

Construction Code Communicator



State of New Jersey
Jon S. Corzine, Governor
Volume 20 Number 2

Department of Community Affairs
Joseph V. Doria, Jr., Commissioner
Summer/Fall 2008

Statewide Nonresidential Development Fee Act

On July 17, 2008, Governor Jon Corzine signed into law the Statewide Nonresidential Development Fee Act, which impacts all construction permits issued under the Uniform Construction Code for nonresidential new construction or improvements where the work type is “new” or “addition” and the group designation is other than a residential group.

The Act, which took effect immediately upon signing, establishes a new statewide nonresidential development fee to be charged by all municipalities for nonresidential new construction or additions. The fee of 2.5 percent of the equalized assessed value of nonresidential development is determined by the tax assessor and must be paid by the developer prior to the issuance of a Certificate of Occupancy. The Act provides for limited exemptions from the 2.5 percent fee.

Under this Act, the following categories of buildings are exempt from the nonresidential development fee: 1) all nonresidential construction of buildings or structures on property used by churches, synagogues, mosques, and other houses of worship; 2) property used for nonprofit educational purposes; 3) parking lots and parking structures; 4) any nonresidential development which is an amenity to be made available to the public, including but not limited to recreational facilities, community centers, and senior centers; 5) nonresidential construction resulting from a relocation of, or an onsite improvement to, a nonprofit hospital or a nursing-

home facility; 6) projects located within transit hubs; 7) transit hub-light rail projects; and 8) projects consistent with transit village plans.

The Act allows a municipality under the jurisdiction of the Council on Affordable Housing (COAH) pursuant to the Fair Housing Act to retain the nonresidential development fees collected in accordance with COAH’s regulations and the law for deposit into the municipality’s Affordable Housing Trust Fund. In all other municipalities that are not under COAH’s jurisdiction, the fees are to be paid to the State of New Jersey. A list of municipalities under COAH’s jurisdiction may be found on COAH’s website at:

<http://www.state.nj.us/dca/coah/legislation.shtml>

Note: Where payment is to be made to the State of New Jersey, it must now be made through the Department of the Treasury, Division of Revenue’s website at <http://www.state.nj.us/njbgs/nrdf.htm>. Payment may be made by electronic check or by credit card. A convenience fee applies for all payments made by credit card. Once payment is made, a Certificate of Payment of Nonresidential Fee will be generated as proof of payment. A developer must present a construction official with the proof of payment in order to receive a Certificate of Occupancy. If a developer is eligible for a reduced fee or is claiming a credit, payment must be made to the Department of Community

(continued on page 7)

In This Issue

Backflow Preventers -- What Type is Required? 	7	Numeric or Roman, It All Has To Do With Class!	5
Building Safety Conference -- Another Adventure, New Venue	2	Residential In-Ground Pools 	6
Defining Occupant Load  	8	Statewide Nonresidential Development Fee Act	1
Loading Requirements for Handrails and Guards 	10	Three-Second Gust vs. Fastest-Mile Wind Speed 	12
Manual J Referenced in the IRC/2006 	8	Update Fees	9
New Jersey Licensed Master Plumbers and Home Improvement Contractor Registrations 	5	Van-Accessible Parking Space Dimensions 	6
New Jersey Register Adoptions	13	What is a Commercial Farm Building? 	12
		Windows 	13

BUILDING SAFETY CONFERENCE Another Adventure, New Venue

The New Jersey Building Safety Conference was held this year from April 30 through May 2 at the Trump Taj Mahal in Atlantic City. It was like meeting an old friend! Many of you remember that the Building Safety Conferences were held at the Taj Mahal in the early 1990s. The Taj has many large and spacious training rooms, and VERY long hallways. We had 12 seminars on the first day and 14 on the second. All were very well received by our inspectors. The Crackerbarrel on the evening of the first night had 43 tables with varied topics of interest.

Our theme this year was "Building Safety: Where You Live, Work, and Play." Special guests at the Inspector of the Year luncheon were the Commissioner of the Department of Community Affairs, Joseph V. Doria, Jr., and the Director of the Division of Codes and Standards, Cynthia A. Wilk. Together, they, along with the organization presidents, presented awards. Those who were honored for their accomplishments were:

MUNICIPAL ELECTRICAL INSPECTORS ASSOCIATION OF NEW JERSEY
Electrical Inspector of the Year
Michael Jahn

NEW JERSEY FIRE PREVENTION AND PROTECTION ASSOCIATION
Fire Protection Inspector of the Year
Richard M. Barbarise

NEW JERSEY STATE PLUMBING INSPECTORS ASSOCIATION
Plumbing Inspector of the Year
William D. Olinger

BUILDING OFFICIALS ASSOCIATION OF NEW JERSEY
Building Inspector of the Year
Robert B. LaCosta

NEW JERSEY ASSOCIATION OF TECHNICAL ASSISTANTS
Technical Assistant of the Year
Rosalind Bosserdet

Conferences like this provide a chance for networking; they also foster fellowship among our peers. The reception to honor the awardees gives all inspectors a chance to offer their congratulations to the awardees. The gathering had good food and very lively entertainment! The Fabulous Greaseband provided music from the '60s and '70s. The evening concluded with a new feature — a dessert bar.

