

BUTTONHEAD MECHANICAL ANCHORAGE TEST DATA CONVERSION - 20M AND 25M (GRADES 500R, 500W)

Lab Report & Reference No.		Bar Type	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
6T4057	6A	Black	No. 6	0.44	54,120	123,000	164%	20M	300	240.7	802	160%
	6B		No. 6	0.44	52,280	118,818	158%	20M	300	232.5	775	155%
	6C		No. 6	0.44	51,600	117,273	156%	20M	300	229.5	765	153%
8T2423	8A	Black	No. 8	0.79	90,650	114,747	153%	25M	500	403.2	806	161%
	8B		No. 8	0.79	89,670	113,506	151%	25M	500	398.9	798	160%
	8C		No. 8	0.79	90,340	114,354	152%	25M	500	401.8	804	161%
	8D		No. 8	0.79	89,680	113,519	151%	25M	500	398.9	798	160%

NOTES

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

Reinforcing Bars, per ASTM A 615 Grade 75, have a specified yield, $f_y = 75,000$ psi (520 N/mm²).

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

The ButtonHead, BNX, with a gross bearing area of 10 times the bar area, complies with CAN/CSA A23.3 Section 7.1.4

when installed in accordance with Barsplice Swaging Instructions (SM35) and Barsplice Terms and Conditions of Sale.



BUTTONHEAD MECHANICAL ANCHORAGE TEST DATA CONVERSION - 30M, 35M AND 45M (GRADES 500R, 500W)

Lab Report & Reference No.		Bar Type	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
9T1616	9A	Black	No. 9	1.00	111,210	111,210	148%	30M	700	494.7	707	141%
11T3136	11A	Black	No. 11	1.56	186,940	119,833	160%	35M	1000	831.5	832	166%
	11B		No. 11	1.56	186,740	119,705	160%	35M	1000	830.6	831	166%
	11C		No. 11	1.56	186,020	119,244	159%	35M	1000	827.4	827	165%
	11D		No. 11	1.56	188,210	120,647	161%	35M	1000	837.2	837	167%
14T841	14A	Black	No. 14	2.25	261,530	116,236	155%	45M	1500	1163.3	776	155%
	14B		No. 14	2.25	260,940	115,973	155%	45M	1500	1160.7	774	155%
	14C		No. 14	2.25	257,050	114,244	152%	45M	1500	1143.4	762	152%
	14D		No. 14	2.25	259,640	115,396	154%	45M	1500	1154.9	770	154%

NOTES

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Reinforcing Bars, per ASTM A 615 Grade 75, have a specified yield, fy = 75,000 psi (520 N/mm²).

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

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The ButtonHead, BNX, with a gross bearing area of 10 times the bar area, complies with CAN/CSA A23.3 Section 7.1.4

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