NFPA 70®-2023 Edition National Electrical Code®

**TIA Log No.: 1820 Reference:** 314.29(A)

**Comment Closing Date: April 8, 2025** 

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1. Revise section 314.29(A) to read as follows:

## 314.29(A) In-Buildings and Other Structures.

Boxes and conduit bodies shall be installed at the interiors and exteriors of buildings and other structures shall be installed so the contained wiring and devices are accessible. Boxes and conduit bodies that are recessed into or behind finished surfaces of buildings and structures shall have access to their internal contents maintained by openings in their covers and in the building finish that comply with 314.29(A)(1), 314.29(A)(2), or 314.29(A)(3) as applicable. Removable finished covers and faceplates that maintain this access shall be permitted.

- (1) Boxes 1650 cm³ (100 in.³) or Less in Size. The openings Openings in the building surfaces, if reduced from the outer walls of the box boxes, shall comply with the following: shall be centered not more than 25 mm (1 in.) from the centerline of the box, and shall not extend beyond the walls of the box. If rectangular, the opening shall be not less than 73 mm (2 1/8 in.) by 45 mm (1 3/4 in.) in size. If circular, the opening shall not be less than 90 mm (3 1/2 in.) in diameter.
- (1) They shall be centered not more than 25 mm (1 in.) from the centerline of the box-boxes.
- (2) They shall not extend beyond the walls of the box-boxes.
- (3) If rectangular, the opening they shall not be not-less than 73 mm (2 7/8 in.) by 45 mm (1 3/4 in.) in size.
- (4) If circular, the opening they shall not be less than 90 mm (3 1/2 in.) in diameter. Exception: Smaller openings in building surfaces that accommodate one or more individual devices shall be permitted if all of the following conditions are met:
- (1) The outlet box that supplies the device(s) is nonmetallic.
- (2)(1) The branch-circuit wiring that supplies each device consists of a separate nonmetallic cable assembly originating outside the box, or individual sets of conductors in a single nonmetallic raceway, all of which originate outside the box. Other than the connections to a single device, these the branch-circuit conductors are not spliced in the box, or continued to another device, and no other wiring or raceways enter the box.
- (3)(2) Each device is capable of removal from the building surface opening without being damaged. If a special tool is required for this purpose, the applicable circuit directory for the device records the location of the tool, together with a product code/QR code for acquiring a replacement if necessary.
- (4)(3) All connections for each device to the branch-circuit wiring are made with listed clamping-type wire connectors, which are supplied with the devices. The branch-circuit conductors are arranged to permit the connector(s) to be exposed after the device has been fully removed.
- (5)(4) The device assemblies are listed for this application.
- (2) Boxes Larger Than 1650 cm<sup>3</sup> (100 in.<sup>3</sup>) in Size. The openings Openings shall not be smaller than the outer walls of the box-boxes.

(3) Conduit Bodies. The openings Openings shall not be smaller than the outer walls of the conduit body bodies.

**Substantiation:** This TIA is to revise the restrictions incorporated into the 2023 NEC, from TIA 1690 in 310.29(A). These revisions are based on new information considered and incorporated into the NEC-2026 revision cycle. See Public Inputs 1595 and 1750 with the resulting FR 7516 in the first draft process, and Public Comment 737 with SR 7933 in the second draft process for CMP-8 actions. The proposed text presented in this TIA incorporates the same concepts and final text that have been accepted by CMP-8 for the 2026 edition of the NEC.

As background, toward the end of the 2023 NEC code cycle, TIA 1690 was processed and published to clarify access requirements for a unique kind of receptacle. The device that initially raised concerns had been listed for installation in both Canada and United States for over 14 years with no reported issues. Since the NEC did not have clear requirements to address concerns being raised regarding the installation of these receptacles, TIA 1690 was created and processed to provide requirements and allowances.

For the NEC-2026 cycle, in accordance with the Regulations, TIA 1690 became a Public Input, PI 1595, and was sent to CMP-8 to process. In the 2026 NEC processing, the concepts of the TIA 1690 were accepted but removed some of the wiring method restrictions. The changes by the panel to the allowed wiring methods were accepted after reviewing additional information demonstrating the metal wiring methods that had been restricted could be properly installed and provide a safe installation. The panel actions resulted in FR 7516. In the Second Draft, Public Comment 737 made a minor editorial change in the main charging statement, resulting in SR 7933. No Public Comments regarding the text for the installation of these receptacles were submitted.

This TIA incorporates all the changes made by CMP-8 in the first and second draft stages and is submitted to align the 2023 NEC text with the text that is set for the 2026 NEC. The primary need for this TIA is to remove the metal wiring method limitations that had been incorporated via TIA 1690 that would now be allowed from the processing of the 2026 edition. These wiring method restrictions incorporated as part of TIA 1690 inhibit the legitimate application of a listed product in areas that require metal wiring methods. This TIA removes these restrictions that are presently enforceable in the 2023 edition of the NEC and allows the metal wiring methods that would become permitted when the 2026 NEC is adopted.

**Emergency Nature:** The NFPA Standard contains a conflict within the NFPA Standard or within another NFPA Standard. 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 or was without adequate technical (safety) justification for the action.

The 2020 edition and all previous editions of the NEC did not have requirements restricting the installation of reduced opening receptacles that are being installed for aesthetic purposes. At the end of the 2023 NEC cycle, the issuing of TIA 1690 imposed significant restrictions on the applications and potential installation of the innovative technology receptacles in the United

States. These devices have been listed by both CSA and UL and have been on the market for over 14 years without any reported incidents. The listing ensured these receptacles meet the applicable NEC requirements as well as the installation aspects of UL 498, the UL standard for receptacles.

It is important to understand that there have been various jurisdictions that prohibited this type of receptacle outright due to the lack of clarity on the proper safe installation. TIA 1690 resolved many of the concerns raised but also imposed, what has been demonstrated to the code panel, to be an unnecessary metal wiring method restriction.

During the 2026 NEC cycle CMP-8 processed TIA 1690 from Public Input 1595. Based on additional information provided, the result of this processing removed the metal wiring method limitations found in the adopted TIA 1690. This made the requirements in the 2023 NEC inconsistent and more restrictive than as allowed by the 2026 NEC. In a short time frame the NEC went from no restrictions to many restrictions and then backing off to some restrictions. The final 2026 text establishes what is necessary for safety and clarity for these installations.

Processing of this TIA is the only mechanism available to modify the 2023 NEC. Many jurisdictions have adopted the 2023 NEC and others are still working on that process. It will be some time before these jurisdictions adopt the 2026 NEC. Therefore, it could be many years depending on jurisdictional adoption, that the substantive changes initiated by TIA 1690 could be in force. This TIA to the 2023 NEC will bring the 2023 code text into alignment with the actions taken for the 2026 NEC cycle processing and smooth out the transitions around these new requirements. If this TIA is not adopted, it could cause the needless prohibition of a perfectly acceptable receptacle for installation where metal wiring methods are required, or even worse, it could allow it to be installed incorrectly. It is crucial that this TIA be processed and voted upon.

Anyone may submit a comment by the closing date indicated above. Please identify the TIA number, state whether you SUPPORT or OPPOSE the TIA along with your comment, and forward to the Secretary, Standards Council. SUBMIT A COMMENT