

			cz 7	cz 10	cz 14	cz 15	Comments	
<b>Insulation (1)<sup>A</sup></b>	Roofs / Ceilings		U 0.031 R 30	U 0.031 R 30	U 0.025 R 38	U 0.025 R 38	or lower ----- or higher	
	Walls	Above Grade	2x4 Framed (2)	U 0.065 R 15+4 or R 13+5	U 0.065 R 15+4 or R 13+5	U 0.065 R 15+4 or R 13+5	U 0.065 R 15+4 or R 13+5	or lower ----- or higher
			Mass Wall Interior (3)	U 0.070 R 13	U 0.070 R 13	U 0.070 R 13	U 0.070 R 13	or lower ----- or higher
		Mass Wall Exterior (3)	U 0.125 R 8	U 0.125 R 8	U 0.125 R 8	U 0.125 R 8	or lower ----- or higher	
		Below Grade	Below Grade Interior (3)	U 0.070 R 13	U 0.070 R 13	U 0.070 R 13	U 0.070 R 13	or lower ----- or higher
	Below Grade Exterior (3)		U 0.200 R 5	U 0.200 R 5	U 0.100 R 10	U 0.100 R 10	or lower ----- or higher	
	Floors	Slab Perimeter		NR	NR	NR	NR	
		Raised		U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	or lower ----- or higher
			Concrete Raised	U 0.269 R 0	U 0.269 R 0	U 0.092 R 8	U 0.138 R 4	or lower ----- or higher
	<b>Radiant Barrier</b>			REQ	REQ	REQ	REQ	
<b>Roofing Products</b>	Low-sloped	Aged Solar Reflectance	NR	NR	NR	0.63		
		Thermal Emittance	NR	NR	NR	0.75		
	Steep-sloped	Aged Solar Reflectance	NR	0.20	0.20	0.20		
		Thermal Emittance	NR	0.75	0.75	0.75		
<b>Fenestration</b>	Maximum U factor (4)		0.32	0.32	0.32	0.32	or lower	
	Maximum SHGC (5)		0.25	0.25	0.25	0.25	or lower	
	Maximum Total Area		20%	20%	20%	20%	or lower	
	Maximum West Facing Area		5%	5%	5%	5%	or lower	
<b>Space Heating (8) (9)</b>	Electric-Resistance Allowed		No	No	No	No		
	If gas, AFUE		MIN	MIN	MIN	MIN	Central furnace: $\geq 225,000$ kBtuh 80% AFUE or higher <sup>B</sup>	
	If Heat Pump, HSPF (6)		MIN	MIN	MIN	MIN	Single-phase air source Split: <65 kBtuh 8.2 HSPF Packaged: <65 kBtuh 8.0 HSPF or higher <sup>B</sup>	
<b>Space Cooling</b>	SEER		MIN	MIN	MIN	MIN	Central air conditioner or central air source heat pump Split: <45 kBtuh 14.0 SEER/12.2 EER $\geq 45$ but <65 kBtuh 14 SEER /11.7 EER Packaged: <65 kBtuh 14 SEER/ 11 EER or higher <sup>B</sup>	
	Refrigerant Charge Verification or Charge Indicator Display		NR	REQ	REQ	REQ		
	Whole House Fan (7)		NR	REQ	REQ	NR		
<b>Central System Air Handlers</b>	Central Fan Integrated Ventilation System Fan Efficacy		REQ	REQ	REQ	REQ		
<b>Ducts (10)</b>	Duct Insulation		R 6	R 6	R 8	R 8	or higher	
<b>Water Heating</b>	All Buildings		Gas Storage $\leq 55$ gallons; $\leq 75$ Btuh				Jan 1, 2014: 0.67-(0.0019*V) <sup>C</sup> EF or higher Apr 16, 2015: 0.675-(0.0015*V) <sup>C</sup> EF or higher	

A For numbered notes (#), see the reverse side of this sheet.

B See the tables at the end of the quick reference for information on other common system types. For information about other HVAC equipment efficiency requirements, refer to Chapter 4 of the 2013 Residential Compliance Manual.

C V= rated storage volume of water heater



## Numbered Footnotes from Compliance Baseline Table on Front

- (1) The U-factors/R-values shown for ceiling, wall and raised floor insulation are for wood-frame construction with insulation installed between the framing members. For alternative construction assemblies, see Section 150.1(c)1A, B and C.
- (2) U-factors can be met by cavity insulation alone or with continuous insulation alone, or with both cavity and continuous insulation that results in a U-factor equal to or less than the U-factor shown. "R-15+4" means R-15 cavity insulation plus R-4 continuous insulation. Any combination of cavity insulation and/or continuous insulation that results in a U-factor equal to or less than 0.065 is allowed, such as R-13+5.
- (3) Mass wall has a thermal heat capacity greater than or equal to 7.0 Btuh-ft<sup>2</sup>. Below grade "interior" denotes insulation installed on the inside surface of the wall. Below grade "exterior" denotes insulation installed on the outside surface of the wall.
- (4) The installed fenestration products shall meet the requirements of Section 150.1(c)3.
- (5) The installed fenestration products shall meet the requirements of Section 150.1(c)4.
- (6) HSPF means "heating seasonal performance factor."
- (7) When whole house fans are required (REQ), only those whole house fans that are listed in the Appliance Efficiency Directory may be installed. Compliance requires installation of one or more WHFs whose total airflow CFM is capable of meeting or exceeding a minimum 2 cfm/square foot of conditioned floor area per Section 150.1(c)12.
- (8) A supplemental heating unit may be installed in a space served directly or indirectly by a primary heating system, provided that the unit thermal capacity does not exceed 2 kilowatts or 7,000 Btuh and is controlled by a time-limiting device not exceeding 30 minutes.
- (9) Furnaces shall have an electrical standby mode power consumption and electrical off mode power consumption not more than the following:
  - Non-weatherized gas furnaces (not including mobile home furnaces) ..... 10W
  - Non-weatherized oil-fired furnaces (not including mobile home furnaces) ..... 11W
  - Electric furnaces..... 10WCentral air conditioners and central air conditioning heat pumps manufactured on or after January 1, 2015, shall have an average off mode electrical power consumption of:
  - Split-system air conditioners ..... 30W
  - Split-system heat pumps..... 33W
  - Single-package air conditioners ..... 30W
  - Single-package heat pumps..... 33W
  - Small-duct, high-velocity systems ..... 30W
  - Space-constrained air conditioners..... 30W
  - Space-constrained heat pumps ..... 33W
- (10) Duct sealing is a Mandatory Requirement in all climate zones, as confirmed through field verification and diagnostic testing. See Section 150.0(m)11.

