Executive Order 103 Scheduled to Expire July 4, 2021 – Looking Ahead

On June 4, 2021, Governor Philip D. Murphy signed P.L. 2021, c. 104 into law. This Law ends the public health emergency by allowing for the expiry of Executive Order 103 while ensuring that necessary orders remain in place to provide the flexibility needed to manage the ongoing pandemic. The effective date of the expiration of Executive Order 103 is July 4, 2021.

In adapting to the restrictions set by the pandemic, the Division released a number of guidance memos and rule relaxations; these are also set to expire following the expiration of Executive Order 103. Please note that the expiration of these documents is included within their text. Thus, any applicable extensions, inspections, and waivers, are now subject to the expiration timelines provided within the relevant documentation. By way of example, permit applications received after August 3, 2021 for minor work projects, as referenced in the “Ongoing Construction Guidance,” are to follow the normal operating procedures of the Uniform Construction Code, N.J.A.C. 5:23.

All guidance and regulatory information relevant to the ongoing pandemic is available on the Division’s website at COVID-19 Information. The Division will be updating this webpage as expiration dates take effect.

Source: Marie Daniels
Code Development Unit
(609) 984-7609
Job Announcement: Southern Regional Office

The Division of Codes and Standards, Office of State and Local Code Inspections, Southern Regional Office based out of Hammonton is looking for full and part time subcode officials to perform work involving enforcement and administration of the Uniform Construction Code Act and Regulations, performing inspections for the building, electrical, plumbing, or fire subcodes. A valid NJ issued Uniform Construction Code HHS and subcode official license is required to perform the duties.

Job Types: Full-time, Part-time
Pay: $31.40 - $44.63 per hour

Please forward resumes and a copy of your license(s) to Nicole Zimmerman at Nicole.zimmerman@dca.nj.gov.

Source: Division of Codes and Standards
(609) 292-7899

Building Safety Conference: Welcome Back!

Welcome Back! Please save the date: the 39th Building Safety Conference of New Jersey is returning to Atlantic City, September 8th through 10th at the Hard Rock Hotel in Atlantic City.

Conference brochures will be mailed very soon and posted on the Licensing webpage, so keep an eye on your mailbox and on our website!

Source: John Delesandro
Supervisor of Licensing and Education
(609) 984-7834
National Electrical Code (NFPA 70) and Tentative Interim Amendments

As you all know, on September 3, 2019, the State adopted the 2017 edition of the National Electrical Code, NFPA 70, at N.J.A.C. 5:23-3.16, the electrical subcode. It was adopted as it was originally published, with the exception errata, and no tentative interim amendments (TIAs) included. This remains true today.


- **Errata** - A correction issued to an NFPA Standard, published in NFPA News, the National Fire Codes Subscription Service (NFCSS), and included in any further distribution of the Standard.
- **TIAs** - Amendments to an NFPA standard processed in accordance with Section 5 of the Regulations Governing the Development of NFPA Standards. TIAs have not been published in a First Draft Report and Second Draft Report for review and comment. *An issued TIA automatically becomes a Public Input for the next edition of the standard and is then subject to all of the procedures of the standards development process.* TIAs are published in NFPA News, the National Fire Code Subscription Service, and any further distribution of the standard after being issued by the Standards Council.

From the above, you can see why errata is accepted in all conditions, and TIAs must be adopted at N.J.A.C. 5:23-3.16. The last TIA that was adopted as part of the electrical subcode was within the 2011 edition for a modification to 680.42(B) for bonding of swimming pools, proposed at 44 N.J.R. 10(a) and adopted at 44 N.J.R. 1336(a). At that time, that was the only TIA accepted in the State, and all others, including this one, were later included in the 2014 edition.

The issue we are having today is that NFPA is publishing the current electrical subcode, the 2017 edition, with all TIAs included without showing the change or the previous text in the original publication, as the State has adopted it, with no TIAs; for reference, there are 17 TIAs listed at [https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=70&year=2017](https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=70&year=2017). We recognize how this is causing confusion and are working on a solution. In the meantime, please work with the permit holder if this issue arises and come to the best solution possible.

Source: Rob Austin, Code Assistance/Development Unit
(609) 984-7609

Abandoned Underground Storage Oil Tank (UST) – Tank or Not A Tank?

The Code Assistance Unit has been receiving questions regarding previously abandoned underground oil storage tanks (USTs) that have had a Uniform Construction Code (UCC) permit issued and final inspections completed. There are two related questions: the first is whether it is still considered an oil tank, or if it’s just a piece of steel in the ground; the second is whether a permit is required to remove that steel from the ground at a later time.

The answer to the first is simple: this is considered to be a piece of steel in the ground. As such, there is no regulation requiring a UCC permit to remove that steel later.

If someone would like a UCC permit to remove the piece of steel from the underground, please politely indicate (or remind the interested party) that there is no regulation for this and a UCC permit is not applicable. However, it would be recommended that they consider hiring a New Jersey Department of Environmental Protection (DEP) Underground Heating Oil Tank (UHOT) contractor to remove the piece of steel and to record the removal and location. This is because, when a UCC permit is applied for and issued to abandon a UST in place, the contractor performing the abandonment must be certified by the DEP to abandon UHOTs.

Source: Thomas C. Pitcherello, Code Assistance Unit
(609) 984-7609

Errors in the Fall 2020 Construction Code Communicator

It has been brought to the Division’s Attention that two articles within the Fall 2020 edition of the *Construction Code Communicator* contained errors. These errors have been revised in the document on the Division’s webpage at [Construction Code Communicator](https://www.nfpa.org/Codes-and-Standards/Standards-development-process/How-the-process-works/TIAs-Errata-and-FIs). Please download and review the corrected *Communicator*.

