

Construction Code Communicator



State of New Jersey
Philip D. Murphy, Governor

Department of Community Affairs
Lt. Governor Sheila Y. Oliver, Commissioner

Volume 34, Number 2

Summer 2022

The 39th Annual Building Safety Conference of New Jersey

After a two-year postponement, the 39th Annual Building Safety Conference of New Jersey was held on May 4th through 6th at the Hard Rock Hotel in Atlantic City. Aside from finally getting to see everyone once again, our focus this year was on preparing our code enforcement officials for the pending updates to the model codes and their application upon adoption. It was our first face-to-face class offerings since 2019.

The “Crackerbarrel” began our Conference, as it always does. This very popular event gives our guests the opportunity to hear from a variety of presenters in a short format style with a focus on new items of particular interest to the code enforcement community. Topics ranged from the pending electronic permitting system to an opportunity to meet with DCA staff to gain insight into recent code change proposal and guidance. We also held our second annual “Job Fair” at this year’s Conference which was successful for our Association partners and for those seeking positions in code enforcement throughout the State. We are most likely going to include the fair within the Crackerbarrel space next year to include more prospective employers and make it easier for attendees to attend both events.

The centerpiece of the Building Safety Conference was, of course, the opportunity to recognize and honor those selected by their associations as Code Enforcement Professionals of the Year for not only 2022, but also, the years 2020 and 2021. We were honored to have our Commissioner, Lt. Governor Shelia Oliver join Director Edward Smith in presenting the 2022 awards at the annual awards luncheon. Assistant Director Kevin Luckie and I were on hand to present the 2020 and 2021 awards later at the award reception. Each of the Presidents of the respective partner associations were also on hand to make the award presentations at the annual luncheon.

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The following awards were presented:



**New Jersey State Plumbing Inspectors Association
Plumbing Inspectors of the Year –**
2022 Mark A. Bocchino
2021 Daniel O’Gorman
2020 Joseph Lariccia (posthumously)



**Municipal Construction Officials of New Jersey
Construction Officials of the Year –**
2022 Joseph G. Hoff, Jr.
2021 Anthony J. Neibert
2020 Steven M. Gluck



**New Jersey Association of Technical Assistants
Technical Assistants of the Year –**
2022 Denyce Yannazzone
2020 and 2021 Anna Maria Cappelleri



**New Jersey Building Officials Association Building
Inspectors of the Year –**
2022 James A. Sabetta
2021 Jerry L. Eger
2020 Robert L. Penrose, Jr.



**Municipal Electrical Inspectors Association of New Jersey
Electrical Inspectors of the Year –**
2022 David C. Rudolph
2021 Anthony J. Neibert
2020 Nick A. Fabiano, Jr.



**New Jersey Fire Prevention and Protection Association
Fire Protection Inspectors of the Year –**
2022 Richard J. Orlando
2021 James Zaconie
2020 Scott M. McCormick

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The Construction Code Communicator is an online publication of the New Jersey Department of Community Affairs’ Division of Codes and Standards. It is typically published four times a year.

Copies may be read or downloaded from the division’s website at: www.nj.gov/dca/divisions/codes.

Please direct any comments or suggestions to the NJDCA, Division of Codes and Standards, Attention: Code Development Unit, PO Box 802, Trenton, NJ 08625-0802 or codeassist@dca.nj.gov.



*New Jersey State Plumbing Inspectors Association
2022 Plumbing Inspector of the Year – Mark Bocchino (with Lt. Governor Shelia Oliver, Director Edward Smith, and NJPIA President Calvin King)*



Jerry Eger accepting the 2020 Plumbing Inspector of the Year Award on behalf of Joseph Lariccia, 2021 Plumbing Inspector of the Year Daniel O’Gorman, NJPIA President Calvin King, Assistant Director Kevin Luckie and John Delesandro Supervisor of Enforcement

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*Municipal Construction Officials of New Jersey
2022 Construction Official of the Year – Joseph Hoff (with Lt. Governor Sheila Oliver, Director Edward Smith, Retired Director William M. Connolly, and Piscataway Twp. Mayor Brian Wahler)*



2021 Construction Official of the Year Anthony Neibert, 2020 Construction Official of the Year Steven Guck, Assistant Director Kevin Luckie and John Delesandro, Supervisor of Enforcement

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*New Jersey Association of Technical Assistants
2022 Technical Assistant of the Year – Dencyce Yannazzone (with Lt. Governor Sheila Oliver, Director Edward Smith, and Susan McLaughlin NJATA Treasurer)*



2020/2021 Technical Assistant of the Year Anna Maria Cappelleri, with Monmouth/Ocean Technical Assistants Association President Valerie Waricka, Assistant Director Kevin Luckie and John Delesandro, Supervisor of Enforcement

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*New Jersey Building Officials Association
2022 Building Inspector of the Year – James A. Sabetta (with Lt. Governor Shelia Oliver, Director Edward Smith, and NJBOA President John Fiedler)*



2021 Building Inspector of the Year Jerome Eger with retired Assistant Director Cynthia Wilk, Assistant Director Kevin Luckie and John Delesandro, Supervisor of Enforcement

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*Municipal Electrical Inspectors Association of New Jersey
2022 Electrical Inspector of the Year – David Rudolph (with Lt. Governor Sheila Oliver, Director Edward Smith, and Richard Vigliotti, Jr., NJMEIA President)*



2020 Electrical Inspector of the Year Nick Fabiano, 2021 Electrical Inspector of the Year Anthony Neibert, Assistant Director Kevin Luckie and John Delesandro, Supervisor of Enforcement

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*New Jersey Fire Prevention and Protection Association
2022 Fire Protection Inspector of the Year – Richard Orlando (with Lt. Governor Sheila Oliver, Director Edward Smith, Richard Silvia NJFPPA President and Kevin Batzel, President, Ocean County Fire Prevention and Protection Association)*



2020 Fire Protection Inspector of the Year Scott McCormick with NJFPPA President Rich Silvia, Assistant Director Kevin Luckie and John Delesandro, Supervisor of Enforcement

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2021 Fire Protection Inspector of the Year James Zaconie, NFPPA President Rich Silvia, Assistant Director Kevin Luckie and John Delesandro, Supervisor of Enforcement

Congratulations to all for your hard work and dedication to improving code enforcement in New Jersey!

