



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 : 84/2024-2025 (Steel).

Copy No : 01

Name of Client : GE (Navy) Patuakhali.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : EinC/51 of 2024-2025/09/E-6 Dt.27 Apr'2025.

Sample Grade : 60

Project Name : Construction of Remaining Boundary Wall.

Frog Mark : Baizid B-420 DWR.

Dt. of Sample Collection : 04 May'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	0.398 10.11	0.1217 78.5398	0.424 0.630	0.424 0.630	13404.70 59.63	110112 759	106590 735	16143.64 71.81	132611 915	129070 890	1.20	20.5		21	
2	0.394 10.00	0.398 10.11	0.1217 78.5398	0.424 0.630		12386.85 55.10	101751 702		14998.56 66.72	123205 850		1.21	22.5			
3	0.394 10.00	0.398 10.11	0.1217 78.5398	0.424 0.630		13136.36 58.43	107908 744		15995.59 71.15	131395 906		1.22	18.5			

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.

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

Job No : 84/2024-2025 (Steel).

Copy No : 02

Name of Client : GE (Navy) Patuakhali.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : EinC/51 of 2024-2025/09/E-6 Dt.27 Apr'2025.

Sample Grade : 60

Project Name : Construction of Remaining Boundary Wall.

Frog Mark : Baizid B-420 DWR.

Dt. of Sample Collection: 04 May'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	0.479 12.17	0.175 113.097	0.614 0.914	0.614 0.914	17480.72 77.76	99718 688	98306 678	21015.44 93.48	119882 827	121738 840	1.20	18		18	
2	0.472 12.00	0.479 12.17	0.175 113.097	0.614 0.914		17078.21 75.97	97422 672		21450.34 95.42	122363 844		1.26	15.5			
3	0.472 12.00	0.479 12.17	0.175 113.097	0.614 0.914		17140.67 76.25	97778 674		21556.75 95.89	122970 848		1.26	20.5			

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 Mpa (kg/cm2)	Ult.Str Mpa (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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TEST RESULT FOR TENSILE STRENGTH OF PLAIN/DEFORMED/RIBBED COLD TWISTED M.S BARS

Job No : 84/2024-2025 (Steel).

Copy No : 03

Name of Client : GE (Navy) Patuakhali.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : EinC/51 of 2024-2025/09/E-6 Dt.27 Apr'2025.

Sample Grade : 60

Project Name : Construction of Remaining Boundary Wall.

Frog Mark : Baizid B-420 DWR.

Dt. of Sample Collection: 04 May'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	0.635 16.12	0.312 201.062	1.077 1.603	1.077 1.603	25908.06 115.24	83133 573	83806 578	33717.74 149.98	108192 746	108509 748	1.30	17.5		18	
2	0.630 16.00	0.635 16.12	0.312 201.062	1.077 1.603		26289.75 116.94	84358 582		33632.15 149.60	107918 744		1.28	19.5			
3	0.630 16.00	0.635 16.12	0.312 201.062	1.077 1.603		26155.58 116.35	83927 579		34099.43 151.68	109417 755		1.30	17.5			

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.

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

Job No : 84/2024-2025 (Steel).

Copy No : 04

Name of Client : GE (Navy) Patuakhali.

Sample Specimen : Length 600mm , Dia 20mm

Ref.ltr.No : EinC/51 of 2024-2025/09/E-6 Dt.27 Apr'2025.

Sample Grade : 60

Project Name : Construction of Remaining Boundary Wall.

Frog Mark : Baizid B-500 DWR

Dt. of Sample Collection: 04 May'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	0.787 20.00	0.4869 314.1593	1.657 2.466	1.657 2.466	37115.97 165.10	76222 526	84310 581	49105.78 218.43	100844 695	110171 760	1.32	17.5		17	
2	0.787 20.00	0.787 20.00	0.4869 314.1593	1.657 2.466		43035.69 191.43	88378 610		55791.20 248.17	114573 790		1.30	16.5			
3	0.787 20.00	0.787 20.00	0.4869 314.1593	1.657 2.466		43012.56 191.33	88331 609		56045.66 249.30	115096 794		1.30	17.5			

Cautions:

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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 Mpa (kg/cm2)	Ult.Str Mpa (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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