

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

To, Resident Engineer-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **33217**, **380** (Dr. Qasim Khan)

Reference of the request letter # 3772/AMP/103/MWA/04/18

Dated: 13-05-2019

Dated: 30-04-2019

Tension Test Report (Page – 1/6)

Date of Test 14-06-2019 Gauge length 2 inches

Description Steel Structure Steel Strip Tensile Test as per ASTM A-36

Sr. No.		(honi) Designation	(m) Size of Strip	X Section Area	ga Yield load	max Breaking (Sg) Load	(MPa)	Withmate Stress	ii Elongation	% Elongation	Remarks
1	Angle	6x6x3/4	29.60x19.30	571.28	17300	27000	297.07	463.64	0.85	42.50	
2	Aligie	6x6x3/4	29.80x19.30	575.14	16300	26800	278.02	457.12	0.85	42.50	
3	Anglo	5x5x1/2	29.70x12.20	362.34	11500	19300	311.35	522.53	0.80	40.00	
4	Angle	5x5x1/2	29.40x12.20	358.68	12200	19000	333.67	519.66	0.80	40.00	
5	Anglo	4x4x3/8	28.30x9.50	268.85	9800	16500	357.59	602.06	0.70	35.00	
6	Angle	4x4x3/8	28.20x9.30	262.26	9600	15800	359.09	591.01	0.70	35.00	
7	Anglo	4x4x1/2	28.50x12.70	361.95	14000	20500	379.44	555.62	0.70	35.00	
8	Angle	4x4x1/2	29.40x12.50	367.50	13700	19800	365.71	528.54	0.65	32.50	
9	Angle	3x3x3/8	28.00x9.50	266.00	9300	14500	342.98	534.76	0.75	37.50	
10	Angle	3x3x3/8	28.10x10.20	286.62	10200	15300	349.11	523.67	0.70	35.00	
11	Anglo	$2^{-1}/_2 \times 2^{-1}/_2 \times 1/4$	25.40x8.00	203.20	6700	10200	323.46	492.43	0.70	35.00	
12	Angle	$2^{-1}/_2 \times 2^{-1}/_2 \times 1/4$	25.00x7.90	197.50	6600	9600	327.83	476.84	0.65	32.50	
	Only Twelve Samples for Tensile Test										
	Bend Test										

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To, Resident Engineer-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **33217, 380** (Dr. Qasim Khan) Dated: 13-05-2019 Reference of the request letter # 3772/AMP/103/MWA/04/18 Dated: 30-04-2019

Tension Test Report (Page - 2/6)

Date of Test 14-06-2019 Gauge length 2 inches

Description Steel Structure Steel Strip Tensile Test as per ASTM A-36

Sr. No.		Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
		(inch)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	A1 -	$3^{-1}/_2 x 3^{-1}/_2 x 3/8$	27.50x9.80	269.50	8900	13900	323.97	505.97	0.80	40.00	
2	Angle	$3^{-1}/_2 x 3^{-1}/_2 x 3/8$	28.20x9.60	270.72	9000	14100	326.13	510.94	0.65	32.50	
3	Cross	18x7	29.40x15.00	441.00	14500	23300	322.55	518.31	0.75	37.50	
4	Girder	18x7	29.20x15.00	438.00	13800	22100	309.08	494.98	0.75	37.50	
5	Rail	12x6	29.10x9.50	276.45	9900	16300	351.31	578.42	0.70	35.00	
6	Girder	12x6	29.20x9.30	271.56	9600	15800	346.80	570.77	0.70	35.00	
7	Channel	6x3	29.40x7.50	220.50	8300	12500	369.27	556.12	0.70	35.00	
8	Chamiei	6x3	29.30x7.60	222.68	8400	12700	370.06	559.49	0.70	35.00	
9	Ctuin	150x38x16mm	29.40x15.75	463.05	13000	19600	275.41	415.24	1.00	50.00	
10	Strip	150x38x16mm	29.40x15.75	463.05	13100	19700	277.53	417.36	1.10	55.00	
	Only Ten Samples for Tensile Test										
	Bend Test										

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To, Resident Engineer-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **33217, 380** (Dr. Qasim Khan) Dated: 13-05-2019 Reference of the request letter # 3772/AMP/103/MWA/04/18 Dated: 30-04-2019

Tension Test Report (Page – 3/6)

Date of Test 14-06-2019 Gauge length 2 inches

Description Steel Structure Steel Strip Tensile Test as per ASTM A-36

Sr. No.		Designation	(mm) Size of Strip	X Section Area Area	(kg)	Breaking (5) Load	(MPa)	Ultimate Stress	(ii) Elongation	% Elongation	Remarks
1	DI (3/8''	29.50x10.00	295.00	9800	14500	325.89	482.19	0.70	35.00	
2	Plate	3/8''	29.70x10.00	297.00	10000	14800	330.30	488.85	0.70	35.00	
3	Plate	1/2''	29.70x12.00	356.40	11300	16000	311.04	440.40	0.80	40.00	
4	Flate	1/2''	29.70x12.00	356.40	11400	16000	313.79	440.40	1.00	50.00	
5	Plate	3/4''	28.50x19.50	555.75	17000	24500	300.08	432.47	1.00	50.00	
6	1 late	3/4''	28.40x19.40	550.96	16500	24300	293.79	432.67	1.10	55.00	
7	Bed Plate	25mm	29.80x25.00	745.00	22100	34300	291.01	451.66	1.10	55.00	
8	Dea Tiate	25mm	29.80x25.00	745.00	22000	34400	289.69	452.97	1.20	60.00	
9	Plate	3mm	29.50x3.20	94.40	2800	3900	290.97	405.29	0.80	40.00	
10	1 1400	3mm	29.60x3.20	94.72	2700	4100	279.63	424.63	0.80	40.00	
	I		On	ly Ten Sa	mples fo	r Tensile T	Γest	T		Γ	
	D J Tr 4										
	Bend Test										

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To, Resident Engineer-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **33217, 380** (Dr. Qasim Khan) Dated: 13-05-2019 Reference of the request letter # 3772/AMP/103/MWA/04/18 Dated: 30-04-2019

Weight & Size Test Report (Page – 4/6)

Date of Test 14-06-2019

Gauge length ----

Description Angle Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	L-1	L-2	Thickness	Remark	
	(inch)	(g)	(mm)	(kg/m)	(mm)	(mm)	(mm)		
1	6x6x3/4	4440	101.20	43.87	154.40	155.00	19.20		
2	5x5x1/2	2583	103.00	25.08	127.8	127.20	12.20		
3	4x4x3/8	1431	92.40	15.49	103.80	103.70	9.50		
4	4x4x1/2	1841	92.80	19.84	105.00	103.00	12.40		
5	3x3x3/8	1085	92.00	11.79	81.00	78.40	9.75		
6	2-1/2x2-1/2x1/4	707	94.80	7.46	65.50	65.40	7.80		
7	3-1/2x3-1/2x3/8	1328	92.00	14.43	88.80	88.70	9.50		
-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-		
	Only Seven Samples for Test								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

ON NERWOOD TO SERVICE AND THE SERVICE AND THE

STRUCTURAL ENGINEERING DIVISION

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

To, Resident Engineer-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **33217, 380** (Dr. Qasim Khan) Dated: 13-05-2019 Reference of the request letter # 3772/AMP/103/MWA/04/18 Dated: 30-04-2019

Weight & Size Test Report (Page – 5/6)

Date of Test 14-06-2019

Gauge length

Description

Girder & Channel Weight and Size Test

Sr. No.	Designation		Weight	Length	Weight per Unit Length	Depth (d)	Flange Width (b _t)	Flange Thickness (t _f)	Web Thickness (t _w)	Remark
	(inch	1)	(g)	(mm)	(kg/m)	mm	mm	mm	mm	
1	Cross Girder	18x7	11615	97.00	119.74	462.00	179.50	27.80	14.70	
2	Rail Girder	12x6	4858	85.20	57.02	305.20	154.20	14.75	9.80	
3	Channel	6x3	1925	94.50	20.37	150.00	77.20	9.90	7.50	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
			Or	nly Three	e Samples	for Test	,			

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To, Resident Engineer-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **33217, 380** (Dr. Qasim Khan) Dated: 13-05-2019 Reference of the request letter # 3772/AMP/103/MWA/04/18 Dated: 30-04-2019

Weight &Size Test Report (Page – 6/6)

Date of Test 14-06-2019

Gauge length -----

Description Plate Weight and Size Test

Sr. No.	Designation		Weight	Length	Width	Weight per Unit Length	Thickness	Remark
			(g)	(mm)	(mm)	(kg/m^2)	(mm)	
1	Strip	150x38x16mm	1146	95.74	95.60	125.21	15.90	
2	Plate	3/8	717	95.60	95.60	78.45	10.10	
3	Plate	1/2	876	94.00	93.80	99.35	12.00	
4	Plate	3/4	1435	95.70	95.60	156.85	19.20	
5	Bed Plate	25mm	1795	95.40	95.60	196.81	25.00	
6	Plate	3mm	218	95.60	95.40	23.90	3.00	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
		(Only Six S	amples for	Test	I		

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To.

Assistant Executive Engineer Pakistan Railways, Lahore (Work of Special Repair of Public Foot over Bridge (Across the Yard) No. 13, 14, 15 & 16 on PSCEnd at Lahore Railway Station)

Reference # CED/TFL **33310** (Dr. Qasim Khan) Dated: 28-05-2019 Reference of the request letter # 634-W/PCS END Dated: 25-05-2019

Tension Test Report (Page - 1/1)

Date of Test 14-06-2019 Gauge length 2 inches

Description Steel Angle Iron Steel Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	. Elongation	Remarks
	(inch)	(mm)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)	%	
1	$3^{1}/_{2}x3^{1}/_{2}x3/8$	26.10x9.60	250.56	9500	13900	371.95	544.22	0.60	30.00	
2	3 ¹ / ₂ x3 ¹ / ₂ x3/8	26.30x9.60	252.48	8900	13400	345.81	520.65	0.70	35.00	
3	4x4x1/2	26.10x12.00	313.20	11800	17300	369.60	541.87	0.70	35.00	
4	4x4x1/2	26.15x12.20	319.03	11500	17400	353.62	535.04	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
	Only Four Samples for Tensile and Two Samples for Bend Test									

Bend Test

Strip Taken from Steel Angle (3¹/₂"x3¹/₂"x3/8") Bend Test Through 180° is Satisfactory

Strip Taken from Steel Angle (4"x4"x1/2") Bend Test Through 180° is Satisfactory

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

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To,
Resident Engineer
EA Consulting (Pvt) Ltd
Sukkur – Multan Motorway Project
Section – III (CSCEC)(IIL Lahore)

Reference # CED/TFL **33318** (Dr. Qasim Khan) Dated: 29-05-2019 Reference of the request letter # CRE/EA/M.P-III/414-2019 Dated: 28-05-2019

Tension Test Report (Page -1/2)

Date of Test 14-06-2019 Gauge length 2 inches

Description GI Pipe Steel Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	Elongation	Remarks
	(mm)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)	%	
1	100	29.00x4.50	130.50	3400	4400	255.59	330.76	0.70	35.00	
2	100	29.00x4.50	130.50	3300	4200	248.07	315.72	0.70	35.00	
-	-	-	-	-	-	-	•	-	-	
-	-	-	-	-	-	•	•	•	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	•	-	-	
	I	Only Two Sa	mples for	Tensile aı	nd One Sa	mple for	Bend Test			

Bend Test

Strip Taken from GI Pipe (100mm) Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

SINERING ASSESSMENT OF THE PROPERTY OF THE PRO

STRUCTURAL ENGINEERING DIVISION

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

To,
Resident Engineer
EA Consulting (Pvt) Ltd
Sukkur – Multan Motorway Project
Section – III (CSCEC)(IIL Lahore)

Reference # CED/TFL **33318** (Dr. Qasim Khan) Dated: 29-05-2019 Reference of the request letter # CRE/EA/M.P-III/414-2019 Dated: 28-05-2019

Seamless/Flattening Test Report (Page – 2/2)

Date of Test 14-06-2019

Description GI Pipe Seamless Test as per ASTM-A53-02

Sr. No.	Designation	Test Type	Observation/Results						
1	100mm	Ductility	No crack was observed						
1	100mm	Soundness	No evidence of lamination noticed						
		-	-						
-	-	-							
		-	-						
-	-	-	-						
		-	-						
-	-	-	-						
		-	-						
-	-	-	-						
		Only One	Sample for Test						

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To, M/S SEM Engineers Lahore

Reference # CED/TFL **33326** (Dr. Qasim Khan)

Reference of the request letter # Nil

Dated: 30-05-2019

Dated: 29-05-2019

Tension Test Report (Page - 1/3)

Date of Test 14-06-2019 Gauge length 2 inches

Description M.S Pipe Steel Strip Tensile Test

Sr. No.	(honi) Designation	(mm) Size of Strip	X Section Area	(g) Yield load	Breaking (Sg) Load	WPa) Xield Stress	Ultimate Stress	(ui) Elongation	% Elongation	Remarks
			, ,			, ,				
1	2	29.00x2.55	73.95	2200	2700	291.85	358.17	0.70	35.00	
2	2	29.00x2.50	72.50	2300	2800	311.21	378.87	0.55	27.50	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-		-	-		
-	-	-	-	-	-	-	-	-	•	
-	-	-	-	-	-	-	-	-	-	
			Only Tw	o Samples	for Tensil	e Test				
	Bend Test									

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To, M/S SEM Engineers Lahore

Reference # CED/TFL **33326** (Dr. Qasim Khan)

Reference of the request letter # Nil

Dated: 30-05-2019

Dated: 29-05-2019

Seamless/Flattening Test Report (Page – 2/3)

Date of Test 14-06-2019

Description M.S Pipe Seamless Test as per ASTM-A53-02

Sr. No.	Designation	Test Type	Observation/Results						
1	2''	Ductility	No crack was observed						
1	2	Soundness	No evidence of lamination noticed						
		-	-						
-	-	-							
		-	-						
-		-	-						
		-	-						
-	-	-	-						
		-	-						
_	-	-	-						
		-	-						
•	-	-	-						
	Only One Sample for Test								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

Ref: <u>CED/TFL/05/33333</u> Dated: <u>30-05-19</u>

To

Chief Resident Engineer NESPAK Lahore Orange Line Metro Project Package - 1

Subject: - TEST RESULT REPORT FOR PANEL WITH ANTI STATIC RAISED FLOOR SYSTEM

Reference to your letter no. 3765/13/FAM/C&C/Raised-Floor-2250, dated: 21/05/2019 on the above mentioned subject. One Panel with Anti Static Raised floor system with concentrated load by 80mm Indentor/Pressure stamp has been tested and results are given below:

Sr. No.	Applied Load	Deflection at 400 kg load	Remarks
1	400 kg	1.60mm	No crack is observed at applied load of 400 kg

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

NEE RING THE PROPERTY OF THE P

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 Five Star Corporation
Bahawalpur
(Construction of Noor Care Hospital Rajanpur)

Reference # CED/TFL **33164** (Dr. Asisf Hameed)

Reference of the request letter # 636/UET/LHR

Dated: 13-06-2019

Dated: 11-06-2019

Tension Test Report (Page -1/1)

Date of Test 14-06-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Diameter/ Size (inch)		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks	
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.418	3/8	0.395	0.11	0.123	4800	5900	96200	86180	118300	106000	0.90	11.3	
-	-	-	-	1	-	-	-	-	-	-	•	1	•	
-	•	-	-	1	-	-	-	-	-	-	•	ı	ı	
-	-	-	-	•	-	-	-	-	-	-	-	-	•	
-	-	-	-	•	-	-	-	-	-	-	-	•	•	
-	•	-	-	ı	-	-	•	-	-	-	•	ı	ı	
	Note: only one sample for tensile and one sample for bend test													
2/0	Bend Test 3/8" Dia Bar Bend Test Through 180° is Satisfactory													
3/8	" Dia Ba	ır Bend	Test Th	nrough	180° 18 S	Satisfacto	ry							

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To,

Assistant Engineer (C) University of Sargodha

Construction of 12 Nos. Residences (01 Block) for BPS (1-10) at Main Campus University of

Sargodha

Reference # CED/TFL **33365** (Dr. Asisf Hameed)

Reference of the request letter # SU/P.D(W)/16031

Dated: 13-06-2019

Dated: 10-06-2019

Tension Test Report (Page -1/1)

Date of Test 14-06-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Diameter/ Size (inch)		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stro (psi)		Elongation	% Elongation	Remarks	
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	Ŗ
1	0.379	3/8	0.377	0.11	0.111	2900	4600	58200	57360	92200	91000	1.10	13.8	
2	0.385	3/8	0.379	0.11	0.113	3000	4800	60200	58490	96200	93600	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-		-	-	-	-	-	-	-	-	-	-	-	-	
-		-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
2/0	" D' D	·			1000: 1	7	Bend T	est						
3/8	" Dia Ba	ır Bend	Test Th	nrough	180° is \$	Satisfacto	ory							

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To, Sub Divisional Officer Buildings Sub Division No. 15 Lahore

(Construction of A new Administration Block in The Premises of Lahore High Court Lahore)

Reference # CED/TFL **33366** (Dr. Asisf Hameed)

Reference of the request letter # 2280/H

Dated: 13-06-2019

Dated: 29-05-2019

Tension Test Report (Page -1/1)

Date of Test 14-06-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Diameter/ Size K (inch)		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stro (psi)		Elongation	% Elongation	Remarks	
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.417	3/8	0.395	0.11	0.122	4300	5800	86200	77410	116300	104500	0.80	10.0	
2	0.418	3/8	0.395	0.11	0.123	4400	5800	88200	78970	116300	104100	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-		-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
							D 17							
2/0	"D. D	D 1	Tr. 4 (Tr)		1000: 0	7	Bend T	est						
3/8	" Dia Ba	ır Bend	Test Th	nrough	180° 18 S	Satisfacto	ory							

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

MEERING THE PROPERTY OF THE PR

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 Defence Housing Authority.
Lahore Cantt
(Infra Dev Works IVY Green Sector-Z DHA Ph-VIII)(M/s MCC Ruba)

Reference # CED/TFL **33182** (Dr. M Rizwan Riaz) Dated: 13-06-2019 Reference of the request letter # 408/241/E/Lab/595/326 Dated: 28-05-2019

Tension Test Report (Page -1/1)

Date of Test 14-06-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Mei Diameter/ size		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stres (psi)		Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	₩ E	Re
1	0.376	3	0.375	0.11	0.111	3200	5200	64200	63770	104200	103700	0.80	10.0	eel
2	0.368	3	0.371	0.11	0.108	3100	5200	62200	63140	104200	106000	0.90	11.3	City Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Ci
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	'est						
#3	#3 Bar Bend Test Through 180° is Satisfactory													

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

SUNER RIVERS

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 Defence Housing Authority.
Lahore Cantt
(Infra Dev Works (Pkg-II, III & IV), DHA PH-IX)Prism)(M/s NLC)

Reference # CED/TFL **33374** (Dr. Asif Hameed) Dated: 13-06-2019 Reference of the request letter # 408/241/E/Lab/605/15913 Dated: 12-06-2019

Tension Test Report (Page -1/1)

Date of Test 14-06-2019

Gauge length

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A496

Weight	M Diameter/ size		Area (mm²)		Yield load	Breaking Load	Yield Stress (Mpa)			Remarks	
Sr. No. (Kg/m) W	Nominal (in)	Actual (mm)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	Re
0.265	1/4	6.56	32.26	33.79	1300	1700	395	377	517	493	
0.262	1/4	6.52	32.26	33.38	1300	1750	395	382	532	514	
ı	ı	1	•	-	•	-	•	•	-	-	
•	•	1	-	-	•	-	•	-	-	-	
•	•	•	•	-	•	-	•	•	-	-	
		-	-	-	-	-	-	-	-	-	
	N	lote: on	ly two	sample	s for tens	sile and o	ne sampl	e for ben	d test	1	
					Bend	d Test					
" Dia Ba	ar Bend	Test Tl	hrough	180° is \$	Satisfacto	ory					
	(m/gM) 0.265 0.262	(m/sg/N)	(mm)	(m)	(m)	(kg) 0.265 1/4 6.56 32.26 33.79 1300 0.262 1/4 6.52 32.26 33.38 1300	(H) (R) ((H) (R) (R) <td>(kg) (kg) (kg) (kg) (kg) (kg) (kg) (kg)</td> <td> The construction The constru</td> <td>(H) (H) (H)</td>	(kg) (kg) (kg) (kg) (kg) (kg) (kg) (kg)	The construction The constru	(H) (H)

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples