

ACRYLASTIC™ ULTRAROOF™ 510

Technical Data Sheet | High-Performance Elastomeric Roof Coating



TECHNICAL PRODUCT DATA

HIGH-TENSILE ACRYLIC | WATER-BASED | LOW VOC 6 g/L | AIR-DRY

PRODUCT CHARACTERISTICS

Acrylastic™ UltraRoof™ 510 is a bright white, ultra-tough, waterproofing, copolymer elastomeric coating. Davlin's proprietary Acrylastic™ 510 system has a proven track record since 1985. The cured system creates a permanent, liquid-applied roof that is seamless, fully adhered, and watertight. The system's high solar reflectance helps reduce thermal-mechanical stress and cooling loads. An optional thin glaze coat of Sunshield 3800 can further boost reflectance and keep the surface extra clean.

KEY BENEFITS

- Cuts cooling costs with a bright white, highly reflective surface.
- Dramatically reduces the cost of re-roofing; no tear-off necessary.
- Available with Davlin's 5, 10, 15, and 20 year warranties.
- Light weight; restores existing roof; install over the existing roof; blocks UV; cures fast; more coverage; waterproof at the lowest cost; considered maintenance.
- Tenacious adhesion; high tensile strength; low perm rate; breathes; resists peeling, alkali, acid, salts, fungus, and wear.

ENVIRONMENTAL BENEFITS

Acrylastic™ 510 is water-based for easy cleanup and low odor, contains low VOCs, requires few anti-microbial additives due to the low perm rate and smooth top coats, contains no zinc additives, and reduces landfill waste by restoring existing roof systems while contributing to cleaner wastewater and healthier air.

MANUFACTURER INFORMATION

Davlin Coatings LLC
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www.davlincoatings.com

Made in the USA | Designed by Davlin in California

HIGH-PERFORMANCE | WATER-BASED | AIR-DRY

Provides a highly reflective weatherproof membrane over new or existing roof surfaces

PRODUCT OVERVIEW

Acrylastic™ UltraRoof™ 510 is uniquely formulated for the protection of urethane foam roofs, asphalt emulsion, and roofs coated with Acrylastic™ 900. It is a single-part water-based coating designed for coastal, temperate, humid, hot, and extreme alkaline environments. It creates a tough, long-lasting protective membrane that remains flexible over time and provides exceptional resistance to maintenance traffic, weathering, UV exposure, tearing, peeling, fungus, and water penetration while still allowing trapped moisture vapor to pass through the film.

SUITABLE SUBSTRATES

UltraRoof™ 900

SPF

Mineral Mod. Bit

Smooth Mod. Bit

Smooth BUR

Mineral BUR

Gran. Asphaltic

Asphalt Cut-Back

Tar & Gravel

Metal / Galv.

50%±2

SOLIDS BY VOLUME

6 g/L

VOC

1400 PSI

TENSILE STRENGTH

2100%

ELONGATION

1.2

PERM RATE

50°-100°F

APP TEMP.

PROVEN PERFORMANCE SINCE 1985 | AVAILABLE WITH DAVLIN 5, 10, 15, AND 20 YEAR WARRANTIES

APPLICATION EQUIPMENT

Equipment changes in pressure, tip size, and setup may be needed for proper spray characteristics.

- **Airless:** Standard equipment such as a Graco Bulldog Hydra Spray 30 or 45:1 pump with a 0.025-0.031 inch reversible fluid tip.
- **Conventional:** Industrial equipment such as a Binks 11:1 Saturn pump or equivalent with air control cut-off, a material hose 3/4 inch ID minimum, and an air hose 1/2 inch ID and 50-75 psi air pressure minimum. Heavy mastic spray gun such as Binks 7E2 with 1/4 inch fluid tip or larger and slotted nozzle.
- **Brush or Roller:** Suitable for waterborne coating; multiple coats may be required; roller nap varies according to substrate, typically 3/4 inch nap roller.

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PROPERTIES / SPECIFICATIONS*

Property	Test Method	Typical Value
Tensile strength	ASTM D2370, 1 in./min.	1400 psi
Tensile elongation	ASTM D2370, 1 in./min.	2100% at break
Moisture vapor transmission	ASTM E96, Proc. B, 20 mils DFT	1.2 perms
Adhesion, foam	ASTM D413, Elcometer	350 psi (foam cohesive failure)
Shore A hardness	ASTM D2240	75
Impact resistance	U.S.B.R.	No surface cracks
Hailstone resistance	Fed. Spec. TT-C-555B, GSA ex.1	No effect
Heat stability	Fed. Std. 141 [6051], 160°F for 10 days	No viscosity change
Resistance to wind-driven rain >100 mph	Fed. Spec. TT-C-555B, 4.4.7 min. 95 mph req.	No weight gain
Resistance to ponded water	-	No blisters, no film degradation
Accelerated weathering @ 5000 hrs	ASTM D822	No chalking, sheen loss, discoloration
Fungus resistance	Fed. Std. 141 [6271], note 2	No growth
Heat stability	Fed. Std. 141 [6051], 160°F for 10 days	No viscosity change
Volatile organic compounds	US EPA Reference Method 24	6 g/L
Flash point	SETA	>215°F
Viscosity (Stormer K.U.)	ASTM D562	100-120 KU
Solids by volume	ASTM D2597	50% ± 2
Solids by weight	ASTM D2369	60% ± 2
Dry film thickness (DFT)	-	8 mils @ 100 ft ² /gal
Recommended system DFT	-	16-48 mils total
Components	-	1
Curing mechanism	-	Air dry
Clean up	-	Water
Shelf life	-	3 years if properly stored
Packaging	-	1, 5, 55, 275 gal
Availability	-	Shipped nationally & internationally
Drying time to re-coat	-	4-8 hours dry-through @ 70°F (21°C)
Application temperature (air and surface)	-	50-100°F (10-38°C)
Color	-	White or Custom Color
Finish	-	Egg Shell

SPECIFICATION NOTES

* Typical values shown are based on laboratory testing and field evaluation. The information, ratings, and opinions stated are believed to be accurate; however, the user is responsible for determining whether the product is suitable for the intended application. Consult Davlin Coatings for project-specific guidance.



INSTALLATION / APPLICATION NOTES

WEATHER RESTRICTIONS

Apply at air and surface temperatures between 50°F and 100°F. Do not apply below 50°F, nor during or within 24 hours preceding inclement weather, including rain, fog, mist, or freezing temperatures. Protect from freezing during shipment and storage. Do not store material below 50°F.

SURFACE PREPARATION

Remove all contaminants and loose material, including dust, dirt, oil, silicone, release agents, wax, mildew, salt deposits, heavy oxidation, and chalky or loose coating. Thoroughly power wash the roof. Polyurethane Foam: Repair cracks and holes with Acryflex 1210 and embed polyester tape or fabric in wet coating. Coat new foam within the time frame recommended by the foam manufacturer.

MIXING PROCEDURES

Flush all equipment with water before use. Stir Acrylastic™ UltraRoof™ 510 thoroughly until uniformly blended, but avoid excessive mixing to prevent air entrapment. Do not thin.

COLOR / TOPCOAT NOTES

Color: White or custom color. Finish: Egg Shell. The system's high solar reflectance helps reduce thermal-mechanical stress and cooling loads. An optional thin glaze coat of Sunshield 3800 can further boost reflectance and help keep the surface cleaner. Roofing granules may be broadcast into the final coating at 35-40 lbs per 100 square feet.

APPLICATION PROCEDURES

Apply a wet coat in even, parallel passes, overlapping each pass approximately 50% to avoid holidays, bare areas, and pinholes. Cross-roll or spray at a right angle to the first pass. Apply one coat at 1 gallon per 100 square feet to achieve approximately 8 mils DFT, then allow 4-8 hours to dry. Apply second, third, and fourth coats as required by the system specification. For additional durability, roofing granules may be broadcast into the final coating application at 35-40 lbs per 100 square feet.

RECOATING PROCEDURE

Install subsequent coats only when the previous coat is dry-through and firmly adhered. Use the rule-of-thumb test: when a thumb is pressed firmly to the coating, none should adhere to the thumb. If surface and roof temperatures are between 50°F and 70°F, Acrylastic™ 510 may be applied in one thick coat of 24 wet mils at 1.5 gallons per 100 square feet. Do not apply thick coats above 70°F; the surface can skin over while coating beneath remains wet, resulting in blisters.

CLEANUP

Clean equipment with water or water and detergent immediately after use. When applying polyester sheeting, work in small areas so the coating remains wet enough to embed the sheets. Consult Davlin Coatings for special application procedures when the surface or air temperature exceeds 110°F.