

Construction Code Communicator



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Lt. Governor Sheila Y. Oliver, Commissioner

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Implementation of P.L. 2021, c. 182 – Lead Based Hazards in Rental Housing

(Reprint of GovConnect Notice sent to Municipal Clerks, Administrators, and Housing Authorities on March 1, 2022)

Please be advised that last July the Governor signed P.L. 2021, c. 182 into law. This Lead Law addresses lead based paint in rental housing, one of the biggest sources of lead exposure for children. The signing of this law marked a major step forward in our efforts to end childhood lead poisoning.

Specifically, this law pertaining to lead-based paint hazards, residential rental property, and establishing lead-based paint hazard programs was approved on July 22, 2021. The Act takes effect one year following the date of enactment, but the Department of Community Affairs, and municipalities, are authorized to take anticipatory actions necessary for the implementation of the Act. The full text of the act is available online at: <https://www.njleg.state.nj.us/Bills/2020/PL21/182.PDF>.











The act imposes an obligation on municipalities that maintain permanent local agencies for the purpose of conducting inspections and enforcing laws, ordinances, and regulations concerning buildings and structures, to perform inspections of certain single-family, two-family, and multiple rental dwellings for lead-based paint hazards, at times specified in the Act. Municipalities that do not maintain such local agencies shall hire a certified lead evaluation contractor to perform such inspections. A municipality shall permit dwelling owners/landlords to directly hire a certified lead evaluation contractor for this purpose. If lead-based paint hazards are identified, then the owner of the dwelling shall remediate the hazards through abatement or lead-based paint hazard control mechanisms.

As we get closer to the effective date of the Act, the Department will be providing further information on the requirements of the Act and how it is to be implemented. In the meantime, the Department encourages municipalities to begin to familiarize themselves with the requirements of the bill and to begin to prepare for implementation.

Any questions should be emailed to: LeadLaw21pL182@dca.nj.gov. Municipal clerks are asked to provide this message to any departments that may be responsible for its implementation.

Source: Code Development Unit
(609) 984-7609

In This Issue

In This Issue			
All “New Homes” Are Not Created Equal – Reprint	13	Mechanical Inspection Technical Section 	5
Applicable Electrical Requirements in Rehabilitation Projects 	3	Occupancy Classifications for One- and Two-Family Dwellings 	3
Application of “Special Technical Services	4	Residential Fire and Smoke Alarm/Detection Systems – Quick Reference Guide  	9
Emergency Escape and Rescue Openings in Group R-2 Buildings  	2	The Habitable Attic Provision in the New Jersey International Residential Code 	8
Ground Snow Loads and Wind Loads 	6	The State Housing Code and its Applicability	7
Implementation of P.L. 2021, c. 182 – Lead Based Hazards in Rental Housing	1	When to Call the DEP Hotline for Unregulated Heating Oil Tanks (UHOTs) 	2

Emergency Escape and Rescue Openings in Group R-2 Buildings

As you all are aware, new Group R-2 occupancies are required to have automatic sprinkler protection per Section 903.2.8 of the International Building Code/2018 (IBC/2018). This isn't the focus of the article, but a reminder before we get to the "meat and potatoes."

Section 1030.1, the "General" section for the emergency escape and rescue openings (EERO) requirements of the IBC/2018 states that in addition to the means of egress required by this chapter, EEROs are to be provided in Group R-2 occupancies located in stories with only one exit or access to only one exit as permitted by Tables 1006.3.3(1) and 1006.3.3(2).

In other words, this means a new building that contains Group R-2 occupancies, is 3 or fewer stories, and contains not more than 4 dwelling units per story is permitted to have one exit or access to one exit if common travel distances are maintained to 125 feet (see Table 1006.3.3(1)). If a building meets these criteria, then the building is required to have EEROs installed in sleeping areas. Note that I do not reference Table 1006.3.3(2); this is because, as per Note C, this table is used for R-2 occupancies consisting of sleeping units, and I specifically state dwelling units in my example. However, if the building is designed with two exits or access to two exits, then EEROs are not required.

Yes, when two exits or access to two exits are provided, this means the interior could be dark and drab with minimal natural light. But also note, Section 1202.1 allows for buildings to be provided with natural ventilation in accordance with Section 1202.5, or mechanical ventilation in accordance with the International Mechanical Code. Also note, Section 1204.1 allows for every space intended for human occupancy are to be provided with natural light by means of exterior glazed openings in accordance with Section 1204.2 or are to be provided with artificial light in accordance with Section 1204.3.

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

When to Call the DEP Hotline for Unregulated Heating Oil Tanks (UHOTs)

The Code Assistance Unit has been in contact with the NJ DEP regarding when the NJ DEP Hotline should be called. In general, the only time one needs to call the DEP Hotline is when there is a confirmed oil discharge. The below bullets provide guidance on situations that are considered confirmed discharges and warrant a call to the DEP Hotline.

- Active Tanks – If a hole has been found in a tank that has been in service, the presence of the hole constitutes a confirmed discharge which should be reported to the NJ DEP Hotline.
- Tanks no Longer in Operation – For tanks that have been in the ground, out of service, without having undergone the proper abandonment procedure, the presence of a hole in the tank constitutes a confirmed discharge which should be reported to the NJ DEP Hotline.
- Tanks Abandoned in Place Without a UCC Permit – When a tank has been abandoned without the issuance of a UCC permit and final inspection, there is no way to determine whether the abandonment followed proper procedure. Therefore, the presence of a hole in the tank would constitute a confirmed discharge which should be reported to the NJ DEP Hotline.
- Tanks Abandoned in Place with a UCC Permit – When a UCC permit has been issued and a final inspection has been performed for the abandonment of a UHOT, that procedure has been verified. In this circumstance, the presence of a hole in the tank alone does not constitute a confirmed discharge. Contractors will often use visual and olfactory inspections as well as field screenings to determine whether there has been a discharge. Because in these circumstances, the presence of a hole in the tank does not constitute a confirmed discharge, the presence of a hole should not be used as the sole basis for calling the NJ DEP Hotline.