Source: Code Assistance Unit
(609) 984-7609
According to the U.S. Consumer Product Safety Commission website (CPSC Recall - Kidde), Kidde has issued a recall of approximately 262,000 TruSense Smoke and Combination Smoke/Carbon Monoxide Alarms. The details follow:

<table>
<thead>
<tr>
<th>Model</th>
<th>Alarm</th>
<th>Key Feature</th>
</tr>
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<tbody>
<tr>
<td>2040-DSR</td>
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<td><img src="image2.png" alt="2040-DSR Image" /></td>
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<tr>
<td>2050-DS10</td>
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<td><img src="image4.png" alt="2050-DS10 Image" /></td>
<td>TRUSENSE Logo On Side</td>
</tr>
<tr>
<td>2060-ASR</td>
<td><img src="image5.png" alt="2060-ASR Image" /></td>
<td>Sliding door to access 9V battery</td>
</tr>
<tr>
<td></td>
<td><img src="image6.png" alt="2060-ASR Image" /></td>
<td>TRUSENSE Logo On Side</td>
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<tr>
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<tr>
<td>2070-VDSR, 2070-VASCR</td>
<td><img src="image9.png" alt="2070-VDSR Image" /></td>
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<tr>
<td></td>
<td><img src="image10.png" alt="2070-VASCR Image" /></td>
<td>Pop-up door to access 9V battery</td>
</tr>
</tbody>
</table>

(continued on next page)
**Kidde Recalls Smoke and Combination Smoke/Carbon Monoxide Alarms; Can Fail to Warn of a Fire**

**Name of Product:** Kidde TruSense Smoke Alarms and Combination Smoke/Carbon Monoxide Alarms.

**Description:** This recall involves Kidde TruSense Smoke Alarms and Combination Smoke/Carbon Monoxide Alarms. The recalled units are Kidde Model Series 2040, 2050, 2060 and 2070 Smoke and Combination Smoke/Carbon Monoxide alarms. Only alarms with the TruSense logo or “AMBER=FAULT” printed on the front of the alarm are included in this recall. The model number is printed on the back of the alarm.

**Smoke Alarm - Models:** 2040-DSR; 2050-DS10; 2060-ASR; 2070-VDSR; and 2070-VASR.

**Combination Smoke/Carbon Monoxide - Models:** 2070-VASCR; and 2070-VDSR.

**Hazard:** The smoke alarm and the combination smoke/carbon monoxide (CO) alarm can fail to alert consumers to a fire.

**Incidents/Injuries:** No incidents or injuries have been reported.

**Remedy:** Consumers should immediately contact Kidde for a free replacement alarm. Consumers should keep using the recalled alarms until they install replacement alarms.

**Consumer Contact:** Kidde toll-free at (844)796-9972 from 8 a.m. to 8 p.m. ET Monday through Friday and 9 a.m. to 3 p.m. ET on Saturday or online at www.kiddetsalarmrecall.rsvpcomm.com or www.kidde.com and click on “Support” and then “Product Alerts” for more information.

**Recall number:** 21-130

**Sellers:** Walmart, Home Depot, Menards and other department, home and hardware stores and electrical distributors nationwide, and online at Amazon.com, ShopKidde.com and other online retailers from May 2019 through September 2020 for between $10 and $70.

**Importer(s):** Walter Kidde Portable Equipment Company Inc., of Mebane, N.C.

**Manufactured in:** China

**Units Recalled:** About 262,000

Please make sure your fire officials are aware of this voluntary recall so the units can be identified upon inspections for resale or re-occupancy. When performing routine inspections, dwelling unit alarms should also be checked in all Residential Group R and Institutional Group I-1 occupancies. If any of these alarms were installed, the consumers need to contact Kidde for a free replacement.

**Source:** Keith Makai

**Code Assistance Unit**

(609) 984-7609

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**Transfer Switches and Current-Carrying Conductors**

Since the events of Superstorm Sandy, homeowners have been installing home backup systems as an uninterrupted power source in the event of failure due to weather, etc. For new construction, installations are easy to incorporate from the start. However, for existing homes, the established wiring could become an issue without careful review; this is the focus of this article.

Starting the integration of automatic transfer switches, the installation essentially replaces the existing “main” panel, and it becomes our new service equipment (if listed as “suitable for use as service equipment”). The existing “main” circuit panel now becomes a subpanel and here is where things start to unravel. As many of you are already aware, the requirements of Article 250.140 of the electrical subcode, National Electrical Code/2017 (NEC/2017), pose a unique problem, in that there arises a need for a “3-wire” to be run to ranges and dryers, with the exception being that existing installations are permitted to remain if the wiring method originates in service equipment.

Moving further, there is no place for a branch circuit to originate within a transfer switch, thus requiring the need to run a new circuit that complies with Article 250.140 of the NEC/2017, as required per N.J.A.C. 5:23-6.8(d)3. This situation has created headaches for homeowners, contractors and code officials alike.

*(continued on next page)*
As a remedy, the Department is looking to address this issue by means of an amendment to the Rehabilitation Subcode, N.J.A.C. 5:23-6 to clarify the application of condition (3) of the exception in 250.140. In short, the text "and the branch circuit originates at the service equipment" will not apply in order for the exception to apply. For existing homes, this would allow the previous wiring installation to remain that in many cases has been there for years without issue. The future amendment will look similar to the following and for those that would like to apply it now, a variation request would be required:

- N.J.A.C. 5:23-6.8(d)3i: In applying condition (3) of the exception of Section 250.140, the branch circuit may originate at a location other than the service equipment.

Of course, things aren't that easy, and this of course leads to a follow-up question: where should this uninsulated conductor be terminated in what is now the subpanel? What you don't want to do is terminate this conductor on the ground block, as it could possibly introduce unwanted currents on the ground conductor. To comply, the code would require the installer to insulate all exposed sections of the uninsulated conductor, in an approved manner, and terminate this conductor on the neutral bar within the original circuit panel.

