

Summary of Current Reinforcement Products

			Ultimate Tensile Strength	Ultimate Tensile Strength	Creep Reduced Strength	LTDS or Tal	T _a	LTDS or Tal	T _a	
			(lb/ft)	(kN/m)	(lb/ft)	(lb/ft)	(lb/ft)	(kN/m)	(kN/m)	
Strata Systems	StrataGrid	MicroGrid	2,000	29	1,149	871	581	12.7	8.5	
	StrataGrid	SG150	1,875	27	1,136	939	626	13.7	9.1	
	StrataGrid	SG200	3,600	53	2,323	1,919	1,280	28.0	18.7	
	StrataGrid	SG350	5,000	73	3,226	2,666	1,777	38.9	25.9	
	StrataGrid	SG500	6,400	93	4,129	3,412	2,275	49.8	33.2	
	StrataGrid	SG550	8,150	119	5,258	4,346	2,897	63.4	42.3	
	StrataGrid	SG600	9,100	133	5,871	4,852	3,235	70.8	47.2	
	StrataGrid	SG700	11,800	172	7,613	6,292	4,194	91.8	61.2	
TC Mirafi	Miragrid	2XT	2,000	29	1,266	1,096	731	16.0	10.7	
	Miragrid	3XT	3,500	51	2,215	1,918	1,279	28.0	18.7	
	Miragrid	5XT	4,700	69	2,975	2,575	1,717	37.6	25.1	
	Miragrid	7XT	5,900	86	3,734	3,233	2,155	47.2	31.5	
	Miragrid	8XT	7,400	108	4,684	4,055	2,703	59.2	39.5	
	Miragrid	10XT	9,500	139	6,013	5,206	3,471	76.0	50.7	
	Miragrid	20XT	13,705	200	8,674	7,510	5,007	109.6	73.1	
	Miragrid	22XT	17,760	259	11,241	9,732	6,488	142.0	94.7	
	Miragrid	24XT	27,415	400	17,351	15,023	10,015	219.2	146.2	
	Tensar	Tensar	LH800	2,600	38	880	850	567	12.4	8.3
Tensar		UX1100HS	3,970	58	1,530	1,450	967	21.2	14.1	
Tensar		UX1400HS	4,800	70	1,850	1,760	1,173	25.7	17.1	
Tensar		UX1500HS	7,810	114	3,000	2,860	1,907	41.7	27.8	
Tensar		UX1600HS	9,870	144	3,800	3,620	2,413	52.8	35.2	
Tensar		UX1700HS	11,990	175	4,610	4,390	2,927	64.1	42.7	
Tensar		UX1800HS	14,390	210	5,330	5,080	3,387	74.1	49.4	
SRW Products		SRW Products	3 Series	2,000	29	1,299	1,093	729	16.0	10.6
	SRW Products	5 Series	3,600	53	2,323	1,919	1,279	28.0	18.7	
	SRW Products	7 Series	5,000	73	3,226	2,666	1,777	38.9	25.9	
	SRW Products	8 Series	6,400	93	4,129	3,508	2,339	51.2	34.1	
	SRW Products	9 Series	8,150	119	5,258	4,467	2,978	65.2	43.5	
	SRW Products	10 Series	9,100	133	5,871	4,988	3,325	72.8	48.5	
	SRW Products	11 Series	10,250	150	6,529	5,652	3,768	82.5	55.0	
	SRW Products	12 Series	31,000	452	19,745	17,095	11,397	249.5	166.3	
	Huesker Inc.	Fortrac	35	2,400	35	1,527	1,322	881	19.3	12.9
		Fortrac	55	3,700	54	2,342	2,027	1,351	29.6	19.7
		Fortrac	80	5,685	83	3,596	3,117	2,078	45.5	30.3
		Fortrac	110	7,400	108	4,740	4,130	2,753	60.3	40.2
Fortrac		150	10,100	147	6,392	5,535	3,690	80.8	53.9	
Fortrac		200	13,500	197	8,544	7,398	4,932	108.0	72.0	
Synteen	Synteen	SF 20	2,050	30	1,331	1,099	733	16.0	10.7	
	Synteen	SF 35	3,435	50	2,230	1,878	1,252	27.4	18.3	
	Synteen	SF 55	4,670	68	3,032	2,625	1,750	38.3	25.5	
	Synteen	SF 65	6,000	88	3,871	3,373	2,249	49.2	32.8	
	Synteen	SF 80	7,400	108	4,774	4,133	2,755	60.3	40.2	
	Synteen	SF 90	8,500	124	5,483	4,747	3,165	69.3	46.2	
	Synteen	SF 110	10,205	149	6,500	5,627	3,751	82.1	54.7	
	Synteen	SF 350	27,390	400	17,445	15,104	10,069	220.4	147.0	
	Carthage Mills	Carthage Mills	GX-150	1,700	25	1,156	1,011	674	14.8	9.8
Carthage Mills		GX-300	3,250	47	2,211	1,879	1,253	27.4	18.3	
Carthage Mills		GX-500	4,500	66	3,061	2,601	1,734	38.0	25.3	
Carthage Mills		GX-700	6,080	89	4,136	3,514	2,343	51.3	34.2	
Carthage Mills		GX-800	7,315	107	4,976	4,228	2,819	61.7	41.1	
Carthage Mills		GX-1000	9,790	143	6,660	5,658	3,772	82.6	55.0	
Geostar		Geostar	HP200	3,437	50	2,148	1,860	1,240	27.1	18.1
	Geostar	HP300	4,815	70	3,009	2,606	1,737	38.0	25.4	
	Geostar	HP500	8,025	117	5,016	4,343	2,895	63.4	42.3	
	Geostar	HP600	8,809	129	5,506	4,767	3,178	69.6	46.4	
	Ridgerock	Gridlock	270	2,700	39	1,753	1,475	983	21.5	14.4
Gridlock		370	3,700	54	2,402	2,022	1,348	29.5	19.7	
Gridlock		540	5,400	79	3,506	2,950	1,967	43.1	28.7	
Gridlock		980	9,800	143	6,363	5,356	3,571	78.2	52.1	
Earth Reinforcement Technologies		HTG Geogrid	HTG 35	3,604	53	2,340	2,026	1,351	29.6	19.7
		HTG 80	5,981	87	3,884	3,363	2,242	49.1	32.7	
		HTG 120	8,359	122	5,428	4,699	3,133	68.6	45.7	
		HTG 160	10,974	160	7,126	6,170	4,113	90.0	60.0	

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Values shown are taken from published literature and are believed to be accurate. Verification of reported values is the responsibility of the user / engineer.

Note 1: The table reports only the published values of Ultimate Strength (T_{ult}) and Long Term Design Strength (LTDS), and no other properties of the reinforcement.

Note 2: The table does not report system connection strengths (i.e. block/reinforcement), which may govern design strengths in Segmental Retaining Wall (SRW) Designs.

Note 3: LTDS or Tal = T_{ult} / (RF_{creep} x RF_{installation} damage x RF_{durability}) is based on published data for sand/silt/clay soil

Note 4: Ta = LTDS / FS = Tal / FS. FS is equal to 1.5 for segmental retaining wall applications

Summary of Current Reinforcement Products

		Ultimate <u>Tensile Strength</u> <u>(lb/ft)</u>	Ultimate <u>Tensile Strength</u> <u>(kN/m)</u>	Creep Reduced <u>Strength</u> <u>(lb/ft)</u>	<u>LTDS or Tal</u> <u>(lb/ft)</u>	<u>T_a</u> <u>(lb/ft)</u>	<u>LTDS or Tal</u> <u>(kN/m)</u>	<u>T_a</u> <u>(kN/m)</u>
Tensar	LH800	2,600	38	880	850	567	12.4	8.3
StrataGrid	MicroGrid	2,000	29	1,149	871	581	12.7	8.5
StrataGrid	SG150	1,875	27	1,136	939	626	13.7	9.1
Carthage Mills	GX-150	1,700	25	1,156	1,011	674	14.8	9.8
SRW Products	3 Series	2,000	29	1,299	1,093	729	16.0	10.6
Miragrid	2XT	2,000	29	1,266	1,096	731	16.0	10.7
Synteen	SF 20	2,050	30	1,331	1,099	733	16.0	10.7
Fortrac	35	2,400	35	1,527	1,322	881	19.3	12.9
Tensar	UX1100HS	3,970	58	1,530	1,450	967	21.2	14.1
Gridlock	270	2,700	39	1,753	1,475	983	21.5	14.4
Tensar	UX1400HS	4,800	70	1,850	1,760	1,173	25.7	17.1
Geostar	HP200	3,437	50	2,148	1,860	1,240	27.1	18.1
Synteen	SF 35	3,435	50	2,230	1,878	1,252	27.4	18.3
Carthage Mills	GX-300	3,250	47	2,211	1,879	1,253	27.4	18.3
Miragrid	3XT	3,500	51	2,215	1,918	1,279	28.0	18.7
SRW Products	5 Series	3,600	53	2,323	1,919	1,279	28.0	18.7
StrataGrid	SG200	3,600	53	2,323	1,919	1,280	28.0	18.7
Gridlock	370	3,700	54	2,402	2,022	1,348	29.5	19.7
HTG Geogrid	HTG 35	3,604	53	2,340	2,026	1,351	29.6	19.7
Fortrac	55	3,700	54	2,342	2,027	1,351	29.6	19.7
Miragrid	5XT	4,700	69	2,975	2,575	1,717	37.6	25.1
Carthage Mills	GX-500	4,500	66	3,061	2,601	1,734	38.0	25.3
Geostar	HP300	4,815	70	3,009	2,606	1,737	38.0	25.4
Synteen	SF 55	4,670	68	3,032	2,625	1,750	38.3	25.5
StrataGrid	SG350	5,000	73	3,226	2,666	1,777	38.9	25.9
SRW Products	7 Series	5,000	73	3,226	2,666	1,777	38.9	25.9
Tensar	UX1500HS	7,810	114	3,000	2,860	1,907	41.7	27.8
Gridlock	540	5,400	79	3,506	2,950	1,967	43.1	28.7
Fortrac	80	5,685	83	3,596	3,117	2,078	45.5	30.3
Miragrid	7XT	5,900	86	3,734	3,233	2,155	47.2	31.5
	HTG 80	5,981	87	3,884	3,363	2,242	49.1	32.7
Synteen	SF 65	6,000	88	3,871	3,373	2,249	49.2	32.8
StrataGrid	SG500	6,400	93	4,129	3,412	2,275	49.8	33.2
SRW Products	8 Series	6,400	93	4,129	3,508	2,339	51.2	34.1
Carthage Mills	GX-700	6,080	89	4,136	3,514	2,343	51.3	34.2
Tensar	UX1600HS	9,870	144	3,800	3,620	2,413	52.8	35.2
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SRW Products	12 Series	31,000	452	19,745	17,095	11,397	249.5	166.3

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