

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

To,

M/S Fiaz Brother & Co.

Reference # CED/TFL <u>3455 (Dr. M Rizwan Riaz)</u>
Reference of the request letter # Test/Conct230607B

Dated: 08-06-2023

Dated: 08-06-2023

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

Date of Test 09-06-2023 Gauge length 8 inches

Description Galvanized Wire Plain Steel Bar Tensile Test

Sr. No.	Weight		meter/ ize		rea m²)	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)	<b>%</b>	
1	0.045		2.69		5.7		250		432	0.40	5.0	
2	0.070		3.36		8.9		820		908	0.10	1.3	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
				No	ote: only	two samp	les for te	nsile test				
						Bend	Γest					

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/06/3408</u> Dated: <u>08-06-2023</u>

Dated of Test: 09-06-2023

To

M/S United Wire Industries (Pvt) Ltd Lahore

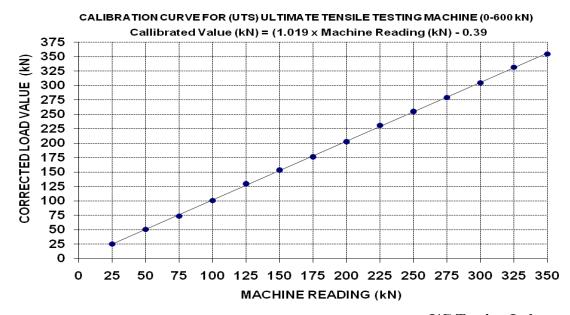
Subject:- CALIBRATION REPORT FOR 600 kN (UTS) ULTIMATE TENSILE TESTING MACHINE (MARK: CED/TFL/06/3408)

Reference to your letter No. UWIL/D-1830, dated: 07/06/2023 on the subject cited above. One Ultimate Tensile Testing Machine has been calibrated by using standard calibration device at site. The results are tabulated as under:

Total Range : Zero - 600 (kN)

Calibrated Range : Zero - 350 (kN)

Machine Reading (kN)	25	50	75	100	125	150	175	200	225	250	275	300	325	350
Corrected Load Value (kN)	25.38	51.09	74.14	101.18	129.22	152.94	175.99	202.03	231.48	254.63	279.43	304.89	332.09	355.25



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 NESPAK

Construction of Multi-Level Grade Separation Flyover at Shahdra Moor, Lahore

Reference # CED/TFL 3409 (Dr. M Rizwan Riaz)

Reference of the request letter # 4537/03/MSA/09/56

Dated: 08-06-2023

Dated: 07-06-2023

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

Date of Test 09-06-2023 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)		te Stress si)	Elongation	Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	4.122	10	1.242	1.27	1.212	38400	52000	66700	69850	90300	94600	1.50	18.8	B-3861
2	4.092	10	1.238	1.27	1.203	39200	52400	68100	71830	91000	96100	1.80	22.5	E-9064
3	4.161	10	1.248	1.27	1.223	41200	56000	71500	74250	97200	101000	1.40	17.5	E-9067
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only three samples for tensile and three samples for bend test											ı		
	) D D						Bend	Test						

#10 Bar Bend Test Through 180° is Satisfactory

#10 Bar Bend Test Through 180° is Satisfactory

#10 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

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

To,

M/S Design Force (Pvt) Limited Karachi (Construction of APL Retail outlet at Mini Hazara Rest Area Motorway)

Reference # CED/TFL <u>3410 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # DFPL/Mini Hazara/Steel/23

Dated: 08-06-2023

Dated: 07-06-2023

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

Date of Test 09-06-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		te 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	0.372	3	0.373	0.11	0.109	3590	4840	72000	72400	97000	97600	1.00	12.5	
-	0.365	3	0.370	0.11	0.107	3620	4810	72600	74330	96400	98800	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-`	
-	-	-	-	-	-	-	-	-	-	-	-	-	-`	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			ı		Not	e: only t	wo sampl	es for ter	nsile test					
							Bend T	est						

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,

Manager Projects Infrastructure Development Authority of The Punjab Establishment of Emergency and Trauma Center at Jinnah Hospital, Lahore

Reference # CED/TFL **3411** (Dr. M Rizwan Riaz)

Reference of the request letter # E&T-JHL/Site/IDAP/2023/09

Dated: 08-06-2023

Dated: 07-06-2023

### **Tension Test Report**

Date of Test 09-06-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615;

Sr. No.	Weight	Diam Si	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	0.373	3	0.374	0.11	0.110	3490	4890	70000	70190	98000	98400	1.30	16.3	S-1
2	0.372	3	0.373	0.11	0.109	3520	4840	70600	70910	97000	97600	1.30	16.3	3-1
3	0.372	3	0.373	0.11	0.109	3520	4890	70600	70940	98000	98600	1.20	15.0	S-2
4	0.373	3	0.374	0.11	0.110	3490	4860	70000	70080	97400	97600	1.20	15.0	5-2
5	0.373	3	0.374	0.11	0.110	3490	4860	70000	70080	97400	97600	1.20	15.0	S-5
6	0.374	3	0.374	0.11	0.110	3490	4890	70000	69990	98000	98100	1.20	15.0	3-3
			No	te: only	y six sar	nples for	tensile a	nd three	samples	for bend	test			
							Bend T	est est						
#3	Bar Ben	d Test 7	Γhrough	180° is	s Satisfa	ctory								
#3	Bar Ben	d Test 7	Γhrough	180° is	s Satisfa	ctory								
#3	Bar Ben	d Test 7	Γhrough	180° is	s Satisfa	ctory								

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,

Project Manager Zameen Development Construction of Zameen NEO at Plot # 13 Block H, Gulberg-III, Lahore