If you have further questions, please contact the Code Assistance Unit at (609) 984-7609.

Source: Scott Borsos, Division of Codes and Standards

### Corridor Continuity

Recently, the Code Assistance Unit has been receiving inquiries regarding fire-resistance continuity as it pertains to corridors. Though every configuration is not the same, there are a few layouts that seem to be increasingly common. Below, please find the question and answer examples below. Please note that the mixed occupancies below are assumed to meet Section 508 of the International Building Code/2018 (IBC/2018) in terms of separation.

First, let’s review Section 1020.6 of the IBC/2018, Corridor continuity:

Fire-resistance-rated corridors shall be continuous from the point of entry to an exit and shall not be interrupted by intervening rooms. Where the path of egress travel within a fire-resistance-rated corridor to the exit includes travel along unenclosed exit access stairways or ramps, the fire-resistance rating shall be continuous for the length of the stairway or ramp and for the length of the connecting corridor on the adjacent floor leading to the exit.

Exceptions:
1. Foyers, lobbies or reception rooms constructed as required for corridors shall not be construed as intervening rooms.
2. Enclosed elevator lobbies as permitted by Item 1 of Section 1016.2 shall not be construed as intervening rooms.

Now, we can move along to applying these regulations to common configurations

Q1: A fully sprinklered R-2 apartment building with a rated corridor contains an adjacent lounge area open to the corridor as shown in the drawing below. Would this configuration be compliant under the corridor continuity requirements of Section 1020.6?
A1: Yes. Fire-resistance rated corridors are required to be continuous from the point of entry to an exit without being interrupted by intervening rooms. While the lounge area is open to the rated corridor, it is not considered an intervening room since the egress is neither required through the lounge area nor does it obstruct access to the required exits. This would be considered a similar level of hazard as foyers, lobbies and reception rooms permitted by Exception 1. Provided the room has the same rated walls as required for the corridor.

Q2: A fully sprinklered R-2 apartment building with a rated corridor contains an adjacent lounge area separated from the corridor by a nonrated full height glass partition as indicated in the diagram. Would this arrangement comply with the corridor continuity requirements of Section 1020.6?

A2: No. Due to the presence of the glass partition, a corridor is created which defines the path of egress travel and limits the awareness between adjacent areas. The glass partition is required to be fire-resistance rated equivalent to the required fire-resistance rating for the corridor with opening protectives.

Q3: In the same instance as Q2, would it be compliant if the lounge/gym area was bounded by a partial-height wall that essentially creates a defined path?

A3: Yes, but there are other items to consider. Although the partial-height wall does create a confined path of travel, it cannot limit the occupant’s line of sight, hearing and smell that would alert them of a fire in the adjacent lounge/gym area. The code does not specifically state what is considered “enclosed” where corridors are not fire-resistance rated.

With the growing number of Group R-2 buildings with “other” uses constructed within, we feel that it is important to provide this information to code officials and designers to perhaps help prevent these issues during plan review.

Source: Adam Matthews
Code Assistance Unit
609-984-7609

Reliable Power Source for Fire Pumps: Reprint

Is the electrical service from a utility company a reliable power source for fire pumps?

To analyze if the electrical service is reliable as per the codes, it is important to look at New Jersey’s grid system, not the rest of the United States. Some parts of the power grid in North America have one power plant and one transmission network for half of the state or province that it services. Also, some areas have limited fire department response times and utility intervention. In New Jersey, there are multiple grid loops for power plants and transmission networks, and the response time for the fire and utility intervention is less than half an hour.

In order to determine whether there is a reliable power source, some terms referring to the grid will need to be defined.
Electric power transmission is the bulk movement of electrical energy from a generating site, such as a power plant, to an electrical substation. The interconnected lines which facilitate this movement are known as a transmission network. This is distinct from the local wiring between high-voltage substations and customers, which is typically referred to as electric power distribution.

A power station also referred to as a power plant or powerhouse and sometimes generating station or generating plant, is an industrial facility for the generation of electric power.

A substation is a part of an electrical generation, transmission, and distribution system. Substations transform voltage from high to low, or the reverse, or perform any of several other important functions. Between the generating station and electric power distribution, electric power may flow through several substations at different voltage levels.

Electric power distribution is the final stage in the delivery of electric power; it carries electricity from the transmission system to individual consumers. Distribution substations connect to the transmission system and lower the transmission voltage to medium voltage to the primary distribution lines carry this medium voltage power to distribution transformers located near the customer's premises. This is distinct from the high-voltage transmission substations and distribution to the customers’ local service wiring.

The 2017 National Electrical Code Article 695 and 2016 edition of NFPA 20 are the codes and standards which reference to reliable power sources for fire pumps.

The related sections in the 2017 National Electrical Code are:

- **695.3(A) Individual Sources** states "Where reliable, and where capable of carrying indefinitely the sum of the locked-rotor current of the fire pump motor(s) and the pressure maintenance pump motor(s) and the full-load current of the associated fire pump accessory equipment when connected to this power supply, the power source for an electric motor driven fire pump shall be one or more of the following."
  - **695.3(A)(1) Electrical Utility Service Connection** states, "a fire pump shall be permitted to be supplied by a separate service, or from a connection located ahead of and not within the same cabinet, enclosure, vertical switchgear section, or vertical switchboard section as the service disconnecting means. The connection shall be located and arranged so as to minimize the possibility of damage by fire from within the premises and from exposing hazards. A tap ahead of the service disconnecting means shall comply with 230.82(5). The service equipment shall comply with the labeling requirements in 230.2 and the location requirements in 230.72(B).

The National Electrical Code does not define reliable power source, so we have to look at the 2016 edition of NFPA 20 and its Annex A for an explanation of reliable power source. Annex A is explanatory material not code, and it does not address the electrical utility or fire response.

