

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

Client's Reference: Nil; Date 04/03/2020
 BRTC Reference: 1102-09488/MME/2019-20; Date 04/03/2020
 Sample Condition: Not Sealed

Date: 09 March 2020
 MME No: 0956(04)/2019-20

TEST OF DEFORMED M.S. REBAR

Frog Mark/ Description	Sample No.	Bar	Actual Dia	Unit Weight	Average Unit Weight	Yield Load	Yield Strength	Average Yield Strength	Tensile Load	Tensile Strength	Average Tensile Strength	TS/YS Ratio	Elongation (G.L. 200 mm)	Average Elongation	Bend Test (Separate Samples)
		Designation / Nominal Dia													
SSRM RB 400 20	1	20	19.91	2.443	2.443	149.09	475	470	207.55	661	652	1.39	14	14	Satisfactory
	2	20	19.91	2.443		147.81	470	(68000)	204.04	649	(94500)	1.38	14		Satisfactory
	3	20	19.90	2.442		146.45	466		203.35	647		1.39	15		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	0.898	1.578	2.466	3.853	4.834	6.313	7.990	9.885	15.410	22.200

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

Grade	Yield Strength		Grade	Tensile Strength		Minimum Elongation in 8 in. (200 mm) Gauge Length, per cent
	psi (MPa)	psi (MPa)		MPa (psi)	MPa (psi)	
40	40,000 (280)	60,000 (420)	280	280 (40,000)	420 (60,000)	10
60	60,000 (420)	90,000 (620)	420	420 (60,000)	620 (90,000)	9
75	75,000 (520)	100,000 (690)	520	520 (75,000)	690 (100,000)	7
80	80,000 (550)	105,000 (725)	550	550 (80,000)	725 (105,000)	7
100	100,000 (690)	115,000 (790)	690	690 (100,000)	790 (115,000)	7

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

Fahmida
 09.03.2020

Dr. Fahmida Gulshan
 Professor and Head



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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).

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