

TAPER THREADED GRIP-TWIST® SYSTEM TEST DATA CONVERSION - 15M AND 20M (GRADE 400)

Lab Report & Reference No.		Bar Type	ASTM Bar Size Designation	ASTM Bar Area (in ²)	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f_y</i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm ²)	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm ²)	Equivalent Developed Stress % <i>f_y</i> CSA Gr 400
5T3688*	5A	BLACK	No. 5	0.31	29,830	96,226	160%	15M	200	132.7	663	166%
5T5486	5A	BLACK	No. 5	0.31	34,290	110,613	184%	15M	200	152.5	763	191%
	5B		No. 5	0.31	34,490	111,258	185%	15M	200	153.4	767	192%
5T5551	5A	BLACK	No. 5	0.31	33,600	108,387	181%	15M	200	149.5	747	187%
	5B		No. 5	0.31	33,300	107,419	179%	15M	200	148.1	741	185%
5T7986	5A	BLACK	No. 5	0.31	33,380	107,677	179%	15M	200	148.5	742	186%
	5B		No. 5	0.31	32,670	105,387	176%	15M	200	145.3	727	182%
5T8798	5A	BLACK	No. 5	0.31	32,280	104,129	174%	15M	200	143.6	718	179%
	5B		No. 5	0.31	32,860	106,000	177%	15M	200	146.2	731	183%
6T580*	6A	BLACK	No. 6	0.44	42,453	96,484	161%	20M	300	188.8	629	157%
	6B		No. 6	0.44	43,410	98,659	164%	20M	300	193.1	644	161%
6T5372	6A	BLACK	No. 6	0.44	49,010	111,386	186%	20M	300	218.0	727	182%
	6B		No. 6	0.44	48,700	110,682	184%	20M	300	216.6	722	181%
6T5806	6A	BLACK	No. 6	0.44	46,550	105,795	176%	20M	300	207.1	690	173%
	6B		No. 6	0.44	46,650	106,023	177%	20M	300	207.5	692	173%
6T5866	6A	BLACK	No. 6	0.44	45,630	103,705	173%	20M	300	203.0	677	169%
	6B		No. 6	0.44	45,130	102,568	171%	20M	300	200.7	669	167%

NOTES

All splices meet Type 2 requirement of ACI 318 Section 18 (100% *f_u*) Grade 60 bar, and CSA A23.3 Clause 12.14.3.4 requirement (120% *f_y*) Grade 400 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 (or *A706) Grade 60, with a specified yield, *f_y* = 60,000 psi (420 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 - 25M AND 30M (GRADE 400)

Lab Report & Reference No.		Bar Type	ASTM Bar Size Designation	ASTM Bar Area (in ²)	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f_y</i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm ²)	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm ²)	Equivalent Developed Stress % <i>f_y</i> CSA Gr 400
8T398*	8A	BLACK	No. 8	0.79	78,506	99,375	166%	25M	500	349.2	698	175%
	8B		No. 8	0.79	73,506	93,045	155%	25M	500	327.0	654	163%
8T3329	8A	BLACK	No. 8	0.79	85,620	108,380	181%	25M	500	380.8	762	190%
	8B		No. 8	0.79	86,120	109,013	182%	25M	500	383.1	766	192%
8T3542	8A	BLACK	No. 8	0.79	88,505	112,032	187%	25M	500	393.7	787	197%
	8B		No. 8	0.79	88,356	111,843	186%	25M	500	393.0	786	197%
8T3658	8A	BLACK	No. 8	0.79	90,498	114,554	191%	25M	500	402.5	805	201%
	8B		No. 8	0.79	89,310	113,050	188%	25M	500	397.2	794	199%
9T1842	9A	BLACK	No. 9	1.00	107,630	107,630	179%	30M	700	478.7	684	171%
	9B		No. 9	1.00	105,750	105,750	176%	30M	700	470.4	672	168%
9T2030	9A	BLACK	No. 9	1.00	111,547	111,547	186%	30M	700	496.2	709	177%
	9B		No. 9	1.00	108,762	108,762	181%	30M	700	483.8	691	173%
9T2257	9A	BLACK	No. 9	1.00	109,386	109,386	182%	30M	700	486.5	695	174%
	9B		No. 9	1.00	110,050	110,050	183%	30M	700	489.5	699	175%
9T2390	9A	BLACK	No. 9	1.00	114,030	114,030	190%	30M	700	507.2	725	181%
	9B		No. 9	1.00	113,811	113,811	190%	30M	700	506.2	723	181%

NOTES

All splices meet Type 2 requirement of ACI 318 Section 18 (100% *f_u*) Grade 60 bar, and CSA A23.3 Clause 12.14.3.4 requirement (120% *f_y*) Grade 400 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 (or *A706) Grade 60, with a specified yield, *f_y* = 60,000 psi (420 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 - 35M AND 45M (GRADE 400)

Lab Report & Reference No.		Bar Type	ASTM Bar Size Designation	ASTM Bar Area (in ²)	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f_y</i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm ²)	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm ²)	Equivalent Developed Stress % <i>f_y</i> CSA Gr 400
11T548*	11A	BLACK	No. 11	1.56	147,356	94,459	157%	35M	1000	655.4	655	164%
	11B		No. 11	1.56	146,880	94,154	157%	35M	1000	653.3	653	163%
11T3858	11A	BLACK	No. 11	1.56	163,410	104,750	175%	35M	1000	726.8	727	182%
	11B		No. 11	1.56	164,220	105,269	175%	35M	1000	730.4	730	183%
11T4143	11A	BLACK	No. 11	1.56	172,488	110,569	184%	35M	1000	767.2	767	192%
	11B		No. 11	1.56	173,725	111,362	186%	35M	1000	772.7	773	193%
11T4148	11A	BLACK	No. 11	1.56	178,043	114,130	190%	35M	1000	791.9	792	198%
	11B		No. 11	1.56	174,736	112,010	187%	35M	1000	777.2	777	194%
14T140*	14A	BLACK	No. 14	2.25	214,261	95,227	159%	45M	1500	953.0	635	159%
	14B		No. 14	2.25	213,361	94,827	158%	45M	1500	949.0	633	158%
14T881	14A	BLACK	No. 14	2.25	252,450	112,200	187%	45M	1500	1122.9	749	187%
	14B		No. 14	2.25	250,731	111,436	186%	45M	1500	1115.3	744	186%
14T1354	14A	BLACK	No. 14	2.25	234,812	104,361	174%	45M	1500	1044.4	696	174%
	14B		No. 14	2.25	236,324	105,033	175%	45M	1500	1051.2	701	175%
14T1407	14A	BLACK	No. 14	2.25	229,727	102,101	170%	45M	1500	1021.8	681	170%
	14B		No. 14	2.25	232,110	103,160	172%	45M	1500	1032.4	688	172%

NOTES

All splices meet Type 2 requirement of ACI 318 Section 18 (100% *f_u*) Grade 60 bar, and CSA A23.3 Clause 12.14.3.4 requirement (120% *f_y*) Grade 400 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 (or *A706) Grade 60, with a specified yield, *f_y* = 60,000 psi (420 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).
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TAPER THREADED GRIP-TWIST[®] SYSTEM TEST DATA CONVERSION - 55M (GRADE 400)

Lab Report & Reference No.		Bar Type	ASTM Bar Size Designation	ASTM Bar Area (in ²)	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f_y</i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm ²)	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm ²)	Equivalent Developed Stress % <i>f_y</i> CSA Gr 400
18T151*	18A	BLACK	No. 18	4.00	396,792	99,198	165%	55M	2500	1764.9	706	176%
18T471*	18A	BLACK	No. 18	4.00	408,140	102,035	170%	55M	2500	1815.4	726	182%
18T663	18A	BLACK	No. 18	4.00	427,020	106,755	178%	55M	2500	1899.4	760	190%
	18B		No. 18	4.00	428,040	107,010	178%	55M	2500	1903.9	762	190%
18T701	18A	BLACK	No. 18	4.00	430,968	107,742	180%	55M	2500	1916.9	767	192%
	18B		No. 18	4.00	435,180	108,795	181%	55M	2500	1935.7	774	194%
18T780	18A	BLACK	No. 18	4.00	410,144	102,536	171%	55M	2500	1824.3	730	182%
	18B		No. 18	4.00	407,748	101,937	170%	55M	2500	1813.7	725	181%
18T788	18A	BLACK	No. 18	4.00	443,620	110,905	185%	55M	2500	1973.2	789	197%
	18B		No. 18	4.00	438,572	109,643	183%	55M	2500	1950.8	780	195%

NOTES

All splices meet Type 2 requirement of ACI 318 Section 18 (100% *f_u*) Grade 60 bar, and CSA A23.3 Clause 12.14.3.4 requirement (120% *f_y*) Grade 400 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 (or *A706) Grade 60, with a specified yield, *f_y* = 60,000 psi (420 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