Looking ahead, the 2023 Building Safety Conference will be a very special event! We are always looking for new and exciting events to add into an already very successful event. We are proud to say that the Conference continues to grow, and the Committee always seeks to meet the ever-changing needs of our community by offering new training opportunities. We are always on the lookout for new ideas, though! If you have an idea, please pass that along through your association or email me at john.delesandro@dca.nj.gov.

We hope to see you all next year at the Hard Rock Hotel May 3rd through 5th. Please save the date and “like” us on Facebook for event updates, room locations and all other important information!

Source: John Delesandro
Supervisor of Enforcement
Office of Licensing and Education

Stainless Steel Deck Fasteners

Hidden deep within the caverns of Chapter 5 of the 2018 International Residential Code, like a diamond in the rough, you will find footnote b. within Table R507.2.3, Fastener and Connector Specifications for Decks. It states: Fasteners and connectors exposed to salt water or located within 300 feet of a saltwater shoreline shall be stainless steel.

We have received a multitude of questions regarding this tiny footnote, including: what is the definition of a saltwater shoreline? Would a lagoon be considered a saltwater shoreline? The footnote states “exposed,” what if the deck is clad with a composite material and sealed with a compatible sealant, would the fasteners and connectors be considered exposed?

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Unfortunately, "saltwater shoreline" is not a defined term within the I-Codes, therefore, Section R201.4, Terms not defined, is applicable which states: "where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies." Merriam-Webster's dictionary lists lagoon as an example of a saltwater shoreline.

You might be thinking that since a lagoon has no waves, there is no salt spray. But salt spray is not the only issue by the shoreline. Because the moisture and salt ions move inland with wind, salt can still be deposited in the soils, leading to high levels of salt in soils that are not next to the water's edge. These areas are likely to have corrosive soils and need the extra protection of stainless steel fasteners. Ocean salts accumulate on metal surfaces and accelerate the electrochemical reactions that cause rusting and other forms of corrosion.

Lastly, the footnote states "exposed" which is incorrectly leading people to believe that cladding or even fiberglass would result in the fasteners and connectors no longer being exposed. That is inaccurate. While exposed in this context means sitting in salt water, the section states "or located within 300 feet." The "or" here is vital, because if your deck is within 300 feet of the coastline, footnote b will still apply. Therefore, covering the deck or sides of the deck with cladding won't necessarily protect the fasteners from dampness in the air and salts.

Based on data from the Consumer Product Safety Commission, more than 6,000 people are injured each year in incidents involving the structural failure of a deck or porch. For this reason, it is important that we build and enforce proper deck building codes to ensure the safety of the current and future occupants of these decks.

Information regarding the designation of a shoreline should be obtained from the local official having jurisdiction (e.g., municipal engineer; floodplain administrator; etc.)

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

Use of Concrete Electrodes as a Grounding Electrode Conductor (GEC)



The use of a concrete-encased electrode as a GEC can be a highly efficient means of grounding a service – if it is installed properly.

The acceptance of a concrete-encased electrode as a GEC as described in Article 250.52, Grounding Electrodes, of the National Electrical Code/2017 is based upon the notion that *the concrete in which the electrode is encased* has direct contact with earth. As described in the informational note, "the presence of insulation, vapor barrier, films or other similar items that separate the concrete from earth is NOT considered to be in direct contact with earth."

In accordance with the UCC at N.J.A.C. 5:23-3.4, Responsibilities - Electrical Subcode, Article 250.52(A)(3), the building subcode official is responsible for performing the inspection. The building inspector should be aware of this requirement when conducting their inspection of the "Ufer ground." If the location of the concrete-encased electrode is an area that requires or utilizes a vapor barrier or is separated from earth via insulation, Article 250.52(A)(3) should be cited as a violation, and the electrode should be relocated.

Source: Scott Borsos
BCPR, Construction Official
(609) 984-7609

Sorry Folks, It's Not a CCO

Since many are loving our redefined world with virtual meetings, humor me for a moment and pretend this is one. So, by a show of hands, how many of you locals have an ordinance "on the books" for resale or new tenant certificates? And of those with your hands raised, how many ordinances refer to this as a continued certificate of occupancy (CCO)? For those of you that put your hands down, thank you, truly. For those of you with your hands still raised, that would be the incorrect reference. Let's review.

