



SKAPS INDUSTRIES

SEPARATION/STABLIZATION **GEOTEXTILE**

INSTALLATION INSTRUCTION GUIDE



SKAPS INDUSTRIES

SKAPS Industries, a high-quality leading manufacturer and supplier of Geosynthetic products and Fiberglass fabric, holds a strong market presence in over 60 countries.

Our wealth of manufacturing experience enables us to offer the broadest line of products across all divisions. Through our exclusive manufacturing process, we cater to the demands of even the largest orders and adhere to the most rigorous schedules. Customer satisfaction is of utmost importance to us and us at SKAPS ensure it by providing excellent customer service.

Our primary focus is to supply quality products with site-specific performance that satisfy the most demanding civil, environmental and industrial applications.

Geotextiles provide three important key functions when properly installed. These important functions are separation, drainage/filtration, and reinforcement. SKAPS Industries geotextiles can be used in most weather and climate conditions.

The successful use of geotextiles in these applications require proper installation which begins with site preparation during subgrade groundwork. This success is followed with proper geotextile installation, and aggregate placement and compaction.

The intention of this installation instruction guide is to provide recommendations for installation of geotextiles in stabilization and separation applications. These guidelines are to be used to assist the general contractor responsible for installing the specific geotextile fabrics. Site specific guidelines, conditions, design requirements, and/or other variables may require additional action in regards to what is mentioned in these said guidelines.



SUBGRADE PREPARATION:

Prior to installing any geotextile fabrics, generally, the site should be clear of large tree stumps, organic debris, large stones/boulders, and any sharp objects that may cause damage to the fabric during installation. This is generally performed regardless of subgrade bearing strength. In addition, the area should be free of organic debris, vegetation, roots, top-soil, and etc.

Soil deemed unsuitable shall be excavated and backfilled with selected material at the site engineer's discretion.

GEOTEXTILE PLACEMENT AND INSTALLATION:

It is generally recommended to place and roll out the geotextile fabric on the area the installation is intended for. The geotextile fabric shall be placed in accordance to the project site plans and specifications. On very soft subgrades (CBR < 1), the fabric shall be anchored on firm soil and proceed to be rolled to the softer areas. It is important to note that the geotextile fabric should not be dragged across the subgrade to prevent any clogging or damage.

The geotextile is usually installed in the same direction as construction traffic, however, site project plans may alter the orientation of the geotextile placement. When geotextiles are overlapped, SKAPS Industries recommends the overlap range to be a minimum of 1.5 feet and a maximum of 3.0 feet. Overlap recommendations are in the table listed below:

Subgrade CBR Value	Subgrade Shear Strength (lb./in²)	Field Estimation of CBR	Recommended Minimum Overlap
< 0.5	-	-	Sewn Seam Req.
> 0.5 to 1	-	A person can easily walk on the site	3.0 feet
> 1 to 2	> 0 to 10	A low ground pressure bulldozer can access the site without rutting	2.5 feet
> 2	> 8.5	A D4 bulldozer can access the site without rutting	1.5 feet



Alternatively, adjacent fabric edges may be sewn together instead of overlapped. The sewn seams must be used when the geotextile demonstrates significant tensile reinforcement. This is typically seen when there are soft soil subgrades (CBR < 0.5)

AGGREGATE PLACEMENT/ COMPACTION:

Typically, aggregate is placed and spread using a front-end loader or any conventional construction equipment. Geotextile pins or rocks are recommended to be used to anchor the edge of the geotextile fabric to prevent it from lifting during placement of the first aggregate lift. The aggregate is then spread over the geotextile using low ground pressure machinery.

Each lift of aggregate should not be any less than 6 inches. The first lift should be thick enough to prevent any rutting. It is important to carefully place and spread the aggregate without disturbing or damaging the geotextile fabric. Sudden stops and abrupt turns by any equipment operating over top of the geotextile can cause the fabric to shift. Machinery shall not drive or operate directly on top of the geotextile fabric.

If the fabric is damaged during the installation, the damaged section shall be removed and replaced. The portion replaced shall be large enough to exceed the overlap requirements. Then, the aggregate can be replaced and compacted, if necessary.

Aggregate shall be placed in the intended area until the area is completely covered. The aggregate is to be compacted as per the project specifications. After the initial compaction by suitable construction equipment, construction traffic can be used to further compact the material. Final compaction shall be achieved by rolling the area with a vibratory compactor.

END OF SECTION