



# Jefferson City, Missouri Professionals

The City of Jefferson City has adopted the 2009 International Energy Conservation Code (2009 IECC) as the baseline code for residential buildings in the city. You can use the checklist below to verify key residential code requirements that are easy to identify.

While this checklist doesn't include every requirement, it serves as a helpful guide for professionals as they seek or verify compliance with the local residential energy code in the field. Please refer to your local published energy code for complete documentation of all requirements and consult your local code official for questions and clarification. In Missouri, building energy codes are adopted at the local level, so these requirements may not apply to all jurisdictions in the state.

## Mandatory Requirements:

### Energy Certificate

- Energy Certificate located on circuit breaker box is completed and signed

### Air Sealing

- All holes between floors and through exterior walls/ceilings have been sealed with caulk or foam, in accordance with table 402.4.2
- Air leakage may be either tested to be  $\leq 7$  **ACH50** or visually inspected

### Ducts

- All ducts are sealed with approved materials (e.g. mastic or UL 181 tape) - duct tape is not acceptable
- All ducts outside conditioned space are tested and verified to have leakage to the outdoors  $\leq 8$  cfm/100 sq ft or total duct leakage  $\leq 12$  cfm/100 ft<sup>2</sup>

### Heating & Cooling

- Controls: Programmable thermostat installed
- Equipment sized per ACCA Manuals S & J

### Lighting

- Minimum of **50%** high-efficacy lamps installed
- Recessed lighting in thermal envelope IC-rated and air tight

### Building Cavities

- Building framing cavities shall not be used as supply ducts

### Mechanical Ventilation

- Outdoor air intakes and exhausts shall have automatic or gravity dampers

### Windows & Doors

- Windows, skylights and sliding glass doors infiltration rate  $\leq 0.3$  cfm/ft<sup>2</sup>
- Swinging doors infiltration rate  $\leq 0.5$  cfm/ft<sup>2</sup>

### Other Requirements

- Wood-burning fireplaces shall have gasketed doors and outdoor combustion air
- Mechanical system piping insulated to min R-3 for  $>105^\circ$  F or  $<55^\circ$  F
- Circulating hot water system piping insulated to min R-2 and on/off switch installed

## Energy Code Compliance Paths:

**Must only follow one method. See additional requirements on back.**

- Prescriptive Method:** Comply with all mandatory and prescriptive requirements and complete checklist on the back of this page
- Total UA Method:** Comply with all mandatory requirements and submit documentation to show compliance with UA trade-offs (e.g. DOE REScheck)
- Simulated Performance Alternative:** Comply with all mandatory requirements and submit energy analysis showing proposed design will have an energy cost  $\leq$  the standard reference design.



Prescriptive Method Requirements

Code Section	Building Components	Prescriptive Standard	Proposed Value	Remarks
<b>Insulation (R402.2) Prescriptive Standard is a Minimum R-Value</b>				
R402.2.1	Ceilings with Attic Spaces	R-38		R-38 for standard truss, can be reduced to R-30 with Raised Heel/Energy Truss
R402.2.2	Ceilings without Attic Spaces	R-30		Limited to 500 SF OR 20% of the total insulated ceiling area, whichever is less
Table R402.1.1	Wood Frame Wall	R-13		R-13 insulation for interior cavity
R402.2.6	Floors over unconditioned space	R-19		Floor insulation shall maintain permanent contact with subfloor decking
R402.2.7	Conditioned Basement Walls	R-10 or R-13		R-10 continuous insulation on the interior or exterior, or R-13 for interior wall cavity
R402.2.8	Slab-on-grade floors	R-10, 2 ft		Insulation shall be from top of slab to 2 feet below grade
R402.2.9	Conditioned crawl space walls	R-10 or R-13		R-10 continuous insulation on the interior or exterior, or R-13 for interior wall cavity
<b>Fenestration (R402.3) Prescriptive Standard is Maximum U-Factor</b>				
R402.3.1	Windows, glass, opaque and 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, skylights, glass doors and opaque doors (provide documentation).
R402.3.1	Skylights	U-0.60		
<b>Other Prescriptive Requirements</b>				<b>Proposed Value</b>
Duct Insulation (R403.2.1): Supply ducts in the attic shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum of R-6. Exception: Ducts inside conditioned space.				Insulation Level _____ <input type="checkbox"/> N/A
Duct Tightness Test (R403.2.2) Required if furnace or any duct is outside of the thermal envelope				<input type="checkbox"/> Tested; Results: _____ <input type="checkbox"/> N/A
Attic Hatches (R402.2.3): Access doors to attic must be weather-stripped and insulated to a level equivalent to insulation levels of surrounding surfaces				Insulation Level _____ <input type="checkbox"/> N/A

Total UA Method Requirements

- All mandatory and prescriptive requirements must be met. Include documentation to demonstrate compliance with the UA Tradeoff method. REScheck or other compliance software submittal must include completed compliance form, inspection checklist and certificate using 2009 IECC levels.

Simulated Performance Requirements

- All mandatory requirements must be met. Submit an energy cost analysis report which demonstrates that the proposed design (as built) home is more efficient than the standard reference design home (table R405.5.2(1)). See section R405 for additional details.

Prepared by

