

CAB Minutes
December 8, 2017

UNIFORM CONSTRUCTION CODE ADVISORY BOARD
Minutes of Meeting, December 8, 2017

Location
101 South Broad Street
Trenton, New Jersey 08625

Attendance

Board Members

Beth Pochtar, Chair
John Scialla, Vice Chair
Douglas Boydston
Mark Caputo
Andy Cattano
Kathy Herity
Henry Kelly
Arthur Londensky
Gregory Moten
Tony Neibert
Steve Rodzinak
Michael Seeve
Valerie Waricka

DCA Staff

Michael Baier, Supervisor, Code Assistance Unit
Lou Mraw, Office of Regulatory Affairs
John Terry, Assistant Director, Division of Code and Standards
Robert Austin, Code Assistance Unit
Paulina Caploon, Elevator Safety Unit
John Delesandro, Education and Licensing Units
Marie Daniels, Code Assistance and Code Development
Jose Paulino, Code Assistance and Code Development
Tom Pitcherello, Code Assistance Unit
Emily Templeton, Code Development Unit
Michael Whalen, Code Assistance Unit

Guests

Kenneth Krug, City of New Brunswick
Bob Mellohusky, Pennoni

Ms. Beth Pochtar, Chair of the Uniform Construction Code Advisory Board (CAB), called the meeting to order at 9:30 a.m.

Four newly appointed members of the Code Advisory Board were introduced and welcomed: Douglas Boydston, public member and Chair, Elevator Subcode Committee; Andy Cattano,

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public member representing consumers; Kathy Herity, public member; Stephen Rodzinak, representing licensed plumbing inspectors and Chair, Plumbing Subcode Committee.

Ms. Emily Templeton provided a brief summary of the Board, its responsibilities, and its procedures.

A. Approval of Minutes of the Code Advisory Board Meeting of June 9, 2017

Mr. Tony Neibert made a motion, which was seconded by Mr. Greg Moten, to approve the minutes without change. The motion carried unanimously.

B. Subcode Committee Reports

No Subcode Committee had met due to the lack of agenda referrals.

C. Old Business

There was no Old Business carried forward.

D. New Business

Mr. Michael Baier introduced the agenda items. He explained that staff has drafted a rule proposal to adopt the 2018 International Code Council (ICC) model codes and the 2017 National Electrical Code (NEC). The draft is divided by technical subcode and is ready to be referred to the appropriate subcode committees. Department staff is looking for a comprehensive review by the members of the subcode committees. Mr. Baier emphasized that the value of the Subcode Committees' review cannot be over-stated.

1. Draft Rule: Building Subcode-International Building Code (IBC)/2018 (N.J.A.C. 5:23-3.14)

Mr. Michael Baier directed the Board's attention to the item in the packet, explaining that along with the draft rule is a cover memo in which the code changes that represent the substantive changes to the International Building Code (IBC)/2018. These are:

a. At Section 706.1.1, Party Wall, Exception 2 would be proposed to be deleted. The deletion would require that party walls be constructed when a building straddles a lot line.

b. At Section 9.13.2.2, Circuits Supplying Fire Pumps, the IBC requires circuits supplying fire pumps to be protected for one hour. The National Electrical Code (NEC), at Section 695.6, Power Wiring, requires two-hour protection. The Department requested a recommendation on which code should rule on this matter.

c. At Table 1006.2.1, Spaces with One Exit or Exit Access Doorway, in the fifth column of the tenth row (R-3), the reference to the footnote shall be deleted. In footnote g, "R-3 and" shall be deleted. Additionally, the heading over the third, fourth, and fifth row, "Common Path of Egress" shall be deleted and "Exit Access" shall be inserted. This amendment is necessary due to an anomaly in the Code. As drafted, Section 1006.2.2.6 is intended to be an exception to Table 1006.2.1 for Group R-3 occupancies protected throughout with a sprinkler system designed and installed in accordance with NFPA 13D. However, the text is 1006.2.2.6 is more restrictive than Table 1006.2.1. Therefore, it is proposed to delete the reference to Group R-2 in

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this section and amend Table 1006.2.1 to include NFPA 13D systems for Group R-3 occupancies. Additionally, the heading of the third through fifth columns is changes to correct an error in the code; the correct limiting travel distance is the exist access travel distance, not the common path of travel distance. This correction is being made at Section 1006.3.3, Single Exits, as well as Tables 1006.3.3(1), Stories with One Exit or Access to One Exit for R-2 Occupancies, and 1006.3.3(2), Egress Based on Occupant Load.

