



MATERIALS TESTING LABORATORY MILITARY ENGINEER SERVICES(MES)

Page no: 376

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

Job No : 47/2025-2026 (Steel).

Copy No : 01

Name of Client : GE (Air) Tejgaon.

Sample Specimen : Length 600mm , Dia 10mm

Ref.ltr.No : CE Air/197 of 2024-2025/25/E-6 Dt.24 Aug'2025.

Sample Grade : 60

Project Name : Construction of Base HQ.

Frog Mark : RSM B-420 DWR

Dt. of Sample Collection : 25 Aug'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	0.399 10.14	0.1217 78.5398	0.426 0.633	0.426 0.633	13365.37 59.45	109789 757	111968 772	16696.52 74.27	137152 946	140529 969	1.25	19.5		19	
2	0.394 10.00	0.399 10.14	0.1217 78.5398	0.426 0.633		13654.53 60.74	112164 774		17311.85 77.01	142207 981		1.27	18.5			
3	0.394 10.00	0.399 10.14	0.1217 78.5398	0.426 0.633		13871.98 61.71	113950 786		17314.17 77.02	142226 981		1.25	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.
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 : 47/2025-2026 (Steel).

Copy No : 02

Name of Client : GE (Air) Tejgaon.

Sample Specimen : Length 600mm , Dia 12mm

Ref.ltr.No : CE Air/197 of 2024-2025/25/E-6 Dt.24 Aug'2025.

Sample Grade : 60

Project Name : Construction of Base HQ.

Frog Mark : RSM B-420 DWR

Dt. of Sample Collection: 25 Aug'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	0.477 12.10	0.175 113.097	0.607 0.903	0.607 0.903	17226.26 76.63	98267 678	100673 694	21917.62 97.49	125028 862	125833 868	1.27	17		16	
2	0.472 12.00	0.477 12.10	0.175 113.097	0.607 0.903		17226.26 76.63	98267 678		22044.86 98.06	125754 867		1.28	16.5			
3	0.472 12.00	0.477 12.10	0.175 113.097	0.607 0.903		18491.63 82.25	105485 727		22213.73 98.81	126717 874		1.20	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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TEST RESULT FOR TENSILE STRENGTH OF PLAIN/DEFORMED/RIBBED COLD TWISTED M.S BARS

Job No : 47/2025-2026 (Steel).

Copy No : 03

Name of Client : GE (Air) Tejgaon.

Sample Specimen : Length 600mm , Dia 16mm

Ref.ltr.No : CE Air/197 of 2024-2025/25/E-6 Dt.24 Aug'2025.

Sample Grade : 60

Project Name : Construction of Base HQ.

Frog Mark : RSM B-420 DWR

Dt. of Sample Collection: 25 Aug'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	0.636 16.15	0.312 201.062	1.081 1.609	1.081 1.609	30058.11 133.70	96449 665	90214 622	35797.39 159.23	114865 792	113618 784	1.19	17		17	
2	0.630 16.00	0.636 16.15	0.312 201.062	1.081 1.609		26958.29 119.92	86503 597		35013.19 155.75	112349 775		1.30	16.5			
3	0.630 16.00	0.636 16.15	0.312 201.062	1.081 1.609		27328.42 121.56	87690 605		35415.70 157.54	113641 784		1.30	17			

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.

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	Ult.Str	Grade	Y/strength	Ult.Str	Minimum Elongation in 8"(203.2 mm) GL (%)			
					psi (kg/cm2)	psi (kg/cm2)		Mpa (kg/cm2)	Mpa (kg/cm2)	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 : 47/2025-2026 (Steel).

Copy No : 04

Name of Client : GE (Air) Tejgaon.

Sample Specimen : Length 600mm , Dia 20mm

Ref.ltr.No : CE Air/197 of 2024-2025/25/E-6 Dt.24 Aug'2025.

Sample Grade : 60

Project Name : Construction of Base HQ.

Frog Mark : RSM B-420 DWR

Dt. of Sample Collection: 25 Aug'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	0.792 20.12	0.4869 314.1593	1.677 2.495	1.677 2.495	39861.85 177.31	81861 565	80844 558	50463.68 224.47	103633 715	104657 722	1.27	16.5		18	
2	0.787 20.00	0.792 20.12	0.4869 314.1593	1.677 2.495		39265.02 174.66	80635 556		51217.82 227.83	105181 725		1.30	17.5			
3	0.787 20.00	0.792 20.12	0.4869 314.1593	1.677 2.495		38973.55 173.36	80036 552		51206.25 227.78	105158 725		1.31	18.5			

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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