

# AlphaGuard® BIO Base Coat

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

**Composition:** The AlphaGuard BIO Base Coat is a two-part, bio-based, polyurethane roof coating. AlphaGuard BIO Base Coat is used with fiberglass mat or polyester reinforcement.

**Basic Uses:** The AlphaGuard BIO System can be used in a variety of projects, including roof restoration, approved recover and new construction assemblies, IRMA and vegetative roof systems.

**Limitations:**

- Do not apply when ambient temperatures are below 45°F (7°C)
- Do not apply when overnight temperature drops below 40°F (4°C)
- Do not adhere to expanded polystyrene or extruded polystyrene.
- Do not apply directly to plywood, tongue and groove decks, wood decks, poured in place gypsum, lightweight insulating concrete decks, structural lightweight concrete and cementitious wood fiber decks.
- Not for use over coal tar pitch, gravel BUR, corrugated metal roof systems, and silicone-based coatings and sealants.

**Packaging:**

Part A - 5 gallon (18.9 L) container (3.2 gal total).  
Part B - 1 gallon (3.78 L) container (0.8 gal total).  
Each Part A & Part B kit yields 4 gallons

**Colors:** Gray

Product Advantages	
Features	Benefits
Bio Content	<ul style="list-style-type: none"> <li>• High bio content makes product sustainable and environmentally friendly</li> </ul>
Catalyzed Cure	<ul style="list-style-type: none"> <li>• Results in faster cure times than similar one-component products</li> </ul>
Versatile	<ul style="list-style-type: none"> <li>• Suitable for use over many substrates/roof types</li> </ul>
High Solids	<ul style="list-style-type: none"> <li>• 100% Solids</li> </ul>
Low VOC	<ul style="list-style-type: none"> <li>• Low Odor</li> <li>• Meets California VOC limits</li> <li>• Can be used in limited access areas</li> </ul>
Chemical Resistant	<ul style="list-style-type: none"> <li>• Resistant to a wide variety of harmful chemicals</li> </ul>

**Grade:** Brush/roller/squeegee.

**Pot Life:** 20-25 minutes (77°F/50% RH)

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

**Storage Life:** 12 months in unopened containers. Recommended storage conditions are in an area sheltered from harsh weather conditions at temperatures ranging from 60-80°F (15-26°C) and low humidity. Storage temperatures must not exceed 110°F (43°C). Do not store in direct sunlight.

**APPLICATION:**

**Preparation:** Clean the substrate with a high pressure power wash of at least 2,000 psi. Prior to application the surface must be clean, dry, solid, and free of dirt, grease, oil, algae, and other debris.

**Mixing:** 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 (Gray Label) for 1 minute before adding Part B (Gray Label). 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. Never fully invert empty pails in attempt to drain material will result in non-curing material.

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

**Repairs:** If AlphaGuard BIO is being used over an existing roof system, all appropriate repairs should be made before applying the AlphaGuard BIO system. Allow suggested cure time of repairs before applying AlphaGuard BIO to the roof surface.

**Reinforcement:** AlphaGuard BIO Base Coat requires full reinforcement with AlphaGuard Glass Mat or Permafab. Fully embed reinforcement into wet coating using a brush or roller until free of voids, wrinkles, air pockets, standing fibers, etc.

**ACCEPTABLE ROOF SURFACES/SUBSTRATES:  
Bituminous Roof Systems**

AlphaGuard BIO can be used over aged asphalt based roof products. When using over felt roof systems, repair any blisters and degraded felts.



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## Concrete

AlphaGuard BIO can be used directly over concrete with the appropriate primer. Any cracks should be repaired before coating is applied. Allow new concrete to fully cure for a minimum of 28 days (a concrete dryness test should be performed before application).

## Single Ply Systems

AlphaGuard BIO can be used over select single ply systems, when used with the appropriate primer.

## Modified Bitumen Systems

AlphaGuard BIO can be used over MB roof systems when used with the appropriate primer.

## Coverage Rate:

Smooth BUR/MB, Concrete, Single-Ply surfaces:

3 gals / SQ (48 wet mils) minimum

Granule surfaced MB:

4 gals / SQ (64 wet mils) minimum

**Clean Up:** Before the product cures, clean surfaces and equipment with Isopropyl Alcohol.

**Precautions:** Use Tremco AlphaGuard BIO System Coatings with adequate ventilation. Users must read container labels and Material Safety Data Sheets for health and safety precautions prior to use.

**Availability and Cost:** Contact your local Tremco Roofing Representative for pricing and availability. For the name and number of your Representative, call the Roofing Division at 216-292-5000.

**Maintenance:** Your local Tremco Roofing 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.

**Guarantee/Warranty:** Tremco Inc. warrants AlphaGuard BIO to be free of defects and to meet published physical properties when cured and tested according to ASTM and Tremco standards. Under this warranty, we will provide at no charge, AlphaGuard BIO in standard packaging to replace any AlphaGuard BIO proven to be defective when applied according to our written instructions, and in applications recommended by us as suitable for AlphaGuard BIO. THIS IS BUYER'S SOLE AND EXCLUSIVE REMEDY.

All claims concerning product defects must be made in writing within (12) months of shipment. The absence of such claims in writing during this period will constitute a waiver of all claims with respect to such product.

This warranty shall be IN LIEU OF any other warranty, express or implied, including but not limited to, any implied warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

AlphaGuard BIO can be used in a system configuration. Talk to your local Tremco Representative about system roof warranties.

**Technical Services:** Your local Tremco Representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for

## Physical Performance Characteristics

### AlphaGuard BIO Base Coat

Property	Test Method	Typical Value
Tensile Strength <sup>1</sup>	ASTM D412	1,400 lb/in <sup>2</sup>
Water Vapor Transmission <sup>1</sup>	ASTM E96	0.19 perms
Low Temperature Flexibility	ASTM D522	Pass at -25°F (1/2" mandrel bend)
Tear Strength <sup>1</sup>	ASTM D5147	309 lbf
Water Absorption <sup>1</sup>	ASTM D471	0.008
Indentation Hardness	ASTM D2240	88 Shore A
Dimensional Stability <sup>1</sup>	ASTM D5147	< 0.1%
Volume Solids	ASTM D 2697	100%
Weight Solids	ASTM D 1644	100%
Volatile Organic Content	ASTM D3960	1 g/L (A+B mix)
Viscosity	ASTM D 2196	2,500 - 5,500 cp

<sup>1</sup> Data is for AlphaGuard BIO System

### Skin & Over-Coat Times

Skin Time at: 77 °F / 50% RH 3-4 hours

Over-Coat Time at: 77 °F / 50% RH 6-7 hours

NOTE- Both skin & overcoat times are temperature-dependent. Higher temperatures will result in reduced skin/overcoat times, lower temperatures may result in extended skin/overcoat times

special applications. The services of the Tremco Research Center, which has earned a unique reputation in weather-proofing technology, complement and extend the services of the Tremco Technical Service Staff.

## Statement of Policy and Responsibility:

Tremco takes responsibility for furnishing quality materials and for providing specifications and recommendations for their proper installation. As neither Tremco itself nor its Representatives practice architecture or engineering, Tremco offers no opinion on, and expressly disclaims any responsibility for the soundness of any structure on which its products may be applied. If questions arise as to the soundness of a structure or its ability to support a planned installation properly, the Owner should obtain opinions of competent structural engineers before proceeding. Tremco accepts no liability for any structural failure or for resultant damages, and no Tremco Representative is authorized to vary this disclaimer.

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