It is important to be familiar with these situations and be mindful that if an unnecessary call is made to the NJ DEP Hotline, the result may be that the tank owner must undertake a remediation, and be subject to the expense of the remediation, where one is not needed.

Should you have any questions, please contact me at 609-913-6677 or Michael.Justiniano@dep.nj.gov.

Source: Michael Justiniano, Section Chief
N.J. Department of Environmental Protection
Bureau of Field Operations - Southern Field Office

Occupancy Classifications for One- and Two-Family Dwellings

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 310.4 and 310.6 of the 2018 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 310.4 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 310.6 for Group R-5, but a closer analysis clarifies the differences between the classifications. Section 310.6 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 [2018] 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 310.6 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. For example, 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. If you are a designer that would like to apply the habitable attic provisions, pay close attention to its application; the story limitation for Group R-5 is a “hard stop” at a three and habitable space above that would land you at Group R-3, suppressed – habitable attics may apply to a two-story Group R-5 only, not suppressed.

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/Development Unit
(609) 984-7609

Applicable Electrical Requirements in Rehabilitation Projects

As an Inspector and CEU instructor, I get many phone calls from contractors and other inspectors about what we can and cannot enforce in a rehabilitation project.

Here are a few typical questions that come up.

1. Do I need to install AFCI breakers when replacing or upgrading an existing service?

Answer: No. It's not a new building element even if you are upgrading the service. The branch circuits are existing (see N.J.A.C. 5:23-6.9(a)26).

2. Do I need to use AFCI breakers for a kitchen renovation?

Answer: Maybe. Same as above, if you are just removing old branch circuits and installing the same amount of new branch circuits (replacing the old wiring with new), no AFCI is required. If you are adding new circuits which did not exist prior to the renovation, AFCI is required for the new branch circuits only (see N.J.A.C. 5:23-6.9(a)26).

(Continued on next page)

(Applicable Electrical Requirements in Rehabilitation Projects)

3. Do I need a receptacle on an island or peninsula in a kitchen renovation?

Answer: No. An island, peninsula, or any other new counter space is not on the “New Building Element” list (see N.J.A.C. 5:23-6.9(a)1 through 34 for a list of new building elements. Electrical new building elements are #24, 25, and 26).

That brings us to Materials and Methods, N.J.A.C. 5:23-6.8(a) which tells us:

The following requirements shall be met for materials and installation methods for all items that are part of the applicant's proposed project for all categories of work other than repair.

N.J.A.C. 5:23-6.8(d) tells us:

Electrical Materials and Methods. The following sections of the electrical subcode (N.J.A.C. 5:23-3.16) shall constitute the electrical materials and methods requirements for this subchapter:

#3 goes on to say, “all of chapter 2 entitled "Wiring and Protection" except Sections 210.11, Branch Circuits Required, 210.12, Arc-Fault Circuit-Interrupter Protection, 210.52, Dwelling Unit Receptacle Outlets, 210.60, Guest Rooms or Guest Suites, Dormitories and Other Similar Occupancies, 210.62, Show Windows, 210.63, Heating, Air Conditioning, and Refrigeration Equipment Outlet, and 210.70, Lighting Outlets Required.”

Therefore, we cannot enforce Section 210.52, which is where the receptacle spacing requirements are found. Section 210.52(C) is where the receptacle requirements are found for counter tops, islands, and peninsulas.

The only time we can enforce Section 210.52 in a rehabilitation project is if someone is creating finished space in previously unfinished spaces (N.J.A.C. 5:23-6.6(e)13 & 15), in additions (N.J.A.C. 5:23-6.31(a)), and in reconstruction projects (N.J.A.C. 5:23-6.26(o), Basic Requirements R2 & R4, and N.J.A.C. 5:23-6.27(f), Basic Requirements R3 & R5). Receptacle and lighting outlets shall comply with Section 210.52 and 210.70, respectively, of the electrical subcode.

Source: Tom Valeo, Electrical Subcode Official
(Union City, North Arlington, and Wallington)

Application of “Special Technical Services”

The Office of Regulatory Affairs has received numerous complaints where code officials are using the Special Technical Services section of the UCC, N.J.A.C 5:23-2.19, as a tool to ask for a “post installation letter” as a *blanket* request on final inspections to verify code compliance. This issue has been primarily with one- and two-family homes (Groups R-3 or R-5) undergoing, but not limited to, the installation of solar photovoltaic (PV) systems.

Officials have stated that some installations are of a “rack-less” type PV module, and installing contractors are able to complete a full installation of a PV system in just a day or two. Consequently, this means that the inspection process is limited to only a final inspection. Note that, per N.J.A.C. 5:23-2.17A, solar PV installations are not minor work and would require a full permit. This means that a midpoint inspection is required for this work.

Moving further, and back to the title of this article, please refer to the last sentence in the of the paragraph at N.J.A.C. 5:23-2.19(a): “*Such report shall contain the information deemed necessary by the construction official to aid in his determination.*” The use of the words “to aid in his determination” indicates to the reader that the intent of this section is to aid an official’s decision if a plan being presented for review before them will meet applicable codes when the project is completed. Upon the UCC official’s plan review, they may ask for Special Technical Services to determine code compliance on a “particular” project but **not** as a blanket request for all projects of a certain type (e.g. solar PV).

To further prove this point, note that UCC Bulletin 03-5, page #4, provides information on “Special Cases” in which N.J.A.C. 5:23-2.19 may be applied and is best for the plan review process; note that this bulletin is issued for Special Inspections, which apply to Class 1 buildings (not Group R-3 or R-5).

Special Cases: N.J.A.C. 5:23-2.19(a) authorizes the building subcode official to require special inspections for proposed work that is unusual in nature. Some examples include alternative construction materials and systems, unusual design applications of materials, and materials and systems required to be installed in accordance with additional manufacturer’s instructions that prescribe requirements not contained or referenced in the Building Subcode.

(Continued on next page)

(Application of Special Technical Services)

As a licensed UCC code official, it is the duty of the appropriate subcode official or inspector to verify during an inspection that has been requested that installations have occurred in accordance with plans previously presented for review and under the applicable codes using the methods and materials as set forth by any required code and/or standard at time of review. N.J.A.C 5:23-2.18(b)3 and 4 do provide for "additional" inspections if requested in writing at the time of application, providing such inspections do not cause a disruption of work. These articles may be used to check for compliant listed equipment as well as a verification that all equipment as specified in the permit application are being installed. The ability to perform or not perform a building or electrical inspection on a Group R-3/R-5 home that has had a solar PV system installed, or even an automatic generator, does not constitute a "special case."

It is the position of the Office of Regulatory Affairs that officials are misapplying this section of the UCC. If anyone would like further interpretation, please contact the Code Assistance Unit at (609) 984-7609.

Source: Office of Regulatory Affairs
(609) 984-7672

Mechanical Inspection Technical Section

The Division has been receiving many questions pertaining to who can sign and seal the "Mechanical Inspection Technical Section." As a reminder, the Mechanical Technical Section can only be used for rehab of a R-3 or R-5 projects. It cannot be used for a new or additions of R-3 or R-5 projects or for any commercial projects.

The following is a partial reprint of the communicator article from Volume 31, Number 3, Fall 2019:

"The Division has received numerous phone calls regarding when a mechanical technical section is required. There is a misconception that the mechanical technical section is for when HVAC and duct work are installed in any use group; this is incorrect. N.J.A.C. 5:23-3.4(d) states that the mechanical technical section is to be used for existing R-3 and R5 structures when mechanical equipment and other related apparatuses are being installed. So now the question is: What type of work is being done? Based on questions that have been asked most frequently, the Division has put together the following matrix as a guide (refer to CCC Volume 31, Number 3, Fall 2019). Remember, this is NOT an all-inclusive list, but it should provide officials with a starting point for when to require mechanical technical sections."

Below is a breakdown of the items listed on the form indicating who can sign and seal the form:

Water Heater – Only NJ Licensed Master Plumbers (LMP) is permitted to install equipment and sign and seal the Mechanical Technical Section.

Fuel Oil Piping Connections – NJ Licensed Heating, Ventilating, Air Conditioning, and Refrigeration (HVACR) contractors and NJ LMPs are permitted to install fuel oil piping and sign and seal the Mechanical Technical Section.

Gas Piping Connections – NJ Licensed HVACR contractors and NJ LMPs are permitted to install gas piping and sign and seal the Mechanical Technical Section. Electrical contractors are permitted to install gas piping and sign and seal the Mechanical Technical Section for gas piping to a generator only.

Gas Piping Connections for Hearth Equipment – Master Hearth Specialists do not and will not be issued a seal by the licensing board. Therefore, they are not required to seal the Mechanical Technical Section. They may install the gas piping connections and must sign the Mechanical Technical Section.

Steam Boiler and Hot Water Boiler - NJ Licensed HVACR contractors and NJ LMPs are permitted to install steam boilers and hot water boilers and sign and seal the Mechanical Technical Section.

Backflow Preventers – Work involving the installation or replacement of backflow preventers and for the installation and replacement of heating or cooling equipment or other mechanical equipment must be filed on a Plumbing Technical Section as per NJAC 5:23-3.4(d).

Hot Air Furnace – Only NJ Licensed HVACR contractors are permitted to install hot air furnaces and sign and seal the Mechanical Technical Section. A NJ LMP cannot install hot air furnace systems, including ductwork, pursuant to the HVACR licensing regulations.

Oil Tank – NJ Licensed HVACR contractors and NJ LMPs are permitted to install or remove above ground oil tanks and sign and seal the Fire Technical Section (*contrary to the article's title, not a mechanical technical section*). Underground oil tanks can only be installed, removed, or abandoned by a NJ DEP certified contractor.

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(Mechanical Inspection Technical Section)

LPG Tank – NJ Licensed HVACR contractors and NJ LMPs are permitted to install and sign and seal the Mechanical Technical Section. LPG companies registered through the Department are permitted to install or remove LPG tanks and should check the “Exempt Applicant” box.

Fireplace – NJ Licensed HVACR contractors, NJ LMPs, and NJ Licensed Master Hearth Specialist are permitted to install and can sign the Mechanical Technical Section. Again, a Master Hearth Specialist will not be issued a seal and not required to seal the Mechanical Technical Section. HVACR contractors and LMPs must sign and seal Mechanical Technical Section.

Generator – NJ Electrical Contractors are permitted to install generators. NJ Licensed HVACR contractors, NJ LMPs, and NJ Licensed Electrical Contractors are permitted to install the gas piping and sign and seal the Mechanical Technical Section.

Other – Air conditioning system – Only NJ Licensed HVACR contractors are permitted to install air conditioning systems and sign and seal the Mechanical Technical Section.

Also, under **Other** – Replacement of a non-testable backflow preventer on a boiler. NJ Licensed HVACR contractors and NJ LMPs are permitted to install and sign and seal the Mechanical Technical Section. A Plumbing Technical Section is required if mechanical inspector is not a plumbing subcode official or plumbing inspector. Licensed HVACR contractors would sign the Plumbing Technical Section as an “Exempt Applicant.”

