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

Zeeruk International (Pvt) Ltd. Lahore Sialkot Motorway Project

Client Reference: LSMP/RE-II/St/19/345 **Dated:** 05-07-2019

SOM Lab Ref: CED/SOM/1072 (Page-2/2) **Dated:** 09-07-2019

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

Sample Type: Deformed Bar(Mughal 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	3.848	25	24.98	491	490	274.00	340.50	558	560	694	695	30.0	200	15.0	
2	3.813	25	24.87	491	486	262.50	336.00	535	541	684	692	27.5	200	13.8	
3	3.869	25	25.05	491	493	274.00	345.20	558	556	703	701	27.5	200	13.8	
4	2.434	20	19.87	314	310	151.70	200.50	483	490	638	647	30.0	200	15.0	
5	2.450	20	19.93	314	312	156.00	203.20	497	500	647	652	30.0	200	15.0	
6	2.431	20	19.86	314	310	155.50	203.70	495	503	648	658	27.5	200	13.8	
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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

Note:-

Only Eight Samples Received and Tested

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

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

Zeeruk International (Pvt) Ltd. Lahore Sialkot Motorway Project

Client Reference: LSMP/RE-II/St/19/345 **Dated:** 05-07-2019

SOM Lab Ref: CED/SOM/1072 (Page-1/2) **Dated:** 09-07-2019

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

Sample Type: Deformed Bar(Mughal 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	1.529	16	15.76	201	195	102.50	126.00	510	526	627	647	25.0	200	12.5	
2	1.532	16	15.77	201	195	105.20	129.00	523	539	642	661	27.5	200	13.8	
3	1.539	16	15.80	201	196	105.00	129.20	522	536	643	660	30.0	200	15.0	
4	0.872	12	11.89	113	111	65.50	78.00	579	590	690	703	35.0	200	17.5	
5	0.900	12	12.08	113	115	65.00	78.70	575	567	696	687	32.5	200	16.3	
6	0.903	12	12.10	113	115	65.70	79.20	581	572	700	689	35.0	200	17.5	
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BEND TEST:

16mm	Sample bend through 180 degrees Satisfactorily without any crack
12mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Eight 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 Irfan Ul Hassan**

Dy Dir MTL, Proposed Commercial Plaza, DRGCC Ph-III, DHA Ph-VI, (M/S Construct)

Client Reference: **408/241/E/Lab/633/2879** **SOM Lab Ref:** **1076(Page-1/1)**

Dated: **09-07-2019** **Dated:** **10-07-2019**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar (Kamran 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	1.482	6	0.745	0.44	0.436	13.88	19.47	69590	70230	97590	98490	1.20	8.0	15.0	
2	1.490	6	0.747	0.44	0.438	13.76	19.69	68980	69300	98720	99170	1.20	8.0	15.0	
3	1.485	6	0.745	0.44	0.436	12.71	18.57	63720	64300	93100	93950	1.50	8.0	18.8	
4	1.494	6	0.748	0.44	0.439	13.46	19.34	67450	67600	96930	97150	1.30	8.0	16.3	
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BEND TEST:

# 6	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

Maj Adnan khalid® **Test Performed By:** Dr. /Engr. **M Irfan Ul Hassan**

Dy Dir MTL, Proposed Commercial Plaza, DRGCC Ph-III, DHA Ph-VI, (M/S Construct)

Client Reference: 408/241/E/Lab/634/2921 **SOM Lab Ref:** 1077(Page-1/1)

Dated: 09-07-2019 **Dated:** 10-07-2019

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	1.508	6	0.751	0.44	0.443	13.05	18.96	65400	64960	95040	94390	1.40	8.0	17.5	
2	1.476	6	0.743	0.44	0.434	13.81	19.72	69240	70190	98870	100240	1.20	8.0	15.0	
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BEND TEST:

# 6	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

Talha Javaid **Test Performed By:** **Dr. /Engr.** **M Irfan Ul Hassan**

Planning & Coordination Engr. Construction of Commercial Plaza at , DRGCC, DHA Ph-VI, Block I,Lahore

