

Nafiz OZCAN

Contractor's Representative, SA - RA Energy, Construction Trade and Industry Inc. Lahore

**Test Performed By:**

Dr. /Engr.

S. Asad Ali  
Gillani

**Client Reference:** MIG/2020/1125

**Dated:** 15-10-2020

**Test:** Tension Test & Bend Test

**Gauge Length:** 8 inch

**Test Specification:**

**Sample Type:**

**SOM Lab**

**Ref:** 3114(Page-2/2)

**Dated:** 15-10-2020

ASTM-A-615

Deformed Bar(Batala Premium 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	1.464	6	0.740	0.44	0.430	13.30	18.57	66680	68230	93100	95260	1.10	8.0	13.8	
2	1.446	6	0.736	0.44	0.425	14.17	19.11	71020	73530	95800	99190	1.10	8.0	13.8	
3	1.463	6	0.740	0.44	0.430	13.46	18.47	67450	69020	92590	94740	1.20	8.0	15.0	
4	0.586	4	0.468	0.20	0.172	5.93	7.90	65420	76070	87120	101300	1.10	8.0	13.8	
5	0.586	4	0.468	0.20	0.172	5.73	7.75	63180	73460	85430	99340	1.00	8.0	12.5	
6	0.635	4	0.488	0.20	0.187	6.85	8.56	75540	80790	94420	100990	1.00	8.0	12.5	
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**Witnessed By:**

Sohaib Ali, Nespak & Muhammad Adid SA-RA Energy

**BEND TEST:**

# 6(Sr.1&2)	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Twelve Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	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)

Sub Divisional Officer  
Highway (M&R) Sub Division, Bhawalpur

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

Client Reference: 1884/SDO BWP  
Dated: 10-08-2020  
Test: Tension Test & Bend Test  
Gauge Length: 8 inch

SOM Lab  
Ref: 3116(Page-1/1)  
Dated: 16-10-2020  
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	2.459	8	0.959	0.79	0.723	16.08	25.94	44880	49040	72430	79140	1.40	8.0	17.5	
2	2.541	8	0.975	0.79	0.747	18.12	28.21	50600	53510	78750	83280	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 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)

Interlink Mobile Accessories  
Turki Road, Ring Road Lahore

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: Nil

Dated: 16-10-2020

Test: Tension Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3117(Page-1/1)

Dated: 16-10-2020

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	2.630	8	0.992	0.79	0.773	28.13	37.38	78550	80270	104360	106650	1.00	8.0	12.5	
2	0.644	4	0.491	0.20	0.189	6.12	8.58	67450	71370	94650	100160	1.20	8.0	15.0	
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**BEND TEST:**

--	No Bend test performed	<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)

Muhammad Zubair  
Team Leader-JIPC, Project Implementation Consultants (PICs)

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

S. Asad Ali  
Gillani

**Client Reference:** JIPIC/2.18/1425

**Dated:** 15-10-2020

**Test:** Tension Test & Bend Test

**Gauge Length:** 8 inch

**Test Specification:**

**Sample Type:**

**SOM Lab**

**Ref:** 3118(Page-1/1)

**Dated:** 16-10-2020

ASTM-A-615

Deformed Bar(Pak 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	1.519	6	0.754	0.44	0.446	14.80	19.95	74190	73190	99990	98650	1.20	8.0	15.0	
2	1.499	6	0.749	0.44	0.441	15.55	20.46	77920	77750	102550	102320	1.20	8.0	15.0	
3	1.035	5	0.622	0.31	0.304	9.99	12.84	71070	72480	91380	93180	1.20	8.0	15.0	
4	1.054	5	0.628	0.31	0.310	8.53	11.59	60700	60700	82460	82460	1.30	8.0	16.3	
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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	

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

Lt. Col. ® Muhammad Ibrahim  
Estate Engineer, Sundar Industrial Estate, Lahore

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: BOM/SIE/BCD/5914

Dated: 14-10-2020

Test: Tension Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3119(Page-1/1)

Dated: 16-10-2020

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	1.485	6	0.745	0.44	0.436	14.88	19.32	74600	75290	96830	97710	1.00	8.0	12.5	
2	1.496	6	0.748	0.44	0.440	14.07	18.44	70510	70510	92430	92430	1.10	8.0	13.8	
3	0.678	4	0.503	0.20	0.199	6.65	8.92	73290	73660	98360	98850	1.00	8.0	12.5	
4	0.690	4	0.508	0.20	0.203	6.22	8.18	68570	67560	90150	88820	0.90	8.0	11.3	
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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)

Sub Divisional Officer  
Buildings Sub Division No. 2, Multan

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

Client Reference: 281/2nd

SOM Lab

Ref: 3120(Page-1/1)

Dated: 06-10-2020

Dated: 16-10-2020

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	2.603	8	0.987	0.79	0.765	25.35	35.73	70780	73090	99750	103010	1.20	8.0	15.0	
2	2.596	8	0.986	0.79	0.763	25.10	35.37	70070	72540	98750	102240	1.20	8.0	15.0	
3	1.457	6	0.738	0.44	0.428	14.37	19.06	72050	74070	95550	98230	1.10	8.0	13.8	
4	1.458	6	0.738	0.44	0.428	14.42	19.39	72300	74330	97180	99910	1.00	8.0	12.5	
5	0.672	4	0.501	0.20	0.197	6.17	8.77	68010	69050	96670	98140	1.10	8.0	13.8	
6	0.667	4	0.500	0.20	0.196	6.17	8.79	68010	69400	96900	98880	1.00	8.0	12.5	
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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)

M. Sohail Anjum

Test Performed By:

Dr. /Engr.

