



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 206

TEST RESULT FOR TENSILE STRENGTH OF PLAIN/DEFORMED/RIBBED COLD TWISTED M.S BARS

Job No : 77/2024-2025 (Steel).

Copy No : 01

Name of Client : GE (Army) Central, Dhaka.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : 600/Mosque/15/E-6 Dt.24 Mar 2025.

Sample Grade : 60

Project Name : Construction of 1 x Mosque.

Frog Mark : KSRM B-420 DWR.

Dt. of Sample Collection : 27 Mar'2025

Sample No	Nominal Dia	Actual Dia	Area Under Test	Actual Unit Weight	Average Actual Unit Weight	Yield or Proof load	Yield or Proof Strength	Average Yield or Proof load	Ultimate load	Ultimate Strength	Average Ultimate Strength	Ratio	Elongation% (gauge length)		Average Elongation% (gauge length)	
	inch mm	inch mm	sq.inch sq.mm	lb/ft kg/m	lb/ft kg/m	lb kn	psi Mpa	psi Mpa	lb kn	psi Mpa	psi Mpa	(Fult/Fy)	8inch	5d	8inch	5d
1	0.394 10.00	0.394 10.00	0.1217 78.5398	0.415 0.617	0.415 0.617	14927.47 66.40	122621 846	112586 776	17021.07 75.71	139818 964	138846 958	1.14	19		20	
2	0.394 10.00	0.394 10.00	0.1217 78.5398	0.415 0.617		13095.00 58.25	107568 742		16812.63 74.79	138106 952		1.28	19.5			
3	0.394 10.00	0.394 10.00	0.1217 78.5398	0.415 0.617		13095.00 58.25	107568 742		16874.47 75.06	138614 956		1.29	20			

Cautions:

1. Samples as supplied to the laboratory have been tested. The laboratory authority does not bear any responsibility as to the representative character of the samples to be tested.
2. It is recommended that samples are sent in a secured and sealed cover/packet/container under signature of the competent authority.
3. In order to avoid fraudulent of the test results, it is recommended that all test reports should be collected by duly authorised person and not by contractor/supplier.

Observation on Specimen (if any):

Minimum Standard Requirements (BDS/ISO 6935-2:1991(E))				Minimum Standard Requirements (ASTM A615/A616M-96a)									
Grade	Y/strength	Ult.Str	Elongation	ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M			
	N/mm ² or Mpa	N/mm ² or Mpa	%	Grade	Y/strength psi (kg/cm ²)	Ult.Str psi (kg/cm ²)	Grade	Y/strength psi (kg/cm ²)	Ult.Str psi (kg/cm ²)	Minimum Elongation in 8" (203.2 mm) GL (%)			
300	300	330	16	40	40000(2810)	70000(4910)	300	300(3050)	500(5090)	10 mm	13,16,19 mm	22,25 mm	29,32,36 mm
400/400w	400	440	14	60	60000(4210)	90000(6310)	420	420(4275)	620(6295)	9	9	8	7
500/500w	500	550	14	75	75000(5255)	100000(7015)	520	520(5275)	690(7010)	..	7	7	6

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MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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TEST RESULT FOR TENSILE STRENGTH OF PLAIN/DEFORMED/RIBBED COLD TWISTED M.S BARS

Job No : 77/2024-2025 (Steel).

Copy No : 02

Name of Client : GE (Army) Central, Dhaka.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : 600/Mosque/15/E-6 Dt.24 Mar 2025.

Sample Grade : 60

Project Name : Construction of 1 x Mosque.

Frog Mark : KSRM B-420 DWR.

Dt. of Sample Collection: 27 Mar'2025

Sample No	Nominal Dia	Actual Dia	Area Under Test	Actual Unit Weight	Average Actual Unit Weight	Yield or Proof load	Yield or Proof Strength	Average Yield or Proof load	Ultimate load	Ultimate Strength	Average Ultimate Strength	Ratio	Elongation% (gauge length)		Average Elongation% (gauge length)	
	inch mm	inch mm	sq.inch sq.mm	lb/ft kg/m	lb/ft kg/m	lb kn	psi Mpa	psi Mpa	lb kn	psi Mpa	psi Mpa	(Fult/Fy)	8inch	5d	8inch	5d
1	0.472 12.00	0.473 12.00	0.175 113.097	0.597 0.888	0.597 0.888	16759.95 74.55	95607 659	96648 667	22087.86 98.25	125999 869	125860 868	1.32	20.5		23	
2	0.472 12.00	0.473 12.00	0.175 113.097	0.597 0.888		16982.13 75.54	96874 668		21993.94 97.83	125464 865		1.30	22.5			
3	0.472 12.00	0.473 12.00	0.175 113.097	0.597 0.888		17085.21 76.00	97462 672		22108.47 98.34	126117 870		1.29	26.5			

Cautions:

1. Samples as supplied to the laboratory have been tested.The laboratory authority does not bear any responsibility as to the representative charecture of the samples to be tested.
2. It is recommended that samples are Sent in asecuried and sealed cover/packet/container under signature of the competent authority.
3. In order to avoid fraudulent of the test results,it is recommended that all test reports should be collected by duly authorised person and not by contractor/supplier.

Ovservation on Specimen(if any):

Minimum Standard Requirements (BDS/ISO 6935-2:1991(E))				Minimum Standard Requirments(ASTM A615/A616M-96a)									
Grade	Y/strength	Ult.Str	Elongation	ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M			
	N/mm2 or Mpa	N/mm2 or Mpa	%	Grade	Y/strength psi (kg/cm2)	Ult.Str psi (kg/cm2)	Grade	Y/strength psi (kg/cm2)	Ult.Str psi (kg/cm2)	Minimum Elongation in 8"(203.2 mm) GL (%)			
300	300	330	16	40	40000(2810)	70000(4910)	300	300(3050)	500(5090)	10 mm	13,16,19 mm	22,25 mm	29,32,36 mm
400/400w	400	440	14	60	60000(4210)	90000(6310)	420	420(4275)	620(6295)	9	9	8	7
500/500w	500	550	14	75	75000(5255)	100000(7015)	520	520(5275)	690(7010)	..	7	7	6

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MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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TEST RESULT FOR TENSILE STRENGTH OF PLAIN/DEFORMED/RIBBED COLD TWISTED M.S BARS

Job No : 77/2024-2025 (Steel).

Copy No : 03

Name of Client : GE (Army) Central, Dhaka.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : 600/Mosque/15/E-6 Dt.24 Mar 2025.

Sample Grade : 60

Project Name : Construction of 1 x Mosque.

Frog Mark : KSRM B-420 DWR.

Dt. of Sample Collection: 27 Mar'2025

Sample No	Nominal Dia	Actual Dia	Area Under Test	Actual Unit Weight	Average Actual Unit Weight	Yield or Proof load	Yield or Proof Strength	Average Yield or Proof load	Ultimate load	Ultimate Strength	Average Ultimate Strength	Ratio	Elongation% (gauge length)		Average Elongation% (gauge length)	
	inch mm	inch mm	sq.inch sq.mm	lb/ft kg/m	lb/ft kg/m	lb kn	psi Mpa	psi Mpa	lb kn	psi Mpa	psi Mpa	(Fult/Fy)	8inch	5d	8inch	5d
1	0.630 16.00	0.630 16.00	0.312 201.062	1.061 1.579	1.061 1.579	27296.66 121.42	87588 604	84274 581	35368.69 157.33	113490 783	112338 775	1.30	26.5		27	
2	0.630 16.00	0.630 16.00	0.312 201.062	1.061 1.579		26483.50 117.80	84979 586		35490.09 157.87	113879 785		1.34	27.5			
3	0.630 16.00	0.630 16.00	0.312 201.062	1.061 1.579		25010.65 111.25	80253 553		34170.71 152.00	109646 756		1.37	26.5			

Cautions:

1. Samples as supplied to the laboratory have been tested.The laboratory authority does not bear any responsibility as to the representative charecture of the samples to be tested.
2. It is recommended that samples are Sent in asecuried and sealed cover/packet/container under signature of the competent authority.
3. In order to avoid fraudulent of the test results,it is recommended that all test reports should be collected by duly authorised person and not by contractor/supplier.

Obsvervation on Specimen(if any):

Minimum Standard Requirements (BDS/ISO 6935-2:1991(E)				Minimum Standard Requirments(ASTM A615/A616M-96a)									
Grade	Y/strength N/mm2 or Mpa	Ult.Str N/mm2 or Mpa	Elongation %	ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M			
				Grade	Y/strength psi (kg/cm2)	Ult.Str psi (kg/cm2)	Grade	Y/strength Mpa (kg/cm2)	Ult.Str Mpa (kg/cm2)	Minimum Elongation in 8"(203.2 mm) GL (%)			
										10 mm	13,16,19 mm	22,25 mm	29,32,36 mm
300	300	330	16	40	40000(2810)	70000(4910)	300	300(3050)	500(5090)	11	12	..	..
400/400w	400	440	14	60	60000(4210)	90000(6310)	420	420(4275)	620(6295)	9	9	8	7
500/500w	500	550	14	75	75000(5255)	100000(7015)	520	520(5275)	690(7010)	..	7	7	6

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MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

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TEST RESULT FOR TENSILE STRENGTH OF PLAIN/DEFORMED/RIBBED COLD TWISTED M.S BARS

Job No : 77/2024-2025 (Steel).

Copy No : 04

Name of Client : GE (Army) Central, Dhaka.

Sample Specimen : Length 600mm , Dia 20mm

Ref.ltr.No : 600/Mosque/15/E-6 Dt.24 Mar 2025.

Sample Grade : 60

Project Name : Construction of 1 x Mosque.

Frog Mark : KSRM B-420 DWR.