- **9.2 Normal Power**
- **9.2.1 Provided with a normal source of power.** (per the National Electrical Code)
- **9.2.2(1) Service dedicated for the fire pump.** (per the National Electrical Code)

NFPA 20/2016 Section 9.3 Alternate Power specifically Section 9.3.2 Other Sources, refers you to the Annex A, A.9.3.2 "A reliable power source should possess the following characteristics."

- **9.3.2* Other Sources.** Except for an arrangement described in 9.3.3, at least one alternate source of power shall be provided where the normal source is not reliable.
  - A.9.3.2, (1) The source power plant has not experienced any shutdowns longer than 4 continuous hours in the year prior to plan submittal. NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, requires special undertakings (i.e., fire watches) when a water-based fire protection system is taken out of service for longer than 4 hours. If the normal source power plant has been intentionally shut down for longer than 4 hours in the past, it is reasonable to require a backup source of power.
    - There may be power plants down for refueling or refitting for a year or more with no interruption of power. There are enough power plants and standby power plants available to go online in less than an hour of a shutdown of another power plant. This is not a concern for reliability for the power source in New Jersey.

(continued on next page)
A.9.3.2, (2) The standard is not intended to require that the normal source of power be infallible to deem the power reliable. NFPA 20 does not intend to require a back-up source of power for every installation using an electric motor-driven fire pump.

A.9.3.2, (3) The first thing a fire chief does when arriving at a sprinklered building that is on fire is connect the pumper to the fire department connection, then if warranted, call the electric utility to cut power to prevent electrocution to the fire personal. Regardless if there are overhead or underground supplies this is done. If needed for safety, the chief may request the electric utility distribution along the street to be turned off. Fire equipment is not an issue and response time for utility intervention is reasonable. If the one or two pieces of fire equipment for that area are on the scene of a fire or mutual aid is over an hour away the chief may need to keep the fire pump working. How a fire chief needs or chooses to address a fire does not make the power source unreliable. The electric utility distribution along the street is more of a concern to the fire personnel than are the 50 feet or less of service drop.

A.9.3.2(4) If the installation for the fire pump meets the Article 695 of the National Electrical Code it will meet this requirement.

It is the Department’s opinion that utility services in New Jersey are reliable power sources.

Source: Code Assistance Unit
(609) 984-7609

Permits and Penalties

You discover that a contractor has installed a new deck without the required permit. This is not the first time this contractor has failed to obtain a required permit. When the contractor comes to your office with the permit application, you give him a notice of violation and an order to pay penalty. You also inform the contractor that he must pay the penalty before you will issue the permit.

The contractor protests and refuses to pay the penalty. What is wrong with this scenario?

The Office of Regulatory Affairs gets calls and written complaints about this situation regularly. Our response to the complainants is to inform them that you, the code official, should not hold up the permit until the fine is paid. However, at N.J.A.C. 5:23-2.24(a)4 (reprinted below), the Uniform Construction Code (UCC) clearly allows the certificate of occupancy/approval to be withheld until the fine is paid.

As per N.J.A.C. 5:23-2.24(a), a Certificate of occupancy shall be conditioned upon the following:
1. That the completed project meets the conditions of the construction permit, and all prior approvals and has been done substantially in accordance with the code and with those portions of the plans and specifications controlled by the code;
2. That all required fees have been paid in full;
3. That all necessary inspections have been completed and that the completed project meets the requirements of the regulations;
4. That all violations have been corrected and that any assessed penalties have been paid;
5. That all protective devices and equipment required to be installed by the regulations will continue to be operational as required by the regulations.

This regulation and the applicant’s right to appeal a penalty prevent requiring the payment of a penalty prior to the issuance of a permit. Withholding the certificate of occupancy or approval until the penalty issue is resolved is the appropriate way to deal with this situation under the UCC regulations.

If you have questions or comments, please contact the Office of Regulatory Affairs at (609) 984-7672.

Source: Robert Hilzer
Office of Regulatory Affairs

Robert Hilzer has retired as of July 1, 2021, after 39 years of service. Please join us in wishing him a long, happy, and healthy retirement.
Rehabilitation Subcode – Table of Contents

The Code Assistance Unit received an email from a code official containing a table of contents for the Rehabilitation Subcode of the Uniform Construction Code. The Unit felt it could serve as a helpful reference document for Code Officials; the listing is provided below:

Subchapter 6. Rehabilitation Subcode.

N.J.A.C. 5:23-6.1 Introduction; Using This Subcode
N.J.A.C. 5:23-6.2 Applicability and Compliance
N.J.A.C. 5:23-6.3 Definitions
N.J.A.C. 5:23-6.3A Flood-Resistant Construction
N.J.A.C. 5:23-6.4 Repairs
N.J.A.C. 5:23-6.5 Renovations
N.J.A.C. 5:23-6.6 Alterations
N.J.A.C. 5:23-6.7 Reconstruction
N.J.A.C. 5:23-6.8 Materials and Methods
N.J.A.C. 5:23-6.9 New Building Elements
N.J.A.C. 5:23-6.10 Basic Requirements and Supplemental Requirements--General
N.J.A.C. 5:23-6.11 Basic Requirements in All Groups
N.J.A.C. 5:23-6.11A Supplemental Requirements in All Groups
N.J.A.C. 5:23-6.12 Basic Requirements--Group A-1
N.J.A.C. 5:23-6.12A Supplemental Requirements--Group A-1
N.J.A.C. 5:23-6.13 Basic Requirements--Group A-2 Nightclubs
N.J.A.C. 5:23-6.14 Basic Requirements--Groups A-2 Other Than Nightclubs, A-3 and A-4
N.J.A.C. 5:23-6.15 Basic Requirements--Group A-3 Places of Worship
N.J.A.C. 5:23-6.15A Supplemental Requirements--Group A-3 Places of Worship
N.J.A.C. 5:23-6.17 Basic Requirements--Group B
N.J.A.C. 5:23-6.17A Supplemental Requirements--Group B
N.J.A.C. 5:23-6.18 Basic Requirements--Group E
N.J.A.C. 5:23-6.18A Supplemental Requirements--Group E
N.J.A.C. 5:23-6.19 Basic Requirements--Group F
N.J.A.C. 5:23-6.19A Supplemental Requirements--Group F
N.J.A.C. 5:23-6.20 Basic Requirements--Group H
N.J.A.C. 5:23-6.20A Supplemental Requirements--Group H
N.J.A.C. 5:23-6.21 Basic Requirements--Group I-1
N.J.A.C. 5:23-6.21A Supplemental Requirements--Group I-1
N.J.A.C. 5:23-6.22 Basic Requirements--Groups I-2 and I-4
N.J.A.C. 5:23-6.22A Supplemental Requirements--Groups I-2 and I-4
N.J.A.C. 5:23-6.23 Basic Requirements--Group I-3
N.J.A.C. 5:23-6.23A Supplemental Requirements--Group I-3
N.J.A.C. 5:23-6.24 Basic Requirements--Group M
N.J.A.C. 5:23-6.24A Supplemental Requirements--Group M
N.J.A.C. 5:23-6.25 Basic Requirements--Group R-1
N.J.A.C. 5:23-6.25A Supplemental Requirements--Group R-1
N.J.A.C. 5:23-6.26 Basic Requirements--Groups R-2 and R-4
N.J.A.C. 5:23-6.26A Supplemental Requirements--Groups R-2 and R-4
N.J.A.C. 5:23-6.27 Basic Requirements--Groups R-3 and R-5
N.J.A.C. 5:23-6.28 Basic Requirements--Group S
N.J.A.C. 5:23-6.28A Supplemental Requirements--Group S
N.J.A.C. 5:23-6.29 Mixed Use Buildings
N.J.A.C. 5:23-6.30 Special Technical Requirements--All Groups
N.J.A.C. 5:23-6.31 Change of Use
N.J.A.C. 5:23-6.32 Additions
N.J.A.C. 5:23-6.33 Historic Buildings

Source: Code Assistance Unit, (609) 984-7609
March 2021 Highlights of the New Jersey Construction Reporter

The following information is from the March 2021 Highlights. The New Jersey Construction Reporter is published monthly and includes highlights and summary data on building permits from local construction offices throughout the State. To view full reports, please visit https://www.nj.gov/dca/divisions/codes/reporter.

Source: John Lago, Division of Codes and Standards
(609) 984-7609

- March is busy month for construction officials and technical assistants. Construction usually picks up in the spring. Activity reached new levels. Nearly 60,000 building permits were issued in March 2021 for $2.388 billion of construction.
- The number of building permits a year ago was only 21,500, authorizing $1.45 billion of construction.

Dollar Amount of Construction Authorized by Building Permits by Use Group, March 2021

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<tr>
<th>Use Group</th>
<th>March Estimated</th>
<th>Year-to-Date Estimated</th>
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<tr>
<td>RESIDENTIAL</td>
<td>Permits</td>
<td>Square Feet</td>
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<td>1 &amp; 2 Family</td>
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<td>NONRESIDENTIAL</td>
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<td>891,031,646</td>
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</tbody>
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Hotels, motels, guest houses
- 336
- 12,612,261
- 12,996
- 526
- 26
- 143,860
Assembly
- 628
- 52,778,555
- 155,571
- 1,185
- 144,242,173
Business / Office
- 3,071
- 319,447,226
- 631,297
- 6,147
- 629,792,287
Education
- 244
- 128,359,667
- 124,444
- 445
- 232,141,330
Hazardous uses
- 13
- 3,402,840
- 17,792
- 26
- 6,650,180
Industrial
- 95
- 77,679,606
- 842,526
- 193
- 124,201,140
Institutional
- 72
- 15,428,670
- 0
- 178
- 65,229,814
Retail
- 411
- 411,148,803
- 173,935
- 779
- 85,357,747
Storage
- 306
- 129,287,811
- 2,790,248
- 565
- 261,068,043
Signs, fences, miscellaneous
- 3,902
- 109,920,207
- 352,625
- 7,048
- 191,869,813

New Jersey
- 59,936
- 2,388,404,276
- 15,403,315
- 118,540
- 4,703,902,464

Mar 2020
- 21,426
- $1,452,854,305
- 6,948,842
- 77,014
- $3,878,847,756

Top as a % of New Jersey
- 36.5%
- 35.0%
- 41.2%
Year to Date

- $4.703 billion of construction was authorized between January and March 2021. This was $825 million more than first quarter 2020, an increase of 21.3 percent.
- 9,181 new houses were authorized by building permits issued in the first three months of 2021. This was 4,189 houses more than first quarter 2020, an increase of 83.9 percent.

