# Construction Code Communicator

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

**Department of Community Affairs** Lori Grifa, Commissioner

### Volume 23, Number 1

## Energy Subcode **Compliance - Continuation**

The Fall 2010 Construction Code Communicator (Volume 22, Number 3) contained a lot of information about energy subcode compliance with regard to the 2009 International Energy Conservation Code (IECC/2009) and the American Society of Heating, Refrigeration, Air-Conditioning Engineers (ASHRAE) Standard 90.1-2007. That article referenced a soon-tobe published checklist that was being developed for code enforcement officials and independent (from the installer of the insulation) inspectors to use when verifying building thermal envelope tightness. Well, the checklist has been published as part of Bulletin 11-1, on pages 7-8; it applies to low-rise residential buildings. (NOTE: There is a forthcoming rule proposal to make this checklist a standard form). The following is a summary of what is required and the role the checklist plays in providing for thorough inspections and accurate records.

In accordance with N.J.A.C. 5:23-2.18(b)1 and (b)2, in all buildings, work must stop for the insulation inspection, which will take place after the rough inspections for compliance with the other subcodes and

# **Electric Vehicle Charging** Stations - Installation and **Permit Requirements**

The growing need to offer drivers relief from the increasingly high cost of gasoline has produced various models of vehicles powered by alternate sources, i.e. natural gas, hybrid and electric, to name just a few. The purpose of this article is to provide you with technical and administrative guidance on the installation of electric vehicle (EV) charging stations.

An EV charging station supplies electricity to recharge electric or plug-in hybrid vehicles at voltages and currents that minimize the charging time. Even though most electric cars can be recharged from a typical 120 volt/15 amp wall receptacle (NEMA 5-15R), the charging time for a fully depleted battery can take longer than the typical eight-hour overnight charge. This makes EV charging stations a practical means of faster charging.

The Society of Automotive Engineers (SAE) classify EV charging stations in three categories: Level 1 - 120 volt alternating current (AC) charging; Level 2 - 240 volt AC charging; and Level 3 - 500 volt direct current (DC) high-

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before the installation of any interior finish material. The Uniform Construction Code (UCC) inspector will complete the insulation portion of the checklist, which is separated into verification of the "insulation" and the "air barrier" requirements in Section 402.4.2 of the IECC/2009.

Section 402.4.2 of the IECC/2009 provides the permit holder with two options for verifying building thermal envelope tightness: (1) testing in accordance with Section 402.4.2.1, or (2) visual inspection in accordance with Section 402.4.2.2. Because the insulation inspection is a UCC-required inspection, the visual inspection (option #2) will have already been partially completed; the remaining inspection issues for envelope tightness relate to the air barrier.

If the permit holder chooses a visual inspection, the code official will field-verify that the building thermal envelope tightness complies with Table 402.4.2. The air barrier inspection may be performed by a person other than the local code official, but that person must be independent of the installer and approved by the code official. The IECC/2009 does not establish credentials for persons performing these inspections. In all cases where the inspection option is used to document compliance, the Air Barrier and Insulation Checklist must be completed.

If the permit holder chooses testing, the documentation showing the results of the blower door test will be part of the permit file. If the permit holder chooses a visual inspection, the code official will field-verify that the building thermal envelope tightness complies with Table 402.4.2. The air barrier inspection may be performed by a person other than the local code official, but that person must be independent of the installer and approved by the code official. The IECC/2009 does not establish credentials for persons performing these inspections. In all cases where the inspection option is used to document compliance, the Air Barrier and Insulation Checklist must be completed. Once completed, checklists documenting visual inspection(s), as described below, are to be retained in the file.

- UCC inspector(s) One checklist documenting both insulation and air barrier requirements have been met is filed.
- UCC inspector(s) and independent inspector(s) In this case, two checklists would be filed, one for the insulation completed by the UCC inspector(s), and one for the air barrier completed by the independent inspector(s).
- UCC inspector(s) and blower door test One checklist, for insulation, that was completed by the UCC inspector(s) is filed; in addition, the documentation of a passing blower door test is appended to the checklist.

Bulletin 11-1 and the checklist can be found at the

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## following direct link:

http://www.nj.gov/dca/divisions/codes/publications/pdf bulletins/11-1.pdf. Alternatively, you may go to our main page, http://www.nj.gov/dca/divisions/codes, click on "Publications," scroll to the bottom of that page and click on "Bulletins" under the title of "Uniform Construction Code." This will take you to the entire list of current bulletins. Scroll down to Bulletin 11-1, which is at the bottom. Click on it to open it.

Finally, since this article deals with a portion of the "Air Leakage" section of the IECC/2009, I would also like to remind you that a general article was published in the *Construction Code Communicator*, Spring/Summer 2009. It included figures that showed the areas that must be caulked, gasketed, weatherstripped, or otherwise sealed to make the building thermal envelope tightness effective.

If you have questions on this matter, please contact me at (609) 984-7609.

Source: Rob Austin Code Assistance Unit

# ASME Requirement for Pressure Vessels

In the National Standard Plumbing Code (NSPC), Section 3.3.8, Pressure Tanks and Vessels, states: "Hot water storage tanks shall meet construction requirements of ASME, CSA, or UL, as appropriate." At N.J.A.C. 5:23-3.15(b)4vi, Section 3.3.8a has been amended to add the following phrase: "Pressure vessels shall be designed and constructed in accordance with the requirements of the American Society of Mechanical Engineers (ASME), Rules for the Construction of Pressure Vessels, Section VIII/2004. Any pressure vessel that exceeds any of the following shall meet the requirements of ASME and shall be stamped ASME:

- A heat input rating of 200,000 BTU per hour; or
- water temperature of 200 degrees Fahrenheit; or
- nominal water capacity of 120 gallons or any other thresholds of ASME that apply."

Any hot water storage tank or water storage heater exceeding any of these thresholds is required to be constructed in accordance with ASME and must be stamped "ASME."

It is critical that, prior to issuing a permit for a new or replacement water heater that is required to meet the ASME standard, the contractor must be made aware that the water heater must be ASME stamped.

Should you have any questions, you may contact me at 609-984-7609.

Source:	Thomas C. Pitcherello
	Code Assistance Unit

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current charging. To speed up the charging process electric vehicle owners will probably opt to install a level 2 charging station at home, while businesses and local government may provide level 2 and level 3 public charging stations. It is important to note that SAE standards have been developed for Levels 1 and 2, but DC Level 3 Fast Charge standards are still under development.

Just like any other electrical installation, the charging systems for electric vehicles are required to comply with the subcodes adopted by the State of New Jersey in the Uniform Construction Code (UCC). In fact, the installation of the electric vehicle charging systems are addressed in Article 625 of in the 2008 National Electrical Code (NEC) as adopted in the UCC.

The most common question about electric vehicle charging stations is about listing and labeling requirements. Most electrical equipment is listed and labeled per Section 625.5; this makes the approval of the equipment for the installation and use a "no brainer". However, what does one do when there is no clear listing or labeling? N.J.A.C. 5:23-3.7, Municipal approvals of alternative materials, equipment, or methods of construction, provides regulations to assist in the approval of equipment that does not have the standard listing and labeling. A testing agency may verify the installation and the intended use, which means that the equipment complies with Section 625.5. Note that, per Sections 625.29(C) and (D), indoor charging stations may require special ventilation per their listing and labeling or testing.

Another common question: When are permits required for the installation of the charging systems for electric vehicles? At N.J.A.C. 5:23-2.14, Construction permits, when required, the UCC does not require a permit for cord-and-plug-connected electrical equipment. This includes equipment that is capable of being plugged in to an existing receptacle, no matter what the voltage rating of the equipment is. If the existing receptacle has the proper voltage rating, but the configuration is not compatible with the plug on the equipment, the replacement of the receptacle to one with the proper configuration would be considered Ordinary Electrical Maintenance (N.J.A.C. 5:23-2.7(c)3.i.) and no permit for, inspection, or notice to the enforcing agency of Ordinary Maintenance, is required. However, there are exceptions to this rule. For example: if there is an existing 120 volt receptacle on a 15 amp circuit that is to be replaced by a higher current 120 volt receptacle that requires a 20 amp circuit (NEMA 5-20R), the upgrade of the circuit would be considered Minor Work (N.J.A.C. 5:23-2.17A(c)3).

When a vehicle charging system is being installed that

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requires a new 120 or 240 volt receptacle or an electrical line that will be directly connected the system, it also is subject to the Minor Work provisions. As with all Minor Work, the issuance of a permit is not required before the work may proceed. However, the owner or contractor acting on behalf of the owner must provide notice to the enforcing agency before the work begins. Also, a permit application must be filed and must be delivered in person or by mail within five business days from the date of oral notice. The inspection of Minor Work must be performed within 30 days of the request for inspection and is based upon what is visible at the time of the inspection with the certificate of approval stating so.

Recognizing that electric vehicles and their charging stations are not yet the norm in most communities, here are some examples that describe the different charging needs of vehicles that you may encounter:

- With the launch of the 2011 Chevrolet Volt and the 2011 Nissan Leaf, 240volt (level 2) EV charging stations are being hardwired in homes to reduce charging times. Chevrolet states that their 240 volt EV charging station will take about 4 hours to recharge the Volt's batteries. Nissan states that their 240 volt EV charging station will take about 7 hours to recharge the Leaf's batteries with the option of a 480 volt (level 3) "quick-charge" EV charging station to further reduce charging time. However, due to their high cost and the lack of an adopted SAE standard, it is highly unlikely that level 3 charging stations will be installed in homes at this time. Why the difference in charging times for Chevrolet and Nissan? This is because the Volt can go approximately 40 miles before recharge and the Leaf can go approximately 100.
- Owners of the high end Tesla Roadster, are offered similar charging stations as described above. However, they also have the option of a "universal mobile connector" which provides multiple adapters, such as one that works with an electric dryer receptacle (NEMA 14-50R) and 10 additional adapters. Therefore, dependent on adapter, there may be more issues to looks at along with the example given above where the 120 volt receptacle is upgraded from 15 amps to 20 amps.

Although home charging of electric vehicles will likely necessitate the installation of an EV charging station, it should not be a deterrent to considering these cars.

If you have any questions on this matter, you may reach us at (609) 984-7609.

Source: Suzanne Borek and Rob Austin Code Assistance Unit

# Accessible and Adaptable Dwelling Units Revisited

Once again, the rumor seems to be traveling around that the Barrier Free Subcode (BFSC) of the Uniform Construction Code (UCC) requires a percentage of dwelling units in multifamily dwellings to be fully accessible. Sometimes the rumor is two percent accessible; sometimes it is four percent accessible. This is not true. These percentages were eliminated in 1990 because they did not meet the requirements of the Federal Fair Housing Amendments Act. Let me take this opportunity to straighten out the requirements for accessible and adaptable dwelling units.

# What is the difference between accessible and adaptable?

An adaptable dwelling unit is a Type A dwelling unit that meets Section 1003 of the ICC/ANSI A117.1-2003 (ICC/ANSI-2003). Essentially, this unit is a dwelling unit with an accessible entrance, accessible clear floor space, and accessible route into and through the dwelling unit, and adaptable features in the kitchen and bathroom. The BFSC specifies that an adaptable dwelling unit must have (1) an accessible entrance, (2) an accessible interior route throughout the dwelling unit, (3) one full adaptable bath on an accessible route, (4) maneuvering space at all doors, and (5) adaptable features in the kitchen and bathroom.

An accessible dwelling unit is a dwelling unit that meets Section 1002 of ICC/ANSI A117.1-2003. As with an adaptable dwelling unit, an accessible dwelling unit must have an accessible entrance and an accessible route into and throughout the dwelling unit. In an accessible dwelling unit, however, the toilet and bathing facilities must comply with general requirements for toilet room and bathing facilities that are in ICC/ANSI A117.1-2003. Section 603 through Section 610 inclusive. Similarly, kitchens are required to comply with the general requirements in ICC/ANSI A117.1-2003 at Section 804, kitchens and kitchenettes, and must also provide one 30-inch long work surface that meets the requirements of Section 902, dining surfaces and work surfaces, regarding clear floor space and height. Finally, storage facilities must also meet the general requirements in ICC/ANSI A117.1-2003, which are at Section 905, for clear floor space, height, and operable controls, and must meet the requirement of Section 804.5 that 50 percent of the shelves in cabinets must comply with Section 905.

## Which dwelling units are required to be adaptable?

1. In a building with four or more dwelling units, if the building has an elevator, all (100 percent) of the dwelling units must be adaptable. [*N.J.A.C.* 5:23-7.5(b)] See Accessible and Adaptable at right

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2. In a building with four or more dwelling units, if there is no elevator, all (100 percent) of the ground-floor dwelling units must be adaptable. [*N.J.A.C.* 5:23-7.5(c)]

3. Ground-floor dwelling units: In a building with dwelling units, the first floor containing dwelling units must be accessible and must contain adaptable dwelling units, regardless of whether that floor is at grade. [*N.J.A.C.* 5:23-7.5(c)1] Keep in mind, a building may have more than one ground floor due to sloping grade.

4. Generally speaking, townhouses are exempt from the Barrier-Free Subcode. There is one exception: Townhouses for which credit as a low or moderate income unit (COAH credit) is awarded are required to comply—and are discussed below. A townhouse is a single dwelling unit with two or more stories of dwelling space, exclusive of basement or attic, where each dwelling unit extends from foundation to roof. This dwelling unit is to have an independent entrance that serves one dwelling unit only and that is at or near grade; most or all of the sleeping rooms are on one story; and most or all of the remaining habitable space, such as kitchen, living, and dining areas, are on another story. [*N.J.A.C.* 5:23-7.3(b)1]

5. What level of accessibility is required for a townhouse that has "COAH credit?" When a townhouse, or a multistory dwelling with fewer than four dwelling units in a single structure, is being constructed with credit as low or moderate income housing, the dwelling unit must comply with the Barrier Free Subcode. There are two unique requirements that apply to these buildings: each dwelling unit must have a room that could be used as a bedroom on the entry level; and they may have either an accessible or an adaptable entrance. If an adaptable entrance is provided, the plans for making the adaptation to an accessible dwelling unit must be submitted and released through the standard plan review process. The funds to effect the adaptation of 10% of the entrances that are not accessible must be escrowed with the municipality.

## What features in the kitchen may be adaptable?

1. Adaptable work surface: There must be a 30-inch length of counter that is either set at 34 inches or that can be adjusted to an accessible height. The base cabinets in this section must be removable and the floor must be finished all the way to the wall. The 30-inch section of the counter does not have to be precut; it can be "replaceable as a unit." This means that it must be able to be cut and either lowered or replaced. [ANSI/2003, Sections 1003.12.3.1 and 1003.12.3.2, as amended at N.J.A.C. 5:23-7.2(b)33 and 34, respectively]

# NSPC Code Change Hearings Will be Held in New Jersey - Again

The public hearing for the code changes for the 2012 edition of the National Standard Plumbing Code (NSPC) will be held again in New Jersey. It will be held on Thursday, June 9, 2011 at the Tropicana Casino and Resort at Brighton and the Boardwalk and will begin at 8:30 a.m.

Information is available on the web site for the National Association of Plumbing, Heating, and Cooling Contractors (NAPHCC), <u>www.PHCCweb.org</u>. Information will also be provided on the Division's web site, <u>www.nj.gov/dca/codes</u>.

This will be the third time the public hearing for the NSPC code changes will be held in New Jersey. The previous two hearings, which were held in 2008 and 2010, were very well attended by code officials, master plumbers, union representatives, engineers, architects, manufacturers' representatives, and the general public. This hearing is open to the public, so you do not have to pre-register to attend. If you have not attended in the past, please come and see how the NSPC's code change process works.

Any interested party may comment in support of -- or against -- any of the proposed code changes before the code change committee votes on the changes.

Let's have a great turnout and keep the NSPC's public hearing on proposed code changes here in New Jersey!

Should you have any questions, you may contact me at 609-984-7609.

Source: Thomas C. Pitcherello Code Assistance Unit

# Exterior Balconies and Decks – Defined

When the International Residential Code (IRC)/2009 was adopted in New Jersey, it was amended to retain the IRC/2006's 60 psf loading requirements for exterior balconies (N.J.A.C. 5:23-3.21(c)3vi/Table R301.5). Because the unamended IRC/2009 had the same loading requirements for exterior balconies as for decks, there was no need in the code to define the terms. Yes, we should have put the definitions of "exterior balconies" and "deck" back into the Uniform Construction Code (UCC) regulations, but we forgot. In the meantime, until we correct this error, use Section R201.4 of the IRC/2009. Where terms are not defined through the methods authorized by the code, such terms shall have ordinary accepted meanings as the

# Highlights of Changes to Lateral Wind Bracing in the International Residential Code/2009

There have been a number of changes to the International Residential Code (IRC)/2009 for wind bracing requirements.

- 1. The IRC/2009 allows for the mixing of bracing methods -- intermittent bracing methods and the continuous sheathing methods -- in Section R602.10.1.1.
- a. Mixing of bracing methods is permitted from story to story. That is, you can have one type of bracing on the first story and a different type of bracing on the second story.
- b. Mixing of bracing methods is permitted within a story. Example: On the north wall you may have method Diagonal Wood Boards (DWB) on a braced wall line and on the east wall you may have method Portland Cement Plaster (PCP) on a braced wall line.
- c. Mixing of bracing methods within a braced wall line is permitted, but you must provide the greatest required bracing length of the methods chosen. If you choose one method that requires a minimum length of 4 feet of braced wall line and another method that requires a minimum length of 8 feet of braced wall line, the minimum length of bracing of 8 feet of braced wall line must be provided.
- Bracing methods are no longer referred to by number as per the 2006 International Residential Code (IRC/2006). Instead, in the IRC/2009, the methods are identified by abbreviations of the name of the bracing method. Bracing methods are separated into two distinct classifications, intermittent and continuous.

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context implies. The NJ IRC/2006 contained the following definitions and they are considered accepted meanings:

**BALCONY, EXTERIOR**. An exterior floor projecting from and supported by a structure without additional independent supports.

**DECK.** An exterior floor system supported on at least two opposing sides by an adjoining structure and/or posts, piers, or other independent supports.

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

Source: John N. Terry Manager, Construction Code Enforcement

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### Accessible and Adaptable

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2. Kitchen cabinets: Upper kitchen cabinets may be installed at the standard height as long as they are attached in such a manner that they can be lowered without damaging the wall. [ANSI/2003, Section 1003.12.5, as amended at N.J.A.C. 5:23-7.2(b)38]

3. Kitchen sink: This is almost a combination of the above two. The cabinets below the sink must be removable and the floor must be finished all the way to the wall. Also, the sink and the counter are required to be adjustable or replaceable as a unit to an accessible height provided; rough-in plumbing that allows connections of supply and drain piping for sinks mounted at heights of 29 inches must be provided. [ANSI/2003, Sections 1003.12.4.1 and 1003.12.4.2, as amended at N.J.A.C. 5:23-7.2(b)35 and 36, respectively]

### What features in the bathroom may be adaptable?

1. Grab bars do not have to be installed, but the wall must be reinforced to permit their later installation. [ANSI/2003, Sections 607.4, 1003.11.4 and 1003.11.8]

2. The threshold in a transfer shower may be adaptable as long as the adaptation can be made easily without undertaking a construction project. [ANSI/2003, Sections 1003.11, as amended at N.J.A.C. 5:23-7.2(b)32]

3. The mirror may be installed at a standard height as long as it is attached in such a way that it can be lowered without damaging the wall. [ANSI/2003, Section 1003.11.6, as amended at N.J.A.C. 5:23-7.2(b)31]

4. A vanity may be installed underneath the lavatory as long as it can be removed without requiring the removal or replacement of the lavatory. [ANSI/2003, Section 1003.11.5]

## Maneuvering Space at Doors

There have been some projects that have been brought to the Department of Community Affairs' attention in which no maneuvering space has been provided at doors. Maneuvering space is critical to the usability of the dwelling unit. The requirements can be found in Section/Table 404.2.3.1 dependent on approach.

The following are the maneuvering spaces with dimensions as noted based on the door location:



Front approach, Pull Side
 60-in perpendicular, 18-in parallel beyond latch





(2) Front approach, Push side 48-in perdendicular, 12-in parallel beyond latch if both closer and latch are provided, otherwise 0-in if one or none provided







A wider door is not better. The Barrier Free Subcode requires that a wheelchair user be able to *maneuver* the wheelchair. Maneuvering space is critical and, therefore, is required in both dwelling units and commercial buildings. This is one of those items that must be checked in plan review and checked again at the framing inspection. It is nearly impossible to fix once the building is built.

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

Source Rob Austin Code Assistance Unit

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The purpose of this article is to make you aware of an error that was made in the printing of the IRC (New Jersey edition and unamended version).

In Chapter 44, entitled "Referenced Standards", under the American Forest and Paper Association heading, the 2008 edition of the *Wood Frame Construction Manual (WFCM) for One- and Two-Family Dwellings* is listed. This is an error!! The correct edition of this manual is the 2001. In fact, the next version of the *WFCM* is tentatively slated as the 2012 Edition to coincide with the 2012 IRC.

This error, as well as all of the I-Code errata, is available on-line at ICC Errata Central (http://www.iccsafe.org/cs/codes/Pages/errata.aspx)

Source: John N. Terry Manager, Construction Code Enforcement

# Ordinary Maintenance – Shower Valves

At N.J.A.C. 5:23-2.7(c)2vii, the section on ordinary maintenance includes the "replacement of valves (including shower or combination bath/shower valves in a single family dwelling)."

The question is: Is the replacement of a two-handle and diverter bath/shower valve by a combination single bath/shower valve in a single-family dwelling ordinary maintenance? If not, is a permit required?

The answer is that it is ordinary maintenance and, therefore, no permit is required. Whether the valve is replaced with like-for-like or with another type of valve where minor piping modifications would be needed, the replacement would be ordinary maintenance and would not require a permit.

Should you have any questions, you may contact me at 609-984-7609.

Source: Thomas C. Pitcherello Code Assistance Unit

# Private Garages Below Dwelling Units – Fire Separation

There has been some confusion in the reference to FTO-13 from Section 406.1.4 of the International Building Code (IBC)/2009 and Section R302.6 of the International Residential Code (IRC)/2009. Both sections require a 1-hour fire-resistance-rated horizontal assembly, with the option of using FTO-13, when a private garage is below a Group R-3 or R-5 dwelling unit(s). It appears the way the code references FTO-13 may be the problem as it states "see FTO-13" after the 1-hour rating requirement. If you were to go to the FTO, you will see that it states "The text that follows provides examples of construction practices that meet the intent of the code requirements and should be considered as acceptable methods of providing a one-hour, fire-resistance-rated assembly when there is living space above an attached, private garage in homes in Group R-3 or R-5." This is why we say "see FTO-13" as it is an acceptable way to achieve the 1-hour rating. Please keep in mind, penetrations are treated separately based on the one-hour rating option. This means, if a 1-hour rated assembly is chosen from a nationally recognized testing laboratory, penetrations are to be dealt with via the allowances in the testing report/documentation. However, if FTO-13 is chosen, then the bulletin specifically spells out how to deal with penetrations (see Section 712 of the IBC/2009).

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

Source: Rob Austin Code Assistance Unit

# Americans with Disabilities Act: Recent Revisions are under Review

On September 15, 2010, the US Department of Justice published revisions to the Americans with Disabilities Act Accessibility Guidelines (ADAAG). The Department of Community Affairs is currently reviewing, but has not yet completed its review of, these revised Federal standards. However, questions about how to address differences between State and Federal accessibility laws are coming into the Code Assistance Unit.

When the Americans with Disabilities Act (ADA) was passed in 1990 and the ADAAG were first promulgated in 1991, the Department faced the same See ADA: Recent Revisions Under Review - page 9

# Prototypes and the Permit Extension Act

Prototype releases that might otherwise have expired are still valid. Why? As you may recall, the Permit Extension Act (PEA) extends all permits that were open and valid as of January 1, 2007. This Act overrides the rules of the Uniform Construction Code (at N.J.A.C. 5:23-2.16(b)) regarding the suspension of a construction permit. (As a reminder, the UCC provides that a permit lapses if (1) no work is done for a year or (2) work, having been started, is discontinued for six months.) However, every beginning must have an ending and the PEA ends December 31, 2012, with exceptions that may allow the permit to continue to June 30, 2013.

In general, the PEA provided that a UCC permit issued before January 1, 2007 would be valid for an additional six months beyond December 31, 2012 or for the time that would have remained on January 1, 2007, *whichever is shorter*. Any permit issued during the extension period (between January 1, 2007 and December 31, 2012) would be valid until June 30, 2013 (six months beyond the end of the extension period,) or until the date when it would have expired if the PEA had not been passed, *whichever is longer*.

The Department has provided guidance on this issue (September 23, 2008 and January 25, 2010 correspondence to code officials). However, another question has arisen: How does the PEA affect prototype plans? The answer is: **If a prototype plan release was valid on January 1, 2007, it remains valid until June 30, 2013.** The reasoning is provided below:

The PEA stopped the clock for releases that were in place on January 1, 2007. It also extended the "useful life" of any releases issued between January 1, 2007 and December 31, 2012. This means that the adoption of subsequent editions of the model codes, and the ending of their associated grace periods, does not affect the validity of prototype releases issued during timeframe delineated in the PERA. All of these prototype releases remain valid until June 30, 2013. NOTE: Prototype plan releases based on the 2009 editions of the national model codes will remain valid until the end of the grace period following the adoption of a subsequent edition(s) of the model code(s). Remember that the PEA says June 30, 2013 or the date when the release would otherwise expire, whichever is longer.

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

Source: John N. Terry Manager, Construction Code Enforcement ADA: Recent Revisions Under Review continued from page 8

problem: design professionals and building owners might want to comply with the Federal standards, but code enforcement officials are licensed to enforce the Uniform Construction Code, State, not Federal, law. In the Spring, 1992 *Construction Code Communicator*, Assistant Director Charles M. Decker provided guidance to code enforcement officials and design professionals with regard to the enforcement relationship between the new Federal requirements and the Barrier Free Subcode (BFSC). Grounded in logic, his guidance applies today:

- When the Federal requirements exceed those of the BFSC, upon request, code enforcement officials should allow compliance with Federal law. Because this deals with an exceedence, providing more that the BFSC requires, there is no need for a variation.
- When the BFSC exceeds the Federal standards, code enforcement officials must enforce the BFSC.
- For dimensional differences that are not a question of stringency, but where both dimensions cannot be met, code enforcement officials should allow compliance with Federal law, upon request. Code enforcement officials should verify that, in fact, the dimensions are different. Then, to ensure that a valid legal record is created, the variation process of the Uniform Construction Code (UCC) should be used.

These rules of thumb that worked so well 19 years ago can be used again in this interim period during which Departmental staff is reviewing the recently published Federal standards for accessible construction and preparing amendments to the BFSC to ensure that it is, once again, at least as stringent as Federal law in each particular.

It is helpful to remember that the UCC is enforced by licensed code enforcement officials through plan review, permits, and inspections; its enforcement takes place on the "front end" of construction. As civil rights laws, the Americans with Disabilities Act and, for multifamily residences with four or more dwelling units, the Federal Fair Housing Amendments Act (FFHAA) are enforced by civil lawsuit alleging discrimination against people with disabilities; their enforcement is on the "back end" of construction. In some cases, defending against such a lawsuit and altering a completed building to meet the Federal standards can cost more than compliance would have cost at the time of construction. Because of this enforcement mechanism, there is a strong incentive to comply with Federal design standards.

Municipal code enforcement officials can allow, but cannot -- and will not – require, compliance with Federal law; New Jersey's code enforcement professionals are licensed to enforce the State UCC. The ADA and the FFHAA are enforced at the Federal level and do not provide for the delegation of enforcement authority to State or municipal code enforcement professionals. ADA: Recent Revisions Under Review contin

**Review** continued from left

Therefore, code officials will not ask whether a permit applicant wants to comply with the newly amended ADAAG; the request that one of the three options above be exercised is the responsibility of the permit applicant or the applicant's agent.

Bottom Line: Code officials must continue to enforce the BFSC by making sure that plans/projects meet or exceed it. For dimensional differences where both dimensions cannot be met, a variation should be allowed.

I trust this provides all code users with a framework in which to make a decision concerning the application of any differences that you have identified between the ADAAG/1991, the BFSC, and the ADAAG/2010.

If you have any questions, please do not hesitate to contact me at (609) 984-7609.

Source: Emily W. Templeton Division of Codes and Standards

# Ordinary Maintenance --Application

This article is a follow-up to the one published in the Fall 2010 *Construction Code Communicator*. It is a response to continuing questions regarding the application of the Uniform Construction Code (UCC) provisions for ordinary maintenance.

At N.J.A.C. 5:23-2.7(a), the UCC states that the ordinary maintenance of structures may be made without filing a permit application with, or giving notice to, the construction official. The question that has arisen is whether this applies only to existing Common sense dictates that ordinary buildings. maintenance does not apply to new construction, but, as with anything else in the UCC, when in doubt, look At N.J.A.C. 5:23-1.4, "ordinary for a definition. maintenance" is defined as the "restoration or improvement of a routine or usual nature which is done by replacing a part of, or putting together, something that is worn or broken in a building, electrical, plumbing, heating, ventilation or air conditioning system and meeting the definition set forth in N.J.A.C. 5:23-2.7."

This definition makes it clear that ordinary maintenance applies to existing structures. It addresses the repair or replacement of a building element. Ordinary maintenance also applies to the initial installation of certain items, such as batt insulation or communication wiring, in an existing building. As was emphasized in the Fall 2010 *Construction Code Communicator* article, it is important to remember that, although there is no

# Guard Haigh

# Guard Heights in the IRC/2009 - Correcting An Error

The International Residential Code (IRC)/2009 was adopted as the one- and two-family dwelling subcode (N.J.A.C. 5:23-3.21) on September 7, 2010. In the adoption, the minimum height requirement for a guard (within the exception of Section R312.2) was unintentionally modified to 30 inches in height. Obviously, allowing a 30-inch high guard in new construction was not the intent. To correct this, the Department has proposed a correction in the *New Jersey Register*. The revised text of R312.2 is provided below and is to be enforced.

## R312.2 Height.

Required guards at open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than 36 inches high measured vertically

See Guard Heights at right

# Electrical Bonding of CSST Gas Piping Systems

There has been some confusion as to whether Section 310.1.1 of the International Fuel Gas Code (IFGC)/2009 and Section G2411.1.1 of the International Residential Code (IRC)/2009 are in direct conflict with Section 309.1 and Section G2410.1, respectively, of the same codes, along with Section 250.104(B) of the National Electrical Code (NEC)/2008. We believe the confusion lies in the words of Section 309.1 (IRC)/G2410.1 (IFGC) as follows: "Gas piping shall not be used as a grounding electrode." In short, bonding the gas CSST piping system does, by default, make it part of the electrical service grounding electrode system, it however is not being *USED* as the grounding electrode.

## The IRC/2009 and IFGC/2009 state:

"G2411.1.1 (310.1.1) CSST.

Corrugated stainless steel tubing (CSST) gas piping systems shall be bonded to the electrical service grounding electrode system at the point where the gas service enters the building. The bonding jumper shall be not smaller than 6 AWG copper wire or equivalent."

The purpose of the bonding jumper required by these sections is to reduce the likelihood of damage to the CSST caused by the electrical energy from an indirect

### Guard Heights

continued from left

above the adjacent walking surface, adjacent fixed seating or the line connecting the leading edges of the treads.

## Exceptions:

- 1. Guards on the open sides of stairs shall have a height not less than 34 inches measured vertically from a line connecting the leading edges of the treads.
- 2. Where the top of the guard also serves as a handrail on the open sides of stairs, the top of the guard shall not be not less than 34 inches (864 mm) and not more than 38 inches measured vertically from a line connecting the leading edges of the treads.

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

Source: Rob Austin Code Assistance Unit

\* \* \* \* \* \* \*

## Electrical Bonding

continued from left

lightning strike. As you know, NOTHING is capable of protecting ANYTHING from a direct lightning strike. In the case of an indirect strike, the electrical energy could travel along metal piping and tubing and "jump" off to other metal components in the building. This causes an arcing that could burn and perforate the wall of CSST tubing due to the lack of thickness of its exterior wall thus causing a gas leak. Per the IRC/2009 Commentary, the bonding of the CSST directly to the electrical service grounding electrode system has been shown in laboratory testing to greatly reduce this risk. Remember that the bonding clamp must connect to the rigid steel piping at the point where the gas service enters the building and may be located either inside or outside the building. The bonding conductor must be continuous with the other end connected to the steel enclosure of the electrical service equipment or the grounded conductor at the electrical service or the grounding electrode conductor (if od sufficient size) between the service equipment and the grounding electrode(s) or one or more of the grounding electrodes for the electrical system. The bonding jumper may be connected as per the diagram below. The diagram is a reprint, with permission from the International Code Council (ICC), from the IRC/2009 Commentary. As you can see, ICC Commentaries provide wonderful insight into the intent of the code provisions and are a useful tool in any code official's library.



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### Ordinary Maintenance

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permit required for work categorized as ordinary maintenance, all work is required to meet the UCC.

For those who would like to review what items are specified as ordinary maintenance, please see N.J.A.C. 5:23-2.7(c). Again, keep in mind that these are not all-inclusive listings for ordinary maintenance items.

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

Source: Rob Austin Code Assistance Unit

# Accessible Parking Serving Multifamily Dwellings: How to Calculate

It has come to the Department's attention that there may be confusion about how to calculate accessible parking when multiple multifamily residential buildings that are required to comply with the Barrier Free Subcode share a common parking lot. In the Fall, 2009 Construction Code Communicator, the Department provided guidance on the application of the accessible parking requirements in a commercial application, specifically at health care centers and offices where people with mobility impairments receive health care services. This article is intended to provide similar, clear guidance for a site with more than one multifamily residential building that is required to comply with the Barrier Free Subcode where parking is provided and, therefore, where some of the parking must be accessible.

At N.J.A.C. 5:23-7.10(d), the Barrier Free Subcode requires that two percent (2%) of the parking spaces for residential buildings multifamily with accessible/adaptable dwelling units be accessible. The Barrier Free Subcode itself provides some clarity because N.J.A.C. 5:23-7.10(d) also states that "two percent of the parking spaces serving the dwelling units be accessible" (emphasis added). The Department has long considered that, where there is a project with multiple buildings served by a common parking lot, the Barrier Free Subcode be applied so that those "parking spaces serving the dwelling units "are accessible." This means that there will be accessible parking serving each building.

An example might help. Consider a project with five multifamily residential buildings that are required to comply with the Barrier Free Subcode are served by 200 parking spaces in a single, common parking lot. In

# Construction Data: Dummy Dates

We receive a lot of building permits with bad dates. Some construction officials and technical assistants intentionally report the wrong month, day, and year. They do so to get a jump on work customers submit but are not ready to pay for. Some use a dummy year, say 1953 or 2050. Others enter 11/11/11, or another madeup date as a temporary placeholder until the customer is ready to pay for the inspections and the real date is known.

## Don't do this.

You need to understand two things about construction data in New Jersey. First, what you enter in your computer is transmitted to the Department of Community Affairs (DCA) on a regular basis. This means monthly and weekly. Second, there's a firewall between us. Once your data are sent, it blocks changes made on your side from going through to our side. We allow you to report additional work on existing permits. These are permit updates. But edits, corrections, and other changes to existing permits are blocked by the firewall. If you need to make corrections, you must let us know. This is the only way to scale the firewall. You must call and report any corrections to either Charlie Pierson, Jr. or me at (609) 292-7898.

If you enter a bad permit date, transmit the record, and then go back and re-enter the right date, we won't get this change. Again, don't do it. There are ways to get a jump on your work or keep it from piling up without sending bad data. We can help with that, too. Some reporting software may have an "issue permit" function. It allows you to enter the permit, without issuing it to the applicant or sending it to us. PermitsNJ uses an application or control number. This switches to a formal permit number when you are ready to issue the permit and transmit the information. Both approaches allow users to enter a building permit on one day and formally issue it and report it on another. If your software does not do this, talk to your vendor or contact us. That's where the solution is, not bad dates.

Building permits are one of the few sources of information available from every town, every month. They provide key insights on settlement patterns and development trends, as well as vital indicators on New Jersey's construction industry and the health of the State's economy. Many people rely on this information. It is important to get it right.

If you have any questions, please call Charlie Pierson or me at (609) 292-7898.

Source:	John Lago
	Division of Codes and Standards

### Accessible Parking

continued from page 12

the absence of a specific number of parking spaces for each building, assume that the parking spaces are equally allocated among the five buildings. This would mean that there would be 40 parking spaces "serving the dwelling units" of each building. Of those 40 parking spaces, 2% (or 1) would be required to be accessible, so there would be one accessible parking space serving each multifamily residential building. At N.J.A.C. 5:23-7.10(a)2, the Barrier Free Subcode also requires that "for every eight accessible parking spaces, or fraction thereof, at least one shall be a van accessible parking space." Therefore, the one accessible parking space that serves each building would be required to be van accessible. In addition, each accessible parking space must be the "closest parking space provided and must be on the shortest route, which must be an accessible route, to an accessible entrance." (N.J.A.C. 5:23-7.10(a)).

If the calculation were erroneously based on the total number of parking spaces without regard for the number of buildings served, a total of four accessible parking spaces ( $200 \times .02 = 4$ ) would be required. This would mean that one building with accessible/adaptable dwelling units and with parking serving the building (and, in the language of the Barrier Free Subcode, "serving the dwelling units") would have no accessible parking at all, and, therefore, would not be in compliance.

It is important to remember that the Barrier Free Subcode exists to ensure access for people with disabilities. That over-arching charge would not be met if a commonly provided parking lot were allowed to have no direct relationship to the accessible entrance of, or the accessible dwelling units in, the buildings the parking spaces serve.

In sum, where multifamily buildings are required to comply with the Barrier Free Subcode and, therefore, the multifamily buildings have (each multifamily building has) accessible dwelling units; and the multifamily buildings are served by (each multifamily building is served by) parking, two percent of the parking spaces serving the dwelling units in each building are required to be accessible. This means that the accessible parking must be the closest parking spaces provided to the accessible entrance. They must also be on the shortest route, which must be an accessible route, to the accessible entrance for each building. It also means that each grouping of accessible parking spaces must comply with the requirements for van accessible parking spaces.

If you have questions about these requirements, please contact the Code Assistance Unit at (609) 984-7609.

The Code Assistance Unit has been receiving multiple questions on whether the design professional of record is required to sign and seal deferred submittals prepared by other design professionals. The simple answer is, no.

However, the design professional of record is required to review all documents that are not submitted with the initial application and that are prepared by others. Furthermore, the design professional of record must submit a letter indicating that he has reviewed and found the construction documents to be in conformance with the regulations of the design for the building. In lieu of a letter, the design professional of record may stamp and signed on each page that the construction documents have been reviewed and found to be in conformance with the regulations of the design for the building.

The applicable regulations are found at N.J.A.C. 5:23-2.15(f)1.xi(1), which states, "All documents prepared by people other than the design professional shall be reviewed by the design professional and submitted with a letter indicating that they have been reviewed and found to be in conformance with the regulations for the design of the building."

Two examples that illustrate the application of the requirement follow:

- A New Jersey State licensed architect has prepared all of the construction documents for the project; however the roof trusses are being designed by others. The trusses have been designed by the truss manufacturer based upon the design criteria provided by the architect of record. The architect of record must review the truss documents for compliance with the regulations for the design of the building before submitting them to the authority having jurisdiction. The construction documents submitted to the authority having jurisdiction must be accompanied by a letter signed and sealed by the architect of record acknowledging this.
- 2. Another example is a building that contains an automatic fire suppression system. Typically, the design of a suppression system is prepared by a sprinkler manufacturer and construction documents are prepared accordingly. In this case, the design professional of record must review the construction documents for compliance with the project design requirements. The construction documents must be accompanied by a signed and sealed letter acknowledging this.

I cannot stress enough that the design professional of record is not "sealing" the design of another design professional; the design professional of record must verify that the construction documents have been reviewed and state that they comply with the design parameters of the

### Deferred Submittals

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### project.

The two examples above are not all-inclusive. There are a multitude of situations to which the above referenced section can be applied. These examples are intended to illustrate instances when the design professional of record's review is required.

This issue was discussed in a previous *Construction Code Communicator* article by Rob Austin of our staff (Winter of 2006, Volume 18, number 3, page 2).

If you have any questions on this, please direct your calls to me at (609) 984-7609.

Source: Marcel Iglesias Code Assistance Unit

# Fire Department Connections & Large Diameter Hose STORZ Connections for Automatic Fire Sprinkler and Standpipe Systems

Over the past year, the Department has received questions about using STORZ type threadless adaptors as a Fire Department Connection (FDC). Some Fire Subcode Officials and Fire Officials have informed the Department that the fire company has required the adaptor to be installed as a FDC. Some sprinkler contractors and designers have asked if this can be done. The answer is yes. The Building Officials and Code Administrators (BOCA) National Building Code/1990 had an exception allowing the installation of a single connection with the approval of the local fire department. This exception has been retained in the building subcode of the Uniform Construction Code (UCC), including the adoption of the current New Jersey edition of the International Building Code (IBC)/2009. The National Fire Protection Association (NFPA) standard is referenced in the charging text in the FDC section.

NFPA 13 prohibits the use of a large diameter threadless adaptor unless it has been listed for use as a FDC. In NFPA 13-2002, Section 6.8.3 specifically states that the use of threadless couplings is permitted where required by the authority having jurisdiction and where listed for that use. Thus, when the fire department requires the FDC to be of the threadless

#### Fire Department Connections

continued from left

type, the building subcode allows it. The exception in the building subcode supersedes the requirement in the standard. In the legal hierarchy, the code trumps the referenced standard. This means that, where the provisions of the adopted building subcode differ from those in the referenced standard, the requirements in the building subcode govern. I have checked with some threadless adaptor manufacturers and they are in the process of getting their adaptors listed. This will help in other states that have not amended the current national model building code and that require the strict compliance of the NFPA standards for the system being installed.

There have been other issues with using the single adaptor as the FDC. First, the Department has learned that these large diameter adaptors have been installed on some small residential systems where a single 1 <sup>1</sup>/<sub>2</sub>- or 2 <sup>1</sup>/<sub>2</sub>- inch connection could provide the required additional water supply. There is no reason to require a large adaptor for this application; it can be detrimental to the sprinkler system when a firefighter over-supplies the system. The second issue is dealing with the high zone on high rise buildings. Many fire departments purchase only large diameter supply or relay fire hose. Supplying a high zone on a high rise building cannot be accomplished with standard supply or relay hose. If a fire department is requiring the single adaptors for high rise buildings, ask whether it has large diameter attack hose. Make sure the fire department knows what they are asking for.

It should also be noted that hose lines between the pumper and the fire department connection are considered attack, rather than supply, hose. This is supported by the definition of supply hose in NFPA 1961, the Standard on Fire Hose. A dual-inlet connection has the benefit of allowing an immediate changeover to the alternate inlet without shutting down should debris obstruct the first inlet or should the hose at the first inlet become damaged and unusable. This not only aids in extinguishing the fire, but also increases the safety of firefighters involved with interior attack lines. When a single large diameter line breaks or is damaged, the supplemental water supply is lost. So, when these adaptors are installed on any system, the question that needs to be asked is: Does the Fire Department have the proper hose?

If you have any questions, please feel free to contact me at (609) 984-7609.

Source: Michael Whalen Code Assistance Unit

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See Fire Department Connections at right

continued from page 2

### **Intermittent Bracing Methods**

2006 International Residential	
Code – Section R602.10.3	2009 International Residential Code – Table R602.10.2
Method 1	LIB – Let-in-bracing
Method 2	DWB – Diagonal wood boards
Method 3	WSP – Wood structural panel, see Section R604
Method 4	SFB – Structural Fiberboard sheathing
Method 5	GB – Gypsum board
Method 6	PBS – Particleboard sheathing
Method 7	PCP – Portland cement plaster
Method 8	HPS – Hardboard panel siding
Alternate braced wall panel –	ABW – Alternate braced wall, see Section R602.10.3.2
Section R602.10.6.1	
Alternate braced wall panel	PFH – Intermittent portal frame
adjacent to a door or window	Portal frame with hold-downs,
opening, see Section	see Section R602.10.3.3
R602.10.6.2	
-	PFG- Intermittent portal frame at garage
	At garage door openings in Seismic Design Category A, B
	and C, see Section R602.10.3.4

### **Continuous Sheathing Bracing Methods**

2006 International Residential Code	2009 International Residential Code – Table R602.10.4.1
Continuous wood structural panel sheathing – see Section R602.10.5 and Length requirements for braced wall panels in a continuously sheathed wall – see Table	CS – WSP - Wood structural panel see Section R602.10.4 and Table R602.10.4.2
R602.10.5 Length requirements for braced wall panels in a continuously sheathed wall – see Table R602.10.5 note b	CS – G – Wood structural panel adjacent to the garage openings and supporting roof loads only see Section R602.10.4 and Table R602.10.4.2
Length requirements for braced wall panels in a continuously sheathed wall – see Table R602.10.5 note c	CS – PF – Continuous portal frame see Section R602.10.4.1.1 and Table R602.10.4.2

The following reference is not part of the Table, but is discussed in R602.10.5 and is provided here for completeness and convenience.

-	CS – SFB – Continuously sheathed braced wall line
	Section R602.10.5

The IRC/2009 allows the continuously sheathed braced wall line to be applied to each wall line individually, but the IRC/2006 required that if this method was chosen, it then applies to all walls on all stories.

Lateral Wind Bracing

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3. There are now two separate tables in the IRC/2009 to calculate the amount of bracing required. Table R602.10.1.2(1) provides the bracing requirements for wind loading and Table R602.10.1.2(2) provides the bracing requirements for seismic loading. Note that the seismic requirements in the IRC/2009 have been deleted as per N.J.A.C. 5:23-3.21(c)3.v and Table No. 301.2(1). Therefore, Table R602.10.1.2(2) is not applicable and bracing length is designed only in accordance with Table R602.10.1.2(1).

In the previous editions of the IRC, there was one bracing table for wind and seismic. The table was based on the seismic loads, which increased the amount of bracing required as the wall length increased. The wind tables are based on engineering principles.

- 4. The amount of required bracing is now provided in feet (IRC/2009) instead of a percentage of braced wall line length (IRC/2006). This eliminates the need to calculate the length of bracing necessary as a percentage of the braced wall line.
- 5. The number of narrow wall bracing alternatives increased from two to five.
- 6. The definitions for "braced wall line" and "braced wall panel" have been revised and a new term "continuously sheathed braced wall line" has been added. All of these terms are defined in Chapter 2 of the IRC/2009.

A good source of information is "A Guide to the 2009 IRC Wood Wall Bracing Provisions" published by the International Code Council (ICC).

If you have any questions, please direct your calls to me at (609) 984-7609.

Source: Marcel Iglesias Code Assistance Unit

# Typo in Bulletin 11-1

With the adoption of the 2009 International Energy Conservation Code, the Prescriptive Packages no longer have window-to-wall percentage ratios. Please note that on page "2 of 8" in Bulletin 11-1, there are some words (three, to be exact) that were not supposed to make it to publishing.

Please strike the words "window percentages and" in the 4<sup>th</sup> sentence or 7<sup>th</sup> line in item #4, Compliance with Prescriptive Packages and retain your corrected copy. A corrected copy is also available on the Division's web site, <u>www.nj.gov/dca/codes</u>.

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

Source: Robert Austin Code Assistance Unit

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Copies may be read or downloaded from the our website at: www.nj.gov/dca/divisions/codes.

Please direct any comments or suggestions to the NJDCA, Division of Codes and Standards, Attention: Code Development Unit, PO Box 802, Trenton, NJ 08625-0802.

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# Construction Code Communicator



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

## Volume 23, Number 2

## 2011 Building Safety Conference "30 Years of Working Together for a Safer New Jersey"

The 30<sup>th</sup> annual New Jersey Building Safety Conference was held this year from April 27<sup>th</sup> through April 29<sup>th</sup> at the Trump Taj Mahal in Atlantic City. Our theme this year was "30 Years of Working Together for a Safer New Jersey." It is meaningful not only because it celebrates the 30 years that the Conference has existed, but because it highlights the real reason for the Building Safety Conference--bringing together all elements of the code enforcement community to share and exchange ideas with the goal of making our State and our individual communities safer.

The "Crackerbarrel" event on the first evening offered over 40 tables at which presenters covered topics that ranged from an update on the newly adopted energy subcode to an overview of certificate requirements. There were 12 seminars held each training day. They ranged from construction code updates and reports to an examination of the retrofit provisions of the Uniform Fire Code.

One of the major events at the Conference, as always,

## Department of Community Affairs Lori Grifa, Commissioner

## Summer 2011

## OPRA, Common Law, and Construction Documents

It has come to the Department's attention that there is some confusion about the Open Public Records Act (OPRA) as it pertains to construction documents. At this time, the Division of Codes and Standards together with the Government Records Council (GRC) is undertaking an initiative to provide guidance about construction documents and OPRA to code enforcement officials. **Background:** Generally speaking, documents created

or held by a public entity are public records and are to be made available to a member of the general public upon request. There are specific exceptions to this general statement. In its definition of "government record," the OPRA statute (*N.J.S.A.* 47:1A et seq.) contains 24 exemptions from disclosure. One of those exemptions addresses building security, as follows: "emergency or security information or procedures which, if disclosed, would jeopardize security of the building or facility or persons therein."

