

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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Acceptance of ES-Reports to Comply With the Adopted Codes

There have been numerous inquiries on the acceptance of the ICC Evaluation Services Reports (ESR) to show compliance with the code. As per the Uniform Construction Code, N.J.A.C. 5:23-3.7, the ESRs are an acceptable method for compliance.











N.J.A.C. 5:23-3.7(a)2. Reports of engineering **findings issued by nationally recognized evaluation service programs**, such as, but not limited to, the Building Officials and Code Administrators (BOCA), the International Conference of Building Officials (ICBO), the Southern Building Code Congress International (SBCCI), **the International Code Council (ICC), and the National Evaluation Service, Inc.**, shall be accepted by the appropriate subcode official as meeting the requirements of (a) above. The materials, equipment, or assembly shall be installed in accordance with the conditions specified in the report.

In order to determine if the report is acceptable, it must be determined if it is applicable to the code year in question and it has not expired. If the answer to both questions above is yes, and the report indicates compliance with the section in question, then this ESR meets the code and becomes another alternative to demonstrate compliance without further documentation. Keep in mind, all materials, equipment, and/or assemblies must be installed in accordance with the conditions specified in the report.

Note: An ESR is only one of the methods to show compliance; there are a multitude of others as specified in N.J.A.C. 5:23-3.7.

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

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The 35th Annual Building Safety Conference of New Jersey

The Building Safety Conference celebrated its 35th Anniversary on May 4th through 6th at Bally's Atlantic City. Our focus this year was on bringing together the broad spectrum of people that make up our code enforcement community from code officials, to special inspectors to design professionals.

The "Crackerbarrel" began our Conference, as it always does. This very popular event gives our guests the opportunity to hear from a variety of presenters in a short format style with a focus on new items of particular interest to the code enforcement community. The topics this year ranged from hearing the latest from the International Code Council (ICC) from Director-at-Large James E. Morganson and Past President Stephen Jones, to the latest changes in fire alarm systems and tables concerning UCC and Multiple Dwelling interaction.

The centerpiece of the Building Safety Conference was the opportunity to recognize and honor those selected by their associations as Inspectors of the Year and as the Technical Assistant of the Year.

The following awards were presented:

-  Municipal Electrical Inspectors Association of New Jersey
Electrical Inspector of the Year -- Donald A. Clare
-  New Jersey State Plumbing Inspectors Association
Plumbing Inspector of the Year -- Ronald J. Barbarulo
-  New Jersey Building Officials Association
Building Inspector of the Year -- Robert J. Mittermaier
-  New Jersey Fire Prevention and Protection Association
Fire Protection Inspector of the Year -- Kevin C. Batzel
-  New Jersey Association of Technical Assistants
Technical Assistant of the Year -- Joseph F. Haggerty





New Jersey Building Officials Association

Building Inspector of the Year -- Robert J. Mittermaier (w/ NJBOA President Pat Naticchione & Director Smith)



New Jersey State Plumbing Inspectors Association

Plumbing Inspector of the Year -- Ronald J. Barbarulo (w/ NJPIA President Frank Speranza & Director Smith)



New Jersey Fire Prevention and Protection Association
Fire Protection Inspector of the Year -- Kevin C. Batzel (w/ Director Smith & NJFPPA President Rich Silvia)



Municipal Electrical Inspectors Association of New Jersey
Electrical Inspector of the Year -- Donald A. Clare (w/ Director Smith & MEIA of NJ President Ed Reed)



New Jersey Association of Technical Assistants

Technical Assistant of the Year -- Joseph F. Haggerty (w/ NJ ATA President Dawn Neil & Director Smith)

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

The Building Safety Conference is a unique opportunity to broaden your knowledge of cutting-edge code enforcement and building construction techniques while also providing an opportunity to meet with your peers throughout the State to share ideas and promote camaraderie and collegiality among the code enforcement community. The Conference Committee is always on the lookout for great and innovative ideas to meet the needs of our attendees--if you have an idea, please pass that along to your association or email us at john.delesandro@dca.nj.gov.

We hope to see you all next year at Bally's in Atlantic City May 3rd through 5th, 2017. Please save the date and "like" us on Facebook for event updates, room locations and all other important information!

Source: John Delesandro, Supervisor
Licensing & Education Unit, (609) 984-7834

Swimming Pool Definition – IRC/2015  

In an obvious attempt to bring old Appendix G of the 2009 International Residential Code (IRC) into the main body of the code, it appears something was missed on the national level. Yes, there is no definition of Swimming Pool within the 2015 IRC and it appears there is no published errata at <http://www.iccsafe.org/errata-central/> addressing it. However, it still is enforceable, just as it always has been.

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

Therefore, the 2015 International Swimming Pool and Spa Code, by the means of R326, applies just as Appendix G has in previous editions of the IRC with the definition in the 2015 International Building Code serving the 2015 IRC also.

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

TO: Department of Community Affairs, Code Officials

FROM: Fire Alarm, Burglar Alarm and Locksmith Advisory Committee 

DATE: May 13, 2016

SUBJECT: Licensing Requirements for Fire Protection, Security System and Locksmithing Construction Permits

Mailing Address:
 P.O. Box 45042
 Newark, NJ 07101
 (973) 504-6245

The Fire Alarm, Burglar Alarm and Locksmith Advisory Committee would like to take this opportunity to clarify the business license categories that are required in order to install Fire Alarm Systems, Burglar Alarm Systems, perform Locksmith work and install Electronic Access Control, CCTV and Intercom Systems. Statutes and Regulations provide an **Exemption** for Licensed Electrical Contracting Businesses (34EB) and business with a Fire Protection (Fire Alarm P#) Contractor Certification issued through DCA (The Department of Law and Public Safety, Division of Consumer Affairs). Since only licensed businesses can install, service and maintain these systems, Construction Officials should accept permit applications only from a licensed business firm.

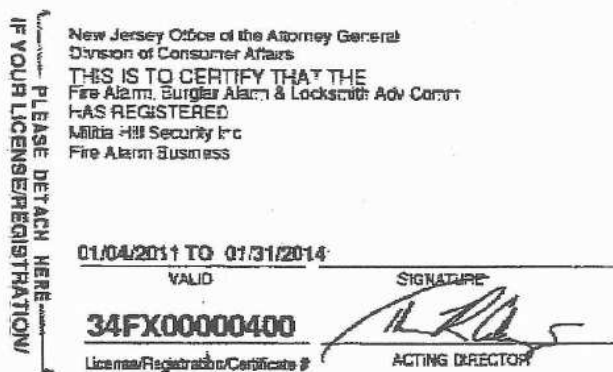
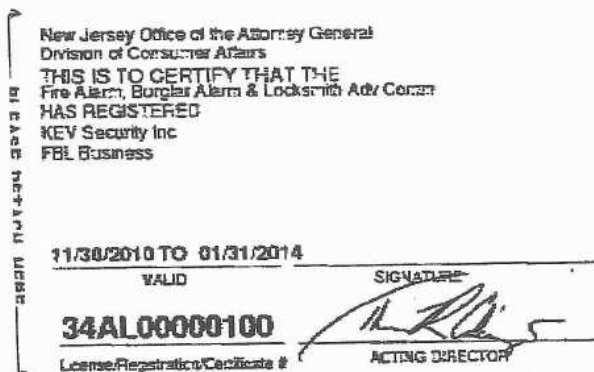
Businesses which hold licenses through the Fire Alarm, Burglar Alarm and Locksmith Advisory Committee begin with one of the following prefixes:

- 34BX - Burglar Alarm Business License
- 34FX - Fire Alarm Business License
- 34LX - Locksmith Business License
- 34BF - Burglar Alarm and Fire Alarm Business License
- 34BL - Burglar Alarm and Locksmith Business License
- 34FL - Fire Alarm and Locksmith Business License
- 34AL - Fire Alarm, Burglar Alarm and Locksmith Business License

These licensed businesses are authorized to install systems within their respective trades. All three trades can install Electronic Access Control Systems, CCTV Systems and Intercom Systems. Attached is an example of a business permit identification card and wallet card. Either is acceptable documentation.

Individuals possessing an individual (Photo ID) license for Burglar Alarm (34BA), Fire Alarm (34FA) or Locksmithing (34LS) may qualify a business for a Business License but are not authorized to install these systems separate and apart from a licensed business. A business license is required to file for a permit.

The Advisory Committee has also found a number of businesses doing the above referenced work and obtaining permits having only a telecommunications wiring exemption issued by the Board of Examiners of Electrical Contractors. That exemption does not authorize a contractor to install any type of security system.



NOTE: Not all work done by these licensed trades requires a UCC permit.

Bureau of Housing Inspection Responsibilities for UCC Officials

If you are appointed as a Uniform Construction Code (UCC) Construction Official, did you know you are also an agent of the Department of Community Affairs, Bureau of Housing Inspection? Yes, N.J.A.C. 5:23-2.18(g) gives you or your subcode officials the responsibility to ensure newly-constructed and altered hotels/multiple dwellings comply with the provisions of the regulations for the maintenance of hotels and multiple dwellings (N.J.A.C. 5:10).

The Construction Official has a responsibility to ensure that certain properties are properly registered with the Bureau of Housing Inspection prior to issuance of a UCC Certificate of Occupancy. There are also technical provisions for which the Construction Official is responsible; see UCC Bulletin 79-6 <http://www.nj.gov/dca/divisions/codes/resources/bulletins.html>.

N.J.A.C. 5:10-1.11 requires the owner of each hotel or multiple dwelling to file with the Bureau of Housing Inspection for a Certificate of Registration. Prior to issuance of a Certificate of Occupancy, N.J.A.C. 5:23-2.24(e) requires a photocopy of a Bureau of Housing Inspection, Certificate of Registration be submitted to the UCC Construction Official. However, the UCC Construction Official may utilize UCC Bulletin No. 01-2 which states that a Temporary Certificate of Occupancy may be issued without a Hotel and Multiple Dwelling Certificate of Registration.

Sometimes, there is confusion as to what constitutes a multiple dwelling. A multiple dwelling is defined as a building or structure in which three or more dwelling units that are occupied or intended to be occupied, any group of ten or more buildings on a single/contiguous parcel(s) of land each with two dwelling units occupied or intended to be occupied, all condominiums, co-ops, non-owner occupied mutual housing corporations, townhouse communities and retirement communities.

NJ Hotel and Multiple Dwelling Law, N.J.S.A. 55:13A(k)2, exempts certain condominiums, co-ops and non-owner occupied mutual housing corporations from the multiple dwelling definition. These properties must still register with the Bureau of Housing Inspection and apply for exemption from the Bureau's inspection process.

Townhouse communities may not have to register with the Bureau however, they must apply for exemption from the registration process through the Bureau's Code Administration Unit.

If you have any questions related to the registration requirements/status of a property, please feel free to contact the Bureau of Housing Inspection's Code Administration Unit at (609) 633-6219.

Source: Carmine Giangeruso, Supervisor of Enforcement
Code Administration Unit, Bureau of Housing Inspection

Additions in a Flood Zone

For those wondering if an **addition** is allowed in a flood zone, here's your answer:

First, check with the local floodplain administrator to (a) see if the **addition** is permitted by local zoning regulations and NJDEP regulations and (b) if the permitted **addition** is considered a substantial improvement.

As a refresher, FEMA defines substantial improvement as "Any reconstruction, rehabilitation, **addition**, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the 'start of construction' of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed" (<http://www.fema.gov/floodplain-management-old/substantial-improvement>). This is reiterated within the Rehabilitation Subcode at NJAC 5:23-6.3A(a).

This leads us to the **addition** section of the Rehabilitation Subcode at NJAC 5:23-6.32. If you recall, subsection (a) states, "Any addition to a building or structure shall comply with the requirements of the Uniform Construction Code applicable to new construction." Since NJAC 5:23-6.3A(a) includes **addition** within the requirements for flood resistant construction, an **addition not** considered a substantial improvement would **not** have to be elevated.

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

US Census Bureau: Building Permits Survey

The United States Code, Title 13, authorizes the collection of building permits data via Form C-404 "Report of Building or Zoning Permits Issued for New Privately-Owned Housing Units" to individual localities. The Building Permits Survey requests the number of buildings, housing units, and valuation for residential construction permitted in permit-issuing places and may be submitted online, by mail, email, or fax. The data you provide are used by the Census Bureau in the annual creation of population estimates used by local, state, and federal government agencies to allocate funding and other resources to your local area and for various planning purposes. If you have any questions, the Census Bureau can be reached at 1-800-845-8244 or www.census.gov/permits

Census classifications:

- Census Item 101 – Include all new privately-owned detached and attached single-family houses.
- Census Item 103 – Include all new privately-owned residential buildings that contain two housing units – stacked units or shared common utilities.
- Census Item 104 – Include all new privately-owned residential buildings that contain three or four housing units - stacked units or shared common utilities.
- Census Item 105 – Five-or-more unit buildings – stacked units or shared common utilities.

Source: Fletcher E. Blackmon, Jr.
 U.S. Census Bureau
 (301) 763-4657
 eid.rcb.bps@census.gov

OMB No. 0607-0054 Approval Expires 02/26/2016

| <p>FORM C-404 U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU</p> <p style="text-align: center;">REPORT OF BUILDING OR ZONING PERMITS ISSUED FOR NEW PRIVATELY-OWNED HOUSING UNITS</p> <p>IMPORTANT: Please see the back of this form for more information and instructions for completing the survey. For further assistance, call 1-800-845-8244, or e-mail us at EID.RCB.BPS@census.gov</p> <p>How can I report? Via Fax: 1-877-273-9501 Via Mail: U.S. Census Bureau 1201 East 10th Street Jeffersonville, IN 47132-0001 Via Internet or to get Help: econhelp.census.gov/bps Use your unique username and original password.</p> | <p style="text-align: center; font-size: 2em; opacity: 0.5; transform: rotate(-15deg);">SAMPLE FORM</p> <p style="text-align: center; font-size: small;">(Please correct any errors in name, address, and ZIP Code)</p> <p>Username: _____ Password: _____</p> <p>1. PERIOD IN WHICH PERMITS WERE ISSUED</p> <p>2. GEOGRAPHIC COVERAGE (For our latest information on your office's coverage, see www.census.gov/construction/bps/pdf/boothnote.pdf) Did your permit system have a geographic coverage change? <input type="checkbox"/> Yes, continue. <input type="checkbox"/> No, skip to Section 3. Mark an (X) in the appropriate box and/or in the requested information. If more space is needed, continue in Section 5.</p> <p>001 <input type="checkbox"/> Permits no longer required to build new residential buildings. Effective Date: _____</p> <p>002 <input type="checkbox"/> Permit office has merged with another permit jurisdiction. Effective Date: _____ Name of permit jurisdiction with which your office has merged: _____</p> <p>003 <input type="checkbox"/> Permit office has split into two or more jurisdictions. Effective Date: _____ Name of additional jurisdictional new issuing permit(s): _____</p> <p>004 <input type="checkbox"/> Extrajurisdictional jurisdiction (ETJ)/Annexation. Effective Date: _____ Define ETJ or annexation: _____</p> <p>3. NEW HOUSING UNITS</p> <p>a. Were there any building permits issued for new housing units during this period? <input type="checkbox"/> Yes, enter data below. <input type="checkbox"/> No, stop and return this form. Your report is important even if no permits were issued.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Type of Structure</th> <th colspan="2">Total Number of</th> <th rowspan="2">Total Valuation of Construction (\$ value - omit cents)</th> </tr> <tr> <th>Buildings (1)</th> <th>Housing Units (2)</th> </tr> </thead> <tbody> <tr> <td>101 b. Single-family houses, detached and attached (must meet the following criteria: no unit above or below the other; wall extends from ground to roof; and, separate utilities for each unit) (Excludes manufactured HUD-inspected homes.)</td> <td style="background-color: black;"></td> <td></td> <td></td> </tr> <tr> <td>102 c. Two-unit buildings</td> <td></td> <td></td> <td></td> </tr> <tr> <td>104 d. Three- and four-unit buildings</td> <td></td> <td></td> <td></td> </tr> <tr> <td>105 e. Five-or-more unit buildings</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>4. ADDITIONAL INFORMATION ON INDIVIDUAL RESIDENTIAL PERMITS, FROM SECTION 3, VALUED AT \$1,000,000 OR MORE (If more space is needed, please attach a separate sheet.)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Description and Site Address (1)</th> <th rowspan="2">Owner or Builder (2)</th> <th colspan="2">Number of</th> <th rowspan="2">Valuation of Construction (\$ value - omit cents) (3)</th> </tr> <tr> <th>Buildings (3)</th> <th>Housing Units (4)</th> </tr> </thead> <tbody> <tr> <td>Kind of building _____ Site address _____ City, State, ZIP Code _____</td> <td>Name _____ Address _____ City, State, ZIP Code _____</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Kind of building _____ Site address _____ City, State, ZIP Code _____</td> <td>Name _____ Address _____ City, State, ZIP Code _____</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>5. COMMENTS (Continue on a separate sheet)</p> <p>6. PERSON TO CONTACT REGARDING THIS REPORT</p> <p>E-mail address _____ Name _____ Internal web address _____ Telephone _____ Fax _____</p> | Type of Structure | Total Number of | | Total Valuation of Construction (\$ value - omit cents) | Buildings (1) | Housing Units (2) | 101 b. Single-family houses, detached and attached (must meet the following criteria: no unit above or below the other; wall extends from ground to roof; and, separate utilities for each unit) (Excludes manufactured HUD-inspected homes.) | | | | 102 c. Two-unit buildings | | | | 104 d. Three- and four-unit buildings | | | | 105 e. Five-or-more unit buildings | | | | Description and Site Address (1) | Owner or Builder (2) | Number of | | Valuation of Construction (\$ value - omit cents) (3) | Buildings (3) | Housing Units (4) | Kind of building _____ Site address _____ City, State, ZIP Code _____ | Name _____ Address _____ City, State, ZIP Code _____ | | | | Kind of building _____ Site address _____ City, State, ZIP Code _____ | Name _____ Address _____ City, State, ZIP Code _____ | | | |
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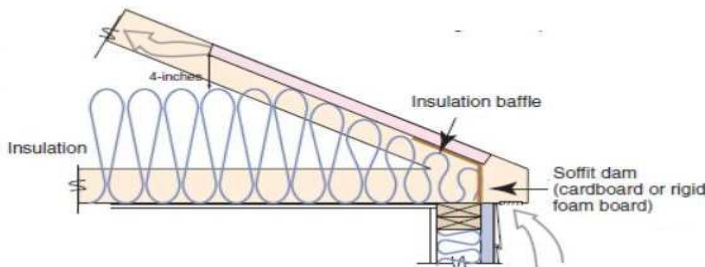
Raise the Roof – Energy Subcode

By now, I'm assuming you are all aware that the International Energy Conservation Code (IECC)/2015 lists the ceiling building thermal envelope value at R-49 in Table R402.1.2, Insulation and Fenestration Requirements by Component. Yes, this a decent jump in insulation for the ceiling compared the former energy subcode, IECC/2009, but there are ways to deal with this increase. Here are two ways:

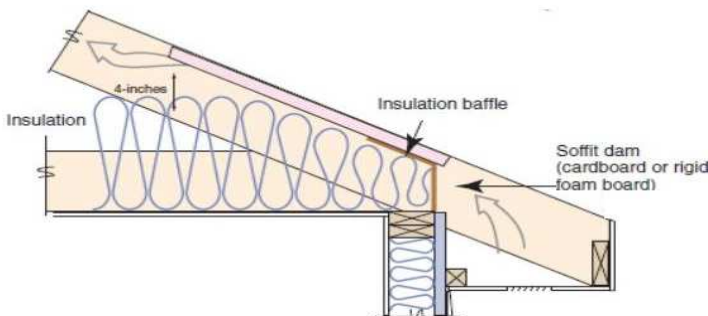
1. REScheck (non-prescriptive): As mentioned in Bulletin 15-4, the REScheck computer software is based on Section R402.1.5, Total UA alternative, and starts with the prescriptive values of Table 402.1.2 and allows you to trade-off insulation values. Technically, REScheck evaluates a design so that the total building thermal envelope UA (sum of U-factor times assembly area) is less than or equal to the total UA resulting from using the U-factors in Table R402.1.4 (multiplied by the same assembly area as in the proposed building); this will demonstrate that the building is in compliance with Table R402.1.2. In short, you may see more insulation elsewhere (walls, floors) or better performing windows to compensate for a ceiling R-value less than R-49.
2. Extended Wall Framing/Raised-Heel Trusses (prescriptive): Section R402.2.1, Ceilings with attic spaces, and Section R402.2.2, Ceilings without attic spaces, both contain an exception, if you will, to the Prescriptive Packages from Bulletin 15-4 for the ceiling building thermal envelope value. Here you will find:
 - a. Ceilings with attic spaces - Where Table R402.1.2 would require R-49 insulation in the ceiling, installing R-38 over 100 percent of the ceiling area requiring insulation shall be deemed to satisfy the requirement for R-49 insulation wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves.
 - b. Ceilings without attic spaces - Where Table R402.1.2 would require insulation levels above R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-30. This reduction of insulation from the requirements of Section R402.1.2 shall be limited to 500 square feet or 20 percent of the total insulated ceiling area, whichever is less.

These two “exceptions” (a. and b. above) do not apply to the U-factor alternative approach in Section R402.1.4 and the total UA alternative in Section R402.1.5, as the REScheck program (or hand calculations, if you went that route) already allow you to trade-off between components.

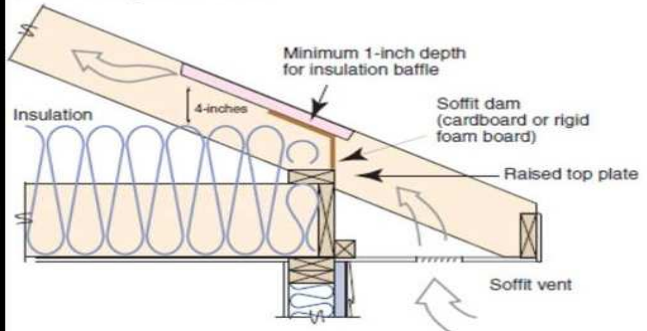
Standard Truss with tapered insulation depth



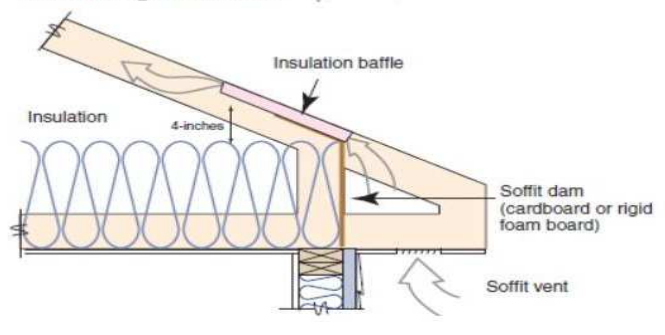
Standard rafter and top plate with tapered insulation depth



Rafter on raised top plate with full height insulation



Energy Truss with full height insulation



Diagrams courtesy of USDOE's Building America Solution Center (<https://baso.pnnl.gov>)

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

Installing Insulation in Existing Buildings

Let me start out by saying, empty areas of the building thermal envelope should be filled with insulation when exposed by the scope of the construction project. This is based on the language found in the Renovation, Alteration and Reconstruction sections of the Rehabilitation Subcode, NJAC 5:23-6.5(e)9, 6.6(e)16 and 6.7(e)12, respectively. Here, it states:

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.

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

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

Dementia Care Homes - Transfer of Jurisdiction from DCA to DOH

On November 9, 2015, Governor Chris Christie signed into law P.L. 2015, c.125 transferring the regulatory authority for licensing and inspecting Class C Boarding Homes for individuals with a dementia-related disorder or other special needs from the Department of Community Affairs, Bureau of Rooming and Boarding House Standards (DCA) to the Department of Health (DOH). This law, which took effect on June 1, 2016, defines this type of boarding house as a Dementia Care Home.

You may contact Mr. John A. Calabria, Director, Department of Health, Division of Certificate of Need & Licensing, (609) 292-8773 if you are interested in obtaining more information regarding Dementia Care Homes.

In the event you discover a facility that provides housing and personal services to two or more residents, whether or not the residents have a diagnosis of a dementia-related disorder, and the operator cannot produce a valid license issued by DOH, another State department or agency or prove the premises is under contract with a State department or agency, continue to report this type of facility to DCA.

Since DCA is the agency charged with enforcing the Rooming and Boarding House Act of 1979 (N.J.S.A. 55:13B-1 et seq) and correlating Regulations Governing Rooming and Boarding Houses (N.J.A.C. 5:27-1 et seq) DCA will conduct a jurisdiction investigation in order to determine if the property falls under the regulatory purview of DCA. If the subject premises meets the definition of a Dementia Care Home, it will be the responsibility of the property owner to provide a valid license from DOH. Until a valid license issued by DOH is provided, DCA will deem the facility to be an unlicensed boarding home and take the appropriate action accordingly.

If you or your staff have any questions or concerns, please feel free to contact DCA. We can verify if a property you may suspect of operating as a rooming/boarding house is licensed or not licensed. Simply call DCA at (609) 633-6251.

Source: Jay Raywood
Bureau of Rooming and Boarding House Standards

Exterior Wall Ductwork

There has been discussion out there that ducts are not permitted to be installed in an exterior wall part of the building thermal envelope. Well, the answer to that question is...it depends.

If you recall the four options to demonstrate compliance with the energy subcode listed in Bulletin 15-4, you have (1) hand calculations, (2) REScheck, (3) Clean Energy Program for Residential New Construction (formerly Energy Star) and (4) Prescriptive Packages. Since item #3 is a separate program outside the International Energy Conservation Code/2015, I won't address its ductwork requirements here. As for the other three options, this is how it works:

Ducts may be installed in the exterior wall – If using the *hand calculations* or the *REScheck* option, you may have ducts installed in this wall. Both methods follow the Overall UA calculation and permit trade-offs between components. The stud bay that has the duct within is calculated separately because it will not accommodate R-20. When using REScheck, that particular bay would be separately inputted into the wall category with the lesser insulation value and the program will calculate the overall value of the wall/home.

Ducts may not be installed in the exterior wall – If using a *prescriptive package*, it is assumed that every single cavity of the exterior wall is going to meet R-20 or R-13+5ci. This is why ductwork cannot be installed in the exterior wall when using this option for demonstrating compliance.

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

Determining the Height of a High-Rise Building

There have been a number of inquiries as to how the definition of a high-rise building in the 2015 International Building Code is applied (identical definition in the 2009 International Building Code).

Section 202, Definitions, defines a High-Rise as a building with an occupied **floor** located more than 75 feet above the lowest level of fire department vehicle access.

The measurement is from the lowest ground location where a fire department can set its fire-fighting equipment in order to access the highest occupied floor. If the highest **floor** level is greater than 75 feet, then it is a high-rise building. When the roof of the building is occupied, the roof becomes the highest occupied **floor** and the height is measured to this **floor** level.

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

Landscape Irrigation Contractor Board Now at DCA

Effective June 1, 2016, the Board of Landscape Irrigation Contractors was transferred the Department of Community Affairs in accordance with P.L.2015, c.169. For those of you unfamiliar with this Board, their regulations were originally part of the Department of Environmental Protection regulations at NJAC 7:62. We are still waiting for the official move of the regulations by the Office of Administrative Law and are hoping to have them located at NJAC 5:62. Until such time, the regulations remain in Title 7. If you would like to know more about this Board and/or how to become certified, please visit <http://www.nj.gov/dca/divisions/codes/advisory/LICboard.html> or contact the Licensing and Education Unit at (609) 984-7834.

Source: Code Assistance Unit
(609) 984-7609

State New Home Builder Registration -- FYI

As you know the Uniform Construction Code section N.J.A.C. 5:23-2.15(b) 1i states, "A current validated State builder registration card shall be shown by the contractor and the registration number of the contractor shall be recorded on the permit, pursuant to the New Home Warranty and Builder's Registration Act (N.J.S.A 46:3B-1 et seq.)". The contractor must provide this registration number prior to commencement of work for a newly-constructed home.

What the UCC doesn't tell you is that the seller of the property upon which the new home is built must be the registered builder regardless of his participation in the actual construction of the home. As per the Regulations Governing New Home Warranties and Builders' Registrations, the person transferring title of a property containing a newly-constructed home must be the registered builder. [See N.J.A.C. 5:25-2.1(c), 2.1(c)1 and 2.1(c)2. See also NJAC 5:25-3.1(a).]

There have been instances when a contractor who has a current builder registration is incorrectly recorded as the registered builder. This contractor cannot supply the home warranty because this contractor is not transferring title. It is important that the company or individual transferring title provide the current State builder registration number that will be recorded on the permit for that new home.

The drafters of the Regulations Governing New Home Warranties and Builders' Registrations foresaw difficulties should this not be a requirement. For example, a company or individual who subdivides a large tract of land for development could escape warranty responsibility by hiring a contractor of modest means to supply the construction office with his builder registration and subsequent home warranty certificates of participation. Should warranty claims arise, that contractor could cease operations and leave responsibility to the warranty program. The developers who sold the defective homes and reaped the profits could build again without consequence. Please advise your staff when reviewing permit applications that the seller of the property must provide a New Home Builder registration number. Additionally, the registered builder (seller) must provide proof of warranty through either the State or a private warranty plan.

Source: Office of Regulatory Affairs and Bureau of Homeowner Protection/New Home Warranty Program
(609) 984-7672 and (609) 984-7910

Dwelling Unit Ventilation Required

Dwelling unit ventilation entered the International Residential Code (IRC) with the 2012 edition. Since the State of NJ never adopted this edition, it became a new requirement with the adoption of the 2015 edition. Section R303.4, Mechanical Ventilation, of the 2015 IRC, requires whole-house ventilation when the air infiltration rate is five air changes per hour or less. Section N1102.4.1.2, Testing, requires an air leakage rate not exceeding three air changes per hour. This is more stringent than the five air changes per hour of Section R303.4, and therefore, triggers the requirement for the dwelling unit to be provided with whole-dwelling unit ventilation in accordance with Section M1507.3, Whole-house mechanical ventilation system.

Some of you may be saying, what about the amendment to the 2015 IRC at NJAC 5:23-3.21(c)10iv (and at NJAC 5:23-3.18(c)4i of the 2015 International Energy Conservation Code – IECC)? This modification allows a permit holder to demonstrate compliance for building envelope tightness through either the blower door test or visual inspection. Offering alternatives for documenting compliance does not change the underlying assumption that compliance (three air changes) is achieved.

This may sound like a big issue but in reality, it can be designed/built into the mechanical systems already being provided for the dwelling unit's HVAC. Section M1507.3.1, System design, Section M1507.3.2 System controls and Section M1507.3.3, Mechanical ventilation rate, will aid the designer in the proper design.

Note that the above is written in accordance with the 2015 IRC. As you know, all other residential buildings outside the scope of the IRC would follow the 2015 IBC and IECC with the same outcome. The correlating 2015 sections are: R303.4 = 1203.1 of the International Building Code; N1102.4.1.2 = R402.4.1.2 of the IECC; and M1507.3 = 403.3.2 of the International Mechanical Code.

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

When is an Addition...an Addition?

As per NJAC 5:23-6.3, an Addition means an increase in (1) the footprint area of a building, (2) the average height of the highest roof surface or (3) the number of stories of a building. To truly understand this definition, and apply it correctly, we need to visit the definitions in the building and one- and two-family dwelling subcodes, International Building and Residential Codes, respectively.

- * *Area, Building* – The area included within surrounding exterior walls (or exterior walls and fire walls) exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above.
- * *Height, Building* – The vertical distance from grade plane to the average height of the highest roof surface.
- * *Story* – That portion of a building included between the upper surface of a floor and upper surface of the floor or roof next above (see “Basement,” “Building Height,” “Grade Plane” and “Mezzanine”). A story is measured as the vertical distance from top to top of two successive tiers of beams or finished floor surfaces and, for the topmost story, from the top of the floor finish to the top of the ceiling joists or, where there is not a ceiling, to the top of the roof rafters.

The main reason I bring this to your attention is due to a rumor going around regarding covered patios being added to a home. Regardless of whether walls are being added, based on the definition of Building Area, extending the existing roof over a patio constitutes an addition.

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

Construction Permit Application Packet & Related Forms Usage

It has come to our attention that a number of towns are using the UCC standard forms for other (eg. zoning) purposes. This has resulted in appeals that have nothing to do with the UCC going to the Construction Board of Appeals. Code officials who are aware of such a practice in their towns are asked to advise their colleagues in other departments not to use the UCC forms for other than their intended purpose. This practice just creates confusion.

As a friendly reminder, the permit packet forms available to the general public can be found on our website at <http://www.nj.gov/dca/divisions/codes/resources/constructionpermitforms.html>.

Source: Code Assistance Unit
(609) 984-7609

Building Safety Conference 2016 - Congratulations on another year Well Done!



Director Edward Smith, the award recipients and the Presidents of the respective associations

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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.

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