Note Proposed Amendments: (added text to the code is: underlined, deleted text to the code is: ~~struck through~~)

#	SECTION	SUMMARY	PROPONENT	ACT.*
1)	2015 IECC C101.1	Delete Section C101.1 'Title' without substitution.	Task Force (Team Leader Chapter 1)	**CF**
2)	2015 IECC C101.6	**Add new Section C101.6 'Requirements for high-efficiency cooling towers' as follows:** **C101.6 Requirements for high-efficiency cooling towers.** Cooling towers installed in new construction shall be in compliance with ANSI/ASHRAE/IES 90.1 Standard	Task Force (Team Leader Chapter 1)	**CF**
3)	2015 IECC C104	Delete Section C104 'INSPECTIONS' without substitution.	Task Force (Team Leader Chapter 1)	**CF**
4)	2015 IECC C107	Delete Section C107 'FEES' without substitution.	Task Force (Team Leader Chapter 1)	**CF**
5)	2015 IECC C108	Delete Section C108 'STOP WORK ORDER' without substitution.	Task Force (Team Leader Chapter 1)	**CF**
6)	2015 IECC C109	Delete Section C109 'BOARD OF APPEALS' without substitution.	Task Force (Team Leader Chapter 1)	**CF**
7)	2015 IECC C202	**Revise the definition for 'COEFFICIENT OF PERFORMANCE (COP) – COOLING', as follows:** **COEFFICIENT OF PERFORMANCE (COP) – COOLING.** The ratio of the rate of heat removal to the rate of energy input, in consistent units, for a complete refrigerating system or some specific portion of that system under designated operating conditions.	Task Force (Team Leader Chapter 2)	**A**
8)	2015 IECC C202	**Delete definition of 'CONDITIONED SPACE' and substitute the following:** **SPACE.** An enclosed space within a building. The classifications of spaces are as follows for the purpose of determining building envelope requirements: **(a) Conditioned space:** a cooled space, heated space, or indirectly conditioned space is defined as follows: **(1) Cooled space:** an enclosed space within a building that is cooled by a cooling system whose sensible output capacity exceeds 5 Btu/h·ft^2 of floor area. **(2) Heated space**: an enclosed space within a building that is heated by a heating system whose output capacity relative to the floor area is greater than or equal to 5 Btu/h·ft^2. **(3) Indirectly conditioned space:** an enclosed space within a building that is not a heated space or a cooled space, containing un-insulated ducts, or containing the heating equipment or which is heated or cooled indirectly by being connected to adjacent space(s), provided that air from heated or cooled spaces is transferred (naturally or mechanically) into the space. Unvented Attic Assemblies meeting the requirements of the IRC are an approved indirectly conditioned space. **(b) Semi-heated space:** an enclosed space within a building that is heated by a heating system whose output capacity is greater than or equal to 3.4 Btu/h·ft^2 of floor area but is not a conditioned space. **(c) Unconditioned space:** an enclosed space within a building that is not a conditioned space or a semi-heated space. Crawl spaces, attics, and parking garages with natural or mechanical ventilation are not considered enclosed spaces.	Task Force (Team Leader Chapter 2)	**CF**

<table>
<tr><th>#</th><th>SECTION</th><th>SUMMARY</th><th>PROPONENT</th><th>ACT.*</th></tr>
<tr><td>9)</td><td>2015 IECC C202</td><td>Add definition of COOLING TOWER' as follows:
<u>COOLING TOWER.</u> <u>A building heat removal device used to transfer process waste heat to the atmosphere.</u></td><td>Task Force (Team Leader Chapter 2)</td><td>CF</td></tr>
<tr><td>10)</td><td>2015 IECC C202
#1 on old report</td><td>Delete definition of 'ON-SITE RENEWABLE ENERGY', and substitute the following:
ON-SITE RENEWABLE ENERGY. <u>Energy systems that are located on the building site, are installed on the building's side of the utility service provider's meter, produce energy primarily intended for use in the building and not solely for export to utilities, and produce energy derived from any of the following sources: solar radiation, wind, waves, tides, biogas, biomass or the internal heat of the earth. Energy systems that derive energy from solar radiation shall be modeled in the orientation of the energy system</u>.

<u>This description only pertains to energy systems that derive energy from solar radiation and are owned by a third-party. The Georgia Solar Power Free-Market Financing Act of 2015 (commonly referred to as "HB 57") allows a customer to purchase solar electricity generated by a solar system owned by a third-party so long as certain criteria are met. Two key criteria are that the law only authorizes solar systems that generate electricity fueled by sunlight and that the solar system must be installed on property owned or occupied by the entity purchasing the system's electricity. The definition of "property" extends to all adjacent contiguous tracts of land utilized by the entity purchasing the solar system's electricity. "Building Site" in C202 is defined as a contiguous area of land that is under the ownership or control of one entity. While this definition of "building site" is similar to HB 57's definition of "property," the key difference is that HB 57 focuses on the entity purchasing the solar system's electricity. When modeling a solar system that is owned by a third-party, it is best to refer to HB 57 to determine whether all criteria have been met.</u></td><td>Shan Arora, Southface</td><td>R</td></tr>
<tr><td>11)</td><td>2015 IECC Table C402.1.3
#47 on old report</td><td>Revise Table C402.1.3 'Opaque Thermal Envelope Insulation Component Minimum Requirements, R-Value Method[a]' Climate Zone 4 except Marine, for unheated slabs to read as follows:
<table>
<tr><th colspan="4">TABLE C402.1.3
OPAQUE THERMAL ENVELOPE INSULATION COMPONENT MINIMUM REQUIREMENTS, R-VALUE METHOD[a]</th></tr>
<tr><th>Climate Zone</th><th colspan="2">4 EXCEPT MARINE</th><td rowspan="3">(remainder of table left unchanged)</td></tr>
<tr><td></td><th>All other</th><th>Group R</th></tr>
<tr><td></td><th colspan="2">Slab-on-grade floors</th></tr>
<tr><td>Unheated slabs</td><td><s>R-10 for 24" below</s> <u>NR</u></td><td><s>R-10 for 24" below</s> <u>NR</u></td></tr>
</table></td><td>James Martin, Building Officials Association of Georgia (BOAG)</td><td>R</td></tr>
<tr><td>12)</td><td>2015 IECC C403.2.3
#49 on old report</td><td>Delete Section C403.2.3 'HVAC equipment performance requirements' and substitute to read as follows:
C403.2.3 HVAC equipment performance requirements. Equipment shall meet the minimum efficiency requirements of Tables <s>C403.2.3(1)</s> <u>6.8.1-1</u>, <s>C403.2.3(2)</s> <u>6.8.1-2</u>, <s>C403.2.3(3)</s> <u>6.8.1-3</u>, <s>C403.2.3(4)</s> <u>6.8.1-4</u>, <s>C403.2.3(5)</s> <u>6.8.1-5</u>, <s>C403.2.3(6)</s> <u>6.8.1-6</u>, <s>C403.2.3(7)</s> <u>6.8.1-7</u>, <s>C403.2.3(8)</s> <u>6.8.1-9, 6.8.1-10,</u> <s>C403.2.3(11)</s> <u>6.8.1-11, 6.8.1-12, and 6.8.1-13 of ASHRAE Standard 90.1</u> when tested and rated in accordance with the applicable test procedure. Plate-type liquid-to-liquid heat exchangers shall meet the minimum requirements of Table <s>C403.2.3 (10)</s> <u>6.8.1-8 of ASHRAE Standard 90.1</u>. The efficiency shall be verified through certification under an approved certification program or, where a certification program does not exist, the equipment efficiency ratings shall be supported by data furnished by the manufacturer. Where multiple rating conditions or performance requirements are provided, the equipment shall satisfy all stated requirements. Where components, such as indoor or outdoor coils, from different manufacturers are used, calculations and supporting data shall be furnished by the designer that demonstrates that the combined efficiency of the specified components meets the requirements herein.</td><td>John Pruitt, Representing ASHRAE</td><td>R</td></tr>
</table>

