

COMMUNITY AFFAIRS

DIVISION OF CODES AND STANDARDS

Uniform Construction Code

Adopted Amendments: N.J.A.C. 5:23-2.18, 3.2, 4.5, 6.6, 6.8, 6.9, 6.31, and 12.2

Proposed: March 21, 2022, at 54 N.J.R. 476(a).

Adopted: September 2, 2022, by Lt. Governor Sheila Y. Oliver, Commissioner, Department of Community Affairs.

Filed: November 23, 2022, as R.2022 d.158, **with a non-substantial change** not requiring additional public notice and comment (see N.J.A.C. 1:30-6.3).

Authority: N.J.S.A. 52:27D-119 et seq.

Effective Date: December 19, 2022.

Expiration Date: February 9, 2029.

Summary of Public Comments and Agency Responses:

Comments were received from Michael Dempsey, Electrical Subcode Official, and Mitchell Malec, a retired former employee of the Department of Community Affairs (Department).

1. COMMENT: One commenter stated that the proposed amendment would allow an existing installation to be less than the minimum National Electrical Code (NEC) grounding requirement as a result of the amendment. He stated that the proposal specifies that the existing wiring could be replaced or insulating the neutral and opined that insulating the neutral could mean that only the exposed ends are taped with insulating tape, while the remainder of the branch circuit is uninsulated. He noted that the rulemaking states that allowing the existing three-wire to remain

does not pose any hazard to homeowners and asked whether there are any National Fire Protection Association (NFPA), International Association of Electrical Inspectors (IAEI), or engineering technical papers or documents that support that statement. He noted that NEC 250.140 has been in the NEC for over 50 years. Finally, he stated that previous *Construction Code Communicators*, specifically Spring 2013 and Summer 2015, supported the enforcement NEC 250.140 for alterations. The commenter expressed that he does not believe this is the direction the rehabilitation subcode should be taking and does not support the adoption.

RESPONSE: The Department thanks the commenter, but respectfully disagrees with the comments. Installations of whole-house generators have become more commonplace and have not impacted the safety of residents. The purpose of the rehabilitation subcode is not to require that projects in existing buildings meet the full requirements of the current national model codes, rather, the purpose is to ensure that buildings are no less safe than they were before the work was undertaken and allow for upgrades without adding undue cost to projects. The *Construction Code Communicator* articles referenced by the commenter are based on codes that have since been updated multiple times, and in the time since their publication, these installations have become safer and more common, warranting a change in the rehabilitation subcode.

2. COMMENT: One commenter expressed the opinion that the proposed amendment at N.J.A.C. 5:23-6.8(d) may result in potentially dangerous conditions. The commenter stated that the proposed amendments would not only apply to homeowners and felt that the Department's statement that many homeowners are opting to install whole-house generators is lacking in justification. The commenter stated that, if the Department has adequate justification for this rulemaking, it should submit a code change to the NFPA for inclusion in the NEC.

RESPONSE: The Department disagrees that this change could result in dangerous conditions. Over time, there has been an increase in the installation of whole-house generators over the past 20 years, according to major retailers. This includes a 50 percent net sales increase of Generac generators in 2021. As these installations become more commonplace over the last decade, the Department has not seen any increase in hazardous conditions to the inhabitants of a building. The rehabilitation subcode, which applies to work undertaken in existing buildings, is not intended to impact the requirements of the national model codes, which establish the requirements for new construction. Thus, the Department respectfully disagrees that this change needs to be brought to the attention of the NFPA.

3. COMMENT: One commenter stated that the proposed amendment at N.J.A.C. 5:23-6.8 would be applicable to all uses and not just homeowners and asked the Department to verify this statement.

RESPONSE: The commenter is correct; the changes at N.J.A.C. 5:23-6.8 are the electrical materials and methods, as applicable for any relevant rehabilitation project.

4. COMMENT: One commenter stated his opinion that, because there are service panels available that contain generator transfer switches, if the existing service panel is changed to one of these service panels, three-wire would still be okay. He then asked whether the Department is allowing the existing service panel to become a subpanel and felt that this would be a listing violation in accordance with the specific intended use of the device if the panel is suitable only for use as service equipment. He also asked whether the existing service panel would need to be modified in order to become a subpanel.

RESPONSE: The commenter is correct that if a panel is listed “only for use as service equipment,” changing the panel to a subpanel would be a violation of the listing. As all installations of a whole-house generator will require a Uniform Construction Code (UCC) permit, this is something that would be made apparent during the application and inspection process and could be addressed by the local enforcing agency.

5. COMMENT: One commenter asked whether ground fault circuit interrupter (GFCI) protection is required in order to meet this exception from NEC 250.140.

RESPONSE: Unless the circuit is being replaced, GFCI requirements do not apply. As this rulemaking is not related to replacement of a circuit, this comment is outside the scope of the rulemaking and does not need to be addressed at this time.

6. COMMENT: One commenter provided the following hypothetical scenario: if a home is undergoing a reconstruction pursuant to the rehabilitation subcode, can the three-wire branch circuit remain, since that is allowed by the proposed amendment to the materials and methods?

