

Client: Mr. Md. Golam Mowla
QC Manager
Shahriar Steel Mills Limited
Konapara, Jatrabari
Dhaka 1362

Client's Reference: Nil; Date 01/10/2019

Date: 06 October 2019

BRTC Reference: 1101-96810/MME/2019-20; Date 01/10/2019

MME No: 0320(07)/2019-20

Sample Condition: Not Sealed

TEST OF DEFORMED M.S. REBAR (ASTM A615M-16)

Frog Mark/ Description	Sample No.	Bar Designation / Nominal Dia	Actual Dia	Unit Weight	Average Unit Weight	Yield Load	Yield Strength	Average Yield Strength	Tensile Load	Tensile Strength	Average Tensile Strength	Elongation (GL = 200 mm)		Bend Test (Separate Samples)
												TS/YS Ratio	Average Elongation	
SSRM RB 400 10	1	10	10.02	0.619		33.86	431	432 (62500)	50.96	649	650 (94000)	15	15	Satisfactory
	2	10	10.04	0.622	33.37	425	51.02		649	15		Satisfactory		
	3	10	10.04	0.623	34.60	440	51.27		652	16		Satisfactory		

* TS/YS ratio is not required as per ASTM A615M.
* Strength values are calculated based on nominal area.



m29wbkuptw

Weight Requirements for Steel Rebar (As Per ASTM A615/A615M-16 Table A1.1)

Bar Designation	Number	Nominal Dia., mm	10	12	16	20	25	28	32	36	40	50	60
			0.617	0.888	1.578	2.466	3.853	4.834	6.313	7.990	9.865	15.410	22.200

* Measured unit weight shall not be less than 94% of the nominal weight.

Minimum Tensile Requirements for Steel Rebar (As Per ASTM A615/A615M-16 Table A1.2)

Grade	ASTM A615		ASTM A615M		Minimum Elongation in 8 in. (200 mm) Gauge Length, per cent											
	Yield Strength	Tensile Strength	Yield Strength	Tensile Strength	Bar Designation Number											
	psi (MPa)	psi (MPa)	MPa (psi)	MPa (psi)												
40	40,000 (280)	60,000 (420)	280 (40,000)	420 (60,000)	10	12	16	20	25	28	32	36	40	50	60	
60	60,000 (420)	90,000 (620)	420 (60,000)	620 (90,000)	11	12	12	12	12	12	12	12	12	12	12	
75	75,000 (520)	100,000 (690)	520 (75,000)	690 (100,000)	9	9	9	9	9	9	9	9	9	9	9	
80	80,000 (550)	105,000 (725)	550 (80,000)	725 (105,000)	7	7	7	7	7	7	7	7	7	7	7	
100	100,000 (690)	115,000 (790)	690 (100,000)	790 (115,000)	7	7	7	7	7	7	7	7	7	7	7	

Ahmed Sharif
Dr. Ahmed Sharif
Professor and Head
6.10.19

Please note: The client supplied the sample(s) and the result given herewith corresponds to the sample(s) tested only. Department of MME, BUET takes no responsibility regarding the misidentification, if any, of the sample(s).