# Construction Code Communicator



State of New Jersey Philip D. Murphy, Governor Volume 32, Number 2 Department of Community Affairs Lt. Governor Sheila Y. Oliver, Commissioner

Summer 2020

# Above Ground Swimming Pools - Ladders with Attached Gates

Recently, the Code Assistance Unit has received several calls regarding companies who claim their premanufactured ladders with attached gate products meet all required state and local codes. Unfortunately, the International Swimming Pool and Spa Code (ISPSC) does not specifically recognize products, but based on the information provided by the manufacturer, the product may be able to establish compliance. For example, an above ground pool that is proposed to use a ladder with a "clamshell" cover on the outside of the pool may be in compliance with Section 305, Barrier Requirements, and for Section 702, Ladders and Stairs, the portion within the pool for entrapment purposes. This means review and inspection will still be required by the local enforcing agency in order to determine code compliance.

Lastly, in a past Construction Code Communicator (CCC) article, titled "*Swimming Pool Definition – IRC/2015,*" guidance was regarding what would qualify as an above ground swimming pool and reads, in part, as follows:

As per R201.3, where terms are not defined in the IRC, such terms shall have the meanings ascribed in other publications of the International Code Council. In the case of "Swimming Pools," please visit Section 202 of the IBC/2015 where it states: SWIMMING POOL. Any structure intended for swimming, recreational bathing or wading that <u>contains water over 24 inches (610 mm) deep.</u> This includes in-ground, aboveground and on-ground pools; hot tubs; spas and fixed-in place wading pools.

This remains the same in the 2018 codes. In addition, this has prompted the question: where is the 24" measurement to be taken from? Per the definition above, if the pool/spa can contain over 24 inches of water, it is regulated; the 24-inch measurement should be taken from the deepest point of the interior floor surface to uppermost part of the pool/spa wall.

Source: Keith Makai

Code Assistance Unit (609) 984-7609

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# Swimming Pool Etiquette – 2020 Edition 🔂 💶

Ok, here it is . . . the official scoop on all you've ever wanted to know about the Uniform Construction Code (UCC) requirements applicable to private swimming pools. Specifically, this article explains provisions for swimming pool depths, materials, barriers, and electrical requirements. Identifying the point at which a swimming pool is regulated by the 2018 edition of the International Building & Residential Code (IBC & IRC) and the Building Subcode & One- and Two-Family Dwelling Subcode has been confusing for several enforcing agencies. This article should clarify these uncertainties.

#### Definition/Application:

Sections 3109 of the 2018 IBC and Section R326 of the 2018 IRC require that all swimming and bathing facilities be regulated by the 2018 International Swimming Pool & Spa Code (ISPSC), except for those that are 24 inches or less in depth. This is based on the definition of "Swimming Pools" at Section 202 of the 2018 IBC; see explanation/application of this definition on page 1 within the article, "Above Ground Swimming Pools - Ladders with Attached Gates."

# Barrier:

"Barrier" is defined at Section 202 of the 2018 ISPSC as "a permanent fence, wall, building wall, or combination thereof that completely surrounds the pool or spa and obstructs the access to the pool or spa. The term 'permanent' shall mean not being able to be removed, lifted, or relocated without the use of a tool." The requirements for a swimming pool barrier can be found at Section 305 of the 2018 ISPSC and modifications to the barrier requirements are noted at Section 3109/R326 of the 2018 IBC/IRC:

\* Section 305.1, General, deletes the allowance for swimming pools to use a powered safety cover that complies with ASTM F1346 as a barrier.

\* Section 305.4, Structure wall as a barrier, is deleted because it is redundant. If a wall of the home/building meets the other criteria of Section 305, it should be allowed as a barrier,

\* Section 305.5, On ground residential pool structure as a barrier, in Item 3, deletes the allowance of removable ladder or "flip-up" stairs to be used as a barrier. At a minimum, for example, a 48" on-ground pool would require a barrier around the access ladder/stair.

A swimming pool barrier may be placed anywhere up to the property line, provided a local ordinance does not say otherwise, and as long as the pool is completely surrounded. As written, the barrier must be independent of any neighboring barrier and neighboring barriers are not to be shared for purposes of meeting pool barrier requirements.

Two conforming pool barriers may be placed back to back, provided the barriers are not climbable from either side. However, if a neighboring property contains a climbable fence or barrier, the barrier for the new pool should be placed a sufficient distance away in order to limit access to the pool. This distance should be based upon the topography of the properties. Separation distances between the fence and the barrier may range from two feet to four feet. Smaller or greater ranges may be appropriate, based upon specific circumstances.

