



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

To,  
 Project Engineer  
 Defence Housing Authority,  
 Gujranwala

Reference # CED/TFL **1345** (Dr. M Rizwan Riaz)  
 Reference of the request letter # 111/15/PE/RS/Pkg-2B/337

Dated: 27-04-2022  
 Dated: 25-04-2022

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

Date of Test 28-04-2022  
 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	0.368	3	0.371	0.11	0.108	4000	5300	80200	81420	106200	107900	1.10	13.8	Batala Steel
2	0.368	3	0.371	0.11	0.108	4200	5300	84200	85630	106200	108100	1.00	12.5	
3	4.233	10	1.259	1.27	1.244	37800	54600	65600	66960	94800	96800	1.60	20.0	
4	4.201	10	1.254	1.27	1.235	36600	55600	63600	65340	96500	99300	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

**Bend Test**

#3 Bar Bend Test Through 180° is Satisfactory

#10 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



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To,  
 Ittefaq Building Solutions Pvt. Ltd  
 Lahore  
 (Cotton Godowns Reliance Cotton Spinning Mill Ltd)

Reference # CED/TFL 1347, 1350 (Dr. M Rizwan Riaz)  
 Reference of the request letter # IBS/CG/ 02

Dated: 27-04-2022  
 Dated: 27-04-2022

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

Date of Test 28-04-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (kg/m)	Diameter/ Size (mm)		Area (mm <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa)		Ultimate Stress (MPa)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.317	6	7.17	-----	40.35	1900	2400	-----	462	-----	584	1.4	17.5	
2	0.600	10	9.86	79.00	76.39	3800	4900	472	488	608	629	1.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and two samples for bend test</b>														
Bend Test														
6mm Dia Bar Bend Test Through 180° is Satisfactory														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
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To,  
M/S Redo Engineering & Construction (Pvt.) Ltd  
Lahore

Reference # CED/TFL **1348** (Dr. M Rizwan Riaz)  
Reference of the request letter # Nil

Dated: 27-04-2022  
Dated: 27-04-2022

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

Date of Test 28-04-2022  
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	0.371	3	0.373	0.11	0.109	3400	4800	68200	68750	96200	97100	0.80	10.0	
2	0.377	3	0.376	0.11	0.111	3600	4900	72200	71600	98200	97500	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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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To,  
 Construction Manager Projects  
 UFD Engineers and Contractor (Pvt) Ltd  
 Pelican Mall, DHA Bahawalpur

Reference # CED/TFL **1349** (Dr. M Rizwan Riaz)  
 Reference of the request letter # UFD/BM/PM/MALL/005

Dated: 27-04-2022  
 Dated: 26-04-2022

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

Date of Test 28-04-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (kg/m)	Diameter/ Size		Area (inch <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	0.374	0.11	0.110	3100	4300	62200	62350	86200	86500	1.20	15.0	FF Steel
2	0.374	3	0.374	0.11	0.110	3100	4300	62200	62230	86200	86400	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
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		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
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2	0.374	3	0.374	0.11	0.110	3100	4300	62200	62230	86200	86400	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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