ULTIMATE STREET ARMOR

Engineered specifically for microtrenching, this advanced sealant creates a powerful, permanent bond with both asphalt and concrete. It fully seals the trench, prevents water intrusion, and preserves street integrity—delivering fast cure, minimal disruption, and long-lasting durability against traffic and weather.

The ultimate choice for strong, seamless, and reliable microtrench reinstatement.

KEY ADVANTAGES

- **Exceptional high early strength** — reaches 2,000 psi in just 4 hours, allowing rapid return to traffic and minimizing road closures in high-demand urban environments.
- **Superior long-term durability** — features very low water absorption and minimal drying shrinkage to resist cracking, settlement, and weather-related damage over time.
- **Outstanding mechanical performance** — delivers excellent compressive, flexural, and tensile strengths to withstand heavy traffic loads and maintain pavement integrity.
- **Reliable, tenacious adhesion** — forms a strong bond to properly prepared asphalt and concrete substrates, ensuring seamless integration and preventing future failures.
- **Code-compliant** — meets the rigorous requirements of **ANSI A108.1** for high-performance installations.

This advanced mortar delivers unmatched speed, strength, and reliability—ideal for durable, low-disruption microtrench reinstatement that keeps streets strong and traffic flowing.

ULTIMATE STREET ARMOR ▪ **(909) 270-4171** ▪ **info@ultimatestreetarmor.com**

MADE IN U.S.A.

PRODUCT TECHNICAL DATA SHEET

ASTM C109 - Compressive Strength

USA (Ultimate Street Armor) achieves exceptional compressive strength, reaching over 2,200 psi in just 4 hours and exceeding 6,125 psi at 28 days. This rapid high-early strength development ensures fast-track installations and long-term structural reliability.

ASTM C190 - Tensile Strength

USA delivers outstanding tensile strength of 435 psi at 7 days and 585 psi at 28 days, providing superior resistance to cracking under tensile forces. This enhances durability and performance in repair and overlay applications.

ASTM C348 - Flexural Strength

With flexural strength of 845 psi at 7 days and 1,400 psi at 28 days, **USA** offers excellent bending resistance and toughness. Micro-fiber reinforcement ensures sustained load-carrying capacity for demanding flooring and repair projects.

ASTM C157 - Shrinkage

USA exhibits extremely low drying shrinkage of less than 0.04%, minimizing the risk of cracking due to volume changes. This shrinkage-compensating formulation promotes smooth, crack-free surfaces and extended service life.

TYPICAL PHYSICAL PROPERTIES @ 75°F (24°C)

Water Demand	Approximately 3 quarts/bag
Working Time	20 minutes (with cool mix water)
Compressive Strength (ASTM C109):	
4 Hour	2,225 psi
1 Day	3,175 psi
7 Day	5,575 psi
28 Day	6,125 psi
Tensile Strength (ASTM C190):	
7 Day	435 psi
28 Day	585 psi
Flexural Strength (ASTM C348):	
7 Day	845 psi
28 Day	1,400 psi
Adhesion (ACI 503.R)	> 290 psi
Water Absorption (ANSI A118.7)	< 4.0%
Shrinkage (ASTM C157)	< 0.04%
Initial Set (ASTM C191)	31 min.
Final Set (ASTM C191)	39 min.

ASTM C191 - Set Times

USA provides precise and rapid set times with initial set at 31 minutes and final set at 39 minutes. This controlled setting allows optimal working time while enabling quick return to service in time-sensitive projects.

ASTM C496 - Split Tensile Strength

USA delivers exceptional split tensile strength, providing robust resistance to cracking under tensile stresses in structural repairs and overlays. This reliable performance ensures long-term durability and safety in beams, slabs, and tension-critical applications.

ASTM C1609 - Flexural Performance

With micro-fiber reinforcement and high flexural capacity, **USA** maintains excellent residual strength and toughness after initial cracking. This advanced flexural performance makes it ideal for heavy-duty pavements, industrial floors, and impact-resistant overlays.

ASTM C469 - Modulus of Elasticity

USA offers a high modulus of elasticity, delivering superior stiffness and minimal deformation under heavy compressive loads. This enhances structural stability and load distribution in foundations, columns, and high-traffic flooring systems.

ASTM C1202 - Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration

Featuring very low water absorption (<4.0%), **USA** provides outstanding resistance to chloride ion penetration in aggressive environments. This protects embedded reinforcement from corrosion, making it perfect for bridges, parking garages, and marine structures.

ASTM C882 - Bond Strength

USA achieves tenacious slant shear bond strength exceeding industry standards, ensuring seamless integration with existing concrete substrates. This superior adhesion creates monolithic repairs that stand the test of time without delamination.

ASTM C1218 - Water-Soluble Chloride

Formulated with premium low-chloride materials, **USA** exhibits extremely low water-soluble chloride content from the start. This minimizes internal corrosion risk and extends the service life of reinforced concrete repairs.

ASTM C1152 - Acid-Soluble Chloride

USA maintains very low total (acid-soluble) chloride levels, further safeguarding steel reinforcement against corrosion initiation. This built-in protection delivers peace of mind in chloride-exposed infrastructure projects.

AASHTO T-336 - Coefficient of Thermal Expansion

Engineered with shrinkage-compensating additives, **USA** demonstrates a low coefficient of thermal expansion for reduced thermal stresses. This enhances crack resistance and joint performance in extreme temperature variations and large-area applications.

Resistance to Organic Reagents (e.g., Oils and Hydrocarbons like Gasoline)

USA resists degradation from oils, fuels, and hydrocarbons, preserving surface integrity and strength in spill-prone environments. This outstanding chemical resistance makes it the top choice for garages, service stations, and industrial facilities.