



City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

BUILDING CONSTRUCTION CODE CHANGE PROPOSAL

Amendment to 2024 International Residential Code (IRC)

Section R309

Submitted by: Home Builders Association of Central Arizona

SECTION: ~~R309 AUTOMATIC SPRINKLER SYSTEMS~~

~~An automatic sprinkler system shall be 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.~~

~~**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.** 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.~~

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

Justification:

This amendment deletes the automatic fire sprinkler system section in compliance with Arizona Revised Statute § 9-807. This amendment is required to comply with A.R.S. § 9-807. This statute provides that “[a] municipality shall not adopt a code or ordinance or part of a uniform code or ordinance that prohibits a person or entity from choosing to install or equip or not install or equip fire sprinklers in a single-family detached residence or any residential building that contains not more than two dwelling units.” Note, the statute “does not apply to any code or ordinance that requires fire sprinklers in a residence and that was adopted before December 31, 2009.” This amendment is also required to comply with A.R.S. § 9-462.13(B)6 which prohibits a municipality with a population of seventy-five thousand persons or more from requiring fire sprinklers in duplexes, triplexes, fourplexes, and townhomes.

Cost Impact: No cost impact.

Staff Committee Rationale for Recommendation: Please see IRC Proposed Amendment R309.

Approved in previous 2018 Code Adoption process: ☐ YES ☐ NO

ACTION TAKEN:			
2024 Code Committee			Date: 1/17/2025
<input type="checkbox"/> Approved as submitted	<input type="checkbox"/> Modified and approved	<input checked="" type="checkbox"/> Denied	<input type="checkbox"/> No action taken
Development Advisory Board (DAB) Subcommittee			Date: 3/20/2025
<input type="checkbox"/> Approved as submitted	<input type="checkbox"/> Modified and approved	<input type="checkbox"/> Denied	<input checked="" type="checkbox"/> No action taken
Development Advisory Board (DAB)			Date:
<input type="checkbox"/> Approved as submitted	<input type="checkbox"/> Modified and approved	<input type="checkbox"/> Denied	<input type="checkbox"/> No action taken
Transportation, Infrastructure and Planning Subcommittee			Date:
<input type="checkbox"/> Approved as submitted	<input type="checkbox"/> Modified and approved	<input type="checkbox"/> Denied	<input type="checkbox"/> No action taken
City Council Action			Date:
<input type="checkbox"/> Approved as submitted	<input type="checkbox"/> Modified and approved	<input type="checkbox"/> Denied	<input type="checkbox"/> No action taken



BUILDING CONSTRUCTION CODE CHANGE PROPOSAL

Amendment to 2024 International Residential Code (IRC)

Section R319.1

Submitted by: Home Builders Association of Central Arizona

SECTION: R319.1 EMERGENCY ESCAPE AND RESCUE OPENING REQUIRED.

Basements, habitable attics, the room to which a sleeping loft is open, and every sleeping room shall have not less than one operable *emergency escape and rescue opening*. Where *basements* contain one or more sleeping rooms, an *emergency escape and rescue opening* shall be required in each sleeping room. *Emergency escape and rescue openings* shall open directly into a *public way*, or to a *yard* or *court* ~~having a minimum width of 36 inches (914 mm)~~ that opens to a *public way*.

Exceptions:

1. Basements used only to house mechanical equipment not exceeding a total floor area of 200 square feet (18.58 m²).
2. *Storm shelters* constructed in accordance with ICC 500.
3. Where the *dwelling unit* or *townhouse unit* is equipped with an automatic sprinkler system installed in accordance with Section P2904, sleeping rooms in *basements* shall not be required to have *emergency escape and rescue openings* provided that the *basement* has one of the following:
 - 3.1 One means of egress complying with Section R318 and one *emergency escape and rescue opening*.
 - 3.2 Two means of egress complying with Section R318.
4. A *yard* shall not be required to open directly into a public way where the *yard* opens to an unobstructed path from the *yard* to the *public way*. ~~Such path shall have a width of not less than 36 inches (914 mm).~~

Justification:

This amendment eliminates the width requirement for emergency escape paths. The basic requirements of emergency escape have been in the code since 2000. New to the 2021 code and continued with the 2024 code is the requirement that the path be not less than 36 inches wide. Our concern is emergency escapes on a 5' side yard with the air conditioner unit. The air conditioner unit is probably wide enough to render that side of the home less than 36 inches wide but still provides enough unobstructed pathway for residents or emergency response personnel to navigate. Given the importance of narrow lots to maintaining affordability, we suggest the new language be stricken so as to retain the requirement as it has existed for the past 27 years.

