

Syed Mustafa Ali  
 Manager Coordination, IZHAR Construction (Pvt) Ltd. Lahore

**Test Performed By:** Dr. /Engr. M Rehan Ashraf

**Client Reference:** ICPL/CONST-NML/21/019

**Dated:** 19-02-2021

**SOM Lab Ref:** CED/SOM/3879(Page-2/2)

**Dated:** 19-02-2021

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** Deformed Bar

**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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.797	25	24.82	491	484	264.00	353.70	538	546	721	731	30.0	200	15.0	
2	3.797	25	24.82	491	484	250.70	337.50	511	519	688	698	27.5	200	13.8	
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**BEND TEST:**

25mm	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)

Syed Mustafa Ali  
 Manager Coordination, IZHAR Construction (Pvt) Ltd. Lahore

**Test Performed By:** Dr. /Engr. M Rehan Ashraf

**Client Reference:** ICPL/CONST- NML/21/018

**Dated:** 19-02-2021

**SOM Lab Ref:** CED/SOM/3879(Page-1/2)

**Dated:** 19-02-2021

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** Deformed Bar

**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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	0.888	12	12.00	113	113	64.70	77.00	572	573	681	682	25.0	200	12.5	
2	0.863	12	11.83	113	110	67.00	78.50	592	610	694	714	25.0	200	12.5	
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**BEND TEST:**

12MM	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)

Resident Engineer/Team Leader

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

Prime Engineering Consultancy, Kallurkot Brgd Project

**Client Reference:** KK-DIK-BR-PJ/2021/249  
**SOM Lab Ref:** CED/SOM/3881(Page-1/2)  
**Test:** Tension Test & bend Test  
**Sample Type:** Deformed Bar(Pak Steel )

**Dated:** 18-02-2021  
**Dated:** 19-02-0221  
**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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	1.577	16	16.00	201	201	96.70	132.70	481	482	660	661	27.5	200	13.8	
2	0.922	12	12.23	113	117	52.20	74.50	462	445	659	635	25.0	200	12.5	
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**BEND TEST:**

16mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Four Samples Received and Tested
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](http://www.uet-civil.edu.pk)

Resident Engineer/Team Leader  
 Prime Engineering Consultancy, Kallurkot Brgd Project

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

**Client Reference:** KK-DIK-BR-PJ/2021/248  
**SOM Lab Ref:** CED/SOM/3881(Page-2/2)  
**Test:** Tension Test & bend Test  
**Sample Type:** Deformed Bar(Pak Steel )

**Dated:** 18-02-2021  
**Dated:** 19-02-2021  
**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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	2.439	20	19.90	314	311	145.20	218.50	462	467	696	703	30.0	200	15.0	
2	0.893	12	12.03	113	114	54.00	76.70	477	475	678	675	30.0	200	15.0	
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**BEND TEST:**

20mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Four Samples Received and Tested
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](http://www.uet-civil.edu.pk)

Project Manager  
 Nazir & Sons Trust Building Construction Project, Lahore

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

**Client Reference:** NST/MT/SR/UET/008

**SOM Lab** 3880(Page-

**Dated:** 19-02-2021  
**Test:** Tension Test & Bend Test  
**Gauge Length:** 8 inch

**Test Specification:**  
**Sample Type:**

**Ref:** 1/1)  
**Dated:** 19-02-2021  
**ASTM-A-615**  
**Deformed(Koh-e-noor &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	1.471	6	0.742	0.44	0.432	12.95	19.37	64890	66090	97080	98880	1.40	8.0	17.5	Koh-e-Noor
2	1.495	6	0.748	0.44	0.439	13.25	19.85	66430	66580	99480	99710	1.20	8.0	15.0	Koh-e-noor
3	1.041	5	0.624	0.31	0.306	10.06	14.39	71580	72520	102400	103740	1.10	8.0	13.8	FF
4	1.029	5	0.620	0.31	0.302	10.16	14.17	72310	74220	100810	103480	1.00	8.0	12.5	FF
5	0.667	4	0.500	0.20	0.196	6.70	9.37	73850	75360	103300	105410	1.10	8.0	13.8	FF
6	0.656	4	0.496	0.20	0.193	6.75	9.40	74420	77120	103640	107400	1.20	8.0	15.0	FF
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**BEND TEST:**

