

**GAF Solar Reflective Products and Ratings for Shingles - Updated 4-20-23**

**All Listed Products (click on the product name for product information and submittal documents)**

Thermal emittance and solar reflectance values shown on this table are values obtained for CRRC ratings.

Other values for reflectance or emittance may vary based on test requirements.

Title 24 is based on requirements effective January 1, 2020. Aged SRI (Title 24) is calculated using Aged Reflectivity and Initial Emissivity.

Program Link	Initial Solar Reflectanc	3 Yr. Solar Reflectance	Initial Thermal Emittance	3 Yr. Thermal Emittanc	Initial SRI	Aged SRI	Aged SRI (Title 24)	CRRC Product ID	Title 24	LEED v4 Credit
<a href="#">Timberline HDZ® (White) (Tampa, FL plant)</a>	0.26	0.29	0.85	0.78	24	25	28	0676-0030	Yes	Not Eligible
<a href="#">Royal Sovereign® (White)</a>	0.27	0.27	0.91	0.84	29	25	28	0676-0033	Yes	Not Eligible
<a href="#">Timberline® Cool Series® and Timberline® CS - Cool Barkwood (Fontana, CA plant)</a>	0.27	0.26	0.90	0.92	27	27	27	0676-0041a	Yes	Not Eligible
<a href="#">Timberline® Cool Series® and Timberline® CS - Cool Weathered Wood (Fontana, CA plant)</a>	0.28	0.27	0.92	0.90	30	28	29	0676-0042a	Yes	Not Eligible
<a href="#">Timberline® Cool Series® and Timberline® CS - Cool Antique Slate (Fontana, CA plant)</a>	0.28	0.26	0.92	0.91	30	27	28	0676-0043a	Yes	Not Eligible
<a href="#">Timberline® Natural Shadow® and Timberline® NS - Arctic White (Shafter, CA plant)</a>	0.26	0.29	0.85	0.78	24	24	28	0676-0089	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series™ and Timberline HDZ® RS (Birchwood)</a>	0.20	0.23	0.92	0.93	20	24	24	0676-0096	Yes	Not Eligible
<a href="#">Timberline® Solar HD and Timberline Solar HDZ™ (Birchwood Plus)</a>	0.20	0.23	0.92	0.93	20	24	24	0676-0096	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series™ and Timberline HDZ® RS (Copper Canyon) (Shafter, CA plant)</a>	0.17	0.18	0.92	0.90	15	17	17	0676-0097	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series™ and Timberline HDZ® RS (Golden Amber) (Shafter, CA plant)</a>	0.20	0.22	0.92	0.89	20	21	22	0676-0098	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series™ and Timberline HDZ® RS (Aged Chestnut) (Shafter, CA plant)</a>	0.18	0.19	0.90	0.88	17	16	18	0676-0130a	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series™ and Timberline HDZ® RS (Coastal Slate) (Shafter, CA plant)</a>	0.18	0.19	0.91	0.88	17	17	18	0676-0131a	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series™ and Timberline HDZ® RS (Sagewood) (Shafter, CA plant)</a>	0.19	0.20	0.91	0.88	19	18	19	0676-0132a	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series™ and Timberline HDZ® RS (Sandalwood) (Shafter, CA plant)</a>	0.21	0.20	0.91	0.88	21	18	19	0676-0133a	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series™ and Timberline HDZ® RS (Charcoal) (Shafter, CA plant)</a>	0.16	0.17*	0.92	Pending	15	16*	16**	0676-0136a	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series™ and Timberline HDZ® RS (Stone Gray) (Shafter, CA plant)</a>	0.18	0.19*	0.93	Pending	18	19*	19**	0676-0137a	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series™ and Timberline HDZ® RS (Hickory) (Shafter, CA plant)</a>	0.18	0.18	0.91	0.89	16	16	17	0676-0138	Yes	Not Eligible

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Program Link	Initial Solar Reflectanc	3 Yr. Solar Reflectance	Initial Thermal Emittance	3 Yr. Thermal Emittanc	Initial SRI	Aged SRI	Aged SRI (Title 24)	CRRC Product ID	Title 24	LEED v4 Credit
<a href="#">Grand Sequoia® Reflector Series and Grand Sequoia® RS - Sagewood (Fontana, CA plant)</a>	0.19	0.19*	0.96	Pending	21	21*	21**	0676-0139a	Yes	Not Eligible
<a href="#">Grand Sequoia® Reflector Series™ and Grand Sequoia® RS - Forest Brown (Fontana, CA plant)</a>	0.18	0.19*	0.94	Pending	18	20*	20**	0676-0140a	Yes	Not Eligible
<a href="#">Grand Sequoia® Reflector Series™ and Grand Sequoia® RS - Sandalwood (Fontana, CA plant)</a>	0.21	0.21*	0.96	Pending	23	23*	23**	0676-0141a	Yes	Not Eligible
<a href="#">Grand Sequoia® Reflector Series™ and Grand Sequoia® RS - Ocean Gray (Fontana, CA plant)</a>	0.19	0.18	0.92	0.89	18	16	17	0676-0142	Yes	Not Eligible
<a href="#">Grand Sequoia® Reflector Series™ and Grand Sequoia® RS - Charcoal (Fontana, CA plant)</a>	0.16	0.17**	0.94	Pending	16	17**	17**	0676-0143a	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series Plus™ and Timberline HDZ® RS+ (Sagewood Plus) (Shafter, CA plant)</a>	0.20	Pending	0.92	Pending	20	Pending	20**	0676-0147a	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series Plus™ and Timberline HDZ® RS+ (Aged Chesnut Plus) (Shafter, CA plant)</a>	0.20	Pending	0.93	Pending	20	Pending	20**	0676-0148	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series Plus™ and Timberline HDZ® RS+ (Hickory Plus) (Shafter, CA plant)</a>	0.20	Pending	0.92	Pending	19	Pending	20**	0676-0149	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series Plus™ and Timberline HDZ® RS+ (Stone Gray Plus) (Shafter, CA plant)</a>	0.20	Pending	0.92	Pending	20	Pending	20**	0676-0152b	Yes	Not Eligible
<a href="#">Timberline® Solar HD and Timberline Solar HDZ™ (Pewter Gray Plus)</a>	0.20	0.20	0.94	0.92	20	20	21	0676-0153	Yes	Not Eligible
<a href="#">Timberline HDZ® Reflector Series Plus™ and Timberline HDZ® RS+ (Charcoal Plus)</a>	0.20	Pending	0.94	Pending	20	Pending	21**	0676-0153	Yes	Not Eligible

\*CRRC Rapid Ratings (Interim laboratory-aged values that simulate weathered values which will be replaced with the measured three-year aged values upon completion of the weathering process.)

\*\*These are calculated values per Title 24 requirements and are not reflected on the CRRC website