

energy right New Homes Plan
TVA Approved Prescriptive Minimum
Single Family and Multifamily Dwellings - Wood Framed Construction**
Classification: energy right *

Thermal Envelope Category ⁽⁷⁾	Zone 3	Zone 4	Zone 5
Ceilings separating conditioned and non-conditioned area:			
Flat Ceiling in Attic	R-30	R-38 ⁽¹⁾	R-38 ⁽¹⁾
Cathedral Ceiling	R-30	R-30	R-30
Walls separating conditioned and non-conditioned area:			
Wood Frame Walls	R-13	R-13	R- 13
Attic Walls	R-19 or R 13 with R4 insulated sheathing	R-19 or R 13 with R4 insulated sheathing	R-19 or R 13 with R4 insulated sheathing
Max U-Value of Glazing ⁽⁸⁾	0.55	0.50	0.45
Basement Wall - Below Grade ^{(2) (5)}	R 0	R 10/13 ⁽⁷⁾	R 10/13 ⁽⁷⁾
Floors separating conditioned and non-conditioned area (4):			
Floor over non-conditioned space	R-19	R-19	R-19
Floors extended over outside air	R-19	R30	R-30
Slab-on-grade ⁽³⁾	R 0	R-5, 2 ft depth	R-5, 2 ft depth
Crawl Space Walls, no floor insulation	R-4/13 ⁽⁷⁾	R-10/13 ⁽⁷⁾	R-10/13 ⁽⁷⁾
HVAC and Water Heating.			
Minimum HVAC Efficiency [SEER/HSPF]	13 SEER/7.7 HSPF	13 SEER/ 7.7 HSPF	13 SEER/ 7.7 HSPF
Water Heater	NAECA min	NAECA min	NAECA min
Ducts/non-conditioned area	R 6 or greater	R 6 or greater	R 6 or greater
Infiltration/Air Leakage			
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. Duct work seams and joints shall be airtight and properly taped and sealed with mastic.			
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 requirement. One opaque door assembly is also exempt.			

Footnotes

* Some homes built to this prescriptive standard, may not achieve a HERS index of 93

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

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TVA Approved Prescriptive Minimum
Single Family and Multifamily Dwellings - Wood Framed Construction**
Classification: *Platinum energy right* *

Thermal Envelope Category ⁽⁷⁾	Zone 3	Zone 4	Zone 5
Ceilings separating conditioned and non-conditioned area:			
Flat Ceiling in Attic	R-30	R-38 ⁽¹⁾	R-38 ⁽¹⁾
Cathedral Ceiling	R-30	R-30	R-30
Walls separating conditioned and non-conditioned area:			
Wood Frame Walls	R-13	R-13	R-19 or 13 + 4 (Insulated sheathing)
Attic Walls	R-19 or 13 + 4 (Insulated sheathing)	R-19 or 13 + 4 (Insulated sheathing)	R-19 or 13 + 4 (Insulated sheathing)
Glazing as a % of gross wall area	13.5	12.5	12
Max U-Value of Glazing ⁽⁸⁾	0.40	0.40	0.40
Max SHGC	0.40	0.45	0.55
Basement Wall - Below Grade ^{(2) (5)}	R 0	R 10/13 ⁽⁷⁾	R 10/13 ⁽⁷⁾
Floors separating conditioned and non-conditioned area (4):			
Floor over non-conditioned space	R-19	R-19	R-30
Floors extended over outside air	R-19	R-30	R-30
Slab-on-grade ⁽³⁾	R 0	R-10, 2 ft depth	R-10, 2 ft depth
Crawl Space Walls, no floor insulation	R-4/13 ⁽⁷⁾	R-10/13 ⁽⁷⁾	R-10/13 ⁽⁷⁾
HVAC and Water Heating.			
Minimum HVAC Efficiency packaged	14 SEER/8.0 HSPF (11.5 EER)	14 SEER/8.0 HSPF (11.5 EER)	14 SEER/8.0 HSPF (11.5 EER)
Minimum HVAC Efficiency split	14 SEER/8.2 HSPF (11.0 EER)	14 SEER/8.2 HSPF (11.0 EER)	14 SEER/8.2 HSPF (11.0 EER)
Water Heater	NAECA min	NAECA min	NAECA min
Ducts/non-conditioned area	R 6 or greater	R 6 or greater	R 6 or greater
Infiltration/Air Leakage	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. Duct work seams and joints shall be airtight and properly taped and sealed with mastic.		
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Footnotes

* Some homes built to this prescriptive standard, may not achieve a HERS index of 85

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