

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

To, M/S Ikan Engineering Services (Pvt) Ltd Lahore

Reference # CED/TFL <u>37373 (Dr. M Rizwan Riaz)</u> Reference of the request letter # IKAN/ICI/PQR # 05 Dated: 17-11-2021 Dated: 17-11-2021

Tension Test Report(Page - 1/2)Date of Test23-11-2021Gauge length2 inchesDescriptionWelded Metal Steel Strip Tensile and Bend Test
ASME Sec IX Ed 2019

Sr. No.	(mm)	(mm) (mm)	X Section Area	Breaking Load	Ultimate Stress	Elongation (inch)	% Elongation	Remarks			
1	31x5x300	20.10x5.00	5.00 100.50 4900 478.30 0.60 30.00 Failure at the location								
2	(2")	20.00x5.00	100.00	4700	461.07	0.60	30.00	Failure at the location other than weld			
-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-			
		Only	two samp	oles for t	tensile an	d Four s	samples	for bend test			
					Bend 7	Гest					
Str	ip taken from `	Welded Metal	(19x5x3	00mm) ((2") Root	Bend Tes	st Throu	gh 180° is Satisfactory			
Str	ip taken from `	Welded Metal	(19x5x3	00mm) ((2") Root	Bend Te	st Throu	gh 180° is Satisfactory			
Str	ip taken from `	Welded Metal	(19x5x3	00mm) ((2") Face	Bend Te	st Throu	190° is Satisfactory			
Str	ip taken from '	Welded Metal	(19x5x3)	00mm) ((2") Face	Bend Te	est Throu	igh 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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To, M/S Ikan Engineering Services (Pvt) Ltd Lahore

Reference # CED/TFL <u>37373 (Dr. M Rizwan Riaz)</u> Reference of the request letter # IKAN/ICI/PQR # 06 Dated: 17-11-2021 Dated: 17-11-2021

Tension Test Report(Page - 2/2)Date of Test23-11-2021Gauge length2 inchesDescriptionWelded Metal Steel Strip Tensile and Bend Test
ASME Sec IX Ed 2019

Sr. No.	(mm)	(mm) Size of Strip	X Section Area	(fax) (bay)	Ultimate Stress	Elongation (inch)	% Elongation	Remarks					
1	1 31x10x300 (5") 21.00x9.15 192.15 11800 602.44 0.50 25.00 Failure at the location 2 21.10x10.40 219.44 12300 549.87 0.50 25.00 Failure at the location												
2													
-	-	-	-	-	-	-	-	-					
-	-	-	-	-	-	-							
-	-	-	-	-	-								
-	-	-	-	-	-	-	-	-					
		Only t	two samp	oles for t	tensile an	d Four s	amples	for bend test					
					Bend 7	Гest							
Str	ip taken from `	Welded Metal	(19x10x	300mm)	(5") Roo	t Bend T	est Thre	ough 180° is Satisfactory					
Str	ip taken from `	Welded Metal	(19x10x	300mm)	(5") Roo	t Bend T	est Thre	ough 180° is Satisfactory					
Str	Strip taken from Welded Metal (19x10x300mm) (5") Face Bend Test Through 180° is Satisfactory												
Str	ip taken from '	Welded Metal	(19x10x	300mm)	(5") Fac	e Bend T	est Thro	ough 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,

M/S China Gezhouba Group Company Limited

Pakistan

Construction of Mohmand Dam Hydropower Project – Contract No. ICB MDHP-01, Construction of Civil Works Including Design, Supply and Installation of Electrical and Mechanical Works and Hydraulic Steel Structures.

Reference # CED/TFL	37382	(Dr. m	Rizwan	Riaz)
Reference of the reques	t letter	# MDS	SYS-137	'-A

