

# SYNTEC PRODUCT SPECIFICATION

## SYNTEC, LLC

4800 Pulaski Highway  
 Baltimore, Maryland 21224 • USA  
 Phone: 410-327-1070 • Toll Free: 1-800-874-7437 Fax: 410-327-1078  
 www.synteccorp.com



**SYNTEC**  
 GEOSYNTHETICS EVOLVED

## TENDRAIN 570-2 Double-Sided Geocomposite

The drainage geonet is comprised of a tri-planar structure consisting of middle ribs that provide direct channelized flow, with diagonally placed top and bottom ribs to limit geotextile intrusion. This geonet structure provides high transmissivity in soil environments under high and low loads. Tendrain has properties conforming to the values and test methods listed below:

| PROPERTY   | TEST METHODS | UNITS                                       | VALUE                | QUALIFIER | FREQUENCY   |
|--|--------------|---|----------------------|-----------|-------------|
| <b>TRI-PLANAR GEONET<sup>1</sup></b>   |              |   |                      |           |             |
| Thickness  | ASTM D 5199  | mil (mm)                                    | 300 (7.6)            | ±10%      | 100,000 sf  |
| Density  | ASTM D 792   | g/cm <sup>3</sup>                           | 0.94 – 0.96          | Range     | 100,000 sf  |
| Melt Flow Index  | ASTM D 1238  | g/10 min                                    | 1.0                  | MAX       | 100,000 sf  |
| Carbon Black   | ASTM D 4218  | %   | 2-3                  | Range     | 100,000 sf  |
| Thickness Retained<br>From 10,000 hour creep test under 10,000 psf, and 20°C temperature   | GRI-GC8      | %   | 80                   | -         | -           |
| Creep Reduction Factor<br>From 10,000 hour creep test under 10,000 psf, and 20°C temperature   | GRI-GC8      | -   | 1.2                  | -         | -           |
| <b>GEOTEXTILE<sup>1</sup></b>  |              |   |                      |           |             |
| U.V. Resistance (500 hrs)  | ASTM D 4355  | %   | 70                   | MARV      | Per formula |
| Grab Tensile   | ASTM D 4632  | lbs (N)                                     | 160 (710)            | MARV      | 100,000 sf  |
| Grab Elongation  | ASTM D 4632  | %   | 50                   | MARV      | 100,000 sf  |
| Tear Strength  | ASTM D 4533  | lbs (N)                                     | 60 (266)             | MARV      | 100,000 sf  |
| CBR Puncture   | ASTM D 6241  | lbs (N)                                     | 400 (1,776)          | MARV      | 100,000 sf  |
| AOS  | ASTM D 4751  | US Std Sieve(mm)                            | 70 (0.212)           | MaxARV    | 500,000 sf  |
| Permittivity   | ASTM D 4491  | sec <sup>-1</sup>                           | 1.4                  | MARV      | 500,000 sf  |
| Water Flow Rate  | ASTM D 4491  | gpm/ft <sup>2</sup> (l/min/m <sup>2</sup> ) | 110 (4481)           | MARV      | 500,000 sf  |
| <b>GEOCOMPOSITE</b>  |              |   |                      |           |             |
| <b>Bond Strength (Ply Adhesion) - MD</b>   |              |   |                      |           |             |
| Peak   | ASTM D 7005  | lbs/in                                      | 1.0                  | MAV       | 100,000 sf  |
| Average  |              |   | 0.5                  |           |             |
| <b>Transmissivity - MD</b>   |              |   |                      |           |             |
| Plate/Ottawa Sand/Geocomposite/<br>Geomembrane/Plate<br>Gradient = 0.02 @ 7,500 psf<br>100 hour seating period   | ASTM D 4716  | m <sup>2</sup> /sec                         | 4.0*10 <sup>-3</sup> | MAV       | 500,000 sf  |
| <b>DIMENSIONS AND DELIVERY</b>   |              |   |                      |           |             |
| The geocomposite shall be delivered to the jobsite in roll form with each identified and nominally measuring 12.75 feet (3.89 meters) in width and 200 feet (61 meters) in length. |              |   |                      |           |             |

Qualifiers: MARV=Minimum Average Roll Value (MARV), MAV=Minimum Average Value, MAX=Maximum Value, MaxARV=Maximum average roll value, MD=Machine Direction.

NOTES: 1. Geotextile and geonet properties listed are prior to lamination.