



**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  
 Dar Engineering  
 Punjab Agriculture Food and Durg Authority's Science Enclave, Lahore Pakistan

Reference # CED/TFL **34833** (Dr. Qasim Khan) Dated: 12-03-2020  
 Reference of the request letter # DB-78/DAR/RE/ME/2020/0216 Dated: 11-03-2020

**Tension Test Report** (Page – 1/3)

Date of Test 27-04-2020  
 Gauge length 2 inches  
 Description Steel Structure Steel Strip Tensile 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
1	MS Angle	5"x5"x1/2"	28.70x12.50	358.75	12600	19700	344.55	538.70	0.80	40.00	
2		5"x5"x1/2"	28.70x12.50	358.75	12000	19600	328.14	535.96	0.70	35.00	
3	MS I-Beam	8"x4"	28.70x7.10	203.77	7000	11000	337.00	529.57	0.60	30.00	
4		8"x4"	28.70x7.10	203.77	7300	11400	351.44	548.82	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,  
Resident Engineer  
Dar Engineering  
Punjab Agriculture Food and Durg Authority's Science Enclave, Lahore Pakistan

Reference # CED/TFL **34833** (Dr. Qasim Khan)  
Reference of the request letter # DB-78/DAR/RE/ME/2020/0216

Dated: 12-03-2020  
Dated: 11-03-2020

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

Date of Test 27-04-2020  
Gauge length -----  
Description MS Angle Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	L-1	L-2	Thickness	Remark
	(inch)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	5x5x1/2	14633	61.4	23.83	128.00	129.00	12.70	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
<b>Only One Sample for 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,  
Resident Engineer  
Dar Engineering  
Punjab Agriculture Food and Durg Authority's Science Enclave, Lahore Pakistan

Reference # CED/TFL **34833** (Dr. Qasim Khan)  
Reference of the request letter # DB-78/DAR/RE/ME/2020/0216

Dated: 12-03-2020  
Dated: 11-03-2020

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

Date of Test 27-04-2020  
Gauge length -----  
Description MS I-Beam Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Depth (d)	Flange Width (br)	Flange Thickness (tr)	Web Thickness (tw)	Remark
	(inch)	(g)	(cm)	(kg/m)	mm	mm	mm	mm	
1	8x4	16250	61.2	26.55	205.00	102.00	10.60	7.10	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
<b>Only One Sample for 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,  
 Su Sub Divisional Officer  
 Building Sub Division, Arifwala  
 (School Education Sector under Construct of Additional Class Rooms Construction of 4 Nos.  
 Class Rooms in Govt. Primary School Dhotan Wala Tehsil Arifwala District Pakpattan)

Reference # CED/TFL **34856** (Dr. Qasim Khan)  
 Reference of the request letter # 1301/SDO-A

Dated: 22-04-2020  
 Dated: 18-01-2020

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

Date of Test 27-04-2020  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <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	0.366	3/8	0.370	0.11	0.107	-----	6700	-----	-----	134300	137500	0.75	9.4	
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<b>Note: only one sample 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**

Ref: CED/TFL/04/34858

Dated: 22-04-2020

Dated of Test: 22-04-2020

**To**  
**Chief Resident Engineer (Civil) Punjnad Barrages**  
**Trimmu Punjnad Barrages Consultants**  
**Trimmu and Punjnad Barrages Improvement Project (TPBIP)**

**Subject: - TEST RESULT REPORT FOR BEARING DEVICE (PAD)**

Reference to your letter no. TPBC/CRE/TECH/678, Dated: 20/04/2020 on the above mentioned subject. One Elastomeric Bearing Rubber Pad (EBRP) (Longman) has been received by us. The same was tested and results are given below.

**Laboratory** : **TEST FLOOR LAB**  
**Machine** : **SHIMADZU**  
**Sample No.** : **1/1**  
**Dimensions of EBRP** : **403 x 304 x 78.64 mm**

**TEST RESULTS - SHORT DURATION**

**Load Duration** : **5+5 minutes**  
**Test Load** : **120 TONS**  
**Bulging Pattern** : **Uniform Buldging.**  
**Laminated Parallelism** : **Parallel**  
**Cracks** : **No crack was observed**

**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,  
 Superintending Engineer-II (Civil)  
 GB. WAPDA Barotha Attock

Reference # CED/TFL **34864, 867** (Dr. Qasim Khan)  
 Reference of the request letter # SE-II(C)/GB/ATK/W-278/89

Dated: 24-04-2020  
 Dated: 03-02-2020

**Tension Test Report** (Page – 1/1)

Date of Test 27-04-2020  
 Gauge length 2 inches  
 Description W-Section & Steel Post Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	W- Section	1.91x0.275	0.53	2000	2650	3808	5045	0.55	27.50	
2		1.90x0.275	0.52	2000	2600	3828	4976	0.60	30.00	
3	Steel Post	2.70x0.500	1.35	5000	7200	3704	5333	0.60	30.00	
4		2.70x0.500	1.35	4900	7200	3630	5333	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,  
Superintending Engineer-II (Civil)  
GB. WAPDA Barotha Attock

Reference # CED/TFL **34864, 867** (Dr. Qasim Khan)  
Reference of the request letter # SE-II(C)/GB/ATK/W-278/89

Dated: 24-04-2020

Dated: 03-02-2020

**Size Test Report** (Page – 2/2)

Date of Test 27-04-2020

Gauge length -----

Description W-Section & Steel Post Size Test

Sr. No.	Designation	Thickness	Remark
		(mm)	
1	W- Section	2.75	
-	Steel Post	5.00	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
<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,  
Superintending Engineer-II (Civil)  
GB. WAPDA Barotha Attock

Reference # CED/TFL **34865, 866** (Dr. Qasim Khan)  
Reference of the request letter # SE-II(C)/GB/ATK/W-283/140

Dated: 24-04-2020

Dated: 21-02-2020

**Tension Test Report** (Page – 1/2)

Date of Test 27-04-2020  
Gauge length 2 inches  
Description W-Section & Steel Post Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	W- Section	1.91x0.275	0.53	1900	2600	3617	4950	0.60	30.00	
2		1.91x0.275	0.53	1900	2600	3617	4950	0.60	30.00	
3	Steel Post	2.72x0.500	1.36	5450	6900	4007	5074	0.50	25.00	
4		2.60x0.500	1.30	5300	6700	4077	5154	0.50	25.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<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,  
Superintending Engineer-II (Civil)  
GB. WAPDA Barotha Attock

Reference # CED/TFL **34865, 866** (Dr. Qasim Khan)  
Reference of the request letter # SE-II(C)/GB/ATK/W-283/140

Dated: 24-04-2020

Dated: 21-02-2020

**Size Test Report** (Page – 2/2)

Date of Test 27-04-2020

Gauge length -----

Description W-Section & Steel Post Size Test

Sr. No.	Designation	Thickness	Remark
		(mm)	
1	W- Section	2.75	
-	Steel Post	5.00	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
<b>Only Two Samples for 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