

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

To,
Deputy Director-II
LDA, Lahore

(Fabrication and Installation of Pedestrian Overhead Bridge Near Kalma Chowk, Across Ferozepur Road, Lahore)

Reference # CED/TFL 1026 (Dr. Usman Akmal)

Reference of the request letter # DD-II/LDA/19

Dated: 07-03-2022

Dated: 24-02-2022

**Tension Test Report** (Page – 1/4)

Date of Test 10-03-2022 Gauge length 2 inches

Description Steel Structure Steel Strip Tensile Test as per ASTM A36

Sr. No.	(m)	m)	(mm) Size of Strip	X Section Area	(g) Yield load	(gx) Breaking Load	(MPa)	Ultimate Stress	ii Elongation	% Elongation	Remarks
1	I-Beam	450x175x17x21	27.45x16.30	447.44	12900	22800	283	500	0.70	35.00	
2	I-Beam	150x75x6x8	27.40x5.30	145.22	5800	8700	392	588	0.60	30.00	
3	Checker Plate	6	27.40x5.60	153.44	4400	6800	281	435	0.60	30.00	
4	Angle	100x100x9	27.40x9.10	249.34	8900	13800	350	543	0.70	35.00	
5	<b>Channel Section</b>	300x88x10x12	27.30x11.50	313.95		18800		587	0.65	32.50	
-	-	-	-	-	ı	-	-	-	ı	-	
-	•	-	-	-	ı	-	-	-	ı	-	
-	-	-	-	-	ı	-			ı	-	
			Only Five S	Samples	for Tens	ile Test					
				Bend T	`est	<u> </u>					<u> </u>

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

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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,
Deputy Director-II
LDA, Lahore
(Fabrication and Installation of Pedestrian Overhead Bridge Near Kalma Chowk, Across
Ferozepur Road, Lahore)

Reference # CED/TFL 1026 (Dr. Usman Akmal)

Reference of the request letter # DD-II/LDA/19

Dated: 07-03-2022

Dated: 24-02-2022

Weight & Size Test Report (Page – 2/4)

Date of Test 10-03-2022

Description I Beam & Channel Section Weight and Size Test

Sr. No.	(m:	Designation	Weight	(mm)	Weight per Unit Length	B Depth (d)	Elange Width (b <sub>f</sub> )	E Flange Thickness (t <sub>f</sub> )	Web Thickness (t <sub>w</sub> )	Remark
1	I-Beam	450x175x17x21	11875	99.40	119.47	457.00	178.30	20.00	16.0	
2	I-Beam	150x75x6x8	1732	102.50	16.90	150.75	80.10	7.95	5.40	
3	<b>Channel Section</b>	300x88x10x12	4903	101.3	48.40	303.00	104.50	9.50	11.50	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	ı	ı	1	-	-	-	-	ı	-	
-	ı	1	ı	-	-	-	ı	1	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
			Only	Three Sa	mples fo	r 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,
Deputy Director-II
LDA, Lahore

(Fabrication and Installation of Pedestrian Overhead Bridge Near Kalma Chowk, Across Ferozepur Road, Lahore)

Reference # CED/TFL <u>1026 (Dr. Usman Akmal)</u> Reference of the request letter # DD-II/LDA/19

Weight &Size Test Report (Page – 3/4)

Date of Test 10-03-2022

Description Checker Plate Weight and Size Test

Sr. No.	Designation		Weight	Length	Width (b)	Weight per Unit Area	Thickness	Remark
	(mm	n)	(g)	(mm)	(mm)	$(kg/m^2)$	(mm)	
1	Checker Plate	6	466	101.95	102.20	44.72	5.60	
-	Checker Plate 6		-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-			-	-	-	-	-	
			Only One	e Sample f	or Test			

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 07-03-2022

Dated: 24-02-2022

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

To,
Deputy Director-II
LDA, Lahore

(Fabrication and Installation of Pedestrian Overhead Bridge Near Kalma Chowk, Across Ferozepur Road, Lahore)