(Continued on next page)

A certificate of occupancy is issued for a new building, a reconstructed building, a building with an addition, and a building undergoing a change of use. A certificate of approval is essentially a modification to the original certificate of occupancy and applies renovation and alteration projects in an existing building (and possibly a repair project). Why do I state all this? These are Uniform Construction Code (UCC) terms and apply only to related projects. Now, on to the main issue: the “existing buildings” portion at N.J.A.C. 5:23-2.23(e):

2.23(e) Existing buildings: ***Upon request of the owner of an existing building or structure***, the construction official, with the approval of the subcode officials, shall issue a certificate of continued occupancy provided that there are not violations of law or orders of the construction official pending and it is established after inspection and investigation of available municipal records that the alleged use of the building or structure has lawfully existed. The certificate of continued occupancy shall evidence only that a general inspection of the visible parts of the building has been made, and that no violations of N.J.A.C. 5:23-2.14 have been determined to have occurred and no unsafe conditions violative of N.J.A.C. 5:23-2.32(a) have been found. Nothing in this subsection shall prevent the continued lawful use and occupancy of any such lawfully existing building or structure.

Yes, I know the bold and italic is a bit dramatic. This citation of the UCC is not permitted to be implemented by a local ordinance for a resale or new tenant situation. “Upon request” does not mean that since the local municipality asks for this to occur; it is a request by the owner of the existing building.

In other words, calling certificates what they are – a resale certificate, a new tenant certificate, an inspection certificate for resale or new tenant, etc. – can help avoid a lot of confusion between local inspections and UCC terminology.

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

Gas Piping Burial Depth

Is it an appliance or is it equipment? That is the current debate when it comes to gas piping burial depth, especially when applying Section 404.12 of the International Fuel Gas Code (IFGC) and its twin, Section G2415.12 in the International Residential Code (IRC), Minimum Burial Depth. I note both sections, since one applies to fuel gas installations in all buildings (IFGC) other than those constructed pursuant to the one and two-family dwelling subcode (IRC).

Moving to the text, Section 404.12/G2415.12 of the IFGC/IRC requires underground piping systems to be installed at least 12 inches below grade. Think of this as the equipment burial depth. This section further goes on to say that individual lines to outdoor lights, grills, and other appliances do not have to meet the 12 inches mentioned above; instead, they must be 8 inches below finished grade (and not susceptible to physical damage). So, the 8 inches is the appliance burial depth, provided it is an individual line.

So, what does this mean? Let’s check the definitions:

- **APPLIANCE.** Any apparatus or device that utilizes a fuel or a raw material as a fuel to produce light, heat, power, refrigeration or air conditioning. Also, an apparatus that compresses fuel gases.
- **EQUIPMENT.** Apparatus and devices other than appliances.

Seems simple enough, right? Nope!

Chapter 6 of the IFGC, which is titled Specific Appliances, contains Section 616, Engine and Gas Turbine-Powered Equipment. Well, that doesn’t look confusing at all. As Britney Spears would say, You Drive Me Craaaazy...I Just Can’t Sleep!

In cases like this, refer to the appliance or equipment’s listing and labeling. If listed as equipment, apply 12 inches; if listed as an appliance (on an individual line), apply 8 inches.

If you have further questions, please contact the Code Assistance Unit at (609) 984-7609. If you want to discuss Britney’s performance from the referenced song’s music video, contact Rob Austin at the same number.

Source: Anthony Menafro
BCPR, Construction Official

Unauthorized UL Marks on Combination CO/Smoke Alarms

It has come to the Department’s attention, that a public notice has been issued by Underwriters Laboratories (UL), <https://www.ul.com/news/ul-warns-unauthorized-ul-marks-cosmoke-alarms>, regarding the unauthorized use of “UL” markings/labels affixed to Combination Carbon Monoxide/Smoke Alarms products. The following is a copy of that public notice:



PUBLIC NOTICE

Release No. 22PN-08

Peyton Zylke
Corporate Communications
UL
847.226.3483
Peyton.Zylke@ul.com

UL Warns of Unauthorized UL Marks on CO/Smoke Alarms

NORTHBROOK, IL, May 13, 2022 - The following is a notification from UL that the Combination Smoke/Carbon Monoxide alarms (CO/Smoke alarms) identified below bear unauthorized UL Certification Marks for the United States. UL has not evaluated these CO/Smoke alarms to the appropriate Standards for Safety, and it is unknown if the CO/Smoke alarms comply with any safety requirements.

The CO/Smoke alarms identified below were not manufactured by and are not associated with Siterwell Electronics. The Siterwell Electronics, Model GS811-A, CO alarm marked “Siterwell Electronics” and bearing a UL Certification Mark is not covered by this notice.

Name of Product: Elvicto or vitowell CO/Smoke Alarm Model GS811-A

Remedy: UL recommends that you stop using this product and obtain a properly UL Certified smoke alarm and CO (Carbon Monoxide) alarm.

Identification on the Product:

The vitowell CO/Smoke alarms bear the following marking:



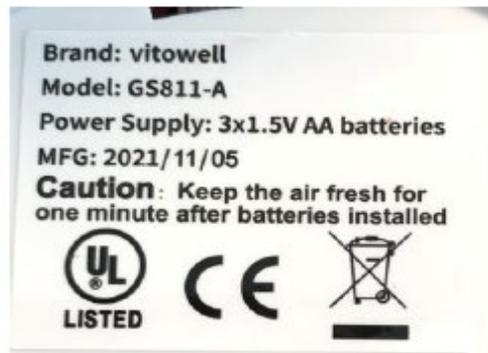
Brand: vitowell
Model GS811-A

The Elvicto CO/Smoke alarms bear the following marking:



Brand: Elvicto
Model: GS811-A

Photographs:



Known to be distributed and sold by: Amazon.com, eBay.com, and online retailers worldwide.

About UL

UL is a global safety science leader. We deliver testing, inspection and certification (TIC), training and advisory services, risk management solutions and essential business insights to help our customers, based in more than 100 countries, achieve their safety, security and sustainability goals. We believe our deep knowledge of products and intelligence across supply chains makes us the partner of choice for customers with complex challenges. Discover more at UL.com.

