Construction Code Communicator

State of New Jersey
Philip D. Murphy, Governor

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

Volume 33, Number 1 **Spring 2021**

NJ Licensed HVACR Contractor and Electrical Work: Article Revision

An article relating to the above was published in the Fall 2017 edition (Volume 29, Number 3) on page 14 of the *Construction Code Communicator*.

In the last paragraph, that article states: "An electrical technical section and inspection would be required for the replacement. The HVACR contractor is permitted to sign the electrical technical section as an exempt applicant. The HVACR contractor should also seal the technical section with their HVACR seal."

This article seeks to revise that paragraph, as follows:

> "An electrical technical section and inspection would be required for the replacement. The HVACR contractor is permitted to sign the electrical technical section as an exempt applicant. They should also put their HVACR License number on the section. The HVACR contractor should **not** seal the Electrical technical section with their HVACR seal."

Should you have any questions, please contact me.

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

In This Issue

Electric Vehicle Charging Stations – Installation and Permit Requirements

The growing need to offer drivers relief from the increasingly high cost of gasoline has produced various models of vehicles powered by alternate sources, e.g. natural gas, hybrid, and electric, to name just a few. The purpose of this article is to provide you with technical and administrative guidance on the installation of electric vehicle (EV) charging stations.

An EV charging station supplies electricity to recharge electric or plug-in hybrid vehicles at voltages and currents that minimize the charging time. Even though most electric cars can be recharged from a typical 120-volt wall receptacle, the charging time for a fully depleted battery can take longer than the typical eight-hour overnight charge. This makes EV charging stations a practical means of faster charging.

The Society of Automotive Engineers (SAE) classify EV charging stations as alternating current (AC) and direct current (DC) charging categories per standard document J1772:

AC Charge Method	**Voltage (AC V)**	**Phase**	**Max Current (A, continuous)**	**Branch Circuit Breaker Rating (A)**	**Max Power (kW)**
AC Level 1	120	1-phase	12	15 (min)	1.44
			16	20	1.92
AC Level 2	208 - 240	1-phase	≤ 80	Per NEC 625	Up to 19.2
DC Charge Method	**EVSE DC Output Voltage (DC V)**			**Max Current (A)**	**Max Power (kW)**
DC Level 1	50 to 1000			80	80
DC Level 2	50 to 1000			400	400

- Appendix M of the SAE J1772, a third AC charge method was also considered but it was never implemented. This AC Level 3 mode would have used up to 96 kW at a nominal voltage of 208 to 240 V AC and a maximum current of 400 A.

As the table above indicates, to speed up the charging process, electric vehicle owners will probably opt to install an AC Level 2 charging station at home, while businesses and local government may provide AC Level 2 and DC Level public charging stations.

Just like any other electrical installation, the charging systems for electric vehicles must comply with the subcodes adopted by the State of New Jersey in the Uniform Construction Code (UCC). In fact, the installation of electric vehicle charging systems is addressed in Article 625 of the 2017 National Electrical Code (NEC) as adopted in the UCC.

The most common questions about electric vehicle charging stations pertain to listing and labeling requirements. Most electrical equipment is listed and labeled per Section 625.5; this makes the approval of the equipment for the installation and use a “no brainer”. However, what does one do when there is no clear listing or labeling? N.J.A.C. 5:23-3.7, Municipal approvals of alternative materials, equipment, or methods of construction, provides regulations to assist in the approval of equipment that does not have the standard listing and labeling. A testing agency may verify the installation and the intended use, which means that the equipment complies with Section 625.5. Note that, according to Sections 625.15(B) and (C), indoor charging stations may require special ventilation per their listing and labeling or testing.

Another common question: When are permits required for the installation of charging systems for electric vehicles? At N.J.A.C. 5:23-2.14, Construction permits, when required, the UCC does not require a permit for cord-and-plug-connected electrical equipment. This includes equipment that is capable of being plugged into an existing receptacle regardless of the equipment’s voltage rating. If the existing receptacle has the proper voltage rating, but the configuration is not compatible with the plug on the equipment, the replacement of the receptacle to one with the proper configuration would be considered Ordinary Electrical Maintenance [N.J.A.C. 5:23-2.7(c)3.i.] and no permit for, inspection, or notice to the enforcing agency of Ordinary Maintenance is required. However, there are exceptions to this rule. For example: if there is an existing 120-volt receptacle on a 15 amp circuit that is to be replaced by a higher current 120 volt receptacle that requires a 20 amp circuit, the upgrade of the circuit would be considered Minor Work [N.J.A.C. 5:23-2.17A(c)4].

