

Construction Code Communicator



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 Chris Christie, Governor
 Kim Guadagno, Lt. Governor

Department of Community Affairs
 Lori Grifa, Commissioner

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A Fond Farewell to Director Cynthia A. Wilk

Cynthia A. Wilk, Director of the Division of Codes and Standards, recently retired from State government after 36 years of service. Over the course of her career, Cindy has had a hand in virtually every major initiative undertaken by the Division. She has also served as President of the National Conference of States on Building Codes and Standards, Chair of the Board of Visitors of the National Fire Academy and as a member of the panel issuing the report *America at Risk*, a reexamination of the issues raised in the *America Burning* report. Her tenure as director has been marked by her willingness to listen with an open mind and by her strong support for local code enforcement. We all join in wishing Cindy a long, happy and healthy retirement.

She will be missed!

Source: Division Staff

Welcome, Director Edward M. Smith

Edward M. Smith has been appointed Director of the Division of Codes and Standards by Commissioner Lori Grifa. While new to government, Ed is not new to construction. He brings to the job 28 years of experience in construction management. A proponent of team-based initiatives, Mr. Smith is looking forward to working with the code enforcement community. Upon accepting this position, Ed said, "I am honored that the Commissioner has placed her confidence in me. I look forward to working with all of the individuals and organizations involved in code enforcement to ensure that we continue to serve the public well during these challenging times."

Welcome aboard, Ed!

Source: Director's Staff

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Energy Subcode Compliance with the 2009 IECC and 2007 ASHRAE 90.1

On September 7, 2010, the 2009 International Energy Conservation Code (IECC) and the 2007 American Society of Heating, Refrigeration, Air-conditioning Engineers (ASHRAE) Standard 90.1 were adopted as the Energy Subcode, N.J.A.C. 5:23-3.18. What does this mean for demonstrating compliance with the newly adopted codes? Actually, not much has changed; the compliance options remain pretty much the same as those of the past codes.

Per N.J.A.C. 5:23-2.15(f)1vi, the Uniform Construction Code (UCC) requires applicants to demonstrate compliance with the Energy Subcode as part of the permit application process for a newly constructed building or an addition. (Buildings that are not heated or cooled do not have to meet the Energy Subcode and rehabilitated buildings have their own requirements per N.J.A.C. 5:23-6.) Compliance methods vary depending on climate zone and building type. The Energy Subcode separates the State into two climate zones as follows:

Zone 4 – Atlantic, Burlington, Camden, Cape May, Cumberland, Essex, Gloucester, Hudson, Middlesex, Monmouth, Ocean, Salem and Union counties;

Zone 5 – Bergen, Hunterdon, Mercer, Morris, Passaic, Somerset, Sussex and Warren counties.

Also, the Energy Subcode divides buildings into two categories: low-rise residential and commercial (which includes all buildings that are not low-rise residential).

PERMIT APPLICATION/PLAN REVIEW

The following is a description of the alternatives for documenting energy subcode compliance at the time of permit application.

Low-rise residential buildings are defined as one- and two-family dwellings or multiple-family buildings that are three stories or less in height. Compliance with the Energy Subcode and the International Energy Conservation Code (IECC)/2009 for these buildings must be demonstrated in one of four ways:

1. COMPLIANCE WITH CALCULATIONS: This has been the traditional way that compliance with energy codes has been shown. It involves calculating the “U” value (thermal transmittance) of the various building components (walls, floors, roofs, etc.) and showing that they are less than the code-specified maximum for the components. Guidance on how to perform the calculations can be found in the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. (ASHRAE) Handbook of Fundamentals.

2. COMPLIANCE WITH RESCHECK SOFTWARE: The software program performs the calculations based on

input about the shape and size of the building, the type of insulation and windows and the type of equipment that the applicant proposes to use. The software is available as a free download from the web site: <http://www.energycodes.gov>. The IECC/2009 version of the software should be used and can be selected under “Code” in the menu bar at top. The software simply requires the input of the areas of the various components, the R value of insulation, and the U value of windows and doors. The software automatically gives tradeoffs. A compliance report is generated by the software program, which can be submitted with the permit application. It must meet or exceed the IECC/2009 (i.e. passes) based on the applicable climate zone location.

3. COMPLIANCE WITH NJ ENERGY STAR HOMES:

This program is sponsored by the New Jersey Board of Public Utilities through its Clean Energy Program (<http://www.njenergystarhomes.com>). The program provides incentives for projects that exceed the Energy Subcode. A letter of enrollment (typically the “builder’s acknowledgement” letter) from the local utility company (or its consultant) should be submitted with the permit application when the applicant is using this compliance option. Inspections for this program are handled by the utility company or its consultant, except that IECC/2009. Section 403, entitled “Systems,” must be verified by the local construction office. The application for a new home’s Certificate of Occupancy should include the Home Energy Rating Scale certificate or equivalent (i.e., passing final inspection report).

NOTE: Homes built and certified to federal (Department of Energy/Environmental Protection Agency—DOE/EPA) Energy Star standards and verified by a certified rater would also be in compliance. Acknowledgement of program participation must be submitted at the time of the permit application and a Home Energy rating certificate or equivalent must be submitted to the local construction official at the time of application for a certificate of occupancy.

4. COMPLIANCE WITH PRESCRIPTIVE PACKAGE:

Previous adoptions of the energy subcode allowed the use of a prescriptive package based on climate zone location and window-to wall ratios. However, the days of many options are gone. The following are the applicable portions of Table 402.1.1 of the IECC/2009 that can be applied as a prescriptive package. With this option, the applicant

Energy Subcode Compliance

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need only identify he/she is using the prescriptive package and show the corresponding details on the plans. If a proposed building has window percentages and U values (a measure of the windows' efficiency) that are equal to or lower than the values found on the line in the appropriate chart, and R values and equipment efficiencies that are equal to or higher than those listed in the chart, the building complies.

INSULATION & FENESTRATION REQUIREMENTS BY COMPONENT ^a										
Climate Zone	Fenestration U-Factor ^b	Skylight U-Factor ^b	Glazed Fenestration SHGC ^b	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value ⁱ	Floor R-Value	Basement Wall R-Value ^c	Slab R-Value ^d & Depth	Crawl Space Wall R-Value ^c
4	0.35	0.6	NR	38	13	5/10	19	10/13	10, 2 ft	10/13
5	0.35	0.6	NR	38	20 or 13+5 ^h	13/17	30 ^g	10/13	10, 2 ft	10/13
a. R-values are minimums. U-factors and SHGC are maximums. R-19 batts compressed into a nominal 2 x 6 framing cavity such that the R-value is reduced by R-1 or more shall be marked with the compressed batt R-value in addition to the full thickness R-value.										
b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.										
c. "10/13" means R-10 continuous insulated sheathing on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.										
d. R-5 shall be added to the required slab edge R-values for heated slabs.										
g. Or insulation sufficient to fill the framing cavity, R-19 minimum.										
h. "13+5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, insulated sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25 percent of exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.										
i. The second R-value applies when more than half the insulation is on the interior of the mass wall.										

Keep in mind, this Table 402.1.1 is for typical wood-framed construction. Steel-framed construction equivalents can be found in Table 402.2.5 of the 2009 IECC.

Regardless of the compliance method chosen, the documentation must be signed and sealed by a design professional for all buildings. The documentation may be signed by the mechanical contractor for Class 3 buildings, as defined at N.J.A.C. 5:23-4.3A(d). A single-family detached homeowner who resides or intends to reside in the home may sign the energy code compliance documentation.

Commercial buildings are defined as all buildings other than low-rise residential buildings. These must demonstrate compliance in one of two ways (compliance is in accordance with the Energy Subcode and ASHRAE Standard 90.1-2007):

1. COMPLIANCE WITH CALCULATIONS: This is very much like the calculations for low-rise residential buildings mentioned above. However, the applicant must also provide information on the type of lighting installed and its usage.

2. COMPLIANCE WITH COMCHECK SOFTWARE: This is very much like the REScheck software mentioned above. However, the applicant must include the type of lighting installed and its usage. The software is available as a free download from the web site: <http://www.energycodes.gov>. The ASHRAE Standard 90.1-2007 software should be used and can be selected under "Code" in the menu bar at top. A compliance report is generated by the software program, which can be submitted with the permit application. It must meet or exceed the ASHRAE 90.1-2007 (i.e. passes) based on the applicable climate zone location.

Regardless of the compliance method chosen, the documentation must be signed and sealed by a design professional for all buildings. The documentation may be signed by the mechanical contractor for Class 3 buildings, as defined at N.J.A.C. 5:23-4.3A(d).

Energy Subcode Compliance

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INSPECTION (Low-Rise Residential)

The requirement to verify that the insulation specified on the plans is the insulation installed is not new. The IECC/2009 does include new requirements for verifying the sealing (air tightness) of the building thermal envelope through either a visual inspection or a blower door test. The IECC/2009 also includes a requirement to verify duct tightness through an air leakage test. This requirement does not take effect until January 1, 2013.

Insulation -- With the exception of those homes that are enrolled in the NJ Energy Star Homes Program (where compliance is verified by a third party), inspectors should verify that the insulation levels installed in all buildings match the insulation levels used in the calculations, found in the REScheck or COMcheck printout, or shown in the Prescriptive Package table, as applicable. Other Energy Subcode requirements, such as piping and ductwork insulation, are still applicable in all cases. More specifically, when ductwork is installed within a low-rise residential building, supply ducts in attics are to be insulated to a minimum of R-8 when outside the building thermal envelope and all other ducts are to be insulated to a minimum of R-6 when outside the building thermal envelope.

Sealing -- Previous editions of the Energy Subcode were not specific about the requirements for the sealing of the building thermal envelope and ductwork. With the adoption of the 2009 IECC, new sealing requirements have been added, and to differentiate from the past editions of the energy subcode, the word "tightness" is used along with sealing.

See Energy Subcode Compliance-continued at right

Drinking Water Facilities –  Plumbing Subcode Requirements

I have received several questions about the provisions of the National Standard Plumbing Code (NSPC), which, in Table 7.21.1, requires that "drinking water facilities" be provided in most use group occupancies. The question is what type of drinking water facility meets the plumbing code requirement?

There are many different types of water dispensing fixtures and appliances that meet the plumbing subcode. The following are examples of approved types: drinking fountains, water coolers, and bottled water cooler dispensers. In NSPC/2009, Section 7.21.5(b), drinking water facilities for employees, a kitchen, or bar sink shall be considered a meeting this requirement.

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

Source: Thomas C. Pitcherello Code Assistance Unit

Energy Subcode Compliance

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- Building Thermal Envelope tightness – The permit holder has two options for verifying building thermal envelope tightness: (1) testing per Section 402.4.2.1 or (2) visual inspection per Section 402.4.2.2. If the permit holder chooses testing, the results of the blower door test should be obtained and become part of the permit file. If visual inspection was selected, the building thermal envelope tightness should be verified utilizing Table 402.4.2. A checklist for this purpose will be included as part of the bulletin on this issue. Documentation of this inspection should be maintained in the permit file.
- Duct tightness – **Beginning on January 1, 2013**, duct tightness will be required to be verified through a leakage test unless the air handler and all ducts are located within conditioned space. The permit holder should verify duct tightness through testing either at 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 qualifications for passing are less stringent than a rough-in test. The benefit to a rough-in test is that the ductwork should be much more accessible to fix if it does not pass. The requirements for passing can be found at Section 403.2.2. Again, a copy of the test results should become part of the permit file.

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

Source: Rob Austin Code Assistance Unit

Are Tenant Separations Required? 

There seems to be confusion as to whether occupancies of the same Group need to be separated by a fire-separation assembly. The short answer is no, not since the Building Officials and Code Administrators (BOCA) National Building Code/1996 was superseded by the International Building Code/2000.

The following is the "separation" language from the International Building Code (IBC), 2000, 2006 and 2009 editions:

* Section 302.3.1 of the IBC/2000 -- Where a building is occupied by two or more uses not included in the same occupancy classification, the building or portion thereof shall comply with Section 302.3.1 or 302.3.2 or a combination of these sections.

See Tenant Separations- page 6

NSPC/2009: Update

On September 7, 2010, the 2009 national model codes were adopted with a six-month grace period, which is in effect until March 7, 2010. The following list presents some of the changes from the 2006 to the 2009 National Standard Plumbing Code (NSPC); this list is not an all-inclusive.

Chapter 2 - General Regulations

1. Section 2.16-- Freezing or Overheating - Item 5. – This item was expanded to describe areas of the building where piping needs protection from freezing.
2. Section 2.25-- Food Handling Establishments and Food Handling Areas Within Buildings - This section was totally rewritten and expanded with more details.
3. Section 2.26--Elevator Sump Pits – New section.

Chapter 3 - Materials

1. Section 3.1.2 General Requirements – e. and f. have been added; they contain the requirements for markings and certification of cast iron piping.
2. Section 3.1.3 – Standards Applicable to Plumbing materials-UCC Referenced Standard Associated Pool and Spa Professionals (APSP) 7, Entrapment avoidance for swimming pools, spas and hot tubs, was added.
3. Section 3.3.9-- Roof Drains – Plastic was added as an approved material.
4. Tables 3.1.3, 3.4, 3.5 and 3.6 – Referenced standards were updated.

Chapter 4 - Joints and Connections

1. Section 4.2.17 Split Couplings – Rolled grooves are permitted for galvanized joints.
2. Section 4.3.7 Copper Tube to Threaded Pipe Joints – Exception was added that would prohibit dielectric unions on water heater connection unless permitted by the manufacturer.
3. Section 4.3.9.e. Plastic DWV Pipe to Other Materials, – This subsection now states that transition cement shall not be permitted to be used within buildings.

Chapter 5 – Traps, Cleanouts and Backwater Valves

1. Section 5.3.2 Trap Seals – Exception (1) was revised. If the interceptor does not provide a trap seal a separate trap must be provided.

Chapter 6 – Liquid Waste Treatment Equipment

1. Section 6.2 Grease Interceptors – Totally revised. Expanded lists of approved types of grease interceptors.

Chapter 7 – Plumbing Fixtures, Fixture Fittings and Plumbing Appliances

1. Section 7.5.1 Urinals – Expanded list of compliant urinals.

2. Section 7.10.6 Shower Floors and Shower Pan Liners – Totally revised. Details more types of permitted shower pan liners.
3. Section 7.23 Safety Features for Spas and Hot Tubs was deleted and reference to ANSI/APSP 7 was added.
4. Section 7.24 Plumbed Emergency Eyewash and Shower Equipment – This section has been expanded and water discharge temperatures have been added.
5. Table 7.21.1 Minimum Number of Required Plumbing Fixtures – “Use Group” column was deleted.