S. Asad Ali  
Gillani

Project Manager, MEK Multistory Offices, P-156, Gulberg-II, Lahore

Client Reference: P-156-152

SOM Lab

Ref: 3121(Page-1/1)

Dated: 16-10-2020

Dated: 16-10-2020

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(Mughal 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	2.610	8	0.988	0.79	0.767	28.13	36.41	78550	80900	101650	104700	1.30	8.0	16.3	
2	2.607	8	0.988	0.79	0.766	27.06	35.65	75560	77930	99520	102640	1.30	8.0	16.3	
3	0.645	4	0.492	0.20	0.190	7.44	9.19	82060	86380	101390	106730	1.40	8.0	17.5	
4	0.655	4	0.494	0.20	0.192	7.03	8.58	77560	80800	94650	98590	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 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)

Muazzam Akram

Test Performed By:

Dr. /Engr.

S. Asad Ali  
Gillani

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Client Reference: nil

SOM Lab

Ref: 3122(Page-1/1)

Dated: 16-10-2020

Dated: 16-10-2020

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	2.642	8	0.994	0.79	0.776	27.22	37.21	75980	77360	103870	105750	1.20	8.0	15.0	
2	2.624	8	0.991	0.79	0.771	25.28	35.14	70580	72320	98100	100510	1.40	8.0	17.5	
3	1.488	6	0.746	0.44	0.437	12.56	18.27	62950	63380	91560	92190	1.40	8.0	17.5	
4	1.484	6	0.745	0.44	0.436	12.64	18.42	63360	63940	92330	93180	1.40	8.0	17.5	
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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	

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



Sub Divisional Officer  
Buildings Sub Division No. 15, Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 1091-

SOM Lab

Ref: 3123(Page-1/1)

Dated: 05-10-2020

Dated: 16-10-2020

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	2.672	8	1.000	0.79	0.785	23.87	33.33	66650	67080	93060	93650	1.30	8.0	16.3	
2	2.677	8	1.001	0.79	0.787	26.71	34.73	74560	74850	96960	97330	1.20	8.0	15.0	
3	1.517	6	0.754	0.44	0.446	15.82	19.93	79300	78230	99890	98550	1.40	8.0	17.5	
4	1.506	6	0.751	0.44	0.443	15.39	19.47	77160	76630	97590	96930	1.40	8.0	17.5	
5	0.703	4	0.513	0.20	0.207	7.31	9.04	80600	77870	99710	96340	1.20	8.0	15.0	
6	0.793	4	0.545	0.20	0.233	7.41	9.23	81720	70150	101730	87320	1.10	8.0	13.8	
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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)

Syed Salman Liaqat  
Resident Engineer, NESPAK (Pvt) Ltd., Jhall Road Flyover, Sahiwal

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: 4116/03/SSL/2020/72

Dated: 15-10-2020

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3124(Page-1/1)

Dated: 16-10-2020

ASTM-A-615

Deformed Bar (SGI, 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	1.498	6	0.748	0.44	0.440	12.86	20.41	64480	64480	102290	102290	1.20	8.0	15.0	
2	0.711	4	0.516	0.20	0.209	6.75	9.35	74420	71210	103080	98640	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 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)

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

AL-REHMAN ENGINEERING WORKS

QUETTA, BALOCHISHTAN

**Project:** Construction of bridge at Anmbar River with Approaches to Talao Road,

Dist. Duki, Baluchistan

**Client Reference No.:**nil

Dated: 16-10-2020

**SOM Lab Ref:** CED/SOM/ 3102(Page-1/1)

Dated: 16-10-2020

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

**Sample Type:** BEARING RUBBER PAD(450 X 450 X 81mm)

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Elongation at Break(%)
1	6.5 x 2.5	0.70	73.08	480

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

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	2.50	2.45	2.0

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

S. No	Sample Type	Hardness (Shore A)
1	Bearing Rubber Pad	60.166

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

GHAZANFARY CONSTRUCTION COMPANY (GHCC)

Nanganhar Offide,

Angoorbagh Road Street # 2,

Afghanistan

**Client Reference No.:**nil

Dated: 16-10-2020

**SOM Lab Ref:** CED/SOM/ 3126(Page-1/1)

Dated: 16-10-2020

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

**Sample Type:** RUBBER PAD

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Elongation at Break(%)
1	6.0 x 2.5	0.68	45.33	470

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	11.8 x 4.0	0.30	57.5

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

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	4.0	3.90	2.5

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

S. No	Sample Type	Hardness (Shore A)
1	Rubber Pad	60.166

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

GHAZANFARY CONSTRUCTION COMPANY (GHCC)

Nangarhar Offide, Angoorbagh Road Street # 2, Afghanistan

PROJECT: Construction of concrete Road including 20M bridge from main road asphalt Meta Khan, Asmail Khel to laghore peryan Village and Tani Didtrick Khost Province

SECTION: Construction of 20M r.c.c. Girger Bridge

CONTRACT ID: RRD/MOF/Nrap/sthe/kht/034/c2/001

LENGH & TYPE: 20M R.C.C GIRDER BRIDGE

VILLAGE KHORSAL, DISTRICT MANDOZEY, PROVINCE KHOST, REGION EAST

Client Reference No.:nil

Dated: 16-10-2020

SOM Lab Ref: CED/SOM/ 3126(Page-1/1)

Dated: 16-10-2020

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

Sample Type: RUBBER PAD (450 x 450 x 60mm)

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Elongation at Break(%)
1	6.0 x 2.5	0.68	45.33	470

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	11.8 x 4.0	0.30	75.0

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

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	4.0	3.90	2.5

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

S. No	Sample Type	Hardness (Shore A)
1	Rubber Pad	60.166