Cost Impact: No cost impact.

Staff Committee Rationale for Recommendation: To avoid potential legal conflicts, City of Phoenix adopted codes cannot be less restrictive than the base codes for critical life safety items and.

Approved in previous 2018 Code Adoption process: ☐ YES ☒ NO

ACTION TAKEN:

2024 Code Committee Date: 1/17/2025
☐ Approved as submitted ☐ Modified and approved ☒ Denied ☐ No action taken

Development Advisory Board (DAB) Subcommittee Date: 3/20/2025
☐ Approved as submitted ☐ Modified and approved ☒ Denied ☐ No action taken

Development Advisory Board (DAB) Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken

Transportation, Infrastructure and Planning Subcommittee Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken

City Council Action Date:
☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken



City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

BUILDING CONSTRUCTION CODE CHANGE PROPOSAL

Amendment to 2024 International Residential Code (IRC) Section P2905.3

Submitted by: Home Builders Association of Central Arizona

SECTION: P2905.3 HOT WATER SUPPLY TO FIXTURES

~~The developed length of hot water piping, from the source of the hot water to the fixtures that require hot water, shall not exceed 100 feet (30 480 mm). Water heaters and recirculating system piping shall be considered to be sources of hot water.~~

Justification:

This is a new requirement in the 2021 code and continued with the 2024 code. This change would significantly impact larger homes where the developed length often exceeds 100'. The additional cost of providing and installing water recirculation in larger homes will be cost-prohibitive. In addition, the additional work will significantly tax the available labor in the market. Therefore, this requirement should be removed.

Cost Impact: (Type one of the following: No cost impact. **Or** Minimal cost impact.)
(Add explanation here.)

Staff Committee Rationale for Recommendation: This will not impact the majority of new Single Family homes. Most new homes will not have a run of greater than 100 ft. Water recirculation aids in the reduction of water waste.

Approved in previous 2018 Code Adoption process: ☐ YES ☒ NO

ACTION TAKEN:

2024 Code Committee

☐ Approved as submitted ☐ Modified and approved ☒ Denied Date: 1/22/2025

☐ No action taken

Development Advisory Board (DAB) Subcommittee

☐ Approved as submitted ☐ Modified and approved ☒ Denied Date: 3/20/2025

☐ No action taken

Development Advisory Board (DAB)

☐ Approved as submitted ☐ Modified and approved ☐ Denied Date:

☐ No action taken

Transportation, Infrastructure and Planning Subcommittee

☐ Approved as submitted ☐ Modified and approved ☐ Denied Date:

☐ No action taken

City Council Action

☐ Approved as submitted ☐ Modified and approved ☐ Denied Date:

☐ 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. On island and peninsular countertops or work surface where the surface is flat 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-foundation-in-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: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
ACTION TAKEN:	
2024 Code Committee <input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input checked="" type="checkbox"/> Denied	Date: 02/11/2025 <input type="checkbox"/> No action taken
Development Advisory Board (DAB) Subcommittee <input type="checkbox"/> Approved as submitted <input checked="" type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	Date: 03/20/2025 <input type="checkbox"/> No action taken
Development Advisory Board (DAB) <input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	Date: <input type="checkbox"/> No action taken
Transportation, Infrastructure and Planning Subcommittee <input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	Date: <input type="checkbox"/> No action taken
City Council Action <input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	Date: <input type="checkbox"/> No action taken



City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

BUILDING CONSTRUCTION CODE CHANGE PROPOSAL

Amendment to 2024 International Residential Code (IRC)

Section E3902.2

Submitted by: Home Builders Association of Central Arizona

SECTION: E3902.2 GARAGE AND ACCESSORY BUILDING RECEPTACLES

125-volt through 250-volt receptacles installed in garages and grade-level portions of unfinished accessory buildings used for storage or work areas and supplied by single-phase branch circuits rated 150 volts or less to ground shall have ground-fault circuit-interrupter protection for personnel. [210.8(A)(2)]

Exception: Receptacles that are not readily accessible.

Justification: This amendment creates an exception to the requirement that garage and accessory building receptacles be GFCI protected for receptacles that are not easily accessible to the homeowner. The City of Chandler adopted this amendment in the 2018 code update. The City recommended this amendment (which the HBACA supported) to ensure that the garage outlet serving the garage door does not have to be GFCI protected. During the amendment review process the City became aware of instances where people's garage doors would not open because the GFCI protection had tripped. Not knowing that the garage door outlet was GFCI protected, people were unable to figure out why their garage door would not open. Moreover, even if they did know that the GFCI was the problem, it is very difficult for homeowners to access the receptacle to reset the GFCI.