### Big permits, 2020

**Construction Reporter: 5/10/2021**

<table>
<thead>
<tr>
<th>municipality</th>
<th>county</th>
<th>permit no.</th>
<th>month</th>
<th>building use</th>
<th>permit type</th>
<th>dollar amt of construction</th>
<th>description</th>
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<td>0702</td>
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<td>03</td>
<td>B</td>
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<td>1612</td>
<td>03</td>
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<td>Warren</td>
<td>2119</td>
<td>03</td>
<td>S-2</td>
<td>NEW</td>
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<td>New Brunswick</td>
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<td>1214</td>
<td>01</td>
<td>I-2</td>
<td>ALT</td>
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<td>1816</td>
<td>03</td>
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<td>Johnson Dr &amp; First Av; Laboratory Corp of America</td>
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<td>Monmouth</td>
<td>1121</td>
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<td>R-2</td>
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<td>0204</td>
<td>04</td>
<td>R-2</td>
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<td>1216</td>
<td>03</td>
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<td>1107</td>
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<td>03</td>
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<td>01</td>
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<td>14,558,000</td>
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<td>NEW</td>
<td>14,400,350</td>
<td>19-47 High St; six-story apt bldg with 82 apts</td>
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<td>Mercer</td>
<td>1114</td>
<td>02</td>
<td>R-2</td>
<td>NEW</td>
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<td>dormitory, Princeton University</td>
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<td>Morristown</td>
<td>Morris</td>
<td>1424</td>
<td>04</td>
<td>E-2</td>
<td>NEW</td>
<td>12,719,149</td>
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<td>1214</td>
<td>04</td>
<td>E-2</td>
<td>NEW</td>
<td>11,449,000</td>
<td>15 Livingston Av; State Theater Nj; Middlesex County</td>
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<td>03</td>
<td>R-2</td>
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<td>1818</td>
<td>02</td>
<td>S-2</td>
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<td>02</td>
<td>B-2</td>
<td>ALT</td>
<td>10,500,000</td>
<td>Colgin Corp, S56 Morris Av</td>
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<td>1204</td>
<td>04</td>
<td>S-2</td>
<td>ALT</td>
<td>9,592,000</td>
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<td>F-2</td>
<td>NEW</td>
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<td>South Orange Village</td>
<td>Essex</td>
<td>0719</td>
<td>01</td>
<td>A-3</td>
<td>ADD</td>
<td>8,763,940</td>
<td>community center, South Orange Township, 5 Mcl Stad</td>
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<td>0220</td>
<td>01</td>
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<td>Franklin Manor Appts, 8 Tice Rd</td>
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<td>S-2</td>
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<td>M Station urban renewal parking deck</td>
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<td>NEW</td>
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<td>01</td>
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<td>8,265,000</td>
<td>office bldg; 6 Vreeland Rd</td>
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<td>0705</td>
<td>01</td>
<td>R-2</td>
<td>ALT</td>
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<td>Rahway</td>
<td>Union</td>
<td>2013</td>
<td>01</td>
<td>R-2</td>
<td>NEW</td>
<td>8,000,000</td>
<td>Merk; 6 Scott Av</td>
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<td>B-2</td>
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<td>Englewood</td>
<td>Bergen</td>
<td>0215</td>
<td>04</td>
<td>R-5</td>
<td>NEW</td>
<td>7,500,000</td>
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<td>1203</td>
<td>02</td>
<td>R-2</td>
<td>NEW</td>
<td>7,375,000</td>
<td>Dunellen Station; 100 S Washington Av</td>
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</tbody>
</table>

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### National Electrical Code Article 705.31: A Silly Millimeter Longer

Yes, that title references an old advertising slogan, but one millimeter makes a difference throughout many Articles in the National Electrical Code (NEC). One of the sections where this is true is Article 705.31, which pertains to the actual conductor length, end to end. There has been confusion about how long the conductor can be, and the answer is simple: 10 feet. If the cable is 10 feet and one millimeter, you're now entering cable limiters or CTL circuit breaker territory, which becomes more costly.

So, when applying Article 705.31, keeping the cable at 10 feet keeps everyone happy. If you have any questions regarding this matter, please contact the Code Assistance Unit at (609) 984-7609.

Source: Neil Nagy

Bureau of Construction Project Review
Permit Extension Act 2020: Information


The time for submission for extension to the Department of Environmental Protection (DEP) closed October 9, 2020. The list of all permits extended under this Act is available on DEP’s website, specifically the “Other Agency Extended Permit List” link, https://www.nj.gov/dep/covid19regulatorycompliance/.

In short, for any projects included on the DEP list, the Act stops the clock on the running of approvals during the “extension period,” which is defined as the period beginning March 9, 2020 and continuing for as long as a public health emergency, corresponding to the “Emergency Health Powers Act” (P.L. 2005, c.222 (C.26:13-1 et seq.)) is in effect. This means that any extended Uniform Construction Code (UCC) permit will remain valid through the duration of the public health emergency. Upon the formal end to the public health emergency, the permit will be valid for an additional six months.

- Per P.L. 2021, c. 104, the formal end to the public health emergency is July 4, 2021. UCC permits that expired during this time and extended per P.L. 2020, c. 53 will remain valid until January 4, 2022. If a project recommences on or before this date, the provisions at N.J.A.C. 5:23-2.16 shall apply.

During such extension, all terms and conditions of the original approval shall continue; that is the exclusions, limitations, and restrictions of the original permit continue to apply.

In addition, it’s important to note that, before issuing a permit, it’s necessary to check with any relevant agencies or officials to ensure that any required prior approvals still remain valid throughout the extension.

Please contact the Code Assistance Unit should you have any further questions.

September 14, 2020 Attachment

Guidance for Local Enforcing Agencies
Permit Extension Act of 2020 – What to tell inquiring permit applicants

In accordance with the Permit Extension Act signed by Governor Murphy on July 1, the term of certain governmental permits, approvals and deadlines that were due to expire on March 9, 2020, or the specified period following it were extended. Any government approval, including permits granted pursuant to the Uniform Construction Code (UCC) Act, subject to the automatic suspension of the running period of such approval for the COVID-19 extension period must be registered with the Department of Environmental Protection (DEP)* by October 8, 2020 by using the “request form” at https://www.nj.gov/dep/pea2020/.** The running period of any approval not registered by October 8, 2020, shall not be suspended for the COVID-19 extension period. For additional information, please see the Department’s notice of this action at 52 N.J.R. 1682(a), which can be found at https://www.nj.gov/dca/divisions/codes/alerts/covid19.html.

* As noted at 52 N.J.R. 1683(a), P.L. 2020, c.53 has charged the DEP as the agency responsible for maintaining the list of ALL permits and approvals.
** When using DEP's request form, select "Other" under "Permitting Issuing Agency" and specify "NJDCA, UCC" under "Permit Type."

If you require further information, please contact Code Assistance Unit.

