MEERING THE PROPERTY OF THE PR

STRUCTURAL ENGINEERING DIVISION

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

To, DGM (Lab)

Future Developments Holdings (Pvt) Limited Development of Capital Smart City, Islamabad (WMI)

Reference # CED/TFL 1626 (Dr. M Rizwan Riaz)

Reference of the request letter # FDHL/CSC/03/2022/0231 Dated: 28-06-2022

Tension Test Report (Page -1/4)

Date of Test 05-07-2022 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	iking 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	17400	170.69	18800	184.43	199	>3.50	23893
2	12.70 (1/2")	775.0	781.0	17700	173.64	19100	187.37	199	>3.50	23900
3	12.70 (1/2")	775.0	782.0	18300	179.52	19400	190.31	199	>3.50	23906
-	-	-	-	1	-	-	-	-	1	-
_	-	-	-	-	-	-	-	-	1	-
-	-	-	-	-	-	-	-	-	-	-

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.

Dated: 29-06-2022

- 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

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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,
DGM (Lab)
Future Developments Holdings (Pvt) Limited
Development of Capital Smart City, Islamabad
(WMI)
Reference # CED/TFL 1626 (Dr. M Rizwan Riaz)

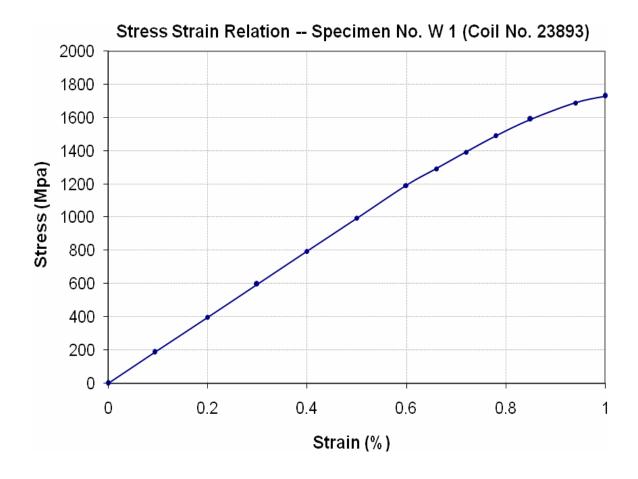
Reference # CED/TFL <u>1626 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # FDHL/CSC/03/2022/0231

Dated: 29-06-2022

Dated: 28-06-2022

Graph (Page -2/4)



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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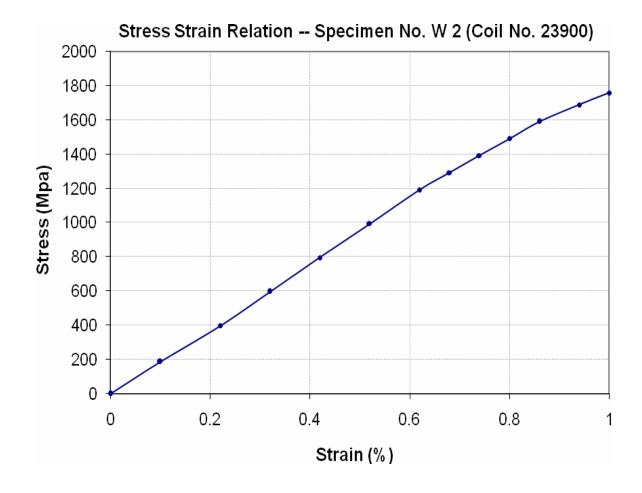
STRUCTURAL ENGINEERING DIVISION

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

To,
DGM (Lab)
Future Developments Holdings (Pvt) Limited
Development of Capital Smart City, Islamabad
(WMI)

Reference # CED/TFL <u>1626 (Dr. M Rizwan Riaz)</u>
Reference of the request letter # FDHL/CSC/03/2022/0231

Graph (Page -2/4)



I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 29-06-2022

Dated: 28-06-2022

- 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.
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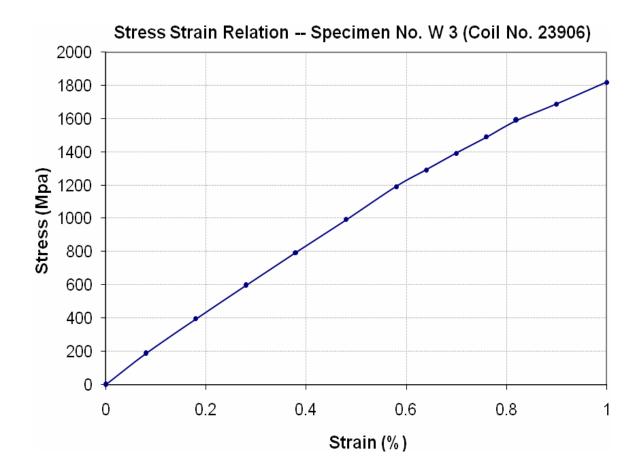
STRUCTURAL ENGINEERING DIVISION

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

To,
DGM (Lab)
Future Developments Holdings (Pvt) Limited
Development of Capital Smart City, Islamabad
(WMI)

Reference # CED/TFL <u>1626 (Dr. M Rizwan Riaz)</u> Reference of the request letter # FDHL/CSC/03/2022/0231

Graph (Page -4/4)



I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 29-06-2022

Dated: 28-06-2022

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

To,

Construction Manager

Zameen Aurum

Construction of Zameen Aurum at Plot No. 15 Block L, Gulberg-III, Main Feroze Pur Road,

Lahore

Reference # CED/TFL 1639 (Dr. M Rizwan Riaz)

Reference of the request letter # ZD/ZA/STR026

Dated: 30-06-2022

Dated: 28-06-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 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)		e Stress si)	Elongation	% Elongation	Remarks
8	(lbs/ft)	Nominal (#)	0.373 0.11 0.109			(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.371	3	0.373	0.11	0.109	3210	4590	64400	64910	92000	92900	1.30	16.3	
2	0.368	3	0.371	0.11	0.108	3310	4690	66400	67420	94000	95600	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		I	N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend 1	test	1		
							D 15							
112	D D	1.00	T1 1	1000	a 1. c		Bend T	est						
#3	Bar Ben	a Test	I hrough	1 180° 18	s Satista	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
City Survey & Engineering Consultants
Green View Executive Apartments Phase-V

Reference # CED/TFL <u>1640 (Dr. M Rizwan Riaz)</u>
Reference of the request letter # GVA/RE/09/22
Dated: 29-06-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 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 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.382	3	0.378	0.11	0.112	4150	4960	83200	81560	99400	97500	1.20	15.0	
2	0.381	3	0.378	0.11	0.112	4200	5020	84200	82590	100600	98800	0.90	11.3	
-	ī	-	-	1	-	-	-	-	-	-	-	-	ı	
-	-	-	-	1	-	-	-	-	-	_	-	1	1	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
			Note: only two samples for tensile and one sample for bend test											
							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,
Resident Engineer
EA Consulting Pvt. Ltd.
Development of Housing Scheme at Kuchlak Road Quetta
(PHA-Foundation)(NLC)

Reference # CED/TFL <u>1641 (Dr. M Rizwan Riaz)</u>
Reference of the request letter # EA/RE/PHA-F/2022/185

Dated: 30-06-2022
Dated: 13-06-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 Gauge length 8 inches

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

Sr. No.	Weight	Diam si:			rea 1 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	R
1	0.451	3	0.411	0.11	0.133	4610	5710	92400	76590	114500	94900	1.00	12.5	Faizan Steel
2	0.455	3	0.413	0.11	0.134	4540	5610	91000	74780	112500	92400	1.00	12.5	Fair Ste
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	1	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							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, Resident Engineer NESPAK

Dualization of Road from Salam to Sargodha via Bhalwal Ajnala Road Length 47.00 km in District Sargodha

Reference # CED/TFL <u>1642 (Dr. M Rizwan Riaz)</u> Reference of the request letter # 4376/SMH/22/2073

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 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
<i>S</i> ₂	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.370	3	0.372	0.11	0.109	3890	4660	78000	78800	93400	94400	0.80	10.0	
2	0.386	3	0.380	0.11	0.113	3060	4280	61400	59450	85800	83200	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend	test	•		
							Bend T	est						
#3	Bar Ben	d Test 7	Γhrough	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 01-07-2022

Dated: 08-06-2022

- 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 Maktab Lahore

Reference # CED/TFL <u>1645 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # Nil

