The Touchstone Energy Home standards are designed to provide homeowners superior comfort and energy savings. Following these guidelines and working closely with your local energy advisor will help you achieve the most out of your new home.

**PROGRAM PROCESS:**
1) Contact your local Cooperative Energy Advisor (Please provide a copy of your blueprints)
2) Pre-drywall inspection (complete thermal bypass checklist) (Required)
3) Final inspection and testing (Required)

### Minimum Requirements

- **Ceiling insulation:** R-44 (cathedral ceiling: R-30)
- **Double pane windows:** Low E rating with 0.30 U-value or less
- **Wall insulation:** R-13

#### Insulation

<table>
<thead>
<tr>
<th>Section</th>
<th>R-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attic</strong></td>
<td>R-44</td>
</tr>
<tr>
<td><strong>Cathedral Ceilings</strong></td>
<td>R-30 (MAXIMUM 500 ft² OF TOTAL CEILING AREA OR 20% OF THE TOTAL INSULATED CEILING)</td>
</tr>
<tr>
<td><strong>Knee Walls</strong></td>
<td>R-13 w/ A FULLY SEALED AIR BARRIER INSTALLED ON THE ATTIC SIDE OF THE WALL</td>
</tr>
<tr>
<td><strong>Exterior Wall</strong></td>
<td>R-13</td>
</tr>
<tr>
<td><strong>Basement Wall</strong></td>
<td>R-10 (CONTINUOUS)/ R-13 (FRAMED CAVITY)</td>
</tr>
<tr>
<td><strong>Floor</strong></td>
<td>R-19 (CRAWLSPACE FLOOR MUST BE COVERED WITH 6 MIL VAPOR BARRIER AND MUST BE GLUED TO THE FOUNDATION WALLS AND GLUED AT THE OVERLAPS)</td>
</tr>
<tr>
<td><strong>Slab</strong></td>
<td>R-10 (2 FEET VERTICAL OR 2 FEET HORIZONTAL)</td>
</tr>
<tr>
<td><strong>Crawlspace Walls</strong></td>
<td>R-10 (CONTINUOUS)/ R-13 (FRAMED CAVITY)</td>
</tr>
</tbody>
</table>
## Ducts

Supply ducts in attics shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum of R-6.

## Windows

U-value <.30 (maximum 18% of wall square footage)

## Air Sealing

**Blower Door Test @50 Pascals**

Final air leakage must be tested to be less than 7 ACH (Air Changes Per Hour) @50 Pascals.

**Duct Leakage**

Joints and seams of duct systems shall be made substantially airtight by means of foil tape then a layer of mastic, or mastic tape.

- Leakage to outdoors ≤ 8 CFM per 100 ft² of conditioned space

**Exceptions:** Duct tightness test is not required if the air handler and all ducts are located within conditioned space.

## Recession Lighting

Recession lighting fixtures bordering unconditioned space must be ICAT (Insulation Contact Air Tight) rated.

90% of all lighting in the home must be CFL or LED.

## Ventilation

**Attic Ventilation**

Minimum attic ventilation should be one square foot per 150 ft² ceiling area.

**Mechanical Ventilation**

Whole house mechanical ventilation recommended.

## Mechanical Equipment

**HVAC**

Air source heat pumps must meet or exceed current

Ground source heat pump energy star* standards

*HVAC installer must supply load calculation

*Please contact your Co-op Energy Advisor for more details

**Water Heating**

Electric storage tank water heater (required)

Energy factor rating ≥ Federal DOE minimum

(Hot water circulating systems are prohibited)

(Instantaneous water heaters prohibited)

## Performance Path Option

A home that receives a HERS rating of ≤75, passes the thermal bypass checklist, the final inspection and the current Kentucky residential energy code may qualify as a Touchstone Energy home. Check with your local cooperative energy advisor to verify compliance.

*Electric Tank Storage Water Heater Required (Energy Factor Rating of ≥ current energy and water conservation standards established by Federal Department of Energy)

*Primary source of heat must be an Air Source Heat Pump or Geothermal

Revised 10/11/18