

PROTECTION FOR METAL ROOFING AND PANELS



FEATURES AND BENEFITS

- | **Reduced surface temperatures & cooling costs**
- | **Extended repaint cycles with color and gloss warranty available for certain colors**
- | **Low-VOC formulations available**
- | **Unsurpassed color and gloss retention**
- | **Excellent protection and durability**
- | **Easy application – brush, roll, or spray**
- | **Excellent choice for roof, siding, canopy, or rehabilitation projects**
- | **Meets the rigorous weathering standards of AAMA 2605 and SSPC-Paint 47**

COOL IT WITH ADVANCED SOLUTION FLUOROPOLYMERS

Fluoronar® is an air-dried, premium fluoropolymer topcoat designed to deliver exceptional long-term performance on architectural metal facades. Its superior color and gloss retention make it an excellent choice for modern building exteriors that demand lasting aesthetics and durability.

Engineered with advanced, colorfast infrared (IR) reflective pigments, Fluoronar helps protect metal roofing and wall panels from deterioration caused by the sun's heat and damaging rays, offering extreme protection while providing a cooling effect. This translates into savings in energy and cooling costs.

Backed by decades of proven durability, Fluoronar offers outstanding resistance to chalking, fading, and weathering, ensuring that building facades retain their appearance and integrity year after year. Because it is field-applied, Fluoronar is also ideal for refurbishing existing facades, extending service life without costly replacement.

ENVIRONMENTAL BENEFITS

Steep-sloped, highly visible roofs and vertical wall panels or siding can gain significant performance advantages from coatings like Fluoronar. Its IR-reflective pigments maximize solar reflectance, reducing heat transfer into the building and improving overall energy efficiency.

Architects and building owners often prefer the aesthetic appeal of darker shades and designs—but with Fluoronar, they don't have to compromise. Because of Tnemec's advanced work and research in infrared reflective pigments, Fluoronar offers a wide palette of greens, blues, grays, and browns that support energy savings while meeting aesthetic goals. Many colors also comply with sustainable building programs, including Leadership in Energy and Environmental Design (LEED) Sustainable Sites Heat Island Reduction Credit 5 (V5).

ASTM STANDARDS

FOR CALCULATING SOLAR REFLECTANCE INDEX (SRI) VALUE

TOTAL SOLAR REFLECTANCE (TSR)

ASTM C1549-04: Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature using a Portable Solar Reflectometer

Total Solar Reflectivity, or reflectance, is the ability of a material to reflect solar energy from its surface back into the atmosphere. The SR value is a number from 0 to 1.0. A value of 0 indicates the material absorbs all solar energy while a value of 1.0 indicates total reflectance.

EMISSIVITY

ASTM C1371-04A: Standard Test Method for Determination of Emittance of Materials Near Room Temperature using Portable Emissiometers

Emissivity is the amount of heat radiated from a surface. The greater the emissivity value, the greater the ability of a surface to cool itself through radiative heat loss.

SOLAR REFLECTANCE INDEX (SRI)

ASTM E1980: Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces

Solar Reflectance Index is a value that incorporates both solar reflectance and emittance in a single value to represent a material's temperature in the sun. SRI quantifies how hot a surface would get relative to standard black and standard white surfaces.

Note: To calculate the SRI, it is necessary to obtain both the reflectance and emittance values for the material.

NEED ASSISTANCE?

For detailed product information, surface preparation and system recommendations, contact your local Tnemec representative at tnemec.com.

LEED v5: SUSTAINABLE SITES HEAT ISLAND REDUCTION CREDIT 5 (ROOF)

Roof Type	Slope	Initial SRI	3-Year Aged SRI
Low-Sloped Roof	<2:12	82	64
Steep-Sloped Roof	>2:12	39	32

REFLECTANCE AND EMISSIVITY DATA

Fluoronar Color	TSR	Emissivity	Initial SRI
00WH Tnemec White	78.8	0.90	98.0
01BR Warm Sun	76.6	0.88	94.8
02SF Lemon Yellow/Safety	61.3	0.88	73.2
03SF Bright Yellow	60.3	0.89	72.1
04BR Desert Sands	55.7	0.89	65.8
04SF Tangerine Orange/Safety	54.3	0.88	63.5
05SF International Orange	51.8	0.88	60.1
06BR Amber Canyon	38.8	0.88	42.5
07SF Chilean Red/Safety	45.5	0.89	51.9
07WH Winter Mist	74.3	0.88	91.5
09SF Spearmint Green/Safety	43.3	0.89	48.9
10GN Aqua Sky	67.4	0.87	81.5
14SF Purple Rain/Safety	45.5	0.88	51.5
15BL Tank White	77.6	0.89	96.4
22YW Barbados	71.1	0.89	95.7
23BR Sahara	67.0	0.88	81.2
25BL Fountain Blue	51.5	0.88	59.7
26BL Clear Sky	44.3	0.89	49.9
29BL Spring Water	73.6	0.89	90.7
31GR Slate Gray	54.6	0.87	63.6
32GR Light Gray	38.6	0.86	41.5
33GR Gray	28.8	0.89	29.8
37BL Teardrop	69.1	0.88	84.2
39BL Delft Blue	61.2	0.89	73.3
44BR Beige	69.7	0.88	85.0
50RD Bare Beige	69.6	0.89	85.1
52GN Aztec Grass	65.7	0.88	79.4
53BR Tiki Wood	45.2	0.89	51.5
57BR Cloud	70.0	0.88	85.4
57GR Aluminum	40.2	0.87	44.0
68BR Twine	44.7	0.88	50.4
71RD Old Glory Red	54.2	0.89	63.7
74BR Clay	45.5	0.89	51.9
78GN Cumulus	74.0	0.88	91.1
108GN Ginger Mist	55.2	0.89	65.1
110GN Clover	32.9	0.88	34.8