Altaf Hussain **Test Performed By:** Dr. /Engr. Nauman Khurram

M.E., A. S. Enterpriises (ASE) (Project: STYLE TEXTILE MILL)

Client Reference: USD/ASE/16 **Dated:** 25-08-2019

SOM Lab Ref: CED/SOM/1290(Page-1/1) **Dated:** 26-08-2019

Test: Tension Test & Bend Test **Test Specification:** ASTM-F-1554

Sample Type: 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^2	mm^2	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.660	25	24.36	491	466	226.70	301.00	462	487	613	646	35.0	200	17.5	
2	3.623	25	24.24	491	461	229.50	322.70	468	498	657	700	35.0	200	17.5	
3	2.057	20	18.27	314	262	125.50	166.70	399	480	531	637	40.0	200	20.0	
4	2.051	20	18.24	314	261	129.20	170.00	411	495	541	651	40.0	200	20.0	
5	1.568	16	15.95	201	200	117.00	143.50	582	586	714	719	25.0	200	12.5	
6	1.578	16	16.00	201	201	117.20	143.70	583	583	715	715	27.5	200	13.8	
7	0.864	12	11.84	113	110	47.20	65.20	417	429	576	593	37.5	200	18.8	
8	0.859	12	11.80	113	109	46.50	64.50	411	426	570	590	40.0	200	20.0	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack
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

Note:-

Only Twelve Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Sub Divisional Officer
Highway Sub Division, T. T. Singh

Test Performed By: **Dr. /Engr.** **Nauman Khurram**

Client Reference: **82-**
Dated: **10-08-2019**

SOM Lab Ref: **1286(Page-1/1)**
Dated: **26-08-2019**

Test: **Tension Test & Bend Test**
Test Specification: **ASTM-A-615 Deformed**
Gauge Length: **8 inch**
Sample Type: **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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.678	8	1.001	0.79	0.787	26.45	33.18	73850	74130	92630	92990	1.50	8.0	18.8	
2	2.687	8	1.003	0.79	0.790	28.34	35.09	79120	79120	97950	97950	1.30	8.0	16.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Tahir Mehmood
Chief Engineer (Infra) New Lahore City

Test Performed By: **Dr. /Engr.** **Nauman Khurram**

Client Reference: **NLC/CE/Infra/005**
Dated: **23-08-2019**

SOM Lab Ref: **1287 (Page-1/1)**
Dated: **26-08-2019**

Test: **Tension Test & Bend test** **Test Specification:** **ASTM-A-615**
Guage 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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.664	4	0.498	0.20	0.195	5.93	8.89	65420	67100	98020	100530	1.40	8.0	17.5	
2	0.662	4	0.498	0.20	0.195	5.78	8.63	63740	65370	95210	97650	1.40	8.0	17.5	
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Witnessed By: **M Javid Iqbal**

BEND TEST:

# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Khalid Latif Sheikh
PMCS Manager, MAK Associates, Lahore

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

Client Reference: **MAK/PAF/SV-GL/TB-028**
Dated: **20-08-2019**

SOM Lab Ref: **1288(Page-1/1)**
Dated: **26-08-2019**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A-615**
Guage 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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.586	6	0.770	0.44	0.466	13.93	20.80	69850	65950	104230	98420	1.30	8.0	16.3	
2	1.575	6	0.768	0.44	0.463	13.97	20.92	70000	66530	104850	99640	1.20	8.0	15.0	
3	0.668	4	0.500	0.20	0.196	6.57	9.70	72510	73990	107010	109200	1.00	8.0	12.5	
4	0.677	4	0.503	0.20	0.199	6.42	9.63	70820	71180	106230	106760	1.00	8.0	12.5	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Furqan Ali Malik **Test Performed By:** **Dr. /Engr.** **Nauman Khurram**

Chief Resident Engineer, Package -I, NESPAK, (Pvt) Ltd. Lahore

Client Reference: **4042/13/FAM/Steel-092** **SOM Lab Ref:** **1291,1292(Page-1/1)**

Dated: **24-08-2019** **Dated:** **26-08-2019**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A-615 Deformed Bar (FF Steel)**

Gauge Length: **8 inch** **Sample Type:**

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.665	4	0.498	0.20	0.195	6.49	8.51	71610	73440	93860	96270	1.30	8.0	16.3	
2	0.664	4	0.498	0.20	0.195	6.47	8.51	71380	73210	93860	96270	1.30	8.0	16.3	
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BEND TEST:

# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Altaf Hussain **Test Performed By:** Dr. /Engr. Nauman Khurram

M.E., A. S. Enterpriises (ASE) (Project: STYLE TEXTILE MILL)

Client Reference: USD/ASE/16 **Dated:** 25-08-2019

SOM Lab Ref: CED/SOM/1290(Page-1/1) **Dated:** 26-08-2019

Test: Tension Test & Bend Test **Test Specification:** ASTM-F-1554

Sample Type: 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^2	mm^2	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.660	25	24.36	491	466	226.70	301.00	462	487	613	646	35.0	200	17.5	
2	3.623	25	24.24	491	461	229.50	322.70	468	498	657	700	35.0	200	17.5	
3	2.057	20	18.27	314	262	125.50	166.70	399	480	531	637	40.0	200	20.0	
4	2.051	20	18.24	314	261	129.20	170.00	411	495	541	651	40.0	200	20.0	
5	1.568	16	15.95	201	200	117.00	143.50	582	586	714	719	25.0	200	12.5	
6	1.578	16	16.00	201	201	117.20	143.70	583	583	715	715	27.5	200	13.8	
7	0.864	12	11.84	113	110	47.20	65.20	417	429	576	593	37.5	200	18.8	
8	0.859	12	11.80	113	109	46.50	64.50	411	426	570	590	40.0	200	20.0	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack
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

Note:-

Only Twelve Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Faisal Mubarik Shabbir Khan(Retd.) **Test Performed By:** **Dr. /Engr. Nauman Khurram**

TBt, TI (M), Lieutenant Colonel, Additional Director Development, DHA Phaes-XI (Rehbar) Lahore

Client Reference: **700/3/Girls School/Ph-XI/Projs/2539** **SOM Lab Ref:** **1294(Page-1/1)**

Dated: **26-08-2019** **Dated:** **26-08-2019**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A-615**

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar (Ittefaq Steel)**

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.481	6	0.744	0.44	0.435	13.61	20.49	68210	69000	102700	103880	1.30	8.0	16.3	
2	1.486	6	0.746	0.44	0.437	13.73	20.54	68830	69300	102960	103660	1.40	8.0	17.5	
3	0.674	4	0.502	0.20	0.198	6.47	9.81	71380	72100	108140	109230	1.10	8.0	13.8	
4	0.670	4	0.501	0.20	0.197	6.39	9.73	70480	71560	107350	108990	1.20	8.0	15.0	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

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

Senior Site Engineer, One Liberty, Noor Jehan Road, Gulberg III, Lahore

Client Reference: **OL/2019/09/02** **SOM Lab Ref:** **1426 (Page-1/1)**

Dated: **04-09-2019** **Dated:** **19-09-2019**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A-615 Deformed**

Gauge Length: **8 inch** **Sample Type:** **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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.627	8	0.991	0.79	0.772	22.78	35.98	63610	65090	100460	102800	1.40	8.0	17.5	
2	2.587	8	0.984	0.79	0.760	22.70	36.06	63380	65880	100660	104630	1.40	8.0	17.5	
3	0.663	4	0.498	0.20	0.195	5.50	8.48	60700	62260	93530	95920	1.10	8.0	13.8	
4	0.667	4	0.500	0.20	0.196	5.45	8.41	60140	61370	92740	94630	1.10	8.0	13.8	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Javaid Iqbal
Riz Builders Lahore

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

Client Reference: **nil**
Dated: **19-09-2019**

SOM Lab Ref: **1427(Page-1/2)**
Dated: **19-09-2019**

Test: **Tension Test**
Test Specification: **ASTM-A-615 Deformed**

Gauge Length: **8 inch**
Sample Type: **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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.479	6	0.744	0.44	0.435	16.69	20.41	83640	84610	102290	103470	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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Witnessed By: **Imran, AFCO Steel**

BEND TEST:

--	**No Bend test performed**

Note:-

Only One Sample Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Javaid Iqbal
Riz Builders Lahore

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

Client Reference: **nil**
Dated: **19-09-2019**

SOM Lab Ref: **1427(Page-2/2)**
Dated: **19-09-2019**

Test: **Tension Test**

Test Specification: **ASTM-A-615 Deformed**

Gauge Length: **8 inch**

Sample Type: **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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.670	4	0.501	0.20	0.197	5.58	7.75	61490	62430	85430	86730	1.60	8.0	20.0	
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Witnessed By: **Imran, AFCO Steel**

BEND TEST:

--	**No Bend test performed**	**Note:-**
		Only One Sample Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Khalid Bashir
CEO, Ittefaq Building Solutions (Pvt) Ltd. Lahore

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

Client Reference: **IBS/PSR/STO**
Dated: **18-09-2019**

SOM Lab Ref: **1428(Page-1/1)**
Dated: **19-09-2019**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A-615 Deformed**

Gauge Length: **8 inch** **Sample Type:** **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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.663	8	0.998	0.79	0.783	30.68	37.07	85660	86430	103500	104430	1.20	8.0	15.0	
2	2.660	8	0.998	0.79	0.782	30.50	36.70	85150	86020	102450	103500	0.90	8.0	11.3	
3	1.468	6	0.741	0.44	0.431	14.14	18.52	70870	72350	92840	94780	0.90	8.0	11.3	
4	1.483	6	0.745	0.44	0.436	14.75	18.52	73940	74610	92840	93690	0.90	8.0	11.3	
5	1.027	5	0.620	0.31	0.302	10.67	13.27	75930	77940	94420	96930	1.10	8.0	13.8	
6	1.026	5	0.620	0.31	0.302	9.60	12.44	68320	70130	88480	90820	1.10	8.0	13.8	
7	0.671	4	0.501	0.20	0.197	5.93	9.07	65420	66420	100050	101570	1.10	8.0	13.8	
8	0.670	4	0.501	0.20	0.197	6.03	9.04	66550	67560	99710	101230	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack

Note:-
Only Twelve Samples

# 5	Sample bend through 180 degrees Satisfactorily without any crack	**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		

Tasawar Riaz
Director, Multi Line Engineers, Gujrat

Test Performed By: Dr. /Engr. **Nauman Khurram**

SOM Lab
Ref: 1429(Page-1/1)
Dated: 19-09-2019

Client Reference: nil
Dated: 19-09-2019

Test: Tension Test
Test Specification: ASTM-A-615 Deformed
Gauge Length: 8 inch
Sample Type: 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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.479	8	0.963	0.79	0.729	26.76	34.22	74700	80950	95530	103530	1.10	8.0	13.8	
2	2.477	8	0.963	0.79	0.728	27.01	35.65	75420	81840	99520	107990	1.20	8.0	15.0	
3	2.486	8	0.965	0.79	0.731	26.88	34.68	75050	81100	96820	104630	1.10	8.0	13.8	
4	1.474	6	0.743	0.44	0.433	17.48	22.02	87630	89050	110370	112150	1.00	8.0	12.5	
5	1.474	6	0.743	0.44	0.433	17.28	21.87	86610	88010	109600	111370	1.00	8.0	12.5	
6	1.515	6	0.753	0.44	0.445	16.54	21.76	82930	82000	109090	107860	1.20	8.0	15.0	
7	0.731	4	0.523	0.20	0.215	6.01	8.79	66320	61700	96900	90140	1.70	8.0	21.3	
8	0.729	4	0.522	0.20	0.214	5.76	8.28	63510	59360	91280	85310	1.80	8.0	22.5	
9	0.716	4	0.517	0.20	0.210	5.73	8.07	63180	60170	89030	84790	1.70	8.0	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

--	No Bend test performed	**Note:-**

		Only Nine Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Abdullah Khadim
Resident Engineer, DAR Engineering

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

Client Reference: **DB-78/DAR/RE/ME/2019/0204**
Dated: **18-09-2019**

SOM Lab Ref: **1430(Page-1/1)**
Dated: **19-09-2019**

Test: **Tension Test & Bend Test**
Test Specification: **ASTM-A-615 Deformed Bar(Kamran Steel)**

Gauge Length: **8 inch**
Sample Type:

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.648	4	0.492	0.20	0.190	5.96	8.31	65760	69220	91610	96440	1.40	8.0	17.5	P-826
2	0.648	4	0.492	0.20	0.190	5.94	8.31	65540	68990	91610	96440	1.40	8.0	17.5	P-826
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 4	Sample bend through 180 degrees Satisfactorily without any crack	**Note:-**
		Only Three Samples Received and Tested
Note: Please always confirm the results of above report on web www.uet-civil.edu.pk		

Rao Inam Ul Haq **Test Performed By:** **Dr. /Engr.** **Nauman Khurram**

Project Engineer, Stallion Construction (Pvt) Ltd. Lahore

Client Reference: **SCPL/Project/CHASNI/100** **SOM Lab Ref:** **1431(Page-1/1)**

Dated: **18-09-2019** **Dated:** **19-09-2019**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A-615 Deformed**

Gauge Length: **8 inch** **Sample Type:** **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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.623	8	0.991	0.79	0.771	24.23	33.18	67650	69310	92630	94910	1.60	8.0	20.0	
2	2.614	8	0.989	0.79	0.768	24.36	33.05	68020	69970	92260	94900	1.50	8.0	18.8	
3	1.449	6	0.736	0.44	0.426	12.49	18.04	62590	64650	90440	93410	1.30	8.0	16.3	
4	1.436	6	0.733	0.44	0.422	12.41	17.86	62190	64840	89520	93340	1.40	8.0	17.5	
5	0.660	4	0.497	0.20	0.194	6.12	8.48	67450	69530	93530	96420	1.40	8.0	17.5	
6	0.664	4	0.498	0.20	0.195	6.09	8.51	67110	68830	93860	96270	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	**Note:-**
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	**Only Nine Samples Received and Tested**

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Sub Divisional Officer
GC University, Faisalabad

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

Client Reference: **GCUF/EC/1264**
Dated: **20-08-2019**

SOM Lab Ref: **1432 (Page-1/1)**
Dated: **19-09-2019**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A-615 Deformed**

Gauge Length: **8 inch** **Sample Type:** **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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.517	6	0.754	0.44	0.446	19.78	25.48	99130	97790	127740	126020	1.10	8.0	13.8	
2	1.456	6	0.738	0.44	0.428	14.24	19.37	71380	73380	97080	99800	1.00	8.0	12.5	
3	1.015	5	0.616	0.31	0.298	11.01	14.42	78330	81480	102620	106750	1.00	8.0	12.5	
4	1.009	5	0.615	0.31	0.297	10.60	14.04	75420	78730	99860	104230	1.00	8.0	12.5	
5	0.679	4	0.505	0.20	0.200	7.03	8.77	77560	77560	96670	96670	1.00	8.0	12.5	
6	0.663	4	0.498	0.20	0.195	6.78	8.38	74750	76670	92400	94770	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:		
# 6	**Sample bend through 180 degrees Satisfactorily without any crack**	**Note:-**
# 5	**Sample bend through 180 degrees Satisfactorily without any crack**	
# 4	**Sample bend through 180 degrees Satisfactorily without any crack**	**Only Nine Samples Received and Tested**
Note: Please always confirm the results of above report on web www.uet-civil.edu.pk		

Test Performed by: Dr. S. Asad Ali Gillani

M/s Madina Hardware
Lahore

Client Reference No. Nil **Dated: 17-09-2019**

SOM Lab Ref: CED/SOM/1417(Page-1/1) **Dated: 18-09-2019**

Test Type: Slippage Test

Sample Type: Anchor - Bolt (20mm Diameter)

Slippage Test Results

Sample No.	Sample Type	Diameter of Bolt (mm)	Ultimate Load (kN)	Remarks
1	Anchor Bolt	20	128.7	Sample Breaks from Thread Portion

Note: Please always confirm the results on web www.uet-civil.edu.pk

Test Performed by: Dr. S. Asad Ali Gillani

Akhunzad Fazal Jameel
and Alstomars

Client Reference No.: nil **Dated: 17-09-2019**

SOM Lab Ref: CED/SOM/1434(Page-1/1) **Dated: 19-09-2019**

Test: Tensile, Elongation at Break, Tear Strength, Hardness Test & Comp Set Test

Sample Type: Rubber Pad (450mm x 450mm x 105mm)

TENSILE STRENGTH AND ELONGATION TEST. (AS PER ASTM-D-412)

S. No	Sample Size(mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Tensile Strength(kg/cm)	Elongation at Break(%)
1	6.0 x 2.4	0.40	27.75	283.0	380

-- TEAR STRENGTH (AS PER ASTM-D-624)

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)	Tear Strength (Kg/cm)
1	13.0 x 3.2	0.21	65.65	65.62

- COMPRESSION SET TEST (AS PER ASTM-D-395)

S. No.	Thickness of Sample	Final Thickness	Compression set

	(mm)	(mm)	(%)
1	3.20	3.16	1.25

- HARDNESS TEST (AS PER ASTM-D-2240)

S. No	Sample Type	Hardness (Shore A)
1	**Bearing Rubber Pad**	**59.83**

Test Performed by: Engr. Bilal Anwar Khokhar

Project Manager,
Baran Dam Consultants, A Joint Venture
of BAK AGES and Electra Consultants
Housr No. 76, Sector D, Banu Town Ship

Client Reference No.: BDC/157/2019 **Dated: 17-09-2019**

SOM Lab Ref: CED/SOM/1435(Page-1/1) **Dated: 19-09-2019**

Test: Tensile, Elongation at Break, Tear Strength, Hardness Test & Comp Set Test

Sample Type: Neoprene Rubber Pad

TENSILE STRENGTH AND ELONGATION TEST. (AS PER ASTM-D-412)

S. No	Sample Size(mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Tensile Strength(kg/cm^2)	Elongation at Break(%)
1	6.0 x 2.6	0.29	18.59	189.0	434

-- TEAR STRENGTH (AS PER ASTM-D-624)

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)	Tear Strength (Kg/cm)
1	12.5 x 3.1	0.38	122.58	124.90

- COMPRESSION SET TEST (AS PER ASTM-D-395)

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	**3.10**	**3.07**	**0.96**

- HARDNESS TEST (AS PER ASTM-D-2240)

S. No	Sample Type	Hardness (Shore A)
1	**Bearing Rubber Pad**	**59.16**