.2 and N1103.3.7 and shall meet the following conditions:

- 1. <u>Third Party Testing & Inspections shall be completed by RESNET certified Raters or</u> <u>Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field</u> <u>Review Procedures.</u>
- Sampling in accordance with Chapter 6 of the MINHERS Standards shall be performed by Raters or Rating Field Inspectors Working under a RESNET Accredited Sampling Provider.
- 3. <u>Third Party Testing is required for the following items:</u>
 - a. N1102.5.1- Building Envelope Thermal Air Barrier Checklist
 - b. <u>N1102.5.1.2– Testing Air Leakage Rate</u>
 - c. <u>N1103.3.7– Sealing Duct Tightness</u>
 - d. Any other testing and inspections required under the code.
- 4. <u>Alternate testing and inspection programs and protocols shall be allowed when approved by the Building Code Official.</u>

Justification: From HBACA - This amendment was developed in collaboration between the MAG Building Codes Committee Members, SRP, APS, and the HBACA and has been adopted in many municipalities throughout the region. It is also included in MAG's Building Code Amendment and Standards Manual. Note that this proposed amendment is slightly different than the amendment adopted in 2018 and 2021 to reflect changing code sections.

Staff Committee Rationale for Recommendation: Amendment carried forward. Doesn't lower standards but allows less dwelling units to be tested.

Current disallowance of MINHERS standards for sampling of single-family homes per MINHERS addendum 78i effective January 1, 2025, subject to RESNET change.

Cost Impact: Applicant did not provide any information.

Approved in previous 2018 Code Adoption process:

ACTION TAKEN:	
2024 Code Committee	Date: 03/25/2025
☐ Approved as submitted ⊠ Modified and approved ☐ Denied	No action taken
Development Advisory Board (DAB) Subcommittee	Date: 03/27/2025
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City Council Action	Date: 06/18/2025
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Adapted by City of Bhasnix Ordinance G 7397 offective August 1, 2025	



Submitted by: International Residential Code Committee

N1104.1.5 (R404.1.5) Gas lighting.

Gas-fired lighting *appliances* shall not be equipped with a *continuous pilot* and shall be equipped with an *on-demand pilot, Intermittent ignition* or *interrupted ignition* as defined be <u>ANSI Z21.20</u>.

Justification: These products as described are not currently readily available, nor are they popular in our jurisdiction.

The gas piping systems for this installation are complex and expensive to install already. These requirements would dramatically drive up the cost of the devices if chosen to be installed.

This is not a building safety issue and as such should be optional for the homeowner/builder if they desire to mitigate the cost of operation over the life of the system.

Cost Impact: No Cost Impact	
Approved in previous 2018 Code Adoption process:	YES 🛛 NO
ACTION TAKEN:	
2024 Code Committee	Date: 01/24/2025
Approved as submitted I Modified and approved I Denied	No action taken
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2024 Code Committee Approved as submitted Modified and approved Denied Development Advisory Board (DAB) Subcommittee Approved as submitted Modified and approved Denied Development Advisory Board (DAB) Approved as submitted Modified and approved Denied Development Advisory Board (DAB) Approved as submitted Modified and approved Denied Transportation, Infrastructure and Planning Subcommittee Approved as submitted Modified and approved Denied City Council Action	□ No action taken Date: 3/20/2025 □ No action taken Date: 04/22/2025 □ No action taken Date: 05/21/2025 □ No action taken Date: 05/21/2025 □ No action taken Date: 05/21/2025 □ No action taken Date: 06/18/2025



BUILDING CONSTRUCTION CODE CHANGE PROPOSAL Amendment to 2024 International Residential Code (IRC) Section N1104.2 – N1104.3.1

Submitted by: International Residential Code Committee

N1104.2 (R404.2) Interior lighting controls.

All permanently installed luminaires shall be controlled as required in Sections N1104.2.1 and N1104.2.2.

Exception: Lighting controls shall not be required for safety or security lighting.

N1104.2.1 (R404.2.1) Habitable spaces.

All permanently installed luminaires in habitable spaces shall be controlled with a manual dimmer or with an automatic shutoff control that automatically turns off lights within 20 minutes after all occupants have left the space and shall incorporate a manual control to allow occupants to turn the lights on or off.

N1104.2.2 (R404.2.2) Specific locations.

All permanently installed luminaires in garages, unfinished basements, laundry rooms and utility rooms shall be controlled by an automatic shutoff control that automatically turns off lights within 20 minutes after all occupants have left the space and shall incorporate a manual control to allow occupants to turn the lights on or off.

N1104.3 (R404.3) Exterior lighting controls.

