

Test Performed by: S. Asad Ali Gillani

M.Usman Yousaf
Assistant Manager Design & Estimation
Riaz-Ud-Din Engineering (Pvt) Ltd.Lahore
(Prefabricated Building For Diamer Basha Dam Security Camp Area # 4)

Client Reference No.: RECO/BDCG #4/2025/101

Dated: 22-01-2025

SOM Lab Ref: CED/SOM/623 (Page 1/1)

Dated: 22-01-2025

Test Type: Tensile Test & Hardness

Sample Type: Nut Bolts

Test Specification: ASTM – F-606

Tensile Test Results

Sample No.	Sample Type	Tested Diameter of Rod/Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	% Elongation
1	M12 x 50	8.30	34.7	641.7	20.0
2	M12 x 50	8.20	32.8	621.4	20.0
3	M16 x 100	10.20	76.0	930.6	20.0
4	M16 x 100	10.30	77.2	927.0	20.0

Hardness Test Details:

Machine used: Avery Rockwell Hardness Testing Machine
(Minor Load: 10 Kgf Major Load: 90.0 kgf Scale: B)

Hardness Test Results

Sample No.	Sample Type	Hardness avg
1	M12 x 50	HR – 88.66– B

Machine used: Avery Rockwell Hardness Testing Machine
(Minor Load: 10 Kgf Major Load: 140.0 kgf Scale: C)

Sample No.	Sample Type	Hardness avg
1	M16 x 100	HR – 29.5– C

Note: Please always confirm the results on web www.uet-civil.edu.pk

Kamran Steel
Re-Rolling Mills (Pvt) Ltd.Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: Nil
Dated: 22-01-2025

SOM Lab Ref: 624 (P-1/1)
Dated: 22-01-2025

Test: Tension Test
Guage Length: 200 mm

Test Specification: ASTM-A-706
Sample Type: Deformed Bar (Kamran Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	4.823	28	27.96	616	614	351.00	462.00	570	572	750	753	25.0	200	12.5	G-80
2	4.763	28	27.80	616	607	328.00	443.00	532	541	719	731	30.0	200	15.0	G-75
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

28mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Four Samples Received and Tested
28mm	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Rashid Kamran, RE

Test Performed By: Dr. /Engr. Asad Ali Gillani

Nespak Lhr.(Construction of Electric Bus Depot at Green Town, Lahore)

Client Reference: 4792/13/RK/05/30

SOM Lab

Dated: 20-01-2025

Ref: 617-618 (Page-1/1)

Dated: 22-01-2025

Test: Tension Test & Bend Test

ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Aziz Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.625	8	0.991	0.79	0.771	23.65	38.76	66020	67650	108200	110860	1.40	8.0	17.5	
2	2.628	8	0.991	0.79	0.772	23.39	38.58	65310	66840	107710	110230	1.30	8.0	16.3	
3	1.494	6	0.748	0.44	0.439	13.78	21.33	69080	69240	106890	107130	1.10	8.0	13.8	
4	1.492	6	0.747	0.44	0.438	13.76	21.33	68980	69300	106890	107380	1.40	8.0	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Six Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
Note: Please always confirm the results of above report on web www.uet-civil.edu.pk		

Engr. Naveed Sadiq
RE Orbit Developers.Lahore.(The Springs Atrium,Gulberg Lahore)

Test Performed By:
Dr. /Engr. Asad Ali Gillani

SOM Lab
Ref: 619 (Page-1/1)
Dated: 22-01-2025

Client Reference: Nil
Dated: 22-01-2025

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Deformed Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.590	8	0.984	0.79	0.761	23.65	33.56	66020	68540	93680	97250	1.50	8.0	18.8	
2	2.569	8	0.980	0.79	0.755	23.55	33.76	65740	68790	94250	98620	1.60	8.0	20.0	
3	1.514	6	0.753	0.44	0.445	14.63	20.15	73320	72500	101020	99880	1.20	8.0	15.0	
4	1.509	6	0.751	0.44	0.443	14.70	20.08	73680	73180	100660	99980	1.30	8.0	16.3	
5	0.661	4	0.497	0.20	0.194	6.44	9.09	71040	73240	100270	103370	1.00	8.0	12.5	
6	0.665	4	0.498	0.20	0.195	6.22	8.82	68570	70330	97230	99730	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Nine Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	
Note: Please always confirm the results of above report on web www.uet-civil.edu.pk		

RHC Pvt Ltd.(17 Centers of Excellences in Existing TEVTA & PVTC Institutes in Punjab Province)

SOM Lab

Ref: 620 (Page-1/1)

Dated: 22-01-2025

Test Specification: ASTM-A-615

Sample Type: Deformed Bar (Markhor Steel)

# 4	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

BSM Developers Lahore.(Project : New Metro City,Lahore)(Ghousia Engineering)

Lahore)(Ghousia Engineering)

SOM Lab
Ref: 621 (Page-1/1)

Dated: 22-01-2025

Test Specification: ASTM-A-615

Sample Type: Deformed Bar

BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Six Samples Received and Tested
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Sr. Manager Mayfair Residencia Lhr.(Mayfair Residencia,Located at Main Canal Bank Road,Lahore)

Dr. /Engr. Nauman Khurram

SOM Lab

622 (Page-1/1)

22-01-2025

Test Specification: ASTM-A-615

Sample Type: Deformed Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in²	in²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.671	8	1.000	0.79	0.785	21.71	32.62	60620	61000	91070	91650	1.30	8.0	16.3	
2	1.501	6	0.749	0.44	0.441	13.53	19.52	67810	67650	97850	97630	1.40	8.0	17.5	
3	0.666	4	0.500	0.20	0.196	5.58	8.22	61490	62750	90600	92450	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Six Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Lt. Col ® Muhammad Ibrahim

Test Performed By: Dr. /Engr. Nauman Khurram

Sundar Industrial Estate.(Const Of LG Workshop & Grid Station Boundary Wall Project in SIE)

Client Reference: BOM/SIE/BCD 1-25/472

SOM Lab

Dated: 22-01-2025

Ref: 625 (Page-1/1)

Dated: 22-01-2025

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Mughal Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.473	6	0.743	0.44	0.433	14.12	17.89	70770	71910	89670	91120	1.50	8.0	18.8	
2	1.466	6	0.741	0.44	0.431	14.98	19.06	75110	76680	95550	97540	1.40	8.0	17.5	
3	0.654	4	0.494	0.20	0.192	6.83	8.66	75320	78450	95550	99530	1.10	8.0	13.8	
4	0.657	4	0.496	0.20	0.193	6.49	8.43	71610	74200	92960	96340	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Six Samples Received and Tested
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Engr Tanveer Afzal

GM Blue Bricks. (Blue World Shenzhen City)

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: BTS/Lab/001126

Dated: 22-01-2025

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 626 (Page-1/1)

Dated: 22-01-2025

Test Specification: ASTM-A-615

Sample Type: Deformed Bar (Moiz Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.038	5	0.623	0.31	0.305	9.86	13.43	70130	71280	95510	97080	1.50	8.0	18.8	
2	0.668	4	0.500	0.20	0.196	6.17	8.99	68010	69400	99150	101170	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 5	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Four Samples Received and Tested
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk