

## Comparison of IECC 2006 with IECC 2015

Table 2 compares some of the requirements of the 2006 and 2015 versions of the IECC. See also Appendix 1 and Appendix 2 for more details.

**Table 2. Highlights of IECC Requirements – Non-residential and High-rise Residential**

	2006 IECC	2015 IECC
<b>Roof</b> – insulation above deck	R-15	R-25 (group R) R-20 (others)
<b>Roof</b> – metal building	R-19 + R-10	R-19 + R-11
<b>Roof</b> – attic or other	R-30	R-38
<b>Wall</b> – mass (CMU or concrete)	R-0	R-5.7
<b>Wall</b> – metal building	R-13	R-13 + R6.5
<b>Wall</b> – metal frame	R-13	R-13 + R-5 *
<b>Wall</b> – wood frame and other	R-13	R-13 + R3.8 or R-20 *
<b>Low-slope roof membrane</b>	No requirement	Aged reflectance $\geq 0.55$ + aged emittance $\geq 0.75$ , or aged reflectance $\geq 0.64$ (exceptions available)
<b>Windows</b> – maximum area	40%	30% of gross wall area (40% with daylighting control)
<b>Windows</b> – solar heat gain coefficient (SHGC)	$\leq 0.25$ if projection factor $< 0.25$ . $\leq 0.33$ if projection factor 0.25- 0.5. $\leq 0.40$ if projection factor $\geq 0.5$ .	$\leq 0.25$ if projection factor $< 0.2$ . $\leq 0.30$ if projection factor 0.2-0.5. $\leq 0.40$ if projection factor $\geq 0.5$ .
<b>Windows</b> – U-factor	1.20	0.50 fixed fenestration 0.65 operable fenestration 1.10 entrance doors
<b>Skylights</b> – minimum area	No requirement	Skylights and daylight responsive controls required for certain spaces $\geq 2,500$ ft <sup>2</sup> with ceiling height $\geq 15$ ft.
<b>Skylights</b> – maximum area	3%	3% (5% with daylighting controls)
<b>Skylights</b> – solar heat gain coefficient (SHGC)	0.40 glass, 0.35 plastic	0.35 (0.60 with daylighting control)
<b>Skylights</b> – U-factor	1.60 glass, 1.90 plastic	0.75 (0.90 with daylighting control)

Table 3 highlights some differences between the 2006 and 2015 IECC. There are few changes to the prescriptive envelope requirements for low-rise residential buildings. The most significant changes are the addition of air leakage testing requirements for the overall house and for air conditioning ducts. A requirement for high-efficacy lighting is also new in 2015.

**Table 3. Highlights of IECC Requirements – Low-rise Residential**

	<b>2006 IECC</b>	<b>2015 IECC</b>
<b>Roof</b> – wood frame	R-30*	R-30*
<b>Roof</b> – metal frame	R-38*	R-38*
<b>Wall</b> – mass (CMU or concrete)	R-3	R-3 ext. or R-4 int.
<b>Wall</b> – metal frame	R-13 + R-5 *	R-13 + R-4.2 *
<b>Wall</b> – wood frame and other	R-13	R-13
<b>Floor</b> – wood frame	R-13	R-13
<b>Floor</b> – metal frame	R-19	R-19
<b>Windows</b> – max. SHGC	0.25	0.25
<b>Skylights</b> – max. SHGC	0.30	0.30
<b>Skylights</b> – U-factor	0.75	0.75
<b>Air leakage testing</b>	None	Blower door test required
<b>Duct leakage testing</b>	None	Duct blaster test required
<b>Lighting</b>	None	> 75% high-efficacy