



# Robertson Recreational Surfaces

## **PRODUCT SPECIFICATION** **TerraFlow® Geocomposite** **Sub surfacing Collector-drain**

The prefabricated TerraFlow geocomposite subsurface drainage system shall consist of a flexible thermoformed three-dimensional polymer core. The polymer core shall be tightly encapsulated by a non-woven geotextile. The core shall consist of a sufficient number of support members for a composite interaction between the polymer core and the geotextile overwrap to prevent geotextile intrusion and in-plane flow reduction.

The prefabricated TerraFlow geocomposite drainage system shall provide a minimum flow rate of 18 gallons per minute per foot width when tested in accordance with ASTM D4716 under the following boundary conditions:

200 psf load

0.10 gradient

Soil environment

The product test sample shall be representative of the product to be supplied for installation.

The prefabricated TerraFlow subsurface drainage system shall permit inflow from both sides. The minimum area for unobstructed inflow shall be 85% on the primary side of the drain and 12% on the secondary collection side of the drain.

The compressive strength of the prefabricated TerraFlow subsurface drainage system shall be determined by ASTM D1621 and shall be a minimum of 2600 psf at the maximum deflection of 10%. Core material must be virgin high-density polyethylene conforming to ASTM D1248, Type III with suitable colorants and additives to provide protection against ultraviolet-light degradation during storage and installation. The drain core must have cuspatations projecting from the flat, perforated base in a uniformly spaced pattern.

The geotextile used to overlap the polymer core should be non-woven, needle-punched and meet the following minimum roll values:

Grab Tensile Strength (ASTM D4632)	95 Lbs.
Grab Tensile Elongation (ASTM D4632)	50% Minimum
Puncture (ASTM D4833)	45 Lbs.
Trapezoidal Tear Strength (ASTM D4533)	40 Lbs.
Mullen Burst (ASTM D3786)	180 Lbs.
Coefficient of permeability (ASTM D4491)	0.20 cm/sec.
AOS (ASTM D4751)	70

## **Warranty**

Playcore, Inc. warrants all Terraflow Drain products to be free of defects in material and workmanship for the life of the product. Terraflow is manufactured using quality polypropylene resins for core and geotextile wrap, and will not deteriorate under normal soil conditions.

Playcore, Inc. will replace any Terraflow Drain found to be defective at no cost to the customer.