

TENAX[®] Tendrain Geonet

TENAX Tendrain Triplanar Geonets are innovative high performance geonets consisting of thick supporting ribs with diagonally placed top and bottom ribs. The three sets of intersecting strands form unique flow conduits that provide extremely high flow capacity, high compressive resistance and enhanced tensile properties. TENAX Tendrain is manufactured from the extrusion of high density polyethylene resin and carbon black. TENAX Tendrain is inert to chemical and biological attack and is stabilized against UV degradation.

Typical Applications:

Landfill leachate collection in landfill liners, Leak detection, Landfill gas venting

Tested Property	Test Method	Frequency	Minimum Average Roll Value ⁽¹⁾		
			TENDRAIN 3	TENDRAIN 5	TENDRAIN 7
Geonet Thickness ⁽²⁾ , mil	ASTM D 5199	1/50,000 ft ²	250	275	300
Transmissivity ⁽⁴⁾ , m ² /sec	ASTM D 4716	1/200,000 ft ²	3.0 x 10 ⁻³	4.0 x 10 ⁻³	5.0 x 10 ⁻³
Creep Reduction Factor ⁽³⁾ , @ 20° C	GRI-GC8	per formulation	1.2 @ 4,000 psf	1.3 @ 10,000 psf	1.1 @ 15,000 psf
Tensile Strength (MD) ⁽²⁾ , lb/in	ASTM D 4595	1/50,000 ft ²	625	1,000	1,200
Density, g/cm ²	ASTM D 1505	1/50,000 ft ²	0.94	0.94	0.94
Melt Flow Index, gal/10 min	ASTM D 1238	1/50,000 ft ²	1.0	1.0	1.0
Carbon Black Content ⁽²⁾ , %	ASTM D 4218	1/50,000 ft ²	2.0	2.0	2.0

Dimensions and Delivery⁽²⁾

The geonet shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 13.1-FT in width and 420-FT in length.

Notes:

1. Unless indicated otherwise, values shown are minimum average roll values.
2. Nominal values.
3. Creep Reduction Factor is based on 10,000 hour test duration, extrapolated to 30 years.
4. Geonet transmissivity is measured by manufacturer as per ASTM D4716 at a normal load of 10,000 psf with testing boundary conditions as follows: steel plate / geonet / steel plate and seating period of 1 hour @ a gradient of 0.1.

Tenax warrants that the geonet products delivered hereunder conform to the stated specification at the time of delivery. All other warranties including claims for performance or suitability for application are excluded. This product specification supersedes all prior specifications for the product described above and is not applicable for products shipped before November 2014.