Cost Impact: No cost impact.

Staff Committee Rationale for Recommendation: Denied by the NEC Committee in section 210.8(A)(2).

Approved in previous 2018 Code Adoption process: ☐ YES ☐ NO

ACTION TAKEN:

2024 Code Committee

☐ Approved as submitted ☐ Modified and approved ☒ Denied Date: 1/22/2025

☐ No action taken

Development Advisory Board (DAB) Subcommittee

☐ Approved as submitted ☐ Modified and approved ☒ Denied Date: 3/20/2025

☐ No action taken

Development Advisory Board (DAB)

☐ Approved as submitted ☐ Modified and approved ☐ Denied Date:

☐ No action taken

Transportation, Infrastructure and Planning Subcommittee

☐ Approved as submitted ☐ Modified and approved ☐ Denied Date:

☐ No action taken

City Council Action

☐ Approved as submitted ☐ Modified and approved ☐ Denied Date:

☐ No action taken



City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

BUILDING CONSTRUCTION CODE CHANGE PROPOSAL

Amendment to 2024 International Residential Code (IRC)

Section E3902.14

Submitted by: Home Builders Association of Central Arizona

SECTION: E3902.14 OUTDOOR OUTLETS

All outdoor outlets, including outlets installed in the following locations, and supplied by single-phase branch circuits rated 150 volts or less to ground, 50 amperes or less, shall be provided with GFCI protection:

1. Garages that have floors located at or below grade level
2. Accessory buildings
3. Boathouses

Exceptions:

1. GFCI protection shall not be required on lighting outlets other than those covered in Section 210.8(F) of NFPA 70.
2. GFCI protection shall not be required for receptacles that are not readily accessible and are supplied by a branch circuit dedicated to electric snow-melting, deicing, or pipeline and vessel heating equipment where such equipment is protected as required by NFPA 70.
3. GFCI protection shall not be required for listed HVAC equipment. ~~This exception shall expire September 1, 2026.~~ [210.8(F)]

Justification: From NAHB and HBACA - The requirements of this section have been very contentious since it was introduced in the 2020 NEC. When it was first implemented, multiple states experienced large numbers of GFCIs tripping which shut down air conditioning as well as heat pump units. Due to the problems experienced by the first states to adopt the 2020 NEC with the new section, almost every other state that adopted that edition modified or deleted Section 210.8(F). The 2023 edition would have required this section to be enforced in full except for the intervention of the NFPA Standards Council following an appeal. In their decision from August 2022, the Council, which acts like a court of last resort in the NFPA code development process, commented that the section has been at the heart of multiple processed Tentative Interim Amendments (TIAs), as well as extensive Task Group work since it was introduced. According to the Council, the appeal does present a clear and substantial basis upon which to overturn the results yielded by the NPFA standards development process. It cannot be overemphasized how significant this statement is, and it shows that not all model code changes should be accepted at face value. The Council's final decision #22-12 adds an exemption for "listed HVAC equipment" which expires September 1, 2026. Jurisdictions should be aware of this date because it is highly unlikely the compatibility issues explained below will be resolved by then. To fully address the issue, the standards that govern GFCI protection as well as HVAC equipment need to be updated in a coordinated manner, and that process is not close to completion. If GFCI protection is required while the incompatibility issue remains, there is a higher risk of people being

adversely impacted by exposure to extreme temperatures due to nuisance tripping than the risk of people being exposed to a leakage current that could cause injury or harm. The issue of GFCI protection not being compatible with listed HVAC equipment was known at the time it was

approved for the model code. In fact, three of the four negative ballots during the code development cycle specifically mentioned the concern with incompatibility associated with requiring GFCI protection for listed HVAC equipment.

Technical Substantiation

UL 943 (Standard for Ground-Fault Circuit-Interrupters) requires that Class A ground-fault circuit-interrupters are capable of tripping at a minimum of 6 mA and could be as low as 4 mA. UL 60335-2 (Standard for Household and Similar Electrical Appliances – Safety – Part 2-40: Particular Requirements for Electrical Heat Pumps, Air Conditioners and Dehumidifiers) allows a maximum leakage current value of 10 mA for appliances accessible to the general public. Data shows that HVAC equipment can have a leakage current higher than what would trip a Class A GFCI, but the touch current remains at safe levels. What is concerning are the number of fatalities (no cooling during a heat wave period) due to nuisance trips associated with GFCI protection of HVAC equipment.

