



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/02/2767

Dated: 10-02-2023

Dated of Test: 16-02-2023

To

Resident Engineer
NESPAK
Construction of Underpass at Samanabad Morr Lahore

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

Reference to your letter No. 4403/03/AZ/Lab/RCC Pipe/17, dated 02.02.2023 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)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	18	7.76	7.25	22.99	17.88	2.55	9500	17000	1938	3468

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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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,

Resident Engineer
 NESPAK
 Establishment of Sports Complex at Shalimar. Lahore, (LDP), NA-130

Reference # CED/TFL **2788** (Dr. M Kashif)

Dated: 15-02-2023

Reference of the request letter # 3772/103/NA-310/RE/05/06

Dated: 14-02-2023

Tension Test Report (Page -1/1)

Date of Test 16-02-2023

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	0.374	3	0.374	0.11	0.110	3000	4900	60200	60140	98200	98300	0.90	11.3	SJ Steel
2	0.372	3	0.373	0.11	0.109	3000	4800	60200	60440	96200	96700	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Resident Engineer
 NESPAK
 Flyover at Saroki Adda on G.T Road (Samma) Gujrat Ding A Road 13 km in District
 Gujrat.

Reference # CED/TFL **2790** (Dr. M Kashif)

Dated: 15-02-2023

Reference of the request letter # 4364/03/CRM/01/22/35

Dated: 01-02-2023

Tension Test Report (Page -1/1)

Date of Test 16-02-2023

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	4.196	10	1.253	1.27	1.233	33200	50200	57700	59330	87200	89700	1.70	21.3	Sheikhoo
2	4.194	10	1.253	1.27	1.233	33200	50200	57700	59360	87200	89800	1.80	22.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#10 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,
 Resident Engineer
 NESPAK
 Construction of Underpass at Samanabad Morr

Reference # CED/TFL **2792** (Dr. M Kashif)
 Reference of the request letter # 4403/AZ/Lab/Steel-23

Dated: 15-02-2023
 Dated: 14-02-2023

Tension Test Report (Page -1/1)

Date of Test 16-02-2023
 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	4.314	10	1.271	1.27	1.268	38200	56000	66300	66390	97200	97400	1.70	21.3	A.F.I.O.S
2	4.310	10	1.270	1.27	1.267	40000	57200	69500	69590	99300	99600	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#10 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,

Project Manager
Premier Developers & Builders
Lyallpur Galleria-II Near Foyr Season Colony Samundri Road, Faisalabad

Reference # CED/TFL **2793** (Dr. M Kashif)
Reference of the request letter # LG-II/037

Dated: 15-02-2023
Dated: 14-02-2023

Tension Test Report (Page -1/1)

Date of Test 16-02-2023
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	0.384	3	0.379	0.11	0.113	3800	4900	76200	74110	98200	95600	1.30	16.3	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one 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
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Project Manager
Union Developers
Construction of Union Luxury Apartments, Etihad Town, Lahore

Reference # CED/TFL **2794** (Dr. M Kashif)
Reference of the request letter # UA/SO/2023/038

Dated: 15-02-2023
Dated: 15-02-2023

Tension Test Report (Page -1/1)

Date of Test 16-02-2023
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	0.372	3	0.373	0.11	0.109	4000	5700	80200	80530	114300	114800	1.00	12.5	Afco Steel
2	0.391	3	0.382	0.11	0.115	3400	4700	68200	65260	94200	90300	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

M/S Batala Steel Industries
77- Peco Road Badami Bag Lahore

Reference # CED/TFL **2795** (Dr. M Kashif)
Reference of the request letter # Nil

Dated: 15-02-2023

Dated: 14-02-2023

Tension Test Report (Page -1/1)

Date of Test 16-02-2023

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	0.378	3	0.376	0.11	0.111	3600	5300	72200	71370	106200	105100	1.40	17.5	
2	0.378	3	0.376	0.11	0.111	3500	5200	70200	69400	104200	103100	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														

I/C Testing Laboratories
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,

Resident Engineer
 ISOTEC
 Flying Cement Company 7000 TPD Line II Khushab Pakistan.

Reference # CED/TFL **2796** (Dr. M Kashif)
 Reference of the request letter # Nil

Dated: 15-02-2023
 Dated: 04-02-2023

Tension Test Report (Page -1/1)

Date of Test 16-02-2023
 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	4.095	32	31.44	1.25	1.204	36400	51600	64198	66660	91006	94500	1.60	20.0	
2	4.257	32	32.06	1.25	1.251	38000	54000	67020	66940	95239	95200	1.70	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
32mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Test Floor Laboratory
Department of Civil Engineering
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Pakistan. Ph: 92-42-99029202

To,

S.E (Civil), SWP
PAEC, WASO, D.G. Khan

Reference # CED/TFL **2797**(Dr. M Kashif)

Dated: 16-02-2023

Reference of the request letter # Misc. Work-2021 at DGKhan

Dated: 06-02-2023

Tension Test Report (Page -1/1)

Date of Test 16-02-2023

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	3500	4900	70200	70840	98200	99200	1.40	17.5	
2	0.373	3	0.374	0.11	0.110	3400	4900	68200	68360	98200	98600	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														

I/C Testing Laboratories
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
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To,
 Project Manager
 United Lifestyle (Pvt) Ltd.
 High-Rise Building “Skyscrapers United” at Johar Town Lahore

Reference # CED/TFL **2801** (Dr. M Rizwan Riaz)
 Reference of the request letter # ULS/2021-22-23/026

Dated: 16-02-2023
 Dated: 16-02-2023

Tension Test Report (Page -1/1)

Date of Test 16-02-2023
 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	0.369	3	0.372	0.11	0.109	3080	4840	61800	62530	97000	98300	1.00	12.5	
2	0.376	3	0.375	0.11	0.111	3230	4840	64800	64380	97000	96500	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 Laboratories
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
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Pakistan. Ph: 92-42-99029202

To,
 Resident Engineer
 NESPAK
 Construction of Underpass at Samanabad Morr

Reference # CED/TFL **2814** (Dr. Ali Ahmed)
 Reference of the request letter # 4403/AZ/Lab/Steel-29

Dated: 20-02-2023
 Dated: 20-02-2023

Tension Test Report (Page -1/2)

Date of Test 22-02-2023
 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	4.199	10	1.254	1.27	1.234	41200	54200	71500	73580	94100	96800	1.40	17.5	SJ
2	4.141	10	1.245	1.27	1.217	41000	54000	71200	74240	93800	97800	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#10 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
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To,
 Resident Engineer
 NESPAK
 Construction of Underpass at Samanabad Morr

Reference # CED/TFL **2814** (Dr. Ali Ahmed)
 Reference of the request letter # 4403/AZ/Lab/Steel-30

Dated: 20-02-2023
 Dated: 20-02-2023

Tension Test Report (Page -2/2)

Date of Test 22-02-2023
 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	4.313	10	1.271	1.27	1.268	39200	57600	68100	68150	100000	100200	1.40	17.5	Rafiq Supreme
2	4.306	10	1.269	1.27	1.266	36200	52600	62900	63040	91300	91600	1.70	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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