

TAPER THREADED GRIP-TWIST® SYSTEM TEST DATA CONVERSION - 15M, 20M AND 25M (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 % fy 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 % fy CSA Gr 500
5T13760	5B	80*	No. 5	0.31	34,278	110,575	147%	15M	200	152.5	762	152%
5T13856	5B		No. 5	0.31	38,126	122,987	164%	15M	200	169.6	848	170%
5T13872	5A		No. 5	0.31	34,995	112,886	151%	15M	200	155.7	778	156%
5T13889	5B		No. 5	0.31	35,248	113,703	152%	15M	200	156.8	784	157%
5T14040	5B		No. 5	0.31	34,586	111,569	149%	15M	200	153.8	769	154%
6T8829	6A	75	No. 6	0.44	53,808	122,292	163%	20M	300	239.3	798	160%
	6B		No. 6	0.44	54,047	122,833	164%	20M	300	240.4	801	160%
6T8903	6B	80*	No. 6	0.44	51,220	116,410	155%	20M	300	227.8	759	152%
6T8937	6B		No. 6	0.44	52,451	119,206	159%	20M	300	233.3	778	156%
6T8989	6B		No. 6	0.44	54,457	123,767	165%	20M	300	242.2	807	161%
6T9076	6B		No. 6	0.44	52,677	119,721	160%	20M	300	234.3	781	156%
6T9085	6B		No. 6	0.44	50,083	113,824	152%	20M	300	222.8	743	149%
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%
8T5473	8B	80*	No. 8	0.79	97,401	123,292	164%	25M	500	433.2	866	173%
8T5562	8B		No. 8	0.79	88,260	111,722	149%	25M	500	392.6	785	157%
8T5587	8B		No. 8	0.79	87,629	110,923	148%	25M	500	389.8	780	156%
8T5591	8A		No. 8	0.79	96,058	121,593	162%	25M	500	427.3	855	171%

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

TAPER THREADED GRIP-TWIST® SYSTEM TEST DATA CONVERSION - 30M AND 35M (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
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%
9T1767	9B	80*	No. 9	1.00	108,410	108,410	145%	30M	700	482.2	689	138%
9T1767	9B		No. 9	1.00	122,748	122,748	164%	30M	700	546.0	780	156%
9T1767	9B		No. 9	1.00	114,716	114,716	153%	30M	700	510.3	729	146%
9T1767	9B		No. 9	1.00	112,105	112,105	149%	30M	700	498.6	712	142%
9T1767	9B		No. 9	1.00	113,822	113,822	152%	30M	700	506.3	723	145%
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%
11T4437	11A	80*	No. 11	1.56	167,630	107,455	143%	35M	1000	745.6	746	149%
11T5132	11A		No. 11	1.56	165,162	105,873	141%	35M	1000	734.6	735	147%
11T5656	11A		No. 11	1.56	173,954	111,509	149%	35M	1000	773.7	774	155%
11T5657	11A		No. 11	1.56	170,973	109,598	146%	35M	1000	760.5	760	152%
11T5703	11A		No. 11	1.56	173,971	111,520	149%	35M	1000	773.8	774	155%
11T5711	11A	80*	No. 11	1.56	174,630	111,942	149%	35M	1000	776.8	777	155%
11T5715	11A		No. 11	1.56	175,071	112,225	150%	35M	1000	778.7	779	156%

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

TAPER THREADED GRIP-TWIST® SYSTEM TEST DATA CONVERSION - 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 % fy 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 % fy CSA Gr 500
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%
14T1805	14A	80*	No. 14	2.25	266,823	118,588	158%	45M	1500	1186.8	791	158%
14T1806	14B		No. 14	2.25	255,526	113,567	151%	45M	1500	1136.6	758	152%
14T1808	14B		No. 14	2.25	278,782	123,903	165%	45M	1500	1240.0	827	165%
14T1811	14B		No. 14	2.25	259,470	115,320	154%	45M	1500	1154.1	769	154%
14T1815	14B		No. 14	2.25	270,038	120,017	160%	45M	1500	1201.1	801	160%
14T1817	14B		No. 14	2.25	248,922	110,632	148%	45M	1500	1107.2	738	148%
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%
18T1301	18A	80	No. 18	4.00	457,020	114,255	152%	55M	2500	2032.8	813	163%
18T1302	18A	80*	No. 18	4.00	456,308	114,077	152%	55M	2500	2029.7	812	162%
18T1304	18B		No. 18	4.00	442,440	110,610	147%	55M	2500	1968.0	787	157%
18T1307	18A		No. 18	4.00	442,808	110,702	148%	55M	2500	1969.6	788	158%
18T1314	18B		No. 18	4.00	436,636	109,159	146%	55M	2500	1942.2	777	155%
18T1315	18B		No. 18	4.00	480,428	120,107	160%	55M	2500	2136.9	855	171%

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