



PRODUCT DATA SHEET

ElastiKote® Bio-Tech 3000

Elastikote®
5020 Enterprise Parkway
Seville, OH 44273
800-992-1053

Part Number
30-RF-WH-05
30-RF-WH-50
30-RF-SI-05
30-RF-SI-50
30-RF-LG-05
30-RF-LG-50

Rev. 7-12-17

DESCRIPTION

ElastiKote® Bio-Tech 3000 is an environmentally responsible low VOC, bio-based, flexible, high performance, watertight, puncture resistant ready-to-use single component fluid-applied styrene ethylene butylene styrene (SEBS) liquid resin used in restoration of roof substrates such as:

EPDM	Galvanized Metal	Spray Polyurethane Foam	Concrete
PVC	Granular Surfaced SBS Modified Bitumen	KEE (Elavaloy®)	
TPO	Plywood	APP Modified Bitumen	

ElastiKote Bio-Tech 3000 possessing a Solar Reflective Index of 106 enables the owner to maximize energy savings. To promote long lasting protection, while simultaneously championing environmental air quality safeguards, Elastikote Bio-Tech 3000 is uniquely designed as a low VOC formulated resin to minimize oxidation and UV radiation degradation vulnerability. Elastikote Bio-Tech 3000 is available in white, silver, light gray, and custom colors in 5-gallon pails or 50-gallon (net by weight) drums. Elastikote Bio-Tech 3000 is manufactured in our ISO 9001:2008 Registered facility located in Seville, Ohio.

TECHNICAL INFORMATION

ElastiKote Bio-Tech 3000 is a USDA certified BioPreferred product, which received certification through the USDA BioPreferred program. Biobased roofing products are commercial or industrial products that utilize biological renewable agricultural or forestry materials as significant components within the basic product composition. Biobased products are specifically designed to reduce or replace petroleum based materials in manufactured products, therefore decreasing the environmental impact while creating domestic demand for agricultural commodities. Elastikote Bio-Tech 3000 is listed in the USDA BioPreferred product Catalog.



ElastiKote Bio-Tech 3000 is classified by Underwriters Laboratories Inc. to ANSI/UL 790 Tests for Fire Resistance of Roofing Materials.



ElastiKote Bio-Tech 3000 has passed ASTM D 6083 Standard Specification for Liquid Applied Coatings Used in Roofing
It is also CA Title 24 compliant

Unless otherwise stated, results are per ASTM D 6083 certified laboratory testing protocol

¹Fully cured sample per laboratory testing

- Colors not guaranteed against color shift

PHYSICAL PROPERTIES	
Physical State	Viscous liquid
Volatile Organic Content (g/l)	< 50
Viscosity @ 73.4°F, KU	132
Solar Reflective Index (white only)	106
Solar Reflectivity	0.84
Thermal Emittance	0.89
FILM PROPERTIES	
Initial Percent Elongation (break) (%)	547.0
Initial Tensile Strength (psi)	565.5
Permeance, perms	4.4 (2 week cure time)
Permeance, perms, fully cured	¹ 0.26
Water Swelling, Mass %	3.1
Tear Resistance (lb/ft)	204.1
Low Temperature Flex	Pass
FILM PROPERTIES AFTER 1000 HOURS ACCELERATED WEATHERING	
Final Percent Elongation (break) (%)	211.8
Low Temperature Flex	Pass
Appearance after 1000 hrs accelerated weathering	Pass
Wind Driven Rain	Pass
Weight Gain of Block (lb)	0.0

Roof Restoration–Project Overview

For specific detailed information refer to the Elastikote material substrate specification.

Storage and Handling

Maintain materials in their original unopened containers with all labels intact and legible. Store containers on pallets in a protected area. **Store in areas where maximum temperature does not exceed 90°F and at a minimum of 40°F. Never store drums in an open environment without using proper protective moisture proof covering as condensation or rain, under certain conditions, may infiltrate and contaminate the drum contents through the “bung” and ring areas. KEEP OUT OF REACH OF CHILDREN. KEEP AWAY FROM FLAME OR ANY OTHER SOURCE OF IGNITION.** For additional safety & health information, refer to the MSDS/SDS for this product.

Roof Inspections

Inspections may include a pre-application technical field evaluation for determination of the acceptability of the substrate. An adhesion test may be required to ensure compatibility with the existing target substrate. At the conclusion of the project a final inspection may be conducted.

Applicator Qualifications

All Elastikote certified applicators are thoroughly trained by the Manufacturer in all aspects of use and application of materials. Certification credentials are issued upon completion of training activities.

Surface Preparation

Surface must be dry, clean, and free from dirt, loose rust and foreign substances. Certain surfaces may require power washing starting @ range up to 3750–4000 psi for metal and decreasing psi depending on substrate and/or conditions. Utilize wire brushing to remove loose mill scale, biomass, expended paint or coatings, corrosion or any other loose or foreign particulate. Certain surfaces may require abrading, scraping, or pickling to ensure proper adhesion. Certain surfaces must be cleaned and primed with a Manufacturer approved product. Existing target surface will dictate need for implementation of abrading and priming procedures.

