

Solar Reflectance Index (SRI) Reference Table

Why Choose EcoStar?

- Innovators in synthetic roofing since 1993
- Breadth of slate, shake and modern tile product offering
- Made with up to 80% (Majestic/Seneca products) or 25% (Empire products) upcycled polymer & rubber (not tires)
- Designed with up to 6" headlap for installation integrity
- Easy application keeps installation costs down
- Proven products providing superior protection against fire, ice, snow, wind, rain and hail
- Manufactured in the USA

Protection Overview

- Miami Dade prolonged and accelerated weathering @ 4,500 hours
- Miami Dade Wind TAS100 & TAS125 (NOA # 23-0601.01)
- Canadian Code Compliance Evaluation (CCMC-14174-R)
- UL listed Class C or A fire resistance (UL 790)
- UL Class 4 (highest rating) hail impact resistance (UL 2218)
- Job lot control produces uniform roof tile weathering
- ISO 9001:2015 Quality Management Standards
- 50-Year Material Warranty
- 50-Year Transferable Labor and Material Warranty available

Color	Reflectance		Emmissivity		SRI	
	0.25 Min. New	0.15 Aged	New	Aged	New	Aged
Empire Colors*						
Sea Salt	0.453	0.419	0.876	0.894	51	47
Drifting Dunes	0.372	0.359	0.858	0.881	40	39
Hampton Harbour	0.330		0.880		33	
Fairport Fern	0.320		0.880		33	
Saratoga Sunset	0.320	0.305	0.890	0.887	32	32
Saranac Smoke	0.290		0.880		29	
Monticello Merlot	0.290		0.880		29	
Auburn Acorn	0.290		0.890		29	
Freeport Federal	0.280		0.880		28	
Geneva Grove	0.270		0.880		27	
Manhattan Midnight	0.240		0.880		24	
Bedford Black	0.050		0.890		0	
Majestic Colors						
Cedar Brown	0.139		0.900		12	
Earth Green	0.087		0.970		9	
Stone Red	0.116		0.900		9	
Smoke Gray	0.080		0.900		8	
Chestnut Brown	0.074		0.940		6	
Black	0.047		0.940		4	
Midnight Gray	0.020		0.900		2	
Federal Gray	0.094		Not tested		Not tested	
Mountain Plum	Not tested		Not tested		Not tested	

The chart above has been developed using a variety of SRI test results. For current CRRC ratings see coolroofs.org.

*All Empire colors listed above are the cool version of standard Empire colors.

- **Reflectance** is the roof's ability to reflect sunlight, reducing heat transfer to the building.
- **Emmissivity** is the portion of absorbed heat reemitted from the roof.
- **Solar Reflectance Index (SRI)** is a measure of the constructed surface's ability to stay cool in the sun by reflecting solar radiation and emitting thermal radiation. It is defined such that a standard black surface (initial solar reflectance 0.05, initial thermal emittance 0.90) has an initial SRI of 0, and a standard white surface (initial solar reflectance 0.80, initial thermal emittance 0.90) has an initial SRI of 100. (Definition according to the U.S. Green Building Council)
- **CA Title 24 Summary - see coolroofs.org/resources/california-title-24**

NOTE: Empire is approved for Miami Dade, Majestic is approved to Florida. Island Groove and Concrete Flat Tile not tested to CCMC.

