

Construction Code Communicator



State of New Jersey
 Chris Christie, Governor
 Kim Guadagno, Lt. Governor

Department of Community Affairs
 Charles A. Richman, Commissioner

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“Flipping” Properties and the Issuance of a Construction Permit

There have been some questions regarding the issuance of a construction permit when a homeowner is performing construction, and it is suspected that when the work is completed, the home will be sold. The issue is that when a homeowner takes out a construction permit, he or she signs an affidavit indicating that he/she intends to live there. However, as soon as the home has a certificate of approval or certificate of occupancy, it is put up for sale. This circumstance is not all that different from a long-time homeowner fixing up his or her house in order to sell it.























When a homeowner applies for a permit to repair his or her house, signs a certification in lieu of oath stating that the plans have been submitted for a home that he or she owns and occupies, and all prior approvals are met, a construction permit is to be issued. Penalties may be issued for falsifying the information submitted on a construction permit if, during the course of construction, the code official determines that a contractor is performing the work. In this case, a permit update would be filed to include the contractor information in the construction permit application. However, it is not the responsibility of the code official to determine if the homeowner is going to “flip” the home.

Note that, as per N.J.A.C. 5:25-2.1(d), no person is permitted to construct a new home for his or her own use and occupancy more often than once every five years without being registered as a builder.

Source: Marcel Iglesias
 Code Assistance Unit
 (609) 984-7609

(Marcelino Iglesias retired on April 1, 2017 after 29 years of service. Please join us in wishing him a long, happy, and healthy retirement.)

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Private detached garages in the One- and Two-Family Dwelling Subcode

The definition of “accessory structure” has been modified with the adoption of the 2015 International Residential Code (IRC).

A side-by-side comparison of the definition from Chapter 2 of the International Residential Code (IRC) is below:

- 2009 IRC – A structure not greater than 3,000 square feet in floor area, and not over two stories in height, the use of which is customarily accessory to and incidental to that of the dwelling(s) and which is located on the same lot.
- 2015 IRC – A structure that is accessory to and incidental to that of the dwelling(s) and that is located on the same lot.

Thus, the 2015 definition no longer contains the 3,000 square feet and 2 stories in height limitation. The reason for the change is that it does not make any sense to limit the size of an accessory structure since the *unamended* text of the IRC does not restrict the size of a home; keep in mind, the *unamended* text also requires an automatic sprinkler system.

In New Jersey, because automatic suppression is not required, the 2015 IRC is amended to limit the height and area as per Section R300. To address the inconsistency that would result, Exception 2 of Section R302.1 is amended as follows:

Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1(1); or dwellings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904 shall comply with Table R302.1(2).

Exceptions:

2. Walls of dwellings and accessory structures located on the same lot **provided the aggregate area of all buildings on the same lot do not exceed the permissible area from Section R300.**

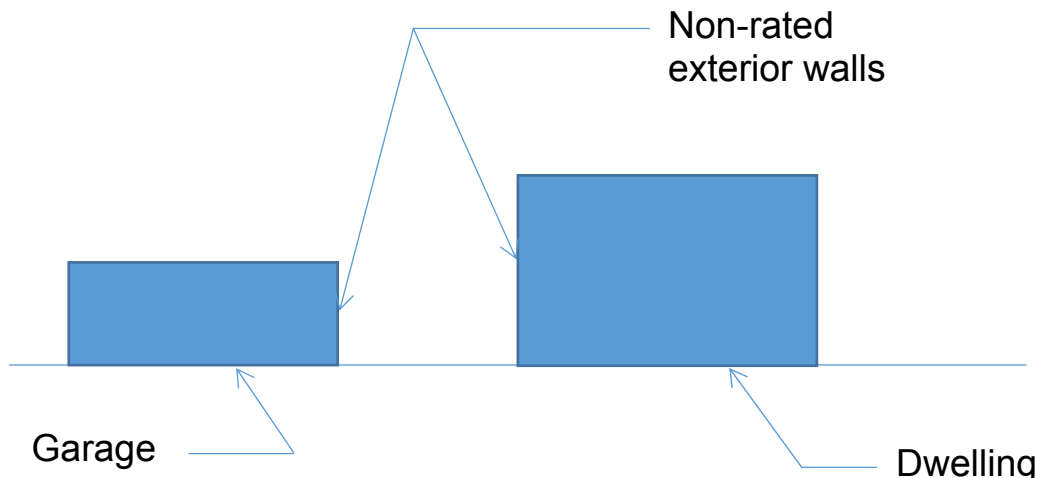
To best describe how to deal with area limitation, the following examples have been prepared:

- Ex. 1: Dwelling plus garage under the area limitation restriction.
- Ex. 2: Dwelling plus garage (combined) over the area limitation – separated – 10 feet minimum.
- Ex. 3: Dwelling plus garage (combined) over the area limitation – rated exterior walls.

Example 1:

The project consists of a non-sprinklered single-family dwelling with a detached garage with a **combined** area per floor of not more than 4,800 square feet.

Dwelling and accessory structure comply with the requirements of Section R300



Combined floor area of the dwelling and garage must be less than or equal to 4,800 square feet.