Reference # CED/TFL <u>1026 (Dr. Usman Akmal)</u> Reference of the request letter # DD-II/LDA/19

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

Date of Test 10-03-2022

Description Angle Weight and Size Test

Sr. No.	Dogina	Designation	Weight	Length	Weight per Unit Length	L-1	L-2	Thickness	Remark
	(m	m)	(g)	(mm)	(kg/m)	(mm)	(mm)	(mm)	
1	Angle	100x100x9	1448	102.5	14.13	101.65	102.50	9.00	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
			Only	One Sam	ple for Te	est			

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 07-03-2022

Dated: 24-02-2022

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

To,
Sub Divisional Officer
Building Sub Division Chauburji
Estate Lahore
(Construction Drain for Raimn Water at Chauburji Garden Lahore)

Reference # CED/TFL <u>1027 (Dr. Usman Akmal)</u>
Reference of the request letter # 190-91/C.E.
Dated: 08-03-2022
Dated: 12-02-2022

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

Date of Test 10-03-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze	Ar (ir	rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
<b>S</b> 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	Э %	R
1	0.417	3	0.395	0.11	0.122	4100	4700	82200	73770	94200	84600	1.20	15.0	
2	0.410	3	0.392	0.11	0.121		6600			132300	120600	0.90	11.3	
3	0.414	3	0.394	0.11	0.122	3800	4900	76200	68830	98200	88800	0.90	11.3	
4	0.410	3	0.392	0.11	0.121	4400	5200	88200	80430	104200	95100	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	te: only	y four s	amples fo	or tensile	and two	samples	for bend	test			
							Bend T	est						
#3	Bar Ber	nd Test	Throug	h 180° i	s Satisf	actory								

I/C Testing Laboratoires UET Lahore, Pakistan.

#### Note:

#3 Bar Bend Test Through 180° is Satisfactory

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

To, Sub Divisional Officer Highway Sub Division Lalian

(Construction of Road from Shekin to Mundi Bair in Tehsil Lalian District Chiniot Length = 2

km)

Reference # CED/TFL 1028 (Dr. Usman Akmal)

Reference of the request letter # 770/L

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

Date of Test 10-03-2022 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)	<b>3</b> %	R
1	0.381	3	0.378	0.11	0.112		7000			140300	137900	0.90	11.3	
-	ı	1	ı	-	-	-	1	ı	-	-	-	-	-	
-	ı	ı	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			1
							D 17	4						
#3	Bar Ben	d Test	Γhrough	n 180° is	s Satisfa	ctory	Bend T	est						

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 08-03-2022

Dated: 07-02-2022

- 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
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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 of Multi Purpose Complex at Quaid-e-Azam Business Park (QABP) on M-2
Motorway, Sheikhupura

Reference # CED/TFL <u>1031 (Dr. Usman Akmal)</u>

Reference of the request letter # RE/AZE/MPC-190

Dated: 08-03-2022

Dated: 22-02-2022

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

Date of Test 10-03-2022 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
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Nominal Actual 4.10		(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	Re
1	0.380	3	0.377	0.11	0.112	3800	4700	76200	74890	94200	92700	0.90	11.3	Faizan Steel
2	0.380	3	0.377	0.11	0.112	3800	4700	76200	75080	94200	92900	1.10	13.8	Fai Ste
-	ı	-	ı	1	-	-	-	-	-	-	-	-	-	
-	ı	-	ı	1	-	-	-	-	-	-	-	-	-	
-	ı	-	ı	ı	-	-	-	-	-	-	-	-	-	
-	-	-	1	-	-	-	-	-	-	-	-	-	-	
		T	No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test	ı	ı	
							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
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

**Executive Engineer** 

Road Construction Division, Hafizabad

Dualization of Road from Gujranwala to M-2 Interchange at Kot Sarwar via Hafizabad km 6.20 to km 80.35 Length = 74.15km in District Gujranwala & Hafizabad (Sevtion - 1 km no. 23.20 to km 40.20 L = 17 km)

