Conclusion

- ANSI 301 Named the Energy Rating Index
  - RESNET HERS ERI
  - 2015 IECC ERI
  - 2018 IECC ERI
  - More to come
- The Code ERI is not a marketing tool/Not the Same at the HERS Index
- Code ERI will become a matrix of compliance just like:
  - Area weighted U-factors for the U-factor trade off/RESCheck path
  - Cost Compliance for the Simulated performance path
- Section R405 Simulated performance path is the path for Builders
  - Most cost affective compliance
  - HERS Index/ERI is a byproduct of the path way for marketing
New in the 2015

• 103.2.1 Building Thermal Envelope depiction:
  • The buildings thermal envelope shall be represented on the construction documents
    • Blue – Exterior air barrier
    • Yellow Thermal Barrier
    • Red Interior air barrier

Building Codes
Intended to protect the public by establishing minimum standards of building safety.
## 2009 IECC vs. 2015/18 IECC Prescriptive Table

<table>
<thead>
<tr>
<th>Climate Zone</th>
<th>Window U-Factor</th>
<th>Window SHGC</th>
<th>Ceiling R-Value</th>
<th>Wood Framed Wall R-Value</th>
<th>Mass Wall R-Value</th>
<th>Floor R-Value</th>
<th>Basement Wall R-Value</th>
<th>Slab R-Value and Depth</th>
<th>Crawl Space Wall R-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.2</td>
<td>0.30</td>
<td>R-30</td>
<td>R-13</td>
<td>R-3/4</td>
<td>R-13</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0.65</td>
<td>0.30</td>
<td>R-30</td>
<td>R-13</td>
<td>R-4/6</td>
<td>R-13</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0.35</td>
<td>0.30</td>
<td>R-30</td>
<td>R-13</td>
<td>R-5/8</td>
<td>R-19</td>
<td>R-5/13</td>
<td>0</td>
<td>R-5/13</td>
</tr>
<tr>
<td>4 except Marine</td>
<td>0.35</td>
<td>0.38</td>
<td>R-38</td>
<td>R-13</td>
<td>R-5/10</td>
<td>R-19</td>
<td>R-10/13</td>
<td>R-10, 2ft</td>
<td>R-10/13</td>
</tr>
<tr>
<td>5 and Marine-4</td>
<td>0.35</td>
<td>0.38</td>
<td>R-38</td>
<td>R-13</td>
<td>R-10/13</td>
<td>R-30</td>
<td>R-10/13</td>
<td>R-15/19</td>
<td>R-10/13</td>
</tr>
<tr>
<td>Climate Zone 6</td>
<td>0.35</td>
<td>0.49</td>
<td>R-49</td>
<td>R-20 or 13+5</td>
<td>R-15/20</td>
<td>R-30</td>
<td>R-15/19</td>
<td>R-10, 4ft</td>
<td>R-10/13</td>
</tr>
<tr>
<td>Climate Zone 7 &amp; 8</td>
<td>0.35</td>
<td>0.49</td>
<td>R-49</td>
<td>R-21</td>
<td>R-19/21</td>
<td>R-38</td>
<td>R-15/19</td>
<td>R-10, 4ft</td>
<td>R-10/13</td>
</tr>
</tbody>
</table>

### INTENT IMPACT & DIFFERENCE

**in·tent**

/inˈtent/

noun

1. intention or purpose.
   "with alarm she realized his intent"

*synonyms:* aim, intention, purpose, objective, object, goal, target,
2018 IECC – Intent

This code shall regulate the design and construction of buildings for the effective use and conservation of energy over the useful life of each building

• Durability

2018 IECC – Intent

This code is intended to provide flexibility to permit innovative approaches and techniques to achieve this objective

“Learn the rules so you know how to break them properly”

Author: Dalai Lama
Date: Feb 25, 2008
2018 IECC - Intent

The code is *not intended* to abridge *safety, health or environmental requirements* contained in other applicable codes or ordinances.

![Graph of U.S. Heat-Related Fatalities 1986-2011](image1)

![Pipe with a warning sign](image2)

*Common starting point*  
*Four divergent paths*  
*Common end point*
Adherence to moral principles.
In ethics, integrity is regarded as the honesty and truthfulness, uprightness, sincerity, and moral soundness.

The key factor of code development

**Adoption**

- **Amendment**
  - a·mend·ment
  - əˈmɛn(d)мент/
  - noun
  - a minor change in a document.
  - a change or addition to a legal or statutory document.
Energy Code
It's not your Daddy's code?

- No longer building the minimum _ _ _ house allowable!
Focus on House Performance

Fundamental Questions

Is It There?  Does It Work?
Chapter 4: Residential Energy Efficiency

Specific and technical requirements for:

- Building Thermal Envelope
- Mechanical Systems
- Service Hot Water Systems
- Electrical Power and Lighting Systems

Pathways = Flexibility/Options
Cost Effective Value?

• Builder Perspective
  • 1st Costs/cost of construction
  • Flexibility in specification selection
  • Build the house you want to
  • Builder Risk

• Consumer Perspective
  • Cost of ownership
  • Payback
    o Simple payback
    o Investment paid for in a loan
  • Opportunity cost

Code Compliance Paths

Prescriptive Path  UA Compliance Path  Simulated Performance Path  Energy Rating Index Path
Regardless of the Pathway

International Energy Conservation Code

Mandatory Requirements

Terminology

• Mandatory requirements
  • Requirements that must be met by every building unless there is a specific exception in the code

• Prescriptive requirements
  • Requirements that must be met by every building unless an approved tradeoff is utilized or unless there is a specific exception in the code

• Performance approach
  • An overall performance requirement for the building that replaces the individual prescriptive requirements for building systems and components
Prescriptive/Mandatory Requirements
Installation issues required by code

- Eve Baffles
- Attic Insulation
- Floor Insulation
- Crawl Vapor Retarders

Prescriptive Path

- Most restrictive path
  - Only option is to do better
- No compliance Tool
- Must declare that this is your method of compliance
- Permitting plan set is the documentation
- Prescriptive installation details carry over to other pathways
  - Eave baffles
  - Crawl space vapor retarder
  - Attic insulation installation requirements
  - Etc.
SECTION R402 BUILDING THERMAL ENVELOPE
Prescriptive path ways through code (3 choices)

• R402.1 General (Prescriptive).
  • The building thermal envelope shall meet the requirements of Sections R402.1.1 through R402.1.4.
• Sections R402.1.3
  • R-value table specification
• Section R402.1.4
  • U-Value table specification
• Section R402.1.5
  • Total UA Alternative Approach

• R402.1.3 R-value computation
  Insulation material used in layers, such as framing cavity insulation and insulating sheathing, shall be summed to compute the component R-value

• The manufacturer’s settled R-value shall be used for blown insulation (Attics)

• Computed R-values shall not include an R-value for other building materials or air films
Floor Systems

- Best Practices
  - Insulation must be in contact with the surface it is intended to insulate
  - Insulation completely fills the cavity

2012 IECC
- R402.2.7 Floors.
  - Floor insulation shall be installed to maintain permanent contact with the underside of the subfloor decking
  - R-30 climate zone 5

Ducts in Garage Ceiling

Code requirements
- Insulation in complete contact with subfloor
- Insulation encapsulates duct
- IECC Table 402.1.2 footnote G
- Minimum R-19 below duct
R402.1.4 U-factor Alternative

<table>
<thead>
<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</th>
<th>FLOOR U-FACTOR</th>
<th>BASEMENT WALL U-FACTOR</th>
<th>CRAWL SPACE WALL U-FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.50</td>
<td>0.75</td>
<td>0.035</td>
<td>0.086</td>
<td>0.197</td>
<td>0.064</td>
<td>0.360</td>
<td>0.477</td>
</tr>
<tr>
<td>2</td>
<td>0.40</td>
<td>0.65</td>
<td>0.030</td>
<td>0.084</td>
<td>0.163</td>
<td>0.064</td>
<td>0.360</td>
<td>0.477</td>
</tr>
<tr>
<td>3</td>
<td>0.32</td>
<td>0.55</td>
<td>0.030</td>
<td>0.060</td>
<td>0.098</td>
<td>0.047</td>
<td>0.091c</td>
<td>0.136</td>
</tr>
<tr>
<td>4, except Marine</td>
<td>0.32</td>
<td>0.55</td>
<td>0.026</td>
<td>0.060</td>
<td>0.098</td>
<td>0.047</td>
<td>0.059</td>
<td>0.065</td>
</tr>
<tr>
<td>5 and Marine</td>
<td>0.30</td>
<td>0.55</td>
<td>0.026</td>
<td>0.060</td>
<td>0.082</td>
<td>0.033</td>
<td>0.059</td>
<td>0.055</td>
</tr>
<tr>
<td>6</td>
<td>0.30</td>
<td>0.55</td>
<td>0.026</td>
<td>0.065</td>
<td>0.060</td>
<td>0.033</td>
<td>0.059</td>
<td>0.055</td>
</tr>
<tr>
<td>7 and 8</td>
<td>0.30</td>
<td>0.55</td>
<td>0.026</td>
<td>0.065</td>
<td>0.057</td>
<td>0.028</td>
<td>0.059</td>
<td>0.055</td>
</tr>
</tbody>
</table>

- **An assembly** with a U-factor equal to or less than that specified in Table R402.1.4 shall be permitted as an alternative to the R-value in Table R402.1.2
- **Example:** Climate zone 5 framed wall
  - U- .060 = R-16.67
  - R-value table requires cavity insulation at R20 or 13+5
  - 1/20 = U.05 Plus sheathing, air film, etc. = U.06

**All other paths use a software**

Software allows tradeoffs

UA Compliance Path  Simulated Performance Path  Energy Rating Index Path
What is a Reference Design

• **Reference Design**
  • A standard set of house specifications that generate a specific level of quantifiable energy performance

• The concept Code uses to show compliance with the UA Trade Off (ResCheck) and the Simulated Performance Path

The *Actual built* homes performance will be less than or equal to the performance of the code standard reference design

The *Standard reference design for code is the prescriptive path of compliance built in Table 405.5.2* (1)

---

**Twin Houses**

<table>
<thead>
<tr>
<th>2018 IECC reference design house</th>
<th>VS.</th>
<th>Builder’s desired house</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Geometric Twin</td>
<td></td>
<td>• Geometric Twin</td>
</tr>
<tr>
<td>• 2018 IECC prescriptive envelope U-values in (Table 402.1.4)</td>
<td></td>
<td>• Envelope U-values based on Builder’s Specification</td>
</tr>
</tbody>
</table>

If the **Builder’s house has the same or lower area weighted U-values then it meets the intent of code**
R402.1.5 Total UA alternative

A method for performing conductive energy trade offs

• Trading off the R-values and U-values in the thermal envelope

• Mathematically making the R-value and U-value paths

R402.1.5 Total UA alternative

- If the total building thermal envelope UA (sum of U-factor times assembly area) is less than or equal to the total UA resulting from using the U-factors in Table R402.1.4 (multiplied by the same assembly area as in the proposed building), the building shall be considered in compliance with Table R402.1.1.

- The UA calculation shall include the thermal bridging effects of framing materials.
### Code Compliance Paths

- **Prescriptive Path**
- **UA Compliance Path**
- **Simulated Performance Path**
- **Energy Rating Index Path**
**Simulated performance alternative - R405**

- This section establishes criteria for compliance using simulated energy performance analysis.

- Such analysis shall include:
  - Heating
  - Cooling
  - Service water heating energy only

- Compliance with this section requires that the (Mandatory) items still be met.

**R405 Performance-based compliance**

- *Energy Analysis*
  - A method for performing whole house performance energy trade offs
    - **Conduction** - Trading off R-values and U-values
    - **Convection** – Energy moving with air infiltration and exfiltration
    - **Radiation** – Trade offs created by energy moving form areas of high concentrations to low concentration through open space.

http://www.bpihomeowner.org/blog/technically-speaking-principles-heat-transfer
Building Science built into the code

The Reference Home/Twin Home Concept
Used by modeling software for Code

- The reference home is the geometric twin of the rated home configured to a standard set of thermal performance characteristics.
  - I.e. The 2015 IECC Prescriptive path

- The home you are building and evaluating, compared to the “Reference” home in order to quantify performance and demonstrate compliance with the Energy code.
Energy Costs?

- **405.3 Performance-based compliance.** Compliance based on simulated energy performance requires that a proposed residence (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.

---

**IECC 2018 Performance Compliance**

<table>
<thead>
<tr>
<th>Design</th>
<th>Annual Energy Cost</th>
<th>As Designed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating</td>
<td></td>
<td>$477</td>
</tr>
<tr>
<td>Cooling</td>
<td></td>
<td>$123</td>
</tr>
<tr>
<td>Water Heating</td>
<td></td>
<td>$126</td>
</tr>
<tr>
<td>Mechanical Ventilation</td>
<td></td>
<td>$177</td>
</tr>
<tr>
<td>Subtotal</td>
<td>Used to determine compliance</td>
<td>$683</td>
</tr>
<tr>
<td>Credits</td>
<td>$90</td>
<td>$90</td>
</tr>
<tr>
<td>Total</td>
<td>$773</td>
<td>$784</td>
</tr>
</tbody>
</table>

*Design exceeds requirements for IECC 2018 Performance compliance by 1.5%.*
By Product
Not a code compliance document

Code Compliance Paths

- Prescriptive Path
- UA Compliance Path
- Simulated Performance Path
- Energy Rating Index Path
Section R406 of the 2015 and 2018 IECC Energy Rating Index Compliance Alternative

- What is an Energy Rating Index

Section R406 of the 2015/2018 IECC Energy Rating Index Compliance Alternative

ERI Index Score ≠ HERS Index Score any more
2015 IECC misprint and the Errata

erratum  
iˈrätəm,-ˈrā-,ˈrät-/ noun  
plural noun: errata  
An error in printing or writing.  
A list of corrected errors appended to a book or published in a subsequent issue of a journal.

R406.2 Mandatory requirements.  
Compliance with this section requires that the mandatory provisions identified in Sections R401.2 through R404 labeled as ‘mandatory’ and Section 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 402.1.2 or 402.1.4 of the 2009 International Energy Conservation Code.

Mandatory sections of the 2015/18 IECC

• R401.1 Mandatory Requirements
  • Section R402.4 Air Leakage
    • R402.4.1.2 Testing
      • Air leakage rate not exceeding 5 air changes per hour in Climate Zones 1 and 2, and 3 air changes per hour in Climate Zones 3 through 8
    • Table R402.4.1.1 Air barriers and Insulation
  • Section R403 Systems
  • Section R404 Electrical Power and Lighting Systems
  • Prescriptive requirements in R403.5.3  
    • Hot water pipe insulation
R406.2 Mandatory Requirements

- 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**.

2018 IECC
- **If there is no solar** on the home then the builders **must** also meet the minimum prescriptive envelope efficiency measures in the **2009 IECC**

- **If Solar** is installed on a home using the ERI path, builders **must** also meet the minimum prescriptive envelope efficiency measures in the **2015 IECC**

### 2009 IECC vs. 2015 IECC Prescriptive Table

<table>
<thead>
<tr>
<th>Climate Zone</th>
<th>Window U-Factor</th>
<th>Window SHGC</th>
<th>Ceiling R-Value</th>
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<tbody>
<tr>
<td>1</td>
<td>1.2</td>
<td>0.30</td>
<td>R-30</td>
<td>R-13</td>
<td>R-3/4</td>
<td>R-13</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0.65</td>
<td>0.30</td>
<td>R-30</td>
<td>R-13</td>
<td>R-4/6</td>
<td>R-13</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
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<td>R-30</td>
<td>R-13</td>
<td>R-5/8</td>
<td>R-19</td>
<td>R-5/13</td>
<td>0</td>
<td>R-5/13</td>
</tr>
<tr>
<td>4 except Marine</td>
<td>0.35</td>
<td>0.40</td>
<td>R-38</td>
<td>R-13</td>
<td>R-5/10</td>
<td>R-19</td>
<td>R-10/13</td>
<td>R-10, 2ft</td>
<td>R-10/13</td>
</tr>
<tr>
<td>5 and Marine 4</td>
<td>0.35</td>
<td>0.32</td>
<td>NR</td>
<td>R-38</td>
<td>R-20 or 13+5</td>
<td>R-13/17</td>
<td>R-30</td>
<td>R-10/13</td>
<td>R-10, 2ft</td>
</tr>
<tr>
<td>Climate Zone 6</td>
<td>0.35</td>
<td>0.32</td>
<td>NR</td>
<td>R-49</td>
<td>R-20 or R20+5 or 13+10</td>
<td>R-15/20</td>
<td>R-30</td>
<td>R-15/19</td>
<td>R-10, 4ft</td>
</tr>
<tr>
<td>Climate Zone 7 &amp; 8</td>
<td>0.35</td>
<td>0.32</td>
<td>NR</td>
<td>R-49</td>
<td>R-21 R20+5 or 13+10</td>
<td>R-19/21</td>
<td>R-38</td>
<td>R-15/19</td>
<td>R-10, 4ft</td>
</tr>
</tbody>
</table>
Why create a backstop

- 100 meets the minimum requirements of the 2006 International Energy Conservation Code prescriptive requirements

**Why create a backstop?**

**2006 IECC compliant**

- 2 story
- 2800 Square Feet
- Single Family Detached
- Conditioned basement

- HERS Index
  - HERS 100
  - 6.5K PV system = HERS ERI 55

**House specs**

- Foundation R-10
- Slab R-0
- Floor over garage R-30 **Grade 3**
- Rim R-19 **Grade 3**
- Walls blown R-19 / Knee wall R-13 **Grade 3**
- Windows U-.35/SHGC -.35
- Doors R-5/ R-2.2
- Attic R-38 flat R-30 edge
- Furnace 80 AFUE w/ 4% CFM LTO & 5% supply & return in attic R-6
- Water Heater .56 EF
- AC 12 Seer
- 8 ACH50 & Exhaust Ventilation
- Default appliances 0% CFL
**R406.3.1 ERI reference design**

2015 IECC
- The *ERI reference design* shall be configured such that it meets the minimum requirements of the 2006 *International Energy Conservation Code* prescriptive requirement.

2018 IECC
- The Energy Rating Index will be developed in accordance with ANSI/RESNET/ICC 301-2014.
- The proposed residential building shall be shown to have an annual total normalized Modified Loads that are less than or equal to the annual total Loads of the *ERI reference design*.

**Twin Houses**

**ERI reference design house**
- Geometric Twin
- 2006 IECC prescriptive requirements

**Builder’s desired house**
- Geometric Twin
- Mandatory 2009 IECC Envelope R-Values
- 2015 IECC Mandatory Requirements

*The Builder’s house must have the Energy Rating Index Required by code, or lower, to meet the intent of code.*
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 R406.3, when compared to the *ERI reference design*.

### Table R406.4 Maximum Energy Rating Index

<table>
<thead>
<tr>
<th>Climate Zone</th>
<th>2015 IECC Energy Rating Index</th>
<th>2018 IECC Energy Rating Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>52</td>
<td>57</td>
</tr>
<tr>
<td>2</td>
<td>52</td>
<td>57</td>
</tr>
<tr>
<td>3</td>
<td>51</td>
<td>57</td>
</tr>
<tr>
<td>4</td>
<td>54</td>
<td>62</td>
</tr>
<tr>
<td>5</td>
<td>55</td>
<td>61</td>
</tr>
<tr>
<td>6</td>
<td>54</td>
<td>61</td>
</tr>
<tr>
<td>7</td>
<td>53</td>
<td>58</td>
</tr>
<tr>
<td>8</td>
<td>53</td>
<td>58</td>
</tr>
</tbody>
</table>

### Summary of ERI Path

- Mandatory Insulation levels (Backstop)
  - 2015 ERI 2009 IECC Insulation Table
  - 2018 ERI 2009 IECC Insulation Table
  - Hot water pipe insulation

- Specific ERI score per climate zone
  - 2015 ERI created per code defined RESNET process
  - 2018 ERI score created per ANSI/RESNET/ICC standard 301

- Other Normal Code compliance Mandatory/Prescriptive requirements
Features that can Impact the ERI score

(Lower the score)

• Mechanical equipment
  • High efficiency furnace
  • High efficiency AC
  • High efficiency water heater
• More R-value than required by the 2009 IECC
• House orientation with the ERI
• House tightness below 3 ACH50
• Duct leakage to the outside
• Duct location
• Whole house fan
• CFL or LED Lighting above 75%
• High efficiency appliances
• Solar
Will the ERI path be used?

