

Illinois Energy Code Advisory Council Commercial Subcommittee
December 4, 2014 – 10:00 a.m.
Teleconference
MEETING MINUTES

In Attendance:

Lisa Mattingly, CDB
George Patterson, Bennett & Brosseau Roofing Inc.
Bruce Maxey, BLDD
Ryan Nation, Hanson Engineers
Tom Buchheit, BRiC Partnership
John Meek, Felmley-Dickerson Company
Tom Ayers, City of Rock Island

Bill McHugh, CRCA
Shannon Bookey, CDB
Joseph Zimmer, Architect
Jeff Mang, Polyisocyanurate Insulation Manufacturers Association (PIMA)
Dave Bowman, ICC
Matthew Giudice, MEEA
Eric Lacey, Responsible Energy Code Alliance

- Chairman Maxey called the meeting to order at 10:00 a.m.
- Roll call of subcommittee members was taken followed by introduction of guests.
- John Meek motioned to approve the meeting minutes from the November 20th meeting, George Patterson seconded the motion. Motion passed.
- Chairman Maxey asked for any public comments from anyone not presenting amendments. Each person may take 5 minutes.
- Mr. Mang stated that their comments were specifically related to the reroofing proposal by CRCA. They support adoption of the 2015 IECC without weakening amendments.
- He noted that there are numerous roofing systems available with fire and wind uplift meeting the FM Class 1A-90 rating.
- The issue of cost effectiveness of an R-30 roof was discussed. A report was referenced that concluded an R-30 roof provides for a 6.5% reduction in energy use for the building.
- Mr. Mang also commented that the life of a low slope roof membrane is 17 years but other roof components of the roof are in place usually twice as long. So the life cycle comparison should be for 34 years not 17.

- He noted that many of these issues were heard at ICC hearings.
- Flashing heights in certain situations can be a problem but code officials have provisions in the code that allow them to deal with these on case by case basis.
- Chairman Maxey then asked for comments from other organizations on the teleconference.
- There were no representatives from ACC.
- No representatives from Responsible Energy Codes Alliance were present at that time.
- Chairman Maxey asked that each person that submitted amendments provide a brief overview of their proposal.
- Mr. Edlesman's amendment was discussed by Chairman Maxey which was to strike C503.1 Exception 7 which conflicts with C503.6 Exception and was an oversight during the code development process. A vote was called by Chairman Maxey to accept this amendment for vote by the full council. Motioned passed.
- The next set of amendments discussed was submitted by Mr. Darren Meyers. Mr. Ayers noted that it was to take the 2015 IECC back to the Illinois amended 2012 IECC.
- Mr. Giudice asked if there was a reason statement provided for keeping the commercial provisions at the 2012 level. It was noted that only a residential reason was provided. He also asked if there was a discussion of the major changes between the 2012 IECC and 2015. He wanted to know if Mr. Meyers could summarize those changes.
- Tom Ayers stated that in conversations that he had with Iowa officials, the changes to the residential code are negligible but the commercial side has higher changes in efficiency.
- Mr. Bowman stated that he could give a summary of the differences between the 2012 and 2015.

He wasn't able to provide the estimated efficiencies estimated by DOE, but he did note several other changes which include:

- Exterior wall R-values increased significantly by 20-25%
- More flexibility for Commercial and Residential compliance in the new standard
- Commercial code has total UA alternative for calculating envelope requirements
- Provides a more comprehensive method for calculations related to steel stud wall assemblies
- Minimum skylight area for day light zone was reduced
- Allows alternative for vestibules and allows for air curtain

- Mr. Lacey stated that RECA cited the DOE study in their letter of support which showed an increase in efficiency of 7.5-8.5% for commercial building using the 2015 IECC depending on whether source or site energy is used.
- Chairman Maxey asked if the Subcommittee wanted to act on Mr. Meyers proposals or table them.
- Mr. Ayers stated that he had considered proposing this on the residential side. Builders are not up to speed on the 2012 so moving the bar will not help things. Getting consistent enforcement between different areas of the state is difficult.
- He feels that on the Commercial side this is not the case. He stated that he feels it should be tabled at this time. The other members agreed.
- Mr. Ayers suggested that the meeting to discuss Mr. Meyers' amendments be a sole purpose meeting.
- Proposals from Mr. McHugh with CRCA were discussed next. Mr. McHugh stated that the amendments were changed at the Subcommittee's request to reference the existing building section. Mr. McHugh disagreed with Mr. Mang's comments about leaving flashing height variances to the AHJ because the code officials do not always have the resources with cutbacks and changes in the economy.
- Mr. McHugh stated that Proposal 1a is to address the issues that the roofing contractors have with the flashing heights and installing the full amount of insulation.
- Chairman Maxey asked if striking exception 2 was meant for all buildings including new construction. Mr. McHugh said that this was a good point and said that CRCA would remove this strikethrough. He said that he was trying to cover both roof replacement and recover so he would need to modify his proposed exceptions to include replacement.
- Mr. Ayers stated that in his region the code officials are very comfortable with their rights. He appreciates the intent of the proposal but he doesn't feel it's needed in his part of the State.
- Chairman Maxey suggested adding language "as accepted by the code official".
- Mr. McHugh said that this is the number one issue that CRCA members have. This is a way of helping the contractor and building owner to comply.
- Chairman Maxey asked if this provision reduced the stringency of the 2012 IECC.
- Mr. Ayers expressed sympathy for owners that have a roofing replacement or recover which becomes exceedingly expensive when meeting the insulation requirements. If the Code can't be met for practical and economic reasons then a practicable solution should be acceptable as long as it doesn't reduce the energy efficiency of the building.