#	SECTION	SUMMARY	PROPONENT	ACT.*
		The above referenced tables of ASHRAE 90.1, HVAC equipment performance tables are available to download for free from DCA's webpage located at: http://www.dca.ga.gov/development/constructioncodes/programs/documents/EfficiencyTables-ASHRAE90.1-2013.pdf.		
13)	2015 IECC C403.2.8 #5 on old report	Delete Section C403.2.8 'Kitchen Exhaust Systems' without substitution.	GA Public School Distr.	**A**
14)	2015 IECC C403.2.8 #5 on old report	Delete Table C403.2.8 'MAXIMUM NET EXHAUST FLOW RATE, CFM PER LINEAR FOOT OF HOOD LENGTH' without substitution.	GA Public School Distr.	**A**
15)	2015 IECC C403.2.9 #62 on old report	**Delete Section C403.2.9 'Duct and plenum insulation and sealing' and substitute to read as follows:** **C403.2.9 Duct and plenum insulation and sealing.** Supply and return air ducts and plenums shall be insulated with a minimum of R-6 insulation where located in unconditioned spaces and where located outside the building with a minimum of R-8 insulation in *Climate Zones* 2 through 4 ~~and a minimum of R-12 insulation in *Climate Zones* 5 through 8~~. Where located within a building envelope assembly, the duct or plenum shall be separated from the building exterior or unconditioned or exempt spaces by a minimum of R-8 insulation in *Climate Zones* 2 through 4 ~~and a minimum of R-12 insulation in *Climate Zones* 5 through 8~~. **Exceptions:** 1. Where located within equipment. 2. Where the design temperature difference between the interior and exterior of the duct or plenum is not greater than 15ºF (8ºC). Ducts, air handlers and filter boxes shall be sealed. Joints and seams shall comply with section ~~403.2.4~~ C403.2.9.2 of these Georgia State Supplements and Amendments. ~~Joints and seams shall comply with Section 603.9 of the International Mechanical Code.~~ **Exceptions:** 1. Air-impermeable spray foam product shall be permitted to be applied without additional joint seals. 2. For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams, and locking-type joints and seams of other than the snap-lock and button-lock types. 3. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect. 4. Sealing that would void product listings is not required.	Elaine Powers, Representing Conditioned Air Association of Georgia (CAAG)	**R**
16)	2015 IECC C403.2.9.2 #63 on old report	**Add new Section C403.2.9.2 'Joints, seams and Connections' as follows:** **C403.2.9.2 Joints, Seams and Connections.** All longitudinal and transverse joints, seams and connections in metallic and nonmetallic ducts shall be constructed as specified in *SMACNA HVAC Duct Construction Standards*- Metal and Flexible and NAIMA *Fibrous Glass Duct Construction Standards*. All joints, longitudinal and transverse seams, and connections in ductwork shall be securely fastened and sealed with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric systems or tapes. Without exception all closure systems shall have mastic applied that is at least 0.08 inches (2 mm) thick. Closure systems used to seal flexible air ducts and flexible air connections shall comply with UL 181B and shall be marked "181B-FX" for pressure-sensitive tape or "181B-M" for mastic. Duct connections to flanges of air distribution systems equipment shall be sealed and mechanically fastened. Mechanical fasteners for use with flexible non-metallic air ducts shall comply with UL 181B and shall be marked 181B-C. Crimp joints for round metallic ducts shall have a contact lap of	Elaine Powers, Representing Conditioned Air Association of Georgia (CAAG)	**R**

#	SECTION	SUMMARY	PROPONENT	ACT.*
		not less than 1 inch (25.4 mm) and shall be mechanically fastened by means of not less than three sheet-metal screws or rivets equally spaced around the joint. Closure systems used to seal metal ductwork shall be installed in accordance with manufacturer's instructions. Round metallic ducts shall be mechanically fastened by means of at least three sheet metal screws or rivets spaced equally around the joint. Unlisted duct tape shall not be permitted as a sealant on any duct. **Exceptions:** 1. Spray polyurethane foam shall be permitted to be applied without additional joint seals. 2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect. 3. Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressure less than 2 inches (51 mm) of water column (500 Pa) pressure classification shall not require additional closure systems.		
17)	2015 IECC C403.3 #61 on old report	**Revise Section C403.3 'Economizers (Prescriptive)' as follows:** **C403.3 Economizers (Prescriptive).** Revise Section C403.3, Economizers (Prescriptive), to delete the last sentence of exception 2 and add exception number 10, Computer Room Applications, at the end. ~~The total supply capacity of all fan-cooling units not provided with economizers shall not exceed 20 percent of the total supply capacity of all fan-cooling units in the building or 300,000 Btu/h (88 kW), whichever is greater.~~ 10. Computer Room Applications	John Pruitt, Representing ASHRAE	**A**
18)	2015 IECC C403.4.2.6 #51 on old report	**Delete Section C403.4.2.6 'Pump isolation' to add a new sentence at the end to read as follows:** **C403.4.2.6 Pump Isolation.** Chilled water plants including more than one chiller shall have the capability to reduce flow automatically through the chiller plant when a chiller is shut down. Chillers piped in series for the purpose of increased temperature differential shall be considered as one chiller. Boiler plants including more than one boiler shall have the capability to reduce flow automatically through the boiler plant when a boiler is shut down. Flow isolation shall allow time for adequate thermal dissipation of residual heat to prevent relief before isolating boiler(s).	Scott Walters, Representing American Council of Engineering Companies (ACEC)	**R**
19)	2015 IECC C407.3 #29 on old report	**Delete Section C407.3 'Performance-based compliance' and substitute to read as follows:** **C407.3 Performance-based compliance.** Compliance based on total building performance requires that a proposed building (*proposed design)* be shown to have an annual energy cost that is less than or equal to the annual energy cost of the *standard reference design.* Energy prices shall be taken from a source *approved* by the *code official,* such as the Department of Energy, Energy Information Administration's *State Energy Price and Expenditure Report. Code officials* shall be permitted to require time-of-use pricing in energy cost calculations. ~~Nondepletable energy collected off site shall be treated and priced the same as purchased energy. Energy from nondepletable energy sources collected on site shall be omitted from the annual the reduction in energy cost of the *proposed design.*~~ The reduction in annual energy cost of the *proposed design* associated with *on-site renewable energy* shall be not more than 5% of the total annual energy cost. The amount of renewable energy purchased from off-site sources shall be the same in the *standard reference design* and the *proposed design*. **Exception:** Jurisdictions that require site energy (1 kWh = 3413 Btu) rather than energy cost as the metric of comparison.	Eric Lacey, RECA	**R**
20)	2015 IECC C407.4.2 #29 on old report	**Revise Section C407.4.2 'Additional documentation' to add a new item 6 to read as follows:** **C407.4.2 Additional documentation.** 6. Documentation of the reduction in annual energy use associated with on-site renewable energy.	Eric Lacey, RECA	**R**
21)	2015 IECC C408 #53 on old report	**Revise Section C408 'System Commissioning' as follows:** Strike the wor.ds "commission" and "commissioning" wherever they appear and replace with "functional performance testing throughout the entire Section C408 SYSTEM COMMISSIONING as required.	Task Force	**R**