Chapter 10 – Water Supply and Distribution

1. Section 10.2 Identification of Potable and Non-Potable Water – Color coding for piping has been added.
2. Section 10.5.9 Protection from Fire Systems – Totally revised. Types of backflow preventers added for residential and limited area sprinkler systems.
3. Section 10.12.4, 10.12.5 & 10.12.6 – These sections were revised to better indicate where required valves are to be located.
4. Section 10.14.6.d. Excessive Pressures – A new paragraph, Gauge port or pressure gauge, has been added.
5. Section 10.15.6.a. Mixed Water Temperature Control – General revisions. Exception: Water temperature, has been changed from 120 deg. to 105 deg.
6. Section 10.15.8.e. Plastic Piping--The requirement for a pressure relief valve on plastic piping has been changed.
7. Section 10.15.9.1 Where Required – General revisions. “Tank-type” has been added to “water heater.”
8. Section 10.17.5 Combined Distribution Systems – New section added that permits the use of manifold-type parallel water distribution systems to be combined with conventional main/branch piping systems.
9. Section 10.20 Multi-purpose fire sprinkler system – A new section has been added to cross reference Section P2904 of the International Residential Code/2009 as a part of the plumbing subcode.

Chapter 11 – Sanitary Drainage Systems

1. Table 11.4.1 Drainage Fixture Unit (DFU) Values - Shower stall – 1-1/2-inch trap added.
2. Table 11.5.1A Building Drains and Sewers – Drainage fixture unit value added for 3-inch pipe at 1/8-inch per foot slope.
3. Section 11.7.6 Grinder Pump Ejector – a. “Authority Having Jurisdiction” has been removed.

NSPC/2009 Update

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- 4. Section 11.7.11 High Water Alarms – Exception: Macerating toilet systems was added.

Chapter 12 - Vents and Venting

- 1. Section 12.10.5 Reserved – Waste stacks in dwelling units was deleted.
- 2. Section 12.10.6 Floor Drains and Floor Sinks – New section for wet venting floor drains and floor sinks.
- 3. Section 12.19 Waste Stack Venting – New section added.

Chapter 15 – Tests and Maintenance

- 1. Section 15.4.1.a – Rough Plumbing—The use of an air test on plastic piping is prohibited.

These are just a few of the changes. There are many more. Please review the NSPC/2009 for all the changes.

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

Source: Thomas C. Pitcherello
Code Assistance Unit

Residential Swimming Pools and the Plumbing Subcode: UPDATE No. 2

The Fall, 2009, Volume 21, Number 2 edition of the *Construction Code Communicator*, contained my article on “Residential Swimming Pools and the Plumbing Subcode: UPDATE.” That article stated that when a residential swimming pool has two main submerged suction (bottom drains), they must be three feet apart and must also have some type of atmospheric safety vacuum release system (SVRS) provided at the pump or pumps to protect against suction entrapment.

The National Standard Plumbing Code/2006 required a SVRS unless there were no submerged suction outlets (bottom drains) in the pool. There is a change in the NSPC/2009, which adopts the “American National Standard for Suction Entrapment in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Catch Basins,” for suction entrapment. The “American National Standard for Suction Entrapment in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Catch Basins” is published by the ANSI/APSP-7-2006 and is adopted as part of the NSPC/2009 by reference.

See *Residential Swimming Pools* -continued at right

Tenant Separations

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* Section 508.1 of the IBC/2006 -- Where a building or portion thereof contains two or more occupancies or uses, the building or portion thereof shall comply with the applicable provisions of this section.

* Section 508.1 of the IBC/2009 -- Where a building contains more than one occupancy group, the building or portion thereof shall comply with the applicable provisions of Section 508.2, 508.3 or 508.4, or a combination of these sections.

As you can see, although the section number has changed and the words have been tweaked, the intent is still the same. An example might help. For a row of office suites (Group B) in one structure (no lot lines in-between), the walls between tenants do not have to have a fire-resistance rating. However, if one of the Group B tenants were to be changed to something other than Group B, a restaurant (Group A-2), for example, the walls between the Group B and the Group A-2 would then have to comply with the provisions for a mixed-use building.

Please keep in mind that the building subcode does contain "Special Occupancies" in Chapter 4 of the IBC/2009 and Special Provisions in Section 509 of the IBC/2009, which override Section 508.1 with regard to separation. For example, enclosed mall buildings require tenant separations and multiple family dwellings also require dwelling unit separation regardless of other code requirements.

Therefore, excluding the provisions from the Special Occupancies in Chapter 4 or the Special Provisions of Section 509, the same occupancies (groups) within the same structure do not require fire resistant tenant separations.

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

Source: Rob Austin
Code Assistance Unit

Residential Swimming Pools

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A summary of the change in the requirements follows:
ANSI/APSP-7 2006 does not require a SVRS if a swimming pool has two bottom main drains spaced at least three (3) feet apart that are properly piped. If only one bottom main drain or a single submerges side wall outlet drain is installed, then a SVRS is required.

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

Source: Thomas C. Pitcherello
Code Assistance Unit

Census Item Numbers

As construction officials and technical assistants, you know you must report information on monthly permit and certificate activity to the New Jersey Department of Community Affairs. You also have an obligation to report residential building permit data to the U.S. Bureau of the Census. For most of you, these requirements occur behind the scenes. The computer software takes care of these obligations. Still, you need to know about what it is the U.S. Census Bureau is looking for. Below is a cheat sheet. It might be helpful to keep it next to the computers used to record building permits.

IF	AND	AND	THEN
Group	Permit Type	Number of Dwellings	Census Item Number Is:
R-3	New	1	101
R-4	New	1	101
R-5	New	1	101
R-3	New	2 (duplex)	103
R-4	New	2 (duplex)	103
R-2	New	0 (college dormitory)	999
R-2	New	3 or 4	104
R-2	New	5 or more units	105
I-2 (assisted living)	New	5 or more units	105*
Residential	Alteration or additions		434
All other groups	New, Addition, or Alteration, Demolition,	Does not matter, but record dwellings in mixed-use buildings	999 (off item to the Census Bureau)
* Note: If the assisted living facility has both nursing homes and apartments, count only the apartments as dwelling units.			

Census item numbers classify construction based on three-digit numbers. The federal government wants to know about new home construction. They focus on building permits for residential uses. Their main concern is the number of new houses authorized by building permits, and their estimated cost.

The most common item number is a 101. It is used for all new, residential building permits issued to build one and only one new dwelling. If you issue a building permit for a new house, the correct item number is 101.

Census item number 102 is no longer used. It referred to a building permit issued for new, residential construction, where one dwelling unit is reported on the building permit and this unit is attached to one or more dwellings. A 102 was for building permits issued to build a single-family attached house. An example would be a row house or town home. Today, if you issue a permit for a new house attached to another, call it a 101, unless, of course, it is not really independent from the other dwellings. These attached units are covered by the other item numbers, which are discussed next.

A 103 item number denotes a building permit issued to build a duplex. If you use a 103 as the item number, the U.S. Census expects to see two dwelling units gained.

A 104 is a residential building that has three or four dwellings. A 105 is a building with five or more dwellings.

The Census Bureau only wants to know about new houses or apartments. They no longer track demolitions and are no longer interested in most nonresidential buildings. The exception is assisted living facilities (group I-2). Both the Census Bureau and the Department of Community Affairs recognize that these buildings as places where people live. The number of dwellings units in the assisted living facilities should be counted and recorded on the building permit. Keep in mind that, if the assisted living facility also has a wing for nursing home or hospital beds, only the assisted living units should be counted as dwellings. The hospital and nursing home beds are NOT counted as dwellings. In most instances, the appropriate census item number for assisted living facilities will be 105.

Census Item Numbers

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Don't misunderstand. Although the Census Bureau no longer cares about demolitions and most nonresidential construction, we at the Department of Community Affairs still do. The only item numbers you have to remember and keep close by your computer if you use construction reporting software are: 101, 103, 104, and 105. Everything else is a 999 or an "off item," as far as the Census Bureau is concerned.

If you have questions you can call the Census Bureau directly at the toll free number: 1-800-845-8244. You also can call or e-mail me with questions I may be reached at jlago@dca.state.nj.us or at (609) 292-7898.

Source: John Lago
Division of Codes and Standards

New Requirements for Smoke Alarms and Low-voltage Smoke Detection Systems

This article is being written to make sure everyone is aware of a new positive addition to the requirement for smoke alarms in the New Jersey International Residential Code (IRC)/2009. Section R314.2, Smoke detection systems, now allows household fire alarm systems to be installed as the primary fire detection system. The IRC now provides homeowners the choice of either installing line voltage hardwired smoke alarms or a low voltage household fire alarm system. The low voltage household fire alarm system must be installed in accordance with the requirements of Sections R314.2, Smoke detection systems, and R314.4. Power source. Below is the new code text that allows the installation of the household fire alarm systems in accordance with the IRC/2009 and National Fire Protection Association (NFPA) 72/2007.

"R314.2 Smoke detection systems. Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notification device installed as required by this section for smoke alarms, shall be permitted. The household fire alarm system shall provide the same level of smoke detection and alarm as required by this section for smoke alarms. Where a household fire warning system is installed using a combination of smoke detector and audible notification device(s), it shall become a permanent fixture of the occupancy and owned by the homeowner. The system shall be monitored by an approved supervising station and be maintained in accordance with NFPA 72.

Exception: Where smoke alarms are provided meeting the requirements of Section R314.4."

See Smoke Alarms -continued at right

Smoke Alarms

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"R314.4 Power source. Smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke alarms shall be interconnected."

The code change is very similar to Bulletin 08-1 in that it requires monitoring and servicing of the fire alarm system after installation. The new code section goes one step further and requires that the low voltage household fire alarm system be a permanent fixture owned by the homeowner.

So, as of September 7, 2010 when New Jersey adopted the IRC/2009, homeowners are allowed to install low voltage household fire alarm systems as long as they own the system, have it monitored by an approved supervising station, and have it maintained in accordance with NFPA 72. Therefore, a variation is no longer required for the installation of a low voltage household fire alarm system installed in accordance with IRC and NFPA-72.

The Department will be withdrawing Bulletin 08-1 when the 6 month grace period expires for the IRC/2009.

Source: Michael E. Whalen
Code Assistance Unit

Introducing the New and Improved Codes and Standards Internet Website

As many of you may have noticed by now, the Division of Codes and Standards has a new website. Its address is: www.nj.gov/dca/divisions/codes/.

We have carefully reorganized the information appearing at the Division's Internet website in a manner that we believe is now easier to navigate, and will more readily enable our website visitors to find whatever it is they need. If you look closely, you will also see that a standard of presentation has been employed as well.

Every page is structured to present the same blue navigation (or menu) list on the left; its purpose is to guide visitors through the website. The white space in the center of each page presents the bulk of the information on that page's subject. Depending on the page, there may also be a right-hand column defined, which may contain one, some, or all of these three components: 1) a teal-colored right-hand navigation that provides a "fast path" to the sub-pages of the

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subject as categorized, 2) a blue "related links" box, and 3) a green "more information" box. Note the "breadcrumbs" that appear at the top of each page will always track your location and "the way back."

Major categories of information appearing on the left-hand menu include: "About the Director," "Bureaus, Offices & Programs," "Codes & Regulations," "Code Official Information," "Advisory Boards," "Alerts & Issues," "Publications," the "Construction Reporter," "Forms," "Additional Resources," "Topics A-Z," and "Contact Us;" simply mouse-click on your topic of interest.

Some of the categories are self-explanatory; for example, the category, "About the Director" provides a brief description of the division director.

The category, "Bureaus, Offices & Programs" provides the name, mailing address, telephone and fax numbers, and sometimes an e-mail address, along with a brief description of each, for the eight bureaus and offices that make up the Division of Codes and Standards. This page also provides the hyperlinks to bureau and offices subpages from which you may access detailed information on the Division's various programs.

The category "Codes & Regulations" provides information on currently adopted codes, previously adopted codes, the grace period, current administrative rules and regulations, and rule proposals and adoptions.

The category, "Code Official Information" provides information for and about the licensed code official community.

The category, "Advisory Boards" provides information about the Division's various advisory boards, their meeting schedules, agendas and meeting minutes, as available.

The category "Alerts & Issues" presents a listing (with hyperlinks) of current as well as past advisory/instructional letters, usually (but not always) issued by the division director, typically to the codes community.

The category, "Publications" provides the listing (with hyperlinks) of all of Codes and Standards' publications; the "Construction Reporter" publication has its own page.

The category, "Forms" provides a listing of all of the Division's various forms, organized by program area and including hyperlinks, where the form may be downloaded from, or completed over, the Internet.

The category, "Additional Resources" provides a listing (with hyperlinks) of additional resources organized by program; please note, this page is still under construction.

See New Website -continued at right

New Website*continued from left*

When you are looking for something at the Codes and Standards website, but are unsure of where to find it, click on the category, "Topics A-Z"

The category, "Contact Us" is self-explanatory.

If you have bookmarked our old website or *any* of the subpages found there, *please* remember to update those bookmarks to the new site. If after considering the website structure improvements explained above, you *still* have trouble finding something, by all means please telephone us at (609) 292-7899; ask for the Codes and Standards website editor.

Source: Berit Osworth
Division of Codes and Standards

Information about Available Training for Lead Safe Work Practices

Since September 15, 2000 the United States Department of Housing and Urban Development (HUD) has required all individuals performing work on "target housing" to be trained in lead-safe work practices (24 CFR 35, Lead Safe Housing Rule). In the case of lead safe work practices, "target housing" means any housing containing one bedroom or more constructed prior to 1978, except housing for the elderly or persons with disabilities (unless any child who is less than six years of age resides or is expected to reside in such housing). This was followed by the State of New Jersey adopting lead-safe building maintenance requirements for multiple dwellings (N.J.A.C. 5:10), emergency shelters (N.J.A.C. 5:15) and rooming and boarding homes (N.J.A.C. 5:27) in 2005.....and finally in June of this year, the Environmental Protection Agency (EPA) fully implemented its Renovation, Repair and Painting (RRP) Rules (40 CFR 35).

Unfortunately, the requirements under each of these regulations can vary making it confusing and difficult for contractors, multiple dwelling owners and maintenance workers to ensure that their activities remain in compliance. The Division of Housing and Community Resources in the New Jersey Department of Community Affairs is offering a certificate program which will satisfy the training requirements under **ALL THREE** regulations.

Information on the **reduced cost** training courses, including how to register can be obtained at: <http://shop.njworkforce.org/>

Code officials are not required to take this training; the Division is providing this as information. If you have any questions, please feel free to contact us at 1-877-DCA-LEAD.

Source: Veronica Delessandro
Division of Housing and Community Resources

CONSTRUCTION REPORTER AUGUST 2010 HIGHLIGHTS

- The estimated cost of construction authorized by building permits in August was \$887.7 million. This is 13.3 percent more than last month.
- Residential work amounted to \$426.6 million (48.1 percent). Office, retail, and other nonresidential activity totaled \$461.1 million (51.9 percent). 560 of New Jersey's 566 municipalities reported.
- For the first time since December 2009, the number of new houses broke 1,000 units. The August tally was 1,252; this was 26.2 percent more than last month.
- Franklin Township, Somerset County had the most work, \$32 million for the month. One of the bigger developments was a \$21.4 million conversion of an existing warehouse to store financial data. Another big permit reported was for a new 70-unit, income- and age-restricted apartment building. Franklin Township ranked third among municipalities with 103 authorized dwellings in August. Only Monroe Township (Gloucester County) and Springfield Township (Union County) had more, 139 and 104, respectively.
- Glassboro in Gloucester County had \$24.4 million of work in August, ranking second among municipalities. Nearly all of this was from a single project for Rowan University. It is a mixed-use building with an estimated construction cost of \$23 million. The development will have 280 dorm rooms, as well as classroom and office space, and retail and restaurant uses.
- Paterson in Passaic County had \$24 million of construction. A new, structured parking deck for St. Joseph Hospital accounted for \$20.5 million.

Year-to-Date

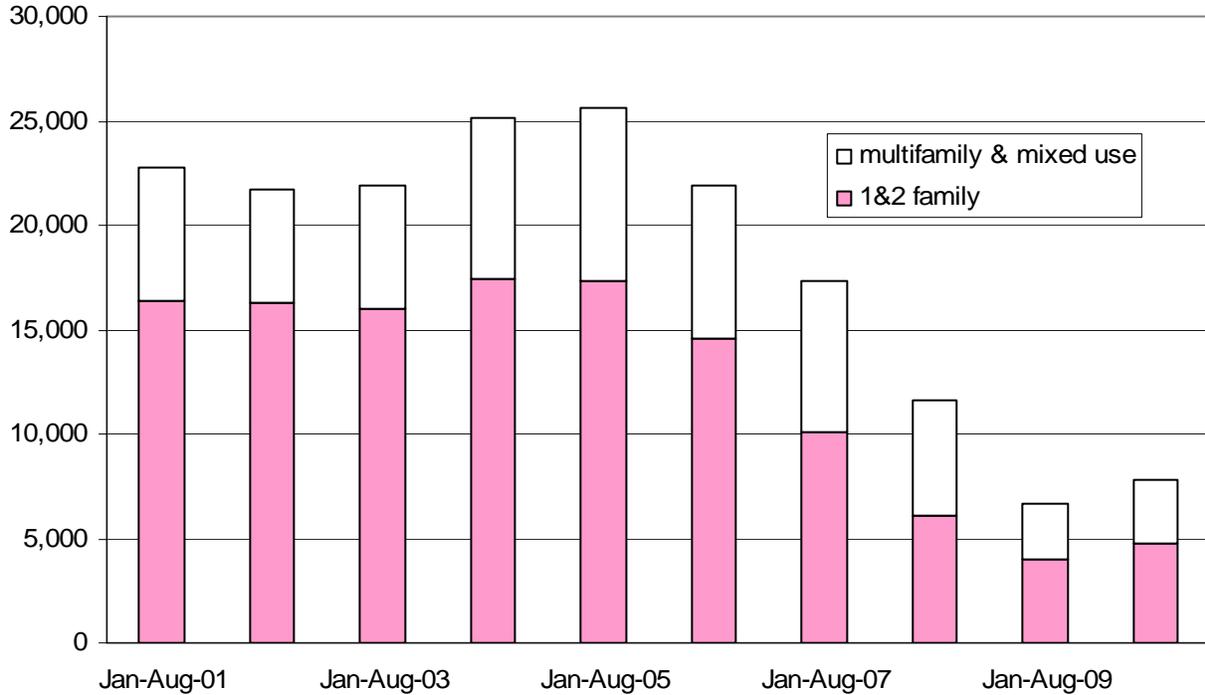
- All major indicators are up.
- The estimated cost of work reported on all building permits between January and August 2010 was \$6.4 billion. This is nearly one percentage point more than the same eight-month period last year.
- Nearly 1,200 more homes were built between January and August 2010 compared to the same period in 2009. This is a gain of 17.3 percent.
- Office construction is up by 49.6 percent, nearly 1.2 million more square feet.
- Retail work is only up by 1.3 percent compared to 2009.

Major Construction Indicators, New Jersey: Year-to-Date Trends				
Period	Estimated Cost of Construction	Authorized Housing Units	Authorized Office Space (square feet)	Authorized Retail Space (square feet)
Jan – August 2010	\$6,477,115,400	7,823	3,603,879	1,593,867
Jan – August 2009	\$6,433,888,059	6,667	2,409,405	1,573,697
Jan – August 2008	\$9,881,873,384	11,584	5,145,483	4,826,935
Jan – August 2007	\$10,024,136,462	17,371	6,137,178	2,942,040
Jan – August 2006	\$10,450,657,277	21,884	7,315,171	4,375,293
Jan – August 2005	\$9,875,901,592	25,615	7,349,034	4,920,026
Jan – August 2004	\$8,864,794,829	25,153	7,191,451	3,603,455
Difference Between 2009 and 2010 year to date				
2009 - 2010	\$43,227,341	1,156	1,194,474	20,170
Percent Change	0.7%	17.3%	49.6%	1.3%
<i>Difference Between 2008 and 2009 year to date</i>				
2008 - 2009	-\$3,447,985,325	-4,917	-2,736,078	-3,253,238
Percent Change	-53.6%	-73.8%	-113.6%	-206.7%

Source: N.J. Department of Community Affairs, 10/7/10

See Construction Reporter- page 11

Authorized Housing Units, Jan-Aug. 2001-10



Source: John Lago
Division of Codes and Standards

Ordinary Maintenance – Plumbing Fixture Replacements

The Department has been receiving questions as to who is permitted to replace plumbing fixtures in a single family dwelling under ordinary maintenance.

At N.J.A.C. 5:23-2.7(c)2x, ordinary maintenance, in the Uniform Construction Code (UCC), "Replacement of a water closet, and/or lavatory, and/or bathtub or shower unit and/or kitchen sink in a single family dwelling with an approved similar fixture provided that no change in the piping arrangement is made....." is listed as ordinary maintenance.

In addition, at N.J.A.C. 5:23-2.15(b)2i, Construction permits – application, the UCC states that "Plumbing and electrical work shall not be undertaken except by persons licensed to perform such work pursuant to law, except in case of a single family homeowner on his own dwelling."

See Ordinary Maintenance -continued at right

Ordinary Maintenance

continued from left

So, who can replace plumbing fixtures in a single family dwelling under ordinary maintenance? A homeowner in his own home or a New Jersey Licensed Master Plumber may replace plumbing fixtures in a detached single family dwelling. A person with only a Home Improvement Contractor registration is not permitted to replace plumbing fixtures under the New Jersey Master Plumbers Licensing Law.

I hope this will clear up any confusion on this issue. Should you have any questions, you may contact me at (609) 984-7609.

Source: Thomas C. Pitcherello
Code Assistance Unit

What's New in the International Building Code/2009

The following is a summary of the changes between the New Jersey edition of the International Building Code (IBC)/2006 and the New Jersey edition of the IBC/2009. This is not an all-inclusive list.

Chapter 2 - Definitions

- New term and definition for Ambulatory Health Care Facility has been added. These types of facilities are regulated as Group B occupancies.
- Definitions have been added for **PRIMARY STRUCTURAL FRAME** and **SECONDARY MEMBERS**. These definitions apply to the terms used in Table 601 and clarify which members are required to be protected.

Chapter 3, Use and Occupancy Classification

- Two exceptions have been added at Section 303.1, Assembly Group A. These exceptions make it clear that assembly areas in Group E occupancies are not separate occupancies and educational rooms in religious occupancies with an occupant load less than 100 are not separate occupancies.
- In Groups S-2 and F-2, allowable, alcohol concentration has been increased from 12 % to 16%. This will allow all wines to be manufactured and stored in F-2 and S-2 facilities.

Chapter 4, Special Detailed Requirements Based on Use and Occupancy

- At 402.6, Types of Construction (Covered Mall Buildings), the concept of "Reduced Open Space" may now be applied to Covered Mall Buildings. This concept has been allowed for all other "Unlimited Area Buildings" since the 2000 IBC and the text of 402.6.1 is consistent with 507.5.
- As a result of the Terror Resistant Building Ad Hoc Committee (which was chaired first by the Division of Codes and Standards' former Director William Connolly and then by Gary Lewis), there are several new requirements in Section 403, High Rise Buildings. They are: **403.2.3 Structural integrity of exit enclosures and elevator hoistway enclosures**, **403.2.4 Sprayed fire-resistant materials (SFRM)**, **403.3.1 Number of sprinkler risers and system design**, **403.3.2 Water supply to required fire pumps**, **403.4.4 Emergency responder radio coverage**, **403.5.1 Remoteness of exit stairway enclosures**, **403.5.2 Additional exit stairway**, **403.5.5 Luminous egress path markings**, **403.6.1 Fire service access elevator**. These new sections provide an enhanced level of safety in high rise and iconic buildings.

See New in IBC/2009 -continued at right

New in IBC/2009

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- New Section 419 has been added to address Live/Work Units which are defined as dwelling units or sleeping units in which a significant portion of the space includes a nonresidential use that is operated by the tenant.
- New Section 422, entitled "Ambulatory Health Care Facilities" has been added to address the special requirements for facilities where individuals are rendered incapable of self-preservation for periods of less than 24 hours.

Chapter 5 – General Building Heights and Areas

- Table 503 is amended to add the following note to Group I-4: "e. Child care facilities of Types IIB, III, IV or V construction shall be limited to 20 feet and 1 story." The amendment to this section reverts back to the 1996 BOCA height limitations for Child care facilities.
- Section 508, entitled "Mixed Use and Occupancy" has been rewritten. The only substantive change is the deletion of "Storage rooms in excess of 100 sf" from Table 508.2.5. The effect of this is that a storage room can be treated as either an accessory use, non-separated mixed use or a separated use as is the case with any other mixed use scenario.
- Added new row and column for Group I-2 occupancies in Table 508.4 entitled "Required Fire Separation of Occupancies," thus increasing the required fire rating of the separations in this occupancy Group.

Chapter 7 – Fire and Smoke Protection Features

- Added UL 263 as a test standard to determine fire resistance rating (in addition to ASTM E119). This change is applied throughout the text of this chapter.
- Added UL 723 as a test standard to determine flame spread index (In addition to ASTM E84). This change is applied throughout the text of the code.
- Old Section 714 has been renumbered as 704 and remains entitled "Fire-resistance rating of structural members."
- Section 704.13 has been added to include Sprayed fire-resistant material (SFRM) requirements into the body of the code. These requirements were previously contained in a standard.
- Section 707.3.9 has been amended to clarify the required fire resistance rating of fire barriers and horizontal assemblies separating a single occupancy into different fire areas.

See New in IBC/2009 -page 13

New in IBC/2009

continued from page 12

New in IBC/2009

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Chapter 9 – Fire Protection Systems

- Sprinklers are required in Group B ambulatory health care facilities when four or more care recipients are incapable of self-preservation or when one or more care recipients is incapable of self-preservation and is located at other than the level of exit discharge.
- The threshold for sprinkler protection in Group E occupancies has been lowered from 20,000 square feet to 12,000 square feet.
- In addition to the current threshold for sprinkler protection in Group M occupancies, a Group M occupancy used for the display and sale of upholstered furniture is required to be sprinklered.
- Group S-2 enclosed parking garages are required to be sprinklered when the fire area of the enclosed parking garage exceeds 12,000 square feet (1115 m²);

Chapter 10 – Means of Egress

- Egress width per occupant is now calculated by the total occupant load being served by the means of egress multiplied by 0.3 inches per occupant for stairways and by 0.2 inches per occupant for other egress components. These multipliers are the same as those in the 2006 code for an unsprinklered building.

- A New Section 1009.4.1, entitled “Dimension reference surfaces” has been added that states that all stair dimensions are exclusive of carpets, rugs or runners.
- Old Section 1019 entitled “Number of Exits and Continuity” is now Section 1021 and has been rewritten. The code previously dealt with BUILDINGS with one exit. The new section 1021 deals with STORIES with one exit. This seems subtle but makes a huge difference!
- New Section 1024.1 requires luminous egress path markings that delineate the exit path be provided in buildings of Groups A, B, E, I, M and R-1 having occupied floors located more than 75 feet above the lowest level of fire department vehicle access.
- Section 1027.1, regarding exit discharge has been amended to clarify that exits that discharge through lobbies and vestibules may not exceed 50 percent of the number and capacity of the required exits.

Source: John N. Terry
Manager, Construction Code Enforcement

NEC and the Rehab Subcode – Which Edition?



The National Electrical Code/2008 (NEC/2008) was adopted April 6, 2009. The six-month grace period for using the NEC/2005 expired October 5, 2009. This means that since October 6, 2009, a complete permit application must comply with the NEC/2008. This applies to new construction only.

Under the Uniform Construction Code (UCC) existing structures must comply with N.J.A.C. 5:23-6, the Rehabilitation Subcode. We are taking this opportunity to remind all code users that any work done in an existing building or dwelling continues to be required to comply with the NEC/2005 because NEC/2005 is referenced in the Rehabilitation Subcode, materials and methods, at N.J.A.C. 5:23- 6.8(d). If you are looking for specific proof, please see the supplement date at the bottom of page 23-140.9; it states that this page is current as of 8-6-07, when the 2005 NEC was in effect.

See NEC and Rehab –page 15

To Vent or Not to Vent?



Per the International Residential Code (IRC)/2009, enclosed attics and enclosed rafter spaces that are formed where ceilings are applied directly to the underside of roof rafters are required to have cross ventilation, including opening requirements of not less than 1/150 of the area of the space ventilated, except that reduction of the total area to 1/300 is permitted when a Class I or II vapor barrier (see Section R601.3) is installed on the warm-in-winter side of the ceiling (Note: This is one of two exceptions listed for reducing the amount of openings.) For attics with the insulation in the “floor” joists, the insulation clearance from Section R806.3 is not difficult to obtain. In an attic that is part of the thermal envelope (or a cathedral ceiling) it may be difficult to maintain the minimum 1-inch space not only between the insulation and the roof sheathing, but also at the location of the vent. Typically, the installation of additional baffles is required. However, Section R806.4, Unvented attic assemblies, contains provisions that help with this situation. Section R806.4 allows for unvented attic assemblies (spaces between the ceiling joists of the top story and the roof rafters) as long as all the following conditions are met:

See Vent or No Vent -page 14

Vent or No Vent*continued from page 13*

1. The unvented attic space is completely contained within the building thermal envelope.
2. No interior vapor retarders are installed on the ceiling side (attic floor) of the unvented attic assembly.
3. Where wood shingles or shakes are used, a minimum 1/4 inch vented air space separates the shingles or shakes and the roofing underlayment above the structural sheathing.
4. In climate zone 5, any air-impermeable insulation shall be a vapor retarder, or shall have a vapor retarder coating or covering in direct contact with the underside of the insulation.
5. Either Items 5.1, 5.2 or 5.3 shall be met, depending on the air permeability of the insulation directly under the structural roof sheathing.
 - 5.1. Air-impermeable insulation only. Insulation shall be applied in direct contact with the underside of the structural roof sheathing.
 - 5.2. Air-permeable insulation only. In addition to the air-permeable insulation installed directly below the structural sheathing, rigid board or sheet insulation shall be installed directly above the structural roof sheathing as specified in Table R806.4 for condensation control.
 - 5.3. Air-impermeable and air-permeable insulation. The air-impermeable insulation shall be applied in direct contact with the underside of the structural roof sheathing as specified in Table R806.4 for condensation control. The air-permeable insulation shall be installed directly under the air-permeable insulation.

The key to applying the insulation directly against the roof sheathing is that the insulation used is air-impermeable as defined in Chapter 2 of the IRC/2009, which states that air-impermeable insulation is "an insulation having an air permeance equal to or less than 0.02 L/s-m² at 75 Pa pressure differential tested according to ASTM E 2178 or E 283." Closed-cell and open-cell spray foam insulation typically meet this definition.

Therefore, in the case of Section R806.4, the 1-inch air space from R806.3 is no longer needed.

Note: For those still dealing with projects designed under the IRC/2006, a similar provision at the same section is provided; it is entitled "conditioned attic assemblies."

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

Source: Rob Austin
Code Assistance

Structural Integrity for High-rise Buildings - New Section in the IBC/2009

With the adoption of the 2009 International Building Code (IBC/2009), there is a new section, Section 1641, entitled "Structural Integrity," which addresses structural integrity for high-rise buildings. Buildings with an occupied floor located more than 75 feet above the lowest level of fire department vehicle access and assigned to Occupancy Category III or IV must comply with the requirements of this new section. Framed structures must comply with the requirements of Section 1614.3 and bearing wall structures must comply with the requirements of Section 1614.4.

The requirements of this section are intended to prevent progressive collapse by tying the structure together vertically and horizontally, thus providing for the transfer and/or redistribution of loads should there be a loss of support.

Occupancy Categories are defined in Table 1604.5 of IBC/2009. Occupancy Category III and IV are defined as follows, respectively:

Occupancy Category III includes buildings and other structures that represent a substantial hazard to human life in the event of failure. Such facilities include, but are not limited to, the following.

1. Building and other structures whose primary occupancy is public assembly with an occupant load greater than 300.
2. Building and other structures containing elementary school, secondary school or day care facilities with an occupant load greater than 250.
3. Buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500.
4. Group I-2 occupancies with an occupant load of 50 or more resident patients but not having surgery or emergency treatment facilities.
5. Group I-3 occupancies.
6. Any other occupancy with an occupant load greater than 5,000.
7. Power-generating stations, water treatment facilities for potable water, waste water treatment facilities and other public utility facilities not included in Occupancy Category IV.
8. Buildings and other structures not included in Occupancy Category IV containing sufficient quantities of toxic or explosive substances to be dangerous to the public if released.

See Structural Integrity -page 15

NEC and Rehab

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So what does this mean? Two big ticket items on which the Department receives many phone calls are: Arc-Fault Circuit-Interrupter (AFCI) Protection (NEC/2008, Section 210.12) and Tamper-Resistant Receptacles (TRR), (NEC/2008, Section 406.11). Obviously, for new construction, the sections in the NEC/2008 are to be followed. But, for work in existing buildings, these sections are not required because they were not part of the NEC/2005 as it was adopted as the electrical subcode.

An example might be helpful: when doing work within the original footprint of an existing home, no AFCI's or TRR's are required. However, if the work project is an addition (i.e. new construction and not finishing a basement or attic), TRR's are required **only** for the addition and AFCI's are required only **if** a new branch circuit is provided to the addition. It is important to note that existing circuits in the existing dwelling may be tapped into to feed the addition and, provided the changes comply with the materials and methods provisions of the rehabilitation subcode, no AFCI protection is required for those circuits in the addition.

Finally, per N.J.A.C. 5:23-6.2(b)2i, if a structure is demolished except for a *de minimis* amount, for example, if only the foundation remains, the replacement structure is designated as a new structure and the NEC/2008 is to be applied.

In summary, until the NEC/2008 is adopted as the materials and methods for the rehabilitation subcode (N.J.A.C. 5:23-6), the NEC/2005 remains in effect for work in existing structures.

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

Source: Rob Austin and Suzanne Borek
Code Assistance Unit

Ordinary Maintenance Does Not Mean No Rules

N.J.A.C. 5:23-2.14(a) requires that a Uniform Construction Code (UCC) permit be obtained to construct, enlarge, repair, renovate, alter, reconstruct or demolish a structure, to change the use of a building or structure, or portion thereof, to install or alter any equipment for which provision is made or the installation of which is regulated by the UCC, or to undertake a project involving lead abatement in accordance with N.J.A.C. 5:17.

Structural Integrity

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Occupancy Category IV includes buildings and structures that are designated by the local emergency management authority as essential facilities. Essential facilities include, but are not limited to, the following:

1. Group I-2 occupancies having surgery or emergency treatment facilities.
2. Fire, rescue, ambulance and police stations and emergency vehicle garages.
3. Designated earthquake, hurricane or other emergency shelters.
4. Designated emergency preparedness, communications and operations centers and other facilities required for emergency response.
5. Power-generating stations and other public utility facilities required as emergency backup facilities for Occupancy Category IV structures.
6. Structures containing highly toxic materials as defined by Section 307 where the quantity of the material exceeds the maximum allowable quantities of Table 307.1(2).
7. Aviation control towers, air traffic control centers and emergency aircraft hangars.
8. Buildings and other structures having critical national defense functions.
9. Water storage facilities and pump structures required to maintain water pressure for fire suppression.