The Building Safety Week Conference is a nice break from our normal routine and gives us a chance to be brought up to date by taking advantage of educational opportunities. Now we are looking forward to next year. We will meet again at the Taj Mahal, May 6-8. Plan to attend!

Source: Susan McLaughlin (Retired)

NOTE: This is Susan McLaughlin's last article for the Construction Code Communicator. Susan retired effective August 1. Thank you, Susan, for all your work managing the Education Unit and ensuring top-notch continuing education for New Jersey's code officials. Enjoy your retirement, Susan; you've earned it!

The *Construction Code Communicator* is published three times a year by the New Jersey Department of Community Affairs. Editor: Emily Templeton. Layout and design: Mary Ellen Handelman. Address: Division of Codes and Standards, New Jersey Department of Community Affairs, 101 South Broad Street, Post Office Box 802, Trenton, New Jersey 08625-0802. Address changes and subscription requests may be directed to the *Publications Unit*. Comments and suggestions should be sent to the attention of the *Code Development Unit*.



Left to right: Cynthia A. Wilk, Director; Victor Timpanaro, Municipal Electrical Inspectors Association of New Jersey; Michael Jahn, Electrical Inspector of the Year; Joseph V. Doria, Jr., Commissioner



Left to right: Cynthia A. Wilk, Director; Francis X. Donovan, Past President and founding member of the New Jersey Fire Prevention and Protection Association; Art Londensky, President of the New Jersey Fire Prevention and Protection Association; Richard Barbarise, Fire Protection Inspector of the Year; Joseph V. Doria, Jr., Commissioner

(continued from page 3)



Left to right: Cynthia A. Wilk, Director; Thomas McGonigle, New Jersey State Plumbing Inspectors Association; William Olinger, Plumbing Inspector of the Year; Joseph V. Doria, Jr., Commissioner



Left to right: Cynthia A. Wilk, Director; Martin Vogt, Building Officials Association of New Jersey; Robert LaCosta, Building Inspector of the Year; Joseph V. Doria, Jr., Commissioner



Left to right: Cynthia A. Wilk, Director; Brenda Sirkis, New Jersey Association of Technical Assistants; Rosalind Bosserdet, Technical Assistant of the Year; Joseph V. Doria, Jr., Commissioner

New Jersey Licensed Master Plumbers and Home Improvement Contractor Registrations

Is a New Jersey Licensed Master Plumber required to have a Home Improvement Contractor Registration to install gas piping, hydronic heating piping, boilers, and warm-air heaters?

Based on the minutes from two public meetings held at the New Jersey State Board of Examiners of Master Plumbers on July 26 and September 27, 2007, and on communication between the Department of Community Affairs and the Division of Consumer Affairs, the Board of Master Plumbers has determined that a New Jersey Licensed Master Plumber can perform this work without also possessing a Home Improvement Contractor Registration.

Therefore, if a New Jersey Licensed Master Plumber applies for a permit to install any of the above items, a permit shall be issued to the plumbing contractor without possessing a Home Improvement Contractor Registration.

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

Source: Thomas C. Pitcherello
Code Assistance Unit

Numeric or Roman, It All Has To Do With Class!

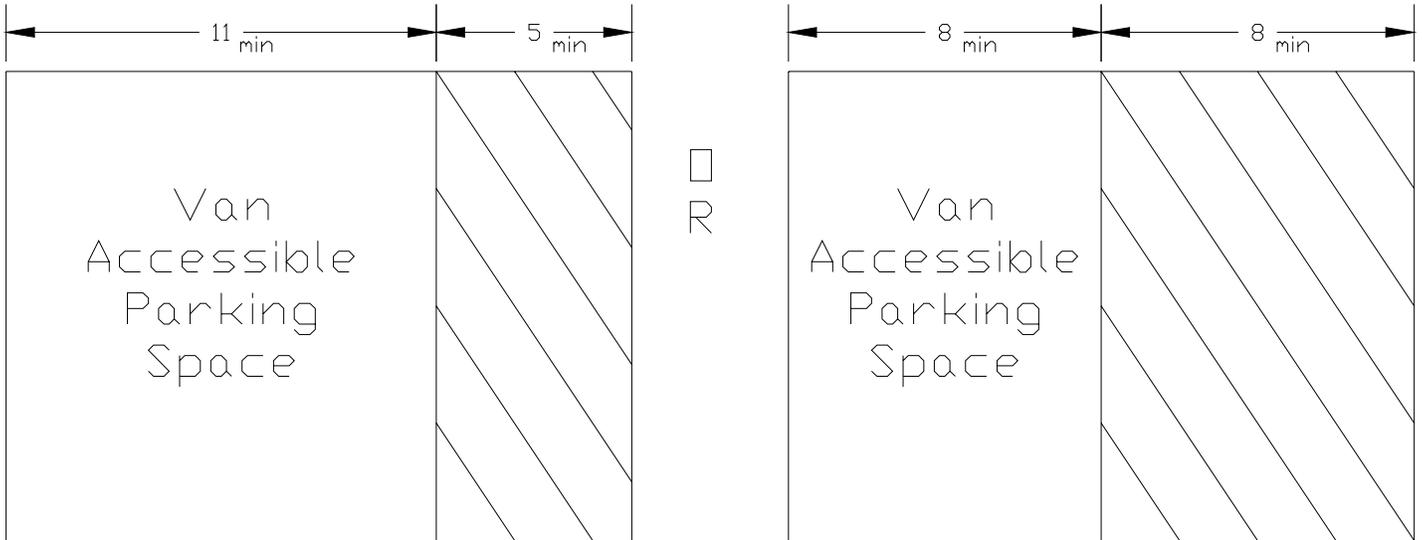
The Code Assistance Unit has received a multitude of questions regarding the classification of a building/structure . . . not occupancy group, not construction type, but the building classification. Two sections should be reviewed when the Uniform Construction Code refers to a building classification of Class 1 (I), Class 2 (II), or Class 3 (III): *N.J.A.C. 5:23-2.15(f)1.vii, Plans*; and *N.J.A.C. 5:23-4.3A(d), Enforcing Agency Classification*.

Both of these sections must be consulted when submitting plans. *N.J.A.C. 5:23-2.15(f)1.vii* requires all engineering plans and computations to bear the seal and signature of the licensed engineer or registered architect responsible for the design. However, there are three exceptions to this rule [*N.J.A.C. 5:23-2.15(f)1.vii(1)*]:

1. Plumbing plans for Class III structures may be prepared by persons licensed pursuant to the Master Plumber Licensing Act (The State Plumbing Licensing Law of 1968, *N.J.S.A. 45:14C-1 et seq.*);
2. Electrical plans for Class III structures may be prepared by persons licensed pursuant to The Electrical Contractors Licensing Act of 1962, *N.J.S.A. 45:5A-1 et seq.*;
3. Mechanical plans for Class III structures may be prepared by mechanical contractors.

Van-Accessible Parking Space Dimensions 

As we all know, *N.J.A.C. 5:23-7.10(a)2* requires that, for every eight accessible parking spaces or fraction thereof, at least one must be a van-accessible parking space. The dimensions of accessible parking spaces are provided at Section 502.2 of the International Code Council/American National Standards Institute (ICC/ANSI) Standard A117.1-2003. Please note that the configuration of the accessible van spaces has changed with the adoption of ICC/ANSI A117.1-2003. The standard configuration for a van space is now 11-foot wide (132 inches), with a 5-foot (60-inch) -wide access aisle. The 8-foot-wide (96-inch) space with an 8-foot (96-inch) -wide access aisle is also allowed. A design professional may specify either of the two van space configurations and the code official must accept the one specified.



Note: When garage parking is subject to *N.J.A.C. 5:23-7.10(a)2*, a minimum vertical clearance of 98 inches is required for vans per Section 502.6 of ICC/ANSI A117.1-2003.

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

Source: Rob Austin
Code Assistance Unit

Residential In-Ground Pools 

In Appendix G of the 2006 International Residential Code (IRC) and in Section 3109.2 of the 2006 International Building Code (IBC), a swimming pool is defined as “any structure intended for swimming or recreational bathing that can hold water over 24 inches deep.” Residential in-ground pools are required to comply with the National Spa and Pool Institute’s (NSPI’s) Standard 5. This article will address some of the questions that have arisen from this reference.

What is a “residential pool?” A residential pool is defined in NSPI-1, which is referenced by NSPI-5, as “any pool that is intended for noncommercial use as a swimming pool by three families or less and their guests.” For practical purposes, then, NSPI-5 applies to one- or two-family

dwellings. However, if a three-family dwelling, a three-unit apartment/condominium, or three townhouses have an agreement (e.g., a homeowner’s association) to share and maintain the pool, then it could still be categorized as a residential pool. Otherwise, once the number of families using the pool becomes four or more, it is then a “commercial/public pool” as per NSPI-1 and is required to be constructed as such.

What are the minimum water envelope dimensions? Because the diving dimensions are no longer published in the Building Subcode or the One- and Two-Family Dwelling Subcode, the table is being provided in this article along with a diagram (not to scale) demonstrating the dimensions. The deep-end wall starts at “W” and the shallow-end wall ends at “E”; the width

(continued from page 1)

Affairs and the check must be made payable to: "Treasurer, State of New Jersey."

Since the passage of the Act, the Department has received numerous questions on the implementation of the law. The following is a list of some frequently asked questions that are intended to provide code officials with guidance:

1. How does the Statewide Nonresidential Development Fee Act apply to new multi-tenant commercial buildings?

Answer: If a permit applicant applies for a construction permit and constructs a spec office building (Group B) or a spec retail building (Group M), a Certificate of Occupancy would be issued once the building is complete. The nonresidential development fee would be based on the equalized assessed value of the land and improvement (building). The fee must be collected before the Certificate of Occupancy is issued. Any "fit-up" work performed in a tenant space after the Certificate of Occupancy is issued is not considered new construction or an addition to an existing structure. Therefore, the work completed under the permit for the tenant space would not be subject to the nonresidential development fee. In any case, the amount of the nonresidential development fee is determined by the local tax assessor. The construction official's sole responsibility is to confirm that the fee has been paid prior to issuing a Certificate of Occupancy.

