

SAFETY

CAUTION: HARMFUL IF SWALLOWED. MAY CAUSE EYE, SKIN AND RESPIRATORY IRRITATION. KEEP OUT OF REACH OF CHILDREN. If spraying, use a dust mask.

First Aid: Eyes – immediately flush with plenty of water, and continue rinsing for at least 15 minutes. Skin – wash with soap and water, followed by a thorough rinse. Ingestion – if swallowed, **DO NOT INDUCE VOMITING**, dilute with one to two cups of water or milk. Immediately contact a poison control center or physician for further instructions. Inhalation – immediately move to fresh air.

For U.S. Health Hazard Information, call (800) 228-5635

SPECIFIC PRODUCT GUARANTEE

Benchmark®

Conklin Company’s guarantee to the Independent Business Owner: Conklin Company Inc. guarantees for a period of five (5) years from date of purchase that Benchmark® is free from any defects in manufacture. This guarantee is limited to replacement of product at the expense of the company when such product proves to be defective in manufacture. Among other things, this guarantee does not apply to coverage failure due to improper application. Proper application includes, but is not limited to the requirements, that Benchmark must be applied in a continuous, unbroken (closed seal) film of a dry thickness of not less than 27 mils, with a wet thickness of not less than 48 mils. **THE COMPANY SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM ANY CAUSE WHATSOEVER. THIS WARRANTY IS IN LIEU OF THE IMPLIED WARRANTY OF MERCHANTABILITY AND ALL OTHER WARRANTIES EXPRESSED OR IMPLIED.** This guarantee applies only to the Conklin Independent Business Owner who purchases the product and cannot be extended to any other person.



Benchmark®

Acrylic
Roof
Coatings

**APPLICATION
GUIDE**

Conklin Company Inc.
Building Products Division
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www.conklin.com

NOTE: Inadequate cleaning usually results in poor adhesion of all acrylic roof coating products to the substrate. If there are indications that moisture is trapped within the roof, remove all the wet layers and replace them with dry material. The use of moisture detection equipment is highly recommended.

Polyurethane Foam
Benchmark® has been designed for new spray-in-place polyurethane foam. Application of the base coat should be made no sooner than two hours and no later than 72 hours following the spray-foam application. However, for best results, application should be made the same day as the spray-foam application to avoid foam damage by sunlight. In any case, follow the polyurethane foam manufacturer’s requirements.

In the event that the foam is not coated within 72 hours and damage has resulted, the damaged foam surface must be removed by a stiff bristle broom or scrapper machine and a new layer of polyurethane foam applied. **CAUTION:** Do not apply Benchmark over urethane foam that has been mechanically scarified.

may be used as directed.
heavy-duty multipurpose cleaner. On weathered acrylic Conklin roofs, Conklin WAC weathered acrylic roof cleaner On sloped or pitched roofs, clean the surface with a stiff bristle broom and/or high pressure water and Conklin Mox® If poor drainage exists, a dry method of roof preparation is necessary. On built-up roofs, use vacuums, sweepers and power blowers to remove all dirt and gravel.
High pressure water is the best way to clean a roof – as long as the water will not damage the building or its contents. It does, however, create a wet roof that must be thoroughly dried before the coating is applied.

Cleaning The Roof
show through the acrylic roofing membrane after application.
The application surface must be finished, smooth, free of grease, wax, dirt, contaminants, moisture, and other matter which would interfere with adhesion. It must also be free of chips, loose roofing or other foreign matter which might retarders, roofing vents, expansion joints, flashings, and positive slope to drain will be required.
A coating will perform well only if the surface to which it is applied is properly prepared and clean. The substrate must be structurally sound, solid, clean and dry. On certain decks and surfaces, proper installation of drains, vapor urethane with the benefits of acrylics to create a seamless membrane. This two coat system offers high tensile strength, elongation, and toughness comparable to some solvent-based systems.

SPECIFICATION		BASE COAT	TOP COAT
Type of resin	Acrylic	Acrylic	Acrylic
Color	Blue/Gray	White	White
Solids (% by weight)	64.5%	65.5%	55.0%
(% by volume)	55.0%	55.0%	55.0%
Density	10.4 lbs./gal.	10.9 lbs./gal.	13.5 lbs./gal.
Thickness (dry mils)	13.5	13.5	13.5
Application temperature	Do not apply at temperatures less than 40 F or during inclement weather.		
**Dry time (hours)	2 – 8	2 – 8	
*Fire resistance	Class “A” (UL 790)		
Elongation	338%	ASTM D-412	
Tensile strength	410 PSI	ASTM D-412	
*Refer to Underwriters Laboratories Roofing Materials and Systems directory for specific fire resistant assemblies or contact Conklin Company Product Services.			
**Dry time for Benchmark will vary depending on the temperature, humidity and thickness at which the product is applied. Lower temperature, higher humidity, or higher wet film thickness will increase the dry time in excess of the two to eight hour average.			

Polyurethane foam that is off-ratio should also be removed and refoamed before applying Benchmark® Off-ratio spray-foam is evident by a brown, glossy structure (high isocyanate) or may feel oily and possibly tacky (high polyol).

Spray-foam surface must be cleaned, free of any dirt or grease, and dry before applying Benchmark. Broken or cracked foam, or imperfections in the foam such as tunnels caused by the blowing agents, should be caulked with Conklin Kwik Kaulk® acrylic latex caulking compound before coating.

Spray-foam application should provide at least 1/4:12 slope to drain. Benchmark top coat should be applied to the base coat as soon as it has reached full cure, usually in 24 hours.

Benchmark top coat is a white reflective coating and should not be tinted to any color. However, Kolor Kote® finish coat may be used to achieve desired color when applied over Benchmark top coat.

Eliminating large depressions and ponding areas on flat roofs

Large depressions and ponding areas (expanses greater than 36 square feet) are not acceptable and must be corrected using one of the following methods:

1. Spray-in-place foam
2. Drains
3. Crickets
4. Tapered boardstock

Filling small cracks

Cracks less than one-fourth inch by one-eighth inch should be filled with Kwik Kaulk acrylic latex caulk to provide a base for a complete membrane seal of Conklin roof coating product over the entire surface. All remaining joints, cracks and flashing details should be prepared using joint tape applied according to instructions. When the job is complete, the result will be a double thickness of coatings/fabric over each joint. Old and/or deteriorated surfaces which contain more than 30 percent alligatoring will require either a complete tear off or use of a ply system (fabric reinforcement). Cracks and holes must be patched, loose substrates removed, damaged surfaces prepared, wet insulation replaced, and vents added (if required) prior to the application of Conklin roof coating products.

Applying insulation board decks

Before applying coating to insulation board decks, all joints and flashing details should be prepared by caulking and using joint tape with a double thickness of base coat over each joint. Refer to the Rapid Ply/Bench Ply specification sheet before application of the system.

METHODS

When applying Conklin acrylic roof systems remember:

The first coat must be thoroughly dry before walking or spraying on the second coat. Inspect and patch any voids prior to applying the second coat. The quality of application is always of utmost importance.

Check the application for pinholes or fissures in the coating. These must be patched or filled using Kwik Kaulk or a significant amount of coating before applying the next coat.

Do not walk on the second or final coat until complete curing takes place.

Airless spray equipment

Benchmark can be applied with airless spray equipment. It is necessary to move the coating into the small seams and cracks to achieve a continuous membrane. A spray tip orifice of .028 – .035 inches is recommended at a minimum 2,500 psi fluid pressure.

When spraying Benchmark, store materials in a warm environment, 60 F or above.

Cold material causes difficulty when spraying.

ADVERSE WEATHER APPLICATION

Moist conditions

Since Conklin acrylic roof coatings are water based, they require complete evaporation of water to cure. **DO NOT APPLY CONKLIN ROOF COATING PRODUCTS BEFORE OR DURING RAIN, DEW, FOG, FREEZING TEMPERATURES OR OTHER CONDITIONS THAT WILL NOT PERMIT COMPLETE CURING.**

KOLOR KOTE FINISH COAT

Kolor Kote finish coat can be used to provide a dirt-resistant, decorative top coat and can be tinted to a variety of colors.

CLEAN UP

While the coating is still wet, clean yourself, tools and the area with water. If the coating is not fully dry, it can easily be removed with a solution of Mox® heavy-duty multipurpose cleaner and water.

GENERAL CAUTIONS AND SAFETY REQUIREMENTS

1. Always follow the directions that accompany Conklin acrylic roof coating products.
2. Uncured coatings, loose granules and cured coating that has become wet from rain, dew or other causes are extremely slippery. Care should be taken when walking on coating or granules.
3. Sunglasses are recommended for application and inspection of coating to ease potential eye strain due to the brightness of the coating.

LIMITATIONS

1. Do not apply Conklin roof coating systems to a surface that is wet, dirty or has a structurally unsound substrate.
2. Do not store any Conklin acrylic roof coating at temperatures less than 40 F. Do not apply at temperatures below 40 F, when temperatures may drop below 40 F within 24 hours, or when the temperature is not at least 5 F above the dew point. Do not apply during inclement weather, when precipitation appears imminent, or when freezing may occur before the membrane is fully cured.
3. Coating applications should not be started during inclement weather, when precipitation appears imminent, during high humidity or when freezing may occur before the coating can cure.
4. Coating shall not be applied to surfaces without adequate slope for drainage to eliminate ponding water.
5. Suitable service walkways shall be provided as indicated by Conklin specification sheets.
6. Application shall not be used in interior settings where a thermal barrier is required.
7. Coating shall not be applied directly to unacceptable surfaces such as wood shingles, slate tile roofing or poured-in-place cementitious insulations.
8. Coating application shall be limited to the decks and substrates indicated herein.
9. Benchmark® top coat is not designed to be tinted directly.
10. Coating shall not be applied to foam over refrigerated tanks or buildings where a vapor barrier coating is required.
11. Coating application shall be limited to above-ground approved substrates.
12. Benchmark shall not be applied to foam surfaces with a texture of “verge of popcorn,” “popcorn” or “tree bark.”

COVERAGE RATES (gallons/square)*

Product	Substrate				
	Metal Approved Plywood** / *Concrete	Smooth Built Up Roofing**	Asphalt Shingles Roll Roofing (Fully Adhered)	Approved Boardstock Insulation With Fabric Reinforcement**	Spray-In-Place Polyurethane Foam
Prime Time®	Optional	1	1	Optional	–
Base coat					
1st coat	1.9	1.5	1.9	1.5	1.9
2nd coat	–	.5	1.25	.5	–
Top Coat	1.9	1.9	1.9	1.9	1.9

*The above application rates include 15% for application loss and 10% for surface texture. This chart is not meant to represent absolute rates, but are starting points to assist in the bidding of a job. Under very irregular roofing substrate conditions, more product may be required. Most importantly, Benchmark must be applied in a continuous, unbroken film of a dry thickness of no less than 27 mils over the entire roof.

**Refer to Conklin specification sheet section 07542C on Rapid Ply and Bench Ply for specific application details.