Client Reference No.: Nil **Dated:** 13-06-2024

SOM Lab Ref: CED/SOM/4325 **Dated:** 14-06-2024

Test Type: Load Test of RPC Manhole Cover 24" Diameter

Test Standard: Non-standard test was performed as per requirement of the client [Application of load at the center of the Manhole Cover through circular thick(19.0mm) steel plate of 377mm diameter]

Test Performed by: Dr. Asad Ali Gillani

Mr. M.Afzal Sial,

Project Manager

Citi Housing Pvt Ltd.

(Development of Citi Housing Jhelum)

This is with reference to your above-mentioned letter and SOM receipt No. 4325 dated: 13-06-2024. The sample of RPC Manhole Cover submitted in the Laboratory has been tested and the result is provided below.

Load Test Result

Diameter of Manhole Cover	Average Thickness of Manhole Cover	Maximum Load	Observations/Remarks
642 mm	70.16mm	10200 kg	Manhole Cover was cracked at this load

Test Performed by: S. Asad Ali Gillani

The Progressive International
Islamabad

Client Reference No.: Nil — Dated: 13-06-2024

SOM Lab Ref: CED/SOM/4329 (Page 1/1) — Dated: 13-06-2024

Test Type: Tensile Test

Sample Type: Nut Bolt (27mm Dia)

Test Specification: ASTM – F-606

Tensile Test Results

Sample No.	Sample Type	Tested Diameter of Rod/Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	% Elongation
1	Nut Bolt (27mm Dia)	18.0	134.7	529.6	35.0

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

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

Tobishima Corporation Islamabad.(Installation of Weather Surveillance Radar In Multan City)

Client Reference: Nil **Dated:** 12-06-2024

SOM Lab Ref: CED/SOM/4324-23 (Page-1/2) **Dated:** 13-06-2024

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

Sample Type: Deformed Bar (Kamran 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	2.227	19	19.02	284	284	129.00	194.00	455	455	684	684	32.5	200	16.3	
2	2.218	19	18.97	284	282	132.00	194.50	466	468	686	689	32.5	200	16.3	
3	2.206	19	18.92	284	281	132.20	193.50	466	471	682	689	27.5	200	13.8	
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BEND TEST:

19mm	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

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

Tobishima Corporation Islamabad.(Installation of Weather Surveillance Radar In Multan City)

Client Reference: Nil **Dated:** 12-06-2024

SOM Lab Ref: CED/SOM/4324-23 (Page-2/2) **Dated:** 13-06-2024

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

Sample Type: Deformed Bar (Kamran 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	0.973	13	12.57	133	124	59.50	84.70	448	480	638	684	35.0	200	17.5	
2	0.975	13	12.57	133	124	59.00	82.70	445	476	623	667	35.0	200	17.5	
3	0.978	13	12.59	133	125	62.00	85.20	467	498	642	685	25.0	200	12.5	
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BEND TEST:

19mm	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

Engr. Haseeb Afzal
PM HMB Developers Pvt Ltd. Lahore

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

Client Reference: HMBDPL/S.O/06/24/111(LHR)
Dated: 13-06-2024

SOM Lab Ref: 4322 (Page-1/1)
Dated: 13-06-2024

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Deformed Bar (DC # 2001990)

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	0.668	4	0.500	0.20	0.196	6.85	8.53	75540	77080	94090	96010	1.30	8.0	16.3	
2	0.666	4	0.500	0.20	0.196	6.73	8.53	74190	75710	94090	96010	1.00	8.0	12.5	
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Witnessed By: Muhammad Azhar Saeed

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

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

Kasur Forest Division at Changa Manga.(Const of B/wall at changa Manga Rest House)

Client Reference: 1267/AC **SOM Lab Ref:** 4326 (Page-1/1)

Dated: 12-06-2024 **Dated:** 13-06-2024

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	0.668	4	0.500	0.20	0.196	6.07	8.36	66890	68250	92180	94060	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

Engineer Muhammad Irfan
Dy Dir Infra. DHA Gujranwala.(Sec C)

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

Client Reference: 111/15/DD/RS/Lab/PKG-2A/2207
Dated: 13-06-2024

SOM Lab Ref: 4327 (Page-1/3)
Dated: 13-06-2024

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
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	2.664	8	0.998	0.79	0.783	27.24	37.10	76040	76720	103590	104510	1.20	8.0	15.0	
2	2.676	8	1.000	0.79	0.786	25.71	35.58	71770	72140	99320	99820	1.40	8.0	17.5	
3	1.487	6	0.746	0.44	0.437	14.80	19.37	74190	74700	97080	97750	1.30	8.0	16.3	
4	1.494	6	0.748	0.44	0.439	14.29	19.06	71640	71800	95550	95770	1.20	8.0	15.0	
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Witnessed By: Habib Sultan (DHAG)

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

Engineer Muhammad Irfan
Dy Dir Infra. DHA Gujranwala.(Sec J)

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

Client Reference: 111/15/DD/RS/Lab/Sec-J/217
Dated: 13-06-2024

SOM Lab Ref: 4327 (Page-2/3)
Dated: 13-06-2024

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	2.638	8	0.993	0.79	0.775	24.72	32.82	69010	70350	91640	93410	1.40	8.0	17.5	
2	2.630	8	0.992	0.79	0.773	24.57	32.47	68590	70090	90640	92630	1.20	8.0	15.0	
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Witnessed By: Habib Sultan (DHAG)

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

Engineer Muhammad Irfan
Dy Dir Infra. DHA Gujranwala.(Sec J)

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

Client Reference: 111/15/DD/RS/Lab/Sec-J/216
Dated: 13-06-2024

SOM Lab Ref: 4327 (Page-3/3)
Dated: 13-06-2024

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	0.671	4	0.501	0.20	0.197	6.34	8.23	69920	70990	90720	92100	1.30	8.0	16.3	
2	0.670	4	0.501	0.20	0.197	6.29	8.21	69360	70410	90490	91870	1.40	8.0	17.5	
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Witnessed By: Habib Sultan (DHAG)

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

Farrukh Jamal, PM **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

UNICON Consulting Services(Pvt) Ltd.(Const Of Ban Of Punjab Building at C-Block,Model Town Lhr)

Client Reference: Nil **SOM Lab Ref:** 4328 (Page-1/1)

Dated: 10-06-2024 **Dated:** 13-06-2024

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	2.523	8	0.971	0.79	0.741	23.72	31.19	66220	70600	87080	92840	1.50	8.0	18.8	
2	2.550	8	0.977	0.79	0.749	23.70	31.42	66170	69790	87710	92510	1.60	8.0	20.0	
3	1.539	6	0.759	0.44	0.452	14.32	19.37	71790	69880	97080	94500	1.50	8.0	18.8	
4	1.528	6	0.756	0.44	0.449	14.22	19.34	71280	69850	96930	94990	1.60	8.0	20.0	
5	0.660	4	0.497	0.20	0.194	5.61	7.16	61830	63740	78910	81350	1.30	8.0	16.3	
6	0.668	4	0.500	0.20	0.196	5.78	7.36	63740	65040	81160	82820	1.30	8.0	16.3	
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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