Reference # CED/TFL <u>1033 (Dr. Usman Akmal)</u> Reference of the request letter # 1470/CB Dated: 08-03-2022 Dated: 02-03-2022

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

Date of Test 10-03-2022 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)	Ultimat (p		Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.391	3	0.382	0.11	0.115	3400	5400	68200	65280	108200	103700	0.80	10.0	
2	0.378	3	0.376	0.11	0.111	3500	6200	70200	69480	124300	123100	0.60	7.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	ı	1	-	ı	-	-	-	-	-	-	1	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
ща	Rar Rei	. 1 T	T1	1. 1000	G-4: C	4	Bend T	est						

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

To, Muddasir Ali Lahore

Reference # CED/TFL 1034 (Dr. Usman Akmal)

Reference of the request letter # Nil

Dated: 08-03-2022

Dated: 08-02-2022

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

Date of Test 10-03-2022 Gauge length 8 inches

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

Sr. No.	Weight		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)	% E	Re
1	0.367	3	0.371	0.11	0.108	3400	4600	68200	69410	92200	94000	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample fo	or bend t	est			
112	Bar Ben	1.75	D1 1	1000:			Bend T	est						

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

To,
Project Manager
United Lifestyle (Pvt) Ltd
A High Rise Building "Skyscraper by United" at Johar Town, Lahore

Reference # CED/TFL <u>1036 (Dr. Usman Akmal)</u>
Reference of the request letter # ULS/2021-22/007
Dated: 09-03-2022

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

Date of Test 10-03-2022 Gauge length 8 inches

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

Sr. No.	Weight	Dian 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)	∃ %	Re
1	0.381	3	0.378	0.11	0.112	3800	5100	76200	74800	102200	100400	1.10	13.8	
2	0.376	3	0.375	0.11	0.111	3900	5100	78200	77720	102200	101700	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	sample f	or bend t	test	ı						
#3	Bar Ben	d Test T	Through	180° is	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, Engr. Uzair Siddique Atiq Associates Lahore American School, Upper Mall Road, Lahore

Reference # CED/TFL 1037 (Dr. Usman Akmal)

Reference of the request letter # Nil

Dated: 09-03-2022

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

Date of Test 10-03-2022 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
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.368	3	0.371	0.11	0.108	4300	5500	86200	87620	110200	112100	0.75	9.4	
2	0.398	3	0.386	0.11	0.117	4900	6000	98200	92410	120300	113200	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			1
							Bend T	est						
#3	Bar Ber	nd Test	Throug	h 180° i	s Satisf	actory								

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
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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, Chief Engineer Zaitoon New Lahore City, Lahore

Reference # CED/TFL 1038 (Dr. Usman Akmal)

Reference of the request letter # NLC/CE/Const/34

Dated: 09-03-2022

Dated: 08-03-2022

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

Date of Test 10-03-2022 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)		ee Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	∃ %	R
1	0.371	3	0.373	0.11	0.109	3400	4700	68200	68660	94200	95000	1.20	15.0	F.F Steel
2	0.370	3	0.372	0.11	0.109	3200	4400	64200	64900	88200	89300	1.10	13.8	F. St
-	-	-	1	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	ı	-	ı	ı	-	1	-	-	-	-	-	-	-	
-	-	-	1	-	-	-	-	-	-	-	-	-	-	
		<u> </u>	N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
	D D	1.55	D1 1	1000:	g .: c		Bend T	est						
#3	Bar Ben	d Test	l'hrough	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
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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
ACES
Sector - H, DHA Multan
Civil Infrastructure Development Works DHA Multan

Reference # CED/TFL 1039 (Dr. Usman Akmal)

Reference of the request letter # ACES-DHAM-NLC-183

Dated: 09-03-2022

Dated: 07-03-2022

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

Date of Test 10-03-2022 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ze m)		Area (in²)		Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	<b>3</b> %	R
1	0.413	10	9.99	0.12	0.121	4200	5400	77161	76200	99207	98000	1.10	13.8	al
2	0.412	10	9.97	0.12	0.121	4100	5400	75324	74690	99207	98400	1.20	15.0	Mughal Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	_	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
	Bend Test													
10r	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,
M/S Pearl One Residencies
Bridgeway Developers
Pilling at Pearl One Residencies by Bridgeway Developers 26 Block-C M.M Alam Road
Gulberg III Lahore

