

FORTRAC[®] 3D 90 GEOGRID

FORTRAC 3D-90 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 FORTRAC 3D GEOGRIDS ARE DESIGNED WITH YARNS WOVEN INTO THAT PROVIDES AN EFFICIENT REINFORCEMENT FOR SOILS AND ROOT VEGETATION. FORTRAC HAS BEEN DEVELOPED FOR USE AS TENSILE REINFORCEMENT FOR RETAINING WALLS, STEEPENED SLOPES, EMBANKMENTS 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.

PROPERTY	TEST METHOD	ENGLISH units ¹	SI units ¹
Mass/Unit Area	ASTM D-5261	13 oz/yd ²	450 g/m ²
Thickness	Measured	0.3 inch	7.5 mm
Percent Open Area	CW022015	50 %	50 %
Ultimate Wide Width Tensile Strength			
Machine Direction (MD)	ASTM D-6637	6165 lb/ft	90 kN/m
Elongation at Break	ASTM D-6637	10 %	10 %
Long Term Design Strength* (MD)			
sandy Gravel	GRI GG4	3378 lb/ft	49.3 kN/m
UV Resistance	ASTM D 4355	80 %	80 %

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

$$\begin{aligned}
 * \text{LTDS} &= \frac{T_{\text{ULTIMATE}}}{\text{FS}_{\text{ID}} \times \text{FS}_{\text{CR}} \times \text{FS}_{\text{CD}} \times \text{FS}_{\text{BD}} \times \text{FS}_{\text{JNT}}} \\
 &= \frac{6165}{1.05 \times 1.58 \times 1.1 \times 1.0 \times 1.0}
 \end{aligned}$$

$$\text{LTDS} = 3378 \text{ lb/ft - sandy Gravel}$$

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

FS_{ID} = factor of safety for installation damage

FS_{CR} = factor of safety for creep deformation (75 Years)

FS_{CD} = factor of safety for chemical degradation (4 < pH < 10)

FS_{BD} = factor of safety for biological degradation

FS_{JNT} = factor of safety for joints (seams and connections)

FS_{UNC} = factor of safety for uncertainties

Standard Roll Size: 14.76 ft (4.5 m) wide x 328.1 ft (100 m) long = 538 yd² (450 m²)

Each roll of Fortrac geogrid delivered to the project site is labeled by HUESKER[®] 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.