Prescriptive Residential Energy Code Compliance

IRC Table N1102.1.2 (R402.1.2) Insulation and Fenestration Requirements by Component

<table>
<thead>
<tr>
<th>Climate Zone</th>
<th>Fenestration U-Factor b</th>
<th>Skylight U-Factor</th>
<th>Glazed Fenestration SHGC b</th>
<th>Ceiling R-Value</th>
<th>Wood Frame Wall R-Value</th>
<th>Mass Wall R-Value i</th>
<th>Floor R-Value</th>
<th>Basement Wall R-Value</th>
<th>Slab d R-Value and Depth</th>
<th>Crawl Space Wall R-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>0.32</td>
<td>0.55</td>
<td>NR</td>
<td>38</td>
<td>20 Or 13+5 h</td>
<td>13/17</td>
<td>30 g</td>
<td>15/19</td>
<td>10, 2 ft</td>
<td>15/19</td>
</tr>
</tbody>
</table>

NR=Not Required

Footnotes:

- a. R-values are minimums. U-Factors and solar heat gain coefficient (SHGC) are maximums. Where insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.

- b. The fenestration U-factor column excludes skylights. The solar heat gain coefficient (SHGC) column applies to all glazed fenestration.

- c. The first R-value applies to continuous insulation on the interior or exterior, the second R-Value to framing cavity insulation at the interior of basement wall; either insulation meets the requirements.

- d. R-5 shall be provided under full slab of heated slab in addition to the required slab edge R-values for slabs.

- g. Insulation sufficient to fill the framing cavity, R-19 minimum.

- h. The first value is cavity insulation, the second value is continuous insulation, so "13+5" means R-13 cavity insulation plus R-5 continuous insulation.

- i. The second R-value applies when more than half the insulation is on the interior of the mass wall.

- j. For residential log home building thermal envelope construction requirements see R402.6.

Energy Code Compliance

See the compliance options below. Plans must be submitted demonstrating energy code compliance.

1. **Option 1: Total UA Alternative Approach**
   A copy of the REScheck compliance report is attached to the plans. (This includes both the cover sheet and the inspection checklist.)

2. **Option 2: Prescriptive Component Approach**

3. **Option 3: Energy Rating Index (ERI).** Approved rating software tools defined in the ANSI/RESNET/ICC 301 standard will generate a report with proposed rating score and inspection checklist, required to be submitted. Maximum ERI Score - 68.

4. **Option 4: Other Simulated Performance**
   Software analysis completed and signed.

7/1/2023