Test Performed by: Dr.S. Asad Ali Gillani

Atif Mughal
Manager Material (Engr)
Central Lab DHA Islamabad- Rawalpindi

Client Reference No.: DHA/Central Lab/Ph-I/58 Dated: 18-04-2024

SOM Lab Ref: CED/SOM/3959 (P-1/1) Dated: 18-04-2024

Test Type: Flexural Strength & Crushing Strength Test **Standard: ASTM-C-875 - 98**

Sample Type: Asbestos Pipes (125mm, 150mm) Brand: WE Infra Tech

Flexural Load Results

Sample No.	Diameter (mm)		Thickness (mm)	Length of the Tested Sample (unsupported span) (mm)	Flexural Load (kN)
	Outer	Inner			
1	142	124.8	8.6	1219	4.90
2	143	125.6	8.7	1219	5.70
3	167	150.6	8.2	1372	6.50
4	167	149.6	8.7	1372	5.90

Crushing Load Results

Sample No.	Diameter (mm)		Thickness (mm)	Length of the Tested Sample (mm)	Crushing Load (kN)
	Outer	Inner			
1	143	126.0	8.5	30.0	2.20
2	143	125.6	8.4	30.0	2.70
3	166	149.6	8.2	30.0	2.20
4	167	151.0	8.0	30.0	2.50

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

Dy Dir Dev. DHA Gujranwala.(Const of InnoVista Technology Zone)

Client Reference: 111/3/DD/Dev/Soft Tech Park/16 **Dated:** 30-03-2024

SOM Lab Ref: CED/SOM/3952(Page-1/1) **Dated:** 18-04-2024

Test: Tension Test & Bend Test **Test Specification:** ASTM-F 1554

Sample Type: J Bolt (24mm) **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	3.906	24	25.18	452	498	211.50	334.50	468	425	739	672	35.0	200	17.5	
2	3.936	24	25.27	452	501	223.00	347.50	493	445	768	693	30.0	200	15.0	
3	4.038	24	25.59	452	514	220.00	349.50	486	428	773	680	37.5	200	18.8	
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BEND TEST:

--	No Bend test performed

Note:-

Only Three Samples Received and Tested

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

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

Director Projects Sheikhoo Sugar Mills (Steel Div),Anwar Abad Kot Addu,Muzaffargarh.

Client Reference: Nil **Dated:** 17-04-2024

SOM Lab Ref: CED/SOM/3960(Page-1/1) **Dated:** 18-04-2024

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

Sample Type: Deformed Bar (Sheikhoo 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	3.816	25	24.88	491	486	229.70	328.70	468	473	670	677	32.5	200	16.3	
2	2.420	20	19.81	314	308	158.70	209.20	505	515	666	679	30.0	200	15.0	
3	1.553	16	15.87	201	198	94.20	133.00	469	477	661	673	30.0	200	15.0	
4	0.888	12	12.00	113	113	57.20	76.70	506	506	678	678	25.0	200	12.5	
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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

FAG Textiles
Faisalabad.

Test Performed By: **Dr. /Engr.** Wasim Abbas

Client Reference: Nil
Dated: 18-04-2024

SOM Lab Ref: 3951 (Page-1/1)
Dated: 18-04-2024

Test: Tension Test & Bend Test
Gauge Length: 4 Inch

Test Specification: BS-4449
Sample Type: MS 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	1.489	6	0.747	0.44	0.438	15.01	19.93	75210	75560	99890	100350	1.00	4.0	25.0	Nomee
2	0.587	4	0.469	0.20	0.173	5.12	7.65	56430	65240	84310	97470	1.00	8.0	12.5	Nomee
3	1.482	6	0.745	0.44	0.436	14.55	19.34	72910	73580	96930	97820	1.40	8.0	17.5	Sheikhoo
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BEND TEST:

--	No Bend test performed

Note:-

Only Three Samples Received and Tested

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

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

Hussain Estate & Builders Lahore.(Constructing a 3.50 K Residential House in Model Town Lhr)

Client Reference: Nil **SOM Lab Ref:** 3953 (Page-1/1)

Dated: 18-04-2024 **Dated:** 18-04-2024

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	0.652	4	0.494	0.20	0.192	6.22	7.85	68570	71430	86560	90160	1.00	8.0	12.5	
2	0.649	4	0.493	0.20	0.191	6.07	7.67	66890	70040	84530	88520	1.00	8.0	12.5	
3	0.650	4	0.493	0.20	0.191	6.17	7.67	68010	71210	84530	88520	0.90	8.0	11.3	
4	0.661	4	0.497	0.20	0.194	6.03	7.67	66550	68610	84530	87150	1.00	8.0	12.5	
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BEND TEST:

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

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

ME Nespak,Hafizabad.(Dualization of Rd From Guj to M-2 Interchange at Kot Sarwar Via Hafizabad)

Client Reference: SA-466F/103/GH/ML/Lab/99 **SOM Lab Ref:** 3954 (Page-1/1)

