

## DOUBLE BARREL ZAP SCREWLOK® SYSTEM TEST DATA CONVERSION - 10M AND 15M (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
4T1144	4A	Black	<b>No. 4</b>	0.20	21,070	105,350	<b>176%</b>	<b>10M</b>	100	93.7	937	<b>234%</b>
	4B		<b>No. 4</b>	0.20	20,300	101,500	<b>169%</b>	<b>10M</b>	100	90.3	903	<b>226%</b>
4T2030	4A	Black	<b>No. 4</b>	0.20	20,960	104,800	<b>175%</b>	<b>10M</b>	100	93.2	932	<b>233%</b>
	4B		<b>No. 4</b>	0.20	21,460	107,300	<b>179%</b>	<b>10M</b>	100	95.5	955	<b>239%</b>
4T3378	4A	Black	<b>No. 4</b>	0.20	20,720	103,600	<b>173%</b>	<b>10M</b>	100	92.2	922	<b>230%</b>
	4B		<b>No. 4</b>	0.20	20,410	102,050	<b>170%</b>	<b>10M</b>	100	90.8	908	<b>227%</b>
4T1197	4A	Epoxy	<b>No. 4</b>	0.20	20,160	100,800	<b>168%</b>	<b>10M</b>	100	89.7	897	<b>224%</b>
	4B		<b>No. 4</b>	0.20	19,790	98,950	<b>165%</b>	<b>10M</b>	100	88.0	880	<b>220%</b>
4T3098	4A	Epoxy	<b>No. 4</b>	0.20	20,540	102,700	<b>171%</b>	<b>10M</b>	100	91.4	914	<b>228%</b>
	4B		<b>No. 4</b>	0.20	20,270	101,350	<b>169%</b>	<b>10M</b>	100	90.2	902	<b>225%</b>
5T7960	5A	Black	<b>No. 5</b>	0.31	31,280	100,903	<b>168%</b>	<b>15M</b>	200	139.1	696	<b>174%</b>
	5B		<b>No. 5</b>	0.31	33,220	107,161	<b>179%</b>	<b>15M</b>	200	147.8	739	<b>185%</b>
5T8127	5A	Black	<b>No. 5</b>	0.31	32,330	104,290	<b>174%</b>	<b>15M</b>	200	143.8	719	<b>180%</b>
	5B		<b>No. 5</b>	0.31	32,230	103,968	<b>173%</b>	<b>15M</b>	200	143.4	717	<b>179%</b>
5T8642	5A	Black	<b>No. 5</b>	0.31	32,110	103,581	<b>173%</b>	<b>15M</b>	200	142.8	714	<b>179%</b>
	5B		<b>No. 5</b>	0.31	31,170	100,548	<b>168%</b>	<b>15M</b>	200	138.6	693	<b>173%</b>
5T1697	5A	Epoxy	<b>No. 5</b>	0.31	33,070	106,677	<b>178%</b>	<b>15M</b>	200	147.1	735	<b>184%</b>
	5B		<b>No. 5</b>	0.31	32,340	104,323	<b>174%</b>	<b>15M</b>	200	143.8	719	<b>180%</b>
5T7871	5A	Epoxy	<b>No. 5</b>	0.31	29,940	96,581	<b>161%</b>	<b>15M</b>	200	133.2	666	<b>166%</b>
	5B		<b>No. 5</b>	0.31	30,070	97,000	<b>162%</b>	<b>15M</b>	200	133.8	669	<b>167%</b>

### NOTES

Test results are from routine testing of each heat lot of arriving coupler material, per Barsplice Products, Inc. ISO Quality System.

Reinforcing Bars, per ASTM A615 (or \*A706) Grade 60, have a specified yield, fy = 60,000 psi (420 N/mm<sup>2</sup>).

See Lab reports for stress versus displacement curves (stress versus cross-head position).

Load rates per ASTM A 370.

ASTM = American Society for Testing and Materials

CSA = Canadian Standards Association

## DOUBLE BARREL ZAP SCREWLOK® SYSTEM TEST DATA CONVERSION - 20M AND 25M (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
6T5531	6A	Black	<b>No. 6</b>	0.44	46,990	106,795	<b>178%</b>	<b>20M</b>	300	209.0	697	<b>174%</b>
	6B		<b>No. 6</b>	0.44	45,900	104,318	<b>174%</b>	<b>20M</b>	300	204.2	681	<b>170%</b>
6T5833	6A	Black	<b>No. 6</b>	0.44	46,190	104,977	<b>175%</b>	<b>20M</b>	300	205.5	685	<b>171%</b>
	6B		<b>No. 6</b>	0.44	44,460	101,045	<b>168%</b>	<b>20M</b>	300	197.8	659	<b>165%</b>
6T5876	6A	Black	<b>No. 6</b>	0.44	45,600	103,636	<b>173%</b>	<b>20M</b>	300	202.8	676	<b>169%</b>
	6B		<b>No. 6</b>	0.44	44,290	100,659	<b>168%</b>	<b>20M</b>	300	197.0	657	<b>164%</b>
6T2480	6A	Epoxy	<b>No. 6</b>	0.44	45,040	102,364	<b>171%</b>	<b>20M</b>	300	200.3	668	<b>167%</b>
	6B		<b>No. 6</b>	0.44	46,590	105,886	<b>176%</b>	<b>20M</b>	300	207.2	691	<b>173%</b>
6T5473	6A	Epoxy	<b>No. 6</b>	0.44	41,920	95,273	<b>159%</b>	<b>20M</b>	300	186.5	622	<b>155%</b>
	6B		<b>No. 6</b>	0.44	43,500	98,864	<b>165%</b>	<b>20M</b>	300	193.5	645	<b>161%</b>
8T1930	8A	*Black	<b>No. 8</b>	0.79	73,880	93,519	<b>156%</b>	<b>25M</b>	500	328.6	657	<b>164%</b>
8T1999	8A	*Black	<b>No. 8</b>	0.79	74,900	94,810	<b>158%</b>	<b>25M</b>	500	333.2	666	<b>167%</b>
8T2570	8A	Black	<b>No. 8</b>	0.79	83,730	105,987	<b>177%</b>	<b>25M</b>	500	372.4	745	<b>186%</b>
	8B		<b>No. 8</b>	0.79	84,900	107,468	<b>179%</b>	<b>25M</b>	500	377.6	755	<b>189%</b>
8T3178	8A	Black	<b>No. 8</b>	0.79	82,303	104,181	<b>174%</b>	<b>25M</b>	500	366.1	732	<b>183%</b>
	8B		<b>No. 8</b>	0.79	83,043	105,118	<b>175%</b>	<b>25M</b>	500	369.4	739	<b>185%</b>
8T1771	8A	Epoxy	<b>No. 8</b>	0.79	76,710	97,101	<b>162%</b>	<b>25M</b>	500	341.2	682	<b>171%</b>
	8B		<b>No. 8</b>	0.79	74,960	94,886	<b>158%</b>	<b>25M</b>	500	333.4	667	<b>167%</b>
8T3081	8A	Epoxy	<b>No. 8</b>	0.79	69,010	87,355	<b>146%</b>	<b>25M</b>	500	307.0	614	<b>153%</b>
	8B		<b>No. 8</b>	0.79	78,038	98,782	<b>165%</b>	<b>25M</b>	500	347.1	694	<b>174%</b>

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