**Building Plans:** Because this reference is broad, but not particularly clear, the Department has sought to provide clarity in its proposed rules for OPRA. Published in the *New Jersey Register* on November 1, 2010 and made effective through Executive Order 47 (Christie 2010), the proposed rules provide that "[b]uilding plans submitted in conjunction with any permit

See 2011 Building Safety Conference- page 2

See OPRA - page 4

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Division of Codes and Standards, P.O. Box 802, Trenton, NJ 08625-0802 www.nj.gov/dca/divisions/codes



Pictured above (from left to right) Edward Smith -Codes and Standards Director, MEIA-South President, Joseph Freeman, MEIA's 2011 honoree, Anthony Nicolisi, NJATA Vice President, Dawn Neil, MEIA-North President Jean Verrier, NJATA's 2011 honoree, Monika Sackman, NJPIA President, William Olinger, NJATA Treasurer, Susan McLaughlin, NJFP&PA's 2011 honoree, Cary Costa, BOANJ's 2011 honoree, Andrew Sanfilippo, and NJFP&PA President, Stanley Sickels.

Not pictured: BOANJ's 2011 award presenter and President, Thomas Pinand, and NJPIA's 2011 honoree, Robert VanCauwenbergh.

is the opportunity to honor those whose commitment and dedication over the past year is recognized by their associations--the Inspectors and Technical Assistant of the Year. Congratulations to all for your hard work and well deserved awards!

Director Edward Smith, along with the association presidents, presented the following awards:

New Jersey Association of Technical Assistants Technical Assistant of the Year Monika Sackman

Building Officials Association of New Jersey Building Inspector of the Year Andrew Sanfilippo

New Jersey State Plumbing Inspectors Association Plumbing Inspector of the Year Robert A. VanCauwenbergh

New Jersey Fire Prevention and Protection Association Fire Protection Inspector of the Year Cary Costa Municipal Electrical Inspectors Association of New Jersey Electrical Inspector of the Year

Anthony G. Nicolosi, Jr.

The Building Safety Conference provides a valuable opportunity not only to gain a better understanding of new code provisions and construction techniques, but also to allow for a chance to share ideas and experiences, fostering fellowship among our peers. The reception to honor the awardees gives us all a chance to offer congratulations to the award recipients.

The Building Safety Conference provides the chance to enhance your educational opportunities and to receive information on important and cutting edge topics. If anyone has suggestions for next year's conference, please contact us at <u>educationunit@dca.state.nj.us</u>.

We are looking forward to seeing everyone next year when we meet again and return to <u>**Bally's Park Place**</u> <u>on May 9 - 11, 2012</u>. Save the date and we hope to see you there!

Source: John Delesandro Supervisor, Licensing and Education

### 2011 Building Safety Conference

continued from page 1

# Energy Compliance Support

When looking for guidance concerning Energy Subcode compliance, there are several effective options. The Uniform Construction Code bulletin relating to this topic is Bulletin 11-1 (it was previously Bulletin 07-2 and Bulletin 03-2); it can be found at http://www.nj.gov/dca/divisions/codes/publications/pdf\_bulletins/b\_11\_1.pdf (or general website address at http://www.nj.gov/dca/divisions/codes).

If you are looking for more information on the topics in Bulletin 11-1, such as the 2009 International Energy Conservation Code (IECC/2009), the 2007 ANSI/ASHRAE/IESNA Standard 90.1 (ASHRAE 90.1-2007), REScheck and/or COMcheck, please keep reading...

The Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE), through its Building Energy Code University program, offers resources to trainers. Although it is advertised for trainers, code officials and design professionals can benefit from these resources, too. For those who want to learn more, the following link provides great PowerPoint and PDF guides to the IECC/2009 and/or ASHRAE 90.1http://www.energycodes.gov/becu/trainers.stm. 2007: From this link, there is a very helpful PDF file entitled "Residential Requirements of the 2009 International Energy Conservation Code" located in the second box "Residential" under the heading (direct link: http://www.energycodes.gov/becu/documents/2009iecc \_residential\_BECU.pdf). There is also a useful link entitled "ANSI/ASHRAE/IESNA Standard 90.1-2007" located in the fourth box under the "Commercial" heading (direct link: http://www.energycodes.gov/becu/documents/90.1-2007 BECU.pdf).

The Building Energy Code Program of the Office of EERE also offers technical support documents for REScheck and COMcheck at http://www.energycodes.gov/help/support\_docs.stm. More specifically, the REScheck software user's guide be found can at http://www.energycodes.gov/rescheck/documents/resc heck\_users\_guide\_1008.pdf and the COMcheck software compliance guide based on ASHRAE 90.1-2007 can be found at http://www.energycodes.gov/comcheck/documents/com software users guide 90.1-2004 and 90.1-2007.pdf.

Source: Rob Austin Code Assistance Unit

\* \* \* \* \* \* \*

## Barrier Free Subcode: Maneuvering Clearance at Doorways. . . . What Does "Clear" Really Mean?

Over the past several years, the Code Assistance Unit has fielded hundreds, if not thousands, of calls about the maneuvering clearance at doorways for compliance with the International Code Council/American National Standards Institute (ICC/ANSI) A117.1.

The recurring question seems to be: "Is the required maneuvering clearance permitted to include the knee and toe clearance at a lavatory?" In response, the Code Assistance Unit has said "No, the maneuvering space must be clear of the fixture and may not include the knee and toe clearance at the lavatory."

With the publication of the 2009 edition of ICC/ANSI A117.1, which is under review by the Department but has not yet been adopted, this response is affirmed. In fact, ICC/ANSI A117.1-2009 specifically prohibits including the knee and toe clearance in the maneuvering clearance.

Remember that ICC/ANSI A117.1-2009 cannot be cited because it has not been adopted. But, the clarification in the newly published standard confirms that the Department's response is correct. The clear floor space required at a fixture must remain clear and may not intrude on the knee and toe clearance at the lavatory.

If you have questions about accessibility requirements, please contact the Code Assistance Unit at (609) 984-7609.

Source: John Terry Manager, Code Assistance Unit

# HVAC Smoke Detectors and Detection Systems Signals

The Department has been receiving calls about code officials who are requiring all duct smoke detectors installed in accordance with the 2009 International Mechanical Code (IMC/2009) for heating, ventilation, or air-conditioning (HVAC) systems to be connected to fire alarm panels. In some cases, code officials are requiring the installation of a fire alarm panel. The applicable code section is Section 606.4.1 of the IMC/2009, entitled "Supervision," which does not require duct smoke detectors that are used as

### OPRA

Continued from page 1

application" are exempt from disclosure under OPRA. The reason for this exemption is simple: OPRA requires that government records be provided to any citizen without requiring an explanation for why the records are wanted. That standard operates well for most of the records that we hold, but building plans are an exception to that general rule. Building plans contain details about building construction and also about security and safety systems that should not be available to just anyone upon request. This does not mean that no one should ever be able to view or obtain copies of building plans; it means that no one should be able to view or obtain copies of building plans without a valid reason for doing so. OPRA does not take into consideration the requestor's reason for requesting records; the common law right of access does consider the requestor's need for records.

Common Law Right of Access: Fortunately, OPRA states plainly that "nothing ... shall be construed as limiting the common law right of access to a government record" (N.J.S.A. 47:1A-8). Under the common law right of access to a public record, the individual requesting the record submits a written request stating the reason for obtaining or viewing the record. If the explanation is reasonable, access to the public record is granted. For local code enforcement officials, when there is a question as to whether the explanation is reasonable, the municipal attorney This path, the should be consulted for advice. common law right of access, is the path to follow when a requestor wants to view or obtain copies of building plans.

**Bulletin 03-3, Public Access to Building Plans:** Bulletin 03-3 was intended to provide guidance to code enforcement officials with regard to OPRA and building plans. It appears that there are some cases in which the Bulletin itself has generated questions. Throughout the Bulletin, the references to "plans" should be read as "building plans." As its title suggests, the Bulletin was focused in its intent to provide guidance on the disclosure of building plans. The Division of Codes and Standards and the Government Records Council have committed to work together to revise Bulletin 03-3 to ensure that its guidance is clear and accurate in each particular circumstance.

**Site Plans and Architectural Renderings:** The Department holds that site plans are different from building plans and are public records that are subject to disclosure under OPRA. Bulletin 03-3, Public Access to Building Plans, states that "Members of the public should be given access to general information

See OPRA at right

#### OPRA

Continued from left

such as elevations, site layout, architectural renderings, etc. This is the type of information that is filed with the planning board or zoning board of adjustment and that the entire community has a right to know."

From the questions that we have received, the Department believes that a significant portion of the requests to "see plans" in a local code enforcement office are actually requests to view the site plans for a specific project. The person asking is often a neighbor who has a concern that a project undertaken on an adjacent property could have an impact on their property. Where the request to "see plans" is really a site concern, access to the site plan can be offered under OPRA and is likely to satisfy the requestor.

In sum,

- Building plans are protected from disclosure pursuant to OPRA; they may be requested through the common law right of access with a clearly stated reason for viewing the building plans;
- Site plans and architectural renderings are subject to disclosure through OPRA.

If you have questions about OPRA, please contact the Government Records Council at (609) 292-6830. If you have questions about how the Division of Codes and Standards has responded to specific records requests, please contact Emily Templeton at <u>etempleton@dca.state.nj.us</u> or at (609) 984-7609. We look forward to providing you with additional information as it is available.

Sources: Edward M. Smith, Director, Division of Codes and Standards Catherine Starghill, Esq., Executive Director, Government Records Council

### \* \* \* \* \* \* \* \* \* \* \*

HVAC

Continued from page 3

shutdown devices to be connected to fire alarm systems. When the 2009 International Building Code (IBC/2009) requires a fire alarm system, the duct detectors must be connected to the fire alarm panel. In that instance, the alarm condition needs to sound the notification devices within the building.

In the absence of a fire alarm system, Section 606.4.1 of the IMC/2009 requires only that the building have a supervisory signal, local-type alarm to alert occupants when the duct detector is activated. In this situation, the term "supervisory signal" is an alarm that sounds an audible and visible signal at an approved location. While

### HVAC

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the code requires the signal to go to a constantlyattended location, that location can be anywhere within the building that is normally occupied. The most common location for this alarm is near the thermostat control. The signal is not required to leave the building. Code officials cannot require the installation of an alarm system because the alarm is not attended when the building is not occupied.

As per the IMC/2009, the smoke detector is a shutdown device to prevent smoke spread from one area of the building to another. In accordance with the exception contained in Section 606.2 of the IMC/2009, if all of the HVAC units/air distribution systems are installed in the same room or space and no smoke spread is possible beyond the enclosed walls, no smoke detectors are required. Many of the activations have come from dust accumulation, not an active smoke condition. If every shutdown device were connected to an alarm system, there would be many more nuisance alarms. When the local alarm sounds in a building and there is no smoke, a certified fire alarm contractor or a licensed electrician can be called to find out what might have caused the activation of the smoke detector.

Remember, the requirement to monitor duct smoke detectors is based in the IMC/2009, not the IBC/2009. If there is a smoke condition in a building, it is likely that building occupants will know long before the smoke detector mounted in the return air duct activates.

If you have questions about this matter, I may be reached at (609) 984-7609.

Source: Michael E. Whalen Code Assistance Unit

# Energy Subcode Certificates

Section 401.3 of the 2009 International Energy Conservation Code (IECC/2009), entitled "Certificate," requires a permanent certificate to be posted on or in the electrical distribution panel in low-rise residential buildings. (This requirement is further defined in Uniform Construction Code (UCC) Bulletin 11-1). The IECC/2009 also states that the certificate must not cover or obstruct the visibility of the circuit directory label, service disconnect label, or other required labels.

The certificate must be completed by the builder or registered design professional and must list the applicable predominant building thermal envelope properties, along with the type and efficiencies of heating, cooling and service water heating equipment installed. In lieu of the certificate provided (see below),

See Certificates at right

#### Certificates

Continued from left

a certificate from REScheck or NJ Energy Star Homes is acceptable.

As you can see, this certificate is designed for posting in the home; it is in addition to compliance calculations. I note this because, if REScheck is the chosen method of documenting compliance, a "Compliance Certificate" meets N.J.A.C. 5:23-2.15(f)1vi(1) and a "Panel Certificate" meets Section 401.3 of the IECC/2009.

In April 2011, Bulletin 11-1 was updated to reflect this information. The next UCC update package should include newly-revised Pages 1, 2, 5 and 6 (two pages, front and back) of this bulletin.

If you have any questions regarding this matter, please contact me at (609) 984-7609.

Source: Rob Austin Code Assistance Unit

NJ IECC/2009 Energy Efficiency Certificate for Low-rise Residential Dwellings\* Address: Permit #: Insulation Rating R-value (batt, spray, blown, cor uous, other) Ceiling/Roof Above Grade Wall: framed ; mass Floor: over unconditioned space ; slab Crawlspace Wall Foundation/Basement Wall Ductwork (unconditioned spaces) Fenestration Rating U-factor SHGC Window Skylight Door Heating & Cooling Type Efficiency (Oil, Gas, Electric, other) (AFUE, EER/SEER, HSPF, other) Equipment Furnace Heatpump Boiler Cooling System Water Heater Other Renewables (type of system) Other Energy Efficiency Equipment Builder or Design Professional Certification Name: Date: Registration/License Number: *Comments* \* This is a generic certificate and some items listed above may not be applicable to this specific design when initially constructed; please leave those items blan

# Energy Subcode Blogging

Dear Energy Subcode,

As much as I would like to embrace your requirements, I am still confused about some key points. I was wondering if you could clear up the following for me: (1) the applicability of your multiple requirements, (2) walls above/below grade plane, and (3) subcategories within climate zones.

Sincerely, Conservation Lover

Dear Conservation Lover,

As you know from reviewing Bulletin 11-1, the following low-rise residential buildings are required to meet the International Residential Code/2009 (IECC/2009): a one-family dwelling of any height; a two-family dwelling of any height; or a multiple family dwelling of three stories or less in height. This is rooted in the definitions of "Residential Building" in Chapter 2 of the IECC/2009 and also in "low-rise residential" in the ASHRAE Standard 90.1-2007 (ASHRAE 90.1-2007). This means that any building not described above is subject to ASHRAE 90.1-2007.

That being said, Question #1 must be broken up into two parts, 1(a) heating and cooling and 1(b) height of structure.

1(a) – Buildings and thermally-isolated spaces not conditioned (heated or cooled) are not required to meet the energy subcode.

For low-rise residential buildings, the IECC/2009 applies when a space within a building is conditioned using a peak design rate of energy usage equal to greater than 3.4 Btu/h  $\cdot$  ft<sup>2</sup> or 1.0 watt/ft<sup>2</sup> of floor area. (Source: Section 101.5.2 and definition of "conditioned space.")

For all other buildings, ASHRAE 90.1-2007 applies and works somewhat differently. ASHRAE divides buildings into two major categories: conditioned and unconditioned. Again, unconditioned buildings are not required to comply with any energy conservation requirements. Under the broader heading of "conditioned" are cooled, heated and indirectly conditioned spaces. The first two are fairly obvious and the definitions in ASHRAE say how much heating or cooling makes a space heated or cooled. According to ASHRAE, a cooled space is an enclosed space within a building that is cooled by a cooling system whose sensible output capacity exceeds 5 Btu/h·ft2 of floor area. A heated space is an enclosed space within a building that is

heated by a heating system whose output capacity relative to the floor area is greater than or equal to 15  $Btu/h-ft^2$ .

Determining whether a space is indirectly conditioned (the third kind of conditioned space) is a bit trickier. It involves a calculation to determine whether the rate of heat transfer from any adjacent conditioned space to the connected (unconditioned) space is greater than the heat transfer rate from that connected space to the outdoors or to other unconditioned spaces. In other words, you have to calculate whether there is more heating or cooling coming into this space from adjacent heated or cooled spaces than what is being lost. The definition in ASHRAE gives the following formula for determining this: the product of the U-factor(s) and surface area(s) of the space adjacent to connected space(s) exceeds the combined sum of the product of the U-factor(s) and surface area(s) of the space adjoining the outdoors, unconditioned spaces, and to or from semi-heated spaces (e.g., corridors.) Yeah, right! There is a second part to the definition of indirectly conditioned space that does not involve doing the math. If the air from heated or cooled spaces is intentionally transferred (naturally or mechanically pushed) into the space at a rate exceeding 3 air changes per hour (ACH) (e.g., atria), it is considered an indirectly conditioned space.

ASHRAE also contains a third, hybrid category: semi-heated space. A *semi-heated space* is an enclosed space within a building that is heated by a heating system whose output capacity is greater than or equal to 3.4 Btu/h-ft<sup>2</sup> of floor area (as compared to greater than or equal to 15 Btu/h-ft<sup>2</sup> for a heated space.) It is not a conditioned space as defined above, but it does have some heat. A good example would be a warehouse space that has just enough heat to prevent the contents from freezing. Tables 5.5-4 and 5.5-5 in ASHRAE have a separate heading, with separate thermal envelope requirements, for semi-heated spaces. (Source: Definition of "space.")

