

TAPER THREADED GRIP-TWIST® SYSTEM TEST DATA CONVERSION - 25M, 30M, 35M, 45M AND 55M (GRADE 500)

Lab Report & Reference No.		Bar Grade	ASTM Bar Size Designation	ASTM Bar Area (in ²)	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f_y</i> ASTM Gr 75 (metric Gr 520)	Equivalent CSA Designation	CSA Bar Area (mm ²)	Max Load (kN)	Equivalent Max Stress CSA Gr 500 (N/mm ²)	Equivalent Developed Stress % <i>f_y</i> CSA Gr 500
8T2577	8A	80	No. 8	0.79	94,430	119,532	159%	25M	500	420.0	840	168%
	8B		No. 8	0.79	95,230	120,544	161%	25M	500	423.6	847	169%
	8C		No. 8	0.79	94,800	120,000	160%	25M	500	421.7	843	169%
9T1767	9A	80	No. 9	1.00	118,640	118,640	158%	30M	700	527.7	754	151%
	9B		No. 9	1.00	118,490	118,490	158%	30M	700	527.0	753	151%
	9C		No. 9	1.00	118,400	118,400	158%	30M	700	526.6	752	150%
11T3256	11A	80	No. 11	1.56	177,200	113,590	151%	35M	1000	788.2	788	158%
	11B		No. 11	1.56	179,230	114,891	153%	35M	1000	797.2	797	159%
	11C		No. 11	1.56	177,289	113,647	152%	35M	1000	788.6	789	158%
11T4205	11A	*80	No. 11	1.56	162,630	104,250	139%	35M	1000	723.4	723	145%
14T836	14A	75	No. 14	2.25	257,400	114,400	153%	45M	1500	1144.9	763	153%
	14B		No. 14	2.25	257,380	114,391	153%	45M	1500	1144.8	763	153%
18T630	18A	75	No. 18	4.00	407,900	101,975	136%	55M	2500	1814.3	726	145%
18T632	18A	75	No. 18	4.00	444,180	111,045	148%	55M	2500	1975.7	790	158%
18T778	18A	75	No. 18	4.00	482,644	120,661	161%	55M	2500	2146.8	859	172%
	18B		No. 18	4.00	470,388	117,597	157%	55M	2500	2092.3	837	167%

NOTES

All splices meet Type 2 requirement of ACI 318 Section 18 (100% *f_u*) Grade 75 bar, and CSA A23.3 Clause 12.14.3.4 requirement (120% *f_y*) Grade 500 bar. Results shown are from routine testing of various heat lots of completed coupler assemblies, per Barsplice Products, Inc. ISO 9001 Quality System. Conducted on reinforcing bars per ASTM A615 Grade 75/80 (or *A706 Grade 80). Minimum specified yield of Grade 75, *f_y* = 75,000 psi (520 N/mm²) Tests performed in accordance with ASTM A1034, Section 10.3, Monotonic Tension Tests, using load rates per ASTM A370 See Lab reports for stress versus displacement curves (stress versus cross-head position). ASTM = American Society for Testing and Materials, CSA = Canadian Standards Association