Exterior lighting controls shall comply with Section N1104.3.1. N1104.3.1 (R404.3.1) Controls for individual dwelling units. Where the total permanently installed exterior lighting power is greater than 30 watts, the permanently installed exterior lighting shall comply with the following: 1.Lighting shall be controlled by a manual on and off switch that permits automatic shutoff actions.

2.Lighting shall be automatically shut off when daylight is present and satisfies the lighting needs.

3.Controls that override automatic shutoff actions shall not be allowed unless the override automatically returns automatic control to its normal operation within 24 hours.

Justification: Not all commercially available residential lights are dimmable and installing motion sensors poses safety concerns with lights going off unexpectedly, such as in bathrooms, garages, laundry rooms etc., as it is typical with motion sensors if they are not installed with a high level of detailed attention paid due to the limited range and positioning of the sensor. To

achieve full range of motion sensor functionality, additional ceiling mounted sensors would be required to mitigate safety concerns especially in large spaces. These additional sensors are not readily available for residential applications, are expensive, difficult to install in a residential application, and can be finicky at best for the intended function of this code.

The exterior lighting requirements are difficult to achieve as these control products are not readily available in the current market. Systems that do exist are expensive and complicated to install, driving up costs overall. Most commercially available residential exterior lights are already equipped with photocells, which shut the light of when daylight is sensed automatically, meeting most of the intent of this section of this code already. Additionally, most commercially available security lights contain photocells AND motion sensor capabilities.

Manufacturing of incandescent lighting has not been allowed for some time now, and new/old stocks is dwindling by the day if one can even source them anymore. The Other portions of this code make the installation of incandescent lighting next to impossible to install and comply. With the code requirements for high efficiency lighting, combined with required high efficiency lighting manufacturing requirements, the market is saturated with these efficient products vastly reducing energy consumption on a large scale in alignment with the intent of this code. Implementing these code requirements proposed to strike, will not drastically increase the desired consumption reduction in any measurable way. The increased safety hazards posed do not outweigh any potential energy savings which will be minimal at best while increasing costs significantly.

This section of the code, as written, is not a building safety concern and should be optional for any homeowner/builder to pursue to their heart and pocketbooks content

Cost Impact: No Cost Impact	
Approved in previous 2018 Code Adoption process: YES No	10
ACTION TAKEN:	
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Adopted by City of Phoenix Ordinance G-7397 effective August 1, 202	25



BUILDING CONSTRUCTION CODE CHANGE PROPOSAL

Amendment to 2024 International Residential Code (IRC)

Section P2903.2

Submitted by: International Residential Code Committee

P2903.2 Maximum flow and water consumption.

The maximum water consumption flow rates and quantities for plumbing fixtures and fixture fittings shall be in accordance with Table P2903.2.

TABLE P2903.2 MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS^b

PLUMBING FIXTURE OR FIXTURE FITTING	R FIXTURE MAXIMUM FLOW RATE OR QUANTITY	
Lavatory faucet	2.2 1.5 gpm at 60 psi	
Shower head ^a	2.5 2.0 gpm at 80 psi	
Sink faucet	2.2 1.5 gpm at 60 psi	
Water closet	1.6 1.28 gallons per flushing cycle	

For SI: 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.

a. A hand-held shower shall be considered to be a shower head.

b. Consumption tolerances shall be determined from referenced standards.

Justification: Per Council Resolution 22129, "A Resolution Addressing the Future Water Consumption of New Development", Section 2.2.b.i., staff will propose updates to the Building Code for water efficiency standards that would be consistent with the water usage best practices. The proposed changes are consistent with the current EPA Water Sense standards.

Cost Impact: No cost impact. These proposed fixture standards are consistent with most of the fixtures on the market.

Approved in previous 2018 Code Adoption process:	YES 🛛 NO
ACTION TAKEN:	
2024 Code Committee	Date: 01/16/2025
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Development Advisory Board (DAB) Subcommittee	Date: 3/20/2025
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City Council Action	Date: 06/18/2025
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BUILDING CONSTRUCTION CODE CHANGE PROPOSAL

Amendment to 2024 International Residential Code (IRC) Section P2904

Submitted by: International Residential Code Committee

SECTION P2904 DWELLING UNIT AUTOMATIC SPRINKLER SYSTEMS

P2904.1 General.

The design and installation of automatic sprinkler systems shall be in accordance with NFPA 13D or Section P2904, which shall be considered to be equivalent to NFPA 13D. the Phoenix Fire Code. Partial automatic sprinkler systems shall be permitted to be installed only in buildings not required to be equipped with an automatic sprinkler system. Section P2904 shall apply to stand-alone and multipurpose wet-pipe sprinkler systems that do not include the use of antifreeze. A multipurpose automatic sprinkler system shall provide domestic water to both fire sprinklers and plumbing fixtures. A stand-alone automatic sprinkler system shall provide domestic water to be required to separate an automatic sprinkler system. A backflow preventer shall not be required to separate an automatic sprinkler system from the water distribution system, provided that the sprinkler system complies with all of the following:

1. The system complies with NFPA 13D or Section P2904.

- 2. The piping material complies with Section P2906.
- 3. The system does not contain antifreeze.
- 4. The system does not have a fire department connection.

DELETE ALL REMAINING SECTIONS OF P2904

Justification: Aligns with state law and Phoenix Fire Code for installation of automatic sprinkler systems. The IRC base code has many references to sprinkler installations that reference P2904 for installation. By amending P2904 to point to the Phoenix Fire Code, it is not necessary to amend all the other provisions containing references to P2904.

Cost Impact: No cost impact.	
Approved in previous 2018 Code Adoption process:	YES 🛛 NO
ACTION TAKEN:	
2024 Code Committee	Date: 01/16/2025
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Submitted by: International Residential Code Committee

E3704.7 Townhouses

Feeders supplying townhouse units shall not pass underneath, through, or above other townhouse units.

Justification: Added feeders for townhouses to clarify and to include the intent of the section. Individually owned townhouse units create logistical challenges as it relates to access, service of equipment, repairs, fires, remodels, etc. that significantly impact the electrical supply for other units.

Cost Impact: No cost impact.

ACTION TAKEN:	
2024 Code Committee Date: 01/16/2025	
🖾 Approved as submitted 🗌 Modified and approved 🔲 Denied 🔄 No action taken	
Development Advisory Board (DAB) Subcommittee Date: 03/20/2025	
🗌 Approved as submitted 🖾 Modified and approved 🔲 Denied 🛛 🗌 No action taken	
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Transportation, Infrastructure and Planning Subcommittee Date: 05/21/2025	
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City Council Action Date: 06/18/2025	
Approved as submitted D Modified and approved D Denied D No action taken	



BUILDING CONSTRUCTION CODE CHANGE PROPOSAL Amendment to 2024 International Residential Code (IRC) Section E3901.4.2 - E3901.4.3

Submitted by: Home Builders Association of Central Arizona

E3901.4.2 Island and peninsular countertops and work surfaces .

Receptacle outlets, if installed to serve an island or peninsular countertop or work surface, shall be installed in accordance with Section E3901.4.3. If a receptacle outlet is not provided to serve an island or peninsular countertop or work surface, provisions shall be provided at the island or peninsula for future addition of a receptacle outlet to serve the island or peninsular countertop or work surface. At least one receptacle shall be installed at each island and peninsular countertop space with a long dimension of 600 mm (24 in.) or greater and a short dimension of 300 mm (12 in.) or greater. A peninsular countertop is measured from the connected perpendicular wall.

E3901.4.3 Receptacle outlet location.

Receptacle outlets rendered not readily accessible by appliances fastened in place, appliance garages, sinks, or rangetops as covered in the exception to Section E3901.4.1, or appliances occupying assigned spaces shall not be considered as these required outlets. Required receptacle outlets shall be located in one or more of the following:

- 1. On or above, but not more than 20 inches (508 mm) above, the countertop or work surface.
- 2. In a countertop using receptacle outlet assemblies listed for the use in countertops.
- 3. In a work surface using receptacle outlet assemblies listed for use in work surfaces or listed for use in countertops. [210.52(C)(3)]

Exception: To comply with the following conditions (1) and (2), receptacle outlets shall be permitted to be mounted not more than 300 mm (12 in.) below the countertop or work surface. Receptacles mounted below a countertop or work surface in accordance with this exception shall not be located where the countertop or work surface extends more than 150 mm (6 in.) beyond its support base.

- 1. Construction for the physically impaired
- 2. <u>On island and peninsular countertops or work surface where the surface is flat</u> across its entire surface (no backsplashes, dividers, etc.) and there are no means to mount a receptacle within 500 mm (20 in.) above the countertop or work surface, such as an overhead cabinet

Justification: From NAHB and HBACA - There is inadequate justification to prohibit receptacles below the countertop or work surface. It is important to remember that the NEC is a minimum code, and its requirements should reflect that. Data from the U.S. Consumer Protection Safety Commission was presented as support for this change. However, the incidents recorded by the CPSC does not specifically indicate that receptacles below the countertops of islands and peninsulas were the cause. There is also no proof that the changes made to the 2023 NEC will be beneficial.

