NFPA 70®-2020 Edition
National Electrical Code®
TIA Log No.: 1563
Reference: 210.8(A)(7) Exception (new)
Comment Closing Date: April 28, 2021
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www.nfpa.org/70

1. Revise Section 210.8(A)(7) to read as follows:

210.8 Ground-Fault Circuit-Interrupter Protection for Personnel. …

(A) Dwelling Units. …

(7) Sinks – where receptacles are installed within 1.8 m (6 ft) from the top inside edge of the bowl of the sink.

Exception to (7): This requirement shall become effective January 1, 2023, for cooking range receptacles rated 30 amperes through 50 amperes that are supplied by single-phase branch circuits rated 150 volts or less to ground.

Substantiation: While this expanded GFCI protection for greater than 125 volt receptacles is in the 2020 NEC, standards for cooking range products connected to these outlets have not been harmonized with this protection (UL 858). The 210.8(A)(7*)* language creates a product requirement that is beyond the listing requirement in UL 858, this has created tripping.

Until the UL product standard is harmonized, designers, installers, AHJs, and consumers are forced to choose between a compliant installation and an operational installation. The purpose of this proposed TIA is not to eliminate the GFCI protection but just postpone the effectivity of the higher voltage range receptacles. This will provide time for the NEC, product standards, and product certification to be harmonized.

This non-compatibility is currently being addressed in UL processes. AHAM is working to submit a proposal to UL 858 to add leakage current requirements for 240 volt products. However, since this requirement did not exist previously, there are significant technical issues that need to be resolved prior to submission of the proposal. It will take time to align the standards and certify new products to those new standards so the requirement effectivity date of 2023 is appropriate.

The precipitating event that drove the extension of GFCI's was linked to a recalled product. However, a GFCI would have tripped on this product due to the missing grounding strap screw. Since this was a recalled product, it should not be considered representative of the millions of ranges produced each year that are compliant to the UL 858 standard in regards to grounding with a solid 4-wire connection.

Section 90.4 allows jurisdictions to approve the use of products, constructions, or materials that comply with the most recent previous edition of this Code (2017). This TIA is meant to formalize such allowances so that individual AHJ approval is not needed.

Emergency Nature: The proposed TIA intends to correct a circumstance in which the revised NFPA Standard has resulted in an adverse impact on a product of method that was inadvertently overlooked in the total revision process or was without adequate technical (safety) justification for the action.

The proposed TIA intends to correct a circumstance in which the revised NFPA standard has resulted in an adverse impact on a product or method that was inadvertently overlooked in the total revision process action. 1. While lack of harmonization will not impact every installation, current product standards do not prohibit leakage current for home appliances from exceeding the Class A GFCI trip levels. Without this TIA, designers, installers, AHJs, and consumers are forced to choose between a compliant installation and an operational installation. 2. This incompatibility is causing extreme economic duress for those involved in resolving range installations for new homes or significant remodels. 3. Boiling water is the CDC number one recommended method for making water safe to drink (https://www.cdc.gov/healthywater/emergency/making-water-safe.html) in an emergency. If a dwelling range is nuisance tripping, and thus non-operational, this recommended method would not be achievable. 4. A quick change to UL 858 will not be possible because the required Class A leakage current limits are not achievable while fulfilling FCC regulations. For example, induction cooktops have filters for radio interference purposes where FCC requirements need to be fulfilled. Due to the filter capacitors, leakage currents can be higher. Without this TIA, manufacturers are forced to choose between an end product requirement mandated by NEC 2020 and an FCC compliant product.