

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

To, Resident Engineer NESPAK

Construction / Re-Construction / Improvement of Metailed Road from More Khunda to Head Baloki Phase-1 km 0.00 to 8.60 km Length 8.60 km in District Nankana Sahib

Reference # CED/TFL 1844 (Dr. Usman Akmal)

Reference of the request letter # 3811/103/ADP/AC/142

Dated: 26-08-2022

Dated: 20-08-2022

Tension Test Report (Page -1/1)

Date of Test 01-09-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea 1 ²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	R
1	0.372	3	0.373	0.11	0.109	3100	4700	62200	62520	94200	94800	1.10	13.8	
2	0.367	3	0.370	0.11	0.108	3100	4700	62200	63380	94200	96100	1.00	12.5	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	or tensile	and one	sample f	or bend t	est			
							Bend T	est est						
#3	Bar Ben	d Test	Γhrough	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
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- 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,
Executive Engineer
Highway Division, Giujrat
(Dualization of Road from GT Road (Samma) to Gujrat Dinga Road I/C Gujrat Flyover Length = 31 kms in District Gujrat)

Reference # CED/TFL 1855 (Dr. Ali Ahmed)

Reference of the request letter # 2228

Dated: 24-08-2022

Tension Test Report (Page -1/5)

Date of Test 01-09-2022 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)		e Stress si)	Elongation	% Elongation	Remarks
8	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.382	3	0.378	0.11	0.112	3300	5000	66200	64800	100200	98200	0.90	11.3	e]
2	0.383	3	0.379	0.11	0.113	3400	5100	68200	66570	102200	99900	1.10	13.8	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	_	-	
1	-	-	-	1	-	1	-	-	-	-	-	-	1	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	or tensile	and one	sample f	or bend t	est			
112	D D	1.75	F1 1	1000:	g .: c		Bend T	est est						
#3	Bar Ben	d Test	I'hrough	180° is	s Satisfa	ictory								

I/C Testing Laboratoires UET Lahore, Pakistan.

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To,
Executive Engineer
Highway Division, Giujrat
(Dualization of Road from GT Road (Samma) to Gujrat Dinga Road I/C Gujrat Flyover Length = 31 kms in District Gujrat)

Reference # CED/TFL 1855 (Dr. Ali Ahmed)

Reference of the request letter # 2228

Dated: 30-08-2022

Dated: 24-08-2022

Tension Test Report (Page -2/5)

Date of Test 01-09-2022 Gauge length 640 mm

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

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield st clause		stre	king 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	781.0	17200	168.73	19700	193.26	199	>3.50	xx
2	12.70 (1/2")	775.0	783.0	17100	167.75	19900	195.22	198	>3.50	XX
3	12.70 (1/2")	775.0	782.0	17800	174.62	19700	193.26	199	>3.50	XX
-	-	-	-	-	-	-	-	-	-	
_	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	

Only three 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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To,
Executive Engineer
Highway Division, Giujrat
(Dualization of Road from GT Road (Samma) to Gujrat Dinga Road I/C Gujrat Flyover Length = 31 kms in District Gujrat)

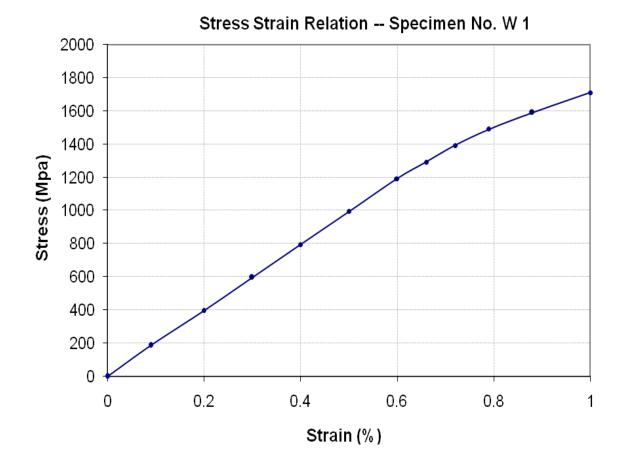
Reference # CED/TFL 1855 (Dr. Ali Ahmed)

Reference of the request letter # 2228

Dated: 30-08-2022

Dated: 24-08-2022

Graph (Page – 3/5)



I/C Testing Laboratoires UET Lahore, Pakistan.

