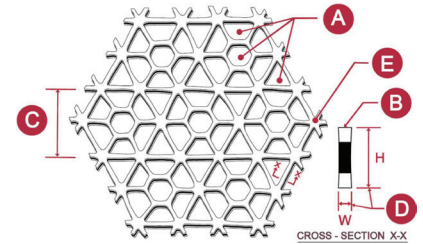


STORMGRID™ WITH TENSAR® TECHNOLOGY - NXSWT 100 GEOGRID SPECIFICATION

Scope

This specification summarizes the product manufacturing process, material properties, geometry and structure of NXSWT 100 geogrid for foundation applications used to stabilize crushed stone underneath buried arch stormwater chambers.



Requirements

NXSWT 100 is manufactured from a co-extruded, composite polymer sheet, which is then punched and oriented. The resulting structure consists of continuous and non-continuous ribs forming three aperture geometries (hexagon, trapezoid and triangle) and an unimpeded suspended hexagon. The following properties are intended for product identification:

Identification Properties

Identification Properties ¹	General
Aperture Shape - A	Hexagonal, Trapezoidal & Triangular
Rib Shape - B	Rectangular
Continuous Parallel Rib Pitch ² - C, in (mm)	3.2 (80)
Rib Aspect Ratio ³ - D	>1.0
Node Thickness ² , in (mm)	0.14 (3.5)
Color Identification	White/Black/White

Durability Properties

Durability Properties	General
Resistance to Chemical Degradation ⁴	100%
Resistance to Ultraviolet Light & Weathering	70%

Dimensions and Delivery

The geogrid shall be delivered to the jobsite in roll form, each clearly labeled, as shown below:

Roll Width, ft (m)	12.5 (3.8)
Roll Length, ft (m)	197 (60)
Approximate Roll Area, SY (m ²)	274 (228)
Approximate Roll Diameter, in (mm)	17 (432)
Approximate Roll Weight, lbs (kgs)	154 (70)

Notes:

1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02.
2. Nominal dimensions.
3. Ratio of the mid-rib height to the mid-rib width.
4. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
5. Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355.

Performance Comparison

The product properties shown above are intended for product identification and Quality Assurance and Quality Control (QA/QC) purposes only. These properties do not influence the stabilization properties of the geogrid or the performance of the Mechanical Stabilized Layer (MSL) and therefore are not intended for design purposes. In order to compare the performance of different types of geogrids, performance validation data from full-scale testing must be used, as outlined in industry accepted geogrid mechanical stabilization design methodologies.