Dated: 01-07-2022

Dated: 30-06-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ze ch)	Aı (iı	rea 1 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.376	3/8	0.375	0.11	0.110	4180	5100	83800	83380	102200	101800	1.00	12.5	
-	1	1	-	-	-	-	-	-	-	-	-	-		
-	ı	ı	-	1	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	_	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only one sample for tensile and one sample for bend test													
							Bend T	'est						

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.
- 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, Senior Project Manager Tehzibul Akhlaq Trust New Aligarh University, Manga Mandi, Lahore

Reference # CED/TFL <u>1646 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # Nil

Dated: 01-07-2022

Dated: 30-06-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 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)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	T %	Re
1	0.375	3	0.375	0.11	0.110	3620	4890	72600	72340	98000	97800	1.20	15.0	
2	0.385	3	0.380	0.11	0.113	3690	4960	74000	71820	99400	96600	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
		Note: only two samples for tensile and one sample fo												
							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, Sr. QS Manzoor Ahmed Khan "E-Tachi Mobile Raiwind"

Reference # CED/TFL <u>1648 (Dr. M Rizwan Riaz)</u>
Reference of the request letter # TCC/UET/319

Dated: 01-07-2022

Dated: 01-07-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ize ch)		rea 1 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	0.368 0.11 0.107		(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	I %	Re
1	0.363	3/8	0.368	0.11	0.107	2960	4180	59400	61190	83800	86500	1.40	17.5	
2	0.341	3/8	0.357	0.11	0.100	2960	4180	59400	65130	83800	92000	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend 1	test	1		
							Bend T	est						
3/8	" Dia Ba	ır Bend	Test Tl	nrough	180° is \$	Satisfacto	ry							

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
Autograph, Lahore
Construction of Autograph Apartment Project at Maple Drive along Ring Road Service Lane
Sector M DHA Lahore

Reference # CED/TFL <u>1649 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # AG/PM/ZA/01

Dated: 01-07-2022

Dated: 01-07-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile 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)	∃%	R
1	0.386	3	0.380	0.11	0.113	3570	4790	71600	69330	96000	93100	1.40	17.5	u
2	0.392	3	0.383	0.11	0.115	3720	4890	74600	71240	98000	93700	1.30	16.3	Kamran Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Ka
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
							Bend T	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
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

MEERING THE PROPERTY OF THE PR

STRUCTURAL ENGINEERING DIVISION

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 (Pvt) Ltd

W/I of Road from Main Kalabagh Road via Irrigation Colony, Comprehensive School, Central Model School to GPO Chowk and Gulberg Chowk to Noor Pura to Mujahid Town upto Hassan abad Sargodha Moor I/C Link to Jhambra in Mianwali City.

(WMI)

Reference # CED/TFL **1651** (Dr. M Rizwan Riaz) Dated: 01-07-2022

Reference of the request letter # AZEA/MWL/BKR/LAB/RR/0123 Dated: 16-06-2022

Tension Test Report (Page -1/2)

Date of Test 05-07-2022 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	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	787.0	18500	181.49	19900	195.22	198	>3.50	xx
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Only one sample 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.

- 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

AZ Engineering Associates (Pvt) Ltd

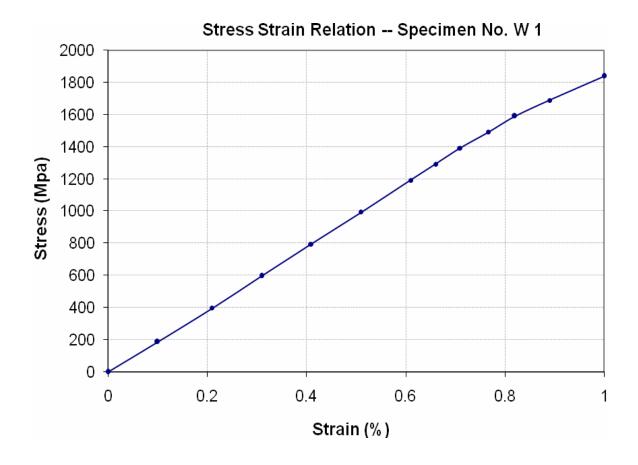
W/I of Road from Main Kalabagh Road via Irrigation Colony, Comprehensive School, Central Model School to GPO Chowk and Gulberg Chowk to Noor Pura to Mujahid Town upto Hassan abad Sargodha Moor I/C Link to Jhambra in Mianwali City. (WMI)

Reference # CED/TFL 1651 (Dr. M Rizwan Riaz)

Dated: 01-07-2022

Reference of the request letter # AZEA/MWL/BKR/LAB/RR/0123 Dated: 16-06-2022

Graph (Page -2/2)



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

To,
Executive Engineer
University of Home Echnomics Lahore
Construction of Acadmic Block at University of Home Echnomics Lahore

Reference # CED/TFL <u>1652 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # UHE/EE/449

Dated: 01-07-2022

Dated: 21-06-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ize ch)		rea 1 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual			(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	I %	Re
1	0.440	3/8	0.406	0.11	0.129	4450	6240	89200	75900	125100	106500	0.90	11.3	
2	0.446	3/8	0.408	0.11	0.131	4510	6270	90400	75890	125700	105600	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test	1		
2/0	" Die De	n Dand	Togt Tl	mouak	1900;	Satisfacts	Bend T	<u>'est</u>						
3/8	" Dia Ba	ır Bend	Test Th	rough	180° is S	Satisfacto	ry							

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

LAHORE -

STRUCTURAL ENGINEERING DIVISION

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

To,
Resident Engineer
ESS-I-AAR Consultant
Rehabilitation of Dualized Road from Sargodha to Makhdom Interchange Length 42 km. (Right Carriage Way)

Reference # CED/TFL <u>1653 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # RE/ADP/BWP/609

Dated: 01-07-2022

Dated: 20-06-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ize ch)		rea n²)	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	0.388	3/8	0.381	0.11	0.114	4180	5120	83800	80830	102600	99100	1.00	12.5	
2	0.386	3/8	0.380	0.11	0.113	3770	5070	75600	73290	101600	98600	0.75	9.4	
-	-	-	_	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
	Note: only two samples for tensile and one sample									or bend t	test			
							Bend T	<u>'est</u>						
3/8	" Dia Ba	ır Bend	Test Th	nrough	180° is \$	Satisfacto	ry							

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
ESAC Sector K DHA Multan
Sector K DHA Main Office & Gate House Building

Reference # CED/TFL <u>1656 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # RE/ESAC/SECTRO K/180

Dated: 04-07-2022

Dated: 28-06-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 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	0.387	3	0.381	0.11	0.114	3740	5120	75000	72470	102600	99300	1.30	16.3	el
2	0.367	3	0.370	0.11	0.108	3310	4760	66400	67700	95400	97400	1.50	18.8	FF Steel
-	-	-	-	-	-	-	-	-	-	_	-	-	-	F
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							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.
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Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Lead Civil StarchPack (private) Limited StrachPack Greenfield Project at Kasur.

Reference # CED/TFL <u>1659 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # Nil

Dated: 04-07-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 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 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	∃ %	Re
1	0.416	10	10.03	0.12	0.122	4200	5270	77161	75660	96819	95000	1.30	16.3	
2	0.414	10	10.00	0.12	0.122	4200	5250	77161	76010	96451	95100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	1	
-	-	-	-	•	-	-	-	-	-	-	•	-	1	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	est						
10r	nm Dia	Bar Be	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 Amanah Noor Residence Wapda Town, Lahore

Reference # CED/TFL <u>1660 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # Nil

Dated: 04-07-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 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)	Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal Actual		(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.374	3	0.374	0.11	0.110	3690	4990	74000	74050	100000	100200	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			N	ote: on	ly one s	ample fo	r tensile	and one	sample f	or bend t	est	I		
	Rar Ren						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.
- 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
Gujranwala Drainge Sub Division
Gujranwala
(Projection of Kamoke and Adjoining Areas (Package B)

Reference # CED/TFL <u>1661 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # 43/1-A

Dated: 04-07-2022

Dated: 06-06-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea n²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
<i>S</i> 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal			(kg)	Nominal Actual		Nominal	Actual	(inch)	% E	R
1	0.371	3	0.373	0.11	0.109	3690	5320	74000	74630	106600	107600	1.00	12.5	
2	0.368	3	0.371	0.11	0.108	3740	5320	75000	76190	106600	108400	1.20	15.0	
3	0.365	3	0.370	0.11	0.107	3690	5270	74000	75730	105600	108200	0.90	11.3	
4	4.286	10	1.267	1.27	1.260	38600	54400	67000	67530	94500	95200	1.20	15.0	
5	4.289	10	1.267	1.27	1.261	38000	55000	66000	66440	95500	96200	1.40	17.5	
6	4.314	10	1.271	1.27	1.268	41200	55400	71500	71610	96200	96300	1.40	17.5	
					No	te: only s	ix sampl	es for ten	sile test	T	T	ı	1	
							Bend T	Cost						<u> </u>
							Della I	CSI						

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,
Procurement Manager
Premier Developers & Builders
Lyallpur Galleria-II near Four Season Colony Samundri Road, Faisalabad

Reference # CED/TFL <u>1662 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # LG-II/020

Dated: 04-07-2022

Dated: 02-07-2022

Tension Test Report (Page -1/2)

Date of Test 05-07-2022 Gauge length 8 inches

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

Sr. No.	Weight		ieter/ ze		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	Ŗ
1	0.385	3	0.380	0.11	0.113	4280	4910	85800	83300	98400	95600	1.00	12.5	eli el
-	-	-	-	-	-	-	-	-	-	-	-	1	-	Amreli Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	ample fo	r tensile	and one	sample fo	or bend t	est			
#2	Bar Ben	d Test T	Through	1200 ;	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
- 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,
Procurement Manager
Premier Developers & Builders
Lyallpur Galleria-II near Four Season Colony Samundri Road, Faisalabad

Reference # CED/TFL <u>1662 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # LG-II/020

Dated: 04-07-2022

Dated: 02-07-2022

Tension Test Report (Page -2/2)

Date of Test 05-07-2022 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	0.307	3	0.339	0.11	0.090	4430	5560	88800	108050	111500	135700	0.80	10.0	e e
-	-	-	-	-	-	-	-	-	-	-	-	-	-	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ı	-	1	-	1	-	-	-	-	-	-	-	-	1	
1	-	1		-	-	-	-	-	-	-	-	-	•	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	or tensile	and one	sample fo	or bend t	est	1		
#3	Bar Ben	d Test	Through	180° is	S Satisfa	ectory	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, GM Engineering Cotton Web Ltd New Office Building

Reference # CED/TFL <u>1664 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # Nil

Dated: 05-07-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile 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	Nominal	Actual	(inch)	% E	Re
1	0.372	3	0.373	0.11	0.109	3770	4940	75600	76050	99000	99700	1.20	15.0	e e
2	0.374	3	0.374	0.11	0.110	3920	5070	78600	78510	101600	101600	1.40	17.5	FF Steel
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
		·		·	<u>-</u>	·	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, Resident Engineer Orbit Developers Private Limited The Springs Atrium, Gulberg Lahore

Reference # CED/TFL <u>1665 (Dr. Rizwan Riaz)</u>

Reference of the request letter # Nil

Dated: 05-07-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 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)	3 %	R
1	0.355	3	0.364	0.11	0.104	3570	4940	71600	75410	99000	104400	1.00	12.5	
2	0.347	3	0.360	0.11	0.102	3520	4860	70600	76140	97400	105200	1.00	12.5	
-	-	ı	ı	1	-	ı	-	-	-	-	-	1	ı	
-	-	-	ı	-	-	-	-	-	-	-	-	-	-	
-	-	-	1	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
							Bend T	`est						
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ectory								

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,
Project Manager
MS Tower Developers
Construction of MS Tower at Plot 450, 451 Johar Town, Lahore

Reference # CED/TFL <u>1666 (Dr. Asad Ali)</u>

Reference of the request letter # MST/BCC/UET/2022/S-008

Dated: 05-07-2022

Dated: 05-07-2022

Tension Test Report (Page -1/1)

Date of Test 05-07-2022 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)	% E	Re
1	0.375	3	0.375	0.11	0.110	4600	5400	92200	92040	108200	108100	0.80	10.0	:=
2	0.379	3	0.377	0.11	0.111	4600	5300	92200	90960	106200	104800	1.10	13.8	Amreli Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	_	-	-	-	
		Ī	No	ote: onl	ly two s	amples f	or tensile	and one	sample f	for bend t	test	ı		
							Bend T	est 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