However, it was determined back in the Winter 2008 edition of the Construction Code Communicator (and republished Winter 2017) that it is permissible to share a swimming-pool barrier, provided the local authority having jurisdiction grants a variation to do so. The variation should include a statement from the fence owner acknowledging use of his fence as a swimming-pool barrier and a statement from the pool owner acknowledging his responsibility to install a compliant barrier should the neighbor remove his fence for any reason.

The barrier should not be climbable, as per code, from the side away from the swimming pool; and if there is a swimming pool on both sides of the barrier, the barrier should not be climbable from either side.

# Electrical:

The Code Assistance Unit has also encountered some confusion about whether an electrical permit is required for the installation of a swimming pool. Typically, there are two scenarios that would trigger the need for an electrical permit: [1a] if a swimming pool is capable of holding water to a depth of greater than 42 inches, OR [1b] a pool has nonmetallic, molded polymeric walls or inflatable fabric walls, regardless of dimension (definition of Storable Pool at Article 680 of the National Electrical Code/2017); or [2] if a swimming pool is equipped with permanent recirculation equipment, regardless of dimension.

#### Permits:

In short, it should be assumed a permit application is required to install any pool. Also, note that requirements for building, electrical and plumbing components are independent may require separate tech sections, as applicable. For example: *(continued on next page)* 

#### (Swimming Pool Etiquette – 2020 Edition)

- Building tech section required for pool that can contain water over 24 inches deep; this is not material specific (see definition for "on-ground pool" in the 2018 ISPSC).
- Electrical tech section required. However, if on-ground with nonmetallic, molded polymeric or inflatable walls, not required if all of the following conditions are met:
  - Motor/filtration pump unit is portable (no foundation/not bolted down) and can be readily disassembled from the water circulation system;
  - Motor/filtration pump unit is listed (UL, etc.) as double insulated and has a cord with a minimum of 25 feet in length;
  - Pool is capable of holding water to a maximum depth of 42 inches; and
  - Pool has no underwater lighting.

And as a friendly reminder, swimming pools receive a Certificate of Approval (not a Certificate of Occupancy). In addition, please see these related swimming pool articles:

- Swimming Pools and Spas Plan Review & Inspections (page 7, Winter 2019 edition)
  - RE: Entrapment hazards; Pool barriers; and Bonding/grounding
  - Pool Construction and Equipotential Bonding (page 15, Fall 2019 edition)
    - RE: Structural reinforcing steel in a conductive pool shell

Source: Rob Austin

Code Assistance/Development Unit (609) 984-7609

# Important Announcement: Building Safety Conference of New Jersey and Fall 2020 Seminars

Due to the ongoing pandemic and restrictions in place on gatherings and conferences, I am sad to announce that the previously rescheduled Building Safety Conference of New Jersey for September is now officially <u>CANCELLED</u>.

We truly appreciate the support of our long time and new attendees for making the decision to carry their registrations from April to September, but the situation has made the planning and execution of a successful conference unattainable. Accordingly, those that made a registration previously will receive a full refund in the next couple of weeks and we begin to reconcile our financial records and issue checks.

Furthermore, please be advised that our fall 2020 schedule of continuing education will be 100% online. There will be no face-to-face seminars this semester. The semester will begin on October 1<sup>st</sup> and continue through the month of January 2021. It is hoped that by expanding the semester schedule our officials can better achieve the goal of meeting their continuing education requirements to renew their licenses/certifications. A more specific announcement with details on classes and dates will be released within the next couple of weeks and a mailer will be sent out directing people to our online catalogue.

It is <u>imperative</u> that we have your **correct and best email address** as we continue to try and serve our code enforcement community during this difficult time, as many communications will be sent via email.

Last but not least, thank you for the support shown to the Education and Licensing Units during this time!

Source: John Delesandro

Supervisor, Licensing and Education Units

# Service Inspection Sticker, Electrical Subcode 🗲

This article is to remind electrical subcode officials/inspectors of the need to physically place the final inspection sticker for the service, at or near the service, at *a readily accessible location that is plainly visible by the utility crew* at the time of approval. It is important to note that this sticker is the indicator to inform the utility company that the building can be energized. If a utility energizes a building before the sticker has been issued/placed, please alert the Code Assistance Unit so that the issue may be referred to the Board of Public Utilities as appropriate.

Source: Code Assistance Unit (609) 984-7609

# Occupancy Classification and Use Designation Overlap 🔂

Back in the Building Officials and Code Administrators (BOCA) days, we simply called these items Use Groups. Today with the I-Codes, International Building Code (IBC) to be exact, I'm sure the millennials would make up an acronym and say OCUD or something like that. But for me and those I speak with, it's just Group, or Occupancy Group.

