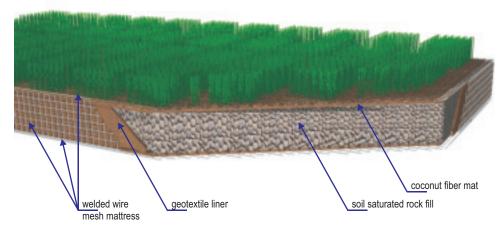
## **EcoMattress Systems**



# Slope Protection & Naturalized Environment

Modular Gabion Systems EcoMattress combines the proven\* slope and channel protection to control erosion and streambank movement while providing a medium for rapid plant growth. (Refer to guidelines below.)

EcoMattresses retain the selected soil media beneath the turf reinforcement mat held securely in place by the welded wire mesh mattress lid. Soil stability is maintained enabling rapid establishment of vegetation. Interior lining of non-woven filter fabric retains soils even in high velocity flows. EcoMattresses quickly become covered with vegetation and appear as a natural slope.

#### GENERAL GUIDELINES FOR USE OF ECOMATTRESS FOR CHANNEL REVETMENTS

| EcoMattress | Stone          | Critical       | Maximum        |
|-------------|----------------|----------------|----------------|
| Thickness   | Diameter       | Velocity       | Velocity       |
| In. (cm)    | In. (cm)       | ft/sec (m/sec) | ft/sec (m/sec) |
| 6 (15.2)    | 3-6 (7.6-15.2) | 9 (2.7)        | 14 (4.3)       |
| 9 (22.9)    | 3-6 (7.6-15.2) | 12 (3.7)       | 17 (5.2)       |
| 12 (30.5)   | 3-6 (7.6-15.2) | 15 (4.6)       | 19 (5.8)       |

#### **SPECIFICATIONS**

| Construction of Mattress:     | Meets ASTM A974-97                            |
|-------------------------------|---|
| Mesh Size:                    | 1½" x 3"                                      |
| Wire:                         | 13½ gauge low carbon soft temper              |
| Metallic Coating:             | Meets ASTM A641, Class III galvanized         |
| Plastic Coating:              | Fuse-bonded PVC powder coating                |
| Interior Filter Fabric Liner: | 8 oz/sq. yd. synthetic non-woven              |
| Turf Reinforcement Mat:       | 8 oz/sq. yd. polymer reinforced coconut fiber |

Weight per square foot of EcoMattress based upon volumes of 70% 3"- 6" limestone and 30% soil fill.

| 6" Thick  | 55 lbs rock fill only / 72 lbs rock and soil   |
|-----------|--|
| 9" Thick  | 82 lbs rock fill only / 108 lbs rock and soil  |
| 12" Thick | 110 lbs rock fill only / 143 lbs rock and soil |

\* US Army Corps of Engineers Technical Report H-75-19, December, 1975.



### **Features**

- proven embankment stabilization solution
- provides protection for germinating seeds and tender new growth to promote rapid re-
- soils are better retained in the mattress to support more complete vegetation coverage
- more weight per square foot than concrete block system
- more resistant to high flow rates









#### **MODULAR GABION SYSTEMS**

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**Erosion Control Specialists**