Eastwood Office Center, Suite 22
810 S. Eisenhower Boulevard
Middletown, PA 17057

P.O. Box 68
Highspire, PA 17034-0068

717/902-0210
Fax 717/902-0290
info@ppmcsa.org

PPMCSA
PETROLEUM MARKETERS & CONVENIENCE STORE ASSOCIATION

October 7, 2002

The Honorable Robert J. Flick, Chairman
House Labor Relations Committee
Main Capitol, Room B-32C
Harrisburg, PA 17120

Dear Representative Flick:

Thank you for allowing our comments at the committee meeting on October 3. As we promised, we are placing our verbal presentation in written form for the committee's consideration.

When the original legislation was passed, we contacted the PA Dept. of Labor & Industry (DLI) and were informed that national construction and energy utilization regulations would be adopted. Our association was not contacted nor was it aware of the Pennsylvania Housing Research Center (PHRC) Alternative to Chapter 11 of the International Residential Code (IRC).

The national code allows for flexibility in the mix of furnace efficiency, amount of window area, insulation and construction values. It rewards the use of higher efficiency furnaces by reducing other construction costs and does not limit fuel type arbitrarily. Several calculations must be made to determine compliance, but this work can be done in an office environment from building plans.

When the proposed rulemaking was published for comment on August 24, 2002, we became aware of the PHRC Alternative to Chapter 11 of the IRC, which was produced by the PHRC.

According to the preface of the PHRC Alternative, "Act 45 requires the PA DLI to promulgate regulations to implement the requirements of the legislation and, in addition, to consider (emphasis added) the development of alternative prescriptive methods for energy conservation that account for the various climatic regions within the Commonwealth. In deriving these energy standards, the PA DLI was to seek to balance energy savings with initial construction costs."

The rationale for the PHRC to develop an alternative version of Chapter 11 of the IRC 2000 was:

That it was simpler;
That it was more flexible;
That it focused on Pennsylvania in terms of climatic and other conditions;
That it was equivalent to the provisions of the IECC 2000; and
That it was independent, as far as possible, of other documents, etc.

The authors also may have felt that the alternative would be utilized by small-volume builders who do not have a large support staff.

Unfortunately, the "advantages" listed above are not available to builders or consumers wishing to use oil heating equipment. The inherent cost savings in using higher-efficiency equipment and reduced costs of other construction are another advantage lost.

We believe that the Alternate Chapter 11 discriminates against oil equipment simply by using a threshold annual fuel use efficiency (AFUE) of 90%.

Our first choice in this matter would be to discard Alternate Chapter 11 because the "simplification" utilized certainly pushes users toward gas as the easy, more-flexible method of compliance. It is not apparent to us that an alternative is required.

As our second choice, in the interest of fairness and to avoid the appearance of a fuel bias, we suggest that one or two additional sets of tables be created starting at 80% AFUE, with corresponding changes in the other values. The same model used to create the presently proposed tables could be utilized.

According to information produced by the Gas Appliance Manufacturers Association (GAMA) for its Directory of Gas and Oil Equipment, the following AFUE ranges apply:

Gas Furnaces	78-96.6 AFUE
Gas Boilers	80-99 AFUE
Oil Furnaces	78-86 AFUE
Oil Burners	79-90.1 AFUE

We wish to thank you for hearing our comments.

We respectfully request that the committee include our concerns in its comments to Labor & Industry and the Independent Regulatory Review Commission.

Sincerely,

John V. Kulik

John V. Kulik
Executive Vice President

JVK:mjw

COMMENTS OF

THE PENNSYLVANIA PETROLEUM MARKETERS & CONVENIENCE STORE ASSOCIATION

ON:

PROPOSED RULEMAKING
TITLE 34 LABOR & INDUSTRY
UNIFORM CONSTRUCTION CODE

JOHN V. KULIK
EXECUTIVE VICE PRESIDENT

SEPTEMBER 20, 2002

The Pennsylvania Petroleum Marketers and Convenience Store Association (PPMCSA) represents over 450 petroleum marketers from all areas of the Commonwealth. The majority of these firms supply home heating oil to residences and other buildings, as well as installing and servicing oil-fired and other mechanical equipment. Over 1.2 million housing units, which represent over 25 percent of all housing units in the state, are heated with oil.

We recently became aware of the "Code for the Conservation of Space Conditioning Energy for Housing in Pennsylvania: PHRC Alternative to Chapter 11, Energy Efficiency, of the International Residential Code (IRC) 2000" for use in Pennsylvania.

It is difficult to evaluate the substitute prescriptive methods in PHRC 11, without the relative studies assuring that it is equal to or better than the IRC, Chapter 11.

Why is it found desirable to adopt the "2000 IRC" made up of 42 chapters and 12 appendices and the "2000 International Energy Conservation Code" (IECC) made up of 9 chapters with the one exception, chapter 11?

Further, we feel that more timely versions of both IRC and IECC will be available for adoption shortly, so it will be counterproductive to base our state requirements on standards that are out of date.

The PHRC alternative, as well as restating values for the building envelope which appear to be less stringent than the values in the IRC, also introduces its own partial or piecemeal requirements for "high efficiency tradeoffs, table PA 1103.6." The rationale is commendable but appears to be a "single source specification" dictating the use of one fuel type over others by using a favorable efficiency value.

The difference in energy saving between 80 or 85 AFUE versus 90 AFUE is not that significant when the corresponding envelope value reductions may vary between 20% to 25% from the 2000 IRC values.

It would appear that the rationale for the PHRC alternative is open to question, since neighboring states and other areas of the country do not seem to have problems with the requirements of the 2000 IRC.

Deliverable fuels, such as home heating oil, are used extensively in rural areas, which may be less affluent and in colder zones. These consumers would be required to use 2000 IRC, since commonly available oil furnaces have AFUE ratings of 80 to 85. Oil and gas-fired boilers would not qualify for the high efficiency tradeoff in any part of the state, since efficiencies are below 90 AFUE.

We respectfully request that the PHRC alternative be critically reviewed by design consultants before being adopted. More supporting data is needed for the statements made by PHRC and for the "new" insulation, wall and window standards proposed, or adopt the latest version of the IRC.

Wolf Block Government Relations LP

212 Locust Street, Suite 600, Harrisburg, PA 17101
Tel: (717) 234-8525 ■ Fax: (717) 234-8812 ■ www.WolfBlockGov.com

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Original: 2283

Richard J. Gmerek, Esquire
Direct Fax: 717 237 2760
E-mail: rgmerek@wolfblock.com

October 23, 2002

Ms. Mary Lou Harris
Independent Regulatory Review Commission
14th Floor, Harristown 2
333 Market Street
Harrisburg, PA 17101

Dear Ms. Harris:

Thank you again for meeting with us last Friday regarding the Department of Labor and Industry's proposed U.C.C. regulations. The suggestions made by you and your staff were helpful and very much appreciated.

As to the proposed testing requirements for oil hydraulic elevators, we hope that you will urge the department to reconsider their proposed testing schedules. The current American Society of Mechanical Engineers (ASME) Code, which was adopted in 2002, requires annual testing of these devices. The national code, developed by national experts with access to nationwide trends, recognized the increasing frequency with which these devices are failing. We believe the department is overlooking a potential safety issue in their recommendations. While our client, P.M. Associates, will continue to push the department on this issue, your consideration of their, and our, comments is appreciated. As to the matter involving the certification of existing elevator inspectors, our conversation about amending the definition section of the current proposed regulations is an option we plan to pursue with the department.

We look forward to working with you and your staff as these regulations proceed under the next Administration. Please do not hesitate to contact us if we can provide any additional information on this matter.

Sincerely,

Richard J. Gmerek
President and CEO

Chris P. Lammando

DSG:3442.1/PMA002-900029

Original: 2283

TRIAD
STRATEGIES

October 10, 2002

Mr. John H. Jewett, Regulatory Analyst
Independent Regulatory Review Commission
14th Floor, Harristown 2
333 Market Street
Harrisburg, PA 17101

Dear Mr. Jewett,

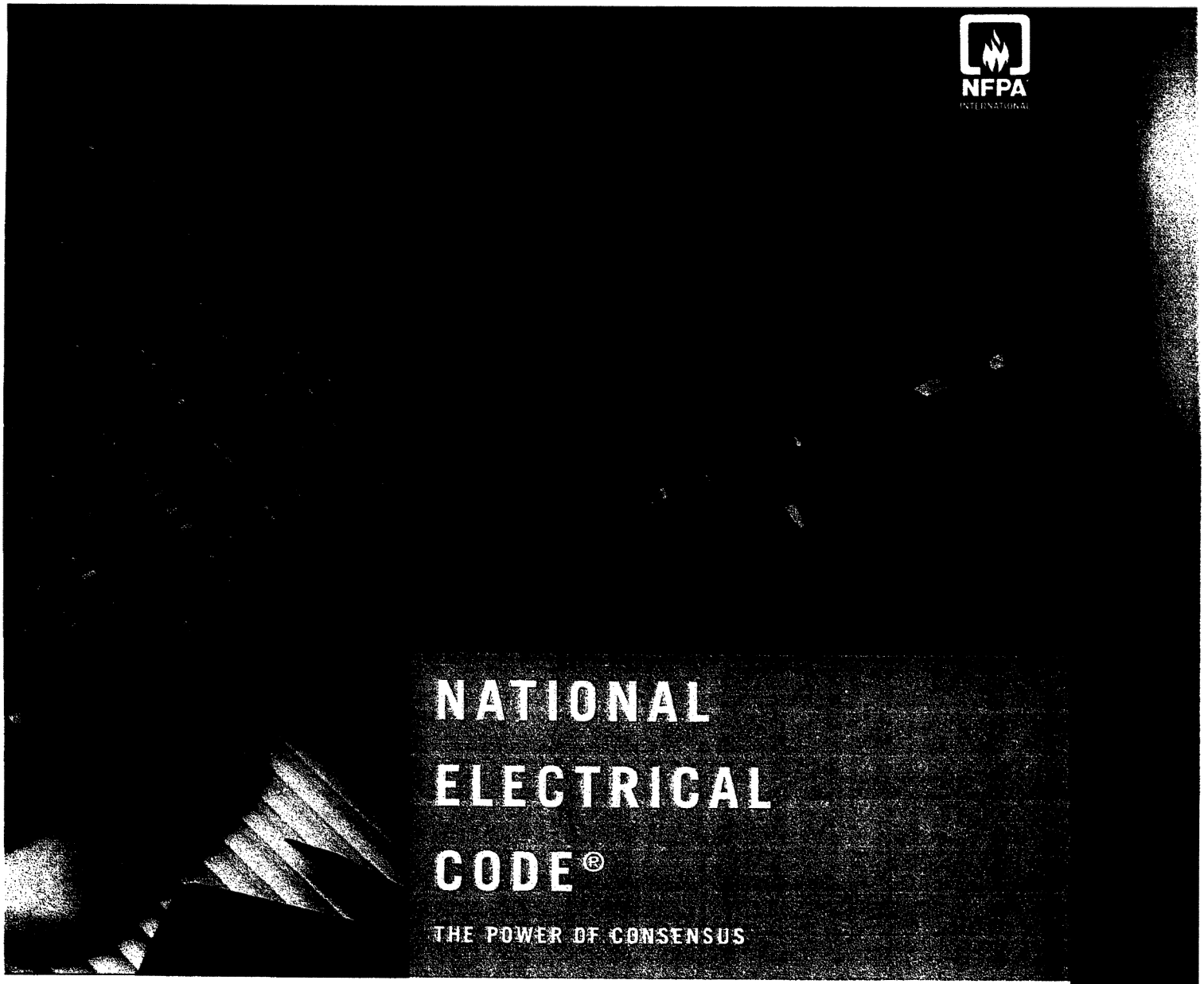
Per Jonathan Bigley, please find enclosed the supporting documents and information you requested. If you have any questions or concerns, or would like help contacting the National Electrical Contractors Associations, please feel free to contact me at (717) 238-2970 x 239.

Thank you.

Sincerely,

Jennifer M. Van Buskirk

Jennifer M. Van Buskirk
Executive Assistant
Government & Corporate Relations



NFPA
INTERNATIONAL

NATIONAL ELECTRICAL CODE®

THE POWER OF CONSENSUS

nec®

FOR YOUR SAFETY

NFPA 70, National Electrical Code® (NEC) is considered to be the blueprint for electrical safety throughout the world. The NEC focuses on the proper installation of electrical systems and equipment to protect people and property from the potential dangers of electricity. The quality of the NEC makes it the most widely used and adopted code for electrical installations.

Electricity — a powerful energy source that affects nearly every aspect of our lives. Whether we are turning on a computer or relying on important medical equipment during a hospital stay, we depend on electricity. Its use is pervasive in our homes, our workplaces, and in technologies that arise every day. Because electricity is all around us, it is vital that it be used safely.

NFPA 70, *National Electrical Code*, also known as the NEC, is a major factor in the safe, reliable use of electricity. Developed by the National Fire Protection Association (NFPA), the NEC provides practical safeguards against the potential electrical hazards to people and property.

The NEC's requirements help ensure that all electrical installations and functions are safe and effective, whether they occur in a public or private building, recreational vehicle, or a stadium. And because of the process NFPA uses to develop safety codes and standards — one based upon science and consensus — the NEC is internationally accepted; it is the basis for all electrical codes in the United States and many around the world.

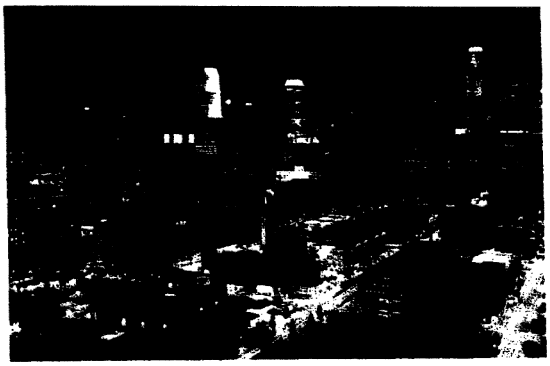
This widespread acceptance, in addition to the NEC's past safety performance, allows us to use higher levels of electrical capability more safely than at any other time in our history. With the increasingly complex electrical demands and requirements of the information age — driven by technologies dependent on electricity — the NEC is clearly the code of choice for new and emerging technologies. Electrical usage today and tomorrow is better and safer because of the NEC.

"The NEC is the single most widely accepted element of a building code in the U.S. and possibly in the world."

— Jack Wells

Pass & Seymour/Legrand

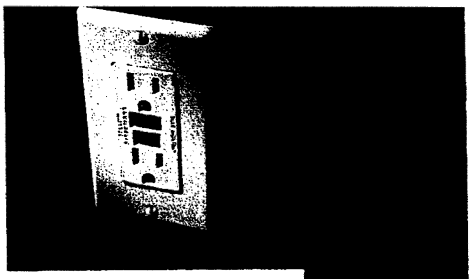
THE NEC IS USED AND ADOPTED GLOBALLY, AND ITS REQUIREMENTS AFFECT 40 PERCENT OF THE WORLD'S ELECTRICITY.



A TRADITION OF SAFETY

"For years, U.S. industry has recognized that the safety and reliability of our national power systems depend on having a single national electrical standard; the National Electrical Code."

Resolution of the Independent Electrical Contractors, Inc.



Ground-fault circuit-interrupter (GFCI) protection, a key safety provision of the NEC, is required for certain receptacle installations. By limiting the flow of current when activated, GFCIs protect users from the intensity of electric shock and electrocution.

With the prevalence of electricity in modern life, proper protection from electrical hazards is as much a safety concern today as it was with the advent of electricity. In the earliest days of electric lighting, no codes existed and installers and manufacturers were forced to improvise. Later, conflicting codes were in use throughout the United States, resulting in controversy and confusion. Concerns over the increase in electrical fires, the safety of electricity, and whether necessary safeguards were in place demonstrated the need for a national code for electrical construction and operation. At the time, existing codes were collectively used as the basis for a single comprehensive document. And in 1897, less than 20 years after Edison introduced the incandescent light bulb, the first edition of the NEC was published.

Since that time, state and local governments across the country have used the NEC to provide for safe installations and the safe use of electricity in their communities. Since then, the widespread international acceptance of the NEC has contributed to its long and chronicled history of helping to save lives globally.

As electrical equipment has become more complex and widespread, the NEC has adapted to meet new challenges. Revised every three years to allow for new technologies and improved installation safety practices, the code is the most detailed of any code or standard. As a result, the NEC is a ready-to-use, comprehensive code suitable for adoption.

"The National Electrical Code is the best in its class. NFPA 70 provides practical safeguards and is the premier electrical installation code available anywhere."

— James T. Pauley
Square D Company

NEC: WORKING FOR SAFER HOMES

- *Establishes requirements for both placement and safety features of receptacle outlets*
- *Sets wiring standards and other construction specifications*
- *Used to develop new appliances and to test procedures to determine their safety*
- *Referenced to bring power from the utility to your home*

NEC: POWERFUL COMMERCIAL BENEFITS

- *Reduces corporate liability by providing safeguards, especially in hazardous environments*
- *Enhances proper equipment performance, increasing worker productivity*
- *Universally recognized and adopted, resulting in savings because of design uniformity and standardization*
- *Developed to allow for the safe use of cutting-edge technologies*

THE NEC ..

THE CHOICE FOR ELECTRICAL INSTALLATIONS

- *The most widely recognized and adopted safety code in the world*
- *Conforms to the newest technologies*
- *Clearly written with enforceable language*
- *Suitable for adoption as law*
- *Developed through an open, consensus-based, democratic-type process*
- *Allows for maximum input from all interest categories*

REFERENCE MATERIALS AVAILABLE TO SUPPORT NEC USERS:

NEC Handbook • Electrical Inspection Manual • NEC Expert Video Series

The NEC is developed by more than 450 volunteer members and alternates, representing electrical contractors, designers, inspectors, and manufacturers; electrical testing laboratories; electricity suppliers and utilities; as well as enforcing authorities, insurance organizations, labor, and other users. These volunteers are organized into 20 code-making panels, balanced to ensure fair representation of affected interests. An 11-member correlating committee oversees the efforts of the panels. Because the process utilizes a comprehensive pool of professional expertise and safety knowledge, the resulting code protects the public while allowing for advances in design and development.

Fundamental to the development of the NEC is full and open discussion. No single interest group may dominate a code-making panel. In fact, anyone may respond to a call for proposals or public comments to offer suggestions for changes to the next edition of the code. In addition, the code-making panels are required to respond to every proposal or comment. Each NEC code-making panel includes a balance of affected interests. The panel reviews every proposal, takes action, provides comments, and prepares a report for the general NFPA membership. Before the NEC is published, members of the public can provide input. All NFPA members, representing a wide variety of interests, have the opportunity to vote on the proposed code.

In addition to being open to all, the development of the NEC is a thorough and detailed process. The procedure takes place over an extended period of time, providing interested parties the opportunity to review and comment on any proposed modification. Thanks to the integrity of the process and the professionalism of the volunteers who serve in it, the end result is the most up-to-date and high-quality electrical safety code available anywhere.

The American National Standards Institute (ANSI) accredits the process by which the NEC and all NFPA codes and standards are developed. NFPA is now using its time-tested, ANSI-accredited code development process to complete a full set of codes for the built environment. The NEC will be accompanied by other codes, including NFPA 1, *Fire Prevention Code*™, NFPA 54, *National Fuel Gas Code*®, NFPA 101, *Life Safety Code*®, and the proposed NFPA 5000, *Building Code*™, among others, to form the first comprehensive set of codes developed through true consensus. In addition, NFPA has established key partnerships with other code development organizations to aid in the development of a full set of codes.

"NFPA's consensus-development procedures combine the input of many different expert groups to create the National Electrical Code — a pillar of public safety in this country. No electrical code can match the track record and authority of the NEC."

— H. Brooke Stauffer
National Electrical Contractors Association (NECA)

INDUSTRYWATCH

NEWS FROM THE POWER AND INTEGRATED BUILDING SYSTEMS INDUSTRY

→ Davis Inks Electrician Certification Bill

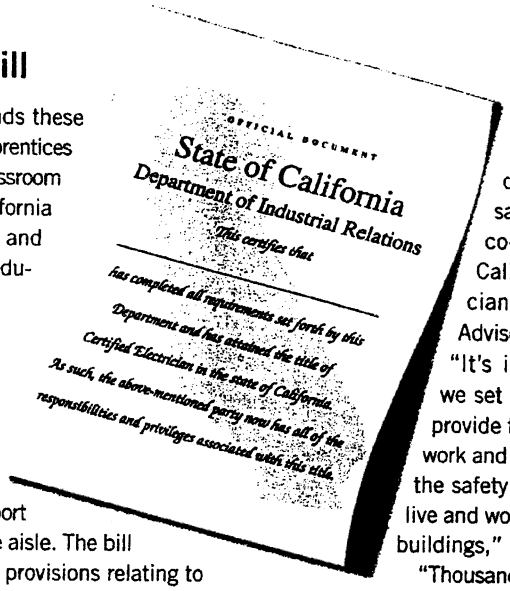
CALIFORNIA GOVERNOR GRAY DAVIS signed Assembly Bill 1087 (AB 1087), which requires all California electricians to earn state certification by meeting specified requirements.

With AB 1087 now law, California will be joining more than 28 other states that already have state-mandated electrician certification guidelines in place when certification requirements go into effect on January 1, 2005.

Unlike acupuncturists, beauticians, locksmiths and even boxers, all of whom need a state certificate or license to practice, construction electricians do not have to be certified to work in California.

Previously enacted legislation, the new law provides several mechanisms for electricians to obtain certification from the Department of Industrial Relations. Journeymen electricians can pass a competency examination, while electrical apprentices are required to first complete a state-approved apprenticeship program to qualify for the exam.

In addition to classroom training, electrician apprentices are also required to complete thousands of hours of on-the-job training. AB 1087 expands these provisions to allow apprentices to obtain required classroom training through California community colleges and school district adult education programs.



AB 1087 was introduced by Assembly Member Tom Calderon, D-Montebello, and passed the legislature in May with support from both sides of the aisle. The bill also includes various provisions relating to issuance of certification cards to electricians, collection of registration fees, and establishment of an educational curriculum for apprentices.

Both the National Electrical Contractors Association (NECA), representing contractors, and the International Brotherhood of Electrical Workers (IBEW), representing electricians, support the new certification law.

"Electricians come into our homes, schools and businesses and have a tremendous impact on everyone's day-to-day life," said Mike Sloan, co-chair of the California Electrician Certification Advisory Committee. "It's important that we set standards that provide for high quality work and that we ensure the safety of people who live and work in California buildings," he added.

"Thousands of electrical-related fires occur in California every year. This legislation is all about raising industry standards and increasing safety to create better electricians," Sloan said. "Without certification, there is no criteria in California for people doing electrical work. Right now, anyone can call themselves an electrician. This new law will help ensure that all electricians have been trained and tested." **EC**

→ California Attorney General Bans ICC Codes

THE CALIFORNIA ATTORNEY GENERAL'S office has ruled that local jurisdictions are not permitted to adopt model building codes other than those referenced in the California Building Code. California adopts and enforces the *National Electrical Code* (NFPA standard 70), with some amendments, as its statewide wiring rules.

Specifically, the ruling invalidates City of Pasadena Ordinance No. 6847, which had adopted for regulatory use a number of codes published by the International Code Council (ICC). The attorney general's opinion number 01-306 stated that the ordinance "is not consistent with state law," and that the state's "Code preempts local regulations as to building standards."

Section 104.2.8 of the 1998 California Building Code permits the use of alternate designs or construction methods based on "sufficient evidence or proof" being submitted to building officials to substantiate any claims that the substitute design or method is equivalent to that required by state law.

However, the attorney general's decision stated that any departure from the California Building Code must be on a case-by-case, project-by-project basis: "That statutory authority is not subject to delegation to a third party such as the publishers of the International Codes. The legislative mandate, that building codes be uniform throughout the state, would otherwise be effectively thwarted."

The National Electrical Contractors Association applauded California's action. "We support uniform adoption of the *National Electrical Code* as the nation's safe wiring rules," said Brooke Stauffer, NECA's executive director for standards and safety. "The ICC, as an organization of non-electrical building officials, has no business trying to publish and promote an alternate electrical code of its own. The *NEC* has been doing an excellent job of protecting public safety for more than a century now."

To read the full opinion by the California attorney general's office, visit http://caag.state.ca.us/opinions/published/01-306.pdf. **EC**

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[redacted] almost 100 million miles around the world. However, due to a shortage of high-speed, local-access connections and a decline in telecommunications infrastructure investments, only five percent of this fiber is actually being used, reports the *New York Times*.

INFORMATION TECHNOLOGY upgrades are resulting in increased profits, say 86 percent of the design firms surveyed by the Newton, Mass.-based market research firm PSMJ Resources, Inc. However, close to two-thirds of the survey's respondents also report that IT costs are too high.

CUTTING MOTOR COSTS is the goal of a new campaign, *Motor Decisions Matter*. By providing end-users with planning tools, the sponsoring consortium of manufacturers, trade associations, utilities and government agencies hope to help increase motor efficiency and reduce energy costs.

MORE M/E FIRM WEB SITES are being utilized for project management, marketing and recruiting, concludes a recent study by the Natick, Mass.-based market research firm ZweigWhite.