2. Are new State-owned buildings or additions to existing State-owned buildings exempt from the nonresidential development fee?

Answer: Yes.

3. Are new municipal buildings or additions to existing municipal buildings exempt from the nonresidential development fee?

Answer: Yes.

4. Are public schools exempt from the nonresidential development fee?

Answer: Yes.

5. Are commercial farm buildings exempt from the nonresidential development fee?

Answer: Yes.

If you have questions concerning implementation of the Act, you may contact the Code Assistance Unit in the Division of Codes and Standards at (609) 984-7609.

Source: Megan Sullivan Czyz
Division of Codes and Standards

Backflow Preventers – What Type is Required? 

The Department of Community Affairs has become aware of questions concerning the type of backflow preventer that is required by water utilities or authorities to be installed on a water service that serves either a combination domestic and fire-protection system or a dedicated fire-protection system.

Some water utilities are requiring, at a minimum, a reduced pressure zone backflow preventer on the water services supplying water to any fire-protection system when the system is supplied from a public water main. This brings up two questions: First, what does the Plumbing Subcode require? Second, can a water utility or authority be more stringent than the Plumbing Subcode?

What does the Plumbing Subcode require? The 2006 National Standard Plumbing Code (NSPC) requires a reduced pressure zone backflow preventer on any fire-protection system that has a fire-department siamese connection. This is a change from NSPC/2003, which allowed a minimum of a double check-valve assembly if the system were both supplied from a potable water source and located more than 1700 feet from a non-potable water supply. On July 6, 2008, an amendment to *N.J.A.C. 5:23-3.15* that would revert to the language in the NSPC/2003 was proposed in the *New Jersey Register*. By the time you read this article, it is likely to have been adopted.

Can a water utility or authority be more stringent than the Plumbing Subcode? This requires a lengthy response because there are two laws that apply. The adopted Plumbing Subcode states the type of backflow preventer required and the location. But, the Safe Drinking Water Act regulates water utilities and authorities, and requires them to protect the potable water from any backflow into the public water supply.

N.J.A.C. 5:23-3.15(b)10.iii amends Section 10.4.3 of the NSPC/2006 as follows: "Section 10.4.3 is amended to read: "potable water supplies shall be protected in accordance with the provisions of this code *and, where applicable*, the Safe Drinking Water Regulations (*N.J.A.C. 7:10*). The requirements of this code shall establish requirements for individual outlet protection. The requirements of the Safe Drinking Water Act shall establish the requirements for containment." (Emphasis added.)

So, the answer to the second question is: Yes, the water utility or authority can be more stringent than the Plumbing Subcode. Therefore, as stated in the amendment to the Plumbing Subcode, the containment backflow preventer on the incoming water service is regulated by the water utility or authority, which would have

(continued on page 8)

(continued from page 7)

the final decision as to what type of backflow preventer is required.

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

Source: Thomas C. Pitcherello
Code Assistance Unit

Defining Occupant Load

Table 1004.1.1 of the 2006 International Building Code (IBC), Maximum Floor Area Allowances per Occupant, is to be used when calculating the occupant load. However, there appears to be some confusion as to what spaces/areas are to be counted within the calculation. Within Table 1004.1.1 of the IBC/2006, two very important terms are used: "gross" and "net." These terms are defined in Section 1002, Definitions, of the IBC/2006. I have included them below:

- ♦ **FLOOR AREA, GROSS** The floor area within the inside perimeter of the exterior walls of the building under consideration, exclusive of vent shafts and courts, without deduction for corridors, stairways, closets, the thickness of interior walls, columns, or other features. The floor area of a building, or portion thereof, not provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above. The gross floor area shall not include shafts with no openings or interior courts.
- ♦ **FLOOR AREA, NET** The actual occupied area, not including unoccupied accessory areas such as corridors, stairways, toilet rooms, mechanical rooms, and closets.

As you can see, the definitions include/exclude certain portions of the building dependent on whether the "function of space" per Table 1004.1.1 of the IBC/2006 is gross or net.

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

Source: Rob Austin
Code Assistance Unit

Manual J Referenced in the IRC/2006

In the 2006 International Residential Code (IRC), Section M1401.3, Sizing, requires heating and cooling equipment to be sized based on building loads calculated in accordance with Air-Conditioning Contractors of America (ACCA) Manual J, Residential Load Calculation, or other approved heating and cooling calculation methodologies. As per *N.J.A.C. 5:23-2.15(f)*1.v and vii, these calculations are required to be submitted for all new one- and two-family dwellings and townhouses that are three stories or less in height.

OVERVIEW:

Manual J produces equipment sizing loads for single-family, detached homes, small multi-unit structures, condominiums, town houses, and manufactured homes. It provides quick supplemental details and advanced topics, as well as supporting reference tables and appendices. Manual J also accommodates homes that have exceptional architectural features and lifestyle accessories, such as:

- ♦ Dwellings that have limited exposure or no exposure diversity
- ♦ Homes with large south-facing glass area or rooms with unusually large glass area
- ♦ A thermally isolated solarium
- ♦ Customized internal load estimates

Manual J is sensitive to an increased variety of issues related to construction materials and methods, including:

- ♦ Fenestration loads for glass rated by the National Fenestration Rating Council
- ♦ Improved duct load models
- ♦ Improved methods for estimating the effect of internal and external shading devices, including insect screens
- ♦ Infiltration estimated based on blower door test
- ♦ Sensitivity to latitude and altitude
- ♦ Sensitivity to skylight glazing material, curb construction, and light shaft construction
- ♦ Heat-gain sensitivity to roofing material, roof color, and the use of radiant barrier
- ♦ Heat loss and gain for log walls; structural foam panels; aerated, autoclaved concrete block; insulated-form concrete panels; brick walls; concrete walls; wood foundation walls; and any other types of walls and insulation options.

Manual J references correlating manuals which are

also published by ACCA including Manual S, Residential Equipment Selection; Manual T, Air Distribution Basics; and Manual D, Residential Duct Systems. These are important because they aid the designer in picking the proper equipment for the loads established by Manual J, distribute the appropriate conditioned air to spaces throughout the home, and use ductwork that applies to the distribution and loads associated with Manual J.

Manual J is obtainable from <http://www.acca.org>, or by calling (703) 575-4477. If you have any questions, you may contact me at (609) 984-7609.

Source: Rob Austin
Code Assistance Unit

Update Fees

(reprinted from the Construction Code Communicator, Volume 11, Number 4, Winter 1999)

You just got an application to update an open permit -- now what do you do with it? If your municipality is like most, the only uniformity you have is your own way of handling it.

An update is an extension of the original permit. Therefore, you need to check the update to see if it still conforms with prior approvals and uses. A plan review may be (but is not always) needed. Now the big question to ask yourself is: "If the change had been on the original application, would it have changed the fee?" If your answer is no, distribute the paperwork just like any permit and file the rest. Generally, when a subcode official or technical assistant is given a filled-out technical form, their first response is to "price" it. However, there are times when no additional fee is required for a permit update. Two pricing examples follow.

The first example deals with a new building for which the fee is based on volume. If, during construction, the owner decides to add offices in an open space, there is no additional fee because the volume of the building has not changed.

The second example is electrical. If the electrician needs to add seven devices that were not on the original application, the electrical subcode official must review the original technical section to determine if an additional fee is required. The electrical fees are determined by unit rate, as indicated in the Uniform Construction Code at *N.J.A.C. 5:23-4.18(c)3*. The original permit and the update

application are combined into one application; they are not regarded as separate permits. To be more specific, suppose the original application included 46 devices and the updated application added seven devices. Using the State fee schedule, \$36 would have been paid on the original permit. Therefore, the updated fee would be \$6 for the three devices over 50. If a fee were allowed to be charged for additional devices independent of the total number of devices, the total fee for the update would come to \$36, an overcharge of \$30.

The comment I often receive from code officials is, "But I have to do another inspection!" This may be true, depending on when the update occurs. Sometimes you have to do additional inspections without an update application. This may occur, for example, on a house that is being remodeled in phases because the owners are living in it; also, a large building requires numerous inspections.

Why complete an update application at all if there is no fee involved? Well, the owner may need it for insurance purposes, or the contractor may need it to get paid or to provide evidence of having completed the job. But, more importantly for code enforcement, the update ensures correct records. Accurate records allow all code officials to know what permitted work has been done in that building.

NOTE: The principal in this article applies even when the fees used in the examples change.

Source: Ken Verbos
Bureau of Regulatory Affairs

Loading Requirements for Handrails and Guards

The 2006 International Building Code (IBC) makes it really easy to figure out the minimum loading requirements for handrails and guards. Section 1012.1 (Handrails – Where Required) and Section 1013.1 (Guards – Where Required) both reference Section 1607.7, Minimum Uniformly Distributed Live Loads and Minimum Concentrated Live Loads, for adequate strength and attachment.

However, moving to the 2006 International Residential Code (IRC), Sections R311.5.6 (Handrails for Stairs), R311.6.3 (Handrails for Ramps), and R312 (Guards) are not so clear when it comes to loading requirements. This is because the IRC/2006 places minimum uniformly distributed live loads within Table R301.5 (Minimum Uniformly Distributed Live Loads). For your convenience, and as a quick reference, the loads specified in Table R301.5 for handrails and guards in the IRC/2006 are provided below.

MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS	
Use	Load (psf)
Guardrails and handrails ^d	200 ⁱ
Guardrails in-fill components ^f	50 ⁱ

Note d – A single, concentrated load applied in any direction at any point along the top.

Note f – Guard in-fill components (all those except the handrail), balusters, and panel fillers shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to one square foot. This load need not be assumed to act concurrently with any other live load requirement.

Note i – Glazing used in handrail assemblies and guards shall be designed with a safety factor of 4. The safety factor shall be applied to each of the concentrated loads applied to the top of the rail and to the load on the in-fill components. These loads shall be determined independent of one another and loads are assumed not to occur with any other live load.

