



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

Client's Reference: Nil; Date 01/10/2019
 BRTC Reference: 1101-96810/MME/2019-20; Date 01/10/2019
 Sample Condition: Not Sealed

Date: 06 October 2019
 MME No: 0320(10)/2019-20

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

Frog Mark/ Description	Sample No.	Bar	Actual	Unit	Average	Yield	Yield	Average	Tensile	Tensile	Average	TS/YS Ratio	Elongation	Average	Bend Test (Separate Samples) Remark
		Designation / Nominal Dia	Dia	Weight	Unit Weight	Load	Strength	Yield Strength	Yield Strength	Load	Strength		Tensile Strength	(GL = 200 mm)	
SSRM RB 400 20	1	20	20.11	2.494	2.491	137.00	436	442 (64000)	221.99	706	704 (102000)	1.62	18	17	Satisfactory
	2	20	20.07	2.483		138.96	442		221.01	703		1.59	16		Satisfactory
	3	20	20.12	2.497		140.44	447		220.64	702		1.57	18		Satisfactory

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

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
Nominal Weight, kg/m	0.617	0.888	1.578	2.466	3.853	4.834	6.313	7.990	9.866	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	Yield Strength	Tensile Strength	Grade	Yield Strength	Tensile Strength	Minimum Elongation in 8 in. (200 mm) Gauge Length, per cent											
						ASTM A615						ASTM A615M					
40	40,000 (280)	60,000 (420)	280	280 (40,000)	420 (60,000)	10	12	12	20	25	28	32	36	40	50	60	
60	60,000 (420)	90,000 (620)	420	420 (60,000)	620 (90,000)	11	12	12	20	25	28	32	36	40	50	60	
75	75,000 (520)	100,000 (690)	520	520 (75,000)	690 (100,000)	9	9	9	7	7	7	7	7	7	6	6	
80	80,000 (550)	105,000 (725)	550	550 (80,000)	725 (105,000)	7	7	7	7	7	7	7	7	7	6	6	
100	100,000 (690)	115,000 (790)	690	690 (100,000)	790 (115,000)	7	7	7	7	7	7	7	7	7	6	6	

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).

Dr. Ahmed Sharif
 Professor and Head
 16.10.19



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