Test Performed by: Dr. Syed Asad Ali Gilani

Engr. Farrukh Alvi
Deputy General Manager (Works)
Habib Rafiq Engineering (Pvt) Ltd.Lahore
(101 Tower, Lahore)

Client Reference No.: HRLE/SKG/2024/179 Dated: 04-12-2024

SOM Lab Ref: CED/SOM/320 (P-1/1) Dated: 06-12-2024

Test Type: Load Test/Slip Test

Sample Type: Anchor Plates/Wedges

Load Test:

S No	Sample Type	Ultimate Load (kN)	Remarks
1	Anchor Plates/Wedges	192.0	Strand Wire breaks at this load
Note: Please always confirm the results of above report on web www.uet-civil.edu.pk			

Witnessed By: M.Asghar (Resident Engineer 101 Group), M.Irfan (QC Engr/HRL)

Test Performed by: .S. Asad Ali Gillani

Muhammad Shahbaz Abbas
Executive Engineer GE(Army)-I Gwa.
(Const of 1 x Spec MT Shed For 91 Sig Bn at Gwa Cantt)

Client Reference No.: 6180-2804/24/E-6 Dated: 05-12-2024

SOM Lab Ref: CED/SOM/330 (Page 2/2) Dated: 06-12-2024

Sample Type: Deformed Bar (1",3/4",1/2") **Test Type:** Hardness Test

Hardness Test Details:

Machine used: Avery Rockwell Hardness Testing Machine
(Minor Load: 10 Kgf Major Load: 90.0 kgf Scale: B)

Hardness Test Results

Sample No.	**Sample Type**	**Hardness** avg
1	Deformed Bar (1")	HR – 95.83– B
2	Deformed Bar (3/4")	HR – 97.33– B
3	Deformed Bar (1/2")	HR – 92.33– B

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

Mohsin Baig
Manager Procurement Gharibwal Cement Ltd.Lahore

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

Client Reference: GCL/Purchase/UET/TEST/009 **Dated:** 06-12-2024
SOM Lab Ref: CED/SOM/323 (Page-1/1) **Dated:** 06-12-2024
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	2.460	20	19.96	314	313	143.00	235.20	455	457	749	752	32.5	200	16.3	
2	2.441	20	19.90	314	311	147.20	240.50	469	474	766	774	30.0	200	15.0	
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BEND TEST:

20mm	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

Engr. Muhammad Tariq Assai **Test Performed By:** **Dr. /Engr.** Wasim Abbas
GM Jafris and Steele (Pvt) Ltd.(Const Of Al-Munawar Residential)

Client Reference: Js80/526 **Dated:** 04-12-2024
SOM Lab Ref: CED/SOM/325 (Page-1/1) **Dated:** 06-12-2024
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	0.882	12	11.94	113	112	58.70	77.00	519	525	681	688	32.5	200	16.3	
2	0.870	12	11.88	113	111	54.00	72.50	477	487	641	654	35.0	200	17.5	
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BEND TEST:

12mm	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

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

Cattle Market,Jhang.(Const Of Model Cattle Market,Jhang)(ECSP)(FWO)

Client Reference: JHANG/FWO/2024/003 **SOM Lab Ref:** 319 (Page-1/1)

Dated: 03-12-2024 **Dated:** 06-12-2024

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	1.498	6	0.748	0.44	0.440	13.00	19.42	65150	65150	97340	97340	1.20	8.0	15.0	
2	1.499	6	0.749	0.44	0.441	12.97	19.54	65000	64850	97950	97730	1.40	8.0	17.5	
3	0.663	4	0.498	0.20	0.195	6.49	9.14	71610	73440	100830	103420	1.40	8.0	17.5	
4	0.665	4	0.498	0.20	0.195	6.17	8.79	68010	69750	96900	99380	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 Khalid Zaman **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

RE ECSP Lahore.(Model Cattle Market Shahpur Kanjra,Lahore)

Client Reference: ECSP/MCML/10 **SOM Lab Ref:** 322 (Page-1/1)

Dated: 03-12-2024 **Dated:** 06-12-2024

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Kisan 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	2.636	8	0.993	0.79	0.775	36.19	42.43	101030	102980	118440	120730	1.00	8.0	12.5	
2	2.631	8	0.992	0.79	0.773	36.90	42.41	103020	105280	118390	120990	1.00	8.0	12.5	
3	1.498	6	0.748	0.44	0.440	16.21	21.12	81240	81240	105870	105870	1.00	8.0	12.5	
4	1.487	6	0.746	0.44	0.437	16.21	21.07	81240	81800	105610	106340	0.90	8.0	11.3	
5	0.663	4	0.498	0.20	0.195	6.44	8.41	71040	72870	92740	95120	1.10	8.0	13.8	
6	0.659	4	0.497	0.20	0.194	6.29	8.28	69360	71500	91280	94100	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

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

RE ECSP Lahore.(Model Cattle Market Shahpur Khanjra,Lahore)

