AQUAFIN Inc. 505 Blue Ball Rd. #160 Elkton, MD 21921 p: 410-392-2300 f: 410-392-2324 e: info@aquafin.net w: www.aquafin.net



Technical Datasheet

RE-ROOF Acrylic Base Coat Single Component, Fast Drying, High-Performance, Acrylic Cool Roof Base Coat

CSI Div. 07 & 09

07 01 50 Maintenance of Membrane Roofing 07 01 50.61 Roof Re-Coating 07 14 16 Cold Fluid Applied Waterproofing 09 01 90 Maintenance of Painting and Coating

LEED Points

MR Credit 5.1, Regional Materials.....Up to 2 Points IEQ Credit 4.2, Low-Emitting Materials Paints and Coatings...1 Point Using this AQUAFIN product can help contribute to LEED certification of projects in the categories shown above.

Product Description:

RE-ROOF Acrylic Base Coat is a single component, fast-drying, highperformance, liquid-acrylic coating that functions as a base coat for Aquafin's RE-ROOF Acrylic System. The RE-ROOF System is an ecofriendly, reliable solution for new roofs and cost-effective option for extending the life of existing roof systems.

Typical Applications:

- As the base coat for Aquafin's RE-ROOF Acrylic System.
- Apply RE-ROOF Acrylic Base Coat over a wide variety of common roof surfaces that have been primed with the appropriate Aquafin primer.

Advantages:

- Simple application with an airless sprayer, paint brush, or roller
- Excellent choice for warm, humid climates
- Resistant to mold growth

Priming and Surface Preparation:

- RE-ROOF Acrylic Base Coat requires a primer for all applications. Select the appropriate primer(s) based on the type of substrate(s) and surface material(s) from the list below.
 - BUR: use RE-ROOF Primer WB
 - EPDM: use RE-ROOF EPDM Treatment
 - Galvanized Steel: use PRO-Tekt SP (Sealant Primer)
 - Masonry: use PRO-Tekt SP (Sealant Primer)
 - Modified Bitumen: use RE-ROOF Primer WB
 - PVC: use RE-ROOF Primer PO
 - TPO: use RE-ROOF Primer PO
 - Wood (trim only): use PRO-Tekt SP (Sealant Primer)
- Refer to the corresponding primer Technical Data Sheet for surface preparation instructions and other important information.
- Ensure RE-ROOF Acrylic Base Coat is applied to primed substrate within the required recoat times.
- Primed substrates must be dry, clean and free of dirt, dust, grease, oil, and other foreign substances that could interfere with adhesion.

Adhesion Test:

To ensure a successful application, always perform several adhesion tests (ASTM D903) with RE-ROOF Acrylic Base Coat to ensure that the primer has successfully bonded to the roof substrate, and the primed roof

Technical Properties:				
	RE-ROOF Acrylic Base Coat			
Total Solids by Weight, ASTM D1644:	65 ± 2%			
Total Solids by Volume, ASTM D2697:	53 ± 2%			
Dry Adhesion ASTM C794, ASTM D903:	4.2 pli			
Wet Adhesion ASTM C794, ASTM D903:	2 pli			
Durometer Hardness Shore A, ASTM D2240:	65 - 75			
Initial Tensile Strength, ASTM D2370:	180 ± 50 psi			
Initial Elongation, ASTM D2370:	200 ± 50%			
Elongation After Accelerated ASTM D2370:	100 ± 20%			
Flexibility 1/8″ Mandrel, ASTM D522:	Pass			
Tear Resistance, Die C, ASTM D624:	110 pli			
Permeance, ASTM D1653:	14 perms			
Water Swelling, ASTM D471:	14 perms			
1000 Hr Accelerated Weathering, ASTM D4798:	No Cracking or Checking			
Fungi Resistance, ASTM G21:	Zero Growth			
Colors:	Gray, Tan and White			
VOCs:	0.42 lb/gal, 50 g/L			

All data are averages of several tests under laboratory conditions. In practice climatic variations such as temperature, humidity, and porosity of substrate may affect these values.

substrate will accept RE-ROOF Acrylic Base Coat. Do not proceed with the application of RE-ROOF Acrylic Base Coat before adhesion testing.

Jobsite Preparation:

- Take all necessary precautions to ensure safety.
- Cover all intake vents near the work area.
- Minimize or exclude all personnel not directly involved with the application.
- Follow appropriate measures to prevent any sparks.

RE-ROOF Acrylic Base Coat

- Do not weld, smoke or allow any open flames during mixing, application or drying.
- Ensure that CO2 or other dry chemical fire extinguishers are within easy access.
- Only proceed with application when ambient temperature is minimum of 50°F (10°C) and falling, and more than 6°F (3°C) above dew point. Temperatures must be maintained within this range for at least 48 hours after the installation. Do NOT proceed with application when the temperatures drop below 50°F (10°C), if precipitation is expected, or if humidity is at or above 90%. Coating should not become wet within 72 hours after application. Special precautions are to be taken when ambient and/or substrate temperatures are approaching, at, or above 105°F (41°C) and it may be necessary to limit material application to evening hours.
- Hot surfaces should be cooled and shaded while cold surfaces should be heated and sheltered.

Mixing:

- Condition material to 70°F to 80°F (21°C to 27°C) prior to mixing and application.
- Use chemical resistant (Nitrile) gloves and goggles when mixing or applying RE-ROOF Acrylic Base Coat.
- Open container and mix at slow speeds (not exceeding 500 rpm) for 1-2 minutes to evenly distribute pigments and other ingredients that may have settled, until a homogeneous mixture is achieved. Thoroughly scrape sides of pail as material is mixed. Boxing material is recommended to ensure color uniformity.
- Use caution not to whip air into the material as this may result in pinhole blisters and/or shortened pot life. Do not mix in an up and down motion.

Application:

Read all instructions thoroughly prior to installation.

- Flashing Treatment: Prior to the application of RE-ROOF Acrylic Base Coat, treat edges, seams, joints, metal flashing, penetrations and transitions with RE-ROOF Acrylic Flashing. Refer to the RE-ROOF Acrylic Flashing Technical Data Sheet for surface preparation, mixing and application instructions, WFT (wet mil thickness) requirements, approx. coverage, drying and recoat times. Allow to dry and pay close attention to recoat times.
- **Primer:** Apply the appropriate primer to the field areas in preparation for RE-ROOF Acrylic Base Coat. Refer to the corresponding primer Technical Data Sheet for surface preparation, mixing and application instructions, DFT (dry film thickness) requirements, approx. coverage, drying and recoat times. Overlap the flashing according to the primer instructions. Allow to dry and pay close attention to recoat times.
- First Base Coat: Apply the first coat of RE-ROOF Acrylic Base Coat in a monolithic application at a rate of 94 ft²/gallon to achieve a minimum of 17 mils WFT (wet film thickness). Use an airless sprayer, paint brush, or 3/8" nap phenolic resin core roller. Always backroll with a roller, even when spray-applying. RE-ROOF Acrylic Base Coat must be a uniformly thick, void-free, continuous membrane across the entire roof surface. Allow to dry and pay close attention to recoat times.

Notes: Do not apply RE-ROOF Acrylic Base Coat at a rate of more than 1 gallon per 60 ft² (or more than 2 gallons per 120 ft²). Sagging and running is more likely to occur on sloped, slanted and vertical areas especially when the coating is applied to thick. Thicker coating applications also increase the chances of bubbles, blisters and/or pinholes. If necessary, apply RE-ROOF Acrylic Base Coat in several thinner coats, allowing each coat to properly dry. Always verify that the proper WFT (wet film thickness) has been achieved by measuring each coat using a wet film gauge. As a minimum, it is recommended to check the mil thickness in every corner, plus the center areas of the roof. Large areas will require many check points. When applying multiple, thinner coats, verify that the total DFT (dry film thickness) meets the stated requirements. See coverage chart for minimum WFT (wet film thickness) mil guidelines and DFT (dry film thickness) mil requirements.

- Second Base Coat: Apply the second coat of RE-ROOF Acrylic Base Coat in a monolithic application at a rate of 94 ft²/gallon to achieve a minimum of 17 mils WFT (wet film thickness). RE-ROOF Acrylic Base Coat must be a uniformly thick, void-free, continuous membrane across the entire roof surface. Allow to dry and pay close attention to recoat times. Inspect the surface for damage prior to the application of RE-ROOF Acrylic Topcoat. Any surface damage must be repaired with RE-ROOF Acrylic Base Coat prior to the application of RE-ROOF Acrylic Topcoat.
- First Top Coat: Apply the first coat of RE-ROOF Acrylic Top Coat. Refer to the RE-ROOF Acrylic Top Coat Technical Data Sheet for surface preparation, mixing and application instructions, WFT (wet film thickness) requirements, DFT (dry film thickness) requirements, approx. coverage, drying and recoat times. Allow to dry and pay close attention to recoat times.
- Second Top Coat: Apply the second coat of RE-ROOF Acrylic Top Coat. Allow to dry and pay close attention to recoat times.
- Third Top Coat: Apply the third coat of RE-ROOF Acrylic Top Coat. Allow to dry and pay close attention to recoat times.
- Fourth Top Coat: Apply the fourth coat of RE-ROOF Acrylic Top Coat. Allow to dry.

Drying:

- Drying time for RE-ROOF Acrylic Base Coat is typically 24 hours at 75°F (24°C) and 50% relative humidity.
- Apply second coat of RE-ROOF Acrylic Base Coat within a maximum of 48 hours after the first coat of RE-ROOF Acrylic Base Coat.
- Apply RE-ROOF Acrylic Topcoat over RE-ROOF Acrylic Base Coat within a maximum of 48 hours after the application of RE-ROOF Acrylic Base Coat.
- Allow to dry for at least 72 hours [based on 75°F (24°C) and 50% relative humidity] before permitting light pedestrian traffic on the finished surface.