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To,
Executive Engineer
Highway Division, Giujrat
(Dualization of Road from GT Road (Samma) to Gujrat Dinga Road I/C Gujrat Flyover Length = 31 kms in District Gujrat)

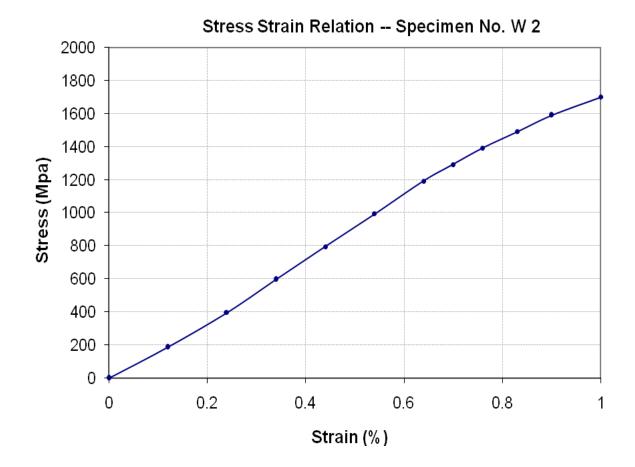
Reference # CED/TFL 1855 (Dr. Ali Ahmed)

Reference of the request letter # 2228

Dated: 30-08-2022

Dated: 24-08-2022

Graph (Page – 4/5)



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
Highway Division, Giujrat
(Dualization of Road from GT Road (Samma) to Gujrat Dinga Road I/C Gujrat Flyover Length = 31 kms in District Gujrat)

Reference # CED/TFL <u>1855 (Dr. Ali Ahmed)</u>

Reference of the request letter # 2228

Dated: 24-08-2022

Graph (Page – 5/5)

Stress Strain Relation -- Specimen No. W 3 2000 1800 1600 1400 Stress (Mpa) 1200 1000 800 600 400 200 0 0 0.2 0.4 0.6 8.0 1 Strain (%)

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 Junaid (Pvt.) Limited Lahore

(Production of PC. Spun Hollow Poles for NTDC/DISCos)

Reference # CED/TFL <u>1861 (Dr. Usman Akmal)</u>
Reference of the request letter # JPL/Poles-03

Tension Test Report (Page -1/3)

Date of Test 01-09-2022 Gauge length 8 inches

Description MS Wire Tensile Test

Sr. No.	Weight		neter/ ize	A (m	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)	%	
1	0.149	5	4.91		18.9		1300		674	1.20	15.0	
-	ı	-	ı	-	ı	-	-	-	ı	ı	-	
-	•	-	1	-	•	-		-	ı	•	-	
-	•	-	ı	-	•	-	-	-	1	•	-	
-	ı	-	ı	-	ı	-	-	-	ı	ı	-	
-	-	-	-	-	-	-	-	-	-	-	-	
				N	ote: only	one samp	ole for ten	sile test			1	
							_					
						Bend	l'est					

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 30-08-2022

Dated: 30-08-2022

- 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
- 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 Junaid (Pvt.) Limited Lahore

(Production of PC. Spun Hollow Poles for NTDC/DISCos)

Reference # CED/TFL <u>1861 (Dr. Usman Akmal)</u>
Reference of the request letter # JPL/Poles-02

Dated: 30-08-2022

Dated: 30-08-2022

Tension Test Report (Page -2/3)

Date of Test 01-09-2022 Gauge length 640 mm

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

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield st clause		Breal strength (6.2	clause	% Elongation	Remarks/ Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	%	Rema
1	9.53 (3/8")	432.0	440.0	10000	98.10	10900	106.93	>3.50	xx
-	-	-	-	1	-	-	-	-	-
-	-	-	-	1	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

Only one sample for Test

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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- 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 Junaid (Pvt.) Limited Lahore

(Production of PC. Spun Hollow Poles for NTDC/DISCos)

Reference # CED/TFL 1861 (Dr. Usman Akmal)

Reference of the request letter # JPL/Poles-01

Dated: 30-08-2022

Dated: 30-08-2022

Tension Test Report (Page -3/3)