Client Reference: ECSP/MCML/09 **SOM Lab Ref:** 324 (Page-1/1)

Dated: 03-12-2024 **Dated:** 06-12-2024

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (AF 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	1.498	6	0.748	0.44	0.440	14.32	19.44	71790	71790	97440	97440	1.30	8.0	16.3	
2	1.499	6	0.749	0.44	0.441	14.55	19.67	72910	72750	98610	98390	1.20	8.0	15.0	
3	1.042	5	0.624	0.31	0.306	9.30	12.84	66140	67010	91380	92570	1.00	8.0	12.5	
4	1.037	5	0.623	0.31	0.305	9.38	12.90	66720	67820	91740	93250	1.00	8.0	12.5	
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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

Note:-

Only Six Samples Received and Tested

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

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

Asst Dir Lab DHA Bahawalpur Cantonment.(Enlistment of Hunza Steel at DHA Bahawalpur)

Client Reference: 530/QC/MTL **SOM Lab Ref:** 326 (Page-1/1)

Dated: 05-12-2024 **Dated:** 06-12-2024

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Hunza 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	0.661	4	0.497	0.20	0.194	7.29	8.89	80370	82860	98020	101050	1.40	8.0	17.5	
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BEND TEST:

# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Two Samples Received and Tested

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

M.Armughan Khan **Test Performed By:** **Dr. /Engr.** Wasim Abbas

DD (QCD) WASA,LDA,Lhr.(PCC/Drainage/Sewerage Scheme UC-270,Arayan Mor Kahna Nepal)

Client Reference: QCD/2445 **SOM Lab Ref:** 327 (Page-1/1)

Dated: 05-12-2024 **Dated:** 06-12-2024

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	6.85	8.61	75540	78690	94990	98940	1.30	8.0	16.3	
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BEND TEST:

# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Two Samples Received and Tested

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

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

Al-Imam Enterprises.(Const Of Zonal Office Building of Bank Al Habib Ltd.Main Boulevard Gulberg,Lhr)

Client Reference: ALM/BAHL/1207/0712 **SOM Lab Ref:** 328 (Page-1/2)

Dated: 06-12-2024 **Dated:** 06-12-2024

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Mughal 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	1.480	6	0.744	0.44	0.435	15.06	19.47	75470	76340	97590	98710	1.50	8.0	18.8	
2	1.469	6	0.742	0.44	0.432	14.83	19.27	74350	75720	96570	98360	1.30	8.0	16.3	
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BEND TEST:

# 6	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

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

Al-Imam Enterprises.(Const Of Zonal Office Building of Bank Al Habib Ltd.Main Boulevard Gulberg,Lhr)

Client Reference: ALM/BAHL/1207/0712 **SOM Lab Ref:** 328 (Page-2/2)

Dated: 06-12-2024 **Dated:** 06-12-2024

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Mughal 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	0.657	4	0.496	0.20	0.193	6.93	8.69	76440	79210	95770	99250	1.00	8.0	12.5	
2	0.657	4	0.496	0.20	0.193	7.03	8.77	77560	80380	96670	100180	1.10	8.0	13.8	
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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

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

Asst Dir Lab DHA Bahawalpur Cantonment.(Enlistment of Aziz Steel at DHA Bahawalpur)

Client Reference: 530/QC/MTL **SOM Lab Ref:** 329 (Page-1/1)

Dated: 05-12-2024 **Dated:** 06-12-2024

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.668	8	0.999	0.79	0.784	23.19	37.23	64740	65240	103930	104720	1.20	8.0	15.0	
2	1.507	6	0.751	0.44	0.443	13.37	20.71	67040	66590	103830	103120	1.20	8.0	15.0	
3	0.659	4	0.497	0.20	0.194	5.71	8.97	62950	64900	98920	101980	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 Six Samples Received and Tested

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

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

Executive Engineer GE(Army)-I Gwa.(Const of 1 x Spec MT Shed For 91 Sig Bn at Gwa Cantt)

Client Reference: 6180-2804/24/E-6 **SOM Lab Ref:** 330 (Page-1/2)

Dated: 05-12-2024 **Dated:** 26-12-2024

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	2.665	8	0.998	0.79	0.783	23.60	33.23	65880	66470	92770	93600	1.50	8.0	18.8	
2	2.663	8	0.998	0.79	0.783	23.70	33.33	66170	66760	93060	93890	1.40	8.0	17.5	
3	1.501	6	0.749	0.44	0.441	14.75	19.75	73940	73770	98970	98750	1.30	8.0	16.3	
4	1.503	6	0.750	0.44	0.442	15.31	19.62	76750	76400	98360	97910	1.20	8.0	15.0	
5	0.668	4	0.500	0.20	0.196	6.24	8.28	68800	70200	91280	93140	1.10	8.0	13.8	
6	0.674	4	0.502	0.20	0.198	6.19	8.22	68230	68920	90600	91520	1.40	8.0	17.5	
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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