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

Source: Rob Austin
Code Assistance Unit

(continued from page 5)

At *N.J.A.C. 5:23-1.4*, Definitions, the class of a structure is defined and *N.J.A.C. 5:23-4.3A* is referenced. So, when figuring out which “class” applies, consult *N.J.A.C. 5:23-4.3A(d)*, which is summarized below. And, yes, Class I, II, and III of *N.J.A.C. 5:23-2.15(f)1.vii* are the same as Class 1, 2, and 3 of *N.J.A.C. 5:23-4.3A(d)*. Because the exceptions to *N.J.A.C. 5:23-2.15(f)1.vii* only apply to Class III (Class 3), we’ll only take a look there --

Class 3 agencies may perform plan review for the following buildings [*N.J.A.C. 5:23-4.3A(d)1*]:

- ♦ Business Group B less than 7,200 square feet, two stories, 40 feet high;
- ♦ Mercantile Group M less than 4,800 square feet, one story, 40 feet high;
- ♦ Storage Group S-1 less than 4,200 square feet, one story, 40 feet high;
- ♦ Storage Group S-2 less than 7,200 square feet, two stories, 40 feet high;
- ♦ Residential Group R-3, as permitted in the Building Subcode, including accessory private garages, radio and television antennas, and swimming pools; and
- ♦ Residential Group R-5, as permitted in the Building Subcode, including accessory private garages, radio and television antennas, and swimming pools.

Therefore, if the project you are reviewing is a Class III/3 structure (which means it can be reviewed by a Class III/3 agency), then the plumbing plans, electrical plans, and mechanical plans may be submitted by a licensed master plumber, licensed electrical contractor, or mechanical contractor, respectively, as per *N.J.A.C. 5:23-2.15(f)1.vii(1)*. Class II/2 and Class I/1 buildings/structures must be designed by registered architects or licensed professional engineers.

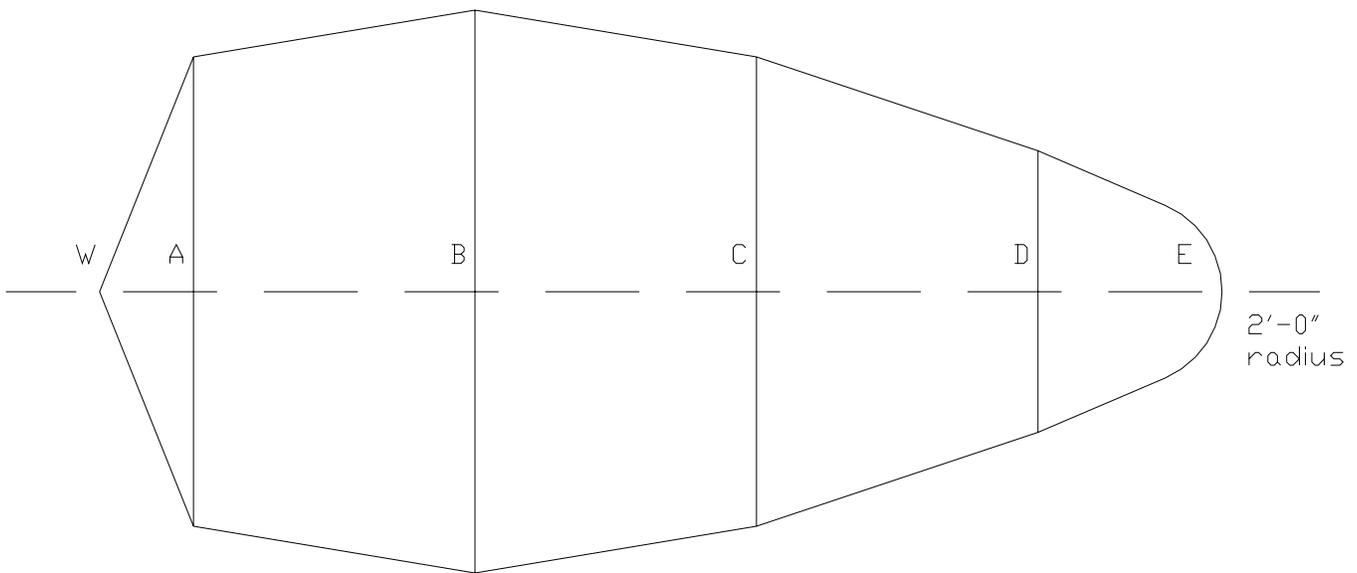
Source: Rob Austin
Code Assistance Unit

(continued from page 6)

dimensions are the total width; the width is expected to be symmetrical.

Pool Type	Minimum Depth at point				Minimum widths at point				Minimum lengths between points					
	A	B	C	D	A	B	C	D	WA	AB	BC	CD*	DE	WE
O	Manufactured diving equipment is prohibited													
I	6'-0"	7'-6"	5'-0"	2'-9"	10'-0"	12'-0"	10'-0"	8'-0"	1'-6"	7'-0"	7'-6"	Varies	6'-0"	28'-9"
II	6'-0"	7'-6"	5'-0"	2'-9"	12'-0"	15'-0"	12'-0"	8'-0"	1'-6"	7'-0"	7'-6"	Varies	6'-0"	28'-9"
III	6'-10"	8'-0"	5'-0"	2'-9"	12'-0"	15'-0"	12'-0"	8'-0"	2'-0"	7'-6"	9'-0"	Varies	6'-0"	31'-3"
IV	7'-8"	8'-6"	5'-0"	2'-9"	15'-0"	18'-0"	15'-0"	9'-0"	2'-6"	8'-0"	10'-6"	Varies	6'-0"	33'-9"
V	8'-6"	9'-0"	5'-0"	2'-9"	15'-0"	18'-0"	15'-0"	9'-0"	3'-0"	9'-0"	12'-0"	Varies	6'-0"	36'-9"

* Minimum length between points may vary based upon water depth at point D and the slope between C & D.



Are handrails required for pool stairs? NSPI-5 requires pool stairs to have a minimum unobstructed tread depth of 10 inches and a minimum unobstructed surface area of 240 square inches. However, the exception to this rule is to provide a handrail when tread depth is less than 10 inches, but no smaller than 8 inches. In short, tread depth ≥ 10 inches, no handrail required; tread depth < 10 inches but ≥ 8 inches, handrail required.

Are decks/walking surfaces required? NSPI-5 does not require a deck or walking surface to be provided around an in-ground pool. However, if provided, NSPI-5 contains requirements for their installation (drainage, materials, etc.).

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

Source: Rob Austin
Code Assistance Unit

What is a Commercial Farm Building?

At *N.J.A.C. 5:23-3.2(d)*, the Uniform Construction Code (UCC) has regulations that apply to commercial farm buildings. At *N.J.A.C. 5:23-3.2(d)1*, a commercial farm building is defined as “any building located on a commercial farm which produces not less than \$2,500 worth of agricultural or horticultural products annually, which building’s main use or intended use is related to the production of agricultural or horticultural products produced on that farm.”

Commercial farm buildings do not fit into any group pursuant to the Building Subcode; they are themselves a classification. At *N.J.A.C. 5:23-3.2(d)2*, the UCC states buildings that meet the definition of commercial farm building “shall be classified as commercial farm buildings.” The UCC further states, “For those provisions not covered by this section, commercial farm buildings shall comply with the construction code provisions applicable to Group S-2.” The UCC does not say that commercial farm buildings are designated as Group S-2. It says that, with certain specific exceptions, commercial farm buildings meet the requirements for Group S-2.

To ensure that the classification of commercial farm buildings is well understood, the UCC contains exceptions for specific aspects of commercial farm buildings. These include provisions for pre-engineered grain bins and other storage equipment used on the farm [*N.J.A.C. 5:23-3.2(d)3*], and temporary greenhouses, also called “hoophouses” [*N.J.A.C. 5:23-3.2(d)4*]. In addition, the UCC provides standards for the amount of hazardous materials that may be stored in a commercial farm building [*N.J.A.C. 5:23-3.2(d)5*] and sets limitations on the use of commercial farm buildings as places of public assembly [*N.J.A.C. 5:23-3.2(d)6*].

If you have questions about commercial farm buildings, their classification, or specific exceptions, please contact the Code Assistance Unit at (609) 984-7609.

Source: Emily W. Templeton
Code Development Unit

Three-Second Gust vs. Fastest-Mile Wind Speed

There seems to be a misunderstanding in the application of Table R301.2.1.3, Equivalent Basic Wind Speeds, of the 2006 International Residential Code (IRC). Prior to the publication of American Society of Civil Engineers Standard No. 7-95, most wind-related code provisions were based on the fastest-mile wind speed. Because there are documents referenced in the IRC/2006 that refer to the fastest-mile wind speed, Table R301.2.1.3 provides the conversion of the three-second gust to fastest-mile wind speed. The IRC/2006 is based on the three-second gust. All wind speeds referenced in the IRC/2006 are measured by the three-second gust, not the fastest mile.

EXAMPLE:

1. Section R301.2.1.1., Design Criteria, refers to a wind speed of 100 miles per hour or greater. This is the three-second-gust wind speed.
2. Section R301.2.1.1 refers to standards for the design of buildings with a wind speed equal to or greater than 100 mph. In the referenced standard SSTD-10 (Southern Building Code Congress International, Standard for Hurricane-Resistant Residential Construction), wind speeds are based on the fastest mile. Therefore, when using Table R301.2.1.3, you must change the wind speed from the three-second gust to the fastest mile in order to use SSTD-10.

The wind speeds obtained from Figures R301.2(4) are in three-second gust and this is the wind speed that must be used. In the standards that reference the fastest-mile wind speeds, you must change the three-second-gust wind speed obtained from Figure R301.2(4) and use Table R301.2.1.3 to convert to the fastest-mile wind speed.

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

Source: Marcel Iglesias
Code Assistance Unit

Windows

How can you decide if the windows being installed in a house are code compliant? Windows are part of the building exterior and, like the exterior walls, must be rated for wind pressure.

How do you decide if the window that is rated for a wind pressure is the right window for a particular location? The design professional should provide documentation to indicate compliance with the 2006 International Residential Code (IRC).

Verification of code compliance is obtained by using the following table, figure, and sections of the IRC/2006: Table R301.2(2), Seismic Design Categories — Site Class D, in conjunction with Figure R301.1(7), Wall Zone 4 and 5, provided that the wind pressure the building exterior must be designed to (including windows and doors) complies with Section R613.3, Performance, as described below.

