

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

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

**Client Reference:** Nil  
**SOM Lab Ref:** CED/SOM/5194(Page-1/5)  
**Test:** Tension Test & Bend Test  
**Sample Type:** M S Deformed Bar (Naveena Steel ASE)

**Dated:** 11-10-2021  
**Dated:** 25-10-2021  
**Test Specification:** ASTM-A 615  
**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	0.890	12	12.00	113	113	55.70	69.50	492	493	615	616	25.0	200	12.5	
2	0.886	12	11.99	113	113	56.70	71.20	501	503	630	632	25.0	200	12.5	
3	0.891	12	12.02	113	113	56.50	70.00	500	498	619	617	27.5	200	13.8	
4	0.888	12	12.00	113	113	57.50	71.50	508	509	632	633	25.0	200	12.5	
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**BEND TEST:**

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

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

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

**Client Reference:** Nil  
**SOM Lab Ref:** CED/SOM/5194(Page-2/5)  
**Test:** Tension Test & Bend Test  
**Sample Type:** M S Deformed Bar (FF Steel ASE)

**Dated:** 11-10-2021  
**Dated:** 25-10-2021  
**Test Specification:** ASTM-A 615  
**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	2.394	20	19.71	314	305	147.20	198.20	469	483	631	650	37.5	200	18.8	
2	2.453	20	19.95	314	313	147.20	200.70	469	471	639	643	35.0	200	17.5	
3	2.376	20	19.63	314	303	160.20	209.70	510	530	667	693	32.5	200	16.3	
4	2.427	20	19.84	314	309	157.20	205.70	500	509	655	666	35.0	200	17.5	
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**BEND TEST:**

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

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

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

**Client Reference:** Nil  
**SOM Lab Ref:** CED/SOM/5194(Page-3(a)/5)  
**Test:** Tension Test & Bend Test  
**Sample Type:** M S Deformed Bar (Mughal Steel ASE)

**Dated:** 11-10-2021  
**Dated:** 25-10-2021  
**Test Specification:** ASTM-A 615  
**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	3.931	25	25.26	491	501	267.20	362.20	544	534	738	723	35.0	200	17.5	
2	3.923	25	25.23	491	500	268.20	362.50	546	537	738	726	37.5	200	18.8	
3	3.946	25	25.30	491	503	263.50	358.20	537	525	730	713	35.0	200	17.5	
4	3.998	25	25.47	491	509	270.50	340.20	551	532	693	668	32.5	200	16.3	
5	2.512	20	20.18	314	320	159.50	208.00	508	499	662	651	32.5	200	16.3	
6	2.483	20	20.07	314	316	160.20	207.00	510	507	659	655	35.0	200	17.5	
7	2.479	20	20.05	314	316	161.20	207.50	513	511	660	658	32.5	200	16.3	
8	2.496	20	20.12	314	318	159.70	209.00	508	503	665	658	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 Twelve Samples Received and Tested
25mm	Sample bend through 180 degrees Satisfactorily without any crack	
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
20mm	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)

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

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

**Client Reference:** Nil  
**SOM Lab Ref:** CED/SOM/5194(Page-3(b)/5)  
**Test:** Tension Test & Bend Test  
**Sample Type:** M S Deformed Bar (Mughal Steel ASE)

**Dated:** 11-10-2021  
**Dated:** 25-10-2021  
**Test Specification:** ASTM-A 615  
**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	1.556	16	15.88	201	198	101.50	129.00	505	513	642	652	32.5	200	16.3	
2	1.555	16	15.88	201	198	101.00	128.20	502	510	638	648	30.0	200	15.0	
3	1.563	16	15.92	201	199	100.50	127.70	500	505	635	642	32.5	200	16.3	
4	1.546	16	15.83	201	197	100.20	127.20	498	509	633	647	32.5	200	16.3	
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**BEND TEST:**

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

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Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

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

Client Reference: Nil  
SOM Lab Ref: CED/SOM/5194(Page-4/5)

Dated: 11-10-2021  
Dated: 25-10-2021

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: M S Deformed Bar (Agha Steel) Kraftcon

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	1.571	16	15.96	201	200	104.00	134.20	517	520	667	671	35.0	200	17.5	
2	1.600	16	16.11	201	204	96.00	131.70	477	471	655	646	30.0	200	15.0	
3	1.571	16	15.97	201	200	102.50	133.50	510	513	664	667	32.5	200	16.3	
4	1.557	16	15.89	201	198	103.20	134.20	513	521	667	677	37.5	200	18.8	
5	0.877	12	11.93	113	112	54.20	72.50	479	485	641	649	32.5	200	16.3	
6	0.871	12	11.89	113	111	54.20	73.50	479	489	650	663	32.5	200	16.3	
7	0.864	12	11.84	113	110	54.00	73.50	477	491	650	668	35.0	200	17.5	
8	0.864	12	11.84	113	110	53.70	73.00	475	489	645	664	32.5	200	16.3	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

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

Client Reference: Nil  
SOM Lab Ref: CED/SOM/5194(Page-5/5)

Dated: 11-10-2021

Dated: 25-10-2021

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: M S Deformed Bar (Naveena Steel)  
Kraftcon

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	3.862	25	25.03	491	492	320.00	399.70	652	651	814	813	32.5	200	16.3	
2	3.897	25	25.14	491	496	314.20	395.50	640	633	806	797	27.5	200	13.8	
3	2.460	20	19.98	314	313	179.70	222.70	572	574	709	711	32.5	200	16.3	
4	2.473	20	20.03	314	315	185.70	225.70	591	590	718	717	30.0	200	15.0	
5	1.598	16	16.10	201	204	107.50	136.70	535	529	680	672	32.5	200	16.3	
6	1.590	16	16.06	201	203	107.70	136.50	536	532	679	675	30.0	200	15.0	
7	0.869	12	11.87	113	111	63.20	79.00	559	571	699	714	27.5	200	13.8	
8	0.887	12	11.99	113	113	64.00	80.70	566	567	714	715	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 Twelve Samples Received and Tested
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
16mm	Sample bend through 180 degrees Satisfactorily without any crack	
12mm	Sample bend through 180 degrees Satisfactorily without any crack	

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Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

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

**Client Reference:** Nil  
**SOM Lab Ref:** CED/SOM/5195(Page-1/3)

**Dated:** 13-10-2021

**Dated:** 25-10-2021

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** M S Deformed Bar (Agha Steel) Kraftcon

**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	1.603	16	16.12	201	204	95.50	128.00	475	469	637	628	37.5	200	18.8	
2	1.606	16	16.14	201	205	95.20	131.20	473	466	653	642	35.0	200	17.5	
3	1.597	16	16.09	201	203	94.70	131.50	471	466	654	647	35.0	200	17.5	
4	1.602	16	16.12	201	204	95.50	130.50	475	468	649	640	37.5	200	18.8	
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**BEND TEST:**

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

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil  
SOM Lab Ref: CED/SOM/5195(Page-2/3)

Dated: 13-10-2021

Dated: 25-10-2021

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: M S Deformed Bar (Naveena Steel)  
Kraftcon

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	3.774	25	24.75	491	481	216.00	315.20	440	450	642	656	32.5	200	16.3	
2	3.830	25	24.92	491	488	213.20	310.20	434	437	632	636	30.0	200	15.0	
3	1.557	16	15.89	201	198	107.70	137.20	536	544	682	692	25.0	200	12.5	
4	1.613	16	16.17	201	205	107.20	138.20	533	522	687	673	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 Six Samples Received and Tested
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)

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

**Test Performed By:** Dr. /Engr. Wasim Abbas

**Client Reference:** Nil  
**SOM Lab Ref:** CED/SOM/5195(Page-3(a)/3)  
**Test:** Tension Test & Bend Test  
**Sample Type:** M S Deformed Bar (Mughal Steel)  
Kraftcon

**Dated:** 13-10-2021  
**Dated:** 25-10-2021  
**Test Specification:** ASTM-A 615  
**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	3.818	25	24.88	491	486	271.70	345.20	554	560	703	711	35.0	200	17.5	
2	3.817	25	24.88	491	486	244.20	318.00	497	503	648	654	30.0	200	15.0	
3	3.838	25	24.95	491	489	272.00	345.00	554	557	703	706	32.5	200	16.3	
4	3.818	25	24.88	491	486	243.70	315.70	496	502	643	650	32.5	200	16.3	
5	2.628	20	20.65	314	335	172.70	213.70	550	516	680	639	37.5	200	18.8	
6	2.539	20	20.30	314	323	175.20	227.00	558	542	723	702	32.5	200	16.3	
7	2.462	20	19.99	314	314	172.50	216.50	549	550	689	691	30.0	200	15.0	
8	2.474	20	20.03	314	315	176.70	223.00	562	561	710	708	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 Twelve Samples Received and Tested
25mm	Sample bend through 180 degrees Satisfactorily without any crack	
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
20mm	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)

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

**Test Performed By:** Dr. /Engr. Wasim Abbas

**Client Reference:** Nil  
**SOM Lab Ref:** CED/SOM/5195(Page-3(b)/3)

**Dated:** 13-10-2021

**Dated:** 25-10-2021

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** M S Deformed Bar (Mughal Steel)  
Kraftcon

**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	0.904	12	12.10	113	115	62.20	75.20	550	541	665	654	25.0	200	12.5	
2	0.909	12	12.14	113	116	62.70	77.50	554	542	685	670	27.5	200	13.8	
3	0.906	12	12.12	113	115	60.70	76.20	537	527	674	661	27.5	200	13.8	
4	0.912	12	12.16	113	116	62.50	78.00	553	539	690	672	27.5	200	13.8	
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**BEND TEST:**

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

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil  
SOM Lab Ref: CED/SOM/5196(Page-1(a)/4)

Dated: 20-10-2021  
Dated: 25-10-2021

Test: Tension Test & Bend Test  
Sample Type: M S Deformed Bar (Naveena Steel)  
Kraftcon

Test Specification: ASTM-A 615  
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	3.848	25	24.98	491	490	247.20	318.20	504	505	648	650	40.0	200	20.0	
2	3.871	25	25.06	491	493	251.20	322.20	512	510	656	654	40.0	200	20.0	
3	3.883	25	25.10	491	495	254.50	324.50	518	515	661	657	37.5	200	18.8	
4	3.874	25	25.07	491	493	248.00	318.20	505	503	648	645	40.0	200	20.0	
5	2.420	20	19.81	314	308	185.20	223.50	590	601	711	725	25.0	200	12.5	
6	2.483	20	20.07	314	316	157.70	200.00	502	499	637	633	25.0	200	12.5	
7	2.448	20	19.93	314	312	164.70	209.50	524	529	667	672	35.0	200	17.5	
8	2.431	20	19.86	314	310	156.70	201.00	499	506	640	650	37.5	200	18.8	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil  
SOM Lab Ref: CED/SOM/5196(Page-1(b)/4)

Dated: 20-10-2021

Dated: 25-10-2021

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: M S Deformed Bar (Naveena Steel)  
Kraftcon

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	1.582	16	16.04	201	202	113.50	136.00	565	562	676	674	27.5	200	13.8	
2	1.580	16	16.01	201	201	114.50	138.00	569	569	686	686	30.0	200	15.0	
3	1.576	16	15.99	201	201	113.20	137.20	563	564	682	684	30.0	200	15.0	
4	1.585	16	16.03	201	202	116.00	139.20	577	575	692	690	30.0	200	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

**Test Performed By:** Dr. /Engr. Wasim Abbas

**Client Reference:** Nil  
**SOM Lab Ref:** CED/SOM/5196(Page-2/4)  
**Test:** Tension Test & Bend Test  
**Sample Type:** M S Deformed Bar (Mughal Steel) ASE

**Dated:** 20-10-2021  
**Dated:** 25-10-2021  
**Test Specification:** ASTM-A 615  
**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	3.824	25	24.90	491	487	215.20	330.50	438	442	673	679	35.0	200	17.5	
2	3.852	25	25.00	491	491	224.20	328.70	457	457	670	670	27.5	200	13.8	
3	3.834	25	24.94	491	488	225.70	328.70	460	463	670	674	25.0	200	12.5	
4	3.895	25	25.13	491	496	221.70	329.50	452	447	671	665	27.5	200	13.8	
5	1.633	16	16.27	201	208	111.70	137.70	556	538	685	663	35.0	200	17.5	
6	1.540	16	15.81	201	196	109.50	135.50	545	559	674	691	30.0	200	15.0	
7	1.564	16	15.93	201	199	109.00	135.50	542	548	674	681	25.0	200	12.5	
8	1.561	16	15.91	201	199	109.20	135.50	543	550	674	682	27.5	200	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

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

Client Reference: Nil  
SOM Lab Ref: CED/SOM/5196(Page-3/4)

Dated: 20-10-2021

Dated: 25-10-2021

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: M S Deformed Bar (FF Steel) ASE

