



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
Designmen Consulting Engineers (Pvt) Ltd.
Construction of AKHSS Gahkuch Package-03, Gilgit Baltistan.

Reference # CED/TFL **3995** (Dr. Rizwan Riaz)

Dated: 02-10-2023

Reference of the request letter # N-187/AKES-SCP/PKG-03-GB

Dated: 18-09-2023

Tension Test Report (Page – 1/2)

Date of Test 05-10-2023

Gauge length 2 inches

Description Steel Structure Steel Strip Tensile Test

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(inch)										
1	MS. Angle – L1	3x3x1/4	27.70x5.50	152.35	7000	8700	451	560	0.70	35.00	
2	MS. Angle – L2	2x2x3x16	24.00x5.25	126.00	6000	7900	467	615	0.60	30.00	
3	MS. Angle – L3	1-1/2x1-1/2x3/16	16.90x3.70	62.53	2900	3900	455	612	0.50	25.00	
4	MS. Girder G1	6x15 lb/ft	27.60x10.50	289.80	9800	16300	332	552	0.70	35.00	
5	MS Plate	12x12x1/2	23.85x9.20	219.42	8000	12300	358	550	0.60	30.00	
6	C1	3x1-3/8x1/4	27.60x3.80	104.88	4300	6300	402	589	0.60	30.00	
7	C2	-----	27.70x5.70	157.89	5800	8800	360	547	0.50	25.00	
8	TB-1	6x6x1/4	27.50x6.00	165.00	6500	8400	386	499	0.70	35.00	
Only Eight Samples for Tensile Test											
Bend Test											

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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Test Floor Laboratory
Department of Civil Engineering
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To,

Project Manager
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Construction of AKHSS Gahkuch Package-03, Gilgit Baltistan.

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Dated: 18-09-2023

Tension Test Report (Page – 1/2)

Date of Test 05-10-2023

Gauge length 2 inches

Description Steel Structure Steel Strip Tensile Test

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(inch)										
1	W6	----	27.50x5.60	154.00	7300	9200	465	586	0.60	30.00	
2	W12	-----	27.30x10.00	273.00	9500	15700	341	564	0.70	35.00	
3	Plate	12x1/2	27.40x11.60	317.84	8000	13400	247	414	0.90	45.00	
4	Z-Purlin	2x8x2	27.40x3.05	83.57	3900	4800	458	563	0.60	30.00	
5	HSS Column	6x6x5mm	27.80x8.75	243.25	9000	14400	363	581	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
Only Five Samples for Tensile Test											
Bend Test											

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 Al-Tariq Construction (Pvt) Ltd.
Karachi
(PARCO MCR 4th LPG SPHERE Project (945-TK54)).
M/S Pak Arab Refinery Ltd.

Reference # CED/TFL **3998** (Dr. Rizwan Azam)
Reference of the request letter # ATL-INS-0029-B

Dated: 03-10-2023
Dated: 02-10-2023

Tension Test Report (Page -1/1)

Date of Test 05-10-2023
Gauge length 8 inches
Description Anchor Bolt Steel Bar Tensile Test

Sr. No.	Weight (kg/m)	Diameter/ size		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa) Actual	Ultimate Stress (MPa) Actual	Elongation (inch)	% Elongation	Remarks
		Nominal (mm)	Actual (mm)	Nominal	Actual							
1	8.058	36	36.15	-----	1026.5	74200	85600	709	818	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test												
Bend Test												

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,

Deputy Director Buildings
LDA, Lahore
(Construction of Orange Line Metro Train Project (Package – II) Chouburi to Ali Town
– Reconstruction of Jamia Masjid Muhammadia (Qadeem), Lake Road, Lahore)

Reference # CED/TFL **4000** (Dr. Rizwan Azam)
Reference of the request letter # DDB/LDA/321

Dated: 03-10-2023
Dated: 25-09-2023

Tension Test Report (Page -1/1)

Date of Test 05-10-2023
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.374	3/8	0.374	0.11	0.110	3080	4890	61800	61780	98000	98100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratories
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 City Builders
Lahore

Reference # CED/TFL **4001** (Dr. Rizwan Azam)
Reference of the request letter # CB/KCW/UET-09

Dated: 03-10-2023
Dated: 03-10-2023

Tension Test Report (Page -1/1)

Date of Test 05-10-2023
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.379	3	0.377	0.11	0.111	4180	5820	83800	82650	116700	115100	1.00	12.5	
2	0.379	3	0.376	0.11	0.111	4200	5880	84200	83180	117900	116500	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
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,

Team Leader – JIPIC
Project Implementation Consultants (PICs)
Jalalpur Irrigation Project (JIP)
Construction of Jalalpur Irrigation Canal and Its System.