Reference # CED/TFL 1040 (Dr. Usman Akmal)

Reference of the request letter # Nil

Dated: 09-03-2022

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

Date of Test 10-03-2022 Gauge length 8 inches

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

Sr. No.	Weight	Diam Si			Area (in²)		<b>Breaking</b> Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Nominal Actual Actual		(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.380	3	0.377	0.11	0.112	3100	4900	62200	61210	98200	96800	1.30	16.3	a m
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Batala Premium
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Pr
-	-	-	-	-	-	-	-	-	-	-	-	_	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
			N	ote: on	ly one s	ample fo	or tensile	and one	sample fo	or bend t	est			
#3	Bar Ben	d Test T	Through	180° is	s Satisfa	ctory	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
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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
City Survey & Engineering Consultants
Green View Executive Apartments Phase-V

Reference # CED/TFL <u>1042 (Dr. Usman Akmal)</u>
Reference of the request letter # GVA/RE/04/22
Dated: 09-03-2022

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

Date of Test 10-03-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze	Area (in²) Xield load		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)	∃ %	Re
1	0.377	3	0.376	0.11	0.111	4100	5000	82200	81540	100200	99500	0.80	10.0	
2	0.370	3	0.372	0.11	0.109	4800	5700	96200	97390	114300	115700	0.50	6.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	est						
#3	Bar Ber	nd Test	Throug	h 180° i	is Satisfa	actory								

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.
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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 Ittefaq Building Solution (Pvt) Ltd. Lahore (New Apparel Facility, Ferozwattwan)

Reference # CED/TFL <u>1043 (Dr. Usman Akmal)</u> Dated: 09-03-2022 Reference of the request letter # IBS/SD/ST-45 Dated: 08-03-2022

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

Date of Test 10-03-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze	Aı (iı	Area (in²)		Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Nominal Actual Actual		(kg)	Nominal Actual		Nominal	Actual	(inch)	% E	Re
1	0.368	3	0.371	0.11	0.108	3800	5000	76200	77410	100200	101900	0.80	10.0	co
2	0.368	3	0.371	0.11	0.108	3700	4800	74200	75410	96200	97900	1.10	13.8	Afco Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	-	-	-	-	-	-	-	-	-	_	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test	1		
							D 17							
#2	Rar Ren	d Tost	Through	. 1900 :	Sotiafa	atomi	Bend T	est						

#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.
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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 Irtiqa Designs Lahore

Reference # CED/TFL 1044 (Dr. Usman Akmal) Dated: 09-03-2022 Reference of the request letter # Nil Dated: 09-03-2022

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

Date of Test 10-03-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		Area (in²)		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	Re
1	0.397	3	0.386	0.11	0.117	3100	4500	62200	58480	90200	84900	1.60	20.0	
2	0.407	3	0.390	0.11	0.120	3100	4700	62200	57180	94200	86700	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	_	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test	ı		
ща	Rar Ren	d Tage 5	T1 1	1000:	Catiof		Bend T	est est						

#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.
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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 Irtiqa Designs Lahore

Reference # CED/TFL 1044 (Dr. Usman Akmal) Dated: 09-03-2022 Reference of the request letter # Nil Dated: 09-03-2022

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

Date of Test 10-03-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		Area (in²)		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	Re
1	0.397	3	0.386	0.11	0.117	3100	4500	62200	58480	90200	84900	1.60	20.0	
2	0.407	3	0.390	0.11	0.120	3100	4700	62200	57180	94200	86700	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	_	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test	ı		
ща	Rar Ren	d Tage 5	T1 1	1000:	Catiof		Bend T	est est						

#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
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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 Irtiqa Designs Lahore

