



**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 - I  
NESPAK  
Construction Underpass at Firdous Market, Lahore

Reference # CED/TFL **35182** (Dr. M Rizwan Riaz)  
Reference of the request letter # 3772/FMU/103/MWA/04/153

Dated: 28-07-2020  
Dated: 27-07-2020

**Tension Test Report** (Page – 1/2)

Date of Test 11-08-2020  
Gauge length 2 inches  
Description Angle Iron Steel Strip Tensile and Bend Test as per ASTM A-36

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm <sup>2</sup> )	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	75x75x6	26.00x6.00	156.00	5400	8400	339.58	528.23	0.40	20.00	
2		26.00x6.00	156.00	5700	8300	358.44	521.94	0.40	20.00	
3	75x75x10	24.00x10.00	240.00	8600	12600	351.53	515.03	0.50	25.00	
4		24.00x10.00	240.00	8500	12300	347.44	502.76	0.50	25.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<b>Only Four Samples for Tensile and Two Samples for Bend Test</b>										
<b>Bend Test</b>										
Strip Taken from Angle Iron (75x75x6xmm) Bend Test Through 180° is Satisfactory										
Strip Taken from Angle Iron (75x75x10xmm) 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,  
Resident Engineer - I  
NESPAK  
Construction Underpass at Firdous Market, Lahore

Reference # CED/TFL **35182** (Dr. M Rizwan Riaz)  
Reference of the request letter # 3772/FMU/103/MWA/04/153

Dated: 28-07-2020

Dated: 27-07-2020

**Weight & Size Test Report** (Page – 2/2)

Date of Test 11-08-2020  
Gauge length -----  
Description Angle Iron Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	L <sub>1</sub>	L <sub>2</sub>	Thickness	Remark
	(mm)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	75x75x6	4896	76.00	6.44	75.00	75.10	6.00	
2	75x75x10	7396	75.90	9.74	75.20	77.00	10.00	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
<b>Only Two Samples for Test</b>								

**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,  
M/S Rajput Builders & Developers  
Lahore  
(Project of Boundary Wall at P.K.L.I & RC Hospital at Lahore)(Clint: PKLI & RC)

Reference # CED/TFL **35188** (Dr. M Rizwan Riaz)  
Reference of the request letter # Nil

Dated: 05-08-2020  
Dated: 04-08-2020

**Tension Test Report** (Page – 1/3)

Date of Test 11-08-2020  
Gauge length 2 inches  
Description MS Pipe Steel Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(inch)	(mm)	(mm <sup>2</sup> )	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	1½	24.80x1.60	39.68	1100	1440	271.95	356.01	0.50	25.00	
2		24.80x1.60	39.68	1040	1280	257.12	316.45	0.50	25.00	
3	3	25.00x1.60	40.00	980	1160	240.35	284.49	0.60	30.00	
4		25.00x1.60	40.00	920	1120	225.63	274.68	0.60	30.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<b>Only Four Samples for Tensile Test</b>										
<b>Bend Test</b>										

**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,  
M/S Rajput Builders & Developers  
Lahore  
(Project of Boundary Wall at P.K.L.I & RC Hospital at Lahore)(Clint: PKLI & RC)

Reference # CED/TFL **35188** (Dr. M Rizwan Riaz)  
Reference of the request letter # Nil

Dated: 05-08-2020  
Dated: 04-08-2020

**Weight & Size Test Report** (Page – 2/3)

Date of Test 11-08-2020  
Gauge length -----  
Description MS 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	1½	670	46.1	1.45	38.20	35.00	1.60	
2	3	1257	45.5	2.76	72.30	69.10	1.60	
-	-	-	-	-		-	-	
-	-	-	-	-		-	-	
-	-	-	-	-		-	-	
-	-	-	-	-		-	-	
-	-	-	-	-		-	-	
-	-	-	-	-		-	-	
<b>Only Two Samples for Test</b>								

**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,  
M/S Rajput Builders & Developers  
Lahore  
(Project of Boundary Wall at P.K.L.I & RC Hospital at Lahore)(Clint: PKLI & RC)

Reference # CED/TFL **35188** (Dr. M Rizwan Riaz)  
Reference of the request letter # Nil

Dated: 05-08-2020  
Dated: 04-08-2020

**Tension Test Report** (Page – 3/3)

Date of Test 11-08-2020  
Gauge length -----  
Description Galvanised Fence Wire Tensile Test

Sr. No.	Measure Diameter Wire	Breaking Load		Remarks
	(mm)	(kg)	(kN)	
1	3.20	280	2.75	
2	3.20	320	3.14	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
<b>Only Two Samples for Test</b>				

**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,  
M/s Markhor Developers (Pvt) Ltd  
Lahore

Reference # CED/TFL **35194** (Dr. M Rizwan Riaz)  
Reference of the request letter # Nil

Dated: 10-08-2020  
Dated: 10-08-2020

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

Date of Test 11-08-2020  
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 <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	0.366	3	0.370	0.11	0.108	3200	4300	64200	65580	86200	88200	1.00	12.5	
2	0.357	3	0.365	0.11	0.105	3100	4500	62200	65150	90200	94600	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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,  
 A/ XEN E&M  
 GE (Air) Rafiqui  
 (Repl of 01 Pre-Fab Parking Shed (Area L x W x H ; for MW-240 CBU Clearance Vehicle at Rafiqui, CA No. GE-RAF-92/2020)

Reference # CED/TFL **35195** (Dr. M Rizwan Riaz)  
 Reference of the request letter # 6000-Test/23/E-6

Dated: 10-08-2020  
 Dated: 06-08-2020

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

Date of Test 11-08-2020  
 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 <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	0.373	3/8	0.374	0.11	0.110	3300	4700	66200	66350	94200	94500	1.00	12.5	
2	0.372	3/8	0.373	0.11	0.109	3300	4700	66200	66600	94200	94900	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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.**

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,  
 A/ XEN E&M  
 GE (Air) Rafiqui  
 (Establishment of AB Point in Charlie Area for JF-17 Thunder Aircraft at PAF Base Rafiqui, CA  
 No. CEAf-CZ-53/2020)

Reference # CED/TFL **35195** (Dr. M Rizwan Riaz)  
 Reference of the request letter # 6389/19/E-6

Dated: 10-08-2020  
 Dated: 05-08-2020

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

Date of Test 11-08-2020  
 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 <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	0.388	3/8	0.381	0.11	0.114	3200	5800	64200	61810	116300	112100	0.75	9.4	
2	0.385	3/8	0.379	0.11	0.113	3300	5800	66200	64340	116300	113100	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 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,  
 Resident Engineer  
 National Engineering Services Pakistan (Pvt) Ltd  
 Establishment of U.E.T. Lahore Sub Campus at Narowal, Construction of Boys Hostel

Reference # CED/TFL **35196** (Dr. M Rizwan Riaz)  
 Reference of the request letter # 3863/13/SYA/Labtesting/57

Dated: 10-08-2020  
 Dated: 08-08-2020

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

Date of Test 11-08-2020  
 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 <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	0.364	3	0.369	0.11	0.107	3200	5000	64200	65970	100200	103100	1.20	15.0	Mahboob Steel
2	0.371	3	0.373	0.11	0.109	3200	5100	64200	64720	102200	103200	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 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,  
 General Manager Plant  
 Shangrila Foods (Private) Limited  
 Karachi

Reference # CED/TFL **35197** (Dr. M Rizwan Riaz)  
 Reference of the request letter # Nil

Dated: 10-08-2020  
 Dated: 10-08-2020

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

Date of Test 11-08-2020  
 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 <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	0.362	3	0.368	0.11	0.106	3500	4500	70200	72510	90200	93300	1.00	12.5	
2	0.359	3	0.367	0.11	0.106	3400	4500	68200	70950	90200	93900	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  
[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  
 Dupak Properties (Pvt) Ltd  
 Defence view Apartments at Shanghai Road, Lahore

Reference # CED/TFL **35199** (Dr. M Rizwan Riaz)  
 Reference of the request letter # Dupak/DVA/048

Dated: 11-08-2020  
 Dated: 11-08-2020

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

Date of Test 11-08-2020  
 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 <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	0.364	3	0.369	0.11	0.107	3800	5200	76200	78220	104200	107100	1.00	12.5	
2	0.368	3	0.371	0.11	0.108	3500	4900	70200	71390	98200	100000	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  
[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