

NEW INSPECTION REQUIREMENTS FOR RESIDENTIAL ENERGY EFFICIENCY

(Based on the 2006 International Energy Conservation Code)

BUILDING THERMAL ENVELOPE REQUIREMENTS FOR BLOUNT COUNTY

WINDOWS AND INSULATION					FOUNDATION TYPE			
Window <i>U</i> -factor	Skylight <i>U</i> -factor	Ceiling R-value	Wood Frame Wall R-value	Mass Wall R-value	Floor R-value	Basement Wall R-value	Slab R-value and Depth	Crawl Space Wall R-value
0.40	0.60	R-38	R-13	R-5	R-19	R-10/13	R-10, 2 ft	R-10/13

1. Construction must meet all minimum requirements for the building thermal envelope listed above.
2. An additional insulation inspection will be required prior to hanging sheetrock. This is to verify R-values.
3. Must provide a permanent certificate posted in the electrical panel that shows R-values of insulation in or on ceiling/roof, walls, foundation (slab, basement wall, crawlspace wall and/or floor) and ducts outside conditioned spaces; U-factors for windows and doors; the solar heat coefficient of windows and doors; and the type and efficiency of heating, cooling and service water heating equipment. This can be filled out by the builder or design professional. Also, blown attic insulation will be required to have markers placed at least one for every 300 square feet indicating the number of inches located throughout the attic space. Request that these be installed for rough-in inspection.
4. Basement and crawlspace floor systems must be insulated to an R-19, as listed above, unless they become part of the conditioned space. In which case, the floor systems are no longer required to be insulated. However, the crawlspace or basement walls must be insulated to an R-10 continuous insulation or R-13 wall cavity insulation.
5. Must make accommodations for air leakage. This means that all joints, penetrations, windows, doors, utility penetrations, walls and ceilings separating a garage from conditioned spaces, behind tubs and showers on exterior walls and all sources of air infiltration will be required to be sealed.
6. Slab-on-grade perimeter insulation is optional in Blount County due to termite infestation conditions. If installed, it must comply with 402.2.7.
7. Supply and return ducts must be insulated to R-8. Ducts within the floor system shall be insulated to R-6. Ducts within the thermal envelope do not require insulation.
8. Mechanical system piping capable of carrying fluids above 105F or below 55F shall be insulated to R-2.
9. All outdoor intakes and exhausts shall have automatic gravity dampers that close when not in operation.

A copy of the code can be found on our website www.blounttn.org/bldgcodes.