Section R613.3 of the IRC/2006 requires that exterior windows and doors be designed to resist the design wind loads specified in Table R301.2(2), adjusted for height and exposure per Table R301.2(3), Weathering Probability Map for Concrete. The IRC/2006 further requires, as per Section R613.4, Testing and Labeling, that exterior windows and sliding doors must be tested by an approved, independent laboratory, and must bear a label identifying manufacturer, performance characteristics, and approved inspection agency to indicate compliance with American Architectural Manufacturers Association/ Window & Door Manufacturers Association/Canadian Standards Association (AAMA/WDMA/CSA)101/I.S.2/A440, Standard/Specification for Windows, Doors, and Unit Skylights. Exterior, side-hinged doors are required to be tested and labeled as conforming to AAMA/WDMA/CSA101/I.S.2/A440. As an alternative, the exterior, side-hinged doors must comply with Section R613.6, Other Exterior Window and Door Assemblies.

If the windows in question meet or exceed the requirements of Section R613.3 and Table R301.2(2), and have been tested and labeled as per Section R613.4 for location, then the windows can be installed, except in wind-borne-debris regions. If a window is to be installed in a wind-borne-debris region, it must also comply with Section R301.2.1.2, Wind-Borne-Debris Protection Fastening Schedule for Wood Structural Panels, of the IRC/2006.

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

Source: Marcel Iglesias
Code Assistance Unit

New Jersey Register Adoptions

Date: July 7, 2008
Adoption: 40 *N.J.R.* 3990(a)
Summary: The adopted amendment at *N.J.A.C.* 5:23-3.14 retains the original text of the 2006 International Building Code (Section 903.3.1.2.1), and requires sprinkler protection for exterior balconies, decks, and ground-floor patios of dwelling units where the building is of Type V construction in Residential Group R buildings.

Date: July 21, 2008
Adoption: 40 *N.J.R.* 4314(b)
Summary: The adopted amendment at *N.J.A.C.* 5:23-2.18 requires that, in addition to the location, the height of the finished foundation be documented in order to identify any potential zoning violation with regard to the height of a new building before the building is constructed. The adopted amendments at *N.J.A.C.* 5:23-2.23 and 2.35 make corrections to a previous adoption to ensure that the correct technical provisions applicable to both nonresidential and residential construction are clearly identified when local code enforcement agencies are addressing problems reported by homeowners after issuance of a Certificate of Occupancy.

Date: August 4, 2008
Adoption: 40 *N.J.R.* 4523(b)
Summary: The adopted amendments at *N.J.A.C.* 5:23-1.1, 1.4, 2.22, 3.16, 4B.1, 4B.3, 4B.10, and 9.3 and adopted new rule at *N.J.A.C.* 5:23-4D establish requirements for recreational park trailers, and adopt American National Standards Institute Standard A119.5, 2005 edition, with amendments as the Recreational Park Trailer Subcode.

Date: September 15, 2008
Adoption: 40 *N.J.R.* 5195(b)
Summary: The requirement for all swimming pools to be equipped with main drain suction outlets in the lowest sections of the swimming pools was previously incorporated into the Plumbing Subcode for consistency with *N.J.A.C.* 8:26, Public Recreational Bathing. However, the requirements of *N.J.A.C.* 8:26 do not apply to swimming pools at one- and two-family residences. And because above-ground and in-ground residential swimming pools typically do not have main drain suction outlets, this amendment to *N.J.A.C.* 5:23-3.15 eliminates the requirement for main drain suction outlets for swimming pools at one- and two-family dwellings.

Date: September 15, 2008
Adoption: 40 *N.J.R.* 5195(c)
Summary: In order to clarify, and make more precise, rules concerning conflict of interest for code officials and

(continued from page 13)

inspectors, the Department of Community Affairs has made the following amendments:

N.J.A.C. 5:23-4.5(j)2 now makes it clear that a code official cannot be engaged in ownership, employment, or contracting to provide goods and services with any business furnishing labor, materials, products, or services for construction, alteration, or demolition of structures within the municipality in which he is employed or in any adjacent municipality, regardless of the location where the activity occurred.

N.J.A.C. 5:23-4.5(j)1 revises the text so as to prohibit any person employed by an enforcing agency as a construction or subcode official or as an inspector from knowingly carrying out any inspection or enforcement procedure with respect to any property or business in which he or she, or any close relative or household member, or his or her superior within the enforcing agency, or any close relative or household member of any such superior, or any other public official or employee having any direct or indirect control over the funding or operations of the enforcing agency, or any household member of any such public official or employee has an economic interest. Thus amended, the rule is consistent with the conflict-of-interest provisions of the Local Government Ethics Law.

N.J.A.C. 5:23-5.25(c) now makes it clear a determination by the Department that a licensee has engaged in conduct constituting a conflict of interest under *N.J.A.C. 5:23-4.5(j)2* constitutes grounds for revocation of a license and that suspension is not an adequate sanction in any such case, or in any case in which a licensee is convicted either of a crime or of an offense in connection with performance as a code official or inspector.

Source: Mary Ellen Handelman
Office of Planning and Operations

NOTES

FIRST-CLASS MAIL

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



FIRST CLASS MAIL
US POSTAGE
PAID
Trenton, N.J.
Permit No. 21