DOE draft proposal for 2015 IECC to improve building efficiency

The summary of CA-12 is:

Re-Roofing (C101.4.3).
Add criteria to ensure adding insulation is required at the time a building is re-roofed.

The proposed new text:

C101.4.3.1 Reroofing. All roof assemblies that are a component of the building thermal envelope of an existing building shall be insulated in accordance with Section C402.2.1 when the roof assembly is re-roofed.

PIMA supports this much needed code clarification. We believe that the intent of the code is to require compliance to the roof insulation requirements in C402.2.1, but that the 2012 IECC language is confusing. The DOE draft proposal adds the important scoping trigger to require roof insulation be addressed when the roof assembly is part of the building thermal envelope.

It is important that the IECC be amended to include specific and clear guidance about reroofing to ensure that this infrequent opportunity to enhance the thermal resistance of the roof assembly is not missed. PIMA is aware that the EECC comment on this issue supports the concept and also raises some suggested scoping issues. We have been active in supporting similar clarifications at ASHRAE and within state adoptions, and are pleased that the DOE understands the need for this clarification. We further offer our assistance in developing the appropriate code text.

The existing building stock provides a tremendous opportunity to immediately reduce building energy consumption in the US. Weatherization of thermal envelopes for existing structures to upgrade insulation levels can be challenging, but the obvious advantage of including additional insulation in the roof envelope during the reroofing process provides improved performance with lower incremental cost.