

Soil-Sement Engineered Formula[®]

Road Construction and Stabilization System



Create an impenetrable, durable surface with superior compressive strength

What is Soil-Sement Engineered Formula?

Soil-Sement Engineered Formula is a special product that creates an engineered stabilized 7 to 25 cm layer with unique superior strength for roadways. Soil-Sement Engineering Formula prepares subgrade for chip seal, paving, and milling applications.

Why it Works

- Easily installed and requires minimal equipment and personnel
- Can be installed in a wide range of ambient temperatures and conditions with the expected level of performance
- Has a short cure time
- Used on base material with a wide range of gradation in either plastic or non-plastic materials
- Water-resistant properties and resists moisture damage
- A long life cycle and minimizes maintenance and repair
- Cuts rolling resistance; reduce tire wear and maintenance costs for power train, suspension and brake systems
- Resists potholes, heaving, pushing and channeling under vehicle wheel pass

Soil-Sement Engineered Formula road construction and stabilization system creates an impenetrable, durable surface with superior compressive strength.

Soil-Sement Engineered Formula includes a total package consisting of Midwest's Design, Installation, Post Installation Performance Testing, and Quality Assurance and Verification Program.

Design

As part of the design, Midwest provides complete engineering services including laboratory analysis of native soils and materials, product volumes, optimum moisture determination, water mix ratio, and blending design to provide optimum compaction and desired density and strength. Where and as appropriate, Soil-Sement Engineered Formula is custom formulated for performance to the site specific factors.

A complete analysis of the soil is conducted including:

- Determination of Particle Distribution
- Plasticity
- Optimum Moisture

Recommendations are provided by our state-of-the-art laboratory targeting the most cost-effective application meeting the desired performance criteria.

Installation

During installation, among the factors are controlled to assure the maintenance performance specifications include:

- The Humboldt GeoGauge®, used to test the resilient modulus and stiffness
- Monitoring and testing during installation for specified results
- Compaction
- Moisture content

Post Installation

The GeoGauge is utilized to perform non-destructive testing with real-time results. Testing will confirm specified target measures assuring performance results of stiffness, modulus, and California Bearing Ratio (CBR) values utilizing the GeoGauge.

Benefits

- Prevents surface deterioration against potholes, washboarding, rutting and areas break-up
- Provides a cumulative effect and creates a stabilized surface which will not shift or sink
- Offers maximum weatherability of the road surface in all weather conditions
- Increases load-bearing strength of all types of surfaces
- Environmentally friendly
- Ease of equipment cleanup
- Enhances overall performance by not tracking
- Provides a solid, cohesive polymer bound road surface which withstands traffic, loading abuses and extreme temperatures
- Creates a smooth road which allows for better fuel efficiency and higher productivity
- Minimizes airborne asphalt particles
- Reduces road maintenance

The Humboldt GeoGauge imparts small displacements to the soil and provides a virtually instantaneous measure of stabilization.