ICC ELECTRICAL CODE UNDER FIRE FROM INDUSTRY COALITION

In response to the International Code Council's (ICC) announcement "that it has no plans for the development of an electrical code that would duplicate the purpose and then compete with the National Electrical Code (NEC)," a coalition of electrical industry organizations has called for the ICC to formally rescind its ICC Electrical Code.

The Inspection Initiative—a consortium of groups including the National Electrical Contractors Association (NECA), the National Fire Protection Association (NFPA), Edison Electric Institute, the National Electrical Manufacturers Association and Underwriters Laboratories—has also requested that the ICC cease distribution of any promotional materials or draft documents that would encourage jurisdictions to adopt the ICC Electrical Code.

But the Falls Church, Va.-based ICC has no plans to abandon its electrical code.

"Some people are saying that we're trying to compete with the National Electrical Code and we have no intention of doing that," explains Richard P. Kuchnicki, ICC's executive vice president. "Our code is not like the NEC. The ICC Electrical Code contains electrical administrative provisions, such as things related to permits, inspections and construction documents, to give code officials a document to help them enforce the NEC."

But critics disagree with the notion that the ICC Electrical Code facilitates enforcement of the NEC, which was developed by NFPA through an American National Standards Institute (ANSI)-approved consensus process.

According to Mark Early, P.E., assistant vice president and chief electrical engineer at the Quincy, Mass.-based NFPA, the group recently developed

continued

[redacted]

A monthly compendium of facts and figures

- **Number of International Code Council (ICC) codes and standards committees: 22**
  www.intlcode.org/NR040401_ICCCallforCommitteeMembers.PDF
- **Number of U.S. jurisdictions which have adopted at least one ICC Code: 1,500**
  www.intlcode.org/NR062601-Adoption.pdf
- **Number of National Fire Protection Association technical committees: 200**
  wwwnfpa.org/Codes/Background/background.html

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administrative provisions for the NEC that will now appear as Article 80, "so the ICC Electrical Code is really unecessary."

"Since the beginning, the ICC has said that their electrical code is nothing but a book of administrative provisions, so why does it have technical requirements such as wiring rules in Chapter 12?" asks Brooke Stauffer, director of codes and standards for NECA, Bethesda, Md.

"The ICC Electrical Code is an attempt to circumvent the consensus process for writing an electrical code, and in the consensus ANSI-approved camp, we don't agree with this," Stauffer says.

Further, Stauffer claims that the ICC code development is largely restricted to building code officials, leaving little opportunity for input from other industry professionals.

"ICC doesn't have the standing, the right or the expertise to mess with our electrical code," he says.

But Kuchnicki counters that the ICC's primary voting members are code officials, who, as public servants, don't have the vested interests of other building professionals.

In addition, ICC code hearings are open to anyone who would like to submit a proposal or disagree with a motion and call for a vote from the general assembly.

However, only members of Building Officials and Code Administrators International, the International Conference of Building Officials and the Southern Building Codes Congress International—founders of the ICC—are eligible to vote. |cse|

MILITARY CONSTRUCTION FUNDS MAY INCREASE

If the proposed military construction budget for fiscal year 2002 makes it through appropriations, the U.S. Corps of Engineers will be plenty busy awarding more than $3 billion worth of projects to the private sector on behalf of the U.S. Army and Air Force.

"For consulting engineers, there's going to be a lot more work coming out of the military construction budget than we've had in years," explains retired U.S. Army Major General Pat M. Stevens IV, executive director of the Society of American Military Engineers (SAME), Alexandria, Va.

However, until the budget actually passes, those dollars will not be available.

continued

Friday July 6, 12:26 pm Eastern Time

Press Release

SOURCE: National Electrical Contractors Association

NECA: Electrical Industry Calls for Withdrawal of ICC Electrical Code

BETHESDA, Md., July 6 /PRNewswire/ -- 'THE INSPECTION INITIATIVE,' a coalition of electrical industry organizations co-sponsored by the National Electrical Contractors Association (NECA), is calling for the International Code Council (ICC) to formally rescind its ICC Electrical Code. In addition, they want the ICC to cease the distribution of promotional materials, including draft ordinances and draft legislation, aimed at encouraging regulatory adoptions of the ICC Electrical Code and officially notify all local, state, and federal jurisdictions of the decision to abandon the ICC Electrical Code. This action follows ICC's June 6 announcement that the building officials' group ``sees no need for another electrical code" than the National Electrical Code.

In their June press release, the ICC made clear that it ``has no plans for the development of an electrical code that would duplicate the purpose and then compete with the National Electrical Code." However, the announcement failed to explain what steps would be taken regarding a 25-page publication entitled ICC Electrical Code. This document is currently marketed as part of ICC's family of building codes, though it isn't a complete book of wiring rules.

``Now it's a month later, and our industry is calling on ICC to 'close the loop' by announcing that they will discontinue their so-called electrical code," explained Brooke Stauffer, director of codes and standards for the National Electrical Contractors Association (NECA).

``The National Electrical Code is already adopted for regulatory use all over the U.S., and we don't want any confusion in the minds of state and local officials, many of whom have been approached and asked to adopt ICC's complete package of building codes," said Stauffer. ``All

jurisdictions must know that the ICC is no longer willing to stand behind one of those documents."

YAHOO! Finance

'THE INSPECTION INITIATIVE' is a coalition of electrical industry organizations that supports the National Electrical Code as the regulatory standard for safe wiring. It also encourages approval of electrical construction work by qualified electrical inspectors. For more information, contact Andy Green at NECA, 301-657-3310, ext. 640 or arg@necanet.org.

The National Electrical Contractors Association, founded in 1901, represents companies that install communications and electric power systems for business and industry. This segment of the construction market is comprised of over 70,000 electrical contracting firms. The industry employs over 650,000 electrical workers and produces an annual volume of over $65 billion. NECA includes 118 U.S. chapters in addition to others in countries around the world. NECA is dedicated to enhancing the industry through continuing education, labor relations, current information and promotional activities.

SOURCE: National Electrical Contractors Association

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ENGINEERING TIMES
ALEXANDRIA, VA
11-TIMES/YEAR 59,215
NOVEMBER 2001

Industry Coalition Asks for Removal Of ICC Electrical Code Standard

The Inspection Initiative, a new coalition of electrical industry interests, is formally calling for the withdrawal of the International Code Council's electrical code standard from any consideration for regulatory adoption by various states, cities, and counties.

In a recent request, the coalition asked that the council immediately stop selling the *ICC Electrical Code: Administrative Provisions (2000)* and terminate all activities to revise and update the publication. Additionally, the coalition has requested ICC to notify all local, state, and federal jurisdictions of the decision to terminate the *ICC Electrical Code.*

Members of The Inspection Initiative include the Edison Electric Institute, the Independent Electrical Contractors, the Inter-national Association of Electrical Inspectors, the International Brotherhood of Electrical Workers, the National Electrical Contractors Association, the National Electrical Manufacturers Association, the National Joint Apprenticeship and Training Committee, and Underwriters Laboratories.

Prior to forming the new coalition, many of these organizations individually had advocated that the *National Electrical Code* (NFPA 70-2002) should be referenced as the only standard for safe wiring throughout ICC's family of publications and the electrical industry, and that all electrical construction work must be approved by qualified inspectors.

Administrators for The Inspection Initiative point out that ICC's electrical code project is duplicative of other standards organizations, incomplete, and confusing because it includes technical provisions conflicting with those of the *NEC.* Moreover, the coalition contends that qualified electrical experts have been excluded from ICC's voting and approval process while developing the standard.

Industry Tells ICC: 'Don't Mess with Our Code'

THE CODE CHANGE BOOK SENT TO YOU WITH THIS magazine is provided with the compliments of the National Electrical Contractors Association. Just as NECA plays a major role in developing and preserving the *National Electrical Code* (*NEC*), so is our association committed to easing and expanding its use.

The world's most widely adopted standard, the *NEC* has been approved for regulatory use by more than 42,000 jurisdictions—state, county and municipal governments—across the United States. It is developed by volunteer experts serving on 19 technical committees, called code-making panels, and published by the National Fire Protection Association (NFPA). It is revised every three years to keep it up-to-date with electrical products, construction methods, and safety techniques.

Electrical contractors have played a significant role in *NEC* development throughout every three-year cycle of code reformation since the 1920s. NECA is one of the few organizations to have official representatives on every code-making panel.

A NECA contractor—D. Harold Ware of Libra Electric in Oklahoma City, Okla.—chairs the Technical Correlating Committee, the supervising body for the entire process. Seven other NECA members chair code-making panels. They include Wayne Brinkmeyer of Biddle Electric in Houston; Don Johnson of Interior Electric in North Miami Beach, Fla.; Stanley D. Kahn of Tri-City Electric in Aptos, Calif.; Stephen J. Thorwegen, Jr. of Fisk Electric in Houston; Ronnie Toomer of Toomer Electric in Baton Rouge, La.; Charles M. Trout of Maron Electric in Hernando, Fla., and Thomas H. Wood of Cecil B. Wood Company in Rockford, Ill. Several other NECA contractors also play a significant role in reviewing the thousands of proposal submitted for changing each edition of the *NEC*—and in submitting a few of their own.

Since the *NEC* is, in effect, largely by and for electrical contractors, it behooves us to protect it from being usurped by any conflicting codes. And, the sad truth is, the *NEC* still faces a threat, which I first reported more than two years ago.

It seems the International Code Council (ICC) has reneged on the promise it made in a press release last summer to cease developing and promoting its own incomplete and confusing document which includes technical provisions conflicting with those of the *NEC*. In fact, ICC Executive Vice President Richard P. Kuchnicki was even quoted as "not being aware" of any formal request from the electrical industry for his organization to withdraw the *ICC Electrical Code*—despite years of face-to-face meetings in which the NFPA and other leading industry participants made this request, articles throughout the electrical trade press denouncing ICC's efforts, and grassroots action by our industry all over the country to oppose regulatory adoption of the *ICC Electrical Code*.

The ICC claims its electrical code is nothing but a book of administrative provisions that would actually promote *NEC* enforcement. The NFPA, which sponsors development of the *NEC* through an American National Standards Institute approved-consensus process, points out that ICC's "help" is not needed. And, the fact that the ICC code includes incomplete and conflicting wiring rules leads the electrical industry to conclude that the ICC is apparently trying to circumvent the consensus process for writing an electrical code, with profit from document sales as its objective.

ICC code development is restricted to building code officials, leaving little opportunity for input from other industry professionals. Only members of Building Officials and Code Administrators International, the International Conference of Building Officials, and the Southern Building Codes Congress International—all founders of the ICC in 1995—are eligible to vote on proposals for the *ICC Electrical Code*.

The coalition fighting to preserve the integrity of the *NEC* from ICC encroachment is called "The Inspection Initiative." It is comprised of NECA, NFPA, Edison Electric Institute, Independent Electrical Contractors, International Association of Electrical Inspectors, International Brotherhood of Electrical Workers, National Joint Apprenticeship and Training Committee, National Electrical Manufacturers Association and Underwriters Laboratories. This coalition has again asked the ICC to cease distribution of any promotional materials or draft documents that would encourage jurisdictions to adopt the *ICC Electrical Code*.

You can help by urging your local building authorities to adopt the 2002 *NEC* and to reject ICC's overtures. As NECA Director of Codes and Standards Brooke Stauffer so correctly pointed out, "ICC doesn't have the standing, the right, or the expertise to mess with our electrical code."

D.R. Borden, Jr.

D.R. BORDEN, JR., *President, NECA*

international activities programs, will give a presentation on strategic metering issues in South America.

More information on this conference can be found on the Metering International website at www.metering.com. For information on NEMA involvement or NEMA meter products programs, contact Kurt Riesenberg at (703) 841-3226 or kur_riesenberg@nema.org. A registration discount will be made available to interested NEMA members.

Struggle over electrical code control continues

A decision by the International Code Council (ICC) to integrate electrical requirements into the 2002 edition of the International Building Code is drawing fire from a range of electrical industry officials who believe that the proposal continues an attempt by the ICC to override the requirements of the National Electrical Code, developed by the National Fire Protection Association.

Previously, the ICC had largely failed in an attempt to gain widespread adoption of its ICC Electrical Code, a strategy NEMA and others in the industry opposed, maintaining that it would cause unnecessary confusion in the marketplace. The Inspection Coalition, a group of industry organizations concerned with proper development, application, and enforcement of electrical installation codes, also opposed the ICC Electrical Code and has been fighting its adoption at the local level because it contains provisions that conflict with the requirements in the National Electrical Code.

Opponents want the International Code Council to eliminate the ICC Electrical Code and reference the NEC for all electrical requirements. They point out that development of the NEC includes representation across the industry and that the code is already widely adopted by local jurisdictions.

While opposition to the ICC Electrical Code has forced the ICC to back away from attempts to introduce a second electrical code, they contend that folding the code's requirements into the International Building Code, would be nearly as problematic. It is expected that the Inspection Coalition will adopt a formal position in favor of ICC board proposal EL1-02, which calls for the elimination of the ICC Electrical Code, as well as a position against acceptance of ICC proposal EL2-02, which calls for provisions of the ECC Electrical Code to be included in the ICC International Building Code.

Federal use of private-sector standards doubles

A new NIST report finds that federal agencies are continuing to increase their use of private-sector standards in regulations and procurement actions—progress intended to raise government efficiency and reduce compliance burdens.

Altogether, 28 agencies and cabinet-level departments used 5,453 so-called voluntary consensus standards in new or revised regulations and specifications issued during fiscal year 2000, the latest reporting period available. The FY 2000 total is double the number reported during the previous fiscal year.

As important, the agencies introduced only 16 government-unique standards and eliminated 537 existing ones, according to *The Fourth Annual Report on Federal Agency Use of Voluntary Consensus Standards*. The annual report to Congress is required by the National Technology Transfer and Advancement Act (NTTAA), which was signed into law in 1996.

States Reject ICC Electrical Code, Adopt *NEC*

STATES ALL AROUND THE COUNTRY are rejecting the so-called ICC Electrical Code. Massachusetts and North Carolina were the first states to adopt the 2002 edition of the *National Electrical Code* (*NEC*). Kansas, Nebraska, and North Dakota are the most recent ones that have voted to continue using the *NEC*.

The International Code Council (ICC), an organization of nonelectrical building officials, is promoting its own electrical document—a 25-page booklet of administrative procedures plus a handful of wiring rules—as part of its International Building Code (IBC) series of publications.

"I don't think it's any mystery why most jurisdictions are sticking with the *NEC*," said Mark Earley, assistant vice president for electrical engineering at the National Fire Protection Association (NFPA). "The *NEC* is a complete code. It covers the full range of applications you find in commercial, industrial, and residential occupancies.

"The 2002 *NEC* also contains a new Article 80 on administrative requirements for adopting and enforcing an electrical code. That's another important reason why there's no need for a separate code of administrative provisions."

An ongoing educational process

D.L. Smith, a Topeka electrical contractor and Kansas Building Advisory Board member, was instrumental in helping convince that state's Division of Architectural Services to continue adopting the *NEC* for regulatory use.

"We explained to them that the *NEC* was the only national building code for electrical work, and was developed through consensus procedures, unlike ICC's documents, which are just written by their members. We helped them understand how important it was to maintain the integrity of this Code that has served us well for 100 years."

"Making sure that states continue to rely on the *NEC* is more of an educational process than anything else," said Brooke Stauffer, director of codes and standards for the National Electrical Contractors Association (NECA). "Often the building departments are headed up by political appointees, and they may not realize there's any controversy about electrical codes unless our industry comes in and tells them: We need the *NEC* to guarantee public safety." EC

—Staff Reports

NECA, Carsforwork Offer Fleet Management Solutions

THE NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION (NECA) has partnered with Carsforwork to offer members vehicle leasing and management programs designed to decrease operating expenses of small to mid-sized businesses with company vehicles. These savings and programs were available only to large corporations—until now.

"...We believe this service fits the profile of our members and will help them to realize significant savings in their operating expenses," said Robert Colgan, director of marketing services for NECA.

The Carsforwork Open-End Lease is different from a traditional lease because it combines the financial advantages of leasing with the freedom of ownership. With as few as four vehicles, business owners can free up capital, take advantage of the tax benefits and off-balance sheet financing while using their vehicles as much as their business demands without incurring excess mileage or wear-and-tear fees.

"Most Fortune 1,000 company vehicle leases are open-end leases," said Gary Rappeport, founder and CEO of Carsforwork. "Carsforwork was launched specifically to serve the small-business fleet market...NECA members represent an important segment of this market that can benefit from these tools and in turn become more competitive."

Vehicle management tools include the Preventive Maintenance Program, a Fuel Card Program, and the ability to run Driver Motor Vehicle Reports online. These programs are flexible and can contribute to the profitability of any business with company vehicles.

The Preventive Maintenance Program combines automatic e-mail maintenance reminders sent prior to the next scheduled service with a National Discount Card, which provides discounts at national automotive service providers and maintenance tracking tools, all available online.

The Carsforwork Fuel Card is accepted at over 55 brands, making it easy for drivers to go to the most convenient station with the best price. Data from all transactions are uploaded to the Carsforwork site for 24-hour access and review.

Companies not only have the right, but also a legal obligation to know if an employee has a problematic driving history. Businesses can protect their assets by minimizing their liability with online Driver Motor Vehicle Reports. The online application makes quick work of checking current and prospective employees' driving histories. EC

—Staff Reports

Contractors' CodeLetter

NECA

Volume 6, Issue 2, May 2001 Published by NECA Codes and Standards

Electrical industry presents united front against upstart ICC Electrical Code

The electrical industry was out in force at the 2000 ICC Electrical Code hearing held March 24 in Portland, Oregon. Representatives from a number of groups urged the International Code Council not to adopt technical requirements different from those of the National Electrical Code; argued against circumventing the NEC's consensus development procedures by creating a 'back door' mechanism to amend the Code; and furnished accurate technical information about proposed revisions that contradict NEC safety rules.

This concerted action by the electrical industry was successful in defeating some draft revisions to the 2000 edition of the ICC's code. Proposals to delete the requirement for arc-fault circuit interrupters (AFCIs) and permit use of the Canadian Electrical Code for regulatory purposes in this country were rejected by substantial margins.

Proposals to allow expanded use of Type NM cable passed. All the same, the outcome represented a partial victory for electrical interests and the NEC. At last year's hearing in Birmingham, Alabama, all of the proposed electrical requirements passed, some by unanimous votes.

Truth in advertising?

Although entitled "2000 ICC Electrical Code: Administrative Provisions," the rival code actually includes a Chapter 12 – Electrical Provisions with technical requirements that differ from those of the National Electrical Code.

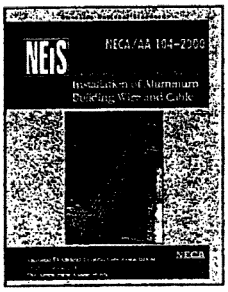
The ICC committee responsible for maintaining the document has no electrical engineers, contractors, or inspectors as members. Only ICC members are permitted to vote on the document, and testimony at hearings is limited to two minutes per person. Despite having the deck stacked against them in this way, the electrical industry people who attended the March 24 hearing came away encouraged.

"I thought we were quite effective, under the circumstances," said Bob Gotham, NECA principal member on CMP-7. "The opposition seemed surprised by the amount of representation and the resulting committee decisions." Electrical interests attending the ICC hearing in Portland included:

- National Electrical Contractors Association (NECA)
- National Electrical Manufacturers Association (NEMA)
- International Association of Electrical Inspectors (IAEI)
- Underwriters Laboratories Inc. (UL)
- Steel Tube Institute (STI)
- Electrical product manufacturers

Inside This Issue:

First *NEIS*™ cable standard published

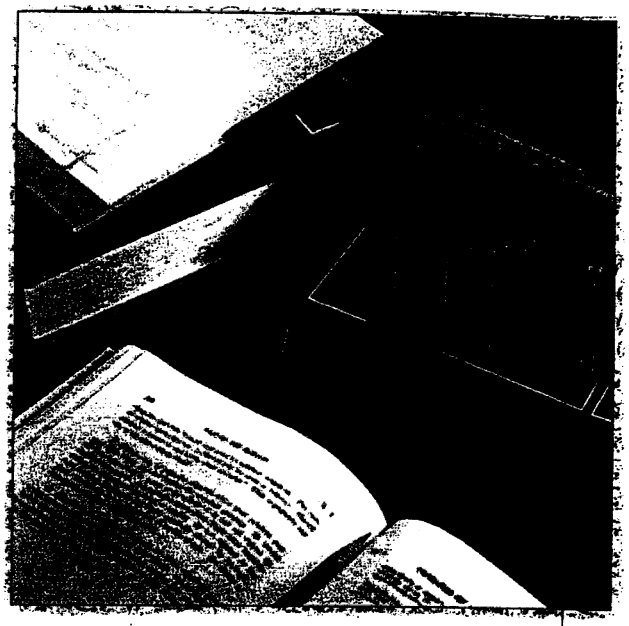


NECA has published its eleventh *National Electrical Installation Standard (NEIS).* NECA/AA 104-2000, *Recommended Practice for Installing Aluminum Building Wire and Cable* (ANSI), describes installation procedures and design considerations for wiring systems in residential, commercial, institutional and industrial applications not exceeding 600 volts.

NECA/AA 104 covers aluminum alloy building wire and cable types AC, MC, RHH, RHW, RHW-2, SE, TC, THW, THW-2, THHN, THWN, THWN-2, XHHW. It was jointly developed by the National Electrical Contractors Association (NECA) and The Aluminum Association, and is approved as an American National Standard.

Ordering information. NECA/AA 104-2000 costs $25 with NECA-member and quantity discounts available. Contact the NECA Order Desk at (301) 215-4504 tel, (301) 215-4500 fax, or *orderdesk@necanet.org.* Provide your name, company, mailing address and NECA member number (where applicable). Non-member orders must be prepaid by check or credit card.

NEMA recommends direct adoption of NEC



The NEMA Board of Directors has endorsed a Codes & Standards Committee recommendation that the association advocate "direct adoption (not by reference) of the latest edition of the *National Electrical Code*—by governmental agencies." The board also directed that the NEMA policy be directly communicated to the International Code Council (ICC). The board's action puts to rest any doubt about the association's position in a contentious debate between the National Fire Protection Association and the ICC.

In the most recent development, NFPA announced that it was moving forward in the development of NFPA's *Consensus Codes*®—a full set of codes for the built environment. That announcement followed on the heels of one by the ICC saying that it was not able to meet an NFPA-imposed deadline to respond to its final offer to partner with ICC in the development of a single family of comprehensive and coordinated model codes and regulations.

In 1999, the ICC published an *Electrical Code* that was ostensibly an administrative document, i.e., how a jurisdiction adopts, implements, and enforces an electrical code. The document contained prescriptive requirements, however, and thus was viewed by critics as a challenge to the *NEC*. Prior to that, in 1997, the ICC and NFPA attempted to work together to develop a joint fire prevention code. The working arrangement disintegrated due to differences over who should participate in the development.

NEMA has traditionally been involved in the development of the *NEC*, believing that electrical installation and inspection laws should protect the public from personal and property hazards and that adoption of the code by local governments was the best way to achieve that goal.

The *NEC* is developed through an ANSI-recognized consensus process whereby all interested parties have an opportunity to contribute to and vote on the document. The ICC process under which the ICC *Electrical Code* is developed, allows the opportunity to submit proposals and comments, but does not as a matter of course include manufacturers, users, enforcers, installers, utilities, testing labs, electrical workers, etc.

In the rationale presented to the NEMA Board of Governors prior to its action on the matter, NEMA President Malcolm O'Hagan said, "Having two different electrical codes could (1) lead to confusion concerning installation and enforcement requirements which can create safety issues; (2) force organizations to expend additional resources to participate in the development of multiple codes; and (3) in the worst case, force manufacturers to maintain multiple product lines if uniform product requirements are not adopted nationwide."

The board action aside, it seems certain that there will be at least two building codes, one issued by the ICC* and one issued by NFPA. NEMA will continue to submit proposals and comments on the ICC *Electrical Code* and participate in public hearings as appropriate, but ICC rules currently preclude direct NEMA involvement in ICC code development.

NFPA has enlisted the Western Fire Chiefs Association and the International Association of Plumbing and Mechanical Officials to participated in its proposed *Consensus Codes*®. As part of that project, NFPA is developing the NFPA Building Code®, a draft of which will be made available on the NFPA Building Code website at buildingcode.nfpa.org.

The NFPA Building Code project (NFPA 5000) includes a committee structure consisting of a new building code technical correlating committee that will have responsibility for the development and release of NFPA 5000, and will oversee the activities of a number of technical committees.

The scope adopted for the technical committee notes that it "shall have primary responsibility for documents or portions of documents on the design and construction of every building or structure, including structural design methods and techniques, as well as the design of integrated building systems for health, safety, comfort, and convenience." ■

* (Subject to withdrawal of the other three model building codes by ICBO, BOCA, and SBCCI.)

Contractors' CodeLetter

Volume 5, Issue 3, August 2000 Published by NECA Codes and Standards

NECA comments oppose ICC Electrical Code

NECA has filed public comments opposing the inclusion of technical wiring requirements in a new electrical code being developed by the International Code Council (ICC), a coalition of model building code groups. (For more complete background information on this matter, see the May 2000 issue of *Contractors' Code Letter*.)

The ICC Electrical Code is intended to be an administrative document that describes procedures for adopting and enforcing an electrical code. However, four proposals for actual wiring rules were accepted at a hearing held April 12 in Birmingham, Alabama. Three of the proposed rules concern the use of Type NM cable, while the fourth deals with cutting, notching and boring of framing members. All four proposed rules differ from existing National Electrical Code requirements on the same subjects.

Not true consensus

Although the ICC's code process lacks the 'true consensus' safeguards of the National Fire Protection Association's code development procedures, it loosely resembles the NEC process. A *2000 Report of Public Hearings* was published in late May with a deadline of July 3 for receiving public comments. NECA submitted comments as an organization, and members of NECA's Codes and Standards Committee also submitted public comments. They included the following:

1. The ICC Electrical Code (ICC EC) is intended as an administrative document that specifies procedures for adopting and enforcing an electrical code. It should not contain technical requirements. (We also note that a new Article 80 on administrative procedures has been proposed for the 2002 National Electrical Code.)

continued on page 2▼

Inside This Issue:

NECA publishes new generator standard

NECA recently released its seventh installation standard. NECA/EGSA 404-2000, *Recommended Practice for Installing Generator Sets* (ANSI) covers the installation of generators used for on-site power production in commercial or institutional buildings, including emergency applications.

NECA joined efforts with the Electrical Generating Systems Association, the industry organization of generator equipment manufacturers, to develop this new technical publication. NECA/EGSA 404-2000 is the seventh in NECA's series of *National Electrical Installation Standards*™, and the fifth to be approved by the American National Standards Institute.

NECA's newest *NEIS*™ publication can be thought of as complementing another ANSI-approved standard, NFPA 110 on emergency and standby power systems. "NECA 404 tells you how to size the feeder for a generator set, how to ground the unit properly, and how to install the exhaust and fuel systems," commented Brooke Stauffer, NECA director of codes and standards. "NFPA 110 defines the performance requirements of generators used for legally-required emergency purposes, after they've been installed."

National Electrical Installation Standards are the first quality and reliability standards for electrical construction. They establish requirements for installing electrical products and systems that go beyond the minimum safety rules of the National Electrical Code (NFPA 70).

NECA/EGSA 404-2000 costs $25 with NECA-member and quantity discounts available. To order, contact the NECA Order Desk at (301) 215-4504 tel. (301) 215-4500 fax, **www.neca-neis.org** or **orderdesk@necanet.org**. Provide your name, company, and mailing address (and NECA member number, where applicable). All nonmember orders must be pre-paid by check or credit card.

New NFPA National Building Code to Anchor Series of Consensus Codes

THE NATIONAL FIRE PROTECTION Association (NFPA) has released the first draft of its proposed new building code for public review. NFPA 5000 is a new national building code that will be the central document of a series of Consensus Codes being developed by the fire protection organization.

The Consensus Codes set of documents will include a number of other regulatory NFPA publications including the *National Electrical Code* and *Life Safety Code.* NFPA's purpose in developing the Consensus Codes is to create a complete, harmonized family of safety codes that can be adopted for regulatory use by states, cities, and counties.

The lack of such a harmonized set of NFPA codes has been one justification used by promoters of the *ICC Electrical Code.* This competing book of wiring rules is being developed by a non-electrical code officials' group, apparently for commercial reasons and without participation by electrical experts. (For more background on this issue, see the April 2000 issue of *Electrical Contractor.*)

NFPA's building code is being developed using open, full-consensus procedures that allow participation by all segments of the construction industry and the general public. When published in 2002, the Consensus Codes will be the first building codes approved by the American National Standards Institute (ANSI).

By contrast, according to Brooke Stauffer, director of codes and standards at the National Electrical Contractors Association (NECA), the other code group's procedures permit only its members to vote on documents. "Other experts including electrical contractors and consulting engineers are deliberately excluded. There aren't even any electrical inspectors on the technical committee that approves the *ICC Electrical Code.*"

NECA supports NFPA's Consensus Codes project as the best way to protect the *National Electrical Code* and encourage its uniform adoption by all U.S. jurisdictions. "The *NEC* is the bible of our industry," said Stauffer, who added that NECA has been a major participant in writing the Code process for more than 80 years.

Harold Ware, the current chairman of the *National Electrical Code* Committee is president of Libra Electric Company, a NECA-member contracting firm based in Oklahoma City.

"We are committed to the time-tested and proven open consensus process," said National Fire Protection Association president George F. Miller. "True consensus is the cornerstone of our mission and is essential to public safety." EC

ICC electrical code reversal

continued from page 1▲

2. It is inappropriate to use the ICC EC as a method for trying to amend the NEC by circumventing that code's normal consensus procedures.

3. The original proposal to permit enforcement of the "International Residential Code, NFPA 70 or CSA C22.1, Part 1 as applicable" was unworkable and contrary to the International Code Council's stated intention to come up with a single package of closely integrated codes.

4. Having incompatible requirements in the NEC and ICC EC will create confusion for specifiers, installers, inspectors, and owners/users of electrical products and systems. Electrician apprenticeship programs, and other electrical regulatory standards, are based on the requirements of the National Electrical Code (NFPA 70).

5. Due to the complexity and voluminous content of the National Electrical Code, promoting a competing code would put citizens in jeopardy.

6. As the largest North American organization for electrical construction firms, we object to the committee's statement that "Electrical contractors welcome the freedom to choose Type NM cable as an option." NECA supports uniform nationwide adoption of the National Electrical Code as the regulatory standard for safe wiring practices.

7. The present electrical code has provisions for changes and additions for safety improvements, new technology, and other items that merit review and acceptance.

8. What will be accomplished by having two or more electrical codes? Who will bear the cost of complying?

Lack of expertise

NECA and other electrical industry segments are also concerned that the International Code Council has not established an electrical code committee. At present, the ICC Electrical Code comes under the jurisdiction of the organization's General/Occupancies Committee. This group is made up of building officials and architects and does not include electrical inspectors or any other members with specialized electrical expertise.

The next step in this process is that public comments on the ICC Electrical Code and all other ICC documents will be discussed at the upcoming annual meetings of the three constituent organizations: Building Officials and Code Administrators International (BOCA), International Council of Building Officials (ICBO), and Southern Building Code Council International (SBCCI). See *Code Calendar* on page 3 for more information about these meetings.

IAEI Central Illinois Division wins "Charlie Trout Plaque"

It had to happen — an award for excellence in NEC knowledge has been named after NECA's own Charlie Trout. Like the America's Cup for world-class sailing, the 'Charlie Trout Plaque' is a traveling award that moves from place to place as different Illinois electrical inspector groups demonstrate their prowess at correctly identifying Code language.

Why Charlie Trout?

Charles M. Trout, chairman of Code-making Panel 12 and veteran member of NECA's Codes and Standards Committee, has long been a well-known figure in the NEC world. Currently he is a monthly Code columnist for *Electrical Contractor* magazine and author of NECA's popular e-mail feature, 'Code Question of the Day.'

For the last 12 years, Trout has also presided over the Code breakfasts held at the spring and winter meetings of the Illinois Chapter of IAEI (International Association of Electrical Inspectors). In 1998, they were officially named the 'Charlie Trout Code Breakfast' and an award was established to celebrate excellence in NEC knowledge.

How the contest works

At each twice-yearly breakfast meeting, members of each IAEI division compete to correctly identify 30 excerpts from the National Electrical Code (i.e., to supply the Article, Section, subsection, exception, Fine Print Note, etc. that fits each excerpt). At the most recent spring meeting held in Rockford, Illinois, the Central Illinois Division triumphed. It beat out all other state divisions in NEC knowledge and took home the coveted 'Charlie Trout Plaque' to hang in a place of honor till the next Chapter meeting in the fall.

The award's namesake observed that "it is very gratifying that the Illinois Chapter members, many of whom were my students in my code classes at Harper College years ago, have honored me by establishing the 'Charlie Trout Plaque'."

ANSI approves third NEIS lighting standard

The American National Standards Institute (ANSI) has approved NECA/IESNA 501-2000, *Recommended Practice for Installing Exterior Lighting Systems.* It is the third lighting standard developed by NECA in cooperation with the Illuminating Engineering Society of North America (IESNA), the professional society for lighting designers and engineers. The previous two are NECA/IESNA 500-1998 on commercial lighting and NECA/IESNA 502-1999 on industrial lighting.

ANSI endorsement represents a 'higher' level of approval for standards developed by industry associations like NECA and IESNA. Documents approved as American National Standards are recognized as representing the official U.S. position on a given technical subject. They can be adopted for regulatory use by state and local governments, and referenced in specifications for electrical construction projects.

All three *National Electrical Installation Standards* jointly developed by NECA and IESNA have now been ANSI-approved. NECA/IESNA 501-2000, *Recommended Practice for Installing Exterior Lighting Systems* (ANSI) is expected to be available for purchase in September.

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS (NSPE)

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Hear Challenge uality Standard

As many as 15 states could be found in noncompliance with the current federal ozone standards, including Georgia, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Missouri, New Hampshire, New Mexico, Ohio, Pennsylvania, Rhode Island, Tennessee, and Wisconsin.

The legal action challenging EPA's controversial new standards was filed in 1997 by the American Trucking Association, the American Road & Transportation Builders Association, the U.S. Chamber of Commerce, and almost two dozen other national business groups.

"The outcome of this lawsuit will have a dramatic impact on the transportation planning process across the nation," says ARTBA President Pete Ruane. "We are confident the case will be upheld by the Supreme Court."

The EPA's proposed standards could have potentially enormous ramifications for the transportation construction industry, according to ARTBA, which points out that the Clean Air Act and federal surface transportation law link state and regional transportation planning and project approval processes to the attainment of federal air quality standards. "Tougher standards mean bigger hurdles for project sponsors to overcome, regardless of public demand or need for the transportation improvements," the association notes.

The Supreme Court is not expected to issue a final ruling in the case until late this year or early 2001.

Plan for Promoting Canadian Electrical Regulation Falls Short

Plans to promote a new electrical code standard recently hit a snag when the Canadian Standards Association withdrew from an agreement that would have encouraged the use of the Canadian electrical regulatory document in the U.S.

Last December, CSA had finalized a memorandum of agreement with the International Code Council giving ICC the authority to promote the *Canadian Electrical Code* for regulatory use in the U.S. Response to the memorandum came swiftly.

In a letter to the Canadian organization, John Grau, chief executive officer of the National Electrical Contractors Association, voiced opposition to CSA promoting and marketing the *Canadian Electrical Code* in the U.S. "We believe this ill-advised decision will result in confusion, reduction of public safety, and an overall weakening of the well-integrated U.S. electrical safety system that is of critical importance to our industry," Grau wrote.

He further noted, "NECA respects the technical and safety expertise in the *Canadian Electrical Code* . . . but it is not suitable for regulatory adoption in this country. It differs from our *National Electrical Code* in significant ways including voltage ranges, cable and conductor types, wiring device configurations, terminology, and reliance on a wholly different set of product safety standards."

Other industry groups followed NECA's lead in forwarding concerns to CSA. In addition to pointing out safety problems and a lack of compatibility between the Canadian code and U.S. wiring practices, electrical organizations were concerned about training costs and confusion in the marketplace that would result from trying to use any regulatory code other than the familiar *National Electrical Code*.

Responding to the opposition and concerns expressed, CSA withdrew in April its proposal to have the *Canadian Electrical Code* recognized—at this time—in the 1999 *ICC Electrical Code*. However, it is still too early to claim total victory in the struggle for control of U.S. electrical codes, says Brooke Stauffer, NECA director of codes and standards, who points out that ICC recently held hearings to consider amendments to its building codes, including the 1999 *ICC Electrical Code*.

"At present, the code [ICC's] is a 25-page booklet of administrative procedures," explains Stauffer. "We have no real problem with that, even if we do think it isn't necessary. What the electrical industry objects to is the notion of ICC's code including technical requirements different from those in the *National Electrical Code*."

Stauffer emphasizes that although CSA withdrew its code recognition proposal, five other proposals were submitted for requirements that conflict with the *National Electrical Code*. According to Stauffer, electrical industry representatives attended the ICC's code hearing in April to argue against these proposals—and succeeded in killing two of them—but three were still approved.

"If we wind up with different wiring rules in different regulatory codes, that's when we'll start having safety problems and creating confusion in the minds of users," Stauffer contends. "But the ICC code process isn't over yet."

NECA currently provides administrative support for a coalition known as "The Inspection Initiative," which promotes use of the *National Electrical Code* and opposes the development of competing regulatory electrical codes. Other participants include the National Fire Protection Association, the International Brotherhood of Electrical Inspectors, the National Electrical Manufacturers Association, the International Association of Electrical Inspectors, and Underwriters Laboratories Inc.

PEC Mentoring Program Expands Licensing Guidance

Since the early 1990s, NSPE's Professional Engineers in Construction practice division has advocated the value of mentoring—the hands-on practice of providing education, career development, and networking opportunities to engineering professionals and students.

However, PEC takes mentoring one further step by offering guidance to individuals with construction experience, and whose goals are to become licensed construction professionals. Only engineers employed in the construction industry and pursuing professional engineering licensure are eligible to request PEC mentoring assistance.

As established, the program has two cornerstones, the first being an introduction of younger engineers to licensed construction professionals. The second cornerstone provides practical guidance on what is considered "creditable" construction experience and assists in the presentation of this information on licensing examination applications.

MA-based Simplex. The two companies will work collaboratively to respond to requests for a total building controls package—one that also includes a fire alarm system.

The design, manufacture, and delivery of the fire alarm system alone will be executed by Simplex. This system will then be included in a total building automation package offered by Johnson Controls.

For more information on this alliance, call (978) 630-7856. Simplex has also formed an alliance with Panasonic Security & Digital Imaging Company's (PSDI) Security Systems Group, a leading supplier of CCTV products and systems. See "Security Briefs" on page 20 for more information.

Flooding Is Costly Cause Of Damage

A recent study of the causes of commercial business property loss from 1990-1999 revealed flooding was the sixth most costly incident. The study, conducted by Providence, RI-based FM Global, confirmed that no area was completely safe, even where average rainfall was minimal. On average, a business could face a gross loss of nearly $1 million as the result of flooding.

Saturated soil conditions and seasonal showers can cause flooding, affecting property located even on relatively high ground. Unprepared companies could find themselves in the middle of a costly clean-up that has the potential to erode market share and stakeholder value as doors close and mopping begins. Now is the time for businesses to make a small investment in advance preparation to prevent or minimize a flood's effects.

FM Global recommends the following five tips:

1. Investigate ways a flood could damage buildings, fire protection systems, services, utilities, communications, access, shipping and receiving, and interrupt business operations. Engage a qualified engineer or consultant to help determine potential risk.

2. Recognize signs of deterioration or other changes on or nearby the facility's property that could impact the likelihood or effects of flooding.

3. Ensure that flood barriers and portable lighting are available, as well as supplies such as sand, sandbags, shovels, mops, squeegees, pails, radios, portable phones, heaters, generators, power cables, and large plastic sheets for covering equipment and stock.

4. Safeguard fire protection equipment to minimize the potentially devastating effects of a fire during a flood.

5. Create a flood emergency response plan and train staff annually, prior to flood season, to ensure readiness.

For more information on FM Global, call (410) 275-3000 or visit the Web at **www.fmglobal.com**.

Avoiding The Fever

With spring, the threat of West Nile Fever has again returned to the tri-state area of New York, New Jersey, and Connecticut—which means building owners should take care to control any roosting pigeon populations. West Nile Fever is transmitted when mosquitoes bite a bird in which the disease has been gestating and then later bite a human. Last year, the disease killed seven people and is believed to have infected up to two thousand others.

According to Michael Deutsch, chief entomologist for Assured Environments, a New York, NY-based pest management firm, "There are an estimated five million

"This would be a very good time for owners and managers of apartments and condominiums to have a full scale inspection of their property to ensure that measures are taken to keep pigeons from roosting."

In addition to inspecting and bird-proofing apartments and office structures, Deutsch says that food loading docks, parks, and anywhere people eat outdoors need to be kept scrupulously clean. "The sheer numbers of this bird species, plus the mosquitoes, raise the odds for a return of the disease which has successfully over-wintered," he comments.

Control involves excluding and/or relocating, repelling, trapping, and, though the last choice, poisoning the birds. Most techniques, however, no matter how necessary, tend to generate bad press.

As to spraying for mosquitoes and other approaches, Deutsch feels, "New Yorkers and others who are concerned about the need for aerial spraying should understand that their exposure to any pesticide is measured in parts per million or even parts per billion. In short, it is so minimal that there is little potential for any harm; whereas West Nile Fever has the capacity to kill them if it is not controlled by eliminating as much of the mosquito population as possible."

For information, call (212) 557-1515.

Opposition To Electrical Code

In a letter to the president of the Canadian Standards Association (CSA), John Grau, executive vice president and CEO of the National Electrical Contractors Association (NECA) expressed deep concern over—and opposition to—CSA's announced intention to cooperate with the International Code Council in promoting and marketing the Canadian Electrical Code, Part 1 for regulatory use in the U.S.

"We believe this is [an] ill-advised decision that will result in confusion, possible reduction of public safety, and an overall weakening of the well-integrated U.S. electrical safety system that is of critical importance to our industry," says Grau.

Currently, a uniform National Electrical Code promotes safety in the 50 states and thousands of local jurisdictions that make up the U.S. While NECA has said it highly respects the technical and safety expertise embodied in the Canadian Electrical Code and has participated in efforts to develop a harmonized, binational electrical code for use throughout North America, it feels the Canadian Electrical Code is not suitable for regulatory adoption in the U.S. NECA says it differs from the U.S. National Electrical Code in significant ways including voltage ranges, cable and conductor types, wiring device configurations, terminology, and reliance on a wholly different set of product safety standards.

"Trying to enforce the Canadian Electrical Code in this country would be a nightmare, practically speaking," observes Brooke Stauffer, NECA codes and standards director. "It would create safety problems, confusion in the marketplace, and could result in a wholesale loss of public confidence in state and local safety officials." NECA views the ICC's efforts to promote a competing electrical code in the U.S. as a commercial campaign that has nothing to do with improving public safety.

Visit the Web at www.necanet.org. TEM

"TODAY'S FACILITY MANAGER"

MAY 2000

Professional Engineers in [redacted]

April 2002

NECA Says Rival Electrical Code Not Attracting State Endorsements

Reception towards a set of electrical code standards put forth by the International Code Council appears to be lukewarm, according to a major electrical trade association, which notes that states across the U.S. have been slowly rejecting the ICC document.

The National Electrical Contractors Association contends that the ICC is promoting its own electrical document. "Actually, it's a 25-page booklet of administrative procedures plus a handful of wiring rules, part of its *International Building Code* series of publications," says Brooke Stauffer, NECA executive director of standards and safety. "But to date, most states are steering clear."

Instead, states are subscribing to the *National Electrical Code*, Stauffer adds. Massachusetts and North Carolina were the first states to adopt the 2002 edition of the *NEC*, and Kansas, Nebraska, and North Dakota are the most recent to vote in favor of its continued use.

"Making sure that states continue to rely on the *NEC* is more of an educational process than anything else," Stauffer points out. "Often, the building departments are headed up by political appointees, and they may not realize there's any controversy about electrical codes unless our industry comes in and tells them. We need the *NEC* to guarantee public safety."

"I don't think it's any mystery why most jurisdictions are choosing to stick with the *NEC*," suggests Mark Earley, assistant vice president for electrical engineering at the National Fire Protection Association (NFPA). "The *NEC* is a complete code. It covers the full range of applications you find in commercial, industrial, and residential occupancies."

The 2002 *NEC* also contains a new Article 80 on administrative requirements for adopting and enforcing an electrical code, says Earley, noting, "That's another important reason why there's no need for a separate code of administrative provisions."

D. L. Smith, a Topeka electrical contractor and long-time member of the Kansas Building Advisory Board, was

instrumental in helping convince that state's Division of Architectural Services to continue adopting the *NEC* for regulatory use.

"We explained to them that the *NEC* was the only national building code for electrical work, and it was developed through public consensus procedures-unlike ICC's documents, which are just written by their own members. We helped the state officials understand how important it was to maintain the integrity of this code that has served us well for more than a hundred years."

"The *NEC* has brought harmony and uniformity to electrical installations all over the U.S. for a century," observes Earley. "And now it's being adopted in other parts of the world as well."*NEC* advocates claim that it is the world's best-known and most widely used building code. Besides serving as official wiring rules in most states and local jurisdictions in the U.S., it is used in Mexico and other Latin American countries.

A Rival Code?

So, what is ICC's rival regulatory document? And why is it under scrutiny? NECA describes the rival code as a "skinny" document, less than 50 pages long, which is simply entitled *2000 ICC Electrical Code: Administrative Provisions.* Stauffer emphasizes, however, that despite its misleading title, the document includes a chapter on electrical provisions, containing technical requirements that differ from, or conflict with, those of the *NEC.*

"The *ICC Electrical Code* isn't a complete regulatory document," says Stauffer. "Most observers regard it primarily as a 'back door' way to amend the *NEC* by circumventing NFPA's demanding consensus development procedures." State and local electrical officials who may find themselves in the middle of this argument need to clearly understand the differences between the two codes and how they are developed, he adds.

Stauffer also explains that because the ICC's building code development procedures fail to satisfy minimum standards of consensus building, the *ICC Electrical Code* and other building codes aren't eligible for approval by the American National Standards Institute.

Safety First

Those in opposition to ICC's rival code also point out that the primary benefit of a single, uniform electrical code is safety, especially in metropolitan areas that comprise multiple cities, towns, and counties. "Electricity acts the same regardless of official boundaries, and having consistent rules everywhere adds to public safety," Stauffer notes. "Adopting the *ICC Electrical Code* even on a statewide basis will potentially cause problems in metropolitan areas that overlap state borders."

The *NEC* is the bedrock of the electrical construction business, according to Stauffer, who says that professional engineers play a critical and major role in helping to develop

the code. "Because of the vital importance of having a single, uniform safety document for regulatory use, all electrical consulting engineers should be concerned about even potential threats to the *NEC* from outside their own industry," he warns.

To counter the ICC's recent promotional efforts, NFPA is currently developing a family of harmonized building codes that will include the *National Electrical Code, Life Safety Code, National Fuel Gas Code*, and other existing regulatory documents. It is partnering in this effort with two other major building code developers: the International Association of Plumbing and Mechanical Officials and the Western Fire Chiefs Association.

These *Consensus Codes*, as they will be called, are being developed through NFPA's public consensus procedures, with participation from all affected interests, including engineers.

Return to: April 2002 "Practice Division Engineer—PEC" | April 2002 "Practice Division Engineer" | April 2002 *Engineering Times*

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Technology & Trends

Trade News

Major Reversal for ICC Electrical Code

PLANS BY the International Code Council (ICC) to promote a new electrical regulatory document that would compete against the *National Electrical Code* hit a snag last month when the Canadian Standards Association (CSA) withdrew from an agreement that would have allowed ICC, a federation of three model building groups, to promote the *Canadian Electrical Code* for regulatory use in this country.

Reaction from the U.S. electrical industry was swift and decisive when the ICC-CSA memorandum of understanding became public knowledge at the end of December 1999. In a January letter addressed to CSA's president, NECA CEO John Grau expressed the industry's concern over and opposition to CSA's promoting and marketing the *Canadian Electrical Code* for regulatory use in the U.S.

Sending a message

"We believe this ill-advised decision will result in confusion, reduction of public safety, and an overall weakening of the well-integrated U.S. electrical safety system that is of critical importance to our industry," Grau wrote. "NECA respects the technical and safety expertise in the *Canadian Electrical Code*... but it is not suitable for regulatory adoption in this country. It differs from our *National Electrical Code* in significant ways."

Other industry segments followed NECA's lead in sending protests to CSA. In addition to pointing out safety problems and a lack of compatibility between the Canadian code and U.S. wiring practices, electrical organizations were concerned about training costs and confusion in the marketplace that would result from trying to use any other regulatory code than the familiar and time-tested *NEC*.

In April, CSA's vice president of standards announced that "as a result of feedback received from the U.S. on this initiative... we have decided to withdraw our proposal to have the CEC recognized in ICC's Electrical Code at this time."

Continuing the fight

But important as CSA's change of heart was, it's still too early to claim total victory in the struggle for control of U.S. electrical codes. Last month, the ICC held hearings in Birmingham, Ala., to consider amendments to its building codes, including the 1999 ICC Electrical Code.

"At present, their code is a 25-page booklet of administrative procedures," explains Brooke Stauffer, NECA director of codes and standards. "We have no problem with that, even if we do think it isn't needed. What the electrical industry objects to is the notion of ICC's code including technical requirements different from those in the *NEC*."

Although CSA withdrew its proposal to have the *Canadian Electrical Code* adopted as ICC wiring rules prior to the Birmingham hearings, six other proposals had also been submitted for requirements that conflict with the *National Electrical Code*. Electrical industry representatives (including several *NEC*-Panel members and one chairman) attended the ICC Electrical Code hearing on April 12 to argue against these proposals, and succeeded in killing two of them. But that means three were still approved.

"If we wind up with different wiring rules in different regulatory codes, that's when we'll start having safety problems and creating confusion in the minds of users," comments Stauffer. "But the ICC code process isn't over yet."

NECA provides administrative support for an industry coalition, The Inspection Initiative, which was formed to support the *NEC* and oppose the development of competing codes. **EC**

INDUSTRY WATCH

Unicom Corp., Chicago, the parent of Commonwealth Edison Co., has acquired **American Lighting Systems, Inc. (ALSI)**, Chicago, a lighting retrofit and lighting maintenance electrical contracting firm. ALSI's management team and lighting technicians are being integrated into Unicom Lighting Solutions, a business unit within Unicom Energy Solutions, based in Westchester, Ill.

Cable Design Technologies (CDT), Pittsburgh, has announced the acquisition of **BoseLAN**, a Silicon Valley-based developer of high-performance fiber optic components. CDT is a leading designer and manufacturer of high bandwidth network connectivity products, fiber optic cable and connector assemblies. and components.

Belden Inc., St. Louis, has completed the purchase of **Corning's** UK-based metallic telecommunications business. Belden manufactures wire, cable and fiber optic products and had 1999 revenues of $818 million.

Square D Co., Palatine, Ill., and **EFI Electronics** Corp., Salt Lake City, have signed a definitive merger agreement for the acquisition of EFI by Square D at $1.50 per share in cash. Square D, a division of Paris, France-based Schneider Electric, is a leading supplier of electrical distribution, industrial control, and automation products. EFI supplies power protection products, including plug-in surge protectors and industrial hardwired products. Schneider had 1999 sales of approximately $8.9 billion.

Cooper Industries, Inc., Houston, and **Sigma-Aldrich Corp.** have entered into an agreement whereby Cooper will acquire Sigma's **B-Line Systems** business for $425 million. B-Line, based in Highland, Ill., manufactures metal products used in electrical, mechanical, and telecommunications applications and had 1999 revenues of $253 mil-

INDUSTRY WATCH *continues on page 16*

Technology & Trends

Trade News

Proposed ICC Electrical Code May Threaten Public Safety

IN A RECENT LETTER addressed to the president of the Canadian Standards Association (CSA), John Grau, executive vice president and chief executive of the National Electrical Contractors Association (NECA) expressed deep concern over and opposition to CSA's announced intention to cooperate with the International Code Council in promoting and marketing the Canadian Electrical Code, Part 1 for regulatory use in the United States.

"We believe this is ill-advised decision that will result in confusion, possible reduction of public safety, and an overall weakening of the well- integrated U.S. electrical safety system that is of critical importance to our industry," said Grau.

A strong, uniform, *National Electrical Code* promotes safety in the 50 states and thousands of local jurisdictions that make up our country. While NECA highly respects the technical and safety expertise embodied in the Canadian Electrical Code and has participated in efforts to develop a harmonized, bi-national electrical code for use throughout North America, the Canadian Electrical Code is not suitable for regulatory adoption in the United States. It differs from our *National Electrical Code* in significant ways including voltage ranges, cable and conductor types, wiring device configurations, terminology, and reliance on a wholly different set of product safety standards.

"Trying to enforce the Canadian Electrical Code in this country would be a nightmare, practically speaking," observed Brooke Stauffer, NECA codes and standards director. "It would create safety problems, confusion in the marketplace, and could result in a wholesale loss of public confidence in their state and local safety officials."

NECA views the ICC's effort to promote a competing electrical code in the U.S. as a commercial campaign that has nothing to do with improving public safety.

To learn more about this issue, please visit *http://www.necanet.org.* EC

IBEW-NECA Technical Institute Launches Solar Electricity Training Facility

THE FIRST AND ONLY teaching center in Illinois for the professional installation of photovoltaic (PV) systems was launched last fall by the International Brotherhood of Electrical Workers-National Electrical Contractors Association (IBEW-NECA) Technical Institute (IN-TECH) at its Alsip training center complex.

Funded in part by a grant from the state's Department of Commerce and Community Affairs, the 5-kilowatt PV teaching system was designed, fabricated, and installed by IN-TECH's teaching staff.

Located on the roof of the training center's main building, the PV system also provides power for the computers in the programmable control laboratory.

"Our goal is to train several hundred members of Local 134 during the next 12 months," said Mike Fitzgerald, IBEW Local 134's business manager, at the facility's opening. He added that as new power sources such as fuel cell, micro turbine, and solar electricity continue to evolve, new courses of study will be developed "to keep Illinois electricians among the best- trained and most skilled in the nation." EC

TECH & TRENDS *continues on page 16*

INDUSTRY WATCH

Quanta Services, Houston, has completed the acquisition of eight companies that are expected to produce annualized revenues of about $100 million in 2000. The acquired companies, which will be integrated into existing operating units, are: **World Fiber, Inc.,** Hendersonville, N.C.; **Arby Construction, Inc.,** New Berlin, Wis.; **Grand Electric Co.,** Denver; **Wade D. Taylor, Inc.,** Athens, Ga.; **Network Communications Services, Inc.,** Duarte, Calif.; **Brown Engineering and Testing, Inc.,** Giddings, Texas; **DB Utilities, Inc.,** Garland, Texas; and **Kingston Contracting, Inc.,** Burlingame, Calif.

Group Maintenance America Corp. (GroupMAC), Houston, and **Building One Services Corp.,** Minneapolis, have completed their merger. The resulting company, **Encompass Services Corp.,** has pro forma combined revenues of $3.6 billion and total assets of $2.4 billion, and ranks as the largest provider of facilities services in the United States.

Ideal Industries, Sycamore, Ill., has acquired the SureTest product line of sophisticated circuit analyzers from **Industrial Commercial Electronics, Inc.,** Tonowanda, N.Y. A leading manufacturer of tools and supplies to the electrical, electronics, and datacommunications trades, Ideal plans an immediate merger of the acquired product line with its test and measurement division.

Siemens Energy & Automation, Inc., Atlanta, completed the acquisition of **Moore Products Co.,** a provider of solutions to process measurement and control applications. Moore had 1998 revenues of $168 million.

G&W Electric Co., Blue Island, Ill., has purchased the assets of the **Hotsplicer Corp.,** Wauconda, Ill., a supplier of molded epoxy products to the electric utility market. G&W manufactures cable accessory and switchgear products.

INDUSTRY WATCH *continues on page 15*

January 28, 2000

JOHN M. GRAU

Executive Vice President
and Chief Executive Officer

Direct Dial
(301) 215-4530

jmg@necanet.org

Robert Griffin, President
CSA International
178 Rexdale Boulevard
Rexdale, Ontario M9W 1R3

Dear Mr. Griffin:

I am writing you to express NECA's strong concern about — and opposition to — CSA's announced intention to cooperate with the International Code Council in promoting and marketing the Canadian Electrical Code, Part 1 for regulatory use in the U.S. We believe this is ill-advised decision that will result in confusion, possible reduction of public safety, and an overall weakening of the well-integrated U.S. electrical safety system that is of critical importance to our industry.

A strong, uniform, National Electrical Code promotes safety in the 50 states and thousands of local jurisdictions that make up our country, just as a single CEC contributes to electrical safety in Canada.

NECA highly respects the technical and safety expertise embodied in the Canadian Electrical Code. Our association has strongly supported, and participated in, efforts to develop a harmonized bi-national electrical code for use throughout North America that would build on the strengths of both the NEC and the CEC, Part 1.

But the Canadian Electrical Code is not suitable for regulatory adoption in this country. It differs from our National Electrical Code in significant ways including voltage ranges, cable and conductor types, wiring device configurations, terminology, and reliance on a wholly different set of product safety standards.

Our industry regards the ICC's effort to promote a competing electrical code in this country as a crassly commercial campaign that has nothing to do with improving public safety. The electrical industry in our country, as in yours, has a long and distinguished history of developing its own safety regulations through an open consensus process that allows all concerned expert interests to participate. This is far different from the closed-door processes by which other U.S. building codes are developed.

NATIONAL
ELECTRICAL
CONTRACTORS
ASSOCIATION

3 Bethesda Metro Center

Suite 1100

Bethesda, MD 20814

301-657-3110

301-215-4500 FAX

I strongly urge CSA International, one of the world's foremost electrical safety organizations, not to lend its name or assistance to an effort by outside interests to subvert the cause of U.S. electrical safety. The National Electrical Code has served our nation well, for more than a century now. NECA opposes any attempt to promote the use of a competing electrical code.

We feel certain that your organization would feel the same way if it were proposed to adopt the National Electrical Code for regulatory use in Canada.

Sincerely,

John M. Grau
Chief Executive Officer

cc: George D. Miller, NFPA
Malcolm O'Hagan, NEMA
Thomas A. Castino, UL
Philip H. Cox, IAEI
Richard Kuchnicki, ICC

Contractors' CodeLetter

NECA

Volume 4, Issue 2, August 1999 Published by NECA Codes and Standards

Building code groups: threatening the NEC?

The National Electrical Code® is the world's best-known and most widely-used building code. Besides serving as official wiring rules in most U.S. states and local jurisdictions, it is rapidly being adopted by Mexico and other Latin American countries. This widespread acceptance demonstrates the importance of uniform safety codes developed through open, consensus procedures.

But in March of this year, a coalition of three model building code organizations filed suit against the National Fire Protection Association (NFPA), publisher of the NEC. Some observers see this as the first step of an attempt by building code officials to try and develop their own, competing electrical installation code. Such an effort would reduce public safety, and harm the interests of all segments of the U.S. electrical construction industry.

Importance of Uniform Codes

The primary benefit of a single, uniform electrical code is safety. Since electricity behaves the same way no matter where it's used, safety requirements in different jurisdictions should also be the same. The National Electrical Code and Canadian Electrical Code have been very similar for years now. Since Mexican acceptance of the NEC in 1994, all of North America has been covered by nearly identical rules for electrical construction.

However, only the electrical construction industry enjoys the benefits of a unified national code. By contrast, there have historically been three competing sets of structural, mechanical, and plumbing codes in this country, often with inexplicable and arbitrary differences between them.

Openness Benefits Code Users

Another major strength of the National Electrical Code is the open, consensus development process by which it is developed. NFPA procedures allow all concerned interests (installers, manufacturers, inspectors, independent experts, consumers) to work together writing the regulatory document that affects them and in which they have expertise.

But only building officials are eligible for membership in the model code organizations. Regulatory documents are developed through "closed" procedures that deliberately *exclude* all others, including engineers and contractors with expert knowledge of the subjects covered by building codes.

Several years ago, the three competing building code groups banded together in a coalition called the International Code Council (ICC) to develop harmonized plumbing, mechanical, and structural codes. In March this coalition sued the National Fire Protection Association, challenging NFPA's copyright of the name "International Electrical Code." (Although NFPA does not yet publish an international electrical code, the increasing global use of the NEC has led the organization to make a number of prudent provisions for the future.)

Bottom Line Time

The National Electrical Code is the bedrock of the electrical construction business. Allowing the development of competing electrical codes would lead to the same kind of confusion and non-uniform safety requirements that has long existed in other

continued on page 2▼

Inside This Issue:

Proposal to certify fire alarm installers defeated

A proposal to require that all installers of supervising (monitored) station fire alarm systems be certified was defeated at the recent NFPA World Fire Congress and Exposition in Baltimore. A revision proposed for the 1999 edition of the *National Fire Alarm Code* (NFPA 72) would have required that all future supervising station fire alarm system installations be verified by one of two agencies.

This new requirement would have imposed a number of specific conditions including periodic field inspection of supervising station fire alarm systems. But one practical effect would have been to require that installers of these systems be certified by either Factory Mutual Corporation (FMC) or Underwriters Laboratories Inc. (UL). These two agencies currently verify the installation of central station fire alarm

continued on page 2▼

AIA Pennsylvania

A Society of The American Institute of Architects

Original; 2283

2002 OCT -7 PM 4:05

7 October 2002

Mr. E. Robert Nyce, Executive Director
Independent Regulatory Review Commission
333 Market Street, 14th Floor
Harrisburg, PA 17101

Dear Mr. Nyce,

Attached please find the comments from AIA Pennsylvania on the Proposed Rulemaking (Title 34; Labor and Industry—Uniform Construction Code; Administration and Enforcement, Elevators and other Lifting Devices—Chapters 401-405) published in the Pennsylvania Bulletin August 24, 2002.

AIA Pennsylvania, with over 2500 members, is the largest single association of architects in the Commonwealth. After participation in the Department of Labor and Industry's stakeholder process, including submission of detailed comments to the draft regulations, we are disappointed with the approach the department has taken in the content of those proposed regulations.

Rather than relying on the published, recognized set of administrative standards crafted to support the body of the model building code, the department has chosen instead to essentially *rewrite* Chapter 1 of the International Building Code, going well beyond the statutory authority granted to them in SB 647.

AIA PA supports adoption of a uniform construction code in Pennsylvania, as evidenced by our support for the final legislation, our participation in the stakeholders' process, and our approval of the final Training and Certification regulations. We are extremely concerned, however, that much more care is needed in the development of the administrative regulations than has been so far exercised.

It is our strong recommendation that the department issue *modifications* to Chapter 1 of the IBC, as it is authorize to do by the UCC law. The professionally written and coordinated regulations, modified as necessary for Pennsylvania, will provide a clearer and safer set of standards for the residents of the Commonwealth—the true beneficiaries of the implementation of the UCC.

Thank you for your consideration of our recommendation, and of our specific comments, which are attached. If we can be of any assistance at all, please do not hesitate to get in touch with us.

Very truly yours,

Maureen Guttman, AIA
Chairman—Government Affairs, AIA PA

cc Matt Steck, Greenlee Partners
Jerry Roller, AIA, President
Caroline E. Boyce, Executive Director

1405 North Front Street
Harrisburg, PA 17102-2634
Telephone: 717.236.4055
Facsimile: 717.236.5407
Web Site: www.aiapa.org
E-Mail: info@aiapa.org

AIA Pennsylvania
Government Affairs Committee
UCC Task Force

Comments on Title 34 Labor and Industry
Uniform Construction Code

Administrative and Enforcement
Elevators and Other Lifting Devices
Chapters 401-405

September 9, 2002

PROPOSED RULEMAKING

Title 34 Labor and Industry
Uniform Construction Code

Administrative and Enforcement
Elevators and Other Lifting Devices
Chapters 401-405

The following pages constitute the Department of Labor and Industry's proposed rulemaking for the administrative and enforcement portion of the Uniform Construction Code. This document will also be published in the *Pennsylvania Bulletin* for public comment and may contain additional editorial changes. Accordingly, the reader should also review the document published in the *Pennsylvania Bulletin*.

This proposed rulemaking does not constitute binding requirements or a final regulation. The administrative and enforcement provisions of the Uniform Construction Code will not take effect until 90 days after they are published as a final-form regulation in the *Pennsylvania Bulletin*.

This proposed rulemaking is published for public comment as part of the regulatory process. The Department of Labor and Industry and the Commonwealth of Pennsylvania and their employees, officers and agents assume no liability for reliance or use of this proposed rulemaking. In SB647, Chapter 1 Preliminary Provisions, Section 102 Legislative findings and purpose, (b) Intent and Purpose, paragraph (4) states, "To eliminate existing codes to the extent that these codes are restrictive, obsolete, conflicting and contain duplicative construction regulations that tend to unnecessarily increase costs or retard the use of new materials, products or methods of construction or provide preferential treatment to certain types or classes of materials or methods of construction". Why is the Department of Labor and Industry modifying Chapter 1 – Administration of the IBC at all? They are essentially producing a document counter to the intent of the original bill.

Why not just edit Chapter One where required, provide modifications to childcare and healthcare in Chapter 4 (Special Detailed Requirements based on Occupancy – of which I2 already exists), issue a new Chapter 30 Elevators (although I do not understand why our state elevator division is refusing to adopt IBC) and finally modify Chapter 34 Existing Structures for historic building (which is already included in Section 3406 and in Appendix J governing accessibility for historic structures).

"Annex A"

UNIFORM CONSTRUCTION CODE

Sec.

Chapter 403. ADMINISTRATION

STANDARDS

PERMIT AND INSPECTION PROCESS FOR COMMERCIAL CONSTRUCTION

PERMIT AND INSPECTION PROCESS FOR RESIDENTIAL BUILDINGS

DEPARTMENT, MUNICIPAL AND THIRD-PARTY ENFORCEMENT FOR NON-COMPLIANCE

MUNICIPAL ELECTION

BOARD OF APPEALS

DEPARTMENT ENFORCEMENT

Chapter 405. ELEVATORS AND OTHER LIFTING DEVICES

STAGE, ORCHESTRA AND ORGAN CONSOLE ELEVATORS

§ 405.30 - Applicability.
§ 405.31 - Platforms.
§ 405.32 - Shaftway requirements.
§ 405.33 - Projections and recesses.
§ 405.34 - Landings and doors.
§ 405.35 - Lifting capacity.
§ 405.36 - Operating controls.
§ 405.37 - Switches.
§ 405.38 - Pit and pit access.
§ 405.39 - Single operator requirement.
§ 405.40 - Additional requirements.

§ 401.1 Definitions.

The following words and terms, when used in this part, have the following meanings, unless the context clearly indicates otherwise: **Again, why are definitions being provided when Chapter 2 Definitions is part of the UCC? If additional definitions are required a supplement should be used.**

Accessibility Advisory Board – The Department's Accessibility Advisory Board created under section 106 of the act (35 P.S. § 7210.106).

* * *

ANSI – The American National Standards Institute, 11 West 42nd Street, New York, NY 10036.

* * *

ASTM – American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshocken, PA 19428-2959.

Board of appeals – A body established by a municipality or municipalities which are parties to an agreement for the joint administration and enforcement of the act to hear requests for variances or extensions of time, and appeals from code administrator decisions.

Building – A structure used or intended for supporting or sheltering any occupancy.
This should not be included here. It is redundant with the IBC 202
BUILDING.
Any structure used or intended for supporting or sheltering any use or occupancy.

Building code official – A construction code official who manages, supervises and administers building enforcement activities. Duties include but are not limited to: management of building code enforcement activities; supervision of building inspectors or plan examiners; issuance of building permits, violation notices and orders to vacate; and the initiation of prosecutions.

Reconcile with IBC 202

BUILDING OFFICIAL.

The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.

* * *

Certificate of occupancy – A certificate issued by a code administrator **Do you mean a *Building code official*** allowing occupancy of a building or structure under the Uniform Construction Code.

Chapter 11 – Chapter 11 of the International Building Code relating to accessibility requirements adopted as part of the Uniform Construction Code.

* * *

Code Requirements for Housing Accessibility – The "Code Requirements for Housing Accessibility 2000" issued by the ICC. The term includes all errata issued by the ICC.

COMcheck EZ™ – The 2000 International Energy Conservation Code compliance guide containing state maps, prescriptive packages and related software published by the United States Department of Energy, Building Standards and Guidelines Program, April 2000, version 2.1.

Commercial construction – A building, structure or facility that is not a residential building.

* * *

Conveyor - A horizontal, inclined or vertical device for moving or transporting bulk material, packages or objects in a path predetermined by the design of the device and having points of loading and discharge, fixed or selected, and related equipment and devices described in and governed by the ASME standards adopted in this chapter.

* * *

Department of Community and Economic Development - The Department of Community and Economic Development of the Commonwealth.

Department of Health - The Department of Health of the Commonwealth.

* * *

Family child day-care home – A home other than the child's own home in which child day care is provided at any one time to four to six children unrelated to the owner under section 3.6(g) of the Fire and Panic Act (35 P.S. § 1223.6(g))
Reconcile with IBC Day care provisions

Filing date – The date that the Department or building code official receives the completed permit application.

Fire and Panic Act- The Fire and Panic Act (35 P.S. §§ 1221, 1223.3-1223.5, 1223.6(f)(1), (f.1), (g), 1230.1, 1233-1235).

Group child day-care home – A home other than a child's own home in which child care is provided at any one time for more than 6 but fewer than 13 children who are unrelated to the owner under section 3.6(g) of the Fire and Panic Act (35 P.S. § 1223.6(g)).
Reconcile with IBC Day care provisions

Health care facility – A facility licensed under the provisions of the Health Care Facilities Act (35 P.S. §§ 448.101- 448.904b).

Health Care Facilities Act-The Health Care Facilities Act (35 P.S. §§ 448.101-448.904b).

ICC – International Code Council, 5203 Leesburg Pike, suite 708, Fall Church, VA 22041-3401.

ICC Electrical Code – The "ICC Electrical Code-Administrative Provisions 2000" (first printing) issued by the ICC. The term includes all errata issued by the ICC.

Industrial Board – The Department's Industrial Board established under sections 445 and 2214 of the Administrative Code (71 P.S. §§ 155, 574), which shall hear requests for variances and extensions of time and appeals of decisions of the Department under the Uniform Construction Code.

Industrialized housing - Under section 3 of the Industrialized Housing Act (35 P.S. § 1651.3), any structure designed primarily for residential occupancy which is wholly or

in substantial part made, fabricated, formed or assembled in manufacturing facilities for installation, or assembly and installation, on the building site. The term does not include housing units defined as mobile homes.

International Building Code – Chapters 2 through 29 and 31 through 35 of the "International Building Code 2000" (first printing), issued by the ICC. The term includes the supplement "Code Requirements for Housing Accessibility 2000" and all errata issued by the ICC.

International Energy Conservation Code – The "International Energy Conservation Code 2000" (first printing) issued by the ICC. The term includes all errata issued by the ICC.

International Fire Code – The "International Fire Code 2000" (first printing) issued by the ICC. The term includes all errata issued by the ICC.

International Fuel Gas Code – The "International Fuel Gas Code 2000" (first printing) issued by the ICC. The term includes all errata issued by the ICC.

International Mechanical Code – The "International Mechanical Code 2000" (first printing) issued by the ICC. The term includes all errata issued by the ICC.

International Plumbing Code – The "International Plumbing Code 2000" (first printing) issued by the ICC. The term includes all errata issued by the ICC.

International Residential Code – The "International Residential Code for One- and Two-Family Dwellings 2000" (first printing) issued by the ICC. The term includes all errata issued by the ICC.

Manufactured housing – Under section 901(a) of the act (35 P.S. § 7210.901(a)), housing which bears a label as required by and referenced to in the Manufactured Housing Act (35 P.S. §§ 1656.1 - 1656.9), certifying that it conforms to Federal construction and safety standards adopted under the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C.A. §§ 5401-5426).

MECcheck™ – The 2000 International Energy Conservation Code compliance guide containing state maps, prescriptive energy packages and related software published by the United States Department of Energy, Building Standards and Guidelines Program, April 2000, version 3.2.

National Evaluation Services, Incorporated – National Evaluation Service, Inc., 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041-3401.

* * *

Person - Includes a corporation, partnership, business trust, other association, estate, trust, foundation or natural person. The term also includes the governing authority for a county or municipality, and a government entity other than the Commonwealth.

PHRC – The Pennsylvania Housing Research Center, 219 Sackett Building, University Park, PA 16802.

Permit – A document issued by a code administrator authorizing the construction, alteration, repair, demolition, location, maintenance or installation relating to a building, structure, elevator or equipment under the Uniform Construction Code.
This should not be included here. It is redundant with, and dilutes the applicability of the word in the IBC 202
PERMIT.
An official document or certificate issued by the authority having jurisdiction which authorizes performance of a specified activity.

PHRC Alternative to Chapter 11 – The "Code for the Conservation of Space Conditioning Energy for Housing in Pennsylvania: The PHRC Alternative to Chapter 11, *Energy Efficiency,* of the International Residential Code (IRC) 2000 for Use in Pennsylvania" issued December 2001.

Residential building – Construction that relates to detached one-family and two-family dwellings and multiple single-family dwellings (townhouses) that are not more than three stories in height with a separate means of egress and the dwellings' accessory structures. The term includes construction relating to a townhouse consisting of a dwelling unit constructed in a group of three or more units and each unit extends from foundation to roof and has open space on at least two sides.

* * *

State-owned building – A building owned by or to be constructed for Commonwealth entities consisting of the General Assembly, the Unified Judicial System, the Pennsylvania Higher Education Assistance Agency, an executive agency, independent agency, and a State-affiliated entity or State-related institution as defined in section 1 of the Commonwealth Procurement Code (62 Pa. C.S. § 103).

Structure – A combination of materials that are built or constructed with a permanent location or attached to something that has a permanent location.
Does this replace or supplement the IBC 202 definition? & Why?
STRUCTURE.
That which is built or constructed.

* * *

Variance – A modification of a Uniform Construction Code standard approved by a Board of Appeals or the Industrial Board.

§ 401.2. Department fees.
These are prohibitively expensive, inconsistent, and will deter construction and development in the state. See examples inserted below. This list should be replaces by something simple and fair.

(a) * * *

(b) The following fees apply to the issuance of a permit:

(1) New construction (per square foot).

(i) Use group A-1 for assembly and theater with stage.	62¢
(ii) Use group A-1 for assembly and theater without stage	55¢
(iii) Use group A-2 for assembly and nightclub.	43¢
(iv) Use group A-2 for assembly, restaurant, bar and banquet hall.	42¢
(v) Use group A-3 for assembly and church.	54¢
(vi) Use group A-3 for assembly, general community hall, library and museum.	40¢
(vii) Use group A-4 for assembly and arena.	43¢
(viii) Use group B for business.	41¢
A 50,000 sf office bldg	**$20,500**
(ix) Use group E for educational construction (kindergarten to 12th grade).	42¢
A 100,000 sf school	**$42,000**
(x) Use group F-1 for moderate hazard factory and industrial.	23¢
(xi) Use group F-2 for low hazard factory and industrial.	23¢

(xii) Use group H-1 for high hazard, explosives. 24¢

(xiii) Use group H-2 through H-4 for high hazard 22¢
Why is this half the cost of a school?

(xiv) Use group H-5 for hazardous production materials. 39¢

(xv) Use group I-1 for institutional and supervised environment. 41¢

(xvi) Use group I-2 for institutional and incapacitated. 63¢

(xvii) Use group I-3 for institutional, restrained and correctional facility construction. 47¢

(xviii) Use group I-4 for institutional and day care facilities. 41¢

(xix) Use group M for mercantile. 31¢

(xx) Use group R-1 for residential and hotels. 44¢
How is this more expensive than a school?

(xxi) Use group R-2 for residential and multi-family. 36¢

(xxii) Use group R-4 for residential and care/assisted-living facilities. 41¢

(xxiii) Use group S-1 for moderate-hazard storage. 41¢

(xxiv) Use group S-2 for low-hazard storage. 22¢

(xxv) Use group U for utility and miscellaneous. 17¢

(2) Alterations/modifications 5.5¢
x cost of construction.

This is ridiculous. $0.055 X $Const. Cost = $^{2}

Example: $9,000, 000 elementary school renovation will equal a fee of $495,000! T he example above indicating a new 100,000 square feet facility will have a $42,000 fee is

bad enough. These are almost apples to apples since a renovation of a 100,000 square foot school could be close to $9,000,000 in construction costs. This will eliminate virtually all renovation projects if this fee remains.

(3) Revisions of plans.	$300
(4) Interim accessibility plan review and inspection.	$200
(5) Elevator and lifting device.	
(i) Electric elevator.	
(A) 1 to 10 openings.	$300
Does this apply equally to one elevator in a ten story building, and 5 elevators in a two story building?	
(B) Each additional opening.	$10 per opening
(ii) Roped hydraulic elevator and roped/chained reciprocating conveyors.	$300
(iii) Hydraulic elevator, limited use/limited access elevator and direct acting hydraulic vertical reciprocating conveyor.	$200
(iv) Aerial tramway and aerial detachable lift.	
(A) Basic fee.	$500
(B) Additional fee over 15 towers.	$35 per tower
(v) Aerial lift, fixed.	
(A) Basic fee.	$300
(B) Each additional tower over 10 towers.	$35 per tower.
(vi) Surface lift, tow and conveyor.	$200.
(vii) Escalator and moving walk	$300.
(viii) Wheelchair lift and inclined stairway chairlift	$150

(ix) Orchestra lift, belt manlift, stage lift, organ lift and other lifting devices.	$300
(x) Permit for major repair	$200
(xi) Re-inspection following failed major repair inspection.	$100 per inspection.
(xii) Re-inspection following failed acceptance inspection.	50% of initial permit fee to a maximum of $300 per inspection.
(xiii) Revision of plans.	50% of initial permit fee.

(6) Subparagraph (xi) and (xiii) fees shall be paid before re-inspection.

(c) The following fees shall apply to periodic elevator and lifting device inspections under § 405.7 (relating to period inspections):

(1) Electric elevator with one to ten openings.	$ 75
(2) Electric elevator with 11 to 20 openings.	$100
(3) Electric elevator with more than 20 openings.	$125
(4) Roped hydraulic elevator, roped/chained vertical reciprocating conveyor, rack and pinion elevator, special purpose personnel elevator, power sidewalk elevator, roof-top elevator and elevator used for construction	$ 75
(5) Hydraulic elevator, limited use/limited access elevator, screw column elevator, hand elevator, inclined elevator, dumbwaiter and direct acting hydraulic vertical reciprocating conveyor.	$ 60
(6) Aerial tramway and aerial detachable lift.	$150
(7) Aerial lift, fixed.	$100

(8) Surface lift, tow and conveyor.	$ 75
(9) Wheelchair lift and inclined stairway chairlift.	$ 75
(10) Escalator and moving walk.	$ 50
(11) Orchestra lift, belt manlift, stage lift, organ lift and other lifting devices.	$ 75

(d) The following fees apply to witnessing periodic inspections and tests under § 405.8 (relating to periodic inspection and test):

(1) Electric elevators with one to ten openings.	$125
(2) Electric elevators with 11-20 openings.	$150
(3) Electric elevators with more than 20 openings.	$175
(4) Roped hydraulic elevator and roped/chained vertical reciprocal conveyor.	$110
(5) Hydraulic elevator, limited use/limited application elevator and direct hydraulic vertical reciprocating conveyor.	$ 85
(6) Escalator and moving walk.	$ 85
(7) Wheelchair lift and inclined stairway chairlift.	$ 75
(8) Orchestra lift, belt manlift, stage lift and organ lift.	$125
(9) Other equipment.	$ 85

(e) The following fees apply to the witnessing of periodic dynamic testing required under § 405.9 (relating to periodic dynamic testing):

(1) Aerial tramways.	$300

(2) Detachable aerial grips.	$300
(3) Fixed grip aerial lifts.	$200

(f) Certificate of operation.

(1) Renewal.	$ 25
(2) Duplicate.	$ 25

(g) Variance request.

(1) Industrial Board variance request.	$100
(2) Accessibility Advisory Board variance request.	$100

§ 401.2a. Municipal and third-party agency fees.

(a) A municipality or third-party agency that enforces the Uniform Construction Code may establish fees for its administration and enforcement and time periods for payment of the fees. The municipality or third-party agency may establish a required time period for payment of the fees and fees for plan review, inspections and other activities related to the Uniform Construction Code.

(b) The building code official for the municipality and a third-party agency shall make the fee schedule available to the public.

(c) A municipality or third-party agency may establish a fee refund policy.

(d) A municipality or third-party agency may withhold issuance of a certificate or permit until a required fee is paid.

(e) A municipality may establish other fees authorized by law.

CHAPTER 403. ADMINISTRATION

§ 403.1 Scope.

(a) The Uniform Construction Code applies to the construction, alteration, repair, movement, equipment, removal, demolition, location, maintenance, occupancy or

change of occupancy **Make clear the this applies to a change of occupancy group per IBC 301, not the change of occupant associated with a property sale, or new tenant.** of every building or structure which occurs on or after [effective date of regulation] and all existing structures that are not legally occupied. **What defines legally occupied? Compliance with previous codes, Prior certificate of occupancy in spite of non-compliance, other conditions?**

(b) The Uniform Construction Code does not apply to:

(1) New buildings or renovations to existing buildings for which an application for a permit was made to the Department or a municipality before [effective date of regulation].

(2) New buildings or renovations to existing buildings on which a contract for design or construction was signed before [effective date of regulation].

(3) Carports, detached private garages, greenhouses, sheds having a building area less than 500 square feet that are accessory to detached one-family dwellings, buildings or structures of an accessory character, and miscellaneous structures not classified in the Uniform Construction Code.

(4) An agricultural building defined under section 103 of the act (35 P.S. § 7210.103).

(5) Manufactured or industrialized housing shipped from the factory under section 901(a) of the act (35 P.S. § 7210.901(a)) as provided in § 403.25 (relating to manufactured and industrialized housing).

(c) Prior permits and construction.

(1) A permit issued under construction regulations before [effective date of regulation] remains valid and the construction of the building or structure may be completed in accordance with the approved permit. The permit is invalid unless the construction commenced within 2 years of permit issuance or a time period specified by municipal ordinance, whichever is less. The permit holder shall acquire a new permit under section 104(c) of the act (35 P.S. § 7210.104(c)) if the permit was not actively prosecuted during this time period.

(2) Construction may be completed without a permit under section 104(c)(2) of the act (35 P.S. § 7210.104(c)(2)) where construction of a building or structure commenced before [effective date of regulation] and a permit was not required at that time.

(3) The legal occupancy of a structure existing on [effective date of regulation] may continue without change except where the Uniform Construction Code provides otherwise. **Definitions or explanations needed.**

(d) The Uniform Construction Code applies to the construction of a residential building or structure governed by a homeowner's or community association under sections 104(d)(2)(ii) **This remains a serious conflict in the law. It prohibits adoption of standards that may be reasonable matters of style or aesthetics.** and 304(a)(2) of the act (35 P.S. §§ 7210.104(d)(2)(ii) and 7210.304(a)(2)).

(e) An electrical provision of the Uniform Construction Code does not apply to a dwelling unit utilized by a member of a recognized religious sect if a code administrator grants an exemption under section 901(b) of the act (35 P.S. § 7210.901(b)) as follows:

(1) A member of a recognized religious sect shall file an application with the code administrator stating the manner in which an electrical provision of the Uniform Construction Code conflicts with the applicant's religious beliefs. The application shall also contain an affidavit by the applicant stating:

(i) The applicant is a member of a religious sect.

(ii) The religious sect has established tenets or teachings which conflict with an electrical provision of the Uniform Construction Code.

(iii) The applicant adheres to the established tenets or teachings of the sect.

(iv) The dwelling unit will be used solely as a residence for the applicant and the applicant's household.

(2) The code administrator shall grant the application for the exemption if made in accordance with subsection (e)(1).

(3) If an applicant receives an exemption for a dwelling unit under section 901(b) of the act and the applicant subsequently sells or leases the dwelling unit, the applicant shall bring the dwelling unit into compliance with the provision of the Uniform Construction Code from which it was exempted prior to the dwelling unit being sold or leased unless the prospective subsequent owner or lessee files an affidavit in compliance with subsection (e)(1).

§ 403.2 Other statutes or ordinances.

(a) Under section 104(d)(1) of the act (35 P.S. 7210.104(d)(1)), the provisions of the Uniform Construction Code listed in § 403.21 (relating to Uniform Construction Code) preempt and rescind construction standards provided by a statute, local ordinance or regulation.

(b) Under section 303(a)(2) of the act (35 P.S. § 7210.303(a)(2)), a municipal building code ordinance provision in effect in or adopted by a city of the first class on or before January 1, 1998 shall remain in effect until December 31, 2003. The provisions of the ordinance which do not comply with the Uniform Construction Code on December 31, 2003 will be amended to provide for the minimum requirements of the Uniform Construction Code.

STANDARDS

§ 403.21. Uniform Construction Code.

(a) The Department adopts and incorporates by reference the following codes as the Uniform Construction Code:

(1) The provisions of Chapters 2 through 29, 31 through 35 of the International Building Code.

(2) ICC Electrical Code.

(3) International Mechanical Code.

(4) International Fuel Gas Code.

(5) International Plumbing Code.

(6) International Residential Code.

(7) International Fire Code.

(8) International Energy Conservation Code.

(9) Code Requirements for Housing Accessibility.

(10) Sections AE501 through AE503 and AE 601 through AE605 of Appendix E of the International Residential Code.

(b) The codes and standards adopted under subsection (a) are part of the Uniform Construction Code to the prescribed extent of each code or standard. The provisions of the Uniform Construction Code apply if there is a difference between the Uniform Construction Code and the codes or standards adopted in subsection (a).

(c) Appendices to a code or standard listed in subsection (a) are not adopted in the Uniform Construction Code except for the provisions adopted in subsection (a)(10).

(d) Until December 31, 2003, a permit applicant shall use one of the following specifications for stairway construction in use groups R-3, within dwelling units in occupancies in use group R-2 and in occupancies in use group U which are accessory to an occupancy in use group R-3. **Why?**

(1) Specifications utilized in place of exception 5 under section 1003.3.3.3 of the International Building Code:

(i) The maximum riser height shall be 8 ¼ inches.

(ii) The minimum tread depth shall be 9 inches.

(iii) A 1-inch nosing shall be provided on all stairways with solid risers.

(2) Stairway specifications utilized in place of section R-314.2 of the International Residential Code:

(i) The maximum riser height is 8 ¼ inches. There is to be no more than a 3/8 inch variation in riser height.
From riser to riser, or within a run, or within a stairway, from largest to smallest...? How is this to be applied?

(ii) The minimum tread depth is 9 inches measured from tread nosing to tread nosing.

(iii) The greatest tread run within any flight of stairs is not to exceed the smallest by more than 3/8 inch.

(iv) All treads may have a uniform projection of not more than 1 ½ inches when solid risers are used.

(v) Stairways may not be less than 3 feet in clear width and clear headroom of 6 feet 8 inches must be maintained for the entire run of the stair.

(vi) Handrails may project from each side of a stairway a distance of 3 ½ inches into the required width of the stair.

(e) A permit applicant may utilize one of the following prescriptive methods to demonstrate compliance with the energy conservation requirements of the Uniform Construction Code in addition to the prescriptive methods contained in the Uniform Construction Code. The standards are those listed for the climatic zone of this Commonwealth where the building or structure is located.
This should be "in lieu of" not in addition to. In addition to requires compliance with both.

(1) The prescriptive methods for detached residential buildings contained in MECcheck™ or the PHRC Alternative to Chapter 11.

(2) The prescriptive methods for all other buildings or structures contained in COMcheck™.

§ 403.22. Health care facilities.

(a) A health care facility shall comply with all of the following: **Again, Why here? This should be modifying Chapter 4, Section 407.**

(1) The Health Care Facilities Act (35 P.S. §§ 448.101- 448.904b).

(2) Regulations of the Department of Health (28 Pa. Code Part IV (relating to health facilities)).

(3) Building codes and regulations set forth in the applicable licensure laws and regulations under section 105(d) of the act (35 P.S. § 7210.105(d)).

(4) This chapter.

(b) Chapter 405 of this part always applies to health care facilities.

(c) In addition to the requirements of this chapter, an applicant for a health care facility shall obtain a license from the Department of Health under the Health Care Facilities Act and its regulations and comply with the Department of Health's license application procedures and its licensing regulations.

(d) An applicant for construction or alteration of a health care facility shall do all of the following:

(1) Submit construction or alteration plans to the Department of Health before commencing construction or performing the alteration.

(2) Obtain a license from the Department of Health before occupancy of a new health care facility.

(3) Obtain approval from the Department of Health before occupancy of an altered portion of an existing health care facility.

(e) A Department of Health inspector may inspect a health care facility site before, during and after construction to monitor compliance with Department of Health's health facility regulations.

(f) A building code official shall provide written notice of Department of Health license and approval requirements for construction and occupancy under the Health Care Facilities Act and regulations at the time of plan approval.

(g) This section applies to construction or alteration of all health care facilities that the Department or a building code official review and approve under this chapter.

§ 403.23. Child day- care facilities.
Reconcile with IBC provisions

(a) A family child day-care home and group child day-care home shall comply with sections 3.6(f)(1)(i), (f.1) and (g) of the Fire and Panic Act (35 P.S. §§ 1223.6(f)(1), (f.1), (g)) and this section. **Why depart to more definitions? I realize the Department of Health probably has a separate license for a group child day-care home and a family child day-care home and a child care facility but for the purpose of the code why can't it just be a child care facility for all? In the event of a life-taking event who is going to stand up from Labor and Industry to explain why a departure from the IBC was taken?**

(b) A family child day-care home, which provides care for five or fewer children for less than a 24-hour period, shall comply with use group R-3 of the International Building Code. **What about over a 24-hour period, use group I2 as defined in Section 308.3.1?**

(c) A family child day-care home, which provides care to six children, which includes a child who is under 2½ years of age, shall comply with use group I-4 of the International Building Code.

(d) A family child day-care home, which provides care to six children that are all older than 2½ years of age, shall comply with use group E of the International Building Code.

(e) A family day-care home shall meet one of the following relating to smoke detection units:

(1) Chapter 9 of the International Building Code (Fire protection systems).

(2) Smoke detection units which comply with all of the following requirements:

(i) Have a non-replaceable lithium battery as its power source.

(ii) Meet the applicable Underwriters Laboratories® standard.

(iii) Have a minimum 10-year limited warranty, commencing with the date of purchase.

(iv) Sound an alarm that is audible to persons in the indoor child care space with all intervening doors closed when each detector is activated.

(v) The facility operator maintains proof of purchase of the detectors, including the date of purchase, in the facility's fire drill logs.

(f) A family day-care center may utilize smoke detectors that are single station units under subsection (e)(2).

(g) A group child day-care home which provides care to 7 to 12 children which includes a child who is under 2½ years of age or under shall comply with use group I-4 of the International Building Code. **What about the gap between 12 and 16 children? What about the time limitations?**

(h) A group child day-care home which provides care to 7 to 12 children and all children are older than 2½ years of age shall comply with use group E of the International Building Code. **IBC states six to sixteen children would be classified as R-4?**

(i) A child day-care facility shall comply with use group I-4 of the International Building Code if it meets all of the following conditions:

(1) Provides care to five or more children.

(2) Cares for a child who is 2½ years of age or under.

(3) Is not located in a home.

(j) A child day-care facility shall comply with use group E of the International Building Code if it meets all of the following conditions:

(1) Provides care to six or more children.

(2) All of the children are older than 2½ years of age.

(3) Is not located in a home.

§ 403.24. Historic buildings, structures and sites.

A building code official may exclude an entire historic building or structure or part of the building or structure from compliance with the Uniform Construction Code if it meets all of the following conditions under section 902 of the act (35 P.S. § 7210.902):

(1) The building or structure is an existing or new building or structure that is not intended for residential use on an historic sites.

(2) The building or structure is identified and classified by Federal or local government authority or the Historical and Museum Commission of the Commonwealth as an historic building or site.

(3) A building code official judges the building or structure or parts of the building and structure as safe and excluded from the Uniform Construction Code in the interest of public health, safety or welfare. The building code official shall apply the Uniform Construction Code to parts of the building or structure where its exclusion jeopardizes the public health, safety and welfare.

§ 403.25. Manufactured and industrialized housing.

(a) Manufactured housing is governed by the following under section 901(a) of the act (35 P.S. § 7210.901(a)):

(1) Except as provided in subsection (a)(2), the Uniform Construction Code does not apply to manufactured housing assembled by and shipped from the manufacturer and which bears a label which certifies that it conforms to Federal construction and safety standards adopted under the Housing and Community Development Act of 1974 (42 U.S.C.A. §§ 5401-5426).

(2) Sections AE501 through AE503 and AE601 through AE605 of Appendix E of the International Residential Code adopted under the Uniform Construction Code apply to the following:

(i) Site preparation.

(ii) Foundation construction.

(iii) Connection to utilities.

(3) The Uniform Construction Code applies to the following:

(i) Alteration or repair to the unit that do not fall within 24 CFR 3280.1-3280.904 (relating to manufactured home construction and safety standards) and the manufacturer's installation instructions after assembly and shipment by the manufacturer.

(ii) Additions ~~to the delivery~~ to the unit after delivery to the site.

(iii) Construction, alteration, repair **a change of** occupancy **group** if the manufactured housing is resold to a subsequent purchaser.
Application of a building code should not relate to changes in ownership, but to changes in use group.

(iv) Construction, alteration, repair or **a change of** occupancy **group** if the original purchaser relocates the manufactured housing.

(b) Industrialized housing is governed by the following under section 901(a) of the act:

(1) Except as provided in subsection (b)(2), the Uniform Construction Code does not apply to industrialized housing assembled by and shipped from the manufacturer.

(2) The Uniform Construction Code applies to all of the following:

(i) Site preparation.

(ii) Foundation construction.

(iii) Utilities connection.

(iv) Installation.

(v) Construction, alteration or repair to the industrialized housing unit after installation.

(v)(i) Construction, alteration, repair or **a change of** occupancy **group** if industrialized housing is resold to a subsequent purchaser.

(v)(ii) Construction, alteration, repair or occupancy if industrialized housing is relocated.

(c) The Department of Community and Economic Development may enforce and take action under the Industrialized Housing Act (35 P.S. §§ 1651.1-1651.12) and the Manufactured Housing Construction and Safety Standards Authorization Act (35 P.S. §§ 1656.1-1656.9).

§ 403.26. Applicability.

(a) This chapter governs the ~~administration~~ **applicability** of the Uniform Construction Code and all of the following ~~applies~~ **apply**:

(1) Chapter 1 of the International Building Code is not adopted as part of the Uniform Construction Code.

(2) Portions of this chapter designate and incorporate portions of the following ICC 2000 copyrighted works:

(i) International Building Code.

(ii) International Residential Code.

(iii) International Electrical Code.

(iv) International Plumbing Code.

(v) International Mechanical Code.

(3) ICC owns the copyrighted works in subsection (a)(2). Reproduced with permission. All rights reserved.

(b) If different sections of this part specify different materials, method of construction or other requirements, the most restrictive material, method of construction or other requirement shall govern. The specific requirement of this part applies if there is a conflict between a general requirement and a specific requirement.

(c) The provisions of this chapter govern if there is a conflict between this chapter and the provisions of the codes relating to administration incorporated under § 403.21(a) (relating to Uniform Construction Code).

(d) A provision of the International Mechanical Code does not apply if the provision conflicts with the Boiler and Unfired Pressure Vessel Law (35 P.S. §§ 1331.1-1331.9).

PERMIT AND INSPECTION PROCESS FOR COMMERCIAL CONSTRUCTION

§ 403.41. Commercial construction.

This subchapter applies to the Department and municipalities electing to enforce the Uniform Construction Code under § 403.101 (relating to municipalities electing to enforce the Uniform Construction Code).

§ 403.42. Permit application.

(a) An owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change the occupancy of a commercial building, structure ~~and~~ or facility or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical, or plumbing system regulated by the Uniform Construction Code, shall first apply to the building code official and obtain the required permit.

(b) The applicant shall submit an application to the municipality on a form provided by the Department of Community and Economic Development. The applicant shall complete additional information requested by the municipality on ~~the~~ **an** addendum to the application. **Is there a prescribed addendum form?**

(c) A permit is not required for the exceptions listed in § 403.1(b) (relating to scope) and the following construction as long as the work does not violate a law or ordinance: **Why get into such detail here? A list could be kept much the same way fees are typically kept on a list or appendix. It makes the update much easier to place into effect and distribute.**

(1) Building construction for the following:

(i) Fences that are not over 6 feet high.

(ii) Oil derricks.

(iii) Retaining walls, which are not over 4 feet in height measured from the bottom of the footing to the top of the wall, unless it is supporting a surcharge or impounding Class I, II or III-A liquids.

(iv) Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2 to 1.

(v) Sidewalks and driveways not more than 30 inches above grade and that are not located over a basement or story below it and which are not part of an accessible route.

(vi) Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finishing work.

(vii) Temporary motion picture, television, and theater sets stage sets and scenery.

(viii)Prefabricated swimming pools accessory to a Group R-3 occupancy which are less than 24 inches deep, do not exceed 5,000 gallons and are installed entirely aboveground. **The residential section permits in-ground pools. Why the difference?**

(ix) Shade cloth structures constructed for nursery or agricultural purposes that do not include service systems.

(x) Swings and other playground equipment accessory to construction.

(xi) Window awnings supported by an exterior wall of Group R-3 and Group U occupancies. **Why? What if one falls, who is responsible then?**

(xii) Movable cases, counters, and partitions that are not over 5 feet 9 inches in height.

(2) Electrical work for the following:

(i) Minor repair and maintenance work that includes the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. **This is extremely minor, why not other small repairs as well?**

(ii) Electrical equipment used for radio and television transmissions. The provisions of the Uniform Construction Code apply to equipment and wiring for power supply and the installation of towers and antennas.

(iii) The installation of a temporary system for the testing or servicing of electrical equipment or apparatus.

(3) The following gas work:

(i) A portable heating appliance.

(ii) Replacement of a minor part that does not alter approval of equipment or make the equipment unsafe. **This should also apply to mechanical, electrical and plumbing work.**

(4) The following mechanical work or equipment:

(i) A portable heating appliance.

(ii) Portable ventilation equipment.

(iii) A portable cooling unit.

(iv) Steam, hot or chilled water piping within any heating or cooling equipment governed under the Uniform Construction code.

(v) Replacement of any part that does not alter its approval or make it unsafe.

(vi) A portable evaporative cooler.

(vii) A self-contained refrigeration system containing 10 pounds or less of refrigerant and placed into action by motors that are not more than 1 horsepower.

(5) The following plumbing repairs:

(i) Stopping leaks in a drain, and a water, soil, waste or vent pipe. The Uniform Construction Code applies if a concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and is removed and replaced with new material.

(ii) Clearing stoppages or repairing leaks in pipes, valves or fixtures, and the removal of and reinstallation of water closets if the valves, pipes or fixtures are not replaced or rearranged.

(d) An ordinary repair does not require a permit. The following are not ordinary repairs:

(1) Cutting away a wall, partition or portion of a wall.

(2) The removal or cutting of any structural beam or load-bearing support.

(3) The removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements.

(4) The addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical.

(e) A permit is not required for the installation, alteration or repair of generation, transmission, distribution, metering or other related equipment that is under the ownership and control of a public service utility by established right.

(f) A permit applicant shall attach construction documents and information concerning special inspection and structural observation programs, Commonwealth Department of Transportation highway access permits and other data required by the building code official with the permit application. The applicant shall submit three sets of documents when the Department conducts the review.

(g) A licensed architect or licensed professional engineer shall prepare the construction documents under the Architects Licensure Law (63 P.S. §§ 34.1 – 34.22), or the Engineer, Land Surveyor and Geologist Registration Law (63 P.S. §§ 148 – 158.2). An unlicensed person may prepare design documents for the remodeling or alteration of a building if there is no compensation and the remodeling or alteration does not relate to additions to the building or changes to the building's structure or means of egress. **This is inappropriate in these regulations. This issue is addressed in the license laws and should not be codified here.**

(h) A building code official may require submission of additional construction documents in special circumstances.

(i) The applicant shall submit construction documents in a format approved by the building code official. Construction documents shall be clear, indicate the location, nature and extent of the work proposed, and show in detail, that the work will conform to the Uniform Construction Code.

(j) The applicant shall submit construction documents that show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of the Uniform Construction Code. The construction documents for occupancies other than Groups R-2 and R-3 shall contain designation of the number of occupants to be accommodated on every floor and in all rooms and spaces. The applicant shall submit shop drawings for a fire protection system that indicates conformance with the Uniform Construction Code. Shop drawings must be approved before the start of the system installation. Shop drawings must contain all the information required by the referenced installation standards contained in Chapter 9 of the International Building Code.

(k) Construction documents shall contain the following information related to the exterior wall envelope:

(1) Description of the exterior wall envelope indicating compliance with the Uniform Construction Code.

(2) Flashing details.

(3) Details relating to intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves, or parapets, means of drainage, water-resistive membrane and details around openings.

(4) Manufactur~~inger~~'s installation instructions that provide documentation that the proposed penetration and opening details described in the

construction documents will maintain the weather resistance of the exterior wall envelope.
This is excess detail for apermit submittal. It should be available upon reasonable request.

(5) If applicable, a full description of the exterior wall system which was tested, and the test procedure that was used. **Who determines? What checks and balances exist to assure reasonableness?**

(l) Construction documents shall contain a site plan, drawn to scale, that includes all of the following:

(1) The size and location of new construction and existing structures on the site.

(2) Accurate boundary lines.

(3) Distances from lot lines.

(4) The established street grades and the proposed finished grades.

(5) The site plan for structure demolition showing construction intended for demolition, the location and size of existing structures, and the construction that is to remain on the site or plot.

(6) Location of parking spaces, accessible routes, public transportation stops and other required accessibility features.

(m) A permit applicant shall submit ~~**required**~~ certifications required for construction in a flood hazard area to the building code official.
What requirements?

(n) A permit applicant shall identify, on the application, the name and address of the individual who will observe the construction to ensure it is built in accordance with the submitted permit application, construction documents and the Uniform Construction Code.

(o) The permit applicant shall describe an inspection program, identify a person or firm who will perform structural observation, and describe the construction stage where structural observation will occur if section 1704 or 1709 of the International Building Code requires structural observation or special inspections for the construction.

(p) A building code official may waive or modify the submission of construction documents or other data if the nature of the work applied for does not require review of construction documents or other data to obtain compliance with the Uniform Construction Code.

(q) A permit applicant shall comply with the permit, certification, or licensure requirements of the following laws applicable to the construction:

(1) The Boiler and Unfired Pressure Vessel Law (35 P.S. §§ 1331.1-1331.19).

(2) Liquefied Petroleum Gas Act (35 P.S. §§ 1321- 1329).

(3) Health Care Facilities Act (35 P.S. §§ 448.101- 448.904b).

(4) Older Adult Daily Living Centers Licensing Act (62 P.S. §§ 1511.1-1511.22).

§ 403.43. Grant, denial and effect of permits.

(a) A building code official shall grant or deny a permit application, in whole or in part, within 30 business days of the filing date. Reasons for the denial shall be in writing and sent to the applicant. A building code official may establish a different deadline to consider applications for a permit in an historic district. The building code official and the applicant may agree in writing to extend the deadline by a specific number of days.

(b) A building code official shall examine, or delegate for examination, the construction documents and shall determine whether the construction indicated and described is in accordance with the Uniform Construction Code and other pertinent laws or ordinances as part of the application process.

(c) A building code official shall stamp or place a notation on the set of reviewed construction documents that the documents were reviewed and approved for Uniform Construction Code compliance before the permit is issued. The building code official shall clearly mark any required changes on the construction documents. The building code official shall return a set of the construction documents with this notation and any required changes to the applicant. The applicant shall keep a copy of the construction documents at the work site open to inspection by the construction code official or his authorized representative.

(d) A building code official shall not issue a permit for any property requiring access to a highway under the Department of Transportation's jurisdiction unless the permit contains notice that a highway occupancy permit is required under section 420 of the State Highway Law (36 P.S. § 670-420) before driveway access to a Commonwealth highway is permitted.

(e) A building code official may issue a permit for the construction of the foundations or other parts of a building or structure before the construction documents for the whole building or structure are submitted if the permit applicant previously filed adequate information and detailed statements for the building or structure under the Uniform Construction Code. Approval under this section is not assurance that the building code official will issue a permit for the entire building or structure. **This wording is poorly crafted. The IBC section is much more clear,** ***IBC 106.3.3 Phased approval.***

> ***The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.***

(f) Issuance of a permit does not bar prosecution or other legal action for violations of the act, the Uniform Construction Code, or a construction ordinance. A building code official may suspend or revoke a permit issued under the Uniform Construction Code when the owner does not make the required changes directed by the building code official under subsection (c), when the permit is issued in error, on the basis of inaccurate or incomplete information, or in violation of any act, regulation, ordinance or the Uniform Construction Code.

(g) A permit becomes invalid unless the authorized construction work begins within 180 days after the permit's issuance, or if the authorized construction work permit is suspended or abandoned for 180 days after the work has commenced. A permit applicant may submit a written request for an extension of time to commence construction for just cause. The building code official may grant extensions of time to commence construction in writing. A permit may be valid for no more than 5 years from its issue date.

(h) The owner shall keep a copy of the permit on the work site until the completion of the construction.

(i) A permit applicant may request extensions of time or variances, or appeal a building code official's action on the permit application to a Board of Appeals under § 403.122 (relating to appeals, variances and extensions of time).

(j) A permit is not valid until the required fees are collected under § 401.2 (relating to Department fees) or § 401.3 (relating to municipal and third-party agency fees).

§ 403.44. Construction materials and changes.

(a) Material, equipment and devices that were evaluated by the National Evaluation Services, Incorporated or its successor, and which meet the codes incorporated as the Uniform Construction Code are considered as an approved design, equipment, or device. **This is too restrictive. It only allows those materials evaluated by NES. Any material, equipment, device or system that meets this code must be permitted. In addition, these regulations should allow that those materials tested by a competent agency such as NES, FM, UL, etc should be deemed to meet the code.**

(b) Construction changes that do not comply with the approved construction documents shall be resubmitted to the building code official for approval as an amended set of construction documents.

§ 403.45. Inspections.

(a) A construction code official shall perform inspections to insure that the construction complies with the approved permit and the Uniform Construction Code.

(b) Before issuing a permit, a building code official may examine, or cause to be examined, buildings, structures, facilities or sites related to the permit application.

(c) The permit holder or his duly authorized agent shall notify the construction code official when work is ready for inspection and provide access for the inspection. A construction code official may inspect the construction and equipment during normal business hours.

(d) The construction code official shall notify a permit holder if construction complies with the Uniform Construction Code or fails to comply with the Uniform Construction Code.

(e) When the construction code official determines that the construction complies with the code, he shall file a final inspection report which indicates that all of the following areas met Uniform Construction Code requirements after a final inspection of the completed construction work: (1) General building.

(2) Electrical.

(3) Plumbing.

(4) Accessibility.

(5) Fire protection.

(6) Mechanical.

(7) Energy conservation.

(8) Elevators and other lifting devices.

The code official requires protection like that offered in the IBC

IBC 104.8 Liability.

The building official, member of the Board of Appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by legal representative of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

The building owner must be held responsible for compliance like that required in the IBC

IBC 110.1 Use and occupancy.

No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.

§ 403.46. Certificate of occupancy.

(a) A building, structure or facility shall not be used or occupied without a certificate of occupancy issued by a building code official.

(b) A building code official shall issue a certificate of occupancy after receipt of a final inspection report(s) that indicates compliance with the Uniform Construction Code. The certificate of occupancy is to contain the following information:

(1) The permit number and address of the building, structure or facility.

(2) The name and address of the owner of the building or structure.

(2) A description of the portion of the building, structure or facility covered by the occupancy permit.

(3) The name of the building code official who issued the occupancy permit.

(4) The applicable construction code edition applicable to the occupancy permit.

(5) The use and occupancy classification under Chapter 3 (Use and occupancy classification) of the International Building Code, when designated.

(6) The type of construction defined in Chapter 6 (Types of construction) of the International Building Code, when designated.

(7) Any special stipulations and conditions relating to the permit and Board of Appeals' decisions and variances for accessibility requirements granted by the Secretary.

(8) The date of the final inspection.

(c) A building code official may issue a certificate of occupancy for a portion of a building, structure or facility if the portion independently meets the Uniform Construction Code.

(d) A building code official may suspend or revoke a certificate of occupancy when the certificate was issued in error, on the basis of incorrect information supplied by the permit applicant, or in violation of the Uniform Construction Code. Before a certificate of occupancy is revoked, a building owner may request a hearing before

the Board of Appeals under § 403.122 (relating to appeals, variances and extensions of time).

§ 403.47. Public utility connections.

(a) A person may not connect a building, structure or system governed by the Uniform Construction Code and requiring a permit to a utility, source of energy, fuel or power unless a building code official authorizes the connection. A building code official may authorize the temporary connection of the building, structure or system to the utility source.

(b) A building code official may authorize the disconnection of utility service, source of energy, fuel or power to the building, structure or system governed by the Uniform Construction Code to eliminate an immediate hazard to life or property. The building code official shall notify the utility, and if possible, the owner and occupant of the building, structure or system prior to disconnection. The building code official shall provide written notification to the owner or occupant if the disconnection was made without prior notification.

§ 403.48. Boilers.

(a) The Boiler and Unfired Pressure Law (35 P.S. §§ 1331.1-1331.19) and 34 Pa. Code, Chapter 3 (relating to boilers and unfired pressure vessels) govern the new installation, repair or replacement of a boiler or other pressure vessel.

(b) A permit is not required for the installation, repair or replacement of a boiler or unfired pressure vessel under subsection (a). The building or structure containing the boiler or unfired pressure vessel shall comply with the Uniform Construction Code or the regulation or ordinance in effect at the time of its legal occupancy.

PERMIT AND INSPECTION PROCESS FOR RESIDENTIAL BUILDINGS. This section differs from the previous commercial building section, in form and content, in ways that create confusion and inconsistency. While a variation in the details of permits and inspections for residential Vs. commercial buildings is appropriate, it seems that these sections were prepared by two separate authors who failed to coordinate their work. A rigorous coordination of content, form, order and wording is imperative to avoid implied, but unintended differences[1] in the applicability of the rules to different types of construction.

A better solution would be to present a single section related to permits and inspections with one set of rules, adjusted through limited exceptions for special residential circumstances.

1. **Examples of assumed unintended differences:**
   - § 403.42.(a) differs in format from § 403.62.(a). but attempts to say the same thing. This is true of numerous related sections.
   - § 403.42.(c).5.(ii) includes valves and fixtures, while the residential section does not.
   - Residential buildings in flood plains have additional requirements. Is that intended?
   - Sections below, marked with a Δ, included in the commercial buildings section should also apply to residential buildings.

A permit applicant shall identify, on the application, the name and address of the individual who will observe the construction to ensure it is built in accordance with the submitted permit application, construction documents and the Uniform Construction Code.

The permit applicant shall describe an inspection program, identify a person or firm who will perform structural observation, and describe the construction stage where structural observation will occur if section 1704 or 1709 of the International Building Code requires structural observation or special inspections for the construction.

A building code official may waive or modify the submission of construction documents or other data if the nature of the work applied for does not require review of construction documents or other data to obtain compliance with the Uniform Construction Code.

§ 403.61. Residential buildings.

This section and §§ 403.62-403.65 applies to municipalities electing to enforce the Uniform Construction Code under § 403.101 (relating to municipalities electing to enforce the Uniform Construction Code) and third-party agencies.

§ 403.62. Permit application and approval.

(a) An owner or authorized agent who intends to perform any of the following shall first apply to a building code official and obtain the required permit:

(1) Construct, enlarge, alter, repair, move, demolish or change the occupancy of a residential building.

(2) Erect, install, enlarge, alter, repair, remove, convert or replace an electrical, gas, mechanical or plumbing system regulated by the Uniform Construction Code.

(b) The applicant shall submit an application to the municipality on a form provided by the Department of Community and Economic Development. The applicant shall complete additional information requested by the municipality on the addendum to the application.

(c) A permit is not required for the exceptions listed in § 403.1(b) (relating to scope) and the following construction if the work does not violate a law or ordinance:

(1) Building construction for the following:

(i) Fences that are no more than 6 feet high.

(ii) Retaining walls that are not over 4 feet in height measured from the bottom of the footing to the top of the wall unless the wall supports a surcharge.

(iii) Water tanks supporting directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2 to 1.

(iv) Sidewalks and driveways that are 30 inches or less above adjacent grade and not placed over a basement or story below it.

(v) Painting, papering, tiling, carpeting, cabinets, counter tops and similar finishing work.

(vi) Prefabricated swimming pools that are less than 24 inches deep.

(vii) Swings and other playground equipment accessory to a residential building.

(viii) Window awnings supported by an exterior wall.

(2) Minor electrical repair and maintenance including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

(3) The following gas work:

(i) Portable heating, cooking or clothes drying appliances.

(ii) Replacement of any minor part that does not alter approval of equipment or make this equipment unsafe.

(4) The following mechanical work:

(i) A portable heating appliance.

(ii) Portable ventilation appliances.

(iii) Portable cooling units.

(iv) Steam, hot or chilled water piping within any heating or cooling equipment regulated by the Uniform Construction Code.

(v) Replacement of any minor part that does not alter approval of equipment or make the equipment unsafe.

(vi) Self-contained refrigeration systems containing 10 pounds or less of refrigerant or that are put into action by motors of 1 horsepower or less.

(5) The following plumbing work:

(i) Stopping leaks in drains, water, soil, waste or vent pipe unless a concealed pipe becomes defective and it is removed and replaced with new material.

(ii) Clearing stoppages or repairing leaks in pipes, and the removal and reinstallation of water closets, if the repair does not involve or require the replacement or rearrangement of valves, pipes or fixtures.

Δ **Residential building permits should also require:**

(d) An ordinary repair does not require a permit. The following are not ordinary repairs:

(1) Cutting away a wall, partition or portion of a wall.

(2) The removal or cutting of any structural beam or load-bearing support.

(3) The removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements.

(4) The addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical.

(d) A permit is not required for the installation, alteration or repair of generation, transmission, distribution, metering or other related equipment that is under the ownership and control of a public service utility by established right.

Δ **Residential building permits should also require:**

A permit applicant shall attach construction documents and information concerning special inspection and structural observation programs, Commonwealth Department of Transportation highway access permits and other data required by the building code official with the permit application. The applicant shall submit three sets of documents when the Department conducts the review.

A building code official may require submission of additional construction documents in special circumstances.

The applicant shall submit construction documents in a format approved by the building code official. Construction documents shall be clear, indicate the location, nature and extent of the work proposed, and show in detail, that the work will conform to the Uniform Construction Code.

Construction documents shall contain the following information related to the exterior wall envelope:

(1) Description of the exterior wall envelope indicating compliance with the Uniform Construction Code.

(2) Flashing details.

(3) Details relating to intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves, or parapets, means of drainage, water-resistive membrane and details around openings.

Construction documents shall contain a site plan, drawn to scale, that includes all of the following:

(1) The size and location of new construction and existing structures on the site.

(2) Accurate boundary lines.

(3) Distances from lot lines.

(4) The established street grades and the proposed finished grades.

(5) The site plan for structure demolition showing construction intended for demolition, the location and size of existing structures, and the construction that is to remain on the site or plot.

(e) An applicant for a building or structure located in a flood hazard area under the National Flood Insurance Program shall submit the following information with the construction documents:

(1) Delineation of flood hazard areas, floodway boundaries and flood zones, and the design flood elevation, as appropriate.

(2) The elevation of the proposed lowest floor including basement and the height of the proposed lowest floor including basement above the highest adjacent grade, is to be included in the documents if the building or structure is located in areas of shallow flooding (Zone AO).

(3) Design flood elevations contained on the municipality's Flood Insurance Rate Map produced by the Federal Emergency Management Agency. The building code official and the applicant shall obtain and reasonably utilize design flood elevation and floodway data available from other sources if this information is not contained on the municipality's Flood Insurance Rate Map.

(f) A building code official shall grant or deny an application for a permit, **in whole or in part,** within 15 business days of the filing date or the application is deemed approved.

This is a severe and absolute condition. Is it appropriate? At least it should emphasize that the owner, designer and builder are not relieved of complying with the code.

Δ **Residential building permits should also require:**

(a) Reasons for the denial shall be in writing and sent to the applicant. A building code official may establish a different deadline to consider applications for a permit in an historic district. The building code official and the applicant may agree in writing to extend the deadline by a specific number of days.

(b) A building code official shall examine, or delegate for examination, the construction documents and shall determine whether the construction indicated and described is in accordance with the Uniform Construction Code and other pertinent laws or ordinances as part of the application process.

(c) A building code official, or third party agency, shall stamp or place a notation on the set of reviewed construction documents that the documents were reviewed and approved for Uniform Construction Code compliance before the permit is issued. The building code official shall clearly mark any required changes on the construction documents. The building code official shall return a set of the construction documents with this notation and any required changes to the applicant. The applicant shall keep a copy of the construction documents at the work site open to inspection by the construction code official or his authorized representative.

(d) A building code official shall not issue a permit for any property requiring access to a highway under the Department of Transportation's jurisdiction unless the permit contains notice that a highway occupancy permit is required under section 420 of the State Highway Law (36 P.S. § 670-420) before driveway access to a Commonwealth highway is permitted.

(e) A building code official may issue a permit for the construction of the foundations or other parts of a building or structure before the construction documents for the whole building or structure are submitted if the permit applicant previously filed adequate information and detailed statements for the building or structure under the Uniform Construction Code. Approval under this section is not assurance that the building code official will issue a permit for the entire building or structure.

This wording is poorly crafted. The IBC section is much more clear
IBC 106.3.3 Phased approval.
The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that

adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

(f) Issuance of a permit does not bar prosecution or other legal action for violations of the act, the Uniform Construction Code, or a construction ordinance. A building code official may suspend or revoke a permit issued under the Uniform Construction Code when the owner does not make the required changes directed by the building code official under subsection (c), when the permit is issued in error, on the basis of inaccurate or incomplete information, or in violation of any act, regulation, ordinance or the Uniform Construction Code.

(g) A permit becomes invalid unless the authorized construction work begins within 180 days after the permit's issuance, or if the authorized construction work permit is suspended or abandoned for 180 days after the work has commenced. A permit applicant may submit a written request for an extension of time to commence construction for just cause. The building code official may grant extensions of time to commence construction in writing. A permit may be valid for no more than 5 years from its issue date.

(h) The owner shall keep a copy of the permit on the work site until the completion of the construction.

(i) A permit applicant may request extensions of time or variances, or appeal a building code official's action on the permit application to a Board of Appeals under § 403.122 (relating to appeals, variances and extensions of time).

(b) Construction changes that do not comply with the approved construction documents shall be resubmitted to the building code official for approval as an amended set of construction documents.

(g) A permit is not valid until the required fees are collected under § 401.2 (relating to Department fees) or § 401.3 (relating to municipal and third-party agency fees).

§ 403.63. Inspections.

Many of the differences between this section and §402.45 (Commercial Inspections) are unwarranted. The two sections should be reconciled, and similar.

(a) A construction code official shall inspect all construction for which a permit was issued. The building permit applicant shall insure that the construction is accessible for inspection. An inspection does not bar prosecution or other legal action for violation of the Uniform Construction Code.

(b) The permit holder or his duly authorized agent shall notify the construction code official when work is ready for inspection and provide access for the inspection.

(c) The construction code official shall notify a permit holder whether construction complies with the Uniform Construction Code.

(d) A construction code official shall make the following inspections and file inspection reports relating to Uniform Construction Code compliance in all of the following areas:

(1) Foundation inspection.

(2) Plumbing, mechanical and electrical system inspection.

(3) Frame and masonry inspection.

(4) Wallboard inspection.

(e) The construction code official may conduct other inspections to ascertain compliance with the Uniform Construction Code or municipal ordinances.

(f) The construction code official shall file a final inspection report that indicates that each of the following areas met Uniform Construction Code requirements after a final inspection of the completed construction work:

(1) General building information.

(2) Electrical.

(3) Plumbing.

(4) Mechanical.

(5) Energy conservation.

(6) Fuel gas.

(g) A third-party agency under contract with a building permit holder shall submit a copy of the final inspection report to the municipality, property owner, builder and the lender designated by the builder.

(f) A municipality enforcing the Uniform Construction Code shall send a copy of the final inspection report to the property owner, the builder and the lender designated by the builder.

§ 403.64. Certificate of occupancy.

(a) A building, structure or facility may not be used or occupied without a certificate of occupancy issued by a building code official.

(b) A building code official shall issue a certificate of occupancy after receipt of a final inspection report(s) that indicates compliance with the Uniform Construction Code. The certificate of occupancy is to contain all of the following information:

(1) The permit number and address of the building, structure or facility.

(2) The name and address of the owner of the building or structure.

(3) A description of the portion of the building or structure covered by the occupancy permit.

(4) A statement that the described portion of the building or structure was inspected for compliance with the Uniform Construction Code.

(5) The name of the building code official who issued the occupancy permit.

(6) The construction code edition applicable to the occupancy permit.

(7) If an automatic sprinkler system is provided.

(8) Any special stipulations and conditions relating to the building permit.

(c) A building code official may issue a certificate of occupancy for a portion of a building or structure if the portion independently meets the Uniform Construction Code.

(d) A building code official may suspend or revoke a certificate of occupancy when the certificate was issued in error, on the basis of incorrect information supplied by the permit applicant, or in violation of the Uniform Construction Code. Before a

certificate of occupancy is revoked, a building owner may request a hearing before the Board of Appeals in accordance with § 403.101 (relating to appeals).

(e) A third-party agency under contract with a building permit holder shall submit a copy of the certificate of occupancy to the municipality.

§ 403.65. Public utility connections.

(a) A person may not connect a building, structure or system governed by the Uniform Construction Code to a utility, source of energy, fuel or power unless a building code official authorizes the connection. A building code official may authorize the temporary connection of the building, structure or system to the utility source.

(b) A building code official may authorize the disconnection of utility service, source of energy, fuel or power to the building, structure or system governed by the Uniform Construction Code to eliminate an immediate hazard to life or property. The building code official shall notify the utility, and if possible, the owner and occupant of the structure or serving system prior to disconnection. The building code official shall provide written notification to the owner or occupant if the disconnection was made without prior notification.

DEPARTMENT, MUNICIPAL AND THIRD-PARTY ENFORCEMENT FOR NONCOMPLIANCE

§ 403.81. Stop work order.

(a) A building code official may issue a written stop work order when he determines that construction violates the Uniform Construction Code, is being performed in a dangerous or unsafe manner or that the construction will interfere with required inspection. The stop work order is to contain the reasons for the order, and list the required conditions for construction to resume.

(b) The building code official shall serve the stop work order on the permit owner or the owner's agent by certified mail or personal service.

(c) A person who continues construction after service of a stop work order, except for construction work that is necessary to remove a violation or an unsafe condition, may be subject to the penalties under section 903 of the act (35 P.S. § 7210.903). A building code official may seek enforcement of a stop work order in a court of competent jurisdiction.

§ 403.82. Notice of violations.

A building code official shall follow the following procedures if an inspection reveals any violation of the Uniform Construction Code:

(1) A construction code official shall discuss the inspection results with the owner or owner's agent at the completion of the inspection.

(2) The building code official may issue a written notice of violations to the owner or owner's agent. The notice is to contain a description of the violations and an order requiring correction of the violations within a reasonable period determined by the building code official. When a violation relates to an unsafe building, structure or equipment, a building code official shall act in accordance with § 403.84 (relating to unsafe building, structure or equipment).

(3) After the compliance date contained in the order, the building code official or his designee shall inspect the building, structure or equipment to determine whether the violation was corrected. The building code official shall close the order if the violation was corrected. The building code official may issue an order to show cause under § 403.83 (relating to order to show cause/order to vacate) to the owner for a violation that was not corrected.

§ 403.83. Order to show cause/order to vacate.

(a) A building code official may initiate action to vacate or close a building, structure or equipment for violations of the Uniform Construction Code by issuing an order to show cause to the owner of a building or structure.

(b) The order to show cause shall contain a statement of the grounds for the action, the alleged violations of the Uniform Construction Code and notification that the building, structure, or equipment may be closed or vacated. The order to show cause shall contain notification that the owner shall submit a written answer within 30 days. The building code official shall serve the order to show cause upon the owner or owner's agent by certified mail or personal service.

(c) The owner may file a written answer to the order to show cause with the building code official within 30 days following service of the order to show cause. The answer shall contain specific admissions or denials of the allegations contained in the order to show cause and set forth the specific facts, matters of law or Uniform Construction Code interpretation relied upon by the owner. The answer may contain a request for a variance or an extension of time for compliance. The building code official shall forward all requests for variances, extensions of time or appeals regarding interpretations of the Uniform Construction Code to the Board of Appeals within 5 business days. The building code official shall send a request for variance, extension of time or appeals regarding interpretation of the Uniform Construction Code's accessibility requirements to the Department within 5 business days.

(d) If the permit owner files an appeal, the Board of Appeals or Department will assume jurisdiction and consolidate the answer with any pending request for variance, extension of time or appeal filed by the owner with the Board of Appeals.

(e) The building code official shall consider the pending request for variance or extension of time, or appeal as a stay to an enforcement action.

(f) After receipt of the answer, the building code official may take the following actions if the owner did not previously file an appeal or request for variance or extension of time:

(1) Issue a stop work order.

(2) Vacate or close the building or structure or place equipment out of operation.

(3) Abate or modify the alleged violation.

(4) Order other action to protect persons or property.

(g) A construction code official shall inspect the construction at the expiration of an extension of time or other time period granted for compliance under this section. If the building, structure or equipment violates the Uniform Construction Code following inspection, the building code official may issue an order vacating or closing the building or structure or placing equipment out of operation. The building code official shall serve this order upon the owner or owner's agent by certified mail or personal service.

(h) Where an unsafe condition exists, a building code official shall act in accordance with § 403.84 (relating to unsafe building, structure or equipment).

§ 403.84. Unsafe building, structure or equipment.

(a) A building code official may determine that a building, structure or equipment is unsafe because of inadequate means of egress, inadequate light and ventilation, fire hazard, other dangers to human life or the public welfare, illegal or improper occupancy or inadequate maintenance.

(b) When a building code official determines the existence of an unsafe condition, the building code official shall order the vacating of the building or structure.

(c) A building code official shall serve a written notice on the owner or owner's agent of the building, structure or equipment that is unsafe under this section. The notice shall contain the order to vacate the building, structure or seal the equipment out of service and state the unsafe conditions, required repairs or improvements. The order shall be served by certified mail or personal service to the owner or to the owner's agent's last known address or on the owner, agent or person in control of the building, structure or equipment. A building code official shall post the written notice at the entrance of the structure or on the equipment if service cannot be accomplished by certified mail or personal service.

(d) When a building or structure is ordered vacated under this section, the building code official shall post a notice at each entrance stating that the structure is unsafe and its occupancy is prohibited.

(e) A building code official may not rescind the order to vacate until the owner abates or corrects the unsafe condition.

(f) The Department may seal an elevator for an unsafe condition under section 105(c)(1) of the act (35 P.S. § 7210.105(c)(1)). The Department is the only entity that may remove or authorize the removal of a seal if an owner abates or corrects the unsafe condition.

§ 403.85. Retention and sharing of commercial construction records.

(a) A building code official shall keep records of all applications received, permits issued, reviewed building plans and specifications, certificates issued, fees collected, reports of inspections, notices and orders issued for all commercial buildings and structures under the Uniform Construction Code. A building code

official shall retain these records as long as the related building, structure or equipment remains in existence.

(b) A building code official shall reproduce records kept in an electronic format to a hard-copy format upon request. A building code official may charge for the reproduction costs.
Request by whom?

(c) A municipality that discontinues enforcing the Uniform Construction Code shall keep records of previous Uniform Construction Code enforcement. A municipality shall make these records available to the Department.

(d) The Department will make its records available to a municipality that elects to enforce the Uniform Construction Code under section 501 of the act (35 P.S. § 7210.501).

§ 403.86. Right of entry to inspect.

(a) A construction code official may enter a building, structure or premises at reasonable times to perform inspections under the Uniform Construction Code, to enforce Uniform Construction Code provisions or if there is reasonable cause to believe a condition on the building, structure or premises violates the Uniform Construction Code or which constitutes an unsafe condition.

(b) A construction code official shall enter a building, structure, or premises when he presents credentials to the occupant and receive permission to enter.
Who grants permission? The inspector must be able to gain access, and must be able to obtain a court order if necessary. Should the inspector have the right of entry without permission or order? Should this right of entry apply only when buildings are under construction or alteration, or with evidence of a code violation.

(c) A construction code official shall not enter a building, structure, or premises that is unoccupied or after normal hours without obtaining permission to enter from the owner or his agent.
(d) A construction code official may seek the assistance of a law enforcement agency to gain entry to enforce the Uniform Construction Code where the building, structure or premises is unsafe.

(e) This section shall be used in conjunction with The Fire and Panic Act (35 P.S. §§ 1233—1235). **Is this not obsolete?**

MUNICIPAL ELECTION

§ 403.101. Municipalities electing to enforce the Uniform Construction Code.

(a) A municipality which elects to enforce the Uniform Construction Code shall enact an ordinance adopting the Uniform Construction Code as its municipal building code under section 501(a) of the act (35 P.S. § 7210.501(a)).

(b) The initial election period is from [effective date of regulation] through [90 days after its effective date]. A municipality shall enact an ordinance adopting the Uniform Construction Code no later than [effective date of regulation plus 90 days].

(c) After the expiration of the initial election period, a municipality may elect to administer and enforce the Uniform Construction Code. The municipality shall provide 180 days notice to the Department of its intention to pass an ordinance adopting the Uniform Construction Code.

(d) A municipality shall submit written notification to the Department of adoption of the ordinance and the following information within 30 days of its adoption:

(1) The number and date of adoption of the ordinance.

(2) Name of building code official.

(3) Business address of building code official.

(4) Business phone number of building code official.

(5) Electronic mail address of building code official, if available.

(e) A municipality may retain ordinances in effect on July 1, 1999 that contain standards that equal or exceed the Uniform Construction Code under section 303(b) of the act (35 P.S. § 7210.303(b)).

(f) A municipality that administers and enforces Uniform Construction Code may cease administration and enforcement so long as it provides 180 days notice to the Department of its intention to adopt an ordinance ceasing administration and enforcement.

(g) A municipality shall notify the Department in writing within 30 days of any changes to the information it provided under subsections (b) and (d).

(h) A municipality that elects to administer and enforce the Uniform Construction Code shall utilize any of the following ways under section 501(b) of the act:

(1) Designating an employee to serve as a building code official.

(2) Contracting with a third-party agency.

(3) Utilizing an intermunicipal agreement under 53 Pa. C.S. §§ 2301-2315 (relating to Intergovernmental cooperation).

(4) Contracting with another municipality.

(5) Contracting with the Department for plan reviews, inspection and enforcement of structures other than one-family and two-family dwelling units and utility and miscellaneous use structures.

(i) A municipality may charge fees under § 401.3 (relating to municipal and third-party agency fees).

(j) A municipality may enact an ordinance containing standards that equal or exceed the Uniform Construction Code as adopted by § 403.21 (relating to the Uniform Construction Code) under section 503 of the act (35 P.S. § 7210.503) after Department review and approval. The municipality shall notify the Department of the proposed ordinance and shall submit all of the following to the Department for its review:

(1) The complete ordinance.

(2) The information required in subsection (d).

(3) A detailed statement containing the differences between the proposed ordinance and the Uniform Construction Code and how the ordinance will equal or exceed the Uniform Construction Code.

(k) A municipality may enact an ordinance relating to the administration and enforcement of the Uniform Construction Code that meets or exceeds the requirements of the following sections:

(1) § 403.43 (b), (c), (g), (h) and (j) (relating to grant, denial and effect of permits).

(2) § 403.44 (relating to construction material and changes).

(3) § 403.45 (relating to inspections).

(4) § 403.46 (relating to certificates of occupancy).

(5) § 403.47 (relating to public utility connections).

(6) § 403.63 (relating to inspections).

(7) § 403.64 (relating to certificates of occupancy).

(8) § 403.65 (relating to public utility connections).

(9) § 403.81(a) and (b) (relating to stop work orders).

(10) § 403.82 (relating to notice of violations).

(11) § 403.83 (relating to orders to show cause and orders to vacate).

(12) § 403.84 (a) – (e) (relating to unsafe buildings, structures and equipment).

(13) § 403.85 (a)-(c) (relating to retention and sharing of commercial construction records).

(l) A municipality may enact an ordinance relating to administration and enforcement of the Uniform Construction Code that meets or exceeds § 403.42 (a)-(e) and (g)-(o) (relating to permit application) and § 403.62(a)-(f) (relating to permit application and approval). A municipality shall utilize forms provided by the Department of Community and Economic Development as the permit application under §§ 403.42(b) and 403.62(b) and may not alter the application form. A municipality may require an applicant to provide additional information on an addendum to the application.

(m) The Department will enforce Chapter 11 (Accessibility) of the Uniform Construction Code and other accessibility requirements contained in or referenced by the Uniform Construction Code until a municipality employs or contracts with a code administrator certified as an accessibility specialist under this part.

(n) A municipality may observe Department inspections of State-owned buildings in its jurisdiction under section 105(b)(1) of the act (35 P.S. § 7210.105(b)(1)). A municipality may review all building plans and plan review documents for State-owned buildings in the Department's custody.

§ 403.102. Municipalities electing not to enforce the Uniform Construction Code.

(a) A municipality shall provide written notification to the Department before [date 120 days after effective date of regulation] if it elects not to administer and enforce the Uniform Construction Code.

(b) An applicant for a residential building permit shall obtain the services of a third-party agency certified in the appropriate categories to conduct the plan review and inspections under § 403.61 (relating to residential buildings), § 403.62 (relating to permit application and approval), § 403.63 (relating to inspections), § 403.64 (relating to certificate of occupancy) and § 403.65 (relating to public utility connections).

(c) A building code official shall approve an alternative material, design or method of construction if the proposed design is satisfactory and complies with the intent of the Uniform Construction Code and the offered material, method or work is equivalent to Uniform Construction Code requirements for its intended purpose. The building code official may allow compliance with specific performance-based provisions of the codes contained in § 403.21 (relating to Uniform Construction Code) as an alternative to compliance with the Uniform Construction Code.

(d) A third-party agency which conducts plan review and inspection of residential buildings and utility and miscellaneous use structures shall retain copies of all final inspection reports relating to Uniform Construction Code compliance.

(e) A third-party agency shall send a copy of the final inspection report to the property owner, builder, municipality and a lender designated by the builder.

(f) A municipality shall provide written notification to a permit applicant for buildings and structures other than residential buildings that he must obtain the Department's services for plan review and inspection. The municipality shall send a copy of the notice to the Department. The notice shall contain the following information:

(1) Name of applicant.

(2) Address of applicant.

(3) Name of building or structure.

(4) Address of building or structure.

§ 403.103. Department review.

(a) The Department will investigate written and signed complaints concerning the enforcement and administration of the Uniform Construction Code under section 105 of the act (35 P.S. § 7210.105). The Department will make a report to the governing body of the municipality or third-party agency that was the subject of the review and provide recommendations to address any deficiencies found by the Department.

(b) The Department will review each municipal enforcement program at least once every 5 years to ensure that code administrators are adequately administering and enforcing the provisions of Chapter 11 (Accessibility) of the Uniform Construction Code and any other accessibility requirements contained in or referenced by the Uniform Construction Code. The Department will submit a written report to the municipality of its findings.

BOARD OF APPEALS

§ 403.121. Board of Appeals.

(a) A municipality which has adopted an ordinance for the administration and enforcement of the Uniform Construction Code or is a party to an agreement for the joint administration and enforcement of the Uniform Construction Code shall establish a Board of Appeals under section 501(c) of the act (35 P.S. § 7210.501(c)).

(b) The Board of Appeals shall hear and rule on appeals, requests for variances and requests for extensions of time. An application for appeal shall be based on a claim that the true intent of the act or Uniform Construction Code has been incorrectly interpreted, the provisions of the act or Uniform Construction Code do not fully apply or an equivalent form of construction is to be used.

(c) A municipality's governing body shall appoint the members of the Board of Appeals. A member of the Board of Appeals shall be qualified by training and experience to pass on matters pertaining to building construction. A member of the Board of Appeals holds office at the pleasure of a municipality's governing body.

(d) Members of a municipality's governing body may not serve on a Board of Appeals.

(e) A municipality may fill a position on the Board of Appeals with a qualified person who resides outside of the municipality when it cannot find a person within the municipality who satisfies the requirements of this section.

(f) Two or more municipalities may establish a joint Board of Appeals through an intermunicipal agreement under 53 Pa. C.S. §§ 2301-2315 (relating to Intergovernmental cooperation).

(g) A Board of Appeals member may not cast a vote or participate in a hearing in any appeal, request for variance or request for extension of time in which the member has a personal, professional or financial interest.

(h) A Board of Appeals shall schedule meetings and provide public notice of meetings in accordance with the Sunshine Act (65 P.S. §§ 701-716).

(i) A Board of Appeals may not act upon appeals, requests for variance, or request for extension of time relating to accessibility under the act.

§ 403.122. Appeals, variances and extensions of time.

(a) An owner or owner's agent may seek a variance or extension of time or appeal a building code official's decision by filing a petition with the building code official or other person designated by the building code official on a form provided by the municipality.

(b) The postmark date or the date of personal service will establish the filing date of the appeal and request for variance or extension of time.

(c) An appeal or request for variance or extension of time to a Board of Appeals will automatically suspend an action to enforce an order to correct until the matter is resolved. An action under § 403.84 (relating to unsafe building, structure or equipment) may not be stayed.

(d) A Board of Appeals shall decide an appeal, variance request or request for extension of time by reviewing documents and written brief or argument unless the owner requests a hearing.

(e) A Board of Appeals shall hold a hearing within 60 days from the date of an applicant's request unless the applicant agreed in writing to an extension of time.

(f) A Board of Appeals shall only consider the following factors when deciding an appeal under section 501(c)(2) of the act:

(1) The true intent of the act or Uniform Construction was incorrectly interpreted.

(2) The provisions of the act do not apply.

(3) An equivalent form of construction is to be used.

(g) A Board of Appeals may consider the following factors when ruling upon a request for extension of time or the request for variance:

(1) The reasonableness of the Uniform Construction Code's application in a particular case.

(2) The extent to which the granting of a variance or an extension of time will pose a violation of the Uniform Construction Code or an unsafe condition.

(3) The availability of professional or technical personnel needed to come into compliance.

(4) The availability of materials and equipment needed to come into compliance.

(5) The efforts being made to come into compliance as quickly as possible.

(6) Compensatory features that will provide an equivalent degree of protection to the Uniform Construction Code.

(h) If the owner requests a hearing, the Board of Appeals shall schedule a hearing and notify the owner and building code official of the date, time and place of the hearing.

(i) The Board of Appeals may:

(1) Deny the request in whole or in part.

(2) Grant the request in whole or in part.

(3) Grant the request upon certain conditions being satisfied.

(4) Grant other appropriate relief.

(j) The Board of Appeals shall provide a written notice of its decision to the owner and to the building code official.

(k) An owner shall file an appeal, request for variances and request for extension of time relating to accessibility with the Accessibility Advisory Board under § 403.142 (relating to Accessibility Advisory Board).

DEPARTMENT ENFORCEMENT

§ 403.141. Enforcement by the Department.

(a) The Department will conduct plan and specification review and inspections for all State-owned buildings under section 105(b) of the act (35 P.S. § 7210.105(b)). The Department will notify municipalities of all inspections of State-owned buildings and provide municipalities the opportunity to observe inspection of the buildings.

(b) The Department will retain jurisdiction over the provisions of Chapter 11 (Accessibility), and any other accessibility requirements contained in or referenced by the Uniform Construction Code, until a municipality administering and enforcing the Uniform Construction Code obtains the services of a Department-certified accessibility specialist.

(c) The Department will enforce the Uniform Construction Code for all buildings and structures except for residential buildings and utility and miscellaneous use structures in municipalities that have not adopted an ordinance to enforce the provisions of the act under section 501(a)(1) of the act (35 P.S. § 7210.501(a)(1)).

(d) The Industrial Board will decide petitions for variances and extensions of time and appeals of Department decisions under the Uniform Construction Code. The Industrial Board will hold the first hearing on a petition within 45 days of receipt of the petition.

(e) An owner may file a petition for variance or extension of time or an appeal with the Industrial Board under § 403.122 (relating to appeals, variances and extensions of time). An owner may file an appeal concerning technical infeasibility under Chapter 11 (Accessibility) of the Uniform Construction Code and any other accessibility requirements contained in or referenced by the Uniform Construction Code with the Accessibility Advisory Board under § 403.142 (relating to Accessibility Advisory Board).

§ 403.142. Accessibility Advisory Board.

(a) The Secretary has the exclusive power to grant modifications and extensions of time and decide issues of technical infeasibility under Chapter 11 (Accessibility) of the Uniform Construction Code and any other accessibility requirements contained in or referenced by the Uniform Construction Code for individual projects under section 301(a)(3) of the act (35 P.S. § 7210.301(a)(3)).

(b) The Accessibility Advisory Board is created with the following powers and duties under section 106 of the act (35 P.S. § 7210.106):

(1) Review all proposed regulations under the act and offer comment and advice to the Secretary on all issues related to accessibility by persons with physical disabilities and enforcement of accessibility requirements.

(2) Review all applications for modifications or variances of Chapter 11 (Accessibility) of the Uniform Construction Code and any other accessibility requirements contained in or referenced by the Uniform Construction Code. The Accessibility Advisory Board will advise the Secretary whether modification or variance should be granted or whether compliance is technically feasible.

(3) Hear appeals from decisions of building code officials, recommend modifications or variances or extensions of time. An appeal of a decision of a building code official shall be based on a claim that the true intent of the act or the Uniform Construction Code was incorrectly interpreted, the provisions of the act do not apply, or an equivalent form of construction is to be used.

(c) The Accessibility Advisory Board will schedule meetings and provide public notice of meetings in accordance with the Sunshine Act (65 P.S. §§ 701-716).

(d) The Accessibility Advisory Board will hear requests for variances or modification, requests for extensions of time and appeals in accordance with the following procedure:

(1) An owner or owner's agent shall file an appeal with the Accessibility Advisory Board on a Department-provided form.

(2) The postmark date or the date of personal service will establish the filing date of the appeal.

(3) An appeal to the Accessibility Advisory Board will automatically suspend an action to enforce an order to correct except where there is an unsafe building, structure or equipment under § 403.84 (relating to unsafe building, structure or equipment).

(4) The Accessibility Advisory Board will make recommendations based upon documents and written brief unless the owner requests a hearing.

(5) If the owner requests a hearing, the Accessibility Advisory Board will schedule a hearing and will notify the owner and the building code official of the date, time and place of the hearing.

(6) The Accessibility Advisory Board may consider the following factors when a request for an extension of time or a variance or other appropriate relief is reviewed:

(i) The reasonableness of the regulations or Uniform Construction Code as applied in the specific case.

(ii) The extent to which an extension of time or a variance will subject occupants of the building or structure to conditions which do not comply with the Uniform Construction Code.

(iii) The availability of professional or technical personnel needed to comply with the Uniform Construction Code.

(iv) The availability of materials and equipment needed to comply with the Uniform Construction Code.

(v) The efforts made to safeguard occupants.

(vi) The efforts made to comply with the Uniform Construction Code.

(vii) Compensatory features that will provide an equivalent degree of compliance with the intent of the Uniform Construction Code.

(7) The Accessibility Advisory Board will recommend that the Secretary take one of the following actions:

(i) Deny the request in whole or in part.

(ii) Grant the request in whole or in part.

(iii) Grant the request upon certain conditions being satisfied.

(iv) Grant other appropriate relief.

(8) The Secretary will make a final decision on the request and will issue written notice of the decision to the owner or the owner's agent and the building code official.

(e) An individual, partnership, agency, association or corporation who reasonably believes there is a violation of the accessibility provisions of the act or the Uniform Construction Code by a governmental entity or private owner may file a complaint with the body responsible for enforcement of the Uniform Construction Code under section 501(f) of the act (35 P.S. § 7210.501(f)).

ELEVATORS AND OTHER LIFTING DEVICES

§ 405.1. Scope.

(a) This chapter constitutes the Uniform Construction Code technical requirements for elevators and other lifting devices. This chapter applies to the construction, alteration, addition, repair, movement, equipment, removal, maintenance, use and change in use of every elevator and lifting device after [Effective date of regulation].

(b) The Uniform Construction Code does not apply to:

(1) New elevators and lifting devices or renovations to existing elevators and lifting devices for which a permit application was made to the Department before [Effective date of regulation].

(2) New elevators and lifting devices or renovations to existing elevators and lifting devices for which a contract for design or construction was signed before [Effective date of regulation].

(3) Elevators and lifting devices solely used by the occupants of a dwelling unit.

(c) Prior permits and construction.

(1) A permit issued under valid regulations before [Effective date of regulation] remains valid and the construction of the elevator or lifting device may be completed in accordance with the approved permit if construction commences by [Effective date of regulation plus 2 years].

(2) If construction of the elevator or lifting device has not commenced within the time period allowed under subsection (c)(1), the permit becomes rescinded. The permit holder shall acquire a new permit under section 304(c)(2) of the act (35 P.S. § 7210.304(c)(2)) before construction.

(3) An elevator or lifting device that was issued a certificate of operation by the Department before (effective date), may remain in use if the owner maintains the elevator or lifting device in accordance with a previous Department permit or approval, and the owner complied with the regulations in effect when the certificate of operation was issued.

§ 405.2. Standards.

(a) The following standards are adopted as part of the Uniform Construction Code and apply to the listed type of elevator or other lifting device:

(1) ASME A17.1- 2000 Edition:

(i) Part 1 (General).

(ii) Part 2 (Electric elevators).

(iii) Part 3 (Hydraulic elevators).

(iv) Part 4 (Elevators with other types of driving machines).

(v) Part 5 (Special application elevators).

(vi) Part 6 (Escalators and moving walks).

(vii) Part 7 (Dumbwaiters and material lifts).

(viii) Part 8 (General requirements).

(ix) Part 9 (Standard codes and specifications).

(2) ASME B20.1-1996 Edition including ASME B20.lb-1998 addenda for vertical and inclined reciprocating conveyors without automatic transfer devices.

(3) ASME A90.1- 1997 Edition including ASME A90.1a-1999 addenda for belt man-lifts.

(4) ANSI B77.1-1999 Edition for passenger ropeways, aerial tramways, aerial lifts, surface lifts, tows and conveyors.

(5) ASME A18.1- 1999 Edition including ASME A.18.1a-2001 addenda for vertical and inclined wheelchair lifts and stairway lifts. Testing under sections 10.3.2 and 10.3.3 shall comply with § 405.8 (relating to periodic test results).

(6) Electric wiring and apparatus shall comply with the ICC Electrical Code.

(b) The following sections of ASME A17.1- 2000 Edition are not adopted as the Uniform Construction Code:

(1) Section 5.3 (Private residence elevators).

(2) Section 5.4 (Private residence inclined elevators).

(3) Section 5.8 (Shipboard elevators).

(4) Section 5.9 (Mine elevators).

(5) Section 7.7 (Automatic transfer devices).

(6) Section 7.8 (Power dumbwaiter with automatic transfer devices).

(7) Section 7.9 (Electric material lifts with automatic transfer devices).

(8) Section 7.10 (Hydraulic material lifts with automatic transfer devices).

(9) Section 7.11 (Material lifts with obscured transfer devices).

(10) Section 8.6.7.3 (Private residence elevator).

(11) Section 8.6.7.4 (Private residence inclined elevators).

(12) Section 8.6.7.8 (Shipboard elevators).

(13) Section 8.6.7.9 (Mine elevators).

(14) Section 8.6.9.2 (Material lifts and dumbwaiters with automatic transfer devices).

(15) Section 8.7.5.3 (Private residence elevators).

(16) Section 8.7.5.4 (Private residence inclined elevators).

(17) Section 8.7.5.8 (Shipboard elevators).

(18) Section 8.7.5.9 (Mine elevators).

(19) Section 8.7.7.3 (Material lifts and dumbwaiters with automatic transfer devices).

(20) Section 8.10.5.2 (Private residence elevators and lifts).

(21) Section 8.10.5.5 (Material lifts and dumbwaiters with automatic transfer devices).

(22) Section 8.10.5.8 (Shipboard elevators).

(23) Section 8.11.5.2 (Private residence elevators and lifts).

(24) Section 8.11.5.5 (Material lifts and dumbwaiters with automatic transfer devices).

(25) Section 8.11.5.8 (Shipboard elevators).

(c) The following portions of ASME B20.1-1996 Edition are not adopted as the Uniform Construction Code:

(1) Section 3 (Intent).

(2) Section 5.14 (Hoppers and chutes).

(3) Section 6.1 (Belt conveyors-fixed in place).

(4) Section 6.2 (Bucket conveyors).

(5) Section 6.3 (Chain conveyors).

(6) Section 6.4 (En masse conveyors).

(7) Section 6.5 (Flight and apron conveyors-bulk material).

(8) Section 6.7 (Live roller conveyors-belt or chain driven).

(9) Section 6.8 (Mobile conveyors).

(10) Section 6.9 (Portable conveyors, extendible belt conveyors and car unloaders).

(11) Section 6.10 (Pusher bar conveyors).

(12) Section 6.11 (Roller and wheel conveyors).

(13) Section 6.12 (Screw conveyors).

(14) Section 6.13 (Shuttle conveyors, belt trippers and transfer cars).

(15) Section 6.14 (Skip hoists-bulk materials).

(16) Section 6.15 (Slat conveyors and roller slat conveyors).

(17) Section 6.16 (Suspended vertical tray conveyors).

(18) Section 6.17 (Tow conveyors-in the floor).

(19) Section 6.18 (Trolley conveyors and power and free conveyors).

(20) Section 6.19 (Vertical articulated conveyors).

(21) Section 6.20 (Vertical chain opposed shelf type conveyors).

(d) The following portions of ASME A18.1 –1999 Edition are not adopted as the Uniform Construction Code:

(1) Part V (Private residence vertical platform lifts).

(2) Part VI (Private residence inclined platform lifts).

(3) Part VII (Private residence incline stairway chairlifts).

(4) Section 10.3.1 (One-year inspection and test requirements).

(e) This section shall apply when there is a conflict with a code or standard related to elevators or lifting devices.

§ 405.3. Permit application.

(a) An owner of an elevator or lifting device or his authorized agent shall apply to the Department for a permit before the construction, alteration, replacement or repair of an elevator or lifting device.

(b) An owner or owner's agent shall submit four copies of a permit application and supporting documents to the Department for review. The application and supporting construction documents shall be submitted in Department-approved media and clearly detail the location, nature and extent of the proposed construction and its compliance with the Uniform Construction Code.

(c) The Department may suspend or revoke a permit when the permit was issued erroneously, on inaccurate, incorrect, or incomplete information or issued in violation of the Uniform Construction Code. The Department may charge an applicant a new application and inspection fee when a previous permit was suspended or revoked based upon inaccurate, incomplete or incorrect information provided by the permit applicant.

(d) A permit becomes invalid unless construction work is commenced within 180 days after its issuance, or if the work is suspended or abandoned for a period of 180 days after it is commenced. The Department may grant written extensions of time for periods of 180 days each. A permit remains valid for no more than 5 years.

(e) The Department will grant or deny a permit in whole or in part, within 30

business days of the filing date of a complete application. The Department will provide written notification to the applicant for applications denied in whole or in part.

(f) The Department will place the written or stamped notation "Reviewed and Approved for Code Compliance" on the documents accompanying the permit application. The Department will keep three sets of the construction documents and send one set of construction documents to the permit applicant.

(g) An owner or owner's agent may request a variance or appeal the code administrator's decision to the Industrial Board under § 403.122 (relating to appeals, variances and extensions of time). The appeal shall be based on a claim that the true intent of the act or the Uniform Construction Code were incorrectly interpreted, the provisions of the act do not fully apply or an equivalent form of construction is to be used.

(h) A permit is not valid until the Department collects the required fees under § 401.2 (relating to Department fees).

§ 405.4. Approved designs, equipment and devices.

A platform, car, cabin or chair safety device may be installed after it receives a Department-issued certificate of acceptance. An applicant for a certificate of acceptance shall meet the following requirements:

(1) The manufacturer, designer or engineer of the platform, car, cabin or chair safety device shall submit the design to the Department.

(2) The Department will observe the operation of the device for compliance with the Uniform Construction Code before use of the device in the Commonwealth.

(3) The Department will issue a certificate of acceptance after it observes successful testing of the device.

§ 405.5. Acceptance inspection.

The Department will conduct an acceptance inspection to confirm compliance with the Uniform Construction Code before a new elevator or lifting device or an elevator or lifting device under repair is put into service.

§ 405.6. Certificate of operation.

(a) An elevator or lifting device may not be operated unless the Department issues a certificate of operation for the elevator or other lifting device. The Department

will issue a certificate of operation for the elevator or other lifting device if it passes inspection.

(b) A certificate of operation is valid for 24 months from the issue date for equipment that requires a 6-month periodic inspection under § 405.7 (relating to periodic inspections). A certificate of operation is valid for 48 months from the issue date for equipment requiring a 12-month periodic inspection cycle under § 405.7.

(c) A certificate of operation may remain valid for an additional 30 days after its expiration date if a periodic inspection is conducted within 30 days of the certificate's expiration date. A certificate of operation is not valid until the Department collects the required fee under § 401.2 (relating to Department fees).

(d) The certificate of operation or a copy of the certificate of operation for equipment with a machine room shall be posted in the elevator car or other lifting device enclosure, or attached to the controller in the machine room. The certificate of operation for escalators, moving walks and other equipment without a machine room shall be made available to a construction code official during a periodic inspection.

§ 405.7. Periodic inspections.

(a) A construction code official of the Department or a third-party agency shall conduct periodic inspections and document compliance with the Uniform Construction Code at intervals that do not exceed 6 months for the following equipment:

(1) Electric elevator.

(2) Hydraulic elevator.

(3) Escalator.

(4) Belt man-lift.

(5) Lumber elevator.

(6) Moving walk.

(7) Orchestra elevator.

(8) Organ elevator.

(9) Limited use/limited application elevator.

(10) Special purpose personnel elevator.

(11) Stage elevator.

(12) Power sidewalk elevator.

(13) Elevators used for construction.

(14) Inclined elevator.

(15) Rooftop elevator.

(b) A construction code official shall perform periodic inspections of all other lifting devices at intervals that do not exceed 12 months. A construction code official shall inspect a lifting device that is used on a seasonal basis before the beginning of the season of operation.

(c) A construction code official who performed a periodic inspection shall complete an inspection report containing all of the following information:

(1) Inspection results.

(2) Day, month and year of the inspection.

(3) The beginning and conclusion times of the inspection.

(4) The construction code official's certification number.

(5) The construction code official's signature. An electronic signature may be used.

(d) A construction code official who performed a periodic inspection shall insure that the following information is completed on the certificate of operation:

(1) Day, month and year of inspection.

(2) The construction code official's certification number.

(3) The construction code official's signature.

(e) A construction code official shall submit the results of routine inspections to the Department within 15 days of the inspection in a format acceptable to the Department.

(f) A construction code official shall notify the Department if a lifting device failed a periodic inspection within 1 business day from the inspection.

§ 405.8. Periodic inspection and testing.

(a) The following periodic inspection and testing under ASME A17.1 –2000 edition are required. A construction code official shall witness all of the testing:

(1) Category One under section 8.11.2.2 at 5-year intervals.

(2) Category Five under section 8.11.2.3 at 5-year intervals.

(3) Category One under section 8.11.3.2 at 5-year intervals.

(4) Category Three under section 8.11.3.3 at 5-year intervals.

(5) Category Five under section 8.11.3.4 at 5-year intervals.

(6) Category One under section 8.11.4.2 at 3-year intervals.

(7) Other equipment under section 8.11.5 at 5-year intervals as follows:

(i) Sidewalk elevators under section 8.11.5.1.

(ii) Hand elevators under section 8.11.5.3.

(iii) Dumbwaiters under section 8.11.5.4.

(iv) Special purpose personnel elevators under section 8.11.5.6.

(v) Inclined elevators under section 8.11.5.7.

(vi) Screw column elevators under section 8.11.5.9.

(vii) Rooftop elevators under section 8.11.5.10.

(viii) Rack and pinion elevators under section 8.11.5.11.

(ix) Limited use and limited application elevators under section 8.11.5.12.

(x) Elevators used for construction under section 8.11.5.13.

(b) Inspection and testing under ASME A.18.1 -1999 Edition is required as follows:

(1) Testing under section 10.3.2 shall be conducted at 5-year intervals.

(2) Testing under section 10.3.3 shall be conducted at 5-year intervals.

(c) A lumber elevator equipped with platform safety devices shall be tested with rated load at intervals that may not exceed 5 years.

(d) Stage, orchestra and organ lifts equipped with a platform safety device shall be tested with rated loads at intervals that may not exceed 5 years.

(e) A construction code official shall complete a test report after he witnesses a periodic test in a format acceptable to the Department. The construction code official shall submit the report to the Department within 15 days of witnessing the tests. All of the following information is required in the report:

(1) Test results.

(2) Day, month and year of the test.

(3) Beginning and concluding times of the test.

(4) The construction code official's signature. The construction code official may use an electronic signature.

§ 405.9. Periodic dynamic testing.

(a) The following periodic dynamic testing shall be conducted under ANSI B77.1-1999 edition:

(1) Aerial tramways dynamic testing under section 2.3.3.1.2.

(2) Detachable grip aerial lifts dynamic testing under section 3.3.3.1.2.

(3) Fixed grip aerial lifts dynamic testing under section 4.3.3.1.2.

(b) A construction code official shall witness all periodic dynamic testing under this section.

(c) A construction code official shall complete and submit a test report to the Department within 15 days of witnessing a periodic dynamic test. The report is required to be in a format acceptable to the Department and contain all of the following information:

(1) Test results.

(2) Day, month and year of test.

(3) Beginning and concluding times of test.

(4) The construction code official's signature. The construction code official may use an electronic signature.

§ 405.10. Major repairs, replacements and alterations.

(a) Repairs, replacement and alterations of elevators or other lifting devices shall comply with the following sections of ASME A17.1- 2000 Edition:

(1) Section 8.6.2 (Repairs).

(2) Section 8.6.3 (Replacements)

(3) Section 8.7 (Alterations).

(b) The requirements of subsection (a) applies to major repairs, replacements and alterations performed on other types of lifting devices that are not referenced in ASME A17.1-2000 Edition.

(c) An elevator or lifting device is to be taken out of service when a major repair, replacement or alteration is performed upon it. The owner or owner's agent shall provide written notification to the Department when the major repair, replacement or alteration is completed. The elevator or lifting device may be returned to service when it passes a Department inspection.

§ 405.11 Accident report.

(a) An owner of an elevator or lifting device or his authorized agent shall submit an accident report to the Department if the elevator or lifting device is involved in an accident resulting in any of the following:

(1) Fatal injury or hospitalization to a person.

(2) Damage to the elevator or lifting device rendering it unsafe under § 403.84 (relating to unsafe building, structure or equipment).

(b) The owner or authorized representative shall submit the accident report on a Department-prescribed form, which must be received by the Department within 24 hours of the accident.

(c) The Department may order an investigation of the accident.

(d) An elevator or lifting device that was involved in an accident may not return to operation until the Department provides approval.

§ 405.12. Lumber elevators.

(a) A lumber elevator is a platform that is used to raise or lower stacked lumber under the requirements of this section. An individual may not ride a lumber elevator.

(b) The shaftway is enclosed on all sides that are not used for loading or unloading with flush partitions that are at least 6 feet high. Movable bars or railings are required to protect all points of loading and unloading, unless gates are provided. Flaring is at an angle of at least 75 degrees from the horizontal and is to protect all shearing points in the shaftway excluding each loading and unloading landing.

(c) Gates are required to protect all points of loading and unloading when the platform's vertical travel exceeds 6 feet or when there are two or more landings. The following types of automatic and semiautomatic gates may be used:

(1) Semiautomatic vertical-rising gates.

(2) Fully automatic vertical-rising gates only at terminal landings.

(3) Manually-operated swinging or horizontal gates, with locking devices and electric brakes

(4) Department-approved, power-operated horizontal gates.

(d) A locking device is to comply with the following requirements:

(1) An automatic locking device is to be placed on, or attached to a manually operated gate. The locking device is to prevent the normal operation of the platform when the gate is open and unsecured. The locking device is to prevent the opening of the gate when the car is away from the landing.

(2) A shield is to be installed on openwork gates and shall be of sufficient size to prevent access to the lock from the outside of the shaftway.

(e) The shaftway is required to have a pit with a depth of at least 2 feet from the lowest point of the underside of the platform framing to the pit floor or highest projection when the platform is at its lowest limit of travel. Toe guards, guide shoes or rollers attached to the platform and buffers or bumpers may extend into this space.

(f) Substantial guides of either wood or steel is required for installation on lumber elevators.

(g) Lifting capacity is to equal a live load of at least 50 pounds per square foot of platform floor area. The gross weight of the movable platform is to include railings, aprons, wirings, conduits, outlets and every item that is permanently attached to the platform.

(h) The lifting speed of a lumber elevator may not exceed 15 feet per minute.

(i) A lumber elevator must be equipped with operating switches that meet the following requirements:

(1) An operating switch cannot be located where the entire shaftway is visible when gates are not installed.

(2) An operating switch is to be a continuous pressure switch.

(3) A manually operated emergency stop switch must be placed adjacent to the elevator's operating switches, driving machine(s), pit entrance(s), machine controller, and landings. An emergency stop switch must be a manually reset switch and cannot be dependent upon springs for proper operation.

(4) An emergency stop switch must be red. No other switch may be red.

(5) All operating switches are to be labeled by function.

(j) Reverse phase protection is required when alternating current is used.

(k) Elevator screws must be directly connecting with worm or beveled gears. All gears are to be enclosed in a housing.

(l) A lumber elevator that is not supported or operated by screws, plungers or similar means must have approved platform safeties capable of stopping and holding the platform with a full-rated load at any point of its travel.

(m) The motor, controller and brake must be located in a lighted room outside of the shaftway, unless the devices are located in the pit. The lumber elevator must be equipped with stone or masonry piers or columns capable of absorbing the impact of a full-loaded platform when the motor and controller are located in the pit.

(n) A lumber elevator must be equipped with normal terminal limit switches located in the shaftway or stop motion devices on the operating machine and arranged to automatically bring the platform to rest at either terminal landing.

(o) Final terminal limit switches are to be installed and connected so the switch will function if a lumber elevator runs by the normal terminal limit switch. Final terminal limit switches will automatically shut off the power, apply the brake and prevent the operation of the lumber elevator in either direction until adjustments are made to return the lumber elevator to normal operation. Final terminal limit switches are to be located in the shaftway.

(p) A slack cable or slack chain device must be installed on all winding drum or sprocket power-driven lumber elevator machinery. The device must automatically shut off the power, apply the brake, and stop the machinery when the platform is obstructed in its descent.

(q) A lumber elevator must be equipped with an approved and enclosed, fused main line switch or an approved and enclosed circuit breaker switch. The switch is to be located adjacent to the entrance door in the machine room when the motor and controller are located in a machine room. The switch is to be located outside of the shaftway and adjacent to the pit access door when the motor and controller are located in the pit.

(r) A motor or controller must be equipped with a second device for disconnection when the motor or controller is not visible from the disconnection equipment required in subsection (q). The second disconnection device must be equipped with a padlock that can lock the device in an "open" and "off" position.

(s) Lighting is to be provided in all machine spaces and pits within the shaftway and landings. The light switch must be mounted at the entryway to a machine space and pit.

(t) A lumber elevator must be equipped with a door that allows access to the pit when the motor or controller is located in the pit. A pit access door is to meet all of the following requirements:

(1) A pit access door must be located below the bottom of the platform when the platform is at its lowest limit of travel.

(2) A pit access door must be at least 30 inches by 30 inches in size, self-closing and self-locking.

(3) A pit access door must have a switch to prevent operation of the elevator while the pit access door is open.

(4) An emergency stop switch must be installed on the strike side of each pit access door.

(5) A switch for operating the pit light(s) must be installed on the strike side of all pit access doors.

(6) A sign must be located on the exterior strike side of each pit access door with the notation, "CAUTION – Elevator Pit Access Door - Authorized Personnel Only." The sign lettering must be a minimum of ¼ inch in width and 1 1/2 inches in height. The color of the lettering must contrast with the color of the access door.

(7) An owner or owners' agent must have sole possession of keys to each pit access door.

(u) A lumber elevator platform must have a steel frame designed with a minimum safety factor of six based on the highest rating of either the rated lifting load or the rated static load, uniformly distributed.

(v) A platform must be equipped with an apron on all of its sides. When the travel distance of a lumber elevator extends above the top of the surrounding floor level, the apron must have sufficient depth to enclose the space between the floor level and the under side of the platform when the platform is at its travel limit.

(w) As part of the initial inspection, the elevator is to be loaded to rated lifting capacity and operated throughout its entire travel. All platform safeties are to be tested with the maximum rated lifting capacity.

STAGE, ORCHESTRA AND ORGAN CONSOLE ELEVATORS

§ 405.30. Applicability.

The following types of elevators are to meet the requirements of this section and §§ 405.31- 405.40:

(1) A stage elevator consisting of a section of the stage arranged to be raised and lowered above and below the stage in a vertical direction.

(2) An orchestra elevator consisting of a platform arranged to be raised and lowered in a vertical direction.

(3) An organ console elevator used for raising and lowering an organ console, including the organist in a vertical direction.

§ 405.31. Platforms.

(a) A stage, orchestra or organ console elevator platform is to be comprised of steel frame construction and designed with a safety factor at least six based on the highest rating of either the rated lifting load or the rated static load, uniformly distributed.

(b) When the travel of a stage, orchestra, or organ console elevator extends above the top of the shaftway enclosure, the platform is to be equipped with an apron at least as deep as the space between the top of the shaftway enclosure and the underside of the platform when the platform is at its limit of travel.

§ 405.32. Shaftway requirements.

(a) The inside surface of a shaftway is to have a smooth finish within the limits of travel without any projections or recesses except for landing entrances, guides and guide brackets, vertical slots required for concealed guides, junction boxes and conduits for wiring, seating cart storage areas, orchestra areas and piano storage areas.

(b) Shaftway guide rails must be made of steel.

(c) Adjacent lift sides are to be equipped with aprons, railings and toeboards and pressure-sensing strips that are necessary to avoid shearing and fall hazards when elevators or other lifts under this section are installed in the same shaftway.

§ 405.33. Projections and recesses.

Projections or recesses for landing entrances, junction boxes and conduits for wiring, seating cart storage areas, orchestra areas and piano storage areas are to have the following protection:

(1) Metal bevel plates must protect the underside and topside of projections and the underside of all recesses. The plates are to extend from the edge of the projection or recess to the wall. The beveled angle may not be less than 75 degrees relative to

a horizontal position. Instead of plates, the bevel surfaces may be made of concrete and troweled to a smooth finish. Pressure sensing strips meeting the requirements paragraph (2) may be used instead of beveled plates.

(2) Pressure sensing strips must be placed on the underside of the platform on sides where there is a projection or recessed opening and on an apron attached to the platform. Pressure sensing strips are to meet the following requirements:

(i) A strip is to be interconnected to the operating and controlling circuit of the elevator.

(ii) A strip is to detect an obstruction that exerts a force of 5 pounds or greater per square inch.

(iii) The elevator is to immediately stop and automatically reverse direction for travel of 2 through 4 inches when a strip detects an obstruction. The pressure strips may automatically reset once the elevator has stopped its reverse travel.

§ 405.34. Landing Doors.

(a) Swinging doors installed at the bottom landing of the shaftway are to open outward.

(b) Shaftway landing doors must be equipped with an approved interlock. The interlock must:

(1) Secure the platform in the stop position or place the power of controlling the elevator beyond the operator's control while any landing door is open.

(2) Operate in conjunction with a normally closed electrical valve operating system when used for maintained–pressure hydraulic elevators.

(c) A landing door may unlock only when the platform is stopped at the landing.

(d) Landing doors are to open manually from inside the shaftway regardless of the platform's position.

§ 405.35. Lifting capacity.

(a) The lifting capacity of an orchestra or organ console elevator must equal a live load of at least 25 pounds per square foot of floor area of the platform.

(b) The lifting capacity of a stage elevator must equal a live load of at least 75 pounds per square foot of floor area of the platform.

(c) Lifting capacity may not exceed 30 feet per minute.

§ 405.36. Operating controls.

Operating controls are to be located so that the operator may view the platform and load throughout their entire travel. Operating controls are governed by the following:

(1) Operating controls must be continuous pressure switches.

(2) Detachable pendent switches that plug into the platform or at an area other than the platform may be installed as operating controls if the operator can view the platform and load throughout their entire travel.

(3) Manually operated emergency stop switches are to be located adjacent to the operating controls, driving machine(s), pit entrance(s), machine controller, orchestra area(s) and any recessed storage areas located within the shaftway. Emergency stop switches must be manually reset and not depend upon springs for proper operation.

(4) Emergency stop switches are to be red. No other switch may be red.

(5) All operating controls are to be labeled by function.

(6) A key is required for use of the operating controls, other than emergency stop switches.

(7) An emergency stop switch must be installed on organ console elevators accessible to the organist.

(8) A stage, orchestra, or organ console elevator that intersects with other stage, orchestra, organ console elevators, storage areas or orchestra areas below the stage level must be equipped with a constant pressure pushbutton switch which meets the following requirements:

(i) The additional switch must be located to permit an unobstructed view of the intersecting area.

(ii) The switch is to be held in the closed or "run" position to complete the operating circuit and permit the operator's controls to function.

(iii) Release of the switch will stop the elevator immediately.

(iv) An additional switch is not required for elevators that are completely enclosed in an operating shaftway.

§ 405.37. Switches.

(a) An elevator is to be equipped with normal terminal limit switches located in the shaft way or a stop motion device on the operating machine. The switches or device shall automatically bring the platform to rest at either terminal landing.

(b) Final terminal limit switches must be installed in the shaftway and meet the following requirements:

(1) The switches are to be connected so that the functioning of the switch will occur if the elevator runs by the normal terminal limit switch.

(2) A final terminal limit switch is to automatically shut off power, apply the brake and prevent the operation of the elevator in either direction until adjustments are made to return the elevator to normal operation.

(c) An approved and enclosed fused main line switch or an approved circuit breaker switch is to be installed to disconnect the elevator and meet the following requirements:

(1) The switch is to be located adjacent to the entrance door in a machine room containing the motor and controller.

(2) The switch is to be located outside of the shaftway and adjacent to the pit access door when the motor and controller are located in the pit.

§ 405.38. Pit and pit access.

(a) The pit is to be equipped with stone or masonry piers or columns or buffers capable of absorbing the impact of a full loaded platform while maintaining a minimum refuge space of 2 feet throughout the pit area.

(b) A pit access door has to meet all of the following requirements:

(1) A pit access door is to be a minimum of 30 inches by 30 inches in size, self-closing and self-locking.

(2) Have a switch to prevent the operation of the elevator while the pit access door is open.

(3) An emergency stop switch is to be installed on the strike side of each pit access door.

(4) A switch for operating the pit light(s) is to be installed on the strike side of each pit access door.

(5) Contain a sign located on the exterior strike side of all pit access door with the notation, "CAUTION- Elevator Pit Access Door-Authorized Personnel Only." The sign lettering is to be a minimum of ¼ inch in width and 1½ inches in height. The color of the lettering is to contrast with the color of the access door.

(6) An owner or owner's agent must have sole possession of keys to each access door.

(c) A shaftway is to have a pit that meets all of the following requirements:

(1) Pit depth is to be at least 2 feet from the lowest point of the underside of the platform framing to the pit floor or highest floor projection, when the platform is at its lowest limit of travel. Toe guards, guide shoes or rollers attached to the platform and buffers or bumpers may extend into this space.

(2) Clearance between the lowest point of an apron, guide shoe or rollers on the underside of the platform and any portion of the pit floor is to be at least 6 inches when the platform has reached its lowest limit of travel.

(3) Pit floor area directly beneath any apron area of the platform is to be marked with paint of at least two contrasting colors to a minimum width of 12 inches past the inside edge of the apron, guide shoe or rollers

(d) A door is to be installed to provide access to a pit when the motor or controller for a stage, orchestra or organ console elevator is located in the pit by one of the following means:

(1) A door below the bottom of the platform when the platform is at its lowest limit of travel.

(2) A door that opens outward in the platform.

(3) The pit is to be equipped with a ladder for gaining access to the pit through this access door.

(4) The ladder and access door must be arranged to secure the ladder to the platform during access to the pit.

(5) The ladder is to extend from the platform to the pit floor regardless of the location of the platform in the shaftway.

§ 405.39. Single operator requirement.

A single operator is required to control operation of a stage, orchestra, or organ console elevator under all of the following conditions:

(1) The operator and designated material handlers are the only persons that may ride on a stage or orchestra elevator.

(2) The operator and organist are the only persons that may ride on an organ console elevator. An organist may be the operator of the elevator if he receives adequate training on the operation of the elevator and all its controls.

(3) An operator is required to work with an assistant when using a stage, orchestra, or organ console elevator that intersects with another stage, orchestra, organ console elevator, storage areas or orchestra areas below the stage level. The assistant shall insure that there are no obstructions in the path of the elevator being operated. The assistant shall always use a two-way communication device with the operator.

§ 405.40. Additional requirements.

(a) Railings and toeboards are to be provided at floor levels when the elevator is not at floor level. The railing and toeboard is to be interconnected to the operating

circuit so that if any portion of the rail and toeboard is not in its proper placement, the elevator cannot operate.

(b) A key is to be located at the lowest floor in a container with a glass surface. This key must open a landing door regardless of the location of the platform.

(c) A plate attached to the equipment controller must contain the manufacturer's listed rated lifting capacity and maximum static load.

(d) The gross weight of the movable platform shall be posted on the controller and will include railings, aprons, wiring, conduits, outlets or an item that is permanently attached to the platform.

(e) Reverse phase protection must be provided when alternating current is used.

(f) Elevator screws are to be directly connecting with worm or beveled gears. All gears are to be enclosed in a housing.

(g) A stage, orchestra or organ console elevator that is not supported or operated by screws, plungers or similar means shall have platform safeties capable of stopping and holding the platform with a full-rated load at any point of its travel.

(h) The motor controller and brake are to be located in a lighted room outside of the shaftway, unless the devices are located in the pit.

(i) A slack cable or slack chain device shall be installed on all winding drum or sprocket power-driven stage, orchestra, or organ console elevator machinery. The device shall automatically shut off the power, apply the brake and stop the machinery when the platform is obstructed in its descent.

(j) A motor or controller must be equipped with a second device for disconnection when the motor or controller is not visible from the disconnection equipment required under subsection (i).

(k) Lighting is to be provided in all machine spaces, pits, storage areas, orchestra areas and landings within the shaftway. A light switch is to be mounted at the entryway to each area.