RESPONSE: The three-wire branch circuit can remain for reconstruction projects in accordance with the requirements for reconstruction at N.J.A.C. 5:23-6.27(f).

7. COMMENT: One commenter noted that the Department had stated “in some document that [he] can’t recall” that the use of an electrical wire insulation sleeve is needed for three-wire bare neutral situations when allowing an exception to Section 250.140. He stated, “Section 250.140, exception #3 states that the grounded conductor to be insulated, or the grounded conductor is uninsulated and part of a Type SE cable and the branch circuit originates at the service

equipment.” He further stated his opinion that an electrical wire insulating sleeve does not make the wire an insulated wire, and that to be an insulated wire, it must be continuously insulated.

RESPONSE: The exception in Section 250.140 permits the use of uninsulated grounded conductors, provided it is part of a USE cable. The Department will be providing guidance to explain that the exposed portion of the uninsulated conductor must be insulated or covered in a manner acceptable to the local enforcing agency.

8. COMMENT: One commenter asked a series of questions based on the Department’s statement that the requirement is “impractical.” The commenter asked whether it is reasonable to change the three-wire to four-wire, even if a generator is not being installed, in the course of a reconstruction project. He also asked if the wiring is allowed to remain as - is if the new appliance has a nameplate rating greater than the ampere rating of the existing branch circuit. He asked if the exception from Section 250.140 applies if the branch circuit and panel board are accessible “due to a remodel.” Lastly, the commenter asked if the wiring is allowed to remain as-is if the branch circuit is within ten feet of the panel and the panel is accessible.

RESPONSE: The Department did not state that the requirement is impractical; the notice of proposal Summary noted that the proposed amendment would not propose any hazard to homeowners and would allow for the installation of generators without cost-prohibitive changes to existing electrical panels. It is not a requirement to change the three-wire to a four-wire during a reconstruction project in accordance with the applicable reconstruction requirements contained at N.J.A.C. 5:23-6.10 through 6.30; if the branch circuit and panel board are accessible during any rehabilitation project; or if the branch circuit is within 10 feet of the panel. Should a

person need to change to a four-wire, the person would have to undertake work in accordance with the requirements of the rehabilitation subcode for electrical work.

In any situation, a person cannot install a new appliance with a greater amperage than what is permitted on the branch circuit. Again, because such installations require a UCC permit, this would be addressed during the application and inspection process.

9. COMMENT: One commentor requested a detailed explanation of when it is required to replace an existing branch circuit serving a range or clothes dryer receptacle with a branch circuit containing an equipment grounding conductor. He speculated that, “Is the Department’s intent that when the service panel is changed to being used as a subpanel, the grounded conductor terminal bar of the existing panel needs to be isolated from the equipment grounding terminal bar and the range and clothes dryer grounded conductor relocated to the grounded conductor terminal bar along with the uninsulated ground conductor that is used for grounding existing ranges or clothes dryer to be field insulated at points of access?” He also requested an explanation of situations where it is not required to replace the existing branch circuit.

RESPONSE: The circuit is not required to be updated during a rehabilitation project unless the scope of the work includes replacing the circuit, which would require the permit applicant to comply with Section 250.140 to the extent required by the rehabilitation subcode. This is to ensure that the location where the rehabilitation work is performed remains as safe as it was prior to the project and does not require the permit applicant to make cost-prohibitive changes that do not substantially increase the safety of the building.

10. COMMENT: One commenter noted that, during the rewrite at N.J.A.C. 5:23-6.9, New building elements, it seems that the Department did not include the provisions related to the elevator subcode. The commenter asked whether the intention was to add the provisions at a later date, or if the Department intended to retain the provisions and simply move them to the appropriate new codification.

RESPONSE: The Department intended to retain the provisions and relocate them to the new codification. This change is being made upon adoption to ensure that the relevant sections of the elevator subcode continue to apply at N.J.A.C. 5:23-6.9. This is not a substantive change, since these provisions are currently included within this section of the rehabilitation subcode; rather, the change ensures that the Department maintains the current requirements in the new codification.

Federal Standards Statement

No Federal standards analysis is required because the adopted amendments are not being adopted under the authority of, or in order to implement, comply with, or participate in any program established under Federal law or under a State law that incorporates or refers to Federal law, standards, or requirements.

Full text of the adoption follows (addition to proposal indicated in boldface with asterisks

***thus*:**

SUBCHAPTER 6. REHABILITATION SUBCODE

5:23-6.9 New building elements

(a)-(c) (No change from proposal.)

(d) Elevator Subcode.

***1. Newly installed elevator devices, including those newly installed in existing hoistways/machine rooms, completely replaced elevator devices, and a change in use of an elevator device from freight to passenger, passenger to freight, or from one freight class to another freight class, and other equipment within the scope of Chapter 30 newly installed or installed in existing hoistways/machine rooms, shall conform to the requirements of Chapter 30 of the building subcode and N.J.A.C. 5:23-12, as applicable.**

i. Exception: Such devices shall not be required to comply with Section 8.4 and Section 8.5 of ASME A17.1, adopted by reference in the building subcode, and Section 3002.4 of the building subcode.*

(e) (No change from proposal.)