

# AlphaGuard™ FC LO Winter Grade-Field

Winter Grade, high performance, two-component, low odor, modified polyurethane methacrylate resin

## FEATURES

PUMA Technology

Low Temperature Applications

Low Odor

High Solids

Highly Reflective (White)

VOC Compliant

## BENEFITS

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

Winter Grade can be installed in below-freezing ambient temperatures

Catalyzed cure is waterproof in as little as 30 minutes and is more reliable than one-component products

Perfect option for odor sensitive accounts/facilities

100% solids

Lowers rooftop temperatures resulting in less stress and potential energy savings

Can be used anywhere (No VOC restriction)

## DESCRIPTION

AlphaGuard FC LO Winter Grade - Field is a winter grade, high performance, two component, low odor, modified polyurethane methacrylate waterproofing resin.

## BASIC USES

AlphaGuard FC LO Winter Grade - Field can be used in a variety of applications, including restoration or repair of approved roofing substrates, AlphaGuard PLUS system roof assemblies, application to structural concrete roof decks, and in IRMA/PRM and vegetative roof system assemblies. The product is installed in a fully reinforced application utilizing AlphaGuard Glass Mat or Permafab reinforcements.

## PACKAGING

5 gal (18.9 L) filled in 6 gal pail

## COLOR

White

## GRADE

Brush, Roller, Squeegee & Backroll

## POT LIFE

10-20 minutes

*\*Pot life dependent on ambient, substrate, and product temperature and the amount of AlphaGuard FC Catalyst used.*

## STORAGE

12 months shelf life in unopened containers when properly stored.

### DO NOT FREEZE

Recommended storage is 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. Rust must be abraded until it no longer exhibits flaking or chalking. Existing wet roofing components 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.

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.

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## APPLICATION CONTINUED

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

AlphaGuard FC LO Winter Grade - Field must be mixed to achieve a uniform distribution and appearance of the product. Once properly mixed, AlphaGuard FC LO Winter Grade - Field can be poured off in smaller quantities into a second container. Measure by weight and add the appropriate amount of AlphaGuard FC Catalyst to the selected amount of AlphaGuard FC LO Winter Grade - Field and mix thoroughly until powder catalyst is completely dissolved. Catalyze only the amount of liquid resin intended to be used within the expected pot life. The amount of AlphaGuard FC Catalyst required is based on the amount of liquid resin used and the ambient temperature (Refer to the mixing chart for proper mixing ratios).

**Priming:** Consult Tremco's Product & Technical Group for primer recommendations on concrete and single-ply substrates.

**Installation:** Install products using one of the approved application methods evenly at the recommended coverage rate. Use wet mil gauges to monitor coverage rates throughout application.

**Fully-Reinforced Application:** Apply base layer of AlphaGuard FC LO Winter Grade - Field at the recommended coverage rate. Immediately embed AlphaGuard Glass Mat or Permafab into wet AlphaGuard FC LO Winter Grade - Field using a brush or roller until reinforcement is fully saturated and is free of voids, wrinkles, air pockets, standing fibers, etc. Immediately apply a top layer of AlphaGuard FC LO Winter Grade - Field in a wet-on-wet application over the properly embedded reinforcement at the recommended coverage rate. In overlap areas ensure AlphaGuard FC LO Winter Grade - Field is present on top of the embedded reinforcement, then overlap the next run of reinforcement with a minimum 3" (76 mm) overlap at side laps and a minimum of 6" (152 mm) at end laps. Do not allow foot traffic on the applied product during application or until product has properly cured.

## ACCEPTABLE ROOF SURFACES

BUR-Gravel	BUR-Smooth	Concrete	MB-Granule	MB-SBS Smooth	Metal	Metal Fluoropolymer	Single Ply	SPUF
	◆	◆	◆	◆			◆*	

\*Requires in-field adhesion test. Contact Tremco's Product & Technical Dept. for instructions

## MIXING CHART

ALPHAGUARD FC LO WINTER GRADE - FIELD AMOUNT	ALPHAGUARD FC CATALYST AMOUNTS BY TEMPERATURE (BY WEIGHT)															
	30-40°F (-1.1-4.4°C)				40-50°F (4.4-10°C)				50-60°F (10-15.5°C)				60-70°F (15.5-21.1°C)			
	8% Catalyst				6% Catalyst				4% Catalyst				2% Catalyst			
	oz	lbs	g	100g Bags	oz	lbs	g	100g Bags	oz	lbs	g	100g Bags	oz	lbs	g	100g Bags
1 gal (10.7 lbs)	14	0.86	388	4	11	0.64	291	3	7	0.43	194	2	4	0.21	97	1
2.5 gal (26.75 lbs)	35	2.14	971	10	26	1.61	728	8	18	1.07	485	5	9	0.54	243	3
5 gal (53.5 lbs)	69	4.28	1,941	20	52	3.21	1,456	15	35	2.14	971	10	18	1.07	485	5

\*Refer to mixing instructions above.

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## PHYSICAL PROPERTIES

Physical Property	Test Method	Test Value
Abrasion Resistance	ASTM C501	391 mg
Accelerated Weathering - 5,000 hrs.	ASTM G154	Pass
Breaking Strength	ASTM D751	MD - 444 lbf/in (77.7 N/mm) XMD - 432 lbf/in (75.6 N/mm)
Dimensional Stability	ASTM D5147	MD - 0% XMD - 0%
Dynamic Puncture Resistance	ASTM D5635	17.5 J
Elongation (Non-Reinforced)	ASTM D5147	137%
Elongation (Reinforced)	ASTM D5147	MD - 67% XMD - 65%
Fungi Resistance	ASTM G21	0 Rating
Indentation Hardness	ASTM D2240	85 Shore A
Peak Load	ASTM D5147	MD - 283 lbf/in (49.5 N/mm) XMD - 286 lbf/in (50.0 N/mm)
Static Puncture Resistance	ASTM D5602	47 lbf (209 N)
Tear Strength	ASTM D5147	MD - 305 lbf (1,356.7 N) XMD - 297 lbf (1,321.1 N)
Tensile Strength (Non-Reinforced)	ASTM D412	830 psi (5,722.6 kN/m <sup>2</sup> )
Tensile Strength (Reinforced)	ASTM D5147	MD - 1,538 lbf/in (269.3 N/mm) XMD - 1,423 lbf/in (249.2 N/mm)
Water Absorption	ASTM D570	2 hrs. - 0.1% 24 hrs. - 0.8%
Volume Solids		100%
Weight Solids		100%
VOC		< 50 g/L

## COVERAGE RATES

### Smooth BUR/MB, Single-Ply, Structural Concrete Substrates:

#### Fully-Reinforced Application:

Base Layer: 3 gals / 100 sq. ft. (1.2 L/m<sup>2</sup>) (48 wet mils)

Top Layer (Standard Warranty): 3 gals / 100 sq. ft. (1.2 L/m<sup>2</sup>) (48 wet mils)

Top Layer (Extended Warranty): 3.5 gals / 100 sq. ft. (1.4 L/m<sup>2</sup>) (56 wet mils)

#### Granule MB Substrates:

#### Fully-Reinforced Application:

Base Layer: 3.5 gals / 100 sq. ft. (1.4 L/m<sup>2</sup>) (56 wet mils)

Top Layer (Standard Warranty): 3 gals / 100 sq. ft. (1 L/m<sup>2</sup>) (40 wet mils)

Top Layer (Extended Warranty): 3.5 gals / 100 sq. ft. (1.4 L/m<sup>2</sup>) (56 wet mils)

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

**Min Ambient:** 30°F (-1.1°C)

**Max Ambient:** 70°F (-21.1°C)

**Min Substrate:** 30°F (-1.1°C)

**Max Substrate:** 135°F (57.2°C)

- Minimum temperatures must be rising following application
- Do not apply when dew point is within 5°F (2.7°C) of ambient temperatures
- Do not apply when precipitation, fog or dew is imminent prior to cure of the product

## TEMPERATURE/WEATHER RECOMMENDATIONS

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## CURE TIMES

**Skin Time:** 25 mins @ 77°F (25°C) / 50% RH

**Recoat Time:** 45 mins - 1 hour @ 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.

## CLEAN UP

Clean tools immediately after use with AlphaGuard PUMA Cleaner or Acetone.

## LIMITATIONS

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 tarbased products.

- Not for use under continuous immersion.

## 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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