

DESCRIPTION

Ultra COAT Composite 1.0™ is a state-of-the-art, high performance, sprayed, plural component, pure polyurea elastomer with a carbon fiber element. This system is based on amine-terminated polyether resins, amine chain extenders and MDI prepolymers. It provides a monolithic membrane that offers flexibility, resiliency and exceptional strength, which makes it the most durable spray applied coating in the market.

FEATURES AND BENEFITS

- 20 Year Limited Warranty
- Strongest Spray-Applied Coating in the Market
- 100% Solids (No Solvents or VOC's)
- 100% Ultraviolet (UV) Resistant
- NFPA and UBC Class I Fire Rating Compliant
- Forms a seamless membrane that can be handled and walked on ten (10) seconds after application.
- Rapid set allows for vertical applications
- Resilient to solvents and mild Acids / Bases
- Spray applied with unlimited thickness in a single application
- Hydrophobic, therefore unaffected by damp, cool surfaces during application
- Extended tack time allows deep surface penetration thus providing superior adhesion
- High temperature stability up to 250° F (121 °C) and intermittent temperatures up to 300° F (148 °C)
- High Abrasion Resistance and Zero Static Conductivity
- Non-Skid coating is available as an option

RECOMMENDED APPLICATIONS

- Spray applied coating for concrete, steel and other substrates.
- Spray applied liner for concrete tanks, various pits, wastewater, landfill, waste treatment, cooling ponds and lagoons.
- Replace or repair failed sheet membrane liners.
- Encapsulation material for EPS, asbestos, lead paint or other dry hazardous materials.
- New or existing subgrade, slabs, walls, and columns.
- New construction projects
- Rehabilitation projects
- Earthen containment lining used with or without Geotextile.

COLORS

The standard colors are battleship gray, desert tan and black.

It should be noted that Ultra COAT Composite 1.0™ is an aromatic polyurea, therefore, as with all aromatics over a period of time a slight color change as well as superficial oxidation will occur.

Aliphatic urethane and other suitable topcoats can be used where long-term aesthetics are of critical importance.

TECHNICAL SPECIFICATIONS

WET PROPERTIES @ 77°F (25°C)	
Solids by Volume	100%
Solids by Weight	100%
Volatile Organic Compounds	0 lbs/gal (0g/l)
Theoretical Coverage DFT	100 sq. ft. @ 18.3 mils/gal
Weight per gallon (approx.)	9.03 lbs.
Number of Coats	1-2
Mix Ratio	1 "A": 1 "B"
Viscosity (cps) @ 77° F (25 °C)	A: 400 approx. B: 550 approx.
Shelf Life @ 60-90°F (15-32°C)	Six months
DRY PROPERTIES* @ 60 mils (1.524 mm)	
Tensile Strength ASTM D 412	9,681 psi (64.5 mpa) +/- 5%
Elongation @ 72°F (22°C)	1,062%
Hardness (Shore D)	52 - 44
100% Modulus ASTM D 412	2,401 psi (16.4 mpa) +/- 5%
300% Modulus	3,085 psi (20.9 mpa) +/- 5%
Tear Resistance ASTM D 624	619 PLI (107 KN/m)
Service Temperature	-60°F - +250°F
	(-50°C - +121°C)
Abrasion Resistance 1 kg. 1000 rev.	H-17 wheel 91 mg lost
	H-21 wheel 43 mg lost
Flame Spread / Smoke Density @ 20 mils ASTM E84	5
Weatherability 3000 hours QUV	No evidence of failure

**All dry film properties are approximate since processing parameters, as well as added mixture types (i.e. colors) and quantities will change physical properties of cured elastomer. All samples for above tests were force cured or aged for more than three weeks.*

CURING SCHEDULE

Gel	6 Seconds (± 2 seconds)
Tack Free	10 Seconds (± 3 seconds)
Post Cure**	6 Hours
Recoat	0 - 12 Hours

***Complete polymerization to achieve final strength can take up to several days depending on a variety of conditions.*

Ultra COAT Composite 1.0™ is a spray-applied carbon fiber injected coating solution that is delivered by ATI's patented specialized equipment.

