

# AlphaGuard™ BIO Base Coat

## High Performance, Two-Component, Bio-Based Polyurethane Base Coat

### FEATURES

Bio Content  
Virtually Odorless  
High Solids  
Low VOC  
Versatile

### BENEFITS

- Rapidly renewable content makes product sustainable and environmentally responsible
- System is perfect for sensitive accounts such as schools, hospitals, occupied buildings, etc.
- Results in thicker dry film vs. lower solids products
- 1 g/L
- Can be applied on many roofing substrates

### DESCRIPTION

The AlphaGuard BIO Base Coat is a two-component, bio-based, polyurethane liquid applied product.

### BASIC USES

The AlphaGuard BIO System can be used to restore weathered smooth asphalt-based BUR, modified bitumen, and single-ply systems.

### PACKAGING

#### Pails: 4 gal (15.1 L) Kits

Part A - 3.2 gals (12.1 L) packaged in a 5 gal (18.9 L) container

Part B - 0.8 gal (3.0 L) packaged in a 1 gal (3.7 L) container

#### Drums: 250 gal (946.3 L) Kits

Part A - 4 drums total - Each containing 50 gals (189.2 L) packaged in a 55 gal (208.1 L) container

Part B - 1 drum total - Containing 50 gals (189.2 L) packaged in a 55 gal (208.1 L) container

### COLOR

Gray

### GRADE

Brush, Roller, Spray, Squeegee & Backroll

### POT LIFE

20-25 minutes, 77°F (25°C)/50% RH.

*\*Temperature dependent - Increasing temperature reduces expected pot-life*

### STORAGE

12 months shelf life in unopened containers when properly stored.

#### DO NOT FREEZE PART B

Recommended storage conditions are indoors in a ventilated, dry area removed from heat, open flame, ignition sources, and direct sunlight. Storage temperatures should range from 60-70°F (15-21°C) and must not drop below 32°F (0°C) or exceed 110°F (43°C).

On the job site, materials should remain on the pallet until use and be stored in a shaded, ventilated area. Materials should be covered with a light-colored, reflective tarp for protection against the elements. Allow for adequate air flow inside the pallets.

Shelf life could be affected if the product is not stored properly.

### APPLICATION

**Preparation:** Surface must be clean, dry, in sound condition, and free of dirt, debris, and contaminants. Wet insulation must be identified and replaced. Deficient areas of existing system must be repaired. All repairs should be made with like materials matching the existing components and allowed to properly cure prior to application of liquid-applied products.

## APPLICATION CONTINUED

# AlphaGuard™ BIO Base Coat

Allow new concrete to cure for a minimum of 28 days and until moisture, RH, and compressive strength values reach an appropriate level. Concrete surfaces must be shot-blasted to a an ICRI 3-6 surface profile.

Metal surfaces and coated metal including fluoropolymer/PVDF coatings such as Kynar® (Registered trademark of Arkema Inc.) and Hylar® (Registered trademark of Solvay Solexis Inc.) must be ground to clean bright metal free of rust and primed prior to application.

If the surface has a pre-existing coating, paint, or sealant, please contact Tremco for adhesion/compatibility testing and surface preparation recommendations.

### **Mixing:**

Product material temperatures must be above 45°F (7°C) when mixing.

**Pails:** Use a heavy duty power drill with Jiffy Mixer attachment. Cordless drills are not recommended and may not properly mix the materials.

Mix Part A for 1 minute before adding Part B. After adding Part B mix the combined materials for a minimum of 2 minutes moving the mix blade from top to bottom. Make sure to mix areas around side walls and bottom of pail. Improper mixing will result in non-curing material.

**Drums:** Use industrial drum mixing equipment to mechanically mix each Part A and Part B container. Mix until product is consistent in appearance and viscosity. Do not thin.

**Do not break down kits into smaller quantities -MIX ENTIRE KIT.**

**Priming:** Primers may be needed on specific substrates/surfaces prior to application. See AlphaGuard Installation Guide for a list of recommended primers.

AlphaGuard BIO Base and Top Coats should be top-coated within 72 hours of application. If cured base or top coat is exposed for longer than 72 hours, an application of Tremco BIO Prime will be required to promote adhesion between coats.

**Installation:** Install product using one of the approved application methods evenly at the recommended coverage rate. Use wet mil gauges to monitor coverage rates throughout application. Never fully invert empty pails in an attempt to drain material as this may result in improperly cured material during application.

### **Reinforcements:**

**Fully-Reinforced Application:** Fully embed AlphaGuard Glass Mat or Permafab into wet AlphaGuard BIO Base Coat using a brush or roller until reinforcement is fully saturated and is free of voids, wrinkles, air pockets, standing fibers, etc. In overlap areas ensure wet base coat is present on the top of the embedded sheet and overlap side laps a minimum of 3" (76 mm) and end laps a minimum of 6" (152 mm). Follow the same guidelines to embed the reinforcement in these areas. Do not allow foot traffic on the AlphaGuard BIO Base Coat during application or until liquid product has cured. Once cured, apply top coat at the specified rate fully covering the embedded reinforcement.

**Partially-Reinforced (NR System):** Install a three-course application on all drainage components, field laps/seams, flashing base and vertical laps/seams, penetrations, etc. following Tremco detail guidelines. Install the three-course application by applying AlphaGuard BIO Base Coat or approved sealant. Fully embedding Permafab into wet AlphaGuard BIO Base Coat or approved sealant using using a brush or roller until reinforcement is fully saturated and is free of voids, wrinkles, air pockets, standing fibers, etc. Then fully encapsulate the fabric with an additional application of AlphaGuard BIO Base Coat or approved sealant.

### **Smooth BUR, Smooth MB, Single-Ply Substrates:**

**Fully-Reinforced:** 3 gals / 100 sq. ft. (1.2 L/m<sup>2</sup>) (48 wet mils) minimum.

**NR System:** 2 gals / 100 sq. ft. (0.8 L/m<sup>2</sup>) (32 wet mils) minimum.

## COVERAGE RATES

# AlphaGuard™ BIO Base Coat

## Granule Surfaced MB Substrates:

**Fully-Reinforced:** 4 gals / 100 sq. ft. (1.6 L/m<sup>2</sup>) (64 wet mils) minimum.

**NR System:** 3 gals / 100 sq. ft. (1.2 L/m<sup>2</sup>) (48 wet mils) minimum.

**Three-Course Application:** 30-65 In ft / gal

*Note: Coverage rates are listed at minimum recommended rates. The application surface can affect the necessary coverage rate.*

**Min Ambient:** 45°F (7.2°C)

**Max Ambient:** 110°F (43.3°C)

- Minimum temperatures must be rising following application
- Do not apply when dew point is within 5°F (2.77°C) of ambient temperatures
- Do not apply when precipitation, fog or dew is imminent prior to cure of the product

**Skin Time:** 3-4 hours @ 77°F (25°C) / 50% RH

**Recoat Time:** 6-7 hours @ 77°F (25°C) / 50% RH

*Note: Cure times can be effected by a number of weather and jobsite conditions including but not limited to exposure to sunlight and wind, humidity, precipitation, and temperature.*

BUR-Smooth	BUR-Gravel	Concrete	MB Smooth/Granule	Metal	Metal-Fluoropolymer	Single Ply	SPUF	Walls
●			●			●		

## GENERAL GUIDELINES

**Component:** Two-Component

**Pressure:** 4,500 psi

**Tip Size:** .045 - .055

**Filters:** Remove

**Hose Type:** High Pressure

**WHIP:** ¼" High Pressure

**Product Temp:** Ambient

- Must use heavy duty or industrial grade spray tips
- Properly clean and maintain spray equipment before, during and after use
- Equipment should be properly grounded during use

Before the product cures, clean surfaces and equipment with Isopropyl Alcohol. Spray equipment can be flushed/cleaned using MEK or xylene.

- Not recommended for use over the following:

**Roof Decks:** Direct applications to cementitious wood fiber, metal, poured-in-place gypsum, structural lightweight or lightweight insulating concrete, and wood decks (includes plywood, tongue and groove, etc.).

**Products/Systems:** Asphalt-based or coal tar gravel surfaced BUR systems, clay tile, expanded or extruded polystyrene insulation, fluoropolymer finished metal, shingles, silicone-based products, and tar-based products.

- Not for use under continuous immersion

COVERAGE RATES  
CONTINUED

TEMPERATURE  
RECOMMENDATIONS

CURE TIMES

ACCEPTABLE  
ROOF SURFACES

SPRAY EQUIPMENT  
RECOMMENDATIONS

CLEAN UP

LIMITATIONS

# AlphaGuard™ BIO Base Coat

## PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
Abrasion Resistance	ASTM C501	31 mg
Accelerated Weathering	ASTM G154	Pass
Breaking Strength	ASTM D751	385 lbf/in
Crack Spanning	ASTM C1305	Pass - 2 mm / 0.08 in
Dimensional Stability	ASTM D1204	0%
Dynamic Puncture Resistance	ASTM D5635	50 J
Elongation	ASTM D412	62%
Flexibility	ASTM D522	Pass @ -18°F
Fungi Resistance	ASTM G21	Pass
Indentation Hardness	ASTM D2240	82 Shore A
Low Temperature Flexibility	ASTM D5147	Pass at -30°F
Peak Load	ASTM D5147	414 lbf/in
Permeance	ASTM E96	0.011 perm-inch
Static Puncture Resistance	ASTM D5602	65 lbf
Tear Resistance	ASTM D5147	294 lbf/in
Tensile Strength	ASTM D412	644 psi
Water Absorption	ASTM D570	2 hours - 0.2%, 24 hours - 1.1%
Water Vapor Transmission	ASTM E96	1.2 perms
Volume Solids	ASTM D 2697	100%
Weight Solids	ASTM D 1644	100%
VOC		1 g/L

Data based on AlphaGuard BIO system

## CODES & APPROVALS

Florida Building Code



## MAINTENANCE

Your local Tremco Roofing sales representative can provide you with effective maintenance procedures which may vary, depending upon specific conditions. Periodic inspections, early repairs and preventative maintenance are all part of a sound roof program.

## PRECAUTIONS

Users must read container labels and Safety Data Sheets for health and safety precautions prior to use.

## TECHNICAL SUPPORT

Your local Tremco Roofing sales representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications.



[www.tremcoroofing.com](http://www.tremcoroofing.com)  
3735 Green Road  
Beachwood, Ohio 44122  
1.800.852.6013

220 Wicksteed Avenue  
Toronto, Ontario, M4H 1G7  
1.800.668.9879

Tremco Roofing and Building Maintenance is part of Tremco Construction Products Group.

Tremco is a US Registered trademark of Tremco CPG Inc.

The information provided on this data page supersedes all previous data concerning this product and its application. The Statements provided concerning the materials shown are intended solely as a general guide for material usage and are believed to be true and accurate. Since the manner of use is beyond our control, Tremco DOES NOT MAKE NOR DOES IT AUTHORIZE ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE, OR ANY OTHER WARRANTY, GUARANTEE OR REPRESENTATION, EXPRESSED OR IMPLIED, CONCERNING THIS MATERIAL EXCEPT THAT IT CONFORMS TO TREMCO'S PRODUCT SAMPLE. Buyer and user accept the product under those conditions and assume the risk of any failure, injury of person or property and loss or liability resulting from the handling, storage or use of the product, whether or not it is handled, stored, used in accordance with directions or specifications. UNDER NO CIRCUMSTANCE SHALL TREMCO BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM ANY BREACH OF WARRANTY. IN ALL CASES, TREMCO'S LIABILITY IS LIMITED, AT TREMCO'S OPTION, TO THE REPLACEMENT OF GOODS, OR THEIR VALUE, PROVEN TO BE DEFECTIVE IN MANUFACTURING.