d. Section 1020.1.1, Hoistway Opening Protection, shall be deleted. This new section requires hoistways opening into corridors be afforded the same level of protection as hoistways opening into elevator lobbies. It is recommended for deletion.

e. New Section 503.1.4, Occupied Roofs, establishes the requirements to occupy the roof of a building. Currently, occupancy on a roof is unregulated; this new section will provide for consistency in regulating this common practice.

f. In Table 1004.5, Maximum Floor Area Allowance per Occupant, Business areas have been changed from 100 gross to 150 gross. The effect of this is to reduce the minimum occupant load of a business area by 1/3. This change, in connection with the change to Section 1004.8, more accurately reflects the true occupant load of a business use area.

g. Table 1607.1, Minimum Uniformly Distributed Live Loads, L_0 , and Minimum Concentrated Live Loads, changed the live load for balconies and decks to 1.5 times the area served, not to exceed 100. There is also an added note for when reductions are not permitted, and text has been removed from the body of the table. This will be a reduction in the live load for balconies off bedrooms from 60 to 45 psf.

h. New Section 1607.15.2, Fire Walls, establishes minimum design force for structural stability of fire walls: 5psf horizontal load.

i. At Section 1609.3, Basic Design Wind Speed, there is a change in terminology from V_{ult} to basic wind velocity V . The Section is divided into two maps for Categories III and IV. Values are lower for Category III buildings, but higher for Category IV buildings. For Category I buildings, the 105 mph contour line has been shifted west, while the 110 and 120 mph contour lines remain the same. The Category II wind map is unchanged. All changes were made for consistency with ASCE 7-16.

j. At Section 2308.5.5.1, Openings in Walls and Partitions, and 2308.5.5.1.1, Openings in Exterior Bearing Walls, language is added to address the use of single member headers.

k. At Section 3001.2, Emergency Elevator Communication Systems for the Deaf, Hard of Hearing and Speech Impaired, a provision is added requiring an emergency communication system for the hearing impaired in elevators.

l. At Section 3314.1, Fire Watch During Construction, a new requirement is added for a fire-watch for buildings under construction that are above 40 feet of adjoining grade.

m. Section 1404.8 extends the use of polypropylene siding beyond Type V construction; please review and comment.

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This draft rule was referred to the Building, Fire Protection, Electrical, and Elevator Subcode Committees.

1.a. Barrier Free Subcode-International Building Code (IBC)/2018, Chapter 11 (N.J.A.C. 5:23-3.14)

Mr. Michael Baier explained that this draft rule would amend the IBC/2018, Chapter 11, which contains the accessibility requirements for construction and in the last code change cycle became the Barrier Free Subcode. A list of the three most significant changes is included in the packet.

- New Section 1103.2.14, Walk-in coolers and freezers, has been added to exempt these spaces from compliance with Chapter 11.
- In Section 1107.6.2.2, Apartment houses, monasteries and convent and Section 1107.6.2.3, Group R-2, other than live/work units, apartment houses, monasteries and convents, a change has been made because ADA and FHA count bedrooms in dormitories and congregate residences when determining the number of units for accessibility requirements. With the recognition that suite designs can include more than one bedroom in a sleeping unit, the requirements here need to be amended to align with these federal regulations.
- In Section 1109.2.1.2, Family or assisted-use toilet rooms, an exception is added to allow for the installation of additional children's height fixtures in these rooms.

This draft rule was referred to the Barrier Free, Building, Fire Protection, Electrical, and Elevator Subcode Committees.

2. Draft Rule: Plumbing Subcode-National Standard Plumbing Code (NSPC)/2018 (N.J.A.C. 5:23-3.15)

Mr. Michael Baier summarized the primary changes to the National Standard Plumbing Code/2018, noting that, overall, the changes from the 2015 to the 2018 editions were minor.

- At Section 13.8, Sizing for Continuous or Intermittent Flows, the Department is amending this section to delete references to Section A-3 and Appendix A and add a reference to the rainfall levels in New Jersey.
- Section 16.1.7, Abandoned Disposal Systems, was revised to require that inspection responsibility is given to the local health department if no local hookup exists.
- Former Chapter 18, Mobile Home and Travel Trailer Park Plumbing Requirements, has been removed from the 2018 NSPC.
- Section 13.1.10.2, Secondary Roof Drainage: In the past, the Department has deleted this section in its entirety. For this adoption, the Department is proposing to add an amended Section 13.1.10.2, titled Overflow Roof Drainage, to address the requirement that

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overflow roof drainage systems be installed where parapet walls or other construction which extends above the roof is taking place.

This draft rule was referred to the Plumbing Subcode Committee.

3. Draft Rule: Electrical Subcode-National Electrical Code (NEC)/2017 (N.J.A.C. 5:23-3.16)

Mr. Michael Baier acknowledged the work and advice of Mr. Ken Verbos, Office of Regulatory Affairs, in reviewing the National Electrical Code (NEC)/2017.

Attached to the memorandum and draft rule is a comprehensive list of the changes between the 2015 and 2017 NEC.

- Article 210.52(G)(1), Garages, requires a GFCI in each garage bay instead of one in each garage. Establishes a height for installation of not more than 5 ½ feet above the floor.
- Article 210.12(B), Dormitory Units, added requirement that arc fault protection is required in bathrooms in dormitories.

This draft rule was referred to the Electrical, Elevator, and Fire Protection Subcode Committees.

4. Draft Rule: Fire Protection Subcode-International Building Code (IBC)/2018 (N.J.A.C. 5:23-3.17)

Mr. Michael Baier commented that the draft Fire Protection Subcode contained few changes because the section numbers referenced in the subcode have not changed.

This draft rule was referred to the Building and Fire Protection Subcode Committees.

5. Draft Rule: Energy Subcode—International Energy Conservation Code (IECC)/2018 (N.J.A.C. 5:23-3.18)

Mr. Michael Baier reminded the Board that the Energy Subcode consists of two parts—standards for commercial buildings and standards for residential buildings.

- ASHRAE 90.1-2016. On July 25, 2017, the US Department of Energy (DOE) issued a preliminary determination that ASHRAE Standard 90.1-2016 would achieve greater energy efficiency in buildings subject to the code. DOE estimates that national savings in commercial buildings of approximately: 8.2% in energy cost savings; 7.9% in source energy savings; and 6.7% in site energy savings. Since the US DOE requires each State to certify that they meet a certain edition of ASHRAE Standard 90.1, the Department would adopt only the ASHRAE and not the commercial portion of the 2018 IECC. This would keep with the status quo.
- At Section R402.4.1, with minor improvements to the IECC, 0.6-1.1% improvement in the prescriptive path, it may be time to revisit the air leakage requirements of the thermal envelope and require the testing in addition to the inspection. The residential portion of the 2018 IECC does not change much from the 2015 edition. There are slight modifications to the building thermal envelope in R-values and U-values.

This draft rule was referred to the Building, Fire Protection, Mechanical/Energy, and Plumbing Subcode Committees.

Mr. Greg Moten raised a question about the rationale for leaving optional the power requirements in the ASHRAE standard, Chapter 8. Mr. Robert Austin responded that site energy

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usage differs from the established usage table. The code sets requirements for the design load, which is difficult to enforce in the field. The code does not have monitoring standards for energy usage. So, Chapter 8 is included as optional, which means that it may be used as a resource, but because it is not enforceable by a code official, compliance is not required.

6. Draft Rule: Mechanical Subcode-International Mechanical Code (IMC)/2018 (N.J.A.C. 5:23-3.20)

Mr. Michael Baier introduced the draft mechanical subcode; a list of changes us included in the packet. There are no significant changes.

This draft rule was referred to the Building, Fire Protection, Mechanical/Energy, and Plumbing Subcodes Committees.

7. Draft Rule: One- and Two-Family Dwelling Subcode—International Residential Code (IRC)/2018 (N.J.A.C. 5:23-3.21)

Mr. Michael Baier introduced the draft one-and two-family dwelling subcode. Staff has identified several changes in the IRC/2018 for particular review and has also included a list of all changes to assist in the review. The significant changes are:

- Section R325, Mezzanines, has added habitable attics to R325.1 and R325.6. The Department plans to delete those references and maintain the definition of habitable attic in the 2015 IRC.
- Section R405, Foundation Drainage – It may be time to reevaluate keeping this section, in addition to the unamended R406, Foundation Waterproofing and Dampproofing. As previously amended, both sections are deleted and Section 1805, Dampproofing and Waterproofing, of the International Building Code (IBC) is inserted.
- Section R507, Exterior Decks, has been reorganized and added more criteria specific to decks. More specifically, Section R507.9.2, Lateral connection, should be reevaluated due to the availability and cost of the products that meet this; it may be time to include.
- Chapter 11, Energy Efficiency receives slight modifications to the building thermal envelope in R-values and U-values but nothing of major concern. With the minor improvements to the IECC, 0.6-1.1% improvement in the prescriptive path, it may be time to revisit the air leakage requirements of the thermal envelope and require the testing in addition to the inspection at Section N1102.4.1.
- Appendix Q, Tiny houses. The Department is considering including this Appendix in the subcode.

