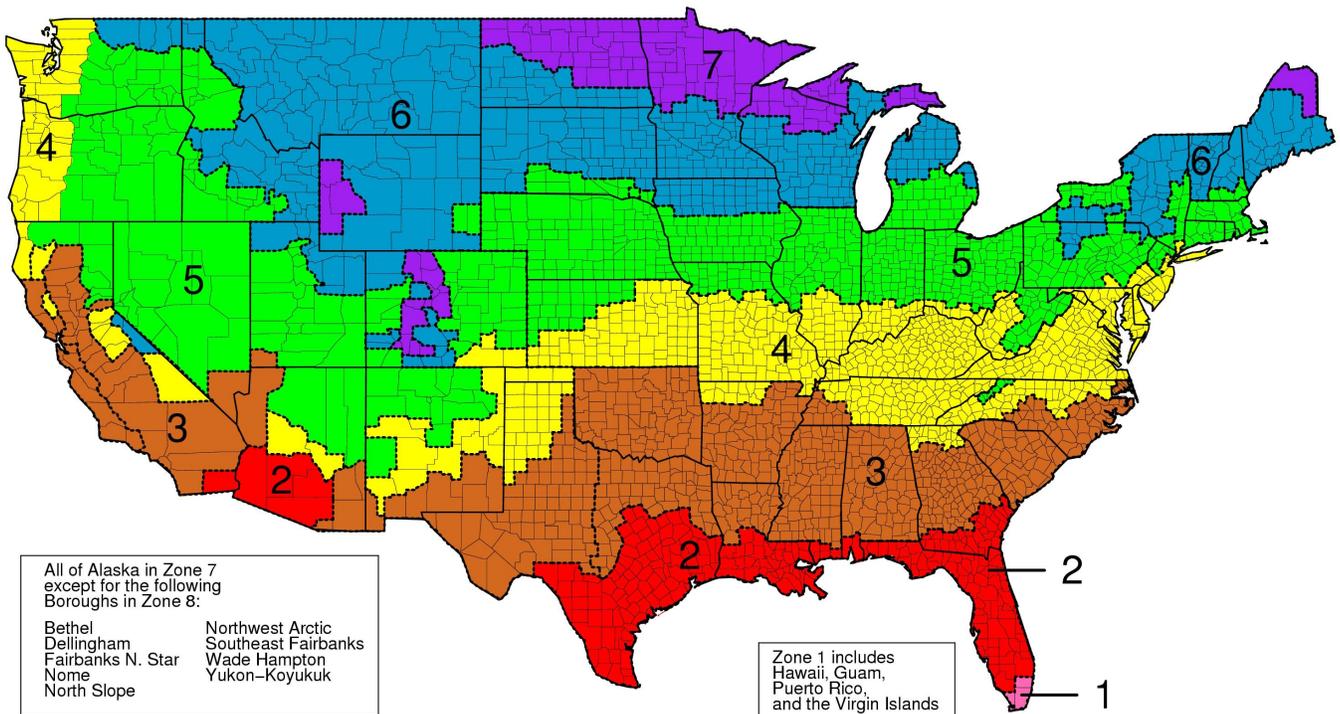




2006 IECC Prescriptive Requirements

[2006 IECC]

The 2006 IECC is very different from prior versions of the IECC. Compliance with [REScheck](#) is more difficult for many homes, but understanding the prescriptive requirements can help you determine what tradeoffs are available.



The 2006 IECC has been completely redesigned, and several of the new code characteristics may cause your house to fail. The most important difference between earlier editions and the new edition is that the 2006 IECC envelope requirements are not coupled to the home's glazing area percentage. A home with modest glazing area, say 13% of floor area, will likely require a more efficient envelope for 2006 IECC compliance. Conversely, a home with larger glazing area, say 20% of floor area, may achieve 2006 IECC compliance with less insulation.

The 2006 IECC also implements a new climate zone system. The new system introduces more homogeneity across climates, resulting in less variation in the envelope requirements from location to location. Therefore, some locations have slightly different (higher or lower) efficiency requirements under the 2006 IECC than under the previous codes.

The 2006 IECC requires the following insulation values:

Climate Zone	Fenestration U-factor	Skylight U-factor (2)	Glazed Fenestration SHGC	Ceiling R-value	Wood Frame Wall R-value	Mass Wall R-value	Floor R-value	Basement Wall R-value (3)	Slab R-value, Depth (4)	Crawlspace Wall R-value (3)
1	1.20	0.75	0.40	R-30	R-13	R-3	R-13	R-0	R-0	R-0
2	0.75	0.75	0.40	R-30	R-13	R-4	R-13	R-0	R-0	R-0



3	0.65	0.65	0.40 (5)	R-30	R-13	R-5	R-19	R-0	R-0	R-5/13
4 except marine	0.40	0.60	NR	R-38	R-13	R-5	R-19	R-10/13	R-10, 2 ft	R-10/13
5 and marine 4	0.35	0.60	NR	R-38	R-19 or 13+5 (7)	R-13	R-30 (6)	R-10/13	R-10, 2 ft	R-10/13
6	0.35	0.60	NR	R-49	R-19 or 13+5 (7)	R-15	R-30 (6)	R-10/13	R-10, 4 ft	R-10/13
7 and 8	0.35	0.60	NR	R-49	R-21	R-19	R-30 (6)	R-10/13	R-10, 4 ft	R-10/13

IECC 2006 Table 402.1.1 Insulation and Fenestration Requirements by Component (1)

1. *R-values are minimums. U-factors and SHGC are maximums. R-19 shall be permitted to be compressed into a 2x6 cavity.*
2. *The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.*
3. *The first R-value applies to continuous insulation, the second to framing cavity insulation; either insulation meets the requirement.*
4. *R-5 shall be added to the required slab edge R-values for heated slabs.*
5. *There are no SHGC requirements in the Marine zone.*
6. *Or insulation sufficient to fill the framing cavity, R-19 minimum.*
7. *"13+5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25% or less of the exterior, insulating sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25% of exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.*

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