

# FORTRAC<sup>®</sup> 80 GEOGRID

**FORTRAC 80** IS COMPRISED OF HIGH TENACITY POLYESTER YARNS, CRAFTED INTO A STABLE, INTERLOCKING PATTERN AND THEN COATED FOR PROTECTION FROM INSTALLATION DAMAGE. FORTRAC IS EASY TO INSTALL, UNAFFECTED BY FREEZE-THAW CONDITIONS, AND RESISTANT TO CHEMICAL, BIOLOGICAL AND ULTRA-VIOLET EXPOSURE. THE HIGH JUNCTION STRENGTH CAPACITY OF FORTRAC GEOGRIDS PROVIDES AN EFFICIENT TENSILE REINFORCEMENT FOR A WIDE RANGE OF SOIL TYPES. FORTRAC HAS BEEN DEVELOPED FOR USE AS TENSILE REINFORCEMENT FOR RETAINING WALLS, STEEPENED SLOPES, ROADWAYS AND LANDFILL LINING SYSTEMS. FORTRAC GEOGRIDS ARE PRODUCED AT HUESKER'S MANUFACTURING FACILITY THAT HAS ACHIEVED ISO 9001 CERTIFICATION FOR ITS SYSTEMATIC APPROACH TO QUALITY IN DEVELOPMENT, MANUFACTURE, INSPECTION, SALES AND APPLICATION SUPPORT OF GEOSYNTHETICS.

## PHYSICAL PROPERTIES OF FORTRAC 80 GEOGRID

PROPERTY	TEST METHOD	ENGLISH units <sup>1</sup>	SI units <sup>1</sup>
<b>Mass/Unit Area</b>	ASTM D-5261	13 oz/yd <sup>2</sup>	440 g/m <sup>2</sup>
<b>Aperture Size</b>	Measured	0.8 x 0.8 inch	20 x 20 mm
<b>Percent Open Area</b>	CWO 22125	65 %	65 %
<b>Ultimate Wide Width Tensile Strength</b>			
Machine Direction (MD)	ASTM D-6637	5750 lb/ft	84 kN/m
<b>Elongation at Break</b>	ASTM D-6637	10 %	10 %
<b>Long Term Design Strength* (MD)</b>			
Sand, Silt and Clay	GRI GG4 (b)	3150 lb/ft	46.0 kN/m
0.75" Minus Well Graded Gravel	GRI GG4 (b)	3150 lb/ft	46.0 kN/m
2.5" Crushed Stone and Gravel	GRI GG4 (b)	2927 lb/ft	42.7 kN/m

<sup>1</sup> MARV - Minimum average roll values are based on a 95% confidence level.

$$* \text{LTDS} = \frac{T_{\text{ULTIMATE}}}{\text{FS}_{\text{ID}} \times \text{FS}_{\text{CR}} \times \text{FS}_{\text{CD}} \times \text{FS}_{\text{BD}} \times \text{FS}_{\text{JNT}}}$$

$$= \frac{5750}{1.05 \times 1.58 \times 1.1 \times 1.0 \times 1.0}$$

$$\text{LTDS} = 3150 \text{ lb/ft} - \text{Sand, Silt and Clay}$$

$$\text{LTDS} = T_{\text{ALLOWABLE}} \times \text{FS}_{\text{UNC}}$$

FS<sub>ID</sub> = factor of safety for installation damage

FS<sub>CR</sub> = factor of safety for creep deformation (75 Years)

FS<sub>CD</sub> = factor of safety for chemical degradation (4 < pH < 10)

FS<sub>BD</sub> = factor of safety for biological degradation

FS<sub>JNT</sub> = factor of safety for joints (seams and connections)

FS<sub>UNC</sub> = factor of safety for uncertainties

Standard Roll Size: 8.2 ft (2.51 m) wide x 328.1 ft (100 m) long = 300 yd<sup>2</sup> (359 m<sup>2</sup>)

Each roll of Fortrac geogrid delivered to the project site is labeled by HUESKER<sup>®</sup> with a roll label that indicates manufacturer's name, product identification, lot number, roll number and roll dimensions. All rolls of Fortrac are encased in a sturdy polyethylene wrap to shield the product from rain, dirt, dust and ultraviolet light. Contact HUESKER for information on our material warranty.