

To,
 Han Jin Jang (Construction Supervisor/ Deputy PM)
 Sunjin Engineering & Architectre

Reference # CED/TFL 7239 (Dr. M Kashif)
 Reference of the request letter # PK-IT-SUN-C-16JUL-001

Dated: 18-07-2025
 Dated: 16-07-2025

Tension Test Report (Page-1/5)

Date of Test 23-07-2025
 Gauge Length 2 inches
 Description Steel Plate Strips Tensile and Bend Test Report

Sr. No.	Designation	Size of Strip	X Section Area	Yield Load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(Inch)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(inch)		
1	Steel Plate 12mm	12.00 x 30.10	361.20	11210	16330	304.5	443.5	1	50.0	-
2	Steel Plate 9mm	9.80 x 30.10	294.98	12230	17070	406.7	567.7	0.8	40.0	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 2 Samples for Bend test

Bend Test

Steel Plate 12mm Strip Bend Test Through 180 Degree is Satisfactory

Steel Plate 9mm Strip Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,
 Han Jin Jang (Construction Supervisor/ Deputy PM)
 Sunjin Engineering & Architectre

Reference # CED/TFL 7239 (Dr. M Kashif)
 Reference of the request letter # PK-IT-SUN-C-18-JUL-003

Dated: 18-07-2025
 Dated: 18-07-2025

Tension Test Report (Page-2/5)

Date of Test 23-07-2025
 Gauge Length 2 inches
 Description Steel Plate Strips Tensile and Bend Test Report

Sr. No.	Designation	Size of Strip	X Section Area	Yield Load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(Inch)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(inch)		
1	Steel Plate 4.5mm	4.30 x 31.10	133.73	3720	5220	272.9	382.9	0.9	45.0	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Note: Only 1 Samples for Tensile and 1 Samples for Bend test

Bend Test	
Steel Plate 4.5mm Strip Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,
 Han Jin Jang (Construction Supervisor/ Deputy PM)
 Sunjin Engineering & Architectre

Reference # CED/TFL 7239 (Dr. M Kashif)
 Reference of the request letter # PK-IT-SUN-C-16-JUL-002

Dated: 18-07-2025
 Dated: 16-07-2025

Tension Test Report (Page-3/5)

Date of Test 23-07-2025
 Gauge Length 2 inches
 Description H-Beam Strips Tensile and Bend Test Report

Sr. No.	Designation	Size of Strip	X Section Area	Yield Load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(Inch)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(inch)		
1	H-Beam	12.40 x 30.30	375.72	13760	20200	359.3	527.4	1	50.0	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Note: Only 1 Samples for Tensile and 1 Samples for Bend test

Bend Test	
H-Beam Strip Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,
 Han Jin Jang (Construction Supervisor/ Deputy PM)
 Sunjin Engineering & Architectre

Reference # CED/TFL 7239 (Dr. M Kashif)
 Reference of the request letter # PK-IT-SUN-C-18-JUL-004

Dated: 18-07-2025
 Dated: 18-07-2025

Tension Test Report (Page-4/5)

Date of Test 23-07-2025
 Gauge Length 2 inches
 Description MS Pipe Strips Tensile and Bend Test Report

Sr. No.	Designation	Size of Strip	X Section Area	Yield Load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(Inch)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(inch)		
1	MS Pipe SC2	4.80 x 31.20	149.76	5910	8560	387.1	560.7	0.8	40.0	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Note: Only 1 Samples for Tensile and 1 Samples for Bend test

Bend Test

MS Pipe SC2 Strip Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,
 Han Jin Jang (Construction Supervisor/ Deputy PM)
 Sunjin Engineering & Architectre

Reference # CED/TFL 7239 (Dr. M Kashif)
 Reference of the request letter # PK-IT-SUN-C-18-JUL-002

Dated: 18-07-2025
 Dated: 18-07-2025

Tension Test Report (Page-5/5)

Date of Test 23-07-2025
 Gauge Length 2 inches
 Description C-Channel Strips Tensile and Bend Test Report

