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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,
Material Engineer
Defence Housing Authority, Multan
(Manufacturing of R.C.C Pipes (M/s Saad Brothers R.C.C. Pipe Factory)

Reference # CED/TFL 37164 (Dr. M Rizwan Riaz)

Reference of the request letter # 701/92/P&D/DHA

Dated: 07-10-2021

Dated: 30-09-2021

Tension Test Report (Page -1/1)

Date of Test 08-10-2021

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A496

Sr. No.	Weight	Diameter/ Size (mm)		Area (mm²)		Yield load	Breaking Load		Yield Stress (Mpa)		Ultimate Stress (Mpa)		
S	(kg/m)	Nominal Actual		Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	Remarks	
1	0.162	4	5.13	12.90	20.64	1000	1200	760	475	913	570		
2	0.161	4	5.11	12.90	20.51	1120	1280	852	536	973	612	Ali Steel	
3	0.316	5	7.16	19.40	40.27	1280	1800	647	312	910	439	Ali S	
4	0.319	5	7.19	19.40	40.65	1280	1840	647	309	930	444		
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-	-	-	-	-	-	-	-	-	-	-	-		
		N	ote: onl	y four	samples	s for tens	ile and tv	vo sampl	es for be	nd test			
						Bend	d Test						
4m	4mm Dia Bar Bend Test Through 180° is Satisfactory												
5m	5mm Dia Bar Bend Test Through 180° is Satisfactory												
	Jilli Dia Dai Delia Test Tillough 100 is Saustactory												

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,
Material Engineer
Defence Housing Authority, Multan
(Manufacturing of R.C.C Pipes (M/s Saad Brothers R.C.C. Pipe Factory))

Reference # CED/TFL 37165 (Dr. M Rizwan Riaz)

Reference of the request letter # 701/92/P&D/DHA

Dated: 07-10-2021

Dated: 30-09-2021

Tension Test Report (Page -1/1)

Date of Test 08-10-2021 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)			e Stress si)	0.0		Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% Elongation	Re
1	0.384	10	9.63	0.12	0.113	3700	5100	67975	72310	93696	99700	1.10	13.8	teel
2	0.380	10	9.58	0.12	0.112	3400	4700	62464	67060	86347	92700	1.20	15.0	SJ Steel
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
	Bend Test													
10r	10mm 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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Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan, Ph: 92-42-99029202

To, Coordinator/ Secretary Lahore Diocesan Board of Education St. Denys' High School, Murree Phase III.

Reference # CED/TFL <u>37166 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # COORD/124/84/BLDG

Dated: 07-10-2021

Dated: 06-09-2021

Tension Test Report (Page -1/1)

Date of Test 08-10-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend 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	0.407	3/8	0.390	0.11	0.120	3500	5500	70200	64530	110200	101400	1.00	12.5	
-	-	-	-	-	-	1	-	-	-	-	-	-	-	
-	•	-	-	-	-	ı	-	-	-	-	-	-	-	
-	-	-	-	-	-	ı	-	-	-	-	-	-	-	
-	-	-	-	-	-	ı	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	or tensile	and one	sample f	or bend t	est	I	Ι	1
3/8	Bend Test 3/8" 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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Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan, Ph: 92-42-99029202

To, M/S Baig ConstructionCo. Lahore

(Jinnah Square Mall, Khayabane Jinnah Road Lahore)

Reference # CED/TFL <u>37170 (Dr. M Rizwan Riaz)</u>
Reference of the request letter # 07102021BCC
Dated: 07-10-2021

Tension Test Report (Page -1/1)

Date of Test 08-10-2021 Gauge length 8 inches

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

Sr. No.	Weight	M Diameter/		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)			e Stress si)	5.0		Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% Elongation	R
1	0.394	3	0.384	0.11	0.116	4900	6100	98200	93350	122300	116300	1.00	12.5	
2	0.392	3	0.383	0.11	0.115	5000	6100	100200	95540	122300	116600	0.80	10.0	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	
ı	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	_	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	for bend t	test			1
	Bend Test													
#3	#3 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
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

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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 Manager
CCECC-MATRACON-HABIB Joint Venture
Re-Construction & Up-gradation of Main Runway (18L/36R) at Allama Iqbal International
Airport (AIIAP), Lahore
(Batala Steel)

Reference # CED/TFL **37171** (Dr. M Rizwan Riaz) Dated: 07-10-2021

Reference of the request letter # AIIAP/CCECC-MATRACON-HABIB Jv/2021/694

Dated: 07-10-2021

Tension Test Report (Page -1/1)

Date of Test 08-10-2021 Gauge length 8 inches

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

Sr. No.	Note that the second se		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Heat No.	
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	H
1	0.421	10	10.09	0.12	0.124	4000	5000	73487	71180	91858	89000	1.30	16.3	750
2	0.429	10	10.18	0.12	0.126	4000	5500	73487	69850	101044	96100	1.00	12.5	751
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-	ı	-	-	ı	-	ı	•	-	-	-	-	-	-	
-	ı	-	-	ı	-	ı	-	-	-	-	-	-	-	
-	•	-	-	1	-	•	-	-	-	-	-	-	-	
			No	te: onl	y two sa	amples fo	r tensile	and two	samples	for bend	test			
	Bend Test													

10mm Dia Bar Bend Test Through 180° is Satisfactory

10mm Dia Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

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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

To, Sub Divisional Officer Buildings Sub Division No. 2 Multan

"Establishment of 200 Bedded Mother & Child Hospital at Ghalla Dodam Multan"

Reference # CED/TFL <u>37176 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # 266/2nd;

Dated: 08-10-2021

Dated: 07-09-2021

Tension Test Report (Page -1/1)

Date of Test 08-10-2021 Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ Size (inch)		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)				Elongation	% Elongation	Remarks
8	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	Э %	R
1	0.360	3/8	0.367	0.11	0.106	3400	5300	68200	70850	106200	110500	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only one sample for tensile and one sample 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,
M/S Style Textile (Pvt) Ltd
Lahore
(Style SAP C1 Project) ((Mughal Steel) Kraftcon)

Reference # CED/TFL <u>37180 (Dr. Asad Ali)</u> Dated: 08-10-2021

Reference of the request letter # Nil Dated: 05-10-2021

Tension Test Report (Page -1/1)

Date of Test 08-10-2021 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)		Ultimate Stre (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.416	10	10.02	0.12	0.122	4280	5520	78631	77140	101412	99500	1.20	15.0	
2	0.417	10	10.04	0.12	0.123	4400	5520	80835	79050	101412	99200	1.10	13.8	
3	0.419	10	10.05	0.12	0.123	4590	5710	84326	82210	104902	102300	1.10	13.8	
4	0.416	10	10.02	0.12	0.122	4380	5610	80468	79040	103065	101300	1.10	13.8	
-	-	1	-	1	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	te: only	y four s	amples fo	or tensile	and two	samples	for bend	test			
	Bend Test													
10ı	10mm Dia Bar Bend Test Through 180° is Satisfactory													
10ı	nm Dia	Bar Bei	nd Test	Throug	h 180° i	s Satisfac	etory							

I/C Testing Laboratoires UET Lahore, Pakistan.

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