1(b) – Once we know that the energy subcode is applicable (per "1(a)" above), we must decide which code within the energy subcode applies. One- and two-family dwellings of any height (including townhouses), attached or detached, follow the IECC/2009 for energy conservation regardless of whether the structural requirements are based on the International Building Code/2009 (IBC/2009) or International Residential Code/2009 (IBC/2009). The tricky part applies to multi-family buildings (three or more dwelling units) and the three-story limit between codes. Because multifamily dwellings (Group R-2) follow the IBC/2009, consulting the definitions in

### Blogging

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Chapter 2, we see that a "Story Above Grade" is defined as "any story having its finished floor surface entirely above grade plane, or in which the finished surface of the floor next above is: 1) more than 6 feet above grade plane or 2) more than 12 feet above the finished ground level at any point." Since there is no such thing as a ½ story per the IBC/2009, when there is a portion of a story on the fourth level that is a "story above grade," then the building would no longer follow the IECC/2009 for energy conservation and must now use ASHRAE 90.1-2007.

CAUTION, dear Conservation Lover, I am shifting gears on you now. The above discussion about stories above grade is used to determine the height of a residential building which goes to whether the building falls under the IECC or ASHRAE. I am moving (in 2. below) to <u>walls</u> above or below grade we are now talking insulation requirements.

2 – If there is a question as to whether a wall is above or below grade, first the definitions in the IECC/2009 and ASHRAE 90.1-2007, as applicable, should be consulted. For example, when there is a basement with one wall that is considered above grade, the basement is treated as above grade even if the rest of the basement walls are considered below grade, as in a typical walk-out basement. Therefore, when the insulation provisions are applied, an above-grade wall (per the IECC/2009) is defined as "a wall more than 50 percent above grade and enclosing conditioned space. This includes between-floor spandrels, peripheral edges of floors, roof and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof and skylight shafts." ASHRAE 90.1-2007 generally defines a wall as "that portion of the building envelope, including opaque area and fenestration, that is vertical or tilted at an angle of 60° from horizontal or greater. This includes above- and below grade walls, between floor spandrels, peripheral edges of floors, and foundation walls." This definition is further clarified as "(a) above-grade wall: a wall that is not a below-grade wall; (b) belowgrade wall: that portion of a wall in the building."

3 - There are eight climate zones for the United States of America. New Jersey falls in two of these zones, 4 and 5. There are subcategories for some zones: Moist (A), Dry (B), and Marine (C). New Jersey is completely in the moist category. For lowresidential buildings (IECC/2009), rise the subcategory is not all that important as Table 402.1.1 splits New Jersey into two simplified zones for the insulation and fenestration requirements bv Similarly, in ASHRAE, the building component. envelope requirements of Tables 5.5-4 and 5.5-5 See Blogging at right

### Blogging

Continued from left

apply to all subcategories. Please note these tables are split into non-residential, residential (multifamily, 4 stories or greater) and semi-heated. However, the subcategories do become important, for example, when analyzing the need for an economizer per Table 6.5.1 in the prescriptive path. Here you will see that Zone 4A does not require an economizer but in Zone 5A, when the cooling capacity is greater than or equal to 135,000 Btu/h, an economizer is required.

In short, it is important to remember to apply the defined terms by the definitions per each code. As you can see, in some instances, it matters!

Sincerely, Energy Subcode

Source: Rob Austin Code Assistance Unit

## Forced Circulation Coil-Type/Water-Tube Boilers: Low Water Cutoff Controls vs. Flow Sensing Devices

The Department has received questions about whether low water cutoff controls or flow sensing devices should be installed on forced circulation coil-type/water-tube boilers. This article is intended to provide guidance on the type of control or device that should be installed on coil-type/water-tube boilers.

Both the 2009 International Mechanical Code (IMC/2009) and 2009 International Residential Code (IRC/2009) have requirements for low water cutoff controls. Section 1007 of the IMC/2009, entitled "Boiler Low-Water Cutoff," and Section M2002.5 of the IRC/2009, entitled "Boiler low-water cutoff," require a low water cutoff control to be installed on all steam and hot water boilers. A low water cutoff is an essential control device designed to prevent boiler operation when the water level is too low.

However, low water cutoff controls are not appropriate for coil-type/water-tube boilers because the controls cannot detect flow and cannot prevent a coil-type/watertube boiler from overheating when loss of circulation occurs. Therefore, flow sensing devices, which detect flow and verify that the boilers and systems contain appropriate amounts of water, should be installed in lieu of low water cutoff controls.

If you have any questions, I may be reached at (609) 984-7609.

Source:	Thomas C. Pitcherello
	Code Assistance Unit

# New Jersey Code Adoptions -Elevator Safety Subcode

The following chart gives the adoption dates and the editions of the codes and standards used in connection with the Elevator Safety Subcode.

Edition Date for Building Subcode	Effective Date for Model Codes	BOCA Article Number for Elevators, Dumbwaiters, and Conveyor Equipment	ANSI A17 Safety Standard for Elevators and Escalators	ANSI A90.1 Safety Standard for Belt Manlifts	ASME A18.1 and A18.1a Safety Standard for Platform Lifts and Stairway Chairlifts
1975	01/01/77	16	A17.1 - 1971; A17.1a - 1972; A17.1b - 1973	A90.1-1969	
1976/S	12/01/77	16	A17.1 - 1971; A17.1a - 1972; A17.1b - 1973; A17.1c - 1974; A17.1d, e, f - 1975	A90.1 - 1969; A90.1a - 1972	
1978	10/01/78	16	A17.1 - 1971; A17.1a - 1972; A17.1b - 1973; A17.1c - 1974; A17.1d, e, f - 1975	A90.1 - 1969; A90.1a - 1972	
1981	05/07/81	21	A17.1 - 1978	A90.1 - 1976	
1983/AS	02/22/83*	21	A17.1 - 1981	A90.1 - 1976	
1984	08/06/84	21	A17.1 - 1981; A17.1a - 1982	A90.1 - 1976	
1985/S	04/01/85	21	A17.1 - 1984	A90.1 - 1976	
1986/AS	09/22/86	21	A17.1 - 1984	A90.1 - 1976	
1987	04/01/87	26	A17.1 - 1984 and 1985 Supplement	A90.1 - 1985	
1988/S	06/20/88	26	A17.1 - 1984 and 1985 Supplement	A90.1 - 1985	
1989/AS	11/01/89	26	A17.1 - 1987	A90.1 - 1985	
1990	07/01/90	26	A17.1 - 1987	A90.1 - 1985	
1991/S	03/04/91	26	A17.1 - 1987		
1993	05/01/93	Chapter 30	A17.1 - 1990	A90.1 - 1985	
1996	07/06/98	Chapter 30	A17.1 - 1993 and 1994, 1995 Supplements	A90.1 - 1992	
IBC-2000 New Jersey Edition	05/05/03	Chapter 30	A17.1 - 1996 and 1997, 1998 Supplements	A90.1 - 1997	A18.1 - 1999 and A18.1a - 2001
IBC-2006 NJ Edition	02/20/07	Chapter 30	A17.1- (2004-2005), including A17.1.S-2005	A90.1-2003	A18.1-2003
IBC-2009 NJ Edition	09/07/10	Chapter 30	A17.1-2007	A90.1-2003	A18.1-2005

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Elevator Safety Subcode

Note:

The grace period is covered at N.J.A.C. 5:23-1.6(a).

- 1) Consult construction files to determine under which elevator or building code the permit was issued;
- 2) The following provides guidance on how to determine the applicable ASME A17.1 or ASME A90.1 codes (editions/supplements) when this information is not available for existing elevator devices. When performing cyclical inspections, if the permit or installation date precedes or is within the grace period, apply the code edition immediately preceding the adoption of the new subcode. Example: A permit was issued on May 15, 1987. If the construction file does not have the information about the edition of the standard used, then ANSI A17.1 1984 is enforced. If the permit was issued on November 16, 1987, ANSI A17.1 1984 with the 1985 supplement applies.

S = Supplement

- AS = Accumulative Supplement
- \* = Operative date

If you have questions about the Elevator Safety Subcode, you may contact the Elevator Safety Unit at (609) 984-7833.

Source: Paulina Caploon Elevator Safety Unit

\* \* \* \* \* \* \*

## License Renewal for Child Day Care Centers and New Certificates of Occupancy

A number of questions have arisen with the withdrawal of FTO-8 and FTO-9. Some of these Must buildings that have been questions are: classified in accordance with a use group in conformance with either FTO-8 or FTO-9 be revised to the current group classification per the 2009 International Building Code (IBC/2009)? Is a new Certificate of Occupancy required for an existing child day care because the newer version of the code would classify it as a Group I-4 when one child younger than 2 1/2 years of age is present? If a new Certificate of Occupancy is required, is the building required to comply with the provisions of the Rehabilitation Subcode of the Uniform Construction Code (UCC)?

No new Certificate of Occupancy is required. A new Certificate of Occupancy is not required when the building subcode is amended to adopt a newer edition of a national model code. The UCC is not a retrofit code, so a legal Certificate of Occupancy remains in effect until the building undergoes a reconstruction or a change of use. The withdrawal of FTO-8 and FTO-9 does not change this. Existing buildings that were in compliance with the FTOs, which were part of the UCC, continue to be in compliance with the UCC and there is no need for a new Certificate of Occupancy.

For licensure renewal for a child day care, a Certificate of Continued Occupancy (CCO) may be required. If the day care operator requests a CCO, then the required inspection must be performed pursuant to N.J.A.C. 5:23-2.23(e); a CCO may be issued upon compliance.

If you have any questions on this, please direct your calls to me at (609) 984-7609.

Source: Marcel Iglesias Code Assistance Unit

### Dryer Exhaust

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Residential Clothes Dryer Exhaust 🔄 🏠

The Department has received calls on two items pertaining to the requirements for residential clothes dryer exhaust as stated in the 2009 International Residential Code (IRC/2009).

The first item has to do with the maximum length of the exhaust duct from the connection to the transition duct from the dryer to the outlet terminal. Section M1502.4.4.1 of the IRC/2009, entitled "Specified length," states that the maximum length of the exhaust duct shall be 25 feet for electric clothes dryers. Section G2439.5.5.1 of the IRC/2009, entitled "Specified length," further states that the maximum length of the exhaust duct shall be 35 feet for gas clothes dryers. Confusion has arisen because both the 2009 International Mechanical Code (IMC/2009) and 2009 International Fuel Gas Code (IFGC/2009) each state that the maximum length of exhaust ducts for clothes dryers, whether electric or gas, shall be 35 feet. This is not a mistake and is not a contradiction. For an electric clothes dryer that is regulated by the IRC/2009, the maximum length of the exhaust duct shall be 25 feet in conformance with Section M1502.4.4.1 of the IRC/2009.

However, Section M1502.4.4.2, entitled "Manufacturer's instructions," and Section G2439.5.5.2

See Dryer Exhaust at right

of the IRC/2009. entitled "Manufacturer's instructions," both state that the size and maximum length of the exhaust duct shall be determined by the manufacturer's installation instructions. If the manufacturer's installation instructions specify a maximum length for the exhaust duct that is more restrictive than the applicable code section, then the more restrictive length applies. The converse is also If the manufacturer's installation instructions true. specify a maximum length for the exhaust duct that is greater than the length specified by the applicable code section, then the manufacturer's installation instructions must be followed.

The second item has to do with the termination location for exhaust ducts. Section G2439.1 of the IRC/2009, entitled "Installation," states that clothes dryers shall be exhausted in accordance with the manufacturer's instructions. Section M1502.3 of the IRC/2009, entitled "Duct termination," states that if the manufacturer's instructions do not specify a termination location, the exhaust duct shall terminate not less than three feet in any direction from openings into buildings. Therefore, if the manufacturer's installation instructions do not specify an exhaust duct termination, Section M1502.3 of the IRC/2009 applies.

If you have any questions, I may be reached at (609) 984-7609.

Source: Thomas C. Pitcherello Code Assistance Unit

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Copies may be read or downloaded from the division's website at: www.nj.gov/dca/divisions/codes.

Please direct any comments or suggestions to the NJDCA, Division of Codes and Standards, Attention: Code Development Unit, PO Box 802, Trenton, NJ 08625-0802.

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# Construction Code Communicator

NEW JERSEY UNIFORM CONSTRUCTION CODE

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Fall 2011

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

Department of Community Affairs Lori Grifa, Commissioner

## Volume 23, Number 3

## Dormitories and the Barrier Free Subcode

Some facilities of higher education are initiating the construction of new undergraduate dormitories and new With regard to providing graduate student housing. accessibility for students with disabilities, higher education facilities must comply with both the Barrier Free Subcode (BFSC) and the Americans with Disabilities Act (ADA). It has come to our attention that the ADA/2010 has a new section in which it addresses "araduate student or faculty housing leased on a yearround basis and without any common use areas available for educational programming" (ADA/2010, Section 233). Because the ADA is specific in its requirements for leased housing for graduate students and faculty, questions have arisen about the requirements of the BFSC for graduate student housing.

## Group Home Fire Sprinkler Requirements Group R or Group I

The Department of Community Affairs and the Department of Human Services met recently to complete a review of fire suppression system requirements as they apply to homes licensed under Standards for N.J.A.C.10:44A, Community Residences for Individuals with Developmental Disabilities, and N.J.A.C. 10:37, Standards for Community Mental Health Services Regulations. This review resulted in the determination that a NFPA 13D fire sprinkler system may be installed in licensed community homes with five or fewer persons, one or more of whom cannot evacuate in three minutes or less.

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This determination is based on the following:

1. Homes with five or fewer residents.

The definition of Group I-1 from the Building Subcode of the Uniform Construction Code (N.J.A.C. 5:23-3.14(b)) follows.

308.2 Group I-1

This occupancy shall include buildings, structures or parts thereof housing more than 5 persons, on a 24hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of slow evacuation in an emergency situation without physical assistance from staff. For the purpose of applying this provision, slow evacuation shall mean the movement of all occupants, residents and staff to an exit in more than three minutes, but not more than 13 minutes. This group shall include, but not be limited to, the following:

Alcohol and drug abuse centers Assisted living facilities Boarding houses Congregate care facilities Convalescent facilities Group homes Halfway houses Social rehabilitation facilities

A facility such as the above with five or fewer persons shall be classified as a Group R-3 in accordance with the building subcode (N.J.A.C. 5:23-3.14) or shall comply with the one- and two family dwelling subcode (N.J.A.C. 5:23-3.21).

In sum, a home with up to five residents, one or more of whom is not capable of evacuating in less than three minutes, is Group R-3; a NFPA 13D sprinkler system may be installed.

2. Homes with more than five residents who cannot self-evacuate.

Residential group homes housing more than five persons with any occupant who is not able to evacuate in emergency situations without physical assistance from staff are classified as Group I-1. These homes are required to install NFPA 13R fire sprinkler systems in accordance with the building subcode. A contracted provider/housing developer can apply for a variation from the building subcode to apply the provisions of the unamended International Building Code (IBC)/2009. The variation would allow the installation of a NFPA 13D fire sprinkler system in accordance with IBC/2009, Section 903.2.6 (unamended), which allows this type of system for Group I-1 facilities.

## Soil Conservation Prior Approvals for Projects Involving Demolition

At N.J.S.A. 4:24-41(g), the Soil Erosion and Sediment Control Act defines "Project" as "any disturbance of more than 5,000 square feet of the surface area of land (1) for the accommodation of construction for which the State Uniform Construction Code would require a construction permit, except that the construction of a single-family dwelling unit shall not be deemed a "project" under this act unless such unit is part of a proposed subdivision, site plan, zonina conditional use. variance. planned development or construction permit application involving two or more such single-family dwelling units, (2) for the demolition of one or more structures, (3) for the construction of a parking lot, (4) for the construction of a public facility, (5) for the operation of any mining or quarrying activity, or (6) for the clearing or grading of any land for other than agricultural or horticultural purposes."

Therefore, if the project requires a permit through the Uniform Construction Code (UCC) and the soil disturbance meets the definition of "project" given above, a prior approval by the Soil Conservation District is required. The problem is that some local code officials have not been properly classifying the work as a demolition project and, therefore, are concluding incorrectly that no soil conservation approval is required.

For example, a UCC demolition permit is not required for the partial demolition of the exterior of a building or structure because that work is categorized as alteration or reconstruction work according to the Rehabilitation Subcode. However, if the project will cause the disturbance of more than 5,000 square feet of soil, the partial demolition falls within the parameters of N.J.S.A. 4:24-41(g), and a soil conservation prior approval is required before a UCC permit can be issued.