Since the days of BOCA, the [Use] Groups have changed some, but the basic alphabet soup remains, not quite A to Z, but A to U: Assembly Group A to Utility Group U. Some Groups are broken down further, such as Assembly, and some remain as just one, Business for example. However, there is also some "cross pollination" between groups when the occupant load or size is smaller. Let's take a look at some of these scenarios:

**Assembly Group A:** Section 303 looks pretty simple, A-1 through A-5 for buildings for the gathering of persons for purposes such as civic, social or religious functions; recreation; food or drink consumption; or awaiting transportation. But oh wait, (1) if you are a building or tenant space used for assembly purposes with an occupant load of less than 50 persons, you can call yourself a Group B occupancy. And oh yeah, (2a) if you are a room or space used for assembly purposes with an occupant load of less than 50 persons and accessory to another occupancy, you can call yourself a Group B occupancy; (2b) if you are a room or space used for assembly purposes that is less than 750 square feet in area and accessory to another occupancy, you can call yourself a Group B occupancy. But wait... there's more! (3) A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy. And (4), accessory religious educational rooms and religious auditoriums with occupant loads of less than 100 per room or space are not considered separate occupancies.

And just a friendly reminder, for any assembly use that doesn't meet the exceptions above and cannot be immediately pinpointed within the A-1 through A-5 designations, Group A-3 is the "catch-all"; Section 303.4 states that "other assembly uses not classified elsewhere in Group A" fall here.

**Educational Group E:** This is not, and I repeat not, a "so-and-so" learning center; that is Group B. Group E is your pre-K through 12<sup>th</sup> grade buildings, public or private (and being six or more persons). Note that there is a reminder in this section referring to item (4) above in Group A. In addition, Group E also includes day care facilities for more than five children, older than 2.5 years of age, and fewer than 24 hours per day; three exceptions apply here for places of religious worship (part of the Group A-3), five or fewer children in general (part of the primary occupancy), and five or fewer children in a dwelling unit (part of the Group R-3 or Group R-5).

So... have a I lost you yet? Well, those that want to learn more, keep reading.

**Factory Group F:** Moderate hazard as Group F-1 and Low hazard as Group F-2. Question, before you looked there, did you check the charging text? Note that Section 306.1 states that Factory/Industrial Group F includes, among others, the use of a building or structure, or a portion thereof, for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair or processing operations *that are not classified as a Group H hazardous or Group S storage.* 

**Hazardous Group H:** Yeah, for this one, you are going to have to peruse Section 307 yourself. Every classification in Group H, from H-1 to H-5, use materials that constitute a physical or health hazard beyond what is permitted per Section 414; Tables with Section 307 are to be consulted along with Section 415 of the IBC and the International Fire Code. Note that Section 307.1.1 states that an occupancy that stores, uses or handles hazardous materials as described within this subsection is not to be classified as Group H but as the occupancy that it most closely resembles.

Institutional Group I & Residential Group R: These are lumped together, as we have already provided for an interpretation on these Groups in Bulletin 15-3. which can be found at https://www.nj.gov/dca/divisions/codes/resources/bulletins.html. In addition, Group R for one- and two-family dwellings further has been broken down on page 6 of the Spring 2017 CCC found at https://www.nj.gov/dca/divisions/codes/resources/ccc.html.

<u>Storage Group S:</u> Similar to Group F designation. We have Group S-1 (moderate-hazard storage) and Group S-2 (low-hazard storage) and the same caveat wherein the storage buildings **are not classified as a hazardous occupancy**.

For the full list of the Occupancy Classifications and Use Designations (which includes Groups B, M and U), please see Chapter 3 of the IBC at <u>https://www.nj.gov/dca/divisions/codes/codreg/</u> (see link under Building Subcode).

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

#### Premanufactured Accessory Structures with Integrated Electrical

In a previous Construction Code Communicator article from the Summer 2018 edition, "Gazebos, Sheds, and **Pergolas: Are Permits Required?**" the Department provided guidance on the issuance of permits pursuant to the Uniform Construction Code (UCC), N.J.A.C 5:23-2.14. This dealt with the building aspect of a construction permit as the accessory type structures, such as a shed, are typically installed without utilities. Note that for a shed, per N.J.A.C. 5:23-2.14(b)8, a construction permit for electrical work is required. The purpose of this article is to address how accessory structures with integrated electrical systems should be reviewed.

