

BUILDING STANDARDS COMMISSION

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CALIFORNIA BUILDING STANDARDS COMMISSION INFORMATION BULLETIN 22-03

DATE: June 30, 2022

TO: CBSC INTERESTED PARTIES
LOCAL BUILDING DEPARTMENTS
STATE AGENCIES AND DEPARTMENTS

SUBJECT: National Fire Protection Association Tentative Interim Amendments 20-13, 20-14 and 20-15 regarding Article 210 Section 210.8 (f); Article 706, Section 706.50; Article 406, Section 406.9 (C), Exception No. 2 (new) of the 2022 California Electrical Code based on the 2020 National Electrical Code.

This Information Bulletin is to advise the California Building Standards Code, Title 24, California Code of Regulations (Title 24) regulated community of Tentative Interim Amendments (TIA) 20-13, 20-14 and 20-15 issued by the National Fire Protection Association (NFPA) and applying to the 2020 National Electrical Code (NEC). Specifically, these TIAs apply to Article 210, Section 210.8(f) which addresses exterior outlets through 250-volts at dwelling units to enhance electrical safety; Article 706, Section 706.50, which addresses the incorrect reference to Article 705; Article 406, Section 406.9 (C) which addresses a single receptacle for electronic toilet or personal hygiene device.

The 2020 NEC is the base model code for the 2022 California Electrical Code (CEC) which is Part 3 of Title 24. The 2022 CEC becomes effective on January 1, 2023.

The provisions of the NFPA, TIAs 20-13, 20-14 and 20-15, were developed after California's adoption of the 2020 NEC and therefore were not approved as part of the 2022 CEC. It is important to note that for local government to enforce the provisions of these TIA's they may do so by either:

- **Enacting a local ordinance:** Local ordinances that amend Title 24 building standards and are subject to requirements of California law, must be enacted and filed for each edition of the California Building Standards Code. Ordinances generally must exercise more restrictive standards than the building standards approved/adopted by the commission. Amendments to Title 24 are neither effective nor operative until filed with CBSC. CBSC's [Information Bulletin 22-02](#), being issued shortly, contains additional information and resources to assist local jurisdictions with local ordinance filing requirements.

The CBSC website: ([CBSC website](http://dgs.ca.gov/BSC) dgs.ca.gov/BSC) has some helpful resources including the *Guide for Local Amendments of Building Standards* and

an updated *California Code Adoption for Local Jurisdictions* video. [Reference Health & Safety Code (HSC) Sections 18938, 18941.5, and 18959]

- **Permit alternative methods:** Article 90, Section 90.4 Enforcement, allows the authority having jurisdiction enforcement flexibility by allowing alternate methods, use of products, construction, or materials.

TIA 20-13 2020 National Electrical Code, Article 210, Section 210.8(f)

Background

Pursuant to Section 5 of the *NFPA Regulations Governing the Development of NFPA Standards*, the NFPA has issued the following TIA to NFPA 70®, *NEC*, 2020 edition. The [TIA 20-13](#) was processed by the National Electrical Code Panel 2, and the NEC Correlating Committee, and was issued by the Standards Council on August 26, 2021, with an effective date of September 15, 2021.

This expansion of GFCI protection in the 2020 NEC, for the purpose of covering exterior outlets through 250-volts at dwelling units, is a necessary enhancement for electrical safety. Code Making Panel 2 supported the expansion of GFCI protection to cover these outdoor outlets based on the electrocution of a young boy who came into contact with the energized enclosure of an outdoor HVAC unit. The purpose of this TIA is not to eliminate the GFCI protection for *all* HVAC outdoor equipment, but to extend the date of enforcement for the circuit supplying the HVAC units employing power conversion equipment.

Revise Section 210.8(f) to read as follows:

210.8 Ground-Fault Circuit-Interrupter Protection for Personnel.

...

(F) Outdoor Outlets. All outdoor outlets for dwellings, other than those covered in 210.8 (A)(3), Exception to (3), that are supplied by single-phase branch circuits rated 150 volts to ground or less, 50 amperes or less, shall have ground-fault circuit-interrupter protection for personnel. This requirement shall become effective on January 1, 2023, for mini-split-type heating/ventilating/air-conditioning (HVAC) equipment and other HVAC units employing power conversion equipment as a means to control compressor speed.

