

Construction Code Communicator



State of New Jersey
Christine Todd Whitman, Governor

Department of Community Affairs
Jane M. Kenny, Commissioner

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20 Years Ago

1977 was a memorable year:

- Elvis died.
- Star Wars was first released.
- Jimmy Carter was in the White House.
- Edward Koch was elected Mayor of New York City.
- Fluorocarbons were banned as an aerosol propellant.
- Legionnaire's disease spread through a Philadelphia hotel's HVAC system.
- Lou Brock surpassed Ty Cobb's record for base stealing.
- The Oakland Raiders defeated the Minnesota Vikings 32-14 to become the Super Bowl champions.
- Gordie Howe became the first hockey player to score 1,000 goals.

AND

- THE UCC REGULATIONS WENT INTO EFFECT!!

Source: Code Development and Assistance
Division of Codes and Standards

Department Marks 20th Anniversary of UCC

The year was 1977. Jimmy Carter was in the White House. "Star Wars" was on the big screen for the first time. And the New Jersey Uniform Construction Code went into effect.

The Uniform Construction Code as it exists today is the result of the vision of Division of Codes and Standards Director William M. Connolly. Two DCA staff members had been assigned to draft the regulations to make this vision a reality: Jim Sinclair (now a Vice President with the New Jersey Business and Industry Association and a member of the Uniform Construction Code Advisory Board) and Sol Metzger (now an Administrative Law Judge.) In September, 1975, they were joined in their efforts by the first employee hired to work exclusively on the UCC: Charles M. Decker. It was Chuck Decker's focus and intellect that shaped the UCC. Under his leadership, the infrastructure to support the UCC through its first 20 years (and the next 20 years) was developed. Today, there are 142 employees working in the enforcement and administration of the UCC.

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One of the keys to code enforcement as it was envisioned 20 years ago was a qualified corps of local officials. The goal was to ensure that all of those involved in the enforcement of the UCC were trained and licensed. The UCC requirements for licensing and continuing education and the provisions governing conflict of interest all were written to ensure that those enforcing the UCC were professionals in every sense of the word. New Jersey joined other states in working with ETS (Educational Testing Service) on the development of standardized tests to measure individual proficiency in the model codes.

Currently, there are 4,583 individual licenses held. Last year, the Department offered 212 continuing education courses, reaching 8,511 attendees with information to enhance their ability to enforce the UCC. Later additions, such as the institution of peer review committees, support the Department's efforts to maintain the professionalism of code officials and underscore the degree to which this goal has been realized.

Over the last 20 years, the UCC has been amended to address barrier free access, manufactured construction, radon hazard construction techniques, asbestos hazard abatement, lead hazard abatement, energy conservation, elevator safety, and a host of other emerging building safety issues. While the Uniform Construction Code has evolved over the years, and has accommodated innovation and change, the framework that was established 20 years ago has remained intact and has served New Jersey residents well. New Jersey acts as a national model in the adoption and enforcement of construction standards. Everyone involved with the administration and enforcement of the UCC can take pride in this achievement.

Source: Code Development and Assistance
Division of Codes and Standards

Modular Construction and Firestopping

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An inspector may think that, when inspecting a modular house, he need only inspect those items built on site. Some modular plans, however, make reference to firestopping which is to be installed by builders for penetrations, such as the tub drain assembly and pipe penetrations through the floor.

Remember to check the modular plans, including the small print, for firestopping requirements that must be done on site by the builder before a final inspection.

Source: Tom Pinand
Building Department
Vernon, New Jersey

Questions About Industrialized/Modular Buildings

QUESTION #1: Can a modular Type 5B CABO house be three stories?

RESPONSE: Yes.

QUESTION #2: Can a modular CABO house be sited in a flood plain provided that the foundation complies with BOCA?

RESPONSE: Yes. The decision to limit construction in flood prone areas to the BOCA National Building Code was based on the lack of design criteria in CABO. In the case of this modular unit, however, the CABO unit will not be subject to flooding since it is installed above the established flood elevation. The code has been met because the site built portion, which might be subjected to flood, was designed and built to BOCA provisions.

QUESTION #3: What are the requirements for filing documents at the time of application for a construction permit?

RESPONSE: Part IV - Section 6(A) of the Uniform Administrative Procedures (*N.J.A.C. 5:23-4A.10*) stipulates the following when applying for a construction permit:

1. A statement must be included that the work to be performed under the permit includes the installation of a certified Industrialized/Modular Building or building component with IBC insignia. This statement must be signed by the applicant or his agent. In addition, schematic floor plan layouts and typical elevations must be submitted. The manufacturer must reference the evaluation agency's approval of the building, building systems, or building components, as applicable. These schematic plans need not be prepared by or sealed by an architect or engineer.

2. The reference of approvals by the evaluation agency can be made by any one of the following methods:

- An approval stamp of the evaluation agency on the plans;
- A letter from the evaluation agency on its letterhead stating that they approved the particular model/options;
- A letter from the manufacturer stating that the particular model/options were approved by the evaluation agency.

3. Detailed plans for site-built construction related to installation of modular buildings must be included with the permit application. These plans must be sealed and signed by a New Jersey Professional Engineer (PE) or Registered Architect (RA). Remember, however, that a homeowner who is planning to construct a single family home himself to be used as his own principal residence is not required to submit signed and sealed plans. (*N.J.A.C. 5:23-2.15(e)*)

4. The manufacturer's installation instructions for the modular buildings must be submitted with the permit application.

QUESTION #4: What are local enforcement agency's responsibilities with respect to the inspection or approval of a modular building including its installation?

RESPONSE: This response is based on *N.J.A.C. 5:23-2.22* and Part IV - Section 6(B) & (C) of the Uniform Administrative Procedures:

- (1) The local enforcement agency is required to inspect all modular buildings upon, or promptly after, the installation at the building site to determine whether all site-built construction complies with the plans filed with the permit application, the manufacturer's installation instructions, and the conditions listed on the manufacturer's data plate.
- (2) Before accepting the unit, the appropriate Subcode Official may require the performance of non-destructive tests.
- (3) The appropriate subcode official must look for any visible signs of damage and/or visible code violations.
- (4) No inspection requiring disassembly, damage to, or destruction of the certified modular building shall be conducted.

QUESTION #5: What are the requirements of fire separation walls in case of townhouses built to the CABO One and Two Family Dwelling Code?

RESPONSE: Per R-218.2, townhouses may be constructed, and shall be considered as separate buildings, provided that they are separated by exterior walls that meet the requirements of Section R-202. Per Section R-202, townhouses may be constructed provided that the two adjoining walls are rated one hour and are protected from exposure on both sides. A common two hour fire resistive wall is also acceptable if it meets the requirements in the Exception to R-218.2.

QUESTION #6: What are the permit requirements for controlled environmental vaults and process equipment?

RESPONSE: As long as the vault contains no provision for human access, houses only telecommunication equipment that is considered process equipment, and is manu-

factured as an integral part of the equipment (one example is the housing for a piece of switchgear), it may be considered process equipment. However, if the vault contains a means for human access, contains equipment regulated by the UCC, or is enclosed within a vault so constructed that it aligns itself with the definition of a structure in the UCC, a permit is required.

Source: Paul Sachdeva
Industrialized Buildings Unit
Bureau of Code Services

Egress from a Mezzanine

This is an old topic that, perhaps, needs a fresh outlook. It is amazing, but true, that determining the requirements for egress from a mezzanine is confusing and sometimes is misinterpreted. Some of the areas that are commonly misinterpreted are: whether one or two means of egress are required from the mezzanine space; what the total travel distance must be; exit access through open stairway; and remoteness.

Other than the special industrial occupancies of Type 1 or 2 construction, the aggregate area of a mezzanine is limited to a maximum of one-third of the area of the room where it is located. For special industrial occupancies in buildings of Type 1 or 2 construction, the mezzanine is limited to a maximum of two-thirds of the area of the room in which it is located. Enclosed space in the room is not taken into account in the calculation of the allowable mezzanine area. Also, although the mezzanine area does not contribute to the building area, it does contribute to the fire area within the building.

Due to the special characteristics of a mezzanine described above, the egress plan must be based on several variable parameters. Among other requirements, egress from a mezzanine must meet the following code provisions:

(1) BOCA - National Building Code 1993, Section 1017.2: It must be determined whether the mezzanine qualifies for one or two independent (and, of course, remote) means of egress. If the stairway is part of the exit access, the travel distance should be measured from the most remote point of the mezzanine area to the bottom of the stairway. The stairway providing exit access from the mezzanine area is not required to be enclosed. This travel distance is not the total travel length required to get to the exit; it just provides direction for determining required egress from the space.

(2) BOCA - National Building Code 1993, Section 1006.5: It must be determined whether the maximum length of exit access travel from the most remote point of the mezzanine area to the exit complies with the code.

It is important to consider the points raised in sections (1) and (2) above when evaluating egress from a mezzanine.

Source: Farid Ahmad, P.E.
Supervisor, Code Assistance Unit

Barrier Free Recreation: “Percent” Rules!

I have received several inquiries concerning the amount of accessible play equipment that is required in a play area. The questions have particularly focused on what must be provided when equipment is being replaced. It is not really a question of “is accessible equipment required?” but, rather, “how much accessible equipment is required?” That is decided by the following “percent rules.” The requirements for including accessible equipment when replacing existing equipment are based on the requirements for newly constructed recreation sites.

On a newly constructed recreation site:

Five Percent (5%)

5% of the following areas and equipment must be accessible: camp sites, picnic tables, benches, fireplaces and grills.

Twenty-five Percent (25%)

25% of the following play equipment must be accessible: (1) single function play equipment in each play area on a site; (2) play activities of multi-function play equipment.

When replacing existing equipment on a site:

Fifty Percent (50%)

50% of the replacement equipment must be accessible to and usable by people with disabilities until at least 25% of the equipment provided is accessible.

Because there are no standards for determining whether play equipment is accessible, accessible play equipment must be identified by the manufacturer as usable by both disabled and non-disabled people.

Also, it is critical that an accessible route of travel, which is required by the recreation section of the Barrier Free Subcode, be provided to accessible sites, access points, equipment, and support facilities.

If there are questions about accessible recreation sites or equipment, please call me at 609/530-8788.

Source: Gail R. Weikel
Code Development and Assistance

Fixture Recount

A while back, I wrote an article on occupant loads for calculating the number of required fixtures called “The Hottest Party of the Year” (*Communicator*, Vol. 6, No. 1). I can only conclude that the article was a flop because, since the article appeared, several people have told me that a great topic for an article would be fixture counts in the plumbing code. Maybe it was the title. (I probably got a bunch of fire guys to read a plumbing article — or at least part of a plumbing article.)

The theme of that article, and of this one, is that the plumbing code is fairly flexible with respect to determining the number of people to be used when applying table 7.24.1 of the plumbing subcode. The code gives some hints about where you

might come up with a number, but it does not have a direct tie to the egress occupant load of the building code. Section 7.24.2 states that “Where the occupant load is based on the egress requirements of a building code ...” Note that the code does NOT say that the number of occupants shall be determined by the building code. Therefore, the code implies that there are other ways to calculate the occupant load.

Some examples of other methods of calculating an occupant load are the number of seats, in the case of restaurants or theaters, or attendance records, in the case of health clubs or swimming pool areas. In the case of day care centers and public school classrooms, occupant load is often limited by other State regulations. In those cases, the established occupant loads can be used for calculating the number of plumbing fixtures. The code gives you the ability to accept these numbers.

What happens when the owner of the restaurant you just approved decides that he can cram in a couple more tables? Similarly, what happens if there is a change of tenant with no change of use — and the new tenant has a higher occupant density? These are valid concerns. If you are concerned that there could be a fluctuation in occupant load that would render the number of fixtures inadequate, you can make the plumbing occupant load a condition of the Certificate of Occupancy. This is suggested only as a complaint tool. I do not expect plumbing subcode officials to count the people coming in and going out of restaurants to make sure that the plumbing occupant load is not exceeded. Making the occupant load a condition of the Certificate of Occupancy allow you respond to consumers who complain about inadequate plumbing facilities.

Maybe one quick example is in order. A restaurant is provided with 60 seats and has 4 employees. Since the number of employees and customers is under 100, a single set of rest rooms for the use of both customers and employees can be provided. The number of people of each sex that must be accommodated is: $64 \times .6 = 38.4$. By table 7.24.1A C. Assembly, the required number of fixtures is 2 water closets (one may be a urinal) for the men, and 2 water closets for the women.

It is important to remember you have this flexibility, especially in the case of existing buildings where the amount of space is limited. So, limber up everybody.

Source: Mike Baier
Code Assistance Unit

Roofs, Ice Shields, and Building Officials — An Interesting Combo

The Department has been made aware of confusion concerning the requirements for roof ice shield protection. It appears that some building subcode officials require ice shields only on total replacement roof covering projects; others never require an ice shield; and still others require an ice shield on all roofing projects whether the situation is total replacement or just recovering.

In an attempt to clarify this issue and to reasonably apply the intent of the code, it is recommended that the building subcode official:

1. Ask the permit applicant whether the roof project is a total roof covering replacement or a roof recovering procedure;
2. Establish whether a recovering, rather than a total replacement, would comply with Section 1512.3 of the 1993 BOCA National Building Code;
3. If, based on knowledge of area conditions, the building subcode official determines it is necessary, an ice shield should be required for a new roof covering or a total roof replacement. We believe that the local building subcode official, who knows his/her geographical area best, is the appropriate person to make this decision.

In addition, it is recommended that, in the case of a roof recovering project, ice shields not be required — or allowed — to be installed over any existing roof covering. There are two reasons for this:

1. The manufacturers of products used to create ice shields do not recommend or warranty their products unless they are applied to clean, smooth and dry decking; and
2. The removal of the roof covering should not be required simply to accommodate an ice shield. The roof covering should be required to be removed only when mandated by Section 1512.3 of the BOCA National Building Code.

Source: Thomas Uber
Construction Official
Bureau of Regulatory Affairs

Elevator Subcode and “Special Devices”

This article intends to give guidance regarding the enforcement responsibility of the elevator subcode officials in dealing with the installation of special devices, such as Personnel Hoists (ANSI A10.4), Material Hoist (ANSI A10.5), Conveyors (ASME B20.1), and Automotive lifts (ANSI B 153.1), devices which are within the scope of BOCA Chapter 30, but are not within the scope of UCC Subchapter 12.

Pursuant to *N.J.A.C. 5:23-2.14(a)*, the installation of special devices should be evaluated to determine to what extent they are subject to the permit process and code compliance. Special devices may be classified into two broad categories:

1. Special devices that are permanently installed and become part of the building service system; and
2. Special devices that are meant for temporary use and are removed from the site upon the completion of a building or structure.

Devices classified in the first category are subject to the Uniform Construction Code permit process, and, therefore, they are subject to plan review and acceptance inspections for conformance with such code items as structural supports, enclosures,

power supply, and disconnecting means. The installation of these devices must comply with the applicable provisions of the Building, Electrical and Fire Protection subcodes. This should be ensured by the appropriate subcode officials.

Devices classified in the second category should be subject to such special requirements as are deemed necessary by the construction official to secure safe operation per Section 3001.1 of the building subcode.

As to the responsibility of the elevator subcode officials, in both cases, when a permit application is requested for the installation of a special device, the elevator subcode official should advise the construction official as to the nature of the project. The construction official should also be advised that, based on *N.J.A.C. 5:23-2.19* and *N.J.A.C. 5:23-2.20(b)*, a report by, or statements of, a licensed engineer or registered architect should be requested where conformance of the equipment with the applicable standards, as scoped in Section 3001.2 of the building subcode, is required.

If further information regarding this subject matter is required, please contact me at 609/530-8833.

Source: Paulina Caploon, Construction Official
Elevator Safety Unit
Bureau of Code Services

New Home Warranty Rule Changes

As a result of the recent New Jersey Appellate Court decision, *Ingraham v. Trowbridge Builders*, the definition of “warranty date” in the Regulations Governing New Home Warranties and Builders’ Registration, *N.J.A.C. 5:25-1* et seq., is in the process of being amended. New home builders need to be aware that this court decision and amendment will affect the warranty coverage for model homes.

The court ruled that the warranty for model homes begins on first occupancy or settlement date, whichever is sooner, by the owner. The date on which the temporary certificate of occupancy is issued is no longer the warranty date for model homes. Builders must give owners the full ten year limited warranty on model homes from the date the owner first occupies or settles on the model home, whichever is sooner. This rule change applies to all builders, whether participating in the State Plan or in the private warranty plans.

New home builders participating in the State Plan must contact the New Home Warranty Program at least four (4) weeks prior to the anticipated settlement or occupancy date by the owner, since a pre-enrollment inspection will be conducted by staff.

For additional information, please contact the warranty enrollment section at 609/530-2445 and request the updated Builder Instructions Sheet for Certificates of Participation.

Source: Karen Schwacha
New Home Warranty Program
Bureau of Homeowner Protection

1996 Model Codes

It has come to our attention that some code officials may be requiring compliance with the 1996 model codes. The 1996 codes have not been adopted. Last year, the Legislature passed and the Governor signed a law that has the effect of freezing the codes at 1993, while giving to the Department of Community Affairs the ability to amend the model codes for consistency with the Uniform Construction Code Act.

The Code Assistance Unit, and other Department staff, have been summarizing and evaluating each change to each model code. The document that lists each change, editorial as well as technical, with the Department's recommendation to adopt or not to adopt each change is nearly finished. It will be published in the *New Jersey Register* as a pre-proposal and public comments will be obtained. When the public comments have been received, they will be reviewed, changes that are needed will be made, and then a proposal to adopt those items in the 1996 codes that meet the UCC Act will be published in the *New Jersey Register*. Public comments will again be taken, reviewed, and evaluated. Necessary changes will be made. Then that adoption will be published in the *New Jersey Register*. This process will probably take the remainder of this year, so that new code provisions should be adopted by the beginning of 1998.

We will keep all readers of the *Construction Code Communicator* informed about this issue throughout this year. In the meantime, the 1993 model codes are the adopted codes in New Jersey and buildings must be designed and constructed to the 1993 codes. Should a permit applicant submit plans designed to the 1996 codes, we recommend that you allow that option by variation. However, at this time, no official should require compliance with the 1996 codes, which have not been adopted in New Jersey.

Source: Emily W. Templeton
Code Development

Plan Review for Health Facilities

As many, if not most, of you know, the Health Facilities Plan Review Unit has been moved from the Department of Health to the Department of Community Affairs (DCA). This has generated questions, which this article intends to resolve.

The review and approval of construction documents for all licensed health care facilities is being done by the Health Facilities Plan Review Unit, which is now part of the DCA. All regulations, codes, and procedures have been retained. The address and telephone and FAX numbers have changed.

The Health Facilities Plan Review Unit is responsible for the review of plans for the following facilities: acute care hospitals, rehabilitation hospitals, psychiatric hospitals, nursing homes, assisted living and comprehensive personal care residences, residential health care facilities, ambulatory surgical centers, birthing centers, dialysis centers, ambulatory health care centers, and adult or pediatric medical day care centers.

For information or to submit plans for review, please contact Kenneth A. Hess or David B. Uhaze. The address and telephone numbers follow:

Department of Community Affairs
Health Facilities Plan Review
329 West State Street
CN 815
Trenton, New Jersey 08625-0815
Telephone: 609/633-8151
FAX: 609/633-8829

Source: David B. Uhaze, R.A.
Health Facilities Plan Review
Bureau of Project Review

Educational Facilities Plan Review

The plan review functions of the Department of Education have been transferred to the Department of Community Affairs. There have been two parts to the submittal and review process and they remain the same. It is the purpose of this article to review the process and to provide the new address, telephone, and fax numbers.

All educational submissions for educational specifications, schematic drawings, and final education drawings are still required to be submitted to and approved by:

Educational Facility Planning Services
CN 500
Trenton, New Jersey 08625
ATTN: Larry Mione
Telephone: 609/633-7400

The Educational Facility Planning Services will maintain the files for each project until all funding is in place. When final education approval is issued, the project will be forwarded to the Education Plan Review Unit in the Bureau of Project Review, Division of Codes and Standards, DCA. The final drawings can then be submitted for code review.

The new address and telephone number of the Education Plan Review Unit is:

Department of Community Affairs
Division of Codes and Standards
Education Plan Review Unit
CN 815
Trenton, New Jersey 08625-0815
Telephone: 609/633-0800
FAX: 609/633-2525

The staff of the Education Plan Review Unit is available to aid architects and school districts at any point during the code review process. Please contact us at the address and telephone number above.

Source: John D. Garcia
Education Plan Review Unit
Bureau of Project Review

May I Use CABO in a BOCA House?

Recently, a respected colleague asked me the above question and was surprised at my response. He then told me that I should write this article. Well, here it goes!

The issue is: A single family house was designed, constructed and issued a Certificate of Occupancy as an R-3 BOCA designed single family residence. The owner now wants to finish the basement using the CABO One and Two Family Dwelling Code.

The question is: Is this allowed?

The answer is: Yes.

The premise of not mixing BOCA and CABO applies for the duration of the permit; it does not apply for the life of the building. If the building owner uses CABO for this project, it should NOT be considered a change of use. Buildings designed using BOCA or CABO, R-3 or R-4, are one and two family dwellings; the use group delineation is a distinction without a difference.

Source: John N. Terry
Code Assistance Unit

CATV Signal Booster

The Department has received numerous inquiries concerning the need for construction permits for electrical power supply equipment installed to supply electric power to cable television signal boosters. This equipment is generally unmetered and is installed either on poles or on pedestals which are owned by an electric utility company.

Since these installations are within the scope of Board of Public Utilities (BPU) regulations and also are performed by entities regulated by the BPU, such as cable television and electric utility companies, no Uniform Construction Code (UCC) permit is required.

The installation of this equipment, however, must be safe and in compliance with the National Electrical Code. If a potentially hazardous condition is noticed, the local enforcing agency is advised to notify the BPU so that corrective action can be taken.

Source: Ashok K. Mehta
Code Assistance Unit

Elevator Records Management 103

As you are aware, administrative fees can only be charged when on-site agencies manage the subcode. In cases where municipalities change from on-site agency elevator subcode enforcement to the local enforcement of the elevator subcode, the administrative fee does not apply. But, old habits die hard, and the administrative fee is sometimes still charged. This is an error.

When these fees have been erroneously collected, the municipalities must return them to the affected building owners.

There are two ways this can be done: (1) By refund check or (2) By deducting the amount in question from the total for the next billing cycle. Don't forget to enclose a letter detailing the explanation for this (hopefully) one-time occurrence. Direct any questions relating to the above to me at 609/530-8833.

Source: Phil Van Leeuwen
Elevator Safety Unit
Bureau of Code Services

Hey, ISO Isn't So Bad After All

The Winter 1996 *Construction Code Communicator* included guidance on answering the Building and Construction Code Effectiveness Grading Questionnaire. As an update, we would like to let all construction officials know the status of that classification effort.

First, not all municipalities have received the questionnaires at this time. Questionnaires have been sent to approximately 208 municipalities. Approximately 80 municipalities have completed the entire process, including the field visit by an Insurance Services Office (ISO) staff member.

The scores of nearly 40 municipalities in New Jersey have been made available to insurance companies. On a scale of 1 (high) to 10 (low), three other states have average scores of 4, 5, and 7. At this time, the scores within New Jersey range from a "high" of 2 to a "low" of 5. These break down as follows:

Score	Number of Departments
2	4
3	11
4	18
5	6

So, you can see, New Jersey is the leader in construction code enforcement! Keep up the good work — and, when you receive your questionnaire, fill it out completely, and return it to ISO promptly. Remember, if you do not participate, the building owners in your community will have no access to the discounts that will be offered by insurance companies. Also, this is an opportunity for New Jersey's Construction Code system — and, more importantly, its code enforcement professionals — to be recognized as the best in the country.

There are 99 municipalities that ISO has categorized as "delaying." If any of you think you might be in that category, fill in the questionnaire promptly. If your questionnaire has been misplaced, just call ISO; they will send you another. If you are having trouble filling out the questionnaire, the Winter 1996 *Communicator* article should help; or, just call Lou Mraw or me — we'd be glad to help.

You can reach Lou Mraw, Acting Chief, Bureau of Regulatory Affairs, at 609/530-8838. You can reach me at 609/530-8788. At ISO, you can reach Dennis Gage at 212/898-6982, Tom Pienciak at 212/898-6983, and Chuck Pisano at 212/898-6984.

Source: Emily W. Templeton
Code Development

UCCARS: A New Release!

As you may have already heard, the Department of Community Affairs' newest version of UCCARS software is scheduled to be released this Spring. Overall, the product still offers all the good things it did before, but it has been enhanced to overcome some of the less favorable aspects of the last release. We hope this will improve usability and output. This new version includes over 25 changes to either System I or System II — or both. We believe these are significant improvements. For the purposes of this summary, the changes are categorized as either resulting from: (1) Legislative or Administrative Rule Changes; (2) the need for Increased User Utility; (3) the discovery of the need for a Design Correction; or (4) the need to adapt to a Changing Environment. The most significant changes follow.

(1) Legislative or Administrative Rule Changes

- The reference to social security numbers has been removed from the Contractor File. The space on the file may now be used for Federal Employer Identification Number or Contractor's telephone number.
- Modifications have been made to accommodate Lead Abatement activity.
- There is a provision for a new Fee Processed type on the payment record input screen for Elevators. This is also included as an individual line item on the Cash Audit Report.
- There have been modifications of all applicable screens and outputs to reflect the recent changes to standard forms.
- The 10% of construction permit calculation for the certificate of occupancy fee has been eliminated. (Note: This is also a design correction.)

(2) Increased User Utility

- Provisions have been made for a system option to enable municipalities to run a database reindexing process on an as-needed basis.
- When adding a permit record, it is now possible to select the contractor by name, rather than social security number, from the Contractor File. This can be accomplished by entering the first few characters of a contractor's name. A pop-up window from which to select will appear and will display all records meeting the search criteria entered.
- A provision has been made for deleting records from the Contractor File.
- An on-screen area will be provided for the free-form entry of technical site data for the electrical, plumbing, fire and elevator subcodes. This capability has always been, and continues to be, available for building subcode technical site data.
- A provision for running backup utilities other than Maynard from within the UCCARS Program Setup has been made.
- A method to track Abandoned/Void/Expired Permits and exclude them from existing reports, including both open and closed permits, has been made available. A new report listing Abandoned/Void/Expired Permits is now available.

- It is now possible to preview selected reports on-screen before they are printed.
- It is possible to select a range of records by date on the Open Permits and Inspection Reports.
- The need to print a Site ID page has been eliminated.

(3) Design Corrections

- The State Training Fee Report has been modified to exclude the volume of new construction and value of construction on alterations related to fee exempt permits when calculating the total State Training Fee owed. The amounts of exempt volume and value will appear on the report, but will not be included in the fee calculation.
- The applicable system reports on open permits will be able to exclude permit updates whose original permit has been closed. In the past, when a certificate was issued, the original permit record was closed, but all the corresponding update records remained open and were incorrectly included in Inspection and List of Open Permits Reports.
- Additional levels of fee categories have been provided.
- There is a method to allow a Temporary Certificate of Occupancy (TCO) to continue to trigger a CARS data transmission. But, this will not prevent the scheduling and recording of a final inspection.
- The ability to enter violation information and to produce the standard form violation notice as outlined in the Municipal Procedures Manual has been added.
- A method to easily convert a Control Number to a Permit Number has been included, which eliminates the need to convert every subcode area individually.
- The ability to update or delete a Certificate record has been included.
- The ability to copy the Description of Work from a Permit output to a Certificate output now exists.
- The Prototype field can be used on updates.
- The ability to automatically supply the next available Permit Number when converting a Control Number to a Permit Number is now provided.

(4) Changing Environment

- A new field, known as the Tax Assessor Qualification Code, is provided. This is also reflected on the revised Permit Application standard form.

Please watch for the Department's announcement of the availability of this new UCCARS release and the schedule of the UCCARS Support Seminars, which will provide an overview on using the new product. Remember, UCCARS is the property of the State of New Jersey and is provided free to municipal construction code enforcement offices. If there are questions on the upcoming UCCARS training seminars, please contact the Education Unit in the Bureau of Code Services at 609/530-8798.

Source: TEAM UCCARS
Division of Codes and Standards

Important Note for Users of the Inspection Module in UCCARS System I or System II!!!

The UCCARS software will not accept the Year 2000 or higher as a date of license expiration for inspectors. The UCCARS software treats these years as 1900 or 1901, etc. This problem is being corrected. In the meantime please enter those licenses as expiring on December 31, 1999, which is, at this time, the highest date acceptable.

Source: Larry Wolford
UCCARS Unit
Division of Codes and Standards

Troubleshooting Modem/Transmission Problems with UCCARS Software

The majority of problems related to the SEND DATA TO DCA option in UCCARS relate to the type of modem selected and the version of CROSSTALK XVI. When purchasing a modem to use to transmit data:

1. Select a name brand modem that is supported by CROSSTALK XVI. This may mean that a newer version of CROSSTALK XVI is purchased at the same time as the modem.
2. Set up the modem in CROSSTALK XVI for the new modem and modem speed. If the modem is a 14,400 baud use 19,600. If the modem is a 28,800 or 33,600 baud use 38,400
3. If you currently have UCCOMM version 3, you can edit the file called uccsend.xtk, in either the uccars.cmm subdirectory of uccars (System I) or xtalk (System II), to input the new speed or communications port. Your alternative is to rerun the UCCOMM version 3 to set up the changes in your modem.

If you have UCCOMM version 1.03, please notify me at 609/292-7899 to obtain the UCCOMM version 3 diskette.

Source: Larry Wolford
UCCARS Unit
Division of Codes and Standards

Attention Construction Officials and Control Persons! Demolition Permits

When entering data into the UCCARS, or similar software, for TANK REMOVAL, please note that the proper USE GROUP IS U and the CENSUS ITEM NUMBER is 649. Even if the tank is being removed from a residential structure, the permit is for the removal (demolition) of a tank, not of the residence. The use of the U USE GROUP more accurately reflects the work done. It also eliminates the need to account for a "lost housing unit" when what was demolished was the tank, not the house.

Remember, demolition permits apply to the demolition of an entire structure. Gutting, or the complete removal of interior space in a structure, which is sometimes called "demolition", is actually an alteration to the structure.

Source: Larry Wolford
UCCARS Program
Division of Codes and Standards

Two Appointments Equal Tenure

Let's say that you are a construction official or a subcode official in a noncivil service municipality. Your four year appointment is coming to an end and you hear nothing about being reappointed. You work one or two weeks beyond the expiration of your four year appointment and you assume, pursuant to *N.J.S.A. 52:27D-126*, that you now have tenure in your position. You would be wrong because of a recent Appellate Division decision which I will now discuss.

The Appellate Division case involved a construction official who claimed tenure based on the above set of circumstances. The municipality, which notified the official eleven days after his 4- year appointment expired that he would not be reappointed, argued that, under the statute, the phrase "on or after a fifth consecutive year of service including years of service in an equivalent job title" applied only to "grandfather in" those officials who worked in equivalent job titles prior to the enactment of the Uniform Construction Code and did not automatically grant tenure to holdover officials.

It is thus clear from the decision that tenure is now only conferred upon a second four year appointment and the "brief holdover thus acquiring tenure" approach no longer has any validity. However, all is not lost for those officials nearing the end of their initial four year appointments in noncivil service municipalities. Under the amended *N.J.A.C. 5:23-4.4(a)9*, a municipality is required to give notice 30 days prior to the expiration of the four year term as to whether the official is to be reappointed. If notice is not given and no other action is taken by the municipality, the official shall be deemed to have been appointed to serve in an acting capacity for not more than 60 days. Prior to the expiration of the 60 day period that follows the expiration of the four year term, if the official is neither reappointed nor given written notice that he or she is not being reappointed the Department shall not extend the acting appointment and the official shall be deemed to have been reappointed, such reappointment being effective retroactively to the date of expiration of the prior four year term. Thus, if a municipality does nothing and ignores the above procedures, it could find itself with a tenured official not of its choosing.

Since the case discussed above may be appealed to the New Jersey Supreme Court and involved a situation that occurred prior to the amendment of the regulations, there may be further developments in this area. If you wish to discuss your particular tenure situation, you are encouraged to call me at 609/530-8838.

Source: Robert Hilzer, Esq.
Bureau of Regulatory Affairs

BOCA Membership

The responsibility for keeping track of municipal BOCA memberships has recently been transferred to the Office of Fiscal Services in the Division of Codes and Standards. This office will be working in conjunction with the Bureau of Regulatory Affairs to update the BOCA membership list. Your municipality will be contacted soon to provide the names of current municipal BOCA members, and we will be updating the list every six months. In the meantime, any changes that occur should be sent to:

Department of Community Affairs
Division of Codes and Standards
Office of Fiscal Services
CN 802
Trenton, NJ 08625
ATTN: Joanne McDonald

Changes can also be faxed to 609/633-6729. Please do not forward any information directly to BOCA. If you have questions, you can contact me at 609/292-7898.

Source: Joanne McDonald
Office of Fiscal Services
Division of Codes and Standards

New Jersey Register Adoption

Date: 2/18/97
Adoption: 29 NJR 550(a) Elevator Safety Code: Accident Reporting
Adopted New Rule: *N.J.A.C. 5:23-12.11*; Adopted Amendments: *N.J.A.C. 5:23-4.5*; adopted 1/14/97, effective 2/18/97, operative 5/19/97.
Summary: A new rule adopted at *N.J.A.C. 5:23-12.11* requires construction officials to report elevator accidents to the Department of Community Affairs. To accomplish this, a new form F326 - Accident/Incident Report has been adopted under *N.J.A.C. 5:23-4.5*. The revisions to two other forms, F190 Permit Update and F260 Certificate, have also been adopted under the same section.

Source: Farid Ahmad, P.E.
Supervisor, Code Assistance Unit

Building Safety Conference May 7 - 9, 1997

Conference Events

Wednesday, May 7, 1997

9:00AM-3:00PM Golf Outing — *Mays Landing Country Club*
4:00PM-7:00PM Registration — *Convention Headquarters*
6:00PM-7:30PM Crackerbarrel — *Grand Ballroom*
(Roundtable Discussions)

Thursday, May 8

6:15AM-8:00AM Breakfast — *Grand Ballroom*
6:30AM-8:30AM Registration — *Convention Headquarters*
8:00AM-11:45AM Educational Programs
12:00PM-2:00PM Awards Luncheon — *Grand Ballroom*
2:00PM-4:00PM Educational Programs
4:00PM-5:00PM Association Meetings (if scheduled)
6:00PM-7:30PM Awards Reception — *Grand Ballroom*

Friday, May 9

6:15AM-8:00AM Breakfast — *Grand Ballroom*
6:30AM-8:30AM Registration — *Convention Headquarters*
8:00AM-1:00PM Educational Programs

Spouse's Program

Wednesday, May 7, 1997

4:00PM-7:00PM Registration — *Convention Headquarters*
6:00PM-7:30PM Welcome Session — "Color Me Beautiful, Looking Your Best" — *Diamond D*

Thursday, May 8

6:15AM-8:00AM Breakfast — *Grand Ballroom*
6:30AM-8:30AM Registration — *Convention Headquarters*
9:00AM-4:30PM Lenox China Factory Tour, Noyes Art Museum, Luncheon at Ram's Head Inn
or
12:00PM-2:00PM Awards Luncheon — *Grand Ballroom*
6:00PM-7:30PM Awards Reception — *Grand Ballroom*

Friday, May 9

6:15AM-8:00AM Breakfast — *Grand Ballroom*
10:00AM-11:30AM "Wellness as a Way of Life" — *Grand Ballroom B*

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Construction Code Communicator



State of New Jersey
Christine Todd Whitman, Governor

Department of Community Affairs
Jane M. Kenny, Commissioner

Volume 9 Number 2

Summer 1997

Zoning, Group Homes, and the Construction Code

In a recent decision, *The ARC of New Jersey, Inc., et al. v. The State of New Jersey*, a Federal Court declared unconstitutional the provisions of the Municipal Licensing Use Law (MLUL) that would allow municipalities to adopt a zoning ordinance requiring a conditional use permit for group homes for the developmentally disabled or mentally ill that are licensed by the Department of Human Services. The court held that those group homes are permitted as of right under the Federal Fair Housing Amendments Act of 1988.

The MLUL had permitted municipalities to adopt criteria for "conditional uses" for certain types of group homes, including community residences for the developmentally disabled with seven or more residents, to impose spacing requirements on these homes, and to limit the total municipal population living in these homes. With respect to community residences for the developmentally disabled or the mentally ill, these provisions of the MLUL have been voided. Whether the same determination would be made in a future case with regard to other types of group homes covered by this MLUL provision is uncertain.

The Department of Human Services only licenses group homes for the developmentally disabled or mentally ill with 15 or

fewer residents. Accordingly, municipalities are not prohibited by the specific terms of this decision from classifying group homes not licensed by DHS as a conditional use when they house seven or more residents. It should be understood, however, that the status of group homes not licensed by DHS, or licensed by DHS and serving other populations, was not before the court, so it is a matter of conjecture as to how the court might rule with regard to these other types of facilities in any future case.

For code officials, this is a prior approval issue. Homes for the developmentally disabled or mentally ill with 15 or fewer residents that are licensed by DHS do not require any zoning prior approval to be located in any residential zone. This decision is narrow and applies only to these group homes. It is important for construction officials to recognize that since all zoning limitations on these DHS licensed group homes have been ruled invalid, there is no justification for holding up the issuance of a construction permit pending a zoning approval.

This decision did not address construction code issues. It dealt only with zoning, but a code official who delays the issuance of a construction permit because the municipality has not revoked its ordinance on conditional uses, spacing, and/or population cap,

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could be liable to charges of discrimination by residents of these group homes. The Federal Fair Housing Amendments Act made it clear that discrimination against people with disabilities includes actions that are paternalistic, which means that decisions are based on subjective judgments about people with disabilities, or actions that have the effect of discriminating, even though the decision is made with good intentions.

The Department has issued Bulletin 95-3, Congregate Dwellings, to provide guidance to code officials on reasonable code requirements for the change of use of an existing Use Group R-3 single family home to Use Group R-2 for use as a group home which, although not licensed, still has some government or private agency oversight. The zoning decision discussed in this article concerns licensed group homes, so Bulletin 95-3 is not directly relevant. But it does provide guidance on code requirements which can be applied to homes where the residents have the ability to self-egress in an emergency situation.

It is critical to remember that at this time all the court cases on group homes and the Federal Fair Housing Amendments Act of 1988 have dealt with zoning issues. None has directly addressed construction codes. We will continue to keep all code officials informed as other cases are brought and other court decisions are made.

Source: Division of Codes and Standards

New UL Recognition Expands Applications for Wood Structural Panel Wall Sheathing

It has been brought to the attention of the Department that Underwriters Laboratories, Inc. (UL) has promulgated a new fire-rated wall design that recognizes both oriented strand board (OSB) and plywood panels for wall sheathing in one-hour fire resistance rated, load bearing exterior wall assemblies.

The new fire resistance rated assembly (UL design U356), which will be published in the mid-year supplement to the 1997 UL Fire Resistance Directory, Volume 1, is a "one-sided" assembly which is rated for exposure from the interior face of the wall. For this assembly, 7/16" or thicker plywood or OSB wall sheathing is installed on the exterior face of the wall over studs spaced 16" on center. The wall sheathing may be installed horizontally or vertically. If panels are installed horizontally, all horizontal joints must be blocked. Any type of code approved exterior wall finish can be used. On the interior face of the wall, 5/8" type X gypsum wallboard is required.

As previously stated, this assembly is tested for exposure from the inside; therefore, it is not acceptable to use this design in a building which has a fire separation distance of 5 feet or less.

Any questions regarding this new UL designation should be directed to Sal Vuocolo, American Plywood Association, at 908/832-6144.

Source: John N. Terry
Code Assistance Unit

Premanufactured Construction

NOTE: This article is an update of the article in the Spring 1993 *Construction Code Communicator*, Volume 5, Number 1.

"Premanufactured construction" is a generic term for all types of factory-built construction. The attached chart gives the categories of premanufactured construction that are covered by the New Jersey Uniform Construction Code. The chart also lists the critical items in each category, which should be helpful in understanding the specific requirements. (Note that premanufactured construction which has been approved and certified — and carries the proper insignia of certification — in accordance with the New Jersey Uniform Construction Code is acceptable for installation in New Jersey.)

For the factory-built portion, any visible code violations (or, in the case of a mobile home, violations of the Federal Mobile Home Construction and Safety Standards) should be brought to the attention of the Department to ensure that action will be taken to correct the violations.

Manufactured homes (formerly called mobile homes) are built to Federal Mobile Home Construction and Safety Standards. Certified (labeled) mobile homes are not subject to requirements other than those of the Federal standards. Bulletin 88-2 and Bulletin 80-6 provide additional information, including a description of the requirements for certification, support and anchorage systems, and fire separation.

A construction permit is required for all on-site work related to installation of certified premanufactured construction. The on-site work includes, but is not limited to, assembly, foundation systems, external utility connections, and installations. The local municipal enforcing agency is responsible for the inspection and approval of all on-site work.

Questions relating to premanufactured construction should be directed to the Industrialized Buildings Unit at 609/530-8837.

Source: Paul Sachdeva, P.E.
Manager, Industrialized Building Unit

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Premanufactured Construction*

N.J.A.C. 5:23-1.4 and 2.22

	Manufactured (Mobile) Homes	M.H. Add-on Units	Building Elements	Industrialized/ Modular Buildings	Building Components
Definition/ Certification	<i>N.J.A.C. 5:23-1.4</i> <i>N.J.A.C. 5:23-4B.3(a)</i>	<i>N.J.A.C. 5:23-4B.3(b)</i>	<i>N.J.A.C. 5:23-4.26(a)</i>	<i>N.J.A.C. 5:23-4A.4</i> <i>N.J.A.C. 5:23-4A.7</i>	<i>N.J.A.C. 5:23-4A.4</i> <i>N.J.A.C. 5:23-4A.7</i>
Acceptability	<i>N.J.A.C. 5:23-2.22(a)</i> <i>N.J.A.C. 5:23-4B.5(a)</i>	<i>N.J.A.C. 5:23-2.22(a)</i> <i>N.J.A.C. 5:23-4B.5(b)</i>	<i>N.J.A.C. 5:23-4.26(a)</i>	<i>N.J.A.C. 5:23-2.22(a)</i> <i>N.J.A.C. 5:23-4A.3(b)</i>	<i>N.J.A.C. 5:23-2.22(a)</i> <i>N.J.A.C. 5:23-4A.3(b)</i>
Construction Standards	Federal M.H. Construction and Safety Standards Part 3280 (latest edition October 1994)	NJ UCC/M.H. Subcode <i>N.J.A.C. 5:23-3.19</i>	NJ UCC <i>N.J.A.C. 5:23-4.26(a)</i>	NJ UCC <i>N.J.A.C. 5:23-4A.5</i>	NJ UCC <i>N.J.A.C. 5:23-4A.5</i>
Insignia (Label) Requirement	Federal M.H. Insignia <i>N.J.A.C. 5:23-4B.5</i> 3280.11	NJ DCA M.H. add-on insignia <i>N.J.A.C. 5:23-4B.7(c)</i>	none <i>N.J.A.C. 5:23-4.26(a)</i>	I.B.C. insignia Part IV Section 4 of UAP**	I.B.C. insignia Part IV Section 4 of UAP**
Assembly/ Installation at Site	on-site work (foundation, etc.) plans and specs signed and sealed by N.J. P.E. or R.A.*** <i>N.J.A.C. 5:23-2.15(e)1.vii</i>	on-site work (foundation, etc.) plans and specs signed and sealed by N.J. P.E. or R.A.*** <i>N.J.A.C. 5:23-2.15(e)1.vii</i>	plans and specs signed and sealed by N.J. P.E. or R.A.*** <i>N.J.A.C. 5:23-2.15(e)1.vii</i>	on-site work (foundation, etc.) plans and specs signed and sealed by N.J. P.E. or R.A.*** <i>N.J.A.C. 5:23-2.15(e)1.vii</i>	plans and specs signed and sealed by N.J. P.E. or R.A.*** <i>N.J.A.C. 5:23-2.15(e)1.vii</i>
Required Inspections by Local Municipal Enforcing Agency	<i>N.J.A.C. 5:23-2.22</i> 1. visible signs of damage 2. visible code (federal standards) violations 3. all on-site work I/C assembly, installation, external utility systems, foundation, etc. 4. non-destructive testing (not mandatory)	<i>N.J.A.C. 5:23-2.22</i> 1. visible signs of damage 2. visible code (federal standards) violations 3. all on-site work I/C assembly, installation, external utility systems, foundation, etc. 4. non-destructive testing (not mandatory)	<i>N.J.A.C. 5:23-2.22</i> 1. visible signs of damage 2. visible code (UCC) violations 3. all on-site work I/C assembly, installation, external utility systems, foundation, etc.	<i>N.J.A.C. 5:23-2.22</i> Part IV Section 6(B)&(C) of UAP 1. visible signs of damage 2. visible code (UCC) violations 3. all on-site work I/C assembly, installation, external utility systems, foundation, etc. 4. non-destructive testing (not mandatory)	<i>N.J.A.C. 5:23-2.2</i> Part IV Section 6(B)&(C) of UAP 1. visible signs of damage 2. visible code (UCC) violations 3. all on-site work I/C assembly, installation, external utility systems, foundation, etc. 4. non-destructive testing (not mandatory)

* Premanufactured construction is a generic term used for factory-built construction.

** U.A.P. — Uniform Administrative Procedures of Industrialized Buildings Commission (I.B.C) adopted by reference per *N.J.A.C. 5:23-4A.10*.

*** Requirements for sealed plans waived in case of a homeowner building his own private residence — *N.J.A.C. 5:23-2.15(e)1.vii*.

What Is Multi-functional Play Equipment?

Although code officials do not enforce the accessibility provisions of the Barrier Free Recreation Subcode, it may be helpful—even interesting—to have some information explaining some of its provisions. Because of the size of some structures, code officials may require permits for multi-functional play equipment, so this topic seems a good place to start.

“Multi-functional play equipment” means play equipment that is designed to provide multiple play activities or experiences, such as, but not limited to, swinging, jumping, sliding, and climbing. (*N.J.A.C. 5:23-7.3*)

Multi-functional play structures might be complex wooden structures or small, brightly colored simple structures for toddlers. The small structures may have three or four play activities, whereas large structures may include 40 or more play events.

The play activities incorporated into multi-functional play structures may include, but are not limited to:

- Climbing may be provided by arched chains of various sizes, inverted climbers, step ladders, stairs, curly climbers, chain net, pipe climber, loop climber, pommel climber, or ropes.
- Upper body exercise is made possible by including horizontal ladders of various shapes, such as the “C” or “S” arch or wavy or bowed ladders. Chinning bars, turning bars, and parallel bars also provide for upper body exercise.
- Balance events may be experienced through the inclusion of balance chains, varied bridge formations, balance beams of different sizes, lengths, and widths, or log rolls.
- Enclosures give children the opportunity to crawl and explore crawl tunnels (both single and double) that are available in numerous configurations.
- Talk Tubes are the 90’s version of the old tin can and string ‘phone system’.
- Theme Panels, such as castles, frontier forts, ships, or villages may provide a central theme aimed at merging the play functions into one common play experience. The theme is limited only by the children’s imaginations.
- Activity Panels include bubble panels, mirror bubble panels, window panels, tic-tac-toe panels, animal panels, spelling panels, math panels, counter panels, door panels, seat panels, abacus panels, sign panels, jungle maze panels, dinosaur maze panels, find-the-face panels, and ringer maze panels. Most panels can be placed above and below deck and others can be placed deck to deck. Although some panels may require activity, most constitute a passive activity, and therefore do not qualify as play activities.

Access is required onto the play structure. Think about it. It makes sense. After all, it would not be much fun to be able to get to—but not onto—the play structure. Access may be provided by ramps, transfer points, or transfer platforms. The elements that provide access onto the multi-functional play structure are not considered play activities.

It is the responsibility of the manager of the park or play facility to be sure that multi-functional play equipment is accessible to and usable by all children, whether the children are able-bodied or disabled. The Barrier Free Recreation Subcode requires that 25% of the play activities on a play structure be accessible and that the manufacturer provide verification that equipment designed, marketed, and sold as “accessible” is actually usable by children with disabilities.

Questions about accessible recreation should be directed to me at 609/530-8788.

Source: Gail R. Weikel
Code Development and Assistance Unit

Omega Sprinkler Heads

It has come to the attention of the Department that Omega series sprinkler heads manufactured by the Central Sprinkler Company may fail to operate at the design pressure. These heads, produced between 1983 and June 1996, include a rubber (EPDM) O-ring. Contact between the O-ring and hydrocarbons found in petroleum-based substances can cause the O-ring to swell and increase the pressure required to operate the sprinkler.

No new installation using Omega sprinkler heads manufactured before June 1996 should be permitted. At that time, the company switched to a silicone O-ring. The date of manufacture is stamped on the barrel of the head. Central Sprinkler Company recalled all the sprinkler heads in question from distributors and warehouses, but it is possible that some installers still have them.

For existing sprinkler systems installed using Omega series heads, Central Sprinkler Company is recommending that the sprinkler heads be tested and is offering to provide this testing. (Note: Because “stop leak” products also affect the operation of the heads, if testing reveals the presence of stop leak in the system, Central will not retrofit any heads that fail to operate at the design pressures.)

The Department is gathering additional information to determine what action, *if any*, local officials should take on existing installations. In the meantime, local code enforcement officials should ensure that no new installations are made using these Omega series heads and should advise anyone who asks that existing systems that were installed with these heads should be tested. (In addition to Central Sprinkler Company, Underwriters Laboratories and the Consumer Product Safety Commission are also conducting tests on these sprinkler heads.)

For additional information on which heads are involved and on Central’s testing of them, please call Central Sprinkler Company at 1-800-523-6512, Kip Bilo (ext. 125) or Andy Post (ext. 357). If there are any other questions, please call the Code Assistance Unit at 609/530-8793.

Source: Amy Fenwick Frank
Section Chief
Code Development and Assistance Section

What Is a State Building?

What is a State building? The Uniform Construction Code Act requires that construction permits for State buildings be issued by the Department of Community Affairs and that inspections of those buildings be performed by State employees. But, what is a State building? It is a building situated on State property or owned by the State of New Jersey and it includes buildings owned by an autonomous State agency, such as New Jersey Transit.

There have recently been some errors made where local code officials issued permits and performed inspections on State buildings located on State property in their municipality. Those officials should have contacted the State Buildings Unit. If any official has a question about where the jurisdiction lies, Bulletin 93-2 clarifies the issue. Bulletin 93-2 clearly states which level of government has the authority to administer the code for buildings or structures on State property.

The following is a list of some of the agencies whose construction projects are administered by the State Buildings Unit:

- All Departments of the State Government
- New Jersey Transit — Bus and Rail
- University of Medicine and Dentistry of New Jersey
- New Jersey Division of Military Affairs and Veterans Administration
- New Jersey National Guard Armories
- Kean College
- Montclair State University
- Rowan College
- The College of New Jersey (formerly Trenton State College)
- New Jersey Sports and Exhibition Authority
- Jersey City State College
- Ramapo College
- William Paterson College
- New Jersey Highway Authority/Garden State Parkway
- New Jersey Turnpike Authority
- South Jersey Seaport Corporation
- South Jersey Transportation Authority/Atlantic City Expressway
- Atlantic City International Airport
- North Jersey District Water Supply Authority
- New Jersey Department of Environmental Protection's clean up projects, such as the Combe Landfill in Chester and the Williams property in Cape May.

Questions on State Buildings may be directed to the State Buildings Unit at 609/530-8876.

Source: Michael J. Bruno
State Buildings Unit
Bureau of Construction Project Review

Charter Schools

A new type of school has been authorized by State law. Called "charter" schools, these schools are generally exempt from public school regulations. These schools receive funds through the local school board, but the local school board does not oversee them. They are administered by a process that includes the local school board and the Department of Education.

Recently, 17 of these schools were approved throughout New Jersey. In February, William Connolly, Director of the Division of Codes and Standards, wrote to the construction officials in each of the 17 communities to let them know how to apply the Uniform Construction Code (UCC) to this new kind of school and its buildings.

The charter schools are subject to the UCC. They must meet all the requirements of the UCC for construction, alterations, additions, or changes of use.

The charter schools are subject to all the administrative provisions of the UCC, including the payment of fees.

Generally speaking, charter schools are not subject to the State plan review. As with private schools, plan review is the responsibility of the local enforcing agency. Similarly, the charter schools are not subject to the additional code requirements for public schools.

The charter schools are subject to plan review by the State whenever the local enforcing agency is not classified for Class 1 or Class 2 work and the charter school project falls within the Class 1 or Class 2 category. All school buildings up to 14,400 square feet, two stories and 30 feet in height are Class 2 structures. Larger projects are Class 1.

If you have any questions, please call the Education Plan Review Unit at 609/633-0800 or the Code Assistance Unit at 609/530-8793.

Source: John Garcia
Education Plan Review Unit

What's New in the Uniform Construction Code Book?

GOOD NEWS!!! Beginning this summer, the Division of Codes and Standards will provide a summary sheet on the substance of changes to the Uniform Construction Code (UCC). This information will be included with your updates to make it easier to identify exactly which section of the code has been changed.

One note: This summary will not include case law changes or administrative changes. These are initiated by the Office of Administrative Law (OAL) and we are not made aware of them ahead of time. This summary will include changes to the code that are initiated by the DCA. We hope everyone will find it useful.

Source: Joanne McDonald
Fiscal Office
Division of Codes and Standards

16th Annual Building Safety Conference



Electrical Inspector of the Year

Richard Castellitto (*center*), Electrical Inspector of the Year, with Commissioner Jane M. Kenny (*left*) and Victor V. Timpanaro (*right*), President of the Municipal Electrical Inspectors' Association.



Elevator Inspector of the Year

Robert J. Carroll (*center*), Elevator Inspector of the Year, with Commissioner Jane M. Kenny (*left*) and William Connolly (*right*), DCA.



Fire Protection Inspector of the Year

From left to right: William Connolly, DCA, Commissioner Jane M. Kenny, Captain Robert A. Bendlin, Fire Protection Inspector of the Year, and Gary Lewis, President of the New Jersey Fire Prevention and Protection Association.

Building Safety Conference Committee

From left to right: Richard Osworth, Kevin Luckie, Martin Vogt, Donald Metcalf, Susan McLaughlin, Robert Mittermaier, Gary Lewis, and Richard Marshall. The Building Safety Conference Committee wishes to thank all those who participated in the the 1997 Building Safety Conference of New Jersey.



1997 Awards — The “Best of the Best”

Plumbing Inspector of the Year

From left to right: Alexander Tucciarone, President of the New Jersey State Plumbing Inspectors Association, Commissioner Jane M. Kenny, Gerda E. Peterson, Plumbing Inspector of the Year, and William Connolly, DCA.



Building Inspector of the Year

From left to right: William Connolly, DCA, Commissioner Jane M. Kenny, Victor J. Dai, Building Inspector of the Year, and Ronald Estepp, President of the Building Officials Association of New Jersey.



Control Person of the Year

From left to right: Susan McLaughlin, DCA, Commissioner Jane M. Kenny, Dorothy Giesenhaus, Control Person of the Year, and William Connolly, DCA.



Plexvent, Ultravent, Cellvent, Cracked-vent?

Every so often, a product that is permitted under the code ends up having some problems. Fire retardant plywood, polybutylene pipe, and exterior insulation finish systems are a few that I can recall during my tenure at the Department. There could be a new addition to this list, high temperature plastic vent pipe.

This pipe is used to vent mid-efficiency gas appliances with positive pressure exhausts. This type of equipment is referred to as "category three" by NFPA 54. The equipment itself presents some unique design concerns for the venting system. Because these appliances fall somewhere between high efficiency appliances (where the exhaust is relatively cool and condensation is relatively high), and traditional appliances (where the exhaust is hotter and condensation is limited), the vent system must have properties that satisfy both the temperature and condensation concerns. Because of the condensation problem, the material must be corrosion resistant, which rules out most metals, and the product must be heat resistant, which rules out many plastics.

Manufacturers developed a high temperature plastic vent that meets both of these design concerns. This vent pipe has been marketed as Cellvent, Plexvent, Ultravent and possibly others. There have been a number of reported problems with these products. Reports include the pipe cracking, fittings coming loose, joints separating, or sealants for the joints degrading. The reports of these problems have led to a variety of actions on the part of the vent pipe manufacturers and the equipment manufacturers.

No one has been absolutely clear on the cause of these problems. The manufacturers of the vent products contend that part of the problem is the result of faulty installation. Failure to let the pipe expand and contract properly has been cited as one installation problem. In any case, the manufacturers have developed a second generation of these products. This second generation is made from a different resin, one that is reportedly more durable and more temperature resistant.

The manufacturers of the boilers and furnaces that use these high temperature plastic vents have reacted in a way that has some interesting code implications. These systems are discussed under section M-1203.1.1 of the Mechanical Code. Basically, the code allows the use of these vents as long as the equipment has been tested to be used with this vent system and as long as the equipment manufacturer allows the use of this vent product with its equipment. This is where it gets interesting. After the initial problems surfaced, many equipment manufacturers said that it was no longer proper to vent their equipment with these high temperature plastic vent pipes. This made the use of these high temperature plastic vents with that equipment a code violation.

With the development of the second generation plastics, some, but not all, equipment manufacturers have lifted their ban on the use of the high temperature plastic vents. Code officials should exercise caution when confronted with an installation using this type of product. It is important to check with the manufacturer to make sure that the installation is code conforming.

Another issue that confronts code officials is the retrofitting of vent systems that have failed. While some manufacturers will allow the replacement of the original plastic vent with the new generation of plastic vent, other manufacturers require that stainless steel pipe be used. Again, as with new installations, code officials should check with the manufacturer of the equipment to see what can be used.

On a broader note, the Consumer Product Safety Commission (CPSC) is working with the manufacturers to decide whether a recall is in order. So far, the CPSC is not aware of any serious injury or death caused by the product deficiencies. They are recommending, however, that homeowners who have had this product installed check the condition of the product. In an effort to get a handle on the scope of the problem, the CPSC would like to know where there are failures. The CPSC can be reached at 301/504-0626 ext. 1344. The CPSC will accept reports of problems and will also provide information.

Source: Mike Baier
Code Assistance Unit

Permit Fee for Structures of Use Group A-5

What permit fee should be charged for a stadium, bleachers, or similar structures of Use Group A-5? The common answers are: "I've never gotten a project like that," "flat fee," "some dollars per seat," or "total cost of construction" because you can't calculate the volume. Although these answers offer a response to the question, none of them is the best answer. The Code Assistance Unit has researched this issue and concluded that the most reasonable basis for the fee calculation for these types of structures is the volume.

The next question is: How do you calculate the volume of the variable shapes that are enclosed underneath such structures? The answer is: It is difficult, but not impossible. In this age of technological growth, the computer can do it for you.

The formula for volume calculation is the area multiplied by the average height of any particular shape; rectangular, triangular and trapezoidal are the areas most frequently encountered. The basic data from the plan are fed to the computer and the computer performs the calculations for you. You then have the total volume.

If you do not have a computer program or a math coprocessor that can perform the calculations, the architect should be asked to submit a computer generated calculation. You may be thinking: How do I check the answer? To that, I would respond, the same way you check the hydraulic calculations for sprinklers or energy load calculations — by verifying the basic parameters. The same approach should work with the computer-generated calculations; check the basic dimensions of the shapes with the plans.

Because it is difficult to calculate the volume of these A-5 structures, the Department has not specified a fee calculation

procedure at *N.J.A.C. 5:23-4.20*. As a result, controversies have arisen over determining the proper basis for the fee calculation. A "flat fee" is obviously too low and a fee based on "cost" or "seating capacity" can be too high. Thus, the volume of seating, concessions, and similar spaces provides a reasonable basis for a fee that covers the cost of plan review and inspection. It is particularly important to note that the calculation does not include the field. The Department plans to amend its fee schedule to include A-5.

Code enforcing agencies are advised to base the permit fee on the volume of A-5 structures. If there are any questions, please contact the Code Assistance Unit at 609/530-8793.

Source: Farid Ahmad, P.E.
Supervisor, Code Assistance Unit

Computer Based Testing Is Coming

Beginning in February 1998, the National Certification Program for Construction Code Inspectors (NCPCCI) will give its tests on computers. The change from paper and pencil tests to Computer Based Tests will allow the NCPCCI to offer more flexibility in scheduling the tests and greater test security, and will also make it possible for the test taker to get the results immediately.

There are many of us who cannot imagine taking a test on a computer. The familiar paper and pencil test just seems much more familiar and, therefore, much better. But, the test itself will be very much the same. There will be the same number of questions (50). There will be a way to mark the questions you want to look at again. There will be a way to move back to a previous screen and review the questions you have already answered. There will be a way to change your answers.

Perhaps most importantly, for those of us who are not all that familiar with a computer, there will be a tutorial available before the test so that you can get used to moving the cursor by using the mouse. The Chauncey Group (it used to be the Educational Testing Service (ETS)) staff has experience with other professional testing programs and the test candidates have reported that they have found the pre-test computer tutorials very helpful. Even test takers who had practically no computer experience said that the tutorial helped them understand how to use the mouse to mark the answer. Everyone liked the fact that when the test was over they did not have to wait six weeks for the results.

Important Dates to Remember:

November 15, 1997	The last paper and pencil NCPCCI examinations.
February, 1998	Computer Based Testing starts for all NCPCCI tests
February, April, June, August, October, December, 1998	Computer Based Tests will be given during these months

Important Facts to Remember:

The registration process will be like the paper and pencil registration process. You will register with the Chauncey Group.

You will be sent an authorization ticket. Then (this is new), you will call the telephone number given on your form and make an appointment to take the test(s). You can make an appointment that is convenient for you.

During the months of February, April, June, August, October, and December, the testing center will be able to schedule you during the "window" (time set aside) for these NCPCCI tests. In each of these months, there will be a testing window of seven days. This means that any day during the week that these tests are given — from one Saturday to the next Saturday (except Sunday) — you can take your test at a time and on a day in that week that works best for you.

You may bring in appropriate reference materials, just as you always could. You will receive your score report on the screen as soon as you finish the test. You will also receive a paper copy of your score.

Cost

The cost of the Computer Based Testing is a \$60 registration fee and a \$45 fee for each examination. (This means that if you want to take two examinations, you would send \$60 registration fee and \$90 for the two tests (\$45 × 2), which will mean a total of \$150 for the two tests.

Where are the testing centers?

In New Jersey, they are in East Brunswick, Fair Lawn, Hamilton, Princeton, Toms River, and Verona. There are also testing centers in New York and Pennsylvania — and they will also give these tests, if their locations are more convenient for you.

Exactly what tests will be given by computer?

- Building One and Two Family (1A)
- Building General (1B)
- Building Plan Review (1C)
- Electrical One and Two Family Dwelling (2A)
- Electrical General (2B)
- Electrical Plan Review (2C)
- Fire Protection General (3B)
- Fire Protection Plan Review (3C)
- Mechanical One and Two Family Dwelling (4A)
- Mechanical General (4B)
- Mechanical Plan Review (4C)
- Plumbing One and Two Family Dwelling (5A)
- Plumbing General (5B)
- Plumbing Plan Review (5C)
- Elevator (6B)

This article serves as an introduction to the NCPCCI computer based testing program. If you have questions, you may contact the Chauncey Group at the following address: The Chauncey Group, NCPCCI, Post Office Box 6508, Princeton, New Jersey 08541-6508.

Sources: Pamela Duris, The Chauncey Group
Emily Templeton, Code Development/DCA

Issuance of Cut-In Cards

It has been brought to the attention of the Department that there is a lack of uniformity in the procedures that are followed to deliver cut-in cards to electrical utilities. There are instances where cut-in cards are handed over to the electrical contractors, general contractors, or others for delivery to utilities. In some instances, cut-in cards have been left on the construction sites to be picked up by others. The handling of the cut-in cards in this manner delays the introduction of electrical power which is vital for any project.

Under no circumstances should cut-in cards be handled in this manner. Utilities do not accept cut-in cards from people such as contractors or customers. Cut-in cards must be hand-carried or mailed to the utility by the local electrical subcode official. However, to expedite electrical service, cut-in cards may be faxed to the utility by the enforcing agency provided the utility agrees. The original must then be sent or delivered to the utility company.

Source: Ashok K. Mehta
Code Assistance

UCCARS and Certificate Activity

N.J.A.C. 5:23-2.23 requires that all permits be closed through the issuance of a Certificate of Approval, Certificate of Occupancy, or Lead Abatement Clearance Certificate. In accordance with the regulations, towns using UCCARS or UCCARS-like software shall enter the certificates into the system and transmit such data to DCA. If the municipality has not issued any certificates over the course of a month's period, the municipality will need to forward a written report stating that no certificates were issued. The report should be sent to the following address:

State of New Jersey
Department of Community Affairs
Division of Codes and Standards
CN 802
Trenton, NJ 08625-0802

Source: Larry Wolford
UCCARS Unit
Division of Codes and Standards

UCCARS and Windows 95

UCCARS will run under Windows 95 with no apparent problems. As with all software, the program must be properly shut down by fully exiting the program. The use of Plug and Play modems with Windows 95 does present problems. Not all Plug and Play modems can be used with DOS-based software such as Crosstalk XVI for DOS, the communications software for UCCARS. The supplier of the modem must set up the modem with hardware jumpers to make the modem available to DOS-based programs. There are modems that do not work with DOS-based

programs and, therefore, do not work with the UCCARS software. When purchasing a computer, be sure that the vendor guarantees that the modem will work with Crosstalk XVI for DOS. Also, you should require the vendor to set up the modem in Crosstalk and attempt to SEND DATA TO DCA.

You may have your vendor contact DCA at 609/984-0040 if there are problems setting up the Crosstalk XVI software.

Source: Larry Wolford
UCCARS Unit
Division of Codes and Standards

DCA Training Fee-Exempt Permits and UCCARS System I Version 3.10

The recent release of UCCARS System I Version 3.10 tackles a problem that has plagued UCCARS towns and DCA alike for many years. It is the handling of permits that are either exempt from DCA Training Fees or have a computed training fee equal to zero.

It is current State policy that the following permits shall be considered exempt from DCA Training Fees: Public Buildings, Demolition, Lead Abatement and Asbestos Removal. In addition, alterations, renovations or repairs where the work value is less than \$625 will result in a calculated training fee of zero (0). This is because these permits compute to \$0.49 or less, and when rounded to the nearest whole dollar, equal zero (0).

Changes to UCCARS System I include two new fields, cubic feet of new construction and dollar value of alterations, under 'Exempt Fee Permits' on the Quarterly State Training Fee Report. There are also two new fields, 'Lead' and 'Asbestos', on the Permit Fee Log Input screen.

To ensure the correct calculation on the Quarterly State Training Fee Report, follow these guidelines when using the new fields of 'Lead' and 'Asbestos':

1. Each Lead Abatement permit and Asbestos Removal permit must be treated as an Alteration permit. Therefore, the field of 'Alteration' must be marked.
2. Each Lead Abatement and Asbestos Removal permit must be treated as a 'stand-alone' Alteration permit. If a permit is being taken out for work where Lead Abatement or Asbestos Removal is only part of the work being performed, treat the Lead Abatement and/or Asbestos Removal as a permit update and treat the 'other' work as the original permit (see below).
3. Both 'Lead' and 'Asbestos' cannot be marked on the same Permit Fee Log Input record.

Original Permit

Subtract the value of construction for any Lead Abatement and/or Asbestos Removal work from the overall value of construction. Enter this value in the field labeled 'Total Value of Constr'.

Calculate the value of the DCA Training Fee from the value in the field 'Total Value of Constr'. (Again, do not include any

work values for Lead Abatement and/or Asbestos Removal in this calculation.) Place this value in the field labeled 'DCA'.

Permit Update

The 'stand-alone' Lead Abatement and/or Asbestos Removal permit update(s) should have a value of ONLY the Lead Abatement and/or Asbestos Removal work entered in the field labeled 'Total Value of Constr'.

The State Training Fee for these permit types is zero, so enter (or leave) zero (0) in the field labeled 'DCA'.

By following the above guidelines, the process that produces the Quarterly State Training Fee Report is able to identify those Permit Fee Log records with exempt work values so as not to include those values in the calculation of Total Work Value but instead to include those values in the new calculation for Total Exempt Work Value.

Also, for Demolition permits, Public Building permits, and regular permits whose total value of construction is less than \$625, please do not charge a DCA Training Fee, just enter zero (0) in the field labeled 'DCA'. The individual values of 'cu ft' and 'Total Value of Constr' from these state training fee exempt permits will now be summarized on the Quarterly State Training Fee Report.

Source: Jack Moticha
UCCARS Project Manager
Division of Codes and Standards

Common UCCARS Data Transmission Problems and Their Remedies

PROBLEM:

- Modem dials, but does not connect, or
- Modem dials, but script does not execute, or
- Modem dials, "Waiting for strings" message appears, or
- Modem dials, (1 Ring) message appears.

DIAGNOSIS:

Modem is improperly set up in Crosstalk XVI.

[NOTE: System I users: Crosstalk XVI is found in the uccars.cmm subdirectory of uccars. System II users: Crosstalk XVI is found in the xtalk directory.]

SOLUTION:

- (1) Enter Crosstalk XVI by typing xtalk in the uccars.cmm subdirectory or xtalk directory.
- (2) Select the file setup.
- (3) Press the enter key in all screens until you get to the select modem type. If your modem is not on the list, experiment with the available files or use the other modem not listed and, using the manual from the modem, input the required information.

PROBLEM:

Modem times out. (Clock counts down seconds before modem can dial.)

SOLUTION:

- (1) Edit the UCCSEND.xtk and UCCRBBS.xtk files in the uccars.cmm subdirectory or the xtalk directory.
- (2) Change the r45/300 line to r45/3000.

If other problems persist, please call Larry Wolford at 609/984-0040 for assistance.

Source: Larry Wolford
Division of Codes and Standards

Program Assistant Positions Available

Rutgers University's Center for Government Services is seeking Program Assistants to service the Uniform Construction Code courses throughout New Jersey.

These individuals will be expected to make sure that the code officials who are attending the classes are checked in, the appropriate forms are returned, the necessary audio-visual equipment is available and is set up (and works!), and any class handouts are distributed.

Applicants may express their interest in servicing classes held in a specific part of New Jersey or during a specific period of time. Program Assistants will be needed from August 26 through December 19, 1997 to service classes held during the Fall semester. They will also be needed from March through June 1988 to to service the Spring semester classes. Retired code officials are welcome!

Interested persons may call Marge McDonald at 908/932-3640 ext. 624 for detailed information.

New Jersey Register Adoption

Date: 5/19/97

Adoption: 29 NJR 2267(a) Uniform Construction Code: administrative correction regarding establishment of fees. Adopted amendments: *N.J.A.C. 5:23-2.25*.

Summary: The second sentence at *N.J.A.C. 5:23-2.25* has been amended to end with the phrase "the permit or certificate"; "or" was inadvertently omitted in the previous adoption. This amendment provides for permit fee collection before the issuance of construction permit or the certificate of occupancy.

Source: Farid Ahmad, P.E.
Supervisor, Code Assistance Unit

Construction Code Communicator



State of New Jersey
Christine Todd Whitman, Governor

Department of Community Affairs
Jane M. Kenny, Commissioner

Volume 9 Number 3

Fall 1997

Subchapter 6: The Rehab Subcode

For the past three years, the Department of Community Affairs, Rutgers University, and a committee of approximately 40 people have been in the process of developing a new code to deal with rehabilitation projects. This new code, which is scheduled to be adopted on January 5, 1998, will replace the 25/50 rule, the increase in size provisions, and the change of use section in the Uniform Construction Code (UCC).

The proposal for this new subchapter was published in the August 18, 1997 *New Jersey Register*; the public comment period extends through October 18, 1997 with public hearings scheduled on September 25, 1997 at Kean College, Union, New Jersey and on October 7, 1997 at Camden County Community College, Blackwood, New Jersey. A rigorous training effort is being developed to ensure that all code officials will be ready to apply the provisions of the Rehab Subcode as soon as it is adopted.

The six month grace period will apply to the adoption of this subcode, just as it does to the adoption of the other subcodes of the UCC. However, this new code will streamline, clarify, and make predictable the requirements for rehab, so we in the Department of Community Affairs believe that most design professionals and building owners will want to use it as soon as possible.

Source: John N. Terry
Code Assistance Unit

Copies of the Rehab Subcode proposal will be provided to working code officials at the training without charge. Additional copies may be obtained for a fee of \$5 from

Division of Codes and Standards
P.O. Box 802
Trenton, NJ 08625

Checks should be made payable to **Treasurer, State of NJ**. Once adopted, the rehab subcode will be sent to all subscribers as part of the blue book.

Rehab Training — A Head's Up!

By the time you receive this issue of the *Communicator*, you may have received a letter from the Bureau of Code Services giving you information about the training sessions planned for this fall on the newly proposed Rehab Subcode.

As some of you may have heard, the Rehab Subcode is an entirely new approach to construction work in existing buildings. For some people, the thought of a new approach is challenging and exciting. For others, the prospect of tackling a whole new way of doing things is stressful and frustrating.

(Continued on page 2)

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Well, as the Rehab Subcode moves through the rule process, we in the Bureau of Code Services are preparing an extensive training program, which will be available to all working code officials during the training program this fall.

Working code officials will receive training first. Retired or non-working code officials will receive training next. The training will consist of a fall class in which the underlying premises of the rehab code will be explained and the categories of work will be actively discussed. In the spring 1998, follow-up workshops will be held to evaluate any problems and to discuss complex questions that may have arisen while enforcing this new subcode.

As always, we look forward to serving you and will keep you all informed as the plans to provide this training progress.

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

New Jersey One-Call

In the Summer 1995 *Construction Code Communicator* (Volume 7, Number 2), an article was published entitled the "Underground Facility Protection Act," which advised code enforcing agencies to treat the notification to the New Jersey One-Call Center as a prior approval for the issuance of footing and foundation or demolition/excavation permits. The Underground Facility Protection Act requires anyone who is planning to perform demolition or excavation work to allow utilities three business days to mark out their facilities; the project must then be started within ten business days of the One-Call Center notification. Sometimes advertised as "Call Utility Dig, 1-800-272-1000", this program directs you to let utility companies know that you are planning to dig. With underground utilities, it critical that New Jersey One-Call know the location of your project and that you know the location of the underground utilities.

Synchronizing the One-Call notification with the Uniform Construction Code (UCC) permitting process and the start of construction work has proven difficult. Because of the lapse in time that sometimes occurs between the issuance of a permit and the start of work, New Jersey One-Call staff asked that the policy of treating New Jersey One-Call notification as a prior approval for the issuance of a construction or demolition permit be discontinued. However, code officials may advise builders to make the call and obtain the necessary approvals for demolition or excavation before work begins.

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

Source: Farid Ahmad, P.E.
Supervisor, Code Assistance Unit

Elevator Devices — Permits, and Parties Responsible

This article updates an article that appeared in the Spring 1993 *Construction Code Communicator* (Volume 5, Number 1). This article is based on the Uniform Construction Code's (UCC) current requirements regarding the enforcement responsibilities of various subcodes when work on elevator devices requires a permit.

What type of work on elevator devices is subject to a permit?

The installation of new elevator devices, alteration of elevator devices, and minor work on elevator devices all require a permit. The installation or alteration of an elevator device requires the issuance of a permit before work begins. A construction permit (UCC Form F-170) or permit update (UCC Form F-190) are issued by the construction official upon receipt of approvals from all subcode officials involved.

What subcodes are involved in the permit process?

With the exception of the installation of a new elevator device (which is always subject to multiple subcodes), work that requires a permit may or may not include more than one subcode. To determine which subcodes are involved in the project — and, consequently, which UCC Technical Sections need to be submitted to the construction official's office — the scope of work must be identified by the applicant. Responsibility to enforce provisions of the various subcodes are in *N.J.A.C. 5:23-3.4*, where the plan review responsibilities and construction inspection functions of every subcode are listed.

Who is responsible for obtaining the permit from an enforcing agency?

Either the owner or the owner's agent (for example, a licensed engineer, registered architect or plumbing, electrical, or other contractor employed in connection with the proposed work) is responsible for obtaining the permit.

Is the elevator contractor allowed to obtain a permit (to act as a general contractor) for work on elevator devices when the work involves more than one subcode?

The answer is yes. An example may help explain this issue. A permit is required for the addition of firefighter service to an existing elevator as well as for the installation of fire alarm devices to initiate automatic recall of the elevator. The elevator contractor may be authorized by the owner to be the agent responsible for obtaining a permit for the entire scope of work. In this case, the elevator contractor will submit to the enforcing agency the application for a permit and the elevator subcode technical section.

The elevator contractor must also ensure that the fire protection technical section is prepared and submitted by the contractor who installs the fire alarm initiating devices.

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Who is responsible for submitting the electrical subcode technical section when the work on an elevator device includes tasks that are within the electrical subcode officials' responsibilities as delineated in N.J.A.C. 5:23-3.4?

When work relating to the elevator devices includes electrical tasks that require a licensed electrical contractor, the electrical subcode technical section should be prepared and signed by the licensed electrical contractor.

When work relating to the elevator devices includes electrical tasks that *do not* require a licensed electrical contractor, such as work in elevators and escalators which is exempt electrical work pursuant to the Electrical Contractors Licensing Law, this work may be included on the elevator subcode technical section by the elevator contractor.

Whose responsibility is it to submit the electrical subcode technical section when work proposed is limited to the tasks of the elevator contractors, but require inspections by the electrical subcode officials?

An example might help explain this issue. Suppose that an elevator is located in a hazardous area (NEC-1995, sections 620-638) and work is limited to the elevator contractor's work on the equipment and wiring located on the underside of the elevator car platform. Since the requirements of NEC 620-38, Electric Equipment in Garage and Similar Occupancies, are enforced by the electrical subcode official, the elevator contractor needs to submit the elevator subcode technical section and the electrical subcode technical section to the enforcing agency.

If there are any questions, please contact me at 609/530-8833.

Source: Paulina Caploon
Elevator Safety Unit
Bureau of Code Services

The Elevator Inspection Form and Maintenance Issue

The Elevator Safety Unit has been asked to provide guidance on the Elevator Inspection form regarding what type of violations should be addressed in the routine maintenance sections of the form. To formulate guidance, the Uniform Construction Code (UCC) rules and the technical standard referenced in those rules have been consulted.

According to *N.J.A.C. 5:23-12.2(b)*, all operating and electrical parts and accessory equipment of elevator devices shall be maintained in safe operating condition. The maintenance of elevators, dumbwaiters and escalators shall conform to the most recent edition of ASME A17.1 referenced in the building subcode. Presently, ANSI/ASME A17.1-1990 is the referenced standard.

ASME A17.1-1990, Section 1206, entitled "Maintenance", outlines various maintenance tasks, for example:

1206.2c Top of Cars. The tops of cars shall be kept clean and free from oil or grease and shall not be used for storing lubricants.

Material not required for the operation of the elevator shall not be stored or carried on top of the elevator car (see Rule 204.1g).

1206.2a Hoistways and Pits. Hoistways and pits shall be kept clean and free of dirt and rubbish and shall not be used for storage purposes. Water shall not be allowed to accumulate in pits.

Rule 1206.5 Maintenance of Hydraulic Elevators and Dumbwaiters 1206.5b(4). Valves and cylinders shall be kept properly packed and the packing glands shall be periodically tightened to prevent loss of the fluid.

Violations of requirements like these shall be noted in the applicable "routine maintenance" section of the elevator inspection form. The inspector will then provide on the Notice of Violation and Order to Terminate a clear description of the violation(s), including the applicable citation(s) from the rules.

Source: Paulina Caploon
Elevator Safety Unit
Bureau of Code Services

16 Gauge Pipe Columns

It has come to the attention of the Department that some code officials reject 16 gauge tubular steel, concrete-filled pipe columns for use in residential construction. According to these officials, Bulletin 88-4, Concrete-Filled Pipe Columns, does not permit the use of such columns. This statement is not correct. Bulletin 88-4 does permit the use of 16 gauge columns; it just conditions their acceptance upon test results. The Bulletin is primarily intended to restrict the use of substandard 16 gauge concrete-filled steel pipe columns.

Building Officials and Code Administrators (BOCA) Evaluation Services, Inc. has published Research Reports No. 91-11 and No. 93-36 on fixed length, 16 gauge tubular steel, concrete-filled column for structural support of floor girders in residential construction, Use Group R-3. For use groups other than R-3, special in-plant inspections are recommended.

The products evaluated are factory-fabricated pipe columns of 3 1/2 inch and 4 inch outside diameters and 5 feet to 14 feet in length with fixed top and bottom steel plates. Among other things, structural application of these columns requires builders to follow manufacturer's installation instructions and perform structural calculations on all loading aspects.

Code officials may accept 16 gauge concrete-filled steel pipe columns on the basis of test and evaluation reports and the supporting structural calculations. The research reports published in support of the product carry some limitations and use conditions. Code officials should carefully review and enforce such requirements.

If there are any questions or concerns about the 16 gauge pipe columns, please call the Code Assistance Unit at 609/530-8793.

Source: Farid Ahmad, P.E.
Supervisor, Code Assistance Unit

New Codes Are on the Way!

Well, it's about time! The 1996 editions of the model codes are on track to be adopted on January 5, 1998. The pre-proposal was published in the *New Jersey Register* on August 4, 1997. The proposal is expected to be published in the *New Jersey Register* on October 20, 1997.

For those of you who have been living in a cave for the last two years, the reason for the extra time for this cycle of code adoptions is the change that took place in the Uniform Construction Code Act. This change essentially "froze" the codes at the 1993 editions, while giving the Department of Community Affairs the ability to adopt any provisions of future model codes that are consistent with the intent of the Uniform Construction Code statute. To establish a new "base" code, the Department identified in the pre-proposal every change that took place between the 1993 editions of the codes and the new 1996 editions (1992 and 1995 CABO One and Two Family). This task was completed in the middle of 1997 and the Department has been moving forward with the adoption.

This adoption of model codes will differ from all previous adoptions because the Department of Community Affairs now has the authority to make technical changes to the model codes. In an attempt to make this process as painless as possible for all code users, upon adoption, the text of the amended sections will be printed in the Uniform Construction Code. This will make it easy to copy and paste the amendment into your code book.

Public comment on the proposal begins with the publication of the preproposal in the August 4, 1997, *New Jersey Register*, so if you have anything to say about the changes, please comment.

Source: John N. Terry
Code Assistance Unit

The following article is reprinted from the Spring 1997 Construction Code Communicator (Volume 9, Number 1). The two sentences inadvertently omitted from that article are included here at the end of the second paragraph.

Two Appointments Equal Tenure

Let's say that you are a construction official or a subcode official in a noncivil service municipality. Your four year appointment is coming to an end and you hear nothing about being reappointed. You work one or two weeks beyond the expiration of your four year appointment and you assume, pursuant to *N.J.S.A. 52:27D-126*, that you now have tenure in your position. You would be wrong because of a recent Appellate Division decision which I will now discuss.

The Appellate Division case involved a construction official who claimed tenure based on the above set of circumstances. The municipality, which notified the official eleven days after his four year appointment expired that he would not be reappointed, argued that, under the statute, the phrase "on or after a fifth consecutive year of service including years of service in an equivalent job title" applied only to "grandfather in" those officials who worked in

equivalent job titles prior to the enactment of the Uniform Construction Code and did not automatically grant tenure to holdover officials. *The court in this case reviewed the legislative history of this 1979 amendment to the statute and adopted the argument of the municipality in its decision. It endorsed the holding below that the Legislature did not intend to "confer tenure upon a technicality" (the brief holdover period of service following the expiration of the four year appointment).*

It is thus clear from the decision that tenure is now only conferred upon a second four year appointment and the "brief holdover thus acquiring tenure" approach no longer has any validity. However, all is not lost for those officials nearing the end of their initial four year appointments in noncivil service municipalities. Under the amended *N.J.A.C. 5:23-4.4(a)9*, a municipality is required to give notice 30 days prior to the expiration of the four year term as to whether the official is to be reappointed. If notice is not given and no other action is taken by the municipality, the official shall be deemed to have been appointed to serve in an acting capacity for not more than 60 days. Prior to the expiration of the 60 day period that follows the expiration of the four year term, if the official is neither reappointed nor given written notice that he or she is not being reappointed, the Department shall not extend the acting appointment and the official shall be deemed to have been reappointed, such reappointment being effective retroactively to the date of expiration of the prior four year term. Thus if a municipality does nothing and ignores the above procedures, it could find itself with a tenured official not of its choosing.

Since the case discussed above involved a situation that occurred prior to the amendment of the regulations, there may be further developments in this area. If you wish to discuss your particular tenure situation, please contact me at 609/530-8838.

Source: Robert Hilzer, Esq.
Bureau of Regulatory Affairs

Barrier Free Enforcement: A Promise Kept

The *New Jersey Register* of May 19, 1997 included the adoption of three rule revisions that impact the enforcement of the Barrier Free Subcode.

First, the Barrier Free Subcode training has been made mandatory for all building subcode officials. Each building subcode official in a municipality must have taken this course by the end of the three-year licensing cycle that begins in July 1998. All courses taken since July 1, 1995 shall count toward meeting this mandatory training requirement.

Second, there are now two required Barrier Free Subcode inspections, one at framing and one which is part of the final inspection. There are spaces on the newly revised standard forms for a sign-off.

Third, site diagrams submitted with permit applications must include designations of the accessible route(s) for buildings required by the Barrier Free Subcode to be accessible.

Fourth, the enforcement of specific sections of CABO/ANSI A117.1 has been revised and clarified.

These changes have been made to enact Commissioner Kenny's promise in July 1996 to improve the enforcement of the Barrier Free Subcode, with particular emphasis on ensuring compliance with the provisions for accessible multi-family housing in both State and Federal laws. As the Department of Community Affairs has repeatedly stated, compliance with the Barrier Free Subcode should, by extension, give compliance with the Federal Fair Housing Act of 1988 because the Barrier Free Subcode meets all the provisions of Federal law, as well as the provisions of its own enabling legislation, which was passed in New Jersey in 1975.

