

energy right New Homes Plan  
**Minimum Prescriptive Standards\***  
 Zone 4 (East Tennessee and North Georgia)  
 Single Family and Multifamily Dwellings - Wood Framed Construction\*\*

Thermal Envelope Category (7)	<i>energy right</i>	<i>energy right Platinum</i>
<b>Ceilings separating conditioned and non-conditioned area:</b>		
Flat Ceiling in Attic	R-38 (1)	R-38 (1)
Cathedral Ceiling	R-30	R-30
<b>Walls separating conditioned and non-conditioned area:</b>		
Wood Frame Walls	R-13	R-13
Attic Walls	R-19, or R-13 + R4 insulated sheathing	R-19, or R-13 + R4 insulated sheathing
Glazing as a % of gross wall area	na	12.5
Max U-Value of Glazing (8)	0.50	0.40
Max SHGC	na	0.45
Basement Wall - Below Grade (2) (5)	R 10/13 (7)	R 10/13 (7)
<b>Floors separating conditioned and non-conditioned area (4):</b>		
Floor over non-conditioned space	R-19	R-19
Floors extended over outside air	R-19	R-19
Slab-on-grade (3)	R-5, 2 ft depth	R-10, 2 ft depth
Crawl Space Walls, no floor insulation	R-10/13 (7)	R-10/13 (7)
<b>HVAC and Water Heating</b>		
Minimum Efficiency for package heat pump	13 SEER (11.5 EER) / 7.7 HSPF	14 SEER (11.5 EER) / 8.0 HSPF
Minimum Efficiency for split heat pump	13 SEER (11.5 EER) / 7.7 HSPF	14 SEER (11.5 EER) / 8.2 HSPF
Water Heater Energy Factor (EF) (9)	.92 for 40 gal / .90 for 50 gal / .86 for 80 gal	.92 for 40 gal / .90 for 50 gal / .86 for 80 gal
Ducts in non-conditioned area	R 6 or greater	R 6 or greater
<b>Infiltration/Air Leakage</b>	All joints, seams, penetrations (site built windows, doors, and skylights), openings between window and door assemblies and their respective jambs and framing, and other sources of air leakage (infiltration and exfiltration) through the building envelope shall be caulked, gasketed, weatherstripped, wrapped or otherwise sealed to limit uncontrolled air movement	

Conditional Statements:

- (1) R-38 ceiling may be reduced to R-30 if the insulation requirement is obtained over the exterior wall top plate at the eaves.
- (2) Conditioned basement walls require insulation from top of wall to floor to 10 feet below grade or to the basement floor - whichever is less.
- (3) Slab-on-grade insulation waived in areas subject to heavy termite infestation areas; increase insulation in other areas to offset.
- (4) Insulate either 1) floors over non-conditioned space 2) slab or 3) crawl space wall as applicable.
- (5) Basement walls refer to walls below grade/frost line. Walls in a basement area exposed to ambient air should be treated as above grade walls. Where the top of the wall is above grade, the above grade R-Value should extend at least 1 foot below frost line. The first R Value applies to continuous insulation, the second to framing cavity insulation: either meets the requirement.
- (6) Categories of the Thermal Envelope refer to building parameters that separate conditioned areas from non-conditioned areas.
- (7) The first R value applies to continuous insulation, the second to framing cavity insulation: either meets the requirement.
- (8) Up to 15 square feet of the allowable glass area may be exempted from U factor and SHGC requirements. One opaque door assembly is also exempt.
- (9) Water heater must meet NAECA minimum.

\* Some homes built to this prescriptive standard, (particularly one level homes with a high ratio of length to width) may not achieve a HERS index of 93

\*\* Steel framed construction requires additional insulation to meet equivalent standards - see Steel Framed Charts

*energy right* Prescriptive Standards reflect 2004 IECC codes.