Five conditions were identified that affect interoperability which have yet to be fully examined. This highlights the fact that a solution to the issue is unlikely to be found prior to the 2026 expiration date for the current exception as approved by the Standards Council.

Conclusion:

Almost every state that has adopted the 2020 Edition of the NEC has modified or deleted Section 210.8(F). The equipment incompatibility issues identified above will not be resolved by September 1, 2026. If GFCI protection is required while the incompatibility issue remains, there is a higher risk of people being adversely impacted by exposure to extreme temperatures due to nuisance tripping than the risk of people being exposed to a leakage current that could cause injury or harm.

- Similar amendments have been adopted in Georgia, Massachusetts, New Mexico, Oregon, South Dakota, Texas, and Utah. Many other states have dealt with Section 210.8(F) in ways other than code amendments. Additionally, five states added exemptions allowing certain pumps (sump pumps, sewage lift pumps or condensate pumps) to not be covered by a GFCI.

Cost Impact: Cost savings

Staff Committee Rationale for Recommendation: Denied by the NEC Committee in section 210.8(F) of NFPA 70

Approved in previous 2018 Code Adoption process: ☐ YES ☒ NO

ACTION TAKEN:

2024 Code Committee	Date: 1/17/2025
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input checked="" type="checkbox"/> Denied	<input type="checkbox"/> No action taken

Development Advisory Board (DAB) Subcommittee	Date: 3/20/2025
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input checked="" type="checkbox"/> Denied	<input type="checkbox"/> No action taken

Development Advisory Board (DAB)	Date:
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken

Transportation, Infrastructure and Planning Subcommittee	Date:
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken

City Council Action	Date:
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken



BUILDING CONSTRUCTION CODE CHANGE PROPOSAL

**Amendment to 2024 International Residential Code (IRC)
Section E3606.5**

Submitted by: Home Builders Association of Central Arizona

SECTION: E3606.5 SURGE PROTECTION

~~E3606.5 Surge Protection (2023 NEC 230.67)~~

Justification:

From NAHB and HBACA - Adequate substantiation was not provided to clearly identify a risk to equipment or safety concern to warrant this requirement being added to the 2020 NEC. Surge protection devices (SPDs) are currently permitted by the code and can provide a value to the end user, but it should remain up to the consumer as to whether the benefit is worth the investment. There are also potential issues with mandating currently available surge-protection products in all cases.

In addition to the overall problems of this provision, the 2023 NEC added the requirement that SPDs need to have a nominal discharge current rating of 10kA minimum. The National Electrical Manufacturers Association (NEMA) that represents the manufacturers of these devices submitted an amendment to remove the 10kA rating. In their testimony, they said the following: "The currently proposed revisions would confuse installers, specifiers, and inspectors who are familiar with interrupting ratings, and short circuit current ratings. It would inappropriately encourage them to require a nominal discharge current equal to or greater than the available short circuit current, under the mistaken belief that this would assure compliance with manufacturers' installation and use instructions, as required by NEC Section 110.3(B), or with short circuit current ratings - rating requirements of relevant 2023 NEC Sections."

Another company that manufacturers electrical devices claimed that the minimum rating of 10kA backed by certain members of the industry "represents an unwarranted exclusion of products offered by many other industry providers and stakeholders." These products that are now excluded have ratings permitted by their listing with UL Solutions (previously Underwriters Laboratories) and, until now, were compliant with the NEC. This requirement severely limits market choice by reducing the number of manufacturers offering compliant SPDs from about a dozen to just four. This is especially concerning in this time when supply chain difficulties already make it difficult to procure electronic devices and increase their cost substantially.

There is also no guarantee that SPDs remain in service, further negating any possible advantages of this new mandate. This becomes a costly requirement without a means to determine the benefit for the user. It is not necessary to mandate the protection just in case a

consumer has a transient incident. During the code development process for the 2020 NEC, several public comments were rejected to expand the surge-protection requirement to all occupancies and multiple levels of protection because they lacked substantiation. The same reason should be applied to remove this section as well.

Similar amendments have been adopted in Maine, North Dakota, Oregon, and South Carolina

Cost Impact: Cost savings.

Staff Committee Rationale for Recommendation: Denied by the NEC Committee in section 230.67

Approved in previous 2018 Code Adoption process: ☐ YES ☒ NO

ACTION TAKEN:

2024 Code Committee

Date: 1/22/2025

☐ Approved as submitted ☐ Modified and approved ☒ Denied ☐ No action taken

Development Advisory Board (DAB) Subcommittee

Date: 3/20/2025

☐ Approved as submitted ☐ Modified and approved ☒ Denied ☐ No action taken

Development Advisory Board (DAB)

Date:

☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken

Transportation, Infrastructure and Planning Subcommittee

Date:

☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken

City Council Action

Date:

☐ Approved as submitted ☐ Modified and approved ☐ Denied ☐ No action taken



BUILDING CONSTRUCTION CODE CHANGE PROPOSAL

Amendment to 2024 International Residential Code (IRC)

Section E4002.11

Submitted by Home Builders Association of Central Arizona

SECTION: E4002.11 BATHTUB AND SHOWER SPACES

~~Receptacles shall not be installed inside of the tub or shower or within a zone measured 900 mm (3 ft) horizontally from any outside edge of the within or directly over a bathtub or shower stall, including the space outside the bathtub or shower stall space below the zone.~~

~~The zone also includes the space measured vertically from the floor to 2.5 m (8 ft) above the top of the bathtub rim or shower stall threshold. The identified zone is all encompassing and shall include the space directly over the bathtub or shower stall and the space below this zone, but not the space separated by a floor, wall, ceiling, room door, window, or fixed barrier.~~

~~**Exception No. 1:** Receptacles installed in accordance with 680.73 shall be permitted.~~

~~**Exception No. 2:** In bathrooms with less than the required zone, the receptacle(s) required by 210.52(D) shall be permitted to be installed opposite the bathtub rim or shower stall threshold on the farthest wall within the room.~~

~~**Exception No. 3:** Weight supporting ceiling receptacles (WSCR) shall be permitted to be installed for listed luminaires that employ a weight supporting attachment fitting (WSAF) in damp locations complying with 410.10(D).~~

~~**Exception No. 4:** In a dwelling unit, a single receptacle shall be permitted for an electronic toilet or personal hygiene device such as an electronic bidet seat. The receptacle shall be readily accessible and not located in the space between the toilet and the bathtub or shower.~~

Informational Note No. 1: See 210.8(A)(1) for GFCI requirements in a bathroom.

Informational Note No. 2: See 210.11(C) for bathroom branch circuits.

Informational Note No. 3: See 210.21(B)(1) for single receptacle on an individual branch.

Justification:

This amendment reinstates the allowance for GFCI-protected receptacles to be located within 3-feet of a bathtub or shower stall. From NAHB and HBACA - The 2020 NEC prohibited receptacles to be installed near bathtub and shower spaces. This amendment reverts the language back to the 2017 edition of the NEC which prohibited receptacles from being located directly above a bathtub or in a shower stall. Receptacles in bathrooms are required to be GFCI protected, so further restrictions on their location are not needed. The submitter of the code change claimed the original language was unclear, but it was easily understood in most cases. The new language adds complexity, which is made clear based on the addition of multiple exceptions, and complexity leads to non-uniform enforcement.

Corded, handheld devices, such as hairdryers, hair trimmers and shavers have cords longer than three feet, so the new requirement does not prevent them from entering a tub or shower. Additionally, the code requires a receptacle within three feet of a sink with no minimum. No substantiation was 33 presented when this change was adopted to suggest that a receptacle within three feet of a bathtub or shower poses a greater risk than that at a sink. Since receptacles in bathrooms are required to be GFCI protected these locations do not pose different levels of risk. Both should be acceptable.

Finally, receptacles in proximity to bathtub and shower spaces is addressed for manufactured and mobile homes in the code as well, but distance restrictions are not included. The requirements for site-built homes should not be more restrictive than for manufactured and mobile homes.

Similar amendments have been adopted in Maine, Oregon, and Utah.

Cost Impact: No cost impact.

Staff Committee Rationale for Recommendation: Denied by the NEC Committee in section 406.9(C).

Approved in previous 2018 Code Adoption process: ☐ YES ☒ NO

ACTION TAKEN:

2024 Code Committee	Date: 1/22/2025
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input checked="" type="checkbox"/> Denied	<input type="checkbox"/> No action taken

Development Advisory Board (DAB) Subcommittee	Date: 3/20/2025
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input checked="" type="checkbox"/> Denied	<input type="checkbox"/> No action taken

Development Advisory Board (DAB)	Date:
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken

Transportation, Infrastructure and Planning Subcommittee	Date:
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken

City Council Action	Date:
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied	<input type="checkbox"/> No action taken