

# Construction Code Communicator



State of New Jersey  
Christine Todd Whitman, Governor

Department of Community Affairs  
Harriet Derman, Commissioner

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## Just Married: The UCC and the Consumer Fraud Act — *Cox v. Sears Roebuck & Co.*

The New Jersey Supreme Court has set a new precedent with a case involving a homeowner and a home improvement contractor whose work was less than satisfactory.

The Consumer Fraud Act has been around in New Jersey since 1960. Over the course of time the Legislature toughened the Act; private lawsuits are allowed, and treble damages and attorneys' fees are mandated in some cases. The Department of Law and Public Safety implemented the Consumer Fraud Act with rules that include stringent language on home improvement contracts. And most recently, in 1994, the New Jersey Supreme Court for the first time linked Uniform Construction Code requirements into the Consumer Fraud Act.

In 1988, an 82-year-old homeowner contracted for kitchen remodeling with Sears. The total cost came to about \$8,795. Some of the work required permits. None were obtained. In addition to poor workmanship, the contractor created code violations. A new microwave vent was installed to exhaust back into the house; newly installed ground fault interrupters weren't grounded; a receptacle box was installed with the polarities reversed, etc. Cost to repair the problems: \$6,830. The homeowner's estate (he died) was awarded \$20,490 (three times the repair cost) plus attorneys' fees, filing fees, and costs.

According to the Court's opinion in *Cox v. Sears Roebuck & Co.*, 138 NJ 2 (1994), the following is the legal test: If a seller of

home improvement services commits an "unlawful practice" under the Consumer Fraud Act, and the buyer of those services (homeowner or noncommercial tenant) suffers any identifiable loss as a result, a court must, in addition to any other relief, award threefold damages as well as attorneys' fees, filing fees, and costs of suit.

Closer to home, the Court clearly stated that failure to obtain necessary permits for home improvement work is an "unlawful act" within the meaning of the Consumer Fraud Act. It is also an "unlawful act" when a home improvement contractor to ask for final payment before the work is completed and approved, and when the contractor does not give the homeowner or tenant a copy of what the Court calls "inspection certificates" before final payment or before the contractor asks for a "satisfactory" signoff on the job.

The Court's language does not always parallel that of the Uniform Construction Code. The Court uses, for example, the non-UCC term "inspection certificates" and the term "Certificate of Continued Occupancy" when a Certificate of Approval is the UCC-required evidence of approved work. The meaning of the Court, however, is clear.

We know work without a permit is an unlawful act. We've seen it discussed in these pages. It is stated in the Uniform Construction Code Act (N.J.S.A. 52:27D-130) and regulations

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(*N.J.A.C. 5:23-2.14*). The Department of Law and Public Safety's regulations even state it (*N.J.A.C. 13:45A-16.2(a)10* — note that all of Subchapter 16 is devoted to home improvement practices in those regulations).

But the Uniform Construction Code is young, and the courts have addressed construction code enforcement issues in only a handful of cases. The Supreme Court of the State has now added its unique validation to construction code enforcement by affirming that certain violations of the Uniform Construction Code are also violations of the Consumer Fraud Act. Looked at another way, the judicial branch of government joins the legislative and executive branches in reinforcing the need for permits and inspections.

Weaving together two complementary laws, each strengthening the other, provides a sharp additional incentive to ensure permits are in place and inspections are requested when home improvement contractors undertake a job. The potential for multiple penalties has become significant.

The above doesn't do justice (pun intended) to a 23-page opinion, which is published at the noted citation, on page 2 of Volume 138 of *New Jersey Reports*. It's probably in your municipal attorney's office and might be recommended as required reading for contractors doing home improvement work.

Source: Vivian Lopez  
Division of Codes & Standards

## What Is Exempt from Training Fees?

As we continue to review and report on the State Training Fee, there still seems to be some confusion on what is exempt from the fee.

Let us first try to define the word exempt as it is used in the enabling legislation. Many activities such as permits for promoting accessibility in existing structures (52:27D-126e), nonprofit corporations doing rehabilitation, or new housing may be exempt from local fees, if the municipality passes an ordinance (52:27D-126d). The operative words in these sections are "local ordinance" and "local fees." These areas may also exempt surcharges.

Secondly, what about exemptions under ordinances, such as exemptions for churches, or for volunteer organizations, or other nonprofit groups? These exemptions are by ordinance so are these permits fee exempt?

Yes, all of the above are local fee exempt, but in only one situation are permits exempt from the State Training Fee. Any public buildings that are erected or altered are exempt from the State Training Fee (52:27D-126c), and it is important to note that the statute uses the exact term, "training fee." Any and all other exemptions mentioned either in the statute or in the local ordinance

may be exempt from local fees, but you must collect a State Training Fee and submit it to the State on a quarterly basis.

Remember to apply these definitions when you are calculating fees; it will make your report and collection more accurate. We still may ask you to justify your report if it does not fall within a reasonable variation volume and alteration dollars reported and fees transmitted. If you have any questions regarding exemptions, feel free to call the Bureau of Code Services at 609/530-8857.

Source: Richard Z. Osworth  
Chief, Bureau of Code Services

## Verifying Estimated Costs

What is the most appropriate method for code officials to use to verify an applicant's estimated cost of a project? This verification becomes important when verifying the percent of alteration and in calculating the State Training Fee for alteration work. *N.J.A.C. 5:23-4.20(c)2.i(2)* (Departmental Fees) requires the applicant to submit such cost data as may be available produced by an architect or engineer of record, or by a recognized estimating firm or by the contractor. A bona fide contractor's bid, if available, shall be submitted. Of all the above sources used for verification, the contractor's bid is the most controversial. As the construction files are public information and subject to review, contractors are reluctant to divulge their bids and pricing methods to potential competitors. An easy solution for both problems is merely to verify the estimated cost as submitted on the bid and application and to return the bid to the contractor, thus providing assurance that the specifics of the bid will not become public information.

Source: Gerald E. Grayce  
Bureau of Regulatory Affairs

## Requirements above and beyond the Code

It has been brought to the attention of the Department that confusion exists with respect to the application of *N.J.A.C. 5:23-2.2(c)* by construction and subcode officials. The regulation states, "Any requirement for structural, fire or sanitary safety of a building or structure, or essential for the safety of the occupants thereof and which is not specifically covered by the regulations, shall be determined by the construction official and appropriate subcode official." Instances have occurred where this regulation has been misapplied by code officials in an attempt to obtain what they wanted rather than what was intended by the regulations.

This section of the regulations should only be utilized when a situation occurs which is not addressed in any matter by the various subcodes which comprise the Uniform Construction Code.

It should not be utilized to prohibit a procedure or installation which is not prohibited by the model codes. If a construction official, subcode official, or licensed inspector has an objection to a particular procedure or installation, he/she must be able to reference a particular model code section to justify the objection. Otherwise, what was intended to be a uniform construction code becomes a code personalized to each official's particular concerns with no real opportunity for consensus on what is and what is not a violation of the code. If an official believes that a matter comes under the requirements of *N.J.A.C. 5:23-2.2(c)*, he/she should not only provide for the necessary requirements for a safe installation, but should also work to have the situation addressed by the code. This will help to eliminate the exercise of discretion on the part of the code official which causes much confusion, delay, and expense in the construction industry.

Source: Robert Hilzer  
Bureau of Regulatory Affairs

## Park Models — Update

I would like to update you on two areas regarding the siting of "Park Models" in New Jersey: first, the label; and second, clarifying what a park model is.

The use of two labels is still allowed based on Bulletin 93-6, Recreational Vehicle Industry Association (RVIA) or Recreation Park Trailer Industry Association (RPTIA), even though the Bulletin mentions an October 1994 date as approved by settlement agreements with different manufacturers. This part of the settlement agreements has been extended indefinitely since the revision to the ANSI 119.5 Park Model standard is not complete.

Some new types of recreational buildings have been proposed or constructed. Loosely, some individuals refer to them as Park Models. Park Models are a specific type of trailer and are constructed to a specific standard, including a label. The term should not be used when mentioning a modular unit being transported to a site without a label. The square footage, height, type of construction, and other code issues for closed panel construction of modular units fall under the rules and regulations within Subchapter 4A and the Industrialized Buildings Commission. Cabins are not Park Models and should not be treated as such under the regulations, nor are they necessarily modular buildings if closed-panel-construction is not involved in the process of erecting the cabin on the site. Make sure you review the definitions of these different types of construction with the owner to assure yourself that the building being sited has an appropriate label or that it does not need a label at all and is subject to your on-site inspection.

Source: Richard Z. Osworth  
Chief, Bureau of Code Services

## Demolition Permits

I recently fielded a complaint in which the aggrieved party alleged that the construction official in his municipality did not

assure that adjacent property owners were notified about a demolition permit being issued. Upon further investigation, I determined that the demolition in question was nothing more than the removal of an underground storage tank.

I promptly called the complainant and informed him the Construction Official used common sense and good judgment in not requiring the applicant to notify adjoining property owners. Well, an argument commenced whereby a second opinion was sought by the complainant. I will not go into the details of what happened next; however, I will say that the complainant went away unhappy and the Construction Official was vindicated.

*N.J.A.C. 5:23-2.17*, entitled Demolition or Removal of Structures, and the procedures which follow, were intended to apply to the total removal of a structure. In many instances, demolition permits are issued without the need to submit proof of utility disconnects and notification of adjoining property owners. Another example of this is the renovation of an existing structure, for which the code official issues a "demolition only" permit because there are some unresolved code issues. There is no need to disconnect the utilities to proceed with the demolition work, and therefore no need to notify adjoining property owners.

The purpose of notifying property owners is that disconnecting the utilities may temporarily affect them. If there will be no interruption of services, there is no need for notification as in the example above and the tank removal mentioned earlier.

Remember, many of the sections of the Uniform Construction Code were written for a certain set of circumstances. When the circumstances differ, it is up to the code official to apply what is appropriate and reasonable. We are paid to make decisions based upon our knowledge and experience, not to blindly enforce regulations which clearly do not address the situation at hand.

Source: Louis Mraw  
Supervisor of Investigations  
Bureau of Regulatory Affairs

## Afloat in Pool Permits

Since the major changes to the enclosure section of swimming pool regulations in 1993, many people have called us with questions. And we have a few answers.

One of the most difficult issues concerned the door alarms required at the entry to the pool area from a house. The instantaneously activated alarm required in 1993 was not on the market, thus making compliance impossible. As explained in our previous *Communicator* issue by William Hartz, BOCA has achieved a compromise solution as a code change, allowing alarms with a seven-second delay. Therefore, pending a New Jersey adoption of that change, accepting the device with the seven-second delay is recommended.

Pool gate swinging direction (section 421.10.1 condition #8) is required as "outwards away from the pool." It appears that chain link fence gates traditionally are manufactured free swinging in both directions. Is that acceptable in view of the fact that BOCA doesn't say "only" outwards? A look at code commentaries and a BOCA

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reply to a letter of inquiry yield a firm NO. The intention is that the pool access gate must operate outward away from the pool only. This causes a desirable delay (going opposite to the access travel direction), and sometimes an inward push (toward the pool) made in vain actually completes a latching action that might have failed. Also, having to work a very high, hard-to-reach latch is expected to be an additional entry deterrent to an unsupervised child.

In closing, a few words about location on the lot, section 421.4. In a nutshell, it affirms that the local zoning ordinance has primary jurisdiction over the issue of pool location. It is only when an ordinance has no such restrictions that the BOCA pool setback dimensions apply.

Source: E. Maria Roth  
Code Assistance Unit  
Bureau of Technical Services

## Radon Fan Access

Recently we were asked by a radon mitigator if we really meant that a walkway to the fan is required for mitigation work. The inquirer reminded us that similar appliances such as attic exhaust fans do not normally require such measures.

The difficulty and expense of providing a walkway in an existing home does not seem warranted for radon exhaust fans. Motors for these fans are normally maintenance free and replaced rather than repaired. Therefore, even though Bulletin 93-4 mentions that walkways and lights should be provided, it is not required for radon exhaust fans with small horsepower motors that can easily be replaced.

Source: Michael Baier  
Bureau of Technical Services

## Construction Site GFCI Protection

Ground-fault circuit interrupter devices that are evaluated for use in a permanent installation will not operate when the neutral conductor is "opened" or lifted at the panel on the line-side of the device. Under such conditions, the device is no longer capable of operating, but 120V-to-ground will still be available at the now-unprotected receptacle. Similarly, if the phase and neutral conductors are reversed on the supply-side of the GFCI-type breaker, under conditions of ground-fault at the receptacle, the breaker will operate, but will only open the neutral conductor leaving the phase-leg connected to the fault. Under both of these conditions which may exist at construction sites, if a faulted tool is connected to the now-unprotected receptacle, the person attempting to use that tool will be exposed to the same type of shock or electrocution hazard the GFCIs are intended to prevent.

The need for "open-neutral" and "reverse-phasing" protection in any GFCI according to UL standards is based on its intended use. If the device is intended for temporary power applications such as at construction sites, then both types of protection are needed under listing requirements. Cord and plug connected GFCI assemblies that are manufactured and intended for use in tempo-

rary power applications are provided with "open-neutral" as well as "reverse-phase" protection. Electrical inspectors may avoid potential hazards involved in the temporary power supply on the construction sites by requiring the use of those GFCI assemblies that are listed and intended for temporary power applications, unless the GFCI device is part of the permanent wiring meeting the requirements of section 305-6(a) of the NEC-93.

Source: Ashok K. Mehta  
Bureau of Technical Services

## Garage Doors to Adjacent Spaces

In a recent conversation with a builder it was brought to my attention that Section 407.0 of *The BOCA National Building Code/1993* is not being enforced consistently throughout the State.

Section 407.3 requires that a minimum of one (1) hour fire partition and floor/ceiling assembly be used to separate a private garage from interior residential spaces when the garage is located beneath habitable rooms. Section 407.4 requires that the interior spaces of attached garages side-by-side to rooms be separated by means of 1/2 inch gypsum board or equivalent to the garage side. Both of these conditions are required to have a door conforming to Section 407.6, 1 3/4 inch solid core wood or 1 3/4 inch solid or honeycomb core steel.

Nowhere in this section is the jamb of the specific type of door discussed. Nowhere in this section is the necessity for door closers discussed. The Code only prescriptively describes the door panel itself. There are no requirements for the door to be activated by a self-closing device nor are other ratings or special frames required.

Source: John N. Terry  
Code Specialist, Code Assistance Unit  
Bureau of Technical Services

## New Snow Load Bulletin

In the next transmittal of bulletins you will find one called "Ground Snow Loads." It replaces Bulletin 81-9, and will make life a little easier when trying to find snow loads for your town using the BOCA map for the eastern United States, Figure 1610.3(1). The bulletin even goes into a little more detail in the northwest portion of New Jersey where the small-scale BOCA map is too crowded to show additional isolines.

Source: E. Maria Roth  
Code Assistance Unit  
Bureau of Technical Services

## Subchapter 12 and Accident Reporting

To further enhance the safety of the riding public the Elevator Safety Unit of the State of New Jersey is in the process of collecting data on accidents related to elevator devices. The statistical analysis of such data will allow for identification of areas requiring improvement and will help to determine necessary safety

measures which need to be taken in order to minimize occurrences of accidents in the future.

Pursuant to the Uniform Construction Code the owners of the buildings are required to immediately notify the municipal construction official of every accident involving death or personal injury caused by the malfunction or misuse of elevator devices as well as to report accidents involving damage to the apparatus.

