

# 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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## Continuous Insulation and Notes

Those who have been paying attention to the insulation tables within the ASHRAE Standard 90.1-2013 might have noticed the notes at the bottom of the page. Tables 5.5-4 and 5.5-5, applicable to New Jersey for Climate zones 4A and 5A respectively, show an asterisk at the bottom. This very important note informs the user to consult the definitions in Section 3.2 for the applicability of the requirement for continuous insulation (c.i.).

Continuous insulation is defined as “insulation that is uncompressed and continuous across all structural members without thermal bridges other than fasteners and service openings. It is installed on the interior or exterior or is integral to any opaque surface of the building envelope.”

The second part of the definition is the part people have the most questions about in relation to the insulation tables. Whether or not the insulation can be installed on the exterior or interior relies on the manufacturer’s installation instructions and how the continuous insulation has been tested. This should help determine where to place the insulation.

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

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## Smoke Alarm and Carbon Monoxide (CO) Alarm Compliance

This article is intended to assist Construction Officials with the smoke alarm and carbon monoxide alarm requirements when a reconstruction, alteration, renovation, or repair is undertaken.

The Division of Codes and Standards has been receiving calls about code officials requiring verification of the existence of these alarm devices before they will issue a permit to a homeowner or contractor. This is not the intent, nor is it supported by the UCC. Some code officials have even gone as far as modifying the application form from the Division of Fire Safety that is required for resale, rentals and re-occupancy of one-or two-family dwellings. Some officials are requiring that the contractor or homeowner sign a form and, in some cases, have the form notarized, before issuing a permit.

The installation of smoke alarms and carbon monoxide alarms **is not a prerequisite** to the issuance of a construction permit for reconstruction, alteration, renovation or repair work. The Construction Official should simply notify the permit applicant that these alarm devices need to be installed when they were not part of the original construction.

When smoke or CO alarms have been installed as part of the original construction or other rehabilitation project, they must be maintained. The UCC does not hold the contractor responsible for installing these alarm devices, nor does it require an inspection of these devices; it only requires them to be installed and maintained in the dwelling unit or building.

It is the responsibility of the Construction Official to ensure that these code provisions are made known to all permit applicants. A guidance document has been prepared that may be distributed/used as a counter document. This document can be found on the Codes & Standards website "SMOKE ALARM AND CARBON MONOXIDE ALARM COMPLIANCE" and is published on the following page.

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

## Typo in Bulletin 03-5

If you have looked at your Special Inspections bulletin recently, Bulletin 03-5, you will notice one inconsistency with the Uniform Construction Code (N.J.A.C. 5:23) and two inconsistencies with the International Building Code(IBC)/2015.

- On page 1, "Class I" should be "Class 1" to be consistent with N.J.A.C. 5:23-4.3A.
- On page 2, the "Building Permits and Reports" section should state "responsible person in charge of the work" in lieu of "design professional."
- On page 4, the "Special Inspection for Smoke Control" section has an incorrect reference to the IBC/2015; Section 1705.13 should be 1705.18.

So please take the time to update your bulletin physically (e.g. turn the 3 into an 8) or download new pages at <http://www.nj.gov/dca/divisions/codes/resources/bulletins.html>.

Source: Code Assistance, (609) 984-7609

## Seeing Double – Tables R404.1.2(2) and (8) of IRC/2015

The Code Assistance Unit has received multiple questions regarding Tables R404.1.2(2) and R404.1.2(8) of the International Residential Code/2015 regarding reinforcement of basement walls. At first glance, the minimum vertical reinforcement for a 6-inch nominal flat basement wall in both tables seems odd since the numbers do not match up. Keep in mind, a table within the code is only as good as how you got to it...the section reference!

This means that even if you are staring down the tables, you have to go back to the section that referenced it for applicability. In the case of the tables mentioned above, Section R404.1.3.3.7.2, Location of reinforcement in wall, should be your starting point. You will find that:

- The center of vertical reinforcement in basement walls determined from **Tables R404.1.2(2)** through R404.1.2(7) is at the centerline of the wall.
- Vertical reinforcement in basement walls determined from **Table R404.1.2(8)** is to provide a maximum cover of 1-1/4 inches measured from the inside face of the wall.

So the subtle difference (but huge impact) between tables is the location of the wall reinforcement.

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

## **SMOKE ALARM AND CARBON MONOXIDE ALARM COMPLIANCE FOR SOME REHABILITATION PROJECTS**

The application for permit that you have submitted requires the installation of smoke alarms and carbon monoxide alarms when they have not been installed as part of the original construction. This information does not contain change of use requirements located at N.J.A.C. 5:23-6.31(i) and (j) or addition requirements located at N.J.A.C. 5:23-6.32(f). Smoke and carbon monoxide alarms must be installed in accordance with the following information.

### **The following are the requirements for Smoke Alarms:**

- Work being performed in accordance with N.J.A.C. 5:23-6.4(f) repair, 6.5(f) renovation and 6.6(f) alteration require smoke alarms to be installed in the dwelling units of Group R-2 and buildings of Groups R-3, R-4 and R-5.
- Smoke alarm(s) must be installed on each level of the dwelling, including the basement, outside of each separate sleeping area in the immediate vicinity of the bedroom. Smoke alarms may be placed on the ceiling or within 12 inches of the ceiling on the wall.
- Smoke alarms are permitted to be battery operated, but shall not replace any required A/C-powered smoke alarms or a household fire alarm system.
- The installation of battery operated smoke alarms does not require a permit.

### **The following are the requirements for Carbon Monoxide Alarms:**

- Work being performed in accordance with N.J.A.C. 5:23-6.4(g) repair, 6.5(g) renovation, 6.6(g) alteration, and 6.7(f) reconstruction require that carbon monoxide alarms be installed in buildings of Groups I-1, R-1, R-2, R-3, R-4, and R-5 that contain a fuel burning appliance or have an attached garage.
- Section 915 of the building subcode and Section R315 of the one- and two-family dwelling subcode require that carbon monoxide alarms be installed in the immediate vicinity of each sleeping area when the building contains a fuel burning appliance or has an attached garage. Carbon monoxide alarms may be placed anywhere on the ceiling or the wall.
- Carbon monoxide alarms are permitted to be battery operated, hard-wired or the plug in type.
  - The installation of battery operated or plug in type carbon monoxide alarms does not require a permit or an inspection.

It is your responsibility to ensure that these provisions have been met.

## Annual Permit Audit

The Licensing & Education office is responsible for collecting training fees connected to the issuance of annual permits and the subsequent training of workers named in those permits. Over the past few years, there has been a noticeable drop in the number of permits submitted to our office, despite a long history of the permits being issued to particular institutions. In an effort to verify that the permits we've tracked in the past have, indeed, expired and are no longer valid, we are asking each building department to check its records and verify any and all annual permits issued through their offices and send that information to us.

This should not affect many departments, and those that issue these types of permits should have the information readily available. Please send the information to our office via mail, fax (609-633-6729) or by email ([muriel.smith@dca.nj.gov](mailto:muriel.smith@dca.nj.gov)) as soon as possible.

Thank you very much for your cooperation on this topic!

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

## Chimney Liners – Required or Not Required

In the Fall 2015 edition, Volume 27, Number 3, Page 13 of the Construction Code Communicator, I wrote an article entitled “Chimney Liner Requirement – Rehab”. I would like to update this article as follows:

The International Residential Code/2015, Section G2427.5.5 (503.5.6) Inspection of chimneys, states: “before replacing an existing appliance or connecting a vent connector to a chimney, the chimney passageway shall be inspected in accordance with the chimney verification program as provided for in N.J.A.C. 5:23-2.20(d), and it shall be cleaned if previously used for venting solid or liquid fuel-burning appliances or fireplaces.

Exception: where an existing chimney complies with Section G2427.5.5 through G2427.5.5.3 and in sizing is in accordance with G2427.5.4, its continued use shall be allowed where the appliance vented by such chimney is replaced by an appliance of similar type, input, rating and efficiency.”

Replacing a furnace, boiler or water heater in an existing one- or two- family dwelling falls under the Rehabilitation Subcode, N.J.A.C. 5:23-6; this work is typically classified as “Renovation” by definition (replacement of equipment). N.J.A.C. 5:23-6.5(h) refers to N.J.A.C. 5:23-6.8, the Residential Materials and Methods. Here, N.J.A.C. 5:23-6.8(h)14 requires compliance with all portions of Chapter 24 from the 2015 International Residential Code (IRC) that pertains to gas equipment, and there are many sections that refer to resizing chimneys when equipment is replaced or removed.

Since this article was written, I have been told by two of the major water heater manufacturers that the efficiency of “natural draft” water heaters has not changed within the last 20 years. The only change is the requirement for more insulation to reduce heat loss.

For example, based on IRC/2015 Section G2427.5.5, Exception, a 40 gallon, 40,000 BTU/Hr., natural draft water heater can be installed in an existing chimney, whether interior or exterior, as long the existing chimney is sized properly, already lined, and in good shape.

This would not pertain to boiler or furnace replacements, which are more efficient than in past years. An exterior chimney would most likely have to be relined for these installations.

I know this is a major change, but it is a section in the IRC/2015 that would permit the use of the existing exterior chimney without having it relined for the replacement or installation of natural draft water heaters.

The submission of the chimney verification form would determine whether the existing chimney meets the code as to whether the chimney has to be relined.

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

## NJ DOL Registration of Liquid Carbon Dioxide CO<sub>2</sub> Carbonated Beverage Systems

Recently, the Department has been receiving calls regarding the New Jersey Department of Labor (NJ DOL), Boiler and Pressure Vessel Bureau registrations of liquid CO<sub>2</sub> beverage tanks. The actual registration certificate from the NJ DOL takes between 30-45 days to be printed and mailed. The NJ DOL inspector will leave a signed copy of “NB-7 PRESSURE VESSELS REPORT OF INSPECTION Standard Form for Jurisdictions Operating under the ASME Code.” This form is acceptable as meeting the requirement for proof of registration (a required prior approval), so that the installation may be approved by the fire protection subcode and construction official.

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

<b>TO:</b>	Division of Community Affairs, Code Officials	<i>Mailing Address:</i> P.O. Box 45042 Newark, NJ 07101 (973) 504-6245
<b>FROM:</b>	Fire Alarm, Burglar Alarm and Locksmith Advisory Committee	
<b>DATE:</b>	June 28, 2016	
<b>SUBJECT:</b>	Licensing Requirements and Submitting Permits for the Installation and Service of Magnetic and Mag Locks/Access Control Devices  	

The Fire Alarm, Burglar Alarm and Locksmith Advisory Committee would like to take this opportunity to clarify the Business license categories that are licensed to install Electronic Access Control. As a point of clarification, magnetic locks and electronic locking systems are included in the definition of Access Control per **N.J.A.C. 13:31A-1.2** which in the pertinent part reads:

*"Access control system" means a system that provides access to authorized persons and may record and report which persons entered or exited a facility or areas within a facility, which doors or areas were accessed while persons are within a facility, and the time that such activity occurred. "Access control systems" may include the use of keys, access cards, locks, card readers, biometric identification devices, recorders, printers and control devices. "Access control systems" may be independent systems or may be integrated with other electronic security systems."*

Electronic Access Control Systems by their nature require the use of magnetic locks, electric strikes, electrified locksets, electrified crashbars, etc. as part of an electronic access control system.

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.

Statutes and Regulations also provide an **Exemption** for Licensed Electrical Contracting Businesses (34EB). Since only licensed businesses can install, service and maintain these systems, Construction Officials should accept permit applications only from a licensed business firm.

## Board of Landscape Irrigation Contractors Now Part of Codes & Standards

Pursuant to P.L. 2015 c.169, the Board of Landscape Irrigation Contractors was moved from the Department of Environmental Protection to the Department of Community Affairs on June 1, 2016. The administration and enforcement of the Board's functions have been assigned to the Licensing and Education Office in the Division of Codes and Standards.

