

Typical Mechanical Properties

Product	Description	Total Weight Oz./Sq. Yd.	Roll Length Yards	Dry Thickness/Ply	Tensile Strength		Tensile Modulus		In-Plane Shear KSI	Poisson's Ratio μ12	% Fiber Weight
					0° KSI	90° KSI	0° MSI	90° MSI			
ROVCLOTH											
1854	18 Oz./Sq. Yd. Woven Roving	17.2	134	0.030	26.20	19.80	2.41	1.91	3.95	0.11	50.0%
2454	24 Oz./Sq. Yd. Woven Roving	23.3	100	0.040	24.80	21.20	2.30	2.02	3.95	0.11	50.0%
3273	32 Oz./Sq. Yd. Woven Roving	31.7	100	0.055	25.30	20.70	2.33	2.00	3.95	0.11	50.0%
3674	36 Oz./Sq. Yd. Woven Roving	35.8	100	0.060	25.00	16.80	2.33	2.20	3.95	0.11	50.0%
EP822	24 Oz./Sq. Yd. Stabilized Woven Roving	23.7	100	0.040	24.80	21.20	2.30	2.02	3.95	0.11	50.0%
FABMAT											
1815	Chemically Bonded FABMAT	31.5	60	0.066	23.00	22.50	2.06	1.54	4.73	0.20	45.0%
2415	Chemically Bonded FABMAT	37.5	55	0.076	23.50	23.00	1.87	1.77	4.55	0.17	45.0%
Stitched FABMAT											
SM1815	Stitched FABMAT	33.0	60	0.066	23.00	22.50	2.06	1.54	4.73	0.20	45.0%
SM2415	Stitched FABMAT	38.1	55	0.076	23.50	23.00	1.87	1.77	4.55	0.17	45.0%
SM4020	Stitched FABMAT	58.4	45	0.120	20.00	22.90	1.75	1.93	4.42	0.15	45.0%
KNITMAT 0/90											
S1200	12 Oz./Sq. Yd. Biaxial	12.6	175	0.024	23.00	23.00	2.16	2.16	3.95	0.10	50.0%
S1208	12 Oz./Sq. Yd. Biaxial plus ¼ oz/sq ft Chop	20.7	100	0.037	21.00	21.00	2.01	2.01	5.10	0.16	50.0%
S1800	18 Oz./Sq. Yd. Biaxial	18.0	125	0.033	23.00	23.00	2.16	2.16	3.95	0.10	50.0%
S1808	18 Oz./Sq. Yd. Biaxial plus ¼ oz/sq ft Chop	26.1	80	0.043	21.50	21.50	2.05	2.05	4.86	0.15	50.0%
S1815	18 Oz./Sq. Yd. Biaxial plus 1½ oz/sq ft Chop	31.5	80	0.065	22.00	22.00	2.00	2.00	5.21	0.17	50.0%
S2400	24 Oz./Sq. Yd. Biaxial	24.0	90	0.037	23.00	23.00	2.16	2.16	3.95	0.10	50.0%
S2408	24 Oz./Sq. Yd. Biaxial plus ¼ oz/sq ft Chop	32.1	70	0.053	21.70	21.70	2.07	2.07	4.69	0.14	50.0%
S2415	24 Oz./Sq. Yd. Biaxial plus 1½ oz/sq ft Chop	38.3	65	0.075	22.00	22.00	2.03	2.03	5.01	0.16	50.0%
S3208	32 Oz./Sq. Yd. Biaxial plus ¼ oz/sq ft Chop	40.3	55	0.061	22.00	22.00	2.09	2.09	4.54	0.13	50.0%
S3610	36 Oz./Sq. Yd. Biaxial plus 1 oz/sq ft Chop	45.0	60	0.080	22.00	22.00	2.09	2.09	4.54	0.13	50.0%
S4410	44 Oz./Sq. Yd. Biaxial plus 1 oz/sq ft Chop	53.0	50	0.090	22.00	22.30	2.05	2.15	4.45	0.12	50.0%
KNITMAT +/-45 Double Bias											
SX1200	12 Oz./Sq. Yd. Double Bias	12.6	175	0.027	13.00	13.00	1.19	1.19	9.82	0.51	50.0%
SX1208	12 Oz./Sq. Yd. Double Bias plus Chop	20.7	100	0.039	14.90	14.90	1.43	1.43	8.67	0.40	50.0%
SX1700	17 Oz./Sq. Yd. Double Bias	17.0	125	0.034	13.00	13.00	1.19	1.19	9.82	0.51	50.0%
SX1708	17 Oz./Sq. Yd. Double Bias plus ¼ oz/sq ft Chop	25.1	90	0.044	14.60	14.60	1.39	1.39	8.88	0.42	50.0%
SX1715	17 Oz./Sq. Yd. Double Bias plus 1-½ oz/sq ft Chc	30.9	90	0.050	15.20	15.20	1.46	1.46	8.52	0.39	50.0%
SX2400	24 Oz./Sq. Yd. Double Bias	24.0	100	0.041	13.00	13.00	1.19	1.19	9.82	0.51	50.0%
SX2408	24 Oz./Sq. Yd. Double Bias plus ¼ oz/sq ft Chop	32.1	70	0.050	14.30	14.30	1.35	1.35	9.08	0.44	50.0%
SX2415	24 Oz./Sq. Yd. Double Bias plus 1-½ oz/sq ft Chc	38.0	55	0.065	14.80	14.80	1.41	1.41	8.77	0.41	50.0%
SX3610	36 Oz./Sq. Yd. Double Bias plus Chop	45.2	50	0.065	14.00	14.00	1.32	1.32	9.24	0.45	50.0%



