



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/07/36799, 800

Dated: 29-07-2021

Dated of Test: 02-08-2021

To
Resident Engineer
NESPAK
Construction of Underpass at Ghulab Davi Hospital and Additional Lanes on Lahore Bridge

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

Reference to your letter No. 3772/GD/103/RE/05/20, dated 27.07.2021 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	7.97	7.68	2.77	2.24	3.22	5920	11740	760	1507

Witness by Ghulam Ali (Quantity Surveyor NESPAK)

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
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To,
M/S Meksol Engineering
Lahore
(Lift up-Gradation of CM Center 1 Link Faridkot Road, Lahore)

Reference # CED/TFL **36803, 814** (Dr. Qasim Khan)
Reference of the request letter # UET/1

Dated: 29-07-2021
Dated: 28-07-2021

Tension Test Report (Page – 1/1)

Date of Test 02-08-2021
Description Steel Wire Rope Tensile Test

Sr. No.	Nominal Diameter	Measured weight	Breaking Load	Remarks / Coil No.
	(mm)	(kg/m)	(kg)	
1	11	0.421	6200	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
Only one sample for Test				

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To,
M/S Transtech Engineering Company
NESPAK-CMEC
PTPL
Construction of 1263 MW Punjab Thermal Power Plant, Jhang (Ittefaq Steel)

Reference # CED/TFL **36805** (Dr. Qasim Khan)
Reference of the request letter # TEC/UET/21061101

Dated: 30-07-2021
Dated: 11-06-2021

Tension Test Report (Page -1/1)

Date of Test 02-08-2021
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	Heat No.
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.400	10	9.83	0.12	0.118	3800	5600	69812	71200	102881	105000	1.40	17.5	522
2	0.400	10	9.83	0.12	0.118	3300	5500	60627	61840	101044	103100	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														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
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To,
 Manager Construction Projects
 Allied Bank
 Construction of ABL Building, 3-Babar Block, New Garden Town, Lahore

Reference # CED/TFL **36806** (Dr. Qasim Khan) Dated: 30-07-2021
 Reference of the request letter # HOL/ENGG.C.P./SM/2021/25 Dated: 29-07-2021

Tension Test Report (Page -1/1)

Date of Test 02-08-2021
 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	0.381	3	0.378	0.11	0.112	4200	5100	84200	82600	102200	100300	0.70	8.8	Amreli Steel
2	0.387	3	0.381	0.11	0.114	4300	5000	86200	83260	100200	96900	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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
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To,
 Resident Engineer
 ACES (Pvt) Ltd
 Development of Sector – I, G, N & X DHA Multan

Reference # CED/TFL **36809** (Dr. Qasim Khan)
 Reference of the request letter # RE/Sec- I/Test/12

Dated: 30-07-2021
 Dated: 29-07-2021

Tension Test Report (Page -1/1)

Date of Test 02-08-2021
 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	0.384	10	9.62	0.12	0.113	3800	4900	69812	74290	90021	95800	1.00	12.5	Mughal Steel
2	0.369	10	9.44	0.12	0.109	3500	4500	64301	71100	82673	91500	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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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
 Expansion Works (Construction of New Godowns/ Sheds & Pavements) at Allied Bank Limited
 Warehouse Munirabad

Reference # CED/TFL **36810** (Dr. Qasim Khan)
 Reference of the request letter # Nil

Dated: 30-07-2021
 Dated: 30-07-2021

Tension Test Report (Page -1/1)

Date of Test 02-08-2021
 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	3400	4400	68200	67590	88200	87500	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample 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
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 Resident Engineer
 NESPAK
 Punjab Intermediate Cities Improvement Investment Program (PICIP),
 Consultancy Services for Engineering, Procurement and Construction Management
 Watson Sialkot Lot-02
 Reference # CED/TFL **36811** (Dr. Qasim Khan)
 Reference of the request letter # Nespak/SAH/UET/022

Dated: 30-07-2021
 Dated: 29-07-2021

Tension Test Report (Page -1/2)

Date of Test 02-08-2021
 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	0.374	3	0.374	0.11	0.110	3100	4700	62200	62090	94200	94200	1.30	16.3	Kamran Steel
2	0.374	3	0.374	0.11	0.110	3100	4700	62200	62190	94200	94300	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 Laboratoires
UET Lahore, Pakistan.

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To,
 Resident Engineer
 NESPAK
 Punjab Intermediate Cities Improvement Investment Program (PICIP),
 Consultancy Services for Engineering, Procurement and Construction Management
 Wason Sialkot Lot-02
 Reference # CED/TFL **36811** (Dr. Qasim Khan)
 Reference of the request letter # Nespak/SAH/UET/021

Dated: 30-07-2021
 Dated: 29-07-2021

Tension Test Report (Page -2/2)

Date of Test 30-07-2021
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test

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	0.172	2	0.254	-----	0.051	1240	1520	-----	54090	-----	66300	1.50	18.8	SJ Steel
2	0.171	2	0.253	-----	0.050	1200	1520	-----	52470	-----	66500	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#2 Bar Bend Test Through 180° is Satisfactory														

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UET Lahore, Pakistan.

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To,
 Resident Engineer
 ACES (Pvt) Ltd
 Development of Sector – T & B-1 - DHA Multan

Reference # CED/TFL **36812** (Dr. Qasim Khan)
 Reference of the request letter # RE/SEC-T/Material/17

Dated: 30-07-2021
 Dated: 29-07-2021

Tension Test Report (Page -1/1)

Date of Test 02-08-2021
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A496

Sr. No.	Weight	Diameter/ Size (mm)		Area (mm ²)		Yield load	Breaking Load	Yield Stress (Mpa)		Ultimate Stress (Mpa)		Remarks
	(kg/m)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	
1	0.229	6	6.09	32.30	29.11	1240	1680	377	418	510	566	Ali Steel
2	0.228	6	6.08	32.30	29.02	1240	1680	377	419	510	568	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test												
Bend Test												
6mm Dia Bar Bend Test Through 180° is Satisfactory												

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
M/S NLC Engineers – Tijaarat Developers (Jv)
Lahore
(Construction of PEC Regional Office, Lahore)

Reference # CED/TFL **36813** (Dr. Qasim Khan)
Reference of the request letter # 901/NLC-TD(JV)/PEC/276

Dated: 30-07-2021
Dated: 30-07-2021

Tension Test Report (Page -1/2)

Date of Test 02-08-2021
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	2300	3200	46100	45740	64200	63700	2.00	25.0	AA Steel
2	0.369	3	0.372	0.11	0.109	2800	3500	56200	56870	70200	71100	1.80	22.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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To,
M/S NLC Engineers – Tijaarat Developers (Jv)
Lahore
(Construction of PEC Regional Office, Lahore)

Reference # CED/TFL **36813** (Dr. Qasim Khan)
Reference of the request letter # 901/NLC-TD(JV)/PEC/276

Dated: 30-07-2021
Dated: 30-07-2021

Tension Test Report (Page -2/2)

Date of Test 02-08-2021
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	0.387	3	0.381	0.11	0.114	4300	5400	86200	83250	108200	104600	0.90	11.3	AF Steel
2	0.379	3	0.377	0.11	0.111	4000	5200	80200	79140	104200	102900	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														

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