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	2.362	20	19.58	314	301	154.70	201.50	492	514	641	670	35.0	200	17.5	
2	2.348	20	19.52	314	299	146.70	198.00	467	491	630	662	32.5	200	16.3	
3	2.367	20	19.60	314	302	151.70	199.70	483	504	636	663	32.5	200	16.3	
4	2.373	20	19.62	314	302	152.70	200.20	486	506	637	663	30.0	200	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil  
SOM Lab Ref: CED/SOM/5196(Page-4/4)  
Test: Tension Test & Bend Test  
Sample Type: M S Deformed Bar (Agha Steel) Kraftcon

Dated: 20-10-2021  
Dated: 25-10-2021  
Test Specification: ASTM-A 615  
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	3.851	25	25.00	491	491	219.70	329.50	448	448	671	672	37.5	200	18.8	
2	3.894	25	25.13	491	496	223.50	325.50	455	451	663	657	35.0	200	17.5	
3	3.850	25	24.99	491	490	213.50	314.00	435	436	640	641	35.0	200	17.5	
4	3.976	25	25.40	491	507	270.50	361.20	551	535	736	714	35.0	200	17.5	
5	1.581	16	16.01	201	201	118.00	141.20	587	586	702	702	27.5	200	13.8	
6	1.588	16	16.05	201	202	106.70	136.20	531	528	677	674	30.0	200	15.0	
7	1.579	16	16.01	201	201	116.20	139.50	578	578	694	694	27.5	200	13.8	
8	1.543	16	15.82	201	197	107.20	136.50	533	546	679	695	32.5	200	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil  
SOM Lab Ref: CED/SOM/5197(Page-1/2)  
Test: Tension Test & Bend Test  
Sample Type: M S Deformed Bar (Agha Steel) Kraftcon

Dated: 21-10-2021  
Dated: 25-10-2021  
Test Specification: ASTM-A 615  
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	3.860	25	25.03	491	492	268.70	340.70	547	547	694	693	40.0	200	20.0	
2	3.866	25	25.04	491	492	273.20	344.20	557	555	701	699	37.5	200	18.8	
3	3.864	25	25.03	491	492	249.20	322.70	508	507	657	656	37.5	200	18.8	
4	3.883	25	25.10	491	495	270.50	343.50	551	547	700	695	35.0	200	17.5	
5	1.594	16	16.08	201	203	107.70	140.20	536	531	697	691	32.5	200	16.3	
6	1.566	16	15.94	201	200	106.70	138.20	531	535	687	693	30.0	200	15.0	
7	1.561	16	15.91	201	199	108.00	139.70	537	544	695	703	30.0	200	15.0	
8	1.567	16	15.94	201	200	105.70	138.00	526	530	686	692	32.5	200	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

Riasat Ali  
Style Textile (Pvt.) Ltd. Lahore

**Test Performed By:** Dr. /Engr. Wasim Abbas

**Client Reference:** Nil  
**SOM Lab Ref:** CED/SOM/5197(Page-2/2)

**Dated:** 21-10-2021

**Dated:** 25-10-2021

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** M S Deformed Bar (Agha Steel) Kraftcon

**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	0.865	12	11.84	113	110	54.20	70.00	479	493	619	637	37.5	200	18.8	
2	0.905	12	12.12	113	115	56.70	73.20	501	492	647	635	32.5	200	16.3	
3	0.850	12	11.74	113	108	53.20	66.70	470	492	590	617	30.0	200	15.0	
4	0.917	12	12.19	113	117	56.20	73.20	497	482	647	627	32.5	200	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

Muhammad Shabbir  
Construction Manager, Opal Deever Developers Pvt. Ltd. Lahore

Test Performed By: Dr. /Engr. Irfan ul Hassan

Client Reference: ZD/ZO/L/037

SOM Lab

Ref: 5189(Page-1/1)

Dated: 25-10-2021

Dated: 25-10-2021

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar

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)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.652	4	0.494	0.20	0.192	6.09	8.74	67110	69910	96340	100350	1.30	8.0	16.3	
2	0.672	4	0.501	0.20	0.197	6.47	8.63	71380	72470	95210	96660	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 4	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)

Mr. Umar Safdar  
Usman Industries, Lahore

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil

SOM Lab

Ref: 5198(Page-1/1)

Dated: 25-10-2021

Dated: 25-10-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar

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)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.670	8	1.000	0.79	0.785	25.10	36.34	70070	70510	101450	102100	1.20	8.0	15.0	
2	2.657	8	0.997	0.79	0.781	24.97	36.24	69720	70530	101170	102330	1.50	8.0	18.8	
3	1.667	6	0.790	0.44	0.490	14.07	20.85	70510	63320	104490	93830	1.20	8.0	15.0	
4	1.673	6	0.791	0.44	0.492	14.34	21.12	71890	64290	105870	94680	1.30	8.0	16.3	
5	0.668	4	0.500	0.20	0.196	5.88	8.07	64860	66190	89030	90850	1.20	8.0	15.0	
6	0.655	4	0.494	0.20	0.192	5.98	8.86	65990	68740	97680	101750	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	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)

Global Dairy Tech  
Main Boulevard Bahria Town, Lahore

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil

SOM Lab

Ref: 5199(Page-1/1)

Dated: 25-10-2021

Dated: 25-10-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar

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)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.665	4	0.498	0.20	0.195	7.14	8.94	78690	80710	98580	101110	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Two 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)

Muhammad Shahbaz  
Imperium Hospitality (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: IHPL/Steel/0136  
Dated: 25-10-2021  
Test: Tension Test & Bend Test  
Gauge Length: 8 inch

SOM Lab  
Ref: 5200(Page-1/1)  
Dated: 25-10-2021  
Test Specification: ASTM-A-615  
Sample Type: Deformed Bar

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)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.672	4	0.501	0.20	0.197	7.39	9.81	81500	82740	108140	109780	1.10	8.0	13.8	
2	0.661	4	0.497	0.20	0.194	7.16	9.43	78910	81350	103980	107190	1.20	8.0	15.0	
3	0.664	4	0.498	0.20	0.195	6.70	8.02	73850	75750	88470	90740	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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Witnessed By: Rafi Ullah (IHPL) & Ali Hasnain Khan, Jr. Planing Engineer, Kingcrete Builders.

**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Five Samples Received and Tested
# 4	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)

Sub Divisional Officer  
Highway Sub Division, DG Khan

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: 2371

SOM Lab

Ref: 5202(Page-1/1)

Dated: 27-08-2021

Dated: 25-10-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar

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)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.660	8	0.998	0.79	0.782	23.34	34.83	65170	65840	97240	98240	1.50	8.0	18.8	
2	2.661	8	0.998	0.79	0.782	23.39	34.86	65310	65980	97330	98320	1.60	8.0	20.0	
3	1.516	6	0.754	0.44	0.446	13.93	20.15	69850	68910	101020	99660	1.70	8.0	21.3	
4	1.522	6	0.754	0.44	0.447	13.93	20.18	69850	68760	101170	99580	1.60	8.0	20.0	
5	0.666	4	0.500	0.20	0.196	6.03	8.89	66550	67910	98020	100020	1.40	8.0	17.5	
6	0.662	4	0.498	0.20	0.195	6.07	8.89	66890	68600	98020	100530	1.40	8.0	17.5	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	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)

Naeem Bhatti

Test Performed By:

Dr. /Engr.

Wasim Abbas

Project Manager, CM Engineering Pvt. Ltd., Enfra Share Rollout Site ID: USKSK =08, USKSK10, S-7442, S-7438, S-7441, S-7443, S-7449, S-7448, S-7457

Client Reference: CME/Steel/EnfraShareRollout/1002

SOM Lab Ref: 5201(Page-1/1)

Dated: 24-10-2021

Dated: 25-10-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A 615

Guage Length: 200 mm

Sample Type:

M S Deformed bar

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	2.210	20	18.95	314	282	123.00	192.00	392	437	611	681	37.5	200	18.8	
2	2.230	20	19.02	314	284	151.00	187.50	481	532	597	661	25.0	200	12.5	
3	1.527	16	15.74	201	195	120.20	142.20	598	618	707	731	25.0	200	12.5	
4	1.537	16	15.79	201	196	71.70	121.70	357	367	605	622	32.5	200	16.3	
5	0.980	12	12.61	113	125	69.70	85.00	617	559	752	681	27.5	200	13.8	
6	0.958	12	12.47	113	122	68.90	83.20	610	565	736	682	30.0	200	15.0	
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**BEND TEST:**

20mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
16mm	Sample bend through 180 degrees Satisfactorily without any crack	
12mm	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)