Nasir Mehmood
Construction Manager,Elite Engg.Ltd.(Sitara Heights 3-Jays Tower)

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

Client Reference: Nil
Dated: 13-12-2021

SOM Lab Ref: 5483(Page-1/1)
Dated: 17-12-2021

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	2.647	8	0.995	0.79	0.778	27.06	34.05	75560	76720	95050	96520	1.40	8.0	17.5	
2	2.658	8	0.997	0.79	0.781	27.93	35.24	77980	78880	98380	99510	1.50	8.0	18.8	
3	1.515	6	0.753	0.44	0.445	14.90	19.57	74700	73860	98100	97000	1.30	8.0	16.3	
4	1.462	6	0.740	0.44	0.430	15.14	20.10	75880	77640	100760	103100	1.40	8.0	17.5	
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Witnessed By: M. FAYYAZ RASUL (35202-8748064-5)

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

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

RE QA/QC Department,Bahria Town Lhr.(Disposal Station Block Eastern Ext.Ph-I Bahria Orchard Lhr)

Client Reference: QA/QC-Steel-2446 **SOM Lab Ref:** 5484(Page-1/1)

Dated: 15-12-2021 **Dated:** 17-12-2021

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	1.545	6	0.760	0.44	0.454	18.20	22.22	91210	88390	111390	107950	1.20	8.0	15.0	
2	1.509	6	0.751	0.44	0.443	17.04	21.10	85430	84850	105770	105050	1.20	8.0	15.0	
3	0.683	4	0.506	0.20	0.201	8.26	10.06	91050	90600	110950	110400	1.10	8.0	13.8	
4	0.665	4	0.498	0.20	0.195	6.22	8.41	68570	70330	92740	95120	1.40	8.0	17.5	
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BEND TEST:

# 6	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 Zubair **Test Performed By:** **Dr. /Engr.** S Asad Ali Gillani

Team Leader-JIPIC.(Const.of Main Canal Including Distribution Sys and Flood carrier Channels Etc)

Client Reference: JIPIC//2.18/2844 **SOM Lab Ref:** 5485(Page-1/1)

Dated: 17-12-2021 **Dated:** 17-12-2021

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	1.519	6	0.754	0.44	0.446	18.60	23.01	93250	92000	115320	113770	1.20	8.0	15.0	
2	1.479	6	0.744	0.44	0.435	17.20	20.66	86200	87190	103570	104760	1.10	8.0	13.8	
3	1.032	5	0.621	0.31	0.303	11.06	13.97	78690	80510	99360	101650	1.00	8.0	12.5	
4	1.033	5	0.622	0.31	0.304	10.96	13.61	77960	79500	96820	98730	1.00	8.0	12.5	
5	0.675	4	0.502	0.20	0.198	5.98	8.94	65990	66650	98580	99580	1.30	8.0	16.3	
6	0.671	4	0.501	0.20	0.197	5.98	9.02	65990	66990	99480	101000	1.40	8.0	17.5	
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BEND TEST:

# 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 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.** Asad Ali Gillani

Shujabad.(Const.of Pavilion in Football Ground,Prayer Room,Flood Light Poles and Boundary Wall)

Client Reference: 273/Sujabad **SOM Lab Ref:** 5486(Page-1/2)

Dated: 29-09-2021 **Dated:** 17-12-2021

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	1.496	6	0.748	0.44	0.440	14.48	20.08	72560	72560	100660	100660	1.20	8.0	15.0	
2	0.671	4	0.501	0.20	0.197	6.34	9.91	69920	70990	109260	110930	1.20	8.0	15.0	
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BEND TEST:

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

Note:-

Only Four 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.** Asad Ali Gillani

Shujabad.(Const.of Academic Block,Boundary Wall&Toilets In Govt Girls Primary School Jungle Khan)

Client Reference: 478/Sujabad **SOM Lab Ref:** 5486(Page-2/2)

Dated: 08-12-2021 **Dated:** 17-12-2021

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	1.531	6	0.757	0.44	0.450	18.01	21.07	90290	88280	105610	103270	1.00	8.0	12.5	
2	0.668	4	0.500	0.20	0.196	6.29	7.82	69360	70770	86220	87980	1.20	8.0	15.0	
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BEND TEST:

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

Note:-

Only Four Samples Received and Tested

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

Adnan Khalid Maj ® **Test Performed By:** **Dr. /Engr.** S Asad Ali Gillani

Dy Dir MTL,DHA Lahore,(Extn Of Coffee lounge, Kichen&Washroom at J Club DHA Ph-1)(M/S UCC)

Client Reference: 408/241/E/Lab/187/119 **SOM Lab Ref:** 5487(Page-1/1)

Dated: 17-12-2021 **Dated:** 17-12-2021

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	1.454	6	0.737	0.44	0.427	14.63	20.56	73320	75560	103060	106200	1.00	8.0	12.5	Model
2	1.444	6	0.735	0.44	0.424	14.42	19.62	72300	75030	98360	102070	1.20	8.0	15.0	Model
3	0.669	4	0.501	0.20	0.197	6.37	8.36	70260	71330	92180	93580	1.20	8.0	15.0	Kamran
4	0.674	4	0.502	0.20	0.198	6.49	8.41	71610	72330	92740	93680	1.20	8.0	15.0	Kamran
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BEND TEST:

# 6	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

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

Ittefaq Building Solution (Pvt.)Ltd. (Sapphire Diamond Ferozwatwan)(Yarn Warehouse)

Client Reference: IBS/SD/ST20 **SOM Lab Ref:** 5488(Page-1/2)

Dated: 17-12-2021 **Dated:** 17-12-2021

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	2.611	8	0.988	0.79	0.767	25.94	35.42	72430	74600	98890	101860	1.30	8.0	16.3	
2	2.589	8	0.984	0.79	0.761	24.03	34.63	67080	69630	96670	100360	1.30	8.0	16.3	
3	1.467	6	0.741	0.44	0.431	16.33	21.99	81860	83570	110210	112510	1.00	8.0	12.5	
4	1.480	6	0.744	0.44	0.435	16.79	22.94	84160	85120	114960	116290	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

Note:-

Only Six Samples Received and Tested

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

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

Ittfaq Building Solution (Pvt.)Ltd. (Sapphire Diamond Ferozwatwan)(New Apparel Village)

Client Reference: IBS/SD/ST21 **SOM Lab Ref:** 5488(Page-2/2)

Dated: 17-12-2021 **Dated:** 17-12-2021

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	1.511	6	0.752	0.44	0.444	15.87	19.85	79560	78840	99480	98590	1.10	8.0	13.8	
2	1.522	6	0.754	0.44	0.447	16.89	21.41	84670	83340	107300	105620	1.00	8.0	12.5	
3	0.653	4	0.494	0.20	0.192	6.57	8.72	72510	75530	96110	100120	1.00	8.0	12.5	
4	0.648	4	0.492	0.20	0.190	6.54	8.53	72170	75970	94090	99040	1.00	8.0	12.5	
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BEND TEST:

# 6	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

Test Performed by: Dr. S. Asad Ali Gillani

Engr.Syed Taufeeq Ahmad
Resident Engineer CEC-H&B(JV).
Mingora Distt.Swat.
Project: Construction Supervision Of "F/S Design and Construction of 02 No Flyover On Mingora-Kanju Rd SH:Mingora Bypass and Kanju Chowk, Distt.Swat, SH:Flyover at Mingora Bypass Rd.(Phase-I).

Reference No.: CEC-H&B/PKHA/RE/SWT/196.Steel Dated: 05-11-2021

SOM Lab Ref: CED/SOM/5482(Page-1/1) Dated: 17-12-2021

Test: Tensile Test, Elongation at Break, Tear Test, Hardness Test & Comp. Set Test

Sample Type: Elastomeric Bearing Pad

TENSILE STRENGTH AND ELONGATION TEST. (AS PER ASTM-D-412)

S. No	**Sample Size (mm)**	**Ultimate Load (kN)**	**Tensile Strength (Mpa)**	**Tensile Strength (kg/cm^2)**	**Elongation at Break**(%)
1	7.0 x 3.0	0.67	31.90	325.28	470.0

TEAR STRENGTH (AS PER ASTM-D-624)

S. No	**Sample Size (mm)**	**Ultimate Load (kN)**	**Tear Strength (N/mm)**
1	14.5 x 3.5	0.18	51.42

- COMPRESSION SET TEST (AS PER ASTM-D-395)

S. No.	**Thickness of Sample (mm)**	**Final Thickness (mm)**	**Compression set (%)**
1	10.2	9.90	2.94

- HARDNESS TEST (AS PER ASTM-D-2240)

S. No	**Sample Type**	**Hardness (Shore A)**
1	Elastomeric Bearing Pad	62.33