(continued on next page)

(Electrical Vehicle Charging Stations – Installation and Permit Requirements)

When a vehicle charging system is being installed that requires a new 120 or 240-volt receptacle or an electrical line that will connect directly to the system, it is also subject to the Minor Work provisions. As with all Minor Work, the issuance of a permit is not required before the work may proceed. However, the owner or contractor acting on behalf of the owner must provide notice to the enforcing agency before the work begins. Additionally, a permit application must be filed with the local enforcing agency within five business days from the date of notice. The inspection of Minor Work must be performed within three business days of the request for inspection and is based upon what is visible at the time of inspection with the certificate of approval stating so.

The following are some examples that describe the different charging needs of vehicles that you may encounter:

- The 2020 Chevrolet Bolt has a 66-kWh lithium-ion battery and a 7.2-kW onboard charging module. The EPA states that the range is 259 miles and the energy efficiency is 118 MPGe. It can use its portable charge cord at AC Level 1 (120 V, 12 A) to get up to 4 miles of range per hour or go off an AC Level 2 charging unit (240 V, 32 A) to get up to 25 miles of range per hour. Using an optional DC fast charging port, the Bolt can also charge at up to 55 kW to get up to 90 miles of range per half hour.
- Owners of the high-end Tesla vehicle are offered similar charging stations as described above (Level 2 charging at 277 V). They are similar to 208 V, but your familiarity would be more so to the receptacle of your electric dryer. In addition, they also have the option of a "universal mobile connector" which provides multiple adapters. Therefore, dependent on adapter, there may be more issues to look at along with the example given above wherein the 120-volt receptacle is upgraded from 15 amps to 20 amps.

Many of those who purchase electrical vehicles will find the installation of a home charging station necessary; this should not be a deterrent for those considering electric vehicles. If you have any questions on this matter, you may reach Code Assistance at (609) 984-7609.

Source: Rob Austin, Code Assistance/Development Unit

Visible Alarm Notification – Updated

Back in the Spring of 2007, a CCC article was published on page 16, entitled "Visible Alarm Notification – IBC/2000 and ICC/ANSI A117.1-1998: Clarification of the Winter 2005 Communicator Article." Since then, code sections and editions have changed concerning the installation of visible alarm notification devices.

According to Section 907.2 of the 2018 International Building Code (IBC), all new structures must provide "an approved fire alarm system installed in accordance with the provisions of this code and NFPA 72" and provide "occupant notification in accordance with Section 907.5." More specifically, section 907.5.2.3, entitled "Visible alarms", identifies "when" the installation of visible alarms devices would be required.

In general, areas open to the public require installation of visible alarm notification devices, in accordance with Section 907.5.2.3.1 from the 2018/IBC. Examples are described on page 12 of the CCC article from Spring/2008, entitled "**Public and Common Area Visible Alarms"** (https://www.nj.gov/dca/divisions/codes/publications/pdf_ccc/2008_v20.pdf). In addition, for Groups I-1 & R-1, Section 907.5.2.3.2 requires that only a "percentage" of dwelling units and sleeping units be provided with visible alarm notification devices, as specified in Table 907.5.2.3.2.

However, for Group R-2, Section 907.5.2.3.3 states that dwellings units must provide the "capability of supporting visible alarm notification devices in accordance with Chapter 10 of ICC A117.1-2009." In other words, installation of the visible alarm notification devices may be applied as an "adaptable feature." Examples of this can be found on page 10 of the CCC article from Fall/2019, entitled "**Accessible and Type A Dwelling Units**" (https://www.nj.gov/dca/divisions/codes/publications/pdf_ccc/CCC_Fall_2019.pdf). At a minimum, the wiring for the notification appliance must be in place for the future installation of a visible alarm notification appliance.