The ultimate responsibility during the use of electrical appliances falls upon the user. To that end, appliance manufacturers have taken measures to address the concern. Manufacturers of cooking appliances already include multiple warnings in their instruction manuals. Below are examples from a single instruction manual of one appliance.

- "Close supervision is necessary when any appliance is used by or near children."
- "Do not let cord hang over edge of table or counter or touch hot surfaces."
- "Use deep fryer only on a clean, dry, level, stable, and heat-resistant surface, away from countertop edge."
- "Close supervision is necessary when any appliance is used by or near children. Hot oil can cause serious and painful burns."

Most notably, manufacturers have already addressed the issue through innovations, such as magnetic cords that are designed to detach easily from the appliance if pulled. This design feature would prove effective in all circumstances, including all of the existing receptacles located below the countertop.

Surprisingly, the proposed change does not actually prohibit all receptacles from being installed below a countertop on an island or peninsula, and therefore, will have limited effect. There are two reasons for this. First, only receptacles installed "to serve" an island or peninsular countertop or work surface would need to be installed in the areas specified by 210.52(C)(4). Convenience receptacles (at the standard height of 18 inches above finished floor) installed in an island or peninsula do not serve the countertop or work surface, and therefore, would be allowed. Secondly, this provision is located under Part III. of article 210 titled Required Outlets (beginning at Section 210.50). Because this section only applies to required outlets, additional outlets would be allowed below the countertop as usual.

The reason given during the panel meeting for the new requirement under 210.52(C)(2) was that it would be too difficult to install a receptacle in an island or peninsula on a slab-on-grade floor after the home was completed. However, over a third of all new single-family homes are built over either a basement or a crawl space (source: https://eyeonhousing.org/2021/08/65-of-new-single-family-homes-used-slab-foundationin-2020/). In these cases, it would be possible to access the island or peninsula from below if a future receptacle were to be installed. Requiring all homes to meet the proposed text is too restrictive. There is also concern about how inspectors may enforce this provision differently. "Provisions shall be provided" is a very open requirement and can lead to differing guidance from no additional work needed (such as when there is access from below) to providing a powered circuit terminating in an electrical box. Requirements that are open to interpretation can be enforced much more strictly than those that clearly state what is intended—adding unnecessary costs to the homeowner.

This is yet another major change to the IRC and NEC with possible unintended consequences; adopting it can conceivably result in problems requiring future changes. These constant changes lead to confusion among all users of the code.

Cost Impact:

Staff Committee Rationale for Recommendation:

The NEC Committee recommended this proposed amendment to be denied as it does not address the additional safety hazard associated with the documented cases of children being burned by pulling the appliance cord that is plugged into a receptacle located below the counter. The intent of NEC 210.52 (and much of the electrical code) is to provide receptacle outlets located to preclude the need for extension cords. The code has long required at least one receptacle outlet, (located below the respective countertop), to serve island or peninsular countertops. However, due to numerous instances of burn injuries, a direct result of spilling hot contents of countertop cooking appliances onto children that pulled the appliance cord; the 2023 NEC was revised to no longer allow receptacle outlets to be located below the countertop. An amendment is proposed by the NEC Committee to address concerns with extension cords by requiring at least one receptacle at island and peninsula spaces.

Note that the informational notes refer to NEC code sections, but this amendment is in the IRC.

Approved in previous 2018 Code Adoption process:	YES 🛛 NO
ACTION TAKEN:	
2024 Code Committee	Date: 02/11/2025
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Transportation, Infrastructure and Planning Subcommittee	Date: 05/21/2025
Approved as submitted D Modified and approved D Denied	No action taken
City Council Action	Date: 06/18/2025
Approved as submitted I Modified and approved I Denied	No action taken



Submitted by: International Residential Code Committee

E3901.9 Basements, garages and accessory buildings.

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

Justification: 2024 IRC Section G2408.2 (305.3) Elevation of ignition source. This section states that Equipment and appliances having an ignition source shall be elevated such that the source of the ignition is not less than 18 inches (457 mm) above the floor in hazardous locations and public garages, private garages, repair garages, motor fuel dispensing facilities and parking garages. Many private/dwelling garages are utilized to work on vehicles or other equipment that contain volatile fuels or other liquids and gases. Other jurisdictions around the United States have amended this section of NEC article 210.52 to address this situation. The receptacles outlets, if installed below the 18 inches, could possibly become an ignition source which could cause fire, property damage, injury, or death if these volatile liquids or gases are present. This proposed amendment to the 2024 IRC is to mirror the proposed amendment to the 2023 NEC article 210.52(G)(1), which has been voted on by the 2023 NEC code adoption committee. The 2024 NEC code adoption committee voted to accept the amendment as written to add the minimum receptacle height.