These rules emphasize clarity of information as one of the key components of effective enforcement. John Terry and I look forward to seeing the building subcode officials in class!

In the meantime, if you have dimensional questions, please call John Terry at 609/530-8793. If you have scoping questions or questions about the interaction of State and Federal accessibility laws, please feel free to call me at 609/530-8788.

Source: Emily W. Templeton
Code Development

Levels of Living Space

In the Winter 1995 issue of the *Communicator* (Volume 7, Number 4), I wrote an article to clarify what constitutes a "multi-story dwelling unit." This term is critical in determining whether the dwelling units in a single structure are — or are not — required to be accessible.

A "multi-story dwelling unit" is a dwelling unit with "more than one level of living space." In the interest of returning some common sense to rules, regulations, and enforcement, there seemed no need to elaborate, and, fundamentally, that proved to be right. There have been no requests to redefine "multi-story dwelling unit." There have been requests, however — and there have been many — to define "more than one level of living space."

Well, living space is habitable space, space that can be lived in. More than one level of habitable space (it's a multi-story dwelling unit, remember) is habitable space of more than one story. That seems clear. In fact, everyone who has asked has agreed that bedrooms and family rooms are habitable, and, therefore, are "living space."

The problem seems to come with stating clearly what "living space" is NOT. Habitable space ("living space") is not a garage. It is not a bathroom in a garage. It is not a closet in a garage. The fact that some projects are submitted with these spaces identified as "living space" seems to result from a permit applicant's desire to qualify for the "multi-story dwelling unit" exemption in the Barrier Free Subcode. Some of these permit applicants assume that the code official, then, must prove that the space included as part of the garage is not "living space." That is not so. The person who designs a project to meet an exemption must provide plans that comply with the code; in other words, the applicant must

ensure that the space provided on both stories of a multi-story dwelling unit is living space.

With the passage of the Federal Fair Housing Amendments Act of 1988 and the Americans With Disabilities Act in 1990, this country made a public policy determination to include, for all people, access to the built environment. New Jersey had made the same public policy decision much earlier — in 1975, the Barrier Free Subcode enabling legislation was passed. New Jersey was a national leader in accessibility when the Barrier Free Subcode regulations were first promulgated in 1977.

It is time to stop applying the Barrier Free Subcode with a loophole mentality; there are effective and valid exemptions in the Barrier Free Subcode. As someone who works with words, I believe that no language can cover each contingency of individual thought. Therefore, I suggest that it is now time to spend time (and time is money, as we all know) designing buildings available to all. The time spent trying not to include accessibility could be better spent designing an accessible building.

Let's all apply some intelligence to the words on the page. Let's return to common sense.

Source: Emily W. Templeton
Code Development

Barrier Free Recreation: Are Construction Permits Required?

The construction of recreational equipment may require a construction permit. The determination about whether a permit is required is made by the building subcode official. A permit might be required for a large, multi-functional piece of play equipment, for example. The permit, however, would be for footings; it would not include accessibility features. To date, there are no technical standards for accessible play equipment (although there are some "in the works"), so there is no objective way to decide whether the playground equipment is truly accessible. The recreation portion of the Barrier Free Subcode relies on the manufacturer to ensure accessibility.

A reliable manufacturer of playground equipment will provide detailed specifications for installing the equipment. The size, height, and weight of the equipment will dictate the installation specifications. If the manufacturer's installation specifications are ignored, any warranty will become invalid.

There is one part of the recreation portion of the Barrier Free Subcode where the code official enforces the accessibility provisions. The enforcement of all of the requirements for swimming pools, including the accessibility features, is the responsibility of the building subcode official (see *N.J.A.C. 5:23-7.6*).

If you have questions about the Uniform Construction Code's barrier free recreation requirements, please feel free to call me at 609/530-8788.

Source: Gail Weikel
Code Development and Assistance

Zoning and Manufactured Housing

The Department of Housing and Urban Development (HUD) announced in the May 5, 1997 edition of the *Federal Register* that there have been attempts by some municipalities to regulate or control the siting of manufactured homes by allowing only those built to a standard other than the HUD manufactured housing code.

HUD states that these controls are put in place by the adoption and enforcement of a zoning ordinance based only on a construction and safety code other than the HUD manufactured housing code. It is HUD's position that municipalities do not have the authority to do this.

In areas regulated by the federal government, the federal laws preempt any state or local building or development requirements.

If you have any questions about manufactured housing, please contact Paul Sachdeva at 609/530-8833.

Source: Emily W. Templeton
Code Development

New Jersey's License and BOCA's Certification

This article will be most helpful to those New Jersey licensed inspectors who have completed the certification tests rather than those licensed in the late 1970's and early 1980's before the testing program began.

The Department is getting numerous inquiries about whether New Jersey's Uniform Construction Code (UCC) licenses can be converted to Building Officials and Code Administrators (BOCA) certifications. The interest in this could result from the possibility of the adoption of BOCA as the statewide code in both New York and Pennsylvania, the reliance on BOCA certification in Virginia, or the new International Codes and speculation about their impact on certification.

The testing program used for New Jersey licenses and BOCA certification is the same. This program is the National Certification Program of Construction Code Inspectors (NCPCCI); it is administered by The Chauncey Group International, a for-profit testing company owned by the Educational Testing Service (ETS). While most of the tests are applied similarly, there are two major differences.

First, New Jersey has a fire protection license, whereas BOCA has no fire protection certification. In BOCA's certification program, fire protection is part of the building inspector and/or building plan reviewer's responsibility. An example may help explain the effect of this difference. If you have a New Jersey building inspector HHS license, you have completed tests 1A, 4A, 1B, and 1C. In applying the results of these tests to BOCA certifications, you would be able to obtain the CABO 1&2 Family building and mechanical inspector's certification (1A and 4A), but to obtain the BOCA building inspector certification you must also

complete test 3B (fire protection general). To also obtain the BOCA building plan review certification, you must complete test 3C (fire protection plan review). Those with a fire protection HHS license (tests 3B, 3C, and 4A) could obtain the CABO 1&2 Family mechanical inspector certification, but would need to complete 1A (CABO 1&2 Family building) and 1B (building general) for the BOCA building inspector certification. To also obtain the BOCA building plan review certification, you must complete test 1C (building plan review).

Other New Jersey licenses also convert easily within the BOCA certification program. Plumbing and electrical ICS inspectors are eligible for BOCA plumbing and electrical inspector certifications. The HHS level licenses compare with BOCA's plan review certifications and someone who holds an elevator HHS license is eligible for the BOCA elevator inspector certification.

The second difference between New Jersey's licensure requirements and BOCA's certification program concerns the date the test was taken. New Jersey regulations allow a test to be used up to three years after it was successfully completed. BOCA has no time limit. Tests completed in the 1980's may still be applied to a BOCA certification.

One final point on BOCA certification: BOCA has a certificate maintenance (renewal) program similar to New Jersey's license renewal program. Certifications are renewed every three years with 15 hours of continuing education required for each certificate. Those with multiple certificates must complete a maximum of 45 hours of education for the three year period. All courses approved by the Department of Community Affairs are accepted by BOCA.

If you would like more information on the BOCA certification program call the BOCA Eastern Regional Office at 215/638-0554. They will be able to discuss your options with you and send you additional information on these certifications and the fire prevention and property maintenance certification program.

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

Elevator Records Management 104

This article is devoted to the matter of certificate issuance when no payment has been received for elevator inspections.

While reviewing elevator records, I have noticed that sometimes when a municipality has not received payment, the certificate is withheld until payment is received. This results in an elevator operating in violation of *N.J.A.C. 5:23-12.9(a)* or (b), which states that no device shall be operated unless a valid Certificate of Compliance (CC) or Temporary Certificate of Compliance (TCC) has been issued.

Admittedly, many construction officials prefer that the Elevator Subcode Official manage elevator issues. But issuing the certificates and managing the fees are among the construction official's responsibilities.

The most effective way to deal with the matter is for the construction official to issue a 30 day TCC and an accompanying Notice of Violation/Order to Terminate (NOV/OTT) for non-payment and to cite it as such. After 30 days, if there is no response, the construction official should issue a Notice and Order of Penalty (also for non-payment), the penalty amount at your discretion, but within the cap set by the Uniform Construction Code. To bring about compliance, the construction official may also forward the matter to the attorney for the municipality or for the joint enforcement agency. A check is usually forthcoming in short order.

If there are any questions, please direct them to me at 609/530-8833.

Source: Phil van Leeuwen
Bureau of Code Services

Certification Program for Technical Assistant, Office of the Construction Official

The certificate program for the Technical Assistant in the Office of the Construction Official (TACO for short), which was implemented during the Spring of 1997, now has 315 people enrolled. The program has been well received, not only by the participants, but the municipalities as well.

The core curriculum has been expanded with new courses scheduled this fall. Brochures were mailed to those enrolled in the program.

If you would like more information on the program or a registration form, please call the Education Unit, Bureau of Code Services at 609/530-8798.

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

New Jersey Register Adoptions

Date: July 7, 1997

Adoption: 29 NJR 2817(a)

Adopted amendment: *N.J.A.C.* 5:23-3.2.

Summary: *N.J.A.C.* 5:23-3.2(d) New sections 5.i and 9.iv state that in commercial farm buildings the building owner decides whether to provide electric service to the building. If the owner provides electricity, any electric light shall meet the means of egress lighting requirements unless the commercial farm building will be used as a place of public assembly. A commercial farm building with electrical service used as temporary places of public assembly must have a backup power source.

N.J.A.C. 5:23-3.2(e) has been recodified as *N.J.A.C.* 5:23-3.2(d)10 to clarify that the submittal of a sketch plan of the site in lieu of site plans signed and sealed by a registered architect or licensed engineer is permitted only for commercial farm buildings.

Date: July 21, 1997

Adoption: 29 NJR 3242(b)

Adopted amendments: *N.J.A.C.* 5:23-2.14 and 2.23; 1.6 and 4.19; 2.15, 2.18, 5.21, and 7.1.

Adopted new rule: 5:23-12.12.

Summary: *N.J.A.C.* 5:23-2.14 and 2.23 As Uniform Construction Code companion changes to the rules for lead hazard abatement on structures and in commercial buildings (*N.J.A.C.* 5:21-17.11), these amendments clarify that neither a permit nor a lead clearance certificate is required for that abatement work.

N.J.A.C. 5:23-1.6 The amendments at *N.J.A.C.* 5:23-1.6(a) and (b) clarify the grace period, which allows applicants to submit construction documents based upon the prior code for a period of six months following the operative date of a subcode revision.

N.J.A.C. 5:23-4.19(b)2 exempts asbestos and lead hazard abatement work from the State Training Fee.

N.J.A.C. 5:23-7.1(f) apportions Barrier Free Subcode enforcement responsibilities among subcode officials.

N.J.A.C. 5:23-5.21(d)5ii(1) requires building subcode officials to take a seminar on the Barrier Free Subcode.

N.J.A.C. 5:23-2.15(e)1i requires that a site diagram showing accessible routes be provided with the permit application.

N.J.A.C. 5:23-2.18(b)1ii(1) and (d)1 require two Barrier Free Subcode inspections (framing and final) for buildings required to be accessible.

N.J.A.C. 5:23-12.12 requires all existing elevators with an excessive amount of space between the elevator hoistway door and the car door to be retrofitted with safety guards.

Date: August 18, 1997

Adoption: 29 NJR 3721(a)

Adopted amendment: *N.J.A.C.* 5:23-2.25.

Summary: *N.J.A.C.* 5:23-2.25 deletes the reference to certificate of compliance and certificate of approval to coordinate with an earlier amendment to *N.J.A.C.* 5:23-4.18(f) preventing separate fees for such certificates.

Source: Farid Ahmad, P.E.
Supervisor, Code Assistance Unit

UCC Standard Forms

By this time, all local construction offices should have received the latest set of revisions to the UCC Standard Forms package along with a letter outlining the revised print specifications. Your office may use the existing forms in its inventory until they are gone, provided that, when the need arises, your existing forms are altered manually to accurately reflect new code requirements, such as Lead Abatement.

Watch out for corrected code citations and time limits, too. If an applicant should submit a recently revised UCC standard form to your office, you must accept it. UCC Standard Forms F330A and F340A, which relate to the Construction Board of Appeals, have been removed from the Standard Forms package.

With the evolution of UCCARS — and similar software programs — the print specifications for many of the standard forms are now recommended; they are no longer required. Please refer to the letter (dated June 30, 1997) that was included with your UCC Standard Forms packages for details.

For anyone who may be interested, the permit application file folder (UCC F100) may be letter or legal size.

If your office has not yet received this information, please contact me at 609/292-7899.

Source: Susan Woidill
Division of Codes and Standards

Do You Issue More Than 200 Permits per Year?

Do you? If so, *N.J.A.C. 5:23-4.5(d)2* provides that any construction office that issues more than 200 permits per year shall submit all required monthly reports to the Department electronically.

If your office issues more than 200 permits per year and is not transmitting data electronically, please call the UCCARS Unit (at 609/292-7899) for assistance.

If you are interested in our UCCARS System, please contact this office for information on upcoming training sessions for both System I and System II. These sessions are free. All you need to become a UCCARS user is the required hardware, communications software Crosstalk XVI, and the one day training session. The UCCARS software is free. It's that simple.

If you are unable to comply with *N.J.A.C. 5:23-4.5(d)2*, you must submit a request for an extension of time in writing setting forth the reasons for such extension to: NJ Department of Community Affairs, Division of Codes and Standards, UCCARS Unit, PO Box 802, Trenton, NJ 08625-0802.

If you have questions or would like additional information, please do not hesitate to contact Team UCCARS at 609/292-7899.

Source: Susan Woidill
UCCARS Unit
Division of Codes and Standards



Center for Government Services
P.O. Box 5079
New Brunswick, NJ 08903-5079

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Department of Community Affairs
Jane M. Kenny, Commissioner

Volume 9 Number 4

Winter 1997

Rehabilitation Subcode Is Adopted!!

On January 5, 1998, Subchapter 6 of the Uniform Construction Code, the "Rehabilitation Subcode" was adopted. With its adoption, the way to deal with existing buildings in New Jersey has changed drastically. A list of changes to the *proposal* which have been made for the *adoption* follows. This is not an exhaustive list, but includes the issues of greatest interest.

Several people who commented on the proposal asked the Department to include a specific size for egress windows in sleeping rooms of residential occupancies. This has been done. Although not as large as the egress window required in new construction, this window will provide the enhanced safety that was the concern of the commenters. You will find this requirement in each of the categories of work.

Other commenters focused on the structural sections of the proposed Rehab Subcode. In recognition of the impact of loads on specific construction types and also of the impact of loads on roofs with different slopes, language has been added to distinguish among wood frame, steel, and concrete construction as well as to differentiate between roofs with a pitch of 3 in 12 or less and those

that are more steeply pitched. You can find this provision in each of the categories of work and in the structural sections of the Basic Requirements.

With these two major issues identified, the remainder of the changes will be identified in list form divided by section for clarity. You may consult the accompanying article for the list.

The Rehab Subcode is a whole new world. As with all subcode adoptions, the grace period applies, but it is likely that permit applicants will want to use this subcode immediately. Training will be available for code officials as well as for other code users. Please plan to attend, if you have not already done so. Phase I of the training is a briefing in which the framework of this subcode is explained and illustrated. Phase II provides an opportunity for code officials to discuss specific projects in a workshop format. In the meantime, if you have questions about how to apply this subcode to a project you are reviewing, call Code Assistance at 609/530-8793.

Source: John N. Terry
Code Assistance Unit

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Rehab Subcode: Changes Made Upon Adoption

The Rehab Subcode was the product of teamwork. A diverse committee chaired by the Center for Policy Studies at Rutgers University participated in compiling and reviewing the draft. Because the Rehab Subcode draft and the resulting proposal (which was published in the *New Jersey Register* on August 18, 1997) have been widely read and because so many code officials have already attended Phase I of the training program, the briefing session, the following list of changes to the Rehab Subcode proposal that have been made upon its adoption is being provided for information and convenience. The list is divided by section for clarity.

Section 6.1 Introduction

6.1(a) has been changed to clarify that this section is a guide to using the rehabilitation subcode and is not meant to be cited for enforcement purposes.

Section 6.2 Applicability and Compliance

6.2(e) has been amended to reference only Section 3408.6 of the BOCA National Building Code (BOCA), the specific part of BOCA Section 3408 to be used in a building evaluation. Language has also been added to clarify that this alternative is limited to building and fire protection requirements.

6.2(e) has been amended to clarify that the assignment of enforcement responsibility does not imply that a permit is required. The question of whether a permit is required continues to be as prescribed at *N.J.A.C. 5:23-2*.

6.2(e) has been amended to reference the Barrier Free Subcode (*N.J.A.C. 5:23-7*) for enforcement responsibilities for accessible building features.

6.2(g)3 clarifies the relationship between variations issued under the Uniform Construction Code (UCC) and compliance with Subchapter 4 of the Uniform Fire Code (UFC). This section now provides that the construction official consult with the fire official and requires concurrence if the fire official is also licensed as a fire protection subcode official.

6.2(g)6 includes the language from *N.J.A.C. 5:23-2* which states that licensed health care facilities are subject to applicable federal requirements.

Section 6.3 Definitions

A definition of "addition" has been added to clarify what is meant as this term is used in this subcode.

The definition of "alteration" has been amended to include an increase in ceiling height and to clarify what is meant by the phrase "affects a primary structural component."

