



**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/05/1322

Dated: 25-04-2022

Dated of Test: 19-05-2022

To

**Flight Lieutenant**  
**Assistant Director**  
**Fazaia Housing Scheme**  
**Commercial Area at Fazaia Housing Scheme-I (Phase-III) Lahore**

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

Reference to your letter No. FHSL/5711/1/Org, dated 07.04.2022 on the subject cited above. Three R.C.C. Pipes 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	9	7.79	7.33	12.56	9.04	1.76	14000	16900	5592	6750
2	12	7.77	7.33	16.02	11.66	2.18	8200	13700	2540	4244
3	15	7.82	7.33	19.76	15.21	2.28	8900	15500	2112	3678

**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



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To,  
 Project Director  
 New Metro City Housing Scheme  
 Sara-I-Alamgir

Reference # CED/TFL **1408** (Dr. Asad Ali)  
 Reference of the request letter # PD/NMC/22/101

Dated: 18-05-2022  
 Dated: 17-05-2022

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

Date of Test 19-05-2022  
 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	0.402	3/8	0.388	0.11	0.118	4150	5100	83200	77500	102200	95300	1.10	13.8	ST Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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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To,  
 Project Director  
 New Metro City Housing Scheme  
 Sara-I-Alamgir

Reference # CED/TFL **1408** (Dr. Asad Ali)  
 Reference of the request letter # PD/NMC/22/102

Dated: 18-05-2022  
 Dated: 17-05-2022

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

Date of Test 19-05-2022  
 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	0.377	3/8	0.376	0.11	0.111	3520	5300	70600	69980	106200	105400	1.10	13.8	Afco Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
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3/8" Dia Bar Bend Test Through 180° is Satisfactory														

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To,  
 Sr. Engineer (Civil), SWP  
 Pakistan Atomic Energy Commission  
 D.G. Khan

Reference # CED/TFL 1411 (Dr. M Rizwan Riaz)  
 Reference of the request letter # WASO-CMD-LOI 75/C

Dated: 19-05-2022  
 Dated: 17-05-2022

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

Date of Test 19-05-2022  
 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	0.374	3	0.374	0.11	0.110	3430	4840	68800	68770	97000	97100	1.20	15.0	
2	0.374	3	0.374	0.11	0.110	3430	4760	68800	68860	95400	95600	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														

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