

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

To, M/S ASM Steel Buildings Lahore

Reference # CED/TFL **2034** (Dr. M Rizwan Riaz)

Reference of the request letter # Nil

Dated: 29-09-2022

Tension Test Report (Page - 1/1)

Date of Test 04-10-2022 Gauge length 2 inches

Description Steel Plate Steel Strip Tensile Test

Sr. No.	ım) Designation		(mm) Size of Strip	X Section Area	(gg)	Breaking (Sg Load	(MPa)	Ultimate Stress	(ii) Elongation	% Elongation	Remarks			
1			26.30x3.90	102.57	3200	4700	306	450	0.70	35.00				
2	Plate	4	26.10x3.90	101.79	3200	4800	308	463	0.70	35.00				
3	Plate	5	26.10x4.90	127.89	3700	5600	284	430	0.75	37.50				
4	riate	3	26.10x4.90	127.89	3700	5500	284	422	0.80	40.00				
-	-	-	-	-	-	1	-	-	-	-				
-	-	-	-	-	-	-	-	-	-	-				
			Only	Four San	nples for	Tensile T	est							
				В	end Test									
	Della 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
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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/09/2048</u> Dated: <u>30-09-2022</u>

Dated of Test: 04-10-2022

To

Sub Divisional Officer
Public Health Engg: Sub Division
Mianwali
(Revamping / Comprehencive Sewerage & Draianage including Tuff Tiles and PCC Scheme for Mianwali City)

Subject: TESTING OF R.C.C. PIPE [ASTM-C76 - 08a] (Page -1/2)

Reference to your letter No. 183/MI, dated 17.03.2022 on the subject cited above. Five R.C.C. Pipes as received by us have been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
·	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.73	7.33	16.22	11.97	2.12	9000	15000	2714	4524
2	15	7.73	7.30	19.37	14.70	2.34	9500	13000	2342	3205
3	18	7.76	7.33	22.91	17.99	2.46	8700	10000	1744	2005
4	21	7.73	7.17	26.57	21.09	2.74	11740	15620	2054	2733
5	24	7.82	7.19	30.16	23.88	3.14	9800	13680	1509	2107

I/C Testing Laboratoires UET Lahore, Pakistan.

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Ref: <u>CED/TFL/09/2048</u> Dated: <u>30-09-2022</u>

Dated of Test: 04-10-2022

To

Sub Divisional Officer
Public Health Engg: Sub Division
Mianwali
(Revamping / Comprehencive Sewerage & Draianage including Tuff Tiles and PCC Scheme for Mianwali City)

Subject: TESTING OF R.C.C. PIPE [ASTM-C76 - 08a] (Page -2/2)

Reference to your letter No. 181/MI, dated 17.03.2022 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
•	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	9	7.77	7.32	11.10	8.64	1.23	8500	10000	3555	4182

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 NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR Jv Diamer Basha Dam Project

Reference # CED/TFL **2051** (Dr. M Rizwan Riaz)

Reference of the request letter # DBCG/Lab/PF-JV/2022/040A

Dated: 03-10-2022

Dated: 01-10-2022

Tension Test Report (Page -1/3)

Date of Test 04-10-2022 Gauge length 640 mm

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

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield st	_	stre	nking ngth e (6.2)	Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa	%	Rema
1	12.70 (1/2")	775.0	787.0	17500	171.68	19700	193.26	199	>3.50	WS-2022- S4-03A
2	15.24 (0.6")	1102.0	1118.0	24100	236.42	27600	270.76	199	>3.50	WS-2022- S4-03
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	

Only two 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.

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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 NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR Jv Diamer Basha Dam Project

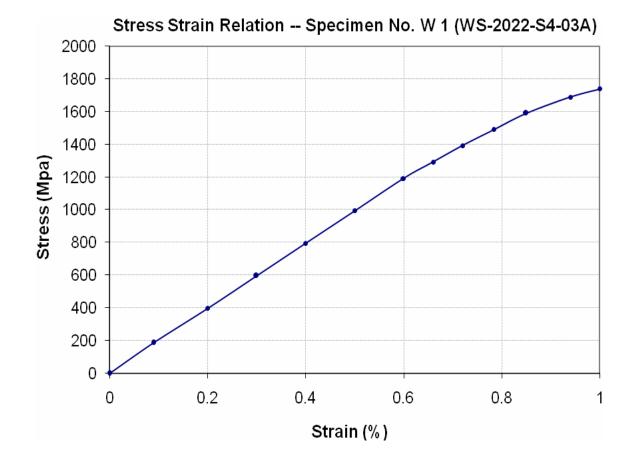
Reference # CED/TFL **2051** (Dr. M Rizwan Riaz)

Reference of the request letter # DBCG/Lab/PF-JV/2022/040A

Dated: 03-10-2022

Dated: 01-10-2022

Graph (Page -2/3)



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, Resident Engineer NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR Jv Diamer Basha Dam Project

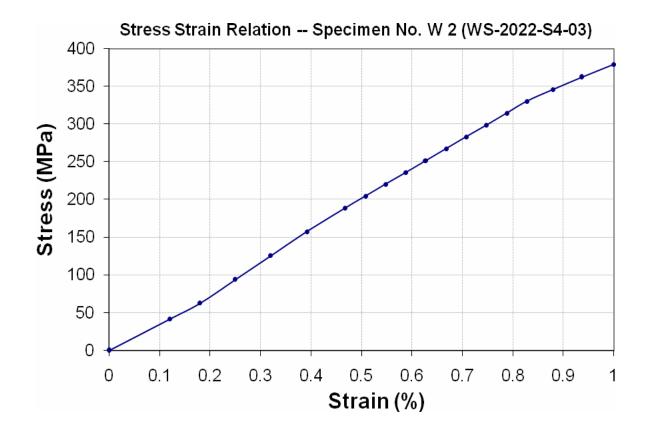
Reference # CED/TFL **2051** (Dr. M Rizwan Riaz)

Reference of the request letter # DBCG/Lab/PF-JV/2022/040A

Dated: 03-10-2022

Dated: 01-10-2022

Graph (Page -3/3)



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, Sr. Manager Coordination Dream Builders Construction of Apartment Building at 32-P, Model Town Ext, Lahore

Reference # CED/TFL **2052** (Dr. M. Rizwan Riaz)

Reference of the request letter # DB/CONST-32P/22/1003

Dated: 03-10-2022

Dated: 03-10-2022

Tension Test Report (Page -1/1)

Date of Test 04-10-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.380	3	0.377	0.11	0.112	3700	4900	74200	73090	98200	96800	1.00	12.5	
2	0.379	3	0.377	0.11	0.111	3900	4900	78200	77200	98200	97000	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	1	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			1
	D D	1.50	D1 1	1000:			Bend T	est est						
#3	Bar Ben	d Test	l'hrough	180° is	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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STRUCTURAL ENGINEERING DIVISION

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

To,
Project Director
Infrastructure Development Authority of The Punjab
Pilot Program for Hub and Spoke Model at Zahir Pir, Rahim Yar Khan

Reference # CED/TFL 2053 (Dr. M. Rizwan Riaz)

Dated: 03-10-2022

Reference of the request letter # PD/ZP/IDAP/SO/2022/034 Dated: 02-10-2022

Tension Test Report (Page -1/1)

Date of Test 04-10-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea n²)	Yield load	Breaking Load		Stress si)	Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks
S			Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.377	3	0.376	0.11	0.111	3400	5000	68200	67610	100200	99500	1.10	13.8	
-	-	-	ı	ı	-	-	-	-	-	-	1	-	-	
-	-	-	ı	ı	-	-	-	-	-	-	ı	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	ı	-	-	-	-	-	-	-	-	-	-	
-	-	-	ı	ı	-	-	-	-	-	-	ı	-	-	
		T	N	ote: on	ly one s	sample fo	r tensile	and one	sample f	or bend t	est			
#3	Bar Ben	d Test	Through	180° i	S Satisfa	ectory	Bend T	est						
#3	Dar Den	u rest	inrougn	1 100 1	s Sausia	сюгу								

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, G.M Engineering Mughals Pakistan (Private) Limited Construction of Serena Hotel, Hunza.

Reference # CED/TFL **2054** (Dr. M. Rizwan Riaz)

Reference of the request letter # 786/MPL-0075/031006/2022

Dated: 03-10-2022

Dated: 03-10-2022

Tension Test Report (Page -1/1)

Date of Test 04-10-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea 1 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#) Actual (inch)		Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.374	3	0.374	0.11	0.110	3300	5000	66200	66170	100200	100300	1.10	13.8	
-		-	1	1	-	-	-	-	-	-	-	-	1	
-	-	-		-	-	-	-	-	-	-	-	-	-	
-	-	-	1	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Note: only one sample for tensile and one sample for bend test												
							Bend T	est						
#3	Bar Ben	d Test	Through	180° is	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, M/S Ritz Developers (Pvt) Ltd. Lahore

Reference # CED/TFL 2055(Dr. M. Rizwan Riaz)

Reference of the request letter # Nil

Dated: 03-10-2022

Tension Test Report (Page -1/1)

Date of Test 04-10-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze	Ar (ir	rea 1 ²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
S 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Ŗ
1	0.378	3	0.376	0.11	0.111	4900	5700	98200	97280	114300	113200	0.80	10.0	el.
2	0.387	3	0.381	0.11	0.114	5100	5900	102200	98730	118300	114300	0.75	9.4	AF Steel
3	0.388	3	0.381	0.11	0.114	5100	5900	102200	98540	118300	114000	0.75	9.4	A
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		I	No	te: only	three	samples	for tensil	e and one	e sample	for bend	test	I		
							Don d T	logt.						
							Bend T	est						

#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, Fayyaz Khan Lahore

Reference # CED/TFL **2056** (Dr. M Rizwan Riaz)

Reference of the request letter # Nil

Dated: 03-10-2022

Tension Test Report (Page -1/1)

Date of Test 04-10-2022 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight		ieter/ ze	Ar (ir	rea 1 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	Re
1	0.373	3	0.374	0.11	0.110	3400	4800	68200	68320	96200	96500	1.10	13.8	
-	-	-	-	-	-	ı	-	-	-	-	-	-	ı	
-	-	-	ı	-	-	1	-	-	-	-	-	-	1	
•	1	1	ı	-	-	1	-	-	-	-	-	1	1	
-	-		ı	-	-	ı	-	-	-	-	-	-	ı	
-	-		ı	-	-	ı	-	-	-	-	-	-	ı	
					No	te: only o	ne samp	le for ten	sile test					
							Bend T	est						

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.E AS Enterprises Style Textile Manga, Knitting Building, Yarn Store, Acro (AA Associates)

Reference # CED/TFL <u>2057 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # STM/ASE/03

Dated: 03-10-2022

Dated: 03-10-2022

Tension Test Report (Page -1/1)

Date of Test 04-10-2022 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ze m)		rea 1 ²)	Yield load	Breaking Load		Stress si)		ee Stress si)	Elongation	% Elongation	Remarks
S 2	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	Э %	R
1	0.415	10	10.01	0.12	0.122	4200	5300	77161	75910	97370	95800	1.30	16.3	eel
2	0.402	10	9.86	0.12	0.118	3600	5000	66138	67110	91858	93300	1.20	15.0	Afco Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Af
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend	test			
							Bend T	est						
10ı	nm Dia	Bar Bei	nd Test	Throug	h 180° i	s Satisfac	ctory							

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 Engineer
Defence Housing Authority
Gujranwala
"Sector-C"

Reference # CED/TFL <u>2061 (Dr. M Rizwan Riaz)</u> Dated: 04-10-2022 Reference of the request letter # 111/15/PE/RS/Pkg-2A/694 Dated: 03-10-2022

Tension Test Report (Page -1/1)

Date of Test 04-10-2022 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze	Aı (iı	rea 1 ²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	∃%	R
1	4.307	10	1.270	1.27	1.266	38800	55400	67400	67560	96200	96500	1.40	17.5	nee el
2	4.330	10	1.273	1.27	1.273	30200	42000	52500	52300	72900	72800	1.40	17.5	Nomee Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	est						
#10) Bar Be	nd Test	Throug	sh 180°	is Satist	factory								

Witness by Amir Shehzad (L.T)

I/C Testing Laboratoires UET Lahore, Pakistan.

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