Table 3.10 REDI-ROCK/Mirafi Design Parameters.

PROPERTY	MIRAFI GEOGRID			
	5XT	8XT	10XT	20XT
Soil Reinforcement Tensile Strength				
Ultimate Strength, T_{ult} (lbs/ft)	4,300	7,000	9,500	12,420
Durability Reduction Factor, RF_D	1.15	1.15	1.15	1.15
Installation Damage Reduction Factor, RF_{ID}, with gravelly sand backfill	1.30	1.30	1.30	1.30
Creep Reduction Factor, RF_{CR}	1.9	1.9	1.9	1.9
Long-Term (Nominal) Strength, T_{al} (lbs/ft)	1,514	2,464	3,444	4,737
Overall Factor of Safety	1.5	1.5	1.5	1.5
Allowable Design Load, T_a (lb/ft)	1,009	1,643	2,230	3,158
Percent Coverage, R_c (%)	100	100	100	100
Design Load per Unit Width of Wall (lb/lft of wall)	1,009	1,643	2,230	3,158
Connection Strength				
Ultimate Rupture Strength, $T_{ult\text{-}conn}$ (lbs/ft)	see Tables 3.4 and 3.7			
Connection Factor of Safety	2.0			
Percent Coverage, R_c (%)	100%			
T_{LOT} / $T_{ULT\text{-}MARV}$ Reduction (%)	85.8%			
Nominal and Design Connection Design Load per Unit Width of Wall, T_{ac} (lb/lft of wall)	see Tables 3.6 and 3.9			
Geogrid – Soil Interaction for Sand Reinforced Wall Fill				
Friction Angle Along Geogrid-Soil Interface, ρ	2/3 tan φ = 2/3 tan 34° = 24°			
Pullout Resistance Factor, F*	0.6			
Scale-Effect Correction Factor, α	1.0			
Geogrid – Soil Interaction for 3-foot Geogrid Connector Tab in Coarse Filter Aggregate				
Friction Angle Along Geogrid-Soil Interface, ρ	20°			
Pullout Resistance Factor, F*	0.4			
Scale-Effect Correction Factor, α	0.8			
Reinforcement Length, L	Measured from the back of the REDI-ROCK face unit			