



**COMPLIANCE:** Exceeds performance requirements of ASTM D6694. CRRC. Energy Star. Miami-Dade County Product Control Approved.

**DESCRIPTION:** APOC® 587 Armor Flex® Miracle Roof™ is a moisture cure, fluid applied, high solids, silicone coating. Unlike other silicone coatings, Armor Flex Miracle Roof is specially designed and formulated to bond to almost all silicone coatings and sealants. Miracle Roof creates a shield of protection over your roof with Pond-Proof® Technology and cutting edge performance. Engineered with "Green" solvent-free polymers, Armor Flex Miracle Roof outperforms traditional solvent and solvent-free products including asphaltic, urethane, thermoplastic and other protective coating products. Additionally, Armor Flex Miracle Roof has minimal impact on the applicator or our environment.

**Why Armor Flex Miracle Roof?** Because Armor Flex Miracle Roof Works! Armor Flex Miracle Roof is formulated to help reduce cooling costs, heat gain, carbon emissions and health hazards associated with these emissions. Electricity usage can be reduced and utility bills lowered. When applied according to the instructions, Miracle Roof creates a tough, flexible and resilient barrier that helps prevent damage from severe weather; and with proper maintenance, Armor Flex Miracle Roof will greatly extend the life of your roof! NOTE: ALL leaks and repairs MUST be made prior to application of any coating product. It is recommended to make repairs using APOC #581 as per product instructions. Once coatings are installed, leaks and damaged areas become covered and are more difficult to identify.

**PRIMER:** An APOC approved bleed blocking primer should be used on applications over asphalt substrates to help limit bleed through or discoloration. Previously coated surfaces do not need primer, however they should have an adhesion test performed prior to application.

**PREPARATION:** All surfaces must be clean, dry, and free of any dirt, dust, oil, surface chemicals, or other contaminants that may interfere with optimum adhesion. Rusty metal must be cleaned and primed with APOC rust inhibiting primer. Surfaces with mildew or biological growth must be cleaned with a bleach solution (2 parts water to one part bleach). Clean and pressure wash the roof. A mild detergent with broom is recommended on single ply membranes. Use only a wide fan spray tip or wet vac. Previously coated surfaces must be completely dry and cured. For applications over existing silicone coatings or materials, pressure wash substrate at a maximum of 2,000 PSI and allow to completely dry. Ensure sun is up and roof is dry with no moisture, dew or condensation present on the roof substrate when applying this product. If there are any concerns or questions, a peel test is always recommended. APOC requires that all seams, penetrations, drains, ponding, flashings, terminations, curbs and other work are treated and repaired using the appropriate APOC sealant and reinforcement and installed in accordance with APOC Details which are available at [www.apoc.com/pages/commercial-roof-restoration](http://www.apoc.com/pages/commercial-roof-restoration).

**NOTE:** If surface temperatures become hot (over 180 °F) during application, wait for roof to cool. DO NOT apply to a wet or damp surface.

**APPLICATION:** For exterior use only. Do not store over 100 °F for extended periods of time. DO NOT THIN. Rain, dew, fog, frost and relative humidity greater than 70% may result in adhesion problems. Protective clothing, gloves, and eyewear should be used during application. Application should be completed when air, surface and material temperatures are 40 °F or higher (for 24 hours) but not above 120 °F. Application can take place at colder temperatures (above 32 °F) however, special precautions must be taken to ensure there is NO MOISTURE, DEW or FROST present on the roof. These conditions will create adhesion issues. Apply with a 3/4" nap exterior paint roller (preferably with mill gauge) or long bristle brush. Contact APOC for spray requirements. Apply a uniform coat over entire surface, avoiding excessive rolling. Coverage rate is 1.5 - 4 gallons per square (100 square feet) in a one coat application. Coverage varies depending on roof condition and desired warranty coverage. For extended warranty information, see published warranty qualifications at [www.apoc.com/productwarrantyinfo](http://www.apoc.com/productwarrantyinfo). If multiple coats are used, additional coats shall be applied between 4 - 24 hours after first coat. If there will be foot traffic on roof after installation (and cured), embed 40 - 60 lbs. of #11 ceramic granules per 100 sq ft into top layer of coating to create a non-skid finish. Surfaces without granules are slippery when damp or wet. Coating skins in 6 hours and fully cures in 72 hours at 70 °F and 50% relative humidity at 1.5 gallons per square. Thicker films, poor air flow and low humidity will increase dry times. Seal container when not in use. Do not walk on coating until fully cured. The contents of this container are reactive with moisture in the air. Curing starts immediately upon opening and opened product cannot be returned. Use all contents within one day of opening.

**CLEAN-UP:** Spray equipment with VM&P or Naptha. Do not leave 587 for long periods in hoses, pumps or spray guns.

**SHelf LIFE:** Up to 18 months depending on storage.

**TYPICAL PHYSICAL & PERFORMANCE CHARACTERISTICS:**

Solids Weight (ASTM D1644)	98 ± 2%
Solids Volume (ASTM D2697)	98 ± 2%
Density	11.0 lbs/gal
Tensile Strength (ASTM D2370)	275 psi
Elongation (ASTM D2370)	300%
Tear Resistance (ASTM D624)	37
Initial Reflectivity	.90
Initial Emissivity	.90
SRI Value	115 Initial
Permeability (ASTM E96)	4 perms
Water Absorbption (ASTM D471)	.1% after 2 weeks at 75 °F
Weathering	No degradation after 5000 hrs
Tack Free Time	1 hour
VOC	10 g/L
Durometer Hardness	55 ± 5 pts
Maximum Surface Temp	180 °F
Flash Point	>290 °F
Skin Time	6 hours
Full Cure	72 Hours
Shelf Life	Up to 18 months depending on storage

**Approx. Shipping Weights:** (Note: All approx. weights include container)

5 gallons (18.9L)	58 lbs.
55 gallon drum (208.2L)	648 lbs.
275 gallon drum (1,039.5L)	3180 lbs.

**VOC: <10 g/L (regulatory)**

**STORAGE & HANDLING PRECAUTIONS:** Do not heat or thin. Keep container sealed when not in use. Product must be kept out of sunlight, protected from the elements and in areas where air flows freely and is not restricted. Shelf life is up to 18 months from date of manufacturer for unopened containers. For maximum shelf life store between 50 °F and 80 °F. Storage at temperatures outside these conditions or at relative humidity over 65% will reduce shelf life. Storage longer than 6 months may require additional mixing. Tightly seal container after opening and when not in use. Opened containers should be used within 3 - 5 days after opening. If a skin forms, remove prior to mixing material. When transporting this product, ensure that the lid and openings are tight and unit is secure and upright. Do Not allow products to tumble or shift as this may cause leakage to occur. Do not transport on passenger seats or inside the passenger compartment of any vehicle. Store product in the cargo area of vehicle, and secure on top of 6 mil plastic sheeting to prevent damage due to accidental spills or loosening of lids.

**WARRANTY AND DISCLAIMER:** For limited warranty and disclaimer information, visit our website at: [www.apoc.com/productwarrantyinfo](http://www.apoc.com/productwarrantyinfo).

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