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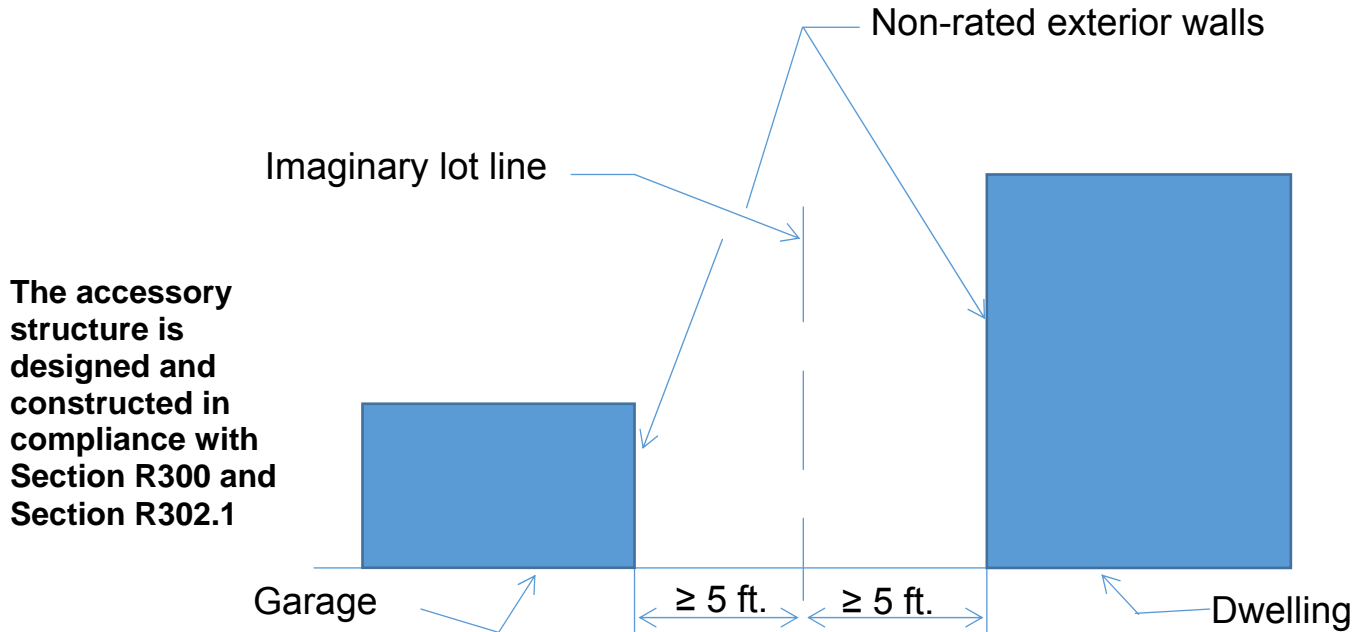
(Private Detached Garages in the One- and Two-Family Dwelling Subcode - 2)

As noted in the sketch, there is no fire resistance rating required for the walls facing each other. Buildings on the same lot may be considered one building when the building height, number of stories, and the aggregate building area of the buildings are within the limitation specified in Section R300.

Example 2:

The project consists of a non-sprinklered, single family dwelling with a detached garage where the floor area per floor of each building is not more than 4,800 square feet and the fire separation distance to the imaginary lot line is 5 feet or greater.

The dwelling is designed and constructed in compliance with Section R300 and Section R302.1.



Each building is ≤ 4,800 square feet in area per floor.

Buildings on the same lot may be designed and constructed as separate buildings. As noted in the sketch, there is no fire resistance rating required for the walls facing each other. In accordance with Table R302.1(1), a fire separation distance of 5 feet or greater does not require a fire resistance rating.

(continued on next page)

Glazing in Windows – Four Criteria 

Since the Code Assistance Unit receives many questions regarding the four (4) general glazing in windows criteria listed in Section 2406.4.3 of the International Building Code/2015 (and the identical code requirements at Section R308.4.3 of the International Residential Code/2015); this article provides the simple answer. The “Glazing in Windows” section states:

Glazing in an individual fixed or operable panel that meets ALL of the following conditions shall be considered to be a hazardous location.

1. The exposed area of an individual pane is larger than 9 square feet;
2. The bottom edge of the glazing is less than 18 inches above the floor;
3. The top edge of the glazing is more than 36 inches above the floor; AND
4. One or more walking surfaces are within 36 inches, measured horizontally and in a straight line, of the glazing.

The code clearly states that all four criteria must be triggered for the window glazing to be considered a hazardous location requiring safety glazing (criteria #3 has an “and” to inform the user that all four criteria are required). If only one, two, or three of the conditions are triggered, this would **not** require safety glazing.

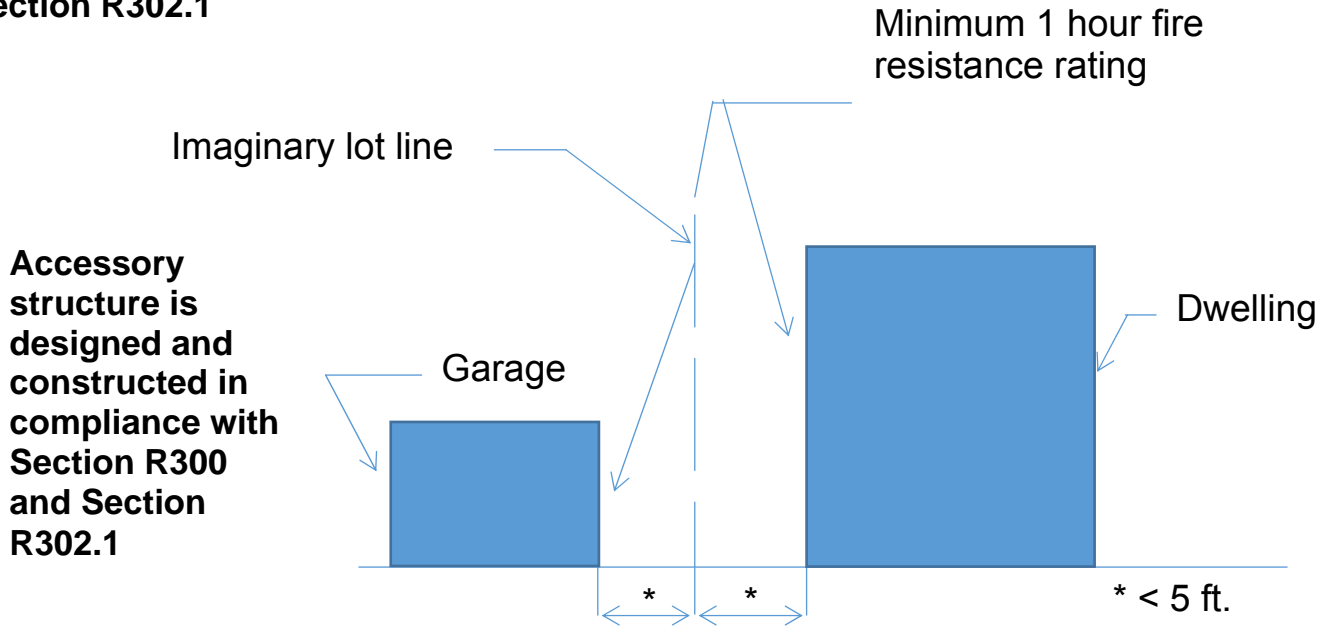
Source: Rob Austin
Code Assistance Unit
(609) 984-7609

(Private Detached Garages in the One- and Two-Family Dwelling Subcode - 3)

Example 3:

The project consists of a non-sprinklered, single-family dwelling with a detached garage where the floor area per floor of **each** building is not more than 4,800 square feet, and the fire separation distance to the imaginary lot line is less than 5 feet.

