

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

To,

Projects Manager ICPL Izhar Construction (Pvt) Ltd OMBRe' Holding Pvt Ltd Raiwind, Lahore

Reference # CED/TFL **3042** (Dr. Usman Akmal)

Reference of the request letter # OMBRe'/Ittefaq/Steel/014 Dated: 03-04-2023

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

Date of Test 06-04-2023 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	(lbs/ft)	Nominal	Actual	Nominal			(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.378	10	9.55	0.12	0.111	3540	5150	65036	70280	94614	102300	1.20	15.0	faq sel
2	0.372	10	9.48	0.12	0.109	3440	5070	63199	69300	93144	102200	1.30	16.3	Ittefaq Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Note: only two samples for tensile and one sample for bend test									test	1		1
							Bend T	<u>'est</u>						
10r	nm Dia	Bar Ber	nd Test	Throug	h 180° i	s Satisfac	etory							

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 04-04-2023

- 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 Director Building Section Defence Housing Authority** Gujranwala (Construction of Villas (Block – D)

Reference # CED/TFL **3044** (Dr. Usman Akmal) Dated: 04-04-2023 Reference of the request letter # 111/3/AD Bldgs/Gen/39 Dated: 04-04-2023

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

06-04-2023 Date of Test 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	0.363 3 0.368	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re	
1	0.363	3	0.368	0.11	0.107	3870	4760	77600	80010	95400	98500	1.10	13.8	el
2	0.360	3	0.367	0.11	0.106	2960	4150	59400	61660	83200	86500	1.60	20.0	Kamran Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	amra
-	-	-	-	-	-	-	-	-	-	-	-	-	-	K
-	1	1	-	1	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
#2	Bar Ben	d Tost 7	[ Through	. 1900 :	Sotisfa	untors:	Bend T	est 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.
- 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/04/3046</u> Dated: <u>04-04-2023</u>

Date of Test: 06-04-2023

To,

M/S M. Hanif & Sons Lahore

Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/04/3046) (Page # 1/1)

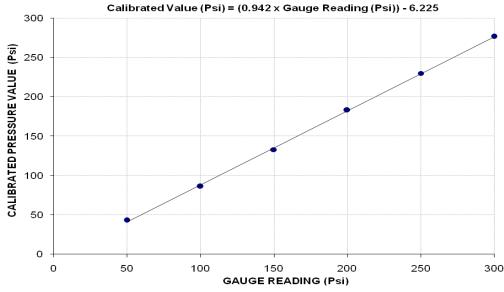
Reference to your Letter No. Nil, Dated: 04/04/2023 on the subject cited above. One Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 350 (Psi) Calibrated Range : Zero - 300 (Psi)

Pressure Gauge Reading (Psi)	50	100	150	200	250	300
Calibrated Load (kg)	600	1200	1850	2550	3200	3850
Calibrated Pressure (Psi)	43	86	133	183	230	277

The Ram Area for Calibration = 198 cm<sup>2</sup>

#### Calibration Curve for Pressure Gauge No. EN 837-1



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 Unicon Consulting Services (Pvt) Ltd Construction of Capacity Building Center at University of Agriculture, Faisalabad

Reference # CED/TFL <u>3047 (Dr. Usman Akmal)</u> Dated: 04-04-2023 Reference of the request letter # Nil Dated: 03-04-2023

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

Date of Test 06-04-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight		neter/ ize		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>3%</b>	Re
1	0.385	3	0.379	0.11	0.113	3590	5050	72000	69960	101200	98500	1.20	15.0	
2	0.371	3	0.373	0.11	0.109	3410	4810	68400	68840	96400	97100	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Not	e: only t	wo sampl	es for te	isile 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,

Resident Engineer

Velosi Integrity & Safety Pakistan (Pvt) Ltd.

Design and Resident Type Supervision of Loding Facility 1000 Female Hostel at UAF,

Faisalabad

Reference # CED/TFL <u>3048 (Dr. Usman Akmal)</u> Dated: 04-04-2023 Reference of the request letter # VISP/AUF/002 Dated: 27-03-2023

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

Date of Test 06-04-2023 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			(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.376	3	0.375	0.11	0.111	3520	4910	70600	70200	98400	98000	1.20	15.0	el el
2	0.371	3	0.373	0.11	0.109	3470	4860	69600	70140	97400	98300	1.20	15.0	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	1	-	1	-	1	-	-	-	-	-	-	1	
-	-	1	-	1	-	1	-	-	-	-	ı	-	1	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Note: only two samples for tensile and one sample for bend test										T		1
							<i>p</i>							
112	D D	1.00 : 5	T1 1	1000:	G .: 0		Bend T	est						
#3	Bar Ben	d Test	Through	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 Rizwan Associates

Construction of Regional Nuclear Safety Inspectorate Office Building at LHR, Johar town.