#	SECTION	SUMMARY	PROPONENT	ACT.*
22)	2015 IECC C408.2.4.1 #53 on old report	Delete Section C408.2.4.1 'Acceptance of report' without substitution.	James Martin	**R**
23)	2015 IECC Chapter 6	**Revise Chapter 6 'Referenced Standards' and add the following Standards to this chapter (standards not listed to remain unchanged):** **UL** UL LLC 333 Pfingsten Road Northbrook, IL 60062-2096 Standard reference number | Title | Referenced in code section number 181—2013 Factory-made Air Ducts and Air Connectors—with Revisions through May 2003 .....C403.2.9.2 181A—2013 Closure Systems for Use with Rigid Air Ducts and Air Connectors—with Revisions through December 1998.....C403.2.9.2 181B—2013 Closure Systems for Use with Flexible Air Ducts and Air Connectors—with Revisions through August 2003.....C403.2.9.2	Elaine Powers, Representing Conditioned Air Association of Georgia (CAAG)	
24)	2015 IECC R101.1	Delete Section R101.1'Title' without substitution.	Task Force (Team Leader Chapter 1)	**CF**
25)	2015 IECC R103	Delete SECTION R103 'CONSTRUCTION DOCUMENTS' without substitution.	Task Force (Team Leader Chapter 1)	**CF**
26)	2015 IECC R104	Delete SECTION R104 'INSPECTIONS' without substitution.	Task Force (Team Leader Chapter 1)	**CF**
27)	2015 IECC R107	Delete SECTION R107 'FEES' without substitution.	Task Force (Team Leader Chapter 1)	**CF**
28)	2015 IECC R108	Delete SECTION R108 'STOP WORK ORDER' without substitution.	Task Force (Team Leader Chapter 1)	**CF**
29)	2015 IECC R109	Delete SECTION R109 'BOARD OF APPEALS' without substitution.	Task Force (Team Leader Chapter 1)	**CF**
30)	2015 IECC R202 #31 on old report	**Add definition of 'ATTIC KNEEWALL' as follows:** **ATTIC KNEEWALL.** Any vertical or near-vertical wall in the building envelope that has conditioned space on one side and unconditioned attic space on the other side. If the envelope features the insulation installed along the sloped ceiling, the vertical wall is considered an interior wall and thus does not require insulation.	Task Force (Team Leader Chapter 2)	**CF**
31)	2015 IECC R202	**Add new definition of 'CERTIFIED DUCT AND ENVELOPE TIGHTNESS (DET) VERIFIER' as follows:** **CERTIFIED DUCT AND ENVELOPE TIGHTNESS (DET) VERIFIER.** A certified DET verifier shall be a certified Home Energy Rating Systems (HERS) rater, or be a Building Performance Institute (BPI) Analyst, or be an Infiltration Duct Leakage (IDL) Certified, or successfully complete a certified DET verifier course that is approved by the Georgia Department of Community Affairs.	Neal Davis, Representing Home Builders Association of Georgia (HBAG)	**R**
32)	2015 IECC R202	**Delete definition of 'CONDITIONED SPACE' and substitute as follows:** **SPACE.** An enclosed space within a building. The classifications of spaces are as follows for the purpose of determining building envelope requirements: **(a) Conditioned space:** a cooled space, heated space, or indirectly conditioned space is defined as follows:	Task Force (Team Leader Chapter 2)	**CF**

#	SECTION	SUMMARY	PROPONENT	ACT.*
		(1) Cooled space: an enclosed space within a building that is cooled by a cooling system whose sensible output capacity exceeds 5 Btu/h·ft^2 of floor area. **(2) Heated space**: an enclosed space within a building that is heated by a heating system whose output capacity relative to the floor area is greater than or equal to 5 Btu/h·ft^2. **(3) Indirectly conditioned space:** an enclosed space within a building that is not a heated space or a cooled space, containing un-insulated ducts, or containing the heating equipment or which is heated or cooled indirectly by being connected to adjacent space(s), provided that air from heated or cooled spaces is transferred (naturally or mechanically) into the space. Unvented Attic Assemblies meeting the requirements of the IRC are an approved indirectly conditioned space. **(b) Semi-heated space:** an enclosed space within a building that is heated by a heating system whose output capacity is greater than or equal to 3.4 Btu/h·ft^2 of floor area but is not a conditioned space. **(c) Unconditioned space:** an enclosed space within a building that is not a conditioned space or a semi-heated space. Crawl spaces, attics, and parking garages with natural or mechanical ventilation are not considered enclosed spaces.		
33)	2015 IECC R202	**Add definition of 'ON-SITE RENEWABLE ENERGY' as follows:** **ON-SITE RENEWABLE ENERGY.** Energy systems that are located on the building site, are installed on the building's side of the utility service provider's meter, produce energy primarily intended for use in the building and not solely for export to utilities, and produce energy derived from any of the following sources: solar radiation, wind, waves, tides, biogas, biomass or the internal heat of the earth. Energy systems that derive energy from solar radiation shall be modeled in the orientation of the energy system. The following description only pertains to energy systems that derive energy from solar radiation and are owned by a third-party. The Georgia Solar Power Free-Market Financing Act of 2015 (commonly referred to as "HB 57") allows a customer to purchase solar electricity generated by a solar system owned by a third-party so long as certain criteria are met. Two key criteria are that the law only authorizes solar systems that generate electricity fueled by sunlight and that the solar system must be installed on property owned or occupied by the entity purchasing the system's electricity. The definition of "property" extends to all adjacent contiguous tracts of land utilized by the entity purchasing the solar system's electricity. "Building Site" in R202 is defined as a contiguous area of land that is under the ownership or control of one entity. While this definition of "building site" is similar to HB 57's definition of "property," the key difference is that HB 57 focuses on the entity purchasing the solar system's electricity. When modeling a solar system that is owned by a third-party, it is best to refer to HB 57 to determine whether all criteria have been met.	Shan Arora, Southface	**R**
34)	2015 IECC R401.2 #32 on old report	**Revise Section R401.2 'Compliance' as follows:** **R401.2 Compliance.** Projects shall comply with all provisions of Chapter 4 labeled "Mandatory" and one of the following: 1. Sections R401 through R404. 2. Section R405.~~and the provisions of Sections R401throughR404 labeled "Mandatory."~~ 3. ~~An energy rating index (ERI) approach in~~ Section R406. 4. The most recent version of REScheck, keyed to the 2015 IECC.	Eric Lacey, RECA	**A**
35)	2015 IECC R401.3	**Revise Section R401.3 'Certificate (Mandatory)' by revising first sentence and adding at end as follows:** **R401.3 Certificate (Mandatory).** A permanent certificate shall be completed by the builder or registered design professional and posted ~~a wall in the space where the furnace is located, a utility room or an approved location inside the building~~ on or near the electrical distribution panel or air handler. Where located on … (Middle of section left unchanged) …water heating equipment. Refer to Appendix RD for the Mandatory Compliance Certificate that shall be used. (Remainder of section left unchanged)	Task Force (Team Leader Chapter 4)	**CF**

