

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

To,

Project Manager Ittefaq Construction Associates Syed Maududi Islamic Center Lytton Road, Lahore

Reference # CED/TFL **2921** (Dr. Rizwan Azam)

Reference of the request letter # ICA/SMIC/03

Dated: 10-03-2023

Dated: 10-03-2023

Tension Test Report (Page -1/1)

Date of Test 13-03-2023 Gauge length 8 inches

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

Sr. No.	Weight		iameter/ Area (in²)			Yield load	Breaking Load		Stress si)		ee Stress si)	Elongation	% Elongation	Remarks
S	(IJ/sqI)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	E %	R
1	0.373	3	0.374	0.11	0.110	3400	5500	68200	68340	110200	110600	0.80	10.0	
-	-	-	-	ı	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-			-	-	-	
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-	-	1	į	1	-	-	-	-	-	-	-	-	-	
			N	Note: only one samples for tensile and one sample for bend test										
							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.
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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 Buildings Sub Division No. 15 Lahore

(Construction of Bachelor Accommodation and Judicial Rest House at Dharampura, District Lahore)

Reference # CED/TFL 2922 (Dr. Rizwan Azam)

Reference of the request letter # 2841

Tension Test Report (Page -1/2)

Date of Test 13-03-2023 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ize ch)	Area (in²)		Yield load	Breaking Load		Stress si)	Ultimat (p		Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal			% E	Re
1	0.380	3/8	0.377	0.11	0.112	3400	5000	68200	67070	100200	98700	1.50	18.8	
2	0.387	3/8	0.381	0.11 0.112		3500	5000	70200	67740	100200	96800	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	1	
			N	Note: only two samples for tensile and one sample for bend test					test	1				
2/0	" Dia Da	n Dag 1	T 4 T1		1000:-	Satisfacto	Bend T	est						

3/8" Dia Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 10-03-2023

Dated: 07-03-2023

- 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
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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 Buildings Sub Division No. 22 Lahore

(Construction of Population Welfare House Punjab at Lahore)

Reference # CED/TFL <u>2922 (Dr. Rizwan Azam)</u>
Reference of the request letter # 45/SDO-22

Tension Test Report (Page -2/2)

Date of Test 13-03-2023 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ze ch)	Area (in²)		Yield load	Breaking Load		Stress si)	Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal Actual		(inch)	% E	R
1	0.384	3/8	0.379	0.11	0.113	3400	5000	68200	66450	100200	97800	1.30	16.3	
2	0.382	3/8	0.378	0.11	0.112	3400	5000	68200	66770	100200	98200	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			N	Note: only two samples for tensile and one sample for bend test				test						
							Bend T	est						
3/8	" Dia Ba	8" Dia Bar Bend Test Through 180° is Satisfactory												

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 10-03-2023

Dated: 06-03-2023

- 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
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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, NESPAK

Construction Supervision of Gateway Monument (Gate # 2) of GEPCO Emplyees Housing Foundation (GEHF Town, Phase-1) Gujranwala

.

Reference # CED/TFL **2923** (Dr. M Kashif)

Reference of the request letter# P4265/23/MA/186

Dated: 10-03-2023

Dated: 09-03-2023

Tension Test Report (Page -1/1)

Date of Test 13-03-2023 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)	Ultimat (p	e Stress si)	Elongation	Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal Actual		(kg)	(kg)	Nominal	Nominal Actual		Actual	(inch)	% E	Re
1	0.370	3	0.372	0.11	0.109	3200	4900	64200	64850	98200	99300	1.40	17.5	me
2	0.371	3	0.373	0.11 0.109		3600	4900	72200	72740	98200	99100	1.40	17.5	Farooq Supreme
3	0.374	3	0.374	0.11	0.110	3100	4500	62200	62230	90200	90400	1.50	18.8	S boo
4	0.370	3	0.372	0.11	0.109	3600	4900	72200	72900	98200	99300	1.50	18.8	Fare
-	ī	1	-	1	-	ī	-	-	-	-	1	1	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	te: only	four s	amples fo	or tensile	and two	samples	for bend	test			
	Day Day	1		1000	~		Bend T	est						

#3 Bar Bend Test Through 180° is Satisfactory

#3 Bar Bend Test Through 180° is Satisfactory

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,

Sr. Manager Projects
Izhar Construction (Pvt) Ltd
Construction of Riphah Medical City Gulberg Greens Islamabad (Retaining Piles)

Reference # CED/TFL **2924** (Dr. Rizwan Azam)

Reference of the request letter # IZHAR/RIPHAH/030/2022

Dated: 10-03-2023

Dated: 06-03-2023

Tension Test Report (Page – 1/1)

Date of Test 13-03-2023 Gauge length 640 mm

Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breal strength (6.2	clause	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		Rema
1	12.70 (1/2")	775.0	783.0	17100	167.75	18900	185.41	>3.50	xx
2	12.70 (1/2")	775.0	783.0	16900	165.79	18900	185.41	>3.50	xx
3	12.70 (1/2")	775.0	781.0	17100	167.75	19000	186.39	>3.50	xx
_	-	-	-	1	-	-	-	-	
_	-	-	-	-	-	-	-	-	
_	-	-	-	-	-	-	-	-	

