



SOILTAC[®]

Mixed-In (2-6" ↔ 5-15cm Deep) Soil Stabilization Application Overview

1.) Prepare the Site:

Dry Soil: The site must be below the optimum moisture level

(minimally low enough to reach optimum with the addition of Soiltac[®] at a 1:1 water ratio).

Weather: The site must be free from rain for a minimum of 72 hours after the application. Temperature must be at least 40°F (4°C).

1.) Scarification:

Scarification: Scarify or till the soil completely (without clods) to the recommended depth.

Large Aggregate: Remove any large aggregate (4"+/10cm+) that could effect the final compaction.

2.) Prepare Application Equipment

Spray Nozzles: Set spray nozzles to the desired width, height and output rate.

Test equipment (off-site) if necessary.

Coverage: The spray nozzles should provide an even coat over the treatment area with each pass.

Spray Rate: Set the spray rate high enough to allow even coverage with multiple coats and low enough to prevent material from draining away from the treatment area.

Release Agent (Optional): Optionally, a form release agent (like Durasoil[®]) can be sprayed onto the equipment to prevent Soiltac[®] overspray from adhering onto the outside of the equipment

3.) Prepare the Soiltac[®] Dilution:

Water: Fill the application equipment with the recommended volume of water.

Dilution Calculation: The amount of water required to achieve optimum moisture must be field determined by comparing the in place moisture content to the optimum moisture content (determined by a laboratory proctor test ASTM D2216-92). The in place moisture content can be determined by the average of four in place readings with a nuclear density gauge. Testing the native soil for optimum moisture levels **is required** to determine the exact parts of water to use for diluting Soiltac[®] properly. *Not enough water will generate dry spots / too much water will create mud or "pumping". Optimum moisture is critical when compacting for maximum compressive strength.*

Example: Base Stabilization Average (6"/15cm deep) rate (25 ft²/gal.)(1.63L/m²),
 4,000 gallon (15,142 liter) water truck, 4 parts water (laboratory & field calculated) dilution rate

Calculation: 3+1 = 4 parts dilution total.

4,000 gallons / 4 parts = 1,000 gallons (3,785 liters) per part

Volume of Water: 1,000 gal. X 3 parts = 3,000 gallons (11,356 liters) of water

Volume of Soiltac: 1,000 gal. X 1 part = 1,000 gallons (3,785 liters) of Soiltac[®] concentrate

Volume of Dilution: 1,000 gal. X 4 parts = 4,000 gallons (15,142 liters) of Soiltac[®] dilution

Soiltac: Fill the application equipment with the recommended volume of Soiltac[®] concentrate.

Foaming: To prevent foaming, add the Soiltac[®] concentrate last, directly into the water.

4.) Apply and Process the Soiltac[®] Dilution

Application: Apply the Soiltac[®] dilution evenly over the scarified treatment area.

Example: (See Above) Base Stabilization Average (6"/15cm deep) rate (25 ft²/gal.) (1.63L/m²),
 1,000 gallons (Soiltac[®] concentrate) X 25 ft²/gal.= 25,000 ft² (2,323 m²) treatment per water truck

Processing: Till, disc or manipulate the treated soil until the dilution is uniformly distributed into the soil.

Grading: Contour, shape and crown the site to provide for proper drainage.

Compaction: Compact the site to a minimum of 95% (per ASTM D 698 D 1557 modified Proctor Density). Optimally, use a pneumatic compactor for initial compaction to prevent soil adhering to the drum and finishing with a vibratory smooth steel drum compactor.

5.) Clean the Application Equipment

Rinse: Rinse off all application equipment thoroughly with water until clean. If Soiltac[®] is allowed to dry and cure use a hot pressure washer or steam cleaner and brush to remove residue.

Traffic: Prevent any human activity over the treated area until the site has completely cured.

Curing: Allow the treated area to dry and cure for approximately 24 hours (@70°F/21°C).

Topical Wear Coarse: If the mix-in/processed area is not going be covered with an alternate topical wear coarse (example: asphalt, concrete, chip-seal, etc.), then a topical application of Soiltac[®] must be applied as a topical road sealer and surface wear coarse (see our "Standard Application Coverage Rates" for details).