



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

To,  
Chief Resident Engineer  
Osmani & Co. (Pvt) Ltd  
Swat Motorway Project

Reference # CED/TFL **33603** (Dr. Safer Abbas)  
Reference of the request letter # 311/CRE/QATSMP/2019

Dated: 22-07-2019  
Dated: 12-07-2019

**Tension Test Report** (Page – 1/2)

Date of Test 25-07-2019  
Gauge length 2 inches  
Description End Section Strip Tensile and Bend Test as per AASHTOO A-180

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	End Section	1.84x0.28	0.52	1750	2200	3396.74	4270.19	0.60	30.00	
2	End Section	1.84x0.28	0.52	1800	2300	3493.79	4464.29	0.50	25.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<b>Only Two Samples for Tensile and Two Samples for Bend Test</b>										
<b>Bend Test</b>										
Strip Taken from End Section Bend Test Through 180° is Satisfactory										
Strip Taken from End Section 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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Swat Motorway Project

Reference # CED/TFL **33603** (Dr. Safer Abbas)  
Reference of the request letter # 311/CRE/QATSMP/2019

Dated: 22-07-2019  
Dated: 12-07-2019

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

Date of Test                    25-07-2019  
Gauge length                 -----  
Description                    End Section Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Thickness	Remark
		(g)	(cm)	(kg/m)	(mm)	
1	End Section	1141	100.40	11.36	2.90	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
<b>Only One Sample for Test</b>						

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To,  
 Chief Resident Engineer  
 Osmani & Co. (Pvt) Ltd  
 Swat Motorway Project

Reference # CED/TFL **33612** (Dr. Safer Abbas)  
 Reference of the request letter # 314/CRE/QAT/SMP/2019

Dated: 22-07-2019  
 Dated: 19-07-2019

**Tension Test Report** (Page – 1/2)

Date of Test 25-07-2019  
 Gauge length 2 inches  
 Description W-Section & Post Strip Tensile and Bend Test as per AASHTOO A-180

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	W-Section	1.86x0.28	0.52	2000	2600	3840.25	4992.32	0.50	25.00	
2	W-Section	1.74x0.28	0.49	1900	2400	3899.84	4926.11	0.50	25.00	
3	Post	1.84x0.71	1.31	4600	6500	3521.13	4975.51	0.70	35.00	
4	Post	1.84x0.71	1.31	4700	6600	3597.67	5052.05	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<b>Only Four Samples for Tensile and Four Samples for Bend Test</b>										
<b>Bend Test</b>										
Strip Taken from W-Section Bend Test Through 180° is Satisfactory										
Strip Taken from W-Section Bend Test Through 180° is Satisfactory										
Strip Taken from Post Bend Test Through 180° is Satisfactory										
Strip Taken from Post Bend Test Through 180° is Satisfactory										

**I/C Testing Laboratoires**  
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To,  
Chief Resident Engineer  
Osmani & Co. (Pvt) Ltd  
Swat Motorway Project

Reference # CED/TFL **33612** (Dr. Safer Abbas)  
Reference of the request letter # 314/CRE/QAT/SMP/2019

Dated: 22-07-2019  
Dated: 19-07-2019

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

Date of Test                    25-07-2019  
Gauge length                 -----  
Description                    W-Section & Post Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Thickness	Remark
		(g)	(cm)	(kg/m)	(mm)	
1	W-Section	15652	120.80	12.96	3.00	
2	Post	22015	184.00	11.96	7.10	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	
<b>Only Two Samples for Test</b>						

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To,  
 Senior Engineer  
 Mansoor Mazhar & Associates  
 Model House Tulip Block (Vision Developeres)(Iqtedar Construction Company)

Reference # CED/TFL **33622** (Dr. Asad Ali)  
 Reference of the request letter # MMA/PVV/MH/06

Dated: 24-07-2019  
 Dated: 24-07-2019

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

Date of Test 25-07-2019  
 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	3060	4510	61400	61420	90400	90600	1.30	16.3	
2	0.372	3	0.373	0.11	0.109	3060	4510	61400	61730	90400	91000	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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.**

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To,  
 Senior Engineer  
 Mansoor Mazhar & Associates  
 Over Head Water Tank Tulip Overseas Block (Vision Developeres)(Iqtedar Construction Company)

Reference # CED/TFL **33622** (Dr. Asad Ali)  
 Reference of the request letter # MMA/PVV/WT/05

Dated: 24-07-2019  
 Dated: 24-07-2019

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

Date of Test 25-07-2019  
 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	0.381	3	0.378	0.11	0.112	3330	5100	66800	65580	102200	100500	1.00	12.5	
2	0.369	3	0.371	0.11	0.108	3360	5070	67400	68340	101600	103200	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														

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To,  
 Muhammad Ali Mirza  
 House under Construction in Bahria Town Lahore

Reference # CED/TFL **33624** (Dr. Asad Ali)  
 Reference of the request letter # Nil

Dated: 24-07-2019  
 Dated: 24-07-2019

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

Date of Test 25-07-2019  
 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	0.366	3	0.370	0.11	0.107	3670	4460	73600	75290	89400	91500	1.10	13.8	
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<b>Note: only one sample for tensile test</b>														
Bend Test														

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To,  
 Additional Director Development  
 DHA Phase-XI (Rahbar)  
 Construction of DHA Girls School at Block-‘B’ Sector-I, DHA Phase-XI (Rahbar)

Reference # CED/TFL **33626** (Dr. Asad Ali) Dated: 24-07-2019  
 Reference of the request letter # 700/3/Girls School/Ph-XI/Projs//2269 Dated: 24-07-2019

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

Date of Test 25-07-2019  
 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	0.368	3/8	0.371	0.11	0.108	3360	5120	67400	68480	102600	104400	1.10	13.8	Ittefaq Steel
2	0.369	3/8	0.372	0.11	0.109	3330	5050	66800	67600	101200	102600	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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.**

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To,  
 Planning and Coordination Engineer  
 Pachem Global (Pvt) Limited  
 International Petrochemicals (Pvt) Ltd  
 Model Town, Lahore

Reference # CED/TFL **33628** (Dr. Asad Ali)  
 Reference of the request letter # Nil

Dated: 24-07-2019  
 Dated: 24-07-2019

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

Date of Test 25-07-2019  
 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	0.371	3/8	0.373	0.11	0.109	3280	4610	65800	66300	92400	93200	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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														

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