



Planning and
Community Development
Cynthiana - Harrison County - Berry
Planning Commission

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ENERGY CODE CHECKLIST FOR RESIDENTIAL CONSTRUCTION

(Required for all new residential buildings, additions, and other residential building permits as applicable)

The Commonwealth of Kentucky now requires the 2009 International Energy Conservation Code (IECC) be the energy code for all residential construction in Kentucky. The code sections are from Chapter 4 in the 2009 IECC.

Project Address:		Permit #
Owner/Agent:		Checked by
Phone:	Email:	Date
Project Type: <input type="checkbox"/> New Building <input type="checkbox"/> Addition <input type="checkbox"/> Renovation (Check one)		Method

Required Documentation with Permit Submittal

- Energy Compliance Documentation** – Choose one method. All methods must meet mandatory requirements.
 - Prescriptive** (402.1 through 402.3, 403.2.1 & 404.1 & mandatory requirements) USE THIS FORM (#1,2,3,4,5,6)
 - Trade Off** (402.1 through 402.3, 403.2.1 & 404.1 & mandatory requirements) USE THIS FORM (#1,2,3,4,6) and attach documentation to show compliance (i.s. REScheck must include compliance form, inspection checklist and certificate: www.energycodes.gov/REScheck --it's easy and free)
 - Performance** (405 and mandatory requirements) USE THIS FORM (#1,2,3,4)
- Mandatory Requirements** - All projects must meet the mandatory requirements of the IECC (401, 402.4, 402.5, 403.1, 403.2.2, 403.2.3, 403.9). COMPLETE ALL ITEMS (A through Q)

A. Building Thermal Envelope 402.4.1 Seal building from air infiltration	<input type="checkbox"/> Will Comply
B. Air Sealing and Insulation 404.4.2 Choose one method	<input type="checkbox"/> Blower Door <input type="checkbox"/> Visual Insp
C. Fireplaces 402.3 Wood burning have gasketed doors & outdoor combustion air	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
D. Fenestration Air Leakage 402.4.4 Windows, sliding doors, skylights	<input type="checkbox"/> $\leq 0.3 \text{ cfm/sf}$
E. Fenestration Air Leakage 402.4.4 Swinging Doors	<input type="checkbox"/> $\leq 0.5 \text{ cfm/sf}$
F. Recessed Lighting 402.4.5 IC Rated and air tight when in thermal envelope	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
G. Heating/Cooling Controls 403.1 Programmable t-stat for HVAC	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
H. Duct Sealing 403.2 Required if furnace/dust is outside of thermal envelope	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
I. Duct Testing 403.2.2 Required if furnace/duct is outside of thermal envelope	<input type="checkbox"/> Test 1 <input type="checkbox"/> Test 2 <input type="checkbox"/> N/A
J. Building Cavities 403.2.3 Bldg framing cavities shall not be used as supply ducts	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
K. Mechanical System Piping Insulation 403.3 R-3 Min for <math>< 105 \text{ deg}</math> or <math>< 55 \text{ deg}</math>	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
L. Circulating Hot Water System 403.4 R-3 Min & on/off switch	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
M. Mechanical Ventilation 403.5 Outdoor air intakes/exhaust require dampers	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
N. Equipment Sizing 403.6 HVAC sized per M1401.3 IRC	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
O. Systems serving multiple dwelling units 403.7 shall comply w/ Chapters 503 & 504	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
P. Snow Melt System Controls 403.8 Automatic Shut Off	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
Q. Pools 403.9 Pool Heaters, Time Switches, Pool Covers	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A

3. **Building Cross Section** – Required for all new buildings and additions. Additional documents may be required by the building official. Minimum (1) section required. For interior alterations include documents to illustrate code compliance.
4. **Floor Plan** –Required for all new buildings and additions. Floor plan must indicate thermal envelope, conditioned space/unconditioned spaces and heating system location.
5. **Prescriptive Requirements** –COMPLETE THIS TABLE, if prescriptive is chosen:

Building Components	Prescriptive Standard	Actual Value	Remarks
Insulation 402.2 Prescriptive Standard is Minimum R-Value			
Ceilings with attic spaces 402.2.1	R-38		R-38 for standard truss
Ceilings without attic spaces 402.2.2	R-30		Limited to 500sf or 20% of total insulated ceiling area, whichever is less
Wood Frame Wall	R-13		R-13 for interior cavity
Floors over unconditioned space 402.26	R-19		Floor Insulation shall maintain permanent contact with subfloor
Basement Walls 402.2.7	R-10 / R-13		R-10 continuous on the interior or exterior or R-13 for interior wall cavity
Slab-On-Grade Floors 402.2.8	R-10		Insulation depth shall be the depth of the footing
Crawl Space Walls 402.2.9	R-10 / R-13		R-10 continuous on the interior or exterior or R-13 for interior wall cavity
Fenestration 402.3 Prescriptive Standard is Maximum U-Factor			
Windows, Sliding Glass Doors, Swinging doors with 50% glazing	U-0.35		An area weighted average may be used to satisfy the U-factor requirements but must include all windows, skylight, glass doors & opaque doors. Provide documentation if this used.
Skylights	U-0.60		

The above table is based on wood frame construction and common building practices. If not address in the table above, please attach separate documentation to illustrate code compliance. Value based on Climate Zone 4 from Chapter 3 I the IECC

6. Other Prescriptive Requirements:

Duct Compliance 403.2.1 Supply Ducts in attic R-8min, all other ducts outside envelope R-6 min	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A
Lighting Equipment 404.1 A minimum of 50% of lamps permanently installed must Be high efficiency	<input type="checkbox"/> Will Comply <input type="checkbox"/> N/A

Notes:

- For further clarification on any of the above items, please consult the International Conservation Code (IECC). The IECC may be purchased through the International Code Council at www.icsafe.org or 1-88-ICC-SAFE
- For thermally isolated sunroom (greater than 40% glazing area of walls and roof) addition, refer to the IECC.
- For free, updated energy references, energy training and energy code info, visit www.energycodes.goc