

**Test Performed By:** Dr. Syed Asad Ali Gillani

Rimsha Naz  
Application & Design Engineer  
Fibre Craft Industries (Pvt) Ltd.  
(Fiberglass Filament Wound Tank)

**Client Reference:** FCI/24/CR/23443

Dated: 31-10-2024

**SOM Laboratory Reference:** CED/SOM/139(Page-1/1)

Dated: 01-11-2024

**Test:** Tensile Test & Compression Test

**Sample Type:** Fiberglass

**Tensile Test (ASTM-D-638)**

Sr #	Sample Type	Size of Sample (mm)	Ultimate Load (kN)	Ultimate Stress (MPa)
1	Fiberglass	26.1 x 19.4	89.7	177.15
2	Fiberglass	26.6 x 20.1	75.7	141.59
3	Fiberglass	27.0 x 19.1	92.0	178.40

**Compression Strength Test (ASTM-D-695)**

Sr #	Sample Type	Size of Sample (mm)	Compression Load (kN)	Compressive Stress (MPa)
1	Fiberglass	13.8 x 13.3	20.0	108.97
2	Fiberglass	13.6 x 14.0	18.70	98.21

**Note:** Please always confirm the results of above report on web: [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

**Test Performed By:** Dr. Syed Asad Ali Gillani

Rimsha Naz  
Application & Design Engineer  
Fibre Craft Industries (Pvt) Ltd.  
(Fiberglass Filament Wound Tank)

**Client Reference:** FCI/24/CR/23442

Dated: 31-10-2024

**SOM Laboratory Reference:** CED/SOM/141(Page-1/1)

Dated: 04-11-2024

**Test:** Flexure Test

**Sample Type:** Fiberglass

**Flexural Strength Test (ASTM-D-790)**

Sr #	Sample Type	Size of Sample (mm)			Flexural Load (kN)	Flexural Stress (MPa)
		unsupported Length	breadth	height		
1	Fiberglass	300mm	26.2	10.4	1.85	293.77
2	Fiberglass	300mm	27.6	10.1	2.0	319.66
3	Fiberglass	300mm	25.0	10.2	1.90	328.71

**Note:** Please always confirm the results of above report on web: [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Engr. Farrukh Alvi

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Dy. General Manager Works.Habib Rafiq Engineering (Pvt.) Ltd.(101 Tower,Lahore)

Client Reference: HRLE/SKG/2024/Aziz/9.295/176

SOM Lab Ref:

220 (P-1/1)

Dated: 18-11-2024

Dated:

18-11-2024

Test: Tension Test

Test Specification:

ASTM-A706

Guage Length: 200 mm

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)				
	kg/m	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	4.928	28	28.28	616	628	281.50	457.50	457	449	743	729	32.5	200	16.3	
2	4.916	28	28.24	616	626	279.50	453.70	454	447	737	725	35.0	200	17.5	
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**BEND TEST:**

28mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Engr. Farrukh Alvi

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Dy. General Manager Works.Habib Rafiq Engineering (Pvt.) Ltd.(101 Tower,Lahore)

Client Reference: HRLE/SKG/2024/Kamran/174-B/2nd Re-Test

SOM Lab Ref:

221 (P-1/1)

Dated: 18-11-2024

Dated:

18-11-2024

Test: Tension Test

Test Specification:

ASTM-A-615

Gauge Length: 200 mm

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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	2.984	22	22.00	387	380	213.70	280.70	552	563	725	739	32.5	200	16.3	
2	2.909	22	21.72	387	371	185.00	251.70	478	500	650	680	35.0	200	17.5	
3	2.972	22	21.96	387	379	214.00	279.70	553	566	723	739	32.5	200	16.3	
4	2.987	22	22.01	387	380	175.00	252.50	452	460	652	664	37.5	200	18.8	
5	2.916	22	21.75	387	371	187.00	254.20	483	504	657	685	32.5	200	16.3	
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Witnessed By: M. Irfan (QC Engr/HRL), M.Akram(101 Group)

**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Five Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Sheikh Maqbool, RE (4521)  
 NESPAK Lahore.(Renovation of Gaddafi Stadium Lahore Project)

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

**Client Reference:** RE/4521/04/MH/52  
**SOM Lab Ref:** CED/SOM/224 (Page-1/1)  
**Test:** Tension Test & Bend Test  
**Sample Type:** Deformed Bar (Mughal Steel)

**Dated:** 04-11-2024  
**Dated:** 18-11-2024  
**Test Specification:** ASTM-A 615  
**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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.870	25	25.05	491	493	255.20	332.20	520	518	677	674	35.0	200	17.5	
2	3.862	25	25.03	491	492	254.70	332.20	519	518	677	676	35.0	200	17.5	
3	2.424	20	19.83	314	309	164.70	212.20	524	534	675	688	32.5	200	16.3	
4	2.428	20	19.85	314	309	164.00	211.00	522	531	672	683	35.0	200	17.5	
5	0.884	12	11.98	113	113	61.00	77.20	539	542	683	686	27.5	200	13.8	
6	0.894	12	12.04	113	114	63.20	77.20	559	556	683	679	27.5	200	13.8	
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**BEND TEST:**

25mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
12mm	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](http://www.uet-civil.edu.pk)

Sheikh Maqbool, RE (4521)

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

NESPAK Lahore.(Renovation of Gaddafi Stadium Lahore Project)

Client Reference: RE/4521/04/MH/47

Dated: 02-11-2024

SOM Lab Ref: CED/SOM/225 (Page-1/1)

Dated: 18-11-2024

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar (Mughal 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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.930	25	25.26	491	501	243.50	329.00	496	487	670	657	37.5	200	18.8	
2	3.916	25	25.20	491	499	249.50	333.20	508	501	679	668	40.0	200	20.0	
3	2.434	20	19.87	314	310	162.00	204.20	516	523	650	659	30.0	200	15.0	
4	2.433	20	19.86	314	310	159.50	203.70	508	515	648	658	35.0	200	17.5	
5	0.883	12	11.97	113	112	61.50	77.20	544	547	683	687	30.0	200	15.0	
6	0.880	12	11.95	113	112	62.70	78.70	554	560	696	703	27.5	200	13.8	
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**BEND TEST:**

25mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
12mm	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](http://www.uet-civil.edu.pk)

M.Nadeem Zafarullah

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

Incharge for MD SNGPL.(Underground Water Tank For Fire Fighting at Rigital Distribution Office Lhr)

Client Reference: CC/UGWT/RDO/LHR

SOM Lab

Ref: 217 (Page-1/1)

Dated: 14-11-2024

Dated: 18-11-2024

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.453	6	0.737	0.44	0.427	14.42	21.66	72300	74500	108580	111880	1.10	8.0	13.8	
2	1.456	6	0.738	0.44	0.428	17.28	21.92	86610	89040	109850	112930	1.10	8.0	13.8	
3	0.668	4	0.500	0.20	0.196	8.07	9.43	89030	90850	103980	106100	1.00	8.0	12.5	
4	0.671	4	0.501	0.20	0.197	6.95	8.82	76660	77830	97230	98720	1.00	8.0	12.5	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Four Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Riaz Construction Company  
205-A Block NFC Street1, Lahore.(Karnkay High School, Lahore Cantt)

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

**Client Reference:** Nil  
**Dated:** 18-11-2024

**SOM Lab Ref:** 218 (Page-1/1)  
**Dated:** 18-11-2024

**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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.472	6	0.743	0.44	0.433	14.80	20.08	74190	75390	100660	102290	1.30	8.0	16.3	
2	0.667	4	0.500	0.20	0.196	6.68	8.82	73630	75130	97230	99220	1.00	8.0	12.5	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  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](http://www.uet-civil.edu.pk)

G3 Engg Consulting Pvt Ltd

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

The Women University Multan.(Const Of Admin Block for Pharmacy & Computer Science)

Client Reference: REG3/WUM/181

SOM Lab

Ref: 219 (Page-1/1)

Dated: 13-18-2024

Dated: 18-11-2024

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.672	8	1.000	0.79	0.785	23.96	38.35	66880	67300	107060	107740	1.50	8.0	18.8	
2	2.670	8	1.000	0.79	0.785	23.77	38.38	66370	66790	107140	107830	1.50	8.0	18.8	
3	0.671	4	0.501	0.20	0.197	6.29	9.50	69360	70410	104770	106360	1.20	8.0	15.0	
4	0.670	4	0.501	0.20	0.197	6.22	9.38	68570	69620	103420	104990	1.30	8.0	16.3	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine 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](http://www.uet-civil.edu.pk)

Z.H Kazmi

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

Z.H.Kazmi & Associates.(HBL Bank Ltd Railway Road Relocation Branch 0405 Gujrat)

**Client Reference:** Nil

**SOM Lab**

**Ref:** 222(Page-1/1)

**Dated:** 18-11-2024

**Dated:** 18-11-2024

**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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.531	6	0.757	0.44	0.450	15.80	18.76	79200	77440	94020	91930	1.50	8.0	18.8	
2	0.667	4	0.500	0.20	0.196	7.08	8.61	78130	79720	94990	96930	1.40	8.0	17.5	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  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](http://www.uet-civil.edu.pk)

Yasir Ahmad  
GM-Works FF Steel Lahore.

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

Client Reference: Nil  
Dated: 11-11-2024

SOM Lab  
Ref: 223 (Page-1/1)  
Dated: 18-11-2024

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

Test Specification: ASTM-A-615  
Sample Type: 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.025	5	0.619	0.31	0.301	10.45	13.93	74340	76560	99140	102100	1.20	8.0	15.0	1
2	1.023	5	0.619	0.31	0.301	10.72	14.24	76300	78580	101310	104340	1.10	8.0	13.8	2
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Ahmad Associates  
Lahore.(Project 18KM Lahore Kasur Road Sufiabad Descon Lahore)

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

**Client Reference:** IAA-200445

**Dated:** 18-11-2024

**Test:** Tension Test & Bend Test

**Gauge Length:** 8 inch

**Test Specification:**

**Sample Type:**

**SOM Lab**

**Ref:** 226(Page-1/1)

**Dated:** 18-11-2024

ASTM-A-615

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.668	4	0.500	0.20	0.196	7.80	9.48	85990	87750	104540	106670	1.30	8.0	16.3	
2	0.672	4	0.501	0.20	0.197	7.75	9.45	85430	86730	104200	105790	1.30	8.0	16.3	
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**BEND TEST:**

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

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)