

Test Performed by: S. Asad Ali Gillani

M.Armughan Khan

Dy.Dir(QCD) WASA,LDA,Lhr.(Manufactring of R.C.C Covers WASA L.D.A Lahore)

(M/S Eagle RCC Pipe Industies)

Client Reference No.: QCD/534-35

Dated: 23-04-2024

SOM Lab Ref: CED/SOM/4008 (Page 1/1)

Dated: 26-04-2024

Test Type: Tensile Test, Bend Test & Unit Weight Test Specification: ASTM A-36

Sample Type: MS Angle (2x2x1/4")

Gauge Length: 2 inches

Tensile Test Results

Sr. No.	Size of strip (mm)	X Section Area (mm ²)	Yield Load (kN)	Ultimate Load (kN)	Yield Stress (MPa)	Ultimate Tensile Stress (MPa)	Elongation (inch)	% Elongation
1	27.2 x 7.20	195.84	98.00	124.70	500.41	636.74	0.20	10.00
2	29.8 x 7.10	212.29	104.00	161.70	489.90	761.69	0.15	7.50
3	MS Angle (2x2x1/4") strip sample, Bend through 180 degrees satisfactorily without any crack							
4	MS Angle (2x2x1/4") strip sample, Bend through 180 degrees satisfactorily without any crack							

Weight and Size Test

Sr. No.	Sample Type	Weight (g)	Length (cm)	Length (L1)	Length (L2)	Weight per Unit Area (Kg/m)	Thickness (mm)
1	MS Angle (2x2x1/4")	3098	61.0	51.6	50.1	5.078	7.1
2	MS Angle (2x2x1/4")	3102	61.0	51.7	50.2	5.085	7.0

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

Dy Manager Civil

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

Const Div GSC LESCO Lhr.(132Kv Double Circuit Single Core 1000mm Sq. For OLM Train Project)

Client Reference: DM/CIVIL/GSC/LESCO/2942-44

Dated: 26-04-2024

SOM Lab Ref: CED/SOM/4015(Page-1/1)

Dated: 26-04-2024

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: M S Deformed Bar

Gauge Length: 200 mm

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	3.993	25	25.46	491	509	245.00	355.50	499	482	724	699	35.0	200	17.5	
2	3.967	25	25.37	491	505	305.00	406.00	621	604	827	804	32.5	200	16.3	
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BEND TEST:

25mm	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

Engineer Muhammad Irfan
 Dy Dir Infra. DHA Gujranwala.(Sec C)

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

Client Reference: 111/15/DD/RS/Lab/Pkg-2A/256

SOM Lab

Ref: 4002 (Page-1/1)

Dated: 23-04-2024

Dated: 25-04-2024

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (FF Steel)

ASTM-A-615

Deformed Bar (FF 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	0.621	4	0.481	0.20	0.182	5.61	7.56	61830	67940	83410	91660	1.20	8.0	15.0	
2	0.622	4	0.483	0.20	0.183	5.56	7.51	61270	66960	82850	90540	1.00	8.0	12.5	
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BEND TEST:

# 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

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

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

Client Reference: Nil

SOM Lab

Ref: 4009 (Page-1/1)

Dated: 25-04-2024

Dated: 26-04-2024

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

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	2.632	8	0.992	0.79	0.773	24.59	35.52	68640	70150	99180	101360	1.50	8.0	18.8	
2	2.638	8	0.993	0.79	0.775	24.77	35.58	69160	70490	99320	101240	1.30	8.0	16.3	
3	1.495	6	0.748	0.44	0.439	13.78	17.71	69080	69240	88750	88960	1.30	8.0	16.3	
4	1.496	6	0.748	0.44	0.440	13.99	17.84	70100	70100	89420	89420	1.30	8.0	16.3	
5	0.662	4	0.498	0.20	0.195	7.10	9.58	78350	80360	105670	108370	1.00	8.0	12.5	
6	0.672	4	0.501	0.20	0.197	7.24	9.70	79810	81030	107010	108640	1.10	8.0	13.8	
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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

Engr. Muhammad Ashraf Bhatti

Test Performed By:

Dr. /Engr. Nauman Khurram

CM Barqaab Consult.Services (Pvt) Ltd.(500/220/132kV Nokhar S/Station,ADB Loan No.3677-Pak)

Client Reference: 500KV/SS/N-LHR/BQB/247

SOM Lab

Ref: 4010 (Page-1/1)

Dated: 20-04-2024

Dated: 26-04-2024

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

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)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.043	5	0.625	0.31	0.307	9.99	13.68	71070	71770	97330	98280	1.20	8.0	15.0	
2	1.044	5	0.625	0.31	0.307	96.61	13.40	687270	693980	95370	96300	1.30	8.0	16.3	
3	1.040	5	0.624	0.31	0.306	9.58	13.37	68170	69060	95150	96390	1.20	8.0	15.0	
4	1.050	5	0.627	0.31	0.309	9.96	13.83	70860	71090	98410	98730	1.30	8.0	16.3	
5	0.668	4	0.500	0.20	0.196	6.32	8.23	69700	71120	90720	92570	1.10	8.0	13.8	
6	0.667	4	0.500	0.20	0.196	6.44	8.46	71040	72490	93300	95200	1.10	8.0	13.8	
7	0.668	4	0.500	0.20	0.196	6.29	8.26	69360	70770	91050	92910	1.20	8.0	15.0	
8	0.671	4	0.501	0.20	0.197	6.44	8.46	71040	72130	93300	94720	1.10	8.0	13.8	
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Witnessed By: M. Farhan (Barqaab),Jamshed (NTDC)

BEND TEST:

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

Engineer Anis Ahmad

Test Performed By:

Dr. /Engr. Asad Ali Gillani

Mansoor Mazhar & Associates Lhr.(Const Of Tanveer Ahmad Residence,243 Sec-D DHA PH-VIII)

Client Reference: MMA/TAH/PVIII/001

SOM Lab

Ref: 4012 (Page-1/1)

Dated: 26-04-2024

Dated: 26-04-2024

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

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	1.024	5	0.619	0.31	0.301	11.47	14.39	81590	84030	102400	105460	1.00	8.0	12.5	
2	1.034	5	0.622	0.31	0.304	11.26	14.37	80140	81720	102260	104270	1.00	8.0	12.5	
3	0.666	4	0.500	0.20	0.196	8.15	10.40	89930	91760	114660	117000	1.10	8.0	13.8	
4	0.665	4	0.498	0.20	0.195	8.18	10.35	90150	92460	114100	117020	1.10	8.0	13.8	
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BEND TEST:

# 5	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

Jawad Ahmad,PM

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

Izhar Construction (Pvt) Ltd.(Const of Nishat Paper Products Plant at QABP,Sheikhupura)

Client Reference: ICPL/Const/NPPCL/24/007

SOM Lab

Ref: 4013 (Page-1/1)

Dated: 25-04-2024

Dated: 26-04-2024

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

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	1.076	5	0.634	0.31	0.316	12.08	15.04	85940	84310	106970	104940	1.40	8.0	17.5	Afco
2	1.033	5	0.622	0.31	0.304	12.46	15.19	88620	90370	108060	110190	1.30	8.0	16.3	Adco
3	1.026	5	0.620	0.31	0.302	10.75	13.61	76510	78540	96820	99380	1.20	8.0	15.0	Mughal
4	1.032	5	0.621	0.31	0.303	10.91	13.76	77600	79390	97910	100170	1.30	8.0	16.3	Mughal
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BEND TEST:

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

Metroplan-Asian JV

Test Performed By:

Dr. /Engr. Asad Ali Gillani

Site Office JHL ET,Lahore.(Estb Of Emergency & Trauma Center at Jinnah Hospital Lahore)

Client Reference: Metroplan-Asian JV ET-JHL-RE-083-2024

SOM Lab

Ref: 4014(Page-1/1)

Dated: 26-04-2024

Dated: 26-04-2024

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Pak 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	2.557	8	0.978	0.79	0.751	26.20	33.74	73140	76940	94200	99090	1.20	8.0	15.0	
2	2.552	8	0.977	0.79	0.750	26.32	33.94	73480	77400	94770	99820	1.30	8.0	16.3	
3	0.652	4	0.494	0.20	0.192	7.08	8.66	78130	81380	95550	99530	1.40	8.0	17.5	
4	0.649	4	0.493	0.20	0.191	7.08	8.61	78130	81810	94990	99460	1.40	8.0	17.5	
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BEND TEST:

# 8	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