Reference # CED/TFL 3413 (Dr. M Rizwamn Riaz)

Reference of the request letter # ZD/QAQC/NEO/03

Dated: 08-02-2023

Dated: 08-06-2023

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

Date of Test 09-06-2023 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	R
1	0.413	3	0.393	0.11	0.121	3470	5150	69600	63000	103200	93500	1.00	12.5	e
2	0.413	3	0.393	0.11	0.121	3520	5250	70600	63960	105200	95400	1.00	12.5	Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	_`	S
-	-	-	-	-	-	-	-	-	-	_	-	-	_`	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
,			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	est	ı		1
	D D	1.75	F1 1	1000:	g vi s		Bend T	est est						
#3	Bar Ben	d Test	Through	1 180° is	s Satisfa	ictory								

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,

Project Manager Ittefaq Building Solutions Pvt. Ltd McDonald 's Restaurant Lake City, Lahore.

Reference # CED/TFL **3414** (Dr. M Rizwan Riaz)

Reference of the request letter # IBS/CED/MRLC-01

Dated: 08-06-2023

Dated: 08-06-2023

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

Date of Test 09-06-2022 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ze m)		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress 'si)		te Stress si)	Elongation	% Elongation	Remarks
S	(kg/m)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	∃%	R
1	0.402	10	9.85	0.12	0.118	3870	5120	71098	72160	94063	95500	1.00	12.5	
-	1	-	-	1	-	-	-	1	-	-	-	-	1	
-	-	-	-	1	-	-	-	-	-	-	-	-	-	
-	-	-	-	1	-	-	-	-	-	-	-	-	-	
-	-	-	-	1	-	-	-	ı	-	-	-	-	ı	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample f	or bend t	est	1		
							Bend T	est						
101	nm Dia	Bar Bei	nd Test	Throug	h 180° i	s Satisfac	ctory							

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

**NESPAK** 

Dualization of Road from Gujranwala to M-2 Interchange at Kot Sawar via Hafizabad km 6.20 to km 80.35 Length 74.15 km in District Gujranwala & Hafizabad (Section km 55.40 – 79.35, L=23.95 km)

Reference # CED/TFL 3415 (Dr. M Rizwan Riaz)

Reference of the request letter # SA-466F/103/GH/ML/Lab/76

Dated: 08-06-2023

Dated: 16-05-2023

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

Date of Test 09-06-2023 Gauge length 8 inches

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

Sr. No.	eight	Diam Si			rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
<i>S</i> 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.399	3	0.386	0.11	0.117	3230	4840	64800	60700	97000	91000	1.40	17.5	
2	0.389	3	0.381	0.11	0.114	3080	4480	61800	59430	89800	86500	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	ı	ı	ı	ı	-	-	ı	-	-	-	-	-	1	
-	ı	1	ı	1	-	-	ı	-	-	-	-	-	1	
-	-	-	1	-	-	-	•	-	-	-	-	-	-	
			No	ote: on	ly two s	amples fo	or tensile	and one	sample f	or bend	test	ı		
							Bend T	est						
#3	Rar Ren	d Test 1	Through	180° i	c Satisfa	etory	Della 1	CSI						

#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



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

To,

Divisional Forest Officer Kasur Forest Division At Changa Manga "Construction of Boundary Wall at Changa Manga Irrigated Plantation"

Reference # CED/TFL 3416 (Dr. M Rizwamn Riaz)

Reference of the request letter # 1037/AC

Dated: 08-06-2023

Dated: 13-05-2023

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

Date of Test 09-06-2023 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		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	0.410	3	0.392	0.11	0.120	4250	5170	85200	77760	103600	94600	1.00	12.5	<u>e</u>
-	-	-	-	-	-	-	-	-	-	-	-	-	· -	) Steel
-	-	-	-	-	-	-	_	-	-	_	-	-	_`	SJ
-	-	-	-	-	-	-	-	-	-	-	-	-	· -	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	_	-	-	-	
			N	ote: on	ly one s	sample fo	or tensile	and one	sample fo	or bend t	est			
							Bend T	est						
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ctory								

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,

General Manager Base & Brick Solutions Pvt Ltd.

Construction of Sub-Campus for Superior University, Sialkot-Wazirabad Road, Sialkot

Reference # CED/TFL 3417 (Dr. M Rizwan Riaz)

Dated: 08-06-

2023

Reference of the request letter # B&B/Sub-Camp.Sialkot/Lot-2/2023/0806 Dated: 08-06-2023

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

Date of Test 09-06-2023 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
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	I %	R
1	0.364	3	0.369	0.11	0.107	3330	4760	66800	68600	95400	98100	0.90	11.3	
2	0.354	3	0.364	0.11	0.104	3210	4690	64400	67980	94000	99400	1.00	12.5	
-		-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
		1	<b>T</b>	1000:	~		Bend T	est						
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ictory								

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,

Project Manager Haris & Co Construction of Ideal Filling Station Sargodha

Reference # CED/TFL **3420** (Dr. M Kashif) Dated: 09-06-2023

Reference of the request letter # H&CO/IFS-KDR/01 Dated: 09-06-2023

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

Date of Test 09-06-2023 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
<i>S</i> 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.225	2	0.290		0.066	1910	2400		63650		80000	1.20	15.0	el
2	0.225	2	0.290		0.066	1940	2420		64730		80800	1.40	17.5	Mughal Steel
3	0.363	3	0.369	0.11	0.107	3540	4460	71000	73160	89400	92200	1.10	13.8	lugha
4	0.368	3	0.371	0.11	0.108	3490	4430	70000	71040	88800	90200	1.10	13.8	M
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	te: only	y four s	amples fo	or tensile	and two	samples	for bend	test			
							Bend T	est						
#2	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ctory								
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ctory								

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

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