

General Manager Project
A.S. Enterprises, Engineers & Contractors, Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: LTR. # ASE/STM/002
SOM Lab Ref: CED/SOM/702(Page-1/1)

Dated: 23-02-2019
Dated: 23-04-2019

Test: Tension Test & Bend Test
Sample Type: M S Deformed Bar(AFCO Steel)

Test Specification: ASTM-A 615
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	3.711	25	24.54	491	473	247.70	331.70	505	524	676	702	32.5	200	16.3	
2	3.684	25	24.45	491	469	237.20	322.00	483	506	656	687	30.0	200	15.0	
3	2.341	20	19.49	314	298	149.00	193.70	474	500	617	650	27.5	200	13.8	
4	2.394	20	19.70	314	305	149.70	193.00	477	491	614	633	30.0	200	15.0	
5	1.545	16	15.83	201	197	116.70	147.00	580	593	731	747	25.0	200	12.5	
6	1.533	16	15.77	201	195	117.20	140.50	583	601	699	720	27.5	200	13.8	
7	0.609	12	9.94	113	78	38.20	48.00	338	493	424	620	25.0	200	12.5	
8	0.616	12	10.00	113	78	38.50	48.50	340	491	429	618	27.5	200	13.8	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Twelve Samples Received and Tested
20mm	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: Please always confirm the results of above report on web www.uet-civil.edu.pk

Sub Divisional Officer
Buildings Sub Division, Sheikhpura

Test Performed By: Dr. /Engr. Bilal A. Khokhar

Client Reference: 4341/S

SOM Lab

Ref: 698 (Page-1/1)

Dated: 05-03-2019

Dated: 23-04-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed

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	1.558	6	0.764	0.44	0.458	13.78	17.66	69080	66370	88500	85020	1.60	8.0	20.0	
2	0.679	4	0.505	0.20	0.200	6.21	9.25	68460	68460	101960	101960	1.50	8.0	18.8	
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BEND TEST:

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

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

Eng. Ch Liqat Ali
Resident Engineer, G 3 Engineering Consultants (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Bilal A. Khokhar

Client Reference: G3/RE/013

SOM Lab

Ref: 699(Page-1/1)

Dated: 19-04-2019

Dated: 23-04-2019

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	2.738	8	1.012	0.79	0.805	25.96	34.76	72480	71130	97040	95230	1.00	8.0	12.5	
2	1.560	6	0.764	0.44	0.458	13.78	19.29	69080	66370	96670	92870	1.10	8.0	13.8	
3	0.652	4	0.494	0.20	0.192	5.52	8.69	60930	63470	95770	99760	1.00	8.0	12.5	
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BEND TEST:

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

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

Noor Ahmed Chowdhry
Chief Executive, Authorized Signatory

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: nil

SOM Lab

Ref: 703 (Page-1/1)

Dated: 20-04-2019

Dated: 23-04-2019

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	2.656	8	0.997	0.79	0.781	22.53	33.03	62890	63620	92210	93270	1.50	8.0	18.8	
2	2.644	8	0.995	0.79	0.777	22.58	32.93	63040	64090	91920	93460	1.60	8.0	20.0	
3	1.550	6	0.762	0.44	0.456	16.11	21.51	80730	77900	107810	104030	1.20	8.0	15.0	
4	1.543	6	0.759	0.44	0.453	16.51	21.66	82780	80400	108580	105460	1.10	8.0	13.8	
5	0.676	4	0.503	0.20	0.199	6.60	8.84	72730	73100	97460	97950	1.00	8.0	12.5	
6	0.678	4	0.503	0.20	0.199	6.39	8.82	70480	70840	97230	97720	1.00	8.0	12.5	
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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