The dwelling is designed and constructed in compliance with Section R300 and Section R302.1



Each building is ≤ 4,800 square feet in area per floor.

Buildings on the same lot may be designed and constructed as separate buildings. As noted in the sketch, the walls facing each other must be designed and constructed with a minimum of 1-hour fire resistance rating. In accordance with Table R302.1(1), fire separation distances of less than 5 feet require a minimum of 1-hour fire resistance rating for the walls facing each other.

Source: Marcel Iglesias
Code Assistance Unit
(609) 984-7609

Grace Period and the Rehab Subcode

This article serves as an explanation of the applicability of the grace period (N.J.A.C. 5:23-1.6) to changes to the rehabilitation subcode.

This question is common when changes to the rehab subcode are made following the adoption of more recent editions of the model codes. To the extent that changes to the rehab subcode involve section number changes, with the requirements remaining the same, there is no real issue. However, if a new requirement is being added to the rehab subcode, then the grace period would apply. The decision to add – or not to add – a requirement to the rehab subcode is one that is taken deliberately. It is not automatic upon adoption of the most recent edition of the national model code.

Note: We have just received notice from the Office of Administrative Law that the September 19, 2016 proposal has been adopted May 1, 2017. Therefore, for those who wish to use the previous provisions, a complete permit application would have to be submitted on or before October 31, 2017.

Source: Code Assistance Unit
(609) 984-7609

Where Elevator Layout Drawings Should Be Forwarded for Review/Release

Although the assumption that two buildings on the same block and lot (for example, a garage and medical clinic) will be reviewed by the same entity is logical, it is not necessarily true in every instance. If a project is reviewed within the DCA, it may be reviewed by either the Elevator Safety Unit (ESU) or the Bureau of Construction Project Review (BCPR). However, not all projects are reviewed by the ESU or BCPR.

To avoid confusion and loss of time, it is extremely critical for the elevator applicant to know who performs the building plan review for the project so that the elevator layout drawings and other required materials may be forwarded to the correct review group.

The following are examples:

1. When the BCPR reviews building plans and specifications, the elevator layout drawings and other required materials should be forwarded to the BCPR for review/release.
2. When a municipal building department is reviewing the building plans and specifications, with the ESU enforcing the elevator subcode, the elevator layout drawings and other required materials should be forwarded to the ESU for review/release. **In this case only**, the architect of record is required to submit the 15-item questionnaire in lieu of building plans. The answers should be submitted along with all other required materials.
3. When a municipal building department that has a contract with a third-party agency (or their own elevator subcode official/inspector) reviews building plans and specifications, the elevator layout drawings and other required materials should be forwarded to the municipality for review/release.

If you have further questions regarding this subject, please direct your calls to me.

Source: Paulina Caploon
Elevator Safety Unit
(609) 984-7833

Electrical Meters Relocated Below Design Flood Elevation

It has come to the attention of the Office of Regulatory Affairs that some electrical utility employees are requiring electrical meters to be relocated below the required design flood elevation (DFE) before they will energize the service. This is a violation of the Uniform Construction Code and the agreement between the electrical utilities, the Board of Public Utilities and the Department of Community Affairs. Any known utility employee(s) requiring the relocation of an electrical meter into a flood zone should be brought to my attention by email at ken.verbos@dca.nj.gov with the following information:

- Name of the utility;
- Name of the utility worker; and
- Location of the property.

All help is greatly appreciated, and necessary, in order to prevent these utility employees from violating the flood resistant requirements of New Jersey and their employer’s agreement with the State.

If you have any further questions or concerns, please feel free to contact me.

Source: Kenneth W. Verbos
Office of Regulatory Affairs
(609) 984-7768

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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.

Stadiums, Arenas, and Theaters

In November of 2012, the Department amended N.J.A.C. 5:23-3.11(a) by adding #12 to the list of projects for which the Department has sole plan review jurisdiction. This amendment gives the Bureau of Construction Project Review sole plan review jurisdiction for all stadiums, arenas and theaters with an occupant load of 5,000 or greater. This includes all work in existing buildings that meet this criterion.

Local enforcing agencies are reminded that there is no exception to this regulation. Should the owner wish to have the local agency review the plans, authorization must be requested from the Bureau.

If you have any questions regarding this, please feel free to contact me by phone or by email at John.Terry@dca.nj.gov.

Source: John N. Terry
Chief, Bureau of Construction Project Review
(609) 984-7850

One- and Two-Family Dwelling Occupancy Classifications

As the title implies, there are two possible occupancy classifications for one- and two-family dwellings: Groups R-3 and R-5. Why two? It all comes down to the details of the design.

In review, Sections 310.5 and 310.7 of the 2015 International Building Code (IBC) pertain to Group R-3 and R-5, respectively. For the purpose of this article, the focus is on the portion of Section 310.5 for Group R-3 that includes, "Detached one- and two-family dwellings greater than three stories in height, multiple single-family townhouses greater than three stories in height, attached two-family dwellings separated from adjacent units by firewalls, and other one- and two-family dwellings that are outside the scope of the one- and two-family dwelling subcode."

This may look similar to Section 310.7 for Group R-5, but a closer analysis clarifies the differences between the classifications. Section 310.7 states, "Residential Group R-5 occupancies shall include all detached one- and two-family dwellings not more than three stories in height with a separate means of egress and multiple single-family townhouses not more than three stories in height with a separate means of egress designed and constructed in accordance with the 2015 International Residential Code" (IRC).

Therefore, detached one- and two-family dwellings or attached single-family townhouses that are three stories or fewer are Group R-5; one- and two-family dwellings or attached single-family townhouses that are greater than three stories are Group R-3.

Note that to maintain Group R-5 status, Section 310.7 of the IBC states that each unit is to have its own separate means of egress in accordance with the IRC. More specifically, when applying Section R311.1 of the IRC, the means of egress is not to be shared before making it outdoors. If the units share a small vestibule before going outside, the occupancy would be Group R-3, instead of Group R-5, regardless of stories.

Additionally, Group R-3 dwellings require an automatic suppression system in accordance with Section 903.2.8 of the IBC regardless of stories, unlike the options listed in Section R300 of the IRC.

Another element to consider is that if a one- or two-family dwelling is attached to a building of another occupancy, the dwelling is no longer detached, making it a Group R-3. For example, an apartment above a Business (Group B) would be a Group R-3 dwelling. Another example would be multiple sets of two-family dwellings attached to each other – with each set separated by firewalls – which would also be Group R-3.

Lastly, in any event, if there are 3 or more dwelling units in a building, the use is straight-up Group R-2 for the residential portion.

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

Detection in MRL Elevators

I always hated it as a kid when I was playing a game and the rules changed in the middle of it. Unfortunately, the same thing happens from time to time in my adult life. In my childhood life, the rules often “changed” (or were usually expanded) to address some situation that we hadn’t thought about when the game started. The same thing happens in the codes.

Specifically, it has happened recently with the use of fire detection in elevator shafts. For many years, the requirements were clear; detection was required in machine and control spaces and was only allowed in the shaft if it contained fire suppression. If there was fire suppression, detection was needed to activate the shunt trip that would disconnect power to the elevator prior to the activation of the sprinkler head. Otherwise, because of the limited risks associated with elevator shafts and the chance of nuisance alarms, it was not permitted to locate a detector in the shaft. It was a simple, straightforward rule, and everyone playing the game of elevators and fire protection understood it.

Recently though, the game has changed. In their never-ending quest to make elevators use less and less of the rentable area of the building, elevator companies have begun locating the elevator machinery in the shaft. This new equipment is fittingly called a “machine room-less elevator” or “MRL” for short, and it’s as popular as fantasy football. Applying the 2013 edition of NFPA 72 to this new arrangement creates a situation that has led to some questions. When there is a shaft with no suppression, there cannot be any detection, but when a shaft is also a machine space, detection is required. As a result, it’s time to come up with a new rule for this game. The 2016 edition of NFPA 72 allows detection in shafts that do not have suppression if they contain the elevator machine. The Department is suggesting that this new rule be followed.

There is one more necessary refinement to the rule to address the type of detector that should be installed. While many elevator inspectors support smoke detection because it often activates faster, the choice is not that simple. Elevator shafts are not always pristine, and the older they are, the less pristine they are. So, it’s an environment that may be dusty and dirty, and there’s, essentially, a giant piston going up and down to stir that dust and dirt up. Some of the people on the fire protection team who are playing the game are concerned about this, and NFPA 72 is, too. Both versions of NFPA 72 (2013 and 2016) state that the type of detection selected must be appropriate for the environment to which the device will be subjected. As a result, if smoke detectors are selected, they must be approved by the manufacturer for installation in an elevator shaft. Alternatively, a heat detector can be installed. The fire protection subcode official is charged with making sure that the type of detection used is appropriate in the shaft of a MRL; the elevator subcode official just needs to make sure that some form of detection is there.

Hopefully, this article will help resolve any issues that may arise from this new twist to the game.

Source: Michael Baier
Bureau of Code Services
(609) 984-7974

Air BnB Rentals

The Code Assistance Unit has received multiple inquiries regarding Air BnB rentals. The following is guidance to keep in mind in evaluating requirements applicable to these rentals.

The most common configuration for Air BnB is the use of a single-family house, which should be treated as a whole house rental. It would not be subject to any change of use provisions of the Uniform Construction Code, nor would it be subject to the Hotel and Multiple Dwelling regulations. Note that whole house rentals are fairly common in shore towns, and some have municipal ordinances in place which are applicable to these rentals. However, if the owner is renting out individual rooms, this would trigger additional requirements.

Additionally, an R-2 building being used as an R-1 would be subject to change of use provisions depending on whether the occupants are primarily transient (staying for up to 30 days) or primarily permanent.

If you have any further questions regarding this, please call the Code Assistance Unit.

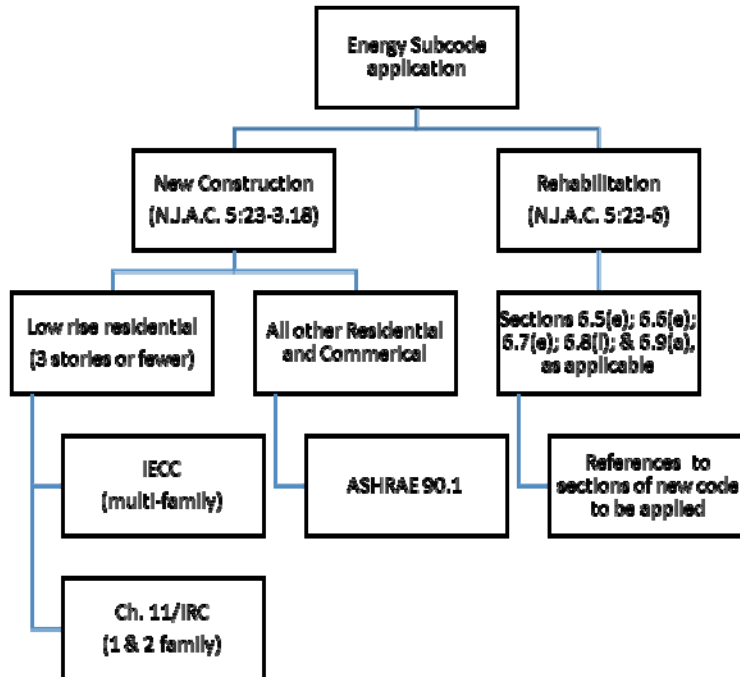
Source: Code Assistance Unit
(609) 984-7609

Energy Subcode Application

As noted in Bulletin 15-4, <http://www.nj.gov/dca/divisions/codes/resources/bulletins.html>, the Uniform Construction Code requires applicants to show compliance with the Energy Subcode as part of the permit application process for a newly constructed building or an addition; rehabilitated buildings must meet the requirements under N.J.A.C. 5:23-6, the Rehabilitation Subcode.