Only three samples for 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,

M/S Amanah Noor Residence Wapda Town, Lahore

Reference # CED/TFL **2925** (Dr. Rizwan Azam)

Reference of the request letter # Nil

Dated: 10-03-2023

Dated: 10-03-2023

Tension Test Report (Page -1/1)

Date of Test 13-03-2023 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze	Area (in²)				Yield load	Breaking Load		Yield Stress (psi)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Z ,		(kg)	(kg)	Nominal	Nominal Actual		Actual	(inch)	% E	Re		
1	0.363	3	0.369	0.11	0.107	3000	4700	60200	61960	94200	97100	1.30	16.3			
-	-	-	-	-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-	-	-	-	-			
			Note: only one sa				or tensile	and one	sample f	or bend t	test					
#2	Rar Ren	d Tost 7	The augh	1000;	Sotiafa	antom.	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,

Resident Engineer

NESPAK

Dualization of Lilla Interchange (M-2) via P.D Khan to Jhelum I/C Bypass (2 Nos)

Length 128 km, District Jhelum.

(United Wire)

Reference # CED/TFL 2926 (Dr. M Rizwan Riaz)

Reference of the request letter # NESPAK/RE/JH/23/357

Dated: 10-03-2023 Dated: 07-03-2023

Tension Test Report (Page -1/4)

Date of Test 13-03-2023 Gauge length 640 mm

Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight		trength e (6.3)	stre	aking ngth e (6.2)	Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa	%	Rema
1	12.70 (1/2")	775.0	779.0	17700	173.64	19500	191.30	199	>3.50	xx
2	12.70 (1/2")	775.0	779.0	17600	172.66	19400	190.31	198	>3.50	XX
3	12.70 (1/2")	775.0	781.0	18000	176.58	19500	191.30	199	>3.50	XX
-	-	-	-	1	-	-	-	-	-	
-	-	-	-	1	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	_

Only two samples for Test

Note:

- 1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM A416a
- 2. Load versus percentage strain graphs are attached

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,

Resident Engineer

NESPAK

Dualization of Lilla Interchange (M-2) via P.D Khan to Jhelum I/C Bypass (2 Nos)

Length 128 km, District Jhelum.

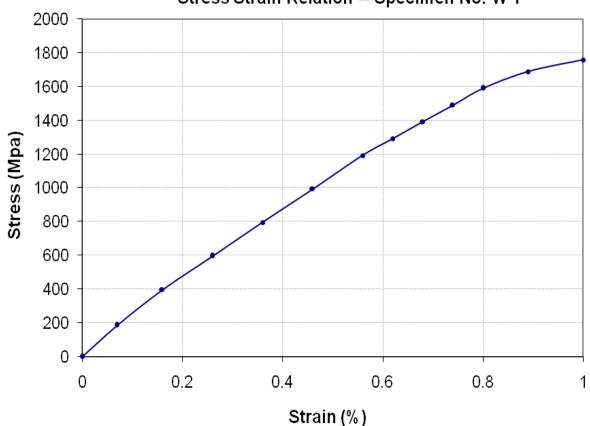
(United Wire)

Reference # CED/TFL 2926 (Dr. M Rizwan Riaz)

Reference of the request letter # NESPAK/RE/JH/23/357

Graph (Page – 2/4)

Stress Strain Relation -- Specimen No. W 1



I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 10-03-2023

Dated: 07-03-2023

- 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
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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

NESPAK

Dualization of Lilla Interchange (M-2) via P.D Khan to Jhelum I/C Bypass (2 Nos)

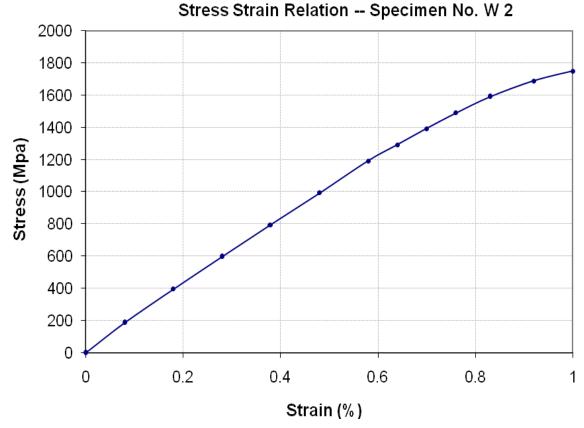
Length 128 km, District Jhelum.

(United Wire)

Reference # CED/TFL 2926 (Dr. M Rizwan Riaz)

Reference of the request letter # NESPAK/RE/JH/23/357

Graph (Page – 3/4)



I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 10-03-2023

Dated: 07-03-2023

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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

NESPAK

Dualization of Lilla Interchange (M-2) via P.D Khan to Jhelum I/C Bypass (2 Nos)

Length 128 km, District Jhelum.

