



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 375

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

Job No : 60/2025-2026 (Steel). Copy No : 01
Name of Client : GE (Army)South, Dhaka. Sample Specimen : Length 600mm , Dia 10mm
Ref.ltr.No : EinC/138 of 2024-2025/09/E-6 Dt.08 Sep'2025. Sample Grade : 60
Project Name : Construction of DGFI office Building in Kakril. Frog Mark : AKS B-500 DWR.
Dt. of Sample Collection : 09 Sep'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	0.397 10.08	0.1217 78.5398	0.421 0.627	0.421 0.627	15153.55 67.41	124478 858	124655 860	17989.65 80.02	147775 1019	148231 1022	1.19	18		18	
2	0.394 10.00	0.397 10.08	0.1217 78.5398	0.421 0.627		15146.61 67.38	124421 858		18089.12 80.46	148592 1025		1.19	18.5			
3	0.394 10.00	0.397 10.08	0.1217 78.5398	0.421 0.627		15225.26 67.73	125067 863		18056.73 80.32	148326 1023		1.19	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.

Obsveration on Specimen(if any):

Minimum Standard Requirements (BDS/ISO 6935-2:1991(E)				Minimum Standard Requirments(ASTM A615/A616M-96a)									
Grade				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 (%)			
N/mm2 or Mpa										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 : 60/2025-2026 (Steel). Copy No : 02
Name of Client : GE (Army)South, Dhaka. Sample Specimen : Length 600mm , Dia 12mm
Ref.ltr.No : EinC/138 of 2024-2025/09/E-6 Dt.08 Sep'2025. Sample Grade : 60
Project Name : Construction of DGFI office Building in Kakril. Frog Mark : AKS B-500 DWR.
Dt. of Sample Collection: 09 Sep'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	0.476 12.10	0.175 113.097	0.606 0.902	0.606 0.902	19178.68 85.31	109404 755	109818 757	23691.92 105.39	135150 932	134125 925	1.24	20.5		19	
2	0.472 12.00	0.476 12.10	0.175 113.097	0.606 0.902		19162.49 85.24	109312 754		23356.49 103.89	133236 919		1.22	20			
3	0.472 12.00	0.476 12.10	0.175 113.097	0.606 0.902		19412.33 86.35	110737 764		23488.35 104.48	133989 924		1.21	15.5			

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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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 : 60/2025-2026 (Steel).

Copy No : 03

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

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : EinC/138 of 2024-2025/09/E-6 Dt.08 Sep'2025.

Sample Grade : 60

Project Name : Construction of DGFI office Building in Kakril.

Frog Mark : AKS B-500 DWR.

Dt. of Sample Collection: 09 Sep'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	0.634 16.11	0.312 201.062	1.075 1.600	1.075 1.600	31140.73 138.52	99923 689	99512 686	38853.26 172.83	124671 860	124629 860	1.25	22.5		21	
2	0.630 16.00	0.634 16.11	0.312 201.062	1.075 1.600		31043.57 138.09	99611 687		38897.21 173.02	124812 861		1.25	21			
3	0.630 16.00	0.634 16.11	0.312 201.062	1.075 1.600		30853.88 137.24	99003 683		38769.98 172.46	124404 858		1.26	20			

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.
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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.

Obsvervation 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 : 60/2025-2026 (Steel). Copy No : 04
Name of Client : GE (Army)South, Dhaka. Sample Specimen : Length 600mm , Dia 20mm
Ref.ltr.No : EinC/138 of 2024-2025/09/E-6 Dt.08 Sep'2025. Sample Grade : 60
Project Name : Construction of DGFI office Building in Kakril. Frog Mark : AKS B-500 DWR.
Dt. of Sample Collection: 09 Sep'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	0.793 20.13	0.4869 314.1593	1.680 2.499	1.680 2.499	38848.63 172.81	79780 550	87021 600	56189.09 249.94	115390 796	115267 795	1.45	22.5		23	
2	0.787 20.00	0.793 20.13	0.4869 314.1593	1.680 2.499		44805.36 199.30	92013 635		56172.89 249.87	115357 796		1.25	23			
3	0.787 20.00	0.793 20.13	0.4869 314.1593	1.680 2.499		43470.59 193.37	89272 616		56024.84 249.21	115053 793		1.29	22			

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 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 : 60/2025-2026 (Steel). Copy No : 05
Name of Client : GE (Army)South, Dhaka. Sample Specimen : Length 600mm , Dia 25mm
Ref.ltr.No : EinC/138 of 2024-2025/09/E-6 Dt.08 Sep'2025. Sample Grade : 60
Project Name : Construction of DGFI office Building in Kakril. Frog Mark : AKS B-500 DWR.
Dt. of Sample Collection: 09 Sep'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	0.989 25.12	0.7609 490.8739	2.614 3.890	2.614 3.890	67248.95 299.14	88386 610	89243 615	84469.12 375.74	111019 766	111048 766	1.26	24.5		26	
2	0.984 25.00	0.989 25.12	0.7609 490.8739	2.614 3.890		68227.47 303.49	89672 618		84496.88 375.86	111055 766		1.24	26.5			
3	0.984 25.00	0.989 25.12	0.7609 490.8739	2.614 3.890		68227.47 303.49	89672 618		84508.44 375.91	111070 766		1.24	26.5			

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.

Obsvervation 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 (%)			
										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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