- In 2015
  - 190,180 homes were HERS Rated
  - Average HERS Index 62

- In 2016
  - 206,583 homes were HERS Rated
  - Average HERS Index 61

- In 2017
  - 227,840 homes were HERS Rated
  - Average HERS Index 62

- HERS ≠ ERI

Code Compliance Paths

- Prescriptive Path
- UA Compliance Path
- Simulated Performance Path
- Energy Rating Index Path
Code Compliance Paths

Prescriptive Path  UA Compliance Path  Simulated Performance Path

Energy Rating Index Path

2015 ERI = 51
2018 ERI = 61
IECC Compliance Reality

<table>
<thead>
<tr>
<th>Compliance Comparison</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2018 UA Trade OFF</td>
<td>Pass By 4.1%</td>
</tr>
<tr>
<td>2015 UA Trade OFF</td>
<td>Pass by 6.2%</td>
</tr>
<tr>
<td>2018 Simulated Performance</td>
<td>Pass by 1.1%</td>
</tr>
<tr>
<td>2015 Simulated Performance</td>
<td>Pass by 0.5%</td>
</tr>
<tr>
<td>HERS ERI</td>
<td>76</td>
</tr>
<tr>
<td>2015 ERI</td>
<td>76 (required ERI 55 CZ 5)</td>
</tr>
<tr>
<td>2018 ERI</td>
<td>89 (required ERI 61 CZ 5)</td>
</tr>
</tbody>
</table>

Base House
- 2 story
- 2800 Square Feet
- Single Family Detached
- Conditioned basement

Why the Code ERI is diverging from the HERS ERI

Codified calculation methodology vs. continual maintenance ANSI Standard

- HERS ERI
  - Ventilation Rate based on ASHRAE 62.2-2013
  - Size adjustment factor and LED Lighting modeling example of continual maintenance

- 2015
  - In alignment with HERS ERI at the time of codification

- 2018
  - Ventilation Rate based on ASHRAE 62.2-2010
Which Pathway to use?

Home Energy Rating Certificate
Confirmed Report

HERS® Index Score: 47

Section R405 Simulated Performance Path HERS Index is a by product

Four Steps of IECC Performance Compliance using the Simulated Performance Path or the Energy Rating Index

Step 1
From Plan Analysis:
• Demonstrates that the proposed design will comply with the IECC.
• Determine the most cost effective way to comply with the IECC.
• Develop required permitting submittal documents.
• Assistance with other required documents such as air sealing details.

Step 2
Rough Inspection:
• Perform IECC required rough inspections for compliance, quality assurance, and builder risk.
• Inspections allow 3rd Party to generate final documentation that is needed to obtain the certificate of occupancy.
• Insulation, air barrier, windows, HVAC, Duct leakage, ventilation and more will be inspected.
• Action item reporting after each inspection.
Four Steps of IECC Performance Compliance
Simulated Performance Path or Energy Rating Index

Step 3

Final Inspection:
• Diagnostics - Blower door air tightness and duct leakage to outside.
• Attic and foundation insulation.
• Controlled whole house mechanical ventilation / Spot Ventilation.
• Action item reporting after each inspection.

Step 4

Modeling and Certification
• Making the from plans analysis address and lot/site specific including the details of what has been inspected at rough and final.
• Generate required code compliance certificates and reports for C.O.
• Homes using the Simulated Performance Path receive a cost compliance report, and other required reports.
• The HERS Index is a byproduct on code compliance using the SPP.

Agenda

- Intro
- Prescriptive Path
- UA Trade off Path
- Simulated Performance Path
- Energy Rating Index
- Process
- Builders Will Use the Simulated Performance Path

Change is Hard ... Change is Good... Change can be Made Easier
Robby Schwarz
EnergyLogic
Principal/Director of Builder Relations

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