



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
M/S Asia Consultancy Group  
Kabul, Afghanistan

Reference # CED/TFL **33822** (Dr. Qasim Khan)  
Reference of the request letter # RTCC/UET/Civil/Angle Test/12-19

Dated: 13-09-2019

Dated: 12-09-2019

**Tension Test Report** (Page – 1/1)

Date of Test 17-09-2019

Gauge length 2 inches

Description Steel Plate Steel Strip Tensile and Bend Test as per AATM A36

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(inch)	(mm)	(mm <sup>2</sup> )	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	2x2	27.20x4.50	122.40	4900	7000	392.72	561.03	0.70	35.00	Ishtiaq Steel
2	2x2	27.20x4.50	122.40	5000	7000	400.74	561.03	0.70	35.00	
3	3x3	27.10x4.60	124.66	5100	7000	401.34	550.86	0.70	35.00	City Steel
4	3x3	27.10x4.60	124.66	4800	7000	377.73	550.86	0.70	35.00	
5	5x5	27.40x13.00	356.20	12900	18500	355.28	509.50	0.70	35.00	Shalimar Steel
6	5x5	27.40x13.00	356.20	12600	18600	347.01	512.26	0.80	40.00	
<b>Only Six Sample for Tensile and Three Samples for Bend Test</b>										
<b>Bend Test</b>										
Strip Taken from Angle 2"x2" Bend Test Through 180° is Satisfactory										
Strip Taken from Angle 3"x3" Bend Test Through 180° is Satisfactory										
Strip Taken from Angle 5"x5" Bend Test Through 180° is Satisfactory										

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,  
M/S Saad Hammad Associates  
Lahore

Reference # CED/TFL **33827** (Dr. Waseem Abbas)  
Reference of the request letter # Nil

Dated: 16-09-2019  
Dated: 16-09-2019

**Tension Test Report** (Page -1/1)

Date of Test 17-09-2019  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.364	3	0.369	0.11	0.107	3700	4800	74200	76310	96200	99000	0.90	11.3	
.	.	.	.	.	.	.	.	.	.	.	.	.	.	
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<b>Note: only one sample for tensile test</b>														
Bend Test														

**I/C Testing Laboratoires**  
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To,  
 Managing Director  
 Bilal & Brothers  
 Construction of Regional Blood Centre (RBC), Skardu

Reference # CED/TFL **33829** (Dr. Waseem Abbas)  
 Reference of the request letter # RBC/SKD

Dated: 16-09-2019  
 Dated: 16-09-2019

**Tension Test Report** (Page -1/1)

Date of Test 17-09-2019  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.360	3	0.367	0.11	0.106	3200	4400	64200	66630	88200	91700	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,  
 GM  
 Professional Construction Services (Pvt) Ltd  
 TCF Primary School at Chak # 521 Adda Zaheer Nagar Burewala

Reference # CED/TFL **33831** (Dr. Waseem Abbas)  
 Reference of the request letter # PCS/19/Eng-60-A

Dated: 16-09-2019  
 Dated: 16-09-2019

**Tension Test Report** (Page -1/1)

Date of Test 17-09-2019  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.371	3	0.372	0.11	0.109	3000	4100	60200	60720	82200	83000	1.70	21.3	
2	0.370	3	0.372	0.11	0.109	3000	4100	60200	60880	82200	83200	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,  
M/S Riz Builders  
Lahore  
(Boundary wall Plot No. 3 at FIEDM at Faisalabad)(Chishty Brothers)

Reference # CED/TFL 33832-842 (Dr. Waseem Abbas)  
Reference of the request letter # Nil

Dated: 16-09-2019  
Dated: 16-09-2019

**Tension Test Report** (Page -1/1)

Date of Test 17-09-2019  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.387	3/8	0.380	0.11	0.114	3800	4800	76200	73680	96200	93100	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,  
Resident Engineer  
NESPAK  
China – Pakistan Economic Corridor (CPEC), Western Route Hakla (on M1) to D.I. Khan  
Motorway – Rehmani Khel to Kot Belian Package IIB(Minir Industries)(M/s Sardar Muhammad  
Ashraf)

Reference # CED/TFL **33833** (Dr. Waseem Abbas)

Dated: 16-09-2019

Reference of the request letter # RE/NESPAK/P-2B/CPEC-WR/919

Dated: 30-08-2019

**Tension Test Report** (Page – 1/1)

Date of Test 17-09-2019

Gauge length -----

Description Fence Wire Tensile Test as per AASHTO-M-181

Sr. No.	Diameter of Wire	Breaking Load		Remarks
	(mm)	(kg)	(kN)	
1	3.00	280	2.75	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
<b>Only One Sample for Test</b>				

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To,  
 Project Manager  
 Gattwala Commercial Hub  
 Construction of Gattwala Commercial Hub, Faisalabad

Reference # CED/TFL **33834-843** (Dr. Waseem Abbas)  
 Reference of the request letter # G.C.H/MT-02

Dated: 16-09-2019  
 Dated: 16-09-2019

**Tension Test Report** (Page -1/1)

Date of Test 17-09-2019  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	4.142	10	1.245	1.27	1.218	39800	52800	69100	72050	91700	95600	1.40	17.5	
-	4.102	10	1.239	1.27	1.206	40800	55000	70900	74590	95500	100600	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
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To,  
 Acting Project Director  
 Air University Multan Campus  
 Construction of Boys Hostel I  
 (Ittefaq Steel)

Reference # CED/TFL **33836** (Dr. Waseem Abbas)  
 Reference of the request letter # MUX/AUMC/BH1/2019/002

Dated: 16-09-2019  
 Dated: 03-09-2019

**Tension Test Report** (Page -1/1)

Date of Test 17-09-2019  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.369	3	0.372	0.11	0.109	2800	4100	56200	56880	82200	83300	1.30	16.3	40
2	0.370	3	0.372	0.11	0.109	2700	4100	54100	54780	82200	83200	1.30	16.3	
3	0.374	3	0.374	0.11	0.110	3200	4900	64200	64150	98200	98300	1.30	16.3	60
4	0.379	3	0.376	0.11	0.111	3200	4900	64200	63360	98200	97100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#3 Bar Bend Test Through 180° is Satisfactory														

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To,  
M/S Defence Housing Authority.  
Lahore Cantt  
(Const of Kennel Hospital Sector-E (Extn) DHA Ph-6)(M/s Fauz Engrs)

Reference # CED/TFL **33840** (Dr. Waseem Abbas)  
Reference of the request letter # 408/241/E/Lab/694

Dated: 17-09-2019  
Dated: 16-09-2019

**Tension Test Report** (Page -1/1)

Date of Test 17-09-2019  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.383	3	0.379	0.11	0.113	3400	5100	68200	66600	102200	99900	1.20	15.0	City Steel
2	0.378	3	0.376	0.11	0.111	3300	5000	66200	65510	100200	99300	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

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