



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 Tijaarat Developers
Lahore
(Construction Site of OPUS 30-L Gulberg III, Lahore)

Reference # CED/TFL 36377 (Dr. Qasim Khan)
Reference of the request letter # TD/UET-OPUS/0419-01

Dated: 26-04-2021
Dated: 19-04-2021

Tension Test Report (Page -1/1)

Date of Test 27-04-2021
Gauge length 8 inches
Description Deformed 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	Grade
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.382	3/8	0.378	0.11	0.112	3000	4500	60200	58850	90200	88300	1.50	18.8	40
2	0.386	3/8	0.380	0.11	0.114	2900	4500	58200	56310	90200	87400	1.30	16.3	
3	0.370	3/8	0.372	0.11	0.109	3600	5100	72200	72990	102200	103400	0.80	10.0	60
4	0.376	3/8	0.375	0.11	0.111	3300	4900	66200	65770	98200	97700	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only four samples for tensile and two sample for bend test

Bend Test

3/8" Dia Bar Bend Test Through 180° is Satisfactory

3/8" 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,
M/S Khalid Overseas Corporation
Sialkot

Reference # CED/TFL **36378** (Dr. Qasim Khan)
Reference of the request letter # Nil

Dated: 26-04-2021
Dated: 26-04-2021

Tension Test Report (Page -1/1)

Date of Test 27-04-2021
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	0.367	3	0.370	0.11	0.108	3700	4800	74200	75680	96200	98200	1.00	12.5	
2	0.368	3	0.371	0.11	0.108	3700	4800	74200	75360	96200	97800	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:

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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 Haris & Company
Lahore
(NRO Coverge 2020 Project – Site ID: LHR5851)

Reference # CED/TFL **36379** (Dr. Qasim Khan)
Reference of the request letter # 0013

Dated: 26-04-2021
Dated: 21-04-2021

Tension Test Report (Page -1/1)

Date of Test 27-04-2021
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	0.370	10	9.45	0.12	0.109	3400	4600	62464	68910	84510	93300	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one 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.

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

To,
 Manager Construction N-I
 Allied Bank
 Sukh Chayn Garden Branch Lahore

Reference # CED/TFL **36381** (Dr. Qasim Khan)
 Reference of the request letter # KLP/Engg-Cell/AI/2021/2409

Dated: 26-04-2021
 Dated: 24-04-2021

Tension Test Report (Page -1/1)

Date of Test 27-04-2021
 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	0.395	3	0.385	0.11	0.116	4300	5300	86200	81560	106200	100600	0.80	10.0	Mughal Supreme
2	0.397	3	0.386	0.11	0.117	4400	5400	88200	83090	108200	102000	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

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

To,
 Resident Engineer
 NESPAK

Establishment of U.E.T Lahore Sub Campus at Narowal – Construction of Boys Hostel
 (Balance Works)

Reference # CED/TFL **36383** (Dr. Qasim Khan)

Dated: 26-04-2021

Reference of the request letter # 3863/13/SYA/Labtsting/349

Dated: 24-04-2021

Tension Test Report (Page -1/1)

Date of Test 27-04-2021

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	0.384	3	0.379	0.11	0.113	3500	5100	70200	68290	102200	99500	1.30	16.3	
2	0.385	3	0.380	0.11	0.113	3200	4800	64200	62350	96200	93600	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.

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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
 Amad Anwar & Partners
 Construction of Plaza No. 31/2 CCA Phase – V, DHA Lahore

Reference # CED/TFL **36384** (Dr. Qasim Khan)
 Reference of the request letter # AA/CCA/31/2/002

Dated: 26-04-2021
 Dated: 22-04-2021

Tension Test Report (Page -1/1)

Date of Test 27-04-2021
 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	0.369	3	0.372	0.11	0.108	3700	4900	74200	75230	98200	99700	1.00	12.5	
2	0.368	3	0.371	0.11	0.108	3800	5000	76200	77420	100200	101900	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:

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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
 Engineering Consultancy Services Punjab (Pvt) Ltd
 Supply, Construction, Installation of Water Filtration Plants & Direct Supply in Lahore Division

Reference # CED/TFL **36385** (Dr. Qasim Khan)
 Reference of the request letter # ECSP/PAPA/CZ-LHR-08

Dated: 26-04-2021
 Dated: 26-04-2021

Tension Test Report (Page -1/1)

Date of Test 27-04-2021
 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	0.383	10	9.62	0.12	0.113	3300	4700	60627	64570	86347	92000	1.40	17.5	
2	0.373	10	9.49	0.12	0.110	3300	4600	60627	66310	84510	92500	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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
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Pakistan. Ph: 92-42-99029202

To,
 Resident Engineer
 AZEA Sialkot Residency
 Rehabilitation/ Repair of Road from Zafarwal to Shakargarh (Group-1 km 0/0 to 17.66
 Excluding Fair Portion of 0.58 km length = 17.08 km & Zafarwal City Links Length = 2.34 km
 Total Length = 19.42 km) in District Narowal

Reference # CED/TFL **36386** (Dr. Qasim Khan) Dated: 26-04-2021
 Reference of the request letter # AZEA/SIALKOT/ADAM20/111 Dated: 19-04-2021

Tension Test Report (Page -1/1)

Date of Test 27-04-2021
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in ²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Grade
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.381	3/8	0.377	0.11	0.112	3100	4700	62200	61070	94200	92600	1.50	18.8	
2	0.378	3/8	0.376	0.11	0.111	3100	4700	62200	61440	94200	93200	1.40	17.5	
3	0.360	3/8	0.367	0.11	0.106	3200	4500	64200	66650	90200	93800	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only three samples for tensile test														
Bend Test														

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,
Project Manager
Aldo International (Pvt) Ltd
Construction of Bridge at Khaira Distributary, Ata Buxh Road, Kamahan

Reference # CED/TFL **36387** (Dr. Qasim Khan)
Reference of the request letter # AI/UET/001

Dated: 26-04-2021
Dated: 26-04-2021

Tension Test Report (Page – 1/2)

Date of Test 27-04-2021
Gauge length 640 mm
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	12.70 (1/2")	775.0	770.0	13600	133.42	15600	153.04	198	>3.50	xx
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only one sample for Test										

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

I/C Testing Laboratoires
UET Lahore, Pakistan.

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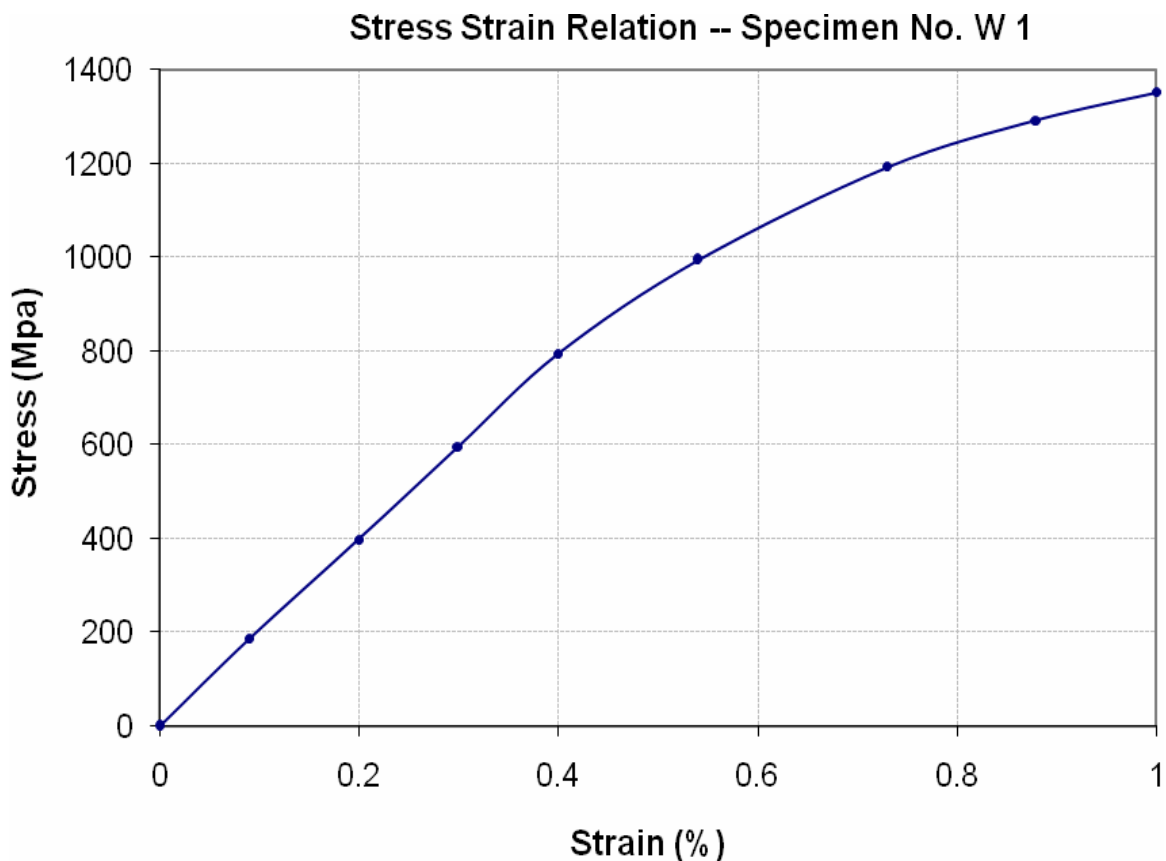
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Project Manager
Aldo International (Pvt) Ltd
Construction of Bridge at Khaira Distributary, Ata Buxh Road, Kamahan

Reference # CED/TFL 36387 (Dr. Qasim Khan)
Reference of the request letter # AI/UET/001

Dated: 26-04-2021
Dated: 26-04-2021

Graph (Page – 2/2)



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
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To,
M/S Ibrahim Nizami Steel Wire Ind. (Pvt) Ltd
Lahore

Reference # CED/TFL **36389** (Dr. Qasim Khan)
Reference of the request letter # Nil

Dated: 27-04-2021
Dated: 27-04-2021

Tension Test Report (Page -1/2)

Date of Test 27-04-2021
Gauge length 2 inches
Description MS Wire Tensile Test

Sr. No.	Weight (kg/m)	Diameter/ size		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa) Actual	Ultimate Stress (MPa) Actual	Elongation (inch)	% Elongation	Remarks
		Nominal (mm)	Actual (mm)	Nominal	Actual							
1	0.109	5	4.20	-----	13.9	1900	2800	1344	1981	0.20	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test												
Bend Test												

I/C Testing Laboratories
UET Lahore, Pakistan.

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To,
M/S Ibrahim Nizami Steel Wire Ind. (Pvt) Ltd
Lahore

Reference # CED/TFL **36389** (Dr. Qasim Khan)
Reference of the request letter # Nil

Dated: 27-04-2021

Dated: 27-04-2021

Tension Test Report (Page – 2/2)

Date of Test 27-04-2021
Gauge length 640 mm
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	432.0	436.0	11000	107.91	11700	114.78	>3.50	xx
2	12.70 (1/2")	775.0	781.0	16500	161.87	19200	188.35	<3.50 Not ok	xx
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

Only two samples for Test

I/C Testing Laboratoires
UET Lahore, Pakistan.

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