Section 6.4 Repairs

6.4(a) emphasizes that there is no limit to the amount of repair work that may be undertaken. Additionally, on the list of items that are *not* repairs, the "removal or cutting of any primary structural

component" has been rephrased to clarify what changes to a primary structural component are *not* repairs.

6.4(c) states which standard is to be applied as the threshold for structural strength, system capacity, and mechanical ventilation. Also, a sentence has been added to clarify that additional equipment or fixtures cannot increase loads beyond that which is permitted. These changes are also found in Sections 6.5(c), 6.6(c), and 6.7(c).

6.4(c)2 now states that fire protection systems cannot be "removed without replacement" to clarify that a building owner is permitted to remove and replace an existing system. The same change has been made in Sections 6.5, 6.6, and 6.7.

6.4(d)2 has been modified to add to the list of "products prohibited" carpet that does not meet the "Pill Test." This change is also made at 6.5, 6.6, and 6.7.

6.4(f) has been moved from 6.4(e)4 and a reference to the statute requiring battery-operated smoke detectors in residences has been added. The same change has been made in Sections 6.5 and 6.6.

Section 6.6 Alterations

6.6(e)4 has been amended to require the provision of an accessible entrance rather than a ramp in recognition of the fact that the construction of a ramp may or may not be necessary in the creation of an accessible entrance.

6.6(e)9 has been amended to require hard-wired smoke detectors for newly created bedroom space.

Section 6.7 Reconstruction

6.7(a) has been amended to clarify that the code official requires compliance with the provisions for reconstruction where the project falls below the definition of reconstruction by a *de minimis* amount. A section has also been added to clarify how the requirements for reconstruction will be applied to a project undertaken in phases.

6.7(e)9 has been amended to provide for ceiling height requirements in previously unfinished spaces in Use Groups R-1 and R-2. Minimum ceiling height requirements currently exist in both the building subcode and in the Hotel and Multiple Dwelling Regulations.

6.7(f) has language added to clarify that in repair work undertaken in connection with a reconstruction project, materials that are the same as or similar to those existing may be used and to repeat that there is no limit to the amount of repair work that may be undertaken.

6.7(h) - The requirement that existing fire protection systems remain has been repeated here.

Section 6.8 Materials and Methods

6.8(d)10 - The language at the end of this subsection has been deleted because the concept of addressing hazardous conditions already is incorporated in Subchapter 2 of the Uniform Construction Code.

6.8(e) - The materials and methods requirements for the mechanical subcode, as proposed, reflected the Department's plans to

adopt the International Mechanical Code as the mechanical subcode of the UCC. In response to comments received on a separate proposal, the Department will not be adopting the International Mechanical Code at this time. Accordingly, the proposed mechanical subcode materials and methods requirements have been replaced with references to the existing mechanical subcode (1993 BOCA Mechanical Code).

Section 6.9 New Building Elements

6.9(a)2 has been added to clarify that there is also a requirement applicable to an increase in the number of stories in a building where there is no increase in building height.

6.9(a)17 has been added to address clearance requirements for new electrical equipment.

Section 6.25 Basic Requirements, Use Group R-1

6.25 (n) 6. has been amended to include one switch-controlled ceiling or wall outlet in a room and, when the work area includes a bathroom, one GFCI protected duplex receptacle outlet and one switch controlled lighting outlet in the bathroom.

Section 6.26 Basic Requirements, Use Group R-2

6.26(a)3 has been amended to clarify that, distinct from the egress window requirements contained elsewhere in this subcode, a basement window must have a *net clear opening* of five square feet to meet the requirement of a second means of egress.

6.26(a)5 - The term "guest units" has been changed to "dwelling units" since this section is Use Group R-2 and not Use Group R-1.

6.26(m)2 has a new subsection which provides that when a new light is installed, a switch should be provided and has added amended language for both Use Group R-2 and Use Group R-3/R-4 (Section 6.27(d)2).

6.26(s) - This section has been moved from 6.26A(h), Supplemental Requirements, renamed "Communicating Attic Spaces," and amended to clarify the intent of the requirement. The same change has been made to this requirement as it applies to Use Group R-3/R-4. (Section 6.27A(b) has been moved to Section 6.27.)

Section 6.27 Basic Requirements, Use Group R-3/R-4

Section 6.27(a) The requirements for smoke detection in dwelling units have been moved from the Supplemental Requirements to Basic Requirements because, in order to be considered a reconstruction, a project in a dwelling unit, by definition, must include the entire dwelling unit. Accordingly, Section 6.27A is deleted and its requirements moved to Section 6.27.

Section 6.30 Special Technical Requirements, All Use Groups

6.30(c) has been amended to add provisions for a damp suppression system in windowless stories of more than 3,000 square feet but less than 10,000 square feet as allowed under Subchapter 4 of the Uniform Fire Code.

6.30(g) has been amended to clarify the requirements for the provision of standby power for certain elevators.

Section 6.31 Change of Use

6.31(a)4 states clearly that existing fire protection systems cannot be removed without replacement to make this section consistent with the other sections of this subcode.

6.31(b)1 clarifies which requirement governs when there is a difference between a Basic Requirement and another requirement of the Change of Use section applicable to a project.

6.31(c) has been reordered to clarify that the exit loading requirements must be met for all changes of use.

6.31(c)4 - The words "to a single exit building" have been added to this section to clarify the circumstances under which this requirement applies.

6.31(d)1 - The words "which also constitutes a change of use group" have been added to this section to clarify the circumstances under which this requirement applies.

6.31(e)1i has been changed to delete the words "expanded beyond" and replace them with "exceed" to clarify that this is not an addition or "expansion," but a change of use.

6.31(g)1 has been amended to clarify what requirements apply to a partial change of use.

6.31(g)2 has been amended to add requirements for the suppression of windowless stories when there is a change of use.

6.31(k), Table K has been amended to add Use Group F-2 to category 1 because it is logical to apply the same requirements to this use group as those applied to the others in this category and to clarify what is included in "other" in category 2. Also, a building subcode citation has been corrected in Section (k)3.

6.31(o)4 has been amended to add a reference to the accessibility requirements for renovations.

Section 6.32 Additions

6.32(d) has been modified to clarify that the increase in size is permitted up to 25%; there could be more than one increase, but the total increase(s) may not exceed 25%.

6.32(f) has been amended to delete the words "owner occupied." These words were taken from the existing UCC requirement, but it is no longer correct to limit this requirement to owner occupied units. Also, subsection 3 has been deleted. The installation of battery-operated smoke detectors is required whenever any work is performed.

Section 6.33 Historic Buildings

6.33(a)4 has been amended to clarify the limitations on historic buildings being used as museums if they are to be classified as Use Group B.

6.33(b)8 has been amended to clarify that the exception for interior finishes is limited to Use Group R-3.

6.33(b)12 has been deleted because there are no distinct energy conservation requirements established by this subcode.

That's it! These are the technical (not the editorial) changes to the adoption of the Rehab Subcode. You will all receive the full subchapter in a future transmittal.

Source: Code Development and Code Assistance Units
Division of Codes and Standards

Major Structural Defects

The following is the first in a series of reports from the New Home Warranty Program, Major Structural Claims Section.

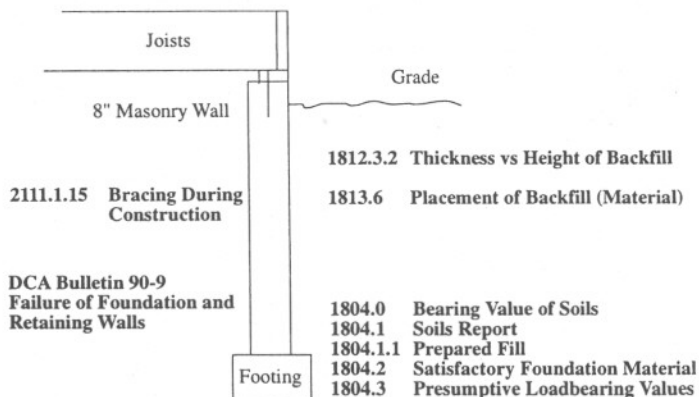
In processing major structural claims per *N.J.A.C. 5:25-3.7*, we have identified Uniform Construction Code sections which may require closer monitoring by Inspectors and Construction Officials. Subsequent issues of the *Communicator* will examine other areas of Major Structural Defects (MSD) claims. This report will address foundation walls.

MSD's in foundation walls are among the most frequently claimed defects, the highest in homeowner inconvenience during reconstruction, and the most costly to the program. Recently, there have been several cases of explosion-like catastrophic failure of foundation walls. Prior to the failure the homeowners observed:

- Step Cracks,
- Water Seepage,
- Masonry Displacement, and
- Horizontal and Vertical Bowing

The Major Structural Claims Section investigated the collapses and found that the:

1. Backfill height was in excess of that allowed for the thickness of the wall.
2. Foundation wall was subject to excessive lateral pressure exerted by saturated backfill.
3. Permit File, approved plans and final survey, clearly showed that the 8 inch wall was inadequate for the proposed and final grading height of backfill.



Foundation MSD's

Improper application of BOCA National Building Code Section 1804.0, loadbearing value of soils, and BOCA Tables 1812.3.2(1) and (2), is a major cause of horizontal cracking generally found three courses down from the sill, horizontal and vertical wall bowing, and step cracks starting at the ends and running from top to bottom toward the center of the wall.

During excavation to replace the wall, we found violations of BOCA Section 1813.6, placement of backfill. Boulders, organic material (tree stumps), and construction debris were found in the backfill.

Particularly in the erection of modular homes, we have found severe foundation cracking due to backfill without bracing during construction (BOCA Section 2111.1.5). This has been verified by homeowners' photographs that were taken during construction. The erector needs an area to roll the home onto the foundation and backfill. In this case, the walls exhibit horizontal and vertical bowing and horizontal and step cracking through joints and blocks. These problems could have been prevented by applying BOCA Section 2111.1.5, bracing during construction.

In the homes with catastrophic failure of the foundation wall, no settlement of the footing was found. However, there are many MSD claims where footing failures have occurred. Footing failures and wall settlement are generally due to inadequate application of BOCA Section 1804.1.1, Prepared Fill, which occurs where the home is sited on a lot that has been cut and filled to produce a front first floor walk-in and a rear basement walkout with the lot sloping steeply to the rear.

Urban renewal sites have been prone to footing and wall settlement where the home was built on a filled in lot over a previous foundation. Mud jacking and pressure grouting of the footings has been used to level up homes with as much as 8 inches of settlement.

Refer to DCA Bulletin 90-9 "Failure of Foundations Walls and Retaining Walls" for additional factors contributing to foundation failures.

Construction Code Enforcement agencies are our first line of defense in ensuring code compliance with footing and foundation design through plan review. In addition, field inspection must be coordinated to the approved plan. Correctly constructed footings and foundations can eliminate a future Major Structural Defect.

Your comments are welcome. I can be reached at 609/530-6331.

Source: Wilbur Hinds, Architect
Major Structural Claims
New Home Warranty Program
Bureau of Homeowner Protection

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Manufactured Homes: Foundation and Support

The Department has received numerous inquiries from code officials regarding foundation and support requirements for manufactured homes. Bulletin #80-6 states that a construction permit is required for the placement of a manufactured home and further states that an application for a construction permit should contain the following:

1. A statement that the work to be performed includes the installation of certified manufactured home (manufactured home bearing the Federal insignia of certification);
2. Manufacturer's installation instructions; and
3. Detailed plans for any on-site construction (foundation and support system) related to set up of the manufactured home. These plans must be signed and sealed by a New Jersey Professional Engineer or Registered Architect.

It appears that there is some confusion regarding the information required to satisfy items #2 (manufacturer's installation instructions) and #3 (detailed plans for on-site construction) above. Some code officials require the structural design of the foundation and supporting engineering system that has been signed and sealed by a Professional Engineer or Registered Architect to be additionally approved or endorsed by the manufacturer. This is not a requirement and is inappropriate.

Please note that the Uniform Construction Code requires that the foundation system, which may be a full size concrete pad, strip or pier or any other suitable foundation, to be designed by a New Jersey Professional Engineer or Registered Architect based on the site-specific soil conditions. The design may differ from the foundation system (which is usually pier foundation) in the manufacturer's installation instructions based on the assumed bearing capacity of the soil. The code official may question the parameters or elements of the engineering design, but should not mandate an approval or endorsement by the manufacturer.

It may be noted, however, that the manufacturer's installation instructions related to the assembly (roof, wall, floor connections) of the manufactured home and utility connections must be followed.

The items relating to manufactured (mobile) homes covered in the article entitled "Premanufactured Construction" in the Summer 1997 edition of the *Construction Code Communicator* may provide helpful information to code officials concerning other aspects of manufactured homes.

Source: Paul Sachdeva, Manager
Industrialized Buildings Unit

Winter Sports

With winter coming up on us, this is a good time to review the accessibility requirements for newly constructed ice rinks, skating areas, and ski lifts.

Ice Rinks/Skating Areas: The surface of an ice rink must adjoin an accessible route of travel.

At each designated skating area at natural or man-made bodies of water, there shall be an accessible route or an accessible trail connecting at least one point at the water's edge to other elements at the site. One location per site satisfies these requirements.

Ski Lifts, Aerial Tramways, and Conveyors: In areas where ski lifts or other mechanisms are provided, there shall be an accessible route of travel connecting site access point(s) and support facilities with the area where the transfer to skis is made.

In areas where aerial tramways, conveyors or other mechanisms for sight-seeing are provided, an accessible route of travel shall connect site access point(s) and support facilities with the moving seat or car platform of the aerial tramway or conveyor. A five feet by five feet (5' X 5') clear, level area shall be provided immediately adjacent to the upper, lower, and intermediate terminal of these mechanisms to facilitate transfer from a wheelchair to the seat, car, or platform. Where seats are provided, they shall be at a height of 16 inches to 18 inches above the clear, level area.

A control shall be immediately available to the operator of the ski lift, aerial tramway or conveyor to stop and restart the mechanism to allow a person with a disability to transfer on and off.

Remember, this is not a retrofit requirement. These requirements apply only when the facilities are newly constructed or substantially altered. If you have questions, I can be reached at 609/530-8788.

Source: Gail Weikel
Code Development and Assistance Unit

Carports

Rigid canopies supported in whole or in part by structural members that rest on the ground may be used as carports. A structure like this should be designed so as not to present a hazard to its users. Because of the safety concerns, especially structural and fire safety, these structures require a construction permit under the Uniform Construction Code (UCC). They should be designed and constructed to withstand wind or other lateral loads and live loads. The shape of the canopy is an important factor with regard to snow build up and wind effects. The framework should be metal, adequately braced, and protected to prevent deterioration, such as rust or other decay. The covering attached to the structure is required to be flame resistant in accordance with NFPA 701 or to have a flame spread rating of 25 or less when tested in accordance with ASTM E84.

The provisions for these structures are in the BOCA National Building Code 1993 at Section 5105. Please call the Code Assistance Unit at 609/530-8793 with any questions.

Source: Farid Ahmad, P.E.
Supervisor, Code Assistance Unit

Say "Ah"

"You're the first inspector to ever ask for a throat inspection, what do you want to see?" Good question.

You would be hard-pressed to find inspectors or design professionals who agree on basic masonry fireplace design. Because masonry fireplaces are on the endangered species list and are being virtually displaced by the more affordable factory-built fireplace, this may be something you as an inspector have never inspected.

A throat inspection is cheap insurance to ensure a safe, efficient operation of a fireplace and should not be overlooked by the inspector. First, let's look at some key components of a fireplace.

Hearth: The hearth consists of two parts; the front and back hearth. Because the back hearth must withstand intense heat, it is built of heat-resistant materials (firebrick). The front hearth is a precaution against flying sparks. It must be noncombustible, but does not need to be able to resist intense prolonged heat. The hearth should extend a minimum of 16 inches beyond the face of the fireplace opening; for fireplaces with openings of less than 6 square feet, the hearth should extend at least 6 inches on each side of the fireplace opening.

Walls: The back and side walls of fireplaces must be constructed of solid masonry at least 8 inches thick and lined with fire brick at least 2 inches thick. The rear and side walls of the firebox must be constructed vertically to a minimum height equal to $1/2$ the fireplace opening height, at which point the rear and side walls must slant inward at a $22\frac{1}{2}$ degree angle. This is to reflect heat back into the room. The width of the walls should always be greater than the height in a correctly proportioned firebox.

Firebox: The firebox is the space or chamber in which the fuel is burned. The fireboxes of masonry fireplaces must have a minimum depth of 20 inches.

Lintel: A lintel must be installed across the top of the fireplace opening to support the above masonry. This usually is a $3\frac{1}{2}$ " \times $3\frac{1}{2}$ " \times $1/4$ " angle iron.

Throat: The throat is the area directly above the firebox. It forms the passageway from the firebox to the smoke chamber. The throat has tapered sides which should start 8 inches above the lintel. The area of the throat should be no less than that of the flue. Also, its length should be equal to the fireplace opening and have a minimum opening width of 4 inches.

Smoke Shelf: The purpose of the smoke shelf is to prevent down drafts from entering the firebox. It is the horizontal surface directly behind the throat for the full length of the throat. The depth of the shelf may be 8 inches to 12 inches or more depending on the depth of the fireplace. The smoke shelf should be concave to retain any slight amount of rain that may enter.