Source: Keith Makai, Code Assistance Unit
(609) 984-7609

Minor Work and Lead Water Service Replacements

This information is based on a previous article, "Minor Work and Building Drain/Sewer and Water Services," from the Spring 2015 Construction Code Communicator. It has been updated below to reflect today's requirements.

Background

The Department has received calls from project applicants regarding the timeframe for the inspection of the open trench for a water service replacement. This work is often undertaken to replace old lead water services, which can contaminate drinking water with dangerous levels of lead. Because of this, many municipalities make these open trench inspections a top priority for their daily inspections; however, some are requiring these trenches to remain open until the next available inspection date. The Department has been made aware of scenarios in which the next available date is extended from one to two weeks out. This is unacceptable and a violation of the Uniform Construction Code (UCC). Pursuant to N.J.A.C. 5:23-2.18(c)2, inspections must be performed within three business days of the request for inspection.

Because this work ensures public health, it can be considered emergency work, and local offices and inspectors should be directed to put these projects to the top of the list when permit applications are received and when inspections are requested. Any municipality that is not issuing permits or conducting inspections as required should be notified that they must do so immediately.

Replacement of water services is considered Minor Work. Water service replacements for one- and two-family dwellings are addressed at N.J.A.C. 5:23-2.17A(c)1.ii; water service replacements for buildings other than one- and two-family dwellings are addressed at N.J.A.C. 5:23-2.17A(c)2.

Applying the Minor Work Requirements

Pursuant to N.J.A.C. 5:23-2.17A, the applicant must notify the Local Enforcing Agency (LEA) before the work begins. In addition to the notice, a permit application must be filed within five (5) business days from the date of the notice, and the permit fee must be paid prior to the issuance of the construction permit. The issuance of a permit is not required before minor work may proceed. The LEA must perform an inspection within three business days of a request for inspection, and the Certificate of Approval is issued pursuant to N.J.A.C. 5:23-2.17A(d)2

Minor Work requires that the inspection be based upon what is visible at the time of inspection. The connection to the utility and the connection to the existing piping is made on the interior of the building, so the penetration through the wall must be inspected to ensure that both the interior and exterior sides of the wall are sealed properly. The entire trench **does not** need to remain open.

In accordance with the minor work requirements at N.J.A.C. 5:23-2.17A(c)1.ii or (c)2, depending on the structure, the work only needs to be inspected at the connection point at the curb, the connection inside the building, and the penetration of the foundation; the remainder of the trench can be filled in, and sight tubes are acceptable to view the connection points underground.

The contractor can decide necessary areas should be kept open for inspection; some methods include using plates over the open holes or using a removable cap to show piping installed over connections.

Additional Requirements and Information

Any work done to water service system that is owned by the water utility, either in the street or in public or private easement is strictly the jurisdiction of the water utility and subject to their rules and inspection up to the shut-off/meter at the property line.

The water service, from the utility shut-off/meter at the curb into the structure, falls under UCC jurisdiction and is subject to local inspections and permits as necessary.

If the Department decides more oversight is required, N.J.A.C. 5:23-2.14(b)5 may be applied. Similar to the past issue of gas utilities moving meters and the required permits, the Department could require a list of applicable addresses to be supplied, and the inspector would pick a percentage of the entire water service with an open trench to follow the full UCC permit and inspection process, while others would remain minor work. If a certain percentage of the full permit water services fail, then all addresses would be required to have a full permit inspection until no issues are found, then back to percentages.

Source: William B. Schmidt, Thomas Pitcherello, and Anthony Menafro
Office of Regulatory Affairs (609-984-7672) and Code Assistance Unit (609-984-7609)

Pool Inspections Update

This article builds upon the “2015 International Swimming Pool and Spa Code” (ISPSC) memorandum dated July 11, 2016, to Construction Officials from the Director and is intended to focus enforcement effort with regard to swimming pools and spas and to establish priorities. The previous memo stated:

“With the adoption of the 2015 International Codes, the 2015 International Swimming Pool and Spa Code (ISPSC) is adopted by reference as part of the Uniform Construction Code. It should be noted that the provisions of the ISPSC are not new. These provisions were previously contained in referenced standards or in appendices (NSPI/APSP or Appx G).

As always, attention should be given to the requirements relate to safety, including:

- Entrapment hazards (APSP/ICC 7)
- Pool barriers (Section 305/ISPSC)
- Bonding and grounding (Art 680/NEC).”

Now, this is why I say this article builds on the memo. Since then, Responsibilities at N.J.A.C. 5:23-3.4 have been updated to reflect this, and Section 311.1, Hydrostatic Pressure Test of the 2018 ISPSC, should be incorporated above.

For plan review purposes, a general note indicating that the pool or spa will conform to the 2018 ISPSC should be accepted; this will remain for the 2021 ISPSC also. It is not necessary to require plans that show every detail of the pool or spa to be installed. The pressure testing of piping, which has been required since adoption of the 2009 codes, should be included as part of the inspection as this is not easily addressed after concrete has been poured. And again, the inspection should focus on safety: entrapment hazards (plumbing), pool barriers (building), and bonding and grounding (electrical).

All of us are trying to get the job done with scarce resources. Focusing on the requirements of the ISPSC that relate to safety, rather than giving equal import to every detail, will enable local code enforcement agencies to fulfill their responsibility to the public they serve without devoting a disproportionate amount of time to ISPSC enforcement.

Should you have any questions, please feel free to contact the Code Assistance Unit.