Dated: 18-11-2021 Dated: 17-11-2021

Tension Test Rep	ort (Page – 1/10)	
Date of Test	23-11-2021	

Gauge length 640 mm

Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Nominal Measured Weight weight		trength e (6.3)	Brea stre clause	king ngth e (6.2)	Young's Modulus of Elasticity	Elongation	ırks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	E, GPa	%	Rema
1	15.24 (0.6")	1102.0	1128.0	25400	249.17	27300	267.81	199	>3.50	
2	15.24 (0.6")	1102.0	1238.0	25200	247.21	27400	268.79	198	>3.50	PH-02
3	15.24 (0.6")	1102.0	1123.0	25400	249.17	27500	269.78	199	>3.50	
4	15.24 (0.6")	1102.0	1124.0	25200	247.21	27500	269.78	199	>3.50	
5	15.24 (0.6")	1102.0	1127.0	24500	240.35	27400	268.79	199	>3.50	PI-02
6	15.24 (0.6")	1102.0	1126.0	24500	240.35	27400	268.79	199	>3.50	
7	15.24 (0.6")	1102.0	1122.0	24900	244.27	27300	267.8	199	>3.50	
8	15.24 (0.6")	1102.0	1123.0	25200	247.21	27300	267.8	198	>3.50	3971-1
9	15.24 (0.6")	1102.0	1128.0	25400	249.17	27300	267.81	199	>3.50	
				Only nine :	samples for	• Test				

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM - A416a

2. Load versus percentage strain graphs are attached

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

2. The above results pertain to sample /samples supplied to this laboratory.

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

To, M/S China Gezhouba Group Company Limited Pakistan Construction of Mohmand Dam Hydropower Project – Contract No. ICB MDHP-01, Construction of Civil Works Including Design, Supply and Installation of Electrical and Mechanical Works and Hydraulic Steel Structures. Reference # CED/TFL <u>37382 (Dr. m Rizwan Riaz)</u> Reference of the request letter # MDSYS-137-A Dated: 17-11-2021

Graph (Page – 2/10)



I/C Testing Laboratoires UET Lahore, Pakistan.

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To, M/S China Gezhouba Group Company Limited Pakistan Construction of Mohmand Dam Hydropower Project – Contract No. ICB MDHP-01, Construction of Civil Works Including Design, Supply and Installation of Electrical and Mechanical Works and Hydraulic Steel Structures. Reference # CED/TFL <u>37382 (Dr. m Rizwan Riaz)</u> Reference of the request letter # MDSYS-137-A Dated: 17-11-2021

Graph (Page – 3/10)



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, M/S China Gezhouba Group Company Limited Pakistan Construction of Mohmand Dam Hydropower Project – Contract No. ICB MDHP-01, Construction of Civil Works Including Design, Supply and Installation of Electrical and Mechanical Works and Hydraulic Steel Structures. Reference # CED/TFL <u>37382 (Dr. m Rizwan Riaz)</u> Reference of the request letter # MDSYS-137-A Dated: 17-11-2021

Graph (Page – 4/10)



I/C Testing Laboratoires UET Lahore, Pakistan.

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To, M/S China Gezhouba Group Company Limited Pakistan Construction of Mohmand Dam Hydropower Project – Contract No. ICB MDHP-01, Construction of Civil Works Including Design, Supply and Installation of Electrical and Mechanical Works and Hydraulic Steel Structures. Reference # CED/TFL <u>37382 (Dr. m Rizwan Riaz)</u> Reference of the request letter # MDSYS-137-A Dated: 17-11-2021

Graph (Page - 5/10)



I/C Testing Laboratoires UET Lahore, Pakistan.

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To, M/S China Gezhouba Group Company Limited Pakistan Construction of Mohmand Dam Hydropower Project – Contract No. ICB MDHP-01, Construction of Civil Works Including Design, Supply and Installation of Electrical and Mechanical Works and Hydraulic Steel Structures. Reference # CED/TFL <u>37382 (Dr. m Rizwan Riaz)</u> Reference of the request letter # MDSYS-137-A Dated: 17-11-2021

Graph (Page - 6/10)



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, M/S China Gezhouba Group Company Limited Pakistan Construction of Mohmand Dam Hydropower Project – Contract No. ICB MDHP-01, Construction of Civil Works Including Design, Supply and Installation of Electrical and Mechanical Works and Hydraulic Steel Structures. Reference # CED/TFL <u>37382 (Dr. m Rizwan Riaz)</u> Reference of the request letter # MDSYS-137-A Dated: 17-11-2021

Graph (Page - 7/10)



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, M/S China Gezhouba Group Company Limited Pakistan Construction of Mohmand Dam Hydropower Project – Contract No. ICB MDHP-01, Construction of Civil Works Including Design, Supply and Installation of Electrical and Mechanical Works and Hydraulic Steel Structures. Reference # CED/TFL <u>37382 (Dr. m Rizwan Riaz)</u> Reference of the request letter # MDSYS-137-A Dated: 17-11-2021

Graph (Page - 8/10)



I/C Testing Laboratoires UET Lahore, Pakistan.

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Graph (Page - 9/10)



I/C Testing Laboratoires UET Lahore, Pakistan.

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To, M/S China Gezhouba Group Company Limited Pakistan Construction of Mohmand Dam Hydropower Project – Contract No. ICB MDHP-01, Construction of Civil Works Including Design, Supply and Installation of Electrical and Mechanical Works and Hydraulic Steel Structures. Reference # CED/TFL <u>37382 (Dr. m Rizwan Riaz)</u> Reference of the request letter # MDSYS-137-A Dated: 17-11-2021

Graph (Page - 10/10)



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, Resident Engineer – I NESPAK Construction of Sheranwala Flyover, Lahore

Reference # CED/TFL <u>37383 (Dr. M Rizwan Riaz)</u> Reference of the request letter # 3772/SF/103/MWA/04/149 Dated: 18-11-2021 Dated: 30-10-2021

Tension Test Report (Page -1/2)

Date of Test23-11-2021Gauge length640 mmDescriptionSteel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	al Measured Yield strength nt weight clause (6.3)		Brea stre clause	lking ngth e (6.2)	Young's Modulus of Elasticity "E"		arks / Coil No.	
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa	%	Rema
1	12.70 (1/2")	775.0	781.0	17500	171.68	19500	191.30	199	>3.50	23016
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
				Only one s	ample for T	est				

Witness by Ashiq Hussain (M.E. NESPAK) & Engr. Ishtiaq (M.E HCS)

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM - A416a

2. Load versus percentage strain graphs are attached

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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2. The above results pertain to sample /samples supplied to this laboratory.



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 of Sheranwala Flyover, Lahore

Reference # CED/TFL <u>37383 (Dr. M Rizwan Riaz)</u> Reference of the request letter # 3772/SF/103/MWA/04/149 Dated: 18-11-2021 Dated: 30-10-2021

Graph (Page - 2/2)



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

To, M/S Wadduha Engineering Lahore (Construction of East Bay Expressway Gawadar)(CCCC) (Manufacturer: M Khalid & Sons) Reference # CED/TFL <u>37384 (Dr. M Rizwan)</u> Reference of the request letter # Nil

Dated: 18-11-2021 Dated: 18-11-2021

Tension Test Report (Page – 1/2)

Date of Test Gauge length Description 23-11-2021 2 inches

G.I Wire PVC Coated Tensile Test (without Coating)

ir. No.	Weight	Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		Diameter/ Size (mm)		A) (m	rea m²)	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	longation	emarks
S	(kg/m) Nominal Actual		Actual	Nominal	Actual	(kg)	(kg)	(MPa)	(MPa)	(inch)	% E	R																												
1	0.063	3.25	3.20		8.0		520		635	0.30	15.0																													
-	-	-	-	-	-	-	-	-	-	-	-																													
-	-	-	-	-	-	-	-	-	-	-	-																													
-	-	-	-	-	-	-	-	-	-	-	-																													
-	-	-	-	-	-	-	-	-	-	-	-																													
-	-	-	-	-	-	-	-	-	-	-	-																													
				Ι	Note: onl	y one samj	ple for ter	nsile test																																
						Bend	Гest																																	

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, M/S Wadduha Engineering Lahore (Construction of East Bay Expressway Gawadar)(CCCC) (Manufacturer: M Khalid & Sons) Reference # CED/TFL <u>37384 (Dr. M Rizwan)</u> Reference of the request letter # Nil

Dated: 18-11-2021 Dated: 18-11-2021

Size Test Report (Page – 2/2)

Date of Test	•	23-11-2021
Description		G.I Wire PVC Coated Thickness Test

Sr. No.	(mm)	(mm) Diameter	Remark
1	3.25	3.00	without Coating
2	4.90	4.90	with Coating
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	_	
-	-	-	
	Only T	wo Samples for 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

To, Project Manager Pro-Health Children's Heart Hospital and Research Institute Pakistan Children's Heart Foundation Westcon Construction Private Limited

Reference # CED/TFL <u>37397 (Dr. M Rizwan Riaz)</u>	Dated: 22-11-2021
Reference of the request letter # T2111101-L002-UET/LTR	Dated: 20-11-2021

Tension Test Report (Page -1/1)

Date of Test 23-11-2021

Gauge length 8 inches

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

ir. No.	Weight	Diam Si	neter/ A ize (i		Area (in ²)		Breaking Load	Yield Stress (psi)		Ultimate Stres (psi)		Elongation	longation	emarks
9 1	(lbs/ft)	Nominal (#)	Nominal (#) (#) Actual Nominal Nominal (kg)		(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	R	
1	0.380	3	0.377	0.11	0.112	3900	5000	78200	77000	100200	98800	1.00	12.5	
2	0.379	3	0.377	0.11	0.111	3900	4900	78200	77100	98200	96900	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		6	N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test	1		n
							Bend T	est						
#3	Bar Ben	d Test	Through	n 180° i	s Satisfa	ictory								

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

To, Deputy Project Director Center PMU – SBP Tehsil Sports Complex Dijkot, District Faisalabad

Reference # CED/TFL <u>37400 (Dr. M Rizwan Riaz)</u> Reference of the request letter # DPD/PMU/SBP/LHR/21 Dated: 22-11-2021 Dated: 19-11-2021

Tension Test Report (Page -1/1)

Date of Test Gauge length Description 23-11-20218 inchesDeformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Dian Si (in	Diameter/ Size (inch) (in ²)		neter/ ze ch) I Coad I		Area (in ²)		Yield (p	Stress Ultimate Stress si) (psi)		Elongation	longation	Remarks
S	(lbs/ft)	Nominal	ActualActualNominalNominalNominalNominalNominalNominal					Actual	(inch)	% E	Ro			
1	0.376	3/8	0.375	0.11	0.111	3300	5100	66200	65790	102200	101700	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	I	-	I	-	-	-	-	-	-	-	-	-	
-	-	I	-	I	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	_	
			Ň	ote: on	ly one s	sample fo	or tensile	and one	sample f	or bend t	est	1		
- /-							Bend T	est						
3/8	" Dia Ba	ar Bend	Test Th	rough	180° is S	Satisfacto	ry							

I/C Testing Laboratoires UET Lahore, Pakistan.

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To,

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

Sub Divisional Officer Buildings Sub Division Kot Radha Kishan (Construction of Additional Class Rooms in Schools (ADP No. 15/2021-22) Construction of 02-Nos. Additional Class Rooms at Govt. Girls Primary School Rakh Butt Tehsil K.R.K District Kasur)

	Re	eference	e # CED)/TFL <u>3</u>	<mark>7401 (</mark> [Dr. M Riz	wan Riaz)		Dat	ed: 22-11	-2021		
	K T	ension	e of the	request Renor	t (P	1 //KKK				Date	ed: 25-10	-2021		
	Da	ate of T	'est	23	3 -11-202	21								
	Ga	auge lei	ngth	8	inches			_						
	De	escripti	on	D	eformed	l Steel Ba	r Tensile	Test as p	er ASTM	-A615				
Jr. No.	Weight	Dian Si (in	neter/ ize ch)	Aı (iı	rea n ²)	Yield load	Breaking Load	Yield (p	Stress si)	Ultimat (p	te Stress si)	Elongation	longation	emarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.400	3/8	0.387	0.11	0.118	3200	4900	64200	59990	98200	91900	1.20	15.0	
2	0.391	3/8	0.383	0.11	0.115	3300	4900	66200	63300	98200	94000	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Not	e: only t	wo samp	les for ter	nsile test					-
							Bend T	est						

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
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- 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

To, Lab Technician Banu Mukhtar Contracting (Pvt) Ltd PK Meat and Food Company

Reference # CED/TFL <u>37402 (Dr. M Rizwan Riaz)</u> Reference of the request letter # Nil Dated: 22-11-2021 Dated: 22-11-2021

Tension Test Report(Page -1/1)Date of Test23-11-2021Gauge length8 inchesDescriptionDeformed Steel Bar Tensile and Bend Test as per ASTM-A615

ir. No.	Weight	Dian Si (m	neter/ ize um)	Aı (iı	rea n²)	Yield load	Breaking Load	Yield Stress (psi)		Ultimat (p	te Stress si)	Elongation	longation	emarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.384	10	9.63	0.12	0.113	2400	3000	44092	46850	55115	58600	1.70	21.3	
2	0.372	10	9.48	0.12	0.109	3600	4800	66138	72580	88184	96800	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	[]	1	N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test	1		
<u> </u>														
							Bend T	est						
101	nm Dia	Bar Ber	nd Test	Throug	h 180° i	s Satisfac	ctory							

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

To, Manager Procurement Namco Associates (Pvt) Ltd. Manufacturing of PCC Poles at Jahania Pole Plant

Reference # CED/TFL <u>37403 (Dr. M Rizwan Riaz)</u> Reference of the request letter # NAMCO/UET/1011-2021 Dated: 22-11-2021 Dated: 19-11-2021

Tension Test Report (Page – 1/1)

Date of Test23-11-2021Gauge length640 mmDescriptionSteel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield st clause	trength e (6.3)	Brea strength (6.	king 1 clause 2)	Elongation	urks/ Coil No.		
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	%	Rema		
1	9.53 (3/8")	432.0	444.0	9800	96.14	11000	107.91	>3.50	XX		
2	9.53 (3/8")	432.0	438.0	9900	97.12	11200	109.87	>3.50	XX		
3	11.11 (7/16")	582.0	591.0	13000	127.53	14900	146.17	>3.50	XX		
4	11.11 (7/16")	582.0	590.0	13900	136.36	14800	145.19	>3.50	xx		
-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-		
	Only four sampled for Test										

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
- 2. The above results pertain to sample /samples supplied to this laboratory.
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Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Construction Manager Elite Engineering Pvt. Ltd. Sitara Serene Multistoried Building Lahore

Reference # CED/TFL <u>**37404** (Dr. Ali Ahmed)</u> Reference of the request letter # Nil Dated: 22-11-2021 Dated: 22-11-2021

Tension Test Report (Page -1/1)Date of Test23-11-2021Gauge length8 inchesDescriptionDeformed Steel Bar Tensile and Bend Test as per ASTM-A615

ir. No.	Weight	Dian Si (m	neter/ ze m)	Aı (iı	Area (in ²)		Breaking Load	Yield (p	Stress si)	Ultimat (p	te Stress si)	Elongation	longation	emarks
S	(llbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Ro
1	0.370	9.52	9.45	0.110	0.109	3400	5000	68200	68970	100200	101500	1.20	15.0	reli el
2	0.388	9.52	9.68	0.110	0.114	3400	5000	68200	65690	100200	96700	1.40	17.5	Amı ste
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
							Bend T	`est						
9.5	2mm Di	a Bar E	Bend Te	st Throu	ıgh 180	° is Satisf	actory							

Witness by Farraz Rasul

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

2. The above results pertain to sample /samples supplied to this laboratory.



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

To, Director Projects Innovative (R) Construction Company Construction of ABL Branch at Jubilee Town, Lahore

Reference # CED/TFL 37405 (Dr. M Rizwan Riaz)	
Reference of the request letter # ICL/ABL/JT/1121/01	

Dated: 22-11-2021 Dated: 22-11-2021

Tension Test Report (Page -1/1)

Date of Test Gauge length Description 23-11-2021 8 inches

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

ir. No.	Weight	Dian Si	neter/ ize	Aı (iı	rea n²)	Yield load	Breaking Load	Yield (p	Stress si)	Ultimat (p	e Stress si)	Elongation	longation	emarks
5 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.379	3	0.377	0.11	0.111	4000	5000	80200	79080	100200	98900	1.00	12.5	
2	0.376	3	0.375	0.11	0.110	3700	4800	74200	73860	96200	95900	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	I	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	_	
		1	N	ote: on	ly two s	amples f	or tensile	and one	sample f	for bend t	test	T		
			Bend Test											
#3	Bar Ben	d Test '	Througł	n 180° i	s Satisfa	ictory								

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

2. The above results pertain to sample /samples supplied to this laboratory.

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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, Resident Engineer Orbit Developers Private Limited The Spring Apartment Homes

Reference # CED/TFL <u>37409 (Dr. M Rizwan Riaz)</u> Reference of the request letter # Nil Dated: 23-11-2021 Dated: 23-11-2021

Tension Test Report (Page -1/1)Date of Test23-11-2021Gauge length8 inchesDescriptionDeformed Steel Bar Tensile and Bend Test as per ASTM-A615

ir. No.	Weight	Dian Si	neter/ ze	Aı (iı	rea n ²)	Yield load	Breaking Load	Yield (p	Stress si)	Ultimat (p	te Stress si)	Elongation	longation	emarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.379	3	0.377	0.11	0.111	3400	5000	68200	67230	100200	98900	1.10	13.8	
2	0.370	3	0.372	0.11	0.109	3500	5100	70200	70920	102200	103400	1.40	17.5	
-	-	-	-	I	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	I	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			1
							Bend T	est						
#3	Bar Ben	d Test	Througł	n 180° i	s Satisfa	ictory								

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

2. The above results pertain to sample /samples supplied to this laboratory.

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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 Duplicate

To, Project Engineer SMC 2038 - Carrefour (M) at Hyper Box at Gujranwala

Reference # CED/TFL <u>36401, 37410 (Dr. M Rizwan Riaz)</u> Reference of the request letter # 2038-BOX/008/2021

Tension Test Report (Page -1/1)

Date of Test Gauge length Description 30-04-20218 inchesDeformed Steel Bar Tensile and Bend Test as per ASTM-A615

Dated: 29-04-2021

Dated: 29-04-2021

r. No.	Weight	Dian Si	neter/ ze	Aı (iı	rea n²)	Yield load	Breaking Load	Yield (p	Stress si)	Ultimat (p	e Stress si)	Elongation	longation	emarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.379	3	0.377	0.11	0.111	4000	4900	80200	79150	98200	97000	1.00	12.5	hal el
2	0.379	3	0.377	0.11	0.111	4000	5000	80200	79150	100200	99000	1.00	12.5	Mug Ste
-	-	-	-	I	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	for bend t	test			
							Bend T	`est						
#3	Bar Ben	d Test	Througł	n 180° i	s Satisfa	actory								

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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- 3- 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 Duplicate

To, Project Engineer SMC 2038- Carrefour (M) at Hyper Box at Gujranwala

 Reference # CED/TFL 36644, 37410 (Dr. Qasim Khan)
 Dated: 25-06-2021

 Reference of the request letter # 2038/BOX/009/2021
 Dated: 25-06-2021

Tension Test Report (Page -1/1)

Date of Test Gauge length Description 28-06-20218 inchesDeformed Steel Bar Tensile and Bend Test as per ASTM-A615

r. No.	Weight	Dian Si	neter/ ze	Aı (iı	Area (in ²)		Breaking Load	Yield (p	Stress si)	Ultimat (p	e Stress si)	Elongation	longation	emarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.374	3	0.374	0.11	0.110	3300	4900	66200	66110	98200	98200	1.30	16.3	teel
2	0.376	3	0.375	0.11	0.111	3300	5000	66200	65730	100200	99600	1.20	15.0	aq Sı
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Ittef
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	I	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test	1	ſ	n
							Bend T	est						
#3	Bar Ben	d Test [Through	n 180° i	s Satisfa	ctory								

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

To, General Manager Sufi City Building Project at Sufi City, Mandi Bahauddin

Reference # CED/TFL <u>37413 (Dr. Safeer Abbass)</u> Reference of the request letter # Nil Dated: 23-11-2021 Dated: 23-11-2021

Tension Test Report (Page -1/1)

Date of Test Gauge length Description 23-11-20218 inchesDeformed Steel Bar Tensile and Bend Test as per ASTM-A615

r. No.	Weight	Dian Si (in	neter/ ze ch)	Aı (iı	Area (in ²)		Breaking Load	Yield (p	Stress si)	Ultimat (p	e Stress si)	Elongation	longation	emarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Ro
1	0.381	3/8	0.377	0.11	0.112	2000	3400	40100	39400	68200	67000	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			Ň	ote: on	ly one s	sample fo	or tensile	and one	sample f	or bend t	est	1		1
<u> </u>														
							Bend T	est						
3/8	" Dia Ba	ar Bend	Test Th	rough	180° is S	Satisfacto	ry							

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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> I/C Testing Laboratoires UET Lahore, Pakistan.

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