THE RIGHT OF THE PARTY OF THE P

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 Building Standards
Lahore
(Construction of Residential Building in Gulberg, Lahore)

Reference # CED/TFL <u>37349 (Dr. Rizwan Azam)</u>

Reference of the request letter # GT/LTR/211110-115

Dated: 11-11-2021

Tension Test Report (Page -1/1)

Date of Test 15-11-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight		neter/ ze	Aı (iı	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)	N A N		Actual	(inch)	% E	Re	
1	0.383	3	0.379	0.11	0.113	4200	5100	84200	82210	102200	99900	0.80	10.0	
-	-	-	-	-	-	-	_	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Γ	Γ		No	te: only o	ne samp	le for ten	sile test	1	ı	1		
							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
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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

Development of Infrastructure in LDA City, Lahore (Package 3 of Development Area – 1) (Strom Water Drainage)

Reference # CED/TFL <u>37353 (Dr. Rizwan Azam)</u>

Reference of the request letter # 4047/13/SA/04-KRC/219

Dated: 11-11-2021

Dated: 04-11-2021

Tension Test Report (Page -1/1)

Date of Test 15-11-2021 Gauge length 8 inches

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

Sr. No.	Weight	Diam Si			rea n²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
<i>S</i> 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	₩ E	Re
1	0.385	3	0.380	0.11	0.113	3700	5500	74200	72080	110200	107200	1.30	16.3	SJ Steel
2	0.385	3	0.380	0.11	0.113	3800	5500	76200	73930	110200	107100	1.30	16.3	SJ Stee
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-		-	-	-	-	-	-	-	-	-	-	
-	-	-	1	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	est						
#3	Bar Ben	d Test 7	Γhrough	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
- 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,

Project Manager

Republic Engineering Corporation (Pvt) Ltd

Construction of Alpha Home Apartments (Block-C) at Beaconhpouse Estate Jati Umra Road off

Raiwind Road Lahore

Reference # CED/TFL <u>37354 (Dr. Asif Hameed)</u>

Reference of the request letter # AHA-18

Dated: 11-11-2021 Dated: 10-11-2021

Tension Test Report (Page -1/1)

Date of Test 15-11-2021 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)		te Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.373	3	0.374	0.11	0.110	3300	4600	66200	66290	92200	92400	1.40	17.5	
2	0.370	3	0.372	0.11	0.109	3200	4600	64200	64780	92200	93200	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	1	-	ı	ı	-	-	ı	-	-	-	-	-	1	
-	-	-	1	-	-	-	•	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	est						
#3	Bar Ben	d Test	Γhrough	n 180° is	s Satisfa	ctory								

Witness by Zeeshan Elahi (Site Supervisor)

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,
Resident Engineer
Engineering Consultancy Services Punjab (Pct) Ltd
Infrastructure Development and Construction of Affordable Housing Unit at Moza Rakh Paji
Tehsil Raiwind, Ditrict Lahore
(Mughal Steel)

Reference # CED/TFL <u>37355 (Dr. Rizwan Azam)</u>
Reference of the request letter # ECSP/RE/LH/04
Dated: 11-11-2021

Tension Test Report (Page -1/1)

Date of Test 15-11-2021 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	Grade
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	
1	0.415	3	0.394	0.11	0.122	3400	5000	68200	61470	100200	90400	1.70	21.3	40
2	0.414	3	0.393	0.11	0.122	3400	5000	68200	61650	100200	90700	1.60	20.0	40
3	0.412	3	0.393	0.11	0.121	4500	5500	90200	81900	110200	100100	1.00	12.5	60
4	0.412	3	0.393	0.11	0.121	4200	5300	84200	76430	106200	96500	1.00	12.5	OU
-	-	-	-	1	-	-	-	-	-	-	1	-	1	
-	-	-	-	-	-	-	-	-	-	-	1	-	1	
			No	te: only	four s	amples fo	or tensile	and two	samples	for bend	test	1		
							D 15							
							Bend T	est						

#3 Bar Bend Test Through 180° is Satisfactory

#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



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

To, Manager Nam Associates MCB Bank, Town Ship

Reference # CED/TFL <u>37357 (Dr. Rizwan Azam)</u>
Reference of the request letter # NAM-424/5
Dated: 12-11-2021

Tension Test Report (Page -1/1)

Date of Test 15-11-2021 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)	Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	₩ E	R
1	0.371	3	0.372	0.11	0.109	3400	5000	68200	68790	100200	101200	1.00	12.5	
-	-	1	ı	ı	-	-	-	-	-	-	1	1	1	
-	-	ı	ı	ı	-	-	-	-	-	-	ı	ı	ı	
-	-	-	-	1	-	-	-	-	-	-	-	-	ı	
-	-	ı	ı	1	-	-	-	-	-	-	ı	ı	ı	
-	-	1	-	-	-	-	-	-	-	-	ı	ı	1	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample f	or bend t	est			1
							Bend T	est 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 Munir Industry (Private) Limited Lahore

Reference # CED/TFL <u>37359 (Dr. Rizwan Azam)</u>
Reference of the request letter # C.C.PVC/Gwd/03

Dated: 12-11-2021

Tension Test Report (Page – 1/1)

Date of Test 15-11-2021

Description PVC Wire Breaking Load Test (Wire With Coating)

Sr. No.	Nominal Diameter	Measured Diameter	Breaking Load	Remark
	(mm)	(mm)	(kg)	
1	4.70	4.75	240	
-	-	-		
-	-	-		
-	-	-		-
-	-	-		-
-	-	-		-
-	-	-		
	Only (One Sample 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.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

NEEROO TO THE TOTAL THE TO

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 **37360** (Engr. Rizwan Riaz) Dated: 12-11-2021

Reference of the request letter # AIIAP/CCECC-MATRACON-HABIB Jv/2021/755

Dated: 10-11-2021

Tension Test Report (Page -1/2)

Date of Test 15-11-2021 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ze m)		rea n²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Heat No.
S	(lbs/ft)	Nominal	Vominal Vomi		Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	H
1	0.410	10	9.95	0.12	0.120	3900	5300	71650	71380	97370	97000	1.30	16.3	116
2	0.407	10	9.92	0.12	0.120	3900	5300	71650	71790	97370	97600	1.00	12.5	144
-	-	•	-	-	-	•	-	-	-	-	-	-	-	
-	-	•	-	-	-	•	-	-	-	-	-	-	-	
-		ı	-	-	-		-	-	-	-	-	-	-	
-	-	ı	-	-	-	-	-	-	-	-	-	-	-	
			No	te: onl	y two sa	amples fo	or tensile	and two	samples	for bend	test	1		
							Bend T	est est						

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.

- 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

NEEROO TO THE TOTAL THE TO

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 **37360** (Engr. Rizwan Riaz) Dated: 12-11-2021

Reference of the request letter # AIIAP/CCECC-MATRACON-HABIB Jv/2021/751

Dated: 10-11-2021

Tension Test Report (Page -2/2)

Date of Test 15-11-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Si	neter/ ze m)		rea n²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Heat No.
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	H
1	0.403	10	9.87	0.12	0.119	3700	5400	67975	68800	99207	100500	1.00	12.5	46
2	0.409	10	9.93	0.12	0.120	3600	5300	66138	66040	97370	97300	1.40	17.5	40
-		-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			1		Not	e: only t	wo sampl	es for te	nsile test	ı	ı			
							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,

Construction Manager

Deevar Developers Pvt. Ltd

Construction of Zameen Opal, Plot No. 16, Sector-A, Land Breeze Housing Society, Raiwind

Road, Lahore

Reference # CED/TFL 37361 (Dr. Ali Ahmed)

Reference of the request letter # ZD/ZO/L/039 Dated: 12-11-2021

Tension Test Report (Page -1/1)

Date of Test 15-11-2021 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		Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.380	3	0.377	0.11	0.112	3500	5000	70200	69090	100200	98700	1.00	12.5	
2	0.374	3	0.374	0.11	0.110	3400	4700	68200	68160	94200	94300	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
		ı	No	ote: on	ly two s	amples f	or tensile	and one	sample f	for bend t	est	1		
							Bend T	est						
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 12-11-2021

- 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

ALANORE ALANOR

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-2 ACES (Pvt) Ltd Sector-V DHA Multan

Reference # CED/TFL <u>37363 (Dr. Rizwan Azam)</u>

Reference of the request letter # ACES/DEV/CONSPLUS/42

Dated: 12-11-2021

Tension Test Report (Page -1/2)

Date of Test 15-11-2021

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

Sr. No.	Weight	Si	neter/ ze m)		rea m²)	Yield load	Breaking Load		Stress pa)		e Stress pa)	Remarks
S	(kg/m)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	Re
1	0.260	6	6.49	32.30	33.08	1600	2000	486	474	607	593	Ali Brother
2	0.273	6	6.66	32.30	34.84	1600	2300	486	451	699	648	A Bro
-	-	1	-	-	-	ı	-	1	-	-	-	
-	ı	1	-	-	-	1	-	1	-	-	-	
-	ı	1	-	-	-	1	-	1	-	-	-	
-	ı	1	-	-	-	1	-	1	-	-	-	
		N	lote: on	ly two	sample	s for tens	sile and o	ne sampl	le for ben	d test		_
						Beno	d Test					
6m	m Dia B	ar Beno	d Test T	hrough	180° is	Satisfact	ory					

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, Resident Engineer-2 ACES (Pvt) Ltd Sector-V DHA Multan

Reference # CED/TFL <u>37363 (Dr. Rizwan Azam)</u>

Reference of the request letter # ACES/DEV/CONSPLUS/43

Dated: 12-11-2021

Tension Test Report (Page -2/2)

Date of Test 15-11-2021 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)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual					Actual	(inch)	% E	Re	
1	0.379	10	9.56	0.12	0.111	3900	4800	71650	77230	88184	95100	0.90	11.3	
2	0.377							77550	90021	97500	1.20	15.0	Mughal Steel	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Ž S
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend 1	test	1		
							Bend T	`est						
101	mm Dia	Bar Bei	nd Test	Throug	h 180° i	s Satisfac		CSI						

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,
Project Manager
Dupak Properaties (Pvt) Ltd
Defence view Apartments at Shanghai Road Lahore

Reference # CED/TFL <u>37366 (Dr. Mazhar Saleem)</u>
Reference of the request letter # Dupak/DVA/056

Dated: 15-11-2021

Tension Test Report (Page -1/1)

Date of Test 15-11-2021 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)		te Stress si)	Elongation	% Elongation	Remarks
<i>S</i> 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.375	3	0.375	0.11	0.110	3500	4800	70200	69940	96200	96000	1.20	15.0	
2	0.373	3	0.374	0.11	0.110	3300	4700	66200	66350	94200	94500	1.10	13.8	
-	ı	ı	ı	1	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test		ı	1
42	Dan Dan	1 T 4 T	Γ1	1000:	- Catiafa		Bend T	est						
#3	Bar Ben	a lest.	ınrough	1 180° 18	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
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples