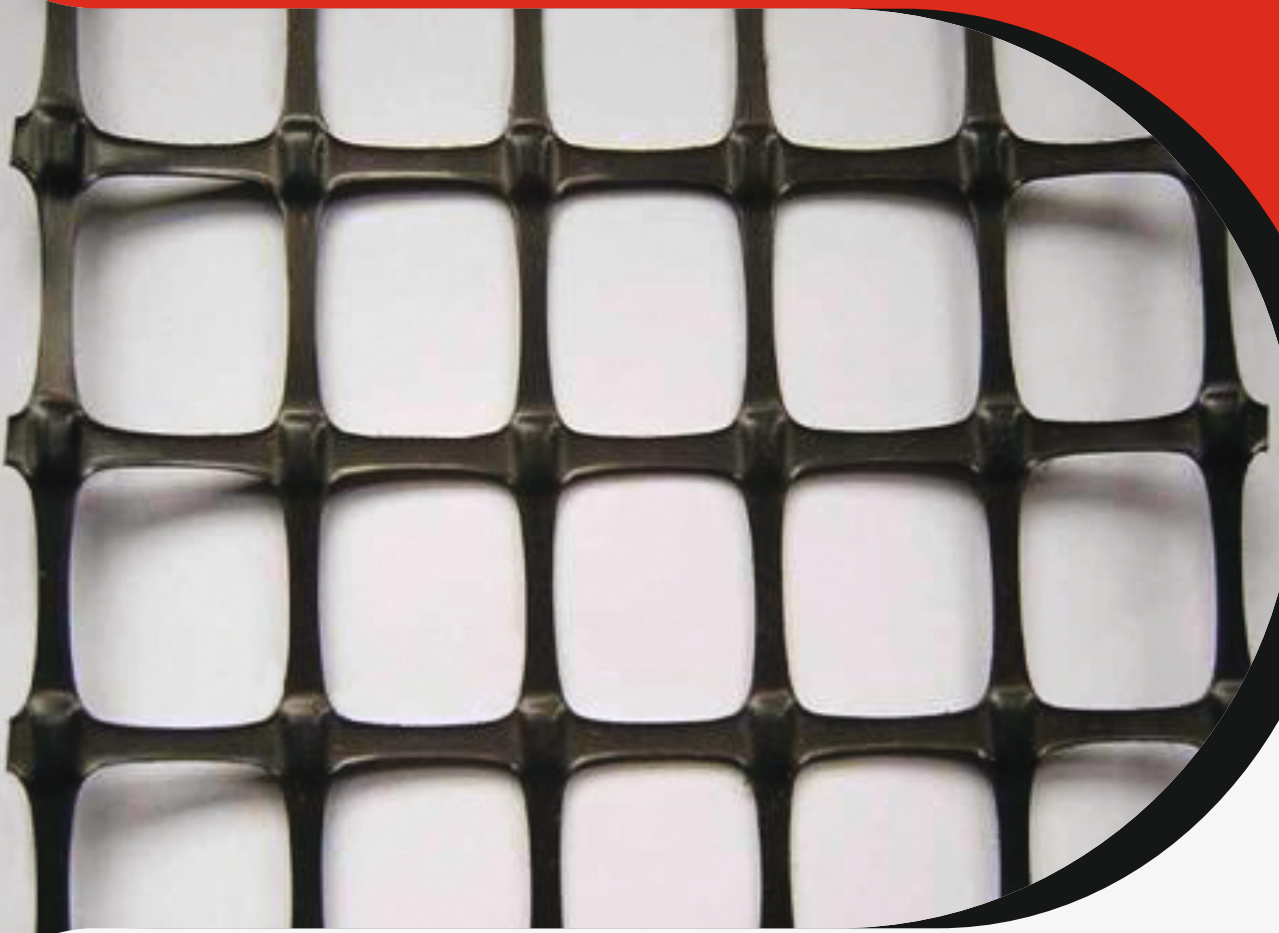


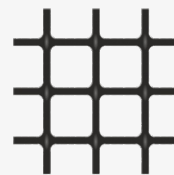
# TECHGRID PP BIAXIAL GEOGRID

MADE IN INDIA



**TECHFAB INDIA**

*At the heart of geosynthetic activity*



**TechGrid PP  
Biaxial Geogrid**

**Integrally formed Polypropylene Biaxial Geogrids for Reinforcement, Separation and Stabilization**

- ▶ Unpaved Roads
- ▶ Flexible Highway Pavements
- ▶ Flexible Airport Pavements
- ▶ Trackbed Stabilization
- ▶ Hard Standages
- ▶ Area Stabilization
- ▶ Working Platforms
- ▶ Load Transfer Platforms
- ▶ Void Spanning
- ▶ Secondary Reinforcement in Slopes

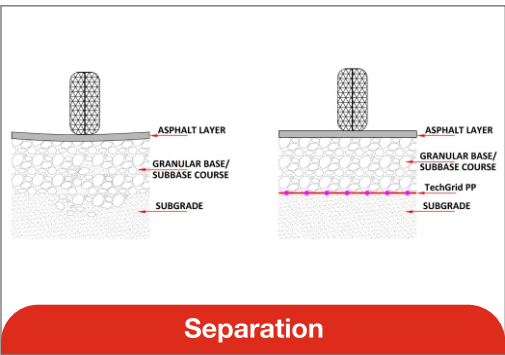
[www.techfabindia.com](http://www.techfabindia.com)

TECHGRID PP is a family of integrally formed biaxial geogrids manufactured from superior grades of polypropylene using precisely controlled punching-drawing processes. Stringent controls on raw materials and manufacturing process ensures a high-quality product with consistent geometry, integral junctions, superior mechanical properties and excellent durability.

- ▶ High tensile strength
- ▶ High tensile modulus
- ▶ High junction strength
- ▶ High aperture rigidity
- ▶ Excellent durability
- ▶ Proven performance
- ▶ Consistent & assured quality
- ▶ Cost-effective pricing
- ▶ On-time delivery
- ▶ Efficient pre-sales & after-sales support

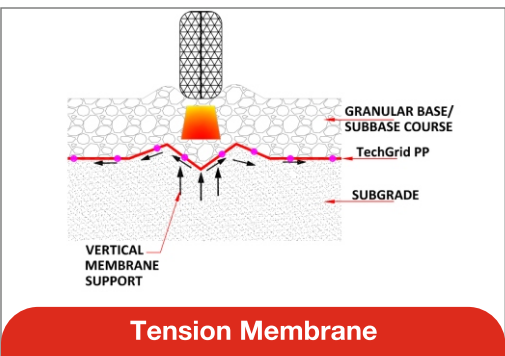
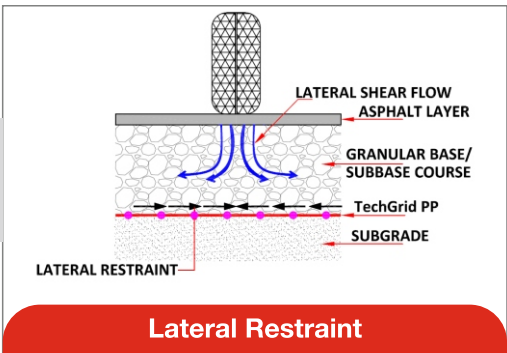
## TECHGRID PP IN ACTION

The placement of TechGrid PP Biaxial Geogrids within a layer of granular material results in strong interaction, mainly through interlocking of particles within the geogrid apertures, which ultimately leads to a significantly enhanced structural capacity. The mechanical improvement of the soil-geogrid system results from the development of four distinct mechanisms, as follows:



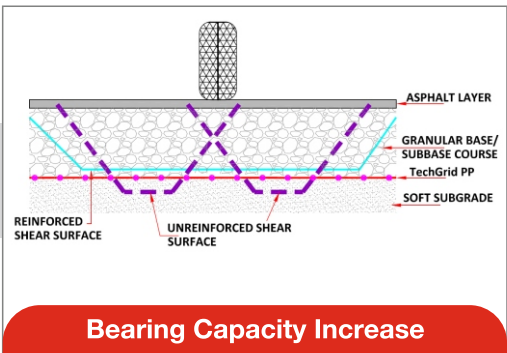
**01 Separation :** The geogrid, when placed between two dissimilar materials, avoids their mixing and maintains their integrity and functionality

**02 Lateral Restraint :** The geogrid develops tensile forces that maintain high stiffness in the granular material by effectively controlling cyclic load-induced lateral deformations



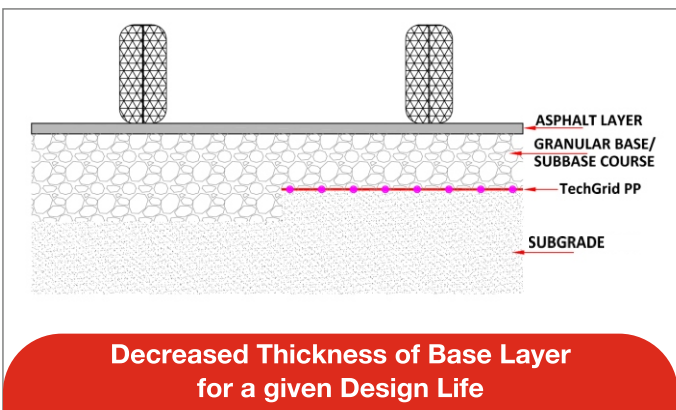
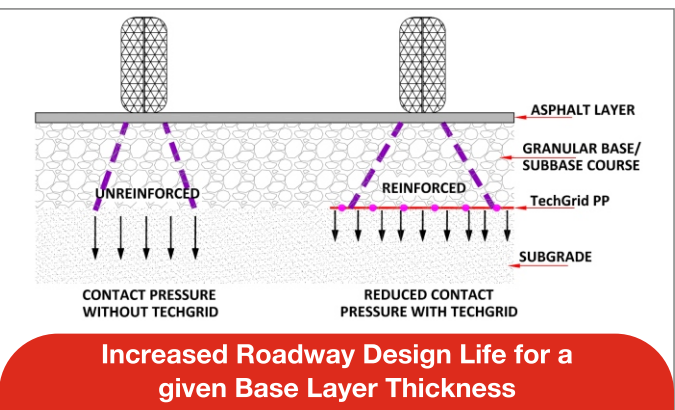
**03 Tensioned Membrane :** The geogrids acts as a stretched membrane that resists the vertical loads while simultaneously provides confinement to the subgrade soil

**04 Enhanced Bearing Capacity :** The geogrid provides an increased bearing capacity margin of safety by intercepting the potential failure surfaces that develop under vertical loads



## BENEFITS OF TECHGRID PP

- ▶ Functions as a separator - preserves the designed thickness and integrity of granular layers placed over weak soils
- ▶ Acts as a working platform over weak soils by supporting the load of construction equipment, preventing excessive deformation of underlying subgrade and facilitating proper compaction of overlying granular layers
- ▶ Enhances the structural performance of granular subbase and base courses in unpaved roads as well as in flexible pavements for roadways & airfields
- ▶ Improves the performance of ballast and sub-ballast/blanket layers of railway trackbeds
- ▶ Strengthens the foundations of hard standages, factory and warehouse floors and storage areas
- ▶ Improves the performance of load transfer platforms over pile/column supported embankments
- ▶ Spans voids in subsidence prone areas, such as regions affected by mining activity and sink holes
- ▶ Prevents surficial slope failures when used as secondary reinforcement



**Enhanced  
Performance**

**Savings in Immediate  
and Life Cycle Costs**

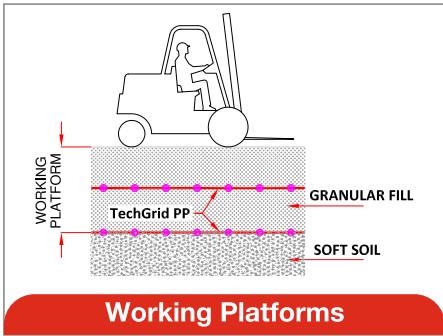
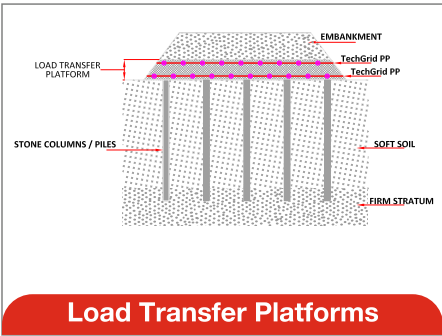
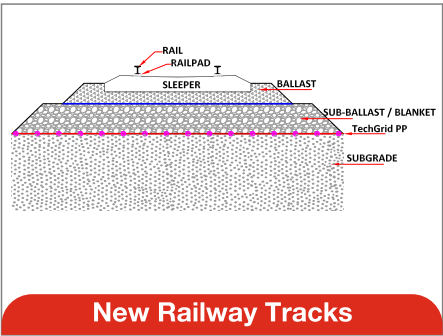
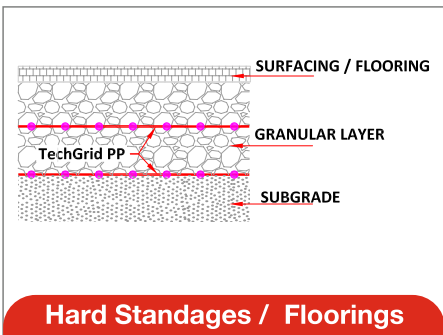
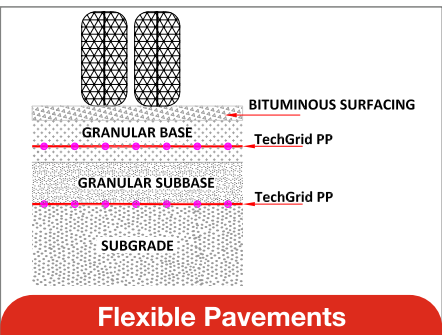
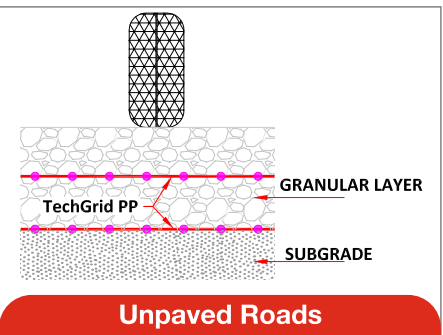
**Faster Construction**

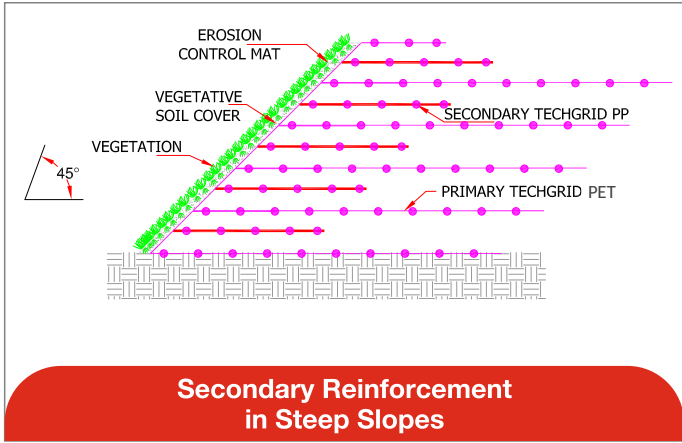
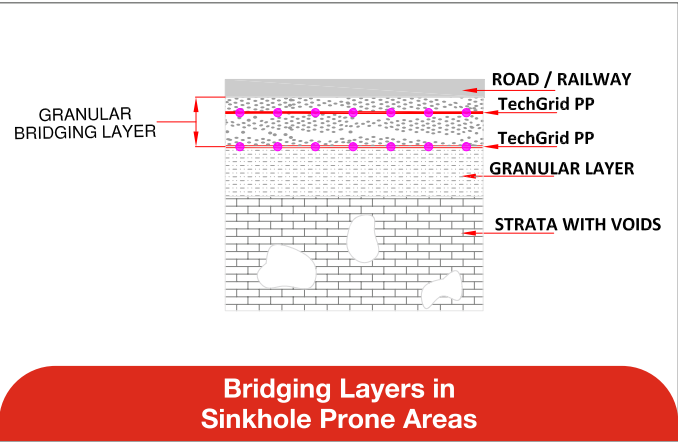
**Longer Service Life**

**Increased  
Sustainability**

## APPLICATIONS OF TECHGRID PP

- ▶ Roadways
- ▶ Airfields
- ▶ Civil Construction
- ▶ Land Development
- ▶ Railways
- ▶ Ports
- ▶ Mining Projects





TECHGRID PP SPECIFICATIONS

Product Code	Mechanical Properties							Dimensions	
	Unit Tension (kN/m)						Junction Efficiency	Aperture Size (mm)	
	Ultimate		Strain@2.0%		Strain@5.0%			Aperture Size (mm)	
	MD	TD	MD	TD	MD	TD		MD	TD
TechGrid PP 2020	20	20	7.5	7.5	15	15	≥95%	38	38
TechGrid PP 2020L	20	20	7.5	7.5	15	15	≥95%	65	65
TechGrid PP 3030	30	30	11.0	11.0	21.6	21.6	≥95%	38	38
TechGrid PP 3030L	30	30	12.5	12.5	21.6	21.6	≥95%	65	65
TechGrid PP 4040	40	40	14.5	14.5	28	28	≥95%	38	38
TechGrid PP 4040L	40	40	14.5	14.5	28	28	≥95%	65	65

ABOUT TECHFAB INDIA INDUSTRIES LTD

Established in 2003, TechFab India has become the largest geosynthetics manufacturing company in India, with an extremely wide range of world-class products, which are exported to more than 25 countries. Our products are regularly tested at our three in-house NABL and GAI-LAP accredited laboratories as well as at reputed independent accredited laboratories.

We manufacture the following products at our state-of-the-art plants in Silvassa and Daman in India.

- ▶ TechGrid knitted and polymeric coated PET Geogrids (CE and BBA certification)
- ▶ TechGrid PP Biaxial geogrids (CE Marked)
- ▶ TechFab Polyester Straps (CE Marked)
- ▶ Tech GeoMattress
- ▶ TechGlass AIC Asphalt Interlayer Composite
- ▶ TechFab Metal Gabions (CE Marked)
- ▶ TechGeo needle-punched nonwoven geotextiles (CE marked / AASHTO NTPEP qualified)
- ▶ TechPave Paving Fabric (CE Marked)
- ▶ TFI 3000 Woven PET Geotextiles (CE Marked)
- ▶ TechFab Geotextile Tubes and Bags
- ▶ TechDrain PVD (CE Marked)
- ▶ TechDrain Drainage Composite



**TechFab India Industries Ltd.**  
**Head Office:**  
712, Embassy Center, Nariman Point, Mumbai - 400 021, India  
• Tel. +91-22-2287 6224 / 25 • Fax: +91-22-2287 6218  
**Email:** 'anant@techfabindia.com • **Website:** www.techfabindia.com  
**Regional Offices:** • New Delhi • Hyderabad • Vadodara