Client Reference: **Nil** **SOM Lab Ref:** **1078(Page-1/1)**

Dated: **10-07-2019** **Dated:** **10-07-2019**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar (Kamran 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	1.467	6	0.741	0.44	0.431	15.26	19.67	76490	78090	98610	100670	1.00	8.0	12.5	
2	1.475	6	0.743	0.44	0.433	14.34	19.80	71890	73050	99230	100830	1.20	8.0	15.0	
3	1.459	6	0.739	0.44	0.429	13.68	18.65	68570	70330	93510	95900	1.20	8.0	15.0	
4	1.471	6	0.742	0.44	0.432	13.93	18.96	69850	71140	95040	96800	1.10	8.0	13.8	
5	0.674	4	0.502	0.20	0.198	6.73	8.21	74190	74940	90490	91400	1.30	8.0	16.3	
6	0.665	4	0.498	0.20	0.195	6.83	7.72	75320	77250	85100	87280	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

Talha Javaid **Test Performed By:** **Dr. /Engr.** **M Irfan Ul Hassan**

Planning & Coordination Engr. Construction of Commercial Plaza at , DRGCC, DHA Ph-VI, Lahore

Client Reference: **Nil** **SOM Lab Ref:** **1079(Page-1/1)**

Dated: **10-07-2019** **Dated:** **10-07-2019**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar (Kamran 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	0.668	4	0.500	0.20	0.196	6.80	8.38	74980	76510	92400	94290	1.20	8.0	15.0	
2	0.665	4	0.498	0.20	0.195	6.83	8.53	75320	77250	94090	96500	1.10	8.0	13.8	
3	0.669	4	0.501	0.20	0.197	6.83	8.38	75320	76460	92400	93810	1.30	8.0	16.3	
4	0.668	4	0.500	0.20	0.196	6.70	8.61	73850	75360	94990	96930	1.10	8.0	13.8	
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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

Sana Ullah Cheema
Resident Engineer (AZEA), Sargodha Residency

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

Client Reference: **RE/AZEA/SGD/1658**
Dated: **29-06-2019**

SOM Lab Ref: **1080(Page-1/1)**
Dated: **10-07-2019**

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	0.659	4	0.497	0.20	0.194	6.12	9.33	67450	69530	102860	106040	0.90	8.0	11.3	
2	0.661	4	0.497	0.20	0.194	6.07	9.38	66890	68950	103420	106620	1.10	8.0	13.8	
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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

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

Resident Engineer -AZEA, Sargodha Residency.

Client Reference: **RE/AZEA/SGD/1658** **SOM Lab Ref:** **1080(Page-1/1)**

Dated: **29-06-2019** **Dated:** **010-07-2019**

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	0.659	4	0.497	0.20	0.194	6.12	9.33	67450	69530	102860	106040	0.90	8.0	11.3	
2	0.661	4	0.497	0.20	0.194	6.07	9.38	66890	68950	103420	106620	1.10	8.0	13.8	
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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

Maj Adnan khalid® **Test Performed By:** **Dr. /Engr. S. Asad Ali Gillani**

Dy Dir MTL, Const. of 1-Kanal Villas at DRGCC Club House DHA Ph-6 (M/S Linker Developers Pvt. Ltd.)

Client Reference: **408/241/E/Lab/635/186** **SOM Lab Ref:** **1081(Page-1/1)**

Dated: **09-07-2019** **Dated:** **10-07-2019**

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	1.471	6	0.742	0.44	0.432	13.17	19.80	66020	67240	99230	101060	1.30	8.0	16.3	
2	1.481	6	0.744	0.44	0.435	12.95	19.90	64890	65640	99740	100880	1.30	8.0	16.3	
3	0.643	4	0.491	0.20	0.189	5.81	8.92	64080	67800	98360	104080	1.00	8.0	12.5	
4	0.646	4	0.492	0.20	0.190	5.81	8.84	64080	67450	97460	102590	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		