

To: Beach Metal Roofing Supply c/o Philip Helms
Fr: Kloeckner Metals
Re: Cool Roof / Energy Star paint system info
Dt: 4-17-15

Philip - below is the information on the various pre painted steel coils. You can see that many of your colors meet the specs to qualify for the "cool roof" system, however there are some darker colors that will not meet the specs.

Solar spectrum reflectivity and emittance was determined using a D&S Solar Spectrum Reflectometer according to ASTM C1549. Emittance was determined according to ASTM C1371 using the D&S Model AE Emissometer calibrated to measure normal emittance.

In order to meet the "Cool Roof" or Energy Star criteria or to be considered a cool roof, the following must be true. On steep slope roofs (3/12 or steeper) the initial **SSR value** must be (**0.250**) or greater and the 3yr reflectivity must be (0.15) or greater. For low slope roofs (less than 3/12) initial SSR value must be (0.65) or greater and the 3yr SSR value (0.50) or greater.

The below table shows the SSR Value for Beach Building Supply color card. The **bold colors** meet the cool roof rating for a steep slope.

<u>Color</u>	<u>SSR Value</u>
Polar White	0.65
Red	0.264
Tan	0.402
Cocoa	0.093
Black	0.044
Shadow	0.202
Lt Gray	0.384
Lt Brown	0.242
Antique Bronze	0.193
Ivory	0.583
Lt Stone	0.465
Clay	0.376
Green	0.125
Patina Green	0.387
Hawaiian Blue	0.235
Gallery Blue	0.116
Berry	0.204