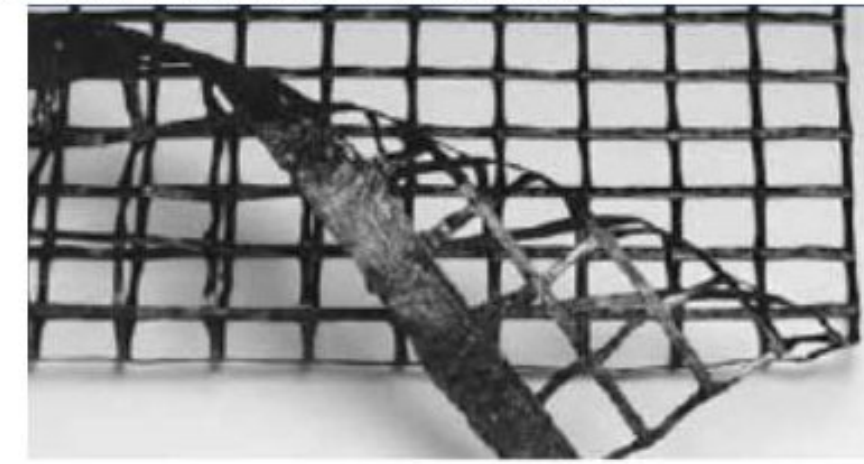


**Short Specification**  
**Miragrid® 8XT Geogrid Soil Reinforcement**

Geosynthetic reinforcement to consist of geogrids that are manufactured specifically for soil reinforcement applications using virgin resin and one hundred percent made in America. Geogrid shall be woven from high tenacity polyester filament yarn with molecular weight exceeding 25,000 g/m and a carboxyl end group value less than 30 to meet durability requirements. Geogrid to be coated and impregnated with PVC coating that resists peeling and cracking. Geogrid shall be TenCate Miragrid® 8XT geogrid and meet the following:

Ta, Long Term Allowable Tensile Design Strength of the geogrid shall be as determined as follows and a minimum of 4000 lbs/ft:

$T_a = T_{ult} / (R_{Fcr} \times R_{Fd} \times R_{Fid})$   
Ta shall be evaluated based on 100-yr design life.

Tult, Ultimate Tensile Strength in accordance with ASTM D6637 based on minimum average roll values (MARV).

RFcr, Reduction Factor for Long Term Tension Creep in accordance with ASTM D5262 based on 10,000-hr creep testing as published in FHWA NTPEP report. RFcr shall be 1.45 for Miragrid.

RFd, Reduction Factor for Durability shall be determined by FHWA durability testing covering the range of expected soil environments. RFd = 1.10 minimum for geogrid in typical soil backfill.

RFid, Reduction Factor for Installation Damage shall be 1.05 minimum for geogrid in silt, sand and clay backfill. Geogrid specific construction damage testing performed in accordance with ASTM D5818 shall be provided for more severe soil type.

Geogrid manufacturer shall meet all the following quality control measures:

1. Manufacturing quality control testing by a laboratory in the production facility accredited by ISO 9001, GAI-LAP and A2LA for geogrid. Ultimate Tensile Tests at frequency meeting ASTM D4354. Current certificates shall be submitted with geogrid certification data sheet.
2. Geogrid shall have geogrid type and tensile strength direction permanently marked on each individual roll along the roll length at a minimum of twenty foot intervals.

Geogrid installation shall be in accordance with the construction drawings and geogrid manufacturer's installation guidelines.