



**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/01/4435

Dated: 01-01-2024

Dated of Test: 10-01-2024

To

**Assistant Resident Engineer**

**MM Pakistan (Pvt). Ltd.**

**“Providing and Laying of Sewerage Network (Zone-1)in Jhang City”**

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a] (Page # 1/4)**

Reference to your letter No. Jhang/PKG03/81, dated 22.12.2023 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

<b>Sr. No</b>	<b>Nominal Size</b>	<b>Total Length</b>	<b>Loaded Length</b>	<b>External Diameter</b>	<b>Internal Diameter</b>	<b>Wall Thickness</b>	<b>Proof load</b>	<b>Ultimate Load</b>	<b>Proof Stress</b>	<b>Ultimate Stress</b>
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.70	7.33	15.79	11.35	2.22	14000	17500	4454	5567

**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](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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Ref: CED/TFL/01/4435

Dated: 01-01-2024

Dated of Test: 10-01-2024

To

**Assistant Resident Engineer**

**MM Pakistan (Pvt). Ltd.**

**“Providing and Laying of Sewerage Network (Zone-1)in Jhang City”**

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a] (Page # 2/4)**

Reference to your letter No. Jhang/PKG03/81-A, dated 22.12.2023 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	15	7.78	7.34	19.09	14.40	2.35	11500	14000	2878	3504

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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- 1- You can See your reports On Internet in the following web site  
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Ref: CED/TFL/01/4435

Dated: 01-01-2024

Dated of Test: 10-01-2024

To

**Assistant Resident Engineer**  
**MM Pakistan (Pvt). Ltd.**  
**“Providing and Laying of Sewerage Network (Zone-1)in Jhang City”**

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a] (Page # 3/4)**

Reference to your letter No. Jhang/PKG03/81-B, dated 22.12.2023 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	7.78	7.30	22.91	17.77	2.57	15200	17400	3100	3548

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**Pakistan. Ph: 92-42-99029202**

Ref: CED/TFL/01/4435

Dated: 01-01-2024

Dated of Test: 10-01-2024

To

**Assistant Resident Engineer**  
**MM Pakistan (Pvt). Ltd.**  
**“Providing and Laying of Sewerage Network (Zone-1)in Jhang City”**

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a] (Page # 4/4)**

Reference to your letter No. Jhang/PKG03/81-C, dated 22.12.2023 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	21	7.78	7.16	26.61	20.91	2.85	15000	17000	2651	3004

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**Department of Civil Engineering**  
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**Pakistan. Ph: 92-42-99029202**

To,

XEN  
GE (Army)-I Gwa  
Const of 8 x Sldrs Flats (G+3), 148 Lt AD Regt, HQ 19 IABG at Gwa Cantt.

Reference # CED/TFL **4461** (Dr. Ali Ahmed)  
Reference of the request letter # 6180-2720/7/E-6

Dated: 08-01-2024  
Dated: 05-01-2024

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024  
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 <sup>2</sup> )		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	3/8	0.383	0.11	0.115	3590	5120	72000	68620	102600	97900	1.20	15.0	
2	0.388	3/8	0.381	0.11	0.114	3490	4990	70000	67380	100000	96400	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
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](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
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To,  
 M/S Lord's Residencia  
 Lahore

Reference # CED/TFL **4462** (Dr. Ali Ahmed)  
 Reference of the request letter # 004

Dated: 08-01-2024  
 Dated: 06-01-2024

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024  
 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 <sup>2</sup> )		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	0.110	3060	5370	61400	61090	107600	107200	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
3/8" 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,  
Iban Al Aziz  
Lahore

Reference # CED/TFL **4465** (Dr. Ali Ahmed)  
Reference of the request letter # IAA-131223

Dated: 08-01-2024  
Dated: 08-01-2024

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024  
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 <sup>2</sup> )		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	3/8	0.372	0.11	0.109	4810	5630	96400	97430	112900	114100	1.00	12.5	
2	0.371	3/8	0.373	0.11	0.109	4710	5370	94400	95250	107600	108600	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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To,  
 M/S Expo Gold  
 Lahore

Reference # CED/TFL **4466** (Dr. Ali Ahmed)  
 Reference of the request letter # Nil

Dated: 08-01-2024  
 Dated: 08-01-2024

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in <sup>2</sup> )		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.388	3	0.381	0.11	0.114	3330	4790	66800	64390	96000	92700	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,  
M/S Five Star Steel Mill Pvt Ltd.  
Sheikhupura

Reference # CED/TFL **4467** (Dr. Ali Ahmed)  
Reference of the request letter # FSSM/Letter # 3

Dated: 08-01-2024  
Dated: 08-01-2024

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		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	0.359	3	0.366	0.11	0.105	3840	5710	77000	80280	114500	119400	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile test</b>														
Bend Test														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,

QA QC Manager  
Zameen Development  
Construction of Zameen Quadrangle at Plot # 49, Zafar Ali Road, Lahore

Reference # CED/TFL **4469** (Dr. Ali Ahmed)  
Reference of the request letter # ZD/QAQC/QUAD/06

Dated: 08-01-2024  
Dated: 08-01-2024

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024  
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 <sup>2</sup> )		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	3840	5420	77000	77490	108600	109400	1.20	15.0	JN-01-03
2	0.373	3	0.373	0.11	0.110	4000	5420	80200	80510	108600	109100	1.30	16.3	
3	0.371	3	0.373	0.11	0.109	3790	5270	76000	76620	105600	106600	1.50	18.8	Dec 160
4	0.368	3	0.371	0.11	0.108	3740	5270	75000	76270	105600	107500	1.30	16.3	
5	0.372	3	0.373	0.11	0.109	3520	4840	70600	71000	97000	97700	1.10	13.8	NEO/H cat # SJ-08
6	0.368	3	0.371	0.11	0.108	3470	4790	69600	70790	96000	97800	1.00	12.5	
<b>Note: only six samples for tensile and three samples for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#3 Bar Bend Test Through 180° is Satisfactory														
#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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**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
Project Director  
Overseas Construction Co. (Pvt) Ltd  
Gulberg City Centre, Lahore

Reference # CED/TFL **4470** (Dr. Ali Ahmed)  
Reference of the request letter # OCC/Steel/51

Dated: 08-01-2024  
Dated: 08-01-2024

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024  
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 <sup>2</sup> )		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	0.373	0.11	0.110	4330	5300	86800	87120	106200	106700	1.10	13.8	Afco Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
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**  
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**Pakistan. Ph: 92-42-99029202**

To,

Director Projects  
Sheikhoo Sugar Mills (Steel Division)  
Anwar Abad Kot Addu, Muzaffargarh

Reference # CED/TFL 4472 (Dr. Asad Ali)  
Reference of the request letter # Nil

Dated: 08-01-2024  
Dated: 07-02-2024

**Tension Test Report** (Page -1/2)

Date of Test 10-01-2024  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in <sup>2</sup> )		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	4.151	32	31.66	1.25	1.220	40600	53400	71605	73350	94181	96500	1.60	20.0	
2	4.178	32	31.76	1.25	1.228	40800	54800	71958	73230	96650	98400	1.40	17.5	
3	4.186	32	31.79	1.25	1.230	39600	53800	69842	70940	94886	96400	1.40	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only three samples for tensile test</b>														
Bend Test														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**STRUCTURAL ENGINEERING DIVISION**  
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**Pakistan. Ph: 92-42-99029202**

To,

Director Projects  
Sheikhoo Sugar Mills (Steel Division)  
Anwar Abad Kot Addu, Muzaffargarh

Reference # CED/TFL 4472 (Dr. Asad Ali)  
Reference of the request letter # Nil

Dated: 08-01-2024  
Dated: 07-02-2024

**Tension Test Report** (Page -2/2)

Date of Test 10-01-2024  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		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	5.210	11	1.396	1.56	1.531	50600	68400	71500	72830	96700	98500	1.50	18.8	
2	5.244	11	1.401	1.56	1.541	50400	68200	71300	72070	96400	97600	1.50	18.8	
3	5.228	11	1.399	1.56	1.537	50400	68200	71300	72290	96400	97900	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only three samples for tensile test</b>														
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](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 Manager/RE  
EDCS, Pakpattan  
Osmani & Company (Pvt.) Ltd.  
Engineering Design & Construction Supervision for Punjab Rural Sustainable Water  
Supply and Sanitation Project (PRSWSSP) Cluster Central II.  
(Markhor Steel)

Reference # CED/TFL **4473** (Dr. Ali Ahmed)

Dated: 08-01-2024

Reference of the request letter # PM/OCL/PRSWSSP/EDCS/Pkg-05/2023/10 Dated: 28-12-2023

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024

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 <sup>2</sup> )		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	0.379	3	0.377	0.11	0.111	4100	5220	82200	81150	104600	103400	1.30	16.3	
2	0.380	3	0.377	0.11	0.112	4050	5150	81200	79990	103200	101800	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 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](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,  
Dy Dir Infra  
Defence Housing Authority, Gujranwala  
"Sec C"

Reference # CED/TFL **4475** (Dr. Ali Ahmed)  
Reference of the request letter # 111/15/DD/RS/Lab/Pkg-2A/1918

Dated: 09-01-2024  
Dated: 27-12-2023

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024  
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 <sup>2</sup> )		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	0.371	3	0.373	0.11	0.109	3940	5930	79000	79680	118900	120000	0.90	11.3	Batala Steel	
2	0.369	3	0.372	0.11	0.109	3890	5880	78000	78950	117900	119400	1.00	12.5		
-	-	-	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<b>Note: only two samples for tensile and one sample for bend test</b>															
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  
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- 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,  
 Manager  
 ABL – UML P-199 & 200  
 Allied Bank  
 Construction of ABL Upper Mall Lahore Plot No. 199, 200.

Reference # CED/TFL **4476** (Dr. Ali Ahmed)  
 Reference of the request letter # ABL-UML-AMC-QAQC; 59

Dated: 09-01-2024  
 Dated: 09-01-2024

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024  
 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 <sup>2</sup> )		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	0.376	3	0.375	0.11	0.110	4760	5630	95400	95000	112900	112400	1.00	12.5	Amreli Steel
2	0.376	3	0.375	0.11	0.111	4330	5300	86800	86280	106200	105700	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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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 Manager  
Izhar Construction (Pvt) Ltd.  
OMBRe' Holding Pvt Ltd. Raiwind, Lahore

Reference # CED/TFL 4477 (Dr. Ali Ahmed)  
Reference of the request letter # OMBRe'/Mughal/Steel/016

Dated: 09-01-2024  
Dated: 09-01-2024

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024  
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 <sup>2</sup> )		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	0.372	10	9.48	0.12	0.109	4200	5070	77161	84610	93144	102200	1.00	12.5	Mughal Steel
2	0.369	10	9.44	0.12	0.108	4000	4960	73487	81310	91123	100900	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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- 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,

Material Engineer  
Banu Mukhtar Contracting (Pvt) Ltd  
Burj – 1 by Ajwa Builders.

Reference # CED/TFL **4479** (Dr. Ali Ahmed)  
Reference of the request letter # DOC-BMC/AJWA/141

Dated: 09-01-2024  
Dated: 09-01-2024

**Tension Test Report** (Page -1/1)

Date of Test 10-01-2024  
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 <sup>2</sup> )		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	4.228	10	1.258	1.27	1.243	40400	55000	70200	71650	95500	97600	1.60	20.0	
2	4.393	10	1.282	1.27	1.291	42800	57200	74300	73060	99300	97700	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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