Source: Code Assistance Unit
(609) 984-7609

Bureau of Housing Inspection – Understanding “the Act”

The Bureau of Housing Inspection administers the New Jersey Hotel and Multiple Dwelling Law (N.J.S.A. 55:13A-1 et seq.) (hereafter called “The Act”). The Bureau is responsible for ensuring that hotels and multiple-family buildings of three or more dwelling units operating within the State of New Jersey are properly maintained and do not pose a threat to the health, safety, and welfare of their residents, nor the community in general. To achieve these objectives, the Act requires that the Bureau conduct a five-year cyclical inspection of these properties. The Bureau has thereby been given the authority to enforce the New Jersey Regulations for the Maintenance of Hotels and Multiple Dwellings and, where applicable, Subchapter 4 of the New Jersey Uniform Fire Code, by issuing citations for the violation of these requirements.

Under this Act, Condominiums, Cooperatives and Mutual Housing Corporations fall within the definition of multiple dwelling, and as such, are subject to its provisions. Under the Regulations, the Condominium Association, Cooperative or Mutual Housing Corporation, is for the most part considered to have the responsibilities of the “owner” as described in the Act and is responsible for the registration of each building and for the correction of all cited violations. Additionally, it is imperative that the local Uniform Construction Code enforcing agency ensure that no certificate of occupancy is issued for a newly constructed hotel or multiple dwelling until a certificate of registration is presented to the Construction Official (N.J.A.C. 5:23-2.24(e)). This requirement includes all condominiums and townhomes that are not deemed “fee simple” by the Bureau of Housing Inspections.

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The term "Fee Simple" refers to each unit being owned individually and not in the condominium or cooperative form of ownership. The Bureau's policy regarding fee simple ownership in townhouse developments is as follows:

Developments involving fee simple ownership are not subject to the Hotel and Multiple Dwelling Law where the association has no residential building maintenance responsibility; however, in such cases, the association must provide the Bureau with sufficient documentation demonstrating that ownership is fee simple and that individual owners, and not the association, are directly responsible for maintenance of the residential building.

In the case where a townhouse development is deemed "fee simple," the homeowner association and/or their representative will be provided with written confirmation of this "fee simple" exemption from the Bureau. This confirmation can be presented to the Construction Official in lieu of a Certificate of Registration.

Source: Carmine Giangeruso, Chief
Bureau of Housing Inspection
(609) 633-6216

Electrical Panel Recall Due to Thermal Burn and Fire Hazards

It has come to the Department's attention that, according to the Consumer Product Safety Commission, a recall has been issued involving approximately 1.4 million electrical panels, from Schneider Electric™, due to Thermal Burn and Fire Hazards, [Schneider Electric™ Recalls 1.4 Million Electrical Panels Due to Thermal Burn and Fire Hazards | CPSC.gov](https://www.cpsc.gov/Recalls/2022/06/Schneider-Electric-Recalls-1.4-Million-Electrical-Panels-Due-to-Thermal-Burn-and-Fire-Hazards) , for the following products:



Recalled Indoor Load Center Boxes

Name of Product:

Square™ D QO™ Plug-on-Neutral Load Centers, also known as, Load Centers, Breaker Boxes, Electrical Panels

Hazard:

The load center can overheat, posing thermal burn and fire hazards.

Remedy:

Replace
Repair

Recall Date:

June 16, 2022

Units:

About 1.4 million (In addition, 289,000 were sold in Canada)

Description: This recall involves indoor, outdoor and original equipment manufacturer (OEM) Square D QO Plug-On Neutral Load Centers that were installed in homes, recreational vehicles, or commercial establishments, including restaurants, manufacturing facilities and warehouses, commercial lighting and others. The circuit breaker boxes were sold in gray and come in various sizes (square and rectangular). The recalled circuit breaker boxes were manufactured between February 2020 and January 2022, with date codes between 200561 and 220233.

For installed outdoor load centers, the manufacturing date codes are printed on the inside of the cover/door of the unit or on the box itself when the cover/door is open.

For installed indoor load centers, a qualified electrician can locate the interior date codes that are not visible to the homeowner.

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Circuit breaker boxes with covers that were manufactured between December 2019 and March 2022 are also included in this recall. The affected catalog/part numbers can be found inside the electrical panel doors for both the U.S. and Canada.

Recalled Electrical Panel U.S. and Canada Catalog/Part Numbers

CQO116L100PGRB	QO116L125PGRB	QO142M200PRB	QOC24UF	QOC42UF
CQO116M100PRB	QO116M100PRB	QO142M225PRB	QOC24UFW	QOC42UFW
CQO116M60PRB	QO120M100PRB	QO1816M200PFTRB	QOC24US	QOC42US
CQO124L125PGRB	QO120M150PRB	QO816L100PRB	QOC30U125C	QOC54UF
CQO124M100PRB	QO120M200PRB	QOC12UF	QOC30UF	QOC54UFW
CQO140L200PGRB	QO124L125PGRB	QOC12US	QOC30UFW	QOC60UF
CQO140M200PRB	QO124M100PRB	QOC16UF	QOC30UFWG	QOCMF30UC
NQC20FWG	QO124M125PRB	QOC16UFW	QOC30UFWGW	QOCMF30UCW
NQC20FWGW	QO130L200PGRB	QOC16US	QOC30US	QOCMF42UC
NQC30FWG	QO130M150PRB	QOC20U100F	QOC32UF	QOCMF42UCW
NQC30FWGW	QO130M200PRB	QOC20U100FW	QOC32UFW	QOCMF54UC
QO112L125PGRB	QO140L200PGRB	QOC20U100S	QOC40UF	QOCMF54UCW
QO112L200PGRB	QO140M200PRB	QOC20UFWG	QOC40UFW	QOCMF60UC
QO112M100PRB	QO142L225PGRB	QOC20UFWGW	QOC40US	QOCMF60UCW

Remedy: Schneider Electric is directly contacting all known retailers, distributors, homeowners, and any other individuals that purchased or installed the recalled product. All purchasers and installers should immediately contact Schneider Electric to arrange to have the recalled load centers inspected by trained electricians to determine if replacement or repair is required. This inspection and any resulting replacement or repair is free of charge.

Consumers can find the catalog number and date code on their interior load centers inside panel door. Consumers should immediately contact Schneider Electric to arrange to have the recalled load center inspected by a trained electrician to determine if repair is required. This inspection and any resulting repair are free of charge. Consumers who continue to use the load centers while awaiting the free repair should have working smoke alarms in their homes.

For uninstalled products, consumers should contact Schneider Electric for a free repair or replacement.

Incidents/Injuries: The firm has received one report of an incident of a loose wire. No injuries have been reported.

Sold At: Authorized Schneider Electric distributors and home improvement and hardware stores nationwide and online including Home Depot, Lowe's, and Menard's from February 2020 through January 2022 for between \$90 and \$1,660.

Manufacturer(s): Schneider Electric USA Inc., of Lexington, Kentucky

Manufactured In: United States

Recall number: 22-159

Please make sure your fire officials are aware of this voluntary recall so that panels can be identified upon inspections for resale, re-occupancy or when performing routine inspections. If any of these panels were installed, the consumers need to contact Schneider Electric for a free replacement.

Source: Keith Makai
Code Assistance Unit
(609)984-7609

Happy Retirement "Tommy Pitch" 

Thomas Pitcherello retired on July 1, 2022 after more than 23 years of service. We could easily fill up a page of Tommy's accomplishments during his tenure at the Department but we would simply like to you to join us in wishing him a long, happy, and healthy retirement!

Existing Buildings and Thermal Envelopes

For those that look at an existing building and immediately quote Rehab by Amy Winehouse, “They tried to make me go to rehab, but I said no, no, no.” Then you need to stop and say “Yes, Yes, Yes!”

Silliness aside, the applicability of the energy subcode requirements for any project in an existing building is specified in the rehabilitation subcode, N.J.A.C. 5:23-6.

When it comes to the building thermal envelope, one should review subsection (e) within the renovation, alteration and reconstruction sections. Here it states that when the work being performed creates or exposes the roof decking/sheathing or the framing of any wall, floor, ceiling, or roof assembly that is part of the building thermal envelope (enclosed conditioned space), any accessible voids in insulation shall be filled using insulation meeting the R-values/U-factor of tables of the energy code per the applicable framing method. These sections also state that if insulation meeting the R-values of these tables cannot be installed due to space constraints, insulation that fills the cavities of the framed assembly must be installed.

For reference, the tables for Zones 4A and 5A can be found within (1) Section N1102.1 of the International Residential Code/2018 (IRC/2018) for one- and two-family detached dwellings and single-family attached townhouses, all 3 or fewer stories in height, (2) Section R402.1 of the International Energy Conservation Code/2018 (IECC-R/2018) for all other residential, 3 or fewer stories in height, or (3) Section 5.5 of the ASHRAE Standard 90.1-2016 for all remaining building types.

Walls

The language above does not require exposed wall framing members to be extended so that whatever insulation material chosen fills the space in meeting the values of the energy code. It is simply stating that the portion of the existing wall, regardless of size, should be filled with a recognized insulation material of the applicant's choice. So, if someone chooses to use batt insulation versus spray-foam insulation, that is perfectly acceptable (even though spray-foam will provide a better R-value per inch) as long as the existing frame is filled. Going further, if someone chooses to finish their basement by framing out of existing walls with 2x4 studs and uses batt insulation that does not meet current energy subcode R-values, this is still acceptable. The end goal here is to prevent thermal envelope breaks and provide some resistance for heated/cooled air to escape.

Roofs

Like the wall scenario above, the goal is to achieve the maximum thermal value possible based on the space constraints. The available space of the thermal envelope being opened must be filled with insulation. In terms of roofing, if all insulation is above the roof, space constraints made by parapet walls and/or vents and equipment may limit the ability to install insulation. In most cases, the existing level of insulation is merely maintained due to these roofing issues. If there are no space constraints, insulation should be added to the maximum extent possible in accordance with the tables mentioned above.

So, to wrap this up, don't be like Amy Winehouse. Apply rehab appropriately when it comes to an existing building and its thermal envelope by aiming for the best thermal envelope you can. Whether based on the scope of the project and the available space within the existing framing (what is exposed) or within the chosen framing (what is created).

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

New Gas Piping System Approval

The Department has recently received information that a new PEX pipe and fitting product for gas installations may have been installed in some municipalities in violation of its approval. The product, Jones Stephens PEX-AL-PEX Gas Pipe and Fitting System, also known as Pexal Gas Piping, has achieved an ICC-ES product certification report (PMG-1588, <https://icc-es.org/report-listing/pmg-1588/>) which, in short, provides for:

(Continued on next page)

Compliance with the following codes:

2021, 2018, 2015, 2012 and 2009 *International Fuel Gas Code*® (IFGC)
2021, 2018, 2015, 2012 and 2009 *International Residential Code*® (IRC)
2021, 2018, 2015, 2012 and 2009 *Uniform Plumbing Code*® (UPC)*

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Compliance with the following standards:

ASTM F1281-2017(2021)e1, Standard Specification for Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Pressure Pipe
ISO 17484/AS 4176.8-2010, Metal-Plastic Multilayer Pipes and Brass Fittings for Conveying Combustible Gases for System in Pressure Up to 5 bar.

Installation:

All systems must be installed by qualified installers in accordance with the manufacturer's published installation instructions, which are provided with the product. Installation must conform to the requirements of the applicable code and is subject to approval by the code official having jurisdiction.

Authority Having Jurisdiction for the area in which this product is to be installed, shall have the final decision for compliance to Section G2415.17 of the IRC, Section 404.17 of the IFGC, and 1210.1.7 of the UPC.

As you can see, the product was tested to be installed in buildings constructed in accordance with International Residential Code (IRC) and International Fuel Gas Code (IFGC), 2009 through 2021 editions. More importantly, even though tested to be allowed within these buildings, when installed, it is still required to meet the parameters and limitations of Section G2415.17 of the IRC and Section 404.17 of the IFGC, Plastic Pipe. Note that these sections are for the installation of plastic pipe and limit the installation to outdoors and underground. In other words, this product should not be installed in the interior of a building or structure.

To date, the manufacturer has not sought additional scoping or testing of this product. The Department has advised the manufacturer of the installation limitations of the product and to provide the Department with any updated approvals as they are obtained. If you require additional guidance on this issue, please contact the Office of Regulatory Affairs at (609) 984-7768 or the Code Assistance Unit at (609) 984-7609.

Source: William B. Schmidt
Investigator
Office of Regulatory Affairs

Industrialized/Modular Buildings: Process

The Department continues to receive questions related to the installation process of Industrialized/Modular Buildings, regarding requirements for submission of documents with the construction permit application, and the municipal enforcing agency's responsibilities with respect to inspection(s) and the issuance of Certificates of Occupancy (COs).

Background: The first thing one should know is that the State of New Jersey is part of a compact that only accepts premanufactured construction with certification labels issued by the Interstate Industrialized Building Commission (IIBC). In order to participate in the program, all manufacturers must register with IIBC and then partner with one of its listed/registered third-party inspection agencies, for the plan review and inspection of units being manufactured.

Process: In a nutshell, all premanufactured modules receive an IIBC label which certifies the unit(s) as being code compliant. The owner and/or their agent will be responsible to apply for Uniform Construction Code (UCC), N.J.A.C 5:23, permit to the Authority Having Jurisdiction (AHJ), otherwise known as the local Construction Official, for any site work construction (e.g. - building a foundation, connections of multiple units, etc.).

(Continued on next page)

Guidance: Following the guidance provided in UCC Bulletin 07-1, Premanufactured Construction, (<https://www.nj.gov/dca/divisions/codes/codreg/ucc.html>), the following defined terms can be found: *Building Component*; *Building Element*; *Industrialized/Modular Building*; *Manufactured (Mobile) Home (a.k.a. HUD unit)*; and *Recreational Park Trailer*. Depending on the category and/or defined term that the project falls under, a table can be located on the last page of UCC Bulletin 07-1, which redirects users to the applicable code section(s) of either the UCC or the Uniform Administrative Procedures (UAP). Currently, NJ has adopted the “2018-edition” of UAP.

(*Note: As of August 5, 2019, the initial installation of manufactured HUD units, is/are under the jurisdiction of the Federal Government. The contact number for HUD’s Newark, NJ field office is (973) 776-7200. For more information, please see page 13 of the Construction Code Communicator from Fall/2019, entitled “Manufactured (HUD) Homes - UCC Role”, <https://www.nj.gov/dca/divisions/codes/resources/ccc.html>).

Local Enforcement Procedures and Inspection: Local enforcement, procedures for filing documents, performing inspections, and issuance of a CO can be located in Part IV, Section 6 of the Uniform Administrative Procedures (UAP) of the Industrialized Buildings Commission, as adopted at N.J.A.C. 5:23-4A.7, which reads as follows:

SECTION 6. LOCAL ENFORCEMENT AGENCY PROCEDURES AND INSPECTIONS

(A) Local enforcement agencies shall issue building permits for certified industrialized/modular buildings prior to installation and shall not withhold issuance of building permits for buildings containing certified building components which in all other respects comply with the codes. An application to a local enforcement agency for a building permit shall, when requested, in addition to any other requirements, contain the following.

(1) A statement that the work to be performed under such permit is to include the installation of certified industrialized/ modular building or building component in accordance with the provisions of these Uniform Administrative Procedures. The statement is to be signed by the applicant or their agent, with the appropriate address.

(2) Schematic floor plan layouts and typical elevations showing the arrangement and layout of the specific building to be manufactured and installed wherein the manufacturer references the building, building systems, or building component approvals of the evaluation agency. Such schematic floor plan layouts and typical elevations need not include sections, construction details, or structural, plumbing, mechanical, and electrical layouts or details typical to the building, building systems, and building component approvals of the evaluation agency. These schematic plans need not be prepared by or sealed by an architect or engineer.

(*Note: for details regarding Compliance Assurance Documents, see Part IX, Sec.-1(A) of the UAP.)

(3) Detailed plans shall be prepared for any site-built construction related to the installation of the industrialized/modular buildings or building components. The plans shall be sealed by an architect or engineer if the participating state’s law requires it in connection with the type of building involved. Nothing herein shall be construed to limit the issuance of partial permits, such as footing and foundation permits, where permitted by the code.

(*Notes:

1. See “On-site Work” (Installation, assembly, etc.) from UCC Bulletin 07-1; also see UCC Bulletin 94-4 for Partial Plan Filing and Approval.

