Updating Solar Heat Gain Coefficients in the HERS Guidelines

Bill Prindle
Deputy Director
American Council for an Energy-Efficient
Economy
Washington, DC

Proposed Guidelines Change

Proposed Change

Table 4. Shading and Solar Heat Gain Coefficients

CLIMATE	SEASON	<u>SC</u>	SHGC
<u>HDD65 > 3500</u>	<u>Heating</u>	<u>0.703</u>	<u>0.612</u>
	Cooling	0.547	<u>0.476</u>
HDD65 < 3500	<u>Heating</u>	<u>0.414</u>	<u>0.360</u>
	Cooling	0.322	0.280

Current Table 4

Season	SC^1	SHGC ²
Heating	0.675	0.581
Cooling	0.541	0.466

¹ For calculation tools using shading coefficients

² For calculation tools using solar heat gain coefficients as defined by NFRC 200

Reason for the Proposal

- Bring the Guidelines in alignment with current codes
- Correct current bias toward heating energy savings
 - Enhance cooling performance up to 30%
 - Reduce peak demand and emissions
- Align the Guidelines with proposed Tax credit criteria