Cost Impact: No cost impact. Receptacle outlets are required in the dwelling garages as per the NEC and IRC. All wiring and associated electrical equipment do not change from the NEC and IRC standard requirement.

Approved in previous 2018 Code Adoption process:	YES 🗌 NO
ACTION TAKEN:	
2024 Code Committee	Date: 1/29/2025
Approved as submitted I Modified and approved I Denied	No action taken
Development Advisory Board (DAB) Subcommittee	Date: 3/20/2025
Approved as submitted I Modified and approved I Denied	No action taken
Development Advisory Board (DAB)	Date: 04/22/2025
Approved as submitted Denied and approved Denied	No action taken
Transportation, Infrastructure and Planning Subcommittee	Date: 05/21/2025
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Adopted by City of Phoenix Ordinance G-7397 effecti	

Adopted by City of Phoenix Ordinance G-75



Section E3908.9

Submitted by: International Residential Code Committee

E3908.9 Types of Equipment Grounding Conductors. The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

(4) Electrical metallic tubing with an additional equipment grounding conductor.

Justification:

This amendment requires that specific wiring methods include an individual equipmentgrounding conductor. This amendment is more restrictive than the NEC, but provides for a higher degree of equipment grounding safety. The intent of the amendment is to supplement the low impedance path to ground and to attain reasonable compliance with requirements for the performance of the fault current path.

Cost Impact: Minor increase. Cost due to additional grounding conductor.

Approved in previous 2018 Code Adoption process:	YES 🗌 NO
ACTION TAKEN:	
2024 Code Committee	Date: 11/21/2024
Approved as submitted Denied and approved Denied	No action taken
Development Advisory Board (DAB) Subcommittee	Date: 3/20/2025
Approved as submitted D Modified and approved D Denied	No action taken
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Transportation, Infrastructure and Planning Subcommittee	Date: 05/21/2025
Approved as submitted D Modified and approved D Denied	No action taken
City Council Action	Date: 06/18/2025
Approved as submitted D Modified and approved D Denied	No action taken
Adapted by City of Pheenix Ordinance C 7207 effectiv	Vo August 1 2025



Appendix BA

Submitted by: International Residential Code Committee

Adopt Appendix BA and replace entire Appendix BA with the following text:

APPENDIX BA MANUFACTURED HOUSING USED AS DWELLINGS AND FACTORY BUILT BUILDINGS

BA101.1 General.

Factory-built buildings, manufactured homes and mobile homes shall comply with applicable laws of the State of Arizona and this code. The provisions of this section for factory-built buildings, manufactured homes and mobile homes take precedence over other code provisions which are inconsistent therewith. The general provisions of this code shall apply in all areas where there are not specific provisions in this section.

BA101.1.1 Arizona law.

The construction of factory-built buildings and manufactured homes is regulated by the State of Arizona, Arizona Revised Statutes ARS 41-4001 through ARS 41-4010 and is not included in this Code.

BA101.1.2 Factory-built building installation.

The installation of factory-built buildings, manufactured homes, and mobile homes including their foundations and direct connection to sewer, water, gas or electric utilities, is regulated by the State of Arizona and is not included in this code, except that a City of Phoenix On-Site Permit is required for compliance with Phoenix Zoning Ordinance requirements and with Building Code requirements pertaining to location on property and setback from other buildings or structures on the property. A City of Phoenix building permit is required for all on-site construction (except foundations) including connection to or alteration of existing on-site sewer, water, gas or electrical systems, and for construction of all site improvements required by the Phoenix Zoning Ordinance such as design review elements, signs, parking, landscaping, site amenities and disabled accessibility. Connection to a City water or sewer tap requires a separate permit from the Planning and Development Department.

BA101.1.3 Alterations and additions.

Repairs, alterations and site-built additions to factory-built buildings, mobile homes and manufactured homes are regulated by this code and by the Phoenix Zoning Ordinance and require City of Phoenix permits.

BA101.1.4 Occupancy and use.

Occupancy and use of a factory built-building, manufactured home or mobile home is prohibited without first obtaining inspection approval and a certificate of occupancy from the building official, to verify compliance with the Phoenix Zoning Ordinance and other applicable city codes and ordinances. **BA101.2 Definitions.** For the purpose of this Section, the following definitions shall apply:

FACTORY BUILT BUILDING is a residential or non-residential building including a dwelling unit or habitable room thereof which is either wholly or in substantial part manufactured at an off-site location to be assembled on-site, except it does not include a manufactured home, recreational vehicle or mobile home.

MANUFACTURED HOME is a structure built in accordance with the National Manufactured Home Construction and Safety Standards Act.

MOBILE HOME is a structure built prior to June 15, 1976, on a permanent chassis, capable of being transported in one or more sections and designed to be used with or without a permanent foundation as a dwelling when connected to on-site utilities except that it does not include recreational vehicles or factory-built buildings.

ON-SITE PERMIT is the permit issued by the building official which authorizes the placement of a factory-built building, manufactured home or mobile home on a site. The on-site permit shall authorize only the placement, foundation or unit tie-down, and specific connections to utility services which are authorized by a permit issued by the State of Arizona Office of Manufactured Housing. All other work on the site shall require a building permit issued by the building official in accordance with Section 105 of this code. Connection to a City water or sewer tap requires a separate permit from the Planning and Development Department.

BA101.3 Installation requirements.

No factory-built building, manufactured home or mobile home shall be moved onto or installed on any lot or site in the City of Phoenix except in compliance with these provisions.

BA101.3.1 State insignia required.

No person, firm or corporation shall move onto any site any factory-built building or manufactured home building unless such building bears a current, valid insignia of approval of the State of Arizona.

BA101.3.2 State permit required.

No person, firm or corporation shall move onto any site any factory-built building, manufactured home or mobile home unless and until a permit for such installation has been obtained from the State of Arizona.

BA101.3.3 On-site permit required.

No person firm or corporation shall move onto any site, or relocate on any site, any factory built building, manufactured home or mobile home until an On-Site Permit has been issued by the City of Phoenix building official.

A site plan shall be submitted to the building official which shows all utility connections and all other information necessary to ascertain compliance with the separation and area restrictions of other sections of this code and with all provisions of the Phoenix Zoning Ordinance. If the building official is satisfied that the work described by the documents submitted conform to this section and other applicable law, the On-Site Permit shall be issued to the owner of the site or his authorized agent.

BA101.3.4 Building permit required.

The person, firm or corporation obtaining the On-Site Permit shall also apply for and obtain a building permit from the building official when one or more of the following conditions apply:

1. For all on-site of	construction whic	h connects to o	r alters exist	ing buildings	or existing
onsite sewer, v	vater, gas or elec	trical systems.			

- 2. For all on-site construction which is required by or regulated by the Phoenix Zoning Ordinance, such as for design review elements, signs, parking, landscaping, site amenities and accessibility.
- 3. For all construction or alteration which is not part of the State-approved factory-built building, manufactured home, or mobile home including all interior fit-up, tenant improvement or remodeling work which is not specifically included in such State permit.
- <u>4. When a City of Phoenix inspection is requested by the installer for work otherwise</u> included in the State of Arizona installation permit, including but not limited to requests for utility clearance inspections.

BA101.4 Repairs, alterations, and additions.

No person shall repair, alter or add on to a factory-built building, manufactured home or a mobile home after the unit has been installed without first having obtained a permit from the building official for the specific work to be performed. All such work shall comply with the requirements of this Code.

BA101.5 Fire protection.

Factory-built buildings shall be protected pursuant to the Phoenix Fire Code.

Justification:

Appendix BA Manufactured Housing Used as Dwellings does not address the State of Arizona having jurisdiction to regulate the construction of these buildings including manufactured housing used as dwellings. The City of Phoenix has worked extensively, and will continue to work, with the State of Arizona on the construction of these buildings. This is an existing amendment carrying forward.

Cost Impact: No cost impact.

Approved in previous 2018 Code Adoption process:	YES 🗌 NO
ACTION TAKEN:	
2024 Code Committee	Date: 01/15/2025
Approved as submitted I Modified and approved I Denied	No action taken
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Approved as submitted Denied and approved Denied	No action taken
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Adopted by City of Phoenix Ordinance G-7397 effection	ve August 1, 2025



Appendix BB

Submitted by: International Residential Code Committee

Appendix BB, Section BB102-Definitions

TINY HOUSE. A dwelling that is <u>no more than</u> 400 square feet (37 m2) <u>and no less than</u> <u>200 square feet</u> (18.58 m2) or less in floor area excluding *lofts*.

Justification:

Referencing the Coconino County policies and to keep requirements uniform throughout the state.