The following are three of the most common permit applications that will be encountered:

- <u>Industrialized/Modular buildings, with affixed Interstate Industrialized Building Commission (IIBC)</u> <u>labels:</u> Procedures can be found within UCC Bulletin 07-1 and the Uniform Administrative Procedures (UAP), Part IV Section 6.
- <u>Certified Building Elements</u>: Follow NJ.A.C. 5:23-4.26, which reads as follows:
  - N.J.A.C. 5:23-4.26 Certification of building elements
    - (a) Building elements shall be certified in accordance with the following provisions:

1. Building elements, such as fire walls, fire separation walls, wall panels, pre stressed/prefabricated floor or roof panels, and pre-engineered structural frames, built in accordance with the New Jersey Uniform Construction Code, may be approved by (a)1i or ii below:

*i.* Approval for both design and construction by a nationally recognized laboratory or a product certification agency. The local municipal subcode official has the authority to accept such approvals based on the evidence, test and/or documentation presented to him or her;

*ii.* Approval for both design and construction by a professional engineer licensed either in the State of New Jersey or in the state of manufacture. The local municipal subcode official has the authority to accept such approvals based on the evidence, of test and/or documentation presented to him or her;

• <u>No labels or certifications</u>: In this case, signed and sealed drawings would be required (see UCC Bulletin 96-2 for more information); in the case of a single-family detached home where the owner resides, he/she may provide their own drawings.

Regardless of UCC permit requirements, homeowners should always check with their local zoning official for the allowance of any of these structures to be placed on their property.

Source: Keith Makai

Code Assistance Unit (609) 984-7609

# Supply Disruption: Arc Fault Circuit Interrupters

It has come to the Division's attention that there may be a supply disruption in the availability of Arc Fault Circuit Interrupters (AFCI) and that AFCIs may not be available for purchase/immediate installation; it is important for the local official to work with the permit applicant in remedying any issues related to this shortage.

Some solutions could be as simple as going through another manufacturer/supplier for the needed equipment. One could also consider other code-compliant workarounds (e.g. creating a subpanel). Additionally, if this issue is impacting the issuance of a certificate of occupancy (CO) for new home construction, creative solutions could be implemented such as a CO with conditions, which would hold money in escrow until such time as AFCIs are widely available (see N.J.A.C. 5:23-2.16(j)), at which point they will be installed as required and the CO will be complete.

Source: Code Assistance Unit (609) 984-7609

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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 <u>codeassist@dca.nj.gov</u>.

# Free-Standing Decks Footings for One- and Two-Family Dwellings

Piggybacking onto a repeated article for Garden-Type Utility Sheds and Similar Structures (the latest being the Winter 2018 CCC, updated to the 2015 codes – which can now be applied just the same for the 2018 codes), we will look at instances within the One- and Two-Family Dwelling Subcode when a deck may eliminate footings all together or footings to frost.

To explain the above statement, please visit Section R507.3.2 (Minimum depth) of the International Residential Code/2018 (IRC/2018) which requires deck footings, in general, to extend below the frost line specified in Table R301.2(1) in accordance with Section R403.1.4.1. This means 2 feet, 6 inches for Southern NJ (SNJ) and 3 feet, 0 inches for Northern NJ (NNJ). And as a friendly reminder, per note b, SNJ consists of Monmouth and Burlington Counties and all counties to the south; NNJ consists of Mercer and Middlesex Counties and all counties to the north.

In order for a deck to be FREE standing, i.e. not attached to the home, Section R507.3.2 provides two (2) separate exceptions:

Per item (1), NO footing is required for free-standing decks that meet all of the following criteria:

1.1. The joists bear directly on precast concrete pier blocks at grade without support by beams or posts.

1.2. The area of the deck does not exceed 200 square feet.

1.3. The walking surface is not more than 20 inches above grade at any point within 36 inches measured horizontally from the edge.

→ This is very similar to exception #2 at Section R403.1.4, as amended by N.J.A.C. 5:23-3.21.

Per item (2), the minimum depth of a footing per R403.1.4.1 would be required for a free-standing deck over 200 square feet. This would require at least a 12" footing below the undisturbed ground surface. In addition, per R403.1.4.1, the area must be 600 square feet or less for light-framed construction, or 400 square feet or less for other than light-framed construction. Those greater than these areas would require a footing to frost.

➔ The added limitations are based on the exception at Section R403.1.4.1, criteria #2, as amended by N.J.A.C. 5:23-3.21.

Note that if a deck is provided with a stair for access, it would be part of the calculation and subject to the footing requirements.

Source: Rob Austin

Code Assistance/Development Unit (609) 984-7609

# Designation of Responsibilities for Solar Systems: Upcoming Corrections

Upon the adoption of the 2018 model codes (PRN 2019-025), the Department proposed amendments to N.J.A.C. 5:23-3.4, Enforcement responsibilities, to align the content of the section with the model codes. In reviewing these amendments, certain oversights and inconsistencies have been identified that the Department is seeking to remedy.

The changes will pertain to IBC Section 3111, Solar energy systems, IBC Section 3112, Greenhouses, and IRC Section 324, Solar thermal systems. Formerly, Section 3111 contained blanket designations wherein responsibility for plan reviews resided with building and fire protection subcode officials and responsibility for inspections resided with fire protection subcode officials. The amendments will specify plan review and inspection responsibilities by subsection so as to mirror the responsibility breakdown assigned in IRC Section 324. Plan review and inspection responsibilities will also be assigned for Section 3112, Greenhouses.

Source: Marie Daniels Code Development Unit (609) 984-7609

# April 2020 Highlights of the New Jersey Construction Reporter

The following information is from the September 2019 Highlights. The New Jersey Construction Reporter is published on a monthly basis 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

- Most building departments in New Jersey were open in April, at least in a limited capacity. This was the first full month of the social distancing policies and restrictions because of the COVID-19 pandemic. Construction in New Jersey was affected.
- The dollar amount of work authorized by building permits was only \$740.6 million. This was based on permits from 510 of New Jersey's 565 municipalities. Last year at this time, the dollar amount authorized by building permits was \$1.25 billion.
- Only 762 new houses were authorized by permits in April 2020, compared to 2,446 for the previous month and 2,105 new houses in April 2019.
- The Department of Community Affairs recognizes the bravery, dedication, and professionalism of essential employees in local building departments in these difficult times.

# Dollar amount of construction authorized by building permit type, April 2020

Source: New Jersey Department of Community Affairs, 6/19/2020

N	lo. of municipalitie	s	New			
Month	reporting	Total	construction	Additions	Alterations	
Jan	552	\$1,185,611,554	456,276,954	97,149,084	632,185,516	
Feb	543	1,320,372,562	615,095,542	148,699,399	556,577,621	
Mar	537	1,668,692,831	1,065,124,405	91,729,392	511,839,034	
Apr	510	740,598,042	343,267,791	56,304,793	341,025,458	
May						
Jun						
Jul						
Aug						
Sep						
Oct						
Nov						
Dec						
Total		\$4,915,274,989	\$2,479,764,692	\$393,882,668	\$2,041,627,629	
April 2019	517	\$1,250,557,073	513,669,162	114,954,327	621,933,584	
Jan - Apr 2019		\$4,617,390,543	1,875,790,499	441,294,571	2,300,305,473	
April 2019 Jan - Apr 2019	517	\$1,250,557,073 \$4,617,390,543	513,669,162 1,875,790,499	114,954,327 441,294,571	621,933,584 2,300,305,473	

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Major Construction Indicators, New Jersey, January - April 2009 to 2020 NJ DCA, 6/19/2020					
			Authorized	Authorized	
	Estimated cost	Authorized	office space	retail space	
Period	of construction	housing units	(square feet)	(square feet)	
January - April 2020	\$4,915,274,989	6,477	1,200,071	1,311,140	
January - April 2019	4,617,390,543	7,259	1,432,202	226,617	
January - April 2018	4,455,430,800	6,908	1,473,343	764,409	
January - April 2017	4,772,835,656	5,477	2,072,928	794,048	
January - April 2016	5,734,978,178	9,149	1,617,303	810,587	
January - April 2015	4,039,461,004	4,968	1,005,828	1,746,835	
January - April 2014	3,876,038,930	6,230	1,601,420	628,231	
January - April 2013	3,930,738,582	5,737	1,921,562	695,444	
January - April 2012	3,390,078,746	4,208	2,415,800	646,398	
January - April 2011	3,444,393,038	3,786	1,978,255	781,690	
January - April 2010	2,869,962,723	3,474	1,487,311	431,806	
2019-20	\$297,884,446	-782	-232,131	1,084,523	
percent change	6.5%	-10.8%	-16.2%	478.6%	
2018-19	161,959,743	351	-41,141	-537,792	
percent change	3.6%	5.1%	-2.8%	-70.4%	
2017-18	-\$317,404,856	1,431	-599,585	-29,639	
percent change	-6.7%	26.1%	-28.9%	-3.7%	
2016-17	-\$962,142,522	-3,672	455,625	-16,539	
percent change	-16.8%	-40.1%	28.2%	-2.0%	

# (April 2020 Highlights of the New Jersey Construction Reporter)

#### Dollar Amount of Authorized Construction, top municipalities, January - April 2020 NJ DCA. 6/19/2020

110 2 01 1, 01 10/2020					
Municipality	County	Estimated cost of construction	Authorized housing units	Authorized office space (square feet)	Authorized retail space (square feet)
Jersey City	Hudson	\$926,803,656	1,909	224,152	0
Newark	Essex	224,440,740	26	5	0
Hoboken	Hudson	86,231,340	2	0	0
Logan Towmship	Gloucester	79,223,552	0	0	0
Toms River Township	Ocean	67,211,462	71	49,939	0
Lakewood Township	Ocean	63,065,652	112	108,123	3,210
Woodbridge Township	Middlesex	52,500,830	10	0	0
Warren township	Somerset	49,691,936	8	0	0
Paramus borough	Bergen	47,825,078	7	0	2,540
Wayne township	Passaic	47,167,267	0	15,806	18,880
Top municipalities		1,644,161,513	2,145	398,025	24,630
New Jersey		\$4,915,274,989	6,477	1,200,071	1,311,140
top munis as % of NJ		33.5%	33.1%	33.2%	1.9%

(continued on next page)

#### (April 2020 Highlights of the New Jersey Construction Reporter)

Construction Reporte	r 6/19/2019			dollar amount	
municpality	county	permit no.	month	of construction	proces <b>descripton</b>
lesev City	Hudson	20193344+C	03	400,949,780	351 Marin Blvd, 38 story, 507
Jesey City	Hudson	20200719	02	123 263 250	315 15th St. 26 story, 350 for sale dwellings
Jesey City	Hudson	20193148+B	03	102 649 500	184 Morgan St / 331 Marin Blvd: 41-story 482 rental units: broke ground 8/19
logan	Gloucester	202000124	04	73,107,000	Greek Development. Target distribution warehouse. Racoon Creek
Jesev City	Hudson	20192382+d	03	69.000.000	380 Skinner Memorial Dr
Hoboken	Hudson	20200232	02	65.800.000	Capital Point, student housing Stevens Institute, two connected towers: 18 & 21 stories
Newark	Essex	20CP000334+A	04	60.950.000	update. Essex Co courthouse
Newark	Essex	20CP000334	02	54.756.195	484-87 MLK Blvd. Essex Co Court House: A-3: B
Jesev City	Hudson	20193743+A	05	43.555.000	13 & 35 Carbon PI: New Jersev City University. 198 units
Orange	Essex	20-60004	02	32.613.000	380 Central Av. addition Orange public school
Franklin Lakes	Bergen	000020200097	02	29.600.000	724 Franklin Av: assisted living & parkding deck (S-2): Sunrise
Woodbridge	Middlesex	000020201039	05	29,285,373	Arizon Iced Tea plant, 1 Arizona Way, F-1, S-1, & B
Bridgeton	Cumberland	20-0126-03	03	28,000,000	county jail
West New York	Hudson	20200258	06	25,824,000	4901 Bergenline Av; 97 apts
Robbinsville	Mercer	000020200276	05	25,424,395	Amazon warehouse, conveyor system, 18 Applegate Dr.
Neptune Township	Monmouth	20191335+B	03	20,548,325	740 Wayside Rd, My Place, 19 apts broke ground 11/19
Mountain Lakes	Morris	20-027	01	20,288,797	medical lab, 1 Bloomfield Av
Secaucus	Hudson	20-163	04	20,230,000	2 Emerson Ln; Secaucus Data Ctr Bldg; CoreSite data collection
Toms River	Ocean	19-04644	01	20,096,256	Community Medical Center, ER renovation, 99 Rte 37 W
Belleville	Essex	19-01297+B	05	20,000,000	81-179 Belmont Av, 132 rental units, broke ground 12/19
Voorhees	Camden	20-0341	05	19,342,100	Virtua hospital addition & renovation , 100 Bowman Dr, proton therapy ctr
Belleville	Essex	19-01298+A	05	19,000,000	81-179 Belmont Av, 100 rental units, broke ground 12/19
Jesey City	Hudson	20192382+I	03	17,000,000	380 Skinner Memorial Dr
Warren Township	Somerset	20-0118	02	16,974,458	200 Warren Corp Ctr Dr
Wayne	Morris	000020200016	01	16,505,300	Whole Foods, fit up; Valley Ridge Shopping Center 580 Valley Rd
Warren Township	Somerset	20-0117	02	15,262,148	100 Warren Corp Ctr Dr
Maple Shade	Burlington	2020-107	02	15,200,150	Maple Shade high school
Linden	Union	000020200032	01	14,585,000	warehouse; 4000 Road to Graffelli; general spec (2nd of 8 bldgs)
Jesey City	Hudson	20193385+C	01	14,525,000	1 Berry Rd, Berry Rd park concession & athletic facility
Mansfield	Burlington	19-447+A	01	14,500,000	1273 Jacksonville Rd; VA hospital
Cherry Hill	Camden	20200721	04	14,150,000	Commerce Ctr, 650-850 Garden Park Blvd
Jesey City	Hudson	20200522	02	13,946,000	5 Jackson Sq
Robbinsville	Mercer	000020200211	03	13,877,000	museum, office, parking, 112 N Main St
Holmdel	Monmouth	000020200137	02	13,480,905	727 N Beers St; Bayshore Community Hospital
Marlboro	Monmouth	000020200140	01	13,256,009	Costco, American Plaza, 623 Texas Rd
Summit	Union	202072529	02	12,707,500	Overlook Medical Center, 43-51 Overlook Rd
Newark	Essex	20CP000634	03	12,176,001	self storage; 1239-47 Broad St
East Brimswick	Middlesex	19CP002013	05	11,975,001	39 Edgeboro Rd; Pinnacle Materials Inc
Newark	Essex	20CP000782	05	11,250,709	tenant fit out for Amazon warehouse
Jesey City	Hudson	20192041+C	01	11,210,000	preschool
Wayne	Passaic	000020200459	03	10,385,000	25 Corporate Dr, tenant fit out
Kearny	Hudson	000020200830	05	10,097,000	warehouse; Seagis Property Group; Centeral Av
Paramus	Bergen	00020181241U	03	10,000,000	Garden St Plaza renovation; old JC Penny
Passaic City	Passaic	18-60055+K	03	10,000,000	Dayton Av school development
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# Energy Subcode – Training Materials Online

For those of you looking to freshen up on the Energy Subcode, NJAC 5:23-3.18, the Building Energy Codes Program, part of the US Department of Energy, provides many materials for review at <u>https://www.energycodes.gov/resource-center/training</u>.

(continued next page)

#### (Energy Subcode – Training Materials Online)

In review, low-rise residential buildings are defined as one- and two-family dwellings or multiple-family buildings three stories or less in height. Compliance must be in accordance with the residential portion of the International Energy Conservation Code (IECC-R)/2018, which parallels Chapter 11 of the International Residential Code (IRCN)/2018. All other buildings must demonstrate compliance with the ASHRAE 90.1-2016; note that the IECC-C, the commercial portion of the International Energy Conservation Code, is not adopted.

For those looking for IECC-R and IRCN review, please go to:

https://www.energycodes.gov/resource-center/training-courses/residential-provisions-2018-international-energyconservation-code

For those looking for ASHRAE 90.1 review, please go to:

<u>https://www.energycodes.gov/resource-center/training-courses/ansiashraeies-standard-901-2016</u> Being more complex, the review/training materials here are broken down by (a) Overview; (b) Envelope; (c) HVAC; and (d) Lighting.

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

# Cut-In-Cards, Electrical Contractor Letter 🗲

It has come to the attention of some of our electrical subcode officials that there has been some confusion concerning utility provider's requirements for service connections. To provide an example, we will review JCP&L's requirements found in their "Customer Guide for Electric – NJ October 2018".

<u>https://www.firstenergycorp.com/content/dam/customer/service%20requests/files/Customer-Guide-for-Electric-Service-NJ.pdf</u>

#### Section 3.9, Electrical Inspection, states in part:

Service Restoration- disconnected services – If a service has been disconnected (i.e. service wires cut, or meter blocked) for 12 months or more, and no work has been done on the electrical service, a licensed electrician shall perform a safety inspection. The licensed electrician shall provide the company with a signed letter on the electrician's company letterhead stating that the service has been inspected and is safe to have power restored. If work has been done on the electrical service, a new inspection by the local or state inspection authority is required before the service is reconnected".

#### Section 3.12, Disconnect/reconnect of existing service upgrades/maintenance, states in part:

The Company has as Agreement for Temporary Uninspected Service, which is only applicable for single-phase overhead services 200 amps or less. This form provides a means by which a service can be re-energized before it has been inspected. This waiver cannot be utilized in conjunction with new, temporary, underground, 400 amp or grater services, three-phase services or for service restoration following a building fire".

The above guidance gives three choices of action:

- 1. If power is off for less than 12 months and no work has been done, nothing is required for the utility from any agency, just a phone call from the customer.
- 2. If power is off for over 12 months, the utility requires a letter from a licensed electrical contractor stating that the service has been inspected by the contractor and is in good working condition. In this case, no action is required by the agency for the utility.
- 3. If the power is off and the meter pulled or has been tampered with, a UCC permit is required with an inspection. Once approved, a cut-in-card is required.

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

Source: Uniform Construction Code, Code Advisory Board, Electrical Subcode Committee

# Ground Snow Loads and Case Study Areas

Not all areas in the State are created equal, at least that is when you look at the ground snow loads. The maps in the International Building and Residential Code provide most information but in certain locations in the State, the area is designated as a "Case Study Area." This is due to unique geographic conditions of that area (e.g. mountainous terrain) and the data needed to determine the ground snow load should be asked of the local enforcing agency.

With the adoption of the 2018 I-Codes, the design load bulletins were combined; 94-8, Ground Snow; 03-4, Wind; and 05-2, Seismic. Now, following the guidance of Bulletin 19-1, Design Loads for Ground Snow, Wind and Seismic, users are directed to the Applied Technologies Council (ATC) website (<u>https://hazards.atcouncil.org/</u>), which provides the most up to date "site-specific hazard information". Using the website is pretty straight forward. Basically, you type in the desired site location address and click on one of the applicable tabs below (WIND, SNOW, or SEISMIC). Under each tab, you will find a list of standards from which to choose from. To identify which one of the listed standards is applicable, go into the "Reference Standards section" of whichever edition code book that you are working from and simply match it to the list.

For example, in the 2018 International Residential Code (IRC), Chapter 44 Reference Standards, shows "ASCE 7 - 16" would be the correct "Wind" speed standard to follow.

**Note:** The remaining standards listed under the tab, from the ATC website, are/were recognized and apply to other "editions" of the code (e.g. 2015/IRC or 2009/IRC).

Using the ATC website and following the steps, as mentioned above, will either display "a list reference standard to choose from" or "case study (CS) area" message. The ATC website reiterates: "This is a CS area, which requires site-specific Case Studies to establish ground snow loads and should be approved by the Authority Having Jurisdiction." In the event that the information cannot be obtained, it should be noted that, now withdrawn, Bulletin 94-8 provided for a maximum pounds per square foot per CS counties as follows:

Sussex, 50 psf; Warren, 35 psf; Hunterdon, 35psf; Passaic, 40 psf; Morris, 35 psf; Somerset, 30 psf. All other counties should generate a load number.

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

# **COVID-19 Impact on Our Community**

Code officials and their office members, including technical assistants, secretaries, and construction office staff throughout New Jersey strive to make their municipalities a safe and vibrant place. As do technical board members and the construction advisory community. Your work promotes development while maintaining standards that ensure a safe and affordable neighborhood. You promote communities of equality. Taking on this work requires experience, technical skill, and relationship building. Both within local communities and the construction fields, this work takes dedication and commitment to the job. The realization of this work underpins the entire development of the cities you administer. Faced with a pandemic, construction officials, office staff, and the construction code community have made great sacrifices, decisions on the fly, and kept offices functional. Code officials have made personal sacrifices to keep critical projects moving forward. We attest to these trials and tribulations and greatly appreciate the work our community is doing, and has done, during this pandemic that hit New Jersey so hard.

The sense of camaraderie, support, and teamwork is inspirational to witness during times like this and entails the best of what we find in our construction code community. We have been told of how building departments are helping local business with outside seating and Covid-19 alterations. We have heard of how construction officials have been working to schedule inspections on critical constructions sites to keep projects on target. We have seen how construction officials have remained dedicated to keep their staff employed and safe. We have heard stories of staff who have taken on greater workloads to assist with the functionality of their township as offices were closed to the public. These actions are reminders of all the good that exists within our diverse community. We thank you.

During these months however, the impacts of Covid-19 on our community have been immense. We have been hearing of lives that have been lost due to Covid-19 throughout New Jersey. We mourn the loss of dedicated professionals in our community. As we grieve, heal, and remember our construction code community members that have been lost, we want all our offices and community members to know we are thinking of you. For those who have been lost, we reflect on their great work and are reminded of what they have accomplished in their careers by witnessing municipalities develop to the highest standards. Their work remains with us always. We honor their commitment to our mission. We at DCA wish all our community who has experienced loss and hardship the upmost condolences. Our thoughts are with you.

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

# Private Residence Elevator Hoistway Door Clearances

The Elevator Safety Unit has been receiving questions on the proper installation of Private Residence hoistway doors in relation to the elevator car door. To address this issue we must refer to Sections 5.3.1.7.2 and 5.3.1.8.3 of ASME A17.1-2016.

The dimensions noted at Section 5.3.1.7.1 are clear in that the clearances between the inside surface of the hoistway door to the edge of the hoistway sill shall not to exceed 0.75 in. for swinging doors and clearances shall not exceed 2.25 in. for sliding doors. The dimension noted at Section 5.3.1.8.3 is the one that comes into question: clearance between the face of the hoistway door and the face of the car door or gate shall not exceed 4 in.; this applies to subsections (a) through (e) and the 4 in. clearance covers all types of hoistway doors and car doors.

With the ASME A17.1 stipulating that these clearances must be maintained, there should be no purpose for "fillers" to be installed to make up the clearance difference between the face of hoistway doors and the face of car door or gate. In the design phase, drawings are submitted, signed and sealed by a registered/licensed design professional from the State of NJ, to be reviewed by the local authority having jurisdiction (Note: Many locals do not have an elevator subcode and therefore, this defaults to the State for review). Once released, these drawings and the application have been approved as submitted according to the ASME A17.1 and the sections noted above for clearances. This code does not address "fillers" none should be required in the design phase and none should be required if the installation is built to the drawings.

Source: Dan Tober

Bureau of Construction Project Review (609) 984-7850

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

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