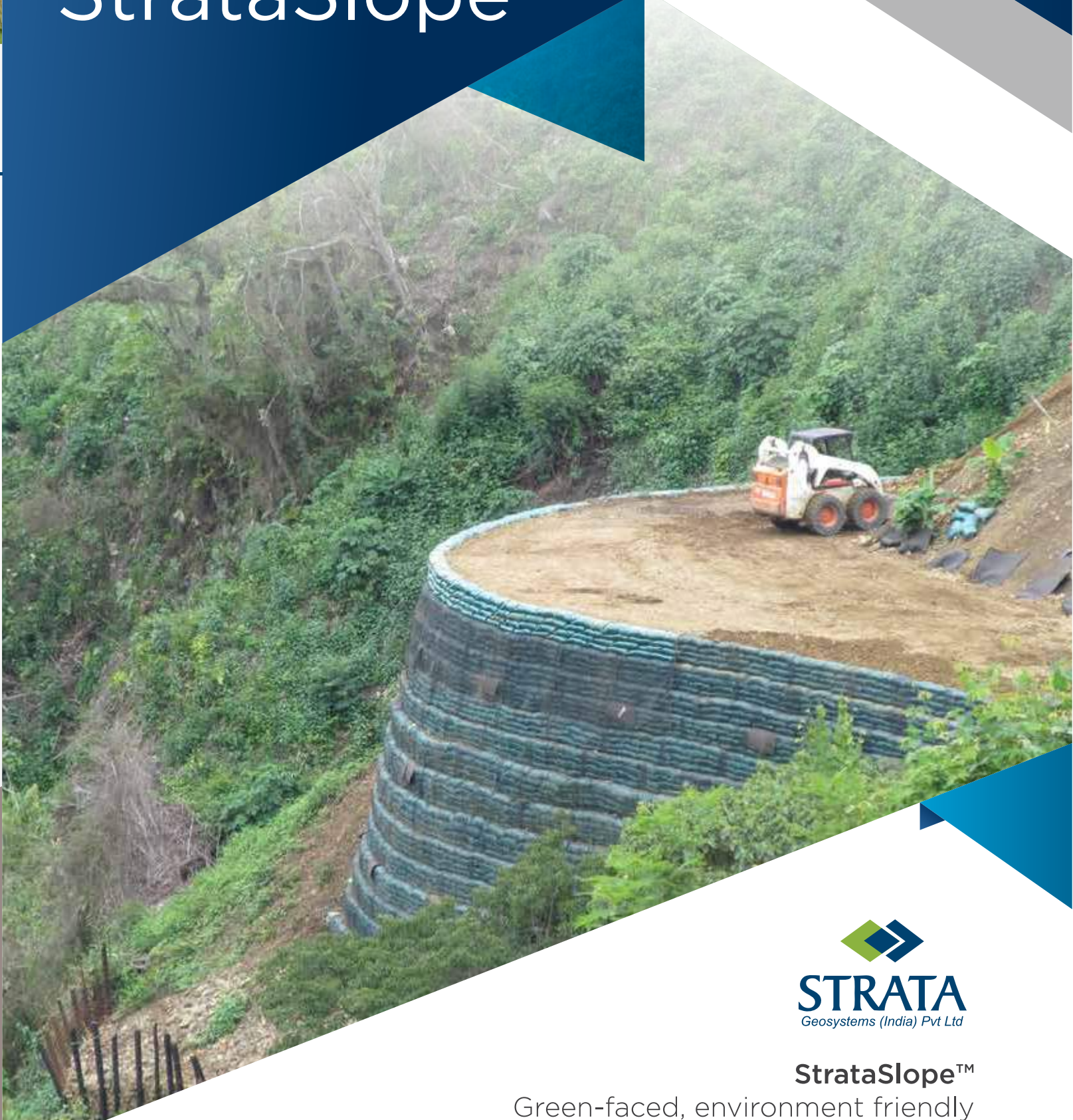


StrataSlope™



STRATA
Geosystems (India) Pvt Ltd

StrataSlope™

Green-faced, environment friendly
reinforced soil structure



StrataSlope™ is a green-faced, environment friendly solution which can considerably increase the usability of land interracing and embankments in a cost effective manner.

StrataSlope™ is economical than reinforced soil walls with concrete block or panelled fascia, and installation time is also faster.

Technical details

StrataSlope™ is basically a reinforced soil structure. It is proven technology and has been evaluated and accepted by US government bodies and agencies including US Army Corps of Engineers and the Federal Highway Administration. It also enjoys international acceptance.

StrataSlope™ can be used for embankments where reinforced soil outer structure contains the inner backfill and surcharges. Such an embankment with engineered steeper slopes of reinforced soil will have a smaller footprint than the conventional embankment with stable side slopes.

Slope stability

Slope stability is analysed using limit equilibrium methods such as Bishop's Method. The approach is to calculate the driving and resisting forces along circular or log-spiral slip surfaces and determine factors of safety

against shear failure. The minimum safety factor should be greater than that mandated by codes of practice for that load combination case.

Slope facing options

StrataSlope™ system provides designers and engineers with a new array of options for creating aesthetic vegetated steep slopes, temporary retaining walls and embankments with steep slopes.

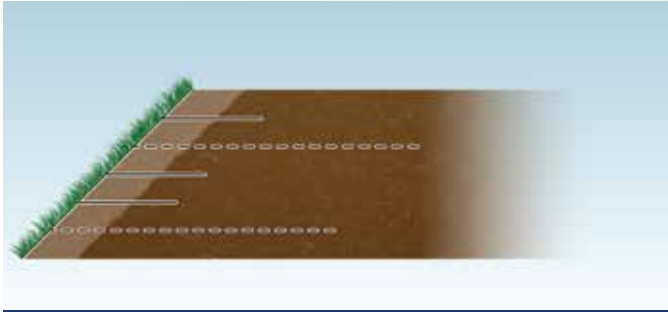
Several key factors that influence slope surface selection include environmental conditions to foster vegetation, final surface slope and maintenance regime proposed. In regions with adequate rainfall or where irrigation during the

life of the structure is possible, vegetation offers the most economical and aesthetic choice.

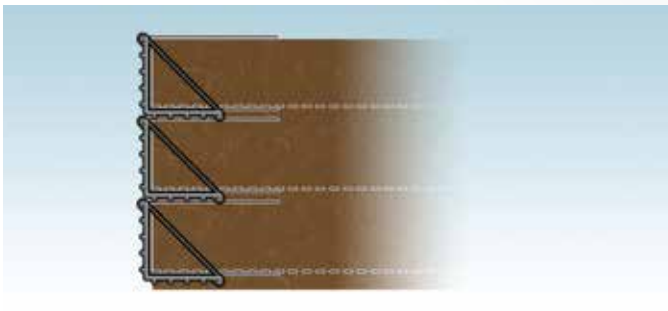
Stone facing is commonly used for permanent structures in arid regions or cases where the structure batter is too steep to support vegetation. The slope may be close to 70°, or the structure may be adjacent to a water body. Galvanized steel welded wire forms are used for long-term facing, which also function as the construction form.

Where the reinforced slope is temporary, a plain geogrid wrap or woven/ nonwoven/ composite geotextile around soil filled jute bags may suffice. Black steel welded wire forms are also used depending on the function.

Temporary applications may include temporary surcharges where a plain geogrid wrap may suffice, or road/ railway temporary diversions or support systems with heavy loadings, where wire forms may be advisable.



Erosion control blanket facing option



Metal welded wire mesh facing option

Highlights

- ▶ An aesthetic, environmentally friendly green solution. The fascia may be either vegetated or be given a stone appearance to blend with the natural surroundings and also minimise impact on eco-sensitive areas
- ▶ As a reinforced soil structure, the solution is flexible and tolerant to differential settlements
- ▶ Slopes can be as steep as 70°
- ▶ Minimal site preparation is required
- ▶ Local non-plastic soil can be used for reinforced fill as long as its gradation is within a specific but wide envelope
- ▶ Installation is fast even with minimal equipment and manpower
- ▶ There is significant cost savings when compared to an equivalent reinforced concrete structure





About us



Established
2004



Manufacturing Facility
StrataGrid™ geogrid, StrataWeb®
geocells at Daman, India



Joint Venture
Strata Systems Inc. USA
(Division of Glen Raven Group)



Project Track Record
Timely & infallible installation



Global Presence
USA, Brazil & Ireland



Certification
CE TUV

Strata India offers a comprehensive range of high-quality geosynthetic and geotechnical solutions to India's civil engineering and construction industry.

Strata India provides turnkey solutions for various applications like reinforced soil structures, slope protection and stabilization, erosion control, precast arch bridges, foundation improvement for structures and embankments, steep slope embankments, strengthening of paved/ unpaved roads, storage/ container yards etc.



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