2. For any site-built construction, the plans shall be sealed by an architect or engineer unless the plans are submitted by a single-family homeowner building their own private residence.)

(4) Installation instructions for the industrialized/modular building or building component, as set forth in these Uniform Administrative Procedures.

(B) Local enforcement agencies shall inspect work performed on site, including foundations and the structural, mechanical, plumbing, and electrical connections, for compliance with the Uniform Administrative Procedures.

(*Note: see item #3, “Required Inspections by Local Enforcing Agency”, from UCC Bulletin 07-1.)

(C) Local enforcement agencies shall inspect all industrialized/modular buildings or building components upon, or promptly after, installation at the building site to determine whether all site-built work is in accordance with the plans filed with the permit application, the installation instructions, and the conditions listed on the manufacturer’s data plate. This may include tests for tightness of plumbing connections done on site and for malfunctions in the electrical system, and a visual inspection for obvious nonconformity with the approved plans or the code.

(1) Destructive disassembly of certified industrialized/modular buildings and building components shall not be performed in order to conduct such tests or inspections, nor shall there be imposed standards or test criteria different from those adopted by the participating state having jurisdiction. (2) Nondestructive disassembly may be performed only to the extent of opening access panels and cover plates.

(3) Systems tested during manufacture shall not be subjected to retesting at the building site.

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(D) Local enforcement agencies shall issue certificates of occupancy for certified industrialized/modular buildings, and for buildings containing certified building components, which otherwise comply with all codes, after they have been installed and inspected pursuant to these Uniform Administrative Procedures, provided that any industrialized/modular building or building component found not to comply with the plans filed with the permit shall be brought into compliance before such certificate of occupancy shall be issued.

(E) When the local enforcement agency is making an inspection and finds that the building contains violations to these Uniform Administrative Procedures in work covered by the inspection agency's approval, it shall report the details of such violations in writing to the inspection agency. Where violations are hazardous to occupants, a certificate of occupancy shall not be issued, and the building shall not be occupied before such hazards are corrected. If the violations are not hazardous, a provisional or temporary certificate of occupancy shall be issued.

Please visit IIBC's website at <https://interstateibc.org/>, to view the 2018 UAP (under "codes and regulations" tab, select "Forms and Regulations"), approved inspection/evaluation agencies (select "Designated Agencies and Personnel" tab), and a list of approved manufacturers.

Source: Keith Makai
Code Assistance Unit
(609) 984 - 7609

Multifamily Dwellings and Elevators for Accessibility

Well, this information has been provided not once (Spring 2016), but twice (Fall 2019) – but it is worth revisiting. So, this article addresses when an elevator is required in a typical condominium or apartment building pursuant to Chapter 11, Accessibility, of the International Building Code (IBC).

So, for starters, are there four or more dwelling units in the residential building? Yes? Great, then the text of the code will apply. Let's look at this through the lens of a typical apartment building via Section 1107.6, Group R.

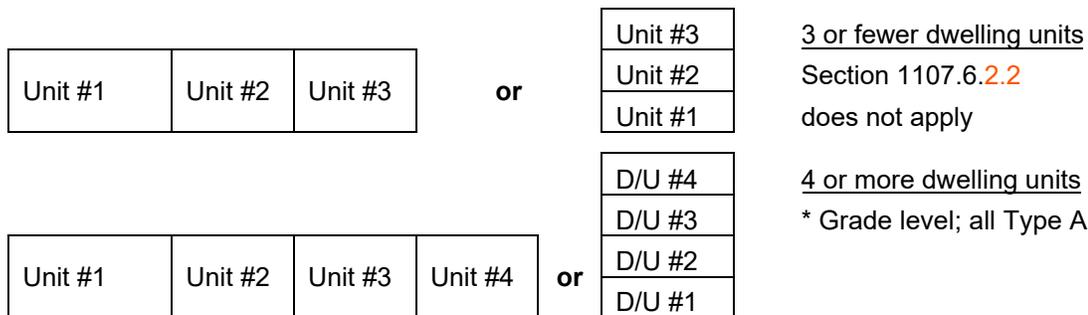
Start with Section 1107.6.2.2 and, more specifically, Subsection 1107.6.2.2.1. Note that this subsection does not reference Table 1107.6.1.1 and instead states that a building containing four or more apartments will be as such:

- Dwelling units at ground level: All units at ground level must be Type A and no elevator is required.

OR

- No dwelling units at ground level: An elevator would now be required to provide access to at least the first level of residential units, and all units on that level would be Type A units.

To add a visual element, here are some examples:



Code references
updated 08/30/2022

(Continued on next page)

Unit #1	Unit #2	Unit #3	Unit #4
Rose Apothecary		Café Tropical	

4 or more dwelling units

- * No units at grade level
- * Elevator required to at least first level of units
- * Type A for units served by elevator

Unit #2	Unit #3	Unit #4	Unit #5
Rose Apothecary	Café Tropical		Unit #1

4 or more dwelling units

- * One unit at grade level, Type A
- * Units on second story, N/A
(unless elevator is chosen to be installed)

Unit #2	Unit #3	Unit #4	Unit #1
Rose Apothecary	Café Tropical		

4 or more dwelling units

- * Multi-level at grade level, Type A features on first level¹
- * Units on second story, N/A
(unless elevator is chosen to be installed)

¹ – Type A features per Section 1107.7.1, Multistory units

It should also be noted that once an elevator is provided, all of the floors it serves within the building must be comprised of Type A dwelling units.

And now, we've covered the information thrice – eww, David!

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

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