In short, the 2018/IBC specifies *which* types of alarms systems would be required depending on the use group, then redirects designers to other codes like NFPA 72 (as per Section 907.2/IBC noted above), ICC A117.1 (see Section 1006.4), etc., which explains *how and where* to install the devices. The designer may choose to install devices in any number of locations, as long they meet minimum standards of this code. Devices are required to be specifically "listed and labeled" and cannot be removed or deactivated, unless reviewed and approved to do so by both the local fire official and fire subcode official. For more information, please see page 10 of the CCC article from Spring/2020, "Fire Protection System Removal" (https://www.nj.gov/dca/divisions/codes/publications/pdf_ccc/CCC_Spr_2020.pdf).

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

Conflict of Interest: Spring 2019 Follow Up

A question was raised about conflict-of-interest permits. The Spring 2019 issue of the *Construction Code Communicator* stated that when a local enforcing agency (LEA) has a permit that raises a conflict, it must seek help from another LEA. Some think the conflicted LEA abandons all authority. In practice and reality, the two LEAs must work together. Just because a permit raises a conflict does not mean that it's exempt from the regulatory requirements of the UCC.

N.J.A.C. 5:23-4.5 specifies the administrative and enforcement duties for LEAs, their construction officials, and technical staff. N.J.A.C. 5:23-4.5(j) deals with conflicts of interest; N.J.A.C. 5:23-4.5(j)1ii requires the supporting LEA to maintain a separate log of all inspections and enforcement procedures. The supporting LEA is responsible for plan review, inspections, and approvals. Permits have other requirements. A public record must be kept in the correct place. The correct fees and prior approvals must be used. State training fees must be collected and reported by the correct LEA. The construction activity authorized by the permit must be reported as occurring in the correct location. In all instances, the correct place is the LEA with the conflict, not the one asked to help.

How should LEAs handle conflict? They must divide duties, not abandon them. Plan review, inspections, and approvals are left to the supporting LEA. The recording of the fees submitted by the applicant; the verification of prior approvals; and record keeping and reporting all remain the responsibility of the LEA with the conflict.

The Department will propose language intended to remove confusion. When a LEA determines there is a conflict of interest pursuant to N.J.A.C. 5:23-4.5(j)1, the permit application must be sent to the supporting LEA who maintains all contact with the applicant until the certificate of occupancy/approval is issued. No plan review, permit issuance, inspections, approvals, or certificate issuance should be performed by the conflicted LEA. The conflicted LEA remains responsible for record keeping and reporting to the Department. The supporting LEA must work with the conflicted LEA to ensure that the permit(s) and any updates are recorded and reported accurately and in a timely fashion by the LEA where the activity occurred. The fee schedule used on the project is that of the conflicted LEA, the municipality where the project is located. State training fees for the project and the reporting of the project to the Department are to be submitted by the conflicted LEA.

The Department intends to propose these changes. Some construction officials believe they are in violation of the conflict of interest regulations when they submit training fees and report activity on projects located in their municipality when the code enforcement was performed by another LEA; this was never the position of the Department.

If you have any questions, do not hesitate to contact the Office of Regulatory Affairs at (609) 984-7672 or the Code Assistance Unit at (609) 984-7609.

Source: Robert Hilzer, Office of Regulatory Affairs
John Lago, Division of Codes and Standards

Mechanical Permits – Power Vented Water Heaters

There is some confusion around an article on page 15 of the Fall 2019 edition of the *Construction Code Communicator* (Volume 31, Number 3), entitled "When to use the Mechanical Technical Section", as to whether an electrical Tech Section is required when a like for like power vented, gas-fired water heater is replaced.

Please refer to page 17, "Water Heater – Gas," Direct Replacement/New installation, existing dwelling, under "E" where the chart indicates with an asterisk (*) that an Electrical Tech Sheet is required. The * indicates in the footnote that electric is required if the replacement is power vent exhaust.

The intent was that if the existing water heater was a natural draft and the new water heater is a power vented exhaust, then an electrical tech sheet is required because electric is required for the new heater.

If the existing water heater was a power vented exhaust and the new water heater is a power vented exhaust and plugged into an existing outlet, then an electrical tech sheet is not required. I hope this article clears up the confusion.

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

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.

Referenced Standards

The Department has been receiving an increased amount of inquiries regarding referenced standards and the edition that applies. In short, check the Referenced Standard chapter of the applicable model code.

To best explain this, an example is always helpful. Let's take Section R327.2 (Equipment listings) of the International Residential Code/2018 (IRC/2018). Here you will find a reference to UL 9540. Yes, there is no year noted. Why? Because it is located within Chapter 44 of the IRC/2018. Following the list alphabetically, you'll find "UL" and then see "9540—14: Outline of Investigation for Energy Storage Systems and Equipment" and the sections of the model code where the references can be found. The "14" here means that the IRC/2018 references the 2014 version of this standard. Any information referenced within this standard would be assumed that it is 2014 or year prior.

So, consider this a simple "road map" in navigating this concept in the model code. I know, most do not use road maps anymore (I'm looking at you, Google and Apple) but when in doubt, go back to the basics.

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

Whole House Generator, Sizing of Conductors

There appears to be some confusion, and possible contradiction, regarding past *Construction Code Communicator* articles about generators. As we know, sections of the code can change with every new edition. This article is intended to allay any further confusion.

The provisions of article 310.15(B)(7) of the electrical subcode, the National Electrical Code/2017, permit the reduction in feeder size when supplying one- and two-family dwellings and allow for the ampacity of SE conductors/feeders to be reduced to no less than 83% of the service/feeder rating, provided the generator supplies the "entire load" of the structure.

The definition of feeder is key to understanding the application of code. Per the electrical subcode, a Feeder is defined as, "All circuit conductors between the service equipment, the source of a separately derived system, or other power supply source and the final branch-circuit overcurrent device."

In review of the definition above, the "other power supply" can be applied to an optional standby generator. If the "other power supply", (i.e. generator), supplies the "entire load," meaning no load shedding capabilities, then the reduction in ampacity of these conductors, with respect to the feeder or service rating, shall be permitted.

The supporting *Code Communicator* article dealing with this issue can be found on pages 9 and 12 of the Spring 2016 CCC as "Generators Revisited".

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

Source: Scott Borsos
Bureau of Construction Project Review

Communication in the Time of COVID-19

It is difficult to believe that it has been over a year since COVID-19 first changed our day-to-day lives, especially with the many safety restrictions that have been introduced in the workplace. The Division recognizes that inspectors, contractors, and the public at large are all still finding their footing in adapting to these changes in order to move ahead with tasks and responsibilities. Perhaps as a consequence of this, the Code Assistance Unit has been receiving a number of calls regarding lapses in communication. This article is meant to serve as a reminder that, with social distancing being the "new normal," the need for increased communication is now more important than ever. Phone calls the day before – or even the morning of – an upcoming inspection are helpful for both parties; the code official is able to confirm his or her schedule, and the contractor doesn't have to wait on site all day for a quick inspection. This saves time and frustration for everyone involved, especially as work continues throughout this time.

Source: Neil Nagy
Bureau of Construction Project Review

Rehab Now References New (2018/2017) Codes

After many inquiries into the status of the updated model codes in the Rehabilitation subcode, the update was finally adopted February 16, 2021 at 53 N.J.R. 245. And even if you feel fully done with the 2015/2014 references, don't forget you still have a six-month grace period per N.J.A.C. 5:23-1.6 (in other words, a complete permit application submitted on or before August 15, 2021 may still utilize the previous codes).

So, what does this mean? Let's apply this to an example. Back in the Fall 2019 edition of the *Construction Code Communicator*, "Section R324, Solar Energy System Pathways, Roof Access, and Setback Requirements" was published on page 9. This article informed readers that the provisions of the newly adopted one- and two-family dwelling subcode, 2018 International Residential Code (IRC), now contained requirements that would restrict placement of the solar energy system on certain portions of the roof. This meant that newly constructed homes, from the ground up, would be required to comply if these items were installed.

- https://www.nj.gov/dca/divisions/codes/publications/pdf_ccc/CCC_Fall_2019.pdf

As for existing homes, at that time, they were to follow the 2015 IRC as adding a solar energy system was considered an alteration project and the materials and methods prevailed on the installation. This remained the case until the date noted above. The Rehabilitation Subcode now contains the newest model code references and is to be applied as such. However, those applicants that would prefer the 2015 IRC requirements need to submit their complete permit application before the grace period ends.

