



ARMORMAX[®]

Engineered Earth Armoring System

PATCHING REPAIR GUIDELINES

Thank you for purchasing ARMORMAX[®] for Erosion Control or Slope Stability by Propex Operating Company, LLC (Propex). This document provides installation and maintenance guidelines for ARMORMAX used as slope armoring to improve earthen slope resiliency and slope stability. ARMORMAX provides permanent erosion protection of an earthen slope, promotes vegetation, and improves slope stability, consists of two components:

- PYRAMAT[®] - High Performance Turf Reinforcement Mat (HPTRM)
- Engineered Earth Anchor (Anchor)

Temporary securing pins (pins) are used during installation to hold ARMORMAX in place while installing anchors. Pins also promote vegetation establishment keeping ARMORMAX in intimate contact with the soil.

ARMORMAX is an Engineered Earth Armoring Solution TM with a unique design for each specific project. While Propex has made every effort to ensure general validity, this information should not be used for a specific application without independent professional examination and verification of its suitability, applicability, and accuracy. The information provided herein is for general information only, and is intended to present installation guidance. Project specific contract documents take precedence when pin and anchor placements are different than what is represented in this document. Depending upon the critical nature of the structure to be armored, work restrictions may be in place such as limiting work based on growing seasons, weather patterns, etc. Work should be performed under the provisions set forth for the specific project. Propex Engineering Services is available for support during installation to consult for solving constructability issues encountered in specific applications. Please feel free to contact our Engineering Services team at GeoEngineering@propexglobal.com.

PATCHING AND REPAIRS

ARMORMAX may require localized repair at times. For emergency repairs, an adequate supply of ARMORMAX should be maintained in inventory with the necessary tools to install. This will allow for a timely, initial repair of the system.

1. In order to identify areas in need of repair, the site should be patrolled immediately after mowing and after rain events of 2 inches or more. When patrolling look for areas of sparse vegetation, exposed edges of ARMORMAX, and areas where direct contact between ARMORMAX and the slope surface is compromised. ARMORMAX should be rated as *Acceptable*, *Minimally Acceptable*, or *Unacceptable* during inspection.
 - A. *Acceptable* (A) - The rated area is in satisfactory, acceptable condition, and will function as designed and intended during the rain event. ARMORMAX has no exposed edges, is installed tightly by maintaining direct contact to the slope surface with no rilling beneath, and has over 90% vegetation cover. There is no noticeable damage present.
 - B. *Minimally Acceptable* (M) - The rated area has a minor deficiency that needs to be corrected. The minor deficiency will not seriously impair the functioning of the area during the next rain event; however, the overall reliability of the project will be lowered because of the minor deficiency. ARMORMAX has 75% vegetation cover with un-vegetated patches as large as one square yard. Edges of ARMORMAX are exposed with noticeable damage. Minimal erosion has occurred underneath ARMORMAX.
 - C. *Unacceptable* (U) - The rated area is unsatisfactory. The deficiency is so serious that the area will not adequately function in the next rain event. ARMORMAX has been physically torn, ripped, or lifted from the slope surface. Less than 75% vegetation cover is present with un-vegetated patches being greater than 1 square yard, and there is evidence that erosion is occurring beneath ARMORMAX.
2. Repair any raised or exposed edges of ARMORMAX by driving existing and additional pins or anchors along the edges as necessary to securely fasten to the ground. Inspect areas where the vegetation is not growing on top of ARMORMAX. Many times this is an indicator that ARMORMAX has lost contact with the ground beneath. Check for voids beneath ARMORMAX and fill any holes, gullies, etc. with compacted fill material if possible. Replace ARMORMAX as described below.

3. To repair ARMORMAX, cut out and remove damaged areas in a square configuration a minimum size of 2 ft by 2 ft. Remove all vegetation and debris atop of ARMORMAX. Loosen the top 1 to 2 in of soil in the patch area then seed. The subgrade of area to be patched shall be prepared to be smooth and uniform and transition smoothly into the in-situ area. Cut a square ARMORMAX patch a minimum of 12 in greater than the damaged area for all four sides of the patch. Overlap the patch area in all directions a minimum of 12 in. The patch overlaps shall be tucked under the existing damaged ARMORMAX material (Figure and Figure).

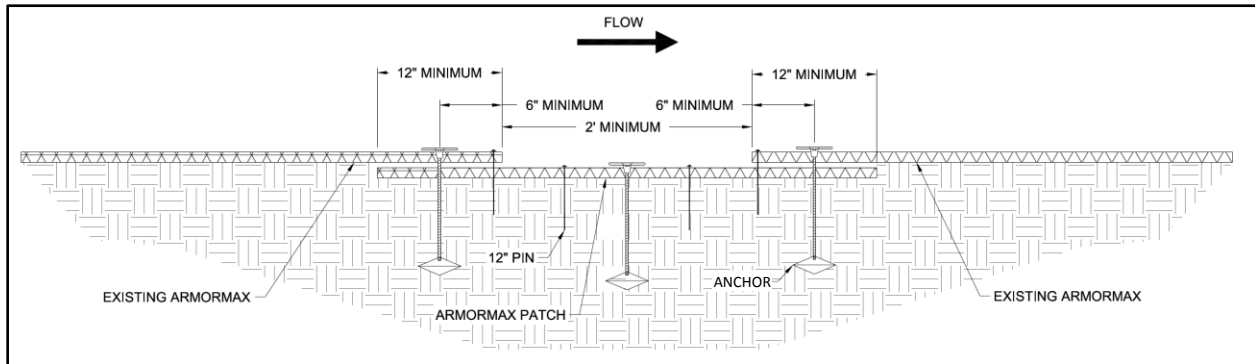


Figure 1: ARMORMAX Patch Cross Section

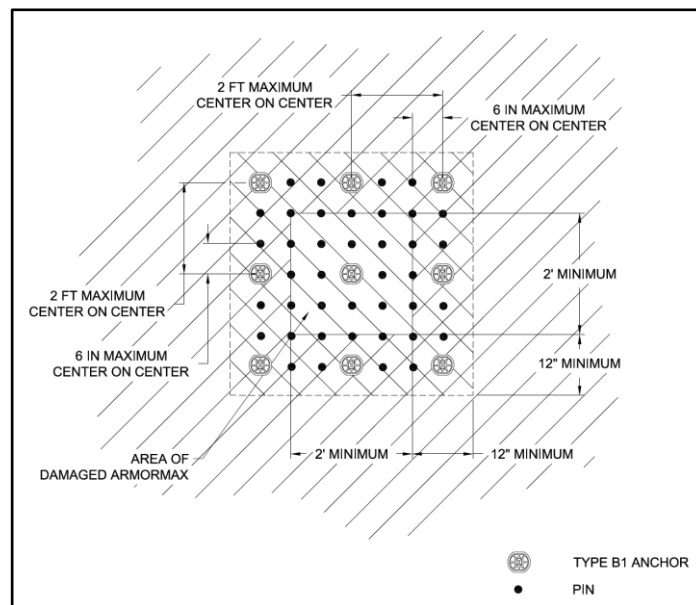


Figure 2: ARMORMAX Patch Plan View

4. Install anchors on 2 ft (600 mm) (max) centers, and pins on 6 in (150 mm) (max) centers. For larger areas of damage, anchors should be installed to match existing anchor pattern and type. Once ARMORMAX is in place, vegetate per project specifications.