- Chairman Maxey made motion to accept CRCA Proposal 1A without the strikethrough of Exception 2. Mr. Ayers seconded. No other discussion was held. Roll call vote was taken. All approved except Mr. Patterson who recused himself and Mr. Ayers who abstained.
- CRCA Proposal 1B has a typo which will be corrected. Chairman Maxey made motion to approve CRCA Proposal 1B. Mr. Ayers seconded. There was no other discussion. All approved except Mr. Patterson who recused himself and Mr. Ayers who abstained.
- A motion was made by to accept CRCA Proposal #2 by Mr. Ayers. It was seconded by Mr. Buchheit. A roll call vote was taken and approved by all but Mr. Patterson who recused himself.
- A motion was made by Mr. Ayers seconded by Mr. Buchheit to approve CRCA Proposal #3. A roll call vote was taken and approved by all but Mr. Patterson who recused himself.
- CRCA Proposal #4 was discussed. Mr. Buchheit asked if previous reference to climate zone 2B had been removed. He also stated that this proposal makes sense to him. Mr. Buchheit made a motion to approve CRCA Proposal #4. Chairman Maxey seconded. A roll call vote was taken approved by all but Mr. Patterson who recused himself.
- CRCA Proposal #5. Mr. McHugh noted that the numbering is off and their added exception should be numbered 6 and not 5.
- Mr. Ayers stated that he didn't think this language was necessary.
- Mr. Ayers made a motion to approve. Mr. Meek seconded. Roll call vote was taken motion did not pass. All voted nay except Mr. Patterson who recused himself.
- Proposals by Joseph Zimmer were discussed next.
- The Amendment to Section C408 Commissioning was discussed first. Mr. Zimmer stated that he added service water heating, electrical power and lighting systems to the commissioning requirements. Mr. Buchheit verified that this was for testing or observation to ensure that a particular efficiency or rating is complied with. Mr. Zimmer agreed that this is language is to provide more specificity about what is ensured through the commissioning.
- Mr. Ayers stated that commissioning of buildings should be done but many commercial building owners do not know what commissioning is. He is in favor of commissioning as a principal but in his opinion very few jurisdictions are aware of the commissioning requirement in the 2012.

- Chairman Maxey stated that when the designer seals the drawings he is documenting that the design meets the mandatory requirements. Mr. Zimmer stated that this is a third party documenting that requirements were met.
- Chairman Maxey asked about the code officials being receptive to receiving this additional documentation. Mr. Ayers stated that there is a lack of understanding of what commissioning is and owners don't want to pay for it, although it is needed to ensure that the building systems operate as they should.
- Mr. Buchheit motioned to approve. Mr. Meek seconded. It was a split vote. This amendment will move forward to the full council with no recommendation for approval or disapproval.
- Mr. Zimmer retracted his proposal for low energy conditioned building compliance alternative. He stated that this was due to the discussion by the Residential Subcommittee. He felt that the Council was not ready for these changes to the Code. Mr. Ayers encouraged him to submit these proposals at the ICC hearings for the 2018 code.
- Mr. Zimmer then discussed C409.1.
- Mr. Ayers commented that he appreciated Mr. Zimmer's effort and encouraged him to also present this at the national level.
- Mr. Zimmer then discussed his proposal for building envelope air leakage test alternative for small building volumes. Mr. Buchheit asked Mr. Ayers if there was lack of people performing this test. Mr. Ayers said that he didn't have an answer for this.
- Mr. Zimmer clarified that the text in red is just for the Subcommittee edification.
- Mr. Buchheit said that added specificity makes sense but he didn't know if the need was there to move to this for smaller buildings. Mr. Zimmer said that he did not think this test was being conducted for most commercial building but since there are people trained for residential this could help.
- Chairman Maxey verified that this is an alternative and not replacing anything already in the Code.
- Mr. Ayers stated that to clarify the definition for "building gross thermal envelope surface area" a rewording might be helpful. He suggested "gross building thermal envelope surface area". It would make sense to then change "building net enclosed volumes" to "net building enclosed volumes".
- Mr. Buchheit isn't certain that we need an additional provision for pressure testing. He motioned to table this proposal for now. Mr. Meek seconded. Motioned passed.
- Meeting adjourned at 12:09 p.m.