

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

To, Resident Engineer NESPAK M. Garh – D.G Khan Road

Reference # CED/TFL **33806** (Dr. M Rizwan Riaz)

Reference of the request letter # 3949/HA/01/297

Dated: 11-09-2019

Dated: 28-08-2019

**Tension Test Report** (Page – 1/2)

Date of Test 16-09-2019 Gauge length 2 inches

Description W-Section & Vertical Post 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		
		(cm)	(cm <sup>2</sup> )	(kg)	(kg)	(kg/cm <sup>2</sup> )	(kg/cm <sup>2</sup> )	(in)	%			
1	W Coeffee	2.89x0.285	0.82	3100	4400	3763.73	5342.07	0.50	25.00			
2	W-Section	2.89x0.285	0.82	3100	4500	3763.73	5463.49	0.50	25.00			
3	Vantical Dagt	2.49x0.715	1.78	6800	9500	3819.47	5336.03	0.70	35.00			
4	Vertical Post	2.49x0.715	1.78	6800	9800	3819.47	5504.54	0.70	35.00			
-		-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-			
	Only Four Samples for Tensile and Two Samples for Bend Test											
	Bend Test											

Strip Taken from W-Section Bend Test Through 180° is Satisfactory

Strip Taken from W-Section Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

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- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

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## 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 NESPAK M. Garh – D.G Khan Road

Reference # CED/TFL **33806** (Dr. M Rizwan Riaz)

Reference of the request letter # 3949/HA/01/297

Dated: 11-09-2019

Dated: 28-08-2019

Weight &Size Test Report (Page – 2/2)

Date of Test 16-09-2019

Gauge length -----

Description Vertical Post Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Depth d	Thickness	Remark
		(g)	(mm)	(kg/m)	(mm)	(mm)	
1	Vertical Post	985	79.00	12.47	120.00	7.10	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
		(	Only One S	Sample fo	or Test		

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

To, Senior Resident Engineer ProMag Pvt Ltd Development of Sector M1 - DHA Multan (M/s FTC Pvt Ltd)(Mughal Steel)

Reference # CED/TFL **33818** (Dr. M Rizwan Riaz)

Reference of the request letter # CRE/Sec-M1/315

Dated: 13-09-2019

Dated: 11-09-2019

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

Date of Test 16-09-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Si	neter/ ze m)		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	Re
1	0.415	10	10.01	0.12	0.122	4300	5400	78998	77670	99207	97600	0.80	10.0	
2	0.413	10	9.99	0.12	0.122	4400	5400	80835	79810	99207	98000	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-		-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			ı		Not	e: only t	wo sampl	es for ter	nsile test					
	Bend Test													

I/C Testing Laboratoires UET Lahore, Pakistan.

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## STRUCTURAL ENGINEERING DIVISION

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

To,

Furqan Ali Malik

Construction/ Improvement & Rehabilitation of at Grade Works along Lahore Orange Line Metro Train Corridor Construction of Steel Impact Gantries for Station of Package-1

Reference # CED/TFL **33820** (Dr. M Rizwan Riaz) Dated: 13-09-2019 Reference of the request letter # 4042/13/FAM/steel-088 Dated: 07-07-2019

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

Date of Test 16-09-2019 Gauge length 8 inches

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

Sr. No.	Weight	Diam si	neter/ ze		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)	ress Ultimate Stre (psi)		Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	∃ %	Re
1	4.240	10	1.260	1.27	1.246	40600	52800	70500	71800	91700	93400	1.50	18.8	
2	4.287	10	1.267	1.27	1.260	41200	53800	71500	72070	93400	94100	1.60	20.0	teel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	S.J Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	01
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend	test			
	Bend Test													
#10	#10 Bar Bend Test Through 180° is Satisfactory													

I/C Testing Laboratoires UET Lahore, Pakistan.

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## 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

(External Elec Works (U/G) IVY Green, Sector-Z, DHA Ph-VIII)(M/s NLC)

Reference # CED/TFL **33821** (Dr. M Rizwan Riaz) Dated: 13-09-2019 Reference of the request letter # 408/241/E/Lab/692/1294 Dated: 12-09-2019

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

Date of Test 16-09-2019 Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ size		size		size		size		size		size		size		size			rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	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	0.110	3800	5200	76200	75860	104200	103900	1.10	13.8	ш														
2	0.375	3	0.375	0.11	0.110	4000	5100	80200	79960	102200	102000	1.00	12.5	Kamran Steel														
-	-	-	-	-	-	-	-	-	-	-	-	-	-	K														
-	-	-	-	-	-	-	-	-	-	-	-	-	-															
-	-	-	-	-	-	-	-	-	-	-	-	-	-															
-	-	-	-	-	-	-	-	-	-	-	-	-	-															
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test	•	•	•														
	Bend Test																											
#3	#3 Bar Bend Test Through 180° is Satisfactory																											

I/C Testing Laboratoires UET Lahore, Pakistan.

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## STRUCTURAL ENGINEERING DIVISION

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

To, W - Mall MM Alam Road, lahore

Reference # CED/TFL **33823** (Dr. M Rizwan Riaz) Dated: 13-09-2019 Reference of the request letter # Nil Dated: 13-09-2019

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

Date of Test 16-09-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diam si:	neter/ ze	Aı (iı	rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	<b>3</b> %	Re
1	0.379	3	0.376	0.11	0.111	3400	5300	68200	67340	106200	105000	0.90	11.3	
-	ı	•	1	-	•	-	ı	•	-	•	•	1	ı	
-	•	•	-	-	-	-	•	-	-	-	•	-	1	
-	•	-	-	-	-	-	-	-	-	-	-	-	•	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1	1		No	te: only o	ne samp	le for ten	sile test			1		
							Bend T	est						

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

To,
Resident Engineer
G3 Engineering Consultants (Pvt) Ltd

Construction of Infrastructure and Allied at Rachna Industrial Parks at District Sheikhupura.

Phase-2

Reference # CED/TFL **33824** (Dr. M Rizwan Riaz) Dated: 13-09-2019 Reference of the request letter # G-3/0207/1093 Dated: 13-09-2019

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

Date of Test 16-09-2019 Gauge length 8 inches

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

Sr. No.	Weight	Diam si	neter/ ze		rea n²)	Yield load	Breaking Load		Stress si)	Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#) Actual (inch)		Nominal	Nominal Actual (k		(kg)	Nominal	Actual	Nominal	Actual	(inch)	∃%	Re
1	0.383	3	0.379	0.11	0.113	3400	5200	68200	66530	104200	101800	1.00	12.5	
-	•	•	1	•	-	-	•	-	-	-	•	1	ı	
-	•	-		-	-	-	-	-	-	-	-		-	
-	-	•	•	•	-	-	-	-	-	-	•	ı	ı	
-	-	•	•	•	-	-	-	-	-	-	•	ı	ı	
•	•	•	ı	•	-	-	•	-	-	-	•	ı	ı	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample f	or bend t	est			
	Bend Test													
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ctory								

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

To.

Resident Engineer

## AZ Engineering Associates

Construction Supervision of Scheme Pertaining to "Naya Pakistan Manzilyen Asan" Rural Acessibilty Programme (RAP) Phase-I for The Year 2018-19 Pertaining to Highway Circle Lahore (District Nankana Sahib)

- 1. Rehabilitation/ Construction of Road from Nankana Mangatanwala Road to Pipal wala via Bangla Nabi pur Piran Nabi pur Dak Pindi Piran Length = 13.20 km in District Nankana Sahib
- $2. \ \ Rehabilitation/\ Construction\ of\ Road\ from\ Nankana\ Shahkot\ Road\ Kamalpur\ Choki\ to\ Panwan\ via\ Nathuwala\ Tehsil\ Shahkot\ Length = 6.90\ km$

Reference # CED/TFL **33830** (Dr. Qasim Khan)

Reference of the request letter # RE/LHR-53

Dated: 16-09-2019

Dated: 16-09-2019

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

Date of Test 16-09-2019 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft) Nominal (#) Actual (inch)		Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	<b>H</b> %	Re	
1	0.367	3	0.370	0.11	0.108	3900	4800	78200	79770	96200	98200	0.90	11.3	
2	0.367	3	0.371	0.11	0.108	3800	4700	76200	77580	94200	96000	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
#2	Bar Ben	d Tost	Through	. 1900 :	Sotiafa	otom	Bend T	est						

#3 Bar Bend Test Through 180° is Satisfactory

Witness by Ali Shahid (Material Engineer AZEA)

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