Source: Code Assistance
(609) 984-7609

Hoistway Access Switches and Operation

For those involved in the elevator industry, safety is always the top priority. In addition to protecting the general public, the codes provide safe conditions for field personnel, such as mechanics, apprentices, and inspectors. More specifically, there are devices for elevators that are utilized by the qualified personnel in the construction, repair, and inspection phase of a project.

It has therefore come to the attention of the Department that one such device produced by various manufacturers, the elevator controller, contains a software flaw. The flaw pertains to the function of the Access key switch, normally located at the top and bottom of the hoistway. The operation of these switch devices is defined in ASME A17.1-2016, Section 2.12.7.3; the requirement has remained the same in previous code editions. The problem remains that these controllers allow movement of the car when the car doors and hoistway doors are in the closed position. It is a violation of the code to allow for car movement from a location other than the floor where a car was put on access. Only the key switch adjacent to the car can allow for movement. In other words, access key switches away from the floor other than where the car is located cannot move the car; consequently, these controllers are in violation of the code by including a switch non-adjacent to the car which allows it to travel the full length of the hoistway. Sections 2.12.7.3.3(c) and (d) dictate the distance of travel in vertical directions with the switch ***adjacent*** to the car. This could pose a hazard to someone who is working on the car top or bottom within the pit.

Based on the above, it is imperative to check the car on inspection that hoistway access is inoperative as per section 2.12.7.3.2(e). This must be tested in the construction phase and on existing elevators. In the event of a flawed controller, it should be documented for correction. It is the Department's goal to work together to provide a safe elevator industry for the general public and for those who work to install, maintain, and inspect elevators.

Source: Dan Tober, Division of Codes and Standards

Save the Date - The Building Safety Conference of New Jersey is Back!

The 2021 Building Safety Conference of New Jersey is planned for Wednesday September 8th through Friday September 10th at the Hard Rock Hotel and Casino in Atlantic City.

We are still in the process of planning out the event and waiting on re-opening guidance to make the event a successful one. This will be the first face-to-face training event for 2021, and we want to make it a special and memorable one. As soon as details emerge, we will get email blasts and the registration brochure out to all.

We hope to see you all in Atlantic City!

Source: John Delesandro
Building Safety Conference Committee

Generators in the NEC and NFPA 110

The intent of this article is to demonstrate other referenced codes within the electrical subcode, 2017 National Electrical Code (NEC), regarding generators. Starting with the NEC:

- Article 700.3(F) includes requirements for an alternate source of power in the event of an outage;
- Article 700.8 states that surge protection is required on all switchboards and panelboards, not just the distribution equipment; and
- Article 700.10(D)(3) applies to integrity of the start circuit only when the specifications of Article 700.10(D)(1) are met.

It is also important to note when sections specify whether the local enforcing agency (LEA) needs to be present for the testing of a system. For example, Articles 700.3(A) and 701.3(A) require the LEA to conduct or witness the testing of the complete system when the installation includes an Emergency or Legally Required Standby Systems; this is not the same for Optional Standby Systems, and Article 702 does not contain similar requirements for the witness of testing.

Please also note that, whenever relevant, transfer equipment must be provided with field labeling of AIC ratings.

Correlating portions of the NFPA 110-2016, in relation to "gensets," is as follows:

- Section 7.9.7, which addresses natural gas, states that the fuel connection must be made before the main gas is shut off.
- Section 5.6.5.6 requires an additional remote stop to be located outside of the room or enclosure where the genset is located.
- Section 5.6.6 requires a remote alarm located away from the genset.

If you have any questions related to these sections, please do not hesitate to contact the Code Assistance Unit at (609) 984-7609.