<table>
<tr><th>#</th><th>SECTION</th><th>SUMMARY</th><th>PROPONENT</th><th>ACT.*</th></tr>
<tr><td></td><td></td><td>The above referenced form, Mandatory Compliance Certificate is available to download for free from DCA's webpage located at:
http://dca.ga.gov/development/constructioncodes/programs/documents/2019GeorgiaEnergyCodeCertificate09.21.17_FILLABLE.pdf</td><td></td><td></td></tr>
<tr><td>36)</td><td>2015 IECC Table R402.1.2 & R402.1.4
#57 on old report</td><td>Revise Table R402.1.2 'Insulation and Fenestration Requirements by Component[a]' as follows:

TABLE R402.1.2
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT[a]
<table><tr><th>Climate Zone</th><th>Fenestration U-Factor[b]</th><th>Skylight[b] U-Factor</th><th>Glazed Fenestration SHGC[b,e]</th><th>Ceiling R-Value</th><th>Wood Frame Wall R-Value</th><th>Attic Kneewall R-Value[i]</th><th>Mass Wall R-Value</th><th>Floor R-Value</th><th>Basement[c] Wall R-Value</th><th>Slab[d] R-Value & Depth</th><th>Crawl Space[c] Wall R-Value</th></tr><tr><td>2</td><td>~~0.40~~ 0. 35</td><td>0.65</td><td>~~0.25~~ 0.27</td><td>38</td><td>13</td><td>18</td><td>4/6</td><td>13</td><td>0</td><td>0</td><td>0</td></tr><tr><td>3</td><td>0.35</td><td>0.55</td><td>~~0.25~~ 0.27</td><td>38</td><td>~~20 OR 13+5h~~ 13</td><td>18</td><td>8/13</td><td>19</td><td>5/13[f]</td><td>0</td><td>5/13</td></tr><tr><td>4 except marine</td><td>0.35</td><td>0.55</td><td>~~0.40~~ 0.27</td><td>~~49~~ 38</td><td>~~20 OR 13+5h~~ 13</td><td>18</td><td>8/13</td><td>19</td><td>10/13</td><td>~~10, 2 FT~~ 0</td><td>10/13</td></tr></table>~~h. The first value is cavity insulation, the second value is continuous. So "13+5" means *R*-13 cavity insulation plus R-5 continuous insulation.~~
(Remainder of footnotes left unchanged)

Revise Table R402.1.4 'Equivalent U-Factors[a]' as follows:

TABLE R402.1.4
EQUIVALENT U-FACTORS[a]
<table><tr><th>Climate Zone</th><th>Fenestration U-Factor</th><th>Skylight U-Factor</th><th>Ceiling U-Factor</th><th>Frame Wall U-Factor</th><th>Mass Wall U-Factor[b]</th><th>Floor U-Factor</th><th>Basement Wall U-Factor</th><th>Crawl Space Wall U-Factor</th></tr><tr><td>2</td><td>~~0.40~~ 0.35</td><td>0.65</td><td>0.030</td><td>0.084</td><td>0.165</td><td>0.064</td><td>0.360</td><td>0.477</td></tr><tr><td>3</td><td>0.35</td><td>0.55</td><td>0.030</td><td>~~0.060~~ 0.084</td><td>0.098</td><td>0.047</td><td>0.091[c]</td><td>0.136</td></tr><tr><td>4 except marine</td><td>0.35</td><td>0.55</td><td>~~0.026~~ 0.030</td><td>~~0.060~~ 0.084</td><td>0.098</td><td>0.047</td><td>0.059</td><td>0.065</td></tr></table>Table footnote left unchanged</td><td>James Martin, Representing Building Officials Association of Georgia (BOAG)</td><td>A</td></tr>
<tr><td>37)</td><td>2015 IECC R402.1.6
#72 on old report</td><td>Add a new Section R402.1.6 'Compliance Alternative Constraints (Mandatory)' as follows:

R402.1.6 Compliance Alternative Constraints. (Mandatory) Where Compliance Alternative Pathways are used, the minimum R-values, maximum U-factors, and maximum SHGCs for thermal envelope components in projects complying under this code (including the use of REScheck) shall be according to Table 402.1.6. Compliance Alternative Pathways include Total UA Alternative, Simulated Performance Alternative, and Energy Rating Index Alternative.</td><td>Mike Barcik, Southface, Representing (GEFA)</td><td>A</td></tr>
</table>

<table>
<tr><th>#</th><th>SECTION</th><th>SUMMARY</th><th>PROPONENT</th><th>ACT.*</th></tr>
<tr><td>38)</td><td>2015 IECC R402.1.6
#72 on old report</td><td>
Add a new Table 402.1.6, 'Minimum Insulation R-Values for Envelope Components When Trade-offs Are Used' to read as follows:

<u>Table R402.1.6</u>
<u>MINIMUM INSULATION R-VALUES FOR ENVELOPE COMPONENTS WHEN TRADE-OFFS ARE USED</u>
<table>
<tr><th>Climate Zone</th><th>Wood[a] Framed Walls</th><th>Mass [a, b] Wall</th><th>Attic [a, c] Kneewall</th><th>Basement [a] Wall</th><th>Crawl [a] Wall</th><th>Floor Over Unheated Spaces</th><th>Ceilings with Attic Space</th><th>Vaulted [c, d] Unvented Attic Roofline Air-impermeable</th><th>Vaulted [c, d] Unvented Attic Roofline Air-permeable</th><th>Cathedralized [c, d] Vented Ceiling Roofline Air-permeable</th></tr>
<tr><td>2</td><td>13</td><td>4</td><td>18</td><td>0</td><td>0</td><td>13</td><td>30</td><td>20</td><td>20+5*</td><td>20</td></tr>
<tr><td>3</td><td>13</td><td>5</td><td>18</td><td>5</td><td>5</td><td>13</td><td>30</td><td>20</td><td>20+5*</td><td>20</td></tr>
<tr><td>4</td><td>13</td><td>5</td><td>18</td><td>5</td><td>5</td><td>13</td><td>30</td><td>20</td><td>20+15*</td><td>20</td></tr>
<tr><td colspan="8">Window U-Factor 0.5 max with SHGC 0.30 max</td><td colspan="3">* Air -impermeable as per IRC 806.5</td></tr>
</table>
a: Weather-stripped hinged vertical doors (minimum R-5 insulation or maximum U-0.20), weather-stripped hatches/scuttle hole covers (minimum R-19 insulation or maximum U-0.05), or weather-stripped and disappearing/ pull-down stairs (minimum R-5 insulation or maximum U-0.20) shall be deemed to meet the minimum insulation R-values of the corresponding envelope element.
b: Any mass wall (masonry, CMU, etc.)
c: Attic kneewall for the purpose of this code is defined as any vertical or near vertical wall in the building envelope that has conditioned space on one side and attic space on the other side.
Exception: When the building roofline is insulated, the former kneewall is classified as an interior wall.
d: Examples of air-impermeable insulation include spray foam and rigid foam board. Examples of air-permeable insulation include fiberglass batts and cellulose. See 'Roofline Installed Insulation Options' in Appendix RA, of these Georgia State Supplements and Amendments for details.
</td><td>Mike Barcik, Southface, Representing (GEFA)</td><td>A</td></tr>
<tr><td>39)</td><td>2015 IECC R402.2.1
#37 on old report</td><td>
Revise Section R402.2.1 'Ceilings with attic spaces' as follows:
R402.2.1 Ceilings with attic spaces. Where Section R402.1.2 would require R-38 insulation in the ceiling, installing R-30 over 100 percent of the ceiling area requiring insulation shall be deemed to satisfy the requirement for R-38 wherever the full height of uncompressed R-30 insulation extends <u>completely</u> over the wall top plate at the eaves. ~~Similarly, where Section R402.1.2 would require R-49 insulation in the ceiling, installing R-38 over 100 percent of the ceiling area requiring insulation shall be deemed to satisfy the requirement for R-49 insulation wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves.~~ This reduction shall not apply to the U-factor alternative approach in Section R402.1.4 and the total UA alternative in Section R402.1.5.
<u>For HVAC attic platforms used for locating and servicing equipment, R-19 (maximum U-Factor 0.047) shall be deemed to meet the requirements of R-38 (maximum U-Factor 0.027) in the ceiling. R-19 is deemed acceptable for up to 32 square feet of attic decking per HVAC system. R-19 shall be deemed acceptable for a maximum 32 inch wide passage to the HVAC system as referenced under M1305.1.3 of the International Residential Code.</u>
</td><td>Randy Nicklas, ICYNENE, Inc.</td><td>R</td></tr>
<tr><td>40)</td><td>2015 IECC R402.2.3</td><td>
Delete Section R402.2.3 'Eave baffle' and substitute to read as follows:

R402.2.3 Eave baffle. <u>For air permeable insulation in vented attics, baffles shall be installed adjacent to soffit and eave vents. A minimum of a 1-inch of space shall be provided between the insulation and the roof sheathing and at the location of the vent. The baffle shall extend over the top of the insulation inward until it is at least 4 inches vertically above the top of the insulation. Any solid material such as cardboard or thin insulating sheathing shall be permissible as the baffle. (See Appendix RA for further clarification.)</u>
</td><td>Task Force (Team Leader Chapter 4)</td><td>CF</td></tr>
</table>

#	SECTION	SUMMARY	PROPONENT	ACT.*
41)	2015 IECC R402.2.4	**Delete Section R402.2.4 'Access hatches and doors' and substitute the following:** **R402.2.4 Access hatches and doors.** Access doors from conditioned spaces to unconditioned spaces (e.g. attics, unconditioned basements and crawl spaces) shall be weather-stripped and insulated in accordance with the following insulation values: 1. Hinged vertical doors shall have a maximum *U*-Factor of U-0.20 (R-5 minimum); 2. Hatches/scuttle hole covers shall have a maximum *U*-Factor of U-0.05 (R-19 minimum); and 3. Pull down stairs shall have a maximum U-Factor of U-0.20 with a minimum of 75 percent of the panel area having (R-5 minimum) insulation. Access shall be provided to all equipment which prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened, and to provide a permanent means of maintaining the installed *R*-value of the loose fill insulation.	Task Force (Team Leader Chapter 4)	**CF**
42)	2015 IECC R402.2.11	**Delete Section R402.2.11 'Crawl space walls' and substitute to read as follows:** **R402.2.11 Crawl space walls.** As an alternative to insulating floors over crawl spaces, crawl space walls shall be permitted to be insulated when the crawl space is not vented to the outside. Crawl space wall insulation shall be permanently fastened to the wall and extend downward from the floor to within 9 inches (229 mm) of the finished interior grade adjacent to the foundation wall. A 3-inch (76 mm) inspection/view strip immediately below the floor joists shall be provided to permit inspections for termites. Exposed earth in unvented crawl space foundations shall be covered with a continuous Class 1 vapor retarder in accordance with the *International Building Code*. All joints of the vapor retarder shall overlap by 6 inches (152 mm) and be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (152 mm) up the stem wall and shall be attached and sealed to the stem wall.	Task Force (Team Leader Chapter 4)	**CF**
43)	2015 IECC R402.3.4	**Revise Section R402.3.4 'Opaque door exemption' as follows:** **R402.3.4 Opaque door exemption.** One side-hinged opaque door assembly up to 24 square feet (2.22 m^2) in area is exempted from the *U*-factor requirement in Section R402.1.4. This exemption shall not apply to Attic Access Doors or the *U*-factor alternative approach in Section R402.1.4 and the total UA alternative in Section R402.1.5.	Task Force (Team Leader Chapter 4)	**CF**
44)	2015 IECC R402.4.1.1	**Revise R402.4.1.1 'Installation' to add the new sentence at the end to read as follows:** **R402.4.1.1 Installation.** (Beginning of the section left unchanged) See Appendix RA 'AIR BARRIER AND INSULATION INSTALLATION COMPONENT GUIDE' of these Georgia State Supplements and Amendments for a graphical representation of the items listed above.	Task Force (Team Leader Chapter 4)	**CF**
45)	2015 IECC R402.4.1.2 #58 on old report	**Revise Section R402.4.1.2 Testing to read as follows:** **R402.4.1.2 Testing.** All one and two-family dwelling units shall be tested and verified to less than five air changes per hour at 50 Pascals (ACH50) for Climate Zones 2, 3, and 4.	Neal Davis, Representing Home Builders Association of Georgia (HBAG)	**R**
46)	2015 IECC R402.4.1.2 #59 on old report	**Revise Section R402.4.1.2 Testing to read as follows:** **R402.4.1.2 Testing.** Testing shall be conducted in accordance with ASTM E 779 or ASTM E1827 or ANSI/RESNET/ICC 380 and reported at a pressure of 0.2-inch w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be per formed at any time after creation of all penetrations of the building thermal envelope. Testing shall be conducted by a certified duct and envelope tightness (DET) verifier.	James Martin, Representing Building Officials Association of Georgia (BOAG)	**R**

