

The web that binds like no other: **StrataWeb™**



StrataWeb™ -Slope protection



StrataWeb™ -Load Support System

About Us

Strata India offers a comprehensive range of high-quality geosynthetic and geotechnical solution to India's civil engineering and construction industry. Strata India was established in 2004 as a joint venture with Strata Systems Inc. USA. Strata India began manufacturing in its ISO certified facility in Daman.

From design to execution, Strata India provides turnkey solutions for various geotechnical applications such as reinforced soil walls, slope protection and stabilization, erosion control, foundation improvement for structures and embankments, strengthening of paved and unpaved roads, canal and reservoir linings. etc.

We have built a track record for ensuring timely and infallible installation and pride ourselves in delivering a matchless customer experience.



Manufacturing facility of StrataWeb™ geocell in India

StrataWeb™ Slope Protection System

StrataWeb™ geocell slope protection system is a low-cost, high performance solution that addresses slope erosion challenges while providing several facing options such as vegetation for aesthetic cover, concrete for permanent cover etc., thereby enabling a sustainable footprint.



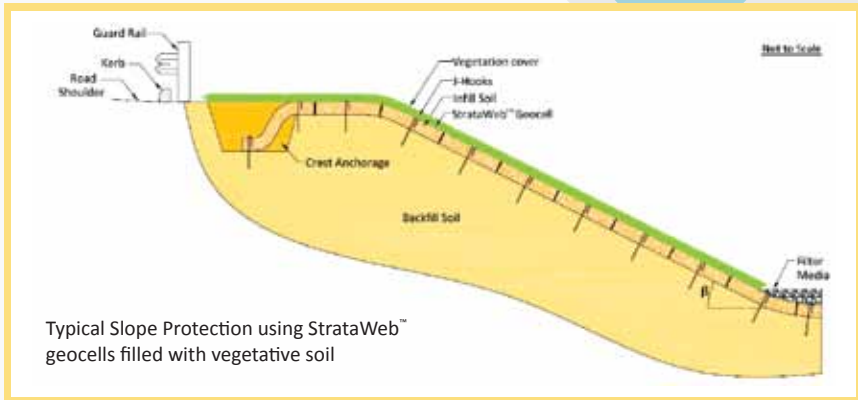
Sectors and Applications

StrataWeb™ slope protection systems have the following applications, though not limited to:

- Highway embankments
- Reservoir lining and Ash pond lining
- Railway embankments
- Landfill slope lining (municipal solid wastes/ hazardous waste/ mine tailing)
- Mine overburden dumps
- Slope protection for Earthen dykes
- Canal lining



Technical Details



The three dimensional honey-comb shaped structure of geocell confines the infill material within the cell, thereby reduces the potential for erosion and prevents the downward movement of embankment materials due to wind and water. Geocells offer versatility in the selection of the infill material such as concrete, aggregate, natural soil, clayey soil, local and recycled materials. The infill is selected appropriately depending on design and site specific requirements. The design may also require geocells to be used in conjunction with suitable geotextile or geosynthetic material.

The ability of geocells to confine soil promotes growth of vegetation. Roots of appropriate flora would penetrate deeper into the slope material and bind it together. This will improve the resistance against erosion. While protecting the slope, StrataWeb™ provides yet another advantage by permitting flow of water out of the slope, thereby relieving the hydrostatic pressures.



Typical laying procedure



Figure 1: Site Preparation



Figure 2: Tying of StrataWeb™



Figure 3: Laying of StrataWeb™



Figure 4: Concreting of trench



Figure 5.i: Green fascia using StrataWeb™
(where applicable)



Figure 5.ii: Concrete fascia using StrataWeb™
(where applicable)

Benefits

- The system fabricated using StrataWeb™ geocells is applicable even for steep slopes as much as 1V:1H, as long as the slope *per se* is stable.
- When compared to the conventional slope protection methods such as stone pitching, the system offers technical and cost benefits. It eliminates use of expensive stone and their transportation. Locally available soil can be used instead, which can lower construction costs by as much as 50%
- StrataWeb™ can be laid generally along the contours of the terrain.
- When used within water bodies such as reservoirs, StrataWeb™ geocell lining protect the geomembrane lined slopes against uplift and damage.
- Placing StrataWeb™ linings can be 8 to 10 times faster than conventional methods. The material is easy to transport owing to its flat and collapsible structure.
- Since local material can be used as in-fill, the system eliminates the need to quarry special material. This also eliminates the cost of transportation from the quarry to the site and only short haul local transportation may be required. The reduction on transportation results in a lower carbon footprint
- Considering the placement procedures, the system requires less maintenance as compared to stone pitching
- Since the laying process is simple, only a small group of unskilled labour is required.
- With the growth of vegetation the slope is visually pleasing.
- StrataWeb™ is fabricated from long lasting material that is resistant to extreme soil and weather conditions.

Projects Completed



ROB – NH 202, Andhra Pradesh



Landfill lining, Delhi



Slope protection for gas plant



Reservoir lining, Chennai

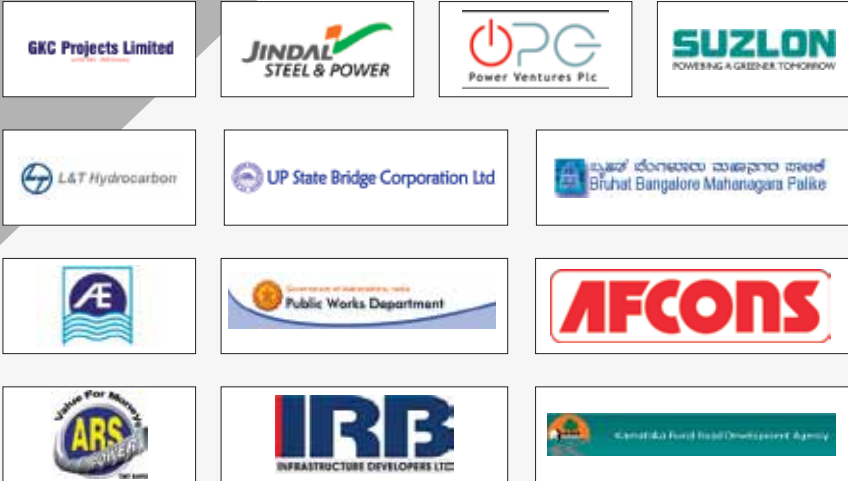


Reservoir lining, Gandhidham



Curtailed wall NH-15, Amritsar

Indicative Clients



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