Source: Neil Nagy, Bureau of Construction Project Review

Fire Rated Ductwork Systems and Assemblies for Ventilation

(Reprint from Volume 29 Number 2 Summer 2017)

Where Fire Rated Ductwork Systems and Assemblies are proposed as an alternate to the horizontal or vertical shaft requirements, the alternate system must be at least the equivalent of that prescribed:

The applicable section of the Uniform Construction Code (UCC) is found at N.J.A.C. 5:23-3.7, Municipal approvals of alternative materials, equipment, or methods of construction, which states:

"(a) Approvals: Alternative materials, equipment, or methods of construction shall be approved by the appropriate subcode official provided the proposed design is satisfactory and that the materials, equipment, or methods of construction are suitable for the intended use and are at least the equivalent in quality, effectiveness, fire resistance, durability and safety of those conforming with the requirements of the regulation.
1. A field evaluation label and report or letter issued by a nationally recognized testing laboratory verifying that the specific material, equipment, or method of construction meets the identified standards or has been tested and found to be suitable for the intended use, shall be accepted by the appropriate subcode official as meeting the requirements of (a) above."

The UCC building subcode code addresses the fire resistance rating of assemblies that are not symmetrical under Section 703.2.1 Nonsymmetrical wall construction, "Interior walls and partitions of nonsymmetrical construction shall be tested with both faces exposed to the furnace, and the assigned fire-resistance rating shall be the shortest duration obtained from the two tests conducted in compliance with ASTM E119 or UL 263."

Fire Rated Ductwork Assemblies:
In the case of fire rated ductwork, fire test standards ISO 6944, ISO 6944-01 or ASTM E2816 where the fire rated ducts for ventilation are tested to fire exposures may be considered equivalent to the standard- time temperature curve, as set forth for 'built-in' assemblies in ASTM E119. Under all three of these ventilation duct fire resistance test standards, there are four conditions that are necessary for fully testing the assemblies:

- Fire inside vertical
- Fire inside horizontal
- Fire outside vertical
- Fire outside horizontal

(continued on next page)

(Fire Rated Ductwork Systems and Assemblies for Ventilation: Reprint from Summer 2017)

Examples of applications utilizing fire resistance ductwork systems or assemblies for ventilation may include the use of horizontal offsets as an alternate to the two-hour enclosure as currently required by the building subcode:

- Exhaust systems (bathroom, domestic kitchen, commercial dryer, residential dryer)
- Supply air systems (make up, outside)
- Horizontal offset transitions for vertical risers
- Laboratory or hazardous exhaust systems
- Life Safety systems (stairwell & elevator shaft pressurization, smoke evacuation, smoke control)

Verification of Compliance:

- Ventilation duct testing certifications from a Nationally Recognized Testing Laboratory (NRTL) that document compliance of all four orientations;
  ISO 6944 or ISO 6944-1, All 4 orientations:
  - Duct A (fire outside) Horizontal
  - Duct A (fire outside) Vertical
  - Duct B (fire inside) Horizontal
  - Duct B (fire inside) Vertical

  Or, ASTM E2816, All 4 orientations:
  - Condition A (fire outside) Horizontal
  - Condition B (fire outside) Vertical
  - Condition C (fire inside) Horizontal
  - Condition D (fire inside) Vertical

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

Assembly Group "Exceptions"

The International Building Code 2018 (IBC/2018) provided "exceptions" to the Assembly Group A occupancy classification. This discussion focuses on the occupancy groups that would normally be considered Assembly Group A that can be classified as Business Group B, dependent on occupant load or area. Section 303.1 states:

"Assembly Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering of persons for purposes such as civic, social or religious functions; recreation, food or drink consumption or awaiting transportation.

Section 303.1.1, Small buildings and tenant spaces: A building or tenant space used for assembly purposes with an occupant load of less than 50 persons shall be classified as a Group B occupancy.

Section 303.1.2, Small assembly spaces: The following rooms and spaces shall not be classified as Assembly occupancies:

1. A room or space used for assembly purposes with an occupant load of less than 50 persons and accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy.

2. A room or space used for assembly purposes that is less than 750 square feet in area and accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy."

(Note: Section 303.1.3 and Section 303.1.4 are not related to Business Group B and not included in this discussion.)

Example of Section 303.1.1: A building or tenant space is constructed to house only a karate institution with an occupant load of fewer than 50 persons. In this situation, occupant load is to be analyzed as "Assembly Without Fixed Seats, Standing Space" from Table 1004.5 of the IBC/2018; if the resulting occupant load is less than 50 persons, the building may be classified as Group B.