#	SECTION	SUMMARY	PROPONENT	ACT.*
47)	2015 IECC R402.4.1.2 #60 on old report	**Revise Section R402.4.1.2 Testing to read as follows:** **R402.4.1.2 Testing.** ~~Where required by *code official,* testing shall be conducted by an approved third party.~~ Bring Forward Current GA Amendment: **R402.4.1.2 Testing.** Testing shall be conducted by a certified duct and envelope tightness (DET) verifier. **Add definition of 'CERTIFIED DUCT AND ENVELOPE TIGHTNESS (DET) VERIFIER' as follows:** **CERTIFIED DUCT AND ENVELOPE TIGHTNESS (DET) VERIFIER.** A certified DET verifier shall be a certified Home Energy Rating Systems (HERS) rater, or be a Building Performance Institute (BPI) Analyst, or be an Infiltration Duct Leakage (IDL) Certified, or successfully complete a certified DET verifier course that is approved by the Georgia Department of Community Affairs.	Neal Davis, Representing Home Builders Association of Georgia (HBAG)	**R**
48)	2015 IECC R402.4.1.3 #39 on old report	**Add a new Section R402.4.1.3 'Low-rise R-2 multifamily testing' as follows:** **R402.4.1.3 Low-rise R-2 multifamily testing**. Low-rise R-2 multifamily dwellings shall be tested to less than 7 air changes per hour at 50 Pascals (ACH50). As an alternative to ACH50, compliance for Low-rise R-2 dwellings may be attained by achieving an Envelope Leakage Ratio at 50 Pascals (ELR50) of less than 0.35 (ELR50 < 0.35, where ELR50 = CFM50 / Envelope Shell Area, in square feet).	David Goulding, Ensign Building Solutions; Mike Barcik, Southface, Representing (GEFA)	**R**
49)	2015 IECC R402.4.1.3.1 #39 on old report	**Add a new Section R402.4.1.3.1 'Low-rise multifamily testing protocol (Optional)' as follows:** **R402.4.1.3.1 Low-rise multifamily testing protocol (Optional).** Where a residential building is classified as R-2, envelope testing may (optionally) employ either one or both of the following testing protocols: 1. Utilize multiple fans in adjacent units (commonly referred to as Guarded Blower Door testing) to minimize effect of leakage to adjacent units (not required). 2. Envelope testing of less than 100 percent shall be acceptable assuming a maximum sampling protocol of 1 in 4 units per floor (if sampled unit passes, the remaining up to three units are deemed to comply; if sampled unit fails, it must be sealed and retested and the remaining up to three units shall also be tested).	David Goulding, Ensign Building Solutions; Mike Barcik, Southface, Representing (GEFA)	**R**
50)	2015 IECC R403.1.2 #74 on old report	**Revise Section R403.1.2 'Heat pump supplementary heat (Mandatory)' to add a new sentence at the end to read as follows:** **R403.1.2 Heat pump supplementary heat (Mandatory).** Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load. Except in Emergency heating mode, the supplementary electric-resistance heat in heat pump systems installed in new construction may not energize unless the outdoor temperature is below 40° F (4°C).	Elaine Powers, Ryan Taylor and Mike Barcik	**A**
51)	2015 IECC R403.1.2.3	**Add new Section R403.1.2.3 'Primary heat source' to read as follows:** **R403.1.2.3 Primary heat source.** For new dwelling unit central HVAC systems, or replacement HVAC systems installed in dwelling units that were originally permitted after January 1, 1996, electric-resistance heat shall not be used as the primary heat source. Primary heat source is defined as the heat source for the original dwelling unit system.	Task Force (Team Leader Chapter 4)	**CF**

#	SECTION	SUMMARY	PROPONENT	ACT.*
52)	2015 IECC R403.3.2 #65 on old report	**Revise Section R403.3.2 'Sealing (Mandatory)' as follows:** **R403.3.2 Sealing (Mandatory).** Ducts, air handlers and filter boxes shall be sealed. Joints and seams shall comply with Section ~~403.2.4~~ R403.3.6 of these Georgia State Supplements and Amendments. ~~Joints and seams shall comply with either the International Mechanical Code or International Residential Code, as applicable.~~ **Exceptions:** 1. Air-impermeable spray foam product shall be permitted to be applied without additional joint seals. 2. For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams, and locking-type joints and seams of other than the snap-lock and button-lock types. 3. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect. 4. Sealing that would void product listings is not required.	Elaine Powers, Representing Conditioned Air Association of Georgia (CAAG)	**A**
53)	2015 IECC R403.3.3 #66 on old report	**Revise Section R403.3.3 'Duct testing (Mandatory)' as follows:** **R403.3.3 Duct testing (Mandatory).** Ducts shall be pressure tested to determine air leakage by one of the following methods: 1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure ~~if installed at the time of the test.~~ All registers shall be taped or otherwise sealed during the test. 2. Post-construction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test. **Exceptions:** 1. A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope. 2. Duct tightness testing is not required for existing duct systems unless more than 50% of the duct system is modified. 3. If the air handler, furnace or evaporator coil is replaced on an existing system, all joints, seams and connections from equipment to duct system and duct system connections to plenums within 5 feet from the new work shall meet the sealing requirements of this code and be verified by a visual inspection by the state licensed conditioned air contractor or by a DET Verifier. A report of the results of the test shall be signed by the party conducting the test and provided to the ~~*code official*~~ owner or the owner's agent and, if requested, to the *code official*.	Elaine Powers, Representing Conditioned Air Association of Georgia (CAAG)	**R**

#	SECTION	SUMMARY	PROPONENT	ACT.*
54)	2015 IECC R403.3.4 #68 on old report	**Revise Section R403.3.4 'Duct leakage (Prescriptive)' as follows:** **R403.3.4 Duct leakage ~~(Prescriptive)~~ (Mandatory).** The total leakage of the ducts, where measured by one of the following methods in accordance with Section R403.3.3 shall be as follows: 1. Rough-in test: The total leakage shall be less than or equal to ~~4~~ 6 cubic feet per minute (113.3 L/min) per 100 square feet (9.29 m^2) of conditioned floor area where the air handler is installed at the time of the test. ~~Where the air handler is not installed at the time of the test, the total leakage shall be less than or equal to 3 cubic feet per minute (85 L/min) per 100 square feet (9.29m^2) of conditioned floor space.~~ 2. Post-construction test: Total leakage shall be less than or equal to ~~4~~ 6 cubic feet per minute (113.3 L/min) per 100 sq. feet (9.29 m^2) of conditioned floor area. **Exceptions:** 1. A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope. 2. Duct tightness testing is not required for existing duct systems unless more than 50% of the duct system is modified. 3. If the air handler, furnace or evaporator coil is replaced on an existing system, all joints, seams and connections from equipment to duct system and duct system connections to plenums within 5 feet from the new work shall meet the sealing requirements of this code and be verified by a visual inspection by the state licensed conditioned air contractor or by a DET Verifier.	Elaine Powers, Representing Conditioned Air Association of Georgia (CAAG)	**R**
55)	2015 IECC R403.3.6	**Add a new Section R403.3.6 'Joints, seams and Connections' as follows:** **R403.3.6 Joints, seams and Connections.** All longitudinal and transverse joints, seams and connections in metallic and nonmetallic ducts shall be constructed as specified in *SMACNA HVAC Duct Construction Standards*- Metal and Flexible and NAIMA *Fibrous Glass Duct Construction Standards*. All joints, longitudinal and transverse seams, and connections in ductwork shall be securely fastened and sealed with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric systems or tapes. Without exception all closure systems shall have mastic applied that is at least 0.08 inches (2 mm) thick. Closure systems used to seal flexible air ducts and flexible air connections shall comply with UL 181B and shall be marked "181B-FX" for pressure-sensitive tape or "181B-M" for mastic. Duct connections to flanges of air distribution systems equipment shall be sealed and mechanically fastened. Mechanical fasteners for use with flexible non-metallic air ducts shall comply with UL 181B and shall be marked 181B-C. Crimp joints for round metallic ducts shall have a contact lap of not less than 1 inch (25.4 mm) and shall be mechanically fastened by means of not less than three sheet-metal screws or rivets equally spaced around the joint. Closure systems used to seal metal ductwork shall be installed in accordance with manufacturer's instructions. Round metallic ducts shall be mechanically fastened by means of at least three sheet metal screws or rivets spaced equally around the joint. Unlisted duct tape shall not be permitted as a sealant on any duct. **Exceptions:** 1. Spray polyurethane foam shall be permitted to be applied without additional joint seals. 2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect. 3. Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressure less than 2 inches (51 mm) of water column (500 Pa) pressure classification shall not require additional closure systems.	Elaine Powers, Representing Conditioned Air Association of Georgia (CAAG)	**A**

#	SECTION	SUMMARY	PROPONENT	ACT.*
56)	2015 IECC R403.5.4 #67 on old report	**Revise Section R403.5.4 'Drain water heat recovery units' to read as follows:** **R403.5.4 Drain water heat recovery units**. Drain water heat recovery units shall comply with CSA B55.2 or IAPMO PS 92. Vertical drain water heat recovery units shall be tested in accordance with CSA B55.1 and have a minimum effectiveness of 42 percent when tested in accordance with CSA B55.1. Sloped drain water heat recovery units shall be tested in accordance with IAPMO IGC 346 and have a minimum rated effectiveness of 42 percent when tested in accordance with IAPMO IGC 346 at the minimum slope specified in the Georgia plumbing code. Potable water-side pressure loss of vertical drain water heat recovery units shall be less than 3 psi (20.7 kPa) for individual units connected to one or two showers. Potable water-side pressure loss of vertical drain water heat recovery units shall be less than 2 psi (13.8 kPa) for individual units connected to three or more showers. Potable water-side pressure loss of sloped drain water heat recovery units shall be less than 4 psi (20.7 kPa).	Ryan Taylor, Representing SCAC and the American Institute of Architect, GA Association (AIA)	**A**
57)	2015 IECC R403.6 #73 on old report	**Revise Section R403.6 'Mechanical Ventilation' to read as follows:** **R403.6 Mechanical ventilation (Mandatory).** Where required, the building shall be provided with ventilation that meets the requirements of the *International Residential Code* or *International Mechanical Code*, as applicable, or with ASHRAE 62.2-2016, *Ventilation* and Acceptable Indoor Air Quality in Low-Rise Residential Buildings (in entirety) or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating. (Remainder of section left unchanged)	Mike Barcik, Southface, Representing (GEFA)	**R**
58)	2015 IECC R403.7 #71 on old report	**Revise Section R403.7 'Equipment sizing and efficiency rating (Mandatory)' by adding the following sentence at the end:** **R403.7 Equipment sizing and efficiency rating (Mandatory).** (The beginning of section left unchanged.) For automatically modulating capacity heating and cooling equipment, the system shall be deemed to comply with appropriate portions of Manual S provided the lowest output capacity of the equipment is less than the peak design load as determined by Manual J.	Jeffery Sauls, Energy Vanguard, Elaine Powers and Mike Barcik	**A**
59)	2015 IECC R403.13	**Add new Section R403.13 'Electric powered attic ventilators' to read as follows:** **R403.13 Electric powered attic ventilators.** In new construction, electric powered attic ventilators shall not be connected to the Service supply premise wiring system. Solar photovoltaic (PV) powered attic ventilators shall be permitted.	Task Force (Team Leader Chapter 4)	**CF**
60)	2015 IECC R406 #44 on old report	**Revise Section R406 ENERGY RATING INDEX COMPLIANCE ALTERNATIVE to read as follows:** **R406 ENERGY RATING INDEX COMPLIANCE ALTERNATIVE** **R406.1 Scope.** This section establishes criteria for compliance using an Energy Rating Index (ERI) analysis. **R406.2 Mandatory requirements.** Compliance with this section requires that the mandatory provisions identified in Sections R401 and R403.5.3 be met. The building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table 402.1.1 or 402.1.3 of the 2009 *International Energy Conservation Code*. **Exception:** Supply and return ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-6. **R406.3 Energy Rating Index.** The Energy Rating Index (ERI) shall be ~~a numerical integer value that is based on a linear scale constructed such that the *ERI reference design* has an Index value of 100 and a *residential building* that uses no net purchased energy has an Index value of 0. Each integer value on the scale shall represent a 1-percent change~~ determined in ~~the total energy use of the rated design relative to the total energy use of the *ERI reference design*~~ accordance with	Shan Arora, Southface	**R**

#	SECTION	SUMMARY	PROPONENT	ACT.*
	2015 IECC R406 #44 on old report	ANSI/RESNET/ICC 301 except for buildings constructed in accordance with the International Residential Code, where the ERI reference design ventilation rate shall be in accordance with the following: Ventilation rate = (0.01 x total square foot area of house) + (7.5 (N_{br} + 1)) **Equation 4-1** where, Ventilation rate is defined in units of cubic feet per minute N_{br} = Number of bedrooms The ERI shall consider all energy used in the *residential building* including *on-site renewable energy*. Energy used to recharge or refuel a vehicle for on-road (and off-site) transportation purposes shall not be included in the ERI *reference design* or the *rated design*. ~~**R406.3.1 ERI reference design.**~~ ~~The *ERI reference design* shall be configured such that it meets the minimum requirements of the 2006 *International Energy Conservation Code* prescriptive requirements. The proposed *residential building* shall be shown to have an annual total normalized modified load less than or equal to the annual total loads of the *ERI reference design*.~~ **R406.4 ERI-based compliance.** Compliance based on an ERI analysis requires that the *rated design* be shown to have an ERI less than or equal to the appropriate value listed in Table R406.4 when compared to the *ERI reference design*. **TABLE R406.4** **MAXIMUM ENERGY RATING INDEX** | CLIMATE ZONE | ENERGY RATING INDEX | | 2 | ~~52~~ 57 | | 3 | ~~51~~ 57 | | 4 | ~~54~~ 62 | **R406.5 Verification by approved agency.** Verification of compliance with Section R406 shall be completed by an *approved* third party. **R406.6 Documentation.** Documentation of the software used to determine the ERI and the parameters for the residential building shall be in accordance with Sections R406.6.1 through R406.6.3. **R406.6.1 Compliance software tools.** ~~Documentation verifying that the methods and accuracy of the compliance software tools conform to the provisions of this section~~ The ERI shall be determined using ~~provided to the *code official*~~ Approved Software Rating Tools in accordance with ANSI/RESNET/ICC 301. **R406.6.2 Compliance report.** Compliance software tools shall generate a report that documents that the ERI of the *rated design* complies with Sections R406.3 and R406.4. The compliance documentation shall include the following information: 1. Address or other identification of the residential building. 2. An inspection checklist documenting the building component characteristics of the *rated design*. The inspection checklist shall show results for both the *ERI reference design* and the *rated design*, and shall document all inputs entered by the user necessary to reproduce the results. 3. Name of individual completing the compliance report. 4. Name and version of the compliance software tool. **Exception:** Multiple orientations. Where an otherwise identical building model is offered in multiple orientations, compliance for any orientation shall be permitted by documenting that the building meets the performance requirements in each of the four (north, east, south and west) cardinal orientations.	Shan Arora, Southface	**R**