If the building is a high-rise and is either an Occupancy Category III or IV, it must comply with Section 1614 of IBC/2009.

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

Source: Marcel Iglesias
Code Assistance Unit

List of Registered Builders

Back in the Spring 2008 edition of the *Construction Code Communicator*, we said we would no longer be mailing to local construction officials the list of revoked or suspended new home builders, but, in fact, we continued to periodically mail the printed list of revoked or suspended new home builders.

We are advising you, once again, that we will no longer mail that list to local construction officials; this time we really mean it.

As a reminder, under New Jersey law, all new home builders must be registered with the Department of Community Affairs; and, in order to obtain a permit for

Registered Builders

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the construction of a one- or two-family dwelling, condominium or cooperative. a builder's registration cannot be expired, revoked or suspended.

When presented with a new home builder registration number on a Construction Permit Application, check its validity by visiting the Division of Codes and Standards' website page specifically at:

www.nj.gov/dca/divisions/codes/publications/registered_builders.html

where you will find the current listing of ALL NJ builders. The list is sorted alphabetically by builder

See Registered Builders continued at right

Ordinary Maintenance

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A permit is not required for projects that consist of ordinary maintenance. N.J.A.C. 5:23-2.7(c) provides a list of items that are ordinary maintenance. Please keep in mind, this is not an all-inclusive list; if you are curious as to whether something is ordinary maintenance, N.J.A.C. 5:23-2.7(b) lists those items that are not considered ordinary maintenance.

It is important to recognize that, although there is no permit required for work categorized as ordinary maintenance, the project is still required to meet the UCC. This can present problems for code enforcement officials who are not authorized to go into properties in search of non-compliant ordinary maintenance projects. However, if a code official is inspecting work that did require a permit and observes non-compliant work that did not require a permit, the code official may order that the non-compliant work be made to comply. In that case, if the work that required a permit is compliant, that work should be approved; a violation notice should be issued for the non-compliant work.

Finally, even though a UCC permit is not required for work categorized as ordinary maintenance, the professional licensing laws apply. Therefore, unless a homeowner is doing the work himself, appropriately licensed professionals are required. For instance, if a homeowner is having the toilet replaced and is not doing the work himself, a licensed master plumber is required to do the work. As another example, if a homeowner decides to have his home repainted and does not do the work herself, a licensed home improvement contractor is required. Code officials do not enforce the licensing laws, but because the code enforcing agency is often the primary source of information for homeowners for their projects, it is helpful to know that the licensing laws do apply.

Source: Rob Austin
Code Assistance Unit

Registered Builders

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name; builder names beginning with numbers appear in numerical order at the beginning of the list.

The list's format is .pdf. As such, the 'Find' feature may be used to search builder name, registration number or even builder status. Please note, if a builder is not on the list, it means that builder is not currently registered with the State of New Jersey. Builders that have let their registrations lapse are no longer considered registered builders.

If, after reviewing the list, you still have questions about the status of a builder, please telephone the Bureau of Homeowner Protection's New Home Warranty Builder Registration unit at (609) 984-7910.

Source: Berit Osworth
Division of Codes and Standards

The National Standard Plumbing Code/2009 -Member Price Available



The National Standard Plumbing Code (NSPC)/2009 was adopted as the plumbing subcode on September 7, 2010. As a result of the Department's continuing efforts to negotiate with the organizations that publish the adopted national model codes to obtain discounted prices for the code books, the Plumbing, Heating, and Cooling Contractors - National Association (PHCC-NA), publishers of the NSPC, has again agreed to provide municipalities with a "member" price for both the non-illustrated and the illustrated versions of the NSPC/2009.

The NSPC/2009 must be purchased from NJPHCC. To receive the member price, the municipality must submit its request on official municipal letterhead and must include the name(s) of the inspector(s), along with a purchase order or check made payable to: NJPHCC. Each municipality is entitled to a limited number of codebooks at the member price.

Please call NJPHCC at (800) 652-7422 or fax at (609) 987-9797 for the member price, number of codes allowed, and shipping and handling charges.

Your order should be mailed to:

NJPHCC
Attention: Nicole
P.O. Box 2067
Princeton, NJ 08543

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

Source: Thomas C. Pitcherello
Code Assistance Unit

What's New in the International Residential Code/2009?

The following is a summary of changes between the New Jersey edition of the International Residential Code (IRC)/2006 and the New Jersey edition of the IRC/2009. This is not an all-inclusive list.

- Section R302 has been revised to include all of the fire-resistance rated construction requirements that have been spread throughout the code. This section now includes 302.1, Exterior walls; 302.2, Townhouses; 302.3, Two-family dwellings; 302.4, Dwelling unit rated penetrations; 302.5, Dwelling/garage opening protection; 302.6, Dwelling/garage fire separation; 302.7, Under-stair protection; 302.8, Foam plastics; 302.9, Flame spread index and smoke development index for wall and ceiling finishes; 302.10, Flame spread index and smoke development index for insulation; 302.11, Fire blocking; 302.12, Draftstopping; and 302.13, Combustible insulation clearance.
- Section R3084, entitled "Hazardous Locations," has been rewritten with regard to GLAZING. Although it might appear to be different, careful study shows that there are NO changes in the requirements; however, the section is MUCH clearer than the previous editions of the code.

See New in IRC/2009 continued at right

New in IRC/2009

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- In Sections R311, entitled "Means of Egress," and R312, entitled "Guards," all stairway, handrail and guardrail dimensions remain the same as in the past.
- In Section R313, entitled "Automatic Fire Sprinkler System," the scoping requirement for the installation of fire sprinklers has been deleted, however, the installation requirements remain in the code. Therefore, should a permit applicant choose to install an automatic fire sprinkler system, the system must be installed in accordance with NFPA 13D or Section P2904 of the IRC. Both NFPA 13D and P2904 provide requirements for a sprinkler system that is part of the water distribution system. These standards DO NOT require and independent sprinkler system.
- Section R314, entitled "Smoke Alarms," has been rewritten to clarify the requirements applicable to low-voltage smoke detection systems.
- In Section R322.2.1, entitled "Elevation requirements", a new criterion has been added which states: "Buildings and structures in flood hazard areas designated as Coastal A Zones shall have the lowest floors elevated to or above the base flood elevation plus 1 foot (305 mm), or to the design flood elevation, whichever is higher."
- New Section R402.3.1, entitled "Precast concrete foundation materials," has been added to address this new technology. These types of foundation wall have been the subject of several Evaluation Reports. The requirements are now codified.
- In Section R408.2, entitled "Openings for under-floor ventilation" THE EXCEPTION IS BACK! "Exception: The total area of ventilation openings shall be permitted to be reduced to 1/1,500 of the under-floor area where the ground surface is covered with an *approved* Class I vapor retarder material and the required openings are placed to provide cross ventilation of the space. The installation of operable louvers shall not be prohibited."
- Section P2904, entitled "Multi-purpose fire sprinkler systems" is retained through a cross reference in the plumbing subcode. This provides a design alternative to the installation of sprinklers through the use of the plumbing system of the home.

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