Please note that a single-family homeowner who personally occupies his or her own dwelling and who performs work on his or her own dwelling, except chlorofluorocarbons (CFC’s) or hydrochlorofluorocarbons (HCFC’s) refrigerants, can file the Mechanical Technical Section and sign it as “Exempt Applicant.”

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

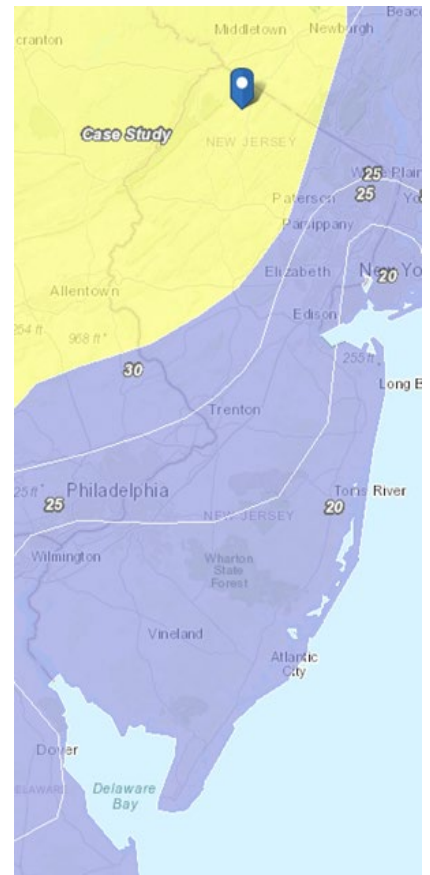
Ground Snow Loads and Wind Loads 

Upon the adoption of the 2018 model codes, the following design load bulletins were combined and consolidated: 94-8, Ground Snow; 03-4, Wind; and 05-2, Seismic. Currently, Bulletin 19-1 directs users to Applied Technology Council’s (ATC) website, <https://hazards.atcouncil.org>, which provides the most up to date “site-specific hazard information.”

This article is to notify users that there is an additional resource website via the American Society of Civil Engineers (ASCE), <http://asce7hazardtool.online>. This website is similar to the ATC website, in which you start with the input of the desired site location address. Here, under Requested Data, you will be asked for a “Site Soil Class.” Where the soil properties are not known on sufficient detail to determine the site class, Site Class D should be used unless the authority having jurisdiction or geotechnical data determines Site class E or F soils are present at the site. For the “Standard Version,” 2018 and 2021 International Building and International Residential Codes (IBC & IRC), both reference ASCE/SEI 7-16. The Risk Category should be determined by referencing Table 1604.5 in the IBC; note that one-and two-family dwellings will default to Risk Category II. For the measurement option, you should use “customary.” Lastly, choose which load types you are seeking (wind, snow or seismic.)

As you can see from the map to the left, the program may provide an output for parts of NJ that may be case study (CS) areas. If your site location requires a site-specific CS to establish ground snow loads, you should follow up with the local construction office to see if they have specific data for this location. 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 which is reiterated in Bulletin 19-1. All other counties should generate a load number.

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



The State Housing Code and its Applicability

The State Housing Code, N.J.A.C. 5:28, is one of the many codes maintained by the Division, and it has recently been the subject of quite a few questions. This article is a helpful reference for what that code is, how it is to be applied, and how it relates to the Uniform Construction Code.

What is the State Housing Code?

N.J.A.C. 5:28 is a property maintenance code that is promulgated for use as a referenced standard. It is intended to provide requirements for the maintenance of one- and two-family dwellings in municipalities that adopt it.

(Note: any building containing three or more dwelling units falls under the jurisdiction of the Maintenance of Hotels and Multiple Dwellings regulations, N.J.A.C. 5:10).

Who is required to comply with the State Housing Code?

As stated above, the State Housing Code is a referenced standard. Unlike the UCC, which applies to every municipality in the State, the State Housing Code is only applicable in the municipalities that have adopted it by ordinance.

In all instances, the State Housing Code is not to be applied to new construction. Because this is a maintenance code, it only applies to existing one- and two-family dwellings. It cannot be used when reviewing a permit application for new construction. New construction must comply with the UCC.

Another nuance that is important to note is that a house built to the UCC with a valid certificate of occupancy should be maintained appropriately. If the State Housing Code contains requirements that differ from the UCC at the time of construction, the dwelling should be maintained as it was built. The municipality should not require new installations. The State Housing Code addresses a variety of maintenance features which may not apply to all houses; regulations regarding any features that do not exist in a home and thus cannot be maintained should not be applied to that home.

Let's look at a Hypothetical Scenario

Say there is an existing one-story, single-family home in a municipality that adopts the State Housing Code by ordinance.

This home was built in accordance with the one- and two-family dwelling subcode (2018 International Residential Code, New Jersey Edition). Section 303.1, Habitable Rooms, of the subcode, does not require windows in habitable rooms that meet certain criteria. As such, the family room does not have any windows.

The Housing Inspector is performing a State Housing Code inspection. N.J.A.C. 5:28-1.6 states that every habitable room shall have at least one window.

Should the housing inspector require the homeowner to create a window?

No. As stated above, because the home meets the requirements of the UCC, the State Housing Code applies only to those elements which exist to be maintained.

Conclusion

In short, the State Housing Code is intended to regulate the maintenance of existing one- and two-family dwellings in municipalities that adopt the Code by ordinance. It cannot be applied to new construction, and it cannot require a homeowner to install new fixtures or systems.

Source: Marie Daniels, Code Development 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 codeassist@dca.nj.gov.