Reference # CED/TFL <u>3050 (Dr. Usman Akmal)</u>
Reference of the request letter # Nil

Dated: 05-04-2023 Dated: 04-04-2023

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

Date of Test 06-04-2023 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
S	(1J/sqI)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	Re
1	0.371	3	0.373	0.11	0.109	3570	4890	71600	72110	98000	98800	1.00	12.5	el el
2	0.370	3	0.372	0.11			4950	72000	72680	99200	100300	1.30	16.3	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Note: only two samples for tensile and one sample for bend test												
							D 1=							
		1		1000:	~		Bend T	est						
#3	Bar Ben	d Test 7	I'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
- 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 Building Standards Lahore (Project for Blairian Developers)

Reference # CED/TFL <u>3051 (Dr. Usman Akmal)</u>

Reference of the request letter # GT/LTR/230215-019

Dated: 05-04-2023

Dated: 15-02-2023

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

Date of Test 06-04-2023 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	0.372	3	0.373	0.11	0.109	4030	4890	80800	81330	98000	98700	0.80	10.0	
2	0.370	3	0.372	0.11	0.109	4280	5100	85800	86780	102200	103500	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
,		Note: only two samples for tensile and one sample for bend test										1		
							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,

Project Manager – Technical Sitara Developers Construction of Flyover at Sitatra Green City.

Reference # CED/TFL <u>3052 (Dr. Usman Akmal)</u>

Reference of the request letter # SGC/UIA/24

Dated: 05-04-2023

Dated: 04-04-2023

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

Date of Test 06-04-2023 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ize m)		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal			(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	R
1	0.378	10	9.56	0.12	0.111	4300	5100	78998	85200	93696	101100	1.10	13.8	
2	0.379	10	9.56	0.12	0.111	4280	5070	78631	84730	93144	100400	1.10	13.8	Steel
3	4.157	32	31.68	1.25	1.222	37200	51400	65609	67110	90653	92800	1.70	21.3	Faizan
4	4.159	32	31.69	1.25	1.223	37600	51800	66314	67790	91359	93400	1.60	20.0	Fa
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only four samples for tensile and two samples for bend test										test			ı	
							Bend T	est						
10ı	nm Dia	Bar Bei	nd Test	Throug	h 180° i	s Satisfac	ctory							

32mm Dia 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,

Sub Divisional Officer
The Punjab Employees Social Security Institution, Lahore
Construction of Social Security Hospital Sargodha (Phase-II)

Reference # CED/TFL <u>3053 (Dr. Usman Akmal)</u>

Reference of the request letter # SS.DC(207)23/1002

Dated: 05-04-2023

Dated: 04-04-2023

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

Date of Test 06-04-2023 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
	(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	3770	4590	75600	75190	92000	91600	1.20	15.0	
-	1	1	-	1	-	ī	-	1	-	-	-	-	1	
-	ı	ı	-	ı	-	ı	-	ı	-	-	-	-	ı	
-	-	ı	-	ı	-	ı	-	ı	-	-	-	-	ı	
-	ı	ı	-	ı	-	ı	-	1	-	-	-	-	ı	
-	ı	1	-	1	-	ı	-	1	-	-	-	-	1	
			N	ote: on	ly one s	amples f	or tensile	and one	sample f	or bend t	test	1		
							Bend T	est						
#3	Bar Ben	d Test	Through	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,

Manager QA/QC New Metro City Mandi Bahaudin

Reference # CED/TFL <u>3056 (Dr. Usman Akmal)</u> Dated: 05-04-2023 Reference of the request letter # MMC/MBD/9 Dated: 24-02-2023

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

Date of Test 06-04-2023 Gauge length 8 inches

Description Plain Steel Bar Tensile Test

Sr. No.	Weight		neter/ ize		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)	%	I
1	0.154	5	4.99		19.6	990	1270	496	637	1.20	15.0	
2	0.157	5	5.05		20.1	990	1120	484	548	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
		· · · · · · · · · · · · · · · · · · ·	Note:	only two	samples	for tensi	le and one	e sample f	or bend t	est	1	
						Bend	Test					
5m	m Dia Ba	ar Bend	Test Thro	ugh 180°	is Satisfa							

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 Prime Steel Re-Rolling Mills Sheikhupura (Prime Steel – Retest)

Reference # CED/TFL 3058 (Dr. Ali Ahmed)

Reference of the request letter # Nil

Dated: 06-04-2023

Dated: 06-04-2023

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

Date of Test 06-04-2023 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 (#) (#) 4.261 10 1.263	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re	
1	4.261	10	1.263	1.27	1.253		53800			93400	94700	1.50	18.8	1
2	4.302	10	1.269	1.27	1.265		62000			107600	108100	0.60	7.5	2
3	4.309	10	1.270	1.27	1.267	33600	56000	58400	58470	97200	97500	1.40	17.5	3
4	4.271	10	1.264	1.27	1.256		59400			103100	104300	0.70	8.8	4
5	4.302	10	1.269	1.27	1.265		62000			107600	108100	0.40	5.0	5
6	4.349	10	1.276	1.27	1.278	33200	55200	57700	57250	95800	95200	1.40	17.5	6
	ı		N	ote: on	ly six sa	amples fo	r tensile	and six s	amples f	or bend t	est	ı	ı	
							D 17							
Д14	) D D	1 T 4	T1	1. 1000	:- O-4:	C4	Bend T	est						
	) Bar Be													
	) Bar Be													
#10	) Bar Be	nd Test	Throug	gh 180°	is Satis	factory								

I/C Testing Laboratoires UET Lahore, Pakistan.

#### Note:

#10 Bar Bend Test Through 180° is Failed #10 Bar Bend Test Through 180° is Failed

#10 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
- 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