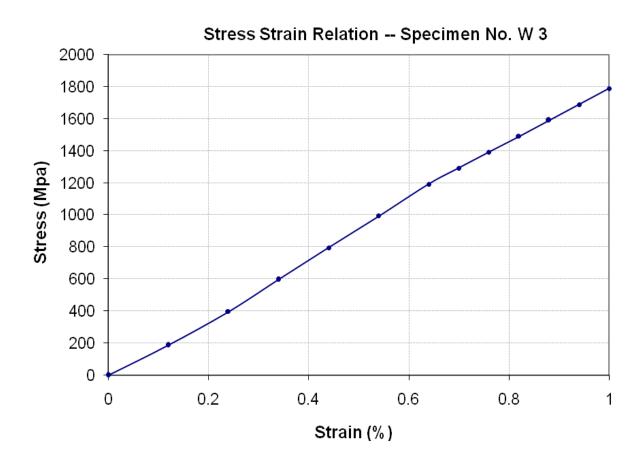
(United Wire)

Reference # CED/TFL 2926 (Dr. M Rizwan Riaz)

Reference of the request letter # NESPAK/RE/JH/23/357

Dated: 10-03-2023 Dated: 07-03-2023

Graph (Page – 4/4)



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 Diamond Metal Karachi

Reference # CED/TFL **2927** (Dr. Rizwan Azam)

Reference of the request letter # Nil

Dated: 10-03-2023

Dated: 10-03-2023

Tension Test Report (Page -1/1)

Date of Test 13-03-2023 Gauge length 8 inches

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

Weight	Si	ze		Area (in²)		Breaking Load					Elongation	longation	Remarks
(lbs/ft)	Nominal	Actual	Nominal Actual 21.0		(kg)	(kg)	Nominal Actual		Nominal	Actual	(inch)	H %	R
0.376	10	9.52	0.12	0.110	3200	4800	58789	63890	88184	95900	1.10	13.8	on
0.360	10	9.32	0.12	0.106	3000	4500	55115	62530	82673	93800	1.10	13.8	I-Con
-	-	-	-	-	-	-	-	-	-	-	-	ı	
-	-	-	-	-	-	-	-	-	-	-	-	Ī	
-	-	-	-	-	-	-	-	-	-	-	-	ı	
-	-	-	-	-	-	-	-	-	-	-	-	ı	
	Note: only two				amples f	or tensile	and one	sample f	or bend 1	test			
						Dand T	l'ast						
	0.376	(t) le uimoN	(lps/ft) Nominal Part 0.376	(lps/ft) Nominal Part Part	(lps/ft) (lps/f	(kg) 0.376 10 9.52 0.12 0.110 3200 0.360 10 9.32 0.12 0.106 3000	Color Colo	Image: Control of the property of t	1	(t) (kg) (kg)	Table Tabl	The state of the late of the	Columbia Columbia

10mm 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
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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 Premier Developers & Builders Lyallpur Galleria-II Near Four Season Colony Samundri Road, Faisalabad

Reference # CED/TFL **2928** (Dr. Rizwan Azam)

Reference of the request letter # LG-II/043

Dated: 10-03-2023

Dated: 08-03-2023

Tension Test Report (Page -1/1)

Date of Test 13-03-2023 Gauge length 8 inches

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

Sr. No.	Weight	Diam Si	ieter/ ze	Area (in²)				(in ²)		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	3100	4500	62200	62410	90200	90600	1.50	18.8	ıla el				
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Batala Steel				
-	-	-	-	-	-	-	_	-	-	-	-	-	-					
-	-	-	-	-	-	-	_	-	-	-	-	-	-					
-	-	-	-	-	-	-	_	-	-	-	-	-	-					
-	-	-	-	-	-	-	_	-	-	-	-	-	-					
			N	ote: onl	ly one s	amples f	or tensile	and one	sample f	or bend t	test	1						
#3 1	Bar Ben	d Test	Chrough	1800 i	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,

Managing Partner Rohaan Construction Construction of Buildings at Descon Oxychem Limited 18-km, Lahore Sheikhupura Road, Lahore

1

Reference # CED/TFL **2930** (Dr. M Kashif)

Reference of the request letter# RCON/Q/132/Misc-005

Dated: 13-03-2023

Dated: 10-03-2023

Tension Test Report (Page -1/1)

Date of Test 13-03-2023 Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ Size (mm)		ze Area (in²)		Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	<u> </u>		(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.378	10	9.55	0.12	0.111	3200	5100	58789	63520	93696	101300	1.00	12.5	
-	-	ı	-	-	-	-	-	ı	-	-	-	-	-	
-	-	ı	-	-	-	-	-	ı	-	-	-	-	ı	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	ı	-	-	-	-	-	ı	-	-	-	-	-	
-	-	ı	-	-	-	-	-	ī	-	-	-	-	ı	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample f	or bend t	est	ı	ı	
							Bend T	est						
10r	nm Dia	Bar Bei	nd Test	Throug	h 180° i	s Satisfac	etory							

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

I/C Testing Laboratoires UET Lahore, Pakistan.

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