This draft rule was referred to the Building, Fire Protection, Mechanical/Energy, and Plumbing Subcodes Committees.

8. Draft Rule: Fuel Gas Subcode—International Fuel Gas Code (IFGC)/2018 (N.J.A.C. 5:23-3.22)

Mr. Michael Baier introduced this draft rule amendment. He informed Board members that the changes are not significant and are summarized in a list that is included in the packet.

This draft rule was referred to the Building, Electrical, Fire Protection, Mechanical/Energy, and Plumbing Subcodes Committees.

9. Draft Rule: Elevator Safety Subcode—International Building Code (IBC)/2018, Chapter 30 (N.J.A.C. 5:23-12)

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Mr. Michael Baier introduced this draft rule and called attention to two changes in the International Building Code: (1) In Section 3001.2, Emergency Elevator Communication Systems for the Deaf, Hard of Hearing and Speech Impaired, a provision was added requiring an emergency communication system for the hearing impaired; and (2) Section 3006.2.1, Rated Corridors, a section was added that requires maintaining the rating of corridors where elevator doorways open into them.

This draft rule was referred to the Building, Elevator, and Fire Protection Subcodes Committees.

E. Information

Flak Jacket Protection: Mr. John Terry, Assistant Director, provided a brief summary of an issue with which the Department has been dealing. The International Residential Code (IRC)/2015 required that except those using composites or dimensional lumber that are 2 X 10 or greater be protected with gypsum, wallboard, “or equivalent” on the underside. Weyerhaeuser obtained a determination of equivalency from the International Code Council (ICC) for its flak jacket protective design. In December 2016, the chemical composition of the flak jacket was changed; the new formulation leached formaldehyde. Weyerhaeuser’s solution was to approve a paint to be used as a covering. The Department asked Weyerhaeuser to demonstrate that the recommended paint retained the required fire resistance rating. Initially, the ICC said that the paint was equivalent and the Department agreed with that determination. However, as problems with the paint surfaced, upon investigation, it was found that the product with the newly formulated paint applied had not been tested for fire resistance, so it could not be accepted as a fix for this problem. The Department has sent email blasts to code enforcement officials and has made information available on the Division’s web pages under Alerts and Issues.

Mr. Mark Caputo commented that leaching formaldehyde is a serious public health concern and removing the affected building elements is more effective in the long term than encapsulating them. Mr. Lou Mraw, Office of Regulatory Affairs, commented that ripping out the impacted building elements and replacing them is the best fix, but code enforcement officials do not have the authority to require replacement if there is a demonstrated means of obtaining code compliance another way. Mr. Mark Caputo commented that removal is the most appropriate solution. There was general agreement with this comment, although it was also recognized that it is not possible to require removal if the fix is determined to meet code.

Lou Mraw’s Retirement: Ms. Emily Templeton informed the Board that Lou Mraw is retiring effective January 1, 2018, so this is his final Board meeting. Ms. Templeton quoted former Director William Connolly who had summed up Lou’s career by saying that two of the foundational premises of the Uniform Construction Code were that its requirements would be predictable and that it would be uniformly enforced. The success of the Uniform Construction Code rests largely on Lou Mraw’s integrity. His leadership as problems have arisen and his ability to identify solutions has been without equal.

Several Board members applauded Lou and his practical, consistent, and honest approach to addressing problems.

Mr. Mraw thanked the Board. In reflecting on his career, he said that when he started with DCA, his supervisor had told him to attend the Code Advisory Board to learn about the code and the interaction with the industry. He said that he believes in the code enforcement process in the UCC and is proud to have had a role in its development and success.

He received a standing ovation.

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Returning to the agenda, the information items provided in the packet were enumerated without further comment.

1. Meeting Dates 2018
2. CAB Log
3. List of Pending Legislation

F. Public Comments

There were no comments from the public.

G. Adjourn

The public portion of the meeting was adjourned at 10:50 a.m.

H. Executive Session

The Executive Session was called to order at 11:05 a.m. Subcode Committees were appointed.

I. Adjourn

The meeting was adjourned at 11:15 a.m.