DCRE / RE -1, Test Performed By: Dr. /Engr. Nauman Khurram

Zeeruk International Pvt Ltd. Lahore Sialkot Motorway Project.

 Client Reference:
 LSMP/RE-1/2018/725
 Dated:
 04-04-2019

 SOM Lab Ref:
 CED/SOM/598 (Page-1/1)
 Dated:
 04-04-2019

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

Sample Type: Deformed Bar(Mughal Steel) Gauge Length: 200 mm

		D	ia.	Ar	ea	Yield	Ultimate	Yield	Yield Stress Ult. Stress		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
	kg/m	mm	mm	mm ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.881	25	25.08	491	494	273.20	337.00	557	554	687	683	32.5	200	16.3	
2	3.850	25	24.99	491	490	269.50	332.20	549	550	677	678	30.0	200	15.0	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
		Only Three Samples
		Received and Tested

Deputy Director (Q.C.D) WASA, LDA, Lahore

Test Performed By:

Dr. /Engr.

S Asad Ali Gillani

Client Reference: QCD/ 273-74

Ref:

SOM Lab

596(Page-1/1)

01-04-2019 Dated:

Dated:

04-04-2019

Test:

Guage Length:

Tension Test & Bend Test 8 inch

Test Specification: Sample Type:

ASTM-A-615

Deformed Bar

		D	ia.	Α	rea	Yield	Ultimate	te Yield Stress		Ult. S	tress			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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.661	4	0.497	0.20	0.194	5.27	7.46	58120	59920	82290	84830	1.60	8.0	20.0	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BEND TEST:

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

Deputy Director (Q.C.D) WASA, LDA, Lahore

Test Performed By:

Dr. /Engr.

S Asad Ali Gillani

Client Reference: QCD/ 278-79 **SOM Lab** Ref: Dated:

597 (Page-1/1)

02-04-2019 Dated:

04-04-2019

Tension Test & Bend Test Test:

Test Specification:

ASTM-A-615

Guage Length:

8 inch

Sample Type:

Deformed Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Yield Stress				Ult. Stress		1	ท	
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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%			
1	0.605	4	0.476	0.20	0.178	6.12	9.23	67450	75780	101730	114300	0.70	8.0	8.8			
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BEND TEST:

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

Nauman

Maj Adnan khalid® Test Performed By: Dr. /Engr. Khurram
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/513/121 SOM Lab Ref: 600(Page-1/1)

Dated: 03-04-2019 Dated: 04-04-2019

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

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	Ult. 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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.643	8	0.995	0.79	0.777	29.36	35.12	81960	83330	98040	99680	1.00	8.0	12.5	
2	2.630	8	0.992	0.79	0.773	27.06	32.95	75560	77220	91980	94000	1.20	8.0	15.0	
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BEND TEST:

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