The Habitable Attic Provision in the New Jersey International Residential Code

What it is

To quote a song title from the late teen era of three Code Assistance coworkers, "I'm Not a Girl, Not Yet a Woman" by Britney Spears. That's kind of what a Habitable Attic (HA) is within the one- and two-family dwelling subcode, the International Residential Code/2018 (IRC/2018), as adopted at NJAC 5:23-3.21, hence the New Jersey edition. HA's are a in between zone; not a 2-story home (I'm not a girl) and not a 3-story home (Not yet a woman). It simply is a 2-story home with a HA above. Oh, and as a reminder per page 12 of the Fall 2018 CCC, the HA provision is not permitted to be applied to a 3-story home and can only be applied to a 2-story home.

History

The habitable attic provision of the IRC/2018, New Jersey edition, can be found at Section R300, Height and Area Limitations. The term habitable attic is defined at Section R202, Definitions. The application of the HA provision dates back prior to the adoption of the 2000 I-Codes, and truly comes from the days of the 1995 CABO One- and Two-Family Dwelling Code and 1996 BOCA National Building Code. It was brought into the IRC/2000, because without amendment, the "plain Jane" IRC allowed for a 3-story home of unprotected (VB) construction. Also of note, no sprinkler was required in the 2000 code; the unamended 2009 code added them but nationally, many administrations amend them out of the code like NJ. That all being said, our mish-mash of previous code provisions with today's provide a quality balance of life-safety regulations and this leads to the text at Section R300, Height and Area Limitations, of the IRC (any NJ edition) which states: Without the addition of sprinkler protection or modification to the construction type, the home is limited to two stories, 4,800 s/f per story and 35 feet in height; a habitable attic is permitted to be included within a two-story home if it meets the definition in Section 202 or the IRC.

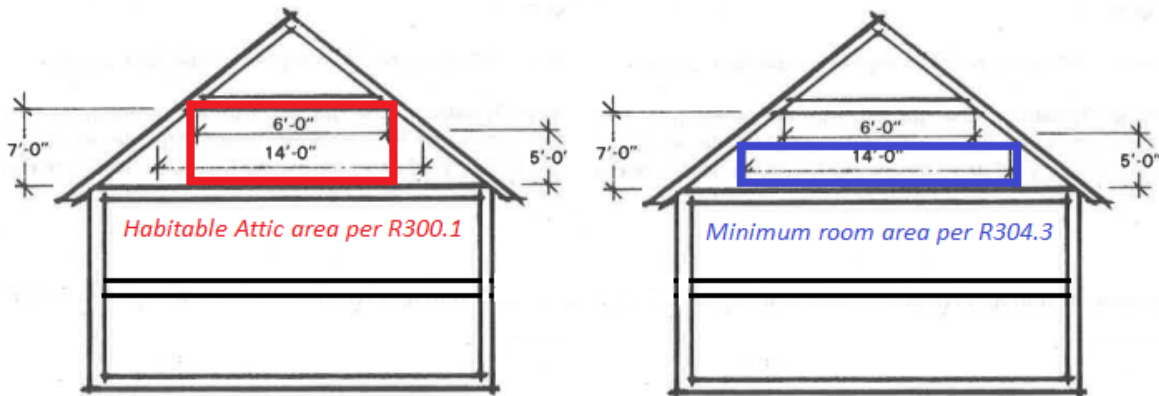
Definitions

From the inquiries received, there seems to be some confusion of what exactly a HA is, and how the square footage is to be calculated so let's review the definition of a habitable attic.

- ATTIC, HABITABLE. An attic that has a stairway as a means of access and egress and in which the ceiling area at a height of 7 feet above the attic floor is not more than one-third the area of the next floor below.
- ATTIC. The unfinished space between the ceiling assembly and the roof assembly.
- HABITABLE SPACE. A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

When one compares the definition of two attics, you will see that the "general" attic states, "unfinished space" which implies the "other" attic, the habitable one, to be finished. Also, by definition, a "general" attic is not considered to be occupiable or habitable. Call it a process of elimination, but when it comes to habitable attic, one should only consider the finished space for which a ceiling height is 7 feet or greater for area.

While we're on the subject of area, let's talk about Section R304.3, Height effect on room area. This is the general Room Area calculation which is calculated separately from the HA area allowance. In other words, it applies for minimum room area but does not effect the maximum HA allowance.



(continued on next page)

(The Habitable Attic Provision in the New Jersey International Residential Code)

Examples

Below are a few common questions that the Code Assistance Unit receives:

- Should the square footage of the stairwell count towards the total area? The answer is within the definition. Note, that the 7-foot height is measured from the attic floor. Since a stairwell communicates between both areas, a floor at the attic level does not exist and it would not be counted.
- Can a habitable attic have a bathroom since a bathroom is not considered a habitable space per the definition of habitable space? And if so, would the bathroom count towards the square footage if the ceiling height is say 6'-8" which is permitted per Section R305.1? The answer is yes, a bathroom can be within a habitable attic and if the ceiling height is under 7'-0" than the square footage of the bathroom would not count towards the total calculation of square footage. However, if the bathroom is finished at 7'-0" or greater, it now counts to the overall habitable attic allowable area. This is also similar to storage space on this level. If finished at less than 7'-0" it can remain but not count as the overall habitable attic allowable area. In both instances, you may utilize the "habitable space" definition to finished spaces below the 7'-0" criteria for non-habitable locations. But if the non-habitable area is finished at 7'-0" or greater, it now counts as part of the allowable habitable attic area.
- Can you create a habitable attic to an existing single family detached home if so, which codes would apply? What if the current stairway does not meet Section R311.7 of the International Residential Code? Yes, you can create a habitable attic but since this is a new building element, we need to start at N.J.A.C. 5:23-6.9(a)2 which states: When the number of stories in a building is increased without increasing the height of the building, the building shall comply with the story requirements of Table 504.4 of the building subcode.
 - i. Stories or habitable attics within buildings of Group R-5 shall comply with N.J.A.C. 5:23-3.21(c)3i of the one- and two-family dwelling subcode.

The link to Section 3.21(c)3i points back to the height and area limitations that you will find at Section R300 of the International Residential Code.

If the applicant intends on using a portion of the proposed habitable attic as a sleeping room, N.J.A.C.5:23-6.6(e)11 must be followed. In short, the following shall be provided:

1. A hard-wired smoke alarm shall be installed within each new sleeping room and a second, hard-wired smoke alarm shall be installed within the immediate vicinity of the sleeping room in accordance with NFPA 72.
2. A bedroom window or exterior door that meets the requirements of N.J.A.C. 5:23-6.9(a)17 shall be provided. However, this requirement does not apply to a home where the sleeping room is provided with a door to a corridor having access to two remote exits or in a home equipped throughout with an automatic sprinkler system.

As for the existing stairway, note that the definition for a habitable attic states, "a stairway as a means of access and egress" it does not state "stairway meeting the requirements of Section R311.7 of the International Residential Code," therefore, if the stairway meets the definition of a stairway found in the International Residential Code, then the stair would apply for rehab purposes. Please note, that pull-down stairs would not be considered a compliant stairway.

I hope this helps clear up any confusion regarding HA's. And if you like Britney Spears, you can thank Rob Austin for editing this article.

Source: Adam Matthews, Code Assistance Unit
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Residential Fire and Smoke Alarm/Detection Systems – Quick Reference Guide

For residential projects that are new construction or existing, the minimum smoke alarm and/or detection system installed should comply with either the 2018 International Building Code (IBC), the 2018 International Residential Code (IRC), or the Rehabilitation Subcode (Subchapter 6), of the Uniform Construction Code (UCC), N.J.A.C. 5:23, as applicable.

The tables below provide guidance to applicable code sections based on the use group classification. Please be advised that the following table is for information purposes only and is not intended to be an all-inclusive list.

(Continued on next page)

(Residential Fire and Smoke Alarm/Detection Systems – Quick Reference Guide)

Existing Homes

Categories of Work	UCC Rehabilitation Subcode, N.J.A.C. 5:23-6 Citations				
REPAIR	R-1	R-2	R-3	R-4	R-5
Smoke alarms required	N/A	6.4(f)			
Fire protection system removal	6.4(c)2				
RENOVATION	R-1	R-2	R-3	R-4	R-5
Smoke alarms required	N/A	6.5(f)			
Fire protection system removal	6.5(c)2				
Materials and methods	6.5(h) & 6.8(b)4				6.5(h) & 6.8(h)1vii
ALTERATION	R-1	R-2	R-3	R-4	R-5
Smoke alarms required	N/A	6.6(f)			
Fire protection system removal	6.6(c)2				
Materials and methods	6.6(i) & 6.8(b)4				6.6(i) & 6.8(h)1vii
Basic requirements (Shall not be reduced)	6.6(h); 6.25(a); & 6.30(f)	6.6(h) & 6.30(f)	6.6(h) & 6.27(a)	6.6(h); 6.26(f)1; 6.26(k)3iii(3); & 6.30(f)	6.6(h) & 6.27(a)
Windowless basement	6.30(c)6 & 6.30(c)7ii	6.30(c)6 & 6.30(c)7ii	N/A	6.10(d); 6.30(c)6; & 6.30(c)7ii	N/A
Work creates a bedroom	6.6(e)11i				
RECONSTRUCTION	R-1	R-2	R-3	R-4	R-5
Fire protection system removal	6.7(c)2				
Materials and methods	6.7(g) and 6.8(b)4				6.7(g) & 6.8(h)1vii
Basic requirements	6.7(i); 6.25(a); & 6.30(f)	6.7(i); 6.26(f)1; 6.26(k)3iii(3); & 6.3(f)	6.7(i) & 6.27(a)	6.7(i); 6.26(f)1; 6.26(k)3iii(3); 6.30(c)6; 6.30(c)7ii; & 6.30(f)	6.7(i) & 6.27(a)
Supplemental requirements	6.7(j); 6.25A(b); 6.25A(c); & 6.25A(d)	6.7(j); 6.26A(b); 6.26A(c); 6.26A(d); & 6.26A(e)3iii(3)	N/A	6.7(j); 6.26A(b); 6.26A(c); 6.26A(d); & 6.26(e)3iii(3)	N/A
Supplemental requirements/high-rise	6.7(j); 6.25A(f)1; & 6.25A(f)4	6.7(j); 6.25A(f)1; & 6.25A(f)4	N/A	6.7(j) & 6.26A(f)1	N/A
Mixed use building	6.10(c) & 6.29(c)				N/A
Windowless basement	6.10(d); 6.30(c)6; & 6.30(c)7ii		N/A	6.30(c)6 & 6.30(c)7ii	
CHANGE OF USE	R-1	R-2	R-3	R-4	R-5
Fire alarms/detection systems	6.31(h)8 & 6.31(i)1	6.31(h)9; 6.31(i)2 & 6.31(i)3	6.31(i)2 & 6.31(i)3	6.31(h)10; 6.31(i)2 & 6.31(i)3	6.31(a)8 & 6.31(i)2
Basic requirements	6.31(b) (NOTE: If applicable, see basic requirements)				
Single- converted to two-family	N/A	N/A	6.31(a)8	N/A	6.31(a)8
Bed and Breakfast	N/A	N/A	6.31(p)2i & 6.31(p)2xi(1)(B)II		
Cooperative sober living	N/A	N/A	6.31(q)1ii	6.31(q)	6.31(q)1ii
ADDITION	R-1	R-2	R-3	R-4	R-5
Applicable to new construction	6.32(a) & 6.32(b)				
Existing portion of the home	N/A		6.32(f)	N/A	6.32(f)

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(Residential Fire and Smoke Alarm/Detection Systems – Quick Reference Guide)

New Construction

2018 International Building Code (IBC) (R-1, R-2, R-3, R-4)

R-1 (see 310.2 for description)	R-2 (see 310.3 for description)
420.5 Fire alarm systems and smoke alarms. <i>(Redirects to 907.2.8)</i> 907.2.8 Group R-1. 907.2.8.1 Manual fire alarm system. <i>(Redirects to 907.5)</i> 907.2.8.2 Automatic Smoke Detection system. <i>(Redirects 907.5)</i> 907.2.8.3 Smoke Alarms. <i>(Redirects to 907.2.10)</i> 907.2.10 Single- and multiple-station smoke alarms. 907.2.10.1 Group R-1. 907.2.10.3 Installation near cooking appliances. 907.2.10.4 Installation near bathrooms. 907.2.10.5 Interconnection. <i>(Includes “wireless” option)</i> 907.2.10.6 Power Source. <i>(Separate from interconnection)</i> 907.2.10.7 Smoke detection system. <i>(Monitoring”, see # 3.)</i> 907.5 Occupant notification systems. 907.5.2.1 Audible alarms. 907.5.2.3 Visible alarms. 907.5.2.3.2 Groups I-1 and R-1.	420.5 Fire alarm systems and smoke alarms. <i>(Redirects to 907.2.9)</i> 907.2.9 Group R-2. 907.2.9.1 Manual fire alarm system. <i>(Redirects to 907.5)</i> 907.2.9.2 Smoke Alarms. <i>(Redirects to 907.2.10)</i> 907.2.9.3 Group R-2 college and university buildings. <i>(Redirects to 907.5)</i> 907.2.10 Single- and multiple-station smoke alarms. 907.2.10.2 Groups R-2, R-3, R-4 and I-1. 907.2.10.3 Installation near cooking appliances. 907.2.10.4 Installation near bathrooms. 907.2.10.5 Interconnection. <i>(Includes “wireless” option)</i> 907.2.10.6 Power Source. <i>(Separate from interconnection)</i> 907.2.10.7 Smoke detection system. <i>(Monitoring, see # 3.)</i> 907.5 Occupant notification systems. 907.5.2.1 Audible alarms. 907.5.2.3 Visible alarms. 907.5.2.3.3 Group R-2.
R-3 (see 310.4 for description)	R-4 (see 310.5 for description)
420.5 Fire alarm systems and smoke alarms. <i>(Redirects to 907.2.10)</i> 907.2.10 Single- and multiple-station smoke alarms. 907.2.10.2 Groups R-2, R-3, R-4 and I-1 907.2.10.3 Installation near cooking appliances. 907.2.10.4 Installation near bathrooms. 907.2.10.5 Interconnection. <i>(Includes “wireless” option)</i> 907.2.10.6 Power Source. <i>(Separate from interconnection)</i> 907.2.10.7 Smoke detection system. <i>(Monitoring, see # 3.)</i>	420.5 Fire alarm systems and smoke alarms. <i>(Redirects to 907.2.10)</i> 907.2.9A Automatic smoke detection systems for Group R-4. <i>(Redirects to 907.5 unless exceptions are met.)</i> 907.2.10 Single- and multiple-station smoke alarms. 907.2.10.2 Groups R-2, R-3, R-4, and I-1. 907.2.10.3 Installation near cooking appliances. 907.2.10.4 Installation near bathrooms. 907.2.10.5 Interconnection. <i>(Includes “wireless” option)</i> 907.2.10.6 Power Source. <i>(Separate from interconnection)</i> 907.2.10.7 Smoke detection system. <i>(Monitoring, see # 3.)</i> 907.5 Occupant notification systems. 907.5.2.1 Audible alarms. 907.5.2.3 Visible alarms.

2018 International Residential Code (IRC) (R-5)

R-5 (see 310.6 of the 2018/IBC for description)

R314.1 General. R314.1.1 Listings. R314.2 Where required. R314.2.1 New construction R314.3 Location. R314.3.1 Installation near cooking appliances. R314.4 Interconnection. <i>(Includes “wireless” option)</i> R314.5 Combination alarms. R314.6 Power source. <i>(Separate from interconnection)</i>	R314.7 Fire alarm systems. R314.7.1 General. R314.7.2 Location. R314.7.3 Permanent fixture. R314.7.4 Combination detectors. R314.7.5 Monitoring. <i>(Note: For R-5 new construction, at a minimum, a “smoke alarm system” is required. However, if desired, a “fire alarm system” may be installed in lieu of the smoke alarm system.)</i>
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(Residential Fire and Smoke Alarm/Detection Systems – Quick Reference Guide)

Contractors - Certification & Licensure: Whenever work involves fire protection equipment, contractors performing such work should have the appropriate certification as per N.J.A.C. 5:23-2.15(b)5 (*Please see exceptions noted within reference*). In addition, if work involves a burglar alarm, fire alarm, or electronic security system, contractors performing such work should have the appropriate license as per N.J.A.C. 5:23-2.15(b)7 (*Please see exceptions noted within reference*).

Locations: Devices for new construction should be installed at the locations specified in either Section 907 of the 2018/IBC or Section R314 of the 2018/IRC, as applicable. Devices for existing structures, should be installed at the locations specified within the Rehabilitation Subcode or as directed therein. In this case, the hierarchy of code versus standard means the model code have specifically called out the minimum locations. In other words, if the model code was silent on location, which it is not, then NFPA 72 would be used for location.

Ordinary Maintenance & Minor Work: For work that qualifies as Ordinary Maintenance, a UCC permit is not required, see N.J.A.C. 5:23-2.7(c)4 for description. For work that qualifies as Minor Work, a UCC permit is required, but the work may commence before permit is issued, provided that notice is submitted to the local enforcement agency, see N.J.A.C. 5:23-2.17A(c)5 for description.