Dt. of Sample Collection: 27 Mar'2025

Sample No	Nominal Dia	Actual Dia	Area Under Test	Actual Unit Weight	Average Actual Unit Weight	Yield or Proof load	Yield or Proof Strength	Average Yield or Proof load	Ultimate load	Ultimate Strength	Average Ultimate Strength	Ratio	Elongation% (gauge length)		Average Elongation% (gauge length)	
	inch mm	inch mm	sq.inch sq.mm	lb/ft kg/m	lb/ft kg/m	lb kn	psi Mpa	psi Mpa	lb kn	psi Mpa	psi Mpa	(Fult/Fy)	8inch	5d	8inch	5d
1	0.787 20.00	0.789 20.03	0.4869 314.1593	1.663 2.475	1.663 2.475	37833.36 168.29	77695 536	75816 523	49955.16 222.21	102588 708	102309 706	1.32	29.5		28	
2	0.787 20.00	0.789 20.03	0.4869 314.1593	1.663 2.475		36463.59 162.20	74882 516		49737.56 221.24	102141 704		1.36	28			
3	0.787 20.00	0.789 20.03	0.4869 314.1593	1.663 2.475		36459.01 162.18	74873 516		49765.04 221.36	102198 705		1.36	27.5			

Cautions:

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2. It is recommended that samples are sent in a secured and sealed cover/packet/container under signature of the competent authority.
3. In order to avoid fraudulent of the test results, it is recommended that all test reports should be collected by duly authorised person and not by contractor/supplier.

Observation on Specimen(if any):

Minimum Standard Requirements (BDS/ISO 6935-2:1991(E))				Minimum Standard Requirements (ASTM A615/A616M-96a)									
Grade	Y/strength	Ult.Str	Elongation	ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M			
	N/mm ² or Mpa	N/mm ² or Mpa	%	Grade	Y/strength psi (kg/cm ²)	Ult.Str psi (kg/cm ²)	Grade	Y/strength psi (kg/cm ²)	Ult.Str psi (kg/cm ²)	Minimum Elongation in 8"(203.2 mm) GL (%)			
300	300	330	16	40	40000(2810)	70000(4910)	300	300(3050)	500(5090)	10 mm	13,16,19 mm	22,25 mm	29,32,36 mm
400/400w	400	440	14	60	60000(4210)	90000(6310)	420	420(4275)	620(6295)	9	9	8	7
500/500w	500	550	14	75	75000(5255)	100000(7015)	520	520(5275)	690(7010)	..	7	7	6

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Page no: 210

TEST RESULT FOR TENSILE STRENGTH OF PLAIN/DEFORMED/RIBBED COLD TWISTED M.S BARS

Job No : 77/2024-2025 (Steel).

Copy No : 05

Name of Client : GE (Army) Central, Dhaka.

Sample Specimen : Length 600mm , Dia 25mm

Ref.ltr.No : 600/Mosque/15/E-6 Dt.24 Mar 2025.

Sample Grade : 60

Project Name : Construction of 1 x Mosque.

Frog Mark : KSRM B-420 DWR.

Dt. of Sample Collection: 27 Mar'2025

Sample No	Nominal Dia	Actual Dia	Area Under Test	Actual Unit Weight	Average Actual Unit Weight	Yield or Proof load	Yield or Proof Strength	Average Yield or Proof load	Ultimate load	Ultimate Strength	Average Ultimate Strength	Ratio	Elongation% (gauge length)		Average Elongation% (gauge length)	
	inch mm	inch mm	sq.inch sq.mm	lb/ft kg/m	lb/ft kg/m	lb kn	psi Mpa	psi Mpa	lb kn	psi Mpa	psi Mpa	(Fult/Fy)	8inch	5d	8inch	5d
1	0.984 25.00	0.985 25.02	0.7609 490.8739	2.595 3.861	2.595 3.861	54325.61 241.65	71401 492	71747 495	77233.79 343.55	101509 700	101436 700	1.42	29.5		30	
2	0.984 25.00	0.985 25.02	0.7609 490.8739	2.595 3.861		54550.08 242.65	71696 494		77087.19 342.90	101316 699		1.41	30			
3	0.984 25.00	0.985 25.02	0.7609 490.8739	2.595 3.861		54891.38 244.17	72144 498		77213.17 343.46	101482 700		1.41	30.5			

Cautions:

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3. In order to avoid fraudulent of the test results,it is recommended that all test reports should be collected by duly authorised person and not by contractor/supplier.

Ovservation on Specimen(if any):

Minimum Standard Requirements (BDS/ISO 6935-2:1991(E))				Minimum Standard Requirments(ASTM A615/A616M-96a)									
Grade	Y/strength	Ult.Str	Elongation	ASTM A 615 M			ASTM A 615 M			ASTM A 615/A 615 M			
	N/mm2 or Mpa	N/mm2 or Mpa	%	Grade	Y/strength psi (kg/cm2)	Ult.Str psi (kg/cm2)	Grade	Y/strength psi (kg/cm2)	Ult.Str psi (kg/cm2)	Minimum Elongation in 8"(203.2 mm) GL (%)			
300	300	330	16	40	40000(2810)	70000(4910)	300	300(3050)	500(5090)	10 mm	13,16,19 mm	22,25 mm	29,32,36 mm
400/400w	400	440	14	60	60000(4210)	90000(6310)	420	420(4275)	620(6295)	9	9	8	7
500/500w	500	550	14	75	75000(5255)	100000(7015)	520	520(5275)	690(7010)	..	7	7	6

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