Sr. No.	Designation	Size of Strip	X Section Area	Yield Load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(Inch)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(inch)		
1	C-Channel	9.30 x 30.70	285.51	13050	17630	448.4	605.8	1	50.0	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Note: Only 1 Samples for Tensile and 1 Samples for Bend test

Bend Test

MS Pipe SC2 Strip Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Mr. Tanvir Ahmed Memon (Resident Engineer, GKBP)
Loya Associates JV Techno-Consult International (Pvt.) Ltd.
Bridge Over River Indus Connecting Ghotki With Kandhkot

Reference # CED/TFL **7243** (Dr. Rizwan Riaz)
Reference of the request letter # RE/IE/GKBP/2025/393

Dated: 21-07-2025
Dated: 18-07-2025

Tension Test Report (Page -1/4)

Date of Test 23-07-2025
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)	GPa		
1	12.70 (1/2")	780.0	785.0	17500	171.68	19300	189.33	205	>3.50	26567
2	12.70 (1/2")	780.0	784.0	17600	172.66	19400	190.31	196	>3.50	26567
3	12.70 (1/2")	780.0	786.0	17500	171.68	19200	188.35	200	>3.50	26567
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only three 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

Test Performed and Verified by:

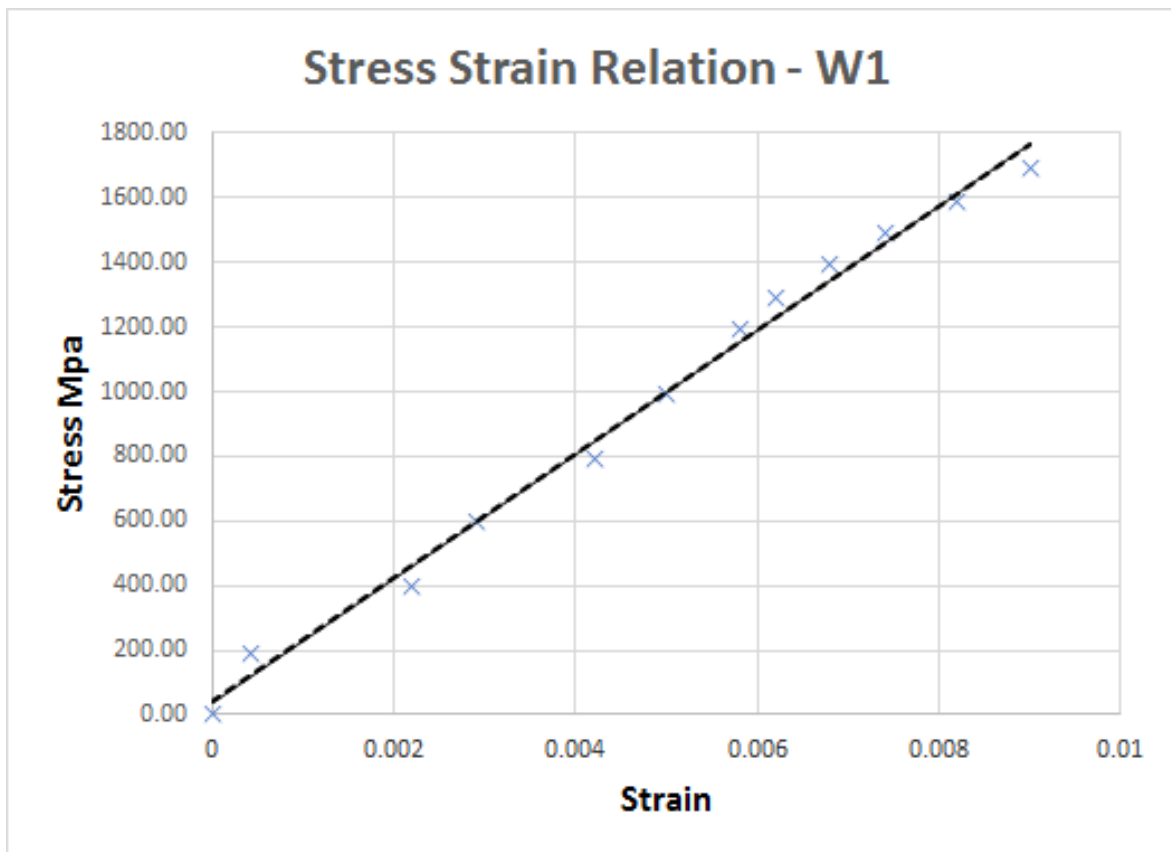
To,

Mr. Tanvir Ahmed Memon (Resident Engineer, GKBP)
Loya Associates JV Techno-Consult International (Pvt.) Ltd.
Bridge Over River Indus Connecting Ghotki With Kandhkot

Reference # CED/TFL 7243 (Dr. Rizwan Riaz)
Reference of the request letter # RE/IE/GKBP/2025/393

Dated: 21-07-2025
Dated: 18-07-2025

Graph (Page – 2/4)



Test Performed and Verified by:

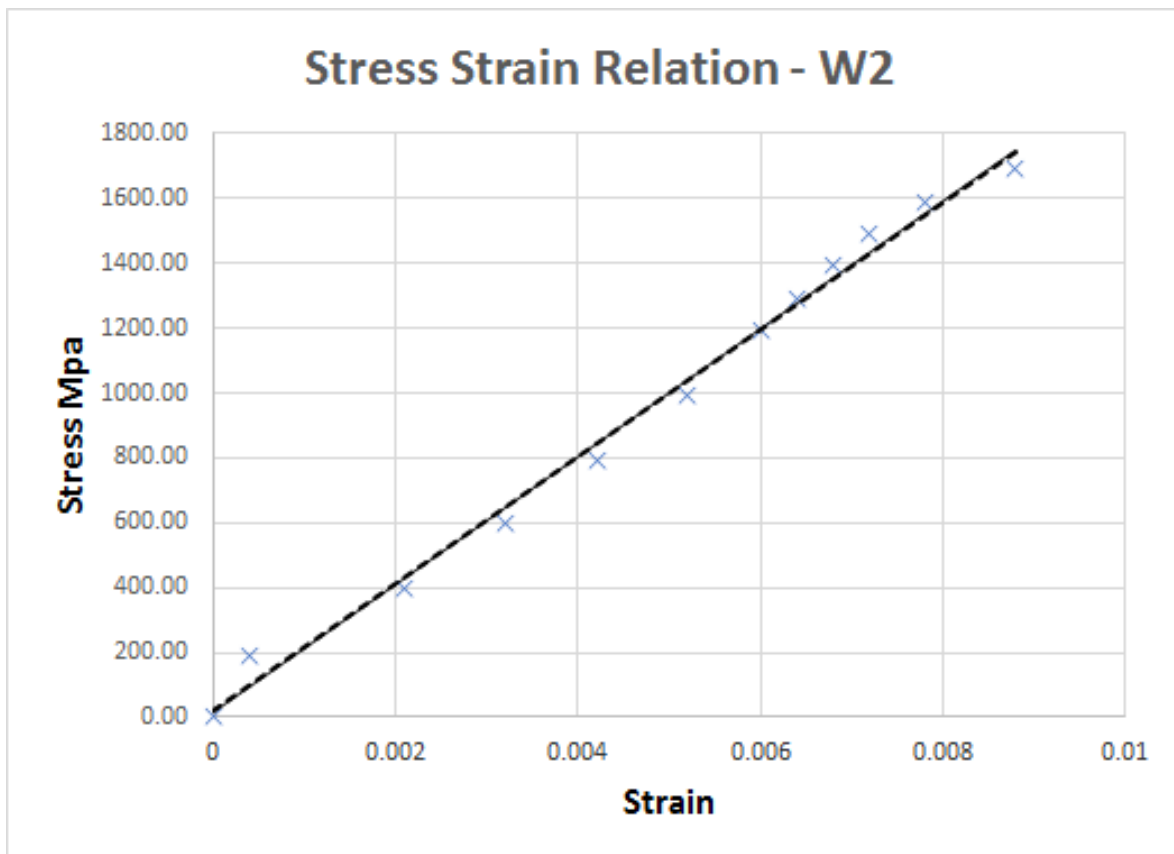
To,

Mr. Tanvir Ahmed Memon (Resident Engineer, GKBP)
Loya Associates JV Techno-Consult International (Pvt.) Ltd.
Bridge Over River Indus Connecting Ghotki With Kandhkot

