Mazhar ahmad Saeed **Test Performed By:** **Dr. /Engr.** Irfan Ul Hasan

RE Kachhi Canal Project.(KC-06B(2R)Const. Of Main Canal And Distibution System)

Client Reference: KCB/RE/KC-6B(2R)/146 **SOM Lab Ref:** 1270 (Page-1/1)

Dated: 17-11-2022 **Dated:** 18-11-2022

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	0.669	4	0.501	0.20	0.197	6.22	8.53	68570	69620	94090	95520	1.20	8.0	15.0	
2	0.672	4	0.501	0.20	0.197	5.78	8.66	63740	64710	95550	97000	1.00	8.0	12.5	
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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

Riaz Ahmad **Test Performed By:** **Dr. /Engr.** Irfan Ul Hasan

Riaz Construction Company.Lahore (TCF Primary School,Sham Key Bhattian,KSK)

Client Reference: Nil **SOM Lab Ref:** 1271 (Page-1/1)

Dated: 18-11-2022 **Dated:** 18-11-2022

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	2.675	8	1.000	0.79	0.786	29.56	36.70	82530	82950	102450	102970	1.30	8.0	16.3	
2	1.490	6	0.747	0.44	0.438	15.39	19.80	77160	77510	99230	99680	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 Four Samples Received and Tested

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

Best Builders
Lahore.(TCF High School, Chak No 236,Jaranwala)

Test Performed By: **Dr. /Engr.** Irfan Ul Hasan

Client Reference: Nil
Dated: 18-11-2022

SOM Lab Ref: 1273 (Page-1/1)
Dated: 18-11-2022

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	2.694	8	1.004	0.79	0.792	29.05	35.80	81110	80900	99950	99690	1.20	8.0	15.0	
2	1.478	6	0.743	0.44	0.434	16.21	19.88	81240	82370	99640	101010	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 Four Samples Received and Tested

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

UMT **Test Performed By:** **Dr. /Engr.** Irfan Ul Hassan

Director PMO UMT Lahore.(Steel of 4th and 5th Floor Slab Beams)

Client Reference: CB-2/23/22 **SOM Lab Ref:** 1274 (Page-1/2)

Dated: 18-11-2022 **Dated:** 18-11-2022

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Ittefaq 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	2.644	8	0.995	0.79	0.777	31.91	39.60	89070	90570	110560	112410	1.00	8.0	12.5	
2	2.614	8	0.989	0.79	0.768	31.91	39.32	89070	91630	109760	112910	1.20	8.0	15.0	
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BEND TEST:

# 8	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

UMT **Test Performed By:** **Dr. /Engr.** Irfan Ul Hassan

Director PMO UMT Lahore.(Steel of 4th and 5th Floor Slab Beams)

Client Reference: CB-2/24/22 **SOM Lab Ref:** 1274 (Page-2/2)

Dated: 18-11-2022 **Dated:** 18-11-2022

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Ittefaq 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	1.489	6	0.747	0.44	0.438	16.71	20.90	83750	84130	104750	105220	1.00	8.0	12.5	
2	1.492	6	0.747	0.44	0.438	16.31	20.59	81750	82130	103210	103680	1.10	8.0	13.8	
3	0.672	4	0.501	0.20	0.197	6.42	9.89	70820	71900	109040	110700	1.00	8.0	12.5	
4	0.672	4	0.501	0.20	0.197	7.44	10.42	82060	83310	114880	116630	1.10	8.0	13.8	
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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

Bridgeway Developers **Test Performed By:** **Dr. /Engr.** Irfan Ul Hassan

Lahore.(Slab & Beam at Pearl Residences By Bridgeway Dev 26 Block-C M.M Alam Rd Gulberg III Lhr)

Client Reference: Nil **SOM Lab Ref:** 1275 (Page-1/1)

Dated: 18-11-2022 **Dated:** 18-11-2022

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	2.662	8	0.998	0.79	0.782	26.20	34.30	73140	73890	95760	96740	1.50	8.0	18.8	
2	1.494	6	0.748	0.44	0.439	13.25	19.22	66430	66580	96320	96530	1.10	8.0	13.8	
3	0.675	4	0.502	0.20	0.198	6.73	8.99	74190	74940	99150	100150	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 Six Samples Received and Tested

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

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

P & CE Ittefaq Building Solution.(Diamond Denim By Saphhire Ferozewattwan)

Client Reference: IBS/SD/ST **SOM Lab Ref:** 1276 (Page-1/1)

Dated: 17-11-2022 **Dated:** 18-11-2022

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	2.557	8	0.978	0.79	0.751	29.26	38.45	81680	85920	107340	112920	1.10	8.0	13.8	
2	2.659	8	0.997	0.79	0.781	26.40	35.60	73710	74560	99380	100520	1.30	8.0	16.3	
3	0.670	4	0.501	0.20	0.197	6.22	7.90	68570	69620	87120	88450	1.30	8.0	16.3	
4	0.664	4	0.498	0.20	0.195	6.27	7.90	69130	70910	87120	89350	1.10	8.0	13.8	
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Witnessed By: Imran Ashfaq (Sapphire Diamond)

BEND TEST:

# 8	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

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

PM Citi Housing (Pvt) Ltd,sialkot.(Development Of Citi Housing)

Client Reference: Citi Housing (Pvt) Ltd/05/03 **SOM Lab Ref:** 1277 (Page-1/1)

Dated: 10-11-2022 **Dated:** 18-11-2022

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Afco 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	2.645	8	0.995	0.79	0.777	23.55	30.94	65740	66840	86370	87820	1.50	8.0	18.8	
2	2.645	8	0.995	0.79	0.777	23.50	31.24	65600	66700	87230	88680	1.50	8.0	18.8	
3	1.667	6	0.790	0.44	0.490	16.46	22.40	82520	74100	112260	100800	1.50	8.0	18.8	
4	1.671	6	0.791	0.44	0.491	16.74	22.53	83900	75190	112920	101190	1.40	8.0	17.5	
5	0.667	4	0.500	0.20	0.196	6.88	9.43	75880	77430	103980	106100	1.00	8.0	12.5	
6	0.667	4	0.500	0.20	0.196	6.95	9.53	76660	78230	105100	107250	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

Test Performed by: Dr. S. Asad Ali Gillani

University of Engineering & Technology
RE ECC-UET Peshawar.
Tribal Distt Khyber. (USAID Assisted FATA Infrastructure Program)
(Const of Jamrud Bypass Road Project Bridge Pkg II)

Reference No.: ECC-UET/FIP/JBR/2022/011 Dated: 07-11-2022
SOM Lab Ref: CED/SOM/1272(Page-1/1) Dated: 18-11-2022

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	8.0 x 3.2	0.92	35.93	366.45	560.0
2	8.0 x 3.2	1.0	39.06	398.32	600.0

TEAR STRENGTH (AS PER ASTM-D-624)

S. No	**Sample Size (mm)**	**Ultimate Load (kN)**	**Tear Strength (N/mm)**
1	16.0 x 3.2	0.48	150.0
2	17.0 x 3.2	0.42	131.25

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

S. No.	**Thickness of Sample (mm)**	**Final Thickness (mm)**	**Compression set (%)**
1	3.20	3.05	4.6

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

S. No	**Sample Type**	**Hardness (Shore A)**
1	Elastomeric Bearing Pad	62.66