Cost Impact: No cost impact

Approved in previous 2018 Code Adoption process:	YES 🗌 NO
ACTION TAKEN:	
2024 Code Committee	Date: 2/14/2025
Approved as submitted I Modified and approved I Denied	No action taken
Development Advisory Board (DAB) Subcommittee	Date: 3/20/2025
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Transportation, Infrastructure and Planning Subcommittee	Date: 05/21/2025
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Submitted by: International Residential Code Committee

Adopt Appendix NE

NE101.1 (RE101.1) Definitions.

AUTOMOBILE PARKING SPACE. A space within a building or private or public parking lot, exclusive of driveways, ramps, columns, office and work areas, for the parking of an automobile.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles and electric motorcycles, primarily powered by an electric motor that draws current from a building electrical service, electric vehicle supply equipment (EVSE), a rechargeable storage battery, a fuel cell, a photovoltaic array or another source of electric current.

ELECTRIC VEHICLE CAPABLE SPACE (EV CAPABLE SPACE). A designated automobile parking space that is provided with electrical infrastructure such as, but not limited to, raceways, cables, electrical capacity, a panelboard or other electrical distribution equipment space necessary for the future installation of an EVSE.

ELECTRIC VEHICLE READY SPACE (EV READY SPACE). An automobile parking space that is provided with a branch circuit and an outlet, junction box or receptacle that will support an installed EVSE.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). Equipment for plug-in power transfer, including ungrounded, grounded and equipment grounding conductors; electric vehicle connectors; attached plugs; any personal protection system; and all other fittings, devices, power outlets or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

ELECTRIC VEHICLE SUPPLY EQUIPMENT INSTALLED SPACE (EVSE SPACE). An automobile parking space that is provided with a dedicated EVSE connection.

NE101.2 (RE101.2) Electric vehicle power transfer infrastructure.

New residential automobile parking spaces for residential buildings shall be provided with electric vehicle power transfer infrastructure in accordance with Sections NE101.2.1 through NE101.2.5

NE101.2.1 (RE101.2.1) Quantity

New one-and two-family *dwellings* and *townhouses* with a designated attached or detached garage or other on-site private parking provided adjacent to the *dwelling unit* shall be provided with one EV capable, EV ready or *EVSE* space per *dwelling unit*.

Exceptions:

1. Where the local electric distribution entity certifies in writing that it is not able to provide 100 percent of the necessary distribution capacity within 2 years after the estimated

certificate of occupancy date, the required EV charging infrastructure shall be reduced based on the available existing electric distribution capacity

2. Where substantiation is *approved* that meeting the requirements of Section NE101.2.5 will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the builder or developer by more than \$450 per *dwelling unit*.

NE101.2.2 (RE101.2.2) EV Capable spaces

Each EV capable space used to meet the requirements of Section NE101.2.1 shall comply with the following:

- 1. A continuous raceway or cable assembly shall be installed between a suitable panelboard or other on-site electrical distribution equipment and an enclosure or outlet located within 6 feet (1828 mm) of the *EV capable space*.
- 2. The installed raceway of cable assembly shall be sized and rated to supply minimum circuit capacity in accordance with Section NE101.2.5.
- 3. The electrical distribution equipment to which the raceway or cable assembly connects shall have sufficient dedicated space and spare electrical capacity for a two-pole circuit breaker or set of fuses.
- 4. The electrical enclosure or outlet and the electrical distribution equipment directory shall be marked: "For future electric vehicle supply equipment (*EVSE*)."

NE101.2.3 (RE101.2.3) EV Ready spaces

Each branch circuit serving EV ready spaces shall comply with all of the following:

- 1. Termination at an outlet or enclosure located within 6 feet (1828mm) of each EV ready space it serves and marked " For electric vehicle supply equipment (*EVSE*)."
- 2. Service by and electrical distribution system and circuit capacity in accordance with Section NE101.2.5.
- 3. Designation on the panelboard or other electrical distribution equipment directory as" For electric vehicle supply equipment (*EVSE*)."

NE101.2.4 (RE101.2.4) EVSE Spaces

An installed EVSE with multiple output connections shall be permitted to serve multiple *EVSE* spaces. Each *EVSE* serving either a single *EVSE* space or multiple *EVSE* spaces shall comply with the following:

- 1. Be served by an electrical distribution system in accordance with Section NE101.2.5.
- 2. Have a nameplate charging capacity of not less than 6.2 kVA (or 30A at 208/240V) per *EVSE* space served. Where an *EVSE* serves three or more EVSE spaces and is controlled by an energy management system in accordance with Section NE101.2.5, the nameplate charging capacity shall be not less than 2.1 kVA per *EVSE* space served.
- 3. Be located within 6 feet (1828 mm) of each EVSE space it serves.
- 4. Be installed in accordance with NFPA 70 and be *listed* and labeled in accordance with UL 2202 or UL 2594.

