

GC ULTRA-SHIELD 3000

ALIPHATIC POLYURETHANE ROOF TOPCOAT

ULTRA-SHIELD 3000 is a high-solids, high build two-component aliphatic polyurethane elastomeric coating. Ultra-Shield 3000 is intended for use as a protective top coat roofing membrane over Ultra-Tuff polyurethane and polyurea elastomeric base coats. Ultra-Shield 3000 provides outstanding UV reflective properties with soil and abrasion resistance, as well as good color and gloss retention.

Ultra-Shield 3000 is part of a fire classified, two layer, roof coating system over spray polyurethane foam. Ultra-Shield 3000 is the protective coating of choice for pedestrian or traffic decks when requiring maximum resistance to weathering or physical elements.

RECOMMENDED USES

- Coating System Over Polyurethane Foam
- Roof Membranes
- Traffic Decks

PACKAGING

10-gallon kit: A-Side 5 gallon (44 lbs net) and B-Side 5 gallons (75 lbs net) pail

110-gallon kit: A-Side 55 gallon (485 lbs net) and B-Side 55 gallon (836 lbs net) drum

COLOR

White and Light Gray. Other colors are available on special order.


TECHNICAL DATA

PHYSICAL PROPERTIES		
Total Solids by Volume	ASTM D2697	75% ± 2
Total Solids by Weight	ASTM D-2369	82% ± 2
Flash Point	ASTM D-56	79°F (26°C)
Ultimate Elongation,	ASTM D412	450% ± 100
Tensile Strength (Die C)	ASTM D412	2200 +/-25 psi
Tear Resistance	ASTM D624	375 ± 50 pli
Permanent Set at Break	ASTM D412	9%
Hardness Shore A	ASTM D-2240	90
Water Absorption,	ASTM D570	1.5%
Weathering After 6,000 hours QUV	ASTM G53	No Degradation
Permeability (U.S. perms)	ASTM E96	45-55
Low Temperature Flexibility	ASTM D1737	Pass
Abrasion Resistance,	ASTM C501	29 Mg Loss
Volatile Organic Compound		219 grams/liter

The information contained herein is for purposes of identifying the product and does not constitute a warranty that the product will conform to that description. Product specifications and performance will vary depending on application methodologies, raw materials and other factors.

CREDENTIALS AND CERTIFICATIONS

UL 790 Class A as an integral component of numerous roof deck assemblies, File #14330

		<u>Initial</u>	<u>Weathered</u>
	Solar Reflectance	.84	.65
	Thermal Emittance	.90	.89
	Rated Product ID	0684-0010	
	Licensed Manufacturer ID	0684	
Classification		Urethane Coating	
<small>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 effect of solar reflectance and thermal emittance on building performance may vary.</small>			
<small>Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating procedures.</small>			

REQUIREMENTS

Ultra-Shield 3000 is a two component spray aliphatic urethane which should be applied only by trained or manufacturer-approved roofing experts familiar with the properties of this material.

EQUIPMENT

Ultra-Shield 3000 should be applied using a plural component (1:1 ratio), heated, high pressure (1500 psi) spray mixing equipment or batch mixed and applied with high pressure airless equipment.

COVERAGE RATE	
Property	Value
Coverage	1 mil thickness is one gallon per 1200 sqft.
Performance, 10 years	12 to 15 DFT mils
Performance, 15 years	20 to 25 DFT mils
Cure Time	4 to 6 hours
Pot Life	30 to 40 minutes
Recoat Time	24 hours
Final Cure	30 days
Service Temperature - Dry	-10°F to 200°F (-23°C to 93°C)

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APPLICATION

Ultra-Shield 3000 "B" Component must be power mixed prior to application. Ultra-Shield 3000 may be applied using plural spray equipment or can be batch mixed 1 to 1 by volume and applied through high pressure airless spray equipment.

The first coat of Ultra-Shield 3000 should be applied at the rate of 1 gallon/100 square feet or 100 sqft/gallon. Ultra-Shield 3000 has limited pot life when mixed at 75°F. Higher temperatures may shorten the pot life. Ultra-Shield 3000 standard cure will dry to touch in 4 hours at 75° F 50% relative humidity and will support light foot traffic in 8-24 hours depending on ambient conditions. Ultra-Shield 3000 can be recoated when set to touch or has cured. Dry sufficiently to allow foot traffic.

PERSONAL PROTECTIVE EQUIPMENT

Since Ultra-Shield 3000 is atomized into a very fine particle distribution during spray application, it is essential that maximum effort is made to protect the spray mechanic and others near the workplace from undue exposure.

JOB-SITE PROTECTION

Overspray from Ultra-Shield 3000 can carry considerable distances and attention should be given to the following:

1. Post warning signs a minimum of 100 feet from the work area.
2. Cover all intake vents near the work area.
3. Minimize or exclude all personnel not directly involved with the spray application.
4. No welding, smoking or open flames.
5. Have CO₂ or other dry chemical fire extinguisher available at the jobsite.
6. Provide adequate ventilation.

STORAGE AND SHELF LIFE

Ultra-Shield 3000 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C) Keep containers closed and store in a dry, cool place away from direct sunlight, heat, sparks, open flame, and moisture.

FREIGHT CLASSIFICATION

DOT: Paint Flammable Liquid UN 1263

HEALTH AND SAFETY

GCMC is committed to the health and safety of our customers. GCMC products shall only be installed by certified contractors. Applicators are required to follow all proper handling, safety and installation procedures. Safety Data Sheets (SDS) are available on this product. Any individual who may come in contact with these products should read and understand the SDS. Ultra-Shield 3000 should not be applied when the wind is of sufficient velocity to cause overspray of adjacent areas, buildings or people.

VAPOR INHALATION

The best form of protection against organic solvents or potentially sensitizing vapors in the workplace is a fresh air supply. Numerous manufacturers, including the 3M Company and MSA, make full face fresh air masks. For maximum protection, we recommend use of NIOSH/MSHA approved self-contained breathing apparatus with a full-face piece operated in a positive pressure mode. In well-ventilated application conditions, the use of Type C organic vapor cartridge respirators is acceptable. Effects of overexposure to vapor are characterized by nasal and respiratory irritation, dizziness, nausea, headache, fatigue, possible unconsciousness or even asphyxiation. Vapor inhalation problems are characterized by coughing, shortening of breath and tightness in the chest. Anyone exhibiting these types of symptoms should be immediately removed from the workplace and administered oxygen or fresh air. If the condition is prolonged or extreme,

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SUMMON EMERGENCY TRAINED MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT

To prevent excessive skin contact with the sprayed product, we recommend use of fabric coveralls and neoprene or other resistant gloves. Skin contact with liquid components can result in a rash or other irritation. Wash the affected skin area with water. Wipe residual liquid from the skin with a clean cloth, then wipe the affected area with 30% solution of rubbing alcohol. Follow the alcohol wipe with repeated washings with soap and water. If a rash or other irritation develops, see a physician.

EYE CONTACT

Wear a full-face mask or OSHA-approved protective goggles. Eye Contact with liquid or sprayed components can result in corneal burns or abrasions. Upon exposure, eyes should be flushed with water for an extensive period. SUMMON EMERGENCY TRAINED MEDICAL ATTENTION IMMEDIATELY.

FLAMMABILITY

Since flash point <80°F (<26°C) for components A and B, avoid open flame or spark sources. Avoid excessive heat. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors or other ignition sources at locations distant from the material-handling point. Never use a welding or cutting torch on or near the drum. In case of fire, use CO₂, steam, dry chemicals or water fog.

TECHNICAL SERVICES

Additional information, such as brochures, technical assistance, roof energy evaluations, life cycle cost analysis, and other roof management services are also available from a General Coatings Manufacturing Corp. Technical Consultant.

LIMITED WARRANTY. We warrant our Products to be free of manufacturing defects and to comply with the Product's current published physical properties when tested under controlled conditions. Our sole responsibility is limited to replacement of that portion of any Products found to be defective at the time of manufacture. There are no other warranties of any nature whatsoever, whether expressed or implied, including an express disclaimer of any warranty of merchantability or fitness for a particular purpose. Further, we disclaim any liability for damages of any type, however caused, including remote, consequential damages, or special damages resulting from any theory of liability, whether based on tort, negligence, or strict liability. We disclaim responsibility for any claims of intellectual property infringement through use of our Products in any manner. Where Products are used as a waterproofing membrane or floor coating, no warranty or guarantee is issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, abnormal wear and tear, or improper application by the applicator. Damage caused by abuse, neglect, lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded. In all instances and as a pre-condition to any available remedy, we reserve the right to conduct sample testing and performance analysis on any materials claimed to be defective, performed prior to any repairs being made by owner, general contractor, or applicator. Our limited warranty is void if repairs have been made or attempted, or if the claimed defect has been adulterated prior to our ability to conduct a formal investigative analysis.

DISCLAIMER: Please read all information in the general guidelines, technical data sheets, application guide and safety data sheets (SDS) before applying material. Products are for professional use only and should only be applied by professionals who have prior experience with our Products or have undergone specific training in their proper application. Published technical data and instructions are subject to change without notice. Contact your local representative or visit our website for current technical data and instructions. All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of these tests are not guaranteed and are not to be construed as a warranty, either expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with any product. It is the user's responsibility to satisfy himself, by his own information and tests, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his own use of the product. We do not suggest or guarantee that any hazards listed herein are the only ones that may exist. We are not liable to the purchaser, end-user, or any third party for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, our Products. Recommendations or statements, whether verbal or in writing, shall not be binding upon us unless in writing and signed by one of our authorized corporate officers. Technical and application information is provided for establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and we make no claim that these tests or any other tests, accurately represent all environments. We are not responsible for typographical errors. © General Coatings Manufacturing Corporation. All Rights Reserved. Revision ULTRA-SHIELD 3000_08172020EA