

Anis Ahmed  
Senior Engineer, Mansoor Mazhar & Associates, Lahore

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

**Client Reference:** MMA/DHA135-S-Q/01

**SOM Lab** 3868(Page-

**Ref:** 1/1)

**Dated:** 15-02-2021

**Dated:** 17-02-2021

**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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.515	8	0.970	0.79	0.739	16.77	26.27	46820	50050	73340	78400	1.80	8.0	22.5	
2	1.529	6	0.756	0.44	0.449	13.43	19.85	67290	65950	99480	97490	1.30	8.0	16.3	
3	0.663	4	0.498	0.20	0.195	5.83	8.05	64300	65950	88800	91080	1.50	8.0	18.8	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  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](http://www.uet-civil.edu.pk)

Takbeer Tpwer  
Mecload Road Lahore

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

Client Reference: nil

SOM Lab 3934(Page-

Ref: 1/1)

Dated: 02-03-2021

Dated: 02-03-2021

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.617	8	0.990	0.79	0.769	29.26	36.16	81680	83910	100940	103700	1.00	8.0	12.5	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Hafiz Ozair Ahmad  
Deputy Director (QCD), WASA, LDA, Lahore

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

Client Reference: QCD/ 266-67

SOM Lab 3870(Page-

Ref: 1/1)

Dated: 12-02-2021

Dated: 17-02-2021

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Guage 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.638	8	0.993	0.79	0.775	28.41	35.02	79310	80850	97750	99650	1.00	8.0	12.5	
2	2.644	8	0.995	0.79	0.777	29.36	36.09	81960	83330	100740	102430	1.20	8.0	15.0	
3	1.517	6	0.754	0.44	0.446	15.31	19.32	76750	75710	96830	95520	1.00	8.0	12.5	
4	1.497	6	0.748	0.44	0.440	15.24	19.37	76390	76390	97080	97080	1.00	8.0	12.5	
5	0.668	4	0.500	0.20	0.196	7.54	9.38	83180	84880	103420	105530	1.10	8.0	13.8	
6	0.673	4	0.502	0.20	0.198	7.46	9.28	82290	83120	102290	103330	1.20	8.0	15.0	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine 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](http://www.uet-civil.edu.pk)

Assistant Engineer Bridges  
Pakistan Railways Sukkaur

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

Client Reference: 56/W/326/2015/Loose=A

SOM Lab 3871(Page-

Ref: 1/1)

Dated: 16-02-2021

Dated: 17-02-2021

Test: Tension 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.450	6	0.736	0.44	0.426	14.42	21.00	72300	74680	105260	108720	1.00	8.0	12.5	
2	1.442	6	0.735	0.44	0.424	14.02	20.61	70260	72910	103310	107210	1.10	8.0	13.8	
3	1.044	5	0.625	0.31	0.307	10.27	12.97	73030	73750	92250	93150	1.40	8.0	17.5	
4	1.049	5	0.626	0.31	0.308	10.11	13.32	71940	72410	94790	95400	1.20	8.0	15.0	
5	0.682	4	0.505	0.20	0.200	6.14	8.77	67670	67670	96670	96670	1.60	8.0	20.0	
6	0.680	4	0.505	0.20	0.200	6.03	8.77	66550	66550	96670	96670	1.60	8.0	20.0	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Yasir Khan  
Resident Engr, New Vision Engg. Consultant,

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

Client Reference: RE/NVEC/BZU21/02

SOM Lab 3872 (Page-

Ref: 1/1)

Dated: 12-02-2021

Dated: 17-02-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (F F 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.547	6	0.761	0.44	0.455	14.95	21.38	74960	72490	107150	103610	1.30	8.0	16.3	
2	1.070	5	0.632	0.31	0.314	10.60	14.83	75420	74460	105520	104180	1.20	8.0	15.0	
3	0.677	4	0.503	0.20	0.199	7.03	9.45	77560	77950	104200	104730	1.20	8.0	15.0	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six Samples Received and Tested
# 5	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](http://www.uet-civil.edu.pk)