



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

To,  
M/S Sun Engineers  
Gujranwala  
(Rehabilitation and Modernization of Islam Barrage)

Reference # CED/TFL 1728 (Dr. M Rizwan Riaz)  
Reference of the request letter # MTC/01

Dated: 28-07-2022  
Dated: 27-07-2022

**Tension Test Report** (Page – 1/1)

Date of Test 02-08-2022  
Description Steel Wire Rope Tensile Test

Sr. No.	Nominal Diameter	Measured weight	Breaking Load	Remarks / Coil No.
	(mm)	(kg/m)	(kg)	
1	38	6.41	94000	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
Only one sample for Test				

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

**Note:**

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- 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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To,  
 Deputy General Manager Projects  
 Habib Rafiq Engineering (Pvt.) Limited  
 Construction of Sky Gardens Tower, Lahore

Reference # CED/TFL 1737 (Dr. M Rizwan Riaz)  
 Reference of the request letter # HRLE/SKG/2022/027

Dated: 29-07-2022  
 Dated: 29-07-2022

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

Date of Test 02-08-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	4.355	32	32.43	1.25	1.280	41000	64000	72311	70590	112876	110200	1.20	15.0	Afco Steel
2	4.255	32	32.05	1.25	1.251	40000	62600	70547	70500	110406	110400	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
32mm Dia Bar Bend Test Through 180° is Satisfactory														

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**UET Lahore, Pakistan.**

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To,  
 Project Engr.  
 Union Developers Private Limited  
 Union Livings – Over Head Water Reservoir & Main Gate

Reference # CED/TFL **1740** (Dr. M Rizwan Riaz)  
 Reference of the request letter # Nil

Dated: 01-08-2022  
 Dated: 29-07-2022

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

Date of Test 02-08-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (Psi)		Ultimate Stress (Psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.377	3	0.375	0.11	0.111	3700	4600	74200	73670	92200	91600	1.00	12.5	Afco Steel
2	0.378	3	0.376	0.11	0.111	4400	5300	88200	87380	106200	105300	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

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**UET Lahore, Pakistan.**

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To,  
 Sub Divisional Officer  
 PHE: Sub Division Arifwala  
 (Provision of Soling Drain & Sewerage Scheme in UC No. 29 (HQ. 59/EB) UC No. 30 (HQ 151/EB), UC. No. 35 (HQ, 13/EB), UC. No. 36 (HQ. 75/EB) & UC. No. 37 (HQ. 69/EB) Tehsil Arifwala District Pakpattan)  
 Reference # CED/TFL **1742** (Dr. M Rizwan Riaz) Dated: 01-08-2022  
 Reference of the request letter # 266/A Dated: 04-11-2021

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

Date of Test 02-08-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (Psi)		Ultimate Stress (Psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.371	3/8	0.373	0.11	0.109	4300	4900	86200	86910	98200	99100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

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To,  
M/S Ittefaq Building Solutions Pvt. Ltd  
Lahore  
(Kohinoor Textile Mill Raiwind Road, Lahore (Weaving Unit Extension & Yarn Storage) Including)

Reference # CED/TFL **1743** (Dr. M Rizwan Riaz)  
Reference of the request letter # IBS/KTML/ST 13

Dated: 01-08-2022  
Dated: 01-08-2022

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

Date of Test 02-08-2022  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (kg/m)	Diameter/ Size (mm)		Area (mm <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa)		Ultimate Stress (MPa)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.611	10	9.95	79.00	77.81	3700	5200	459	466	646	656	1.4	17.5	
2	0.613	10	9.97	79.00	78.03	3800	5300	472	478	658	666	1.5	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

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