

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions

Version 1 Dated April 23, 2019

This summary has been prepared by the EECC to provide a brief outline of selected CE code proposals to be heard by the IECC - Commercial and IECC-Residential Energy Code Development Committees in April/May 2019 and EECC's recommendations on those proposals. The summary and recommendations below reflect careful consideration by the EECC Technical Committee and, as such, represent the EECC's views at this time. This document and, specifically, EECC's recommendations are subject to change as the process moves forward. This document is not intended as a substitute for reviewing and assessing the actual proposals as published by ICC and we encourage a full review. Comments are primarily provided to explain EECC's views on proposals where D is recommended; for proposals where AS or AM is recommended, see also the proponent's reason statement. EECC makes no representations or warranties as to this document or its use. See also EECC's separate summary for RE proposals that will be addressed by the Residential Energy Code Development Committee.

KEY

AS - Approval As Submitted

AM - Approval As Modified

D - Disapproval

NR - No Recommendation at this time

Prop Num.	Proponent	Representing	Summary	Recommended Action	Comments
CE1 Part 1	Darren Meyers	Self	Expands scope of IECC to cover energy-using systems in areas outside the structure.	D	This proposal could significantly broaden the scope of the IECC and apply code provisions across multiple buildings or building sites.
CE1 Part 2	Darren Meyers	Self	Expands scope of IECC to cover energy-using systems in areas outside the structure.	D	This proposal could significantly broaden the scope of the IECC and apply code provisions across multiple buildings or building sites.
CE2	Sharon Bonesteel & Steve Rosenstock	Salt River Project & EEI	Specifies that load shifting from on- to off-peak periods shall be considered part of the effective use of energy.	D	Time of use of energy is inherently a consideration as to the effective use of energy, making this proposal unnecessary. We believe this change would overemphasize this single consideration and possibly invite new trade-offs or measures that would weaken the overall efficiency of the code. In our view, the current intent of the IECC has worked well and does not require changes.
CE3 Part 1	Joseph Cain	SEIA	Adds renewable energy and energy storage systems to the scope of the IECC; also adds intent to achieve the most cost-effective means of compliance.	D	In our view, the current intent of the IECC has worked well and does not require changes -- energy conservation, not energy generation or storage, should be the focus of the IECC. This proposal would expand the scope of the IECC in ways that could lead to unanticipated negative consequences including reduced energy efficiency. Moreover, by adding a reference to the "most cost-effective means of compliance", this proposal could be read to imply a comparative cost-effectiveness test that would be problematic and create confusion among code adopters and users.

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions

CE3 Part 2	Joseph Cain	SEIA	Adds renewable energy and energy storage systems to the scope of the IECC; also adds intent to achieve the most cost-effective means of compliance.	D	In our view, the current intent of the IECC has worked well and does not require changes -- energy conservation, not energy generation or storage, should be the focus of the IECC. This proposal would expand the scope of the IECC in ways that could lead to unanticipated negative consequences including reduced energy efficiency. Moreover, by adding a reference to the "most cost-effective means of compliance", this proposal could be read to imply a comparative cost-effectiveness test that would be problematic and create confusion among code adopters and users.
CE4 Part 1	Bill McHugh	Chicago Roofing Contractors Assc	Revises intent of IECC as regulating buildings for "the effective use and conservation of energy ..."	D	The current language is important in understanding how the IECC should be developed and applied, has been in the IECC since the 2012 edition, and effectively captures the intent of the IECC. Deleting "conservation" and "effective" from the purpose of the energy conservation code would be a step backward.
CE4 Part 2	Bill McHugh	Chicago Roofing Contractors Assc	Revises intent of IECC as regulating buildings for "the effective use and conservation of energy ..."	D	The current language is important in understanding how the IECC should be developed and applied, has been in the IECC since the 2012 edition, and effectively captures the intent of the IECC. Deleting "conservation" and "effective" from the purpose of the energy conservation code would be a step backward.
CE5 Part 1	Hope Medina	Self	Revises intent of IECC as regulating buildings "for <u>life safety along with the effective use and conservation of energy ...</u> "	NR	We agree with the concept that the IECC has an important role in supporting life safety as part of the ICC's comprehensive set of life safety codes. However, we think that the intent of the IECC is the effective use and conservation of energy in order to promote life safety, health and the public welfare. We think that this should be understood without a change to the intent of the IECC.
CE5 Part 2	Hope Medina	Self	Revises intent of IECC as regulating buildings "for <u>life safety along with the effective use and conservation of energy ...</u> "	NR	We agree with the concept that the IECC has an important role in supporting life safety as part of the ICC's comprehensive set of life safety codes. However, we think that the intent of the IECC is the effective use and conservation of energy in order to promote life safety, health and the public welfare. We think that this should be understood without a change to the intent of the IECC.
CE6 Part 1	Darren Meyers	Self	Revises intent of IECC as regulating buildings for "the effective use and conservation of energy <u>primarily for human comfort</u> over the useful life of each building."	D	While we agree that human comfort is an important consideration in energy conservation, we would not consider it the "primary" goal of the IECC. This proposal does not seem necessary and may be interpreted by some to exempt buildings that are not primarily used for human occupancy (warehouses) or preclude considerations other than comfort.

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions					
CE6 Part 2	Darren Meyers	Self	Revises intent of IECC as regulating buildings for "the effective use and conservation of energy <u>primarily for human comfort</u> over the useful life of each building."	D	While we agree that human comfort is an important consideration in energy conservation, we would not consider it the "primary" goal of the IECC. This proposal does not seem necessary and may be interpreted by some to exempt buildings that are not primarily used for human occupancy (warehouses) or preclude considerations other than comfort.
CE7 Part 1	Steve Rosenstock	EEI	Adds energy production and storage to scope of IECC.	D	The proposed change could take the focus off the IECC's core objective of conserving the energy used in a building. The code is not written to comprehensively address energy production or storage in any significant way and this change would unnecessarily expand the scope of the code with potential negative consequences.
CE7 Part 2	Steve Rosenstock	EEI	Adds energy production and storage to scope of IECC.	D	The proposed change could take the focus off the IECC's core objective of conserving the energy used in a building. The code is not written to comprehensively address energy production or storage in any significant way and this change would unnecessarily expand the scope of the code with potential negative consequences.
CE8 Part 1	Dan Bresette	ASE	Requires alternative materials, designs, or methods of construction approved by code official as compliant with the intent of the code to meet mandatory requirements.	AS	
CE8 Part 2	Dan Bresette	ASE	Requires alternative materials, designs, or methods of construction approved by code official as compliant with the intent of the code to meet mandatory requirements.	AS	
CE9 Part 1	Bill Fay	EECC	Adds energy conservation to list of considerations when code official approves alternative materials, designs, or methods of construction.	AS	
CE9 Part 2	Bill Fay	EECC	Adds energy conservation to list of considerations when code official approves alternative materials, designs, or methods of construction.	AS	
CE10 Part 1	Maureen Guttman	BCAP-IBTS	Clarifies that code official shall supply written response whether or not alternative material, design, or method of construction is approved.	AS	
CE10 Part 2	Maureen Guttman	BCAP-IBTS	Clarifies that code official shall supply written response whether or not alternative material, design, or method of construction is approved.	AS	
CE11 Part 1	Shaunna Mozingo	Self	Re-titles "Above code programs" provisions as "Alternate energy efficiency programs."	D	This change is unnecessary and may create confusion. The requirements in this section are aimed at programs that exceed the code and are not just an alternate program.
CE11 Part 2	Shaunna Mozingo	Self	Re-titles "Above code programs" provisions as "Alternate energy efficiency programs."	D	This change is unnecessary and may create confusion. The requirements in this section are aimed at programs that exceed the code and are not just an alternate program.
CE12 Part 1	Harry Misuriello	ACEEE	Requires buildings constructed to approved above-code programs to meet or exceed thermal envelope requirements of 2009 IECC.	AS	
CE12 Part 2	Harry Misuriello	ACEEE	Requires buildings constructed to approved above-code programs to meet or exceed thermal envelope requirements of 2009 IECC.	AS	
CE13 Part 1	Hope Medina	Self	Requires construction documents to identify which compliance path was selected.	AS	This will reduce confusion for code officials and plan reviewers.
CE13 Part 2	Hope Medina	Self	Requires construction documents to identify which compliance path was selected.	AS	This will reduce confusion for code officials and plan reviewers.
CE14	Donald Sivigny	MN/MN Bldg Officials	Requires construction documents to include additional information on heating, cooling, and lighting systems, as well as "other items as determined by code official."	NR	

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions					
CE15 Part 1	Hope Medina	Self	Requires construction documents to include all energy-related information in one location.	NR	
CE15 Part 2	Hope Medina	Self	Requires construction documents to include all energy-related information in one location.	NR	
CE16 Part 1	Robby Schwarz & Shaunna Mozinga	EnergyLogic & Self	Provides additional details related to approved third-party inspection agencies; establishes scope of work, authority, and reporting requirements.	NR	
CE16 Part 2	Robby Schwarz & Shaunna Mozinga	EnergyLogic & Self	Provides additional details related to approved third-party inspection agencies; establishes scope of work, authority, and reporting requirements.	NR	
CE17 Part 1	Craig Drumheller	NAHB	Specifies that compliance materials and software associated with referenced codes or standards shall incorporate the provisions of the IECC, not the referenced standard.	D	Referenced codes and standards are an important part of the code and are used to fill in the gaps related to code requirements where not in conflict. This change is unnecessary and may create confusion. It is unclear what problem this is intended to solve.
CE17 Part 2	Craig Drumheller	NAHB	Specifies that compliance materials and software associated with referenced codes or standards shall incorporate the provisions of the IECC, not the referenced standard.	D	Referenced codes and standards are an important part of the code and are used to fill in the gaps related to code requirements where not in conflict. This change is unnecessary and may create confusion. It is unclear what problem this is intended to solve.
CE17 Part 3	Craig Drumheller	NAHB	Specifies that compliance materials and software associated with referenced codes or standards shall incorporate the provisions of the IECC, not the referenced standard.	D	Referenced codes and standards are an important part of the code and are used to fill in the gaps related to code requirements where not in conflict. This change is unnecessary and may create confusion. It is unclear what problem this is intended to solve.
CE18 Part 1	Hope Medina	Self	Adds new definition for <i>accessory structure</i> to IECC.	NR	
CE18 Part 2	Hope Medina	Self	Adds new definition for <i>accessory structure</i> to IECC.	NR	
CE19 Part 1	Donald Sivigny	MN/MN Bldg Officials	Adds new definition for <i>air-impermeable insulation</i> with specific air permeance characteristics.	NR	
CE19 Part 2	Donald Sivigny	MN/MN Bldg Officials	Revises definition for <i>air-impermeable insulation</i> to add specific air permeance characteristics.	NR	
CE20 Part 1	Donald Sivigny	MN/MN Bldg Officials	Adds new definition for <i>outdoor air</i> .	NR	
CE20 Part 2	Donald Sivigny	MN/MN Bldg Officials	Adds new definition for <i>outdoor air</i> .	NR	
CE21	Jim Edelson	NBI	Adds new definitions for <i>biomass gas</i> and <i>biomass waste</i> ; revises definition of <i>on-site renewable energy</i> to cover biomass gas or waste, or extracted from hot fluid or steam heated within the earth.	AS	
CE22 Part 1	David Collins	SEHPCAC/AIA	Revises definition for <i>demand recirculation water system</i> to be consistent with IPC.	NR	
CE22 Part 2	David Collins	SEHPCAC/AIA	Revises definition for <i>demand recirculation water system</i> to be consistent with IPC.	NR	
CE23 Part 1	Robby Schwarz	EnergyLogic	Adds new definition for <i>compliance report</i> .	NR	This definition references compliance with the "intent" of the code. The definition should reference compliance with the code.
CE23 Part 2	Robby Schwarz	EnergyLogic	Adds new definition for <i>compliance report</i> .	NR	This definition references compliance with the "intent" of the code. The definition should reference compliance with the code.
CE24	Donald Sivigny	MN/MN Bldg Officials	Revises definition for <i>computer room</i> to cover buildings with power density > 20W/sq.ft. conditioned area or connected equipment load >10kW.	NR	

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions					
CE25	Hope Medina	Self	Adds new definition for <i>core and shell</i> .	D	This definition is not necessary because there are no references to core and shell in the IECC. There is also a concern that important features are not included, such as fenestration.
CE26 Part 1	Shaunna Mozingo	CO ICC	Adds new definition for <i>direct digital control</i> .	NR	
CE27	Donald Sivigny	MN/MN Bldg Officials	Revises definition for <i>greenhouse</i> to specify that greenhouses have their own thermal envelope requirements that are independent of the rest of the conditioned spaces.	D	There are currently no thermal envelope requirements for greenhouses in the IECC.
CE28 Part 1	Eric Makela	NW Energy Codes Group	Revises Group R-2 under the commercial code to include buildings 1-3 stories in height above grade plane; making these buildings subject to the commercial IECC instead of the residential IECC.	D	This proposal would lead to a substantial reduction in energy efficiency for many low-rise multifamily homes since the current residential requirements are more stringent than the commercial building requirements in many cases.
CE28 Part 2	Eric Makela	NW Energy Codes Group	Removes Group R-2 (multifamily) from definition for <i>residential building</i> , making these buildings subject to the commercial IECC instead of the residential IECC.	D	This proposal would lead to a substantial reduction in energy efficiency for many low-rise multifamily homes since the current residential requirements are more stringent than the commercial building requirements in many cases.
CE29 Part 1	Ed Kulik	ICC Bldg Action Committee	Revises definition for <i>networked guestroom control system</i> .	NR	
CE29 Part 2	Ed Kulik	ICC Bldg Action Committee	Replaces definitions for <i>accessible</i> and <i>readily accessible</i> with new definitions for <i>ready access (to)</i> and <i>access (to)</i> .	NR	
CE30 Part 1	Hope Medina	Self	Adds new definition for <i>remodel</i> .	NR	
CE30 Part 2	Hope Medina	Self	Adds new definition for <i>remodel</i> .	NR	
CE31 Part 1	Jim Edelson	NBI	Revises definition for <i>on-site renewable energy</i> to eliminate list of types of renewable energy and include only "renewable energy resources harvested at the building site;" adds new definition of <i>renewable energy resources</i> to list the types of resources.	AS	
CE31 Part 2	Jim Edelson	NBI	Adds new definitions for <i>on-site renewable energy</i> and <i>renewable energy resources</i> .	AS	
CE32 Part 1	Joseph Hill	NYSDOS	Revises definition for <i>standard reference design</i> to specify that it meets the minimum prescriptive and mandatory requirements of the code.	NR	
CE32 Part 2	Joseph Hill	NYSDOS	Revises definition for <i>standard reference design</i> to specify that it meets the minimum prescriptive and mandatory requirements of the code.	NR	
CE33	Hope Medina	Self	Adds new definition for <i>tenant finish</i> .	NR	
CE34 Part 1	Donald Sivigny	MN/MN Bldg Officials	Revises definition for <i>U-factor (thermal transmittance)</i> to include inside and outside air films.	NR	
CE34 Part 2	Donald Sivigny	MN/MN Bldg Officials	Revises definition for <i>U-factor (thermal transmittance)</i> to include inside and outside air films.	NR	
CE35	Eric Makela	NBI	Revises definition for <i>wall, above-grade</i> to include between-floor spandrels, peripheral edges of floors, roof and basement knee walls, dormer walls, gable end walls, walls enclosing mansard roof, and skylight shafts.	NR	

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions					
CE36 Part 1	David Collins	SEHPCAC/AIA	Incorporates ASHRAE climate zones into IECC; modifies criteria for determining international climate zones.	NR	Note: although it may reflect a technically accurate change in climate zones, this proposal will result in reduced efficiency in many cases by moving counties to climate zones with less stringent requirements.
CE36 Part 2	David Collins	SEHPCAC/AIA	Incorporates ASHRAE climate zones into IECC; modifies criteria for determining international climate zones.	NR	Note: although it may reflect a technically accurate change in climate zones, this proposal will result in reduced efficiency in many cases by moving counties to climate zones with less stringent requirements.
CE37 Part 1	Donald Sivigny	MN/MN Bldg Officials	Revises C303.1 Identification to require that materials be listed for intended use, in accordance with manufacturer's instructions, and installed by certified installer.	D	These additional requirements could lead to unnecessary complications for many building products.
CE37 Part 2	Donald Sivigny	MN/MN Bldg Officials	Revises R303.1 Identification to require that materials be listed for intended use, in accordance with manufacturer's instructions, and installed by certified installer.	D	These additional requirements could lead to unnecessary complications for many building products.
CE38	Kurt Roeper	Steel Door Institute	Modifies default U-factor for opaque uninsulated metal doors from 1.20 to 0.60 and insulated metal (other) from 0.60 to 0.42.	D	The current default tables work well and provide an incentive to test and label fenestration products.
CE39	Jennifer Hatfield	AAMA	Adds options for skylights to meet VT-annual ratings per NFRC 203; adds definition of <i>visible transmittance, annual</i> .	NR	
CE40 Part 1	Robby Schwarz	EnergyLogic	Revises requirements for marking R-value on insulation to allow an insulation certificate for materials that are installed without an observable R-value mark.	NR	
CE40 Part 2	Robby Schwarz	EnergyLogic	Revises requirements for marking R-value on insulation to allow an insulation certificate for materials that are installed without an observable R-value mark.	NR	
CE41	David Collins	SEHPCAC/AIA	Revises and reorders compliance options for commercial IECC.	AS	This proposal will provide clarity for code users; we recommend correcting section 402.1 for consistency in referencing compliance paths.
CE42 Part 1	David Collins	SEHPCAC/AIA	Combines all mandatory requirements into single table at the beginning of C407; moves .85 performance path multiplier from C401.2 to C407.2; deletes "mandatory" distinction throughout code.	AS	Although we are concerned that the elimination of the word "mandatory" may be misinterpreted to mean that these requirements no longer apply to all projects, the new Table C407.2 appears to capture key mandatory requirements.
CE42 Part 2	David Collins	SEHPCAC/AIA	Combines all mandatory requirements into single tables at the beginning of R405 and R406; deletes "mandatory" distinction throughout code.	AS	Although we are concerned that the elimination of the word "mandatory" may be misinterpreted to mean that these requirements no longer apply to all projects, Tables R405.2 and R406.2 (and accompanying sections) appear to capture key mandatory requirements.
CE43	Steve Rosenstock	EEI	Creates new compliance option for data centers to comply with ASHRAE 90.4.	D	As written, this new compliance option may be incorrectly interpreted to cover more than just data centers, allowing code users to bypass key efficiency requirements.
CE44	Gayathri Vijayakumar & Robby Schwarz	Steven Winter Assoc & EnergyLogic	Creates an exception from compliance with commercial code for dwelling units in R-2 buildings that comply with the ERI.	NR	
CE45	David Renn	CO ICC	Moves .85 multiplier from C401.2 to C407.3	NR	Prefer CE49, which includes the multiplier in both places and improves efficiency.
CE46	Andrew Klein	Self Storage Assoc	Adds new performance compliance option that removes the .85 multiplier and mandatory requirements; requires onsite energy storage system with usable capacity $\geq 1/730$ of annual building energy use.	D	The need to make buildings reasonably efficient is not reduced or eliminated simply because the building has on-site energy storage and renewable energy sufficient to reduce building energy cost to zero.

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions

CE47	Maureen Guttman, Jim Edelson & David Collins	BCAP-IBTS, NBI & AIA	Adds new compliance option for Near Net-Zero Energy Performance based on ZEPI score.	D	It is unclear how on-site renewables will affect the ZEPI compliance score (we would recommend that the section explicitly provide that they not be included or at least limited to 5% as in the performance path). IECC mandatory measures should also explicitly apply. A thermal envelope backstop (such as the 2015 or 2018 IECC) would make the proposal better.
CE48	David Renn	CO ICC	Deletes list of mandatory requirements from C401.2.	D	We prefer leaving the mandatory requirements as they are, but if changes are necessary, CE42 part 1 is a more complete proposal.
CE49	Fay, Bresette, Guttman & Misuriello	EECC et al	Increases efficiency of performance path by requiring proposed design to demonstrate energy cost \leq 80% of standard reference design building, rather than 85%.	AS	
CE50	Tom Culp	GICC/Aluminum Extruders Council	Allows area-weighted averaging of U-factors across product categories in new construction and for fenestration replaced in existing buildings.	D	Prescriptive fenestration U-factors are based on technological and market limitations for specific product categories; allowing trade-offs between product categories creates a new efficiency loophole.
CE51 Part 1	David Collins	SEHPCAC/AIA	Clarifies that mandatory requirements apply to all compliance paths, but prescriptive requirements only apply to prescriptive path.	AS	
CE51 Part 2	David Collins	SEHPCAC/AIA	Clarifies that mandatory requirements apply to all compliance paths, but prescriptive requirements only apply to prescriptive path.	AS	Prefer RE16 because it clarifies the applicability of mandatory items and Chapter 3 requirements.
CE52	Tom Zaremba	Self	Allows area-weighted averaging of U-factors and SHGCs across product categories in new construction and for fenestration replaced in existing buildings.	D	Fenestration U-factors are based on technological and market limitations for specific product categories; fenestration SHGCs are orientation-specific; allowing trade-offs between product categories and (for SHGCs) across orientations creates new efficiency loopholes.
CE53	Jim Edelson	NBI	Adds requirement that building site have equipment for on-site renewable energy with a designated capacity per floor area; includes exceptions for shaded buildings and other situations; adds new definition for <i>renewable energy certificate (REC)</i> .	D	This proposal adds a requirement for on-site renewable energy capability for all commercial buildings (with limited exceptions); such a requirement currently does not exist in the code. The reason states that this requirement would be "mandatory" but the code text does not include a "mandatory" designation. The proposal should be clarified to provide that generation installed to meet this requirement cannot be used as a trade-off against efficiency measures and should be excluded from any performance path compliance. This requirement would be better in an appendix as an option for interested jurisdictions.
CE54 Part 1	Craig Conner	Self	Adds new tropical zone compliance alternative to commercial chapter for Group R-2 buildings at elevations $<$ 2,400 ft.; allows buildings to comply with "limited air conditioning option" where \leq 1/2 of occupied space is air conditioned, renewable energy is used for 80% of water heating, glazing in conditioned spaces has \leq 0.30 SHGC or \leq 0.30 PF, operable fenestration provides ventilation area \geq 14% of floor area in each room or has equivalent ventilation, roof or ceiling is insulated to \geq R-15, etc; allows buildings with no air conditioning to comply with no U-factor or SHGC requirements and very few other minimum requirements.	D	This proposal creates an unnecessary compliance alternative that is far less efficient than the IECC.

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions

CE54 Part 2	Craig Conner	Self	Revises tropical zone compliance alternative; allows buildings to comply with "limited air conditioning option" where $\leq 1/2$ of occupied space is air conditioned, renewable energy is used for 80% of water heating, glazing in conditioned spaces has ≤ 0.40 SHGC or ≤ 0.30 PF, operable fenestration provides ventilation area $\geq 14\%$ of floor area in each room or has equivalent ventilation, roof or ceiling is insulated to $\geq R-15$, etc.; allows buildings with no air conditioning to comply with no U-factor or SHGC requirements and very few other minimum requirements.	D	The requirements for the current tropical climate zone compliance alternative are less efficient than standard requirements in the IECC; these changes would result in even less efficiency.
CE55	Fay, Bresette, Guttman & Misuriello	EECC et al	Adds new requirement for thermal envelope certificate that includes R-values, U-factors, and SHGC values for thermal envelope components and the results of any testing performed on building.	AS	
CE56	Nicholas O'Neil	NW Energy Codes Group	Adds requirements for mechanically heated or cooled greenhouses, which are currently exempt from envelope requirements of code; sets skylight U-factor at 0.5 and vertical fenestration U-factor at 0.7; revises definition of <i>fenestration</i> to include glazing materials used in greenhouses; revises definition of <i>greenhouse</i> to include only those structures erected for ≥ 180 days; adds new definition of <i>internal curtain system</i> .	NR	It is unclear whether the low-energy requirements would continue to apply to greenhouses that are heated and cooled. While these thermal envelope requirements would be some improvement over the current code, a building that is heated and cooled (beyond the low-energy threshold) should meet the efficiency requirements of the code.
CE57	Steve Rosenstock	EEl	Adds new category for low-energy buildings to cover buildings $\leq 1,100$ sq. ft. and used solely to house electric distribution system equipment.	D	We are concerned that this could be used to exempt a broader range of buildings than intended. Moreover, this provision does not seem necessary given the current code language in section C402.1.2.
CE58	Steve Rosenstock	EEl	Increases size of equipment buildings exempt from energy code from 500 to 1200 sq.ft.	NR	More than doubling the size of these exempt buildings reduces energy efficiency.
CE59	Andrew Klein	Self Storage Assoc	Adds new category of reduced efficiency requirements for Group S and U occupancy buildings.	D	This proposal reduces efficiency.
CE60 Part 1	John Woestman	Extruded Polystyrene Foam Assoc	Clarifies that where cavity insulation is installed in multiple layers, only cavity R-values shall be summed to determine compliance; where continuous insulation is installed in multiple layers, only continuous insulation R-values shall be summed to determine compliance.	NR	
CE60 Part 2	John Woestman	Extruded Polystyrene Foam Assoc	Clarifies that where cavity insulation is installed in multiple layers, only cavity R-values shall be summed to determine compliance; where continuous insulation is installed in multiple layers, only continuous insulation R-values shall be summed to determine compliance.	NR	
CE61 Part 1	Bill Fay & Harry Misuriello	EECC & ACEEE	Improves roof insulation requirements by adopting more efficient requirements from ASHRAE Std. 90.1.	AS	
CE62 Part 1	John Woestman	Extruded Polystyrene Foam Assoc	Moves mass wall criteria into its own section; clarifies that wall elements to the exterior of vented air space shall be excluded when evaluating mass wall thermal envelope criteria.	NR	
CE62 Part 2	John Woestman	Extruded Polystyrene Foam Assoc	Clarifies that anchored brick, stone, or masonry veneer are not considered mass walls; also clarifies that components to the exterior of vented air space shall be excluded from heat capacity determination.	NR	
CE63	Bill Fay & Harry Misuriello	EECC & ACEEE	Improves above-grade wall insulation requirements by adopting more efficient requirements from ASHRAE Std. 90.1.	AS	
CE64	Bill Fay & Harry Misuriello	EECC & ACEEE	Improves below-grade wall insulation requirements by adopting more efficient requirements from ASHRAE Std. 90.1.	AS	
CE65	Dan Bresette & Maureen Guttman	ASE & BCAP-IBTS	Corrects joist-framing insulation R-value in cz 1 to be consistent with requirement in U-factor table.	AS	
CE66	Bill Fay & Harry Misuriello	EECC & ACEEE	Improves floor insulation requirements by adopting more efficient requirements from ASHRAE Std. 90.1.	AS	

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions					
CE67	Darren Meyers	Self	Modifies footnotes to opaque envelope tables to clarify that second value refers to full, under-slab insulation.	NR	
CE68	Bill Fay & Harry Misuriello	EECC & ACEEE	Improves slab-on-grade floor insulation requirements by adopting more efficient requirements from ASHRAE Std. 90.1.	AS	
CE69	Bill Fay & Harry Misuriello	EECC & ACEEE	Improves unheated slab insulation requirements in cz 7-8 by adopting more efficient requirements from ASHRAE Std. 90.1.	AS	
CE70	Connor Barbaree	ASHRAE	Deletes R-value requirements for opaque nonswinging doors from R-value table; sets nonswinging door U-factor at 0.31 and swinging door U-factor at 0.37 for all climate zones in U-factor table; adds requirement for nonswinging horizontally-hinged doors with a single row of fenestration to have a U-factor of ≤ 0.440 in cz 0-6 and ≤ 0.360 in cz 7-8 where fenestration area is between 14-25% of total door area.	NR	See CE77
CE71	Darren Meyers	Nat'l Roofing Contractors Assoc	Relocates and rewrites provisions relating to insulation on suspended ceilings and tapered insulation to new independent sections.	NR	Similar to CE72
CE72	Darren Meyers	Nat'l Roofing Contractors Assoc	Relocates and rewrites provisions relating to insulation on suspended ceilings and tapered insulation to new independent sections; maintains some exceptions to roof assembly R-value requirements.	NR	Similar to CE71
CE73	Dan Bresette & Maureen Guttman	ASE & BCAP-IBTS	Corrects U-factor requirement for roof insulation for All Other metal buildings in cz 1.	AS	
CE74	Dan Bresette & Maureen Guttman	ASE & BCAP-IBTS	Corrects U-factor for above-grade mass walls in cz 8.	AS	
CE75	Dan Bresette & Maureen Guttman	ASE & BCAP-IBTS	Corrects U-factors for wall insulation in cz 5 & 7.	AS	
CE76	Jay Crandell	Foam Sheathing Cmtee of ACC	Reduces two heated slab F-factors to a single F-factor for each climate zone in opaque envelope table; deletes footnote "f" relating to the two F-factors.	NR	Proposal clarifies requirements, but does not appear to change stringency.
CE77	Joseph Hetzel	Door & Access Systems Manfng Assoc	Adds new footnote that requires garage doors with a single row of fenestration to have assembly U-factor of ≤ 0.44 in cz 1-6 and ≤ 0.36 in cz 7-8 where fenestration area is between 14-25% of total door area.	NR	See CE70
CE78 Part 1	William Warlick	Self	Revises and moves current provisions related to slab-on-grade perimeter insulation into new section outlining construction of slab-on-grade floors.	D	If a change is necessary, we prefer CE79.
CE78 Part 2	William Warlick	Self	Revises and moves current provisions related to slab-on-grade perimeter insulation into new section outlining construction of slab-on-grade floors; adds new exception for jurisdictions with heavy termite infestation.	NR	
CE79	Jay Crandell	Foam Sheathing Cmtee of ACC	Revises and moves current provisions related to slab-on-grade perimeter insulation into new section outlining slab insulation installation requirements.	NR	
CE80	David Collins	SEHPCAC/AIA	Designates requirements related to airspaces as "mandatory."	AS	
CE81	Eric Makela	NBI	Requires that concrete floor slabs that penetrate the building thermal envelope be provided with R-3 insulation or R-3 thermal break.	AS	
CE82	Jonathan Siu	City of Seattle	Replaces "roof gardens or landscaped roofs" with "landscaped roofs" as an editorial correction to be consistent with change in IBC/IFC.	NR	
CE83	Darren Meyers	Nat'l Roofing Contractors Assoc	Adds new definition for <i>vegetative roof</i> ; adds exemption for vegetative roofs from roof solar reflectance and thermal emittance requirements.	NR	

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions					
CE84	Tom Culp, Jeff Inks, Jennifer Hatfield & Chris Mathis	GICC/Aluminum, WDMA, AAMA & Self	Improves vertical fenestration and skylight U-factors to be consistent with ASHRAE Addendum aw; maintains orientation-specific SHGCs; adopts Addendum aw's "fixed" SHGC values in cz 1 and 6-8 as SEW SHGC requirement; applies higher SHGC for N-oriented fenestration.	AS, Prefer CE85, CE86, and CE87	CE84 U-factors are consistent with the revised ASHRAE 90.1 values. However, CE84 SHGC requirements are inconsistent with ASHRAE values (ASHRAE uses the same values for all orientations; CE84 uses less efficient values for north orientations); adoption of CE87 (errata) along with CE84 would correct this problem by matching the ASHRAE SHGC requirements while still retaining the IECC's current adjustments for projection factors.
CE85	Fay, Bresette, Guttman & Misuriello	EECC et al	Improves vertical fenestration U-factors in all climate zones to be consistent with ASHRAE Addendum aw.	AS	
CE86	Fay, Bresette, Guttman & Misuriello	EECC et al	Improves skylight U-factors in cz 1 and 6-8 to be consistent with ASHRAE Addendum aw.	AS	
CE87	Fay, Bresette, Guttman & Misuriello	EECC et al	Improves vertical fenestration SHGC to be consistent with ASHRAE Addendum aw; replaces orientation-specific SHGCs with improved "fixed" and "operable" SHGC requirements consistent with Addendum aw.	AS	See ICC errata. See also CE84, which uses less efficient SHGC values for north orientations; adoption of CE87 (errata) along with CE84 (or CE85 and CE86) would correct this problem by matching the ASHRAE SHGC requirements while still retaining the IECC's current adjustments for projection factors.
CE88	Eric Makela	NBI	Applies current vertical fenestration U-factors to new category for curtain walls, storefront, and site-built fenestration products; applies more stringent U-factors based on residential requirements to all other vertical fenestration.	D	This proposal would make fenestration U-factors inconsistent with ASHRAE Std. 90.1-2019 and would turn the IECC back toward framing material-specific U-factors (which were eliminated in the 2012 update per an EECC code change). "Site-built fenestration" should not have far weaker requirements than "all other vertical fenestration." Any reduction in U-factors should apply to all vertical fenestration.
CE89	Jack Bailey & Glenn Heinmiller	Int'l Assoc of Lighting Designers	Makes editorial changes to daylighting provisions.	NR	
CE90	Jack Bailey & Glenn Heinmiller	Int'l Assoc of Lighting Designers	Makes editorial changes to daylighting provisions.	NR	
CE91	Jennifer Hatfield	AAMA	Clarifies that maximum skylight area shall be the greater of C402.4.2 (minimum skylight area requirements) or C405.2.3.1 (daylighting).	NR	
CE92	Marc Levitan & Benchmark Harris	ICC Storm Shelter Comm & NSSA	Adds new exception from minimum skylight area requirement for spaces designed as storm shelters complying with ICC 500.	NR	
CE93 Part 1	Marc Levitan & Benchmark Harris	ICC Storm Shelter Comm & NSSA	Creates exception from fenestration U-factor and SHGC requirements for storm shelters complying with ICC 500.	D	This proposal reduces efficiency by excepting such buildings from all fenestration U-factor and SHGC requirements. If the specific fenestration U-factor and SHGC used does not meet the prescriptive requirements, it can be offset by improving the performance of the rest of the building.
CE93 Part 2	Benchmark Harris	NSSA	Creates exception from maximum fenestration U-factor and SHGC caps for storm shelters complying with ICC 500.	NR	

