

TENAX MS 330

TENAX MS™ 330 is composed of three layers of high strength extruded biaxial oriented polypropylene geogrids. The layers are rolled and stitched together without superimposing the grids creating a geogrid with random sized apertures designed to accommodate a variety of fill materials. The random aperture geometry, many tensile elements, and multiple layers of the geogrid enhance soil/geogrid interaction. TENAX MS™ 330 geogrid greatly improves the geogrid interlocking capacity, distributes applied loads, and prevents localized shear failure.

TYPICAL APPLICATIONS

Soft soil stabilization · Base reinforcement · Embankments over soft soils · Working platforms · Haul roads

| MATERIAL CHARACTERISTICS | TEST METHOD | DATA |
|--------------------------|-------------|---------------|
| polymer type | | polypropylene |
| carbon black content | ASTM D 4218 | 0.50% |

| DIMENSIONAL CHARACTERISTICS | TEST METHOD | UNIT | | NOTES |
|-----------------------------|-------------|-----------------------------------|---------------------------|-------|
| thickness: rib - MD/TD | ASTM D 1777 | in (mm) / in (mm) | 0.05 (1.27) / 0.05 (1.27) | b,d,e |
| aperture size | | in (mm) / in (mm) | 1.65 (42) x 1.96 (50) | b,d,e |
| open area | CW 02215 | % | 70 | b |
| roll dimensions | | ft x ft (m x m) | 13.1 x 164 (4.0 x 50) | b |
| roll area | | yd ² (m ²) | 239.2 (200) | b |
| gross roll weight | | lb (kg) | 163 (74) | b |

| TECHNICAL CHARACTERISTICS | TEST METHOD | UNIT | | | NOTES |
|---------------------------------------|-------------|--------------|--------------|--------------|-------|
| Strengths & Load Capacity: | | | MD | TD | |
| peak tensile strength | ASTM D6637 | lb/ft (kN/m) | 1,370 (20.0) | 2,100 (30.7) | a,c,e |
| tensile strength @2% strain | ASTM D6637 | lb/ft (kN/m) | 418 (6.1) | 620 (9.0) | a,c,e |
| tensile strength @5% strain | ASTM D6637 | lb/ft (kN/m) | 925 (13.5) | 1,343 (19.6) | a,c,e |
| initial modulus | ASTM D6637 | lb/ft (kN/m) | 27,420 (400) | 44,550 (650) | a,c,e |
| tensile modulus @ 2% strain | ASTM D6637 | lb/ft (kN/m) | 20,900 (305) | 30,800 (450) | a,c,e |
| tensile modulus @ 5% strain | ASTM D6637 | lb/ft (kN/m) | 18,500 (270) | 26,852 (392) | a,c,e |
| Structural Integrity: | | | | | |
| junction: strength | GRI-GG2 | lb/ft (kN/m) | 1,274 (18.6) | 1,970 (28.8) | a,e |
| efficiency | | % | 93 | | a,e |
| flexural rigidity | ASTM D 1388 | mg-cm | 750,000 | 750,000 | b |
| Durability: | | | | | |
| resistance to installation damage | ASTM D 5818 | %SC/%SW/%GP | >90/>90/90 | | |
| resistance to UV degradation | ASTM D 4355 | % | 100 | | |

NOTES: a: Minimum average roll values determined in accordance with ASTM D4759; b: Typical values; c: Tests performed using extensometers; d: Single layer value; e: MD: machine direction (longitudinal to the roll), TD: transverse direction (across roll width)