Date of Test 01-09-2022 Gauge length 640 mm

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

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield st clause		Breal strength (6.2	clause	% Elongation	Remarks/ Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	%	Rema
1	11.11 (7/16")	582.0	580.0	12300	120.66	13000	127.53	>3.50 Not ok	XX
-	ı	ı	-	ı	-	-	-	-	ı
-	1	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

Only one sample 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,
Assistant Project Engineer
Defence Housing Authority
Gujranwala
"Construction of Villas (Block-B))

Reference # CED/TFL 1864 (Dr. Usman Akmal)

Reference of the request letter # 111/3/APE Bldgs/Gen/21

Dated: 31-08-2022

Dated: 31-08-2022

Tension Test Report (Page -1/1)

Date of Test 01-09-2022 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)		ee Stress si)	Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	Re
1	0.365	3	0.370	0.11	0.107	3300	4900	66200	67770	98200	100700	1.10	13.8	el
2	0.365	3	0.370	0.11	0.107	3400	4600	68200	69760	92200	94400	1.20	15.0	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample fo	or bend t	est			1
#2	Don Don	d Tost T	Fh. manah	1000 :	Sotiafa	atom.	Bend T	est						
#3	Bar Ben	a rest	nrougn	1 1 80° 18	s Satisia	ictory								

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,
Project Manager
Al Noor Developers
Construct Al Noor Heights, Badian Road, Lahore

Reference # CED/TFL 1865 (Dr. Usman Akmal)

Reference of the request letter # Nil

Dated: 31-08-2022

Dated: 30-08-2022

Tension Test Report (Page -1/1)

Date of Test 01-09-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea 1 ²)	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	0.387	3	0.380	0.11	0.114	3500	4800	70200	67890	96200	93200	1.30	16.3	el el
2	0.372	3	0.373	0.11	0.109	3400	4700	68200	68480	94200	94700	1.10	13.8	FF Steel
-	-	-	-	-	-	-	-	_	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	or tensile	and one	sample fo	or bend t	est			
#3	Bar Ben	d Test T	Through	1800 i	s Satisfa	uctory	Bend T	est						
#3	Bar Ben	u rest	ı nrougn	1 180° 18	s Satisia	ictory								

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, Project Manager Maypole Lime Light Pvt. Ltd Silicon Tower (Piling Work)

Reference # CED/TFL 1866 (Dr. Usman Akmal)

Reference of the request letter # MLL-19

Dated: 31-08-2022

Dated: 31-08-2022

Tension Test Report (Page -1/1)

Date of Test 01-09-2022 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)		e Stress si)	Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.362	3	0.368	0.11	0.106	3100	4800	62200	64280	96200	99600	1.20	15.0	
2	0.374	3	0.374	0.11	0.110	3300	4900	66200	66180	98200	98300	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend 1	test	1		
							Bend T	est						
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ctory								

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, Project Director Overseas Construction Co. (Pvt) Ltd Gulberg City Centre, Lahore

Reference # CED/TFL 1868 (Dr. Usman Akmal)

Reference of the request letter # Nil

Dated: 31-08-2022

Tension Test Report (Page -1/1)

Date of Test 01-09-2022 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)		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	3500	4800	70200	70280	96200	96400	1.40	17.5			
2	0.367	3	0.371	0.11	0.108	3300	4500	66200	67390	90200	91900	1.20	15.0			
-	-	1	-	1	-	-	-	1	-	-	1	-	-			
-	-	1	-	1	-	-	-	1	-	-	1	-	-			
-	-	1	-	-	-	-	-	-	-	-	-	-				
-	-	-	-	-	-	-	-	-	-	-	-	-	-			
			Note: only two samples for tensile and one sample for bend test								test	ı				
#3	Rar Ren	Bend Test Through 180° is Satisfactory														
#3	Dai Dell	u 168t	i iii ougi	1100 1	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, Resident Engineer NESPAK

Construction / Improvement of Metailed Road from Mangtanwala Road to Kot Dewan Sign via Burj Ashraf abad Mangtanwala Village & Thathi Gullam Hussain I/C Link up to Thata Lahana Dass via Dhodhy Length 10.6 km in Nankana Sahib

Reference # CED/TFL 1869 (Dr. Usman Akmal)

