

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

To. Resident Engineer RENARDET S.A ((M-4), Package-IIIB)

Construction of Faisalabad - Khanewal Motorway (M-4) Project Package-III, Dinpur-Khanewal, Section-3B (D & L International)(M/s Xinjiang Beixin Road & Bridge Group Co, Ltd)

Reference # CED/TFL **33487** (Dr. Waseem Abbas) Dated: 04-07-2019 Reference of the request letter # RE/M-4/3B/2019/463 Dated: 03-07-2019

**Tension Test Report** (Page - 1/3)

Date of Test 17-07-2019 Gauge length 2 inches

Description W-Section Steel Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area Yield load Breaking		Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks		
		(cm)	(cm <sup>2</sup> )	(kg)	(kg)	(kg/cm <sup>2</sup> )	(kg/cm <sup>2</sup> )	(in)	0			
1	W Cootion	1.96x0.275	0.54	2000	2850	3710.58	5287.57	0.50	25.00	0.1		
2	W-Section	1.96x0.275	0.54	2000	2900	3710.58	5380.33	0.50	25.00	S-1		
3	W C - 44	1.96x0.275	0.54	2100	2800	3896.10	5194.81	0.55	27.50	6.3		
4	W-Section	1.96x0.275	0.54	2000	2900	3710.58	5380.33	0.60	30.00	S-2		
-		-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-			
		Only Eight S	amples fo	or Tensile a	and Eight	Samples for	Bend Test		•			
	Bend Test											

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 W-Section Bend Test Through 180° is Satisfactory

Strip Taken from W-Section Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires **UET Lahore, Pakistan.** 

- 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
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- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

Ref:<u>CED/TFL/07/33559</u>

To Material Engineer EA Consulting (Pvt) Ltd - CSCEC - AER Sukkur - Multan Motorway (392 km) Turnkey Basis Project (Section - 7)

Subject: TESTING OF MAIN HOLE COVER,

Reference to your letter No. CSCEC/PKM/NHA/220, dated 05.05.2019 on the subject citeda bove. One Main Hole Cover as received by us has been tested. The results are tabulated as under.

Sr. No.	Sample	Crack Load	Mode Failure
1	Main Hole Cover	90 kN	Crack was appeared at 90 kN

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 12-06-19

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

To.

Resident Engineer/Team Leader Prime Engineering Consultancy Kallurkot Bridge Project

Construction of 4 Lane Bridge over River Indus Connecting Kallur Kot with D.I Khan

(Nomee Steel)

Reference # CED/TFL **33563** (Dr. Waseem Abbas)

Reference of the request letter # KK-DIK—BR-PJ/2019/028

Dated: 16-07-2019

Dated: 13-07-2019

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

Date of Test 17-07-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in <sup>2</sup> )		Yield load	Breaking Load	Yield Stress (psi)			e Stress si)	Elongation	% Elongation	Remarks
<i>S</i> <sub>2</sub>	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	<b>3</b> %	R
1	4.243	32	32.01	1.25	1.247	39400	51400	69489	69630	90653	90900	1.80	22.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	ample fo	r tensile :	and two s	samples f	or bend t	test			
Bend Test														
321	32mm Dia Bar Bend Test Through 180° is Satisfactory													

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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
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### STRUCTURAL ENGINEERING DIVISION

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

To, Manager Civil US Denim Mills (Pvt) Ltd Lahore (Kanran Steel)

Reference # CED/TFL **33564** (Dr. Waseem Abbas) Dated: 16-07-2019 Reference of the request letter # US Real/CIV/Izmir/03 Dated: 05-07-2019

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

Date of Test 17-07-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		c/ Area (in²)		Yield load	Breaking Load	Yield Stress (psi)			e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.359	3	0.366	0.11	0.105	3300	4600	66200	68990	92200	96200	1.20	15.0	
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-	•	-	•	1	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample fo	or bend t	est			
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires UET Lahore, Pakistan.

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### 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 Defence Housing Authority.
Lahore Cantt
(Infra Development Works Sector-E, DHA Phase-IX) - (M/s Inland)

Reference # CED/TFL **33566** (Dr. Waseem Abbas) Dated: 16-07-2019 Reference of the request letter # 408/241/E/Lab/641/11 Dated: 12-07-2019

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

Date of Test 17-07-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight			Area (in²)		Yield load	Breaking Load	Yield Stress (psi)			e Stress si)	Elongation	% Elongation	Remarks
S	(1J/sqI)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	∃%	Re
1	0.374	3	0.374	0.11	0.110	3200	5200	64200	64170	104200	104300	1.20	15.0	el
2	0.375	3	0.375	0.11	0.110	3300	5300	66200	65920	106200	105900	1.10	13.8	F Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	FF
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
Bend Test														
#3	#3 Bar Bend Test Through 180° is Satisfactory													

I/C Testing Laboratoires UET Lahore, Pakistan.

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

To, Director M/S T.S. Builders (Pvt) Ltd Lahore

Reference # CED/TFL **33567** (Dr. Waseem Abbas)

Reference of the request letter # Nil

Dated: 16-07-2019

Dated: 15-07-2019

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

Date of Test 17-07-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Diameter/ Size (inch)		ize	Area (in²)		Yield load	Breaking Load	Yield Stress (psi)			e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.376	3/8	0.375	0.11	0.111	2800	4300	56200	55780	86200	85700	1.10	13.8	
2	0.373	3/8	0.374	0.11	0.110	2700	4300	54100	54270	86200	86500	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and two samples for bend test													
	Bend Test													
3/8	3/8" Dia Bar Bend Test Through 180° is Satisfactory													

I/C Testing Laboratoires UET Lahore, Pakistan.

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

To, Senior Resident Engineer ProMag Pvt Ltd DHA Multan (Development of Sector-M1)

Reference # CED/TFL **33569** (Dr. Waseem Abbas)

Reference of the request letter # CRE/Lab/Sec-M1/291

Dated: 16-07-2019

Dated: 15-07-2019

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

Date of Test 17-07-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	∃ %	R
1	0.414	10	10.00	0.12	0.122	3500	5000	64301	63370	91858	90600	1.20	15.0	
2	0.414	10	10.00	0.12	0.122	3600	5100	66138	65220	93696	92400	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	te: onl	y two sa	amples fo	or tensile	and two	samples	for bend	test			
Bend Test														
10ı	10mm Dia Bar Bend Test Through 180° is Satisfactory													

I/C Testing Laboratoires UET Lahore, Pakistan.

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### 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 Design Force (Pvt) Limited Rawalpindi (Attock Petrol Station, DHA Lahore)

Reference # CED/TFL **33570** (Dr. Waseem Abbas)

Reference of the request letter # Nil

Dated: 16-07-2019

Dated: 16-07-2019

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

Date of Test 17-07-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Diameter/ Size (inch)		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks	
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.364	3/8	0.369	0.11	0.107	4000	4800	80200	82300	96200	98800	1.00	12.5	
2	0.364	3/8	0.369	0.11	0.107	4100	5000	82200	84420	100200	103000	1.00	12.5	
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-	•	1	-	1	-	-	-	-	-	-	-	-	-	
			1		Not	e: only t	wo sampl	les for ter	nsile test	ı	ı	ı	T	
	Bend Test													

I/C Testing Laboratoires UET Lahore, Pakistan.

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

Ref: <u>CED/TFL/07/33576</u> Dated: <u>17-07-19</u>

To Project Manager GMHP Consultants Gorkin-Matiltan Hydropower Project

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

Reference to your letter no. 3834-36/PM/(30)/GMHPP/2019, Dated: 08/07/2019 on the above mentioned subject. One Elastromeric Bearing Rubber Pad (EBRP) 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 :  $510 \times 200 \times 57.46 \text{ mm}$ 

## **TEST RESULTS - SHORT DURATION**

Load Duration : 5+5 minutes Test Load : 115 TONS

Bulging Pattern : Uniform Buldging.

Laminated Parallelism : Parallel

Cracks : No crack was observed

Witness by ME Consultant GMHP Kalam Swat

I/C Testing Laboratoires UET Lahore, Pakistan.

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