



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/09/37050
2021

Dated: 14-09-

Dated of Test: 20-09-2021

To
Chief Engineer
Zaitoon
New Lahore City Phase-IV

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]**

Reference to your letter No. NLC/CE/Infra/079, dated 03.08.2021 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(foot)	(foot)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	27	7.96	7.60	2.80	2.23	3.39	13680	27270	1778	3543

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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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

Ref: CED/TFL/09/37053

Dated: 15-09-2021

Date of Test: 20-09-2021

To,
M/S Lahore RCC Pipe Factory
Lahore

Subject: - **CALIBRATION OF PRESSURE GAUGE (MARK: TFL/09/37053)** (Page # 1/1)

Reference to your Letter No. Nil, Dated: 15/09/2021 on the subject cited above. One Pressure Gauge as received by us has been calibrated. The results are tabulated as under:

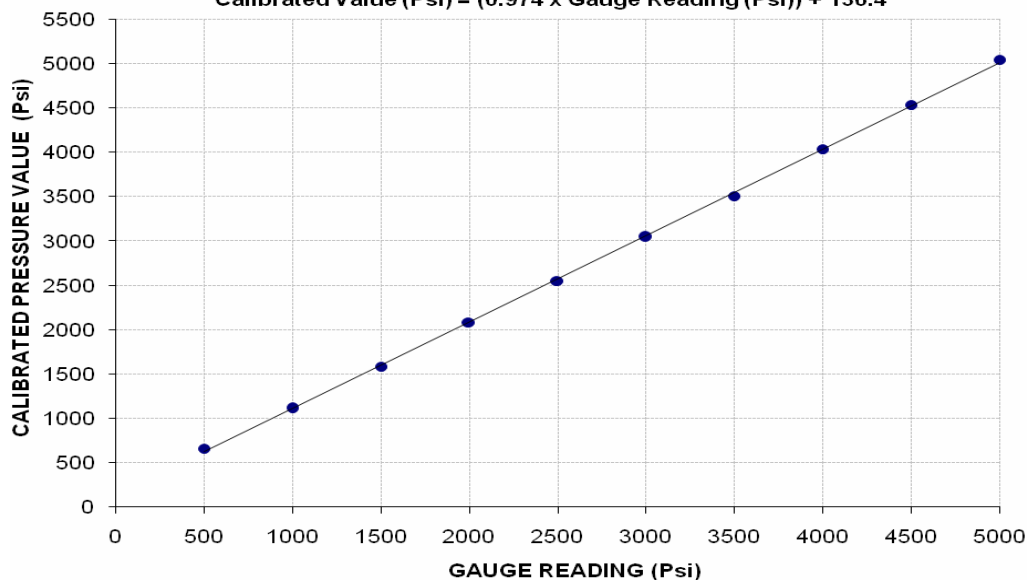
Total Range : Zero - 6000 (Psi)
Calibrated Range : Zero - 5000 (Psi)

Gauge Reading (Psi)	500	1000	1500	2000	2500	3000	3500	4000	4500	5000
Calibrated Load (k g)	9200	15500	22100	29000	35500	42400	48800	56200	63100	70200
Calibrated Pressure (Psi)	661	1113	1588	2083	2550	3046	3505	4037	4533	5043

The Ram Area use for Calibration = 198 cm²

Calibration Curve for Pressure Gauge

Calibrated Value (Psi) = (0.974 x Gauge Reading (Psi)) + 136.4



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STRUCTURAL ENGINEERING DIVISION
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To,
 Sr. Manager Civil
 Luky Cement Limited, Pezu
 800 TPD Line-2 at Luky Cement Limited, Pezu
 Reference # CED/TFL **37061** (Dr. Qasim Khan)
 Reference of the request letter # LCL/Civil/Line-2/2021/9/514

Dated: 17-09-2021

Dated: 17-09-2021

Tension Test Report (Page -1/1)

Date of Test 20-09-2021

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 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	4.213	32	31.89	1.25	1.238	39200	52000	69136	69780	91711	92600	1.40	17.5	
2	4.228	32	31.95	1.25	1.243	40200	52000	70900	71300	91711	92300	1.50	18.8	
3	4.150	32	31.65	1.25	1.220	42400	53400	74780	76620	94181	96500	1.50	18.8	
4	4.492	32	32.93	1.25	1.320	41600	52800	73369	69440	93122	88200	1.50	18.8	
5	4.208	32	31.88	1.25	1.237	40400	52400	71253	71990	92417	93400	1.30	16.3	
6	4.133	32	31.59	1.25	1.215	42000	52800	74075	76210	93122	95800	1.30	16.3	
7	4.126	32	31.56	1.25	1.213	31600	40200	55732	57440	70900	73100	1.40	17.5	
8	4.334	32	32.35	1.25	1.274	30800	39200	54321	53290	69136	67900	1.70	21.3	
9	4.227	32	31.95	1.25	1.243	30400	38000	53616	53930	67020	67500	1.30	16.3	
10	4.351	32	32.41	1.25	1.279	27200	36000	47972	46880	63492	62100	1.60	20.0	

Note: only ten samples for tensile and five samples for bend test

Bend Test

32mm Dia Bar Bend Test Through 180° is Satisfactory

32mm Dia Bar Bend Test Through 180° is Satisfactory

32mm Dia Bar Bend Test Through 180° is Satisfactory

32mm Dia Bar Bend Test Through 180° is Satisfactory

32mm Dia Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires
UET Lahore, Pakistan.

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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,
M.S Firdus Ahmed
Lahore

Reference # CED/TFL **37064** (Dr. Qasim Khan)
Reference of the request letter # Nil

Dated: 17-09-2021
Dated: 17-09-2021

Tension Test Report (Page – 1/1)

Date of Test 20-09-2021
Gauge length 2 inches
Description Wire Tensile Test

Sr. No.	Weight	Diameter/ Size (mm)		Area (mm ²)		Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(kg/m)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	(MPa)	(MPa)	(inch)		
1	0.064	3.25	3.22	-----	8.1	-----	730	-----	880	0.30	15.0	
2	0.062	3.25	3.16	-----	7.9	-----	810	-----	1012	0.30	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile test												
Bend Test												

I/C Testing Laboratoires
UET Lahore, Pakistan.

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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,
 Manager QC
 Country Developers (Pvt) Ltd
 46-G Model Town Lahore
 (Creative Constructors)

Reference # CED/TFL **37065** (Dr. Qasim Khan)
 Reference of the request letter # CD-21-Testing/ST/46G-003

Dated: 17-09-2021
 Dated: 15-09-2021

Tension Test Report (Page -1/1)

Date of Test 20-09-2021
 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	0.377	3	0.376	0.11	0.111	3900	4900	78200	77550	98200	97500	1.00	12.5	Mughal Supreme
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only 0 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.

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Pakistan. Ph: 92-42-99029202

To,
 The University of Lahore
 Lahore
 (Lahore Business School (LBS) - The University of Lahore)
 (NEVCON Construction)

Reference # CED/TFL **37066** (Dr. Qasim Khan)
 Reference of the request letter # Nil

Dated: 17-09-2021
 Dated: 17-09-2021

Tension Test Report (Page -1/1)

Date of Test 20-09-2021
 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	0.388	3	0.381	0.11	0.114	3600	5200	72200	69640	104200	100600	1.20	15.0	Afco Steel
2	0.392	3	0.383	0.11	0.115	3800	5100	76200	72670	102200	97600	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.

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STRUCTURAL ENGINEERING DIVISION
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Department of Civil Engineering
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To,
 Resident Engineer, CGUU
 AZ Engineering Associates, Sialkot
 Construction of Building for Government College Woman University Sialkot on Acquired Piece
 of Land Sialkot, (Group No. 1, Natural Science Block & Admin Block)

Reference # CED/TFL **37067** (Dr. Qasim Khan)
 Reference of the request letter # RE/AZ/GCWUS/SKT/407

Dated: 17-09-2021
 Dated: 08-09-2021

Tension Test Report (Page -1/1)

Date of Test 20-09-2021
 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	0.365	3	0.369	0.11	0.107	3300	4700	66200	67870	94200	96700	1.10	13.8	Kamran Steel
2	0.373	3	0.374	0.11	0.110	3600	4900	72200	72360	98200	98500	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														

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To,
M/S Style Textile (Pvt) Ltd
Lahore
(Style Raiwind)

Reference # CED/TFL **37068** (Dr. Qasim Khan)
Reference of the request letter # 1960/09/2021

Dated: 17-09-2021
Dated: 03-09-2021

Tension Test Report (Page -1/2)

Date of Test 20-09-2021
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 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	0.392	10	9.73	0.12	0.115	4000	6100	73487	76480	112067	116700	0.60	7.5	
2	0.397	10	9.79	0.12	0.117	5000	6400	91858	94450	117579	120900	0.70	8.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Pakistan. Ph: 92-42-99029202

To,
M/S Style Textile (Pvt) Ltd
Lahore
(Style SAP PH3 Project)

Reference # CED/TFL **37068** (Dr. Qasim Khan)
Reference of the request letter # Nil

Dated: 17-09-2021
Dated: 17-09-2021

Tension Test Report (Page -2/2)

Date of Test 20-09-2021
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 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	0.416	10	10.02	0.12	0.122	3900	5100	71650	70290	93696	92000	1.10	13.8	
2	0.416	10	10.02	0.12	0.122	3900	5000	71650	70290	91858	90200	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

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UET Lahore, Pakistan.

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To,
 G. M - Engineering
 Mughals Pakistan (Private) Limited
 Construction of Main Head office & Gate House Building at DHA, Multan

Reference # CED/TFL **37069** (Dr. Qasim Khan) Dated: 17-09-2021
 Reference of the request letter # 786/MPL-0074/170912/2021 Dated: 17-09-2021

Tension Test Report (Page -1/1)

Date of Test 20-09-2021
 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	3200	4800	64200	64260	96200	96400	1.30	16.3	
2	0.375	3	0.375	0.11	0.110	3200	4800	64200	63970	96200	96000	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

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UET Lahore, Pakistan.

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