In support of such an effort, the Elevator Safety Unit is asking the Construction Officials to notify the unit about all accidents reported to them or those that they have otherwise become aware of, as soon as possible after such accidents are reported to the enforcing agency. In addition, we are asking to forward to the Elevator Safety Unit copies of all documents related to the enforcement process, starting from the last cyclical inspection performed on the device. These documents should include but not be limited to the Inspection Reports, List of Violations cited, Notices of Violations and Order to Terminate, Certificates, etc. In addition, when an accident inspection is performed, a copy of the Inspection Report should also be forwarded to the Department.

Source: Paulina Caploon  
Elevator Safety Unit

## Out-of-Service or Out-of-Service

What kind of a title is this? Elevators can only be either out of service or subject to routine and periodic inspection, right? Well, that was what we thought until we started to look a little closer at the issue.

Owners think one thing, the subcode official thinks another, and often the state data base thinks something else. The only out-of-service device that should be released from the routine and periodic inspection process are those taken out by the code through a permit. For such a device the power is removed (not shut off), the cables are removed, the cab is at the bottom of the hoistway, and the hoistway doors are sealed from the inside. This device can be put back in service by a permit and a full acceptance test.

Now what about a device that is out of service because a permit has been taken out to do minor work or alterations? The device according to the rules is not subject to routine and periodic inspections during a period of non-operation (*N.J.A.C. 5:23-2.23j3*). Often a permit is taken out which might require work to be done over a long period of time and involve multiple devices. If this is the case, then the routine and periodic inspections should be performed on equipment which is being phased into a much larger job. The devices are not out of service, but are continuously used to assure service to the building occupants. The inspector should be flexible when they go for a routine inspection in a building where devices are under a permit, and assure that safety is being maintained and that devices which are used to assure service are properly inspected, while the work is ongoing. The Certificate of Approval is issued to close the permit; however, the devices are most likely in use as the work is completed. These devices are then inspected under the permit and given an approval by the inspector.

A Certificate of Compliance would be issued on the next cycle for the device as part of the routine and periodic inspection process.

A device is not working when, as the routine inspection is performed, the owner says, "it's out of service." The device must be inspected, you may give the owner a set period of time to get the device operational, or the owner may choose to take the device out of service by code. Remember to have the Construction Official approve such an action as the device might have been a condition of the original Certificate of Occupancy and can not be taken out of service, but repaired and made safe as per the code of installation.

The State Elevator Data Base does maintain an "out-of-service by code" classification and will report those devices to the individual enforcing authority. We do not place a device in this category based on a representation by the owner, but only accept this status from the subcode official or construction official, and it must be in writing.

Remember, what's out-of-service to one person may not really be out-of-service to another, especially the code official.

Source: Richard Z. Osworth  
Chief, Bureau of Code Services

## Standard Forms

It is time for the Department to review the format and content of the UCC Standard Forms. The Department welcomes all comments and suggestions during this process. Please remember that the information on the form must be able to fit on a single page. If you add information or items to the form, it probably means something will have to be deleted.

Only written comments will be considered. Send them to:

Department of Community Affairs  
Bureau of Technical Services  
CN 816  
Trenton, New Jersey 08625  
ATTN: Standard Forms Project

## Letter to the Editor:

### CONSTRUCTION OFFICIALS

Do you want to be an expert your field?

Do you want to be an asset to your community and your Profession?

Do you want respect for what you know?

Do you want the respect of your peers?

Do you want to retain the status as the Best Code Officials in the World?

Do you want the best one week educational course in Code Enforcement?

Do you want to be the best that you can be?

Do you want to have a say in the Code that you enforce?

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Do you think you know what good Code Enforcement is?

Do you want to participate in the Code Change process?

Do you think that Code Officials from New Jersey know what is best for Code Development in New Jersey?

If you answer YES to these questions, then YOU need to take the next step and budget for and schedule for the next BOCA Code Change Hearing.

The Construction Officials and Fire Subcode Officials working in New Jersey make up the largest state membership in the BOCA world.

At the last BOCA Conference approximately 1,000 BOCA members voted on the proposed Code Changes; only 40 BOCA Members were from New Jersey.

ANY CONSTRUCTION OFFICIAL who wants information on the BOCA Conference or needs help in getting approval to attend should call Ronald Estep, Construction Official, Hillsborough Township, at 908/369-4313 ext. 81.

Source: Ronald E. Estep  
Construction Official

## New Jersey Register Adoptions Spring 1995

Date	Adoption
1/17/95	27 NJR 321(a) Notice of Administrative Correction Test and Inspection Fees: <i>N.J.A.C. 5:23-12.6</i> .
3/6/95	27 NJR 894(a) Abandonment of Septic Systems Adopted Amendment: <i>N.J.A.C. 5:23-3.15</i> , effective 3/6/95, operative 7/1/95.
	27 NJR 894(b) Mechanical Subcode Adopted Amendment: <i>N.J.A.C. 5:23-3.20</i> , effective 3/6/95, operative 7/1/95.
	27 NJR 894(c) Interpretations Adopted Repeal: <i>N.J.A.C. 5:23-9.4</i> , effective 3/6/95, operative 7/1/95.

NOTE: At the time of printing this newsletter, the March 20, 1995 New Jersey Register has not yet been published. Please check this edition for UCC adoptions.

Source: E. Maria Roth  
Code Specialist, Code Assistance Unit  
Bureau of Technical Services

## 2nd Annual Product Expo

Once again the Building Safety Conference will begin with the Product Expo. The Expo will be on May 3, 1995 from 2:00 to 6:00 PM in the Grand Ballroom. Vendors of new and innovative products will be available to explain how their products perform. The Product Expo is not an endorsement by DCA, but only a means to help the inspector make an informed decision. The following is a list of vendors and the products they will display.

VENDOR	PRODUCTS
1. Municipal Information Systems	Computer Software and Hardware for Enforcement Offices
2. Southern Pine Council	Information on Southern
3. 3M	Fire Protection Products
4. Vanguard Plastics	Polybutylene, hydronic radiant floor, geo-thermal water service
5. Simpson Strong Tie	Engineered Wood Connectors, SST Epoxy-Tie
6. Primary Sales	Trianco Heatmaker, Powervent valves
7. Flex-L	Flexible Aluminum Gas Relining Kit
8. Crouse-Hinds	Electrical Equipment for Hazardous Areas
9. BARCO Systems	Petrofill Tank Abandonment
10. Bussman/Cooper Ind.	Fuses/Overcurrent Protection
11. Glezen Associates	Exit devices, Access and Egress Control
12. Hickson Corporation	Fire Retardant Treated Wood
13. Kant Sag Connectors	Lumber Connectors
14. The Celotex Corporation	Building Insulation
15. U.S. Gypsum Company	Firecode Compound, Fire Wall System
16. ConVault Mid Atlantic	Above Ground Fuel Storage Systems
17. Specified Technologies	Sealants, Mortar, Construction Collars
18. N.S.P.C.	Plumbing Code Materials
19. Georgia Pacific Corporation	Engineered Lumber Products
20. Benjamin Obdyke	Roll Vent Attic Ventilation System
21. National Gypsum Company	Area Separation Wall, 1-800 Tech Services
22. BOCA International	BOCA Codes and Commentaries
23. International Masonry Institute	Masonry Materials
24. National Waterproofing	Exterior Foundation Waterproofing System
25. P.S.E. & G.	Gas Safety and CO Detectors
26. Inchcape Testing Services (ETL)	Safety Testing, Certification and Labeling of Electrical and Mechanical Products
27. Altherm	Fuel Gas Piping Systems
28. EPVA	ADA and Building Code Compliance
29. Barrier Technology	Fire Rated Sheathing
30. Underwriters Laboratories	Safety Certification Services
31. The Bilco Company	P.E. Basement Door
32. BBB Plastic Lumber	Plastic Lumber
33. N.J. Propane Association	Propane Gas Information
34. Solutions Now Software	Software for Code Enforcement

**Building Safety Conference****May 3 – 5, 1995****Schedule of Events****May 3, 1995**

2:00 PM - 7:00 PM	<b>Registration</b> - Convention Headquarters
2:00 PM - 6:00 PM	<b>Product Expo</b> - Grand Ballroom
6:00 PM - 7:30 PM	<b>Crackerbarrel</b> - Grand Ballroom

**May 4, 1995**

6:30 AM - 7:45 AM	<b>Breakfast</b> - Sultan's Feast
7:00 AM - 9:00 AM	<b>Registration</b> - Convention Headquarters
8:00 AM - 11:45 AM	<b>Educational Programs</b>
12:00 PM - 2:00 PM	<b>Inspector of the Year Luncheon</b> - Grand Ballroom
2:00 PM - 4:30 PM	<b>Educational Programs</b>
4:30 PM - 5:30 PM	<b>Association Meetings</b> (if scheduled)

**May 5, 1995**

6:30 AM - 7:45 AM	<b>Breakfast</b> - Sultan's Feast (or you may use your ticket for Sultan's Feast Lunch)
8:00 AM - 1:00 PM	<b>Educational Programs</b>

**Spouse's Program****May 3, 1995**

2:00 PM - 7:00 PM	<b>Registration</b>
6:00 PM - 7:30 PM	<b>Get Acquainted Gathering</b>

**May 4, 1995**

7:00 AM - 9:00 AM	<b>Breakfast</b> - Sultan's Feast with ticket
7:00 AM - 9:00 AM	<b>Registration</b>
9:00 AM - 3:30 PM	<b>Gourmet Luncheon and Renault Winery Tour</b>
12:00 PM - 2:00 PM	<b>Inspector of the Year Luncheon</b>

**May 5, 1995**

7:00 AM - 9:00 AM	<b>Breakfast</b> - Sultan's Feast with ticket
9:30 AM - 11:30 AM	<b>Personal Finance</b> - Silver Room

Source: Susan H. McLaughlin  
Supervisor, Education Unit  
Bureau of Technical Services

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THE STATE UNIVERSITY OF NEW JERSEY  
**RUTGERS**

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# Construction Code Communicator



State of New Jersey  
Christine Todd Whitman, Governor

Department of Community Affairs  
Harriet Derman, Commissioner

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## Building Safety Conference — 1995



The Inspectors of the Year with Commissioner Derman at the 14th Annual Building Safety Conference of New Jersey. From the left are: Robert Downey — Electrical, James Castle — Elevator, Renato Campomizzi, Jr. — Plumbing, Commissioner Harriet Derman, Joseph Montemarano — Building, and Stanley J. Sickels — Fire Protection.

*Congratulations to these fine inspectors!*

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## ISO to Develop System to Grade Building Code Enforcement

### Press Release

Insurance Services Office, Inc. (ISO) is developing a system that will grade the effectiveness of communities' building code enforcement to make insurance pricing more accurate and encourage safer homes and commercial buildings.

The Building Code Effectiveness Grading Schedule is a response by the insurance industry to 1992's Hurricane Andrew, which caused a record \$15.5 billion in insured losses. Industry experts determined that at least one-fourth of those losses were because of construction that failed to meet Dade County, Florida's code.

The basic premise of the code-grading system is that municipalities with effective codes that are well enforced should demonstrate better loss experience and should, therefore, receive favorable underwriting recognition.

The prospect of lessening catastrophe-related damage and ultimately lowering insurance costs will provide financial encouragement for citizens to press their local governments to enforce codes more rigorously.

Through its subsidiary, Commercial Risk Services, ISO already provides similar grading of municipal fire protection and flood-mitigation efforts. Many insurers reflect the grades in their insurance rates for individual properties.

ISO expects to phase in the grading program state-by-state beginning in 1995 and to grade every municipality in the country by decade's end. After that, each locality would be regraded every five years.

ISO initially will target states that have suffered catastrophes or that are prone to natural hazards.

This project demonstrates ISO's commitment to significantly reduce the economic consequences of natural disaster. The system may also help reduce human suffering and save lives by encouraging communities to adopt proper codes and to strictly enforce them.

The grading concept has received widespread support from code officials, government representatives, community officials, and the insurance industry.

Adequate testing is essential to the successful development of this service. ISO has completed a 150-municipality pilot test in four states: Florida, North Carolina, South Carolina, and Georgia.

The Building Code Grading Effectiveness System will parallel the design of ISO's Fire Suppression Rating schedule and the Flood Community Rating System, which use a relative rating scale of one to ten, with one representing the best protection and ten indicating no recognized protection.

In developing the new code grading system, ISO has worked closely with the Insurance Institute for Property Loss Reduction and a number of other interested groups, including insurers, local and state government officials, model building code officials and scholars.

The Building Code Effectiveness Grading Schedule measures resources and support available to building code enforcement efforts. The grading program examines how well those resources are applied to mitigating common natural hazards — particularly hurricanes and earthquakes.

The grading process includes interviews with municipal officials, examination of supporting documents, a careful look at training requirements and work schedules, staffing levels, and certification of officials who enforce building codes.

The schedule assesses each municipality's support for code enforcement, plan-review functions, and field inspection quality.

## ISO's Evaluation of New Jersey's Code Enforcement Offices

New Jersey's municipalities should do well on ISO's Building Code Effectiveness Grading Schedule. The Uniform Construction Code addresses most of the issues that are rated in the evaluation. The Department has met with representatives of the insurance industry and agrees this national effort will be beneficial to code enforcement.

In New Jersey the evaluation process will begin in early 1996. During the year ISO will distribute questionnaires to all 567 municipalities. This will be followed up by a visit to each municipality by an insurance industry representative. After the evaluation each municipality will receive a rating from 1 (high) to 10 (low). This rating will be valid until your municipality is regraded in 5 years.

Each municipality should take this evaluation seriously. Although we know we have the best code enforcement system in the nation, it will be beneficial for each municipality to evaluate their code enforcement office for areas that may be improved.

Source: William Hartz  
Chief, Bureau of Technical Services

## Chimney Certification

In February, the Department proposed a new standard form entitled "Chimney Certification for Replacement of Fuel Fired Equipment." This form has been approved and will appear as an adoption in the June 5, 1995 *New Jersey Register* with an operative date of October 1, 1995.

In the next few weeks the Department will mail a letter of explanation and a copy of the form to all code enforcement offices. The form will allow the contractor installing the replacement equipment to certify that the chimney/vent is properly sized, lined, and cleaned.

Two other options are available. The contractor may refuse to sign the certification and agree to be present during the inspection to remove and reinstall the chimney/vent connector. In addition, the construction official may refuse to accept a certification

from a contractor if they feel the certification is not accurate.

Remember, this is a certification of the chimney only. All inspections on the newly installed equipment must be performed by the appropriate inspectors.

If, after you receive the form and explanation you have questions concerning the use of the form, please contact the Code Assistance Unit at 609-530-8793.

Source: William Hartz  
Chief, Bureau of Technical Services

## Underground Facility Protection Act

Public Law 1994, Chapter 118, known as the "Underground Facility Protection Act," was approved October 18, 1994.

This Act mandates the notification of the New Jersey One-Call by any person performing excavation, drilling, boring, or demolition in which material in the ground is moved.

The excavator must allow utilities (3) three business days to mark out their facilities and must start work within (10) ten business days of notifying the One-Call Center.

Permits for excavation or demolition shall not be issued until the excavator supplies a request number to the code enforcement office as proof that the New Jersey One-Call has been notified.

The excavator must immediately notify the utility of any damage to an underground facility caused by or discovered by the excavator. The New Jersey One-Call toll free number is 1-800-272-1000.

Source: Garden State Underground  
Plant Location Service

## New Barrier Free Subcode Is Here

The revised Barrier Free Subcode (BFSC) is finally here! On July 5, 1994, the proposal to amend the BFSC was published in the *New Jersey Register*. Five comments were received, a public hearing was held, and the adoption was published in the *New Jersey Register* on March 20, 1995. It will be effective July 1, 1995. What does this really mean?

The changes to the BFSC are mainly changes of format rather than of substance. The adoption deletes all of *N.J.A.C. 5:23-7.1-7.99*, the entire building portion of the BFSC. (The recreation section has been renumbered, but stays the same, at least for now.) The familiar Subchapter 7 has been replaced by Chapter 11 of the 1993 BOCA Building Code; the familiar graphics have been replaced by a reference to CABO/ANSI A117.1, the technical

standard for accessible design. When you see the adoption, you will notice that there are some changes to BOCA/Chapter 11. Those changes have been made to be sure that there is agreement between our law in New Jersey and the Federal laws that require accessibility, the Americans With Disabilities Act (ADA), and the Federal Fair Housing Amendments Act (FFHAA).

You will notice a lot of changes to the residential section of Chapter 11. This is because BOCA had not revised Chapter 11 to meet the requirements of the FFHAA. To make this section easier to understand, we have deleted that portion of Chapter 11 and replaced it with our own clear, direct requirements. Actually, the residential section is very much like the old BFSC. The old section *N.J.A.C. 5:23-7.68*, that gave directions for when an elevator is needed, has been kept. Also, the general scoping requirement that adaptable units be provided in multi-family dwellings with 4 or more units has been kept, and the exemption for multi-story townhouse units with an independent entrance at grade has been kept.

What changes? Well, first and foremost, the format. The BFSC looks a lot different. But, the old BFSC was based on the ANSI A117.1 standard and this revision adopts the ANSI A117.1 standard (now published by CABO, so it's called CABO/ANSI A117.1), so technically not much has changed. The major technical change is that water closets will now be measured 17" - 19" to the top of the seat, thereby resolving the single most time-consuming and stubborn dimensional conflict between the old Barrier Free and the ADA.

Aside from the height of the water closets, the most frequent question I've been asked is: When will New Jersey adopt the ADA? When will we enforce the ADA? The answer to these questions stays the same: We will not adopt the ADA; we will not enforce the ADA. But, with this BOCA — CABO/ANSI — BF adoption, New Jersey's code officials will be able to enforce a code that matches Federal law in scope and in dimensions. This will make enforcement easier for all of us!

Beginning this fall, Jeffrey Applegate and I will teach a new course in the new BFSC. We look forward to seeing you there.

Source: Emily Templeton  
Code Development Unit

## Lead Abatement: The Next Step

On March 20, 1995 the Department proposed regulations to license contractors to evaluate and abate lead hazards (*N.J.A.C. 5:17*). These regulations are based on State law (P.L. 1993 c.288) and federal law (Title X of the Housing and Community Development Act of 1992).

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As you may know, lead-based paint was used extensively as the "paint of choice" because of its durability. The older a structure is, the more likely that it contains some lead-based paint. Unfortunately, exposure to lead in paint has very harmful effects, particularly for young children. As public awareness of this hazard rises, the State legislation seeks to protect the consumers of lead testing and abatement services from unscrupulous contractors.

Apart from requiring that contractors be licensed by the Department, the regulations outline basic evaluation and testing methods and describe proper work practices for the most used abatement strategies: removal, enclosure, and encapsulation. Removal involves the replacement of lead-painted components, such as doors and windows, with new components. Enclosure includes the covering of lead-painted components with rigid materials that are mechanically fastened (e.g., quarter-inch sheetrock applied over walls covered with lead-based paint). Encapsulation involves the covering of lead-based paint with a product designed to protect the occupants from lead exposure. Many encapsulation products are painted on.

The regulations are based mostly on draft guidelines from the U.S. Department of Housing and Urban Development (HUD). Because HUD has revised its draft guidelines, the Department's proposal of March 20, 1995, to be adopted in July, will be revised to be in accord with the newest HUD guidelines. Because there are new developments in the lead area, the Department expects that further revisions, to accommodate new methods and materials, may occur in the future.

For purposes of determining whether a job is to be considered "lead abatement," intent matters. If a contractor is replacing windows to weatherize a house, this is not considered lead abatement, regardless of whether the windows might be painted with lead-based paint. However, if the purpose of the window replacement is to eliminate a lead hazard, then the contractor must be certified pursuant to these regulations. (All contractors who advertise themselves as competent to identify or to abate lead hazards or who otherwise hold themselves out to potential clients as competent to perform these services will be subject to the contractor certification regulations.)

The Department will provide construction officials with public information handouts which are to be given to permit applicants doing renovation work in residential structures built before 1978 (the year that the Consumer Product Safety Commission banned lead-based paint for residential use). These handouts caution homeowners about the possibility of exposing family members to dangerous levels of lead during renovation. The Department will also send construction officials informational handouts for homeowners performing their own lead abatement. (Owner/occupants are exempt from the requirement to have a licensed abatement contractor perform this work.)

This new regulatory program includes an administrative role for construction officials. Starting in January 1996, permits will be required for lead abatement work. The construction official will receive documentation from the applicant, including the scope of work and the DCA certification number of the lead abatement

contractor performing the work. The local enforcing agency should verify that there are adequate means of egress if the building is to remain occupied during abatement, that replacement materials being used meet the requirements of the UCC, etc. The construction official is not required to assign inspectors to monitor the performance of lead-hazard abatement work. The regulations governing the performance of lead abatement work are not part of the UCC, but are being adopted as a new chapter (5:17). The Department will employ inspectors to spot check abatement sites and to respond to complaints. Anything of concern regarding the performance of a lead abatement job should be brought to the attention of the Department.

Similar to asbestos work, when abatement is complete, a licensed evaluation contractor will submit test results showing that a clearance level was attained. The construction official, based on these test results, will issue a lead abatement clearance certificate. Documents about the scope and completion of abatement will be kept in the building's file for future reference. A fee will be paid to the construction office for this service.

The State Departments of Health and Labor will also be involved in this area. The Department of Health (DOH) is certifying training providers to train workers, supervisors, and inspector/risk assessors who will work for the firms DCA certifies. Additionally, DOH and local health officers will continue to order testing and abatement where lead-poisoned children are identified. The Department of Labor will be in charge of inspecting and fining contractors doing work on steel structures such as bridges, tanks, and large steel commercial and industrial facilities.

Check your updates for new regulations at *N.J.A.C. 5:23-2*. In addition, the Department, through the Education Unit, is planning continuing education courses for construction officials on lead abatement.

When they are completed, handouts and revised standard forms will be sent to each construction official so that this program can be properly administered. After July, if you have specific questions, you should contact the Department at 609/530-8812.

Source: Chrys Wyluda  
Asbestos Unit

## Spring Showers

Well, it's summer, and I hope all those spring shower calls I've been getting will finally begin to dry up. It seems the latest trend in plumbing inspection is to verify shower temperature with a thermometer. That in itself isn't bad.

The code clearly calls for thermostatic and pressure balancing shower valves to be equipped with limit stops that ensure that the maximum temperature of shower water is 120°F. So, if you don't feel comfortable judging temperature by feel, you can justify packing a thermometer with your flashlight and inspection pad.

If you're going to join the trend or if you're one of those who started the trend, you need to decide what to do when the thermometer reads less than 120°F. In other words, how low can the shower



water temperature be and still pass inspection? Some people have claimed that the temperature has to be 120°F exactly. Section 10.15.1 requires that hot water be supplied to all fixtures in residences that are used for bathing, and we know that hot water is defined as 120°F to 140°F. So, it would seem that you can't comply with both 10.15.1 and 10.15.6 unless the water is 120°F. No less, no more.

Requiring water to be 120°F exactly isn't practical, and if you read the code carefully, it isn't required. Section 10.15.1 requires that hot water be SUPPLIED to the fixture. Technically, the water IS supplied to the shower valve, but the valve, by setting the stop at 120°F will not let you get hot water out of it. So technically, there is no minimum temperature at the shower discharge, as long as the hot water to the shower valve is 120° or more. This can be verified by checking the temperature of the water at an adjacent lavatory.

It does not seem reasonable to have the water discharge at a temperature that is not conducive to showering. If the shower discharges at 80°F maximum, the owner will surely make some adjustment to get hotter water. In this case, you've just wasted your time checking. The most reasonable range I've heard of for acceptable shower temperature is from 105°F to 120°F.

Source: Michael Baier  
Code Assistance Unit

## New Lighting Efficiency Standard for Commercial Buildings

In order to comply with federal law, specifically the Energy Policy Act of 1992, New Jersey has recently amended *N.J.A.C. 5:23-3.18*, titled "Energy Subcode." This amendment incorporates, by reference, energy efficiency requirements for commercial and multi-family high-rise buildings that meet, but do not exceed, federal requirements. Accordingly, from July 1, 1995, ASHRAE/IESNA 90.1 (1989) shall be the standard for the energy efficiency requirements of newly constructed commercial buildings in New Jersey. Buildings of Use Groups R-3, R-4, and R-2 which are 3 stories or less shall continue to be subject to Standard LEM-1 (1982).

Standard 90.1 is intended to promote efficient lighting design by requiring and, in some cases, by encouraging the use of advanced lighting control. This standard is more restrictive than Standard LEM-1 for buildings like offices, hospitals, and retail spaces which represent a large portion of new construction and unlike Standard LEM-1 requires some means of control for all lighting except for emergency and exit lights. The project complies if the total connected lighting power (CLP) of the installed system does not exceed the interior lighting power allowance (ILPA) of the building. When qualifying lighting controls are used the connected lighting power (CLP) may be reduced by the lighting power control credits (LPCC) to account for the energy saved because of these controls. The final figure represents the adjusted

lighting power (ALP) for the buildings equipped with qualifying controls.

Standard 90.1 has two approaches to calculate the interior lighting power allowance (ILPA) of a building. Out of these two, the prescriptive method is easy to use and is intended for use with speculative buildings or during the early design stages. This method is more stringent (allows less lighting power) but not sensitive to specific space functions or room configurations. The other method, known as the system performance method, takes into account the space functions and room geometrics of the proposed design. This method provides greater flexibility and is a more accurate and detailed calculation procedure. It is recommended for most projects. If the building type or space activity is not applicable to those mentioned in the prescriptive method, then the system performance method is recommended. In no case should the prescriptive method be the only path available to the designer.

To ensure compliance with the new Standard 90.1, the electrical inspector should review all the worksheets submitted for compliance and be satisfied that the proposed allowance, total connected lighting power, and adjustments are reasonable and the value of CLP/ALP does not exceed ILPA of the project.

Source: Ashok K. Mehta  
Bureau of Technical Services

## Public Relations

Recently, someone requested a seminar on public relations and the construction official. I want to share with you some of the public relations that are currently happening throughout our state.

The Sussex and Warren Code Enforcement Officials have produced and aired on public access television the first of a video series titled "You and the Codes". The purpose of these programs is to create a greater sense of public awareness as far as the purpose and responsibilities for securing construction permits, inspections and final approvals. As we all know, the enforcement of construction codes affects everyone in our communities, both residential and commercial. These programs are of vital public interest.

This project was financed through the organization with donations from sponsors. At the end of each program the list of contributing sponsors is shown in the credits and seen by thousands of local viewers. They are planning to produce additional programs and are looking for continued support.

We are very proud of the Association for its undertaking. We encourage those who are interested in further information to contact Al Ivany (201/383-1817), Harry Salotti (201/347-2502), or Keith Utter (201/383-3522).

Each of us must be responsible for our own public relations, whether it be at our counters in our office, or on the street in our communities. The image you project can be your best asset.

Source: Susan H. McLaughlin  
Supervisor, Education Unit  
Bureau of Technical Services

## 14th Annual Building Safety Conference

### Inspectors of the Year 1995

#### *The Best of the Best*

#### *Plumbing*



Renato Campomizzi, Jr. (left), Plumbing Inspector of the Year, and Jerome Shaw, President of the New Jersey State Plumbing Inspectors Association.

#### *Building*



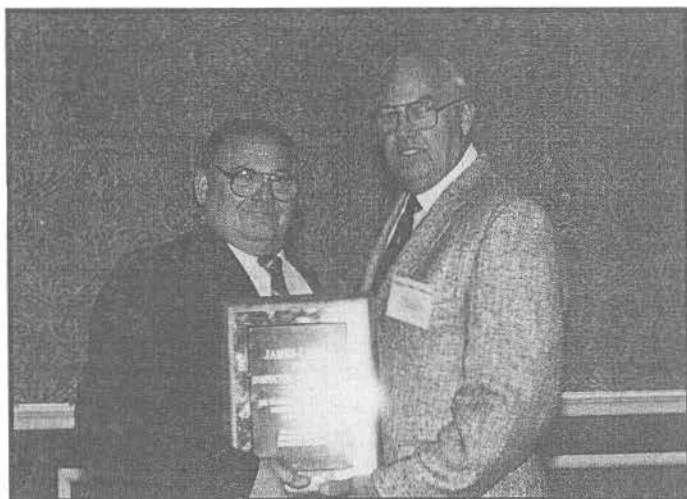
Joseph Montemarano (left), Building Inspector of the Year, and Victor Dai, President of the Building Officials Association of New Jersey.

## *Electrical*



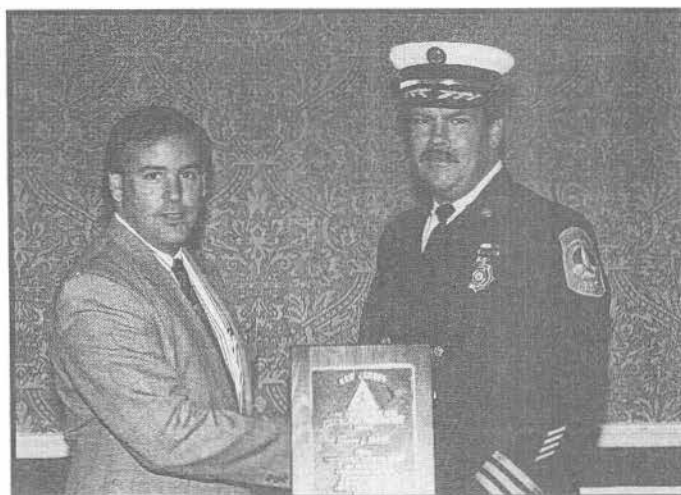
Robert Downey (left), Electrical Inspector of the Year, and Victor Timpanaro, President of the Municipal Electrical Inspectors Association of New Jersey.

## *Elevator*



Frank Marinello (left), Vice President of the Municipal Elevator Safety Inspector Association, and James Castle, Elevator Inspector of the Year.

## *Fire Protection*



Gary Lewis (left), President of the New Jersey State Fire Prevention and Protection Association, and Stanley J. Sickels, Fire Protection Inspector of the Year.

## Zoning Approvals for Groundwater Remediation Equipment

In the past, we wrote an article about groundwater remediation equipment. This equipment is most often installed on a system to clear up groundwater contamination that has resulted from a leaking underground storage tank. The gist of that article was that the remediation equipment was exempt from our permitting process because it is like process equipment. Water connections, electrical connections, and accessory shed structures, however, do require permits under the UCC.

We were recently contacted by a firm that performs groundwater remediation, requested that we write an article about a relatively new law that discusses zoning approval for this type of equipment. It seems that many construction officials require groundwater remediation contractors to appear before either the zoning or planning board prior to issuance of the UCC permits. *N.J.S.A. 40:55D-66.8* and *N.J.S.A. 40:55D-66.9* have amended the Municipal Land Use Law to give specific instructions on how municipalities should treat groundwater remediation systems.

The amendments have stated in part that groundwater remediation equipment shall:

1. Be deemed essential to the continuation of an existing structure or use of a property, including a non-conforming use.
2. Be a permitted use in all zoning or use districts of a municipality.
3. Not require a use variance pursuant to *N.J.S.A. 40:55D-70*.
4. Be deemed to be an accessory use or structure to any structure or use authorized by the development regulations of a municipality.

The law does permit municipalities to enact rules with respect to siting of a structure or equipment on the property, but does not authorize a municipality to require site plan review. Municipalities can also impose time limits for the removal of equipment once the remediation has been completed. However, the intent of the law is to eliminate lengthy delays caused by zoning and planning board approvals when installing groundwater remediation systems. A copy of the law is available if you call the Code Assistance Unit at 609/530-8793.

Source: Michael Baier  
Bureau of Technical Services

## Asphalt or No Asphalt?

Debates have been raging for quite sometime whether or not asphalt can be used as flooring material in open parking structures and public garages. Those in favor present the following logic:

Many parking garage facilities have used bituminous asphalt surfaces in the past without any problems. Hardly any reported incidents can demonstrate that bituminous concrete or

asphalt as floor surfaces contribute in the growth and spread of fire. Bituminous material is combustible but, compacted on the ground level, would not represent a significant fire hazard. Many code officials still allow this material.

Those who are against the use of asphalt have the following rationale to offer:

The code does not permit the use of combustible materials on the floor surfaces of open parking structures and public garages. A noncombustible material must meet or exceed the testing and acceptance criteria of ASTM E136 as specified in the BOCA National Building Code. Asphalt fails to meet these criteria. Besides being combustible, it is absorbent and may create a potential fire hazard through fuel and oil spills or leaks.

The fact is, asphalt is not permitted under the code as floor finish in open parking structures and public garages. In the past, for this specific application, two code change proposals (including one from DCA) could not get this material included into the BOCA code. For the sake of uniformity in this matter, code officials are advised to adhere to the provisions of *The BOCA National Building Code/1993*.

Source: Farid Ahmad, PE  
Supervisor, Code Assistance Unit

## Recent Changes to Federal Manufactured (Mobile) Home Construction and Safety Standards

Federal construction and safety standards for manufacture of Manufactured (Mobile) Homes have recently been amended to incorporate the latest industry standards. The various provisions which have been amended with their respective effective dates are listed below:

### I. WIND STANDARDS

Effective July 13, 1994, the new wind design load criteria is based on the provisions contained in ANSI/ASCE 7-88 "Minimum design loads for buildings and other structures." ANSI/ASCE 7-88 is the standards referenced in our Building Subcode, also.

### II. ELECTRICAL

Effective October 25, 1994, the Federal Standards now correspond to the provision of National Electrical Code, 1993.

### III. ENERGY CONSERVATION STANDARDS

Effective October 25, 1994.

### IV. VENTILATION AND INDOOR AIR QUALITY

Effective October 25, 1994

It may be noted that we have adopted these Standards in *N.J.A.C. 5:23-3.19* as our Manufactured Home Subcode, thereby mandating that all additions and alterations to manufactured homes shall be done in accordance with this Subcode.



A copy of the Standards can be obtained from:

U.S. Department of Housing and Urban Development  
Manufactured Housing and Construction Division  
State and Consumer Liaison Branch  
451 Seventh Street, S.W.  
Attn: Mail Room B-133  
Washington, D.C. 20410  
Telephone: 202-755-7430  
Contact Person: Ms. Pat McDuffie

Any questions regarding the above may be directed to Paul Sachdeva at 609/530-8837.

Source: Paul Sachdeva, Manager  
Bureau of Code Services

## Erosion Control Requirements and Permit Extension Act Coordination with Conservation Districts Essential

DCA Bulletin 91-2 describes the essential need for coordination with Soil Conservation Districts and for satisfying the requirement that prior approvals are met for soil erosion and sediment control on land development projects involving construction. Coordination between the code official and district staff is especially important when the project is nearing completion and in need of certificates of occupancy. The district report of compliance prior to issuance of the municipal Certificate of Occupancy is required by statute to assure that stormwater and drainage facilities are stable, vegetation is adequate, and the requirement for permanent measures to control soil erosion and sedimentation is satisfied.

The 1994 amendments to the Permit Extension Act also apply to the Soil Erosion and Sediment Control Act and extend conservation district certification of soil erosion and sediment control plans, where no changes have occurred, until December 1996. Where changes to the project have occurred a new or modified soil erosion and sediment control plan may be required by the soil conservation district.

Coordination between construction code officials and the Soil Conservation Districts can prevent water quality degradation.

Source: James Sadley  
N.J. Department of Agriculture

## Permit Extension Act: Permit Fee

Let me revisit the issue of the Permit Extension Act. In the Winter 1994 issue of the *Construction Code Communicator*, my brief article on this Act provided information on the extension of the Act until December 31, 1996.

Occasionally, however, we get phone calls on the fee to be charged when restoring the permits. Construction permits restored

under the Permit Extension Act, for which fees have earlier been paid, are not subject to the same fees again. Also, the code enforcing agency should not charge the balance of the current enhanced fee for plan review, inspection, or training. There is absolutely no reinstatement fee for the permits restored.

If there is any confusion in this regard, please call the Code Assistance Unit at 609/530-8793.

Source: Farid Ahmad, PE  
Code Assistance Unit

## Final Inspections — Code vs. Cosmetic

The Bureau has been receiving telephone calls from contractors and homeowners lately, asking whether an inspector may fail a final inspection or refuse to perform the inspection because of cosmetic work being done in the dwelling.

Work such as finish painting, a person cleaning, vacuuming etc., are not the type of activity that justifies a failure or refusal to inspect. We like to stress to callers that it is the code official's responsibility to inspect for code compliance only, not cosmetic items. We also explain that the code official should be providing a code citation for every violation and should provide an inspection sticker for each inspection.

Should you have any questions, call the Bureau at 609/530-8862.

Source: Gerald E. Grayce  
Bureau of Regulatory Affairs

## Backflow Preventer Testing Requirements

The Department has been making an effort to clarify the codes on backflow preventer testing requirements. The first step that we took was reducing the number of periodic inspections from four per year to one per year. The sheer number of devices coupled with four inspections per year made setting up a realistic testing schedule impossible.

The next step toward better enforcement is developing guidelines for testing programs. The Department through the Code Advisory Board and Plumbing Subcode Committee is developing a bulletin that will discuss these guidelines in detail. Currently the Code only requires that the owner has to arrange for his device to be tested once annually. This begs the question as to who performs the test or what steps the plumbing subcode official should take to ensure that tests are performed as required.

So the first fundamental issue that must be established is the qualifications of the person performing the test. Obviously, the test is only as good as the tester. While the National Standard Plumbing Code and DEP's safe drinking water regulations both require that the tester be certified, neither has given much guidance on which certifications are acceptable. We are aware that both New England Water Works and the American Society of Sanitary Engineers have developed certification programs for backflow preventer

testers. Obviously, these types of nationally recognized groups should be deemed acceptable. However, acceptable certifications should not be limited to only nationally recognized bodies. There are several local programs that have curricula similar to these larger programs. One that we have been made aware of is Plumbers and Pipefitters Local Union No. 9 which uses a curriculum that is essentially the same as the New England Water Works program.

The DEP is developing regulations that establish criteria for certifying agencies. In all likelihood, we will simply recognize those agencies meeting the DEP requirements.

The reliance on certified testers should greatly reduce the burden on local plumbing inspectors. There should be no need to have the inspector be present for the test. Rather, the role of the enforcing agency should be limited to accepting a test report submitted by the certified individual.

Source: Michael Baier  
Code Assistance Unit

## What Energy Code Are We Using?

1. **Why the confusion?** Nationally, every state was required to revamp their energy codes in response to the Energy Policy Act (EPACT). It required states to automatically upgrade their commercial energy codes to meet or exceed ASHRAE 90.1 and to examine their residential energy codes relative to the CABO Model Energy Code.
2. **What has New Jersey done to comply with EPACT?** On March 20, 1995, New Jersey adopted ASHRAE 90.1 for commercial buildings. New Jersey elected to keep using the BOCA Energy Code for residential buildings. However, the Federal Department of Energy has requested another evaluation of BOCA versus the CABO Model Energy Code. The ASHRAE 90.1 requirements become operative July 1.
3. **What does the new ASHRAE standard mean to me, as a code official?** ASHRAE has developed a comprehensive standard for energy conservation and has sacrificed simplicity for completeness. The bottom line is that it is an extremely complicated document. New Jersey is trying to aid code officials by placing the bulk of the responsibility for complying with ASHRAE on the design professional. The Department is developing simplified checklists for code officials.
4. **Which buildings are "commercial buildings"?** All buildings except residential buildings under four (4) stories are termed commercial buildings. A high rise residential building is a commercial building for the purposes of the Energy Policy Act.
5. **Other changes under the proposal:** The proposal also modifies the heating degree day value used to determine U values. Currently, the energy code requirements are based on 5500 HDD statewide. The proposal assigns HDD based on counties. This means that for certain counties residential requirements will also change. The attached table lists the new U values and the corresponding R value for batt insulation.

### Effective July 1, 1995 New U Values for Single Family Detached Dwellings

County	U Walls	U Roofs	U Floors
Cape May, Salem, Camden, Cumberland, Gloucester, Atlantic (4000 HDD)	.21 (R11 insulation with 22% dbl. glass)	.05 (R19)	.08 (R13)
Burlington, Ocean, Monmouth, Mercer, Middlesex, Essex, Hudson, and Union	.195 (R11 insulation with 20% dbl. glass)	.0475 (R22)	.08 (R13)
Somerset, Warren, Hunterdon, Morris, Bergen, and Passaic	.185 (R11 insulation with 18% dbl. glass)	.045 (R22)	.08 (R13)
Sussex	.180 (R11 insulation with 17% dbl. glass)	.0425 (R22)	.08 (R13)

Source: Michael Baier  
Code Assistance Unit

## Hazard Alert for Public Swimming Pools

The New Jersey Department of Health (DOH) has recently issued a Health Alert Bulletin which contains a warning to the employees and owners of public swimming pools concerning the potential electrocution hazards in the electrical system associated with pools. This was done as a follow-up of a fatality investigation.

In order to prevent similar fatal accidents, the DOH has recommended periodic inspection of the pool's electrical system, including the integrity of grounding and bonding by a licensed electrician each year before the pool opens for the season. The installation of GFCI protection on the pool circuit, wherever possible, has also been recommended.

We understand and share their concerns regarding this life-safety issue. Code officials are advised to be aware of the potential hazards involved in the electrical system operating over a long period of time in the humid and chlorine-laden atmosphere associated with pools. The Health Alert Bulletin may be given wide publicity. Copies of this Bulletin may be obtained by contacting Patrick Bost at 609/984-1863.

Source: Ashok K. Mehta  
Code Assistance Unit  
Bureau of Technical Services

## More about Private Garages

Now that the can of worms has been opened regarding private garages, the phone inquiries have been pouring in.

The topic for this issue is the rating requirement as specified in Section 407.3. This section of the code requires a fire partition and floor/ceiling assembly rated of at least one (1) hour when the private garage is located beneath habitable rooms.

The question that arises from this requirement is: How is this rating accomplished? As with every other rating requirement in the code, Section 704.1.1 applies. This states that the assembly must be tested in accordance with ASTM E119. The design professional must include the appropriate testing laboratory number in the construction documents for this assembly.

Another point that needs to be made regarding this issue is stated in Section 715.1, which requires any structural member that supports a rated assembly to be rated at least that of the assembly it is supporting. Any columns, girders, or walls that are supporting the one (1) hour rated floor/ceiling must be rated one (1) hour.

Source: John N. Terry  
Code Assistance Unit

## Using UCCARS

Here are some tips that may help you to utilize UCCARS more effectively; these are based on some of the most-often asked support questions that users have been calling in with.

### Control Numbers

Most System II users log permit applications into UCCARS using Control numbers prior to issuance of the permit. Since a Permit number has not yet been assigned, users typically assign a sequential number such as C001, C002, etc. to the application. While making it easier to track new permit applications through the plan review process, this creates a tracking problem of its own, requiring users to keep a manual log of what Control numbers were issued, and to whom they were issued. An easy solution to this problem is to use the block and lot number as the Control number. Thus for a new application brought in for block 342, lot 10, number the Control number "C342/10." Also don't forget that to get a list of all Control numbers that are outstanding, use Display Data and just type "C" in the permit number box. This will cause UCCARS to find all permits that start with the letter "C," which of course are all the current permit applications entered into UCCARS using Control numbers. In case you receive a second permit application for the same block/lot, this can be handled in either of two separate ways. If the first application has been approved and a permit has been issued for it and logged into UCCARS, the Control number

that had been used (C342/10) automatically disappears from within UCCARS and can be re-used for the second application. If both applications exist simultaneously as unissued permits, simply number the second one "C342/10-2."

### Inspections

It's approaching that time of year again when inspectors' licenses expire. So if you enter an inspection request and can't figure out why you get an error message when you try to store the request, chances are the inspector to whom you've assigned the inspection has just had a license renewal. To fix the problem you must enter the inspector's new license expiration date into UCCARS. This is done by selecting the 'Change Program Setup' option in the Main Menu (remember to use the highest level password for this operation). Then enter the inspector's initials and the new expiration date. You may also encounter an error screen when you are attempting to store an inspection result. This is also usually the result of an expired inspector's license, and is remedied in the same way. Just make sure that all the inspectors on the results have current license expiration dates in UCCARS.

Source: Stan Kosciuk  
President, MIS

## New Jersey Register Adoptions Summer 1995

Date	Adoption
3/20/95	27 NJR 1179(b) Subcodes Adopted Amendments: <i>N.J.A.C. 5:23-3.4 and 3.18</i> , effective 3/20/95, operative 7/1/95.  27 NJR 1180(a) Barrier Free Subcode Adopted Amendments: <i>N.J.A.C. 5:23-2.4, 2.6, and 3.14</i> ; Adopted New Rule: <i>N.J.A.C. 5:23-7.1</i> ; Adopted Repeals: <i>N.J.A.C. 5:23-7.1 through 7.99</i> ; Adopted Recodification with Amendments: <i>N.J.A.C. 5:23-7.100 through 7.116 as N.J.A.C. 5:23-7.2 through 7.18</i> , effective 3/20/95, operative 7/1/95.
6/5/95	27 NJR 2187(a) Enforcing Agencies Adopted Amendments: <i>N.J.A.C. 5:23-2.20 and 4.5</i> , effective 6/1/95, operative 10/1/95.

Source: E. Maria Roth  
Code Specialist

*Have a nice summer!*

# Construction Code Communicator



State of New Jersey  
Christine Todd Whitman, Governor

Department of Community Affairs  
Harriet Derman, Commissioner

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## Inspection, Certificates, and Fees

On September 5, 1995 regulations were adopted, with an operative date of January 1, 1996, that are important for code officials to understand. This article highlights the major changes, but code officials should review these regulations carefully.

1. *N.J.A.C. 5:23-2.23(j)* "Certificate of Approval: a certificate of approval shall be issued for all work that requires a construction permit but does not require a certificate of occupancy. No application shall be required for a certificate of approval."
2. *N.J.A.C. 5:23-4.18(f)3* "There shall be no fee charged for a certificate of approval issued pursuant to *N.J.A.C. 5:23-2.23(j)*." The Department considers the certificate of approval (C of A) as the closing part of the permit process. By making an application for the permit, the code enforcement office has all the necessary information to issue the C of A. A separate application is just additional paperwork. If there is a cost for printing or typing a C of A, it should be included in the cost of the permit.
3. *N.J.A.C. 5:23-4.18(g)4* "For cross connections and backflow preventors that are subject to testing and require reinspection, the fee shall be a flat fee."
1. *N.J.A.C. 5:23-4.20(b)2* and *(c)3iii* All references to minimum fees have been deleted. There will no longer be a minimum fee charged by the Department.
2. *N.J.A.C. 5:23-4.20(c)2i.5* establishes a fee of \$92 for tents in excess of 900 square feet or more than 30 feet in any dimension.
3. *N.J.A.C. 5:23-4.20(c)2i.6* sets a flat fee of \$46 for all roofing and siding work completed on structures in use groups R-3 and R-4. This should result in a lower fee for most work. The previous regulations considered this an alteration to be charged on a cost per thousand basis which often resulted in excessive fees.
4. *N.J.A.C. 5:23-4.20(c)2.99(2)* and *(3)* Gas piping has been removed from the special devices category, and the fee has been adjusted to be charged per appliance connected to the gas piping.
5. *N.J.A.C. 5:23-4.20(c)2iv(2)* Detectors have been separated from sprinkler heads. This will result in a much lower fee for detectors in a typical installation of 1 to 12 detectors.
6. *N.J.A.C. 5:23-4.20(c)3iii* The certificate of occupancy fee has been reduced to a flat fee of \$28 and the fee for a certificate of approval and certificate of compliance for work done under a permit has been removed.

