

GC ULTRA-SHIELD 2490

EPOXY ASPHALT BASE COAT

ULTRA-SHIELD 2490 is an two component (1:1 mix ratio formula) epoxy asphalt base coat which performs as vapor barrier over spray foam roofing.. It is a natural black (unpigmented), medium viscosity, 1:1 mix ratio formula designed for placement between 45°F (7°C) and 120°F (47°C)*.

Ultra-Shield 2490 must be top coated with Acrylic (UF1000) or Silicone (UG5700) for cold storage roofing, green roofing, and under paver systems. It is a Class 1 Vapor retarder coating with low permeability rating.

Ultra-Shield 2490 is part of a fire classified, two layer, roof coating system over spray polyurethane foam. Ultra-Shield 2490 is the protective coating of choice for pedestrian or traffic decks when requiring maximum resistance to weathering or physical elements.

RECOMMENDED USES

Vapor Barrier Coating System Over Spray Polyurethane Foam Roofing

PACKAGING

- 10-gallon kit: 5 gal. pail of Side-A (18.9 liters) and 5 gal. pail of Side B (18.9 liters)
- 100-gallon kit: 50 gal. drum of Side-A (189 liters) and 50 gal. drum of Side B (189 liters)
- 500-gal kit: 250 gal. tote of Side-A (946 liters) and 250 gal. tote of Side B (946 liters)

COLOR

Side-A: Light amber Side-B: Black Mixed: Black

PHYSICAL PROPERTIES		
Total Solids by Volume	ASTM D2697	95% ± 2%
Total Solids by Weight	ASTM D1475	Side-A: 9.3 lbs Side-B: 8.2 lbs Mixed: 8.8 lbs
Viscosity	ASTM D2393	Side-A: 2,670 cp Side-B: 3,410 cp Mixed: 3,040 cp
Gel Time, 100g	ASTM D2471	30 minutes
Tensile Strength	ASTM D638	1,450 psi (10 MPa)
Elongation at Break	ASTM D638	68%
Water Vapor Transmission Rate, 20 mils	ASTM E96	passes <0.01 perms
Volatile Organic Compound		<50 grams/liter

FIRE CLASSIFICATION See UL 1693, Inc., File #14330 listed and classified.

ASTM E108

Class A over noncombustible deck with Acrylic or Silicone top coat

Class B over combustible deck with Acrylic or Silicone top coat Granules may be required.

EQUIPMENT

Ultra-Shield 2490 requires high-pressure plural-component coating equipment, such as the GRACO R2E30 or equivalent, operating at a minimum of 2,000 psi with hose lengths up to 300 feet. Recommended settings are 125–140° F (51.7–60°C), with both A-side and B-side drum material temperatures maintained at 85°F. Use of a Fusion PC gun with a 28/28 chamber is recommended for spraying.

MIXING

Ultra-Shield 2490 is a two-component epoxy asphalt. This should be applied by manufacturer approved roofing expert familiar with the properties of this product.

APPLICATION

Ultra-Shield 2490 as a low permeance base coat that should be applied at 60 DFT mils in four lifts. Each lift should be approximately 15 mils to provide a total dry film thickness of 60 mils. There should be 2-4 hour cure time between lift applications. One should spray in a cross-hatch application to ensure a uniform application.

PERSONAL PROTECTIVE EQUIPMENT

Since Ultra-Shield 2490 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. Wear an OSHA-approved cartridge respirator and OSHA-approved protective goggles.

JOB-SITE PROTECTION

Overspray from Ultra-Shield 2490 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 2490 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.

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, 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 an OSHA-approved cartridge respirator 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

Flash of Side A and Side B both exceed 200°F (93.3°C). Not flammable or combustible. Never use a welding or cutting torch on or near the drum. In case of fire, use CO₂, steam, dry chemicals or water fog.

CLEAN-UP/DISPOSAL

All tools and equipment must be cleaned before the mixed material cures. Cleaning can be facilitated with a solvent such as acetone or heavy-duty detergents. Cured material may be removed from equipment and tools by soaking in an epoxy stripper.

HANDLING AND TOXICITY

This bulletin does not accompany the product when sold. For hazard warnings, safe handling, and first aid instructions. CAREFULLY READ THE SAFETY DATA SHEETS AND CONTAINER WARNING LABELS.

Side A: Liquid epoxy resin, HMIS Health Hazard Rating-2 (Moderate Hazard). Warning! Causes eye and skin irritation. May cause an allergic skin reaction, Harmful if swallowed. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid prolonged or repeated contact with skin.

Side B: Liquid epoxy hardener, HMIS Health Hazard Rating-3 (Serious Hazard). Contains alkaline amines. Danger! Causes severe eye and skin burns. May cause allergic skin and respiratory reaction, Corrosive. Do not get in eyes or skin or on clothing. Avoid breathing vapor, keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from heat and open flame.

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.

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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: Please read all information in the General Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. These products are for professional use only and to be applied by professionals who have prior experience and training with the use and application of our materials, and who are fully aware of all Federal, State and local rules, regulations, and code requirements for storage, transportation, handling, installation, and application. Published technical data and instructions are subject to change without notice. Contact your local representative or visit our website for current technical data, SDS, instructions, and project specific recommendations. We warrant our products to be free of manufacturing defects and that they will meet our current published physical properties within the shelf life of products.

Our sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. We will not be liable for damages of any sort, including remote or consequential or punitive damages resulting from any claimed breach of any warranty whether expressed or implied. We will also not be responsible for use of this product in a manner to infringe on any patent held by others. No warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, adhesion, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. We reserve the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator. Your sole and exclusive remedy against us shall be limited to the paid cost of the materials sufficient to replace any affected areas where product failure has occurred. The cost of replacement materials shall, in no event, exceed the value of the original purchase price of the products, subject to equitable reductions for time of use.

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