Source: Code Assistance Unit
(609) 984-7609
Governor Philip D. Murphy Proclaims May as Building Safety Month

State of New Jersey
Executive Department

Proclamation

Whereas, the State of New Jersey is committed to recognizing that our growth and strength depends on the safety and economic value of the homes, buildings and infrastructure that serve our citizens, both in everyday life and in times of disaster; and

Whereas, our confidence in the resilience of these buildings that make up our community is achieved through the devotion of vigilant guardians—building safety and fire prevention officials, architects, engineers, builders, tradespeople, design professionals, laborers, plumbers and others in the construction industry—who work year round to ensure the safe construction of buildings; and

Whereas, these guardians are dedicated members of the International Code Council, a nonprofit that brings together local, state and federal officials that are experts in the built environment to create and implement the highest-quality codes to protect us in the buildings where we live, learn, work and play; and

Whereas, our nation benefits economically and technologically from using the International Codes that are developed by a national, voluntary consensus codes and standards developing organization, our government is able to avoid the high cost and complexity of developing and maintaining these codes, which are the most widely adopted building safety and fire prevention codes in the world; and

Whereas, these modern building codes include safeguards to protect the public from hazards such as hurricanes, snowstorms, tornadoes, wildland fires, floods and earthquakes; and

Whereas, Building Safety Month is sponsored by the International Code Council to remind the public about the critical role of our communities’ largely unknown protectors of public safety—our local code officials—who assure us of safe, sustainable, energy efficient and livable buildings that are essential to America’s prosperity; and

Whereas, “Prevent, Prepare, Protect. Building Codes Save,” the theme for Building Safety Month 2021, encourages all Americans to raise awareness about the importance of safe and resilient construction; fire prevention; disaster mitigation; energy conservation; water safety; training the next generation; and new technologies in the construction industry; and

Whereas, each year, in observance of Building Safety Month, people all over the world are asked to consider the commitment to improve building safety, resilience and economic investment at home and in the community, and to acknowledge the essential service provided to all of us by local and state building departments, fire prevention bureaus and federal agencies in protecting lives and property;

NOW, THEREFORE, I, Philip D. Murphy, Governor of the State of New Jersey, do hereby proclaim:

MAY 2021
AS
BUILDING SAFETY MONTH

in New Jersey.

GIVEN, under my hand and the Great Seal of the State of New Jersey, this twenty-sixth day of April in the year two thousand twenty-one, the two hundred forty-fifth year of the Independence of the United States.

Lt. Governor

GOVERNOR
Exterior Decks, Section R507/IRC

The application of Section R507, Exterior Decks, of the International Residential Code/2018 (IRC/2018) is straightforward when it comes to building an exterior wooden deck on a residential home. Some ambiguities arise, however, when one considers if section R507 is applicable to multi-level decks (i.e., a first-floor deck supporting a second-story deck) or if it provides for the construction of a wooden roof structure over a wooden deck.

A recent ICC-issued opinion confirmed that Section R507 of the IRC/2018 is limited to “single-level” exterior wood decks and is not intended for use with multi-level stacked decks unless designed. As section R507.1 states, for decks using materials and conditions not prescribed in this section, refer to section R301, Design Criteria. This is further addressed at Section R507.4 providing for prescriptive sizing of wood posts and connections and Section R507.5 for beam sizing. Lastly, the minimum sizing of concrete footing from Table R507.3.1 is based on a tributary area of a single level deck.

Likewise, solid roofs above a “R507 deck” must be designed based on Section R301. Additionally, open lattice roofs (e.g. pergolas) are not directly addressed in the IRC/2018 or International Building Code/2018 (IBC/2018) and would require similar design based on Section R301.

Section R301.1.1, Alternate provisions, states that the standards listed therein, when utilized by a design professional (or the single-family homeowner exception at N.J.A.C. 5:23-2.15(f)1ix(1)), will result in a design that complies with the IBC/2018.

Therefore, for those that would like to design something other than a prescriptive single-level deck from R507, design would be required following the standards noted above to ensure that, for example, a multi-level deck or roofed deck is structurally sound and code compliant.

Source: Rob Austin
Code Assistance/Development Unit
(609) 984-7609

HVACR Contractors and Electrical Work: What are the Rules?

As summer begins, I have been receiving many questions about where the HVACR contractor's exemption ends, as it relates to electrical work. It is a simple answer: it's in writing – but where can one find it? N.J.A.C. 13:32A, State Board of Examiners of Heating, Ventilating, Air Conditioning, and Refrigeration (HVACR) Contractors Rules, contains the specific information, which is summarized below:

“10. In replacement cases only, the connection of the wiring from an equipment service disconnect box of adequate size to accommodate pneumatic and/or direct digital controls and control piping of automatic oil, gas, coal burning, or any other product of combustion equipment, mechanical refrigeration equipment, gasoline, or diesel oil dispensing equipment previously dedicated to that equipment, as long as:
   i. The heating or cooling capacity of each piece of equipment is 25 tons or less;
   ii. The voltage of the system is 240 volts or less; and
   iii. The connection of the wiring is performed according to all relevant provisions in the Uniform Construction Code.”

To see the full requirements of N.J.A.C. 13:32A, please visit the “laws and regulations” section of the State Board of HVACR Contractors website, https://www.njconsumeraffairs.gov/hvacr/Pages/regulations.aspx.

Any other work must be performed by a licensed electrical contractor or his or her direct employee. For example, replacement of disconnects, new/different fusing or circuit breakers, changes to a HVACR rated circuit breaker, or change of conductors, would all require a licensed electrical contractor.

Hopefully, this article has been helpful in clearing up some of the confusion surrounding this topic. For other licensure exemptions, please see “License Check” on page 6 within the Spring 2019 CCC, https://www.nj.gov/dca/divisions/codes/resources/ccc.html. Should you have any questions, please do not hesitate to contact the Code Assistance Unit at (609) 984-7609.