Reference # CED/TFL **4002** (Dr. Rizwan Azam)
Reference of the request letter # JIPIC/2.18/5713

Dated: 04-10-2023

Dated: 15-09-2023

Tension Test Report (Page – 1/1)

Date of Test 05-10-2023
Gauge length 2 inches
Description Weld test Coupons Steel Strip Bend Test

Bend Test
Strip taken from Weld test Coupons Root Bend Test Through 180° is Satisfactory (Abid Ali)
Strip taken from Weld test Coupons Face Bend Test Through 180° is Satisfactory (Abid Ali)
Strip taken from Weld test Coupons Root Bend Test Through 180° is Satisfactory (M. Sajid)
Strip taken from Weld test Coupons Face Bend Test Through 180° is Satisfactory (M. Sajid)
Only four samples for bend test

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,
 Managing Partner
 New Global Builders
 Construction of SunShine Medical Tower at Shahdara Lahore.

Reference # CED/TFL **4003** (Dr. Rizwan Azam)
 Reference of the request letter # SMT-1/4923

Dated: 04-10-2023
 Dated: 03-10-2023

Tension Test Report (Page -1/1)

Date of Test 05-10-2023
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.380	3/8	0.377	0.11	0.112	4130	5220	82800	81450	104600	103000	1.00	12.5	
2	0.370	3/8	0.372	0.11	0.109	4100	5170	82200	83000	103600	104700	0.90	11.3	
3	0.373	3/8	0.374	0.11	0.110	3920	5010	78600	78730	100400	100700	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only three samples for tensile and one sample for bend test														
Bend Test														
3/8" 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
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Pakistan. Ph: 92-42-99029202

To,
 CEO
 SmartBuilders & Co.
 'Frontier Corps South' Stationed at Wana, Kp

Reference # CED/TFL **4006** (Dr. Rizwan Azam)
 Reference of the request letter # Nil

Dated: 04-10-2023
 Dated: 03-10-2023

Tension Test Report (Page -1/1)

Date of Test 05-10-2023
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.380	3	0.377	0.11	0.112	4540	5250	91000	89630	105200	103700	0.90	11.3	Ambereli Steel
2	0.386	3	0.380	0.11	0.114	4740	5470	95000	92000	109600	106200	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
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To,

M/S ASG – RTCC jv

Lahore

(Civil Works, Transportation Erection Testing and Commission Including Dismantling Work For The Upraising / Relocation of Existing - Kharian Motorway Project (SKMP) Under Deposit Work.)

Reference # CED/TFL **4007** (Dr. Rizwan Azam)

Dated: 04-10-2023

Reference of the request letter # ASG-RTCC (JV)/01/10

Dated: 03-10-2023

Tension Test Report (Page -1/1)

Date of Test 05-10-2023

Gauge length 8 inches

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

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.370	3	0.372	0.11	0.109	3180	4710	63800	64490	94400	95600	1.40	17.5	Batala Premium
2	0.370	3	0.372	0.11	0.109	3160	4690	63400	64010	94000	95100	1.20	15.0	
3	5.224	11	1.398	1.56	1.535	51000	77600	72100	73210	109700	111400	1.80	22.5	
4	5.245	11	1.401	1.56	1.542	51000	77800	72100	72910	110000	111300	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only four samples for tensile and two samples for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#11 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
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To,
 M/S Unique Apparel
 Lahore
 (Construction of Building)

Reference # CED/TFL **4008** (Dr. Rizwan Azam)
 Reference of the request letter # Nil

Dated: 04-10-2023
 Dated: 04-10-2023

Tension Test Report (Page -1/1)

Date of Test 05-10-2023
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.345	3	0.360	0.11	0.102	2750	4180	55100	59690	83800	90800	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test														
Bend Test														

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
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To,

Resident Engineer
NESPAK
Construction of Dual Carriageway from GT Road (Benazir Chowk) to Lahore-Sialkot
Motorway (Wando Interchange) L=15.20 km, District Gujranwala.

Reference # CED/TFL **4009** (Dr. Rizwan Azam)

Dated: 04-10-2023

Reference of the request letter # 103/EW/GRW/AR/Lab/27

Dated: 30-09-2023

Tension Test Report (Page -1/1)

Date of Test 05-10-2023

Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ Size		Area (in ²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	4.235	10	1.259	1.27	1.245	41400	53600	71900	73300	93100	94900	1.70	21.3	Mughal Steel
2	4.238	10	1.259	1.27	1.246	41400	53600	71900	73260	93100	94900	1.80	22.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#10 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,
Project Manager
ESAC
Grand Central Mall, Faisalabad

Reference # CED/TFL **4011** (Dr. Rizwan Azam)
Reference of the request letter # ESAC/TGC/GCMF/039

Dated: 05-10-2023
Dated: 04-10-2023

Tension Test Report (Page -1/1)

Date of Test 05-10-2023
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	4.255	10	1.262	1.27	1.251	43000	51600	74700	75770	89600	91000	1.50	18.8	SJ Steel
2	4.208	10	1.255	1.27	1.237	43200	52000	75000	76980	90300	92700	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one samples for bend test														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

Witness by Muhammad Asif (M.E ESAC)

I/C Testing Laboratoires
UET Lahore, Pakistan.

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