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions					
CE94	Erika Burns	AERC	Creates new exception from SHGC requirements for fenestration with permanently attached interior or exterior shades, provided shades meet AERC 1 Appx B X 1.1, are automatically controlled, and provide ≥90% coverage.	D	Components with built-in automatic permanent performance (such as low-SHGC fenestration) should not be traded-off, weakened or replaced by systems that are claimed to be "capable" of similar performance (such as window shades combined with a poor window), but depend on proper user operation. Durability of various shading like blinds and shades as compared to the fenestration unit itself is also an issue. If such shading devices are beneficial, they should be required separately and not inserted as a specific prescriptive fenestration trade-off.
CE95	Kevin Duerr-Clark & Joseph Hill	NYSDOS	Specifies that ventilation shall be provided in accordance with the <u>commercial building provisions of IMC Chapter 4.</u>	NR	
CE96	Gayathri Vijayakumar & Robby Schwarz	Steven Winter Assoc & EnergyLogic	Adds new definition for <i>testing unit enclosure area</i> ; requires dwelling and sleeping unit enclosures to be air leakage tested to ≤ 0.30 cfm/sq.ft.; provides option for sampling and several exceptions.	AS	While we are concerned with the proposal for sampling, an air leakage testing requirement for these buildings would improve energy efficiency. See CE97.
CE97	Eric Makela	NBI	Requires most buildings not in occupancy groups R and I to be tested for air leakage at ≤0.40 cfm/sq.ft.; permits area-weighted averaging; provides remedial measures for buildings that test >0.40 cfm/sq.ft. but ≤0.60 cfm/sq.ft	AS	While we are concerned with the option for sampling, an air leakage testing requirement for these buildings would improve energy efficiency. See CE96.
CE98	Theresa Weston	ABAA	Adds ASTM E3158 as a recognized test method for measuring air leakage rate of large or multizone buildings.	NR	
CE99	Eric Makela	NBI	Adds new requirement that continuous air barrier be verified by registered design professional or approved agency; requires final commissioning report of air barrier.	AS	
CE100	Laverne Dalgleish	Air Barrier Assoc	Requires both materials and assemblies to be tested for air leakage.	NR	
CE101	Laverne Dalgleish	Air Barrier Assoc	Clarifies which requirements and referenced standards apply to air barrier components and assemblies; adds new reference to ASTM D8052 for low-sloped membrane roof assemblies.	NR	
CE102	Darren Meyers	Nat'l Roofing Contractors Assoc	Revises list of materials deemed to comply with air barrier requirements as follows: " Fully adhered single-ply roof membrane."	NR	
CE103 Part 1	Darren Meyers	Self	Replaces requirements for rooms containing fuel-burning appliances with requirements to test the total net exhaust flow of the exhaust fans; requires adequate combustion and ventilation air in accordance with manufacturers' instructions and certain referenced standards.	D	The current requirements are more straightforward; the new standards do not provide clarity regarding insulation or sealing of rooms containing fuel-burning appliances.
CE103 Part 2	Darren Meyers	Self	Requires testing of total net exhaust flow where atmospherically vented combustion appliances or solid-fuel burning appliances are located inside the thermal envelope.	NR	
CE104	Donald Sivigny	MN/MN Bldg Officials	Deletes requirements to insulate and seal rooms containing fuel-burning appliances.	D	This proposal would reduce energy efficiency and could result in indoor air quality issues.
CE105	Dan Buuck, David Collins, Gene Boecker, Marsha Mazz & Dawn Anderson	NAHB, AIA, Code Consultants Inc., United Spinal Assoc & Mayor's Office on Disability	Requires vestibules to comply with the IBC; where vestibule serves as part of accessible route, the vestibule must also comply with the turning space requirements in ICC A17.1.	NR	
CE106	Hope Medina	Self	Requires operable openings larger than 40 sq.ft. to have openings interlocked with heating and cooling system.	NR	

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions					
CE107	David Collins	SEHPCAC	Designates calculation of heating and cooling loads as "mandatory."	AS	
CE108 through CE109 - Not reviewed; EECC has no recommendation					
CE110	Fay, Bresette, Guttman & Misuriello	EECC et al	Adds new Fault Detection and Diagnostics requirements for large HVAC systems.	AS	
CE111	Marilyn Williams	NEMA	Adds new Fault Detection and Diagnostics requirements for certain large HVAC systems.	AS, Prefer CE110	
CE112 - Not reviewed; EECC has no recommendation					
CE113	Connor Barbaree	ASHRAE	Replaces IECC HVAC tables with references to ASHRAE tables.	AS	It is important to update the IECC with current ASHRAE HVAC equipment requirements. While we would prefer to see the values from the tables incorporated into the IECC, at a minimum, the actual tables should be reprinted in the IECC as indicated.
CE114	David Collins	SEHPCAC/AIA	Designates hot gas bypass limitation and boiler turndown sections as "mandatory."	AS	
CE115 through CE214 - Not reviewed; EECC has no recommendation					
CE215	Marilyn Williams	NEMA	Adds new requirements for energy monitoring systems for new buildings \geq 25,000 sq. ft.	AS	
CE216	Marilyn Williams	NEMA	Adds automatic receptacle control requirements to specific rooms and locations within a building.	AS	
CE217 Part 1	Matt Frommer, Eric Makela, Jim Edelson, Steve Rosenstock, Dan Bresette & Francesca Wahl	SWEEP, NBI, EEI, ASE & Self	Adds new requirement for EV charging in commercial buildings; adds new definitions for <i>electric vehicle supply equipment</i> , <i>EV capable space</i> , and <i>EV ready space</i> .	AS	
CE217 Part 2	Matt Frommer, Eric Makela, Jim Edelson, Steve Rosenstock, Dan Bresette & Francesca Wahl	SWEEP, NBI, EEI, ASE & Self	Adds new requirement for EV charging in residential buildings; adds new definitions for <i>electric vehicle supply equipment</i> , <i>EV capable space</i> , and <i>EV ready space</i> .	AS	See RE146
CE218	Eric Makela	NW Energy Codes Group	Replaces Additional Efficiency Package Options with new points-based tables for Group B, R&I, E, M, and "Other" occupancies; requires new buildings to achieve 10 points from tables.	NR	
CE219	Marilyn Williams	NEMA	Requires compliance with two Additional Efficiency Options rather than one.	AS	See CE220
CE220	Fay, Bresette, Guttman & Misuriello	EECC et al	Requires compliance with two Additional Efficiency Options rather than one.	AS	See CE219
CE221 through CE225 - Not reviewed; EECC has no recommendation					
CE226	Louis Starr	NEEA	Replaces Additional Efficiency Package Options with a new points-based option with tables of measures for Group B, R&I, E, M, and "Other" occupancies; requires new buildings to achieve 10 points from tables or to comply with one of the modified Additional Efficiency Options; reduces lighting power density by 15% below current allowance.	NR	

