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## **Technical Datasheet**

# **RE-ROOF** White Urethane Top Coat FR

Single Component, Bright White, Fire Rated, Aliphatic Urethane, Cool Roof Top 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 White Urethane Top Coat FR is a single component, bright white, fire retardant, moisture cured, aliphatic, liquid-urethane coating that functions as a top coat for Aquafin's RE-ROOF Urethane System. The RE-ROOF System is an eco-friendly, reliable solution for new roofs and cost-effective option for extending the life of existing roof systems.

#### **Typical Applications:**

- As the top coat for Aquafin's RE-ROOF Urethane System.
- Apply RE-ROOF White Urethane Top Coat FR over RE-ROOF Urethane Base Coat, or over RE-ROOF Urethane Base Coat FR.

#### Advantages:

- Quick & easy application
- Excellent resistance to chemicals, acids, and oils

#### **Preparation:**

- RE-ROOF White Urethane Top Coat FR should only be applied over RE-ROOF Urethane Base Coat or RE-ROOF Urethane Base Coat FR. Refer to the corresponding RE-ROOF urethane base coat TDS for surface preparation instructions and other important information.
- Ensure RE-ROOF White Urethane Top Coat FR is applied within the required recoat times for RE-ROOF Urethane Base Coat or RE-ROOF Urethane Base Coat FR.
- The surface of RE-ROOF Urethane Base Coat or RE-ROOF Urethane Base Coat FR must be dry, clean and free of dirt, dust, grease, oil, and other foreign substances that could interfere with adhesion.

#### 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.
- Do not weld, smoke or allow any open flames during mixing, application or curing.
- Ensure that CO2 or other dry chemical fire extinguishers are within easy access.
- Only proceed with application when ambient temperature is minimum

Technical Properties:				
	RE-ROOF WhiteTop Coat FR			
Durometer Hardness Shore A, ASTM D2240	90 ± 5			
Tear Strength, ASTM D624	350 ± 50 pli			
Tensile Strength, ASTM D2370	3000 ± 300 psi			
Elongation, ASTM D412	350 ± 50%			
Specific Gravity	1.34			
Total Solids by Weight, ASTM D2697	76 ± 2%			
Total Solids by Volume, ASTM D2697	74 ± 2%			
Viscosity @ 77°F (25°C)	3500 ± 1500 cps			
Color	White			
VOC, ASTM D-2369-81	0.42 lb/gal, 50 gm/liters			
All data are averages of several t	ests under laboratory conditions. In practice			

climatic variations such as temperature, humidity, and porosity of substrate may affect these values.

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 24 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 80%. Coating should not become wet within 48 hours after application. Special precautions are to be taken when ambient and/or substrate temperatures are approaching, at, or above 90°F (32°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 White Urethane Top Coat FR.
- 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.

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• 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: Treat edges, seams, joints, metal flashing, penetrations and transitions with RE-ROOF Aluminum-Colored Urethane Flashing or RE-ROOF White Urethane Flashing. Refer to the corresponding RE-ROOF urethane flashing Technical Data Sheet for surface preparation, mixing and application instructions, dry mil thickness requirements, approx. coverage, curing and recoat times. Allow to cure and pay close attention to recoat times.
- Primer: Apply the appropriate primer to the field areas in preparation for a RE-ROOF urethane base coat. Refer to the corresponding primer Technical Data Sheet for surface preparation, mixing and application instructions, approx. coverage, curing and recoat times. Overlap the flashing according to the primer instructions. Allow to cure and pay close attention to recoat times.
- First Base Coat: Apply the first coat of a RE-ROOF urethane base coat. Refer to the corresponding RE-ROOF urethane base coat Technical Data Sheet for surface preparation, mixing and application instructions, dry mil thickness requirements, approx. coverage, curing and recoat times. Allow to cure and pay close attention to recoat times.
- Second Base Coat: Apply the second coat of a RE-ROOF urethane base coat. Allow to cure and pay close attention to recoat times. Inspect the surface for damage prior to the application of RE-ROOF White Urethane Top Coat FR. Any surface damage must be repaired with a RE-ROOF base coat prior to the application of RE-ROOF White Urethane Top Coat FR.
- First Top Coat: Apply the first coat of RE-ROOF White Urethane Top Coat FR in a monolithic application at a rate of 94 ft²/gallon to achieve a minimum of 17 ( $\pm$  1) mils WFT (wet film thickness). Use an airless sprayer, brush, or phenolic resin core roller. RE-ROOF White Urethane Top Coat FR must be a uniformly thick, void-free, continuous membrane across the entire roof surface. Allow to cure and pay close attention to recoat times.

Notes: Do not apply RE-ROOF White Urethane Top Coat FR at a rate of more than 1 gallon per 100 ft<sup>2</sup>. 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 White Urethane Top Coat FR in several thinner coats, allowing each coat to properly cure.

• Second Top Coat: Apply the second coat of RE-ROOF White Urethane Top Coat FR in a monolithic application at a rate of 94 ft<sup>2</sup>/gallon to achieve a minimum of  $17 (\pm 1)$  mils WFT (wet film thickness). RE-ROOF White Urethane Top Coat FR must be a uniformly thick, void-free, continuous membrane across the entire roof surface.

Notes: 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.

#### Total System Thickness (field areas): 54 mils DFT

Notes: Total system thickness requirement excludes additional dry mils of primer coat(s), and flashing.

### Curing:

• Curing time for RE-ROOF White Urethane Top Coat FR is typically 16 hours at 75°F (24°C) and 50% relative humidity. Notes: Mix White Urethane Top Coat FR with RE-ROOF Urethane

Accelerator when faster curing times are desired. Refer to RE-ROOF Urethane Accelerator Technical Data Sheet for more information. When RE-ROOF White Urethane Top Coat FR is mixed with RE-ROOF Urethane Accelerator, curing time is approx. 8 hours [based on 75°F (24°C) and 50% relative humidity].

• Apply second coat of RE-ROOF White Urethane Top Coat FR within a maximum of 48 hours after the first coat of RE-ROOF White Urethane Top Coat FR.

Note: When RE-ROOF White Urethane Top Coat FR is mixed with RE-ROOF Urethane Accelerator, apply the second top coat within a maximum of 24 hours.

- If more than 48 hours has passed after the first application of RE-ROOF White Urethane Top Coat FR [24 hours if RE-ROOF Accelerator is used], re-prime with RE-ROOF Primer PO before proceeding with the second application of RE-ROOF White Urethane Top Coat FR.
- Allow to cure for at least 48 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.
- High temperatures and high humidity will accelerate the cure time. Low temperatures and low humidity will extend the cure time.

#### Clean-up:

Clean tools and equipment with Methyl Ethyl Ketone (MEK), Xylene, or similar product immediately after use. Cured material must be removed mechanically.

#### **Packaging:**

RE-ROOF White Urethane Top Coat FR is packaged in a 5-gallon pail (18.9 liters).

#### Shelf Life & Storage:

- 12 months in unopened, original packaging when stored at temperatures between 40°F and 80°F (4.4°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.

#### 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

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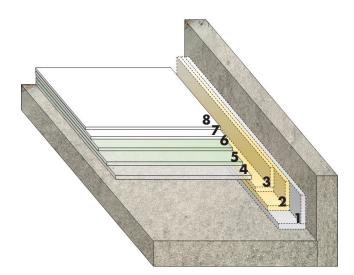
# **RE-ROOF White Urethane Top Coat FR**

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 Urethane System Layers:**



WFT (wet film thickness) and DFT (dry	film thickness) requ	irements are provid	led in mils		
	Minimum WFT (Wet Film Thickness)	Required DFT (Dry Film Thickness)	Coverage Rate Per Gallon	Coverage Rate Per Unit	
<b>1st Layer:</b> Primer(s) for flashing area(s)	(see primer Technical Data Sheet)				
<b>2nd Layer:</b> 1st Coat Flashing: a RE-ROOF urethane flashing	25 mils		64 ft²	224 ft <sup>2</sup> (3.5 gal unit)	
<b>3rd Layer:</b> 2nd Coat Flashing: a RE-ROOF urethane flashing	25 mils		64 ft²	224 ft <sup>2</sup> (3.5 gal unit)	
<b>4th Layer:</b> Primer for main field area (overlapping RE-ROOF flashing as instructed)	(see primer Technical Data Sheet)				
<b>5th Layer:</b> 1st Base Coat: a RE-ROOF urethane base coat	17 mils	14 mils	94 ft²	470 ft <sup>2</sup> (5 gal unit)	
<b>6th Layer:</b> 2nd Base Coat: a RE-ROOF urethane base coat	17 mils	14 mils	94 ft²	470 ft <sup>2</sup> (5 gal unit)	
7th Layer: 1st Top Coat: RE-ROOF White Urethane Top Coat FR	17 mils	13 mils	94 ft <sup>2</sup>	470 ft² (5 gal unit)	
8th Layer: 2nd Top Coat: RE-ROOF White Urethane Top Coat FR	17 mils	13 mils	94 ft <sup>2</sup>	470 ft <sup>2</sup> (5 gal unit)	

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