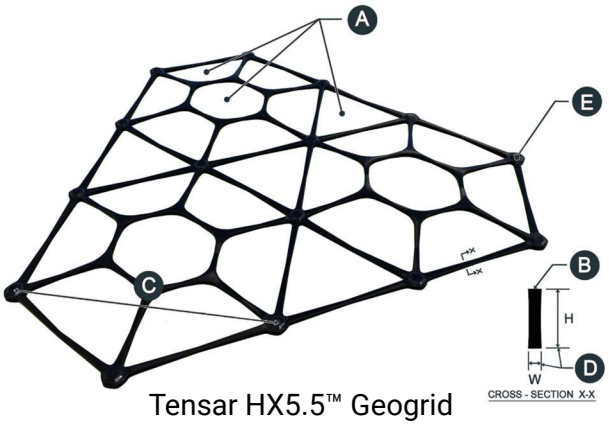
Tensar® H-Series FilterGrid™

PRODUCT IDENTIFICATION DATA SHEET

H-Series™ FilterGrid™ HX5.5™ Geogrid



Tensar HX5.5™ Geogrid
Plan View

INTRODUCTION

H-Series™ FilterGrid™ is a composite geosynthetic consisting of H-Series geogrid bonded to a nonwoven geotextile. This product combines the advanced H-Series geogrid technology with the added functionality of a nonwoven geotextile where site conditions require additional filtration and/or separation.

GENERAL

1. The geogrid is manufactured from a polypropylene 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.
2. The following properties are intended for product identification:

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] - E, in (mm)	0.12 (3)
Color Identification	Black
Product EPD Certification[4]	EN 15804 +A2:2019
Durability Properties	
Resistance to Chemical Degradation[5]	100%
Resistance to Ultra-Violet Light and Weathering[6]	90%

3. The needle punched nonwoven geotextile (nominal 6 oz/sy) is thermally bonded to the geogrid and is manufactured at a NTPEP audited facility. The geotextile shall have the following properties:

Identification Properties for Geotextile	Test Method	English (MARV[2])	Metric (MARV[2])
Grab Tensile Strength	ASTM D 4632	160 lbs.	0.711 kN
Grab Elongation	ASTM D 4632	50%	50%
Trapezoid Tear Strength	ASTM D 4533	60 lbs.	0.267 kN
CBR Puncture Resistance	ASTM D 6241	410 lbs.	1.823 kN
Permittivity	ASTM D 4491	1.5 sec^{-1}	1.5 sec^{-1}
Water Flow	ASTM D 4491	110 gpm/ft^2	4480 l/min/m^2
Apparent Opening Size (AOS)	ASTM D 4751	70 Std. U.S.	0.212 mm
UV Resistance	ASTM D 4355	70%/500 hrs	70%/500 hrs.

NOTES

1. Unless indicated otherwise, values are minimum average roll values in accordance with ASTM D4759-02
2. Nominal dimensions
3. Ratio of the mid-rib height to the mid-rib width
4. Independently verified in accordance with ISO 14025:2006, ISO 14044:2006, and EN 15804:2019+A2.
5. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing
6. 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
7. Maximum Average Roll Value (MaxARV)

This product has been tested for quality control purposes in a GAI-LAP accredited laboratory and its EPD has been certified by UL Environment.

GAI-LAP Accreditation No.: GAI –LAP – 72 – 12

UL CERTIFIED ENVIRONMENTAL PRODUCT DECLARATION UL.COM/EPD

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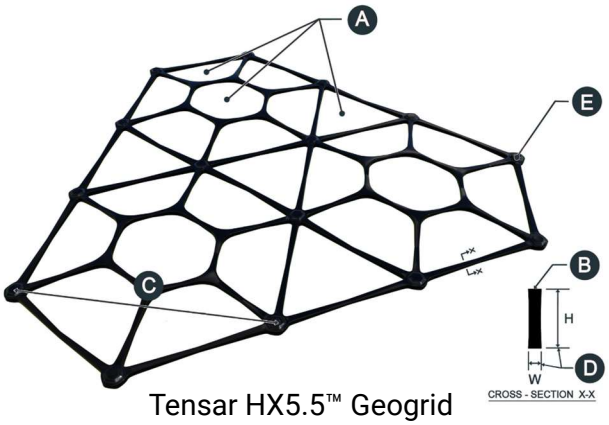

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DIMENSIONS AND DELIVERY

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

Property	Standard Width Roll		Wide Width Roll	
Roll Width[2], ft (m)	12.5	(3.8)	15.5	(4.7)
Roll Length[2], ft (m)	164	(50)	164	(50)
Approx. Roll Area, SY (m^2)	228	(191)	282	(236)
Approx. Roll Diameter[7], In. (mm)	18	(460)	18	(460)
Approx. Roll Weight[7], Lbs. (Kgs)	196	(89)	220	(100)
Approx. Rolls per Full-Truck	Min: 72	Max: 80	Min: 72	Max: 80

PERFORMANCE COMPARISON

The product properties shown above are intended for product identification, Quality Assurance (QA), and Quality Control (QC) purposes only. These properties are not use in any geogrid mechanical stabilization design methodologies or performance assessment and, as such, should not be evaluated or used in isolation. In order to compare the performance of different types of geogrids, performance validation data from full-scale trafficking testing must be used, as outlined in AASHTO R50-09 and other industry accepted geogrid mechanical stabilization design methodologies.

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Tensar reserves the right to change its Product Identification Data Sheet at any time. It is the responsibility of the person specifying the use of this product and of the purchaser to ensure that Product Identification Data Sheet relied upon for procurement purposes are current and that the product is suitable for its intended use in each instance.

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