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# Potential Changes in the 2018 IECC

Results of the 2018 IECC Code Development Hearings

Residential Provisions

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# Goals

2006->2009.....Increased Efficiency

2009->2012.....Increased Efficiency

**TEST IT!**

2012->2015.....Fix it

(Increase Efficiency a little)

Get in the ERI (**HERS Rating**)

Get in the Solar Ready Appendix

2015->2018.....**Defend it**

Improve it...Expand scope?



# Potential Changes...

## Key Areas of Proposed Amendments

- Scope
- Referenced Standards
- Climate Zones
- Building Envelope
- Systems
- ERI compliance backstops and
- the role of Solar



**Creative Power Sharing**

# Potential Changes... Next Steps

CAH	PCH	OGCV	OGCV	Final
AS	AS	AS:SIM	D:SIM	
AS	AMPC#	AMPC:2/3	D:SIM	
AS	D	AS:SIM	D:SIM	
AM	AS	AS:2/3	D:SIM	
AM	AM	AM:SIM	D:SIM	
AM	AMPC#	AMPC#:2/3	D:SIM	
AM	D	AM:SIM	D:SIM	
D	AS	AS:2/3	D:SIM	
D	AMPC#	AMPC#:2/3	D:SIM	
D	D	AS:2/3	D:SIM	

## Next Steps

- Final voting – AHJ's
- Getting your message across
- Get the IECC Adopted
- Resolution 49
- Preventing Rollbacks
- Educating Consumers
- Education, Education, Education

**CAH**-Committee Action Hearing **PCH**-Public Comment Hearing **OGCV**-Online Governmental Concensus Voting

# Potential Changes... SCOPE

## Key Areas of Proposed Amendments

- Scope Questions
  - Express Opinions on CDPAccess
- Should the code include :
  - Water/Energy Nexus items?
  - Water conservation items?

RE114-Showhead Flow Rates to 1.5 g (v2.2)  
RE115-Lavatory Flow Rates 1.8 or 2.0  
(CE170,175)
- Should it include Multi-family Housing in its own chapter? CE272
- RE81 – Air Barrier Checklists – How detailed?
- RE70 – D – Insulation requirements moved into air barrier/insulation table
- ADM26 – “Repair” vs “replacement”

## Next Steps....

- Expressing opinions - CDPAccess
- IECC vs IPC Debate – ultimate decision is the with the ICC Board of Directors. Issues with correlation between the different codes may result.
- Multi-Family Housing Occupancy R-2 vs Commercial or Residential based on number of stories
- The Code vs A Best Practices Manual – do we need to codify checklists? Are they more appropriately placed in the interpretive manual, which could be adopted by a jurisdiction if they wanted more detail codified.
- RE114 -> AS and RE115-> AS
- CE175-> AS

# Potential Changes... Referenced Standards

## Key Areas of Proposed Amendments

- Referenced Standards
- RE15-Sampling and Zone Building Tightness Testing
- RE17- [ICC 400 Standard for Log Cabin Homes](#)
- ADM94-updates ASCE 7-10 to [ASCE 7-16](#),  
and [ANSI A117.1 2015](#) version
- RE82, RE166: [ANSI/RESNET/ICC 301-2014-Calculating](#) and Labeling using ERI
- RE83, RE104: [ANSI/RESNET/ICC 380-2016-Testing](#) Airtightness of buildings and airflow of HVAC
- CE147 – Adds Thermal Distribution Efficiency (TDE) and [NSF Protocol P374](#)

## Next Steps

- RE15 etc – Talk to Robby!
- RE17 should Log Cabins be treated different? Is ICC 400 ok?
- ADM94 – info important to Engineers and Architects – opens the door to other conversations
- RESNET and ICC – and the ERI – can there be another provider of an ERI and does the ICC 301 or 380 prevent it?
- CE147 provides ability to measure, test and compare the TDE to a known R-Value: Recommend Approval

# Potential Changes... Climate Zones

## Key Areas of Proposed Amendments

- Climate Zones
- RE25 – Adds Climate Zone 0
- Adds the CZ 0 to CZ 1 so that IECC can correspond with ASHRAE Standard 169-2013 based upon most current weather data.
- CE23 attempted to add a definition of CZ0 by referencing the ASHRAE 169. This would affect the HDD and CDD and create conflict between the codes.
- CE21 attempted to remove climate map and county tables out of the IECC and just use a reference to ASHRAE 169
- RE-Hawaii Tropical Climate Zone (0 or 1)

## Next Steps

- Yes Martha, the world is getting hotter...
- While appealing to reference a map and table maintained by ASHRAE, the nature of ASHRAE's continual maintenance procedures would cause conflicts.
- If critical in a particular area one could use the HDD and CDD and submit an appeal to the AHJ.



# Potential Changes... Building Envelope

## Key Areas of Proposed Amendments

- Building Envelope
- RE18 improve floor insulation CZ-2,4
- RE15 sampling and zoning for air leakage testing in Multi Family
- RE19 lowers fenestration U-Factors in CZ3,4 - Floor motion for AS apvd
- RE22 R-5 insulation for heated slabs
- RE30 Permits R-18(vR20) w/24"oc
- RE134 High Efficiency equip. traded for less efficient windows and doors

## Next Steps

- RE18->AS
- RE15->Practical goal, but not necessary with proper training of staff regarding air sealing
- RE19->AS....or RE36->AS
- RE22->AMPC1 (edge stops at bottom of slab insulation)
- RE30->D
- RE134->D see RE135

# Potential Changes... Systems

## Key Areas of Proposed Amendments

- Systems
- RE179 – Builder Flex Points – PC removed BFP from ERI compliance path – Did not pass so only workable or enforceable option is D
- RE10-Whole house ventilation must be tested & written report provided
- RE12 new compliance options but allows full equipment tradeoffs
- RE56, RE58, RE60 – These look at air leakage testing option, sampling, increase of air leakage rates to 6 ACH50 in CZ 1-2...etc.
- RE70 – Insulated Sprinkler Pipe penetrations
- RE108-replace duct test w/leakage to outside

## Next Steps

- RE179->AMPC would be best but not available so D
- RE10->AS
- RE12->D
- RE 56,58,60 – Still thinking
- RE70 – AFS issues but...
- RE108->D –important for comfort
- Education, Education, Education

# Potential Changes... ERI compliance backstops

## Key Areas of Proposed Amendments

- ERI backstops and the role of Solar
- RE173, RE177 – What level of efficiency is required before allowing renewable energy to count towards compliance?
- RE164-clarifies ERI shall not include on-site power production in ERI calculation
- RE165-Stepped percentages of Solar allowed?
- RE135-minimal performance path backstops for software to show compliance
- RE7,RE9-definitions for “renewable energy” and “on-site power production”
- RE130-includes lighting in performance path allowing for trade offs of lighting for other measures with longer service lives

## Next Steps

- RE137->AS - Analysis over 30 year useful life of building for performance path
- RE173-D...RE177 is better
  - RE164->AS
  - RE165-?->AMPC or D
  - RE134->AMPC2 or D
  - RE135-> AMPC or AS
  - RE7,9 -> withdrawn
  - RE130->D

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# Watch out for the sharks....

Find Common Ground

Don't Bloody the Water

Focus on the End Game

Get out the Vote!

