

DEC-TECHNICAL BULLETIN



Bulletin No: TB017 Version: v.02 Effective Date: 2022-01-21

Subject: SOLAR REFLECTIVE INDEX (SRI)

- Product
 Pre-Installation
 Installation
 Repair
 Maintenance
 Other
 External
 Internal Use
 Internal Use Only

Target Audience: All
Reason for Bulletin: To provide clarity on warmest and coolest Dec-Tec membrane.

Details:
 What is Solar Reflective Index (SRI)?
 Solar Reflective Index (SRI) measures the relative “steady-state surface temperature” of a surface with respect to the standard white (SRI=100) and the standard black (SRI=0) under the standard solar and ambient conditions.

What is Solar Reflectance?
 Solar Reflectance measures the amount of solar energy reflected. 0% indicates that no solar energy is reflected and 100% indicates that all of the solar energy is reflected from the surface.

How did we test?
 All test data was calculated and measured by ATLAS WEATHERING SERVICES GROUP. SRI is calculated from ASTM E1980. Hemispherical spectral reflectance measurements were performed in accordance with ASTM Standard Test Method E903. The total reflectance was obtained by integrating the spectral data against Air Mass 1.5 (ASTM G173) solar spectrum.

Table below shows the spectral data received for Dec-Tec membranes (warmest to coolest membrane).

Dec-Tec Membranes	% Solar Reflectance	SRI
Classic Line - Granite	17.4	17
Classic Line - Bronze	24.4	26
Classic Line - Beige	29.1	32
Classic Line - Ashdown	32.0	35
Classic Line - Brick	32.4	36
Classic Line - Solid Grey	36.1	41
Classic Line - Rowan	36.3	41
Classic Line - Grafton	56.8	68
CoolStep Line - CoolStep	57.0	68
Classic Line - Harland	58.1	70
CoolStep Line - CoolStep Copper	59.8	73
CoolStep Line - CoolStep Slate	60.6	73
CoolStep Line - CoolStep Sandalwood	61.8	74



- Benefits:**
- Understanding and knowing the SRI value may be useful when selecting the ideal Dec-Tec membrane for your climate conditions and deck use.

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- Lower SRI value indicates a membrane that is likely to absorb more heat and become hotter under sunlight.
 - Higher SRI value indicates a membrane that is likely to reflect more heat and stay cooler under sunlight
 - If the deck is over a living space, choosing the right membrane can have an effect on the indoor ambient air temperature.

Note: Detailed report available upon request. Reference: Report No.: 40423-0 (September 4, 2020), "HEMISPHERICAL SPECTRAL REFLECTANCE AND TOTAL EMITTANCE TEST REPORT"

If you have any questions concerning this bulletin, please contact Dec-Tec, Technical Support at 1-866-461-3914.

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