Questions regarding the certification of landscape irrigation contractors should be directed to (609) 984-7834 or email, [LIC@dca.nj.gov](mailto:LIC@dca.nj.gov).

This reorganization presents a good opportunity to review the relationship between the installation and maintenance of these systems and the Uniform Construction Code (UCC). The relationship is limited, but important. The installation of an irrigation system requires the use of a backflow prevention device to protect the domestic water supply. This requires a plumbing permit and must be installed by a NJ Licensed Master Plumber.

Another topic that warrants discussion is rain sensors. Irrigation systems are required to contain a rain sensing device. When a wireless sensor will be used, no electrical permit is required. The responsibilities section listed in the N.J.A.C. 5:23-3.4(a)3 states that plan review is joint between plumbing and electrical, but if a wireless rain sensor is used, the plan review and inspection are performed by the plumbing official. When a hard-wired rain sensor is utilized, both a plumbing and electrical technical form must be submitted. The responsibility for the inspection of the hard-wired rain sensor is assigned to the electrical official. It should be noted that today's technically advanced systems no longer use the familiar wireless sensor that was placed where the rain could be sensed, often a gutter. The newer systems do not use a sensor, but instead use a wireless link that communicates with weather stations in the area and that turns the system off when more than half an inch of rain is recorded.

In sum, no electrical permit is required for a wireless rain sensor, whether it is the physical (wireless) type mounted on the structure or the wireless communication sensor contained in the control unit. The plumbing inspector should ensure that the control panel is plugged into an existing receptacle without the use of an extension cord. If during an inspection, the plumbing inspector finds that extension cords are being used, the electrical subcode official must be informed, and the owner must be notified that an electrical permit will now be required. A permit is still required for any low voltage zone valve wiring. The landscape irrigation contractors are exempt from the licensing requirement, and are able to apply for required electrical permits to install any wiring for the irrigation system not greater than 30 volts pursuant to N.J.S.A. 45:5A-18(p).

Beyond these items, there are no other permitting requirements under the UCC; however, the installation work must be done by a certified landscape irrigation contractor.

Greater enforcement of the certification law is a goal of the Board and the Department, and we may be seeking the aid of local agencies in meeting that goal.

Source: John Delesandro, Dave Greenhill & Thomas Pitcherello  
Licensing & Education and Code Assistance Units  
(609) 984-7834 and (609) 984-7609

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## Agency Classifications Based on Structure

For those trying to figure out the classification of their local enforcing agency for plan review purposes, this is determined by the lowest level of inspector license held by any of the subcode officials appointed to establish such agency. Enforcing agencies are classified as an agency of Class 3, 2 or 1 (lowest to highest classification). Each Class is defined by building/structure at N.J.A.C. 5:23-1.4.

- Class 3 structure means a structure listed in N.J.A.C. 5:23-4.3A(d)1i – vi.
- Class 2 structure means a structure listed in N.J.A.C. 5:23-4.3A(d)2ii – xxii.
- Class 1 structure means a structure not listed in N.J.A.C. 5:23-4.3A(d)1i – vi or 2ii – xxii.

*(continued next page)*

(Agency Classifications Based on Structure)

As you can see, the key to these definitions is the cross references to N.J.A.C. 5:23-4.3A(d). For future reference, the following table merges this section with the applicable the definitions:

	Occupancy (Group)	Area less than (per floor)	Stories (max above grade)	Height (max above grade)
<b>CLASS 3 Structures; Buildings; &amp; Agency</b>	Business	7,200	2	40
	Mercantile	4,800	1	40
	Storage-1	4,200	1	40
	Storage-2	7,200	2	40
	Residential-3	As permitted in Section 503 of the building subcode and including accessory private garages, radio and television antennae and swimming pools		
	Residential-5	As permitted in Section R300 of the one- and two-family dwelling subcode and including accessory private garages, radio and television antennae and swimming pools		
<b>CLASS 2 Structures; Buildings; &amp; Agency</b>	All plan review activities permitted to class 3 officials and...			
	Assembly-1	4,200	1	40
	Assembly-2	2,400	1	55
	Assembly-3	8,400	2	55
	Assembly-4	9,500	2	55
	Assembly-5	5,000	1	55
	Business	37,500	5	65
	Educational	14,400	2	55
	Factory-1	25,000	4	65
	Factory-2	37,500	5	65
	Paint Spray Booths	As permitted by Section 416 of the building subcode		
	Institutional-1	8,400	3	55
	Institutional-2	7,200	1	55
	Institutional-3	6,000	1	55
	Institutional-4	13,000	3	55
	Mercantile	21,500	4	65
	Residential-1	9,600	3	55
	Residential-2	9,600	3	55
	Residential-4	9,600	3	55
	Storage-1	26,000	4	65
	Storage-2	39,000	5	65
Utility	As permitted by the building subcode			
<b>CLASS 1 Structures; Buildings; &amp; Agency</b>	All plan review activities permitted to class 2 and class 3 officials and...			
	All remaining occupancy groups and categories not reserved to the State.			
<i>Note: The group classifications are per Chapter 3 of the building subcode, areas are per floor and stories/height are above grade.</i>				

Some applications of this within N.J.A.C. 5:23 are section 2.15(a)6 for Class 1 structures, section 2.15(f)1vii(1) and (3) for Class 3 structures and section 2.20(b) for Class 1 buildings.

It should be noted that, as per N.J.A.C. 5:23-4.3A(e), for existing buildings the above also applies to the reconstruction, change of use, additions and installation or alteration of fire protection systems. With that said, repairs, renovations and alterations to other than fire protection systems in any class building are the jurisdiction of the local enforcing agency regardless of their classification.

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

## CO Not Contingent on Commissioning

The information provided in the Winter 2002 Construction Code Communicator article continues to reflect accurately the Department's position on commissioning. This is for many reasons. How does a code official enforce the proper calibration of elements related to Section 6.7.2.4 of the ASHRAE 90.1-2013? The code official can make sure that minimum efficiencies are met and proper sizing of equipment and layout are per design, but the performance of the system and whether it is being used as designed is not something the code official is charged with overseeing. These last two items are contractual matters and would not be linked to the issuance of a certificate of occupancy. We know that LEED and other "above code" programs rely heavily on commissioning, but the Uniform Construction Code is a minimum standard. It does not diminish the importance of commissioning, but again, it does not make the certificate of occupancy contingent on commissioning.

So, if we were to update the original article to today's adopted energy subcode, it would say:

N.J.A.C. 5:23-3.18, Energy Subcode, adopts the 2015 edition of the International Energy Conservation Code (IECC) with technical amendments. The commercial section of the IECC references the American Society of Heating, Refrigeration, and Air-Conditioning Engineers 90.1, the 2013 edition (ASHRAE 90.1-2013) as the only standard to be used for the design of all buildings except residential buildings of three or fewer stories in height.

It is important to remember that only those portions of the referenced standard that address building design are applicable. This applies to the building itself, including the building envelope, percent glazing, R-values, and U-values. This does not include the performance of the equipment installed. Equipment is required to be listed and labeled with a percentage AFUE (furnaces and boilers), HSPF (air source heat pumps), and/or SEER (air-conditioning) efficiency; however, it does not require "system commissioning" (ASHRAE 90.1-2013, Section 6.7.2.4). An inspector must make sure the equipment is listed and labeled as required by the Energy Subcode, but does not need to ensure that the owner/operator is aware of the operating and maintenance requirements for the equipment. Requirements for Groups B and E are different. N.J.A.C. 5:23-2.23(i)7, "Certificate Requirements," does require a "Test and Balance" report for mechanically ventilated Class 1 and 2 buildings of Groups B and E, but other portions of the commissioning process are outside of the scope of the Uniform Construction Code.

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

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## Day Care Classified as Institutional Group I-4

I guess with any update of a model code, things can get missed, or the "bread crumbs" they thought they left so the code users could find their way were eaten. That being said, the Code Assistance Unit has been receiving calls regarding the 2 ½ years of age cut-off for child day care facilities and whether it falls under Group E or Group I-4.

Section 308.6 (Institutional Group I-4, day care facilities) of the International Building Code (IBC)/2015 states that Group I-4 occupancies include buildings and structures occupied by more than five persons of any age who receive custodial care for fewer than 24 hours per day by persons other than parents or guardians, relatives by blood, marriage or adoption, and in a place other than the home of the person cared for. This section further states that this group includes adult day care and child day care.

As you can see, the child day care seems a little lost without its up to 2 ½ years of age clarifier. For this, you must go to the "other" day care facility classification, Section 305.2, which states that Group E, day care facilities include buildings and structures, or portions thereof, occupied by more than five children older than 2 ½ years of age who receive educational, supervision or personal care services for fewer than 24 hours per day.

Yes, this may seem like a lot of trouble to find the answer to apply certain sections of the IBC/2015, but it what it is. So, the next time you are having your breakfast at your desk and reviewing the code, drop some bread crumbs in your book so you can find your way regarding child day care facilities.

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

## Installation of Manufactured Homes

Most code officials are aware that manufactured homes are regulated by the Federal Department of Housing and Urban Development (HUD). Up until recently, that regulation was limited to the construction of the unit at the factory. Through a system of quality control processes, third party inspections, and labeling, a manufactured home would arrive on site with all of the necessary inspections for the work that was done in the factory. The code official, with the exception of inspecting for damage during transit, would limit his inspections to the work that was done on site. The dividing line between the factory work (overseen by HUD) and the site work (overseen by the local building department) was clear.

That line is no longer so clear. The National Manufactured Housing Construction and Safety Act of 1974 was amended on December 27, 2000 to require that HUD establish and implement a new manufactured home installation program for States that chose not to have their own installation program. HUD published rules in June of 2008 that became effective in October of 2008. New Jersey has two of the three necessary components for a HUD-compliant installation program. It has established standards for the installation of manufactured homes, and it has an inspection and approval system to ensure that the installation meets the standards. However, it lacks the third requirement, which is a training and certification program for those doing the installation work. Because that third piece is not in place, HUD began administering an installation program in New Jersey beginning in May of this year.

This has caused some duplication of effort between the State's building code enforcement program and the HUD installation program. It has left the installers in the awkward position of trying to satisfy two regulatory agencies. Nothing has changed under the State enforcement system. Permits are still required as are inspections, and ultimately, a certificate of occupancy. At this time there is no requirement under the Uniform Construction Code to ensure that the installer is certified by HUD. Under the HUD rules, installers are required to be certified, follow the HUD installation requirements, and have a qualified third party inspector sign off on a form certifying that the installation meets the HUD installation standards. It should be noted that the installers have to meet both the Federal installation standards and the UCC installation standards. This is something that the State must resolve and is working to resolve. Until it is resolved, the installers not only have to meet two sets of standards, they also have to navigate through two inspection systems. As noted above, HUD requires that the installation be certified through the filling out and submission of Form 305. Some officials may have already seen the form. It essentially is a checklist that is to be filled out by the installer and a qualified third party attesting that the installation meets the Federal installation standards.

The installers would like to be able to use the inspection by the building inspector under the UCC to satisfy the inspection by the qualified third party. The good news is that the local building inspector meets the requirements of a qualified third party under the HUD rules. The bad news is that the building inspector is not inspecting to the HUD installation standards, and therefore, cannot certify that the installation meets those requirements. Therefore, it is not appropriate for the building inspector to sign Form 305 based on a UCC inspection. Code officials can note on the form that the installation meets the installation requirements of the Uniform Construction Code and sign it accordingly. The Department is encouraging code officials to sign the form with the notation described until the State and HUD can resolve the issue of two different installation standards and two different inspection requirements.

It should also be noted that the HUD requirements do not apply to a used manufactured home that is being relocated. The HUD rules only apply to a new manufactured home being installed for the initial time. If there are questions, please contact Michael Baier, Bureau of Code Services (609) 984-7974.

Source: Michael Baier  
Bureau of Code Services



### Fire Escapes (FTO-3) Update

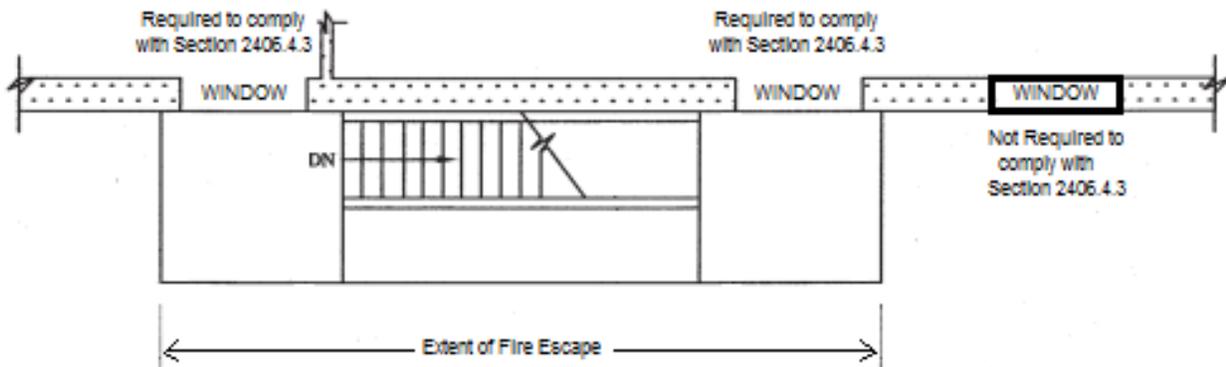
Formal Technical Opinion (FTO) – 3, Fire escapes, was revised in October 2016. The revisions to this FTO are on pages 3 and 6, both within letter H, and consist of the following:

1. Wired-glass has been deleted;
2. Protection of window openings that are 10 feet within any direction of a fire escape has been deleted; and
3. Requirements for window openings directly adjacent to a fire escape to be safety glazed in accordance with the Building Subcode, specifically Section 2406.4.3 of the 2015 International Building Code (IBC) have been added.

With the adoption of the 2006 IBC and subsequent editions, the exception for wired glass in fire doors, fire windows, and view panels was deleted from the code in Section 2406.1 of the building subcode. Therefore, wired glass is not an option for use in lieu of safety glazing.

The decision to delete the requirement for window protection within 10 feet of the fire escape is based on several factors. To truly protect openings that are 10 feet within any direction of the fire escape, both the window and the frame must be replaced. If the frame is not replaced, it will burn faster than the window will deteriorate, and the opening would no longer be protected. Another factor is that a window can be left open during a fire and again would not afford protection.

Therefore, window openings adjacent to the fire escape must comply with the 2015 IBC for safety glazing. The intent of the phrase “directly adjacent” is for window openings that are within the projection and walking area of the fire escape. See plan view below:



The revised section H(1) of FTO – 3 reads as follows:

In existing buildings 3 stories or more in height, all door openings leading directly to a fire escape shall be protected by a minimum of 3/4-hour fire-rated door assemblies. Window openings directly adjacent to a fire escape shall be safety glazed in accordance with Section 2406.4.3 of the building subcode. No type of fire-escape exit door or window is to be located so that the distance from the fire-escape landing platform to the bottom of the door or window opening exceeds 8 inches.

This revised FTO can be found at <http://www.nj.gov/dca/divisions/codes/resources/ftos.html>.

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

### Photovoltaic Panels and Modules on Roofs

Recently, we have been receiving inquiries about whether or not roof access, roof pathways, and spacing requirements need to be applied to photovoltaic (PV) roof systems on one- or two-family dwellings or townhouses designed in accordance with the International Residential Code (IRC)/2015, Group R-5. The short answer: **No**.

(continued next page)

*(Photovoltaic Panels and Modules on Roofs)*

The longer answer: The International Fire Code (IFC)/2015 rules that pertain to PV systems on roofs do not apply to installations on buildings of Group R-5, and there are even exclusions/reductions for Group R-3 buildings designed in accordance with the International Building Code (IBC)/2015. Section R324.3 of the IRC/2015 does not reference the IFC/2015 for PV systems; this section contains requirements for listed equipment, wind resistance, fire classification, and roof live load design. Section 605.11.1.2 of the IFC/2015 further reinforces this by providing an exception saying for buildings constructed under the IRC/2015. In essence, the entire roof of a Group R-5 building can be covered with PV panels or integrated shingles as long as the required plumbing and mechanical vents are not covered. Yes, Section R324.2 of the IRC/2015 does reference the IFC/2015, but that is for solar thermal systems, which are not the same as PV systems. Please don't make this link just because both systems are within Section R324.

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

### Garage Step-Up

The Code Assistance Unit has received many calls regarding a four-inch step-up from the garage leading into the main portion of a residence. This is not required and has not been required since the adoption of the International codes. This was previously a requirement of the BOCA National Building Code, and the last one adopted by the State was the 1996 edition.

Currently, both Section R309.1 of the International Residential Code (IRC)/2015 and Section 406.3.3 of the International Building Code (IBC)/2015 require that the area of floor used for parking of automobiles or other vehicles be sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway; no minimum slope is provided. This would be why the old BOCA requirement went to the wayside.

In review, the four-inch step-up hasn't been a requirement since the 1996 BOCA was in effect. On May 5, 2003, the 2000 editions of the IRC and IBC were adopted which ended BOCA's reign, and the sloped floor became gospel. If someone chooses to install the step-up, they may, but it is not required, and the absence of a step up is not a violation of code.

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

### Kitchen Sinks and the ICC/ANSI A117.1-2009

Prior to the adoption of the 2015 I-Codes, N.J.A.C. 5:23-7.2(b) delineated the modifications to the ICC/ANSI A117.1-2003 ([http://www.nj.gov/dca/divisions/codes/codreg/pdf\\_regs/sub%203\\_6\\_7\\_12\\_2009\\_codes.pdf](http://www.nj.gov/dca/divisions/codes/codreg/pdf_regs/sub%203_6_7_12_2009_codes.pdf)). The modifications to the ICC/ANSI A117.1-2009 are now found at Section 1101.2 of the International Building Code/2015 at N.J.A.C. 5:23-3.14(b)10ii.

For example, N.J.A.C. 5:23-7.2(b)21 provided an exception to kitchen/kitchenette at Section 804.4 of the 2003 standard stating that a conventional height of 36 inches is permitted when there is no cooktop, and that a parallel approach must be provided. This exception still exists but only partially. Section 804.4 of the 2009 standard references Section 606, Clear floor space at [lavatories and sinks]. The exception provided in the cross reference allows for a parallel approach provided there is no conventional range, **but** a height of 34 inches is now required.

This may seem like an inconvenience, but when applying the reach ranges of Section 308, flush-mount electrical outlets above the conventional height counter were not in reach. The 34-inch max would allow the electrical outlets to remain flush-mount and more importantly, be consistent with the American with Disabilities Act.

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

## All “New Homes” are not Created Equal

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 / 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)2i. 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 plaintiff’s 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 home owner 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 not have 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: Steve Denenholtz, Esq. & James F. Fahy, Esq.  
Bureau of Homeowner Protection



## Rehab and Energy Subcode Update

(updated reprint from Spring 2012, Vol. 24, No. 1)

The first provisions of the Energy Subcode entered the Rehabilitation Subcode on May 7, 2007. Construction Code Communicator articles were published in the Spring, 2007 and Spring 2012 editions on how to apply these provisions; until now, it has provided definitive guidance.

We anticipate the Rehabilitation Subcode will be updated in the first quarter of 2017. This update will include an expansion of the provisions of the Energy Subcode and I would like to call attention to some of these amendments:

- Definitions – N.J.A.C. 5:23-6.3
  - o "Commercial energy code" means the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) standard 90.1 adopted at N.J.A.C. 5:23-3.18 and applicable to all buildings other than residential buildings as defined at "residential energy code."
  - o "Residential energy code" means the International Energy Conservation Code adopted at N.J.A.C. 5:23-3.18 and applicable to residential buildings as defined as Group R-3 and R-5 buildings, as well as Group R-2 and Group R-4 buildings three stories or less in height above grade. Group R-5 buildings requirements are denoted in parentheses for the equivalent requirement in the one- and two-family dwelling subcode.
- Renovation – N.J.A.C. 5:23-6.5(e)10 through 13;
- Alteration – N.J.A.C. 5:23-6.6(e)17 through 20;
- Reconstruction – N.J.A.C. 5:23-6.7(e)14 through 17;
- Materials and Methods – N.J.A.C. 5:23-6.8(l); and
- New Building Elements – N.J.A.C. 5:23-6.9(a)27 through 34.

Taking the most extensive project, a reconstruction project, the following would apply to a building subject to the residential or commercial energy code:

1. When the work being performed creates or exposes the roof decking/sheathing or the framing of any wall, floor, ceiling, or roof assembly that is part of the building's thermal envelope (encloses conditioned space), any accessible voids in insulation shall be filled using insulation meeting the R-values of Table R402.1.2 (N1102.1.2) of the residential energy code for wood framing and of Table R402.2.6 (N1102.2.6) 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, and the equivalency exceptions of Sections R402.2.1 and R402.2.2 (N1102.2.1 and N1102.2.2) cannot be applied for residential buildings, insulation that fills the cavities of the framed assembly shall be installed.
2. When fenestration (windows, skylights, or doors) is newly installed or replaced, the U-factor (thermal transmittance) shall not exceed the U-factor of Table R402.1.2 (N1102.1.2) of the residential energy code or of Table 5.5-4 or 5.5-5 of the commercial energy code, as applicable.
  - i. Exception: In residential buildings, fenestration that meets Sections R402.3.3 (N1102.3.3) and R402.3.4 (N1102.3.4), as applicable.
3. Ducts that are newly installed or replaced shall be installed with insulation meeting the R-values of Section R403.3.1 (N1103.3.1) of the residential energy code or of Section 6.4.4.1.2 of the commercial energy code, as applicable.
4. The total replacement of a building lighting system or a newly installed building lighting system shall meet [the following sections]: Section R404 (N1104) of the residential energy code or Section 9.1.2 of the commercial energy code, as applicable. (A "lighting system" is defined by the commercial energy code as "a group of luminaires circuited or controlled to perform a specific function.")
  - i. Exception: The total replacement of a lighting system within a room, space or tenancy shall be required to meet Section 9.1.2 for the room, space or tenancy only.

If the building owner decides to install new building elements in a building subject to the residential or commercial energy code, the following applies regardless of whether the project is a reconstruction:

1. Newly created thermally isolated sunrooms shall meet the R-value and U-factor requirements of Sections R402.2.13 and R402.3.5 (N1102.2.13 and N1102.3.5) of the residential energy code.
2. Newly installed wood burning fire places shall meet Section R402.4.2 (N1102.4.2) of the residential energy code and Section R1006 of the one- and two-family dwelling subcode or Section 5.4.3.1.2 of the commercial energy code and Section 2111.14 of the building subcode, as applicable.

(continued next page)

(Rehab and Energy Subcode Update)

3. Newly installed heating, cooling and ventilation systems shall have controls meeting Sections R403.1 and R403.6 (N1103.1 and N1103.6) of the residential energy code or Sections 6.4.3, 6.5, 7.4.4, and 7.4.6 of the commercial energy code, as applicable. Systems include, but are not limited to, the heating and cooling of air or liquids and the ventilation or exhausting of spaces.
4. Newly installed systems that include piping carrying fluids shall meet Sections R403.4 and R403.5 (N1103.4 and N1103.5) of the residential energy code or Sections 6.4.4.1.3 or Section 7.4.3 of the commercial energy code and Section 1204 of the mechanical subcode, as applicable.
5. Newly installed heating and cooling equipment shall be sized in accordance with Section R403.7 (N1103.7) of the residential energy code or Section 6.4.2.1 and 7.4.1 of the commercial energy code, as applicable.
6. Newly-installed snow and ice melting systems shall be installed in accordance with Section R403.9 (N1103.9) of the residential energy code or Section 6.4.3.7 of the commercial energy code, as applicable.
7. Newly-installed pool heaters shall meet Section R403.10 (N1103.10) of the residential energy code or Section 7.4.5 of the commercial energy code, as applicable.
8. Newly-installed sensible heating systems and radiant floor heating systems shall meet the insulation requirements of Sections 6.4.4.1.4 and 6.4.4.1.5 of the commercial energy code, as applicable.

Currently, N.J.A.C. 5:23-2.15(f)1vi requires energy subcode compliance documentation only for brand new buildings and additions. However, per N.J.A.C. 5:23-2.15(f)1vii, engineering details may be required for calculating the light power densities for a new lighting system. For this, the lighting portion of COMcheck for the building or space could be used.

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

### Wind Design Criteria IRC/2015

There have been inquiries as to when wind provisions are no longer applicable, and when buildings must be designed in accordance with one of the reference standards in Section R301.2.1.1, Wind Limitations and Wind Design Required, of the 2015 International Residential Code (IRC/2015).

Previously, Section R301.2.1.1 of the 2009 IRC stated that in regions where the basic wind speeds (from Figure R301.2.4) equaled or exceeded 100 miles per hour in hurricane prone regions, or 110 miles per hour elsewhere, the design of the building was outside of the scope of the IRC, and had to be designed in accordance with one of the reference standards. **This has changed.**

Currently, according to Section R301.2.1, Wind Design Criteria, of the IRC/2015, buildings must be constructed using Table R301.2(1), Climatic and Geographic Design Criteria, as determined from Figure R301.2(4)A, Ultimate Wind Design Speeds. The referenced standards are required to be used in regions where the wind design is subject to Figure R301.2(4)B, Regions Where Wind Design is Required. According to Figure R301.2(4)B, New Jersey is **not** in a region where wind design is required, therefore, Section R301.2.1.1, Wind Limitations and Wind Design Required, is not applicable.

Therefore, all buildings designed pursuant to the provisions of the IRC/2015 are not required to comply with the reference standards in Section R301.2.1.1, Wind Limitations and Wind Design Required, and may be designed in accordance with Section R301.2.1, Wind Design Criteria.

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

## Acceptance Testing – Single- and Multiple-Station Smoke Alarms vs Smoke Detectors

Back in 2006, an article was written addressing this issue for smoke alarms. However, some misinformation was provided when dealing with the methods to perform the acceptance test of smoke alarms for Groups R-1, R-2, R-3, R-4, R-5, and I-1.

I have recently received several phone calls from contractors and property owners stating that they have failed their acceptance test because they did not have artificial smoke in the can on site. The required smoke alarm requirements in Section 907.2.11 of the International Building Code (IBC) and Section R314 of the International Residential Code (IRC), as amended at NJAC 5:23-3.14 and 3.21 respectively, do not specifically regulate how smoke alarms need to be acceptance tested.

Chapter 14 of the 2013 NFPA 72 provides the specific requirements for smoke alarm and smoke detector testing. Single- and multiple-station smoke alarms installed in Groups R-1, R-2, R-3, R-4, R-5, and I-1 shall be tested for proper operation, however this test may not involve the introduction of artificial smoke being sprayed into the smoke chamber as some fire protection inspectors have required.

NFPA 72 only requires smoke entry testing for smoke detectors (fire alarm systems) in other than one- and two-family dwellings utilizing an approved method in accordance with the manufacturer's instructions.

NFPA 72, Table 14.4.3.2, number 17 (g) gives specific test methods that are acceptable tests for single station smoke detectors, but not alarms. The functional test of smoke alarms is done by holding the test button and making sure that the system operates properly. A/C power, backup power and interconnection are some examples of what must be checked to ensure proper function. When detectors are used in other than one- and two-family dwellings, they need to be tested in accordance with the manufacturer's listing and installation instructions or by introducing smoke into the sensing chamber.

For smoke alarms in one and two family dwellings, NFPA 72 does not specify requirements for sensitivity or smoke entry testing other than what may be specified by the manufacturer's instructions, just a functional test by the homeowner pushing the test button to check operability.

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

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## Type NM cable in Suspended Ceilings

Those of you who know me have heard me say there are two types of enforcers, the literal enforcer, who only knows the code as written, and the enforcer who applies the code based on visual inspection and intent. For this reason, and the way the language is presented in many sections of our code, topics are opened for interpretation. For example, in the 2014 National Electrical Code (NEC) at 334.12(A), it states the type NM (romex) cannot be run above a suspended ceiling in other than one- and two-family dwellings and multi-family dwellings. New Jersey deleted this requirement in the UCC at N.J.A.C. 5:23-3.16 because, "if romex is allowed above a drop ceiling of One, Two and Multi-family dwellings, why would it not be allowed in other structures where Romex is allowed in the walls?"

To understand the history of this deletion, we need to look at the code adoption between 1999 and 2002. In the 1999 NEC, type NM was found in article 336. The 1999 NEC at 336-5(a)(1) excluded the use of romex in multi-family dwellings or other structures greater than three stories. There was nothing in the 1999 NEC that restricted its use above a drop ceiling in the structures where its use was allowed. In the 2002 NEC, romex was moved to article 334, and its permitted use had changed. The height limitation was removed, but the article stated that it could only be used above drop ceilings of one, two and multifamily dwellings (2002 NEC 334.12(A)(1)). During the adoption period, the 2002 proposal took notice to the new requirements. Listed in the New Jersey Register dated Monday, December 16, 2002, New Jersey chose to delete this section of the code. The proposal stated that the 2002 now allows romex cable in multistory buildings of types III, IV and V construction. However, it prohibits the use of romex in drop or suspended ceilings in other than one and two-family and in multifamily dwellings. The reasoning behind the deletion of this requirement was due to the lack of technical justification in not allowing romex to be run throughout these buildings. Therefore, the use of romex in any drop or suspended ceiling, regardless of class of structure, is allowed.

*(continued next page)*

(Type NM cable in Suspended Ceilings)

Pretty simple when explained, but now we get back to the literal reading of the code. Although NJ allows romex to be installed in drop or suspended ceilings, people now look at what is stated in 334.10(3). Here, it states that romex can be run in other structures of types III, IV, and V provided it is covered by a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies. A drop ceiling is not a rated assembly, nor is it required to be. When romex is allowed in the walls of structures type III, IV and V, it is also allowed in the drop or suspended ceiling portions of these structures without requiring the ceiling to be a rated assembly. Reflecting back to the proposal, there is no technical justification to prohibit the use of this product in any drop ceiling where romex is allowed.

Source: Dave Greenhill  
Code Assistance Unit  
(609) 984-7609

### Working Clearances and 110.26 of the NEC

When we think about electrical installations, the first thing that should come to mind is safety. Safety includes picking the right components and making sure that the wiring from these components is done to the minimum requirements of the code. When pieces of equipment, such as switch gear or panel boards, are installed, consideration must be given to the potential of the equipment being worked on while energized. Although Occupational Safety and Health Administration (OSHA) and National Fire Protection Agency (NFPA) 70E frown upon working on energized equipment, sometimes the cause and effect of shutting an entire panel down outweighs the safety aspect and work must be done "hot." With the proper Personal Protective Equipment (PPE) and instruction, live work can be done without injury. This leads to the purpose of Article 110.26, providing working clearances. This article states that working space for equipment operating at 600 volts nominal or less to ground and "**likely to require examination, adjustment, servicing or maintenance while energized shall comply with.....**" It provides safe dimensions in width and depth so the "HOT" work can be performed safely.

The reason this topic is being discussed is that the Code Assistance Unit gets numerous calls about inspectors requiring the above-referenced clearances for a disconnect located adjacent to an air conditioning condenser. This is a required maintenance switch as per Article 440.14 of the National Electric Code (NEC), not clearance's per Article 110.26(A). There is no reason for this switch ever to be worked on while energized.

Article 440.14 (Location) states: "Disconnecting means shall be located within sight from and readily accessible from the air conditioning or refrigerating equipment. The disconnecting means shall be permitted to be installed **on or within** the air-conditioning or refrigerating equipment."

Now apply the definition of readily accessible in Article 100 which states:

"Accessible, Readily (Readily Accessible). Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to actions such as to use tools, to climb over or remove obstacles, or to resort to portable ladders, and so forth."

Article 440.14 requires a **readily accessible** disconnecting means and states it can be **located on or within** the unit. This leads to questions regarding what is readily accessible "within the unit?" How can an installation be code compliant by mounting the disconnecting means within the unit? In this instance, it would require tools and possibly a ladder depending on the location of the equipment. Applying the code literally would mean that there are thousands of air handlers, condensers and chillers installed not in compliance throughout the state.

The clearances required through Article 110.26 are for equipment that **cannot** be shut down for servicing. We have to use common sense and understanding of the intent of the code. A disconnect located slightly above or just to the left or right of an outdoor condensing unit is not a piece of equipment that requires the clearances given in Article 110.26.

Source: Dave Greenhill  
Code Assistance Unit  
(609) 984-7609

### Accessibility and Sales Offices

*(updated reprint from Winter 2001, Vol. 13, No. 4)*

The Department of Community Affairs has received several requests for clarification on the accessibility requirements for sales offices at developments of single-family homes.

**Accessible route:** The office is required to be accessible to all customers; therefore, there must be an accessible route into the office. When the office is in an on-site trailer, this is usually accomplished by a ramp. When the office is in the garage of the on-site model home, the entrance to the office is at grade and is accessible. The model home itself is not required to have an accessible route into and through the dwelling, and the toilet facilities in this single-family home are (of course) exempt from the Chapter 11 of the Building subcode.

**Accessible toilet room:** When toilet facilities are available to customers, an accessible toilet room must be provided. When the sales office is in the garage of the model home, this may be accomplished by providing an accessible port-a-john on an accessible route (stable, firm, and slip-resistant) adjacent to the office. When toilet facilities are not available to customers, but are available only for employees, an accessible toilet must be provided (in compliance with the Americans with Disabilities Act, Title I) as an accommodation to an employee.

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

Source: Code Assistance  
(609) 984-7609

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### Shower Pan Inspections

The Department has received numerous questions regarding the inspection of shower pan liners. The major questions are whether the pan is required to be tested, and if it is, whether the testing may hold up a rough inspection.

As per N.J.A.C. 5:23-2.18(b)1iv(3), construction must stop for the inspection of the rough piping only. The applicant/agent must notify the Local Enforcing Agency (LEA), and the LEA has three (3) business days to perform the inspection in accordance with N.J.A.C. 5:23-2.18(c).

The answer to the question as to whether the pan is required to be tested is yes, as per Section 7.10.6g of the National Standard Plumbing Code/2015. However, this inspection **cannot** hold up construction. Construction must cease for the inspection of rough piping **only** and **not** for the associated plumbing appurtenances. N.J.A.C. 5:23-2.18(b)3 states that any additional inspections that may be required shall be of the type and nature that construction may continue uninterrupted. As a result, this inspection, which is a requirement of the National Standard Plumbing Code/2015, does not stop construction.

The shower pan liner does not need to be installed for a rough piping inspection to take place; therefore, it cannot hold up a rough inspection.

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



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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](mailto:codeassist@dca.nj.gov).

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