

# Advanced Fabric Form Grout Mattress System

## Long-Term Hydraulic applications



**Durable | Versatile | Engineered for Performance**

## TECHMATT

TechMatt is TechFab India's advanced pre-fabricated fabric form concrete mattress system, developed to offer a robust, adaptable, and sustainable solution for slope protection, scour prevention, and hydraulic erosion control. Manufactured using high-strength geotextile formwork and in-situ pumped concrete or grout, TechMatt provides a seamless lining system suitable for a wide range of hydraulic and geotechnical challenges.



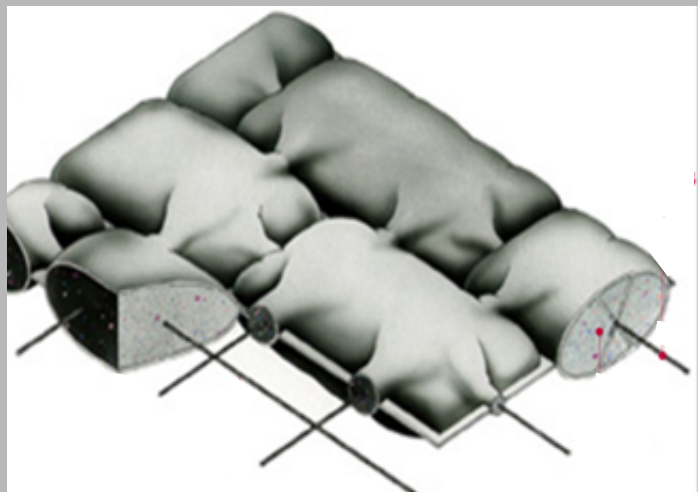
### Engineered for Suitability and performance:



## TECHMATT FP

### (Filter Point Concrete Mattress)

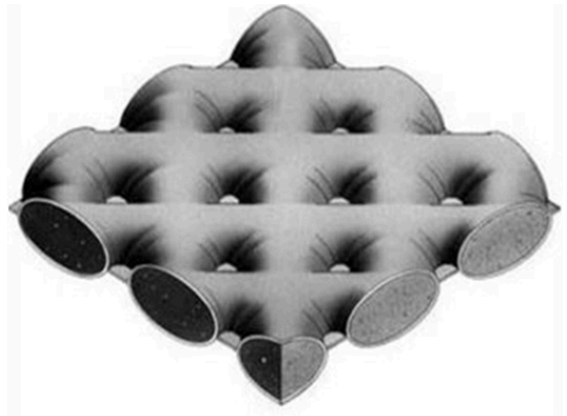
- Engineered with integrated drainage ports to relieve subsoil water pressure.
- Minimizes risks of hydrostatic uplift, soil migration, and piping.
- Ideal for high water table areas, riverbanks, and seepage-prone slopes.



## TECHMATT US

### (Uniform Section Concrete Mattress)

- Forms a monolithic, continuous surface for protecting slopes and channels.
- Ideal for lining canals, embankments, and water conveyance structures.
- Offers excellent resistance to surface erosion and ensures slope integrity.



## TECHMATT AB

### (Articulated Block Mattress)

- Consists of concrete blocks linked by geotextile joints forming an articulated matrix.
- Provides high flexibility to conform to settlements and hydraulic impacts.
- Best suited for coastal revetments, tidal zones, bridge piers, and river training works.
- Optional inclusion of tensile cables for enhanced anchorage in dynamic zones.



## APPLICATIONS OF **TECHMATT**

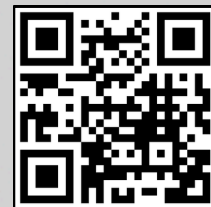
**TechMatt is designed to perform in some of the most challenging environments.**

- **Cofferdam Linings and Temporary River Training**  
Provides a fast-deployable protective mattress for temporary works like cofferdams or bypass channels in dry or submerged zones.
- **Slope Protection in Rock-Scarce Areas**  
Offers a rock-alternative solution for slope armoring, especially where conventional riprap or gabions are not feasible or sustainable.
- **Land Reclamation and Port Infrastructure**  
Stabilizes the perimeter of reclaimed areas and protects the toe of reclaimed fill from wave or tidal erosion.

- **Canal and Irrigation Lining**  
Ensures long-term lining integrity while preventing seepage and erosion in major and minor irrigation networks.
- **Riverbank Protection & Revetments**  
Stabilizes eroding riverbanks, even under high-velocity flow conditions, ensuring safety of adjacent infrastructure and settlements.
- **Bridge Pier & Abutment Scour Protection**  
Guards against local scour around bridge foundations and improves hydraulic stability during floods or high discharge.
- **Coastal and Estuarine Revetments**  
TechMatt ABM adapts to tidal fluctuations and wave action, dissipating energy while preserving shoreline stability.
- **Dam and Spillway Aprons**  
Functions as a robust energy dissipation layer downstream of spillways, reducing risks of undermining and erosion.

## KEY FEATURES

- **High Strength Geotextile Formwork**
- **Custom-Fabricated Panels to Match Site Dimensions**
- **Drainage-Enabled Filter Port Design**
- **Flexibility and Adaptability in Varying Site Conditions**
- **Rapid Installation and Minimal Environmental Footprint**
- **UV-Stabilized, Long-term Durability**



**TechFab India is ready to support your next infrastructure project with end-to-end guidance - from concept to commissioning.**

### **Why Choose TECHMATT ?**

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- **Proven performance in challenging hydraulic projects**
- **Optimized for speed, quality, and sustainability**
- **Backed by TechFab's technical support and in-house design team**
- **Ideal for projects requiring modular, engineered protection systems**
- **Accepted in DPRs and tender specifications across India**



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