



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 – AZEA
 Sargodha Residency
 Rehallitation of Dualized Road from Sargodha to Makhdoom Inerchange (M2) Length 42.00 km
 in District Sargodha (Phase - I) (Left Carriageway)

Reference # CED/TFL **33526** (Dr. Safer Abbas)
 Reference of the request letter # RE/AZEA/SGD/1658

Dated: 10-07-2019
 Dated: 29-06-2019

Tension Test Report (Page -1/2)

Date of Test 12-07-2019
 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 ²)		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	0.389	3	0.381	0.11	0.114	3130	4840	62800	60360	97000	93400	1.20	15.0	
2	0.415	3	0.394	0.11	0.122	2900	4280	58200	52460	85800	77500	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 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
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample /Signed Samples



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 – AZEA
 Sargodha Residency
 Rehalitation of Dualized Road from Sargodha to Makhdoom Inerchange (M2) Length 42.00 km
 in District Sargodha (Phase - I) (Left Carriageway)

Reference # CED/TFL **33526** (Dr. Safer Abbas)
 Reference of the request letter # RE/AZEA/SGD/1658

Dated: 10-07-2019
 Dated: 29-06-2019

Tension Test Report (Page -2/2)

Date of Test 12-07-2019
 Gauge length 8 inches
 Description Plain Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		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	5.094	11/8	1.381	-----	1.497	41200	66800	-----	60650	-----	98400	1.70	21.3	
2	5.045	11/8	1.374	-----	1.483	42400	71300	-----	63020	-----	106000	1.80	22.5	
-														
-														
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
11/8 Dia 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
2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample /Signed Samples



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

To,
 Project Manager
 M/S Zahir Khan & Brothers
 Development of DHA Bahawalpur

Reference # CED/TFL **33532** (Dr. Safer Abbas)
 Reference of the request letter # ZKB/PM/SEC/A-282

Dated: 11-07-2019
 Dated: 02-07-2019

Tension Test Report (Page -1/1)

Date of Test 12-07-2019
 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 ²)		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	0.370	3	0.372	0.11	0.109	3540	4710	71000	71750	94400	95500	1.20	15.0	
2	0.360	3	0.367	0.11	0.106	3330	4510	66800	69350	90400	94000	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 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
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To,
 Principal Architect
 Z.H. Kazmi & Associates
 MCB GHalla MAndi Branch Bahawalpur

Reference # CED/TFL **33534** (Dr. Safer Abbas)
 Reference of the request letter # Nil

Dated: 11-07-2019
 Dated: 08-07-2019

Tension Test Report (Page -1/1)

Date of Test 12-07-2019
 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 ²)		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	0.413	3	0.393	0.11	0.121	5170	5810	103600	93930	116500	105600	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 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
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To,
 Assistant Engineer
 B & W Department U.E.T Lahore
 (Construction of Workshop and Design Center UET Lahore)

Reference # CED/TFL **33535** (Dr. Safer Abbas)
 Reference of the request letter # B&W/AEN/1013

Dated: 11-07-2019
 Dated: 11-07-2019

Tension Test Report (Page -1/1)

Date of Test 12-07-2019
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test a
 s per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		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	0.380	3	0.377	0.11	0.112	3360	4890	67400	66380	98000	96600	1.20	15.0	
2	0.380	3	0.377	0.11	0.112	3490	4910	70000	68890	98400	97000	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 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
2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To,
 Chief Executive
 Pyramid Consulting & Engineering Services
 Construction of Shams Floor Mills

Reference # CED/TFL **33541** (Dr. Safer Abbas)
 Reference of the request letter # PCES/59/SGM/TSRB/001

Dated: 11-07-2019
 Dated: 05-07-2019

Tension Test Report (Page -1/1)

Date of Test 12-07-2019
 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 ²)		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	0.373	3	0.374	0.11	0.110	3380	5050	67800	67870	101200	101400	1.20	15.0	
2	0.368	3	0.371	0.11	0.108	3310	4990	66400	67390	100000	101600	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 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
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To,
 Project Manager
 Liberty Builders
 Construction of Zee Avenue Project, 17-A, Cooper Road, Lahore

Reference # CED/TFL **33547** (Dr. Asif Hameed)
 Reference of the request letter # CONC-20190712

Dated: 12-07-2019
 Dated: 12-07-2019

Tension Test Report (Page -1/1)

Date of Test 12-07-2019
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ size		Area (in ²)		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	0.357	3	0.366	0.11	0.105	4690	5710	94000	98390	114500	119800	0.60	7.5	
2	0.353	3	0.364	0.11	0.104	4230	5350	84800	89770	107200	113600	0.70	8.8	
3	0.353	3	0.363	0.11	0.104	3620	4840	72600	76900	97000	102900	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only three samples for tensile and two samples for bend test														
Bend Test														
#3 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
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

Ref: CED/TFL/07/33548

Dated: 12-07-19

To
Resident Engineer
NESPAK - Zeeruk (Jv)
CEPEC (Western Route), Package-II
Isakhel

Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/07/33548)

Reference to your Letter No. RE/NESPAK/P-2A/CPEC-WR/860, Dated: 04/07/2019 on the subject cited above. One Pressure Gauge (EN 837-1) as received by us has been calibrated. The results are tabulated as under:

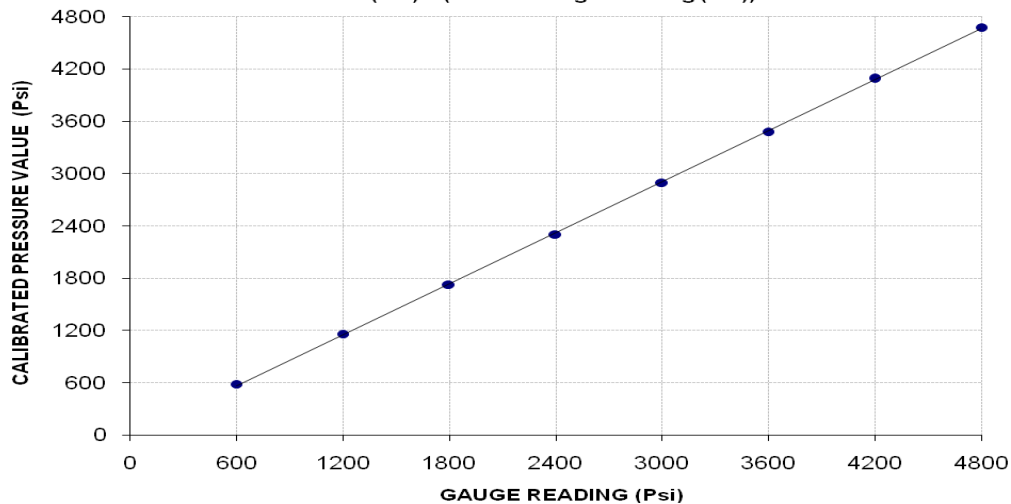
Total Range : Zero - 6000 (Psi)
Calibrated Range : Zero - 4800 (Psi)

Pressure Gauge Reading (Psi)	600	1200	1800	2400	3000	3600	4200	4800
Calibrated Load (kg)	8100	16100	24000	32000	40300	48400	56900	65100
Calibrated Pressure (Psi)	581.85	1156.52	1724.00	2298.67	2894.88	3476.73	4087.32	4676.35

The Ram Area use for Calibration = 198 cm²

Calibration Curve for Pressure Gauge No. EN-837-1

Calibrated Value (Psi) = (0.975 x Gauge Reading (Psi)) - 22.06



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