

Sunshield 3800 Top Coat



Sunshield 3800

- Creates a durable, ultra-reflective clean coat over existing building surfaces.
- Dramatically reduces cooling costs
- Maximizes solar panel power production
- Guaranteed long-term clean appearance

Sunshield 3800 Works Great Over: Roofs

- Acrylastic 510 Roof Coating
- Ultrarroof 900 Primer
- Capseal 800 Roofing Mastic Sealer
- Directly over capsheet
- Mineral surface built-up roof (BUR)
- Granulated asphaltic surfaces
- Low reflectance acrylics
- Primed asphaltic surfaces
- Tile, concrete and pavers

Walls

- Acrylastic 490 Wall Coating

Decks

- Acrylastic 600 Deck Coating
- Primed tile, concrete and pavers

Sunshield 3800 is the top coat for
**Davlin's Complete
Coating Systems
For Roofs, Walls, and Decks**
Seamless • Fully Adhered
Watertight

Davlin Coatings LLC
700 Allston Way
Berkeley Ca 94710 USA
(800) 709-5919
www.davlincoatings.com

made in the USA
designed by Davlin in California

© 2015 Davlin Coatings

Sunshield 3800 is a pure 100% acrylic emulsion latex coating that creates a hard, abrasion resistant film flexible enough to allow the coating to move with an elastomeric undercoat. *Sunshield 3800* is designed to be an ultra-durable top coat over masonry, stucco, concrete, dry wall, and properly primed metal and wood. It is also designed for use over elastomeric roof, wall, and deck coatings, as well as asphalt shingles and mineral surface cap sheets. Because of its hardness, it is recommended as a top coat over elastomeric coatings, which tend to pick up dirt. *Sunshield 3800* stays clean and resists microbial growth.



Sunshield 3800 is a Cool Roof Council Rated Product*

Solar Reflectance, Initial:	0.88
Solar Reflectance, Weathered:	0.84
Thermal Emittance, Initial:	0.90
Thermal Emittance, Weathered:	0.84

*Applies only to *Sunshield 3800* White

Coverage

Sunshield 3800 has better coverage than other white coatings because it contains more reflective pigment. During spray application, *Sunshield* cures quickly, allowing faster job completion.

Environmental

Sunshield 3800 is water-based for easy cleanup and low odor. It contains low VOCs to keep our air clean. Because of its hardness, *Sunshield 3800* requires few anti-microbial agents. Also, Davlin products contain no zinc additives and have a low erosion rate, which contributes to cleaner waste water in our streams, rivers, lakes, and bays.

Reflectance Characteristics

Sunshield 3800 is ultra-reflective in the 300-1200nm CIGS Photovoltaic (PV) spectrum. At the same time, 3800's pigments safely absorb over 80% of the sun's UV, reflecting less than 20% upward. This reduces UV exposure to solar photovoltaic hardware, and may slow degradation. *Sunshield 3800* was specifically engineered to be dirt resistant and durable, at the lowest cost per square foot and per Watt-peak. *Sunshield 3800* is highly resistant to microbial growth and requires few anti-microbial additives. By comparison, other coatings require massive amounts of biocide, which leach out and become ineffective within 3-5 years.

CIGS Reflectance: 98% initial and 94% settled

Sunshield 3800 Top Coat



Properties / Specifications

Tukon Hardness: 1.2
VOC¹: <50 g/L
Flash point²: >215°F
Viscosity³: 70-80 KU
Solids by volume⁴: 40% ± 2
Solids by weight⁵: 54% ± 2
Dry film thickness (DFT): 6.4 mils
at 100 sq ft / gal
Recommended system DFT: 3-10
mils top coat
Components: 1
Curing mechanism: Air dry
Clean up: water
Shelf life: 1 year when properly
stored
Weight: 11 lbs/gal
Dry time to re-coat: 1-2 hours
dry hard at 70°F
Application temperature, air and
surface: 50-100°F
Color: White or custom

Solar Reflectance Properties

Solar reflectance (white)⁶: 0.88
Thermal emittance⁷: 0.90
CIGS reflectance (white)⁸: 98%
3-year CIGS reflectance (white)⁹:
93%
Dirt pickup resistance¹⁰: 95%

Test Methods

- 1 US EPA reference method 24
- 2 SETA
- 3 ASTM D562
- 4 ASTM D2597
- 5 ASTM D2369
- 6 ASTM E903
- 7 ASTM C1371
- 8 ASTM E903
- 9 ASTM E903, CRRC 3-year reflectance, calculated
- 10 CRRC 3-year reflectance

Caution: *Sunshield* 3800 has extremely high sunlight reflectance. Wear tinted sunglasses that filter out ultraviolet light when servicing highly reflective roof surfaces. Roofing and solar technicians should wear appropriate clothing and sunscreen to protect skin from the sun, including skin exposed to reflected light from below

Limitations: Do not use *Sunshield* 3800 on surfaces subject to hot tires, or that are constantly under water. Do not apply during—nor 24 hours preceding—inclement weather including rain, fog, mist, or freezing temperatures. Do not use unless the air and surface temperatures are above 50°F and will remain at or above that temperature for at least 4 hours after completion of application. Keep material from freezing.

Installation: Flush all equipment with water before use. Stir *Sunshield* 3800 thoroughly until uniformly blended, but avoid excessive mixing to prevent air entrapment. Thinning is not recommended.

Spray or Roller application: Apply a wet coat in even, parallel passes, overlapping each pass 50 percent to avoid holidays, bare areas, and pinholes. Clean equipment with water or water/detergent immediately after use. Drying time at 75°F and 50% Relative Humidity is 1-2 hours to dry hard for next coat, and 2 weeks until full cure.

Equipment: *The following is a guide; suitable equipment from other manufacturers may be used. Changes in pressure and tip size may be needed for proper spray characteristics.*

- Airless:** Standard equipment such as Graco Series 600. Tip sizes from 0.018 - 0.021.
- Conventional:** Industrial equipment such as DeVilbiss, MBC, or JGA spray gun. Separate air and fluid pressure regulators and a moisture and oil trap in the main air supply lines are recommended.
- Brush/Roller:** Suitable for waterborne coating. All surfaces should be clean, free from dirt, release agents, wax, mildew, and all other contaminants, including salt deposits.