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

Assistant Project Director  
 Air University, Multan Campus, Multan

**Test Performed By:** Dr. /Engr. M Rehan Ashraf

**Client Reference:** MUX/AUMC/ISD/2021/08

**Dated:** 16-02-2021

**SOM Lab**

**Ref:** 3882(P-1/1)

**Dated:** 19-02-2021

**Test:** Tension Test & Bend Test  
**Gauge Length:** 8 inch

**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	1.451	6	0.736	0.44	0.426	13.93	18.98	69850	72140	95140	98270	1.50	8.0	18.8	
2	1.470	6	0.742	0.44	0.432	13.66	18.55	68470	69740	92990	94720	1.20	8.0	15.0	
3	1.052	5	0.627	0.31	0.309	9.99	15.06	71070	71300	107120	107460	1.10	8.0	13.8	
4	1.039	5	0.623	0.31	0.305	10.19	14.78	72520	73710	105160	106880	1.10	8.0	13.8	
5	0.670	4	0.501	0.20	0.197	6.57	9.23	72510	73610	101730	103280	1.00	8.0	12.5	
6	0.671	4	0.501	0.20	0.197	6.68	9.40	73630	74750	103640	105220	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 Nine 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)

Syed Yasir Ali  
 Resident Engineer, NESPAK, (Pvt) Ltd.(U.E.T. Lahore Sub Campus at Narowal)

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

**Client Reference:** 3863/13/SYA/Labtesting/287

**SOM Lab Ref:** 3883(Page-1/1)

**Dated:** 17-02-2021

**Dated:** 19-02-2021

**Test:** Tension Test & Bend Test  
**Gauge Length:** 8 inch

**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	1.462	6	0.740	0.44	0.430	13.07	16.94	65510	67030	84920	86900	1.40	8.0	17.5	
2	1.465	6	0.741	0.44	0.431	13.68	19.11	68570	70000	95800	97800	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 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)

Maj Adnan khalid®

Dy Dir MTL, Infra Development Works Sector - Q , DHA Ph-XI - (M/S DHA C)

**Test Performed By:**

Dr. /Engr.

Nauman khurram

**Client Reference:** 408/241/E/Lab/35/698

**Dated:** 18-02-2021

**Test:** Tension Test & Bend Test

**Gauge Length:** 8 inch

**Test Specification:**

**Sample Type:**

**SOM Lab**

**Ref:**

**Dated:**

ASTM-A-615

Deformed Bar ( Kamran Steel)

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1/1)

19-02-2021

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	0.662	4	0.498	0.20	0.195	6.37	8.84	70260	72060	97460	99960	1.30	8.0	16.3	
2	0.669	4	0.501	0.20	0.197	6.63	9.17	73070	74180	101170	102710	1.30	8.0	16.3	
3	0.665	4	0.498	0.20	0.195	6.52	8.87	71940	73790	97800	100300	1.30	8.0	16.3	
4	0.663	4	0.498	0.20	0.195	6.12	8.23	67450	69180	90720	93040	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 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)



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

Sub Divisional Officer

C & W building Sub – Division – II,

Kohat

Construction of BTR Banda Fateh Khan Road Darmalak Road. Darmalak to Ghor Zand Road Darsha Khel Road Rehman Abad Road Pakka Road. Karapa Shakardara Road Including Bridge and PCC Road in UCS Sodhal Lachi Rural Mandori Kohat PK-39 ADP No 786/150973 (2018-19)  
SH: Construction of RCC Tarraly Bridge (Balance Work)

**Reference No.:**695 /9-T

Dated: 15-02-2021

**SOM Lab Ref:** CED/SOM/3885(Page-1/1)

Dated: 19-02-2021

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

**Sample Type:** Elastomeric Bearing Pad ( 700 x 700 x 80mm)

**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 4.2	0.72	26.37	490

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	12.0 x 4.0	0.40	100.0

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

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	4.20	4.15	1.190

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

S. No	Sample Type	Hardness (Shore A)
1	Bearing Pad	62.166