Reference # CED/TFL **7243** (Dr. Rizwan Riaz)
Reference of the request letter # RE/IE/GKBP/2025/393

Dated: 21-07-2025
Dated: 18-07-2025

Graph (Page – 3/4)



Test Performed and Verified by:

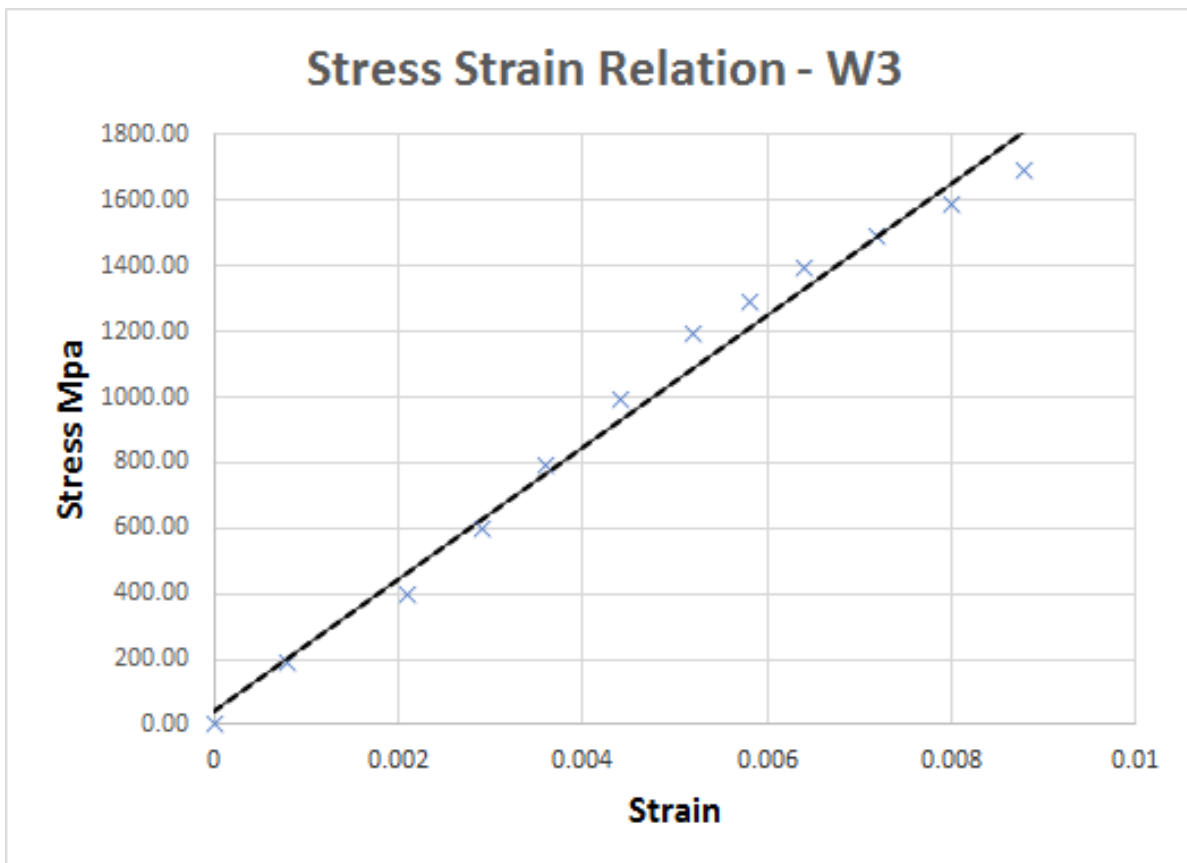
To,

Mr. Tanvir Ahmed Memon (Resident Engineer, GKBP)
Loya Associates JV Techno-Consult International (Pvt.) Ltd.
Bridge Over River Indus Connecting Ghotki With Kandhkot

Reference # CED/TFL **7243** (Dr. Rizwan Riaz)
Reference of the request letter # RE/IE/GKBP/2025/393

Dated: 21-07-2025
Dated: 18-07-2025

Graph (Page – 4/4)



Test Performed and Verified by:

To,

Sub Divisional Officer
Building Sub Division, Kasur
Upgradation / Rehabilitation of Office Building for Deputy Director (DEV), Kasur

Reference # CED/TFL 7250 (Dr. Rizwan Riaz)

Dated: 22-07-2025

Reference of the request letter # 288/K

Dated: 06-05-2025

Tension Test Report (Page-1/1)

Date of Test 23-07-2025

Gauge Length 8 inches

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

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.372	3	0.373	0.110	0.109	35.00	52.70	71502	71866	107661	108209	1.2	15.0	3/8"
2	0.365	3	0.369	0.110	0.107	35.00	52.50	71502	73351	107252	110026	1.0	12.5	3/8"
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 0 Samples for Bend test

Bend Test

Test Performed and Verified by:

To,
 Mr. Sayam Jee (Chief Executive Officer (CEO))
 Risen Pro Industry (Pvt.) Ltd.

Reference # CED/TFL 7253 (Dr. M. Kashif)
 Reference of the request letter # Nil

Dated: 22-07-2025
 Dated: 18-07-2025

Tension Test Report (Page -1/2)
 Date of Test 23-07-2025
 Gauge length 600 mm
 Description Steel Strand Tensile Test as per ASTM A-416

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)	GPa		
1	12.70 (1/2")	780.0	788.0	18800	184.43	19700	193.26	205	>3.50	xx
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Only one sample 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

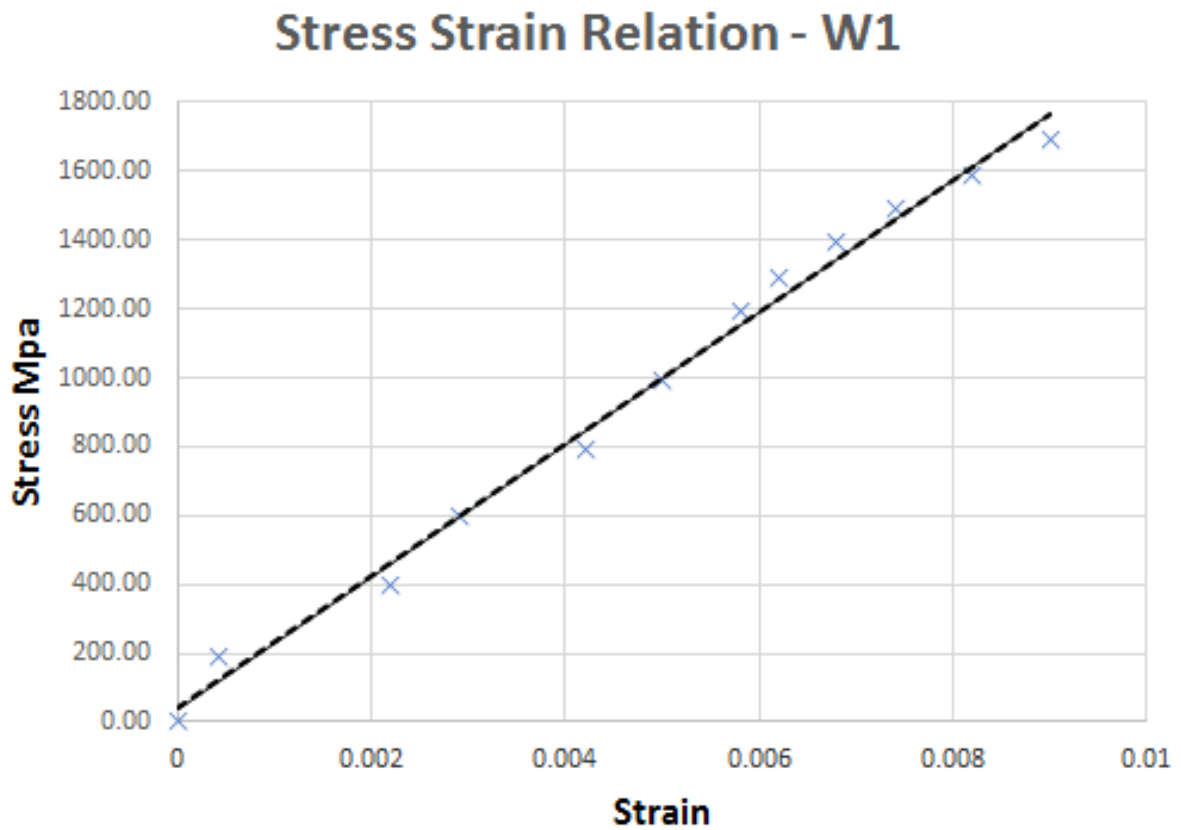
Test Performed and Verified by:

To,
Mr. Sayam Jee (Chief Executive Officer (CEO))
Risen Pro Industry (Pvt.) Ltd.

Reference # CED/TFL 7253 (Dr. M. Kashif)
Reference of the request letter # Nil

Dated: 22-07-2025
Dated: 18-07-2025

Graph (Page – 2/2)



Test Performed and Verified by:

To,

Mr. Arsalan Khurshid
Sufi Muhammad Haroon Haris
Construction of Fauzia and Haris Residence at Green Fort-1 Raiwind Road, Lahore
(Sheikhoo Steel)

Reference # CED/TFL 7256 (Dr. M Kashif)
Reference of the request letter # GreenFort-1/UET/SteelTest

Dated: 23-07-2025
Dated: 23-07-2025

Tension Test Report (Page-1/1)

Date of Test 23-07-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.367	3	0.371	0.110	0.108	41.50	50.70	84780	86409	103575	105565	1.2	15.0	-
2	0.386	3	0.380	0.110	0.113	43.20	52.00	88253	85649	106231	103096	1.2	15.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test

3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Engr. Bilawal Mahmood (A/Resident Engineer ECSP PSCS)
Engineering Consultancy Services Punjab (Pvt.) Ltd.
Engineering Procurement & Construction and Operatio & Maintenance of Ninteen (19) Districts
(Smart Safe Cities Phase-II) Project for 19 District Phase-II (Kot Addu)

Reference # CED/TFL 7232 (Dr. Rizwan Riaz)
Reference of the request letter # ECSP/PSCS/ARE/18

Dated: 17-07-2025
Dated: 11-05-2025

Tension Test Report (Page-1/2)

Date of Test 21-07-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (mm)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.364	10	0.369	0.120	0.107	36.70	48.00	68727	77067	89888	100796	1.3	16.3	Sheikoo Steel
2	0.364	10	0.369	0.120	0.107	36.70	48.00	68727	77019	89888	100734	1.2	15.0	Sheikoo Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test	
10mm Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,

Mr. Javeed Aslam (Material Engineer)
Banu Mukhtar Contracting (Pvt.) Ltd.
Construction of Hyundai Nishat Expansion-FSD
(Ittehad Steel)

Reference # CED/TFL 7259 (Dr. Rizwan Riaz)
Reference of the request letter # HNM/BMC/06/2025

Dated: 23-07-2025
Dated: 21-07-2025

Tension Test Report (Page-2/2)

Date of Test 23-07-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (mm)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.434	10	0.403	0.120	0.128	37.20	52.00	69663	65481	97378	91533	1.4	17.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 1 Samples for Tensile and 1 Samples for Bend test

Bend Test

10mm Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by: