



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
 ACES (Pvt) Ltrd
 DHA Multan
 (Main Truck Sewer – DHA Multan)

Reference # CED/TFL **35238** (Dr. M Rizwan Riaz)
 Reference of the request letter # MTS/CT/Material/01

Dated: 18-08-2020
 Dated: 12-08-2020

Tension Test Report (Page -1/1)

Date of Test 19-08-2020
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A496

Sr. No.	Weight (kg/m)	Diameter/ Size (mm)		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (Mpa)		Ultimate Stress (Mpa)		Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual	
1	0.177	5	5.36	19.40	22.56	1300	1600	657	565	809	696	MSM
2	0.181	5	5.42	19.40	23.08	1300	1600	657	553	809	680	
3	0.217	6	5.93	32.30	27.62	1340	1680	407	476	510	597	
4	0.218	6	5.95	32.30	27.79	1200	1500	364	424	456	530	
5	0.354	8	7.58	51.60	45.15	1900	2500	361	413	475	543	
6	0.349	8	7.53	51.60	44.48	1800	2600	342	397	494	573	
Note: only six samples for tensile and three samples for bend test												
Bend Test												
5mm Dia Bar Bend Test Through 180° is Satisfactory												
6mm Dia Bar Bend Test Through 180° is Satisfactory												
8mm 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 Desen International
Islamabad
(Electric Polls Supply, Mangla Dam, Mirpur AJK)

Reference # CED/TFL **35212** (Dr. Ali Ahmed)
Reference of the request letter # Nil

Dated: 13-08-2020
Dated: 13-08-2020

Tension Test Report (Page – 1/1)

Date of Test 19-08-2020
Gauge length 2 inches
Description Pipe & Steel Plate Steel Strip Tensile Test

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	Pipe	2 1/2"	26.00x3.00	78.00	2700	3300	339.58	415.04	0.70	35.00	
2			26.00x3.00	78.00	2700	3300	339.58	415.04	0.60	30.00	
3	Pipe	4"	26.00x3.00	78.00	2800	3200	352.15	402.46	0.65	32.50	
4			26.00x3.00	78.00	2700	3200	339.58	402.46	0.65	32.50	
5	Plate	8mm	27.00x8.00	216.00	7200	10700	327.00	485.96	0.70	35.00	
6			27.00x8.00	216.00	7300	10600	331.54	481.42	0.80	40.00	
Only Six Sample for Tensile Test											
Bend Test											

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,
Procurement Officer
Jazari Steel
Project : Bholari

Reference # CED/TFL **35222** (Dr. Ali Ahmed)
Reference of the request letter # Nil

Dated: 13-08-2020
Dated: 13-08-2020

Tension Test Report (Page – 1/1)

Date of Test 19-08-2020
Gauge length 2 inches
Description MS Plate Steel Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	12	30.00x12.20	366.00	12100	15700	324.32	420.81	0.80	40.00	
2	20	29.60x19.60	580.16	18500	27900	312.82	471.76	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Two Sample for Tensile Test										
Bend Test										

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



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

To,
 Chief Resident Engineer- 1
 NESPAK
 Construction of Boundary Wall Guard Rooms and Internal Allied Works of Anarkali Station of
 Lahore Orange Line Metro Train Project Package-1

Reference # CED/TFL **35223** (Dr. Ali Ahmed)
 Reference of the request letter # 4042/13/FAM/Steel-169

Dated: 17-08-2019
 Dated: 13-08-2019

Tension Test Report (Page -1/1)

Date of Test 19-08-2020

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	3500	5600	70200	68800	112300	110100	1.20	15.0	Batala Steel
2	0.382	3	0.378	0.11	0.112	3300	5300	66200	64730	106200	104000	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,
 Resident Engineer-2
 Architectural & Civil Engineering Services
 SRE ACES Multan
 Civil Infrastructure Works Sector H – DHA Multan

Reference # CED/TFL **35224** (Dr. M Rizwan Riaz)
 Reference of the request letter # ACES-DHAM-SEC-H-210

Dated: 17-08-2020
 Dated: 12-08-2020

Tension Test Report (Page -1/1)

Date of Test 19-08-2020
 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	0.415	10	10.01	0.12	0.122	4300	5300	78998	77710	97370	95800	1.10	13.8	Amreli Steel
2	0.414	10	10.00	0.12	0.122	4400	5300	80835	79670	97370	96000	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

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 Officer
 Town Committee
 Hadali (Khushab)
 Repair of Bridge at Hadali Drain in Town Committee Hadali District Khushab

Reference # CED/TFL **35225** (Dr. M Rizwan Riaz)
 Reference of the request letter # 475/TC

Dated: 17-08-2019
 Dated: 31-07-2019

Tension Test Report (Page -1/1)

Date of Test 19-08-2020

Gauge length 8 inches

Description Deformed Steel Bar Tensile 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	0.359	3/8	0.366	0.11	0.105	2400	3700	48100	50190	74200	77400	1.40	17.5	
2	0.359	3/8	0.366	0.11	0.105	2400	3600	48100	50150	72200	75300	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test														
Bend Test														

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 Moaz Steel
Lahore
(CGGC-DESCON Jv Muhammad Dam Project)

Reference # CED/TFL **35229** (Dr. Qasim Khan)
Reference of the request letter # MZ/CGGC-DES/MD/UET/022

Dated: 17-08-2020
Dated: 12-08-2020

Slippage Test Report (Page -1/1)

Date of Test 19-08-2020
Description Rock Bolt Slippage Test

Sr. No.	Dia	Failure Load	Mode of Failure	Remarks
	(mm)	(kg)	---	
1	32	44000	Thread Failure	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
Note: only one sample for test				

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



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) Limited
 PSIC House at Davis Road Lahore Phase-1

Reference # CED/TFL **35231** (Dr. Ali Ahmed)
 Reference of the request letter # 314/PSIC/RE/02

Dated: 17-08-2020
 Dated: 17-08-2020

Tension Test Report (Page -1/1)

Date of Test 19-08-2020

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	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.376	3/8	0.375	0.11	0.111	3200	4800	64200	63750	96200	95700	1.50	18.8	
2	0.376	3/8	0.375	0.11	0.111	3300	4800	66200	65770	96200	95700	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
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,
 Sub Divisional Officer
 Buildings Sub Division No. 12
 Lahore
 (Establishment of Mother & Child Block in Sir Ganga Ram Hospital Lahore)

Reference # CED/TFL **35232** (Dr. Ali Ahmed)
 Reference of the request letter # 374/SDO12th

Dated: 17-08-2020
 Dated: 28-07-2020

Tension Test Report (Page -1/1)

Date of Test 19-08-2020

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	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.380	3/8	0.377	0.11	0.112	3400	4900	68200	67130	98200	96800	1.20	15.0	Kamran Steel
2	0.378	3/8	0.376	0.11	0.111	3300	4900	66200	65450	98200	97200	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
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,
 Sub Divisional Officer
 Buildings Sub Division No. 15
 Lahore
 (Construction of New Administration Block in The Premises of Lahore High Court Lahore)

Reference # CED/TFL **35233** (Dr. Ali Ahmed)
 Reference of the request letter # 705

Dated: 17-08-2020
 Dated: 27-07-2020

Tension Test Report (Page -1/1)

Date of Test 19-08-2020

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	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.375	3/8	0.375	0.11	0.110	3100	4700	62200	62030	94200	94100	1.40	17.5	Kamran Steel
2	0.375	3/8	0.375	0.11	0.110	3200	4800	64200	63980	96200	96000	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
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,
 Municipal Officer (I&S)
 Municipal Corporation
 Kamoke
 (Rehabilitation of Municipal Services Infrastructure City Kamoke Group –A M.C. Kamoke)

Reference # CED/TFL **35234** (Dr. M Rizwan Riaz)
 Reference of the request letter # MC(KMK)/999

Dated: 18-08-2020
 Dated: 15-08-2020

Tension Test Report (Page -1/1)

Date of Test 19-08-2020

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	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.406	3/8	0.390	0.11	0.119	4000	5200	80200	73840	104200	96000	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
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,
 Sub Divisional Officer
 Highway Sub Division (M&R)
 Gujrat
 Special Repair of Mindi Bahauddain Rasul Kharian Jalalpur Jattan Head Mariala Paspur Narowal
 Road km no. 21.00 to 50.30 Length= 29.30 km in District Gujrat
 Reference # CED/TFL **35235** (Dr. M Rizwan Riaz) Dated: 18-08-2020
 Reference of the request letter # 53/GT Dated: 30-07-2020

Tension Test Report (Page -1/1)

Date of Test 19-08-2020
 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	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.410	3/8	0.392	0.11	0.120	4500	5400	90200	82380	108200	98900	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

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



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 Defence Housing Authority.
Lahore Cantt
(Infra Dev Works Sector-Q, Phase-9 (Prism) (M/s DJHA Const Coy)

Reference # CED/TFL **35237** (Dr. M Rizwan Riaz)
Reference of the request letter # 408/241/E/Lab/962/14

Dated: 18-08-2020
Dated: 17-08-2020

Tension Test Report (Page -1/1)

Date of Test 19-08-2020
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	0.371	0.11	0.108	3100	4900	62200	63350	98200	100200	1.30	16.3	Ittefaq Steel
2	0.364	3	0.369	0.11	0.107	3200	4900	64200	65990	98200	101100	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.

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
 ACES (Pvt) Ltrd
 DHA Multan
 (Main Truck Sewer – DHA Multan)

Reference # CED/TFL **35238** (Dr. M Rizwan Riaz)
 Reference of the request letter # MTS/CT/Material/01

Dated: 18-08-2020
 Dated: 12-08-2020

Tension Test Report (Page -1/1)

Date of Test 19-08-2020
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A496

Sr. No.	Weight (kg/m)	Diameter/ Size (mm)		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (Mpa)		Ultimate Stress (Mpa)		Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual	
1	0.177	5	5.36	19.40	22.56	1300	1600	657	565	809	696	MSM
2	0.181	5	5.42	19.40	23.08	1300	1600	657	553	809	680	
3	0.217	6	5.93	32.30	27.62	1340	1680	407	476	510	597	
4	0.218	6	5.95	32.30	27.79	1200	1500	364	424	456	530	
5	0.354	8	7.58	51.60	45.15	1900	2500	361	413	475	543	
6	0.349	8	7.53	51.60	44.48	1800	2600	342	397	494	573	
Note: only six samples for tensile and three samples for bend test												
Bend Test												
5mm Dia Bar Bend Test Through 180° is Satisfactory												
6mm Dia Bar Bend Test Through 180° is Satisfactory												
8mm Dia Bar Bend Test Through 180° is Satisfactory												

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



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 The Driller
Lahore
Swiss Tech.
(35-Mall Saddar Rawalpindi)

Reference # CED/TFL **35240** (Dr. Qasim Khan)
Reference of the request letter # Nil

Dated: 19-08-2020
Dated: 19-08-2020

Tension Test Report (Page – 1/3)

Date of Test 19-08-2020
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	788.0	17400	170.69	19600	192.28	199	>3.50	xx
2	12.70 (1/2")	775.0	791.0	18000	176.58	19400	190.31	198	>3.50	xx
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only two samples 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.

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



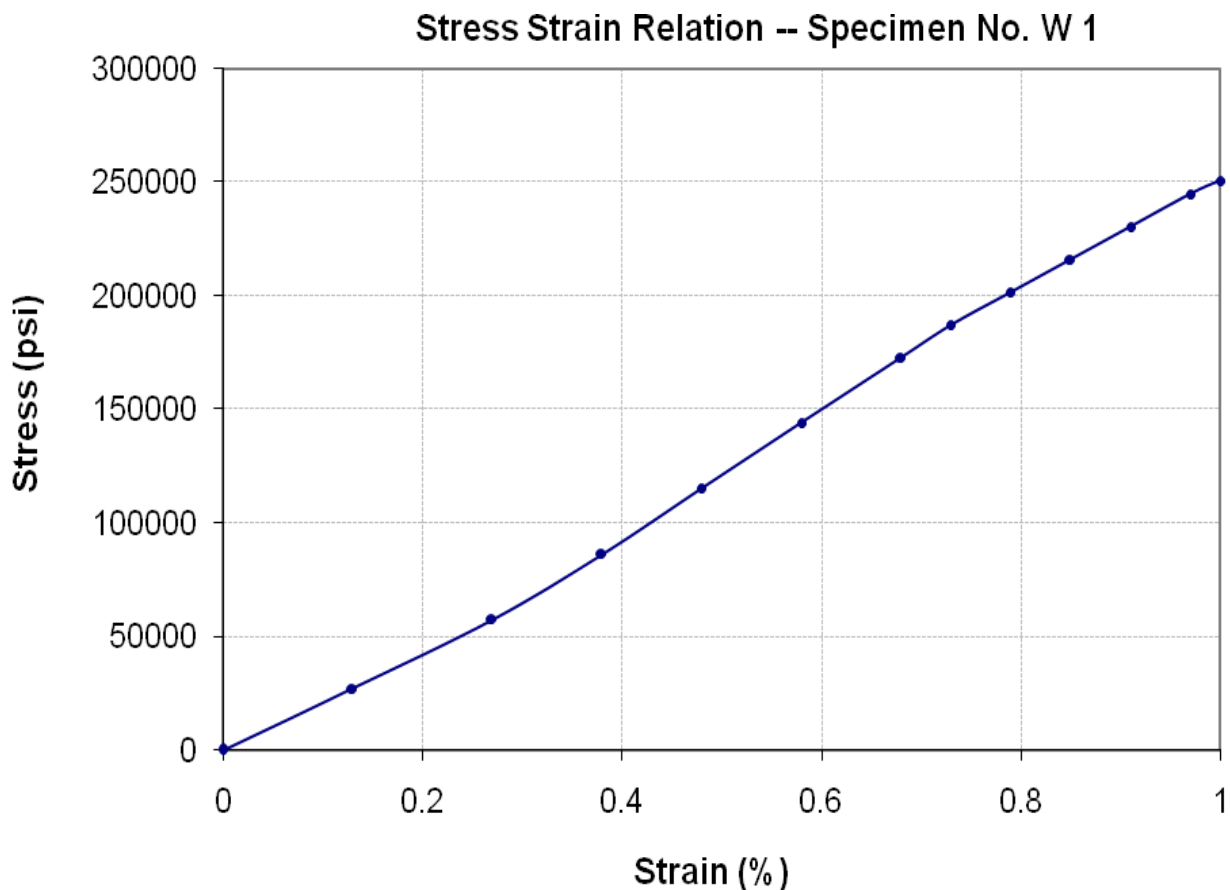
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
M/S The Driller
Lahore
Swiss Tech.
(35-Mall Saddar Rawalpindi)

Reference # CED/TFL **35240** (Dr. Qasim Khan)
Reference of the request letter # Nil

Dated: 19-08-2020
Dated: 19-08-2020

Graph (Page – 2/3)



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



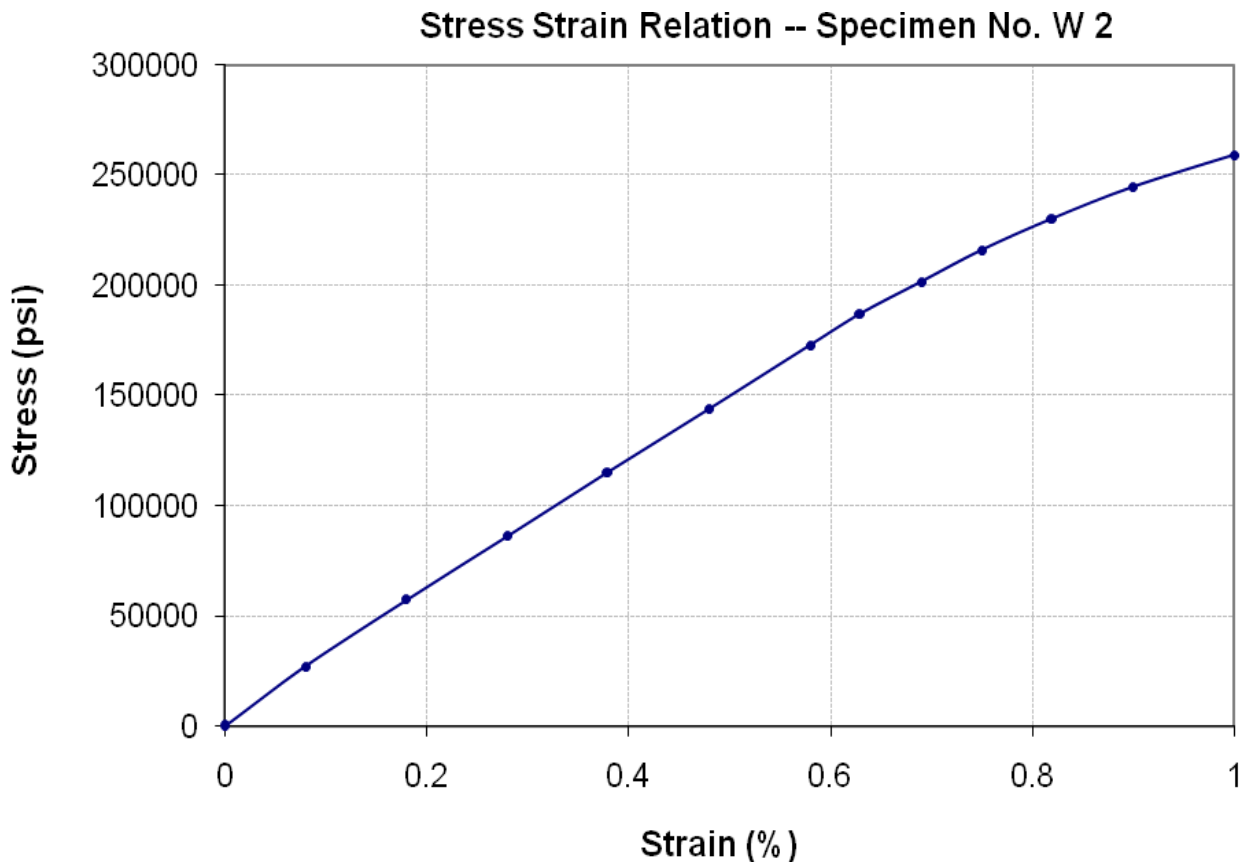
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
M/S The Driller
Lahore
Swiss Tech.
(35-Mall Saddar Rawalpindi)

Reference # CED/TFL **35240** (Dr. Qasim Khan)
Reference of the request letter # Nil

Dated: 19-08-2020
Dated: 19-08-2020

Graph (Page – 3/3)



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 Coordinator
Mazyood Giga DHA Lahore Emerald Ltd
Construction of Gold Crest Mall and Residency Phase-4, DHA Lahotre

Reference # CED/TFL **35241** (Dr. M Rizwan Riaz)
Reference of the request letter # Nil

Dated: 19-08-2020
Dated: 18-08-2020

Weight & Size Test Report (Page – 1/1)

Date of Test 19-08-2020
Description M.S Pipe Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	External Diameter	Internal Diameter	Thickness	Remark
	(inch)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	1.00	760	30.20	2.52	33.80	27.20	3.30	
2	1.25	1130	30.60	3.69	42.00	33.80	4.10	
3	1.50	1275	30.50	4.18	48.80	40.80	4.00	
4	2.00	1587	30.70	5.17	60.30	52.30	4.00	
5	2.50	2525	30.80	8.20	73.50	63.50	5.00	
6	3.00	3252	30.50	10.66	89.10	78.70	5.20	
7	4.00	4626	30.60	15.12	115.20	103.80	5.70	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
Only Six Samples for Test								

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