As you can see, it does not make any difference whether the project is an alteration, reconstruction, or demolition. Quite simply, when more than 5,000 square feet of soil is disturbed, the project falls within the parameters of N.J.S.A. 4:24-41(g) and a soil conservation prior approval is required before the issuance of a UCC permit.

If you have any questions on this, please direct your calls to me at (609) 984-7609 or to the appropriate County Soil Conservation District listed in Bulletin 91-2, Compliance with Requirements of the Soil Erosion and Sediment Control Act.

Source: Marcel Iglesias Code Assistance Unit

See Group Homes - page 4

Dormitories

#### continued from page 1

CURRENT BARRIER FREE SUBCODE: The BFSC does not draw a distinction between housing provided for undergraduate students and housing provided for graduate students. At N.J.A.C. 5:23-7.5(f), the BFSC has a clear standard for dormitories: 5% accessible and 95% adaptable rooms/suites. As with the scoping requirements for other kinds of accessible housing, whether elevator service is provided affects the total number of accessible or adaptable dwelling units. Where an elevator is provided, 5% of the total dwelling units/rooms/suites must be accessible and 95% of the ground floor dwelling units/rooms/suites must be adaptable. Where no elevator service is provided, 5% of the ground floor dwelling units/rooms/suites must be adaptable.

Because the ADA/2010 is specific with regard to multifamily graduate student housing that is leased on an annual basis, questions have arisen as to the applicability of the BFSC to housing being constructed for graduate students or faculty. In advance of revising the BFSC for clarity, this article is intended to stand as a statement of the Department's position on the accessibility requirements for these projects and to provide the reasoning behind that position.

ADA 2010—Graduate Student/Faculty Housing: The ADA/2010 requires compliance with Sections 233 and 809 of 2010 ADA standards for "apartments or townhouses that are provided on/behalf of a place of higher education." Section 809 contains the specific requirements for accessibility within the residential unit—accessible route, bathrooms, communication features, etc. It does not address scoping and, therefore, is not the subject of this review. Section 233 contains the scoping provisions. At 233.3.1, Minimum number, new construction, 5% of the residential units ("graduate student housing leased on a year-round basis and without any common use areas available for educational programming") are required to be accessible (which means that they must comply with Section 809).

OTHER LAWS (BFSC and FHA): In guidance provided in its technical assistance manual, the Department of Justice states that it is possible for a residential unit to be subject to both Title II (State and Local Government) and Title III (public accommodations and commercial facilities) and that "the standard that provides the highest degree of access to individuals with disabilities" applies. It is reasonable to conclude that this reasoning also applies to other laws—the Federal Fair Housing Amendments Act and the BFSC. (NOTE: Because the BFSC has been amended to reflect the requirements of the Federal Fair Housing Amendments Act, this discussion focuses on the BFSC only.)

Following the line of reasoning that a graduate student housing construction project is subject to more than one law, once the 5% accessible requirements of the ADA have been met, a review must be conducted to determine whether other laws might apply. If it is found that other laws do apply, it must be determined whether those laws have requirements that are more stringent than those of the ADA. In New Jersey, this review would involve the BFSC and its application to the balance of the residential units. In multifamily residences with four or more units in a single structure, the BFSC requires adaptability of ground floor dwelling units in non-elevator-serviced buildings and of all units in elevator-serviced buildings. Thus, in buildings with four or more dwelling units in a single structure, the 95% of the units that are not required to be accessible would be required to be adaptable— because, when conducting a stringency test, adaptability is more stringent than no requirement at all. As with other multifamily designs, where elevator service is provided, 95% of the ground floor dwelling units would be required to be adaptable. Where no elevator service is provided, 95% of the ground floor dwelling units would be required to be adaptable.

On the other hand, if the graduate student housing consists of otherwise exempt building designs (single-family detached, townhouses, or buildings with three or fewer dwelling units in a single structure), 5% of the dwelling units would be required to be accessible; none would be required to be adaptable.

IN SUM: If the buildings constructed as "graduate student housing leased on a year-round basis and without any common use areas available for educational programming" are townhouses or another exempt housing design, they must be 5% accessible only. No adaptable units are required.

Where there are four or more dwelling units in a single structure, multistory dwelling units and single story dwelling units (flats) must be 5% accessible. An elevator is not required, but when an elevator is provided, 95% of the remaining dwelling units in the elevator-serviced building must be adaptable. When no elevator is provided, 95% of the ground floor dwelling units, including the entry level of multistory dwelling units, must be adaptable.

If you have questions, please contact the Code Assistance Unit or me at (609) 984-7609.

Source: Emily W. Templeton Division of Codes and Standards Group Homes

continued from page 2

Each variation request must be accompanied by a rationale. The following are the New Jersey Uniform Construction Code variation criteria that must be followed.

N.J.A.C. 5:23-2.9 Variations and exceptions

(a) No variations or exceptions from the requirements of any subcode of these regulations may be made, except upon the following findings:

> 1. That strict compliance with any specific subcode provision, if required, would result in practical difficulty to such owner; and 2. That the exception, if granted, will not jeopardize the health, safety and welfare of intended occupants and the public generally.

(b) Except as may be otherwise specified in this chapter, no variations shall be granted from any of the requirements of N.J.A.C. 5:23-2, 4 or 5.

In this case, the Department regards allowing compliance with Section 903.2.6 (unamended) as reasonable. However, the decision regarding an application for a variation rests with the local enforcing agency, not with the Department. A denial may be appealed to the Construction Board of Appeals.

If you have any questions, please feel free to call me at (609) 984-7609.

Source: Michael E. Whalen Code Assistance Unit

## License Number for Alarm Contractor is Required!

Just a quick reminder that, as with licensed electrical, plumbing, home improvement, fire alarm, and suppression contractors, the name and license number of the contractor installing burglar alarms, fire alarms, or electronic security devices MUST appear on the construction permit application.

The Department of Community Affairs has received a complaint from the Director of the Division of Consumer Affairs about the lack of compliance with the licensing laws. As code officials, we are the front line of enforcement for many of the licensing laws in the State.

As a reminder, the applicant is required to fill out the forms completely!

Read-only Link to National Fire Protection Codes and Standards

The below link is being provided through a new National Fire Protection Association (NFPA) initiative to offer public access to NFPA codes and standards. After signing in and receiving a validation email, code users will be able to view the NFPA standards referenced in the International Codes Council codes adopted as part of the State's Uniform Construction Code.

## Instructions:

 Click on the link below or a link is also provided on the Division of Codes and Standards webpage at <u>http://www.nj.gov/dca/divisions/codes/codreg/</u>

http://www.nfpa.org/itemDetail.asp?cateforyID=279 &itemID=18123&order\_src=C800

- Click on "<u>View the list of NFPA's codes and</u> <u>standards</u>" under the title "To review NFPA's codes and standards online:"
- 3. Click on the NFPA code or standard you wish to view.
- Select the currently referenced edition by clicking on the drop down arrow next to the "Edition to display" at the top of the page.
- 5. Click on "View the (edition you selected in step 4) edition online" under the title "View the document online (read only)". After agreeing to the terms, start viewing the document. If you are a first time user, you must enter your email address and a password before you can proceed. In some cases you may need to click on "Create an account" and follow the prompts.
- 6. NFPA will send you an email validation message from <u>verify@nfpa.org.</u> Please make sure that your email provider is not blocking this address as spam.
- Once you receive the validation email, just click on <u>"click here</u>" to validate your email address and

Source: John N. Terry Code Assistance Unit

## Water-powered Sump Pumps –Backflow Preventer

With the many storms we have been having that involve the loss of electrical power, this office has been receiving many calls about what type of backflow preventer is required on the water supply to the new type of water-powered back-up sump pumps.

Manufacturers recommend that a water- powered sump pump be used as a backup sump pump for the primary electric sump pump. The discharge from the water-powered sump pump must discharge to the outdoors. Manufacturers state that the discharge not be connected to the discharge from the main pump. It will cause the main pump to send water back into the pit and a spill from the backflow preventer will occur.

Since these pumps could be subject to a back siphon condition, a proper backflow preventer must be installed on the water supply to the pump. Not knowing what might enter the sump pit, a reduced pressure zone backflow preventer is the proper backflow preventer to use.

This could conflict with some of the manufacturer's recommendations which only require an atmospheric vacuum breaker. In that case, the Uniform Construction Code (UCC) would override the manufacturer's instructions. Check to be sure that the ejector pump is not set into the sump pit. These units are not made to be submerged.

Finally, a plumbing technical section is required for the installation of this system. It is very important to ensure that the proper backflow preventer is installed and that the pump discharge is not connected to the primary sump pump discharge piping. Connection to the primary pump discharge would be a violation of the manufacturer's installation instructions.

Should you have any questions, you may contact me at (609) 984-7609.

Source: Thomas C. Pitcherello Code Assistance Unit





## Commercial Kitchen Exhaust Hoods, Alarms Required?

Questions have been coming in recently about when hood suppression systems are required to have alarm devices installed. Apparently some code officials have required contractors to install a local horn and strobe device when a hood requires a suppression system. The horn/strobe device has been required to activate upon discharge of the hood suppression system even though there is no fire alarm system installed in the building. This is incorrect. Although subsection 904.3.4, Alarms and warning signs, and subsection 904.3.5, Monitoring, have been cited by code official, these sections only require that automatic fire extinguishing systems be monitored when the occupancy is required to have a fire alarm system.

The requirement to monitor the activation of a hood system comes from the International Building Code (IBC)/2009 New Jersey edition, specifically Section 904.3.5, Monitoring. This section does not require an additional horn or strobe to be installed when no fire alarm system is required; in fact, it requires the monitoring of hood suppression systems only when a fire alarm system is otherwise required to be installed in the building.

The IBC/2009 provides for the building fire alarm system to monitor the activation of the kitchen hood extinguishing system. To accomplish this, the monitoring system would need to activate a required fire alarm system in accordance with Section 907, Fire Alarm and Detection Systems. When no fire alarm system is required, no additional alarm devices are required.

In closing, as a reminder: To verify proper operation, all required tests and inspections must be conducted in accordance with National Fire Protection Association (NFPA) 72, and the IBC/2009, Section 904.4, Inspection and Testing, and Section 907, Fire Alarm and Detection Systems.

If you have any questions, please feel free to call me at (609) 984-7609.

Source: Michael E. Whalen Code Assistance Unit

## Refrigerant –Locking Access Port Caps

This article is to bring to your attention, a new requirement with the adoption of the International Mechanical Code (IMC)/2009 and International Residential Code (IRC)/2009: Refrigerant circuit access ports located outdoors shall be fitted with locking-type tamper-resistant caps. IMC Section 1101.10 Locking access port caps, and IRC Section M1411.6 Locking access port caps, states: "refrigerant circuit access ports located outdoors shall be fitted with locking-type tamper-resistant caps."

Condensing units or heat pump units are typically located outdoors and that are equipped with access ports on the vapor and liquid refrigerant lines are required to be fitted with locking-type tamper-resistant caps. This would include all newly installed and replacement equipment. The access ports allow the connection of diagnostic gauges and to allow refrigerant to be added to or taken from the unit during servicing.

This article is to alert you that, during an inspection, the inspector must make sure that these locking-type caps are installed. If they are not, the equipment/lines will fail inspection.

Should you have any questions, you may contact me at (609) 984-7609.

Source: Thomas C. Pitcherello Code Assistance Unit

### NFPA Link

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start using the free read only edition of this code or standard. If the standard does not open, have someone check your computer for the required program to read the document.

If you have any problems or questions about this service please call (609) 984-7609, ask for Code Assistance, and someone will help.

Source: Michael E. Whalen Code Assistance Unit

## Department of Education Approval for School Projects

Do I really need Department of Education (DOE) approval for that school project? This is a recurring question that code officials ask when school administrators bring projects directly to their offices. Now, there is a very simple way to get an answer. (No, don't call the Department of Community Affairs!) Go directly to the source, Frank LoDolce at DOE.

The process is quite easy. Simply email Mr. LoDolce at <u>frank.lodolce@doe.state.nj.us</u>, provide him with the details of the project, and he will let you know whether DOE review and approval is required. To receive a prompt response, make sure you put "EA Review Question" in the subject line of the email.

If a local agency is requesting to perform the plan review, make sure the DOE124 is filled out in its entirety.

We hope this makes it easier to make an informed decision on public school projects.

Sources: John N. Terry, DCA Frank LoDolce, DOE

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# **Kitchen Remodeling Projects**

The Department has been receiving questions on the enforcement of code requirements in kitchen remodeling or renovation projects. Some of the most frequently asked questions revolve around determining the category of work; others are concerned with permit requirements and code compliance when the work is ordinary maintenance. In this article, we will try to answer some of the most common questions as they have been asked of us.

Question 1: Bulletin 94-3 states that the installation of new and/or replacement cabinets does not need a permit and that only electrical or plumbing work requires permits. There is a discrepancy in this requirement in the categorization of the replacement or installation of cabinets as ordinary maintenance. N.J.A.C. 5:23-2.7(c)1vi refers to the replacement of a cabinet, which is singular, as in one cabinet, and only replacement, not the addition of new cabinets. RESPONSE: The text states: "The repair or replacement of any non-structural member such as a partition railing or kitchen cabinet." "Any... kitchen

cabinet" can mean one -- or more than one -- kitchen

cabinet, so there is no discrepancy. Question 2: N.J.A.C. 5:23-2.7(c)1ii refers to "repair or replacement of 25% or more of interior finishes in any one room." The vast majority of kitchen cabinets replacements involve more than 25% of wall surfaces in the kitchen. Cabinetry is part of the interior finishes of a kitchen since they are permanently attached to the wall, they are not furniture or furnishings and are much more involved than installing paneling for which a permit is required. This should require a Building Technical Section for verification of compliance with N.J.A.C. 5:23-6.8 for materials, methods and attachment, especially for the upper cabinets.

RESPONSE: Because kitchen cabinets are not interior finishes, the 25% limitation does not apply to them.

Question 3: N.J.A.C. 5:23-2.7(b)4 and 5 refer to ordinary maintenance that "does not affect fire safety.. [and] does not increase non-conformity with the regulations." In Section 1901, the International Residential Code (IRC)/2009, as adopted at N.J.A.C. 5:23-3.21, references clearances to combustibles above ranges and cooking appliances. At N.J.A.C. 5:23-3.4, the plan review and inspection responsibilities are assigned to the Fire Subcode Official. This clearly indicates the need for a Fire Technical Section to review and inspect for compliance with this regulation with regard to firerelated issues.

RESPONSE: Within the framework of the Uniform

Construction Code (UCC), there is a distinction between requiring a construction permit and code compliance. Although a permit is not always required, the code requirements always apply. It is not unusual for code requirements to be associated with "ordinary maintenance" items. For example, the replacement of glazing in the side-light of a door is ordinary maintenance and therefore, no permit, inspection, or notice to the enforcing agency is required. However, the UCC requires that the glazing being installed be safety glazing. Regardless of whether a construction permit is required, the project must comply with the UCC. The same holds true for the clearances to combustibles above ranges and cooktops-a construction permit is not required, so a technical section is not required, but the code provisions do apply.

Question 4: N.J.A.C. 5:23-2.17A(c)1ii refers to requiring a minor work permit for "renovation provided no primary structures are altered and the project is not a reconstruction." A kitchen is, by definition, a renovation project and possibly even a reconstruction, since it usually takes from 1 to 4 weeks to do the project and the room, in some cases, cannot be used or occupied during the progress of work. This puts most kitchen renovations, at the very least, in the scope of minor work and, in some cases, a major project. *Very few* kitchen projects are replacement of cabinets only.

RESPONSE: Reconstruction, by definition, is work that is so extensive that it not only encompasses the entire primary function space, use group, or tenancy, but also requires a new certificate of occupancy. Therefore, remodeling a kitchen <u>is never</u> a reconstruction project. We agree that a kitchen remodeling project can be, and often is, minor work. As a reminder, in a kitchen remodeling project, the cabinets would be exempt from the permit; only work that requires a permit should be included in the permit application and in the calculation of the fee.

One of the most basic, foundational ideas of the UCC is that its requirements be predictable; another is that its enforcement be uniform. Questions should be directed to the Code Assistance Unit at (609) 984-7609.

Source: John N. Terry Code Assistance Unit



# Vapor Retarders

The requirements --and the exceptions--for vapor retarders in the International Residential Code (IRC)/2006 have been distributed throughout the text of IRC/2009 regarding the building thermal envelope. The Department has received many questions on the application and installation of vapor retarders, so, in this article, we are providing the IRC/2006 text, footnoted, to help you find the requirements in the IRC/2009; keep in mind that climate zone 4 is exempt for framed assemblies, so the following applies to climate zone 5, unless otherwise noted.

### IRC/2006

R318.1 Moisture control.

In all framed walls<sup>a</sup>, floors<sup>b</sup> and roof/ceilings<sup>c</sup> comprising elements of the building thermal envelope, a vapor retarder shall be installed on the warm-in-winter side of the insulation.

Exceptions:

1. In construction where moisture or freezing will not damage the materials.

2. Where the framed cavity or space is ventilated to allow moisture to escape.

3. In counties identified as in climate zones 1 through 4.

## IRC/2009

a - R601.3, General wall construction

b – R408.1 and R408.2, Naturally ventilated underfloor spaces; R408.3, Unvented under-floor spaces; R506.2.3, Concrete floors on ground (*not a framed assembly and contains its own exceptions*) c – R806.4, Unvented attic assemblies

The term "vapor retarder," is included in the following sections of the IRC/2009, but not necessarily for the building thermal envelope:

- R202 Definitions
  - \* Roof assembly
  - \* Vapor retarder class
- R302.10.1 Flame spread index and smoke developed index for insulation
- R317.1, item #7 Protection of wood and wood based products against decay
- R405.2.2 Wood Foundations
- R611.9.1.2, exception Removal of stay-in-place form material at bolts (for connections between concrete walls and light-framed floor, ceiling and roof systems)
- R702.3.8 Water-resistant gypsum backing board (for interior wall coverings)
- M1601.3 Duct insulation materials
- M1601.4.5 Duct insulation

If you have questions, please contact me at (609) 984-7609.

Source: Rob Austin Code Assistance Unit

# Smoke Alarms and Additions 🖳 🗲 🚳

The Department has been receiving inquiries about whether low voltage smoke detection systems can be installed or extended during rehabilitation work; the question specifically focuses on addition to a detached single family dwelling or a one- or two-family dwelling of Group R-3 or R-5.

N.J.A.C. 5:23-6.32(f)1 of the Uniform Construction Code (UCC) requires that smoke alarms that comply with the building subcode or one-or two-family dwelling subcode, as applicable, be installed throughout the addition and the existing building when the cumulative area of all floors of the addition(s) is 25 percent or more of the floor area of the largest floor of the existing building. At N.J.A.C. 5:23-6.32(f)2. the UCC requires that smoke alarms be installed on each level of the dwelling when the cumulative area of all floors of the addition(s) is at least five percent, but less than 25 percent, of the floor area of the largest floor of the existing building. When the addition is less than five percent (5%), the provisions of the rehabilitation subcode at N.J.A.C. 5:23-6.4(f) apply. Smoke alarms may be battery-powered. They must be installed or maintained on each level of the dwelling and outside the immediate vicinity of the bedrooms.

So what does this mean for smoke alarms? When additions to dwellings are constructed that meet the thresholds of the above sections, smoke alarms are required to be installed. The smoke alarms can either be hardwired, interconnected smoke alarms with battery back-up or smoke alarms meeting the requirements of Section R314, Smoke alarms, of the one- and two-family dwelling subcode. The International Codes Council (ICC) modified Section R314 to allow household fire alarm systems that are installed in accordance with National Fire Protection Association (NFPA) 72, National Fire Alarm Code, and the requirements of this new subsection, including Section R314.2, which requires that the detection system become a permanent fixture of the occupancy, owned by the homeowner, monitored by an approved supervising station, and maintained in accordance with NFPA72.

When a contractor builds an addition to an existing dwelling and there is an existing low voltage smoke detection system, the existing low voltage system may be extended as long as a qualified contractor verifies that the conditions specified in Section R314.2 have been met. When a homeowner performs his/her own Smoke Alarms

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work, the homeowner must provide a written statement from the monitoring and service company that the conditions in Section R314.2 have been met.

Section R314.2 also requires that the household fire alarm system provide the same level of smoke detection and alarm as required by Section R314 for smoke alarms. So, a low voltage detection system may be approved as long as there is documentation that it complies with Section R314.2. A homeowner is not required to install a separate hardwired A/C supplied, interconnected smoke alarm system with battery back-up if the low voltage system meets the requirements of Section R314.2. Furthermore, a variation is no longer needed.

Please contact me if you have any questions; I can be reached at (609) 984-7609.

Source: Michael E. Whalen Code Assistance Unit

# Ductwork and the Energy Subcode

In the International Energy Conservation Code (IECC)/2009, Section 403.2, Ducts, has been modified and expanded from the IECC/2006 for ductwork insulation and sealing. For your information and convenience, the changes follow.

**Insulation:** This is a minor change. Section 403.2.1 now requires supply ducts in attics to be insulated to a minimum of R-8 when outside the building thermal envelope, and all other ducts outside the building thermal envelope, to a minimum of R-6. The obvious exception to this is when ducts or portions thereof are located completely inside the building thermal envelope.

**Sealing:** As before, Section 403.2.2 requires that all ducts, air handlers, filter boxes and building cavities used as ducts be sealed and that joints and seams comply with Section M1601.4.1, Joints and seams, of the International Residential Code (IRC)/2009. This reference ensures that joints of duct systems are made substantially airtight by means of tapes, mastics, liquid sealants, gasketing, or other approved closure systems, including UL 181 tapes per duct type.

These changes are minor; the bigger change is this: **Starting January 1, 2013**, duct tightness must be verified by a leakage test unless the air handler and all ducts are located within conditioned space. The

See Ductwork -continued at right

## **Playground Equipment**

The Department has recently received inquiries about when foundations drawings for playground equipment are required to be signed and sealed by a design professional.

N.J.A.C. 5:23-7.16 of the Barrier Free Subcode states that the construction of recreational equipment *may* require a construction permit, if so determined by the building subcode official.

If the building subcode requires a construction permit, plans for the foundation may or may not be required depending on the recreational structure. The decision as to whether plans are required lies with the building subcode official. Some structures could be considered "work of minor nature" as per N.J.A.C. 523-2.15(f)1x, in which case, plans would not be required. Large, complex structures might need footings and, due to the size or complexity, the building subcode official might need to review plans to ensure the stability of the structure.

If the building subcode official requires plans, they must be signed and sealed by a design professional. The only exception to the requirement for plans that are signed and sealed by a design professional is for a single family home owner who has prepared his or her own plans for the construction of a detached structure used or intended to be used exclusively as his or her private residence.

If you have any questions, please direct your calls to me at (609) 984-7609.

Source: Marcel Iglesias Code Assistance Unit

### Ductwork

continued from left

permit holder may have the test conducted either post-construction or during rough-in; the timing of this test is the permit holder's choice. The benefit to a post-construction test is that the standard for passing is less stringent than is the standard for a rough-in test. The benefit to a rough-in test is that the ductwork should be much more accessible to fix if the work fails the test. A copy of the test results will be part of the permit file. The IECC/2009 establishes no credentials for persons performing this test.

Again for your convenience, the standards for passing follow:

\* Postconstruction test -- Leakage to outdoors is to be less than or equal to 8 cfm per 100  ${\rm ft}^2$  of

# Hotels/Motels and the Rehabilitation Subcode

It has come to the attention of the Division that some rehabilitation projects in hotels and motels are not well-understood and are being misclassified. Hotels and motels are unique in that rehabilitation projects are routinely undertaken—guest rooms are taken out of service to be altered or upgraded and, over time, all rooms undergo rehabilitation.

As an example, the classification of a project in which all the guest rooms are rehabilitated at one time is clear: it is a reconstruction project. In this case, the primary function of building (transient lodging) has ceased. The work involves a primary function space (guest rooms). Even when the work is limited to removing and replacing all the sheetrock and plumbing fixtures within the guest rooms (renovation) and does not include reconfiguring the guest rooms (alteration), this is classified as a reconstruction project.

As a reminder, a reconstruction project consists of "repairs, renovations, alterations or any combination thereof in a building which results in the entire use, primary function space or tenancy not being able to be occupied while the work is in progress and in which a new Certificate of Occupancy is required prior to re-occupying." (N.J.A.C. 5:23-6.3)

Referring to the definition above, when the work involves the entire use or primary function space, the space cannot be occupied while the work is taking place, and a new Certificate of Occupancy (CO) is required, the project is a reconstruction project. It is critical to remember that the basic and supplemental requirements of the Rehabilitation Subcode apply to reconstruction projects.

However, most of the time, all the guest rooms in a hotel or motel are not rehabilitated at one time. It is more common for some rooms to be rehabilitated at one time and for all rooms to have been rehabilitated over a period of time. Remember, the Rehabilitation Subcode provides for projects undertaken over time. In fact, when classifying a project, all work begun within a single 12-month period is counted (N.J.A.C. 5:23-6.10(b)2). So, even when a project is phased, it can still be classified as a reconstruction project. To make sure that the work is classified correctly, the construction official should ask the agent of record and/or design professional named on the construction project application to identify in writing the full extent of work at the completion of a phased or long-term project.

# REScheck Assumptions

As they say, the information provided is only as good as the user who provided it! That being said, how many of you really know how REScheck "works"? Well, the creators of REScheck (Pacific Northwest National Laboratories) include "Help" within the program itself. The "Help" function is in the same row as the "File" menu. Scroll the cursor to "Help." A drop down menu will appear; select "Help Topics". The topics provided help a user become more familiar with REScheck and also help the user find out what the program assumes when the user inputs information.

Since "Wall Software Inputs" seem to cause the most questions, for your convenience, they are provided below.

Wall Software Inputs

- Gross Area Enter the gross area of the wall component in the *Gross Area* field. The gross wall area includes the area of all windows and doors within the wall. You must link the wall to the windows and doors within that wall by using the tree on the left side of the *Envelope* screen. To link a window or door to a wall, drag the window or door label on the tree to the wall label and release the mouse. The gross wall area also includes the peripheral edges of floors (the area of the band joist and subfloor between floors).
- The gross area of any one wall of a conditioned basement with an average depth less than 50% below grade should be entered as a wall (not as a basement). In this case, the gross wall area includes the below-grade portion of the wall as well as the areas of doors and windows within those walls.
- Cavity Insulation R-Value Enter the R-value of any insulation to be installed in the cavities between above-grade wall structural members. The insulating values of other parts of the building assembly (e.g., gypsum board and air films) are accounted for by the program and should not be included.
- Continuous Insulation R-Value Enter the Rvalue of any continuous insulation in the above-grade wall. Continuous insulation is continuous over framing members or furring strips and is free of significant thermal bridging. The R-values of other parts of the

### REScheck

continued from page 10

building assembly (e.g., gypsum board and air films) are accounted for by the program and should not be entered. Insulating sheathing installed on the exterior of abovegrade walls is an example of continuous insulation. For structural insulated panels and forms, enter insulated concrete the manufacturer-reported R-value for the entire assembly. Continuous insulation on woodframed walls is assumed to cover 100% of the wall area. If the continuous insulation does not cover the entire wall or the continuous insulation has variable R-value ratings across the wall, create separate wall assemblies for each distinct R-value rating.

• Assembly U-Factor - If you have selected the *Other* wall type, enter the overall U-factor of the above-grade wall assembly including exterior and interior air films. Building departments may require supporting documentation for assemblies entered using the *Other* wall type and *U-Factor* field.

REScheck may be downloaded from www.energycodes.gov.

If you have questions, please contact me at (609) 984-7609.

Source: Rob Austin Code Assistance Unit

## Lateral Deck Connection: Reminder

It has recently come to the Department's attention that there has been some confusion as to when lateral deck attachment, like the one illustrated in Figure R502.2.2.3, which shows deck lateral load connection, of the International Residential Code/2009 (IRC/2009), is required.

The specific deck attachment for lateral loads as demonstrated in Figure R502.2.2.3, as referenced by Section R502.2.2.3, Deck lateral load connection, of the IRC/2009, is not required. This figure is rooted in Federal Emergency Management Agency (FEMA) 232, entitled "Homebuilders' Guide to Earthquake-Resistant Design and Construction," and is clearly a seismic requirement. Section R301.2.2, Seismic

See Reminder -continued at right

Hotels/Motels

continued from page 10

Properly classifying rehabilitation projects as reconstruction is especially important in buildings that were built prior to the Uniform Construction Code (UCC). Reconstruction projects are required to comply with the basic and supplemental requirements of the Rehabilitation Subcode (N.J.A.C. 5:23-6.7(i) and (j)). The basic and supplemental requirements are drawn from Subchapter 4 of the Uniform Fire Code (UFC), so that compliance with them results in compliance with the UFC's retrofit requirements in Subchapter 4 (N.J.A.C. 5:70-4).

Proper classification of reconstruction projects means that, when classifying an extensive project, whether that project is undertaken at one time or over a period of time, UFC-required retrofit work is included in a reconstruction project. This, in turn, ensures that there are no surprises at the completion of the project. No building owner wants to learn of retrofit requirements at the completion of an extensive rehabilitation project. To avoid this, proper classification of projects under the Rehabilitation Subcode is vital.

You may direct any questions to the Code Assistance Unit at (609) 984-7609.

Source: Carmine Giangeruso Supervisor of Investigations Office of Regulatory Affairs

### Reminder

continued from left

Provisions, of the IRC/2009, states "Detached oneand two- family dwellings and attached single family townhouses are exempt from the seismic requirements of this code."

Based on this, the lateral deck attachment like the one illustrated in Figure R502.2.2.3 is not required for a detached one- or two- family dwelling or attached single family townhouse in New Jersey that is designed and built in accordance with the IRC/2009.

If you have any questions, please direct your calls to me at (609) 984-7609.

Source: Marcel Iglesias Code Assistance Unit

## Useful Links Regarding Code Violations 🐴 🖬 📦 🚰 🛍 失

The duties of a subcode official/inspector, N.J.A.C. 5:23-4.5(i), requires that violations found in the plan review or during inspections be reported to the construction official and the owner (or owner's agent). This report should be complete. This means: do not stop reviewing after you find the first area of noncompliance; do a thorough review/inspection and be sure all violations are noted.

Those of us who are involved in the "code world" know how to make sense of the citations so that we can find the subject-matter of the identified violations. However, the building owner (or owner's agent) does not have the code book to make sense of the citations Fortunately, many of the codes are not online and, in an attempt to help, a list of links is provided below to direct persons seeking the texts of the references:

- Uniform Construction Code (N.J.A.C. 5:23): http://www.nj.gov/dca/divisions/codes/codreg/uc c.html (regulations listed by subcode);
  - o Rehabilitation Subcode (N.J.A.C. 5:23-6)
  - Barrier Free Subcode (N.J.A.C. 5:23-7)
- International Building Code/2009: http://www.ecodes.biz/ecodes\_support/Free\_Re sources/NewJersey/2009/09NJ\_Bldg/09NJBldg \_main.html (regulations listed by chapter);
  - National Fire Protection Association (NFPA) referenced standards: http://www.nfpa.org/aboutthecodes/list\_of\_ codes\_and\_standards.asp;
- International Residential Code/2009: http://www.ecodes.biz/ecodes\_support/Free\_Re sources/NewJersey/2009/09NJ\_Residential/09 NJResidential\_main.html (regulations listed by chapter);
- National Electrical Code/2008 (NFPA 70): http://www.nfpa.org/aboutthecodes/list\_of\_code s\_and\_standards.asp;
- International Energy Conservation Code/2009:

http://publicecodes.citation.com/icod/iecc/2009/i ndex.htm?bu=IC-P-2009-000014&bu2=IC-P-2009-000019 (regulations listed by chapter);

- ASHRAE Standard 90.1-2007 (the link provided is for the 2010 edition as the 2007 edition is not longer online for free): http://openpub.realread.com/rrserver/browser?ti tle=/ASHRAE\_1/ashrae\_90\_1\_2010\_IP\_1024 (regulations listed by chapter);
- International Mechanical Code/2009: http://publicecodes.citation.com/icod/imc/2009/i

### Useful Links

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ndex.htm?bu=IC-P-2009-000005&bu2=IC-P-2009-000019 (regulations listed by chapter);

 International Fuel Gas Code/2009: http://publicecodes.citation.com/icod/ifgc/2009/i ndex.htm?bu=IC-P-2009-000007&bu2=IC-P-2009-000019 (regulations listed by chapter).

Unfortunately, we do not have links for the National Standard Plumbing Code/2009 or International Code Council/American National Standards Institute (ICC/ANSI) A117.1-2003 standard for accessible design, but this list could be given to those who do not have code books and who are trying to decipher the references in a code violation. Finally, if any of these links does not work, the user can go to the Division's "backdoor" website and these links at www.nj.gov/dca/divisions/codes.

Source: Rob Austin Code Assistance Unit

## Ductwork

continued from page 9

conditioned floor area or a total leakage less than or equal to 12 cfm per 100 ft<sup>2</sup> of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots are to be taped or otherwise sealed during the test.

\* Rough-in test -- Total leakage is to be less than or equal to 6 cfm per 100 ft<sup>2</sup> of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the roughed in system, including the manufacturer's air handler enclosure. All register boots are to be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage is to be less than or equal to 4 cfm per 100 ft<sup>2</sup> of conditioned floor area.

**Building Cavities:** There is no change at Section 403.2.3, Building cavities, but I want to take this opportunity to remind you that this section does not allow building framing cavities to be used as supply ducts.

If you have questions, please contact me at (609) 984-7609.

Source: Rob Austin Code Assistance Unit

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

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# Construction Code Communicator



Winter 2011

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

Volume 23, Number 4

Department of Community Affairs Lori Grifa, Commissioner

# The Winter Communicator: A Reminder

The final issue of the *Construction Code Communicator* each year will consist of a collection and re-printing of all the Alerts, Hot Topics, Letters from the Director, guidance documents, and other information items that were posted on the Division's website during the calendar year.

Once the *Construction Code Communicator* has been posted, the individual Alerts, Hot Topics, Letters from the Director, guidance documents, and other information items will be removed from the Division's website. However, it will still be possible to see a copy of any of these documents as it was originally posted on the Division's website by accessing the Division's Document Library or through the "Topics A-Z" tab on the Division's website: www.nj.gov/dca/divisions/codes/.

In short, there are no new articles in this issue.

Also, the Index for all four issues of the *Construction Code Communicator* 2011 is included in this issue as a handy reference.

Prospectively, the *Construction Code Communicator* will follow this same format: three issues, Spring, Summer, and Fall, that contain articles and a Winter issue that will provide in one place all the Alerts, Hot Topics, Letters from the Director, guidance documents, and other information items that were posted on the Division's website in that calendar year. We hope that you continue to appreciate this aspect of the *Construction Code Communicator*.

If you have any questions about the *Construction Code Communicator*, or if you have any recommendations for articles, please feel free to contact me at (609) 984-7609 or at <a href="mailto:etempleton@dca.state.nj.us">etempleton@dca.state.nj.us</a>.

Source: Emily W. Templeton Division of Codes and Standards

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# Are you ready to Ride?

In a May 2011 Alert, the Bureau of Code Services provided the following Safety tips:

# The DOs of Ride Safety:

- Do observe each ride before participating make sure you are comfortable with it
- Do look for the posted State of New Jersey certificate of operation this document ensures rides are
  inspected and have passed the stringent safety regulations required by the state
- Do read and obey all written and verbal warnings and instructions
- Do observe age, height and weight, and other physical restrictions for each ride

## Before the Ride Begins:

- Do fasten safety equipment such as a seatbelt, shoulder harness, lap bar or chain
- Do secure all clothing and personal possessions
- Do follow instructions of ride operators

## While the Ride is in Motion:

Do keep hands, arms, legs and feet inside the ride at all times

## Before Getting off of the Ride:

- Do keep all safety equipment fastened until the operator instructs you to exit
- Do stay in the ride until it comes to a complete stop and wait for the operator to tell you to get out
- Do enter or dismount a ride only in the area instructed by the ride operator

# The DON'Ts of Ride Safety

- Don't throw any object from an amusement ride or attraction
- Don't endanger or injure yourself or others around you on the ride by behaving in a reckless manner
- Don't enter any ride that you are uncomfortable with or that your child fears
- Don't horseplay around, on or near a ride at any time
- Don't enter a ride without the supervision of the ride operator
- Don't bring food or drinks on any ride, and don't smoke

## **Child Safety**

Parents should take several additional safety precautions for their children, especially small children, when
participating in amusement rides or attractions

## Parents should:

- Know your child's capabilities and limitations with regard to whether the ride is appropriate for them
- Watch the ride in operation before entering to make sure your child can ride it safely
- Remind your child of Ride Safety 'Dos' and 'Don's'
- Remind your child to stay seated, hold on to safety bars and obey the ride operator's instructions
- Designate an easily recognizable place to meet your child after the ride is over
- Supervise your child at all times

Safety is the most important component of every family outing. New Jersey's amusement parks, fairs, carnivals and attractions are some of the best in the country and are designed to entertain every member of your family. So the next time you visit your favorite amusement park, fair or carnival, just remember to be "Ready to Ride."



## Non-residential Development Fee Moratorium, 8-29-11 Letter to Construction Officials

In a letter dated August 29, 2011, Director Smith wrote:

Dear Construction Official:

I am writing to inform you that the collection of nonresidential development fees has been suspended. You no longer are required to obtain proof of payment or proof of exemption prior to the issuance of a certificate of occupancy. This will be the case for any project that receives preliminary or final site plan approval before July 1, 2013 and that has a building permit before January 1, 2015.

This change came about on August 24, 2011 when Acting Governor Kim Guadagno signed into law P.L. 2011, c.122 which includes an amendment to the Statewide Non-residential Development Fee Act (P.L. 2008, c.46) that suspends the collection of non-residential development fees and provides a process by which developers may claim refunds of non-residential development fees paid.

Under this law, a developer that has paid a nonresidential development fee subsequent to June 30, 2010 may claim a refund of the fee provided the fee has not been expended by the municipality on affordable housing projects and provided the provisions of Section 37 of the Statewide Nonresidential Development Fee Act, as amended, do not permit the imposition of a fee on the non-residential development.

Individuals who believe they are entitled to a refund should be directed to request the refund from the State or local entity to which the payment was made. If a non-residential development fee was paid to the municipality, the request for a refund must be submitted to the municipality. If a non-residential development fee was paid to the State, the request for a refund must be submitted to the submitted to the State. The request must be made in writing within 120 days of the law being signed and must include a copy of the receipt of payment.

Individuals who are seeking refunds from a municipality and who have questions about their eligibility for refunds should be directed to the local tax assessor.

Individuals seeking refunds from the State may submit the requests to:

Non-residential Development Fee con

continued from left

Department of Community Affairs Division of Codes and Standards Post Office Box 802 Trenton, New Jersey 08625 Attn: Non-residential Development Fee Coordinator

If you have questions about this, please feel free to contact my office at (609) 292-7899.

Sincerely,

Edward M. Smith Director Division of Codes and Standards

## **Emergency Building Inspection Program: A Timely Reminder**

In an August 2011 Alert the Office of Regulatory Affairs reminded licensed code officials:

There are current indications that a potentially large hurricane could make landfall in the State of New Jersey sometime on Saturday, August 27 or Sunday, August 28.

It is anticipated there might be a need for licensed Uniform Construction Code (UCC) Officials to ensure timely re-occupancy of buildings throughout the State.

Local UCC Enforcing Agencies should be reminded to utilize their officials to the greatest extent possible. Additionally, existing mutual aid agreements should be engaged if local resources are overwhelmed.

As stated at N.J.A.C. 5:23-4.25, if local and mutual aid resources are exhausted, the Division of Codes and Standards shall be contacted for additional resources.

If Division resources are necessary, please contact Louis Mraw or Carmine Giangeruso of the Division's Office of Regulatory Affairs, at 609-984-7768 or 609-610-2937.

A Flooding Hazards instructional pamphlet prepared

by the Department may be found at: <u>http://www.nj.gov/dca/divisions/codes/alerts/pdfs/flood.</u> pdf.

Please use this as a resource throughout your community.

See Non-residential Development Fee -at right

## The Flood Hit! Now What?

In an article originally published in Summer 2007 but posted at the Division's website in Summer 2011 again as a reminder, the Division advised:

When flooding causes damage throughout your community, as a local Uniform Construction Code (UCC) enforcement agency, you may be called on to assist in the process of returning building occupants safely back into their homes or businesses. UCC enforcement agencies should provide property owners with the necessary support to evaluate conditions in identified damaged buildings. Depending on the extent of damage to the building, examples of tasks that your agency might be asked to complete are:

- Assessment by building inspectors of damage to foundation walls and inspection for signs of structural damage
- Evaluation by electrical inspectors of the damage to the property's electrical system, including the electrical service and whether reconnection can be made by the utility provider
- Evaluation by plumbing inspectors of the condition of the property's piping and fuel service, including recommending when it is safe to turn service back on
- Evaluation by fire-protection inspectors of the status of fire-protection systems within buildings

Completing these tasks may be overwhelming to your agency, depending on the extent of flood damage in your community. The Department of Community Affairs, Division of Codes and Standards is able to provide assistance to local enforcement agencies in helping a community complete the above tasks during a disaster. A brochure, "Flooding Hazards: What You Need to Know," is available on the Department's web site at:

### http://www.nj.gov/dca/divisions/codes/alerts/pdfs/flood.pdf

Please feel free to reach out to me with questions or comments. I can be reached at (609) 292-7898 or cgiangeruso@dca.state.nj.us.

Source: Carmine Giangeruso Division of Codes and Standards Construction Official/Emergency Coordinator



## **Flood Permits Surcharge Fee**

In a letter dated August 29, 2011, Director Smith wrote:

Dear Construction Official:

As you deal with inspections in the wake of Hurricane Irene, please be reminded that the municipality may waive fees for permits for work done as a result of this event. Pursuant to N.J.A.C. 5:23-4.19(b)5., if the municipality is waiving its fees, then the State permit surcharge fee is also waived.

Should you have any questions, please feel free to contact the Office of Regulatory Affairs at (609) 984-7672.

Sincerely,

Edward M. Smith Director Division of Codes and Standards



# Attention New Jersey Licensed Code Officials

In an August 25, 2011 Alert the Division of Code and Standards advised:

There are current indications that a potentially large hurricane could make landfall in the State of New Jersey sometime on Saturday, August 27 or Sunday, August 28.

It is anticipated there might be a need for licensed Uniform Construction Code (UCC) Officials to ensure timely re-occupancy of buildings throughout the State.

Local UCC Enforcing Agencies should be reminded to utilize their officials to the greatest extent possible. Additionally, existing mutual aid agreements should be engaged if local resources are overwhelmed.

As stated at N.J.A.C. 5:23-4.25, if local and mutual aid resources are exhausted, the Division of Codes and Standards shall be contacted for additional resources.

See Attention Licensed Officials -page 7

Attention Licensed Officials

continued from page 6

If Division resources are necessary, please contact Louis Mraw or Carmine Giangeruso of the Division's Office of Regulatory Affairs, at 609-984-7768 or 609-610-2937.

A Flooding Hazards instructional pamphlet prepared by the Department may be found at:

http://www.nj.gov/dca/divisions/codes/alerts/pdfs/flood.pdf

Please use this as a resource throughout your community.



## Annual Pool Bonding and Grounding Inspections and Backflow Preventer Testing

In a March 7, 2011 e-mail message, the Division of Codes and Standards advised:

To assist in implementing rules concerning the annual bonding and grounding inspection of swimming pools, spas and hot tubs, and also the annual testing of backflow preventers, the Division of Codes and Standards has developed *model* notices and reminders that may be used by municipal Construction Code Enforcement offices when advising property owners of expiring Certificates of Compliance and inspection and testing requirements.

Both the *model* Annual Pool/Spa/Hot Tub Inspection Notice and the *model* Annual Testing of Backflow Preventer Reminder may be found on the division's website at: <u>www.nj.gov/dca/divisions/codes/official</u>.

If you have any questions concerning the model notice or model reminder, or the inspection, testing and certificate requirements, please telephone the division's Code Assistance unit at (609) 984-7609.

## Hurricane Irene-related Requests for Emergency Assistance Must Go Through County Emergency Management Coordinator

In a letter dated August 26, 2011, Director Smith wrote:

Dear Code Officials:

Yesterday, Governor Christie issued Executive Order 73 declaring a state of emergency in preparation for the arrival of Hurricane Irene. As part of this Executive Order, the Governor has directed that any movement of "public works, fire, police, emergency medical or other personnel or equipment into any noncontiguous disaster-stricken municipality" must be directed through the county emergency management coordinator. In compliance with this Executive Order, any and all requests for assistance, whether made under the Emergency Building Inspection Program (NJAC 5:23-4.25) or not, must go through the county emergency management coordinator. The county emergency management coordinators will be working under the direction of the State Director of Emergency Management. The contact information that the Department has collected under NJAC 5:23-4.25 will be used to identify available inspection resources for requests coming through the county emergency management coordinators.

As always, we stand ready to help one another respond to emergent situations. Funneling the requests through the county emergency management coordinators will enable us to get help where it is needed in the event that the damage is widespread.

Thank you for your anticipated cooperation.

Sincerely,

Edward M. Smith Director Division of Codes and Standards



# Announcement: NJ UCC Energy Subcode Training Opportunities

## In a January 2011 Alert, the Division of Codes and Standards announced:

The Department of Community Affairs has received an award from the United States Department of Energy to conduct training in the newly adopted Energy Subcode of the Uniform Construction Code for construction code officials, design professionals, and builders. More than 40 training courses will be held throughout New Jersey between March and June of this year. The training will include courses on the 2009 International Energy Conservation Code (IECC/2009) and on the American National Standards Institute/American Society of Heating, Refrigeration, and Air-conditioning Engineers/Illuminating Engineers Society North America (ASHRAE) 90.1-2007. The training courses will be offered for credit toward meeting continuing education requirements for construction code official licensing. Each course will offer duplicate credit in the building and electrical technical areas.

There will be a priority registration for licensed construction code officials beginning on January 18, 2011. Design professionals and builders may register for the training courses beginning on February 16, 2011.

The training courses are free for all registered participants. In addition, the IECC/2009 and ASHRAE 90.1-2007 will be provided in a single volume free of charge to those who participate in the training. See below for schedule of training. (Please note that a conference fee applies to anyone who registers for the April 28<sup>th</sup> and/or April 29<sup>th</sup> training courses which are being offered as part of the Building Safety Conference.)

Construction code officials, design professionals, and builders may register for the courses by contacting the Education Unit in the Division of Codes and Standards of the Department of Community Affairs at (609) 984-7820 or by e-mailing the Unit at <u>educationunit@dca.state.nj.us</u>. When calling or emailing to register, please be sure to provide your construction code license number (if applicable), the appropriate course code noted below, and the date(s) of the training that you would like to attend. A confirmation of registration will be provided approximately two weeks prior to the training.

## **Schedule of Training**

## <u>IECC/2009</u>

<u>Course Code</u>	D146	(B565/E159)	
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Date March 22, 2011 March 24, 2011 March 29, 2011 March 31, 2011 April 5, 2011

## Location Holiday Inn – Hasbrouck Heights Holiday Inn – Clinton Birchfield Fire Department Headquarters – Mt. Laurel Rutgers Center for Government Services – New Brunswick Quality Inn – Toms River

Energy Code Training continued from page 8

April 7, 2011 April 14, 2011 April 28, 2011 May 4, 2011 May 6, 2011 May 10, 2011 May 12, 2011 May 18, 2011 May 18, 2011 June 1, June 2 & June 3, 2011 June 7 & June 8, 2011 June 14, June 15 & June 16, 2011 June 21, June 22, June 23 & June 24, 2011

ASHRAE 90.1-2007 Course Code D147 (B566/E160) Ramada Inn – East Hanover Northeast Spa & Pool Association – Hamilton (Mercer County) Building Safety Conference – Taj Mahal – Atlantic City Hampton Inn – Woodbridge Rutgers EcoComplex – Bordentown (Columbus) Convention Center – Wildwood The Inn at Lambertville Station – Lambertville Ramada Inn – Vineland Wilshire Grand Hotel – West Orange Rutgers Center for Government Services – New Brunswick Holiday Inn – Cherry Hill Atlantic Cape Community College – Atlantic City Quality Inn – Toms River

### Date

March 23, 2011 March 25, 2011 March 30, 2011 April 1, 2011 April 6, 2011 April 8, 2011 April 15, 2011 April 29, 2011 May 5, 2011 May 11, 2011 May 13, 2011 May 17, 2011

## Location

Holiday Inn – Hasbrouck Heights Holiday Inn – Clinton Birchfield Fire Department Headquarters – Mt. Laurel Rutgers Center for Government Services – New Brunswick Quality Inn – Toms River Ramada Inn – East Hanover Northeast Spa & Pool Association – Hamilton (Mercer County) Building Safety Conference – Taj Mahal – Atlantic City Hampton Inn – Woodbridge Convention Center – Wildwood The Inn at Lambertville Station – Lambertville Ramada Inn – Vineland

Edward M. Smith Director Division of Codes and Standards

## League of Municipalities' <u>New Jersey Municipalities</u> Magazine Article: When Time is Money, Communicate Via E-mail

In a March 15, 2011 e-mail message, the Division of Codes and Standards announced:

Below please find a link to an article on the use of electronic communications for code enforcement which appeared in the March issue of <u>New Jersey Municipalities</u>, the magazine published by the New Jersey League of Municipalities.

http://www.njslom.org/magazine/2011-03/pg-26.html

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

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