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					0°	90°	0°	90°			
KNITMAT Warp/Weft Triaxial											
SXTW2200	22 Oz./Sq. Yd. Warp Triaxial	22.7	90	0.035	24.60	9.50	2.15	1.14	7.42	0.45	50.0%
SXTW2308	23 Oz./Sq. Yd. Warp Triaxial plus ¼ oz/sq ft Chop	31.6	70	0.060	24.90	11.10	2.21	1.27	6.89	0.37	50.0%
SXTW3400	34 Oz./Sq. Yd. Warp Triaxial	36.5	70	0.055	26.50	9.00	2.30	1.10	7.04	0.43	50.0%
SXTW3408	34 Oz./Sq. Yd. Warp Triaxial plus ¼ oz/sq ft Chop	44.5	60	0.070	24.90	10.70	2.20	1.23	7.01	0.39	50.0%
SXTW4000	40 Oz./Sq. Yd. Warp Triaxial	43.8	70	0.060	24.80	9.50	2.17	1.13	7.38	0.44	50.0%
SXTW6200	62 Oz./Sq. Yd. Warp Triaxial	62.2	40	0.085	24.80	9.50	2.16	1.13	7.39	0.44	50.0%
SXTF2708	27 Oz./Sq. Yd. Weft Triaxial plus ¼ oz/sq ft Chop	34.1	70	0.620	10.50	26.50	1.22	2.34	6.60	0.19	50.0%
SXTF4000	40 Oz./Sq. Yd. Weft Triaxial	40.0	70	0.055	9.50	24.80	1.13	2.17	7.38	0.23	50.0%
KNITMAT Quad Axial											
SXQ3508	35 Oz./Sq. Yd. Quad Axial plus ¼ oz/sq ft Chop	43.1	60	0.075	18.20	18.00	1.76	1.75	6.84	0.27	50.0%
SXQ4008	40 Oz./Sq. Yd. Quad Axial plus ¼ oz/sq ft Chop	49.4	50	0.085	17.30	18.20	1.69	1.76	7.04	0.28	50.0%
SXQ5608	56 Oz./Sq. Yd. Quad Axial plus ¼ oz/sq ft Chop	64.6	55	0.085	20.30	15.50	1.90	1.57	6.95	0.30	50.0%
FORTESIL FABMAT											
1310	13 Oz./Sq. Yd. Warp Unidirectional plus Chop	21.8	70	0.040	31.80	10.10	2.48	1.11	4.69	0.27	45.0%
1315	13 Oz./Sq. Yd. Warp Unidirectional plus Chop	26.3	60	0.050	29.40	11.40	2.32	1.20	4.94	0.27	45.0%
WEFT UNIDIRECTIONAL											
SF092	9 Oz./Sq. Yd. Weft Unidirectional	9.2	215	0.025	4.50	41.50	0.79	3.51	3.95	0.06	50.0%
SF155	15 Oz./Sq. Yd. Weft Unidirectional	15.5	150	0.027	4.50	41.50	0.79	3.51	3.95	0.06	50.0%

REV. 3 (1/16/06)