



Application Of Condor SS Soil Stabilizer Surface Method For Light Traffic Load

Notice! The material being treated for surface stabilization <u>must</u> contain <u>at least</u> 30% fines for this process to produce the desired results.

Equipment required:

Water Truck

Preferably a capacity of 1000 to 4000 gallons, equipped with a spreader bar or power spray nozzles, taking care to ensure even coverage of the surface area. The unloading mechanism must be equipped with valves, so the rate of unloading can be accurately determined.

Motorgrader

The motorgrader shall be equipped with scarifiers that are capable of penetrating the ground no less than eight (8) inches. The preferred tool is a hydraulic ripper that can penetrate the ground thirteen (13) inches in one pass. A heavy duty disc plow may be used, provided the required penetration can be obtained.

Compacting Equipment

A self-propelled vibratory roller, minimum capacity of 30,000 pounds of impact, equipped with a variable frequency device.





Surface Method For Applying CONDOR SS To The Subgrade:

- 1) Scarifying with motorgrader
- 2) Applying CONDOR SS diluted in water
- 3) Shaping and compaction of subgrade
- 1) After the subgrade is excavated to a tolerance of +/- one (1) inch of blue top grade, the subgrade soil shall be loosened to a total depth of thirteen (13) inches. Using a standard scarifier on a grader, this will require that the first layer be windrowed because the effective penetration of a standard ripper is six (6) to eight (8) inches. If a hydraulic ripper tool is available that will penetrate ten (10) inches or more, the two-stage operation is not required. The soil should be loose and well-graded, so several passes may be required to loosen the soil, free of fist-sized clumps.
- **2)** For application of CONDOR SS, use one (1) gallon per 1440 square feet (13" deep). Dilute the CONDOR SS at the ratio of one (1) gallon of concentrate to five-hundred (500) gallons of water. Fill the water truck half full of water, then pour the required amount of CONDOR SS into the half-full tank truck of water, then finish filling the tanker. This method will ensure a good mixture of the CONDOR SS and the water.

The water diluted with CONDOR SS shall be spread at the rate of 500 gallons of water per 1440 square feet of surface area. This is equivalent to thirty (30) gallons of CONDOR SS concentrate diluted in 15,000 gallons of water per acre. Depending on the conditions in the field, such as the moisture content of the soil, weather, air temperature, etc...one may find it more practical to apply one half the solution to the soil, then let it drain until it has reached approximately optimum moisture, then scarify the soil and apply the rest of the water. One may make as many as five (5) passes, as it is important to avoid runoff and puddling.

3) Apply (or re-apply the existing) aggregate, and shape to provide a 1-2% transversal slope to assist in rainfall runoff. Compact with the vibratory compactor, making four (4) to six (6) passes. If post-application testing is needed to demonstrate effectiveness, the California Bearing Ratio (CBR) is the preferred test. With surface scarification, results may be measured after a period of not less than two weeks.