Tools & Equipment

Follow personal protective equipment requirements as listed on material MSDS/SDS. Utilize appropriate OSHA safety equipment. Drum and/or pail 4” wide heat bands or heat exchanger, wet mil gauge, infrared thermometer, digital moisture meter, and paddle type mixer are required. Use a smooth-medium (1/4” – 3/8” nap) roller if rolling. Spray application is the preferred method for all sprayable materials. Use a Graco 733, Graco 833, (3 gpm output & displacement pump of 3500 psi) or similar equipment with appropriate tips. Use tarpaulins or other durable materials to protect adjacent areas from damage.

Material Preparation

All ElastiKote Bio-Tech 3000 topcoats/basecoats must be properly heated and stirred prior to either spray or roller application. To maximize product performance and ease of application, always heat the product to a temperature range of between 80°F and 120°F with 4" wide heat bands or heat exchanger. When using spray type application methods, it is especially important to heat product to ensure proper viscosity for maximum performance of applied product in both **warm and cold weather**. Attempting to spray ElastiKote Bio-Tech 3000 at the low end of the temperature range of around 90°F has been found to result in "webbing". Typical minimum ElastiKote Bio-Tech 3000 temperature for spraying is greater than 90°F. It is acceptable to install product at 80°F when using roller or brush applications.

Material Heating Guide

*ElastiKote 3000 application temperature (top)												
**Target substrate temperature (bottom)												
*120	110	100	95	90	85	80						
**40	50	60	70	80	90	100	110	120	130	140	150	160

To work efficiently, keep two or three 5-gallon pails or two 50-gallon drums heating and/or stirring ahead of crew. Heating a 5-gal pail from 70°F to 100°F with one 4" wide heat band on max (#10 setting) should take approximately 10 minutes. Heating a 50-gallon drum from 70°F to 100°F when using a heat exchanger should take between 20 – 30 minutes. Heating a 50-gallon drum from 70°F to 100°F with two 4" wide bands heaters on max (#10 setting) should take approximately 30 – 40 minutes.

Stir entire heated material container (summer & winter) thoroughly prior to application. Always mix (stir) from bottom to top using a paddle type mixer at a minimum of 20 minutes for a 50-gallon drum and 5 minutes for a 5-gallon pail. Be diligent that paddle sweeps actual bottom of container. Do not over mix or allow cavitation of product (make bubbles), as air entrainment will result in pinholes.

Determine "on site" the proper application temperature for efficient and quality assuring best practice product installation. Temperature selection can vary. Selection will be impacted by existing ambient air temperature, target roof substrate temperature, specific roof slope and size, and the type and size of selected spray pump and spray tip to be used. Always synchronize the heating process of the material to be installed with target substrate temperature. When target substrate is equal (very hot during the summer) or in excess of the product application temperature, always adjust the product temperature before application. If applied product becomes too hot from the combination of preparation heating and exposure to extreme heat of target substrate, the product will run or "sag" resulting in low and unacceptable millage thickness.

Material Preparation—Cont.

Conversely, if the product is not heated sufficiently and is applied at too low a temperature, the spray pattern will result in the phenomena known, as "webbing" or "fingering" and the product will not self-level. If in doubt, always contact Manufacturer.

Application

Apply product using appropriate spray equipment (preferred method) or product may be rolled with a smooth-medium nap roller or soft brush at ambient temperatures above 40°F (4°C). Remove all filters from spray unit or spray guns. Use heavy-duty (XHD) tips without a diffuser or atomizer bar. Tip sizes range from 625 to 633 and 725 to 733. Tips may need to be adjusted depending on slope and product. Hold spray wand during application no higher than 12 inches from target substrate with 50% overlap and allow product to "FLOW" AND "SELF-LEVEL". Always spray at a straight "up and down" or 90° angle to enhance performance. Always remix product after any application work stoppage of **20 minutes or more** to ensure critical additive products stay in suspension.

Minimum Suggested Coverage Rate

Target surface dictates actual rate. Refer to guidelines in the ElastiKote material substrate specification.

Apply in **two** coats at a minimum of 21 wet mils per coat (*1.5 gallons per 100 sq ft per coat*) for low slope surfaces. *The combined two (2) coats result in a finished coating @ a minimum of 21 dry mils.*

Vertical surfaces typically take 3 coats @ 14 wet mils per coat to properly build final millage.

Drying Time

2–4 hours (typical) in optimal weather conditions before recoating.

4–6 hours (typical) in non-optimal weather conditions before recoating.

Clean-Up

Clean equipment, brushes, rollers, and tools using Regular Mineral Spirits.