M/S GHS Construction Co. Test Performed By: Dr. /Engr. Khurram

Lahore

SOM Lab

 Client Reference:
 nil
 Ref:
 1179 (Page-1/1)

 Dated:
 25-07-2019
 Dated:
 25-07-2019

Deformed Bar(FF

Gauge Length: 8 inch Sample Type: Steel)

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress		돺	ion	
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	2.597	8	0.986	0.79	0.763	25.45	34.51	71060	73580	96330	99740	1.30	8.0	16.3	
2	1.482	6	0.745	0.44	0.436	12.69	19.72	63620	64200	98870	99780	1.40	8.0	17.5	
3	0.654	4	0.494	0.20	0.192	5.20	7.49	57330	59720	82620	86060	1.70	8.0	21.3	
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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 Six Samples
		Received and Tested

Assistant Engineer Test Performed By: Dr. /Engr. Khurram

LG & CD Civil Sub Division, Sialkot

SOM Lab

Client Reference: 1119- Ref: 1180 (Page-2/2)
Dated: 18-07-2019 Dated: 25-07-2019

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

Deformed

Gauge Length: 8 inch Sample Type: Bar

		D	ia. Area Yield Ultimate Yield Stress		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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.652	4	0.494	0.20	0.192	5.73	7.00	63180	65810	77230	80440	1.00	8.0	12.5	
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BEND TEST:

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

Assistant Engineer Test Performed By: Dr. /Engr. Khurram

LG & CD Civil Sub Division, Sialkot

SOM Lab

Client Reference: 1120- Ref: 1180 (Page-1/2)
Dated: 18-07-2019 Dated: 25-07-2019

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

Deformed

Gauge Length: 8 inch Sample Type: Bar

		Dia. Area 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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.644	4	0.491	0.20	0.189	5.32	6.68	58680	62100	73630	77910	1.20	8.0	15.0	
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BEND TEST:

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

<u>Nauman</u>

Maj Adnan khalid® Test Performed By:

Dr. /Engr.

Khurram

Dy Dir MTL, Const. of OHWT & Tube Well X-Block Ph -III, (M/S N. A. Associates)

SOM Lab

Client Reference: <u>408/241/E/Lab/647/223</u>

Ref:

1181(Page-1/1)

Dated: 22-07-2019

Dated:

25-07-2019

Dated: 22-07-2018

Gauge Length:

Test:

Tension Test & Bend Test

8 inch

Test Specification:

Sample Type:

ASTM-A-615

Deformed Bar (Ittefaq Steel)

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. Stress			_	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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.625	8	0.991	0.79	0.771	23.67	34.00	66080	67710	94910	97250	1.40	8.0	17.5	
2	2.604	8	0.987	0.79	0.765	23.19	33.76	64740	66860	94250	97330	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

<u>Nauman</u>

Engr. Ali Raza Test Performed By: Dr. /Engr. Khurram

Planning & Control Engineer, MS Construction, Mukhtar Sons, (Pvt) Ltd, Lahore

SOM Lab

 Client Reference:
 nil
 Ref:
 1182(P-1/1)

 Dated:
 24-7-2019
 Dated:
 25-07-2019

Deformed

Gauge Length: 8 inch Sample Type: Bar

		D	Dia. Area Yield Ultimate Yield Stress		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	2.647	8	0.995	0.79	0.778	24.94	33.69	69640	70710	94050	95510	1.30	8.0	16.3	
2	2.651	8	0.996	0.79	0.779	27.08	34.58	75610	76680	96530	97890	1.20	8.0	15.0	
3	1.563	6	0.764	0.44	0.459	17.15	20.85	85940	82390	104490	100170	1.10	8.0	13.8	
4	1.558	6	0.764	0.44	0.458	17.28	20.87	86610	83200	104590	100480	1.10	8.0	13.8	
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BEND TEST:

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