

**POSITION 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 <sup>2</sup> )	Max Load (lb)	Max Stress (psi)	Developed Stress %fy ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm <sup>2</sup> )	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm <sup>2</sup> )	Equivalent Developed Stress %fy CSA Gr 400
5T3512*	5A	BLACK	<b>No. 5</b>	0.31	29,960	96,645	<b>161%</b>	<b>15M</b>	200	133.3	666	<b>167%</b>
5T6612	5A	BLACK	<b>No. 5</b>	0.31	34,040	109,806	<b>183%</b>	<b>15M</b>	200	151.4	757	<b>189%</b>
	5B		<b>No. 5</b>	0.31	34,500	111,290	<b>185%</b>	<b>15M</b>	200	153.5	767	<b>192%</b>
5T6947	5A	BLACK	<b>No. 5</b>	0.31	33,020	106,516	<b>178%</b>	<b>15M</b>	200	146.9	734	<b>184%</b>
	5B		<b>No. 5</b>	0.31	32,900	106,129	<b>177%</b>	<b>15M</b>	200	146.3	732	<b>183%</b>
5T8791	5A	BLACK	<b>No. 5</b>	0.31	32,630	105,258	<b>175%</b>	<b>15M</b>	200	145.1	726	<b>181%</b>
	5B		<b>No. 5</b>	0.31	32,440	104,645	<b>174%</b>	<b>15M</b>	200	144.3	721	<b>180%</b>
6T635	6A	BLACK	<b>No. 6</b>	0.44	50,901	115,683	<b>193%</b>	<b>20M</b>	300	226.4	755	<b>189%</b>
	6B		<b>No. 6</b>	0.44	51,040	116,001	<b>193%</b>	<b>20M</b>	300	227.0	757	<b>189%</b>
6T1718	6A	BLACK	<b>No. 6</b>	0.44	47,270	107,432	<b>179%</b>	<b>20M</b>	300	210.3	701	<b>175%</b>
	6B		<b>No. 6</b>	0.44	50,010	113,659	<b>189%</b>	<b>20M</b>	300	222.4	741	<b>185%</b>
6T2282	6A	BLACK	<b>No. 6</b>	0.44	53,590	121,795	<b>203%</b>	<b>20M</b>	300	238.4	795	<b>199%</b>
	6B		<b>No. 6</b>	0.44	50,780	115,409	<b>192%</b>	<b>20M</b>	300	225.9	753	<b>188%</b>
6T5970	6A	BLACK	<b>No. 6</b>	0.44	45,930	104,386	<b>174%</b>	<b>20M</b>	300	204.3	681	<b>170%</b>
	6B		<b>No. 6</b>	0.44	45,490	103,386	<b>172%</b>	<b>20M</b>	300	202.3	674	<b>169%</b>

**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/mm<sup>2</sup>). 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

## POSITION 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 <sup>2</sup> )	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f<sub>y</sub></i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm <sup>2</sup> )	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm <sup>2</sup> )	Equivalent Developed Stress % <i>f<sub>y</sub></i> CSA Gr 400
			No. 8	No. 8	No. 8	No. 8	No. 8	No. 8	25M	25M	25M	25M
8T649	8A	BLACK	No. 8	0.79	85,560	108,304	<b>181%</b>	25M	500	380.6	761	<b>190%</b>
	8B		No. 8	0.79	84,600	107,089	<b>178%</b>	25M	500	376.3	753	<b>188%</b>
8T1505	8A	BLACK	No. 8	0.79	86,610	109,633	<b>183%</b>	25M	500	385.2	770	<b>193%</b>
	8B		No. 8	0.79	85,850	108,671	<b>181%</b>	25M	500	381.9	764	<b>191%</b>
8T2530	8A	BLACK	No. 8	0.79	87,650	110,949	<b>185%</b>	25M	500	389.9	780	<b>195%</b>
	8B		No. 8	0.79	87,940	111,316	<b>186%</b>	25M	500	391.2	782	<b>196%</b>
8T3731	8A	BLACK	No. 8	0.79	88,798	112,402	<b>187%</b>	25M	500	395.0	790	<b>197%</b>
	8B		No. 8	0.79	90,819	114,961	<b>192%</b>	25M	500	404.0	808	<b>202%</b>
9T342	9A	BLACK	No. 9	1.00	109,162	109,162	<b>182%</b>	30M	700	485.6	694	<b>173%</b>
	9B		No. 9	1.00	110,132	110,132	<b>184%</b>	30M	700	489.9	700	<b>175%</b>
9T1091	9A	BLACK	No. 9	1.00	107,070	107,070	<b>178%</b>	30M	700	476.2	680	<b>170%</b>
	9B		No. 9	1.00	108,450	108,450	<b>181%</b>	30M	700	482.4	689	<b>172%</b>
9T1780	9A	BLACK	No. 9	1.00	114,410	114,410	<b>191%</b>	30M	700	508.9	727	<b>182%</b>
	9B		No. 9	1.00	115,040	115,040	<b>192%</b>	30M	700	511.7	731	<b>183%</b>
9T2100	9A	BLACK	No. 9	1.00	110,445	110,445	<b>184%</b>	30M	700	491.3	702	<b>175%</b>
	9B		No. 9	1.00	111,308	111,308	<b>186%</b>	30M	700	495.1	707	<b>177%</b>

