IECC Committee Hearing Agenda  
September 05, 2019 2pm-5pm  
City and County of Denver, Room 4.1.5

1. Roll Call and Introductions

2. Discussion and voting on **Chapter C4 of the IECC**
   a. (p43b) IECC Section C406.1 and C406.2 (these 4 proposals are heard together but voted separately)
   b. (P54): IECC Section C406
   c. (P61): IECC Section C406.12 (not needed if P54 fails to pass)
   d. (P55): IECC Section C406 (not needed if P54 fails to pass)
   e. (P58): IECC Section C405.1
   f. (P65): IECC Section C405.2.7
   g. (P96)401: IECC Section C405.3 (separate committee was to revise proposal and bring back on9/11)

3. Discussion and voting on **Chapter C5 of the IECC**
   a. (P56): IECC Section C502.2
   b. (P168): IECC Section C502.3
   c. (P57): IECC Section C503
   d. #161: IECC Section C505.1

4. Discuss IECC Residential Proposals
   a. (P129): IECC Section Residential EV Ready (Residential Portion only. Commercial approved on8/15)
   b. (P24)317: IECC R406.2 and Table R406.4
   c. #404: IECC Section R103.2
   d. (p75)373: IECC Section R303.2
   e. (P74)372: IECC Section R401.2
   f. ((P76)372: IECC Section R401.3
   g. (P73)371: IECC Table R402.1.2
   h. (P86)393: IECC Table R402.1.2
   i. (P79)377: IECC Table R402.1.2
   j. (P89)396: IECC Section R402.1.5
   k. #52: IECC Section R402.2.3

Please note that any items that we do not get to in this hearing will be automatically transferred to the next scheduled hearing date and will be the first items on the agenda for that hearing.

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https://global.gotomeeting.com/install/375634997
Proposal # P43 B, P54, P61, P55 (Group of Proposals that were requested to be heard together last hearing)

Proposal # P43B

Public Testimony in Support:
Changing 406 to comply with 2 options under 406 instead of 1 and increases the lighting power savings from 10% to 30%. Follows what’s in 2018 IECC more closely.

Public Testimony in Opposition:
Concerned that this could create a calibration issue between prescriptive and performance path. Feel we should either leave 406 alone or go with the points options.

Rebuttal in Support:
This change calibrates better to what is happening with Denver regarding pushing performance method further and the green building ordinance on top of that.

Rebuttal in Opposition:
The way C406 is structured the least stringent option is what you would calibrate to, if everyone picks lighting then everyone who chooses the modeling path gets an easy pass.

Proposal # P54

Public Testimony in Support:
This is the proposal that is going through the national hearing right now. Structured to bring consistency between the different C406 options so you get more consistent energy savings.

Public Testimony in Opposition: None

Questions from the Committee to Proponent:

1. On P54 looking at the percentages, are those numbers feasible and attainable?
   a. Yes, the code currently says 10% but there are certain pieces of equipment that can’t hit that 10%, so this is asking for 5%. Creates more opportunity and more flexibility for projects.

2. P54 How would you qualify your equipment if half of it hits the 5% and the other half hits the 10%, which category would you be getting points in?
   a. If it meets the 5% they would get the 5% even though some of their equipment is higher.

3. P54 We did not approve the proposal to increase efficiency with lighting so would these numbers in this proposal need to be updated?
   a. Only if you wanted additional savings.

Committee Discussion:
- Concerns about this being enforceable with so many different disciplines being affected.
- Makes sense to go with P43B format based on what we already approved in P43A.
- P54 sets up the industry for less changes down the road when 2021 comes in to play and when Stretch Code eventually becomes base code.

Original Motion: As-Submitted (AS) for P43B
Reason: Increases energy efficiency in buildings with the prescriptive path while giving flexibility.

