Syed Mustafa Ali **Test Performed By:** Dr. /Engr. M Rehan Ashraf

Manager Coordination, IZHAR Construction (Pvt) Ltd. Lahore

Client Reference: ICPL/CONST- RPL/19/006 **Dated:** 29-11-2018

SOM Lab Ref: CED/SOM/209-210(Page-1/1) **Dated:** 29-01-2019

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

Sample Type: Deformed Bar **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	3.925	25	25.23	491	500	269.00	344.70	548	538	702	690	30.0	200	15.0	
2	3.920	25	25.22	491	499	269.00	343.00	548	539	699	687	25.0	200	12.5	
3	0.879	12	11.94	113	112	65.00	81.50	575	581	721	728	25.0	200	12.5	
4	0.878	12	11.94	113	112	64.50	81.00	570	577	716	724	30.0	200	15.0	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack
12mm	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

Muhammad Khalid **Test Performed By:** **Dr. /Engr.** **M Rizwan Riaz**

Resident Engineer, (M-4), Package-III-B, Faisalabad -Khaniwal Motorway

Client Reference: **RE/M-4/3B/2019/405** **Dated:** **29-01-2019**

SOM Lab Ref: **CED/SOM/241(P-1/1)** **Dated:** **04-02-2019**

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

Sample Type: **Deformed Bar(Karachi 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	2.978	22	21.97	380	379	179.50	284.00	472	474	747	750	22.5	200	11.3	
2	2.961	22	21.92	380	377	178.50	285.50	470	474	751	757	27.5	200	13.8	
3	2.231	19	19.02	284	284	136.70	208.20	482	482	734	733	35.0	200	17.5	
4	2.258	19	19.14	284	288	133.50	206.70	471	465	729	719	32.5	200	16.3	
5	1.502	16	15.61	201	191	86.20	128.00	429	451	637	669	32.5	200	16.3	
6	1.524	16	15.72	201	194	88.50	131.20	440	456	653	677	35.0	200	17.5	
7	0.907	12	12.13	113	116	60.50	84.50	535	524	747	732	30.0	200	15.0	
8	0.903	12	12.10	113	115	57.50	83.50	508	500	738	726	27.5	200	13.8	
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BEND TEST:

22mm	Sample bend through 180 degrees Satisfactorily without any crack
19mm	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

Resident Egineer **Test Performed By:** Dr. /Engr. M Rizwan Riaz

Prime Engineering Consultancy, Kallurkot Bridge Project

Client Reference: PE-BA-JV/KK-DIK/2018/11 **Dated:** 28-01-2019

SOM Lab Ref: CED/SOM/205(Page-1/1) **Dated:** 29-01-2019

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

Sample Type: Deformed Bar(Nomee Steel Ind.) **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	2.442	20	19.90	314	311	158.50	203.00	505	510	646	653	25.0	200	12.5	
2	2.475	20	20.04	314	315	151.70	196.50	483	482	625	624	27.5	200	13.8	
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BEND TEST:

20mm	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

Syed Mustafa Ali **Test Performed By:** Dr. /Engr. M Rehan Ashraf

Manager Coordination, IZHAR Construction (Pvt) Ltd. Lahore

Client Reference: ICPL/CONST- RPL/19/006 **Dated:** 29-11-2018

SOM Lab Ref: CED/SOM/209-210(Page-1/1) **Dated:** 29-01-2019

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

Sample Type: Deformed Bar **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	3.925	25	25.23	491	500	269.00	344.70	548	538	702	690	30.0	200	15.0	
2	3.920	25	25.22	491	499	269.00	343.00	548	539	699	687	25.0	200	12.5	
3	0.879	12	11.94	113	112	65.00	81.50	575	581	721	728	25.0	200	12.5	
4	0.878	12	11.94	113	112	64.50	81.00	570	577	716	724	30.0	200	15.0	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack
12mm	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

Resident Egineer **Test Performed By:** **Dr. /Engr.** **M Rehan Ashraf**

Prime Engineering Consultancy, Kallurkot Brdge Project

Client Reference: **PE-BA-JV/KK-DIK/2018/11** **SOM Lab Ref:** **205 (Page-1/1)**

Dated: **28-01-2019** **Dated:** **29-01-2019**

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	1.497	6	0.748	0.44	0.440	12.44	18.83	62340	62340	94370	94370	1.70	8.0	21.3	
2	1.561	6	0.764	0.44	0.459	13.76	21.17	68980	66130	106130	101730	1.50	8.0	18.8	
3	0.661	4	0.497	0.20	0.194	7.72	12.74	85100	87730	140510	144860	1.00	8.0	12.5	
4	0.657	4	0.496	0.20	0.193	7.95	12.44	87680	90860	137140	142110	0.90	8.0	11.3	
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BEND TEST:

--	No Bend test performed

Note:-

Only Two Samples Received and Tested

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

Maj Adnan khalid® **Test Performed By:** **Dr. /Engr.** **M Rizwan Riaz**

Dy Dir MTL, Infra Development Works, Sector - E, DHA Phase IX - (M/S Inland)

Client Reference: **408/241/E/Lab/430/51** **SOM Lab Ref:** **206(Page-1/1)**

Dated: **29-01-2019** **Dated:** **29-01-2019**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar (City 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	0.680	4	0.505	0.20	0.200	6.24	9.23	68800	68800	101730	101730	1.40	8.0	17.5	
2	0.682	4	0.505	0.20	0.200	6.22	9.25	68570	68570	101960	101960	1.20	8.0	15.0	
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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

Sadaqat Ahmad **Test Performed By:** Dr. /Engr. **M Rizwan Riaz**

Resident Engineer, NESPAK (Pvt) Ltd. Const. of UET Lahore, Narowal Campus at Narowal

Client Reference: **3854/13/SA/07/495** **SOM Lab Ref:** **208(Page-1/1)**

Dated: **29-01-2019** **Dated:** **29-01-2019**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar(SJ Brand))**

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	2.601	8	0.986	0.79	0.764	29.79	37.53	83160	85990	104780	108350	1.30	8.0	16.3	
2	2.638	8	0.993	0.79	0.775	30.02	37.58	83810	85430	104930	106960	1.10	8.0	13.8	
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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

A. H. Khawaja **Test Performed By:** Dr. /Engr. **M Rizwan Riaz**

For Fairmay Investment, Lahore

Client Reference: **ST/F.R/01** **SOM Lab Ref:** **211(Page-1/1)**

Dated: **29-01-2019** **Dated:** **29-01-2019**

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	2.575	8	0.982	0.79	0.757	25.86	33.84	72200	75350	94480	98600	1.10	8.0	13.8	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Two Samples Received and Tested

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

Hamid R. Butt
Proprietor, Alpha Hardware, Lahore

Test Performed By: Dr. /Engr. M Rizwan Riaz

Client Reference: nil
Dated: 29-01-2019

SOM Lab Ref: 212(Page-1/1)
Dated: 29-01-2019

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	2.625	8	0.991	0.79	0.771	26.35	35.07	73570	75380	97900	100310	1.20	8.0	15.0	
2	2.614	8	0.989	0.79	0.768	26.37	35.02	73620	75730	97750	100550	1.30	8.0	16.3	
3	1.500	6	0.749	0.44	0.441	13.58	19.75	68060	67910	98970	98750	1.60	8.0	20.0	
4	1.499	6	0.749	0.44	0.441	13.63	19.85	68320	68160	99480	99260	1.30	8.0	16.3	
5	0.649	4	0.493	0.20	0.191	6.83	9.14	75320	78860	100830	105580	1.50	8.0	18.8	
6	0.653	4	0.494	0.20	0.192	6.80	9.14	74980	78100	100830	105030	1.20	8.0	15.0	
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BEND TEST:

--	No Bend test performed

Note:-

Only Six Samples Received and Tested

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

Farhan Sajid **Test Performed By:** **Dr. /Engr.** **M Rizwan Riaz**

Resident Engineer, Mascon Associates (Pvt) Ltd. Lahore

Client Reference: **MASC-RE/PG/18/5021** **SOM Lab Ref:** **213(Page-1/2)**

Dated: **29-01-2019** **Dated:** **29-01-2019**

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	0.670	4	0.501	0.20	0.197	6.17	9.91	68010	69050	109260	110930	1.20	8.0	15.0	
2	0.672	4	0.501	0.20	0.197	6.32	9.99	69700	70760	110160	111840	1.20	8.0	15.0	
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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

Farhan Sajid **Test Performed By:** Dr. /Engr. **M Rizwan Riaz**

Resident Engineer, Mascon Associates (Pvt) Ltd. Lahore

Client Reference: **MASC-RE/PG/18/5020** **SOM Lab Ref:** **213(Page-2/2)**

Dated: **29-01-2019** **Dated:** **29-01-2019**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar(Mughal 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	2.650	8	0.996	0.79	0.779	32.54	40.39	90840	92120	112750	114340	1.20	8.0	15.0	
2	2.641	8	0.994	0.79	0.776	32.77	40.32	91490	93140	112550	114580	1.00	8.0	12.5	
3	1.495	6	0.748	0.44	0.439	16.08	19.29	80580	80760	96670	96890	1.20	8.0	15.0	
4	1.491	6	0.747	0.44	0.438	16.30	20.15	81700	82080	101020	101480	1.00	8.0	12.5	
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BEND TEST:

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

Muhammad Aleem **Test Performed By:** **Dr. /Engr.** **M Rizwan Azam**

Maintenance Engineer-I, University of The Punjab, Lahore

Client Reference: **8-177-CE** **SOM Lab Ref:** **214(Page-1/1)**

Dated: **28-01-2019** **Dated:** **29-01-2019**

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	1.499	6	0.749	0.44	0.441	13.78	21.87	69080	68930	109600	109350	1.40	8.0	17.5	
2	0.677	4	0.503	0.20	0.199	7.44	8.97	82060	82470	98920	99420	1.00	8.0	12.5	
3	0.676	4	0.503	0.20	0.199	7.44	8.94	82060	82470	98580	99080	1.30	8.0	16.3	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Four Samples Received and Tested

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

Maj Adnan khalid® **Test Performed By:** Dr. /Engr. **M Rizwan Riaz**

Dy Dir MTL, Const. of Infra Dev Works of DHA Ph -VII - (M/S Al - Karim Enterprises)

Client Reference: **408/241/E/Lab/12T -23B/420** **SOM Lab Ref:** **215(Page-1/1)**

Dated: **22-01-2019** **Dated:** **29-01-2019**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar (Mughal 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	2.641	8	0.994	0.79	0.776	27.52	38.09	76840	78220	106350	108270	1.20	8.0	15.0	
2	2.649	8	0.995	0.79	0.778	22.96	38.14	64090	65080	106490	108130	1.00	8.0	12.5	
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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

Engr. Asif Jah **Test Performed By:** **Dr. /Engr.** **M Rehan Ashraf**

X.E.N Tamirat Committee, Anjuman Himayat - l - Islam, 119 Multan Road Lahore.

Client Reference: **AHI/TM-675** **SOM Lab Ref:** **216 (Page-1/1)**

Dated: **24-01-2019** **Dated:** **29-01-2019**

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	1.497	6	0.748	0.44	0.440	12.44	18.83	62340	62340	94370	94370	1.70	8.0	21.3	
2	1.561	6	0.764	0.44	0.459	13.76	21.17	68980	66130	106130	101730	1.50	8.0	18.8	
3	0.661	4	0.497	0.20	0.194	7.72	12.74	85100	87730	140510	144860	1.00	8.0	12.5	
4	0.657	4	0.496	0.20	0.193	7.95	12.44	87680	90860	137140	142110	0.90	8.0	11.3	
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BEND TEST:

--	No Bend test performed

Note:-

Only Four Samples Received and Tested

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