Example of Section 303.1.2, #1: A cafeteria/coffee shop with an occupant load of less than 50 persons constructed within an office building. In this situation, occupant load should be analyzed as "Assembly Without Fixed Seats, Unconcentrated (tables and chairs)" from Table 1004.5 of the IBC/2018; and if the resulting occupant load is less than 50 persons, the space may be classified as part of the main Group B.

Example of Section 303.1.2, #2: A conference room with less than 750 square feet constructed within an office building may be classified as a Group B occupancy.

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

Deferred Submittals - Review of "Other" Documents

The Code Assistance Unit has been receiving questions on whether the design professional of record is required to sign and seal deferred submittals prepared by other design professionals. The simple answer is no.

However, the design professional of record is required to review all documents that are not submitted with the initial application and that are prepared by others. Furthermore, the design professional of record must submit a letter indicating that he has reviewed and found the construction documents to be in conformance with the regulations of the design for the building. In lieu of a letter, the design professional of record may stamp and sign on each page that the construction documents have been reviewed and found to be in conformance with the regulations of the design for the building.

The applicable regulations are found at N.J.A.C. 5:23-2.15(f)1xi(1), which states, "All documents prepared by people other than the design professional shall be reviewed by the design professional and submitted with a letter indicating that they have been reviewed and found to be in conformance with the regulations for the design of the building."

Some examples that illustrate the application of the requirement follow:

1. A New Jersey State licensed architect chooses to use pre-engineered lumber in his design. After review of the specifications of the pre-engineered lumber (normally certified by a licensed engineer), the architect must supply a letter, including his seal, attesting to the lumber's appropriate use in the design. Please keep in mind, the architect is not sealing "over" the engineer's seal; he is simply stating he has reviewed the material and that it "works" in the design.

2. Similar to above, a New Jersey State licensed architect has prepared all of the construction documents for the project, however, the roof trusses are being designed by others. The trusses have been designed by the truss manufacturer based upon the design criteria provided by the architect of record. The architect of record must review the truss documents for compliance with the regulations for the design of the building before submitting them to the authority having jurisdiction. The construction documents submitted to the authority having jurisdiction must be accompanied by a letter signed and sealed by the architect of record acknowledging this.

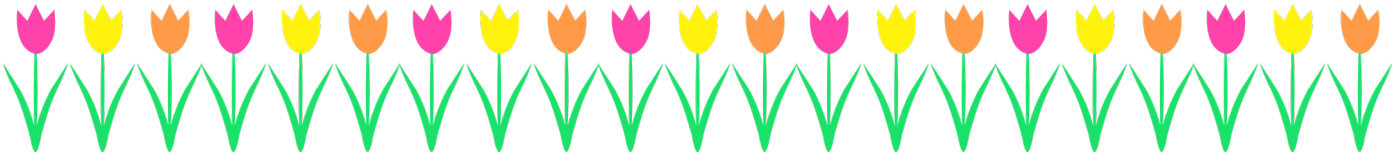
3. A licensed electrician proposes to install wiring through a fire-rated assembly in a new structure. The design professional must review this proposal to make sure the penetration does not jeopardize the rating of the wall. If the proposed installation is acceptable, the design professional must submit a signed and sealed letter stating that the electrical plans meet the intent of his design. (A fire-alarm system is a good example; this situation can also be applied to the proposed installation of piping by a master plumber.)

4. Lastly, consider a building that is to contain an automatic fire suppression system. Typically, the design of a suppression system is prepared by a sprinkler manufacturer and construction documents are prepared accordingly. In this case, the design professional of record must review the construction documents for compliance with the project design requirements. The construction documents must be accompanied by a signed and sealed letter acknowledging this.

We cannot stress enough that the design professional of record is not "sealing" the design of another design professional; the design professional of record must verify that the construction documents have been reviewed and state that they comply with the design parameters of the project.

The examples above are not all-inclusive. There are a multitude of situations to which the above referenced section can be applied. These examples are intended to illustrate instances in which the design professional of record's review is required.

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



New Jersey Department of Community Affairs
Division of Codes and Standards
101 South Broad Street
P.O. Box 802
Trenton, NJ 08625-0802

BULK RATE
US POSTAGE
PAID
PERMIT NO.
XXXXX

FIRST-CLASS MAIL

Mail to: