



TPG Geogrids Comparison Charts

Tensar TPG geogrids product line are comparable to other PET geogrids in the market with the long-term design strength greater or equal to competitive PET geogrids product currently in the market. Attached are the comparison charts between TPG geogrids and typical PET products in the market.

Tensar TPGD vs Synteen SF-series

Properties	Test Method	Units	SF20	TPG25D	SF35	TPG45D	SF55	TPG60D	SF65	TPG80D	SF80	TPG100D
Property (coating)			PET (PVC)		PET (PVC)		PET (PVC)		PET (PVC)		PET (PVC)	
Ultimate Tensile Strength (MARV)	ASTM D6637	(kN/m)	29.6	29.6	52.5	52.5	73	73	90.5	90.5	110.2	110.2
Creep Reduced Strength	ASTM D5262	(kN/m)	19.6	19.6	34.8	34.8	48.3	48.3	59.9	59.9	73.0	73.0
Long Term Design Strength (In Type 3 Backfill sand, silt, clay)	LTDS	(kN/m)	17.0	17.0	30.1	30.1	41.9	41.9	51.9	51.9	63.2	63.2

Properties	Test Method	Units	SF110	TPG130D	SF180	TPG205D
Property (coating)			PET (PVC)		PET (PVC)	
Ultimate Tensile Strength (MARV)	ASTM D6637	(kN/m)	150	150	211.6	211.6
Creep Reduced Strength	ASTM D5262	(kN/m)	99.3	99.3	140.1	140.1
Long Term Design Strength (In Type 3 Backfill sand, silt, clay)	LTDS	(kN/m)	86.0	86.0	121.3	121.3

Assumed $RF_D = 1.1$ and $RF_{10} = 1.05$ for all products

Tensar TPGD vs Mirafi XT-series

Properties	Test Method	Units	2XT	TPG25D	3XT	TPG45D	5XT	TPG60D	7XT	TPG80D	8XT	TPG100D
Property (coating)			PET (PVC)		PET (PVC)		PET (PVC)		PET (PVC)		PET (PVC)	
Ultimate Tensile Strength (MARV)	ASTM D6637	(kN/m)	29.2	29.6	51.1	52.5	68.6	73	86.1	90.5	108	110.2
Creep Reduced Strength	ASTM D5262	(kN/m)	20	19.6	35.2	34.8	47.3	48.3	59.4	59.9	74.5	73.0
Long Term Design Strength (In Type 3 Backfill sand, silt, clay)	LTDS	(kN/m)	17.3	17.0	30.5	30.1	41.0	41.9	51.4	51.9	64.5	63.2

Properties	Test Method	Units	10XT	TPG130D	20XT	TPG205D
Property (coating)			PET (PVC)		PET (PVC)	
Ultimate Tensile Strength (MARV)	ASTM D6637	(kN/m)	138.6	150	200	211.6
Creep Reduced Strength	ASTM D5262	(kN/m)	95.6	99.3	137.9	140.1
Long Term Design Strength (In Type 3 Backfill sand, silt, clay)	LTDS	(kN/m)	82.8	86.0	119.4	121.3

Assumed $RF_D = 1.1$ and $RF_{ID} = 1.05$ for all products

Tensar TPGD vs Strata SG-series

Properties	Test Method	Units	SG150	TPG25D	SG200	TPG45D	SG350	TPG60D	SG500	TPG80D	SG550	TPG100D
Property (coating)			PET (PVC)		PET (PVC)		PET (PVC)		PET (PVC)		PET (PVC)	
Ultimate Tensile Strength (MARV)	ASTM D6637	(kN/m)	27.4	29.6	52.5	52.5	73	73	93.4	90.5	118.9	110.2
Creep Reduced Strength	ASTM D5262	(kN/m)	16.6	19.6	33.9	34.8	47.1	48.3	60.3	59.9	76.7	73.0
Long Term Design Strength (In Type 3 Backfill sand, silt, clay)	LTDS	(kN/m)	12.6	17.0	28.0	30.1	38.9	41.9	49.8	51.9	63.4	63.2

Properties	Test Method	Units	SG600	TPG130D	SG1200	TPG205D
Property (coating)			PET (PVC)		PET (PVC)	
Ultimate Tensile Strength (MARV)	ASTM D6637	(kN/m)	132.8	150	200	211.6
Creep Reduced Strength	ASTM D5262	(kN/m)	85.7	99.3	129	140.1
Long Term Design Strength (In Type 3 Backfill sand, silt, clay)	LTDS	(kN/m)	70.8	86.0	106.6	121.3

Assumed $RF_D = 1.1$ and $RF_{ID} = 1.05$ for all products