

# ROOF 540 BASE COAT™

## Advanced Acrylic Fluid Applied Elastomeric Coating for Roofs

### Technical Data & Application Instructions

#### PRODUCT DESCRIPTION

ROOF 540 BASE COAT is a high solids, water based acrylic elastomeric coating utilizing the latest advances in acrylic technology. It combines acrylic emulsion polymers with reinforcing laminar pigments, powerful biocides

And non-migrating fire retardants for superior physical properties, adhesion, durability, weatherproofing, mildew resistance and fire retardancy. The fire retardant chemicals are permanently locked into the cured coating and will not leach out up on extended weathering. ROOF 540 BASE COAT is a “breathing” coating, allowing moisture vapor to pass through the film while remaining impervious to mass water penetration.

#### BASIC USES & GENERAL INFORMATION

ROOF 540 BASE COAT was especially developed for use in embedding reinforcement fabricat detail areas and/or over the entire roof. It is also used for achieving film build prior to top coating with ROOF 540 & TUFF COAT Finish Coat. It is formulated to achieve superior adhesion over metal, conventional built-up, modified bitumen, single-ply, concrete, board-stock and sprayed-in-place polyurethane foam, and composite shingle roof substrates. ROOF 540 BASE COAT forms a waterproof elastomeric seal, uniformly covering the textured profile of these substrates.

#### PERFORMANCE PROPERTIES

Property	Value	Method
Solids by Weight	67% (±2)	ASTM D2369
Solids by volume	51% (±2)	ASTM D5201
Weight per Gallon	11.8 lbs. (±.2) (1.41 kg/l)	ASTM D1475
Tensile Strength	182psi(±20)(1.83MPa)	ASTMD2370/D6083
Elongation	135%(±20)	ASTMD2370/D6083
Hardness	60-70 Shore A	ASTM D2240
Permeance	2.7 US perms at 22drymils (155ng/(Pa.s.m²) @ 560microns)	ASTM E96
Fire Resistance	UL790 Class “B” classified system over spray-applied polyurethane foam on combustible decks	when used with Roof 540 or Tuff Coat Topcoats
Dry Time for Water Resistance:*	3 hours at 75°F (24°C), 50%R.H. *Required time will increase at higher humidity and / or lower temperatures	-
Low Temperature Flexibility	Passes 180° flex over ½” (1.2cm) mandrel @ -5°F (-21°C)	[Federal Test Method No. 141a-6221]
Temperature Limits for Normal Service Conditions	0°Fto200°F(-18°Cto93°C)	-
Standard Colors	Medium gray color, which provides for a high visual contrast with the application of the subsequent ROOF 540 BASE COAT Finish Coat.	-

#### APPLICATION INSTRUCTIONS

**Mixing:** Use a power mixer capable of uniformly mixing the entire container prior to use. ROOF 540 BASE COAT is easily pumped and sprayed at material temperatures of 60° F (16°C) or greater. Reducing the mixture is not recommended, as it affects the coatings ability to achieve a heavy film build with excellent vertical hold and hide.

**Surface Preparation:** All surfaces must be clean and dry, and free of any dirt, dust, oil, surface chemicals or other contaminants that may interfere with optimum adhesion. All loose gravel, if present, shall be removed by power sweeping and / or vacuuming. Remaining gravel shall be power spud to achieve the smoothest surface possible. Any unsound areas as in the roof, i.e. blisters, delamination, deterioration, moisture saturation, severe corrosion, sharp projections, ridges, etc. shall be repaired or replaced. New asphalt shall be exposed to ambient conditions for 45 to 60 days before coating.

Deteriorated or badly corroded metal shall be replaced. Rusted areas shall be mechanically abraded to remove all loose rust and then primed with AWC Primer. New metal roofs exhibiting any type of surface film shall be washed with a vinegar or muriatic acid solution, or equivalent, to totally remove this film. Low areas that hold excessive ponding water must be brought into conformance by installing additional drains or adding additional slope to existing drains.

Surfaces that are contaminated with oil, grease, embedded dirt, loose paint or coating, etc. shall be cleaned using AWC Cleaning Concentrate. High-pressure power washing may be necessary to remove tightly adhering contaminants. Power-rinse thoroughly with clean water to remove all traces of the AWC cleaner. If roof does not require chemical cleaning, thoroughly sweep, vacuum or blow down roof to remove any dirt, dust or other loose contaminants. Refer to separate ROOF 540 BASE COAT Master Guide Specifications for complete surface preparation procedures on the specific substrate being coated.

**Application:** Reinforce all “moving” cracks, seams, splits, control joints, vertical / horizontal interfaces, roof termination points, openings, transition areas, around the base of all vents pipes and other protrusions, as well as around HVAC units and other roof mounted equipment with FABB MATT, a polyester reinforcement fabric, embedded into ROOF 540 BASE COAT.

Pre-measure the area to be reinforced and cut a strip of 4”, 6” or 12” (10, 15 or 20cm) FABB MATT (depending upon the detail) to the desired length. Apply ROOF 540 BASE COAT liberally over the area to be detailed, at a minimum rate of 1.5 gallons per 100ft<sup>2</sup> (.6l/m<sup>2</sup>), and embed the Fabb Matt so that it is centered over the detail area. Using a brush or roller, work the Fabb Matt into the ROOF 540 BASE COAT to eliminate air pockets, wrinkles and gaps. Apply additional ROOF 540 BASE COAT as necessary, at a minimum of 1 gallon per 100ft<sup>2</sup> (.4l/m<sup>2</sup>), to ensure that the Fabb Matt is thoroughly saturated, encapsulated and fully adhered to the substrate. When incorporating Fabb Matt for reinforcement of the entire roof, apply ROOF 540 BASE COAT at the rate of 1.5 gallons per 100ft<sup>2</sup> (.6l/m<sup>2</sup>) to a 4’(1.2m) wide section of roof where the fabric reinforcement will begin. Embed and encapsulate the end of the reinforcement fabric roll so that it is anchored at that point.

Roll or spray-apply ROOF 540 BASE COAT to a section of roof 4 to 10 feet (1.2 to 3 meters) beyond the fabric at the rate of approximately 1.5 gallons per 100ft<sup>2</sup> (.6l/m<sup>2</sup>). Roll the reinforcement fabric over the wet ROOF 540 BASE COAT, allowing the fabric to conform to the surface contours. To ensure complete encapsulation of the fabric, it must be rolled into the ROOF 540 BASE COAT while it is still wet. Do not allow the ROOF 540 BASE COAT to surface skin prior to rolling out the fabric. Work the ROOF 540 BASE COAT evenly throughout the Fabb Matt so that it is totally saturated, eliminating any airpockets, wrinkles or gaps. Apply an additional coat of ROOF 540 BASE COAT over the top of the saturated Fabb Matt at the rate of approximately 1 gallon per 100ft<sup>2</sup> (.4l/m<sup>2</sup>) so that it is

totally encapsulated. Take extra care to ensure that edges of the fabric are well saturated and adhered. Overlap consecutive passes of Fabb Matt a minimum of 2” (5cm) on each side. Substrate porosity and texture will determine the amount of ROOF 540 BASE COAT required encapsulating the reinforcing fabric. Allow the ROOF 540 BASE COAT to dry thoroughly prior to applying ROOF 540 BASE COAT Finish Coat to the roof. When using ROOF 540 BASE COAT to achieve film build prior to application of the ROOF 540 BASE COAT Finish, apply at the rate of 1 to 1½ gallons per 100ft<sup>2</sup> (.4to.6l/m<sup>2</sup>) per coat to achieve the desired film thickness.

ROOF 540 BASE COAT may be applied by airless spray equipment or roller. Brush or roller may be used for touch-up and edging work, or for small areas that are not practical for spray application. Airless spray is best suited for field application. ROOF 540 BASE COAT can be used to obtain up to ½ of the total dry film thickness requirement specified. However, under no circumstances should the subsequent ROOF 540 BASE COAT Finish be less than 12 dry mils in thickness at any location.

## **LIMITATIONS & PRECAUTIONS**

ROOF 540 BASE COAT should generally not be used over cold storage tanks or buildings where a vapor barrier is required. ROOF 540 BASE COAT will freeze and become unusable at temperatures below 32°F (0°C), or when there is a possibility of temperatures falling below 32°F (0°C) within a 24-hour period after application.

ROOF 540 BASE COAT requires complete evaporation of water to cure. Cool temperatures and high humidity retard cure. Do not apply if weather conditions will not permit complete cure before rain, dew, fog or freezing temperatures occur. Do not apply in the late afternoon if heavy moisture condensation may appear during the night. ROOF 540 BASE COAT may be applied to a wide range of clean, dry and structurally sound substrates

Slope for positive drainage is recommended for any roofing application. It is the responsibility of the applicator to ensure that the roof is sound and sloped properly, and that the expansion joints, vents and flashings have been installed as specified or required. Avoid breathing of vapor or spray mist. For exterior applications, approved (MSHA/NIOSH) chemical cartridge respirator must be worn by applicator and personnel in vicinity of application. Check filters frequently to ensure proper protection. If used in doors, provide mechanical exhaust ventilation. During indoor spray operations, airline masks or positive pressure hose masks must be worn. Avoid contact with eyes and contact with skin.

## **SAFETY & HANDLING**

For specific information regarding safe handling of this material please refer to the Material Safety Data Sheet (MSDS).

ROOF 540 BASE COAT can be used in a safe and environmental friendly manner. It is designed to reduce the output of V.O.C.'s while providing the customer with a high performance roof coating.

For more information, visit [www.awcindia.in](http://www.awcindia.in) or contact our Technical Support Team on 022-2888-3000/3002.

## **CLEANUP**

Thoroughly rinse application equipment with clean water.

## **WARRANTY**

ROOF 540 BASE COAT warranties are available for Five (5) Monsoon years. The warranties guarantee the installation against leaks caused by normal weathering. Refer to Individual warranty documents for additional information.

The Contract shall notify all interested parties in advanced of said inspection.

## **ORDERING INFORMATION**

ROOF 540 BASE COAT can be purchased in 20kg pail only (No small packaging is currently available), for specific requirements; please call us on +91-22-2888-3000/3002.

### **AWC [Architectural Waterproofing Corporation]**

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