Reference # CED/TFL 1044 (Dr. Usman Akmal) Dated: 09-03-2022 Reference of the request letter # Nil Dated: 09-03-2022

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

Date of Test 10-03-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		Area (in²)		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	Re
1	0.397	3	0.386	0.11	0.117	3100	4500	62200	58480	90200	84900	1.60	20.0	
2	0.407	3	0.390	0.11	0.120	3100	4700	62200	57180	94200	86700	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	_	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test	ı		
ща	Rar Ren	d Tage 5	T1 1	1000:	Catiof		Bend T	est est						

#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.
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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 Irtiqa Designs Lahore

Reference # CED/TFL 1044 (Dr. Usman Akmal) Dated: 09-03-2022 Reference of the request letter # Nil Dated: 09-03-2022

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

Date of Test 10-03-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		Area (in²)		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	Re
1	0.397	3	0.386	0.11	0.117	3100	4500	62200	58480	90200	84900	1.60	20.0	
2	0.407	3	0.390	0.11	0.120	3100	4700	62200	57180	94200	86700	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	_	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test	ı		
ща	Rar Ren	d Tage 5	T1 1	1000:	Catiof		Bend T	est est						

#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.
- 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/03/1046</u> Dated: <u>10-03-2022</u>

Dated of Test: 10-03-2022

To,
Resident Engineer
AZ Engineering Associates
Construction of Flyover at Shahabpura Chowk Defence Road Sialkot in District Sialkot

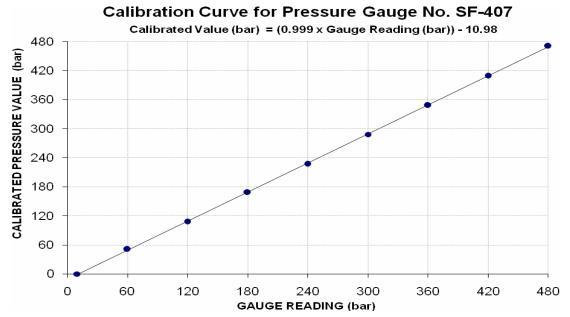
## Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/03/1046) (Page -1/2)

Reference to your Letter No. AZEA/SLK/SF/22/21, Dated: 09/03/2022 on the subject cited above. One Pressure Gauge No. SF-407 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar) Calibrated Range : Zero - 480 (bar)

Pressure Gauge Reading (bar)	10	60	120	180	240	300	360	420	480
Calibrated Load (kg)	0	10300	21700	34000	45800	58200	70300	82600	95000
Calibrated Pressure (bar)	0	51	107	168	227	288	348	409	471

The Ram Are use for Calibration =  $198 \text{ cm}^2$ 



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/03/1046</u> Dated: <u>10-03-2022</u>

Dated of Test: 10-03-2022

To,
Resident Engineer
AZ Engineering Associates
Construction of Flyover at Shahabpura Chowk Defence Road Sialkot in District Sialkot

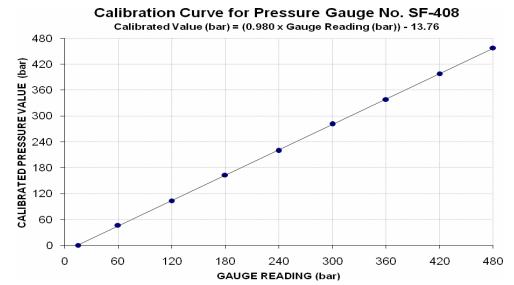
## Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/03/1046) (Page -2/2)

Reference to your Letter No. AZEA/SLK/SF/22/21, Dated: 09/03/2022 on the subject cited above. One Pressure Gauge No. SF-408 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar) Calibrated Range : Zero - 480 (bar)

Pressure Gauge Reading (bar)	15	60	120	180	240	300	360	420	480
Calibrated Load (kg)	0	9500	20900	33000	44300	56800	68300	80400	92400
Calibrated Pressure (bar)	0	47	104	163	219	281	338	398	458

The Ram Are use for Calibration =  $198 \text{ cm}^2$ 



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
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