Limitations:

- Do not dilute under any circumstance.
- Do not apply over spray polyurethane foam roofing.
- High temperatures and high humidity will accelerate the drying time. Low temperatures and low humidity will extend the drying time.

Clean-up:

Clean tools and equipment with mineral spirits immediately after use, while still fresh/wet. Hardened/dried material must be removed mechanically.

Packaging:

- <u>5-gallon pail (18.9 liters)</u>
- <u>55-gallon drum (208 liters)</u>

Shelf Life & Storage:

- 12 months in unopened, original packaging when stored at temperatures between 50°F and 80°F (10°C to 27°C).
- Keep containers closed, store in a dry, cool place away from heat, direct sun, sparks, open flame, and moisture.
- Protect material from freezing.

Check our website for the latest version of the Technical Datasheet. Only the current version is legally binding - and only for the intended market. In cases of uncertainty contact our technical department for further information before starting any applications. www.aquafin.net Page 2 of 3

RE-ROOF Acrylic Base Coat

Note:

Proper application is the responsibility of the user. Field visits by AQUAFIN personnel are for the purpose of making technical recommendations and not for supervising or providing quality control on-site.

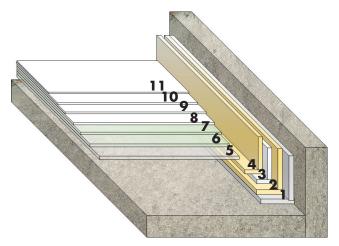
Safety:

Refer to SDS. For commercial use only. Ensure adequate ventilation in application area. Use Type C organic vapor cartridge respirators during spray application. Vapor inhalation problems are characterized by coughing, shortening of breath and tightness in the chest. Anyone exhibiting these types of symptoms should be immediately removed from the workplace and administered oxygen or fresh air. If the condition is prolonged or extreme, seek emergency medical assistance immediately. Avoid contact with skin and eyes. Wear fabric coveralls, neoprene gloves or other chemically resistant gloves and safety goggles during mixing and application. After contact with skin, wash with plenty of water. In case of eye contact, rinse immediately with plenty of water for 15 minutes and seek emergency medical assistance immediately. KEEP OUT OF REACH OF CHILDREN.

LIMITED WARRANTY: AQUAFIN, INC. warrants this product for a period of one year from the date of installation to be manufactured free of defects and to be consistent with its technical properties as stated in our current Technical Data Sheet. This product must be used as directed and within its stated shelf life. AQUAFIN INC. will replace or at our discretion refund the purchase price of any product, excluding cost of labor, which is proven to be defective. Our product recommendations are based on industry standards and testing procedures. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. We assume no warranties written, expressed or implied as to any specific methods of application or use of the product. AQUAFIN INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. AQUAFIN, INC. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.

For Professional Use Only.

RE-ROOF Acrylic System Layers:



WFT (wet film thickness) and DFT (dry film t	hickness) requireme	ents are provided in	mils		
	Minimum WFT (Wet Film Thickness)	Required DFT (Dry Film Thickness)	Coverage Rate Per Gallon	Coverage Rate Per Unit	
1st Layer: Primer(s) for flashing area(s)	(see primer Technical Data Sheet)				
2nd Layer: 1 st Coat Flashing: RE-ROOF Acrylic Flashing	25 mils		50 ft²	175 ft² (3.5 gal unit)	
3rd Layer: (non-woven polyester reinforcing roof fabric)					
4th Layer: 2nd Coat Flashing: RE-ROOF Acrylic Flashing	25 mils		50 ft²	175 ft² (3.5 gal unit)	
5th Layer: Primer for main field area (overlapping RE-ROOF flashing as instructed)	(see primer Technical Data Sheet)				
6th Layer: 1st Base Coat: RE-ROOF Acrylic Base Coat	17 mils	9 mils	94 ft²	470 ft² (5 gal unit)	
7th Layer: 2nd Base Coat: RE-ROOF Acrylic Base Coat	17 mils	9 mils	94 ft²	470 ft ² (5 gal unit)	
8th Layer: 1st Top Coat: RE-ROOF Acrylic Top Coat	22 mils	12 mils	72 ft²	360 ft² (5 gal unit)	
9th Layer: 2nd Top Coat: RE-ROOF Acrylic Top Coat	22 mils	12 mils	72 ft²	360 ft² (5 gal unit)	
10th Layer: 3rd Top Coat: RE-ROOF Acrylic Top Coat	22 mils	12 mils	72ft²	360 ft² (5 gal unit)	
11th Layer: 4th Top Coat: RE-ROOF Acrylic Top Coat	22 mils	12 mils	72 ft²	360 ft ² (5 gal unit)	

Check our website for the latest version of the Technical Datasheet. Only the current version is legally binding - and only for the intended market. In cases of uncertainty contact our technical department for further information before starting any applications. www.aquafin.net Page 3 of 3