







## PRODUCT DATA SHEET RECYCLEX® TRM

## **DESCRIPTION**

Recyclex TRM, permanent non-degradable Turf Reinforcement Mat (TRM), consists of 100% post-consumer recycled polyester (green or brown bottles) with 80% five-inch fibers or greater fiber length. It is of consistent thickness with fibers evenly distributed throughout the entire area of the TRM. The top of each TRM is covered with extra heavy duty polypropylene net and the bottom of each is covered with heavy duty polypropylene net. Fibers are tightly crimped and curled to allow fiber interlock, and to retain 95% memory of the original shape after loading by hydraulic events. Fibers have a specific gravity greater than 1.0; therefore, the blanket will not float during hydraulic events. Recyclex TRM meets Federal Government Executive Order initiatives for use of products made from, or incorporating, recycled materials. Recyclex TRM shall be manufactured in the U.S.A. and the fibers shall be made from 100% recycled post-consumer goods.

Recyclex TRM has a design soil loss ratio (event-based RUSLE C factor) of .022 and is typically suitable for slopes up to .5H:1V. Vegetated Recyclex TRM is rated for channel flows up to 17.0+ ft/s (5.2+ m/s) and 10.0+ lb/ft<sup>2</sup> (480+ Pa) shear stress.

## PHYSICAL PROPERTIES

Recyclex TRM measurements at time of manufacturing:

| Width                         |                         | 8.0 ft (2.4 m)                                       | 16 ft (4.9 m)  |
|-------------------------------|-------------------------|--|--|
| Length                        |                         | 90.0 ft (27.4 m)                                     | 90.0 ft (27.4 m)                                     |
| Area                          |                         | $80.0 \text{ yd}^2 (66.9 \text{ m}^2)$               | $160.0 \text{ yd}^2 (133.8 \text{ m}^2)$             |
| Weight                        |                         | 50.0 lb (22.7 kg)                                    | 100.0 lb (45.4 kg)                                   |
| Fiber Length (80% min.)       |                         | ≥5.0 in (≥12.7 cm)                                   | ≥5.0 in (≥12.7 cm)                                   |
| Mass per Unit Area<br>(± 10%) |                         | $0.625 \text{ lb/yd}^2$<br>(0.34 kg/m <sup>2</sup> ) | $0.625 \text{ lb/yd}^2$<br>(0.34 kg/m <sup>2</sup> ) |
| Net<br>Openings               | Polypropylene<br>Top    | 0.75 in x 1.0 in<br>(19.1 mm x 25.4 mm)              | 0.75 in x 1.0 in (19.1 mm x 25.4 mm)                 |
|                               | Polypropylene<br>Bottom | 0.75 in x 0.75 in<br>(19.1 mm x 19.1 mm)             | 0.75 in x 0.75 in<br>(19.1 mm x 19.1 mm)             |

## TYPICAL INDEX VALUES

| <u>Index Property</u>    | Test Method            | Value  |  |  |
|--------------------------|------------------------|--|--|--|
| Thickness                | ASTM D 6525            | $\overline{0.371}$ in (9.4 mm)                         |  |  |
| Light Penetration        | ASTM D 6567            | 55%  |  |  |
| Resiliency               | ASTM D 6524            | 85%  |  |  |
| Mass per Unit Area       | ASTM D 6566            | $0.63 \text{ lb/yd}^2 (0.342 \text{ kg/m}^2)$          |  |  |
| MD-Tensile Strength Max. | ASTM D 6818            | 387.6 lb/ft (5.66 kN/m)                                |  |  |
| TD-Tensile Strength Max. | ASTM D 6818            | 340.8 lb/ft (4.97 kN/m)                                |  |  |
| MD-Elongation            | ASTM D 6818            | 21.2%  |  |  |
| TD-Elongation            | ASTM D 6818            | 20.3%  |  |  |
| Swell                    | ECTC Procedure         | 26%  |  |  |
| Water Absorption         | ASTM D 1117/ECTC       | 20%  |  |  |
| Specific Gravity         | ASTM D 792             | 1.28   |  |  |
| ÚV Stability             | ASTM D 4355 (1,000 hr) | 90% minimum  |  |  |
| Porosity                 | Calculated             | 97.6%  |  |  |
| Bench-Scale Rain Splash  | ASTM D 7101            | $SLR = 6.17 @ 2 in/hr^{a,b}$                           |  |  |
| Bench-Scale Rain Splash  | ASTM D 7101            | $SLR = 5.90 @ 4 in/hr^{a,b}$                           |  |  |
| Bench-Scale Rain Splash  | ASTM D 7101            | $SLR = 5.63 @ 6 in/hr^{a,b}$                           |  |  |
| Bench-Scale Shear        | ASTM D 7207            | $2.84 \text{ lb/ft}^2$ @ 0.5 in soil loss <sup>b</sup> |  |  |
| Germination Improvement  | ASTM D 7322            | 525.6%   |  |  |
|                          |                        |  |  |  |

<sup>&</sup>lt;sup>a</sup> SLR is the Soil Loss Ratio, as reported by NTPEP/AASHTO. <sup>b</sup> Bench-scale index values should not be used for design purposes.

