

Construction Code Communicator



State of New Jersey
Jon S. Corzine, Governor
Volume 18 Number 3

Department of Community Affairs
Susan Bass Levin, Commissioner
Winter 2006

Demolition Permits

Ever play the kid's game, "Telephone?" Someone whispers a message. It gets repeated and the last person says what she heard, usually to the amusement of all. Every month when I review demolition permits, I play Telephone. Construction officials and technical assistants start with a simple message, something like: "Mike likes to wear boots when it floods." Only, I hear "I like Milk Duds."

Demolitions are significant events. They are very important to demographers, who like to count things. They want to know what gets built, when, and where. They also want to know when something is torn down. They are crazy for information on dwelling units, a fancy term for places where people live — houses, apartments, and condominiums. Hotels, hospital beds and nursing-home rooms, time-shared apartments, college dormitories, prison cells, and extended-stay suites are not dwellings. They look like them, but because a person may stay in them for a short time, they should not be counted or reported as dwellings, either on construction or demolition permits.

Too many confuse dwellings with buildings. Don't report a lost dwelling when you mean building. You enter a "1" to let me know a building was lost. I know that. You can't have a demolition without doing so. A tear down without the

loss of a structure is an alteration. If you demolish an "M" use (mercantile) and report "1" for-rent unit lost, I see the removal of a store with an apartment.


A big source of confusion comes from the wrong use group. Report only the use of the building to be demolished. That sounds simple, but too many enter "U" for accessory or miscellaneous structures, such as detached garages, sheds, swimming pools, and fences, and also report the loss of a dwelling. I see a tear down of a detached garage with an apartment over top. Thus far in 2006, there were over 260 demolitions of "U" buildings that had dwellings. Sorry, these aren't all detached garages with apartments. Most of them are mistakes.

If the building is empty or abandoned, report the last known use. Don't use "U" as a catchall. For a tear down of a vacant building last used to make horse harnesses, enter "F" for factory. Also, don't confuse a change of use with a demolition. A demolition permit is not a change of use. Don't report the use group of the building you expect to replace the one torn down.

Most everyone knows oil tanks and other underground tanks are accessory structures, and report the proper use group, "U." Still, each month, some misclassify

(continued on page 2)

In This Issue

A Low-Voltage Wiring License . . . Not! 	6	Home Improvement Contractor Registration Abandonment List . . .	6
Child-Care Centers 	5	Home Improvement Contractors' Registration Denial List Alternate	
Demolition Permits	1	Web Site Address	7
Design Professionals and "Other" Documents	2	LP-Gas Installation Notice Requirements Reduced	7
DOT Curb Ramps 	3	Minimum Rating/Maximum Setting . . . Huh? 	7
Emergency Rule Regarding Day-Care Centers 	4	<i>New Jersey Register</i> Adoptions	8
Energy Efficiency Tax Credits -- Information to Pass Along . . .	3	Nonresidential Child-Care Facilities and FTO-9 	8
Energy Requirements Revisited: Documentation 	2	UL Product Database Available Online	10
Equipotential What? 	12	Updated Reprint: Proper Disposal of Construction Material and	
Fire Separation Distance Measurement in the One- and Two-Family		Debris	10
Dwelling Subcode 	14	Variation for Gas-Fired, Category 1 Equipment  	7
Free Online Access to the <i>New Jersey Administrative Code</i> . . .	6	Warning: <i>More</i> Counterfeit Automatic Fire Sprinklers  	9
FTO-8 Withdrawn 	6	What's New in the 2006 IBC and IRC? 	11

(continued from page 1)

tank removals with “R-2,” “R-3,” “R-4,” or “R-5” designations. Software developers are logical people. When you issue a demolition permit for a residential use, the reporting software prompts you for the number of dwellings lost. An underground tank is not a house. By misapplying the “R” uses, some of you report a lost house every time a tank is removed. Stop that. If you don’t, I will publish a list of towns where people live in underground tanks.

Accurate construction data are important for many reasons. At the top of the list of reasons is your job. You can’t keep track of what needs to be done, when, and where without good records. Construction data also are used by others. Most recently, they are used by planners who calculate affordable housing obligations. Your town’s fair share of regional affordable housing needs depends on how much it grows. Planners use building permits and demolitions to measure growth. Get it right. If you have questions, call me at (609) 292-7898 or e-mail me at jlago@dca.state.nj.us, anytime, as often as needed.

Source: John Lago
Division of Codes and Standards

Energy Requirements Revisited: Documentation

The Code Assistance Unit has received many inquiries as to why some municipalities are requiring energy compliance documentation and some are not. As a reminder, *N.J.A.C. 5:23-2.15(e)1.vi* requires the submission of calculations showing compliance with the Energy Subcode for all new buildings and additions that are heated or cooled. Additions should be analyzed by themselves. However, as an alternative, when the addition taken by itself does not comply, the entire existing building including the addition may be analyzed if the proper information is available for the existing building.

Newly constructed, detached, one- and two-family residential buildings and other residential buildings three stories or less in height shall demonstrate compliance by the submission of a *REScheck* software compliance certificate (visit <http://www.energycodes.gov> for the New Jersey-specific version), proof of conformance with the prescriptive packages (see Bulletin No. 03-2), submission

of “hand” calculations, or for new homes only, submission of New Jersey Energy Star® Homes compliance documentation (see the Spring 2004 *Construction Code Communicator* article, “New Jersey Energy Star® Homes and the Energy Subcode”).

For all other buildings, compliance shall be demonstrated by submission of a *COMcheck* software compliance certificate [visit <http://www.energycodes.gov> for the American Society of Heating, Refrigerating, and Air-Conditioning Engineers’ (ASHRAE) 1999 version] or “hand” calculations.

As per *N.J.A.C. 5:23-2.15(e)1.vii*, all building calculations shall be signed and sealed by the design professional, with the exception of calculations for class III structures [as defined at *N.J.A.C. 5:23-4.3A(d)*], which may be submitted by the mechanical contractor or a single-family homeowner as per *N.J.A.C. 5:23-2.15(e)1.ix*.

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

Note: As a reminder, the Department of Community Affairs anticipates the adoption of the 2006 International Energy Conservation Code and the 2004 ASHRAE 90.1, as amended at *N.J.A.C. 5:23-3.18*, on February 20, 2007.

Source: Rob Austin
Code Assistance Unit

Design Professionals and “Other” Documents

N.J.A.C. 5:23-2.15(e)1.xi(1) 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 of this code requirement are:

1. A New Jersey State licensed architect chooses to use pre-engineered lumber in his design. After review of the specifications of the pre-engineered lumber (normally certified by a licensed engineer), the architect must supply a letter, including his seal,

attesting to the lumber's appropriate use in the design. Please keep in mind, the architect is not sealing "over" the engineer's seal; he is simply stating he has reviewed the material and that it "works" in the design.

2. A licensed electrician proposes to install wiring through a fire-rated assembly in a new structure. The design professional must review this proposal to make sure the penetration does not jeopardize the rating of the wall. If the proposed installation is acceptable, the design professional must submit a signed and sealed letter stating that the electrical plans meet the intent of his design. (A fire-alarm system is a good example; this situation can also be applied to the proposed installation of piping by a master plumber.)

Please keep in mind that this is not an all-inclusive list. There are a multitude of situations to which the above-referenced section can be applied. These examples are intended as a reminder as to when further documentation is required.

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

Source: Rob Austin
Code Assistance Unit

Energy Efficiency Tax Credits – Information to Pass Along

The Federal Energy Policy Act of 2005 provides a variety of tax credits for homeowners, businesses, and manufacturers for purchase of energy-efficient equipment, completion of new energy-efficient buildings, and improvements to existing buildings which were made or are to be made after January 1, 2006 and before December 31, 2007. The United States Department of the Treasury has amended Tax Form 1040 to include a line for energy tax credits in the tax credit section, and issued regulations in early 2006 specifying the energy efficiency equipment and which improvements to existing buildings or new building designs qualify for the credits. The Energy Efficiency and Renewable Energy Information Center hotline is collecting information on the tax credits, and will be updating same as it becomes available. The hotline number is (877) 337-3463.

ADDITIONAL RESOURCES

- > Tax incentives for buildings and other efficiency improvements:

<http://www.energytaxincentives.org>

- > Commercial building provisions:
<http://www.efficientbuildings.org>

- > Residential building provisions:
http://www.energystar.gov/index.cfm?c=products.pr_tax_credits

- > IRS tax credit rules and information for homeowners:

<http://www.irs.gov/newsroom/article/0,,id=154657,00.html>

- > IRS tax credit rules and information for home builders:

<http://www.irs.gov/newsroom/article/0,,id=154658,00.html>

Source: Rob Austin
Code Specialist

DOT Curb Ramps

It has come to the Department of Community Affairs' (DCA's) attention that sometimes curb ramp specifications provided by the New Jersey Department of Transportation (DOT) are submitted with permit applications. The DCA has reviewed the DOT curb ramp specifications. There are more design configurations included in the DOT specifications than are included in the International Code Council/American National Standards Institute Standard A117.1; this is due, in part, to the application of DOT specifications to existing streets. The DOT curb ramp specifications provide an accessible route and should be accepted by code officials.

For some curb ramp designs, the DOT specifications do not include dimensions for cross slope. In the absence of dimensions for cross slope, the standard cross slope of 1:48 should apply.

If you have questions about whether a DOT curb ramp may be used, please contact the Code Assistance Unit at (609) 984-7609.

Source: Emily Templeton
Division of Codes and Standards

Emergency Rule Regarding Day-Care Centers

This is a reprint of a letter sent on October 27, 2006.

Dear Construction Official:

Last week, the Governor authorized the adoption of an emergency rule by the Department of Children and Families. This rule seeks to address the licensing of child-care centers on contaminated sites. The emergency rule arises out of a case that came to light this summer where children were exposed to mercury because a day-care center had been allowed to open in a former thermometer factory.

The emergency rule triggers requirements for additional environmental investigation on the past use(s) of the building based on Uniform Construction Code (UCC) group classifications. Under this new rule, applications for a child-care center license or license renewal must now include a certification as to whether the building ever was classified as one of the following uses: Group F (factory/industrial), Group H (high hazard), Group S (storage), or nail salons or dry cleaners of Group B. If the building predates the UCC, then the certification should be based on what the group classification would have been had the UCC been in effect. The applications go to the Department of Children and Families, but it is likely that you will receive inquiries from child-care center operators about the past group classifications of the buildings that they are using or considering using.

The emergency rule establishes environmental requirements to be met by child-care center providers as follows:

1. Child-care centers located or to be located in buildings that were classified in Group F, H, S, or that were dry cleaners or nail salons (Group B) must meet Department of Environmental Protection (DEP) soil guidelines for child-care centers. Child-care providers using such buildings must also contact the Department of Health and Senior Services (for indoor environmental conditions) and the DEP to determine what additional steps, if any, must be taken to address any risks posed by the past use of the property.
2. The operator must certify that the child-care center has a potable water supply that meets safe drinking water standards. For child-care centers using private wells, this means that the well must be tested.
3. The operator must certify that the facility complies with the Department of Children and Families' regulatory requirements for radon, asbestos, and lead.

Additionally, after January 1, 2007, all child-care centers located in the same building as a dry cleaner or nail salon will need to have indoor-air sampling. And effective June 1, 2007, all child-care center license or license renewal applications will need to include a No Further Action letter from the DEP covering the site on which the center is located.

The Department of Children and Families' *Manual of Requirements for Child-Care Centers* requires a valid Certificate of Occupancy, so this is not a prior approval issue. As stated above, these new requirements will be enforced by the Department of Children and Families as part of their child-care licensing requirements. But I did want to make you aware of these new rules because I expect that many of you will receive inquiries.

The full text of the rule may be viewed on the Department of Children and Families' web site:

<http://www.state.nj.us/dcf/notices/10-122PhysPIntReq.pdf>

Should you have any questions regarding this new rule, please feel free to contact the Code Assistance Unit at (609) 984-7607.

Sincerely,

William M. Connolly
Director
Division of Codes and Standards

Note: An information web site page including links to this letter, the group descriptions, and the emergency rule can be accessed at:

http://www.nj.gov/dca/codes/misc/childcare_providers_emergency_rule/child_care_providers_secondary_page.htm

Child-Care Centers

This is a reprint of a letter sent on January 31, 2007.

Dear Construction Official:

On January 11, 2007, the Governor signed a bill into law requiring environmental investigations prior to the issuance of a permit or of a Certificate of Occupancy for child-care centers or for schools where certain conditions are met (P.L. 2007, c. 1). The purpose of the new law is to ensure that buildings and building sites with a history that might include contamination undergo an environmental investigation to ensure that they are safe prior to becoming child-care centers or schools. I am writing to inform you of the new law, and of how to proceed with the issuance of permits and Certificates of Occupancy in these cases.

The emergency rules adopted by the Department of Children and Families, which were the subject of my October 27, 2006 letter (*see facing page*), are still in force and effect. These rules apply to applications for a license to operate a child-care center and to license renewals. The new statute governs new construction, rehabilitation, or changes of use on sites or in buildings with an industrial past that create a new child-care center or school. Please note that my October 27, 2006 letter states clearance of the property and of any existing building for use as a child-care center is not a prior approval. With the passage of the new law, this has changed. These environmental clearances are now required prior approvals. (A copy of the October 27, 2006 letter is also available on the Division's web site at http://www.nj.gov/dca/codes/misc/childcare_providers_emergency_rule/child_care_providers_secondary_page.shtml.)

Under the new statute, the Department of Environmental Protection (DEP) is responsible for determining whether the site is safe for a child-care center or for a school. The Department of Health and Senior Services (DHSS) is responsible for making a determination as to whether an existing building (interior) is safe for reuse as a child-care center or as a school. Like the emergency rule, the new statute triggers requirements for additional environmental investigation based on the past use(s) of the building or property. The following is an outline for use in determining whether a prior approval pursuant to this statute is needed for a particular project. Please note that, in accordance with the framework of the statute, two separate approvals are required: one for the site and one for the building interior.

BUILDING SITE – A Remedial Action Workplan approved by the DEP or a No Further Action letter from the DEP must be obtained prior to the issuance of a permit if one of the three conditions listed below is met:

1. The property was the site of one of the following uses:
 - > Factory/Industrial (Group F)
 - > High Hazard (Group H)
 - > Storage (Group S)
 - > Nail Salon or Dry Cleaner (Group B)
 - > Gasoline Station (Group M)

If the use of the property predates the Uniform Construction Code (UCC), then the determination should be based on what the group classification would have been had the UCC been in effect.

2. The property is on a list of contaminated sites maintained by the DEP, or is subject to the Industrial Site Recovery Act. To assist you in determining whether a site is a known contaminated site or a site suspected of contamination, you can review the DEP Site Remediation & Waste Management (SRWM) Program web site at <http://www.nj.gov/dep/srp>, specifically the SRWM data resources links.
3. The construction official knows or has been advised by other local officials that the property has been used for dumping, or there is some other factual basis for believing that there may be "suspected contamination."

For construction on properties that fall into any of the above categories, if a Remedial Action Workplan was submitted prior to issuance of a permit, a No Further Action letter from the DEP is required prior to issuance of a Certificate of Occupancy. If a No Further Action letter was submitted prior to issuance of the permit, then as the name suggests, nothing further is required prior to issuance of the Certificate of Occupancy.

When the site proposed for reuse has no building on it at the time of application, then the DEP prior approval is the only one required.

Free Online Access to the New Jersey Administrative Code

The New Jersey Office of Administrative Law and LexisNexis have created a web site for the *New Jersey Administrative Code (N.J.A.C.)* and the *New Jersey Register (NJR)* at <http://www.lexisnexis.com/njoal>. The full *N.J.A.C.*, along with historical annotations, is available and will be updated quarterly. Documents can be browsed by title, chapter, subchapter, and section, and can be searched by keywords. The documents may also be printed and e-mailed and, although the *N.J.A.C.* cannot be downloaded, sections may be copied and pasted into word documents. Hyperlinks are permitted to be created to a title, chapter, subchapter, or section.

A database of notices from current and past *NJRs* dating back to mid-1995 is also available through the web site. This database is fully searchable, and the documents may be printed and downloaded, but hyperlinks are not permissible.

Source: Denise L. Jones
Code Development Unit

FTO-8 Withdrawn

Effective November 6, 2006, Formal Technical Opinion 8, "Use Group Classification — Department of Human Services Residential Programs," was withdrawn. FTO-8 provided direction to code officials regarding the group classification of group homes licensed by the New Jersey Department of Human Services (DHS). Since the publication of FTO-8, some of the programs in the DHS have been reorganized into the Department of Children and Families (DCF).

There are two divisions in the DHS that license group homes: the Division of Developmental Disabilities (DDD) and the Division of Mental Health and Hospitals. The DCF also licenses group homes through the Division of Youth and Family Services. Of these divisions, the DDD licenses the largest number of group homes.

Now that the FTO has been withdrawn, code officials are to determine the group classification by applying the provisions of the Building Subcode.

The DDD is installing sprinklers in all its newly licensed group homes. The Department of Community Affairs (DCA) recognizes, however, that it is likely code officials will have to make judgments in the case of group homes that were "in the pipeline" at the time of the

withdrawal of this FTO. The DCA is prepared to provide guidance on code requirements for group homes. When the DCA becomes aware that a group home is "in the pipeline" in a specific municipality, a letter will be sent to the construction official providing guidance. In addition, code officials may direct any questions to the Code Assistance Unit at (609) 984-7609.

Source: John Terry
Division of Codes and Standards

Home Improvement Contractor Registration Abandonment List

The Division of Consumer Affairs has published a list of home improvement contractors whose applications for registration have been abandoned and who are, therefore, not eligible to receive permits to perform home improvement work in New Jersey. This list can be viewed at:

<http://www.njconsumeraffairs.gov/contractors/abandoned.htm>

If you have any questions on the Home Improvement Contractors' Certification program, please contact the Division of Consumer Affairs at (888) 656-6225.

Source: Denise L. Jones
Code Development Unit

A Low-Voltage Wiring License . . . Not!

The Board of Examiners of Electrical Contractors has been receiving numerous inquiries regarding a "Low-Voltage Wiring License" that municipalities are requiring in order for contractors to install items such as speakers, central vacuum systems, etc. Such a license does not exist. However, a Limited Telecommunications Wiring Exemption Certificate is available to persons or businesses exempt from electrical contractor licensure requirements when they are engaged in telecommunication wiring as covered in the Board of Examiner's regulations at *N.J.A.C. 13:31-4.1*. The exemption certificate application can be downloaded at:

<http://www.state.nj.us/lps/ca/electric/telewire.pdf>

A permit is not required for telecommunication wiring in any Class 3 structure provided the fire-rated assemblies are not penetrated as per *N.J.A.C. 5:23-2.7(c)3.iii* of the Uniform Construction Code. Other low-voltage wiring requires an electrical permit and may only be performed by a licensed electrical contractor, a

homeowner in their own single-family dwelling, or someone otherwise exempted from licensure by the Board.

Now, the point of all this is . . . make sure you ask for the right thing when requesting a license or other information. If you have any questions on this matter, please contact me at (609) 984-7609.

Source: Suzanne Borek
Code Specialist

Home Improvement Contractors' Registration Denial List Alternate Web Site Address

The web site address in the Home Improvement Contractors' Registration Denial List on page 12 of the Summer/Fall 2006 edition of the *Construction Code Communicator* is listed as:

<http://www.njconsumeraffairs.gov/contractors/denial.htm>

If you are having difficulties accessing this address, try the alternate address at:

<http://www.njconsumeraffairs.com/contractors/denial.htm>

Source: Denise L. Jones
Division of Codes and Standards

Variation for Gas-Fired, Category 1 Equipment

Gas-fired, Category I equipment (water heaters, furnaces, or boilers) installed in multistory residential and other multistory occupancies and connected to a common venting system is permitted by the International Fuel Gas Code (IFGC) 2000, 2003, and 2006 when the combustion air is obtained from the exterior of the building, and not from the interior habitable space.

However, there are many existing buildings where the furnace room is located in the middle of the units with no access to an exterior wall. Here the combustion air is taken from an adjacent interior habitable space. This type of installation was permitted before the adoption of the IFGC.

Today, many water heaters and furnaces are being replaced due to the age of the equipment. The replacement of this equipment is considered a renovation project under the Rehabilitation Subcode (*N.J.A.C. 5:23-6.5*). Section 5:23-6.5(h) requires all materials and methods used in the renovation to comply as specified in *N.J.A.C. 5:23-6.8, Materials and Methods*.

LP-Gas Installation Notice Requirements Reduced

The Department of Community Affairs has proposed to eliminate the requirement for Liquefied Petroleum Gas installation notices to be filed for most installations.

The LP-Gas installation notice will still be required for all temporary heating installations using one or more tanks of 250 gallons or more water capacity and remaining in place for six months or less (temporary installations).

If you have any questions, please contact the Code Assistance Unit at (609) 984-7609 or the LP-Gas Unit at (609) 633-6835.

Source: Denise L. Jones
Code Development Unit

Minimum Rating/Maximum Setting . . . Huh?

The confusion of the label on air conditioners has raised questions regarding the conductor sizing, circuit breaker rating, and disconnect rating.

Section 440.4(C), Branch-Circuit Selection Current, of the 2005 National Electrical Code (NEC) states that equipment having a protection system which is approved for use with the motor-compressor it protects and which permits continuous current in excess of the specified percentage of the nameplate rated-load current given in Subsection 440.52(B)(2) or (B)(4) shall also be marked with a branch-circuit selection current that complies with 440.52(B)(2) or (B)(4). The marking shall be provided by the equipment manufacturer and shall be on the nameplate(s) where the rated-load current(s) appears.

Section 440.6, Ampacity and Rating, (A), Hermetic Refrigerant Motor-Compressor, states that the rated-load current marked on the nameplate of the equipment in which the motor-compressor is employed shall be used in determining the rating or ampacity of the disconnecting means, the branch-circuit conductors, the controller, the branch-circuit short-circuit and ground-fault protection, and the separate motor overload protection. If there is no rated-load current shown on the equipment nameplate, the rated-load current shown on the compressor nameplate shall be used.

EXCEPTION NUMBER ONE: Where so marked, the branch-circuit selection current shall be used instead of the rated-load current to determine the

(continued from page 7)

rating or ampacity of the disconnecting means, the branch-circuit conductors, the controller, and the branch-circuit short-circuit and ground-fault protection.

Section 440.21, General, states that Part III specifies devices intended to protect the branch-circuit conductors against overcurrent due to short-circuits and grounds. They are in addition to, or amendatory of, the provisions of Article 240.

Section 440.22(A), Rating or Setting for Individual Motor-Compressor, states that the motor-compressor branch-circuit short-circuit and ground-fault protective device shall be capable of carrying the starting current of the motor. A protective device having a rating or setting not exceeding 175 percent of the motor-compressor rated load current or branch-circuit selection current, whichever is greater, shall be permitted provided that, where the protection specified is not sufficient for the starting current of the motor, the rating or setting shall be permitted to be increased, but shall not exceed 225 percent of the motor rated-load current or branch-circuit selection current, whichever is greater.

Section 440.31 states that Part IV and Article 310 specify the ampacities of conductors.

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

Source: Suzanne Borek
Code Assistance Unit

New Jersey Register Adoptions

Date: October 2, 2006
Adoption: 38 NJR 4175(a)
Summary: As a result of the Supreme Court decision in the case of *DKM Residential Properties Corporation v. the Township of Montgomery and the Construction Board of Appeals of the Township of Montgomery* and Governor Richard J. Codey's Executive Order #33 of May 9, 2005, the following amendments and new rules have been adopted.

Permits: At N.J.A.C. 5:23-2.14, a permit is required for any work resulting from a Notice of Violation and Order to Terminate (F213) issued to the builder after the issuance of the Certificate of Occupancy.

Enforcement and Administration: The adopted new rules at N.J.A.C. 5:23-2.35 set requirements to ensure all homes in a development are inspected for similar violations when a substantial code violation, as defined within this new rule,

is found; the municipality will be allowed to charge the developer for the costs of these enforcement actions. The adopted rules enable municipalities to hire licensed engineers or architects to assist with the enforcement of development-wide actions, address their qualifications, and stipulate that the work performed is subject to the supervision and control of the construction official. Three new forms have been added at N.J.A.C. 5:23-4.5: a "Consent to Undertake Proposed Work" (Form F101), a "Notice of Violation and Order to Terminate" (Form F213), and a "Notice and Order of Penalty" (Form F214).

Fees: Adopted amendments at N.J.A.C. 5:23-4.17, 4.18, and 4.20 establish fees for development-wide actions. The amendments at N.J.A.C. 5:23-4.17 mirror or reference the provisions of the Municipal Land Use Law for establishing and maintaining an escrow, making charges to the escrow, and accounting for the escrow charges associated with development-wide actions.

Hearing Procedures: The amendment at N.J.A.C. 5:23A-2.2 establishes that the filing of an appeal by any party in a dispute related to violations found after the issuance of a Certificate of Occupancy constitutes consent to entry by the members of the Board of Appeals and that all parties must be notified of any planned visit by any member(s) of the Board of Appeals.

Date: November 6, 2006

Adoption: 38 NJR 4691(a)

Summary: The amendments at N.J.A.C. 5:23-2.20, 3.14, 5.3, 5.4, 5.21, 5.22, and the new rules at N.J.A.C. 5:23-5.19G and 5.23B specify certification and education requirements for special inspectors. The categories of special inspectors are as follows: structural steel and welding special inspector, concrete special inspector, structural masonry special inspector, spray-applied fireproofing special inspector, and exterior insulation finish system special inspector.

Source: Denise L. Jones
Code Development Unit

Nonresidential Child-Care Facilities and FTO-9

It has come to the Department of Community Affairs' attention that there is some confusion about the application of Formal Technical Opinion (FTO) 9, Use Group Classification -- Department of Human Services Nonresidential Child Care Programs. The rule of thumb is that an FTO continues in force and effect until it is officially withdrawn. Therefore, FTO-9 remains enforceable. Some of the information in FTO-9, however, is a little out of date and therefore needs some explanation.

With the adoption of the International Building Code (IBC) 2000, some of the group categories changed. A new category, Group I-4, Day Care Centers, was introduced and a single-family home with not more than three stories became Group R-5. The IBC/2000 also contained some changes in code requirements. The combination of new group designations and new code requirements has apparently caused confusion about how to apply FTO-9. A summary of the group designations for day care centers follows.

RESIDENTIAL DAY CARE --

Group R-5 or Group R-3: Family Day Care

BOCA: In 1995, when FTO-9 was published, the Building Officials and Code Administrators (BOCA) National Building Code designated all single-family homes as Group R-3. So, that is the group designation included in the FTO. Family day care for up to five children of any age could be established in a home with no change in the Group R-3 designation.

IBC: The International Code Council (ICC) now covers single-family homes in two codes: (1) those that are three stories or less are Group R-5 and are contained in the International Residential Code (IRC), (2) those that are more than three stories are designated as Group R-3 and are covered in the IBC. A family day care with up to five children of any age may be established in either a Group R-5 or Group R-3 residence with no change in the group designation. The presence of more than one child under 2½ years of age does not change the group designation.

COMMERCIAL DAY CARE --

Group I-4: Day Care Centers for Children Under the Age of 2½

BOCA: The BOCA National Building Code designated day care centers with six or more children under 2½ years of age as Group I-2. The presence of one child under the age of 2½ did not change the group designation.

IBC: The IBC/2000 included a group designation specifically for day care centers. It designates commercial day care centers with any number of children under the age of 2½ years as Group I-4. The presence of one child under the age of 2½ years in a commercial day care setting establishes the designation as Group I-4.

Group E: Day Care Centers for Children Over the Age of 2½

BOCA: The BOCA National Building Code allowed commercial child care centers that served fewer than 50 children ages 6-13 years to be accessory to another group and to be considered part of the main use. BOCA designated commercial child care centers with 50 or more children ages 6-13 years as Group E.

IBC: The IBC/2000 designates commercial day care centers serving more than five children older than 2½ years as Group E.

Existing Day Care Centers: The IBC/2000 has no provisions for commercial day care centers to be treated as accessory to the main group designation and considered as part of that group. Existing commercial day care centers serving fewer than 50 children ages 6-13 years that were accessory to a main group designation and that were classified as part of that use when the BOCA National Building Code was the Building Subcode in New Jersey may continue in that group designation.

IBC/2006: The Department has proposed the IBC/2006 as the Building Subcode. The proposal was published in the *New Jersey Register* on September 5, 2006; the comment period ended November 4, 2006; it will be published as an adoption on February 20, 2007. Group designations and code requirements for day care centers are unchanged from the IBC/2000 to the IBC/2006.

The Department is in the process of revising FTO-9 to ensure its accuracy.

If you have questions about the applicability of the Uniform Construction Code to day care centers, contact the Code Assistance Unit at (609) 984-7609.

Source: Emily W. Templeton
Code Development Unit

Warning: More Counterfeit Automatic Fire Sprinklers

Underwriters Laboratories, Inc. (UL) is again notifying consumers, distributors, and property owners of chrome-plated, automatic fire sprinklers that bear a counterfeit UL Mark for the United States. Although marked with the word "TYCO," these sprinklers are not manufactured by Tyco Fire Products, and have not been evaluated for safety by UL.

MODEL OF PRODUCT: Not provided on product

UNITS: Unknown

MANUFACTURER: Unknown

DATE OF MANUFACTURE: Not provided on product

IDENTIFICATION: Pendent-type, automatic fire sprinkler

MARKING ON FRAME: TYCO

MARKING ON DEFLECTOR: SSP, a UL Mark (which is UL in a circle), 155°F/68°C

To view pictures of the product, go to:

<http://www.ul.com/newsroom/newsrel/nr092106.html>

UPDATED REPRI NT

Proper Disposal of Construction Material and Debris

This article is a reprint with updates from the Fall 1996 Construction Code Communicator (Volume 8, Number 3)

Over the past few years, there has been increasing concern about the reuse of construction debris from a demolition project as “fill” on the site of origin. The Department of Community Affairs (DCA) requested and received guidance on this issue from the New Jersey Department of Environmental Protection (DEP). The purpose of this article is to provide you with the DEP’s position on this issue.

Concrete, brick, and block are classified as Class B recyclables and are regulated by the DEP, Division of Solid and Hazardous Waste, Recycling Regulations (N.J.A.C. 7:26A). People who generate Class B recyclables have two options for disposal. The first is to transport the material to a recycling center; the second is to reuse the material on-site as clean fill.

The recycling or reuse of these materials that are generated, processed, and reused on-site is exempt from the approval requirements of the DEP [N.J.A.C. 7:26A-1.4(a)2]. To qualify for this exemption, the DEP, the host county, and the host municipality must be provided with written notification of the activity, as per N.J.A.C. 7:26A-1.4(b)5. Notification to the DEP should be sent to: State of New Jersey, Department of Environmental Protection, Division of Solid and Hazardous Waste, PO Box 414, Trenton, New Jersey 08625-0414. *(A fax number was provided in the 1996 edition of this article. Notification by fax is no longer accepted.)*

To be considered for an exemption, all of the following conditions must be met:

1. The material being used for clean fill is generated at the site. Materials may not be imported from other locations.
2. The material is not contaminated by exposure to chemicals from industrial processes or exposure to other contaminants.
3. The clean fill is not mixed with other materials such as wood, glass, plastic, etc.
4. The material is processed to reduce its size in order to minimize voids in the fill.

What effect do these requirements and exemptions have in the “real world?” An example may

help: A homeowner wants to demolish his swimming pool and reuse the debris as fill in its place. He comes to your office to find out what he needs to do. You tell him he must get a demolition permit. He must also provide you with a site plan (not signed and sealed, just a sketch on an existing plot plan that shows where he is going to fill, which is – most likely – the site of the pool). He must provide evidence that he notified the DEP at the above address as well and evidence that he notified the county (usually the recycling or solid waste coordinator). He must also notify the municipality (the construction office). Now work may start. Any debris that is not concrete, brick, or block must be removed from the demolition debris. This includes removal of any rebar, vinyl (from the liner), or wood from the debris. The concrete, block, or brick must be broken up to the point where it will minimize voids in the fill. Although this size is interpretative, a good rule of thumb is three to four inches in diameter. *(The suggested minimal diameter of debris in the 1996 article was eight inches. This has changed to three to four inches.)*

Should you have any questions regarding the DEP requirements or exemptions, please contact the DEP’s Bureau of Recycling and Planning at (609) 984-3438.

Source: John N. Terry
Code Assistance Unit

UL Product Database Available Online

Underwriters Laboratories, Inc. (UL) has announced the introduction of a new online tool for regulatory authorities.

The “Category Code/Model Code Database” is a search engine that links code sections to UL product categories. To view this new database, visit:

<http://www.ul.com/regulators/codelink>

Enter a code section from the International Building Code, International Mechanical Code, International Fuel Gas Code, or the National Electrical Code for a list of the corresponding UL product category and listing information.

This database also provides hyperlinks to the UL Guide Information and other specific information pertaining to each UL Category Code.

For more information, contact Bob Eugene in Seattle, Washington by telephone at (360) 593-2152 or by e-mail at Robert.Eugene@us.ul.com.

Source: John Terry
Division of Codes and Standards

(continued from page 7)

Subsection 5:23-6.8(f)3 states that all requirements of Chapter 5, Chimneys and Vents, shall be applied to the renovation project. IFGC Section 503.6.10.1, Equipment Separation, requires all equipment connected to the common vent to be located in rooms separated from habitable spaces. Each room is required to have provisions for an adequate supply of combustion, ventilation, and dilution air that is not supplied from habitable space.

This requirement can create hardships when renovating older, multistory buildings with common systems. As an example, based on the adopted Mechanical Subcode, in a first-floor furnace room located in the middle of the unit of a multistory condominium building, where each furnace room is located directly above the other, the flue connector from the replacement equipment would not be permitted to reconnect into the existing chimney. As you can see, this creates a hardship for the resident replacing the equipment on the first level because they would have to run a new flue vent which passes through the other units to get to the outdoors.

Because the original installations were code compliant at the time of the installation, the Department of Community Affairs will be proposing an exemption to IFGC Section 503.6.10 for the replacement of equipment of like or lesser capacity. The proposed amendment will also require that a carbon-monoxide detector be installed when equipment is replaced. This exemption is part of the annual amendments to the Rehabilitation Subcode, which were published in the *New Jersey Register* as a proposal on December 4, 2006.

It is recommended that a variation be granted until the change to the Rehabilitation Subcode is adopted.

Source: Thomas C. Pitcherello
Code Assistance Unit

(continued from page 9)

Legitimate, UL-listed sprinklers manufactured by Tyco Fire Products are manufactured with a Job G5 glass bulb. There is also a date code molded into the frame and the Sprinkler Identification Number (SIN) is stamped on the deflector. The identification number is TY followed by four digits 0 through 9. Sprinklers with the counterfeit UL Mark are manufactured without a date code or identification number and are manufactured with a Job F5 glass bulb.

Location: According to Tyco Fire Products, government officials in Delhi, India seized approximately 1,100 of these sprinklers, which were illegally imported from China. These sprinklers have only been found in India and Asia to date.

If you come across sprinklers with the counterfeit UL Mark, UL recommends that the sprinklers be replaced by qualified service personnel and returned to the place of purchase. Code enforcement officials should not allow these sprinklers to be utilized.

For more information, contact Joe Hirschmugl in Northbrook, Illinois by telephone at (847) 664-1508 or by e-mail at Joseph.F.Hirschmugl@us.ul.com.

Source: John Terry
Division of Codes and Standards

What's New in the 2006 IBC and IRC?

The purpose of this article is to make you aware of some of the major differences between the 2000 editions and the 2006 editions of the International Building Code (IBC) and the International Residential Code (IRC). This is not an all-inclusive list; it is merely the "big ticket items" that differ.

IBC:

- > Group A occupancies used by less than 50 persons are classified as Group B. For those of you who are familiar with the 1987 Building Officials and Code Administrators (BOCA) National Building Code, this will sound familiar. Section 303.1, Exceptions 1-3 now address this issue.
- > Section 507.3, Exception 3 now allows Group A-1 and Group A-2 occupancies in unlimited area buildings, such as shopping centers. There are limitations on the area of the Group A occupancies, as well as fire-protection and egress restrictions.
- > Mixed use and occupancy have been relocated. The requirements for these have been moved from

(continued on page 12)

(continued from page 11)

- Section 302 to Section 508. Along with this move, Table 508.3.3 has been amended. This table no longer contains the fire-resistance rating for the separation of the same occupancy; these requirements are now found in Section 706.3.9.
- > Table 803.5 has been amended. The requirements for exit passageways are now the same as those for vertical exit enclosures, instead of corridors (as in the 2000 IBC).
 - > The occupant load threshold for automatic fire sprinklers in Group A-2 has been reduced from 300 occupants to 100 occupants.
 - > All Group R buildings, other than Group R-5, are required to be provided with an automatic fire-sprinkler system. There are no exceptions.
 - > The Portable Fire Extinguisher requirements in Section 906 have been adopted.
 - > Chapter 10, Means of Egress, has been completely revised. Chapter 10 in the 2006 edition of the IBC looks more like the 1996 BOCA National Building Code. You should find it easier to use than the 2000 edition.
 - > The occupant load threshold for the installation of panic hardware in Section 1008.1.9 for Group A and Group E occupancies has been reduced from 100 to 50 occupants.
 - > Section 1405.12.2 establishes a minimum window sill height for Group R-2 and R-3 occupancies.

IRC:

- > Section R301.2.1.1 requires construction, in regions where the basic wind speed is equal to or greater than 100 miles per hour, to be designed in accordance with one of the listed documents (for high-wind design) and not the IRC structural requirements. In the State of New Jersey, the 100 mph line is roughly east of the New Jersey Turnpike. Detached one- and two-family dwellings and attached single-family townhouses that are being constructed east of the Turnpike must also have their structure designed using one of the documents listed in R301.2.1.1. One of the listed documents is the American Forest & Paper Association's *Wood Frame Construction Manual*. This manual is similar to the IRC in format and is very user friendly.
- > In the 2000 IRC, exterior walls with a fire-separation distance of three feet or less were required to be fire-resistance rated. In Section

R302.1 and Table R302.1 of the 2006 IRC, this distance has been increased to five feet.

- > In Section R403.1.4.1, as amended by the New Jersey adoption in *N.J.A.C. 5:23-3.21*, frost protection is not required for foundations for utility structures of up to 600 square feet of light-framed construction or 400 square feet for other than light-framed construction.
- > Tables have been added to Chapter 4 to address reinforced masonry and concrete foundation walls. In the past, reinforced walls were required to be designed. These new tables provide code requirements without engineering being required.
- > Tables have been added to Chapters 5, 6, and 8 to address steel framing code requirements.
- > Section R613.2 establishes a minimum window sill height.

Again, this is only a list of the major changes from the 2000 IBC to the 2006 IBC. Should you have any questions regarding these or any other changes in the code, please contact me at (609) 984-7609.

Source: John N. Terry
Code Assistance Unit

Equipotential What?



The topic of "equipotential bonding grid" is back! This time, it is in the form of a solution rather than a problem. Section 680.26(C) of the 2005 National Electrical Code (NEC) requires that the parts specified in Section 680.26(B), which include the deck of the pool, shall be bonded and Section 680.26(B)1 states that the usual steel tie wires shall be considered suitable for bonding the reinforcing steel together.

There have been questions as to what material is acceptable for use in the bonding grid. Section 680.26(C)(1) of the Tentative Interim Amendment (TIA) states that, where the deck reinforcing steel is not an integral part of the pool, the deck reinforcing steel shall be bonded to other parts of the bonding grid using a minimum 8 AWG solid copper conductor.

The Department of Community Affairs has determined that the deck reinforcing steel (wire mesh) is acceptable to be utilized for the bonding grid. This determination is based on the TIA language and Section 547.10(B) which requires the wire mesh to be bonded to the grid as part of the equipotential bonding grid.

(continued from page 5)

BUILDING INTERIOR – A certification from the DHSS that an existing building is safe for reuse as a child-care center is required prior to the issuance of a permit or of a Certificate of Occupancy for a proposed child-care center (Group I-4 or Group E) if the building previously housed one of the following uses:

- > Factory/Industrial (Group F)
- > High Hazard (Group H)
- > Storage (Group S)
- > Nail Salon or Dry Cleaner (Group B)
- > Gasoline Station (Group M)

Again, if the building predates the UCC, then the determination should be based on what the group classification would have been had the UCC been in effect.

Similar to the requirements described above for building sites, if a certification from the DHSS that the building is safe for the proposed use is submitted prior to issuance of the permit, then nothing further is required for issuance of a Certificate of Occupancy. If additional environmental testing or remedial work is required by the DHSS, the requirements set by the DHSS must be submitted in writing with the permit application. If they are, then the permit may be issued. The Certificate of Occupancy cannot be issued until a written certification from the DHSS that all testing and/or remediation has been properly completed is submitted.

It should be noted that, when a building is proposed for reuse, the prior approval of both the DHSS (for the building) and the DEP (for the site) is required before a permit can be issued.

If remediation work is required, then both the DEP and the DHSS prior approvals will specify the nature of the work. The permit issued will cover both the remedial work (to the extent that the remedial work is work covered by the code) and the UCC work needed to construct or alter the building. Inspections to ensure that the remedial work is properly completed are the responsibility of the DEP and the DHSS, not the local enforcing agency. The local enforcing agency's obligation is to make sure they have the written DEP and the DHSS approvals of the remedial work in hand before issuing a Certificate of Occupancy.

The statute calls for the DHSS to develop rules for these interior environmental investigations and gives DHSS a year to put these rules in place. For child-care centers, the DHSS already is making these determinations because they are required to do that under the rules adopted by the Department of Children and Families. Accordingly, this prior approval is in effect now for child-care centers. For schools (Group E, Grades K through 12), we will have to await adoption of rules by the DHSS. We will notify you when those rules are in place. This directive to wait applies only to building interiors for existing buildings that previously had been one of the above uses that are being converted to schools. The requirement for a prior approval issued by the DEP for the building site for a child-care center or for a school should be enforced now. And, the requirement for a prior approval issued by the DHSS for the building interior for a proposed child-care center also should be enforced now.

Should you have any questions regarding the enforcement of this new law, please feel free to contact the Code Assistance Unit at (609) 984-7607.

Sincerely,

William M. Connolly
Director
Division of Codes and Standards

(continued from page 12)

If used as the bonding grid, the wire mesh must be connected to the grid with a listed clamp or connector. The NEC does not specify the size of the deck reinforcing steel. The deck reinforcing steel is not permitted to be used under pavers due to the listing of the material. Under pavers, a grid of 8 AWG bare, solid-copper conductors, 12 inches by 12 inches, with a 4-inch tolerance would be required.

Multiple bonding inspections will now have to be performed in order to ensure that the grid has been installed in accordance with the code.

Note: The TIA states that the equipotential bonding grid shall extend within or under paved walking surfaces. This includes pavers of conductive material such as brick and concrete.

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

Source: Suzanne Borek
Code Specialist

Fire Separation Distance Measurement in the One- and Two-Family Dwelling Subcode

Section R302.1 of the International Residential Code (IRC) 2000 requires exterior walls with a fire-separation distance less than three feet to have at least a one-hour, fire-resistive rating. However, we receive many questions on how fire-separation distance is measured. Fire-separation distance is defined in Chapter 2 of the IRC/2000 as “the distance measured from the building face to the closest interior lot line, to the centerline of the street, alley, or public way, or to an imaginary line between two buildings on the property. The distance shall be measured at right angles from the lot line.”

Projections, or overhangs, shall not extend into the fire-separation distance unless either (1) the projection is no more than 1/3 the distance to the property line from an assumed vertical plane located where protected openings are required, or (2) the projection is 12 inches or less, whichever of the two results in a lesser projection. A projection extending into the fire-separation distance shall have not less than one-hour, fire-resistive construction on the underside.

Note: Sections R302.2 and R302.3 do not allow openings or penetrations, respectively, with a fire-separation distance less than three feet.

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

Source: Rob Austin
Code Assistance Unit

NOTES

FIRST-CLASS MAIL

**Department of Community Affairs
Division of Codes and Standards
101 South Broad Street
PO Box 802
Trenton, NJ 08625**