### NOTES

All splices meet Type 2 requirement of ACI 318 Section 18 (100% *f<sub>u</sub>*) Grade 60 bar, and CSA A23.3 Clause 12.14.3.4 requirement (120% *f<sub>y</sub>*) 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<sub>y</sub>* = 60,000 psi (420 N/mm<sup>2</sup>). 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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**POSITION TAPER THREADED GRIP-TWIST® SYSTEM TEST DATA CONVERSION - 35M, 45M AND 55M (GRADE 400)**

Lab Report & Reference No.		Bar Type	ASTM Bar Size Designation	ASTM Bar Area (in <sup>2</sup> )	Max Load (lb)	Max Stress (psi)	Developed Stress % <i>f<sub>y</sub></i> ASTM Gr 60 (metric Gr 420)	Equivalent CSA Designation	CSA Bar Area (mm <sup>2</sup> )	Max Load (kN)	Equivalent Max Stress CSA Gr 400 (N/mm <sup>2</sup> )	Equivalent Developed Stress % <i>f<sub>y</sub></i> CSA Gr 400
11T3832*	11A	BLACK	<b>No. 11</b>	1.56	175,620	112,577	<b>188%</b>	<b>35M</b>	1000	781.2	781	<b>195%</b>
11T4062	11A	BLACK	<b>No. 11</b>	1.56	159,460	102,218	<b>170%</b>	<b>35M</b>	1000	709.3	709	<b>177%</b>
	11B		<b>No. 11</b>	1.56	158,100	101,346	<b>169%</b>	<b>35M</b>	1000	703.2	703	<b>176%</b>
11T4193	11A	BLACK	<b>No. 11</b>	1.56	161,563	103,566	<b>173%</b>	<b>35M</b>	1000	718.6	719	<b>180%</b>
	11B		<b>No. 11</b>	1.56	162,736	104,318	<b>174%</b>	<b>35M</b>	1000	723.9	724	<b>181%</b>
11T4202*	11A	BLACK	<b>No. 11</b>	1.56	163,621	104,885	<b>175%</b>	<b>35M</b>	1000	727.8	728	<b>182%</b>
14T366	14A	BLACK	<b>No. 14</b>	2.25	243,650	108,289	<b>180%</b>	<b>45M</b>	1500	1083.8	723	<b>181%</b>
	14B		<b>No. 14</b>	2.25	241,101	107,156	<b>179%</b>	<b>45M</b>	1500	1072.4	715	<b>179%</b>
14T574	14A	BLACK	<b>No. 14</b>	2.25	231,811	103,027	<b>172%</b>	<b>45M</b>	1500	1031.1	687	<b>172%</b>
	14B		<b>No. 14</b>	2.25	230,531	102,458	<b>171%</b>	<b>45M</b>	1500	1025.4	684	<b>171%</b>
14T1285*	14A	BLACK	<b>No. 14</b>	2.25	242,053	107,579	<b>179%</b>	<b>45M</b>	1500	1076.7	718	<b>179%</b>
18T376	18A	BLACK	<b>No. 18</b>	4.00	436,648	109,162	<b>182%</b>	<b>55M</b>	2500	1942.2	777	<b>194%</b>
	18B		<b>No. 18</b>	4.00	440,528	110,132	<b>184%</b>	<b>55M</b>	2500	1959.5	784	<b>196%</b>
18T449*	18A	BLACK	<b>No. 18</b>	4.00	428,280	107,070	<b>178%</b>	<b>55M</b>	2500	1905.0	762	<b>190%</b>
18T724*	18A	BLACK	<b>No. 18</b>	4.00	457,640	114,410	<b>191%</b>	<b>55M</b>	2500	2035.6	814	<b>204%</b>
18T753	18A	BLACK	<b>No. 18</b>	4.00	441,780	110,445	<b>184%</b>	<b>55M</b>	2500	1965.0	786	<b>197%</b>
	18B		<b>No. 18</b>	4.00	445,232	111,308	<b>186%</b>	<b>55M</b>	2500	1980.4	792	<b>198%</b>

**NOTES**

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