

Sub Divisional officer,

**Test Performed By:** Dr. /Engr. Wasim Abbas

BSD No.2,Multan.(Provision Of Correctional Facilities Revamping Program One at Central Jail Multan)

**Client Reference:** 1219/SDO 2nd

**SOM Lab**

**Ref:** 3346 (Page-1/1)

**Dated:** 14-11-2023

**Dated:** 13-12-2023

**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	2.662	8	0.998	0.79	0.782	27.57	34.71	76980	77770	96900	97890	1.70	8.0	21.3	
2	1.357	6	0.713	0.44	0.399	10.16	15.29	50940	56180	76640	84520	1.70	8.0	21.3	
3	0.662	4	0.498	0.20	0.195	6.14	7.41	67670	69410	81720	83820	1.30	8.0	16.3	
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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)

Muhammad Imran Rana

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

AL-Mustafa Contractor (Pvt) Ltd.(Const Of ABL Lahore Road Tehsil Bucheki Branch,Distt NNS)

Client Reference: AMC/UET/1737-23

SOM Lab

Ref: 3347 (Page-1/1)

Dated: 12-12-2023

Dated: 13-12-2023

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	1.483	6	0.745	0.44	0.436	14.95	19.52	74960	75650	97850	98750	1.30	8.0	16.3	
2	1.483	6	0.745	0.44	0.436	14.90	19.47	74700	75390	97590	98490	1.50	8.0	18.8	
3	0.659	4	0.497	0.20	0.194	6.60	8.82	72730	74980	97230	100240	1.00	8.0	12.5	
4	0.661	4	0.497	0.20	0.194	6.44	8.56	71040	73240	94420	97340	1.00	8.0	12.5	
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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
# 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)

IBNA AL AZIZ

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

Construction Company Lahore.(S.Abdullah Ceramic,Allama Iqbal Industrial Area Faisalabad)

Client Reference: IAA-131223

SOM Lab

Ref: 3349 (Page-1/1)

Dated: 13-12-2023

Dated: 13-12-2023

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	2.630	8	0.992	0.79	0.773	29.82	36.51	83240	85070	101940	104180	1.30	8.0	16.3	
2	1.520	6	0.754	0.44	0.447	14.95	19.80	74960	73780	99230	97670	1.30	8.0	16.3	
3	1.028	5	0.620	0.31	0.302	10.50	13.07	74700	76680	92970	95440	1.20	8.0	15.0	
4	0.658	4	0.496	0.20	0.193	5.61	8.43	61830	64070	92960	96340	1.10	8.0	13.8	
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**BEND TEST:**

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

Naeem Shinwari,RE

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

Shahzad Ayub Associates New Metro City Sri Alamgir.(Ghousia Engineering)

Client Reference: SAA-St-Rep-008

SOM Lab

Ref: 3350(Page-1/2)

Dated: 27-12-2023

Dated: 13-12-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (SJ 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	0.682	4	0.505	0.20	0.200	6.80	9.12	74980	74980	100610	100610	1.20	8.0	15.0	
2	0.683	4	0.506	0.20	0.201	6.98	9.30	77000	76620	102520	102010	1.10	8.0	13.8	
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**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three 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)

Naeem Shinwari,RE

Shahzad Ayub Associates New Metro City Sri Alamgir.(AK Construction)

Test Performed By:

Dr. /Engr. Asad Ali Gillani

Client Reference: SAA-St-Rep-009

Dated: 07-12-2023

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 3350(Page-2/2)

Dated: 13-12-2023

Test Specification: ASTM-A-615

Sample Type: Deformed Bar (FF 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	0.677	4	0.503	0.20	0.199	6.73	8.97	74190	74560	98920	99420	1.30	8.0	16.3	
2	0.675	4	0.502	0.20	0.198	6.65	8.92	73290	74030	98360	99350	1.20	8.0	15.0	
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**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three 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)

Rana Associates  
Lahore.(Project:- P-160 Gulberg II Lahore )

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

Client Reference: Nil

Dated: 13-12-2023

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 3351 (Page-1/1)

Dated: 13-12-2023

Test Specification: ASTM-A-615

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	1.501	6	0.749	0.44	0.441	13.43	20.87	67290	67140	104590	104360	1.20	8.0	15.0	
2	1.507	6	0.751	0.44	0.443	13.48	20.95	67550	67090	105000	104290	1.30	8.0	16.3	
3	0.670	4	0.501	0.20	0.197	5.88	8.79	64860	65850	96900	98370	1.00	8.0	12.5	
4	0.685	4	0.506	0.20	0.201	5.91	9.02	65200	64880	99480	98990	1.20	8.0	15.0	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Four 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)

Zahid Mughal  
C/O M/S Amanah Noor Residence Wapda Town, Lahore.

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

**Client Reference:** Nil

**Dated:** 13-12-2023

**Test:** Tension Test & Bend Test

**Gauge Length:** 8 inch

**Test Specification:**

**Sample Type:**

**SOM Lab**

**Ref:** 3352 (Page-1/1)

**Dated:** 13-12-2023

ASTM-A-615

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	2.537	8	0.975	0.79	0.746	26.47	32.64	73910	78270	91120	96500	1.20	8.0	15.0	
2	0.599	4	0.473	0.20	0.176	6.52	7.85	71940	81750	86560	98360	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 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](http://www.uet-civil.edu.pk)

Zahid Mughal  
C/O M/S Amanah Noor Residence Wapda Town, Lahore.

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

**Client Reference:** Nil

**Dated:** 13-12-2023

**Test:** Tension Test & Bend Test

**Gauge Length:** 8 inch

**Test Specification:**

**Sample Type:**

**SOM Lab**

**Ref:** 3353 (Page-1/1)

**Dated:** 13-12-2023

ASTM-A-615

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	0.608	4	0.477	0.20	0.179	6.49	7.80	71610	80010	85990	96080	1.10	8.0	13.8	
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**BEND TEST:**

# 4	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)



Engr. Farid Ullah Shah, RCE

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

Acrow Consultant Engineers Lahore.(Const Of Appartments Building at 45-B-1 Gulberg III Lhr)

**Client Reference:** ACROW/C/45-B/25

**SOM Lab**

**Ref:** 3354 (Page-1/1)

**Dated:** 13-12-2023

**Dated:** 13-12-2023

**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	2.644	8	0.995	0.79	0.777	25.33	39.50	70720	71900	110280	112120	1.10	8.0	13.8	
2	2.673	8	1.000	0.79	0.786	25.43	39.57	71000	71370	110470	111040	1.00	8.0	12.5	
3	1.495	6	0.748	0.44	0.439	13.71	21.00	68730	68880	105260	105500	1.10	8.0	13.8	
4	1.490	6	0.747	0.44	0.438	13.46	21.10	67450	67760	105770	106250	1.00	8.0	12.5	
5	0.671	4	0.501	0.20	0.197	5.61	8.38	61830	62770	92400	93810	0.90	8.0	11.3	
6	0.666	4	0.500	0.20	0.196	5.58	8.43	61490	62750	92960	94860	1.10	8.0	13.8	
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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)

**Test Performed by:** Dr. S. Asad Ali Gillani

Punjab Highway Department.

Sub Divisional Officer

Highway Sub Division, Shujabad.

(Const. Of Flyover at Railway Phatak Chak RS Shujabad Expressway Length = 1.08KM Distt Multan)

**Reference No.:** 61

Dated: 11/12/2023

**SOM Lab Ref:** CED/SOM/3348(Page-1/1)

Dated: 13-12-2023

**Test:** Tensile Test, Elongation at Break, Tear Test, Hardness Test & Comp. Set Test

**Sample Type:** Elastomeric Bearing Pad

**TENSILE STRENGTH AND ELONGATION TEST. (AS PER ASTM-D-412)**

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Tensile Strength (kg/cm <sup>2</sup> )	Elongation at Break(%)
1	6.4 x 2.0	0.32	25.0	254.92	520.0
2	6.9 x 2.0	0.37	26.81	273.39	540.0

**TEAR STRENGTH (AS PER ASTM-D-624)**

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	7.4 x 2.0	0.20	100.0
2	4.5 x 2.0	0.22	110.0

**- COMPRESSION SET TEST (AS PER ASTM-D-395)**

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	2.0	1.89	5.50

**- HARDNESS TEST (AS PER ASTM-D-2240)**

S. No	Sample Type	Hardness <sub>avg</sub> (Shore A)
1	Elastomeric Bearing Pad	64.3