NE101.2.5 (RE101.2.5) Electrical distribution system capacity.

The branch circuits and electrical distribution system serving each EV capable space, EV ready space and EVSE space used to comply with section NE101.2.1 shall comply with one of the following:

- 1. Sized for a calculated EV charging load of not less than 6.2 kVA per *EVSE*, *EV ready* or *EV capable space*. Where a circuit is shared or managed, it shall be in accordance with NFPA 70.
- 2. The capacity of the electrical distribution system and each branch circuit serving multiple EVSE spaces, EV ready spaces or EV capable spaces designed to be controlled by an energy management system in accordance with NFPA 70 shall be sized for calculated

EV charging load of not less than 2.1 kVA per space. Where an energy management system is used to control EV charging loads for the purpose of this section, it shall not be configured to turn off electrical power to EVSE or EV ready spaces used to comply with Section NE101.2.1
Justification: This is not a proposed amendment to IRC Appendix NE. Base code requires appendices to be adopted individually. This simply proposes adoption of IRC Appendix NE. Adoption of IRC Appendix NE aligns with the City of Phoenix Transportation Electrification Action as approved by City Council. The TEAP requires staff to develop draft language for consideration through a public hearing process.
Cost Impact: Cost impact will vary based on EV Capable, EV Ready and EVSE space. This would require the installation of electrical infrastructure to parking locations not currently required.
Approved in previous 2018 Code Adoption process: YES NO
ACTION TAKEN:
2024 Code Committee Date: 03/18/2025
Approved as submitted 🗌 Modified and approved 🗌 Denied 🗌 No action taken
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Approved as submitted Modified and approved Denied No action taken
City Council Action Date: 06/18/2025
Adopted by City of Phoenix Ordinance G-7397 effective August 1, 2025



Appendices Adoption

Submitted by: International Residential Code Committee

Adopt the following appendices:

Appendix BA – Manufactured Housing Used as Dwellings and Factory Built Buildings

Appendix BB – Tiny Houses

Appendix BF – Patio Covers

Appendix BG – Sound Transmission

Appendix BI – Light Straw – Clay Construction

Appendix BJ – Strawbale Construction

Appendix BO – Existing Buildings and Structures

Appendix CA – Sizing and Capacities of Gas Piping

Appendix CB – Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category I Appliances and Appliances Listed for Use with Type B Vents.

Appendix CD – Piping Standards for Various Appliances

Appendix CE – Venting Methods

Appendix CF – Sizing of Water Piping System

Appendix NB – (Rb) Solar-Ready Provisions – Detached One- and Two-Family Dwellings and Townhouses

Appendix BA – Manufactured Housing Used as Dwellings <u>and Factory Built Buildings</u> **Justification:** Continues factory-built building requirements.

Appendix BB – Tiny Houses **Justification:** Useful information for inspectors and customers.

Appendix BF – Patio Covers **Justification:** Continuation of less restrictive structural requirements for patio covers.

Appendix BG – Sound Transmission **Justification:** Incorporates Phoenix Amendment for sound mitigation around city airport.

Appendix BI – Light Straw – Clay Construction Justification: Development options	
Appendix BJ – Strawbale Construction Justification: Development options	
Appendix BO – Existing Buildings and Structures Justification: Allows additional design flexibility when modifying an existing building	
Appendix CA – Sizing and Capacities of Gas Piping Justification: Provides guidance on piping sizing with all the methods of sizing.	
Appendix CB – Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category I Appliances and Appliances Listed for Use with Type B Vents Justification: Provides a guide for inspectors and customers.	
Appendix CD – Piping Standards for Various Appliances Justification: Provides guidance on piping sizing with all the methods of sizing.	
Appendix CE – Venting Methods Justification: Provides useful guidance for residential plumbing situations.	
Appendix CF – Sizing of Water Piping System Justification: Provides useful guidance for pipe sizing.	
Appendix NB – (Rb) Solar-Ready Provisions – Detached One- and Two-Family Dwellings and Townhouses Justification: Development options and guidance for builders.	
Cost Impact: Minimal cost impact.	
Approved in previous 2018 Code Adoption process: 🛛 YES 🗌 NO	
ACTION TAKEN:	
2024 Code Committee Date: 01/31/2025	
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Development Advisory Board (DAB) Subcommittee Date: 03/27/2025 ☑ Approved as submitted □ Modified and approved □ Denied □ No action taken	
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\square Approved as submitted \square Modified and approved \square Denied \square No action taken	
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