



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

To,  
 Executive Engineer  
 Highway Division, Gujrat  
 (Dualization of Road from GT Road (Samma) to Gujrat Dinga Road I/C Gujrat Flyover Length =  
 31 km in District Gujrat (Group No. IV-C Construction of Flyover at Gujrat Sargodha Road & 1  
 No. Small Bridge)  
 Reference # CED/TFL 1285 (Dr. Rizwan Azam) Dated: 19-04-2022  
 Reference of the request letter # 913/MCB Dated: 06-04-2022

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

Date of Test 25-04-2022  
 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	0.381	3	0.378	0.11	0.112	3500	4800	70200	68900	96200	94500	1.50	18.8	
2	0.384	3	0.379	0.11	0.113	3600	4900	72200	70300	98200	95700	1.40	17.5	
3	4.194	10	1.253	1.27	1.233	38600	53200	67000	69020	92400	95200	1.60	20.0	
4	4.174	10	1.250	1.27	1.227	38600	53200	67000	69350	92400	95600	1.70	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only four samples for tensile and two samples for bend test</b>														
<b>Bend Test</b>														
#3 Bar Bend Test Through 180° is Satisfactory														
#10 Bar Bend Test Through 180° is Satisfactory														

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

Note:

- 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](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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To,  
 Director (Civil)  
 Mineral Development Project  
 Islamabad

Reference # CED/TFL 1290 (Dr. Rizwan Azam)  
 Reference of the request letter # MDP-C&S-Gen(1)/2022

Dated: 19-04-2022  
 Dated: 18-04-2022

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

Date of Test 25-04-2022  
 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	5.233	11	1.399	1.56	1.538	33200	44000	47000	47570	62200	63100	1.60	20.0	FF Steel
2	5.253	11	1.402	1.56	1.544	48000	64600	67900	68520	91300	92300	1.50	18.8	
3	5.244	11	1.401	1.56	1.542	50000	66600	70700	71490	94100	95300	1.50	18.8	
4	5.259	11	1.403	1.56	1.546	50600	67200	71500	72150	95000	95900	1.40	17.5	
5	5.262	11	1.403	1.56	1.547	49000	65600	69300	69830	92700	93500	1.50	18.8	
6	5.252	11	1.402	1.56	1.544	48200	64600	68100	68820	91300	92300	1.60	20.0	
7	5.270	11	1.404	1.56	1.549	47400	64000	67000	67450	90500	91100	1.70	21.3	
<b>Note: only seven samples for tensile and three samples for bend test</b>														
Bend Test														
#11 Bar Bend Test Through 180° is Satisfactory														
#11 Bar Bend Test Through 180° is Satisfactory														
#11 Bar Bend Test Through 180° is Satisfactory														

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

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To,  
 Resident Engineer  
 NESPAK

Dualization of Road from Gujranwala to M-2 Interchange at Kot Sarwar via Hafizabad km 6.20 to km 80.35 km in District Gujranwala & Hafizabad (Section km 40.20 – 55.40, L=15.20 km)

Reference # CED/TFL **1292** (Dr. Rizwan Azam)

Dated: 19-04-2022

Reference of the request letter # SA-466F/103/GH/ML/Lab/25

Dated: 12-04-2022

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

Date of Test 25-04-2022

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	4.297	10	1.268	1.27	1.263	39000	53800	67700	68060	93400	93900	1.50	18.8	
2	4.264	10	1.263	1.27	1.253	30000	40200	52100	52760	69800	70700	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two sample for tensile and one sample for bend test</b>														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
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To,  
 Executive Engineer  
 Highway Division, Gujrat  
 (Construction of Service More Flyover to Connect with Industrial Area-II Gujrat Link Road in District Gujrat)

Reference # CED/TFL **1312, 1385** (Dr. Rizwan Azam)  
 Reference of the request letter # 1096/MCB

Dated: 22-04-2022  
 Dated: 20-04-2022

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

Date of Test 25-04-2022  
 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	4.355	10	1.277	1.27	1.280	34400	54400	59700	59240	94500	93700	1.80	22.5	
2	4.155	10	1.247	1.27	1.221	34800	54000	60400	62810	93800	97500	1.90	23.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

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

Reference # CED/TFL **1315** (Dr. Qasim Khan)  
 Reference of the request letter # HRLE/SKG/2022/020

Dated: 25-04-2022  
 Dated: 25-04-2022

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

Date of Test 25-04-2022  
 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	4.234	32	31.97	1.25	1.245	42800	66400	75486	75800	117108	117600	1.30	16.3	Afco Steel
2	4.217	32	31.91	1.25	1.239	27000	42000	47619	48020	74075	74700	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two sample for tensile and one sample for bend test</b>														
Bend Test														
32mm Dia Bar Bend Test Through 180° is Satisfactory														

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