

Resident Engineer/Team Leader

Test Performed By:

Dr. /Engr.

S. Asad Ali Gillani

Prime Engineering Consultancy, Kallurkot Bidge Project

Client Reference: KK-DIK-BR-PJ/2020/191

Dated: 05-10-2020

SOM Lab Ref: CED/SOM/3049(Page-2/2)

Dated: 06-10-2020

Test: Tension Test & bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar(Pak Steel)

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	2.470	20	20.03	314	315	177.70	222.20	566	565	707	706	35.0	200	17.5	
2	1.594	16	16.08	201	203	119.50	151.70	594	589	754	748	27.5	200	13.8	
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BEND TEST:

20mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Four Samples Received and Tested
16mm	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

Resident Engineer/Team Leader

Test Performed By:

Dr. /Engr.

S. Asad Ali Gillani

Prime Engineering Consultancy, Kallurkot Bidge Project

Client Reference: KK-DIK-BR-PJ/2020/192

Dated: 05-10-2020

SOM Lab Ref: CED/SOM/3049(Page-1/2)

Dated: 06-10-2020

Test: Tension Test & bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar(Abbas Steel)

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	0.868	12	11.89	113	111	52.70	81.70	466	475	722	737	30.0	200	15.0	
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BEND TEST:

12mm Sample bend through 180 degrees Satisfactorily without any crack

Note:-Only Two Samples
Received and TestedNote: Please always confirm the results of above report on web www.uet-civil.edu.pk

Ghulam Shabir Hashmani
Resident Engineer, NESPAK (Pvt) Ltd. Islamabad

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

Client Reference: CPEC/NESPAK/RE/PKG3/20/1646

SOM Lab

Ref: 3051(Page-1/1)

Dated: 14-09-2020

Dated: 06-10-2020

Test: Tension 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	1.496	6	0.748	0.44	0.440	16.00	20.00	80220	80220	100250	100250	1.00	8.0	12.5	
2	1.478	6	0.743	0.44	0.434	14.50	18.71	72660	73660	93760	95060	1.20	8.0	15.0	
3	0.656	4	0.496	0.20	0.193	7.26	8.92	80040	82940	98360	101930	1.20	8.0	15.0	
4	0.658	4	0.496	0.20	0.193	7.26	8.99	80040	82940	99150	102740	1.20	8.0	15.0	
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BEND TEST:

--	No Bend test performed	Note:- Only Six Samples Received and Tested

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

Sami Ullah Warraich

Project Manager, ICPL,- OMPL 0629, IZHAR Construction (Pvt) Ltd. Lahore

Test Performed By:

Dr. /Engr.

S. Asad Ali
Gillani

Client Reference: ICPL/CONST-OMPL/20/055

Dated: 05-10-2020

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3052(Page-1/1)

Dated: 06-10-2020

ASTM-A-615

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	1.459	6	0.739	0.44	0.429	13.25	19.42	66430	68130	97340	99830	1.50	8.0	18.8	
2	1.460	6	0.739	0.44	0.429	13.07	19.27	65510	67190	96570	99050	1.30	8.0	16.3	
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BEND TEST:

# 6	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

Abdul Ghafar
Project Manager Liberty Builders, Lahore

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

Client Reference: ST/UET/ 20201006-A

SOM Lab

Ref: 3054(Page-1/1)

Dated: 06-10-2020

Dated: 06-10-2020

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

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	2.689	8	1.003	0.79	0.790	24.54	35.67	68500	68500	99580	99580	1.60	8.0	20.0	
2	2.695	8	1.004	0.79	0.792	24.33	35.49	67930	67760	99090	98840	1.70	8.0	21.3	
3	2.703	8	1.005	0.79	0.794	24.28	35.27	67790	67450	98470	97970	1.50	8.0	18.8	
4	1.505	6	0.750	0.44	0.442	14.22	20.76	71280	70960	104080	103610	1.40	8.0	17.5	
5	1.500	6	0.749	0.44	0.441	14.02	20.64	70260	70100	103470	103230	1.50	8.0	18.8	
6	1.494	6	0.748	0.44	0.439	13.83	20.51	69340	69500	102800	103040	1.60	8.0	20.0	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Eight 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

Abdul Ghafar
Project Manager Liberty Builders, Lahore

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

Client Reference: ST/UET/ 20201006-A

SOM Lab

Ref: 3054(Page-1/1)

Dated: 06-10-2020

Dated: 06-10-2020

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

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	2.689	8	1.003	0.79	0.790	7.03	9.02	19640	19640	25190	25190	1.00	8.0	12.5	
2	2.695	8	1.004	0.79	0.792	6.98	8.84	19500	19450	24680	24610	1.00	8.0	12.5	
3	2.703	8	1.005	0.79	0.794	6.37	8.23	17790	17700	22970	22850	0.90	8.0	11.3	
4	1.505	6	0.750	0.44	0.442	6.68	8.51	33470	33320	42670	42470	1.00	8.0	12.5	
5	1.500	6	0.749	0.44	0.441	7.19	9.07	36030	35940	45480	45370	1.00	8.0	12.5	
6	1.494	6	0.748	0.44	0.439	6.90	8.77	34590	34670	43940	44050	1.00	8.0	12.5	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Eight 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

Maj Adnan khalid®

Test Performed By: Dr. /Engr.

S. Asad Ali
Gillani

Dy Dir MTL, Proposed Commercial Plaza, DRGCC Ph-III, DHA Ph-VI, (M/S Construct)

Client Reference: 408/241/E/Lab/997/6127

SOM Lab

Ref: 3057(Page-1/1)

Dated: 06-10-2020

Dated: 06-10-2020

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

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	0.671	4	0.501	0.20	0.197	6.57	9.30	72510	73610	102520	104080	1.50	8.0	18.8	
2	0.672	4	0.501	0.20	0.197	6.57	9.25	72510	73610	101960	103510	1.50	8.0	18.8	
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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

Rashid Kamran
Resident Engineer, NESPAK (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr.

S. Asad Ali
Gillani

Client Reference: 4047-R2/13/RK/0108

Dated: 29-09-2020

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3058 (Page-1/1)

Dated: 06-10-2020

ASTM-A-615

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	1.461	6	0.739	0.44	0.429	13.66	21.68	68470	70230	108680	111470	1.30	8.0	16.3	
2	1.473	6	0.743	0.44	0.433	14.14	21.78	70870	72020	109190	110960	1.10	8.0	13.8	
3	0.674	4	0.502	0.20	0.198	6.70	9.48	73850	74600	104540	105600	1.40	8.0	17.5	
4	0.670	4	0.501	0.20	0.197	6.65	9.45	73290	74410	104200	105790	1.50	8.0	18.8	
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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

Safdar Hussain
Resident Engineer, ACE, Danish School Mankera Residency

Test Performed By: Dr. /Engr. S. Asad Ali Gillni

Client Reference: ACE/RE-PDS/MNK/BHK/20/341

SOM Lab

Ref: 3061(Page-1/1)

Dated: 05-10-2020

Dated: 06-10-2020

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	2.752	8	1.015	0.79	0.809	33.12	50.87	92460	90290	142000	138670	1.00	8.0	12.5	
2	2.753	8	1.015	0.79	0.809	33.03	50.76	92210	90040	141720	138390	1.00	8.0	12.5	
3	1.474	6	0.743	0.44	0.433	14.17	18.57	71020	72170	93100	94600	1.40	8.0	17.5	
4	1.430	6	0.731	0.44	0.420	13.97	19.34	70000	73340	96930	101540	1.50	8.0	18.8	
5	0.657	4	0.496	0.20	0.193	6.83	9.17	75320	78050	101170	104840	1.30	8.0	16.3	
6	0.658	4	0.496	0.20	0.193	6.83	9.17	75320	78050	101170	104840	1.30	8.0	16.3	
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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

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

Maj Adnan Khalid ®

Dy Dir MTL.

Testing of J-Bolt, External External Elec Works (U/G) Pkg 2 & 4, Prism-9, DHA Phase-IX - (M/S NLC)

Client Reference: 408/241/E/996/56

Dated: 05-10-2020

SOM Lab Ref: CED/SOM/3055(Page-1/1)

Dated: 06-10-2020

Test: Tension Test

Test Specification: ASTM-F -1554

Sample Type: J Bolt

Gauge Length: 200 mm

S.No.	Dia.		Area	Yield Load	Ultimate Load	Yield Stress	Ultimate. Stress	Elongation	Gauge Length	%age Elongation	Reduction of Area (%)
	Original Diameter	Tested Diameter									
	mm	mm	mm ²	kN	kN	MPa	MPa	mm	M m	%	
1	25	24.62	476	170.00	244.50	358	514	45.0	200	22.5	52.3
2	25	24.73	480	213.00	278.70	444	561	25.0	200	12.5	47.6
3	25	25.17	497	192.70	476.0	388	555	40.0	200	20.0	43.0
4	25	25.16	498	195.00	276.5	393	556	45.0	200	22.5	46.0

Note:-

Only Four Samples
Received and Tested

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

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

Maj Adnan Khalid ®

Dy Dir MTL.

Testing of Anchor -Bolt, (Y-Type) External (U/G) Elec with Street Light System Sector-P Pkg -1, Prism -9, DHA Phase-IX - (M/S DHA Const Coy)

Client Reference: 408/241/E/995-B/114

Dated: 05-10-2020

SOM Lab Ref: CED/SOM/3063 (Page-1/1)

Dated: 07-10-2020

Test: Tension Test

Test Specification: ASTM-F -1554

Sample Type: Y Bolt

Gauge Length: 25 mm

S.No.	Dia.		Area	Yield Load	Ultimate Load	Yield Stress	Ultimate Stress	Elongation	Gauge Length	%age Elongation	Reduction of Area (%)
	Original Diameter	Tested Diameter									
	mm	mm	mm ²	kN	kN	MPa	MPa	mm	mm	%	
1	12	12.0	113.0	-	55.0	-	468.81	10.00	25	20.0	39.5
2	12	12.0	113.0	-	62.0	-	548.2	11.25	25	22.5	58.5
3	12	12.0	113.0	-	76.0	-	671.99	11.25	25	22.5	64.0

Note:-

Only Three Samples
Received and Tested

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

Test Performed By: Dr. Syed Asad Ali Gillani

M. Ubaid Ullah Khalid
Manager Marketing
Fibre Craft Industries, Lahore

Client Reference: FCI/20/CR/18021

Dated: 04-10-2020

SOM Laboratory Reference: CED/SOM/3059(Page-1/2)

Dated: 06-10-2020

Test: Stiffness Test & Tensile Test & Compressive Test

Sample Type: GRP Pipe 450mm Diameter

Stiffness Test (Parallel Plate Loading Test as per ASTM-D-2412)

(GRP Pipe 450mm)

Total Length = 308 mm, External Diameter = 460 mm, Wall Thickness = 5.5 mm

Percentage Reduction in Diameter of Sample	Compression Load, P (kN)	Stiffness (Corrected)			Remarks
		Pipe Stiffness (kN/m ²)	Stiffness Factor (N-m)	Specific Tangential initial Stiffness (N/m ²)	
5%	2.6	396	692	7649	No Crack Observed
10%	3.6	295	516	5702	No Crack Observed
15%	4.5	264	462	5108	No Crack Observed
20%	5.1	241	422	4659	No Crack Observed

Tensile Test

Sample Type	Size of Sample (mm)	Ultimate Load (kN)	Ultimate Stress (MPa)
GRP Pipe (450mm)	14.0 x 6.0	2.7	32.142

Compression Strength Test (ASTM-D-695)

Sample Type	Size of Sample (mm)	Compression Load (kN)	Compressive Stress (MPa)
GRP Pipe (450mm)	13.0 x 11.0	9.0	62.937

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

Test Performed By: Dr. Syed Asad Ali Gillani

M. Ubaid Ullah Khalid
Manager Marketing
Fibre Craft Industries, Lahore

Client Reference: FCI/20/CR/18021

Dated: 04-10-2020

SOM Laboratory Reference: CED/SOM/3059(Page-2/2)

Dated: 06-10-2020

Test: Stiffness Test & Tensile Test & Compressive Test

Sample Type: GRP Pipe 400mm Diameter

Stiffness Test (Parallel Plate Loading Test as per ASTM-D-2412)

(GRP Pipe 400mm)

Total Length = 308 mm, External Diameter = 410 mm, Wall Thickness = 6.5 mm

Percentage Reduction in Diameter of Sample	Compression Load, P (kN)	Stiffness (Corrected)			Remarks
		Pipe Stiffness (kN/m ²)	Stiffness Factor (N-m)	Specific Tangential initial Stiffness (N/m ²)	
5%	3.05	521	638	10197	No Crack Observed
10%	5.55	511	625	9996	No Crack Observed
15%	8.05	532	650	10395	No Crack Observed
20%	10.10	537	657	10502	No Crack Observed

Tensile Test

Sample Type	Size of Sample (mm)	Ultimate Load (kN)	Ultimate Stress (MPa)
GRP Pipe (400mm)	14.0 x 6.0	2.2	26.190

Compression Strength Test (ASTM-D-695)

Sample Type	Size of Sample (mm)	Compression Load (kN)	Compressive Stress (MPa)
GRP Pipe (400mm)	10.5 x 10.0	8.9	34.761

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

