

# AlphaGuard™ PUMA Top Coat

High performance, two-component, methyl methacrylate finishing resin

## FEATURES

PUMA Technology

Low Temperature Applications

Catalyzed Cure

High Solids

Reflective Top Coat

Plant Root Resistance

VOC Compliant

## BENEFITS

- Unique technology typically provides higher elongation and crack bridging properties than comparable MMA/PMMA technology

- Product can be applied in freezing temperatures.

- Results in faster cure than one-component products

- 100% Solids

- Lower Surface Temperatures
- Potential Energy Savings

- Highly durable system prevents damage caused by plant roots in vegetative roofing installations

- 0 g/L; Can be used anywhere (No VOC restrictions)

## DESCRIPTION

AlphaGuard PUMA Top Coat is a high performance, two-component, UV resistant, methyl methacrylate waterproofing resin.

## BASIC USES

The AlphaGuard PUMA system is ideal for restoration, repair and waterproofing of a variety of roofing systems and can be used as the primary roofing system in IRMA and vegetative roof assemblies. AlphaGuard PUMA can also be installed as the roofing system in direct to structural concrete applications. AlphaGuard PUMA can also be used as a liquid flashing membrane for approved new roofing systems.

## PACKAGING

Available in 6 gallon (22.71 L) and 2 gallon (7.57 L) containers.

## COLOR

White, Light Gray, Unpigmented

## GRADE

Brush / Roller / Squeegee.

## POT LIFE

10 - 15 minutes. *\*Pot life dependent on ambient, substrate, and product temperature and the amount of AlphaGuard FC or PUMA Catalyst used.*

## STORAGE

12 months in unopened containers. 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 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 effected if the product is not stored properly.

## APPLICATION

**Preparation:** The surface of previously applied AlphaGuard PUMA BaseCoat must be clean, dry, solid, and free of dirt, grease, oil, algae, and other debris prior to application of the AlphaGuard PUMA Top Coat.

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

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

AlphaGuard PUMA Top Coat must be mixed to achieve a uniform distribution and appearance of the product. Once properly mixed, AlphaGuard PUMA Top Coat can be poured off in smaller quantities into a second container. Add the appropriate amount of

# AlphaGuard™ PUMA Top Coat

## APPLICATION CONTINUED

AlphaGuard FC or PUMA Catalyst to the selected amount of top coat and mix thoroughly for a minimum of 2 minutes until powder catalyst is completely dissolved. Catalyze only the amount of top coat intended to be used within the expected pot life. The amount of AlphaGuard FC or PUMA Catalyst required is based on the amount of top coat used and the ambient temperature (Refer to the mixing chart for proper mixing ratios).

**Application:** Apply AlphaGuard PUMA Top Coat over cured AlphaGuard PUMA Base Coat.

### Optional Non-Skid Coat w/ Embedded and Backrolled Aggregate:

- Additional Layer of Top Coat: Apply at 1 - 1½ gal/SQ (16 - 24 wet mils)
- Approved Aggregates:
  - **Silica Sand (20-40 mesh) - Coverage:** 20-30 lbs./100 sq. ft.
  - **No. 11 Roofing Granule - Coverage:** 10-15 lbs./100 sq. ft.

**Unpigmented Top Coat-** Universal Color Paks must be added for desired color and properly mixed prior to pouring off or catalyzing the product. For best results, add 3 Universal Color Paks to each 6 gallon pail of Unpigmented Top Coat and mix to achieve a uniform distribution and appearance.

## MIXING CHART

AG PUMA TOP COAT AMOUNT	ALPHAGUARD FC CATALYST AMOUNTS BY TEMPERATURE																			
	70-95°F (21-35°C) 1% Catalyst				60-70°F (15-21°C) 2% Catalyst				40-60°F (5-15°C) 4% Catalyst				32-40°F (0-5°C) 6% Catalyst				< 32°F (< 0°C)			
	oz	lbs	g	100g bags	oz	lbs	g	100g bags	oz	lbs	g	100g bags	oz	lbs	g	100g bags	oz	lbs	g	100g bags
1 gal (11.28 lbs) 3.78 L (5.11 kg)	1	0.09	41	1/2 bag	3	0.18	83	1 bag	6	0.36	165	1.75 bags	9	0.55	248	2.5 bags	Contact Tremco			
3 gal (33.84 lbs) 11.34 L (15.35 kg)	4	0.27	124	1.25 bags	9	0.55	248	2.5 bags	18	1.09	496	5 bags	26	1.64	745	7.5 bags	Product Group			
6 gal (67.68 lbs) 22.68 L (300 kg)	9	0.55	248	2.5 bags	18	1.09	496	5 bags	35	2.19	993	10 bags	53	3.28	1,489	15 bags	for Information			

\* AlphaGuard FC Catalyst amounts listed on this chart are minimum required quantities.