There are numerous changes to the Department's fee schedule. They are listed here for those municipalities that use on-site inspection agencies. Please note that fees for existing contracts will not change. These fees must be used as a basis for all new contracts issued on or after the operative date of these regulations.

Finally, the section dealing with routine and periodic inspections of elevators in *N.J.A.C. 5:23-12.3* has been completely rewritten. NOTE: See article entitled "Elevator Subchapter Update" on page 2 for a review of these changes.

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Construction officials are responsible for knowing these changes and modifying their fee schedule if necessary.

Source: William Hartz, Chief  
Bureau of Technical Services

## Elevator Subchapter Update

Subchapter 12 of the Uniform Construction Code, the elevator safety subcode, is in the process of being revised. The first set of revisions is contained in a rule adoption that appeared in the September 5, 1995 edition of the *New Jersey Register*, to be operative January 1, 1996. I thought it might be helpful to highlight some of the changes made by this rule adoption and to discuss the expected impact on construction and the inspection process.

The first change is that all elevator-related provisions involving the issuance of certificates have been moved from 5:23-2.23(j) to 5:23-12.3 and 12.9. Now you will be able to find the rules governing routine and periodic inspections and certificates of compliance in one place. The requirement that only one certificate be issued for a building permit has required us to clarify the relationship of the acceptance inspection and test both to the routine and periodic inspection process and to the issuance of certificates of compliance. We have also made it clear, at *N.J.A.C. 5:23-4.18(f)4*, that no fee is to be charged for a certificate of compliance.

The rules, as amended, will now allow a device to operate following the issuance of an approval once the elevator subcode official has applied an inspection sticker (F-225) and has made a recommendation for a certificate of occupancy or approval on the Elevator Technical Section (F-150). Therefore, once the subcode official has given his or her approval following a successful test and inspection, he or she is approving the use of the device. Once the device has in this way been released by the elevator subcode official, it is considered to be fully accepted. By giving this release, the subcode official is giving assurance that all systems are complete and operational, and have passed the required tests and that the public can therefore ride on the device in safety. We therefore caution you that, under the new rules as amended, the device must not have any outstanding nonconformances at the time of approval.

Once the subcode official has applied the "green sticker," a clock starts to run with regard to the scheduling of the routine and periodic inspections of the device. That is why the rules now require (at *N.J.A.C. 5:23-12.3(a)4*), that the building be placed on a cycle. This requirement places each building with elevator devices on a cycle that depends upon the type of devices in the building. The construction official and elevator subcode official must assure that the inspection cycle, once established, is maintained, even if work under a permit takes place in an existing

building. The schedule for the building as a whole determines the cycle for each elevator device, regardless of when work is performed on an existing device. Code officials must follow a schedule that accounts for all devices within the municipality. Inspection work should be distributed over a time period which, taking into account the size of the municipality and the number, type, and distribution of devices, allow enough time for the subcode official to perform the annual and semi-annual inspections. Once the inspection cycle has been established, the owners and elevator companies will be able to plan for the cyclical inspections.

The rules now address the "out-of-service" issue. In a previous article ("Out-of-Service or Out-of-Service," Spring 1995) we discussed the different possible situations in which a device might be placed out of service. *N.J.A.C. 5:23-12.3(a)4iii*.

Lastly, we have included in the revision a requirement (*N.J.A.C. 5:23-12.4(g)*) that the lists of registered devices sent by our office to all construction officials must now be reviewed and that notice of any changes, errors, omissions, etc. shall be given to our office. It is necessary that the statewide registry of elevator devices be correct and complete.

Also to change the broad language concerning minor work at *N.J.A.C. 5:23-12.8* was published in the August 7, 1995 edition of the *New Jersey Register*. This proposal includes a list of items that would be considered to be minor work, and therefore not subject to the plan review and testing requirements applicable to major alterations and "modernizations." More information will be provided regarding these changes once the proposal has been adopted.

Source: Richard Osworth  
Chief, Bureau of Code Services

## Lightning Protection Systems

Some of the frequently asked questions on this subject are (i) "Why is the installation of lightning protection systems on structures other than Unlimited Area Farm Buildings, not regulated by the State Uniform Construction Code?" and (ii) "Are permits and inspections required for the installation of lightning protection systems for farm buildings as outlined in *N.J.A.C. 5:23-3.2(d)5v*?"

The answer to the first question lies in the concept that lightning strokes are most likely to occur at a high point, that is, where a tree, tall building, or some other extension of the earth rises upwards, thereby reducing the distance and, thus, the impedance between the charge on the earth and on the clouds. Studies have shown that the high object tends to 'divert' and 'intercept' practically all strokes that otherwise would have hit somewhere within the radius equal to the height of the object. The principle involved here explains why isolated farm buildings, even though only 20 to 30 feet high, are more susceptible to the lightning than similar

buildings in densely populated areas. Regulations, therefore, mandate the installation of lightning protection systems on such buildings only. For other structures, it is desirable for the designer to assess the risks while considering the need for the system. NFPA 780 - Lightning Protection Code contains a risk assessment guide. This guide takes into consideration factors such as the type of structure, type of construction, structure location, topography, occupancy, contents, and lightning frequency.

The lightning protection system as such does not prevent lightning from striking, but, if installed properly, it provides a safe low-resistance metallic path through which the lightning energy can safely be directed to the ground, thus protecting the destruction and damage to the property and life. It is, therefore, important that the system is designed and installed in accordance with the requirements of nationally recognized standards such as NFPA 780, UL 96, and UL 96A. The Master Label Program of UL and the Certified System Program of the Lightning Protection Institute are both recognized nationally in the field of providing certifications for the installation of lightning protection systems based upon the requirements contained in NFPA 780. The design and installation work involved in the lightning protection system is highly specialized and is generally independent of the building systems regulated by the subcodes. Accepting a certification from recognized agencies/licensed engineers/registered architects, in lieu of a permit application, should be considered as meeting the intent of the UCC regulations.

Source: Ashok K. Mehta  
Code Assistance Unit  
Bureau of Technical Services

## Backflow Prevention and Fire Sprinklers

Over the past several years there has been increasing concern over protection of America's potable water supply. The two groups entrusted with ensuring that the potable water supply is protected are the water companies and plumbing inspectors. The water companies get their authority from the Safe Drinking Water Act. The plumbing inspectors get their authority from the adopted plumbing code.

While both the water companies and plumbing inspectors (via the plumbing code) rely on the installation of backflow preventers, the types and purpose of devices dictated often differ.

Under the Safe Drinking Water Act, the water companies are charged with protecting their supply of water. They are not so concerned with what happens in the building; rather, they focus on keeping any contamination that occurs in the building from reaching their water main in the street. This type of protection is called containment. Under the plumbing subcode, plumbing inspectors are charged with protecting building occupants. Building occupants are protected by installing the appropriate backflow protector on any potable water pipe that connects to a potential source of contamination. An example would be a make-up water line to a boiler. This type of protection is called isolation.

Obviously, when two groups are working toward a single goal, their efforts must be coordinated. One of the tenets of the Uniform Construction Code is to avoid duplication of effort. The Department issued FTO #7 to try to coordinate the efforts of the water companies and plumbing inspectors. The FTO addresses appropriate protection for fire sprinkler lines.

Fire sprinkler lines are unique in that sometimes the backflow prevention provided is for containment and sometimes it is for isolation purposes. When a water line is run directly from the water main and serves only a fire sprinkler system, the protection is for containment purposes. In this case, the protection has nothing to do with the building occupants, and is simply to keep contamination from the fire sprinkler system from reaching the public main. In this case, the water company dictates what type of device is installed and ensures that it is installed properly. There is no plumbing inspector involvement, regardless of the characteristics of the sprinkler system (Siamese connection supplied by fire engine tank water, anti-freeze loop, etc.).

When a single water line is run from the main to the building to serve both the fire sprinkler system and the potable water needs of the building occupants, the backflow preventer requirements are clearly dictated by the plumbing code. In this case, the plumbing subcode official inspects the installation. The plumbing subcode official and the fire official need to share information. The plumbing subcode official needs to know the sprinkler system characteristics so he or she can require the appropriate backflow preventer. The fire subcode official needs to know what type of device is installed so he can check for the proper pressure loss in the design calculations.

And, just to prove that plumbing and fire people CAN work together, this article was jointly written by a 'fire guy' and a 'plumbing guy'! (Although the 'plumbing guy' did most of the work!!)

Source: Mike Baier, Code Assistance Unit, Technical Services  
Gerry Grayce, Regulatory Affairs  
Construction Code Element

## Handicapped Parking

Since there still seems to be plenty of questions about handicapped parking spaces, I'd like to try to clarify who is responsible for ensuring that an individual parking space complies with accessibility requirements.

In 1989, the Handicapped Parking Act was signed into law. Although it amended Title 39, a Department of Transportation (DOT) statute, it also referred to the Uniform Construction Code (UCC) as another law with valid accessible parking requirements. The Handicapped Parking Act increased the penalty for violating the restrictions on an appropriately marked parking space to \$100 for a first offense and adding community service for subsequent offenses. The Handicapped Parking Act required that penalty notification be given, so DOT designed the penalty sign. All spaces constructed June 1, 1990 and later were required to have both a handicapped parking sign and the penalty sign. Existing handi-

capped parking spaces were required to have their handicapped parking signs modified to include the penalty sign by June 1, 1991.

This is where the questions began. Who was responsible for making sure all the existing spaces were modified? In 1990, the Department informed all construction officials that they were responsible for ensuring the compliance of all parking spaces constructed under the UCC. This means that the construction official is responsible for making sure that parking spaces that serve an accessible building entrance have the required signs. (The local parking authority, often the municipal police department, is responsible for ensuring that parking spaces that do not serve an accessible building entrance comply. These parking spaces are usually in municipal parking lots or on municipal streets.)

I hope that this helps to clarify the responsibilities for providing the "appropriately marked" accessible parking spaces required by the 1989 Handicapped Parking Act.

Source: Emily Templeton  
Code Development

## **Fireresistance Rated vs. Non-combustible Construction**

Often fireresistance rated and non-combustible construction are confused as the same or similar. But they are not. The common belief that a fireresistance rated construction invariably constitutes the non-combustible construction is also wrong. Appropriate tests and acceptance criteria are specified in the code to ascertain fireresistance rating and non-combustibility of materials and assembly.

Only those materials that are tested and accepted in accordance with ASTM E 136 and BOCA National Building Code, respectively, are classified as non-combustible. Composite materials are accepted as non-combustible if they not only pass the ASTM E 84 test, but also comply with the criteria set forth in the said building code. For evaluation of fireresistance rating of building components and assemblies, ASTM E 119 is the appropriate test standard. Assemblies rated under this test are listed to perform their function for a specified period of time under specific fire condition.

The mandatory use of fireresistance rated and non-combustible construction is contained mainly in Chapters 6 and 7 of *The BOCA National Building Code/1993*. Whenever the code mandates the use of materials and assemblies to be non-combustible or to have a fireresistance rating, the performance of the material or assembly is to be evaluated as described above. The required fireresistance ratings are based on the potential fire hazard of the occupancy, the type of construction, and building components and assembly. The use of non-combustible building elements is intended to inhibit the growth and development of fire.

In type 1 and 2 construction, for the exterior walls, the code requires fireresistance ratings without the use of combustible materials (some exceptions apply). For other types of construction, combustible materials are permitted by the code. Where a building type requires non-combustible construction, code officials should

be careful to allow only the permitted use of combustible elements. For example, FRTW may be used only as specified in the code. Listing and details of the fireresistance rated assembly should be checked and verified for code conformance. Any deviation from the code may degrade the construction type of the entire building.

To sum up the issue, fireresistance ratings are not necessarily a direct function of the non-combustibility of a material; the type of construction classification primarily determines the acceptability of building materials, components, and assembly.

The scope of this article is limited to the issues discussed and in no way cover the overall requirements of the code.

Please call the Code Assistance Unit at 609/530-8793 with any questions.

Source: Farid Ahmad, PE  
Supervisor, Code Assistance Unit  
Bureau of Technical Services

## **Seminar Registration**

All licensed inspectors should have received their Fall brochure for continuing education seminars by now. If you have not, call the Education Unit at 609/530-8798, and one will be sent to you.

A new procedure for registration was implemented this semester. If, when you call, it is found that you have met your educational requirement, you will not be permitted to register. You will be advised to call one week before the seminar date. If there is space available we will gladly register you for the extra seminar at that time.

This procedure allows those who must complete their requirement this semester a better opportunity and selection, while still providing a chance for those who want extra seminars to register.

As always, it is advisable to attend your required seminars over the two year cycle and not wait until the last semester. Also, it is imperative that if you cannot attend a seminar, inform us as soon as possible. It is considered rude and unprofessional when inspectors do not show up for seminars after they have reserved a space. A "no show" may have pushed another inspector out of the seminar. Classes are smaller in size; every space is important. It is essential that you be in attendance if you have reserved a space.

Let's try to work together and we thank you for your cooperation.

Source: Susan H. McLaughlin  
Supervisor, Education Unit

## **State-Sponsored BOCA Membership**

BOCA membership is provided by the Department for each municipality in New Jersey. The membership belongs to the municipality and, therefore, to the assigned code officials within the municipality. If you leave a municipality's employment, you do not take the state-purchased BOCA membership with you. That membership will be reassigned within the municipality.



With only a few exceptions, each municipality is entitled to two (2) UCC BOCA memberships. The Department uses the following standard to determine which individuals get the BOCA membership. The first member is always the Construction Official. The second membership belongs to the Building Subcode Official unless that person is also the Construction Official. If the Construction Official and Building Subcode Official are the same person, then the second membership goes to the Fire Subcode Official.

We update the BOCA membership every month based on the changes in employment we receive from the municipalities. If the change has not been forwarded the BOCA membership will not be correct.

BOCA membership is now being coordinated by Frank Salamandra, Supervisor of Licensing. If the Construction Official has a question about the UCC BOCA membership in his/her municipality, please direct your question in writing to Frank at DCA, CN 816, Trenton, NJ 08625.

A second type of membership is provided by the Uniform Fire Code. If the fire official (not fire subcode official) has a question about this type of membership, it should be addressed to Kent Neiswender, DCA-UFC, CN 804, Trenton, NJ 08625.

Source: William Hartz  
Chief, Bureau of Technical Services

## Stepped-Down Foundation Walls

The practice of reducing the thickness of foundation walls once the wall is above grade is ever increasing.

The scope of this article is limited to the use of Table 1812.3.2 of *The BOCA National Building Code/1993*, which specifies the minimum thickness of foundation walls for various building materials when calculations are not provided.

The wall thickness specified in this table is based on the height of unbalanced backfill which the foundation is required to support. The wall is required to be this thickness from support to support, in most cases from top of footing to the bottom of the sill plate. If the thickness of the wall is reduced at any point in between supports, the depth of unbalanced backfill is limited to the tabular depth based on the reduced wall thickness.

To demonstrate this point, envision the foundation wall on the horizontal plane. This wall is nothing more than a simply supported beam with the connections at the top of the foundation and the bottom of the plate being the end supports and the unbalanced backfill being the distributed load. When viewing the wall in this plane, it is obvious that the thickness of the "beam" is required to be consistent from support to support. The same holds true for the vertical plane.

Should a design professional choose to use a design beyond the scope of Table 1812.3.2, calculations should be submitted for the code official's review and approval.

Source: John N. Terry  
Bureau of Technical Services  
Code Assistance Unit

## Pre-manufactured Construction Fees

The Department has become aware of a situation relating to the calculation of code enforcement fees with respect to site work involving improvements and the installation of pre-manufactured construction.

Pre-manufactured construction (*N.J.A.C. 5:23-1.4*) is a generic term used for both industrialized/modular buildings (*N.J.A.C. 5:23-4A*), as well as manufactured (mobile) homes (*N.J.A.C. 5:23-4B*). The municipal fee for site construction associated with installation of pre-manufactured construction is covered in *N.J.A.C. 5:23-4.18 (c)* 1.i, which stipulates that such fees shall be based upon ESTIMATED COST OF WORK (all disciplines) and the fee shall be computed as a unit rate per \$1,000 of estimated cost. The municipality can use the unit rate applicable for alterations, or it can adopt a separate unit rate category specifically for site work related to installation of pre-manufactured construction. This would necessitate a change to your fee schedule. As always, make sure your fee schedules are up to date.

If you have any questions regarding this procedure, please contact Paul Sachdeva at 609/530-8837.

Source: Paul Sachdeva  
Manager, Industrialized Buildings  
Bureau of Code Services

## Certificates of Continued Occupancy

Certificate of Continued Occupancy (CCO) seems to be an annual topic for me. Apparently, code officials are still confused as to what their responsibilities are and when CCO inspections should be performed. *N.J.A.C. 5:23-2.23(c)* references CCO inspections. This section states that the use of the building must legally exist. In most cases, the use of a building or structure constructed prior to the adoption of the UCC, January 1, 1977, is deemed to legally exist. All subcode officials are required to conduct an inspection. The subcode officials inspect to ensure that no work has been done without a construction permit, a violation of *N.J.A.C. 5:23-2.14*, and that no unsafe conditions are evident, as cited in *N.J.A.C. 5:23-2.32(a)*. This inspection is done by inspecting visible parts of the building only. Easy, right? But what if. . .?

What if you are unsure about the use of a building prior to the request for the certificate? Available records may help. Your old building department records should reflect the use of a building when built after January 1977. The Uniform Fire Code enforcing authority may have records reflecting their inspections. This may provide some information. What if the building was built prior to 1977 and the use has not changed? The building should be deemed legal. The CCO inspection can then be done. Remember, only visible parts of the building are inspected. You can only cite unsafe conditions. This is not a retrofit inspection. If you have any questions, contact Gerald Grayce at 609/530-8862.

Source: Gerald E. Grayce  
Bureau of Regulatory Affairs  
Construction Code Element



## Is "Minor Work" for One and Two Family Dwellings Only?

NO. Only selected items in that code section — *N.J.A.C. 5:23-2.17A* — are restricted to existing one and two family, or separate single family dwellings. Here's the rest at a glance. These projects can be processed with Minor Work permits in all types of buildings (until you get to #4 below, that is):

1. Under the building subcode, construction or total replacement of any porch or stoop, as long as it does not function as the support of any roof or other building portion.
2. Under the plumbing subcode, replacing any existing plumbing piping with new and approved material of the same capacity, installing drinking fountains and condensate drains, and replacing existing low pressure hot water heaters with new ones of like capacity.
3. Under the electrical subcode, installing a maximum of five 110 or 220 volt receptacles or fixtures as long as the existing circuits and/or available space circuits and service are adequate to support the load. Also, you may replace existing wiring with new if you provide the same capacity and it is approved for use by the code.
4. Other assorted projects: Installation of a burglar alarm or security system. And, the special item in "#4 below": installation of low-voltage communication systems in any structure other than one or two family dwellings. Why the exception? You guessed it! In those dwellings such communication systems don't need any permit whatsoever, according to *N.J.A.C. 5:23-9.3 Ordinary Repairs*.

Source: E. Maria Roth  
Code Specialist

## Using UCCARS

### Changing a Permit Number

At some point, every UCCARS user needs to change a permit number that has already been entered into UCCARS. The method is easy and straightforward, but there is a trick to remember. To change the number of any permit in either System I or System II, select Enter Data from the Main Menu. When UCCARS requests your password, for this time only, enter your level 4 Administrative password (e.g., pwd4). Select Permit, then enter the permit number as it exists in UCCARS. After you press the Enter key, the prompt "<F2> modify permit number, <F10> continue" will appear at the bottom of your screen. Simply press the F2 key; the Permit Number field will be highlighted. Type the correct permit number over the old permit number, and store the data. By the way, if you had entered any payments, permit updates, or certificates for the incorrectly numbered permit, they would also be changed automatically to the new number.

Source: Stan Kosciuk  
President, MIS

## Snow Load in CABO

The snow load figure in the CABO One and Two Family Dwelling Code Table No. R-201.2 (*N.J.A.C. 5:23-3.21*) is often confused as the ground snow load. It is, in fact, the roof snow load. CABO is primarily intended for homeowners building their own home. To keep things simple and avoid complicated design calculations, a reasonable roof snow load value of 20 psf has been assigned to CABO Table No. R-201.2. This roof snow load value is based on the ground snow load of approximately 30 psf.

If there is any serious concern about the ground snow load for any specific location, code officials may invoke Note 4 of the above table and use Bulletin 94-8. Please call the Code Assistance Unit at (609)530-8793 with any questions.

Source: Farid Ahmad, PE  
Supervisor, Code Assistance Unit  
Bureau of Technical Services

## Keeping Out of Trouble

While performing a plan review or an inspection, how many times have you said the following to the owner or contractor? "I don't have a problem with this. Just have a design professional sign and seal the document."

This comment can only get us in trouble! When making a statement such as this, what we are doing is approving a construction design or method which has not been certified by a design professional. By doing so, we as code officials put the designers in a very awkward position. There may be some consequence of the design which we have not taken into consideration or which we may not have the expertise to analyze. When and if the designer refuses to certify the document, the first thing the owner or contractor says to the designer is, "The code official approved this, why won't you?"

The easiest way to avoid any of these problems is not to comment on designs or methods which will be required to be signed and sealed by a design professional.

Source: John N. Terry  
Code Assistance Unit  
Bureau of Technical Services

## Farewell, Adieu

After many years of service to the State of New Jersey, Bill Hartz, Chief, Bureau of Technical Services, will retire at the end of this year. Bill began his government career in the Licensing Unit, became Supervisor of the Education Unit and eventually Chief of the Bureau. He has been a dedicated employee and we wish him the best of luck in his new endeavors. He will be missed.

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## Train-the-Trainer

It has been several years since the Education Unit has provided a train-the-trainer course. Inspectors who successfully completed this course were added to the list of licensed code officials who are eligible to teach our educational programs.

Although we currently have an adequate number of instructors on the list, many inspectors are interested in participating in this training.

Warren County College has submitted an outline for a 40 hour course, which has been approved by the Education Unit. With successful completion, your name can be added to our list.

This course is scheduled to be offered in October 1995. If you are interested, you may call Ms. Nancy Laudenslager at 908/689-7613 for additional information.

Any college interested in running this course can obtain a copy of the course outline from the Education Unit. This course can be incorporated at several of our schools since so many inspectors across the state are interested. This is a great opportunity.

Source: Susan H. McLaughlin  
Supervisor, Education Unit

## New Jersey Register Adoptions

Date	Adoption
7/19/95	27 NJR 2388(a) Interpretation and Opinions Adopted Amendment: <i>N.J.A.C. 5:23-3.9</i> adopted 5/26/95, effective 6/19/95.
9/5/95	27 NJR 3325(a) Annual Permits Adopted amendments: <i>N.J.A.C. 5:23-2.14, 4.18 and 4.20</i> , adopted 6/8/95, effective 9/5/95, operative 1/1/96.
	27 NJR 3325(b) Inspections; Certificates; Fees Adopted Amendments: <i>N.J.A.C. 5:23-2.27(a), 2.23, 2.24, 4.18, 4.20, 12.3, and 12.4</i> . Adopted New Rule: <i>N.J.A.C. 5:23-12.9</i> , adopted 7/25/95, effective 9/5/95, operative 1/1/96.
	27 NJR 3328(a) Building Subcode Adopted Amendment <i>N.J.A.C. 5:23-3.14</i> , adopted 6/8/95, effective 9/5/95.



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State of New Jersey  
Christine Todd Whitman, Governor

Department of Community Affairs  
Harriet Derman, Commissioner

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## Municipal Procedures for Bidding and Contracts with On-Site Agencies

Municipalities choosing to utilize the services of private on-site inspection and plan review agencies have been required to use the competitive bidding process for the award of contracts. Since May of this year the U.S. District Court for New Jersey refused to continue the temporary restraining order issued by that Court regarding the letting of municipal contracts by competitive bid. Because this is a new process, having become effective January 1, 1995, there understandably has been some misunderstanding and/or confusion regarding exactly what is required and who is responsible for what.

During the past few months, the Bureau of Regulatory Affairs has received a record number of telephone calls and written requests for explanations and clarification regarding the bidding process. Following are some of the most frequently asked questions and the answers provided by the Bureau. They are presented in a manner to walk you through the process from issuance of the Request For Proposals (RFP) to award of the contract.

Q. Who is responsible for preparing the RFP?

A. The regulations at present do not specifically delegate this responsibility to any one particular individual. However,

since the RFP is to specify any local procedural requirements with which the construction official and/or governing body will expect a private agency to comply in order to effectively enforce the subcode, it is only reasonable that the construction official assume the responsibility of preparing the RFP. Of course, input from other appropriate municipal officials such as purchasing personnel should be sought and considered.

Q. What is meant by local procedural requirements?

A. Local procedural requirements would include such things as expected days in the office, office hours, staffing, and response time exceeding the minimum standards set forth in the code with which the agency would be expected to comply.

Q. Other than procedural requirements, what additional information should be included in the RFP?

A. The RFP should:

1. Specify the term of the contract. At the option of the municipality, the contract may be awarded for a term of one, two, or three years. Officials may not request three

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bids, that is they may not ask that the agency give them a bid for a one year contract, another bid for a two year contract, then a third bid for a three year contract. The term must be specific and the agency is to submit only one bid for that particular term.

2. Specify that a SEPARATELY SEALED BID is required.
  3. CLEARLY INDICATE that if more than one subcode service is being sought, the agency must submit a bid for EACH SUBCODE SERVICE. Subcode services may not be bid as a package. A separate bid is required for each subcode.
  4. Specify that a SEPARATELY SEALED QUALIFICATION STATEMENT is required.
  5. State the date and time by which qualification statements and bids must be submitted, which CANNOT BE LESS THAN 30 DAYS FOLLOWING THE DATE OF THE MAILING OF THE RFP. Although not required by the regulations at this time, it is suggested that the date, time, and place of bid opening also be included.
  6. Provide the name and address of the person to whom the bid is to be submitted. This individual should be the municipal officer responsible for receiving bids for the municipality.
- Q. To whom should the RFP be sent?
- A. The RFP is to be sent to all authorized private on-site inspection agencies.
- Q. How do we know which agencies are authorized by the Department?
- A. The Bureau of Regulatory Affairs has a list of all authorized agencies and will provide a copy to anyone requesting it.
- Q. Is public advertising (newspaper) also required?
- A. No, it is not required, since only authorized agencies are allowed to bid for the contracts.
- Q. If, for example, a municipality is seeking bids for fire and plumbing subcode services, is it all right to send the RFP only to those agencies providing both of the services?
- A. No. The RFP must also be sent to all agencies providing even only one of the required services. For example, if an agency provides electric and plumbing services only, they should receive an RFP and be given an opportunity to bid on the plumbing subcode. An agency providing building and plumbing services must be given the opportunity to bid on the plumbing service, and so on. Obviously, an agency providing only elevator services would not have to receive the RFP.

- Q. How should notice be given to the authorized agencies?
- A. RFPs must be sent certified mail, return receipt requested.
- Q. How should an agency respond to the RFP?
- A. When responding to the RFP, agencies are to submit a written sealed bid and a separately sealed qualification statement.
1. The sealed bids must set forth the fees proposed to be charged for the work and must be expressed as a uniform percentage by subcode. Bids may not exceed 100% of the State mandated fees.
  2. The qualification statements must contain all of the information required by *N.J.A.C. 5:23-4.5A(d)* through 13. No additional information shall be required; however, any omission of the required information gives the governing body the option to disqualify the proposal automatically.
- Q. What procedures should be followed after proposals have been received from the agencies?
- A. The designated bid receiver should forward all of the qualification statements to the construction official for final determination of eligibility. The separately sealed bids should be given to the municipal bid receiver to be held until the designated time for bid opening.
- Q. May the construction official receive and hold the sealed bids?
- A. Yes, if that is the procedure the municipality wishes to follow. However, the construction official is not to open the bids until the qualification statements have been reviewed and his/her written determinations have been provided to the governing body.
- Q. What is meant by "the construction official's written determinations"?
- A. The construction official is responsible for evaluating all qualification statements and must advise the governing body, in writing, as to whether in his or her judgment each agency submitting a bid is qualified to perform in accordance with the local procedural requirements.
- Q. How does the construction official determine whether or not an agency is qualified to perform?
- A. When reviewing the qualification statements submitted, the construction official should base his or her decision on the criteria specified in *N.J.A.C. 5:23-4.5A(e)*.
- Q. What happens if an agency is considered unqualified?
- A. If an agency is determined to be unqualified by the construction official and governing body of the municipality, the agency's bid is NOT TO BE OPENED.

Q. What happens to the bid of the unqualified agency?

A. The bid may be returned unopened to the agency, kept by the municipality, or handled in the same manner that is normally followed by the municipality when bids, for whatever reason, are not opened.

Q. Once the construction official has determined which agencies are qualified to bid, what are the next steps to be taken?

A. The construction official advises the governing body, in writing, which agencies in his or her judgment are effectively able to perform in accordance with the performance standards stated in the RFP. The governing body then also reviews the qualification statements submitted, consults with the construction official, and makes a final determination as to which agencies are able to satisfactorily perform the subcode services needed. If, as with the construction official's review, the governing body determines any agency to be unqualified, that agency's bid must not be accepted and opened.

Q. When should the bids be opened?

A. The bids should be publicly opened on a date and time set by the municipality. If the date and time were not included in the RFP, the municipality must provide this information to anyone interested in attending the bid opening.

Q. Must the governing body accept the low bidder?

A. The governing body must accept the low bidder OR must reject all bids within 30 days of the bid opening.

Q. What happens if there are tie bids?

A. The regulations are silent on the matter of tie bids. Therefore, the municipality may use any means it desires to break the tie. Names may be pulled from a hat (or whatever), a coin tossed, or the town may follow an established procedure for breaking tie bids if the municipality has one in place.

Q. What happens if all bids are rejected?

A. If all bids are rejected, the municipality must reissue the RFP and begin the entire bidding procedure again.

Q. What happens if the low bid is accepted?

A. If the low bid is accepted, the municipality enters into a contract with the successful low bidder.

Q. What happens to the bid documents after the contract has been awarded?

A. All bid documents such as the RFP, qualification statements, bids, etc. become public records and should be retained by the municipality for at least one year. This information must be made available for review to anyone requesting it.

Q. Is there an established time frame for the execution of the contract?

A. Yes. The contract must be entered into not less than 30 days prior to the beginning of the contract period.

Q. Is there any specific information that is required to be in all contracts?

A. Yes. The contract must set forth the amounts (percentage) to be paid by the municipality to the agency for each subcode service, provide the billing and payment schedule as indicated in *N.J.A.C. 5:23-4.5A(j)* through 5, and identify the employee who will serve as the responsible official and representative of the agency (subcode official). Although not required, the Bureau strongly recommends that all contracts contain a 30- or 60-day no fault cancellation clause.

Q. What happens if the contract does not contain all of the information required?

A. Agencies are required by the regulations to provide the Bureau with a copy of all executed contracts at least 10 days prior to the effective date. Upon receipt, the Bureau reviews each contract. If any of the required information has been omitted, the Bureau notifies the municipality and the agency (by copy of the municipal notification) that a contract amendment/addendum is needed to satisfy the requirements of the regulations. The agencies are also required to provide the Bureau with copies of all contract amendments.

Q. Are there any stipulations as to the term (length) of the contract?

A. The contract must be awarded for the exact term specified in the RFP (which may be one, two, or three years). No deviations from the time frame indicated in the RFP are permissible.

Q. Do the construction official's responsibilities in the bidding process end with the award of the contract?

A. No, one step remains. Construction officials must file with the Department a notice of the execution of each contract within 10 days after the effective date.

Q. May contracts be automatically renewed or extended?

A. No, they may not.

Q. What options does a municipality have if its present contract has expired and a new contract has not yet been awarded and executed?

A. Because contract extensions are no longer permitted, the municipality must make an acting appointment under the provisions of *N.J.A.C. 5:23-4.4(a)6*. Either an individual or an on-site agency may receive an acting appointment of up to 60 days, providing the Department is notified. Acting appointments which exceed 60 days must be approved by the Department.

Hopefully, the information presented above has answered some of the questions you may have had regarding the bidding process. When taken one step at a time, the process is really not that complicated or difficult. However, just like anything new, it does take some getting used to. The most important thing to remember

is to give yourself plenty of lead time to prepare the RFP, to allow the required 30 days for response, to review the qualification statements, and to allow for the municipal procedures involved including timeliness of governing body meetings which can often delay bid openings and the award of contracts. Also to be taken into consideration is the time required to have resolutions prepared and approved by the governing body and the time needed to have contracts prepared and signed by all appropriate parties.

As in the past, the Bureau will continue to notify construction officials and municipal clerks at least three months in advance of contract expiration dates. This should give you sufficient time to prepare documents and proceed with the bidding procedures. In the meantime, if you have any questions or require additional information, please do not hesitate to contact the Bureau at 609/530-8838.

Source: Virginia Skwara  
Bureau of Regulatory Affairs

## Child Protection Window Guards

On June 8, 1995, Governor Whitman signed into law P.L. 1995, c.120. This legislation supplements the Hotel and Multiple Dwelling Law by providing for the installation of child-protection window guards in multiple dwellings, with some exceptions, upon the request of a tenant of a unit in which a child, 10 years of age or younger, resides. Regulations enforcing this law have recently been adopted by the Department.

The new regulation is through the Hotel and Multiple Dwelling Regulation and states that the guards are to be installed at no cost to the owner.

What effect does this have on the Construction Office? None! There are no permits required for the installations and there are no inspections under the Uniform Construction Code. The inspection of these devices are the sole responsibility of the Multiple Dwelling Inspector. Questions on these devices should be directed to the Bureau of Housing Inspection at 609/633-6216.

Source: John N. Terry  
Code Assistance Unit  
Bureau of Technical Services

## Permit Extension Act and the Pinelands Area

On November 30, 1994, the Legislature adopted amendments to the Permit Extension Act, which extended until December 31, 1996, certain governmental approvals that had expired or were due to expire between January 1, 1989 and December 31, 1994. In the New Jersey Pinelands Area, the New Jersey Legislature determined that "Nothing in this act shall be deemed to extend any permit or approval issued pursuant to the 'Pinelands Protection

Act,' P.L.1979, c.111 (C.13:18A-1 et seq.) if the extension would result in a violation of federal law, or any State rule or regulation requiring approval by the Secretary of the Interior pursuant to Pub.L. 95-625 (16 U.S.C. sec. 471(i)). The Pinelands Commission projects that this limitation on the applicability of the Permit Extension Act will affect less than 10 percent of actions taken by the Commission on development proposals in the Pinelands Area. Among the approvals affected by this limitation are those approvals granted by the Pinelands Commission prior to January 14, 1981 and certain Waivers of Strict Compliance granted by the Commission. However, the Commission has extended the effective date of some of these approvals until December 31, 1996, provided certain criteria are met.

If there is any uncertainty that a decision made by the Pinelands Commission is still valid for purposes of issuing a construction permit, municipal officials may call the Commission's development review staff at 609/894-9342.

Source: William Harrison  
Assistant Director  
N.J. Pinelands Commission

## Alert!!

It has been brought to the attention of the Department that dissolving styrofoam in concrete forms with gasoline is a common practice. The removal of the styrofoam which is usually placed in a French drain system is more easily removed by dissolving it with gasoline than breaking it up by mechanical means.

This practice has very serious safety, health, and environmental ramifications. The obvious safety and health hazards are the release of vapors which are flammable (and has resulted in flash fires in the past), as well as hazardous to the health of the workers and the individuals who eventually will live and work in the building. The environmental hazard is the possibility of the movement of the gasoline into the ground water or surface waters, thereby contaminating those waters.

The code citations for this type of a violation are as follows:

- a) BOCA National Building Code Section 417.1 required all buildings utilizing hazardous materials comply with the BOCA Fire Prevention Code. The Fire Prevention Code Section F-3203.7 prohibits the use of Class I and II flammable and combustible liquids within a structure for cleaning purposes.
- b) N.J.S.A. 58:10A-6 (Water Pollution Control) which prohibits the discharge of pollutants without a New Jersey Pollution Discharge Elimination System Permit.
- c) N.J.S.A. 58:10-23.11C (New Jersey Spill Compensation and Control Act) which prohibits the discharge of a hazardous substance to the soil or ground water.

Source: John N. Terry  
Code Assistance Unit

## Barriers vs. Guards

There has been an increased number of calls from design professionals, contractors, and building owners regarding requirements on guardrails. Specifically, a large number of code officials are using the "barrier" requirements of 421.10.1 from the swimming pool section of *The BOCA National Building Code/1993* and applying these to the "guard" requirements of section 1021.3 in the means of egress chapter. These features are separate and distinct. One is a "barrier," the other a "guard;" the requirements for the two may not be interchanged.

The confusion seems to arise around the requirement in section 1021.3 which states, "Guards shall not have an ornamental pattern that would provide a ladder effect." While attempting to enforce this provision, code officials have been referring to section 421.10.1 (#6) for guidance. By doing so, the code officials have been requiring guards, when constructed of chain link mesh, to have a maximum mesh size of 1 1/4 inches. The "ladder effect" provision of section 1021.3 does not apply to the size of chain link mesh; it simply applies to horizontal or nearly horizontal members which are readily climbable.

Source: John N. Terry  
Code Assistance Unit  
Bureau of Technical Services

## Site Impracticality

In Chapter 11 of *The BOCA National Building Code/1993*, section 1107.4.2 grants a site exemption for sites with barriers that prevent the construction of an accessible route. When the Barrier Free Subcode was revised, the site exemption section in Chapter 11 was deleted because it allowed a site to be engineered to avoid access requirements.

Why was such a provision included in BOCA? It was an attempt to craft code language to address the site impracticality provisions in the Federal Fair Housing Amendments Act. Although the intent of the Federal rules for site impracticality was reasonable, its effect was not. The Federal Fair Housing Act Guidelines established a complex and expensive site analysis, which included an engineering analysis using a two-foot grid and a comparison of the slope at the site access point (often the parking area) and the accessible building entrance, to determine the number of required accessible dwelling units.

The Department decided not to include the Federal site impracticality guidelines and not to adopt the more general BOCA provision in the Barrier Free Subcode because we believe the variation process in the Uniform Construction Code is more effective. When it is not feasible to provide the required number of accessible dwelling units, we believe that code officials are able to review and evaluate the application for a variation and to make a site-specific determination about whether a reduced number of accessible units is warranted.

However, in an attempt to clarify the question, the Department submitted a code change to BOCA. Although it was not accepted during the last code change cycle, we intend to continue to work on language to deal with this issue. In the meantime, if you receive an application for a variation that includes the Federal Fair Housing Amendments Act site analysis as evidence of site impracticality, you may consider that analysis in your variation review. Although you cannot require such an analysis, submission of one that is already completed makes a good case for the variation. On the other hand, when you receive an application for a variation and there is no site analysis submitted, we have confidence that you will make a sound judgment based on the characteristics of the site in question.

Source: Emily W. Templeton  
Code Development

## Update and Safekeeping of Standard Forms

As many of you know, input was requested regarding revisions to the standard forms. Input has been received and assimilated. Several forms have changed. We hope to be able to introduce the changes as a proposal in the *New Jersey Register* early in 1996. After adoption, mechanicals will be made and one set mailed to each municipality. An interim time before the new forms are required to be used will be given to allow municipalities to use up the old forms.

For printers to obtain a set of forms they must do so in writing to the undersigned. For safety purposes the only forms that the public is permitted to purchase from printing vendors are the file folder and five technical sections: building, plumbing, fire, electrical, and elevator. There have been a few cases where the construction permit form has gotten into the public hand. Construction officials and control persons: This is the one and only form that must be filled out completely by you or your staff. Please adhere to this uniformity in our requirements. As always, safety and security first.

Source: Susan H. McLaughlin  
Supervisor, Education Unit  
Bureau of Technical Services

## Annual Permits— Changes Effective 1/1/96

Annual permits for building/fire, plumbing and/or electrical may be issued by the construction official to educational, industrial, institutional, mercantile, business, and government facilities. On January 1, 1996 the new training procedures will be implemented. The Department will provide seminars on a regular basis. At least one, but not more than three, individuals per subcode are



permitted to attend. The seminars will be announced in the Rutgers brochure for continuing education published for the Fall and Spring semester each year.

When the construction official forwards the construction permit and the training fee (\$140.00 per subcode) to the Education Unit, Bureau of Technical Service, they must include the list of individuals who are required to complete five hours of continuing education per year. The Department will maintain the training records for each annual permit holder. The annual permit will not be renewed unless the facility completes the training for each issued subcode. The Department will notify the construction official who issued the permit if training has not been completed.

Source: Susan H. McLaughlin  
Supervisor, Education Unit  
Bureau of Technical Services

## Barrier Free "Exempt"— What Does It Mean?

When a construction project to provide access is voluntarily undertaken, does the Barrier Free Subcode apply if the building is otherwise exempt from its provisions? More specifically, do the slope requirements of the Barrier Free Subcode apply when a ramp is constructed at a single family detached home? The answer (to both questions) is "No." If a homeowner wants to build a ramp, it should be constructed to provide access for that individual and the slope may be whatever the individual needs it to be. To apply the Barrier Free Subcode to a building that is otherwise exempt changes the meaning of the word "exempt."

Source: Emily Templeton  
Code Development

## C. of O.: Can You Refuse?

The apartment lease is up in a week and the home closing is two days from now. You, the construction official, tell the applicant it's impossible to move into this home. You say you can't give a certificate of occupancy because the carpeting hasn't been installed, some special interior doors are still on order and running late, and Uncle Joe's promised custom kitchen cabinets are just getting their last finishing touches back in his shop.

All the kitchen has right now is a sink, stove, and refrigerator.

It's a cliff hanger for the prospective owners and decision making time for you — can you or can't you refuse a Certificate of Occupancy (C. of O.)?

The owners have spent hours poring over the plans you approved. They claim they have completed the work "in accordance with the permit, the approved plans and the regulations" as is stated in *N.J.A.C. 5:23-2.23(f)4*.

Well, almost. Some essential things really are missing, as well as some non-essentials. Upon close examination it turns out that for each missing item there is a remedy by which you could save the day:

- The carpet is only in the documents but not regulated by code. Therefore, it could be taken out of the construction documents simply by written amendment. Later it can be installed as an ordinary repair. Therefore the missing carpet is not an obstacle to issuance of the C. of O.
- The cabinets in this case, it turns out, were not even shown in detail on the drawings. Only the space for them, saying "future cabinets" was reserved on the plans and the interior elevations that showed the carpenter how low to bring the soffits. They weren't even in the contract. Also, they are not regulated by code. So their arrival date has no impact upon the C. of O. Had they been in the contract, though, they could have been dealt with as an amendment exactly like the carpet.
- The only items in this case which might require a Temporary Certificate of Occupancy (T.C.O.), instead of a permanent C. of O., may be certain doors. But only two types of interior doors. In a CABO home, toilet room doors are required for privacy and between house and garage, solid core wood doors 1 3/4" thick, or approved equivalent. In a BOCA home, which does not require toilet room doors at all, only the door to the garage is necessary. If you as the official having jurisdiction are able to allow and obtain a temporary solution to the missing required doors "without endangering life or public welfare" then the owners can move in. Those doors will have to be installed and inspected by the date you've shown on the T.C.O., but unregulated doors can later be installed independently by the owner if the contract documents have been adjusted as above.

Examining all that regulatory detail when deciding whether to give or withhold a certificate of occupancy allows good judgment to prevail.

Source: E. Maria Roth  
Code Assistance Unit  
Bureau of Technical Services

## Is It Egress?

Those flat, nearly flat, or sloped utility doors in the yard through which you bring up your gardening tools, hoses, and other occasional items from the basement are almost never intended as primary egress for people. That's why they are often served by only a ladder or wall mounted rungs — though sometimes by a flight of stairs. The codes do not require homes to have basement utility doors and therefore do not specifically regulate them.

Because these doors are almost never part of a home's egress system, the provisions of the BOCA and CABO stairway sections are generally not applicable to them.

On the rare occasions where such a basement utility door must fill the additional function of emergency escape from a sleeping room, it becomes subject to the conditions of BOCA section 1010.4 or CABO section R-210.2.

Source: E. Maria Roth  
Code Assistance Unit  
Bureau of Technical Services

## Multi-Story Dwelling Units and Access

During the past few months, several questions have come up that have caused a great deal of discussion in the Barrier Free Subcode class. One of the issues that seems to be the most confusing is how to define a multi-story dwelling unit. Simply put, a multi-story dwelling unit is a dwelling unit that has more than one story of living space. More simply put, it is a dwelling unit with an upstairs and a downstairs. In buildings with no common use elevator, multi-story dwelling units are exempt from accessibility requirements. In buildings with a common use elevator, the story served by the elevator must be accessible.

Source: Emily W. Templeton  
Code Development

## Habitable Attics Are Back

On September 5, 1995, the term "habitable attic" was inserted in the UCC at *N.J.A.C. 5:23-3.14(b)2v*. The term is defined in a manner consistent with *The BOCA National Building Code/1990* and states:

"Attic, Habitable": A habitable attic is an attic which has a stairway as a means of access and egress and in which the ceiling area at a height of 7 1/3 feet above the attic floor is not more than one third the area of the next floor below."

Should a homeowner or design professional choose to utilize a habitable attic in a design for new construction or an alteration, it is now acceptable under the Uniform Construction Code.

Source: John N. Terry  
Code Assistance Unit  
Bureau of Technical Services

## New Seminars—1996

Several new seminar proposals have been submitted for review and evaluation for 1996. The review committee consists of Marge McDonald and Carolyn Golojuch from Rutgers University and Susan McLaughlin and Larry Wells of the Department of Community Affairs.

Volunteers requested once again from the Associations enhanced the committee structure. Four new names were added: Richard Castellitto representing the Municipal Electrical Inspectors' Association of NJ, Thomas Millar representing the Building Officials' Association of NJ, Arthur Londensky representing the New Jersey Fire Prevention and Protection Association and Charles Douches representing the New Jersey Plumbing Inspectors' Association. We were very pleased to have them add their technical expertise to our review process. Special thanks also go to the Associations for recommending the candidates.

Watch the mail for your spring brochure toward the end of January.

Source: Susan H. McLaughlin  
Supervisor, Education Unit  
Bureau of Technical Services

## Building Safety Conference 1996

The Building Safety Conference of 1996 will be held in Atlantic City at the Trump Taj Mahal Casino Resort on May 15th through May 17th. The registration fee will be \$75.00. (Early registration rates will be \$55.00.) As usual, the Taj Mahal will be setting aside a block of sleeping rooms at a special rate of \$92.00 per room.

Special training seminars will be presented at the conference. We encourage you to mark your calendar now and look forward to seeing you in Atlantic City in the spring.

## Using UCCARS—Census Numbers

Most of the confusion regarding which census item numbers to use involves a few specific types of permit applications. The most common problem areas are listed below, along with the use group, census number, and type of work that should be used.

- In-ground swimming pool: U, 434, alteration
- Above-ground swimming pool: U, 999, alteration
- Detached garage: U, 438, addition or alteration
- Shed: U, 328, new; or U, 434, alteration
- Tank removal/abandonment/fill: U, 649, demolition
- Tank installation: U, 999, alteration

There are a few key points to keep in mind.

First, census item numbers that start with '1' (e.g., 101) are for new residences. Those beginning with '2' (213) are for new residential non-housekeeping buildings such as a hotel or motel. Those beginning with '3' (327) are for new non-residential buildings. Note that all census numbers in this category are for new buildings only, regardless of the type of building, for which you must enter both square and cubic footage.

Second, for alterations or additions, the census numbers always begin with '4' (434). Demolition permits require census numbers that start with '6' (645).

Third, census number '999' is for out-of-scope work. Notice in Information Booklet C-404(B) published by the U.S. Department of Commerce, Bureau of the Census, there are a number of types of construction that are listed as O/S (out of scope). These include roofing, siding, and fences, which often are erroneously entered as '434'. If you take a few minutes to flip through the booklet, you may be surprised at how many permits should be entered as O/S (999) rather than as alterations.

Source: Stan Kosciuk  
President, MIS

## Control Person of the Year

The Building Safety Conference Committee would like to recognize a "Control Person of the Year" at the Spring conference. We feel that this team member is one of the most valuable players in the municipal organization.

The award is available to control people who meet the following criteria:

A full-time control person for the past five years in one or more New Jersey municipalities whose activities have advanced the cause of code enforcement, including a resume that highlights both paid and volunteer activities of the individual.

Nominations may be received from mayors or township committee members, the public at large, control person organizations, and other control persons.

Please respond with nominations by March 31, 1996 to:

Building Safety Committee  
Box 6604  
Lawrenceville, New Jersey 08648

Source: Susan H. McLaughlin  
Supervisor-Education Unit  
Bureau of Technical Services

## Control Persons Unite

A successful venture has begun! Announcing the formation of the CONTROL PERSONS ASSOCIATION OF BERGEN/PASSAIC COUNTY. We have organized to promote and encourage the exchange of information, education, responsibilities, and professionalism of the control person. We have received positive feedback from our first two meetings and invite anyone interested in joining to contact either Linda Aiello (Township of Washington Building Department), or D.J. Giesenhaus (Saddle River Building Department).

Remember, behind every good inspector is a great control person!!!

Source: D.J. Giesenhaus, President  
Bergen/Passaic County Control Persons Association

EDITOR'S NOTE: *The following article is a corrected reprint of the article that appeared in the Summer 1995 Communicator. This article supersedes the previous article. If you save your newsletters, to avoid confusion, cross out the article in Summer 1995 issue and reference this reprint.*

## Revised Article on Lightning Protection Systems

Some of the frequently asked questions on this subject are (i) "Why is the installation of lightning protection systems on structures other than Unlimited Area Farm Buildings not regulated by the State Uniform Construction Code?" and (ii) "Are permits and inspections required for the installation of lightning protection systems for farm buildings as outlined in N.J.A.C. 5:23-3.2(d)5v?"

The answer to the first question lies in the concept that lightning strokes are most likely to occur at a high point, that is, where a tree, tall building, or some other extension of the earth rises upwards, thereby reducing the distance and, thus, the impedance between the charge on the earth and on the clouds. Studies have shown that the high object tends to 'divert' and 'intercept' practically all strokes that otherwise would have hit somewhere within the radius equal to the height of the object. The principle involved here explains why isolated farm buildings, even though only 20 to 30 feet high, are more susceptible to the lightning than similar buildings in densely populated areas. In addition, single story commercial farm buildings are unlimited area buildings that do not require automatic fire suppression systems. Regulations therefore mandate the installation of lightning protection systems on such buildings only. For other structures, it is desirable for the designer to assess the risks while considering the need for the system. NFPA 780—Lightning Protection Code contains a risk assessment guide. This guide takes into consideration the factors such as the type of structure, type of construction, structure location, topography, occupancy, contents, and lightning frequency.

The lightning protection system as such does not prevent lightning from striking, but, if installed properly, it provides a safe low-resistance metallic path through which the lightning energy can safely be directed to the ground, thus protecting the destruction and damage to property and life. It is, therefore, important that the system is designed and installed in accordance with the requirements of nationally recognized standards such as NFPA 780, UL 96, and UL 96A. The Master Label Program of UL and the Certified System Program of the Lightning Protection Institute are both recognized nationally in the field of providing certifications for the installation of lightning protection systems based upon the requirements contained in NFPA 780. The design and installation work involved in the lightning protection system is highly specialized, and is generally independent of the building systems regulated by the subcodes. A construction permit is therefore NOT required for such systems.

Source: Ashok K. Mehta  
Code Assistance Unit

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Source: Ashok K. Mehta  
Code Assistance Unit



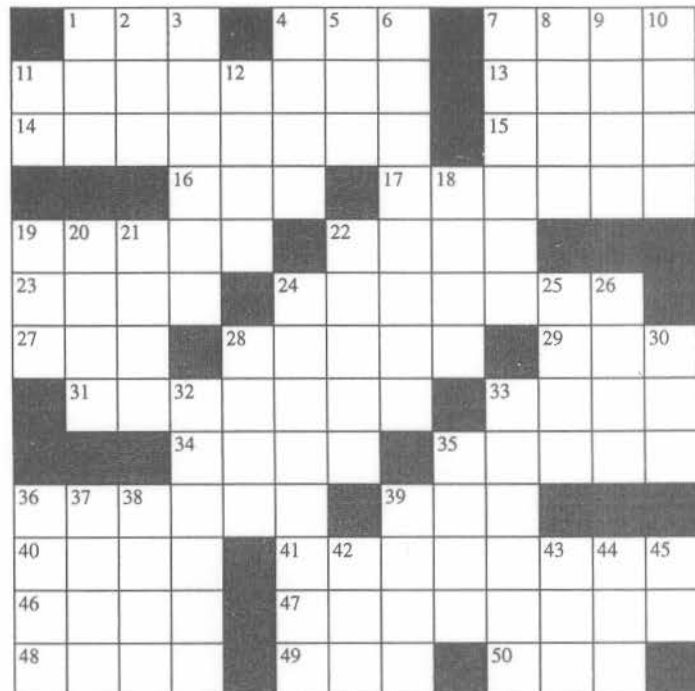
## Crossword Puzzle

## ACROSS

1. Excavate
4. Approves the building
7. Back of the pack
11. Type of load
13. Regarding (2 words)
14. Nail or screw
15. Adolescent
16. Explosive compound
17. Steel members
19. Withheld to protect the innocent
22. Stress \_\_\_\_\_ panel
23. Battle reminder
24. Odorized
27. Hem or Douglas
28. Piece of glass
29. \_\_\_\_\_ and don'ts
31. Blow-up drawings
33. Dryer concern
34. Molding type
35. Insulation rolls
36. Concrete tool
39. I've \_\_\_\_\_ it
40. Roof part
41. Bends
46. Applicant?
47. Must be 7"-11"
49. Drawn proportionally (Abbr.)
50. Times 2 = type of fly

## DOWN

1. UCC Dept.
2. License level
3. Stormwater drainage
4. Beveled wood piece
5. Minimum number of exits
6. Alarm bell components
7. A.C. load
8. Confused
9. Valve or plant part
10. Weight amounts
11. Certificate \_\_\_\_\_ Approval
12. Office need
18. In a \_\_\_\_\_



19. Potable pipe mark
20. Hazardous material
21. The Old Gray \_\_\_\_\_
22. Proportion
24. Coupling type
25. Check and correct
26. Inspector's favorite word?
28. Wise one
30. Address parts (Abbr.)
32. Radio or TV structures
33. Most recent
35. Nut companion
36. Communication device (Abbr.)
37. Guard or hand
38. Famous office
39. Shock protectors (Slang)
42. Not int.
44. Golfer's need
45. "Sweet" softwood (Abbr.)

## Energy Subcode Survey and Training Contract

In order to gain greater compliance with the Energy Subcode adopted by the State of New Jersey for commercial buildings (ASHRAE/IES 90.1-1989), DCA will be awarding an energy contract for the development of a compliance survey; training for design professionals, builders, and other stakeholders; and training for local Uniform Construction Code enforcement officials. If you are interested in receiving a Request for Proposal (RFP), please call Marge McDonald at the Center for Government Services, Rutgers University (908/932-3640 ext. 624).

## Important Notice to All Building Inspector-I.C.S. Applicants

The latest (September 1995) printing of the *Licensing Information Booklet* contains a *partial* error on page 15. One of the two test modules required for the Building Inspector I.C.S. license should have read 4A and *not* 4B – Mechanical 1 & 2 Family. However, the detailed description of the requirements for the Building Inspector I.C.S. license on page 5 of the *Licensing Information Booklet* correctly lists 4A along with 1B as the required test modules.

If you have already registered to take test module 4B in April 1996 (for the Building Inspector I.C.S. license), please contact Education Testing Service immediately at 609/921-9000 in order to make the necessary correction.

We apologize for any inconvenience this may have caused. If you have any further questions you may contact the Licensing Unit at 609/530-8803.

Source: Frank L. Salamandra  
Supervisor of Licensing

## Bye Lines

Bill Hartz, Chief, Bureau of Technical Services, is a legendary figure in the Department of Community Affairs. Many of you may not know Bill personally, but all of you know his work. After Chuck Decker departed, very few people believed that things would remain as smooth as before. Thanks to the extra efforts and extraordinary leadership of Bill Hartz, the construction code element provided some of the best services to benefit the construction community. His charismatic approach to construction problems impressed many of his foes. The Bureau owes him greatly for his input and guidance. We must admire his humane approach to many complex problems — the basic and essential part of a good manager.

Now, when he is leaving us (we won't say he is retiring because he is a person who can never retire from an active life), we wish him great and grand success in all his future endeavors. So Bill, here are some of the thoughts and feelings of your co-workers as you move on.

The State of New Jersey's loss is definitely BOCA's gain. —JNT

Bill has all the ingredients of a great manager. His terrific leadership and concerted efforts provided the construction community with solutions to many complex issues. —FA

I've observed, admired, appreciated, and benefited from his unfailing responsiveness to the many demands of the Bureau and to the individual concerns of the staff. It has been wonderful to know that a very real and caring man sits in that corner office who, despite an extremely crowded schedule, will see and hear you. —EMR

It's hard to describe the kind of person Bill Hartz is in a line or two. He has a true talent for problem solving and management, he's dedicated and responsive, fair and honest. A true gentleman. I'll miss him personally and professionally. —MB

One door shuts and another opens — new opportunities lie ahead. All best wishes as you move in your new circle, remembering always your friendships of the past. —Education Unit

Words cannot express how we feel. A great friendship, a great boss who, in moving on, will be a great leader appreciated by others, a great co-worker, and most of all a great person with a great big heart. I'll miss you like most others but even more. —Debra

As the youngest member of the Bureau staff, and as someone who shares a similar beginning in a career in state government with Bill, I would simply like to express my sincere appreciation for all his help and guidance as well as setting such a fine example for me to follow. I would also like to extend my very best wishes to Bill in his future endeavors. —JAD

I will remember Bill most of all as a truly sensible and practical down-to-earth person of exceptional competency and integrity. To me, Bill epitomizes the qualities that an administrator should possess. My sincere best wishes to him always. —FS

As my supervisor, Bill has supported and assisted me with problems both job related and personal. I will miss you a lot. Just don't forget us and keep in touch. Buena Suerte. —Cecilia

Words do fail me at this time. It's not unlike a small country losing its leader. Upon hearing of Bill's decision to retire, there was shock and disbelief. No one could imagine Tech Services without him. However, unlike a small country losing its leader, Bill leaves with all of our warmest and best wishes for the future. Good luck! —M. Howard

Bill, may you have in the years ahead many fulfilling endeavors and new experiences. Sincerest best wishes to you for good health and much happiness. You will be missed. —PB

## New Jersey Register Adoptions Winter 1995

Date	Adoption
9/18/95	27 NJR 3600(a) Notice of Administrative Changes, Radon Hazard Subcode, New Jersey Municipalities in Tier 1, <i>N.J.A.C. 5:23-10</i> Appendix 10-A.
10/16/95	27 NJR 3933(a) Permits Adopted Amendments: <i>N.J.A.C. 5:23-1.4, 1.6, 2.16, 3.8, and 3.12</i> , effective 10/16/95.
11/6/95	27 NJR 4281(b) Elevators Adopted Amendments: <i>N.J.A.C. 5:23-2.17A, 12.2, 12.6, 12.8 and 12.9</i> , effective 11/6/95, operative 3/1/96 except that <i>N.J.A.C. 5:23-2.17A(c)6xxv through xxvii</i> , operative 5/1/96.
11/20/95	27 NJR 4699(a) Commercial Farm Buildings Joint Adopted Amendments: <i>N.J.A.C. 5:23-2.28, 3.2, 4.18, 4.19, and 4.20</i> , effective 11/20/95, operative 3/20/96.
12/4/95	27 NJR 4884(a) Change of Use Group; Interpretations Adopted Amendment <i>N.J.A.C. 5:23-2.6</i> ; Adopted New Rule: <i>N.J.A.C. 5:23-9.8</i> , effective 12/4/95, operative 4/5/96.
	27 NJR 4885(a) Indoor Air Quality Standards and Procedures for Buildings Occupied by Public Employees Adopted Repeal: <i>N.J.A.C. 5:23-11.1 through 11.12</i> , effective 12/4/95.

Source: E. Maria Roth  
Code Specialist

## Solution to Puzzle



*Best Wishes for a  
Happy New Year!*

## Building Safety Conference Golf Outing

The Building Safety Conference Committee is considering a golf outing in conjunction with the conference. The outing will take place at the Mays Landing Country Club on Wednesday, May 15, 1996. The price will not exceed \$75 per person. A separate mailing will follow with final details.

Any reader of the *Construction Code Communicator* is invited to participate. We ask that you express your interest so we can make appropriate plans.

Please respond by February 1, 1996 to:

Building Safety Committee  
Box 6604  
Lawrenceville, New Jersey 08648

Thank you.

Building Safety Committee

- ☐ Interested in participating
- ☐ Interested in sponsoring a hole
- ☐ Interested in donating a gift/door prize or award

Name \_\_\_\_\_

Address \_\_\_\_\_

Comments: \_\_\_\_\_