Arfan Nazir, Manager Civil **Test Performed By:** **Dr. /Engr.** Nauman Khurram

Nishat Linen (Pvt) Ltd.(Const Of Nishat Linen Fabric Godown Extension Lahore)

Client Reference: NL/ST/003 **SOM Lab Ref:** 396 (Page-1/1)

Dated: 17-12-2024 **Dated:** 18-12-2024

Test: Tension Test **Test Specification:** ASTM-A-615

Guage Length: 200 mm **Sample Type:** MS Def Bar (Afaq 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	3.836	25	24.95	491	489	242.50	367.00	494	496	747	751	30.0	200	15.0	
2	3.879	25	25.08	491	494	246.00	370.20	501	498	754	750	30.0	200	15.0	
3	0.988	12	12.66	113	126	60.20	86.20	533	479	763	685	25.0	200	12.5	
4	0.990	12	12.67	113	126	61.20	87.50	542	486	774	694	25.0	200	12.5	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack
12mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six 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

Manager Technical
Malik Muhammad Riaz
Bin Tariq Pvt. Ltd.
(Project `Manufacturing & Supply of FRP Pultruded Pipe & Tube)

Client Reference: BTPL/Sales/CD/24-312 Dated: 18-12-2024

SOM Laboratory Reference: CED/SOM/397(Page-1/1) Dated: 18-12-2024

Test: Tensile Test, Flexure Test & Compression Test

Tensile Test (ASTM-D-638)

Sample Type	Size of Sample (mm)	Ultimate Load (kN)	Ultimate Stress (MPa)
FRP Pultruded Pipe	25.20 x 5.0	62.0	492.06
FRP Pultruded Tube	24.40 x 4.5	42.0	382.51

Flexural Strength Test (ASTM-D-790)

Sample Type	Size of Sample (mm)			Flexural Load (kN)	Flexural Stress (MPa)
	unsupported Length	Breadth	Height		
FRP Pultruded Pipe	250mm	42.7mm	5.0mm	1.45	509.36
FRP Pultruded Tube	250mm	41.7mm	4.5mm	1.05	466.30

Compression Strength Test (ASTM-D-695)

Sample Type	Size of Sample (mm)	Compression Load (kN)	Compressive Stress (MPa)
FRP Pultruded Pipe	28.20 x 24.4	138.6	201.43
FRP Pultruded Tube	31.0 x 25.9	132.0	164.40

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

Abdul Baseet **Test Performed By:** **Dr. /Engr.** Nauman Khurram

ME Banu Mukhtar Contracting(Pvt.) Ltd.(Burj-1 By AJWA Builders)

SOM Lab

Client Reference: DOC-BMC/AJWA/152 **Ref:** 392 (Page-1/1)

Dated: 17-12-2024 **Dated:** 18-12-2024

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	1.476	6	0.743	0.44	0.434	16.36	20.39	82010	83140	102190	103600	1.20	8.0	15.0	
2	1.506	6	0.751	0.44	0.443	16.18	20.20	81090	80540	101270	100590	1.20	8.0	15.0	
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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

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

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

Client Reference: 111/DD/Infra/Lab/J/522
Dated: 17-12-2024

SOM Lab Ref: 394 (Page-1/1)
Dated: 18-12-2024

Test: Tension Test & Bend Test
Test Specification: ASTM-A-615 Defformed
Gauge Length: 8 inch
Sample Type: 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	2.665	8	0.998	0.79	0.783	22.02	35.83	61470	62020	100030	100930	1.40	8.0	17.5	
2	2.655	8	0.997	0.79	0.780	21.83	36.49	60960	61740	101880	103190	1.30	8.0	16.3	
3	1.518	6	0.754	0.44	0.446	13.78	21.78	69080	68150	109190	107720	1.40	8.0	17.5	
4	1.527	6	0.756	0.44	0.449	13.93	21.89	69850	68450	109700	107500	1.40	8.0	17.5	
5	0.686	4	0.507	0.20	0.202	6.29	9.60	69360	68670	105890	104840	1.20	8.0	15.0	
6	0.667	4	0.500	0.20	0.196	6.03	9.23	66550	67910	101730	103810	1.30	8.0	16.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Nine Samples Received and Tested

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

Banoori
Islamabad.

Test Performed By: **Dr. /Engr.** Nauman Khurram

Client Reference: Nil
Dated: 18-12-2024

SOM Lab
Ref: 398 (Page-1/1)
Dated: 18-12-2024

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	1.487	6	0.746	0.44	0.437	13.00	18.37	65150	65600	92070	92710	1.70	8.0	21.3	
2	1.464	6	0.740	0.44	0.430	13.25	18.78	66430	67970	94120	96310	1.60	8.0	20.0	
3	0.661	4	0.497	0.20	0.194	6.12	8.41	67450	69530	92740	95610	1.60	8.0	20.0	
4	0.664	4	0.498	0.20	0.195	5.86	8.31	64640	66290	91610	93960	1.50	8.0	18.8	
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BEND TEST:

--	No Bend test performed

Note:-

Only Four Samples Received and Tested

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

M.Yasir Kiani, RE **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

JCP Wahga NESPAK. (Expension Of Joint Check Post Wahga, Lahore)

Client Reference: 4749/031/YK/01/104 **SOM Lab Ref:** 399 (Page-1/1)

Dated: 16-12-2024 **Dated:** 18-12-2024

Test: Tension Test **Test Specification:** 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	2.658	8	0.997	0.79	0.781	22.09	34.81	61670	62380	97190	98300	1.50	8.0	18.8	
2	2.651	8	0.996	0.79	0.779	22.58	35.39	63040	63930	98810	100200	1.40	8.0	17.5	
3	1.506	6	0.751	0.44	0.443	13.37	19.95	67040	66590	99990	99320	1.40	8.0	17.5	
4	1.500	6	0.749	0.44	0.441	13.12	19.69	65760	65610	98720	98490	1.20	8.0	15.0	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

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

Mohsin Abbas **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

QAQC Manager Zameen Development.(Const. Of Phoenix Project by Zameen Development,Lahore)

Client Reference: ZD/QAQC/Phoenix/04 **SOM Lab Ref:** 401 (Page-1/1)

Dated: 18-12-2024 **Dated:** 18-12-2024

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	0.666	4	0.500	0.20	0.196	6.70	8.94	73850	75360	98580	100600	1.20	8.0	15.0	H # 31
2	0.671	4	0.501	0.20	0.197	7.08	9.33	78130	79320	102860	104420	1.00	8.0	12.5	H # 31
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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

Nasir Mahmood, CM **Test Performed By:** **Dr. /Engr.** Nauman Khurram

Elite Engineering (Pvt) Ltd.(Project: Sitara 3 JAYS Tower)

SOM Lab

Client Reference: EEPL/08/EL-14 **Ref:** 402 (Page-1/1)

Dated: 18-12-2024 **Dated:** 18-12-2024

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Markhor 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	2.568	8	0.980	0.79	0.755	22.78	33.54	63610	66550	93630	97970	1.30	8.0	16.3	
2	2.593	8	0.985	0.79	0.762	24.87	33.69	69440	71990	94050	97510	1.40	8.0	17.5	
3	1.488	6	0.746	0.44	0.437	15.11	20.13	75720	76240	100910	101610	1.30	8.0	16.3	
4	1.482	6	0.745	0.44	0.436	15.44	20.51	77410	78120	102800	103750	1.30	8.0	16.3	
5	0.665	4	0.498	0.20	0.195	6.03	7.87	66550	68250	86780	89010	1.20	8.0	15.0	
6	0.663	4	0.498	0.20	0.195	6.01	7.82	66320	68020	86220	88430	1.10	8.0	13.8	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Nine Samples Received and Tested

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

Sub Divisional officer, **Test Performed By:** **Dr. /Engr.** Nauman Khurram

Public Health Engg: Sub Div Bhakkar.(Urban Sewerage/Drainage,PCC Slab Brick Pavement)

Client Reference: 174/BK **SOM Lab Ref:** 403(Page-1/1)

Dated: 18-11-2024 **Dated:** 18-12-2024

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	0.672	4	0.501	0.20	0.197	6.57	8.79	72510	73610	96900	98370	1.10	8.0	13.8	
2	0.673	4	0.502	0.20	0.198	6.47	8.72	71380	72100	96110	97080	1.20	8.0	15.0	
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BEND TEST:

--	No Bend test performed

Note:-

Only Two Samples Received and Tested

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

Ali Zahid Latif, RE **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

Nespak-Turkpak JV Lhr.(Reconstruction of Old P&D Building,Lahore)

Client Reference: 4674/P&D/13/09/AZL/78 **SOM Lab Ref:** 406 (Page-1/1)

Dated: 18-12-2024 **Dated:** 18-12-2024

Test: Tension Test & Bend Test **Test Specification:** 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	2.642	8	0.994	0.79	0.776	24.11	39.72	67310	68520	110900	112900	1.30	8.0	16.3	
2	1.501	6	0.749	0.44	0.441	13.32	21.25	66780	66630	106530	106290	1.30	8.0	16.3	
3	1.494	6	0.748	0.44	0.439	13.37	21.94	67040	67190	109960	110210	1.40	8.0	17.5	
4	0.667	4	0.500	0.20	0.196	5.93	9.12	65420	66760	100610	102660	1.30	8.0	16.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Eight Samples Received and Tested

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