AG PUMA TOP COAT AMOUNT	ALPHAGUARD PUMA CATALYST AMOUNTS BY TEMPERATURE RANGES														
	70-95°F (21-35°C) 2% Catalyst			60-70°F (15-21°C) 4% Catalyst			40-60°F (5-15°C) 8% Catalyst			32-40°F (0-5°C) 12% Catalyst			< 32°F (< 0°C)		
	oz	lbs	g	oz	lbs	g	oz	lbs	g	oz	lbs	g	oz	lbs	g
½ gal (4.56 lbs) 1.89 L (2.06 kg)	2	0.09	41	3	0.18	82	7	0.36	165	10	0.54	247	Contact Tremco		
1 gal (9.12 lbs) 3.78 L (4.13 kg)	3	0.18	83	7	0.36	165	13	0.73	330	20	1.09	496	Product Group		
3 gal (27.36 lbs) 11.34 L (12.41 kg)	10	0.55	248	20	1.09	496	40	2.19	993	60	3.28	1,489	for information.		
6 gal (54.72 lbs) 22.68 L (24.82 kg)	18	1.09	496	35	2.19	993	70	4.38	1,986	105	6.57	2,978			

\* AlphaGuard PUMA Catalyst amounts listed on this chart are minimum required quantities.

Smooth BUR	Concrete	Modified Bitumen	Single Ply
◆	◆	◆	◆*

\*Field adhesion test and Product/Technical Management approval required

## ACCEPTABLE ROOF SURFACES/SUBSTRATES

## COVERAGE RATES

## TEMPERATURE RECOMMENDATIONS

## CLEAN UP

## LIMITATIONS

**Standard Warranty:** 1.25 gals / SQ (20 wet mils) (0.5L/m<sup>2</sup>)

**30 Year Warranty:** 2 gals / SQ (32 wet mils) (0.8L/m<sup>2</sup>)

**Tremco Plain and Simple Warranty:** 2.25 gals / SQ (36 wet mils) (0.9L/m<sup>2</sup>)

Apply when ambient temperature is -20°F - 95°F (-28°C - 35°C)

Do not apply when precipitation, fog, or dew is imminent prior to cure of the product.

Clean tools immediately after use with AlphaGuard PUMA Cleaner.

Not recommended for use over the following:

**Roof Decks:** 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, corrugated or standing seam metal roof systems, expanded or extruded polystyrene insulation, fluoropolymer finished metal, shingles, silicone-based products, and tar-based products.

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## LIMITATIONS

- Not for use under continuous immersion.
- Do not thin

## PHYSICAL PROPERTIES

PHYSICAL PROPERTY	TEST METHOD	TYPICAL VALUE
Peak Load @ 73°F, lbf/in.	ASTM D5147	105 (MD) 110 (XMD)
Elongation, % @73°F	ASTM D5147	31% (R-MD), 43% (R-XMD)
Peak Load @ 73°F, post heat conditioning, lbf/in.	ASTM D5147	146 (MD) 131 (XMD)
Elongation %, @ 73°F, post heat conditioning	ASTM D5147	36% (MD) 35% (XMD)
Peak Load @ 73°F, post-accelerated weathering, lbf/in.	ASTM D5147	145 (MD) 152 (XMD)
Elongation %, @ 73°F, post-accelerated weathering	ASTM D5147	33% (MD) 42% (XMD)
Tensile Strength	ASTM D412	1062 psi
Tear Resistance, lbf.	ASTM D5147	216 (MD) 208 (XMD)
Hardness	ASTM D2240	88 Shore A
Dimensional Stability, %	ASTM D5147	0.00%
Water Vapor Transmission, perms	ASTM E96(A)	0.3 perms
Water Absorption, % (@212°F/100°C)	ASTM D570	0.01%
Static Puncture Resistance, lbf	ASTM D5602	Pass 56
Low Temperature Deflection, °F	ASTM D7264	Pass -30 (MD & XMD)
Self-ignition, °F	ASTM D1929	740
Rate of Burning, in/min	ASTM D635	0.9
VOC	ASTM D3960	0 g/L
SRI (White Top Coat)	ASTM C1549	98

## CODES & APPROVALS

Florida Building Code



Rapid Ratings	Rapid Ratings*		Weathered
	Initial	Weathered	
Solar Reflectance	0.79	0.70	Pending
Thermal Emittance	0.89	0.89	Pending
Rated Product ID	0612-0031		
Licensed Manufacturer ID	0612		
Classification	Production Line		

\*CRRC Rapid Ratings: These are interim laboratory-aged values that simulate weathered values. These values will be replaced by the measured three-year aged values upon completion of the weathering process. Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effects of solar reflectance and thermal emittance on building performance may vary.  
 Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.

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## 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 preventive 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.



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