Reference of the request letter # 3811/103/RAP-II/AC/64

Dated: 31-08-2022

Dated: 01-08-2022

Tension Test Report (Page -1/1)

Date of Test 01-09-2022 Gauge length 8 inches

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

Sr. No.	Weight	Diam Si	ieter/ 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)	% E	Re
1	0.368	3	0.371	0.11	0.108	3100	4700	62200	63150	94200	95800	1.30	16.3	
2	0.387	3	0.380	0.11	0.114	3100	4700	62200	60120	94200	91200	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	1	1	
-	-	-	1	-	-	-	-	-	-	-	-	-	-	
-	1	1	ı	ı	-	1	-	-	-	-	-	ı	1	
-	-	-	1	1	-	-	-	-	-	-	-	1	-	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample fo	or bend t	est			
щ2	Rar Ren	1 T 4 T	Γl l.	1000:	- Catiafa		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,

Sr. Engineer (Civil) KCP (W&S) Pakistan Atomic Energy Commission

"Civil Work for COR & Repair of Outer Fence at Site Near Jauharabad"

Reference # CED/TFL 1870 (Dr. Usman Akmal)

Reference of the request letter # KCP(W&S)-Sec-(COR)/2022

Dated: 31-08-2022

Dated: 31-08-2022

Tension Test Report (Page -1/1)

Date of Test 01-09-2022 Gauge length 8 inches

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

Sr. No.	Weight	Diam Si			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	Re	
1	0.384	3	0.379	0.11	0.113	2300	3100	46100	44970	62200	60700	1.10	13.8		
2	0.387	3	0.381	0.11	0.114	2400	3100	48100	46480	62200	60100	1.80	22.5		
-	1	ı	ı	ı	-	ı	-	•	-	•	-	-	ı		
-	1	1	1	-	-	-	-	-	-	-	-	-	1		
-	-	-	1	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-		
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test				
				Bend Test											
#3	Bar Ben	nd 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, **XEN**

GE (Army)-II SIK

(CA No. CEA-CZ-21/2022 - Const of 8 x Sldrs Flats 23 FF HQ 8 Div at SIK Cantt)(M/s

Rafique & Brothers)

Reference # CED/TFL **1871** (Dr. Usman Akmal)

Reference of the request letter # Nil

Dated: 31-08-2022 Dated: 31-08-2022

Tension Test Report (Page -1/2)

Date of Test 01-09-2022 Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ Size (inch)		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
8	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.377	3/8	0.376	0.11	0.111	4200	5100	84200	83450	102200	101400	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only one sample for tensile and one sample for bend test													
3/8	Bend Test 3/8" 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.
- 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, **XEN**

GE (Army)-II SIK

(CA No. CEA-CZ-19/2022 - Const 1 x JCO Club, 37 FF HQ 54 IIBG at SIK Cantt)(M/s Ashraf

& Brothers)

Reference # CED/TFL **1871** (Dr. Usman Akmal)

Reference of the request letter # Nil

Dated: 31-08-2022 Dated: 31-08-2022

Tension Test Report (Page -2/2)

Date of Test 01-09-2022 Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ Size (inch)		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.372	3/8	0.373	0.11	0.109	3000	4800	60200	60440	96200	96700	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only one sample for tensile and one sample for bend test													
3/8	Bend Test 3/8" 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.
- 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 Associates in Development (Pvt) Ltd Islamabad (Dhartian Bridge)

Reference # CED/TFL <u>1876 (Dr. Asif Hameed)</u> Reference of the request letter # RD/AID/202

Tension Test Report (Page – 1/1)

Date of Test 01-09-2022

Description: Steel Wire Rope Tensile Test

Material (reported) = Steel

Product (Obvious) = Wire Rope (Six strands helically laid around a core, in total seven strands)

Nominal diameter (reported) = 32 mm

Condition (Observed from image) = Used

Standard of manufacture = Unknown

Mechanical properties of wire = Unknown

Grips used for testing = V Grips

Test Length = 60cm (Proposed and agreed by client)

Sr. No.	Nominal Diameter (mm)	Measured Diameter (mm)	Measured Weight (kg/m)	Breaking Load (Tons)	Remarks	
1	32	35	5.04	66	Break near the grips	

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 01-09-2022

Dated: 01-09-2022

- 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
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples