

Reflective Roof Coatings Performance comparison chart

* Readings taken with an ambient temperature of 78 °F, in full sun on a windless day

<u>Coating Material</u>	<u>Solar Reflectance</u> (Albedo)	<u>Peak temperature</u> <u>rise over ambient Air</u>	<u>Temperature</u> <u>Reached by</u> <u>surface</u>
Microteja	0.93	5	82°F
Bright white roof coating smooth surface (Elastomeric, Ceramic etc)	0.80	15	93°F
White roof membranes	0.7- 0.8	15-25	104°F
White metal roof	0.6 - 0.7	25-36	104- 115 °F
White mineral coating over tar and gravel	0.60	36	115°F
Aluminum roof coating over tar or asphalt	0.55	51	130°F
Dark red tile	0.18 - 0.33	62-77	142 - 156 °F
Black material tar or asphalt	0.05	90	170 °F

* Based on research at the following laboratories:

- Oak Ridge National Laboratory,
- Lawrence Berkeley National Laboratory,
- Florida Solar Energy Center
- ITESM (Monterrey, Mexico)