Nasir Ahmed Chishty Test Performed By: Dr. /Engr. M Irfan Ul Haddan

Chief Resident Engineer, Osmani & Co. (Pvt) Ltd. Sawat Motorway Project

 Client Reference:
 335/CRE/QAT/SMP/2019
 Dated:
 17-10-2019

 SOM Lab Ref:
 CED/SOM/1605(Page-1/1)
 Dated:
 22-10\-2019

Test: Tension Test Test Specification: ASTM-F-1554

Sample Type: Fence Clamp (U-Clamp) Gauge Length: 50 mm

		D	ia.	Ar	ea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			_	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	kg/m	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	0.885	12	12.00	113	113	39.00	60.00	345	346	531	531	10.0	50	20.0	
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## **BEND TEST:**

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

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

Planning & Coordination Engr.

**SOM Lab** 

 Client Reference:
 nil
 Ref:
 1606 (Page-1/1)

 Dated:
 22-10-2019
 Dated:
 22-10-2019

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

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

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	stress			П	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.510	6	0.752	0.44	0.444	14.27	19.64	71540	70890	98460	97570	1.50	8.0	18.8	
2	1.471	6	0.742	0.44	0.432	13.53	19.16	67810	69060	96060	97840	1.40	8.0	17.5	
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# **BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
		Only Three Comples
		Only Three Samples Received and Tested

Junaid Iqbal Test Performed By: Dr. /Engr. Gillani

Project Manager, Forman Christian College, Lahore

**SOM Lab** 

 Client Reference:
 FCC/PM/DBW/CCP/19/072
 Ref:
 1607(Page-1/1)

 Dated:
 18-10-2019
 Dated:
 22-10-2019

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

Gauge Length: 8 inch Sample Type: Deformed Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			n	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.650	8	0.996	0.79	0.779	22.94	35.60	64030	64940	99380	100780	1.40	8.0	17.5	
2	2.667	8	0.999	0.79	0.784	23.04	35.93	64320	64810	100320	101080	1.40	8.0	17.5	
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Witnessed By: Adnan Ahmed Malik, QAS FCC

## **BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
		Only Three Samples
		Received and Tested

Maj Adnan khalid®

Test Performed By: Dr. /Engr. Gillani

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

**SOM Lab** 

 Client Reference:
 408/241/E/Lab/739/124
 Ref:
 1610(Page-1/1)

 Dated:
 18-10-2019
 Dated:
 12-10-2019

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

Gauge Length: 8 inch Sample Type: Deformed Bar ( City UAE Steel)

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			u	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.664	4	0.498	0.20	0.195	5.63	8.63	62050	63640	95210	97650	1.20	8.0	15.0	
2	0.673	4	0.502	0.20	0.198	5.83	8.65	64300	64950	95440	96400	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

Eng. Ch Liqat Ali Test Performed By: Dr. /Engr. Gillani Gillani

Resident Engineer, G 3 Engineering Consultants (Pvt) Ltd. Lahore

**SOM Lab** 

 Client Reference:
 G3/0207/1095
 Ref:
 1611(Page-1/1)

 Dated:
 22-10-2019
 Dated:
 22-10-2019

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	stress			_	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.494	6	0.748	0.44	0.439	13.15	19.75	65910	66070	98970	99200	1.20	8.0	15.0	
2	0.655	4	0.494	0.20	0.192	5.71	8.74	62950	65570	96340	100350	1.40	8.0	17.5	
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## **BEND TEST:**

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

S. Asad Ali

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

Dy Dir MTL, Const and Extension of Mosque at Sector -A, DHA Ph-I - (M/S Ijaz Hussain)

**SOM Lab** 

**ASTM-A-615** 

**Client Reference:** 408/241/E/Lab/742/nil Ref: 1602(Page-1/1) 22-10-2019 22-10-2019 Dated:

Dated: **Test Specification:** 

Tension Test & Bend Test

Sample Type: Gauge Length: Deformed Bar ( Saeed Kasue ) 8 inch

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			П	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.544	6	0.760	0.44	0.454	13.27	20.31	66530	64480	101780	98640	1.30	8.0	16.3	
2	1.514	6	0.753	0.44	0.445	14.02	22.04	70260	69470	110470	109230	1.20	8.0	15.0	
3	0.636	4	0.488	0.20	0.187	4.84	7.26	53400	57110	80040	85600	1.20	8.0	15.0	
4	0.665	4	0.498	0.20	0.195	6.70	10.01	73850	75750	110390	113220	1.00	8.0	12.5	
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## **BEND TEST:**

Test:

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

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

Resident Engineer, DAR Engineering

**SOM Lab** 

 Client Reference:
 DB-78/DAR/RE/ME/2019/0206
 Ref:
 1613(Page-1/1)

 Dated:
 21-10-2019
 Dated:
 22-10-2019

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

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

	Weight	Dia.		Area		Yield	Ultimate	Yield Stress		Ult. Stress				_	
S.No.		Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.481	6	0.744	0.44	0.435	13.76	19.78	68980	69770	99130	100260	1.30	8.0	16.3	P-76
2	1.484	6	0.745	0.44	0.436	13.76	19.98	68980	69610	100150	101070	1.20	8.0	15.0	P-76
3	0.750	5	0.529	0.31	0.220	9.65	13.27	68680	96780	94420	133050	1.20	8.0	15.0	P-137
4	1.051	5	0.627	0.31	0.309	9.60	13.53	68320	68540	96240	96550	1.20	8.0	15.0	P-137
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## **BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 5	Sample bend through 180 degrees Satisfactorily without any crack	
		Only Six Samples
		Received and Tested