

Muhammad Riaz  
Resident Engineer, Rumanza Golf Course, DHA, Multan

**Test Performed By:** Dr. /Engr. S. Asad Ali Gillani

**Client Reference:** ACES-DHAM-GCRR-179

**Dated:** 16-09-2020

**SOM Lab Ref:** CED/SOM/2964 (Page-1/1)

**Dated:** 17-09-2020

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** Deformed Bar(SJ STEEL)

**Gauge Length:** 200 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	0.848	12	11.73	113	108	53.70	67.50	475	498	597	625	25.0	200	12.5	
2	0.861	12	11.82	113	110	60.50	73.20	535	552	647	668	30.0	200	15.0	
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**BEND TEST:**

12mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

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Altaf Hussain

**Test Performed By:**

Dr. /Engr.

S. Asad Ali Gillani

M. E. A.S. Enterprises, Consultant: AA Associates(Project: Style Textile Managa / Style Textile Rewind)

**Client Reference:** USD/ASE/24

**Dated:** 17-09-2020

**SOM Lab Ref:** CED/SOM/2965(Page-1/1)

**Dated:** 17-09-2020

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** M S Deformed Bar(AFCO Steel)

**Gauge Length:** 200 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.744	25	24.64	491	477	234.00	322.70	477	491	657	677	30.0	200	15.0	
2	3.742	25	24.64	491	477	234.00	323.50	477	491	659	679	30.0	200	15.0	
3	2.458	20	19.97	314	313	148.00	196.50	471	473	625	628	32.5	200	16.3	
4	2.472	20	20.02	314	315	154.00	202.00	490	490	643	642	30.0	200	15.0	
5	1.578	16	16.00	201	201	108.50	137.00	540	540	681	682	30.0	200	15.0	
6	1.581	16	16.02	201	201	108.00	137.00	537	537	681	681	32.5	200	16.3	
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**BEND TEST:**

25mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
16mm	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

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	kg/m	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
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6	1.581	16	16.02	201	201	108.00	137.00	537	537	681	681	32.5	200	16.3	
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