Source: Neil Nagy
Bureau of Construction Project Review
When Are Emergency Responder Radio Coverage Systems Required? (updated from the Spring 2015 edition)


Since this article was originally published, the emergency responder coverage from the 2009 International Building Code (IBC), via the International Fire Code (IFC) have changed from just three short subsections to six lengthy subsections within the 2018 code. In other words, much has changed in installation methods but the end result, per Section 918 of the 2018 IBC, an emergency responder radio coverage system is required for all new buildings and are to be installed per Section 510 of the 2018 IFC.

So, what did the 2009 IFC have back then when compared to the 2018 IFC? In short, a general section that provided two exceptions, a radio signal strength section (max into and out of the building), and an existing building coverage section. Now that the Uniform Construction Code (UCC) references the 2018 I-codes (Sept 03, 2019), this section of the IFC has been expanded as noted above. The general section remains (still Section 510.1), now with a third exception, as does the existing building coverage section (Section 510.2). What this means is, the 2018 IFC more or less swelled in relation to the radio signal strength section for design and performance.

History and timeline to today…

These 2009 IFC requirements were very basic and simply required what is noted above. For the 2012 edition, which NJ did not adopt, the technical requirements of Appendix J of the 2009 IFC were relocated into Section 510 and Chapter 11, “Construction Requirements for Existing Buildings,” was established. The requirements for in-building emergency radio communication enhancement systems in existing buildings were added to this Chapter in Section 1103.2, clarifying the intent that this was to be mandated, retroactive requirements unless the fire official waived the requirement based on a determination that the enhanced communication system was not needed.

Moving to today, further modifications to 2015 IFC and now 2018 IFC address technical issues that arose as more systems were being installed in both new and existing buildings. Other changes were made to embrace new technology and better clarify the intent and understanding of the code for the design, installation and testing. Additionally, the inspection and maintenance requirements necessary to ensure system reliability were incorporated, requirements covering in-building emergency radio communication enhancement systems were added and a cross reference for these systems to be designed and installed in accordance with NFPA 1221.

The technical requirements for design, installation, commissioning, inspection, testing, and maintenance of in-building emergency radio communication enhancement systems included in the 2018 IFC and NFPA 1221 are summarized as follows:

• Typical system operation is continuous or automatic.
• Requires specified signal strength into and out of the building with a Delivered Audio Quality (DAQ) of 3.0 in 95 percent in all areas. Note: DAQ is simply a qualitative measurement of voice intelligibility or clarity.
• Equipment must be approved and the system design/operation must be specifically designated for use as an in-building emergency radio communication enhancement system by the manufacturer.
• The system must meet specific survivability requirements to ensure it will continue to operate during a fire. Examples: single boosters and emergency batteries in NEMA rated cabinets; Bi-Directional Amplifiers (BDAs) used are to have oscillation prevention circuitry; isolation maintained between the donor antenna and all inside antennas.
• The system must have redundant primary power sources and stand-by or backup power to operate at 100% capacity for at least 12 hours.
• The system must be monitored through the building’s fire alarm system for loss of power; failure of the battery charger; low-battery capacity indication when 70% of the 12-hour operating capacity has been depleted; malfunction of the donor antenna and active RF-emitting device(s); and failure of any critical system components and provide either an audible warning or “trouble” signal.

The above is mostly from Section 510.4 of the 2018 IFC but it is recommended you review all the requirements at https://codes.iccsafe.org/content/IFC2018P5 (select Chapter 5).

Source: Code Assistance
(609) 984-7609
Conflicting Requirements
(reprint from Spring 2015 edition)

Occasionally, there are conflicts between requirements contained in different documents. There is a relatively simple hierarchy for deciding which provision would govern. By operation of law, the provisions of a statute (the Uniform Construction Code Act) trump the provisions of an administrative rule (the Uniform Construction Code itself.) In theory, there should never be a conflict between a rule and the enabling statute, but were this to happen, the statute would govern. To continue down the hierarchy, the provisions of the rules, the Uniform Construction Code, trump the provisions of a model code adopted by reference in those rules. The provisions of a model code trump the provisions of a referenced standard. (For example, the provisions of the International Building Code would trump the provisions of a referenced NFPA standard.) And the provisions of a referenced standard trump the provisions of manufacturer’s instructions.

When a conflict arises between two adopted model codes, the provisions of the model code that is the primary subcode for the subject in question would govern. For example, in a conflict between the building subcode and the electrical subcode, it is necessary to decide first whether this is primarily a building issue or primarily an electrical issue. The conflict would be resolved in favor of the provisions of the primary subcode.

Source: Code Assistance Unit
(609) 984-7609

Approvals for Generator Installations

Over the past few weeks, I have been witness to some confusion regarding how to obtain a Certificate of Approval for new generators. I have discussed this issue with many callers, and also brought the issue to the attention of the Electrical Subcode Committee of the Uniform Construction Code Advisory Board, and this article seeks to provide some guidance in applying the electrical subcode to these projects:

Contrary to some urban legends, Article 702.12 of the 2017 National Electrical Code (NEC) is adopted pursuant to the electrical subcode of the UCC, N.J.A.C. 5:23-3.16. In particular, Article 702.12(A) has always been enforceable.

Optional standby systems over 15 KW are required to have a disconnecting means in accordance with Article 445.18 of the NEC. Some generators are manufactured in such a way that they are already compliant with this Section. However, for those that are not, it is the contractor’s responsibility to provide the disconnecting means.

Cut-in-cards are required for all generator installations, and whenever the meter seal is cut.

Of course, the generators themselves are subject to compliance with Nationally Recognized Testing Laboratories’ requirements. Because of this, should you have specific questions about an installation, please do not hesitate to contact the Code Assistance Unit at (609) 984-7609.

Source: Neil Nagy
Bureau of Construction Project Review