#	SECTION	SUMMARY	PROPONENT	ACT.*
	2015 IECC R406 #44 on old report	**R406.6.3 Additional documentation.** The *code official* shall be permitted to require the following documents: 1. Documentation of the building component characteristics of the *ERI reference design*. 2. A certification signed by the builder providing the building component characteristics of the *rated design.* 3. Documentation of the actual values used in the software calculations for the *rated design*. ~~**R406.7 Calculation software tools.**~~ ~~Calculation software, where used, shall be in accordance with Sections R406.7.1 through R406.7.3.~~ ~~**R406.7.1 Minimum capabilities.**~~ ~~Calculation procedures used to comply with this section shall be software tools capable of calculating the ERI as described in Section R406.3, and shall include the following capabilities:~~ ~~1. Computer generation of the *ERI reference design* using only the input for the *rated design*.~~ ~~The calculation procedure shall not allow the user to directly modify the building component characteristics of the *ERI reference design*.~~ ~~2. Calculation of whole building, as a single *zone*, sizing for the heating and cooling equipment in the *ERI reference design* residence in accordance with Section R403.7.~~ ~~3. Calculations that account for the effects of indoor and outdoor temperatures and part-load ratios on the performance of heating, ventilating and air-conditioning equipment based on climate and equipment sizing.~~ ~~4. Printed *code official* inspection checklist listing each of the *rated design* component characteristics determined by the analysis to provide compliance, along with their respective performance ratings.~~ ~~**R406.7.2**~~ **R406.6.4 Specific approval.** Performance analysis tools meeting the applicable sections of Section R406 shall be *approved*. ~~Tools are permitted~~ Documentation demonstrating the approval of performance analysis tools in accordance with Section R406.6.1 shall be provided to ~~be *approved* based on meeting a specified threshold for a jurisdiction~~ the *code official*. The *code official* shall approve tools for a specified application or limited scope. ~~**R406.7.3**~~ **R406.6.5 Input values.** Where~~n~~ calculations require input values not specified by Sections R402, R403, R404 and R405, those input values shall be taken from ~~an approved source~~ ANSI/RESNET/ICC 301. **Add new standard to Chapter 6 Residential:** ANSI/RESNET/ICC 301-2014 Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using an Energy Rating Index First Published March 7, 2014 republished January 2016.	Shan Arora, Southface	**R**
61)	2015 IECC R502.1.1.2 #69 on old report	**Revise Section R502.1.1.2 'Heating and cooling systems' to delete the exception and substitute to read as follows:** **R502.1.1.2 Heating and cooling systems.** New heating, cooling and duct systems that are part of the addition shall comply with Sections R403.1, R403.2, R403.3, R403.5 and R403.6. ~~**Exception:** Where ducts from an existing heating and cooling system are extended to an addition, duct systems with less than 40 linear feet (12.19 m) in unconditioned spaces shall not be required to be tested in accordance with Section R403.3.3.~~ **Exception:** Duct tightness testing is not required for existing duct systems unless more than 50% of the existing duct system is modified.	Elaine Powers, Representing Conditioned Air Association of Georgia (CAAG)	**A**

<table>
<tr><th>#</th><th>SECTION</th><th>SUMMARY</th><th>PROPONENT</th><th>ACT.*</th></tr>
<tr><td>62)</td><td>2015 IECC
R503.1.2
#70 on old report</td><td>Revise Section R503.1.2 ‘Heating and cooling systems’ as follows:
R503.1.2 Heating and cooling systems. New heating, cooling and duct systems that are part of the alteration shall comply with Sections R403.1, R403.2, R403.3 and R403.6.
Exception: ~~Where ducts from an existing heating and cooling system are extended, duct systems with less than 40 linear feet (12.19 m) in unconditioned spaces shall not be required to be tested in accordance with SectionR403.3.3.~~ Duct tightness testing is not required for existing duct systems unless more than 50% of the existing duct system is modified.</td><td>Elaine Powers, Representing Conditioned Air Association of Georgia (CAAG)</td><td>A</td></tr>
<tr><td>63)</td><td>205 IECC
Chapter 6</td><td>Revise Chapter 6 ‘Referenced Standards’ to add the following new Standards to read as follows:
<table>
<tr><td>UL</td><td>UL LLC
333 Pfingsten Road
Northbrook, IL 60062-2096</td><td></td></tr>
<tr><td>Standard reference number</td><td>Title</td><td>Referenced in code section number</td></tr>
<tr><td>181 - 2013</td><td>Factory-made Air Ducts and Air Connectors—with Revisions through May 2003 ……</td><td>R403.3.6</td></tr>
<tr><td>181A - 2013</td><td>Closure Systems for Use with Rigid Air Ducts and Air Connectors—with Revisions through December 1998 ……</td><td>R403.3.6</td></tr>
<tr><td>181B - 2013</td><td>Closure Systems for Use with Flexible Air Ducts and Air Connectors—with Revisions through August 2003 ……</td><td>R403.3.6</td></tr>
</table>
<table>
<tr><td>ASHRAE</td><td>American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
1791 Tullie Circle, NE
Atlanta, GA 30329-2305</td><td></td></tr>
<tr><td>Standard reference number</td><td>Title</td><td>Referenced in code section number</td></tr>
<tr><td>ASHRAE 62.2 – 2016</td><td>Ventilation and Acceptable Indoor Air Quality in Low- Rise Residential Buildings ……..……..…</td><td>R403.6</td></tr>
</table>
<table>
<tr><td>ANSI/RESNET/ ICC 301</td><td>Residential Energy Services Network, Inc. P.O. Box 4561. Oceanside, CA 92052-4561
International Code Council, 500 New Jersey Avenue, NW, 6th Floor. Washington, D.C. 20001</td><td></td></tr>
<tr><td>Standard reference number</td><td>Title</td><td>Referenced in code section number</td></tr>
<tr><td>ANSI/RESNET/ICC 301-2014</td><td>Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using an Energy Rating Index ……..……..…</td><td>R406</td></tr>
</table>
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<tr><td>IAPMO PS 92</td><td>IAPMO
4755 E. Philadelphia St.
Ontario, CA 91761 – USA</td><td></td></tr>
<tr><td>Standard reference number</td><td>Title</td><td>Referenced in code section number</td></tr>
<tr><td>IAPMO PS 92-2013</td><td>Heat Exchangers and Indirect Water Heaters ……..……..…</td><td>R403.5.4</td></tr>
<tr><td>IAPMO IGC 346</td><td>Test Method for Measuring the Performance of Drain Water Heat Recovery Units ……..…</td><td>R403.5.4</td></tr>
</table>
(Standards not listed to remain unchanged)</td><td>Task Force (Team Leader Chapter 6)</td><td>R</td></tr>
</table>

#	SECTION	SUMMARY	PROPONENT	ACT.*
64)	2015 IECC Appendix RA #46 on old report	Delete APPENDIX RA 'RECOMMENDED PROCEDURE FOR WORST-CASE TESTING OF ATMOSPHERIC VENTING SYSTEMS UNDER R402.4 OR R405 CONDITIONS ≤ 5ACH50', entirely.	Andrea L Papageorge, Southern Company Gas	**A**
65)	2015 IECC Appendix RA #46 on old report	Delete APPENDIX RA 'RECOMMENDED PROCEDURE FOR WORST-CASE TESTING OF ATMOSPHERIC VENTING SYSTEMS UNDER R402.4 OR R405 CONDITIONS ≤ 5ACH50', entirely and substitute with new APPENDIX RA 'AIR SEALING KEY POINTS'.	Mike Barcik	**R**
66)	Appendix RC #75 on old report	Add new APPENDIX RC 'THIRD PARTY VERIFICATION'.	TF	**CF**
67)	Appendix RD #76 on old report	Add new APPENDIX RD 'MANDATORY COMPLIANCE CERTIFICATE'.	Lauren Westmoreland,	**R**