Engineered Earth Armoring System
The most advanced and resilient technology for preventing severe erosion and stabilizing surficial slopes is PROPEX® Armormax®.

PROPEX Armormax is composed of High Performance Turf Reinforcement Mat (HPTRM) and Engineered Earth Anchors that work together to lock soil in place and protect against hydraulic stresses.

High Performance Turf Reinforcement Mat
Solmax’s HPTRM technology features patented ultraviolet stabilization and high tensile strength to provide up to 75 years of slope protection and erosion mitigation, even in environments with direct exposure to sunlight. Additionally, the HPTRM is designed to accelerate vegetative growth, exhibit high resiliency, and feature strength and elongation properties to limit stretching in saturated conditions.

Engineering Earth Anchors
Corrosion resistant Engineered Earth Anchors™ (EEA) secure the HPTRM to the ground. EEA’s are designed to provide resistance to shear and lateral forces, and embed beyond the predicted plane of failure. The PROPEX Armormax system uses either a B1, B2, or B3 anchor depending on the application and environment.

Tested. Proven. Trusted.
The U.S. Army Corp of Engineers (USACE) commissioned Colorado State University to test erosion resiliency of HPTRMs for 500-year hurricane overtopping conditions. Testing showed that Armormax provided increased levee resilience and reduced the risk of breaching caused by overtopping. The USACE has now installed more than 1 million square yards of PROPEX Armormax on coastal and river levees.

PROPEX Pyramat 75
HPTRM
FEATURES AND BENEFITS

Design and Performance
- Provides permanent erosion protection for up to 75 years
- Withstands extreme hydraulic stresses
- Provides temporary shoring and stabilization for constructed slopes
- Resistant to non-hydraulic stresses from debris and mowing and maintenance equipment
- Resistant to fire using non-halogen fire retardant technology
- Highly UV stabilized for applications with little or no vegetation
- Outlasts other slope reinforcement methods yielding significant cost savings
- Ease of installation reduces time and labor costs
- Lightweight and easily transported into areas with access challenges
- Reduces the amount of space needed for a right-of-way

Environmental
- Recognized by the EPA as Best Management Practice (BMP) for improving water quality
- Verified carbon footprint is up to 30 times smaller than traditional hard armor
- Recognized by FEMA as a nature-based solution
- Filters sediment and pollutants to improve water quality
- Encourages infiltration of water back into the ground water table
- Proven to reduce erosion and reinforce vegetation for low-impact, sustainable design
- Yields a vegetated solution that is more aesthetically pleasing than traditional hard armoring solutions
- Maintains cooler water temperature than traditional hard armoring, which is healthier for aquatic habitats

APPLICATIONS
- Arid and semi-arid environments where vegetation densities of <30% are anticipated
- Earthen Dams and Spillways
- Roadway Embankments
- Canals/Stream Banks
- Steepened Slopes
- Channels
- Levees
- Areas prone to wild fires
- Defensible spaces
Step 1: Site Preparation
Grade and compact the failed slope and remove objects that would prevent PROPEX Armormax from making direct contact with the soil. Excavate a trench at the crest and toe of the slope.

Step 2: HPTRM Laydown
Unroll the HPTRM on the prepared soil ensuring material has intimate contact with the soil.

Step 3: Anchor Installation
Anchors should be installed in locations specified for the project.

Step 4: Vegetation Establishment
Vegetation can be established by broadcast seeding, hydraulic seed application (hydroseeding), or sodding.
About Solmax
Solmax is a world leader in sustainable construction solutions, for civil and environmental infrastructure. Its pioneering products separate, contain, filter, drain and reinforce essential applications in a more sustainable way – making the world a better place. The company was founded in 1981, and has grown through the acquisition of GSE, TenCate Geosynthetics and Propex. It is now the largest geosynthetics company in the world, empowered by more than 2,000 talented people. Solmax is headquartered in the province of Quebec, Canada, with subsidiaries and operations across the globe.

Uncompromised quality
Our products are manufactured to strict international quality standards. All our products are tested and verified at our dedicated and comprehensive laboratories which maintain numerous accreditations. We offer our partners a wide scope of testing according to published standards to ensure products delivered to sites meet specified quality requirements.

Let’s build infrastructure better

Solmax is not a design or engineering professional and has not performed any such design services to determine if Solmax’s goods comply with any project plans or specifications, or with the application or use of Solmax’s goods to any particular system, project, purpose, installation, or specification.

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