



Anti-projectile Coat

Two-Component 100% Solids Super-Polymer

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Anti-projectile Coat is an ultra-tough, energy absorbing, super-polymer skin that is used primarily for ballistic proofing and shrapnel mitigation. Anti-projectile Coat is capable of absorbing very high impact energy and can withstand firepower from 9mm, 40 and 45 caliber bullets as well as 44 magnum. Anti-projectile Coat is extremely tear resistance and can withstand high heat capacities whereby demonstrating ultimate toughness. Anti-projectile Coat may be used to strengthen a variety of military grade substrates used for transportation vehicles, armament assemblies and structural building reinforcement. Generally, Anti-projectile Coat super-polymers are used in some type of ballistic shielding applications. These materials may be applied to many types of structural substrates which include high strength steel, 6061 Aluminum, high-strength composites, wood laminates, reinforced masonry and concrete. These unique materials provide extreme protection for safe-houses, personnel vehicles, government buildings, armed outposts and special aircraft. Sprayed thickness of Anti-projectile Coat may vary depending on substrates applied to and threat level necessary.

PRODUCT APPLICATION

Physical application of Anti-projectile Coat requires a 2-component high pressure liquid pumping machine. Surfaces must be prepped for cleanliness and use of an adhesion primer is recommended to acquire superior adhesion, which is vital to contributing to the total energy absorption of the system. Application temperature ranges from 40°F to 150°F. Functional operation temperature ranges from -20°F to 250°F. Anti-projectile Coat may be color-tinted if desired.

ADHESION RESULTS

Typical Substrates per ASTM D-4541 Elcometer		
Concrete*	>300 psi	Cohesive failure; excellent bonding
Steel*	>1000 psi	Excellent bonding
Composite Lamination*	>1000 psi	Saturated; excellent bonding

Anti-projectile Coat PHYSICAL PROPERTIES

Hardness	ASTM D785	55-60 D
Tensile Strength	ASTM D412	5,650 psi
Elongation	ASTM D412	350%
Water Absorption (24 hr.)	ASTM D570	0.25%
Moisture Vapor Transmission	ASTM E96	0.24 perms
Taber Abrasion CS17	ASTM D4060	<30 mg/1k cycle
Tear Strength	ASTM D624	750 lbs./lin. in.
Gel Time	Time	8-10 sec.
Mix Ratio	PBV	1A – 1B

CURE SCHEDULE

Anti-projectile Coat has a gel time of 8-10 seconds and dries tack free at 35-40 seconds. Anti-projectile Coat has a post-cure time of approximately 24 hours although Anti-projectile Coat performs best when the materials has time to age. Anti-projectile Coat samples that have been aged for 30 days or more perform exceptionally well as compared to samples that have been aged for 2 days. For specific applications, please contact our technical support group.

HEALTH AND SAFETY

Read the Safety Data Sheet (SDS) and container labels for detailed health and safety information. This product is intended for industrial use by properly trained professional applicators only.

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