



InstaTurf™ ShearForce10 Erosion Control Turf Reinforcement Mat

Product Specification

Simulated Turf High Flow Erosion Control Mat

The simulated turf high flow erosion control mat shall provide the immediate finished look of natural grass along with the high flow erosion protection of large rock riprap, while establishing permanently reinforced vegetative cover. The mat shall consist of a UV stabilized, monolithic polyethylene simulated turf structure with approximate 7/16 inch by 5/8 inch rectangular apertures, backed with an engineered lightweight polyester geotextile. The geotextile must be dense enough to retain fine soil particles and seed, yet open enough to allow seedling emergence. The mat shall have an unvegetated permissible shear stress rating, as determined by ASTM D6460 large-scale channel testing, of 10 lbs/sf or greater for immediate as well as long-term erosion protection against high shear stress water flow. The high flow erosion control turf reinforcement mat shall have the following characteristics and dimensions, and meet or exceed the minimum physical and performance properties as specified below.

Color: Grass green

Roll Sizes: 3ft x 45ft – 135 sf, 6ft x 45ft - 270 sf

Roll Weights: Approx. 49 lbs/99 lbs

| InstaTurf ShearForce10 Index and Performance Properties | | | | |
|--|--|--------------------|---|---------------|
| Index Properties | | Test Method | Units | Values |
| Mass Per Unit Area | | ASTM D6566 | lbs/sy | 3.3 |
| Tensile Strength | | ASTM D6818 | MD (lbs/ft) | 363 |
| | | | XD (lbs/ft) | 164 |
| Elongation | | ASTM D6818 | MD (%) | 22 |
| | | | XD (%) | 37 |
| Thickness | | ASTM D6525 | In | 1.0 |
| Ground Cover | | ASTM D6567 | % | 85.9 |
| UV Stability | | ASTM D4355 | % Tensile Retention @ 1,000 hrs | 93.5 |
| Performance Properties & Typical Design Values | | | | |
| Manning's n Roughness Coefficient | | ASTM D6460 | <.5 ft flow depth | 0.04 |
| | | | .5 - 1.0 ft flow depth | 0.03 |
| | | | >1.0 ft flow depth | 0.025 |
| Permissible Shear Stress | | ASTM D6460 | Unvegetated (lbs/sf) - Cohesive Soils | 12 |
| | | <i>Recommended</i> | Unvegetated (lbs/sf) - Non-cohesive Soils | 10 |
| Permissible Velocity | | ASTM D6460 | Unvegetated (ft/sec) - Cohesive Soils | 25 |
| | | <i>Recommended</i> | Unvegetated (ft/sec) - Non-cohesive Soils | 20 |

InstaTurf™ ShearForce™ products are manufactured by GrassWorx LLC, 2381 Centerline Industrial Drive, St Louis, MO 63146. Insta-Turf.com