

Engr. Khawaja Sajid
Manager Civil, Orient , Lahore

Test Performed By:

Dr. /Engr.

S. Asad Ali Gillani

Client Reference: ORIENT/AFCO/Hotel Tower/Steel/008

Dated: 30-09-2019

SOM Lab Ref: CED/SOM/1489 (Page-1/1)

Dated: 30-09-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Sample Type: 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	3.578	25	24.10	491	456	202.90	338.50	413	445	690	743	32.5	200	16.3	
2	3.593	25	24.14	491	458	204.50	337.20	417	447	687	737	32.5	200	16.3	
3	2.938	22	21.83	380	374	166.70	267.50	439	446	704	715	37.5	200	18.8	
4	2.966	22	21.94	380	378	167.00	268.00	439	442	705	710	32.5	200	16.3	
5	1.525	16	15.73	201	194	83.50	131.70	415	430	655	678	30.0	200	15.0	
6	1.513	16	15.67	201	193	80.50	131.20	400	418	653	681	35.0	200	17.5	
7	0.873	12	11.90	113	111	49.50	74.70	438	445	660	672	37.5	200	18.8	
8	0.886	12	11.99	113	113	50.50	79.50	447	448	703	705	25.0	200	12.5	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Twelve Samples Received and Tested
22mm	Sample bend through 180 degrees Satisfactorily without any crack	
16mm	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

Israr ullah Khan
Resident Engineer, House No 70-Ajinnah Town, Quetta

Test Performed By: Dr. /Engr.

S Asad Ali
Gillani

Client Reference: 3962/101/IUK/440

SOM Lab

Ref: 1486(Page-1/1)

Dated: 14-09-2019

Dated: 30-09-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(Abbas 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	1.470	6	0.742	0.44	0.432	13.81	18.81	69240	70520	94270	96020	1.50	8.0	18.8	
2	1.471	6	0.742	0.44	0.432	14.50	19.18	72660	74000	96160	97940	1.60	8.0	20.0	
3	1.040	5	0.624	0.31	0.306	9.12	12.97	64910	65760	92250	93460	1.50	8.0	18.8	
4	1.055	5	0.628	0.31	0.310	9.12	13.58	64910	64910	96600	96600	1.50	8.0	18.8	
5	0.654	4	0.494	0.20	0.192	5.83	8.12	64300	66980	89590	93320	1.50	8.0	18.8	
6	0.644	4	0.491	0.20	0.189	5.93	8.18	65420	69230	90150	95400	1.30	8.0	16.3	
7	0.677	4	0.503	0.20	0.199	8.05	9.07	88800	89250	100050	100550	1.30	8.0	16.3	
8	0.677	4	0.503	0.20	0.199	7.29	8.38	80370	80780	92400	92870	1.40	8.0	17.5	
9	0.583	4	0.467	0.20	0.171	5.91	8.97	65200	76260	98920	115700	1.20	8.0	15.0	
10	0.658	4	0.496	0.20	0.193	5.91	9.07	65200	67560	100050	103670	1.20	8.0	15.0	

BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Fifteen 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

Engr Imran Zahid,
A. Senior Engineer, University of Education Lahore

Test Performed By: Dr. /Engr.

S. Asad Ali
Gillani

Client Reference: UE/Engg/UE/2019/573

SOM Lab

Ref: 1487(P-1/1)

Dated: 25-09-2019

Dated: 30-09-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar (AF
Steel)

Gauge Length: 8 inch

Sample Type:

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	2.694	8	1.004	0.79	0.792	23.52	34.58	65650	65490	96530	96290	1.40	8.0	17.5	
2	2.707	8	1.007	0.79	0.796	23.45	34.32	65460	64960	95820	95100	1.20	8.0	15.0	
3	1.478	6	0.743	0.44	0.434	13.97	20.56	70000	70970	103060	104480	1.10	8.0	13.8	
4	1.486	6	0.746	0.44	0.437	13.66	19.83	68470	68940	99380	100060	1.10	8.0	13.8	
5	0.679	4	0.505	0.20	0.200	6.57	8.26	72510	72510	91050	91050	1.00	8.0	12.5	
6	0.660	4	0.497	0.20	0.194	7.29	8.99	80370	82860	99150	102210	0.90	8.0	11.3	
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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

Abdul Ghafar
Project Manager Liberty Builders, Lahore

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

Client Reference: CONC - 20190730

SOM Lab

Ref: 11488(Page-1/1)

Dated: 30-09-2019

Dated: 30-09-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(Batala 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	2.617	8	0.990	0.79	0.769	23.60	34.91	65880	67680	97470	100130	1.10	8.0	13.8	
2	2.608	8	0.988	0.79	0.766	22.85	34.58	63810	65800	96530	99550	1.40	8.0	17.5	
3	2.658	8	0.997	0.79	0.781	22.96	32.57	64090	64830	90920	91970	1.50	8.0	18.8	
4	1.483	6	0.745	0.44	0.436	15.46	20.71	77510	78220	103830	104780	1.40	8.0	17.5	
5	1.479	6	0.744	0.44	0.435	15.90	21.10	79710	80630	105770	106980	1.30	8.0	16.3	
6	1.485	6	0.745	0.44	0.436	15.41	20.39	77260	77970	102190	103130	1.20	8.0	15.0	
7	0.695	4	0.510	0.20	0.204	6.39	8.94	70480	69100	98580	96650	1.30	8.0	16.3	
8	0.672	4	0.501	0.20	0.197	5.96	8.66	65760	66760	95550	97000	1.30	8.0	16.3	
9	0.674	4	0.502	0.20	0.198	6.65	8.99	73290	74030	99150	100150	1.10	8.0	13.8	
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BEND TEST:

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

Al- Hamd General Engineer
Services
Lahore

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

Client Reference: nil

SOM Lab

Ref: 1491(Page-1/1)

Dated: 28-09-019

Dated: 30-09-2019

Test: Tension Test

Test Specification:

ASTM-A-615

Deformed

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	2.645	8	0.995	0.79	0.777	25.40	34.40	70920	72110	96050	97650	1.50	8.0	18.8	
2	1.462	6	0.740	0.44	0.430	13.99	18.22	70100	71730	91310	93430	1.50	8.0	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BEND TEST:

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

Sub Divisional Officer
Buildings Sub Division, No 19, Lahore

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

Client Reference: 2298-B

SOM Lab

Ref: 1492 (Page-1/1)

Dated: 03-07-2019

Dated: 30-09-2019

Test: Tension 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	0.641	4	0.489	0.20	0.188	5.96	8.28	65760	69960	91280	97100	1.20	8.0	15.0	
2	0.665	4	0.498	0.20	0.195	6.22	8.53	68570	70330	94090	96500	1.40	8.0	17.5	
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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

Abdullah Khadim
Resident Engineer, DAR Engineering

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: DB-78/DAR/RE/ME/2019/0205

SOM Lab

Ref: 1493(Page-1/1)

Dated: 30-09-2019

Dated: 30-09-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar(Kamran Steel)

Gauge Length: 8 inch

Sample Type:

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	0.644	4	0.491	0.20	0.189	5.86	8.02	64640	68400	88470	93620	1.50	8.0	18.8	A-951
2	0.648	4	0.492	0.20	0.190	5.96	8.26	65760	69220	91050	95840	1.20	8.0	15.0	A-951
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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

Muhammad Farrukh Latif
Education Services (Pvt) Ltd.

Test Performed By: Dr. /Engr.

S. Asad Ali
Gillani

Client Reference: nil

Dated: 30-08-2019

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 11494 (Page-1/1)

Dated: 30-09-2019

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	2.573	8	0.981	0.79	0.756	24.59	34.37	68640	71730	95960	100280	1.30	8.0	16.3	
2	2.605	8	0.988	0.79	0.766	25.69	35.52	71720	73960	99180	102280	1.20	8.0	15.0	
3	0.672	4	0.501	0.20	0.197	7.36	9.09	81160	82400	100270	101800	0.90	8.0	11.3	
4	0.669	4	0.501	0.20	0.197	7.10	8.97	78350	79540	98920	100430	0.90	8.0	11.3	
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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

Test Performed By: Dr. Asad Ali Gillani

Qurban Ali Khan
Resident Engineer
TECNO Consultant International (Pvt) Ltd.
CPEC Package -1,

Client Reference: RE/CPEC/DIK/2019/570,
SOM Laboratory Reference: CED/SOM/1485(Page-1/1)
Test: Flexural Strength & Compression Strength
Sample Type: Cat Eyes
Test Specification: ASTM-D4280

Dated: 24-09-2019

Dated: .30-09-2019

Test Results

Sr. No.	Top Dimensions (mm)	Bottom Dimensions (mm)	Thickness (mm)	Inclination (Degree)	Flexural Load (Kg)	Compression Load (Kg)
1	75.0 x 45.5	101.0 x 89.0	16.0	31.79°	1218.0	18247

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

Test Performed By: Dr. Asad Ali Gillani

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

Client Reference: FCI/19/CR/17011

Dated: 30-09-2019

SOM Laboratory Reference: CED/SOM/1497(Page-1/1)

Dated: 01-10-2019

Test: Stiffness Test, Tensile Test, Compression Strength

Sample Type: GRP Pipe (1000mm Diameter)

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

(GRP Pipe 1000mm)

Total Length = 305 mm, External Diameter = 1042 mm, Wall Thickness = 14.0 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%	3.961	269	5442	5220	No Crack Observed

Tensile Test

Sample Type	Size of Sample (mm)	Ultimate Load (kN)	Ultimate Stress (MPa)
GRP Pipe (500mm)	16.0 x 14.0	31.5	140.625

Compression Strength Test

Sample Type	Size of Sample (mm)	Compression Load (kN)	Compression Stress (MPa)
GRP Pipe (700mm)	16.0 x 15.0	38.5	160.416

