
Dear DOE,

Please change Energy Star standards for Windows and Doors.

First, the thermal transmission standard is ridiculously low. European-manufacture windows competitively priced with US windows have whole window values of better than U-.14. This performance standard is twice as high as what you propose. US window manufacturers can easily manufacture such windows. Some of them already are! Requiring a higher standard that changed then entire market would not punish any particular manufacturers. It would lead to new investment in technology and assembly techniques that would create needed economic activity. As the entire window and door industry adopted the new standard, the prices on high-performance windows and doors would drop quickly. The energy savings would be incredible. This is as simple as raising CAFÉ standards for US-manufactured automobiles. In the words of Nike, “Just Do It!”

If you are unwilling to do this for all zones, then at least please consider doing so for Northern climates.

Second, a blanket SHGC limit is bad policy for two reasons: First, it helps perpetuate the common misconception that there's a “miracle” glass product that can adequately control cooling loads, regardless of orientation, glazing percentage and shading (or lack thereof.) Second, it punishes good design practice by disqualifying windows with a higher SHGC, even if they are oriented and shaded to the point that they are a net positive in the energy balance. As the draft report itself states: “DOE has retained limited tradeoffs in this new Northern Zone, in recognition of the benefits of higher solar gain where orientation and conditions are optimal.”

Proper orientation, shading and glazing balance benefit all buildings in which they are successfully implemented. The revised draft of the DOE Report recognizes the benefits of solar heat gain in Northern climates, but not in other zones, including the entire state of California.

Again, please consider adjusting your standard so that it rational for each climate zone.

Third, there is no mention of an air tightness (infiltration) requirement. Current infiltration testing and reporting (NFRC and AAMA) is OPTIONAL, and inadequate, to ensure that an Energy Star window, door or skylight product is actually energy efficient. Presumably no one would suggest labeling fenestration products with holes through them as energy efficient, yet this is exactly what is being allowed to happen.

"Energy Star" has significant impact in society as the "official model" for energy efficiency and the basis for many policies and programs. Please reconsider the standards.
Cut the heat transmission limit in half (at least for windows in certain zones), either eliminate the SHGC limit or adjust it for climate zone, and impose an infiltration limit that applies in all climate zones.

Thank you.

Sincerely,

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