As always, if the building in question is not heated or cooled, it is not subject to the building thermal envelope portions of the Energy Subcode.

To best demonstrate the application of the Energy Subcode, below is a general breakdown of new construction projects and rehabilitation projects. Hopefully, this little tool is useful in the application of Chapter 11 of the International Residential Code/2015, the International Energy Conservation Code/2015 and the ASHRAE Standard 90.1-2013 in terms of new and existing buildings.



In order to demonstrate compliance, N.J.A.C. 5:23-2.15(f)1vi requires calculations for all new buildings and additions to existing buildings. Note that this does not apply to rehabilitated buildings themselves in terms of the building thermal envelope. However, when lighting systems are completely replaced in buildings subject to the ASHRAE 90.1, the Electrical tab within COMcheck may be used to verify the lighting-power densities of the space/building.

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

Group A-4 Membrane Structures: How Big and How Tall Can They be?

Let's start with the 2015 International Building Code (IBC/2015), as adopted at N.J.A.C. 5:23-3.14, Section 3102.3, Type of construction. More specifically, Section 3102.3.1, Membrane and interior liner material, allows either noncombustible membranes as set forth in Section 703.5, Non-combustibility tests, or materials meeting the fire propagation performance criteria of Test Method 1 or Test Method 2 of NFPA 701. If these conditions are met, the construction type is permitted to be classified as Type IIB.

Now that we have determined that a noncombustible frame or a cable-supported structure covered by one of these approved materials is Type IIB construction, we need to determine the allowable area and height.

(continued on next page)

(Group A-4 Membrane Structures: How Big and How Tall Can They be?)

AREA

Section 3102.4, Allowable floor areas, states, “The area of a membrane structure shall not exceed the limitations specified in Section 506.” Section 506.1.1, Unlimited area buildings, states, “Unlimited area buildings shall be designed in accordance with Section 507.” Section 507.4, Sprinklered, one-story buildings, allows the area to be unlimited when an A-4 occupancy is a single story at grade structure. Exception #2 of this section allows for occupied indoor participant sports areas to be exempt from the automatic sprinkler system requirement as long as two conditions are met. First, the participant sports area needs exit doors going directly to the exterior, and second, the space must be equipped with a manual fire alarm system installed in accordance with Section 907. Unlimited, non-sprinklered structures must comply with these requirements.

HEIGHT

Section 3102.5, Maximum height, states, “Membrane structures shall not exceed one story nor shall such structures exceed the height limitations in feet specified in Section 504.3.” Type IIB structures are limited to 55 feet per Table 504.3. There is one exception to Section 3102.5, where it states, “Noncombustible membrane structures serving as roofs only.” Noncombustible membrane structure is a defined term and this definition is not used in connection with to Section 3102.3.1. The definition is, “A membrane structure in which the membrane and all component parts of the structure are noncombustible.” The key word in the definition is “noncombustible” and both the membrane and all component parts of the structure must be noncombustible. When the membrane fabric is noncombustible, the 55 feet height restriction of Table 504.3 may be exceeded. When the membrane fabric (and not the structure/frame) meets **only** the fire propagation performance criteria of NFPA 701 method 1 or 2, the height is restricted to 55 feet. It should be noted that there are structural implications. The design professional must address wind loads which may limit the height.

Source: Michael Whalen
Code Assistance Unit
(609) 984-7609

Flood Resistant Materials Usage Revisited 

The 2014 Spring/Summer CCC contained a similar article regarding the permitted materials used for flood resistance based on the 2009 International Residential Code (IRC). With the adoption of the 2015 IRC, Section R322.1.8 has been revised. The section used to have two criteria that had to be met, but now there is only one: FEMA’s Technical Bulletin #2 (TB-2). In other words, item #1 from the 2009 IRC was deleted and item #2, TB-2, became the only item required in the 2015 IRC.

However, the logic of the elevation requirements has not changed. As stated in the previous article, when combining R322.2.1 of the 2015 IRC and NJ Department of Environmental Protection (DEP)’s regulations at N.J.A.C. 7:13, TB-2 is to be applied to all items below the design flood elevation (DFE). The DFE is the base flood elevation (BFE) and at least one additional foot per DEP regulations. In the event that a municipality has adopted a “freeboard” greater than one foot, then the DFE becomes the BFE plus freeboard required by municipal ordinance.

References:

- 2014 S/S CCC - <http://www.nj.gov/dca/divisions/codes/publications/ccs.html>
- R322 of 2015 - http://codes.iccsafe.org/app/book/toc/2015/New_Jersey/residential/index.html
- FEMA TB-2 - <https://www.fema.gov/media-library/assets/documents/2655>

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

The Basics of Planned Real Estate Development Exemptions and Warranties

Before issuing a certificate of occupancy for any condominium of at least two but fewer than ten units, request a copy of the Exemption issued by the Planned Real Estate Development (PRED) Section in the Bureau of Homeowner Protection from the owner. Condominiums of more than 9 units (including commercial) cannot be exempted unless the residential units are all low- or moderate-income units.

The Exemption Form is a three-page form entitled “Planned Real Estate Development Exemption Disclosure Notice.” Every page will have an “E” number on the top. Note that some applicants may have used the previous two-page form; this form is valid as long as it has an “E” number. The Exemption signifies that the project is exempt from registration under the Planned Real Estate Development Full Disclosure Act. It is very important to know that **all** local land use and construction obligations continue to apply.

(continued on next page)

(The Basics of Planned Real Estate Development Exemptions and Warranties)

Additionally, the Statute provides for certain automatic exemptions from the need to register a development with PRED, including single-family home developments of 99 homes or fewer, dispositions pursuant to a court order, and entirely commercial projects. Thus, there is usually no PRED document relating to the project, but occasionally, the sponsor of a statutorily exempt development will apply for an Exemption to show proof to a lender. Although most single-family home developments of 100 or more homes are registered, it is possible that such a development qualified for a Bureau-issued exemption, so it's best to ask if one has been issued. PRED Registration is required if no exemption applies.

For applicants using the State's Warranty Program, the Bureau has verified the granting of an Exemption before validating the warranties. The concern is greatest when a developer warrants through a private warranty plan because he or she may have failed to apply for an Exemption before selling units. This is a serious violation of the Planned Real Estate Development Full Disclosure Act and must be brought promptly to the attention of the Bureau of Homeowner Protection at (609) 984-7574. One additional concern is to verify that the person or entity conveying title to the property has an unexpired builder's registration in their name issued by the Bureau's New Home Warranty Program as evidenced by the same card builder's must show the construction official before obtaining a building permit.

If you have any questions about the validity of an Exemption, call the number above, or, if it concerns the Builder's Registration, call the Bureau of Homeowner Protection at (609) 984-7905.

Source: Edward Hannaman
Bureau of Homeowner Protection
(609) 984-7574

Single Exit Buildings in the 2015 International Building Code

It has come to the attention of the Code Assistance Unit that Chapter 10 (Means of Egress) of the International Building Code/2015 (IBC/2015) uses incorrect terminology regarding egress from single exit buildings. Tables 1006.3.2(1) and 1006.3.2(2) each refer to stories with one exit or access to one exit and include headings using the phrase "maximum common path of egress travel distance." In the IBC/2015, common path of egress travel is defined as "that portion of the exit access travel distance measured from the most remote point within a story to that point where the occupants have separate access to two exits or exit access doorways." This term is **not** applicable to single exit buildings. The term "exit access" as defined by the IBC/2015 is, "that portion of a means of egress system that leads from any occupied portion of a building or structure to an exit." Thus, the correct term to use for single exit buildings would be "exit access travel distance."

We have been advised by the ICC that the incorrect terminology in Chapter 10 of the IBC/2015 cannot be revised or processed as an errata because it was approved by the ICC code change process as part of a larger change to reorganize the Chapter. Instead, a code change proposal will be submitted for consideration to correct this error in the 2021 International Building Code.

Source: Code Assistance Unit
(609) 984-7609

Restaurant Bar Accessibility

The Code Assistance Unit has received multiple questions regarding accessibility of the bar area within a restaurant. This stems from Section 1108.2.9.1 (Dining surfaces) of the International Building Code/2015, where it states, "Where dining surfaces for the consumption of food or drink are provided, at least 5 percent but not less than one of the dining surfaces for the seating and standing spaces shall be accessible and be distributed throughout the facility and located on a level accessed by an accessible route." As the inquirers were told, the answer to this can be found in the International Building Code/2015 commentary. Here it states:

The issue of whether a portion of a bar or dining counter in a restaurant is required to be lowered to be accessible is subjective. The assumption is that if other types of seating are provided adjacent to the counter, then services provided at the counter will be available at the adjacent seating. Therefore, if adequate accessible seating is available adjacent to the bar area, the bar is not required to be lowered. If the bar is the only eating or dining surface in a restaurant, or in a separate room in the restaurant, then a portion of the bar must be made accessible.

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

December 2016 Construction Highlights

The following are highlights from the December 2016 issue of the New Jersey Construction Reporter, an on-line magazine on building permit and other construction activity in the State available at: www.nj.gov/dca/divisions/codes/reporter/.

- The dollar amount of construction authorized by building permits was \$1.306 billion in December.
- Residential work totaled \$694.1 million (53.2 percent).
- Office, retail, and other nonresidential activity amounted to \$611.5 million (46.8 percent).
- December activity is based on permits from 553 of New Jersey's 565 municipalities.
- Jersey City, Camden, and Newark had the most work; \$133.2 million, \$92.7 million, and \$45.2 million, respectively.
- Two of the bigger permits in Jersey City were for multifamily housing. A permit update authorized an additional \$34.5 million for a 221-unit apartment building, and a \$41.1 million permit was issued for a new condominium development with 153 dwellings.
- In Camden, \$69.6 million was authorized for the New Jersey American Water Company's new headquarters.
- The big project in Newark was a \$34.2 million conversion of a church to business and office use.

• Year to Date

- Three of four major construction indicators grew significantly in 2016.
- New retail space declined by 17.8 percent.
- The dollar amount of work exceeded one billion dollars every month in 2016. \$16.797 billion was authorized between January and December 2016. This was 11.5 percent more than last year at this time.
- Office space grew by 1.4 million square feet.
- 24,014 new dwellings were authorized by building permits. This was 24.6 percent more than last year and the highest level in eight years.
- Over 62 percent of all new dwellings were attached to other housing or in mixed-use buildings.
- 13.2 percent of all new dwellings were in Jersey City.

