California Energy Commssion
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Building Energy Efficiency Standards

Approved Default Cool Roof Performance Values for Low-Sloped Roofs That Use Aggregate As the Surface Layer

Aggregate used as the surface layer of low-sloped roofs shall have the default cool roof properties for the aggregate sizes listed in Table 1 provided all eligibility criteria are met.

Eligibility criteria for aggregate used as the surface layer of low-sloped roofs:

- 1. Aggregate shall have a tested initial solar reflectance that meets or exceeds 0.50 for Built-Up Roofs and 0.45 for Ballasted Roofs using the ASTM E1918 test procedure conducted by an independent laboratory meeting the requirement of Section 10-113(d)4 of the *Building Energy Efficiency Standards*,
- 2. Aggregate shall have a label on bags or containers of the aggregate material stating: (a) the material's tested initial solar reflectance conforming to ASTM D1863, and (b) the material's size conforming to ASTM D448.

Table 1: Default Solar Reflectance and Thermal Emittance for Aggregate Materials Based on Size

Aggregate Size	Required Tested Initial Solar Reflectance	Default Aged Solar Reflectance	Default Thermal Emittance
Built-Up Roofs			
Size 6-8 conforming to ASTM D448 and ASTM D1863	0.50	0.48	0.85
Ballasted Roofs Size 2-4 conforming to ASTM D448	0.45	0.40	0.85