Final Motion: As Submitted
Final Vote: AS Passes 10-0

Additional staff or committee comments for the record: None

Motion for P54: Disapproval
Reason: Based on previous action in P43B
Final Vote: D Passes 10-0

P61 & P55
Final Motion: Disapproval
Reason: Based on previous action in P43B.
Final Vote: D Passes 10-0
Proposal # P58

Public Testimony in Support:
Efficiency of lighting in dwelling units (high rise multifamily). Previous requirement references residential code, this sets a level that reflects where the technology is presently for high efficacy lights.

Public Testimony in Opposition: None

Questions from the Committee to Proponent:
1. Are these fixtures required to be installed or these requirements just kick in if you install this type?  
   a. This would be for installed luminaires. Whatever is installed at time of certificate of occupancy. This would not require that you install a specific type of lighting, it just requires the lighting installed meets this efficiency requirement.
2. Is there a similar proposal for residential?  
   a. Yes, the same requirements were submitted for residential.

Committee Discussion:
- Utility rebates could further incentivize these requirements.
- Feel we should be more specific to installed/hard wired luminaires.

Original Motion: A/S with Intent to Modify (ASM)

Modification:
No less than 90% of the permanently installed luminaires provided with lamps not by lamps.

Vote on Modification: Passes 10-0

Final Motion: As Modified

Final Vote: AM Passes 10-0

Additional staff or committee comments for the record: None

Proposal # P65

Public Testimony in Support:
Adds a series of control requirements for garage parking. Currently parking structures are exempt but there is a huge savings potential with reducing the lighting levels for energy savings. Occupant load based reduces lighting by 60% doesn’t turn it off. Automatic controls that would be day light based. Approved at national level.

Public Testimony in Opposition: None

Questions from the Committee to Proponent:
1. On national level, were there discussions about safety perceptions? Lighting in parking structures can be touchy when it comes to safety and comfort.  
   a. Safety was discussed. Most felt that this would enhance safety. Lights would be triggered on by walking through the zones. This is just turning lights down the lights would not be turned off.
   b. Unanimously the national committee felt the safety concerns were addressed.

Committee Discussion:
- Concern that energy efficiency lighting should become an exception.
- Fenestration to wall ratio is unclear as viewed from interior.  
  o Intent is to correct 40% barrier, less than 40% would not requires these requirements. Sloped floors can block the openings in garage structures.
- Concerns that this creates two paths and one is easier, so most projects will just go with the easier option.
- Feel 30 feet is just too deep, feel 20 feet would be better.

Original Motion: A/S with Intent to Modify (ASM)

Reason: Committee felt this could provide some energy savings and the modifications give more flexibility and attainability.

Modification: Add Exception for .07 watts per square foot

Proposal Tabled to work on a modification. Will be heard on 9/11
Proposal # P56

Public Testimony in Support:
Intent is to close up a loophole for existing buildings. Commissioning requirements for new equipment for new buildings, but new equipment for existing buildings doesn’t have the same commissioning requirements. We pulled over references that say you need to follow acceptance testing for new equipment. Making sure new equipment in existing buildings is commissioned the same way as in new buildings.

Public Testimony in Opposition: None

Questions from the Committee to Proponent:
1. Can we lower capacity requirements?
   a. Denver has a policy on new buildings if less than 10,000 square feet its exempt, or less than 20 KWH of lighting it is exempt for lighting as well.

Committee Discussion:
Original Motion: A/S with Intent to Modify (ASM)
Reason: Committee felt this was beneficial but needs to incorporate the specific Denver policy language.
Modification: Bring the policy language in to this and in to the base code.
Final Motion: As Modified
Final Vote: AM Passes 10-0
Additional staff or committee comments for the record: None

Proposal # P168

Public Testimony in Support:
Trying to address existing buildings within the performance path for buildings without a change in use. Currently requirements are unclear. Intent to add a home for these under the performance method so equipment and systems modified are directly addressed.

Public Testimony in Opposition: None

Questions from the Committee to Proponent:
1. The existing building plus addition and any renovations being compared to just the existing building?
   a. Has to do more with additions and renovation crossovers. When we have both, they have to be broken out and modeled and it doesn’t always align. This proposes modeling for addition based on section 5 without penalizing for keeping existing equipment.
2. How is the base line done?
   a. C407 for modified equipment, for those not being modified it would be kept the same.

Committee Discussion:
• Concerned about wording not matching up with the intent.
• Committee is in favor of the intent, but the wording here is incorrect.
Original Motion: Table in order to address the intent not matching up will be heard 9/11 with new language.

Proposal # P57

Public Testimony in Support:
Very similar to P56, this is alterations instead of additions. Same requirements.

Public Testimony in Opposition: None

Original Motion: A/S with Intent to Modify (ASM)
Modification: Bring the policy language in to this and in to the base code.
Final Motion: As Modified
Final Vote: AM Passes 9-0
Additional staff or committee comments for the record:
Proposal # 161
This Section is sorely missing objective and uniform criteria for its application. Because it represents a monumental requirement for existing buildings, when applied unequally or unreasonably, it results in an unfair burden to existing buildings. Adaptive reuse is an environmental and energy conserving practice and, in the Denver market costs for new construction are high, reuse of attractive buildings in prime locations (such as LODO & RINO) often present a more affordable alternative. However, the random application of this Section discourages the reuse of existing buildings. Revisions submitted.

Public Testimony in Support: None
Public Testimony in Opposition: None
Original Motion: As-Submitted (AS)
Reason: Committee felt this was beneficial clarification to help Denver reach its goals.
Questions from the Committee to Proponent: None
Committee Discussion:
- When we change occupancies, the requirements should change as the energy consumption will be affected.
- If you go from a grow to an office space would they have to treat as new construction?
  o You would need to show that you are not increasing energy consumption.
- If the consumption is going up, the only real way to meet this would be through modeling correct?
  o Only required for part of the building that is changing. We have been able to get a lot of projects to comply with minimal changes without modeling, they can use Comcheck.

Final Motion: As Submitted
Final Vote: AS Passes 9-0
Additional staff or committee comments for the record: None

Proposal # P24
Public Testimony in Support:
In 2018 a footnote came in to clear up confusion within ERI pathway. Concern was that solar could offset efficiency in the code. Proponents came together and agreed that backstop for a home with solar energy the 2015 would be the backstop for requirements. This proposal suggests eliminating the footnote that creates a back stop for solar and changing the year from 09 for baseline to 12.

Public Testimony in Opposition: None
Questions from the Committee to Proponent: None
Original Motion: A/S with Intent to Modify (ASM)
Reason: Eliminates confusion and provides flexibility for projects with solar.
Modification: Change 2012 to 2015
Final Motion: As Modified
Final Vote: AM Passes 9-0
Additional staff or committee comments for the record: None

Proposal # 404
Requiring vapor management declaration.

Public Testimony in Support:
Proposing this be added R103 because there are 2 components that ask builders to make a choice of 3 things under each category. Code officials often require 1 of the choices and not giving the builder the opportunity to justify their choice.

Public Testimony in Opposition:
Questions from the Committee to Proponent:
1. These requirements are already in the code, so why are we requiring them to summarize on a cover sheet? Seems like busy work at the end that could potentially hold up projects.
   a. From experience builders put little thought in to the vapor strategy for the specific assembly they have chosen to build, this requirement would help them think through the reasons why they may or may not want to use a certain class and why balanced ventilation should be used.
There are requirements in the code, but no clear place where they are being required to declare those choices.

2. Is ventilation strategy already being asked during plan review?
   a. Yes, they are already required to let us know what strategy they will be using.

3. How does this affect low rise apartment buildings 3 stories or less?
   a. It would apply to all 3 stories or less.

Original Motion: Disapprove (D)

Reason: This is a policy about design & review and not about construction. This just restates what we are already requiring.

Final Motion: Disapproval

Final Vote: D Passes 7-0-2

Additional staff or committee comments for the record: None