Major Construction Indicators, New Jersey: January - December

NJ DCA, 2/7/17

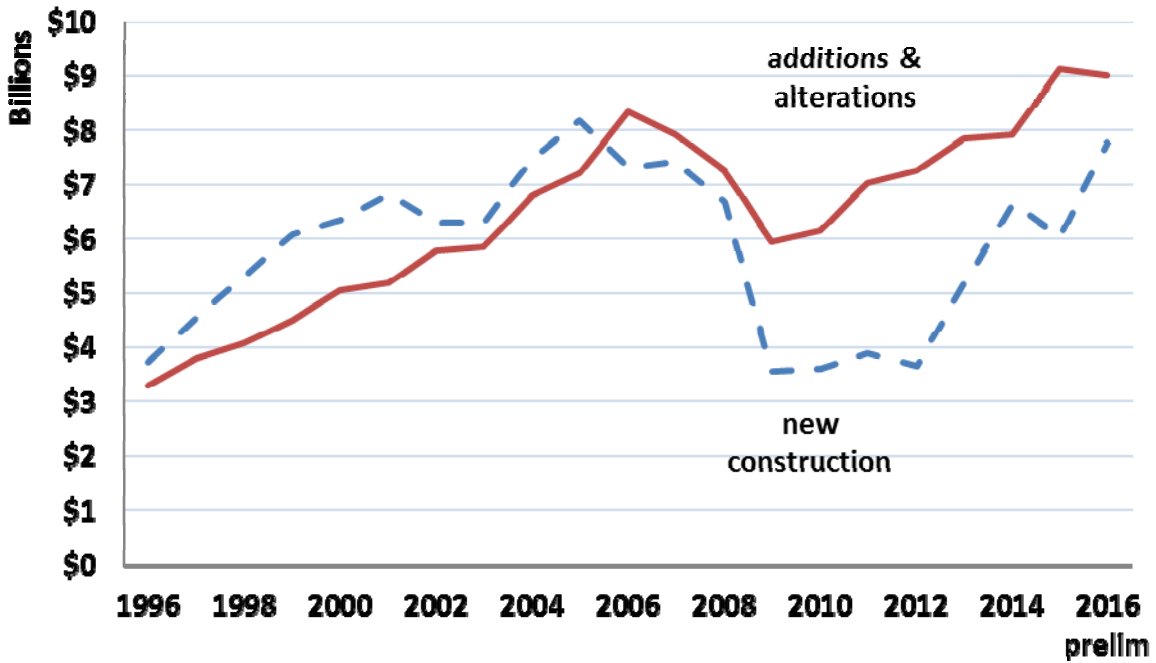
	Estimated cost of construction	Authorized housing units	Authorized office space (square feet)	Authorized retail space (square feet)
<i>year-to-date figures (January - December)</i>				
Jan – December 2016	\$16,797,744,601	24,015	7,172,207	2,913,459
Jan – December 2015	15,069,210,207	19,267	5,731,747	3,544,140
Jan – December 2014	14,439,333,570	22,840	5,325,631	3,536,520
Jan – December 2013	13,007,550,849	18,733	5,822,166	2,240,758
Jan – December 2012	10,901,351,075	15,145	7,376,324	2,073,947
Jan – December 2011	10,890,224,961	11,822	4,889,841	1,649,925
Jan – December 2010	9,657,851,990	11,578	5,192,205	2,135,558
Jan – December 2009	9,454,767,714	11,067	4,035,812	2,417,629
Jan – December 2008	13,834,284,685	16,203	7,869,822	5,459,374
Jan – December 2007	14,907,746,308	25,472	8,875,968	4,993,848
<i>percent change (January - December)</i>				
2015-16	\$1,728,534,394	4,748	1,440,460	-630,681
percent change	11.5%	24.6%	25.1%	-17.8%
2014-15	\$629,876,637	-3,573	406,116	7,620
percent change	4.4%	-15.6%	7.6%	0.2%
2013-14	\$1,431,782,721	4,107	-496,535	1,295,762
percent change	11.0%	21.9%	-8.5%	57.8%

(Continued on next page)

(December 2016 Construction Highlights)

- New construction permits grew by \$1.749 billion compared to last year, a 28.9 percent increase.
- Alterations and additions totaled just over \$9 billion, 1.3 percent less than last year.
- New houses accounted for \$4.772 billion or 28.9 percent of work authorized by permits.
- Home renovations added another \$4.068 billion (24.2 percent).

Dollar Amount of Work Authorized by Permits: rehab vs. new, 1996 - 2016 prelim



- Four cities: Jersey City, Newark, Camden, and Atlantic City were among the municipalities with the most construction.
- Jersey City led all municipalities with \$1.389 billion. The City had 3,174 new dwellings. Since 2001, no other locality has built more new houses.
- Newark had \$456.8 million of construction through December. A new vocational education center for Essex County accounted for \$80 million. A new charter school added another \$52.4 million. \$41 million was for a multi-purpose building for the New Jersey Institute of Technology.
- New home construction accounted for most of the activity in Fort Lee, Secaucus, Weehawken, Franklin in Somerset County, and Lakewood.
- Office development for Holtec, Subaru, and the American Water Company accounted for much of the activity in Camden. The City building department also issued big permits for several charter schools.
- The big development in Atlantic City was by Stockton State University and included a multi-purpose building, a new science center, and a dormitory.

New Home Prices

- 1,970 new houses were completed and began enrollment in a new home warranty in the fourth quarter of 2016. Their median sales price was \$485,000. This was 0.7 percent more than last quarter.
- The most expensive new houses were in Bergen, Cape May, Hunterdon, and Union counties.
- Most new houses built in New Jersey that are for sale are required to have a new home warranty. The exception is for those houses where the homeowner served as his/her own general contractor.

(continued on next page)

(December 2016 Construction Highlights)

New House Prices			
NJ DCA 2/7/2017			
Period	# of New Houses	Median Sales Price	Percent Change
4th qtr 2016 (p)	1,970	\$485,000	0.7%
3rd qtr 2016 (p)	1,961	481,785	1.3%
2nd qtr 2016 (p)	1,820	475,825	10.7%
1st qtr 2016 (p)	1,595	430,000	
4th qtr 2015	2,166	431,350	0.3%
3rd qtr 2015	2,342	430,000	0.8%
2nd qtr 2015	2,490	426,718	7.2%
1st qtr 2015	1,916	397,985	
2015	8,914	\$434,589	8.6%
2014	8,956	400,000	0.3%
2013	7,861	399,000	-0.2%
2012	7,165	399,900	2.5%
2011	6,839	390,000	1.3%
2010	8,712	384,899	4.4%
2009	9,161	368,512	-13.3%
2008	13,841	425,000	0.1%
2007	18,397	424,570	2.6%
2006	22,697	413,825	9.2%
2005	24,571	378,992	8.3%
2004	23,844	349,900	13.9%
2003	22,226	307,168	11.8%
2002	23,647	274,705	8.3%
2001	23,372	253,670	9.5%
2000	25,058	231,728	3.2%
1999	24,479	224,496	6.9%
1998	23,884	209,980	10.5%
1997	21,640	190,000	3.7%
1996	20,903	183,300	

Note: (p) data are preliminary

Source: John Lago
 Code Assistance Unit
 (609) 984-7609



Roof Insulation and Rehab

The applicability of the energy subcode requirements to any rehab project, including roofing, is as specified in the rehabilitation subcode, N.J.A.C. 5:23-6. Specifically, N.J.A.C. 5:23-6.5(e)9, 6.6(e)16, and 6.7(e)12 state:

When the work being performed exposes the roof decking/sheathing or the framing of any wall, floor, ceiling, or roof assembly that is part of the building thermal envelope (encloses conditioned space), any accessible voids in insulation shall be filled using insulation meeting the R-values of Table 402.1.2 of the residential energy code for wood framing and of Table 402.2.6 of the residential energy code for metal framing equivalents or of Table 5.5-4 or 5.5-5 of the commercial energy code, as applicable.

- i. In the event that insulation meeting the R-values above cannot be installed due to space constraints, insulation that fills the cavities of the framed assembly shall be installed.

As you can see, the goal is to achieve the maximum thermal value possible based on the space constraints. There was even a Construction Code Communicator article written about this, but it was in respect to the walls of the building thermal envelope (page 10 of the Summer 2016 CCC, http://www.nj.gov/dca/divisions/codes/publications/pdf_ccc/CCC_Smr_2016.pdf). As the article reads, the available space of the thermal envelope being opened is to 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 insulation that may be possible to install. In most cases, the existing level of insulation is merely maintained due to these roofing issues. In the event that there are no space constraints, insulation should be added to the maximum extent possible in accordance with the tables mentioned above.

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

Mechanical Inspections

It has come to the Department's attention that many municipalities still are not accepting Mechanical Technical forms or using mechanical inspectors for one- and two-family dwellings. This is a direct violation of the Uniform Construction Code.

N.J.A.C. 5:23-3.4(d) requires that a mechanical inspector enforce the provisions of the code relating to the installation of mechanical equipment. If no mechanical inspector is assigned, then the responsibility is given to the plumbing subcode official as per N.J.A.C. 5:23-3.4(d)1. In addition, N.J.A.C. 5:23-4.5(b)2, Form F145, Mechanical Inspector Technical Section, is a requirement for municipal enforcing agencies. Lastly, N.J.A.C. 5:23-4.18(c)5 regulates how mechanical fees must be charged. These sections of the UCC must be followed even if a municipality's fee schedule does not allow for mechanical charges.

Source: William B. Schmidt
Office of Regulatory Affairs
(609) 984-7627

Kitchen Exhaust Hood Makeup Air

The Code Assistance Unit has received multiple questions regarding Section M1503.4 (Makeup air required) of the International Residential Code/2015. These questions are not generally about the need for makeup air when exhausting more than 400 cfm, but more commonly regarding the ability to "pull" air from other spaces. Subsection 1503.4.1 (Location) states that the kitchen exhaust makeup air is to be discharged into the same room in which it is located or into rooms or duct systems that communicate through one or more permanent openings. The commentary for this section clears things up by stating:

This section simply clarifies how makeup air is delivered to the kitchen area. Some readers have interpreted the code to require the makeup air to be delivered directly to the kitchen; however, this has never been required by the code. The makeup air can be delivered to any space that freely communicates with the kitchen as well as to the kitchen or any combination of such locations.

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

Communications Wiring in Ordinary Maintenance

Recently, there has been some confusion regarding language within N.J.A.C. 5:23-2.7 (Ordinary Maintenance), specifically Section 5:23-2.7(b)6iii.(1). The language, as demonstrated below, is correct, but the Code Assistance Unit would like to dispel any possible misunderstandings with this article. Section 5:23-2.7(b)6iii.(1) states:

“Ordinary maintenance shall not include addition to, or alteration, replacement, or relocation of electrical wiring, except that the following shall be considered ordinary electrical maintenance:

Communications wiring in a Class 3 structure provided that the installation does not involve the alteration or penetration of a fire-rated assembly and is not in a hazardous location as defined in Chapter 5 of the electrical subcode.”

This section states two different requirements for electrical work to be considered ordinary maintenance:

1. Communications wiring in a Class 3 structure cannot involve the alteration or penetration of a fire-rated assembly.

And

2. Communications wiring in a Class 3 structure cannot be in a hazardous location as defined in Chapter 5 of the electrical subcode.

In short, if it is to be considered ordinary electrical maintenance, it is **not** through a rated assembly and **not** in a hazardous location. If either of those conditions are not met, then the work cannot be considered ordinary maintenance. Some believe the rule should be revised to replace the word “and” with “or.” Doing so would not be accurate, because the rule uses verbs in the negative (ex: does **not**; is **not** in).

The word “or” would make sense only if the exceptions were written with verbs in the positive: “Communications wiring in a Class 3 structure will not be ordinary maintenance if **it involves** the alteration of a fire rated assembly or **it is in** a hazardous location as defined in Chapter 5 of the electrical subcode.

Hopefully, this explanation is helpful to anyone who may have been confused about how to apply the exceptions. The wording has not been a problem up until now, and with numerous changes to ordinary maintenance being considered, the Code Assistance Unit does not currently plan to change the rule text.

If you have any further questions on this subject, please contact the Code Assistance Unit.

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

Windows in Rehabilitated Bathrooms

What does one do with existing window(s) in a rehabilitated bathroom? Well, there are two answers. Let’s head to the Rehabilitation Subcode, N.J.A.C. 5:23-6.

Each category of work under rehab (Repair, Renovation, Alteration and Reconstruction) contains the following requirement in subsection (e):

Replacement glass shall comply with the “Safety Glazing” requirements of the building subcode and shall be installed in the “Specific Hazardous Locations” as specified by Section 2406.4 of the building subcode or by Section R308.4 of the one- and two-family dwelling subcode, as applicable.

Notice that the above refers to instances when someone chooses to replace their windows, **not** their bathroom fixtures. This is why I say there are two answers.

If a bathroom is redone and the fixtures are swapped out with no rearrangement, a pre-existing window that does not meet the safety requirements of R308.4 is permitted to remain as is.

This changes if a bathroom is redone and the fixtures are moved. If a pre-existing window was compliant and a newly installed bath tub is placed under it during the rehabilitation, the window is no longer in compliance. This is a violation of N.J.A.C. 5:23-6.2(c) as it is no longer compliant as a result of the rearrangement. The window is subject to the safety glazing requirements of R308.4. Please note that there may be a safety film that could be applied to the window in this case.

Source: Rob Austin
Code Assistance 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

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