Smoke Chamber: The smoke chamber is the area from the top of the throat to the bottom of the first flue tile, generally 24". The sidewalls should slope inward approximately 60 degrees to meet the flue. The surface must be smooth in order for smoke and gases to pass upward freely.

Flue: The flue is the passage in the chimney through which the air, gases and smoke travel. Its size (area), height, shape, tightness and smoothness determine the effectiveness of the chimney in producing adequate draft and in expelling smoke and gases. Flues come in various materials, sizes and thicknesses. A good rule of thumb is to make sure the flue area is at least $1/10$ th of the area of the fireplace opening.

Damper: A damper consists of a cast iron frame with a hinged lid that opens or closes to vary the throat opening. It is important that the full damper opening equals the area of the flue.

As many of you may be aware, installation of some of these components is not regulated by the Uniform Construction Code. However, now that we know some of the key components of a fireplace, let's move on.

The inspector should make every effort to inspect once the first flue tile has been set. At this point, all the above components have been installed and their relative relationship to each other has been established and can be easily checked. One of the most critical inspection points is the relationship of the first flue tile to the damper in its full open position. The UCC requires a minimum of $1/2$ inch differential. That is, the flue must be set far enough *behind* the damper to maintain the $1/2$ inch minimum dimension. Improper positioning of these two components could aid in down drafts, the most undesirable and common complaint about fireplace operation. Checking all the above components, especially the position of the first flue, is commonly known as a throat inspection.

Consult the *CABO One and Two Family Dwelling Code*, Section 1003, *The BOCA National Building Code/1993*, Section 2114, and *The BOCA National Mechanical Code/1993*, Chapter 14, for additional construction requirements.

Source: Charles T. Herring
Supervisor, Bureau of Local Code Enforcement
Northern Regional Office

Update on Omega Sprinklers

This is an update of the article on Omega sprinkler heads that was published in the Summer 1997 *Construction Code Communicator* (Vol. 9, No. 2).

Recent admissions by the Central Sprinkler Company indicate that one model of sprinkler heads manufactured after June 6, 1996 may fail to operate because the company had not replaced the rubber O-rings used in the manufacture of these heads with silicone O-rings. Local code enforcement officials should check all new installations of Omega sprinkler heads to ensure that the heads being installed do not have rubber O-rings.

The sprinkler heads in question are the "Flow Control" series. These heads are identifiable by the "FC" stamped on the head. Heads manufactured in 1997 are stamped with "97" on the head. "FC-97" heads manufactured with a silicone O-ring have a red dot on either the deflector or heat collector or both. The only 1997 FC heads which should be approved are those with the red dot.

The Division of Fire Safety is advising all local fire officials to have building owners send heads out for testing in existing installations where these heads have been used. For further information, please call John Terry at 609/530-8793.

Source: John Terry
Code Assistance Unit

Inspection of Elevator Devices and Relevant ASME A17.1/A90.1

Although those involved in the enforcement of the Elevator Subcode agree that the enforcement process is clear, complaints from building owners, elevator companies, consultants, and elevator inspectors have made it clear that one major principle of the Subcode's enforcement must be emphasized. Subchapter 12 is not a retrofit subcode. Therefore, the inspecting officials are required to determine, for every elevator device inspected, the edition and year of ASME A17.1/A90.1 that was in force at the time of the installation or major alteration of the device. The Uniform Construction Code (UCC) process gives an owner the right to appeal decisions of the enforcing agencies, including the edition of the A17.1/A90.1 standards that have been determined by the elevator inspector to be applicable. Remember that inspection for conformance to the wrong edition of the standards can lead to the citation of "false" violations, which poses a burden to building owners.

It is essential for proper enforcement that the applicable standards, including the edition(s), are noted on the forms that are forwarded to the owners. The Elevator Inspection form has been revised to ensure that an owner is given this information. The revised form (UCC F310-1, Rev. 3/96) includes section "F Applicable Codes" where the code(s) and the edition(s) must be documented for every device inspected or reinspected by the enforcing agency.

If you have any questions, I can be reached at 609/530-8833.

Source: Paulina Caploon
Manager, Elevator Safety Unit

Here We Go Again

I hope you have all become used to the gas appliance venting tables that came out a few years ago. If you have been following this issue, you will recall that, as the Federal Department of Energy bumped up appliance efficiencies, the venting of the appliances changed. Increased efficiency meant lower flue gas temperatures and lower flue gas temperatures meant new concerns about flue gases condensing.

The simple rules of venting then became more complex. Bigger was not always better; bigger was not always even allowable. Because the current mechanical subcode (*The BOCA National Mechanical Code/1993*) does not address these concerns, we have advised officials to rely on the manufacturer's recommendations to ensure that the proper size vent is installed.

With that said, it appears that the other shoe is about to drop. Oil appliances have also been affected by Federal Energy Standards. Oil appliances normally have higher flue gas temperatures than gas appliances. Perhaps that is why the need to address oil appliance venting has lagged behind the revisions to gas appliance venting. Nevertheless, it appears the oil appliance vent revolution is here.

The latest edition of NFiPA 31 contains an appendix for venting oil appliances. The appendix discusses relining existing chimneys when new oil appliances are installed. The appendix bases vent size on the firing rate of the appliance, the efficiency of the appliance, the height of the chimney, and the connector lateral distance. According to people from the industry, these tables were included in the latest edition of NFiPA 31 to address condensing flue gases. Unlike gas appliances, using these tables can actually result in a chimney or vent that is smaller in area than the appliance outlet. This creates a conflict with Section M-1201.3 which requires that the chimney or vent shall be at least as large as the appliance connection.

It appears that the code may have fallen out of step with technology. Product manufacturers should provide installation instructions to ensure that the proposed venting arrangement is compatible with the equipment being served. We will provide additional information as it becomes available.

Source: Mike Baier
Code Assistance Unit

UCC Act Update

NEWS FLASH!!!! The Uniform Construction Code (UCC) Act has been updated and has been included with your October 20th update to the Uniform Construction Code book. Thereafter, the UCC Act will be updated yearly, in March. (Bet you thought we forgot about it, but never doubt the Department of Community Affairs.)

Source: Joanne McDonald
Fiscal Unit
Division of Codes and Standards

A New Jersey BOCA Code

The Building Officials and Code Administrators (BOCA) Building Code/1996 may print in an edition for New Jersey code officials reflecting the changes to BOCA 1996 made upon adoption. Although many code enforcement offices have already bought *The BOCA National Building Code/1996*, those that have not or those that need some extra copies might want to wait for the publication of New Jersey/BOCA following the adoption of the 1996 model codes, targeted for Spring 1998. We will keep you posted.

Source: Code Development
Division of Codes and Standards

Asbestos Variations

A code change to *N.J.A.C. 5:23-3.11* and *N.J.A.C. 5:23-8.4*, adopted September 15, 1997, requires that *all* variations to the Asbestos Hazard Abatement Subcode be submitted to the Department. The Department has been particularly concerned about variation requests for work in occupied buildings because of the possible health and safety impact.

The Department believes that the uniform application of the subcode can be ensured if all variation requests are submitted to the same location. Unlike individual local offices, the Department processes a volume of asbestos work and employs people with more specialized asbestos training than is required of a local official.

Source: Chrystene Wyluda, Supervisor
Asbestos and Lead Abatement Unit

Elevator Records Management 105

1. With constant changes of elevator subcode jurisdiction, especially from third party agencies to local jurisdiction, a problem has arisen with the new entity removing old machine room inspection cards to replace them with those showing the new inspection authority. We have one word for this practice: DON'T. The old cards provide an on-site inspection history for any interested party and should be left in place.

2. Many towns use the Ongoing Inspection Schedule (UCC Form F-300A). This is an optional form which, as its name implies, is to be used for scheduling inspections. It should be clear that this is used *prior* to the inspections themselves. This form is not interchangeable with the Ongoing Inspection Log (UCC Log L-730 Rev. 6/96) which is required to be used to document all elevator inspections *after* they have been made.

3. With the elevator subcode, many local enforcing agencies allow the control person to sign certificates for the Construction Official by writing his or her name and initialing. In order to show that this is approved policy, as well as to protect both individuals, execute a memo or letter detailing the policy, including any exceptions, and keep it on file at the agency for future clarification. Direct any related questions to me at 609/530-8833.

Source: Phil van Leeuwen
Elevator Safety Unit

Licensing Unit Update

Due to some recent occurrences in the licensing process, the Licensing Unit will no longer accept copies of course completion certificates, nor will we accept copies of score reports for results from the National Certification exam. Only originals will be accepted. These originals will become part of your perma-

nent file. If you intend to apply for licensure, and want to retain proof of completing the courses and tests for your own records, then it is suggested that you make a copy of the certificate or report for yourself, prior to submitting the application for licensure, since we will not return originals submitted for inclusion in your file.

If you have any questions regarding this new policy, or any other questions regarding licensing matters, please call me at 609/530-8803.

Source: John A. Delesandro, License Examiner
Bureau of Code Services

Construction Code Inspector Testing

The Chauncey Group has informed the Department of Community Affairs that the available seats for construction code inspector testing are filling up quickly. Beginning in 1998, all tests will be given on computers at Sylvan Learning Centers. This change will provide more testing days, but the available seats are limited by the size of the Sylvan Learning Center. Each Center has at least four seats; most have 16 seats, but some have as many as 20 seats. So, those who want to be sure to be able to test during a particular testing window must *register early*.

Also, the old registration forms that were used for the paper and pencil tests have been replaced by forms for the computer based tests.

If you have any questions about this, please call the Chauncey Group at 609/720-6500.

Source: Emily Templeton
Code Development

UCCARS and Windows 95

The Department has become aware of problems with UCCARS and Windows 95. The problems related to Windows 95 have been problems with indexing. These problems are directly related to the improper closure of UCCARS. UCCARS must be exited *entirely* in order to ensure that the data files are properly indexed. Improper shutdown of the UCCARS software results in corrupt indexes.

Symptoms of the problem include:

1. An inability to input inspections, payments, or adjustments.
2. Reports do not show proper figures and have missing permits, missing fee.

To correct the problem, simply be sure to completely exit UCCARS.

Source: Larry Wolford
Team UCCARS
Division of Codes and Standards

Use Group and Census Item Numbers for UCCARS Data Entry

Use Group	Valid Census Item Numbers		Use Group	Valid Census Item Numbers	
A-1	NEW	318	I-2	NEW	323, 324
	ADD/ALT	437, * 999		ADD/ALT	437, * 999
	DEMO	649		DEMO	649
A-2	NEW	318, 327	I-3	NEW	328
	ADD/ALT	437, * 999		ADD/ALT	437, * 999
	DEMO	649		DEMO	649
A-3	NEW	326, 327	M	NEW	327
	ADD/ALT	437, * 999		ADD/ALT	437, * 999
	DEMO	649		DEMO	649
A-4	NEW	319	R-1	NEW	213
	ADD/ALT	437, * 999		ADD/ALT	434, * 999
	DEMO	649		DEMO	649
A-5	NEW	318, 329	R-2	NEW	214, 105
	ADD/ALT	437, * 999		ADD/ALT	434, * 999
	DEMO	649		DEMO	647, 648
B	NEW	324, 327	R-3	NEW	101, 103
	ADD/ALT	437, * 999		ADD/ALT	434, * 999
	DEMO	649		DEMO	645, 646
E	NEW	326	R-4	NEW	101, 103
	ADD/ALT	437, * 999		ADD/ALT	434, * 999
	DEMO	649		DEMO	645, 646
F-1	NEW	320	S-1	NEW	327, 328
	ADD/ALT	437, * 999		ADD/ALT	437, * 999
	DEMO	649		DEMO	649
F-2	NEW	320	S-2	NEW	327, 328
	ADD/ALT	437, * 999		ADD/ALT	437, * 999
	DEMO	649		DEMO	649
H	NEW	320, 328, 329	U	NEW	328, 329
	ADD/ALT	437, * 999		ADD/ALT	437, * 999
	DEMO	649		DEMO	649
I-1	NEW	323, 105			
	ADD/ALT	437, * 999			
	DEMO	649			

** 999 refers to single trade alterations (also cited as O/S)

Common Building Types and Use Groups

Restaurant	A-3	Tents	U
Church	A-4	Sheds	U
Bakery	F-1		

Source: Larry Wolford
 Team UCCARS
 Division of Codes and Standards

Imperfect Modems in a Perfect World

Generic modems (no brand name available) pose a particular problem for UCCARS software users. The problem first becomes obvious when the modem will no longer respond to the setup in Crosstalk XVI. Sometimes the symptoms include "Waiting for Strings" messages even though you may not hear the modem dial out or connect.

To correct the problem: Edit the file uccsend.xts and insert the line, "do hang up" before the "quit". The uccsend.xts file is located in either the XTALK directory (UCCARS SYSTEM II) or \UCCARS\UCCARS.CMM subdirectory (UCCARS SYSTEM I).

Source: Larry Wolford
Team UCCARS
Division of Codes and Standards

New Jersey Register Adoptions

Date: September 15, 1997

Adoption: 29 NJR 4102(a), 4102(b) and 4103(a)

Summary: N.J.A.C. 5:23-2.20(c) The amendment at *N.J.A.C. 5:23-2.20(c)* requires that the contractor who performs work on a chimney certify the work or notify the local code officials for an inspection.

N.J.A.C. 5:23-3.11 and 8.4 The amendment at *N.J.A.C. 5:23-3.11* revises the list of functions reserved to the Department. These include the enforcement of Barrier-Free Recreation Standards, the repeal of the indoor air quality provisions, and the authority to grant variations from the Asbestos Hazard Abatement Subcode. There is a companion amendment at *N.J.A.C. 5:23-8.4* which specifies that variations from the Asbestos Hazard Abatement Subcode are to be submitted to the Department, which has sole jurisdiction.

N.J.A.C. 5:26-4.5 The amendments at *N.J.A.C. 5:23-4.5(b)* and *(c)* make minor changes to four standard forms. Two standard forms which relate to construction boards of appeals have been deleted.

Date: October 6, 1997

Adoption: 29 NJR 4281(a), 4285(a), 4286(a) and 4287(a)
Adopted amendments: *N.J.A.C. 5:23; 1.4, 2.38, 3.2, 3.11, 3.11A, 4.2, 4.9, 4.10 and 4.11; 3.4 and 4.18; 4.5.*

Summary: N.J.A.C. 5:23-1.4, 2.38, 3.2, 3.11, 3.11A, 4.2, 4.9, 4.10 and 4.11 The Governor's Reorganization Plan transferred the responsibility for construction plan review for public schools and health care facilities from the Department of Education and the Department of Health, respectively, to the Department of Community Af-

fairs. These amendments consist of changes to the Uniform Construction Code rules that are necessary to conform to the Reorganization Plan.

N.J.A.C. 5:23-3.4 and 4.18 The amendments at *N.J.A.C. 5:23-3.4(j)1* and *4.18(c)5* allow a plumbing inspector to enforce all provisions of the code, except electrical, for the replacement of heating or cooling equipment or water heaters in Use Group R-3 or R-4 structures.

N.J.A.C. 5:23-4.5 The amendment a *N.J.A.C. 5:23-4.5(j)1* modifies the inspection requirement in case of conflict of interest. The mandatory requirement to have inspections done by another code enforcing agency has been relaxed when the local code enforcing agency has a qualified individual who is not the subordinate of the person who is in the conflict situation. A separate log of such inspections is also required. It is the responsibility of the person who is in the conflict situation to identify the conflict.

Date: December 1, 1997

Adoption: 29 NJR 5062(a)

Adopted amendment: *N.J.A.C. 5:23-3.8a*

Summary: N.J.A.C. 5:23-3.8A The rules requiring electrical fixtures and devices to be listed have been amended at subparagraph (d)2i to make it clear that products bearing the CSA/NRTL (Canadian Standards Association/Nationally Recognized Testing Laboratory) listing are acceptable in the same manner as are listings by UL (Underwriters Laboratories, Inc.) or FM (Factory Mutual). The amendment at subparagraph (d)3i permits the use of transition glues for joining ABS and PVC pipes. This amendment is in accordance with the adopted plumbing subcode (National Standard Plumbing Code). A new provision at subparagraph (d)3vi has been added to make it clear that water closets, lavatories, bath tubs and other fixtures must meet appropriate ANSI standards listed in the plumbing subcode. This prohibits the use of substandard and non-conforming foreign made products.

Source: Farid Ahmad, P.E.
Supervisor, Code Assistance Unit

DCA: On the Web

We have been asked to provide DCA's web site address.

It is: <http://www.state.nj.us/dca/dcahome.htm>

The web site includes DCA's newsletter and other general information.

Source: Code Development
Division of Codes and Standards

Building Safety Conference 1998

Construction Officials, Inspectors, Control Persons and interested parties, mark your calendars now! The annual Building Safety Conference of 1998 will be held in Atlantic City on May 13th through May 15th. This year the conference will be held at a new center: Bally's Park Place. Save these dates and plan to join us at this annual gathering. All code officials are invited to participate. At this time, fees have not been determined, but there will be an early registration rate. The hotel will be setting aside two blocks of sleeping rooms at a special rate of \$85.00 per room in the hotel or \$110.00 per room in the tower.

For the golfers, the third annual golf outing will take place on Wednesday, May 13th. Please consider being a sponsor or a player or, better yet, get together a "foursome". An interesting spouse's program is being planned that will include a day trip and two special activities.

A brochure will be mailed in early March with more information on all these events. We look forward to seeing you in Atlantic City in the spring!

Source: Education Unit
Bureau of Code Services



*Best Wishes
for a
Happy New Year*