Dated: 29-04-2024 **Dated:** 18-04-2024

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	2.686	8	1.002	0.79	0.789	25.30	34.02	70630	70720	94970	95090	1.60	8.0	20.0	
2	2.678	8	1.001	0.79	0.787	25.45	34.00	71060	71330	94910	95270	1.40	8.0	17.5	
3	1.503	6	0.750	0.44	0.442	14.80	18.98	74190	73860	95140	94710	1.50	8.0	18.8	
4	1.506	6	0.751	0.44	0.443	14.53	18.78	72810	72320	94120	93480	1.30	8.0	16.3	
5	0.670	4	0.501	0.20	0.197	7.34	9.04	80940	82170	99710	101230	1.00	8.0	12.5	
6	0.672	4	0.501	0.20	0.197	7.21	8.84	79470	80690	97460	98940	1.00	8.0	12.5	
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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

Allied Bank **Test Performed By:** **Dr. /Engr.** Wasim Abbas

Unit Head PMO ABL-UML-P#199-200.(Const Of ABL Upper Mall Lahore Plot No 199,200)

Client Reference: ABL-UML-QAQC;77 **SOM Lab Ref:** 3955 (Page-1/1)

Dated: 18-04-2024 **Dated:** 18-04-2024

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

Gauge Length: 8 inch **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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.699	8	1.005	0.79	0.793	26.73	37.23	74620	74340	103930	103540	1.30	8.0	16.3	
2	2.680	8	1.002	0.79	0.788	27.44	38.63	76610	76810	107860	108130	1.40	8.0	17.5	
3	1.510	6	0.752	0.44	0.444	14.50	19.39	72660	72000	97180	96310	1.20	8.0	15.0	
4	1.506	6	0.751	0.44	0.443	14.68	19.69	73580	73080	98720	98050	1.20	8.0	15.0	
5	1.044	5	0.625	0.31	0.307	10.27	13.86	73030	73750	98630	99590	1.10	8.0	13.8	
6	1.044	5	0.625	0.31	0.307	10.14	13.76	72160	72870	97910	98860	1.30	8.0	16.3	
7	0.660	4	0.497	0.20	0.194	6.78	8.99	74750	77070	99150	102210	1.10	8.0	13.8	
8	0.681	4	0.505	0.20	0.200	6.88	9.33	75880	75880	102860	102860	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
# 5	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Twelve Samples Received and Tested

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

Mohammad Aslam, MC S-2 **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

Allied Bank Limited, Engg Cell South-II Multan.(ABL New Grain Market Branch,R Y Khan)

Client Reference: Nil **SOM Lab Ref:** 3956 (Page-1/1)

Dated: 17-04-2024 **Dated:** 18-04-2024

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (SJ 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	2.576	8	0.982	0.79	0.757	28.03	35.32	78260	81670	98610	102910	1.40	8.0	17.5	
2	2.579	8	0.982	0.79	0.758	27.68	34.93	77270	80530	97530	101640	1.50	8.0	18.8	
3	1.475	6	0.743	0.44	0.433	15.39	18.42	77160	78400	92330	93820	1.50	8.0	18.8	
4	1.478	6	0.743	0.44	0.434	15.36	18.35	77000	78070	91970	93240	1.60	8.0	20.0	
5	0.660	4	0.497	0.20	0.194	8.79	8.79	96900	99890	96900	99890	1.00	8.0	12.5	
6	0.672	4	0.501	0.20	0.197	6.98	8.87	77000	78170	97800	99290	1.00	8.0	12.5	
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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

Faisal Siddique
Lahore

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

Client Reference: Nil
Dated: 18-04-2024

SOM Lab Ref: 3957 (Page-1/1)
Dated: 18-04-2024

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	2.600	8	0.986	0.79	0.764	23.55	33.18	65740	67980	92630	95780	1.30	8.0	16.3	
2	1.497	6	0.748	0.44	0.440	15.90	20.08	79710	79710	100660	100660	1.20	8.0	15.0	
3	0.666	4	0.500	0.20	0.196	6.52	8.66	71940	73410	95550	97500	1.00	8.0	12.5	
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BEND TEST:

--	No Bend test performed

Note:-

Only Three Samples Received and Tested

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

Asif Javed,RE **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

New Vision Engg Consult.(Govt.College Women Uni Sialkot,Const Of Faculty Natural Science Block)

Client Reference: NVEC/GCWUS/FNS-19-A **SOM Lab Ref:** 3958 (Page-1/1)

Dated: 06-03-2024 **Dated:** 18-04-2024

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	2.612	8	0.989	0.79	0.768	26.15	35.42	73000	75090	98890	101730	1.40	8.0	17.5	
2	2.739	8	1.012	0.79	0.805	27.12	36.21	75700	74290	101080	99200	1.20	8.0	15.0	
3	1.469	6	0.742	0.44	0.432	13.78	19.54	69080	70360	97950	99760	1.20	8.0	15.0	
4	1.466	6	0.741	0.44	0.431	13.78	19.57	69080	70530	98100	100150	1.20	8.0	15.0	
5	0.670	4	0.501	0.20	0.197	6.75	9.28	74420	75550	102290	103850	1.00	8.0	12.5	
6	0.671	4	0.501	0.20	0.197	6.65	9.25	73290	74410	101960	103510	1.00	8.0	12.5	
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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