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions

CE227	Steve Rosenstock	EEI	Alters the multiplier that applies to lighting power density values from 90% to 95% in C406.3.	D	This proposal reduces stringency. If there is insufficient room to further improve lighting by 10%, then this option should be eliminated so that other more efficient options will be selected.
CE228	Mark Lyles	NW Energy Codes Group	Revises Additional Efficiency Package Option C406.3 lighting to require total interior lighting power to be $\leq 90\%$ of lighting power allowance in C405.3.2 and for $\geq 95\%$ of lamps to be ≥ 65 lumens/watt.	AS	
CE229	Jonathan McHugh	McHugh Energy Consultants	Revises Additional Efficiency Package Options to add a new points-based approach with tables of measures for Group B, R&I, E, M, and "Other" occupancies; requires new buildings to achieve 10 points from tables; improves efficiency requirements for lighting controls; adds new definitions for <i>lumen maintenance controls</i> and <i>high end trim</i> .	NR	
CE230	Mark Lyles	NW Energy Codes Group	Revises enhanced digital lighting controls option in C406.	AS	
CE231	Glenn Heinmiller & Jack Bailey	Int'l Assoc of Lighting Designers	Revises enhanced digital lighting controls option in C406.	NR	
CE232	Sean Denniston	Self or NBI?	Revises Additional Efficiency Package Options to add a new points-based option with tables of measures for Group B, R&I, E, M, and "Other" occupancies; requires new buildings to achieve 10 points from tables; adds new efficiency option that requires installation of controlled receptacles.	NR	
CE233	Harold Jepsen	NEMA	Adds automatic receptacle control option to C406.	NR	See CE216.
CE234	Mark Lyles	NW Energy Codes Group	Revises Additional Efficiency Package Options to add a new efficiency option that requires installation of controlled receptacles.	NR	
CE235	Jim Edelson & Eric Makela	NBI & NW Energy Codes Grp	Revises Additional Efficiency Package Options to add a new points-based option with tables of measures for Group B, R&I, E, M, and "Other" occupancies; requires new buildings to achieve 10 points from tables; adds new Efficiency Option for buildings with 150% required daylight area with daylight responsive controls.	NR	
CE236	Mark Lyles	NW Energy Codes Group	Revises Additional Efficiency Package Options to add a new Efficiency Option for buildings with 150% required daylight area with daylight responsive controls.	AS	
CE237	Harold Jepsen	NEMA	Adds energy monitoring system option to C406.	NR	Prefer CE215.
CE238	Sharon Bonesteel & Steve Rosenstock	Salt River Project & EEI	Adds energy storage system option to C406.	NR	The proposal does not indicate whether this would save an equivalent amount of energy cost as other Efficiency Options.
CE239	Marilyn Williams	NEMA	Adds fault detection and diagnostics system option to C406.	NR	See CE110 and CE111.
CE240	Nicholas O'Neil & Mark Lyles	NW Energy Codes Group	Revises Additional Efficiency Package Options to add a new points-based option with tables of measures for Group B, R&I, E, M, and "Other" occupancies; requires new buildings to achieve 10 points from tables; adds new Efficiency Option with increased efficiency kitchen equipment for Group A-2 or other facilities that include a commercial kitchen with certain equipment.	NR	
CE241	Mark Lyles	NW Energy Codes Group	Adds efficient kitchen equipment option to C406.	NR	
CE242	Steve Rosenstock	EEI	Adds EV supply equipment option to C406.	NR	
CE243	Steve Rosenstock	EEI	Revises the reference used for energy prices in the performance path from the EIA's State Energy Price & Expenditure Report to EIA's State Energy Data System Prices & Expenditures Reports.	NR	

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions

CE244	Craig Conner	Self	Deletes 5% limitation for credit for on-site renewable generation in performance path calculation; deletes clarification regarding renewable energy from off-site sources.	D	This change could lead to unwarranted and excessive trade-offs between on-site generation and the energy efficiency of the building and particularly the permanent thermal envelope. Reasonable and robust energy efficiency should be required prior to any use of renewables as a trade-off option.
CE245	Joseph Cain	SEIA	Allows unlimited credit for on-site or off-site renewable generation to count as reduction to energy cost in performance path calculation.	D	This change could lead to unwarranted and excessive trade-offs between on-site generation and the energy efficiency of the building and particularly the permanent thermal envelope. Reasonable and robust energy efficiency should be required prior to any use of renewables as a trade-off option.
CE246	Ted Williams	AGA	Adds exception to performance path energy cost calculation for source-based option similar to residential performance path; deletes exception for jurisdictions requiring site energy as metric of comparison.	NR	
CE247	Fay, Bresette, Guttman & Misuriello	EECC et al	Corrects standard reference design assumptions for above-grade wall assemblies in performance path.	AS	
CE248 Part 1	Erika Burns	AERC	Adds assumptions to to permit the modeling of manual and automated blinds or shades for both vertical fenestration and skylights in the performance path.	D	The current IECC performance path does not allow shades and blinds as trade-offs. External shading allowed as a trade-off should be limited to permanent external building features such as an overhang and internal shading should not be allowed as trade-off. While it is not entirely clear how this proposal is intended to work, it appears to significantly expand current practice to allow for any type of automated shades or blinds as a trade-off option. This would lead to a reduction in energy efficiency as the long-lasting building thermal envelope could be traded off for far less permanent attachments, particularly where energy savings is dependent on occupant choices as to how to use the blinds or shades.
CE248 Part 2	Erika Burns	AERC	Adds assumptions to to permit the modeling of manual and automated blinds or shades for both vertical fenestration and skylights in the performance path.	D	The current IECC performance path does not allow shades and blinds as trade-offs. External shading allowed as a trade-off should be limited to permanent external building features such as an overhang and internal shading should not be allowed as trade-off. While it is not entirely clear how this proposal is intended to work, it appears to significantly expand current practice to allow for any type of automated shades or blinds as a trade-off option. This would lead to a reduction in energy efficiency as the long-lasting building thermal envelope could be traded off for far less permanent attachments, particularly where energy savings is dependent on occupant choices as to how to use the blinds or shades.
CE249	Aaron Gary	Self	Adds alternative to use an approved agency to provide documentation of functional testing of lighting systems.	NR	

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions

CE250	David Collins	SEHPCAC & AIA	Revises provisions that apply to existing buildings; clarifies that ASHRAE 90.1 compliance is an alternative for additions, alterations, repairs, or changes of occupancy; clarifies that change in space conditioning shall comply as an addition; adds commissioning requirements for mechanical, hot water, and lighting systems in additions and alterations.	AS	See also CE251 and CE260
CE251	Eric Makela	NBI	Applies commissioning requirements to mechanical, hot water, and lighting systems in additions.	AS	See also CE250 and CE260
CE252	Darren Meyers	Nat'l Roofing Contractors Assoc	Adds new exception from the requirements for alterations for "removal and replacement of a roof membrane where there is existing roof insulation integral to or below the roof deck."	D	This exception is too broad and could create a conflict with roof replacement requirements
CE253 Part 1	Bill McHugh	Chicago Roofing Contractors Assc	Adds new exception from the requirements for alterations for roof replacements for low-slope roof systems where code official deems the required R-value infeasible.	D	This exception creates unnecessary loopholes in the roof insulation requirements.
CE253 Part 2	Bill McHugh	Chicago Roofing Contractors Assc	Adds new exception from the requirements for alterations for roof replacements for low-slope roof systems where code official deems the required R-value infeasible.	D	This exception creates unnecessary loopholes in the roof insulation requirements.
CE254	Glenn Heinmiller & Jack Bailey	Int'l Assoc of Lighting Designers & Self	Clarifies that C406 does not apply to alterations.	NR	
CE255 Part 1	Bill McHugh	Chicago Roofing Contractors Assc	Adds new exception from code requirements for "roof membrane peel and replacement" in alterations.	D	This exception could create a conflict with roof replacement requirements.
CE255 Part 2	Bill McHugh	Chicago Roofing Contractors Assc	Adds new exception from code requirements for "roof membrane peel and replacement" in alterations.	D	This exception could create a conflict with roof replacement requirements.
CE256	Darren Meyers	Nat'l Roofing Contractors Assoc	Adds new exception to roof replacement requirements in alterations where required R-value cannot be provided due to thickness limitations.	D	This exception creates unnecessary loopholes in the roof insulation requirements.
CE257	Wanda Edwards	RCI Inc.	Adds new exception to roof replacement requirements in alterations where required R-value cannot be provided due to thickness limitations.	D	This exception creates unnecessary loopholes in the roof insulation requirements.
CE258	David Renn	CO ICC	Clarifies that in no case shall R-value of roof insulation be reduced, or U-factor increased, as part of roof replacement.	AS	
CE259	David Collins	SEHPCAC & AIA	Relocates replacement fenestration requirements from new building sections to Chapter C503 Alterations.	AS	
CE260	Eric Makela	NBI	Adds new requirements for commissioning mechanical, hot water, and lighting systems in alterations to existing buildings.	AS	See also CE250 and CE251
CE261	David Collins	SEHPCAC & AIA	Revises change of occupancy or use requirements; uses Energy Use Intensity as basis for applying requirements.	AS	
CE262	Jim Edelson	NBI	Adds requirement for energy storage system space in Appendix CA, Solar-Ready Zone.	AS	

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions

CE263 Part 1	Joseph Cain	SEIA	Adds new appendix CB, which requires solar photovoltaics in certain commercial buildings.	D	This proposal extends well beyond current code scope by establishing a solar requirement that includes options of permanent and non-permanent (leased) systems and community based systems not located on the property. We do not think a building code requirement should be met by leased equipment, much less an off-site community solar project. The proposal also does not justify the amount of solar required and establishes vague unenforceable exceptions where the code official determines that the requirements are "infeasible." In our view, renewable energy requirements should only be considered for the code after the implementation of cost-effective energy efficiency. As a result, the proposal should explicitly provide that the solar energy will not be permitted as trade-off against energy efficiency.
CE263 Part 2	Joseph Cain	SEIA	Adds new appendix RB, which requires solar photovoltaics in certain residential buildings.	D	This proposal extends well beyond current code scope by establishing a solar requirement that includes options of permanent and non-permanent (leased) systems and community based systems not located on the property. We do not think a building code requirement should be met by leased equipment, much less an off-site community solar project. The proposal also does not justify the amount of solar required and establishes vague unenforceable exceptions where the code official determines that the requirements are "infeasible." In our view, renewable energy requirements should only be considered for the code after the implementation of cost-effective energy efficiency. As a result, the proposal should explicitly provide that the solar energy will not be permitted as trade-off against energy efficiency.
CE263 Part 3	Joseph Cain	SEIA	Adds new appendix U, which requires solar photovoltaics in certain residential buildings.	D	This proposal extends well beyond current code scope by establishing a solar requirement that includes options of permanent and non-permanent (leased) systems and community based systems not located on the property. We do not think a building code requirement should be met by leased equipment, much less an off-site community solar project. The proposal also does not justify the amount of solar required and establishes vague unenforceable exceptions where the code official determines that the requirements are "infeasible." In our view, renewable energy requirements should only be considered for the code after the implementation of cost-effective energy efficiency. As a result, the proposal should explicitly provide that the solar energy will not be permitted as trade-off against energy efficiency.

EECC Summary of Selected ICC CE (Commercial and Residential) Code Change Proposals & EECC Recommended Actions

CE264	David Collins	AIA	Adds new appendix AX, which requires enough on-site or off-site renewable energy to offset building energy.	D	Net-zero buildings should maximize energy efficiency before adding on-site generation; this proposal significantly expands the code by incorporating various forms of off-site renewable energy such as community solar, wholesale purchases of solar energy, direct ownership of off-site solar, RECs, etc.
CE265	Steve Rosenstock	EEI	Adds on-site energy storage system option to C406.	D	Energy storage systems can provide benefits related to the effective use of energy, particularly in conjunction with on-site renewables. However, there is no showing that this specific option will save an equivalent amount of energy cost as compared with other packages under C406.