Proponent: Martha VanGeem, Consulting Engineer, representing self (martha.vangeem@gmail.com)

Revise as follows:

605.1.1 Insulation and fenestration criteria. The building thermal envelope shall exceed the requirements of Tables C402.1.2 and C402.3 of the International Energy Conservation Code by not less than 10 percent. Specifically, for purposes of compliance with this code, each U-factor, C-factor, F-factor and SHGC in the specified tables shall be reduced by 10 percent to determine the prescriptive criteria for this code. Where Table C402.2 of the International Energy Code provides for no requirement (NR) for the R-value of an assembly, the U-factor is not required to be reduced. In Sky Type “C” locations specified in Section 808.4, the skylights shall not exceed 5 percent of the building roof area.

Reason: This modification is needed for assemblies that do not require insulation in the IECC. For warm climates, the unheated slab-on-grade, floor, and below grade wall R-value is designated “NR” (no requirement) in the IECC. No insulation is required for these assemblies. However, a U-factor is provided for use in trade-off paths. In these cases, reducing the U-factor by 10% would mean adding a sliver of insulation. This would not be cost effective since applying the first level of insulation has a significant cost. Insulating slabs in these warm climates is problematic for termite inspection. Adding insulation below grade is not cost-effective in these warm climates because it negates the cooling effect of the ground in these climates. Adding insulation below floors in these warm climates is not cost-effective and is often the cause of moisture problems.

Cost Impact: Will not increase the cost of construction

Analysis: The International Energy Conservation Code tables C402.1.2, C402.3 and C402.2 referenced in the text of this proposal are numbers for the 2012 Edition. Due to significant changes approved for the 2015 IECC, the table numbers for the 2015 Editions will be C402.1.4, C402.4 and C402.1.3, respectively.