

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

To, Resident Engineer **Techno Consult International** CPEC Package-1, D.I. Khan

Reference # CED/TFL **32481** (Dr. Qasim Khan) Dated: 22-01-2019 Reference of the request letter # RE/CPEC/DIK/2019/448 Dated: 21-01-2019

**Tension Test Report** (Page - 1/4)

Date of Test 25-01-2019 Gauge length 2 inches

Description Guard Rail & Vertical Steel Post Steel Strip Tensile and Bend Test as per

ASSHTO M-180

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	<b>Breaking</b> 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	Consul Dell	2.44x0.280	0.68	2700	3700	3951.99	5415.69	0.45	22.50	
2	Guard Rail	2.44x0.280	0.68	2800	3700	4098.36	5415.69	0.50	25.00	
3	Vertical Steel	2.44x0.510	1.24	4900	6400	3937.64	5143.04	0.50	25.00	
4	Post	2.44x0.510	1.24	5000	6500	4018.00	5223.40	0.55	27.50	
5	Vertical Steel	2.46x0.610	1.50	4800	6500	3198.72	4331.60	0.75	37.50	
6	Post	2.44x0.610	1.49	4500	6400	3023.38	4299.92	0.75	37.50	
		Only Six Sa	amples fo	r Tensile a	and Two S	amples for	Bend Test	T	1	
				Bend	   Test					

Strip Taken from Guard Rail Bend Test Through 180° is Satisfactory

Strip Taken from Guard Rail Bend Test Through 180° is Satisfactory

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

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To, Resident Engineer Techno Consult International CPEC Package-1, D.I. Khan

Reference # CED/TFL **32481** (Dr. Qasim Khan)

Reference of the request letter # RE/CPEC/DIK/2019/448

Dated: 22-01-2019

Dated: 21-01-2019

Weight &Size Test Report (Page – 2/4)

Date of Test 25-01-2019

Gauge length -----

Description Vertical Steel Post Weight and Size Test

Sr. No.	Designation		Weight	Length	Weight per Unit Length	Depth d	Thickness	Remark
	(mn	n)	(g)	(cm)	(kg/m)	(mm)	(mm)	
1	Vertical	5	7105	60.8	11.69	151.00	5.10	
2	Steel Post	6	8238	60.7	13.57	155.00	6.20	
-	-		-	-	-	-	-	
-	-		-	-	-	-	-	
-	-		-	-	-	-	-	
-	-		-	-	-	-	-	
-	-		-	-	-	-	-	
-	-		-	-	-	-	-	
-	-		-	-	-	-	-	
			Only Tw	o Sample	s for Test			

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To, Resident Engineer Techno Consult International CPEC Package-1, D.I. Khan

Reference # CED/TFL **32481** (Dr. Usman Akmal) Dated: 22-01-2019 Reference of the request letter # RE/CPEC/DIK/2019/449 Dated: 21-01-2019

**Tension Test Report** (Page – 3/4)

Date of Test 24-01-2019

Gauge length -----

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

Sr. No.	Diameter of Wire	Breakin	g Load	Remarks
	(mm)	(kg)	(kN)	
1	3.15	340	3.34	
2	3.15	360	3.53	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
	Only	Two Samples for	Test	1

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To, Resident Engineer Techno Consult International CPEC Package-1, D.I. Khan

Reference # CED/TFL **32481** (Dr. Usman Akmal) Dated: 22-01-2019 Reference of the request letter # RE/CPEC/DIK/2019/449 Dated: 21-01-2019

**Size Test Report** (Page – 4/4) Date of Test 24-01-2019

Gauge length -----

Description Net Size Test

Sr.	Designation	Diameter of Wire	Grid				
No.	Desiį	Diamet	Length	Width			
		(mm)	(mm)	(mm)			
1	Net	3.15	56.60	56.00			
-	-		-				
-	-	-	-	-			
-	-	-	-	-			
-	-	-	-	-			
-	-	-	-	-			
-	-	-	-	-			
-	-	-	-	-			
-	-	-	-	-			
	Only	One Sample	e for 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,
Resident Engineer
RENARDET S.A ((M-4), Package-3A)
Construction of Faisalabad-Khanewal Motorway (M-4) Project, Package-IIIA
(Nizami)(CGGC)

Reference # CED/TFL **32492** (Dr. Qasim Khan) Dated: 23-01-2019 Reference of the request letter # RE/M-4/3A/2019/281 Dated: 23-01-2019

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

Date of Test 25-01-2019

Gauge length -----

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

Sr. No.	Diameter of Wire	Breaking	g Load	Remarks
	(mm)	(kg)	(kN)	
1	3.20	500	4.91	
2	3.15	500	4.91	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
	Only T	Two Samples for	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, Acting Project Director Air University Multan Campus Construction of Academic Block-I

Reference # CED/TFL **32495** (Dr. Qasim Khan)

Reference of the request letter # MUX/AUMC/AB1/2018/46

Dated: 24-01-2019

Dated: 23-01-2019

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

Date of Test 25-01-2019
Gauge length 8 inches

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

Sr. No.	Weight	Diam Si	neter/ ze		rea n <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	0.358	3	0.366	0.11	0.105	2600	3850	52100	54480	77200	80700	1.50	18.8	
2	0.361	3	0.368	0.11	0.106	2600	3900	52100	53970	78200	81000	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend 1	test	· · · · · · · · · · · · · · · · · · ·		
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ctory	Bend T	est						
						-								

I/C Testing Laboratoires UET Lahore, Pakistan.

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

To, M/S ASM Steel Buildings Lahore Cantt

Reference # CED/TFL **32497** (Dr. Qasim Khan)

Reference of the request letter # Nil

Dated: 24-01-2019

Dated: 22-01-2019

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

Date of Test 25-01-2019 Gauge length 2 inches

Description Steel Strip Tensile Test

Sr. No.		Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(m	nm)	(mm)	(mm <sup>2</sup> )	(kg)	(kg)	(MPa)	(MPa)	(in)	%	
1	CI Daville	2	18.40x2.00	36.80	900	1250	239.92	333.22	0.70	35.00	
2	GI Purlin	2	18.40x2.00	36.80	1000	1300	266.58	346.55	0.65	32.50	
3	CICint	1.5	18.40x1.50	27.60	1500	1700	533.15	604.24	0.30	15.00	
4	GI Girt	1.5	18.40x1.50	27.60	1400	1700	497.61	604.24	0.25	12.50	
5	MC Chara	4	18.30x3.90	71.37	3100	3600	426.10	494.83	0.50	25.00	
6	MS Sheet	4	18.30x3.80	69.54	3100	3600	437.32	507.85	0.50	25.00	
7	MC Cl 4	6	18.40x5.80	106.72	4400	5800	404.46	533.15	0.55	27.50	
8	MS Sheet	6	18.40x5.90	108.56	4400	5800	397.61	524.12	0.55	27.50	
9	MC Cl 4	8	18.30x7.90	144.57	5900	7950	400.35	539.46	0.55	27.50	
10	MS Sheet	8	18.20x7.95	144.69	6000	7900	406.80	535.62	0.50	25.00	
	· '		Oı	nly Ten S	amples for	Tensile T	`est		I		
					Bend Tes	t					

I/C Testing Laboratoires UET Lahore, Pakistan.

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

To,

Construction Manager

Depac

Dr. Maqbool Ahmed Block K.E.M.U-Lahore

Reference # CED/TFL **32498** (Dr. Qasim Khan)

Reference of the request letter # C-03/Civil/18

Dated: 24-01-2019

Dated: 24-01-2019

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

Date of Test 25-01-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight		ieter/ ze	Aı (iı	rea n²)	Yield load Breaking Load			Stress si)	Ultimat (p	Elongation	% Elongation	Remarks	
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	З%	Re
1	0.390	3	0.382	0.11	0.115	4200	5100	84200	80760	102200	98100	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	•	-	-	
-	•	•	-	•	-	-	-	-	-	-	•	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	•	-	-	
			I		Not	e: only o	ne sampl	es for ter	nsile test	T		ı		
	Bend Test													

I/C Testing Laboratoires UET Lahore, Pakistan.

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# SIMPLE RAILORS AND THE PARTY OF THE PARTY OF

### STRUCTURAL ENGINEERING DIVISION

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

To,
Deputy Director
PHATA Sub Region, Khushab
(Construction of Over Head Reservoir 15,000- Gallons Capacity, Water Works in Area
Development Scheme-III Quaidabad District Khushab)(M/s Saeed Akhtar & Co)

Reference # CED/TFL **32499** (Dr. Qasim Khan)

Reference of the request letter # DD(PHATA)KHB/318

Dated: 24-01-2019

Dated: 20-12-2018

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

Date of Test 25-01-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

osi)	Elongation	% Elongation	Remarks
Actual	(inch)	% E	R
88600	1.30	16.3	
89100	1.50	18.8	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
ı			
	88600 89100 - -	(inch) Actual Ac	8.81 (inch) Actual 4.3 (inch)

I/C Testing Laboratoires UET Lahore, Pakistan.

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

To, M/S MIB Industrial Co. Lahore

Reference # CED/TFL **32500** (Dr. Qasim Khan)

Reference of the request letter # Nil

Dated: 24-01-2018

Dated: 24-01-2018

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

Date of Test 25-01-2018 Gauge length 2 inches

Description Plain Steel Bar Tensile Test

Sr. No.	Weight		neter/ ize	A (m	rea nm²)	Yield load	Breaking Load	Yield Stress (MPa)	Ultimate Stress (MPa)	Elongation	% Elongation	Remarks	
	(kg/m)	Nominal (mm)	Actual (mm)	Nominal	Actual	(kg)	(kg)	Actual	Actual	(inch)	%	-	
1	7.942	36	35.89		1011.7	50000	69000	485	669	0.6	30.0		
-	•	-	-	-	ı	-	-	-	-	•	-		
-	•	-	-	-	•	-	-	-	-	•	-		
-	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-		
		г т		,	Note: onl	ly one sa	mple for	tensile tes	st		T		
						Ber	nd Test						

I/C Testing Laboratoires UET Lahore, Pakistan.

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

To, Chief Engineer/Project Director Lahore College for Women University Construction of First Floor at Old Committee Room LCW University, Lahore

Reference # CED/TFL **32501** (Dr. Qasim Khan)

Reference of the request letter # 939

Dated: 24-01-2019

Dated: 23-01-2019

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

Date of Test 25-01-2019 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)	% E	Re
1	0.396	3	0.385	0.11	0.116	3600	5500	72200	68190	110200	104200	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	•	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	amples f	or tensile	and one	sample f	or bend t	test	ı	T	ı
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ctory	Bend T	est						

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