Signing and Sealing of Construction Documents: Following the guidance of UCC Bulletin 96-2, Signing and Sealing of Construction Documents, the general rule is that a design professional (e.g., architect or engineer) who is registered with the Department of Consumer Affairs, submit plans with either a raised seal (hard copy submission), or digital seal (electronic submission). The following exceptions should be noted:

1. For all residential uses, N.J.A.C. 5:23-2.15(f)1x, states “The construction official upon the advice of the appropriate subcode official may waive the requirement for plans when the work is of a minor nature.” Please note emphasis on work of a minor nature, not to be confused with minor work.
2. Owners of single-family detached homes who desire to prepare plans themselves, see N.J.A.C. 5:23-2.15(f)1x(1). This is intended for when a single-family detached home is used or intended to be used exclusively as his or her private residence. Ownership under an LLC or similar would not qualify, as this form of ownership is considered a business.
3. For licensed or certified contractors, where the project involves a class 3 structure, see N.J.A.C. 5:23-2.15(f)1vii(1).

For additional guidance, the following CCC articles can be located on the Department's website [here](#):

Edition	Page	Article Title
Summer 2021	4	Kidde Recalls Smoke & Combination Smoke/Carbon Monoxide Alarms: Can Fail to Warn of a Fire
Spring 2021	3	Visible Alarm Notification – Updated
Spring 2020	4	Wireless Burglar or Supplemental Fire Alarm Systems and Permits
Spring 2020	5	Smoke Alarm and Carbon Monoxide Alarm Compliance for Rehabilitation Projects
Spring 2020	10	Fire Protection System Removal
Summer 2019	13	Smoke Alarms 10-Year Sealed Battery Type
Spring 2019	10	Wireless Smoke Detection Systems
Summer 2017	14	Residential Smoke Alarm – Wireless Interconnection
Fall 2016	15	Acceptance Testing – Single- and Multiple-Station Smoke Alarm vs. Smoke Detectors
Spring 2016	11	Windowless Basement – Sprinkler or Supervised Automatic Fire Alarm
Summer 2013	7	Fire Protection Equipment Contractor, NJ Division of Fire Safety Permit/Certification Numbers

Source: Keith Makai
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All “New Homes” are not Created Equal – Reprint

Reprint from Fall 2016

Recently, a distinction has been noted amongst the New Jersey State Uniform Construction Code Regulations (UCC) and the New Home Warranty and Builders’ Registration Act (NHWA) relative to the definition and treatment of a “New Home” under the UCC and its eligibility to receive a New Home Warranty under the NHWA. The distinction arises most often in matters involving remodeled or rehabilitated housing where the preexisting structure is essentially demolished.

It is stated under the UCC that, “if a structure is demolished except for a de minimis amount, the construction official shall designate the replacement structure as a new structure and apply the requirements of the Uniform Construction Code applicable to new construction,” pursuant to N.J.A.C. 5:23-6.2(b)(2)(i). Hence, where the preexisting structure is essentially demolished, the structure will be considered as a “new structure” and all the requirements of the UCC relative to new construction will be applicable.

However, the fact that the structure and building are subject to the “new construction” requirements of the UCC does not mean the structure will be eligible under the NHWA. The NHWA regulations, specifically N.J.A.C. 5:25-1.3, “Definitions”, defines a “New Home” as, “any dwelling unit not previously occupied, excluding dwelling units constructed solely for lease, and units governed by the Federal Mobile Home Construction and Safety Standards Act, 42 USC 5401 et seq.”

While the definition of “New Home” under NHWA does not expressly exclude preexisting structures which have been essentially demolished, there is established case law, namely *Glaum v. Bureau of Construction Code Enforcement, New Jersey Home Warranty Program, Dept. of Community Affairs*, 221 N.J.Super. 79, 533 A.2d 986 (App. Div. 1987) which addresses the distinction. In *Glaum*, the Court considered the question of whether a rehabilitated home was eligible for participation in the NHWA program. The home in the *Glaum* case had been severely damaged in a fire and underwent substantial rehabilitation. The builder sold the home, and the buyers received from the builder a Certificate of Participation in the New Home Warranty Security fund. Subsequently, the buyers filed a notice claim with the DCA for defects in the home that the builder left unaddressed. The DCA notified the buyers that, “its investigation revealed that plaintiffs had purchased a home which had been rehabilitated following major fire damage and that the home was not a “new home” within the contemplation of N.J.S.A. 46:3B-1 et seq and N.J.A.C. 5:25-1 et seq.” *Id.* At 82. The Court concluded:

The Act is designed to protect the integrity of the new homeowner from the new home builder. It is not the intent of the statute to cover remodeled, or what is referred to in the building trade as “gut rehabilitated” housing, i.e., housing in which every part of the house is knocked down except the shell. Petitioner’s home is a substantial remodeling of a preexisting house. *Id.* At 84.

The Court went on to indicate that “new home” for coverage in the NHWA means entirely new structure. Although a substantially remodeled or rehabilitated structure may be classified as new construction pursuant to the requirements of the UCC, the structure cannot be considered a “new home” under the NHWA. The incorporation of any component of the preexisting structure into the new structure would cause the new structure to fail the requirement of N.J.A.C. 5:25-1.3, “Definitions,” that the structure/dwelling unit have not been previously occupied. Essentially, unless every component of a structure is new, the structure cannot be considered a “New Home” under the NHWA even if classified and built as “new construction” under the UCC.

Any questions pertaining to the definitional distinction between a “New Home” under the NHWA and the UCC please feel free to contact the Bureau of Homeowner Protection at (609) 984-7905.

Source: James F. Fahy, Esq., Chief
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