Informational Note: Power conversion equipment is the term used to describe the components used in HVAC equipment that is commonly referred to as a variable speed drive. The use of power conversion equipment to control compressor speed differs from multistage compressor speed control.

Exception: Ground-fault circuit-interrupter protection shall not be required on lighting outlets other than those covered in 210.8(C).

TIA 20-14 2020 National Electrical Code, Article 706, Section 706.50

Background

Pursuant to Section 5 of the *NFPA Regulations Governing the Development of NFPA Standards*, the NFPA has issued the following TIA to NFPA 70®, *NEC*, 2020 edition. The [TIA 20-14](#) was processed by the Code-Making Panel 13, and the NEC Correlating Committee, and was issued by the Standards Council on December 8, 2021, with an effective date of December 28, 2021.

The reference to Part III of Article 705 is incorrect as there is no Part III in that Article. However, the previous parts of Article 706 apply to these other types of Energy Storage Systems (ESS).

Revise Section 706.50 to read as follows:

706.50 General. All electrical connections to and from the system and system components shall be in accordance with the applicable provisions of this Code. ~~Unless otherwise directed by this article, other energy storage technologies~~ The systems shall comply with the applicable provisions of Part III of Article 705 Parts I, II, and III of this article.

TIA 20-15 2020 National Electrical Code, Article 406, Section 406.9

Background

Pursuant to Section 5 of the NFPA *Regulations Governing the Development of NFPA Standards*, the NFPA has issued the following TIA to NFPA 70®, *NEC*, 2020 edition. The [TIA 20-15](#) was processed by the Code-Making Panel 18, and the NEC Correlating Committee, and was issued by the Standards Council on December 8, 2021, with an effective date of December 28, 2021.

It is quite common for a toilet to be located next to a bathtub or shower in a residential bathroom. The existing text in NFPA 70 could prevent the installation of a receptacle that is necessary for the operation of an electronic toilet (also known as a “smart toilet”) or personal hygiene device (e.g., electronic bidet seat) where a toilet is located within 3 feet horizontally of a bathtub or shower. Application of the receptacle placement requirements has the potential to place an undue burden on the consumer whereby additional cost may be incurred to position the receptacle in an acceptable location without considering potential structural barriers behind the wall that may further restrict installation. Therefore, the proposed exception is necessary to ensure that such plumbing products are permitted to be installed while not jeopardizing the level of electrical safety that the standard seeks. As such, due to the proximity of the individual receptacle to the bathtub or shower, it would be required by NEC Section 210.8(A)(9) to be protected by a Class A GFCI device minimizing any potential shock hazard. Moreover, it is our understanding that products like electronic toilets and personal hygiene devices were not taken into consideration during the discussion of the proposal prior to adoption into the current standard.

Revise Section 406.9 to read as follows:

406.9 Receptacles in Damp or Wet Locations.

...

(C) Bathtub and Shower Space. Receptacles shall not be installed within a zone measured 900 mm (3 ft) horizontally and 2.5 m (8 ft) vertically from the top of the bathtub rim or shower stall threshold. The identified zone is all-encompassing and shall include the space directly over the tub or shower stall.

Exception No. 1: In bathrooms with less than the required zone the receptacle(s) shall be permitted to be installed opposite the bathtub rim or shower stall threshold on the farthest wall within the room.

Exception No. 2: 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 located on one of the following:

(1) The wall behind the toilet but not behind the tank

(2) The opposite side of the toilet from the bathtub or shower

The California Building Standards Commission developed this Information Bulletin which provides background material that supports the need for these TIA amendments with the intent of statewide distribution via the Information Bulletin process that impacts the 2022 Building Standards Codes, Title 24, California Code of Regulations. Additionally, please see BSC [Info Bulletin 22-01](#) which announces the forthcoming publication of the 2022 edition of Title 24.

To purchase the 2022 California Electrical Code, visit the following location:

[National Fire Protection Association \(NFPA\) Catalog](#)

NFPA.org

Telephone: 800-344-3555

(Publishes Part 3 of Title 24)

Questions regarding the Tentative Interim Amendments should be directed to the [National Fire Protection Association Contact page](#) (NFPA/contactus.org). Questions specific to this bulletin should be directed to CBSC's staff at (916) 263-0916 or via email at cbsc@dgs.ca.gov.



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